NICE National Institute for Health and Care Excellence

NICE quality standard

Hip fracture in adults

Quality standard
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www.nice.org.uk/guidance/qs16

Contents

This standard is based on CG124.

This standard should be read in conjunction with QS3, QS15, QS86, QS63, QS149 and QS166.

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Statement 2 Adults with hip fracture have surgery on a planned trauma list on the day of, or the day after, admission. **[2012, updated 2016]**

Statement 3 This statement has been removed. See update information for details.

Statement 4 Adults with trochanteric fractures above and including the lesser trochanter, except reverse oblique fractures, receive extramedullary implants in preference to intramedullary nails. **[2012, updated 2016]**

Statement 5 Adults with subtrochanteric fracture are treated with an intramedullary nail. **[new 2016]**

Statement 6 Adults with hip fracture start rehabilitation at least once a day, no later than the day after surgery. **[2012, updated 2016]**

In 2016, this quality standard was reviewed, and statements prioritised in 2012 were updated (2012, updated 2016) or replaced (new 2016). Statement 3 was updated again in 2017 (2012, updated 2017). For more information, see update information.

The 2012 quality standard for hip fracture is available as a pdf.

Quality statement 1: Multidisciplinary management

Quality statement

Adults with hip fracture are cared for within a Hip Fracture Programme at every stage of the care pathway. **[2012, updated 2016]**

Rationale

People with hip fracture, including those cared for in the community, often have comorbidities and complex care needs. The multidisciplinary approach of a Hip Fracture Programme, with regular assessment and continuous rehabilitation, has been found to better meet those needs, and lead to improved functional outcomes and reduced mortality.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure that people with hip fracture are cared for within a Hip Fracture Programme at every stage of the care pathway.

Data source: No routinely collected national data for this measure has been identified. Data can be collected from information recorded locally by provider organisations, for example, from service specifications and clinical protocols.

Process

a) Proportion of presentations of hip fracture in which the person receives an

orthogeriatric assessment prior to surgery.

Numerator – the number in the denominator in which the person receives an orthogeriatric assessment prior to surgery.

Denominator – the number of presentations of hip fracture.

Data source: The National Hip Fracture Database (NHFD) records data on access to orthogeriatric assessment.

b) Proportion of presentations of hip fracture in which the person has their goals for multidisciplinary rehabilitation identified.

Numerator – the number in the denominator in which the person has their goals for multidisciplinary rehabilitation identified.

Denominator – the number of people having surgery for hip fracture.

Data source: The NHFD records data on the main reason why a patient is unable to get up the day after surgery, to support collaborative working. Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example, from patient records.

Outcome

a) Mortality for people with hip fracture at discharge.

Data source: The NHFD records data on mortality rates, including rates of 30-day case-mixed adjusted mortality.

b) Functional outcome at 1 year.

Data source: No routinely collected national data for this measure has been identified. Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example, from patient records.

What the quality statement means for different

audiences

Service providers (such as hospitals) have systems in place to ensure that people with hip fracture are cared for within a Hip Fracture Programme at every stage of the care pathway.

Commissioners (such as integrated care systems) ensure that they commission hip fracture services that provide care within a Hip Fracture Programme at every stage of the care pathway.

People with hip fracture are looked after within a programme of care, called a Hip Fracture Programme. This involves a team of healthcare professionals with different skills working together to provide care. Hip Fracture Programmes provide care at every stage, in hospital and at home, which includes regular assessment, and coordination of care and rehabilitation.

Source guidance

Hip fracture: management. NICE guideline CG124 (2011, updated 2023), recommendation 1.8.1

Definitions of terms used in this quality statement

Hip Fracture Programme

A coordinated multidisciplinary approach ensuring continuity of care and responsibility across the clinical pathway. It covers care in all settings, including ambulances, A&E departments, radiology, operating theatres, wards and in the community and primary care, and at all stages, including diagnosis, treatment, recovery, discharge planning, rehabilitation, long-term after care and secondary prevention.

It involves formal 'orthogeriatric' care, with the geriatric medical team contributing to joint preoperative patient assessment, and increasingly taking the lead in postoperative medical care, multidisciplinary rehabilitation and discharge planning.

It includes all of the following:

- orthogeriatric assessment

- rapid optimisation of fitness for surgery
- early identification of individual goals for multidisciplinary rehabilitation to recover mobility and independence, and to facilitate return to pre-fracture residence and long-term wellbeing
- continued, coordinated, orthogeriatric and multidisciplinary review
- liaison or integration with related services, particularly mental health, falls prevention, bone health, primary care and social services
- clinical and service governance responsibility for all stages of the pathway of care and rehabilitation, including those delivered in the community.

[Adapted from NICE's guideline on hip fracture, recommendation 1.8.1, and expert opinion]

Quality statement 2: Timing and expertise for surgery

Quality statement

Adults with hip fracture have surgery on a planned trauma list on the day of, or the day after, admission. **[2012, updated 2016]**

Rationale

People with hip fracture can experience pain and anxiety while waiting for an operation. Delays in surgery are associated with negative outcomes for mortality and return to mobility. Therefore, it is important to avoid any unnecessary delays for people who are assessed as fit for surgery. A planned trauma list includes specific healthcare professionals with the expertise required for hip surgery. Senior staff supervision can help to reduce the risk of complications during the surgery.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

a) Evidence of local arrangements to ensure that people with hip fracture have surgery on a planned trauma list.

Data source: No routinely collected national data for this measure has been identified. Data can be collected from information recorded locally by provider organisations, for example, from service protocols.

b) Evidence of local arrangements to ensure that people with hip fracture have surgery on the day of, or the day after, admission.

Data source: No routinely collected national data for this measure has been identified. Data can be collected from information recorded locally by provider organisations, for example, from service protocols.

Process

a) Proportion of operations for hip fracture that are performed on a planned trauma list.

Numerator – the number in the denominator that are performed on a planned trauma list.

Denominator – the number of operations for hip fracture.

Data source: No routinely collected national data for this measure has been identified. Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example, from patient records. The National Hip Fracture Database (NHFD) records the time of the operation in relation to the admission.

b) Proportion of operations for hip fracture that are performed on the day of, or the day after, admission.

Numerator – the number in the denominator that are performed on the day of, or the day after, admission.

Denominator – the number of operations for hip fracture.

Data source: The Office for Health Improvement and Disparities (OHID) presents national data and data for other geographies supplied by NHS Digital's (Hospital Episode Statistics) and the Office for National Statistics (unrounded mid-year population) on the standardised rate per 100,000 of hip fractures in people aged 65 and over as part of the OHID Local Health – Small Area Public Health Data Profile – Disease and poor health profile. The NHFD records the time of the operation in relation to the admission.

Outcome

a) Postoperative complications for people with hip fracture.

Data source: The NHFD records data on reoperation (within 120 days), whether people developed pressure ulcers and whether inpatient fractures were sustained.

b) Length of hospital stay for people with hip fracture.

Data source: The NHFD records average length of stay.

c) Mortality for people having hip fracture surgery.

Data source: The NHFD records data on mortality rates, including rates of 30-day case-mixed adjusted mortality.

What the quality statement means for different audiences

Service providers (hospitals) ensure that systems are in place for people with hip fracture to have surgery on a planned trauma list on the day of, or the day after, admission.

Healthcare professionals (such as specialists, orthogeriatricians and anaesthetists) perform hip fracture surgery on a planned trauma list on the day of, or the day after, admission.

Commissioners (such as integrated care systems) ensure that they commission services that have sufficient capacity for people with hip fracture to have surgery on a planned trauma list on the day of, or the day after, admission.

People with hip fracture have an operation carried out by a team of senior specialists on the day they are admitted to hospital or the next day.

Source guidance

Hip fracture: management. NICE guideline CG124 (2011, updated 2023), recommendations 1.2.1 and 1.5.1

Definitions of terms used in this quality statement

Planned trauma list

A planned trauma list is one with a rostered senior anaesthetist, senior surgeon and

dedicated theatre time. [NICE's full guideline on hip fracture]

Quality statement 3: Intracapsular fracture

This statement has been removed. See update information for details.

Quality statement 4: Trochanteric fracture

Quality statement

Adults with trochanteric fractures above and including the lesser trochanter, except reverse oblique fractures, receive extramedullary implants in preference to intramedullary nails. **[2012, updated 2016]**

Rationale

Extramedullary implants, such as sliding hip screws, have similar clinical outcomes to intramedullary devices. However, some studies have shown that intramedullary implants have a higher reoperation rate because of periprosthetic fracture. In addition, extramedullary implants are less expensive than intramedullary implants. The evidence covered trochanteric fractures above and including the lesser trochanter, except reverse oblique fractures. There was insufficient evidence to make a recommendation on which implant to use for reverse oblique trochanteric fractures. Therefore, extramedullary implants should be used in preference to intramedullary nails for the treatment of trochanteric fractures except reverse oblique fractures.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure that people with trochanteric fractures above and including the lesser trochanter, except for reverse oblique fractures, receive extramedullary implants.

Data source: No routinely collected national data for this measure has been identified. Data can be collected from information recorded locally by provider organisations, for example, from service specifications and clinical protocols.

Process

a) Proportion of trochanteric fractures above and including the lesser trochanter (excluding reverse oblique fractures) treated with extramedullary implants.

Numerator – the number in the denominator treated with extramedullary implants.

Denominator – the number of trochanteric fractures above and including the lesser trochanter (excluding reverse oblique fractures).

Data source: The National Hip Fracture Database (NHFD) presents data on the proportion of trochanteric fractures, excluding reverse oblique fractures, treated with a sliding hip screw.

Outcome

Reoperation rates for people with trochanteric fractures (except reverse oblique fractures).

Data source: No routinely collected national data for this measure has been identified. Data can be collected from information recorded locally by provider organisations, for example, from service specifications. The NHFD records data on reoperation (within 120 days).

What the quality statement means for different audiences

Service providers (hospitals) ensure that systems are in place for people with trochanteric fractures above and including the lesser trochanter, except for reverse oblique fractures, to receive extramedullary implants in preference to intramedullary nails.

Healthcare professionals (orthopaedic surgeons) ensure that people with trochanteric fractures above and including the lesser trochanter, except for reverse oblique fractures, receive extramedullary implants in preference to intramedullary nails.

Commissioners (such as integrated care systems) ensure that they commission services where people with trochanteric fractures above and including the lesser trochanter, except for reverse oblique fractures, receive extramedullary implants in preference to

intramedullary nails.

People with a fracture outside the socket of their hip joint and near the top of the thigh bone (called a trochanteric fracture) have an operation to reposition the broken bone and hold it in place while it heals. This is done using 1 or more special screws inserted into the bone and attached to a metal plate, called an extramedullary implant. A different technique may be used if they have a fracture called a reverse oblique fracture.

Source guidance

Hip fracture: management. NICE guideline CG124 (2011, updated 2023), recommendation 1.6.9

Definitions of terms used in this quality statement

Trochanteric fractures

Fractures that occur outside or distal to the hip joint capsule, which can be 2-part fractures (stable) or multi-fragmentary (unstable). [NICE's full guideline on hip fracture]

Extramedullary implants

A screw that is attached to a plate on the outside of the femoral head and neck. [NICE's full guideline on hip fracture]

Intramedullary nail

A metal rod, which is inserted down the middle of the femoral shaft. [NICE's full guideline on hip fracture]

Quality statement 5: Subtrochanteric fracture

Quality statement

Adults with subtrochanteric fracture are treated with an intramedullary nail. **[new 2016]**

Rationale

Using an intramedullary device can provide mechanical protection to a potentially diseased bone. Intramedullary fixation is the treatment of choice for subtrochanteric fractures because it allows splinting of the whole of the femoral shaft. Although intramedullary nails are more expensive than extramedullary implants, they lead to fewer patients with non-union of fracture needing reoperation.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure that people with subtrochanteric fracture are treated with an intramedullary nail.

Data source: No routinely collected national data for this measure has been identified. Data can be collected from information recorded locally by provider organisations, for example, from service specifications and clinical protocols.

Process

Proportion of presentations of subtrochanteric fractures treated with an intramedullary nail.

Numerator – the number in the denominator that are treated with an intramedullary nail.

Denominator – the number of presentations of subtrochanteric fractures.

Data source: The National Hip Fracture Database records the use of an intramedullary nail for subtrochanteric fractures.

Outcome

Number of people with non-union of subtrochanteric fracture.

Data source: No routinely collected national data for this measure has been identified. Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example, from patient records.

What the quality statement means for different audiences

Service providers (hospitals) ensure that systems are in place for people with subtrochanteric fractures to be treated with an intramedullary nail.

Healthcare professionals (orthopaedic surgeons) perform surgery on people with subtrochanteric fractures using an intramedullary nail.

Commissioners (such as integrated care systems) ensure that they commission services where people with subtrochanteric fractures are treated with an intramedullary nail.

People with a fracture outside the socket of their hip joint and a small way down the thigh bone (called a subtrochanteric fracture) have an operation to reposition the broken bone and hold it in place while it heals. This is done using a metal rod, called an intramedullary nail, which is inserted into the bone.

Source guidance

Hip fracture: management. NICE guideline CG124 (2011, updated 2023), recommendation 1.6.10

Definitions of terms used in this quality statement

Subtrochanteric fracture

The fracture is predominantly in the 5 cm of bone immediately distal to the lesser trochanter. [NICE's full guideline on hip fracture]

Intramedullary nail

A metal rod, which is inserted down the middle of the femoral shaft. [NICE's full guideline on hip fracture]

Quality statement 6: Rehabilitation after surgery

Quality statement

Adults with hip fracture start rehabilitation at least once a day, no later than the day after surgery. **[2012, updated 2016]**

Rationale

Early restoration of mobility after hip fracture surgery can be beneficial for the person because it can reduce the length of hospital stay and avoid the complications of prolonged bed confinement. Rehabilitation at least once a day has potential benefits of improved mobility, increased independence, and reduced need for institutional care. A physiotherapist assessment is needed before the rehabilitation starts. People should be offered support with rehabilitation every day while in hospital, which can be given by members of the multidisciplinary team when the physiotherapist is not present. This support should continue after discharge from hospital.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure that people with hip fracture start rehabilitation at least once a day, no later than the day after surgery.

Data source: No routinely collected national data for this measure has been identified. Data can be collected from information recorded locally by provider organisations, for example, from service specifications and clinical protocols.

Process

a) Proportion of hip fracture operations after which the person starts rehabilitation no later than the day after surgery.

Numerator – the number in the denominator after which the person starts rehabilitation no later than the day after surgery.

Denominator – the number of hip fracture operations.

Data source: The National Hip Fracture Database (NHFD) records if the patient was mobilised on the day after surgery.

b) Proportion of hip fracture operations after which the person has rehabilitation at least once a day.

Numerator – the number in the denominator after which the person has rehabilitation at least once a day.

Denominator – the number of hip fracture operations.

Data source: No routinely collected national data for this measure has been identified. Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example, patient records.

Outcome

a) Length of hospital stay for people with hip fracture.

Data source: The NHFD records average length of stay.

b) Return to the pre-hip fracture place of residence.

Data source: The NHFD records whether patients were discharged back to their original residence or were in that residence at the routine follow-up (at 120 days).

c) Return to the pre-hip fracture level of mobility.

Data source: Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example, patient records. The NHFD records the routine follow-up of hip fracture patients (at 120 days).

What the quality statement means for different audiences

Service providers (such as hospitals) ensure that systems are in place for people with hip fracture to start rehabilitation at least once a day, no later than the day after surgery.

Healthcare professionals (such as physiotherapists and nurses) offer rehabilitation at least once a day to people with hip fracture, starting no later than the day after surgery.

Commissioners (such as integrated care systems) ensure that they commission services in which people with hip fracture start rehabilitation at least once a day, no later than the day after surgery.

People who have had an operation for hip fracture are offered rehabilitation at least once a day to help them recover. Rehabilitation should be started by the day after their operation (unless there is a medical or surgical reason not to). Rehabilitation after a hip fracture operation includes support with sitting and standing and keeping an upright posture to improve movement and strength, and help with their recovery.

Source guidance

Hip fracture: management. NICE guideline CG124 (2011, updated 2023), recommendations 1.7.1 and 1.7.2

Definitions of terms used in this quality statement

Rehabilitation

Rehabilitation is the process of re-establishing the ability to move between postures (for example, from sitting to standing), maintain an upright posture and to ambulate with increasing levels of complexity (speed, changes of direction, dual and multi-tasking). [Adapted from NICE's full guideline on hip fracture and expert opinion]

Update information

January 2023: Statement 3 has been removed to reflect the updated NICE guideline on hip fracture. The strength of the source recommendation has changed and the statement is no longer supported by the recommendation. The wording of statement 4, measures and supporting information were also amended to reflect changes to the source recommendation clarifying that reverse oblique fractures are not covered. References, data sources and links have been updated throughout.

May 2017: Statement 3 on intracapsular fracture has been updated to reflect changes to recommendations 1.6.2 and 1.6.3 in the NICE guideline on hip fracture. This is marked as **[2012, updated 2017]**.

November 2016: This quality standard was updated and statements prioritised in 2012 were replaced.

Statements are marked as:

- **[new 2016]** if the statement covers a new area for quality improvement
- **[2012, updated 2016]** if the statement covers an area for quality improvement included in the 2012 quality standard and has been updated.

The 2012 quality standard for hip fracture is available as a pdf.

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 our webpage on quality standards advisory committees for details about our standing committees. Information about the topic experts invited to join the standing members is available from the webpage for this quality standard.

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 guidance and quality standards apply in England and Wales. Decisions on how they apply in Scotland and Northern Ireland are made by the Scottish government and Northern Ireland Executive. NICE quality standards may include references to organisations or people responsible for commissioning or providing care that may be relevant only to England.

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 statement for the NICE guideline on hip fracture to help estimate local costs.

Diversity, equality and language

Equality issues were considered during development and equality assessments for this quality standard 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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Endorsing organisation

This quality standard has been endorsed by NHS England, as required by the Health and Social Care Act (2012)

Supporting organisations

Many organisations share NICE's commitment to quality improvement using evidence-based guidance. The following supporting organisations have recognised the benefit of the quality standard in improving care for patients, carers, service users and members of the public. They have agreed to work with NICE to ensure that those commissioning or providing services are made aware of and encouraged to use the quality standard.

- British Orthopaedic Association
- Chartered Society of Physiotherapy
- Royal College of General Practitioners (RCGP)
- Royal College of Physicians (RCP)