Head injury

NICE quality standard

Draft for consultation

May 2014

Introduction

This quality standard covers the assessment and early management of head injury in children and adults. It also covers rehabilitation for adults (aged 16 and over) after traumatic brain injury. For more information see the head injury overview.

Why this quality standard is needed

Head injury is any trauma (external force) to the head other than superficial injuries to the face and is the most common cause of death and disability in people aged 1–40 years in the UK. Each year, 1.4 million people attend accident and emergency departments in England and Wales with a recent head injury. Between 33% and 50% of these are children younger than 15 years[1]. Most patients recover without specific or specialist intervention, but others experience long-term disability or even die from the effects of complications that could potentially be minimised or avoided with early detection and appropriate treatment. CT scanning is the primary imaging modality for assessing head injury. Emergency departments see a large number of patients with minor or mild head injuries and need to identify the very small number who will go on to have serious acute intracranial complications. Admission to a specialist centre may be required for continued observation and surgical intervention. Early detection and rapid treatment is vital to minimising the risk of disability and to saving lives[2].

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

- mortality after moderate or severe head injury

[1] Head injury. NICE clinical guideline 176 (2014).
[2] Head injury. NICE press release (2014).

- recovery after moderate or severe head injury.

How this quality standard supports delivery of outcome frameworks

NICE quality standards are a concise set of prioritised statements designed to drive measureable quality improvements within a particular area of health or care. They are derived from high-quality guidance, such as that from NICE or other sources accredited by NICE. This quality standard, in conjunction with the guidance on which it is based, should contribute to the improvements outlined in the following 3 outcomes frameworks published by the Department of Health:

- The Adult Social Care Outcomes Framework 2014–15 (Department of Health, November 2012)
- NHS Outcomes Framework 2014–15
- Improving outcomes and supporting transparency: a public health outcomes framework for England 2013–2016, Part 1 and Part 1A.

Tables 1–3 show the outcomes, overarching indicators and improvement areas from the frameworks that the quality standard could contribute to achieving.

Table 1 The Adult Social Care Outcomes Framework 2014–15

Domain	Overarching and outcome measures
2 Delaying and reducing the need for care and support	***Overarching measure*** ***Outcome measure*** 2B Proportion of older people (65 and over) who were still at home 91 days after discharge from hospital into reablement/rehabilitation services*
Aligning across the health and social care system * Indicator shared with NHS Outcomes Framework (NHSOF)	

Table 2 NHS Outcomes Framework 2014–15

Domain	Overarching indicators and improvement areas
3 Helping people to recover from episodes of ill health or following injury	***Overarching indicator*** 3b Emergency readmissions within 30 days of discharge from hospital** ***Improvement areas*** **Improving recovery from major trauma** 3.3 Survival from major trauma **Helping older people to recover their independence after illness or injury** 3.6ii Proportion offered rehabilitation following discharge from acute or community hospital.*
4 Ensuring that people have a positive experience of care	***Overarching indicator*** 4b Patient experience of hospital care ***Improvement areas*** ***Improving hospital's responsiveness to personal needs*** 4.2 Responsiveness to in-patients personal needs ***Improving people's experience of accident and emergency services*** 4.3 Patient experience of A&E services
Alignment across the health and social care system * Indicator shared with Adult Social Care Outcomes Framework (ASCOF) ** Indicator shared with Public Health Outcomes Framework (PHOF)	

Table 3 Public health outcomes framework for England, 2013–2016

Domain	Objectives and indicators
4 Healthcare public health and preventing premature mortality	***Objective*** Reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities ***Indicators*** 4.11 Emergency readmission within 30 days of discharge from hospital*
Aligning across the health and social care system * Indicator shared with NHS Outcomes Framework (NHSOF)	

Coordinated services

The quality standard for head injury specifies that services should be commissioned from and coordinated across all relevant agencies encompassing the whole trauma care pathway. A person-centred, integrated approach to providing services is fundamental to delivering high-quality care to people a head injury.

The Health and Social Care Act 2012 sets out a clear expectation that the care system should consider NICE quality standards in planning and delivering services, as part of a general duty to secure continuous improvement in quality. Commissioners and providers of health and social care should refer to the library of NICE quality standards when designing high-quality services. Other quality standards that should also be considered when choosing commissioning or providing high-quality trauma services are listed in 'Related quality standards'.

Training and competencies

The quality standard should be read in the context of national and local guidelines on training and competencies. All healthcare professionals involved in assessing, caring for and treating people with a head injury should have sufficient and appropriate training and competencies to deliver the actions and interventions described in the quality standard.

Role of families and carers

Quality standards recognise the important role families and carers have in supporting people with a head injury. If appropriate, healthcare professionals should ensure that family members and carers are involved in the decision-making process about investigations, treatment and care.

List of quality statements

Statement 1. Children and adults with a head injury have a CT head scan within 1 hour of a risk factor for brain injury being identified that indicates it necessary.

Statement 2. Children and adults with a head injury and any specific risk factor for cervical spine injury have a CT cervical spine scan within 1 hour of the risk factor being identified.

Statement 3. Children and adults with a head injury who are taking warfarin have a CT head scan within 8 hours of the injury, even if no other risk factor for brain injury is identified.

Statement 4. Children and adults with a head injury and a Glasgow coma scale score of 8 or less at any time have access to specialist treatment through ongoing liaison with or transfer to a neuroscience unit.

Statement 5. Adults (aged 16 and over) in hospital with cognitive deficits that continue 72 hours after a moderate or severe traumatic brain injury, have an assessment of their need for inpatient rehabilitation.

Statement 6. Community rehabilitation services are available to provide a range of interventions to help support adults (aged 16 and over) with continuing cognitive deficits after a moderate or severe traumatic brain injury.

Questions for consultation

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

Question 2 If the systems and structures were available, do you think it would be possible to collect the data for the proposed quality measures?

Quality statement 1: CT head scan

Quality statement

Children and adults with a head injury have a CT head scan within 1 hour of a risk factor for brain injury being identified that indicates it necessary.

Rationale

Head injuries can be fatal or become permanently disabling if there is damage to the brain that is not identified and treated quickly. A CT scan carried out within 1 hour will enable rapid treatment and improve outcomes for people with head injuries that have caused damage to the brain.

Quality measures

Structure

Evidence of local arrangements to ensure that CT head scans can be performed within 1 hour of a risk factor for brain injury being identified.

Data source: Local data collection.

Process

Proportion of children and adults with a head injury who have a CT head scan within 1 hour of a risk factor for brain injury being identified, that indicates it necessary.

Numerator – the number of children and adults in the denominator who have a CT head scan within 1 hour of a risk factor being identified.

Denominator – the number of children and adults with a head injury and a risk factor for brain injury indicating that a CT head scan should be performed within 1 hour.

Data source: Local data collection. The Trauma Audit and Research Network collects data on CT scans within 1 hour for children and adults with a head injury and Glasgow coma scale (GCS) score of less than 13.

Outcome

Mortality from skull fracture and intracranial injury: directly standardised rate, all ages, 3-year average.

Data source: Indicator P00103 in the compendium of population health indicator on the Health and Social Care Information Centre Indicator Portal.

What the quality statement means for service providers, healthcare professionals and commissioners

Service providers (accident and emergency departments, district general hospitals and specialist neurological centres) ensure that CT head scans can be performed within 1 hour of a risk factor for brain injury being identified in children and adults who have a head injury.

Healthcare professionals ensure that they request CT head scans be performed within 1 hour for children and adults with a head injury if they identify a risk factor for brain injury that indicates it necessary.

Commissioners (clinical commissioning groups and NHS England) ensure that providers can perform CT head scans within 1 hour of a risk factor of brain injury being identified. This may be achieved in different ways, for example through, the use of 1-hour targets in acute contracts or enhanced monitoring and audit procedures.

What the quality statement means for patients and carers

Children or adults with a head injury have a scan of their head within 1 hour if their healthcare professionals think the injury might have caused damage to the brain.

Source guidance

- Head injury (NICE clinical guideline 176), recommendations 1.4.7 and 1.4.9 (key priorities for implementation), and 1.4.10.

Definitions of terms used in this quality statement

Head injury

Any trauma to the head other than superficial injuries to the face. [NICE clinical guideline 176].

Risk factors for brain injury indicating CT head scan within 1 hour

For adults, NICE clinical guideline 176 recommendation 1.4.7 states any one of the following risk factors after head injury, is an indication for the need to have a CT head scan within 1 hour of the risk factor being identified:

- Glasgow coma scale (GCS) score less than 13 on initial assessment in the accident and emergency department.
- GCS less than 15 at 2 hours after the injury on assessment in the accident and emergency department.
- Suspected open or depressed skull fracture.
- Any sign of basal skull fracture (haemotympanum, 'panda' eyes, cerebrospinal fluid leakage from the ear or nose, and Battle's sign).
- Post-traumatic seizure.
- Focal neurological deficit.
- More than 1 episode of vomiting.

For children, NICE clinical guideline 176 recommendation 1.4.9 states that any one of the following risk factors after head injury indicates the need for a CT head scan within 1 hour of the risk factor being identified:

- Suspicion of non-accidental injury
- Post-traumatic seizure but no history of epilepsy.
- On initial emergency department assessment, GCS less than 14, or for children under 1 year GCS (paediatric) less than 15.
- At 2 hours after the injury, GCS less than 15.
- Suspected open or depressed skull fracture or tense fontanelle.
- Any sign of basal skull fracture (haemotympanum, 'panda' eyes, cerebrospinal fluid leakage from the ear or nose, Battle's sign).
- Focal neurological deficit.

- For children under 1 year, presence of bruise, swelling or laceration of more than 5 cm on the head.

NICE clinical guideline 176 (recommendation 1.4.10) also states that children who have sustained a head injury and have **more than 1** of the following risk factors (and none of those in recommendation 1.4.9), should have a CT head scan within 1 hour of a risk factor being identified:

- Loss of consciousness lasting more than 5 minutes (witnessed).
- Abnormal drowsiness.
- Three or more discrete episodes of vomiting.
- Dangerous mechanism of injury (high-speed road traffic accident either as pedestrian, cyclist or vehicle occupant, fall from a height of greater than 3 metres, high-speed injury from a projectile or other object).
- Amnesia (antegrade or retrograde) lasting more than 5 minutes.

Quality statement 2: CT cervical spine scan

Quality statement

Children and adults with a head injury and any specific risk factor for cervical spine injury have a CT cervical spine scan within 1 hour of the risk factor being identified.

Rationale

Head injuries can be fatal or can be disabling if there is damage to the cervical spine that is not identified and treated quickly. A CT scan carried out within 1 hour will enable rapid treatment and improve outcomes for children and adults with head injuries that have caused damage to the cervical spine.

Quality measures

Structure

Evidence of local arrangements to ensure that CT cervical spine scans can be performed within 1 hour of any specific risk factor for spinal injury being identified.

Data source: Local data collection

Process

Proportion of children and adults with a head injury, and any specific risk factor for spinal injury who have a CT cervical spine scan within 1 hour of any risk being identified.

Numerator – the number of children and adults in the denominator who have a CT cervical spine scan within 1 hour of the risk factor being identified.

Denominator – the number of children and adults with a head injury and any specific risk factor for spinal injury.

Data source: Local data collection.

What the quality statement means for service providers, healthcare professionals and commissioners

Service providers (accident and emergency departments, district general hospitals and specialist neurological centres) ensure that CT cervical spine scans can be performed within 1 hour of any specific risk factor for spinal injury being identified in children and adults who have a head injury.

Healthcare professionals ensure that they request CT cervical spine scans be performed within 1 hour for children and adults with a head injury who have any specific risk factor for spinal injury.

Commissioners (clinical commissioning groups and NHS England) ensure that services perform CT cervical spine scans within 1 hour in children and adults who have a head injury and any specific risk factor for spinal injury. This may be achieved in different ways, for example through the use of 1 hour targets in acute contracts or enhanced monitoring and audit procedures.

What the quality statement means for patients and carers

Children or adults with a head injury have a scan of their neck within 1 hour if their healthcare professionals think the injury might have caused damage to the neck.

Source guidance

- Head injury (NICE clinical guideline 176), recommendations 1.5.8 and 1.5.11 (key priorities for implementation).

Definitions of terms used in this quality statement

Head injury

Any trauma to the head other than superficial injuries to the face. [NICE clinical guideline 176].

Risk factors for spinal injury indicating CT cervical spine within 1 hour

For adults, NICE clinical guideline 176 recommendation 1.5.8 states any one of the following risk factors after head injury indicate the need for a CT cervical spine within 1 hour of the risk factor being identified:

- GCS less than 13 on initial assessment.
- The patient has been intubated.
- Plain X-rays are technically inadequate (for example, the desired view is unavailable).
- Plain X-rays are suspicious or definitely abnormal.
- A definitive diagnosis of cervical spine injury is needed urgently (for example, before surgery).
- The patient is having other body areas scanned for head injury or multi-region trauma.
- The patient is alert and stable, there is clinical suspicion of cervical spine injury and any of the following apply:
  - age 65 years or older
  - dangerous mechanism of injury (fall from a height of greater than 1 metre or 5 stairs; 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)
  - focal peripheral neurological deficit
  - paraesthesia in the upper or lower limbs.

For children who have sustained a head injury, NICE clinical guideline 176 recommendation 1.5.11 states that a CT cervical spine scan should be performed only if any of the following apply (because of the increased risk to the thyroid gland from ionising radiation and the generally lower risk of significant spinal injury):

- GCS less than 13 on initial assessment.
- The patient has been intubated.
- Focal peripheral neurological signs.
- Paraesthesia in the upper or lower limbs.

- A definitive diagnosis of cervical spine injury is needed urgently (for example, before surgery).
- The patient is having other body areas scanned for head injury or multi-region trauma.
- There is strong clinical suspicion of injury despite normal X-rays.
- Plain X-rays are technically difficult or inadequate.
- Plain X-rays identify a significant bony injury.

Quality statement 3: CT head scans for children and adults taking warfarin

Quality statement

Children and adults with a head injury who are taking warfarin have a CT head scan within 8 hours of the injury, even if no other risk factor for brain injury is identified.

Rationale

Children and adults taking warfarin are at increased risk of intracranial bleeding. Ensuring that they have a CT head scan within 8 hours can help to prevent serious long-term damage caused by undetected intracranial bleeding.

Quality measures

Structure

Evidence of local arrangements to ensure that children and adults with a head injury who are taking warfarin have a CT head scan within 8 hours of the injury, even if no other risk factor for brain injury is identified.

Data source: Local data source.

Process

Proportion of children and adults with a head injury and taking warfarin with no other risk factor for brain injury who have a CT head scan within 8 hours of the injury.

Numerator – the number of children and adults in the denominator having a CT head scan within 8 hours of the injury.

Denominator – the number of children and adults with a head injury and taking warfarin with no other risk factor for brain injury.

Data source: Local data source.

Outcome

Mortality from skull fracture and intracranial injury: directly standardised rate, all ages, 3-year average.

Data source: Indicator P00103 in the compendium of population health indicator on the Health and Social Care Information Centre Indicator Portal.

What the quality statement means for service providers, healthcare professionals and commissioners

Service providers (accident and emergency departments, district general hospitals and specialist neurological centres) ensure that systems are in place to provide children and adults taking warfarin with a CT head scan within 8 hours of any head injury, even if no other risk factor for brain injury is identified.

Healthcare professionals ensure that children and adults taking warfarin have a CT head scan within 8 hours of any head injury, even if no other risk factor for brain injury is identified.

Commissioners (clinical commissioning groups) ensure that services perform CT head scans within 8 hours for all children and adults taking warfarin who have a head injury, even if no other risk factor for brain injury is identified. This may be achieved by improving education of healthcare professionals in acute settings in line with this statement and seeking evidence of compliance by auditing current practice.

What the quality statement means for patients and carers

Children and adults with a head injury who are taking warfarin have a scan of their head within 8 hours of the injury.

Source guidance

- Head injury (NICE clinical guideline 176), recommendation 1.4.12.

Definitions of terms used in this quality statement

Head injury

Any trauma to the head other than superficial injuries to the face. [NICE clinical guideline 176].

Quality statement 4: Access to neuroscience units

Quality statement

Children and adults with a head injury and a Glasgow coma scale score (GCS) of 8 or less at any time have access to specialist treatment through ongoing liaison with or transfer to a neuroscience unit.

Rationale

A Glasgow coma scale (GCS) score of 8 or below after a head injury indicates a severe traumatic brain injury. Children and adults with GCS scores of 8 or below will benefit from specialised clinical management provided by a neuroscience unit.

Quality measures

Structure

Evidence of locally agreed transfer protocols between the ambulance service, accident and emergency department, district general hospital and designated neuroscience unit.

Data source: Local data collection

Process

Proportion of children and adults with a head injury and a GCS score of 8 or less at any time who have a documented record of ongoing liaison with or transfer to a neuroscience unit.

Numerator – the number of children and adults in the denominator with a recorded consideration of ongoing liaison with or transfer to a neuroscience unit.

Denominator – the number of children and adults with a head injury and GCS score of 8 or less at any time.

Data source: Local data collection.

Outcome

Mortality from skull fracture and intracranial injury: directly standardised rate, all ages, 3-year average.

Data source: Indicator P00103 in the compendium of population health indicator on the Health and Social Care Information Centre Indicator Portal.

What the quality statement means for service providers, healthcare professionals and commissioners

Service providers (accident and emergency departments, ambulance services, district general hospitals and specialist neurological centres) ensure that protocols are agreed on engaging in ongoing liaison about children and adults with head injuries and when to transfer to a neuroscience unit.

Healthcare professionals ensure that children and adults with a head injury and a GCS score of 8 or less have access to specialist treatment through ongoing liaison with or transfer to a neuroscience unit.

Commissioners (clinical commissioning groups and NHS England) ensure that the services they commission agree a protocol for transferring children and adults with head injuries to a neuroscience unit.

What the quality statement means for patients and carers

Children or adults with a head injury who show signs of severe brain damage are cared for with input from specialists in brain injuries or are transferred to a unit that specialises in treating brain injuries.

Source guidance

- Head injury (NICE clinical guideline 176), recommendation 1.7.1.

Definitions of terms used in this quality statement

Glasgow coma scale (GCS)

A standardised system used to assess the degree of brain impairment and to identify the seriousness of injury in relation to outcome. The system involves 3 determinants:

eye opening, verbal responses and motor response, all of which are evaluated independently according to a numerical value that indicates the level of consciousness and degree of dysfunction. [NICE clinical guideline 176].

Quality statement 5: Inpatient rehabilitation for adults with brain injury

Quality statement

Adults (aged 16 and over) in hospital with cognitive deficits that continue 72 hours after a moderate or severe traumatic brain injury have an assessment of their need for inpatient rehabilitation.

Rationale

Rehabilitation enables adults with moderate or severe traumatic brain injuries to reach and maintain optimal functioning levels in areas such as intellect, sensory, physical and social behaviour. Moderate or severe traumatic brain injuries can affect many aspects of a person's life; therefore it is important to assess the benefits of inpatient rehabilitation for these adults.

Quality measures

Structure

Evidence of local arrangements to assess inpatient rehabilitation needs of adults in hospital with cognitive deficits, continuing 72 hours after a moderate or severe traumatic brain injury.

Data source: Local data collection.

Process

Proportion of adults in hospital with cognitive deficits continuing 72 hours after a moderate or severe traumatic brain injury, who are assessed for inpatient rehabilitation.

Numerator – the number of adults in the denominator who are assessed for inpatient rehabilitation.

Denominator – the number of adults in hospital with cognitive deficits continuing after 72 hours of a moderate or severe traumatic brain injury.

Data source: Local data collection.

What the quality statement means for service providers, healthcare professionals and commissioners

Service providers (district general hospitals and specialist neurological centres) ensure that systems are in place to ensure that adults in hospital with cognitive deficits continuing 72 hours after a moderate or severe traumatic brain injury have their need for inpatient rehabilitation assessed.

Healthcare professionals ensure that they assess the inpatient rehabilitation needs of adults in hospital with cognitive deficits continuing 72 hours after a moderate or severe traumatic brain injury.

Commissioners (clinical commissioning groups and NHS England) ensure that services assess inpatient rehabilitation needs of adults in hospital with cognitive deficits continuing 72 hours after a moderate or severe traumatic brain injury. This may be achieved by asking services to audit current practice to show evidence of compliance.

What the quality statement means for patients and carers

Adults (aged 16 and over) who are in hospital after a head injury that has caused damage to the brain lasting for 72 hours have an assessment to check whether they would benefit from having rehabilitation therapy (specialised treatment to help them recover their normal functions) while in the hospital.

Source guidance

- Brain injury rehabilitation in adults (SIGN guide 130) section 10.

Definitions of terms used in this quality statement

Moderate or severe traumatic brain injury

Traumatic brain injury may be defined as a traumatically induced structural injury and/or physiological disruption of brain function as a result of an external force that is indicated by new onset or worsening of at least 1 of the following clinical signs, immediately following the event:

- any period of loss of or a decreased level of consciousness

- any loss of memory for events immediately before or after the injury
- any alteration in mental state at the time of the injury (such as confusion, disorientation or slowed thinking)
- neurological deficits (such as weakness, loss of balance, change in vision, praxis, paresis or plegia, sensory loss or aphasia) that may or may not be transient, or
- intracranial lesion. [SIGN guide 130]

Severity of brain injury is widely classified using the Glasgow coma scale score:

- mild – 13–15
- moderate- 9–12
- severe – 8 or less. [SIGN guide 130]

Quality statement 6: Community rehabilitation services for adults with brain injury

Quality statement

Community rehabilitation services are available to provide a range of interventions to help support adults (aged 16 and over) with continuing cognitive deficits after a moderate or severe traumatic brain injury.

Rationale

Community rehabilitation services can be important in helping adults who have had a moderate or severe traumatic brain injury to regain independence and return to their normal daily lives, for example going back to work or continuing their education.

Quality measures

Structure

Evidence of local arrangements to provide community rehabilitation services with a range of interventions to support adults with continuing cognitive deficits after a moderate or severe traumatic brain injury.

Data source: Local data source.

What the quality statement means for service providers, healthcare professionals and commissioners

Service providers (primary care and community rehabilitation services) ensure that systems are in place to identify adults with continuing cognitive deficits after a moderate or severe traumatic brain injury who would benefit from community rehabilitation services.

Healthcare professionals ensure that they consider the benefits of community rehabilitation services for adults with continuing cognitive deficits after a moderate or severe traumatic brain injury.

Commissioners (clinical commissioning groups, NHS England and local authorities) ensure there is sufficient capacity for community rehabilitation services to provide a

range of interventions to help support adults with continuing cognitive deficits after a moderate or severe traumatic brain injury.

What the quality statement means for patients and carers

Rehabilitation therapy (specialised treatment to help people recover their normal functions after an injury) is available in the community for **adults (aged 16 and over) with a brain injury** that is preventing them from returning to their normal daily activities.

Source guidance

- Brain injury rehabilitation in adults (SIGN guide 130) sections 6, 7, 8 and 9.

Definitions of terms used in this quality statement

Moderate or severe traumatic brain injury

Traumatic brain injury may be defined as a traumatically induced structural injury or physiological disruption of brain function as a result of an external force that is indicated by new onset or worsening of at least 1 of the following clinical signs, immediately after the event:

- any period of loss of or a decreased level of consciousness
- any loss of memory for events immediately before or after the injury
- any alteration in mental state at the time of the injury (such as confusion, disorientation or slowed thinking)
- neurological deficits (such as weakness, loss of balance, change in vision, praxis, paresis or plegia, sensory loss or aphasia) that may or may not be transient, or
- intracranial lesion. [SIGN guide 130]

Severity of brain injury is widely classified using the Glasgow coma scale score:

- mild – 13–15
- moderate- 9–12
- severe – 8 or less. [SIGN guide 130]

Equality and diversity considerations

Provision should be made to ensure access to services for adults who find it difficult to travel long distances because of disability, financial barriers or other factors.

Status of this quality standard

This is the draft quality standard released for consultation from 15 May to 12 June 2014. It is not NICE's final quality standard on head injury. The statements and measures presented in this document are provisional and may change after consultation with stakeholders.

Comments on the content of the draft standard must be submitted by 5pm on 12 June 2014. All eligible comments received during consultation will be reviewed by the Quality Standards Advisory Committee and the quality statements and measures will be refined in line with the Quality Standards Advisory Committee's considerations. The final quality standard will be available on the NICE website from October 2014.

Using the quality standard

Quality measures

The quality measures accompanying the quality statements aim to improve the structure, process and outcomes of care in areas identified as needing quality improvement. They are not a new set of targets or mandatory indicators for performance management.

We have indicated if current national indicators exist that could be used to measure the quality statements. These include indicators developed by the Health and Social Care Information Centre through its Indicators for Quality Improvement Programme. If there is no national indicator that could be used to measure a quality statement, the quality measure should form the basis for audit criteria developed and used locally.

See NICE's What makes up a NICE quality standard? for further information, including advice on using quality measures.

Levels of achievement

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, NICE recognises that this may not always be appropriate in practice, taking account of safety, choice and professional judgement, and therefore desired levels of achievement should be defined locally.

Using other national guidance and policy documents

Other national guidance and current policy documents have been referenced during the development of this quality standard. It is important that the quality standard is considered alongside the documents listed in 'Development sources'.

Diversity, equality and language

During the development of this quality standard, equality issues have been considered and equality assessments are available.

Good communication between healthcare professionals and children and adults with a head injury, and their parents or carers (if appropriate), is essential. Treatment, care and support, and the information given about it, should be both age-appropriate and culturally appropriate. It should also be accessible to children and adults with additional needs such as physical, sensory or learning disabilities, and to children and adults who do not speak or read English. Children and adults with a head injury and their parents or carers (if appropriate) should have access to an interpreter or advocate if needed.

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.

Development sources

Further explanation of the methodology used can be found in the quality standards Process guide on the NICE website.

Evidence sources

The documents below contain recommendations from NICE guidance or other NICE-accredited recommendations that were used by the Quality Standards Advisory Committee to develop the quality standard statements and measures.

- Head injury. NICE clinical guideline 176 (2014)
- Brain injury rehabilitation in adults. SIGN guide 130 (2013)

Policy context

It is important that the quality standard is considered alongside current policy documents, including:

- Department of Health (2013) Government response to the House of Commons Health Select Committee report into urgent and emergency services.
- National Audit Office (2010) Major trauma care in England.
- NHS Clinical Advisory Group (2010) Regional networks for major trauma.
- National Confidential Enquiry into Patient Outcome and Death (2007) Trauma: who cares?

Definitions and data sources for the quality measures

- Trauma Audit and Research Network
- Indicator P00103 in the compendium of population health indicator on the Health and Social Care Information Centre Indicator Portal.

Related NICE quality standards

Published

- Patient experience in adults NHS services. NICE quality standard 15 (2012).

Future quality standards

This quality standard has been developed in the context of all quality standards referred to NICE, including the following topics scheduled for future development:

- Major trauma
- Resuscitation following major trauma and major blood loss

- Transition between social care and health care services
- Trauma services
- Urgent and emergency care

Quality Standards Advisory Committee and NICE project team

Quality Standards Advisory Committee

This quality standard has been developed by Quality Standards Advisory Committee 2. Membership of this committee is as follows:

Mr Barry Attwood
Lay member

Professor Gillian Baird
Consultant Developmental Paediatrician, Guy's and St Thomas' NHS Foundation Trust

Mrs Belinda Black
Chief Executive Officer, Sheffcare

Dr Ashok Bohra
Consultant Surgeon, Dudley Group of Hospitals NHS Foundation Trust

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The following specialist members joined the committee to develop this quality standard:

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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.

The methods and processes for developing NICE quality standards are described in the quality standards process guide.

This quality standard will be been incorporated into the NICE pathway for head injury.

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