Hip fracture in adults
NICE quality standard
Draft for consultation

March 2012
April 2016

Introduction

This quality standard covers the diagnosis and management of hip fracture from admission in secondary care to final return to the community, in adults (aged 18 years and over). It does not cover the prevention of hip fracture because this will be covered by NICE quality standards for osteoporosis, falls: prevention and falls in older people.

For more information see the hip fracture topic overview.

This quality standard has been updated. The topic was identified for update following the annual review of quality standards in 2015. The review identified that there had been changes in the areas for improvement for hip fracture. For further information about the update, including statements from the 2012 quality standard that are no longer national priorities for improvement but are still underpinned by current accredited guidance, see update information.

Why this quality standard is needed

Hip fractures occur in the area between the edge of the femoral head and 5 cm below the lesser trochanter. These fractures are generally divided into two main groups. Those above the insertion of the capsule of the hip joint are called intracapsular, subcapital or femoral neck fractures. Those below the insertion are extracapsular.

Hip fracture is a major health issue in an ageing population. About 70,000 to 75,000 hip fractures occur each year and the annual cost (including medical and social care)
for all UK hip fracture cases is about £2 billion. Demographic projections indicate that the UK annual incidence will rise to 101,000 in 2020, with an associated increase in annual expenditure. The majority of this expenditure will be accounted for by hospital bed days and a further substantial contribution will come from health and social aftercare. About 25% of people with hip fracture are admitted from institutional care, and about 10–20% of those admitted from home ultimately move to institutional care. About 10% of people with a hip fracture die within 1 month and about one-third within 12 months. Most of the deaths are due to associated conditions and not to the fracture itself, reflecting the high prevalence of comorbidity. Although hip fracture occurs predominantly in later life (the National Hip Fracture Database reports the average age of a person with hip fracture as 84 years for men and 83 for women), it may occur at any age, especially in people with osteoporosis or osteopenia.

Because a fall and resulting fracture often signals underlying ill health, a comprehensive multidisciplinary approach is needed from presentation to follow-up, including the transition from hospital to the community. Management of hip fracture has improved, especially with the collaboration of teams specialising in the care of older people (‘orthogeriatrics’). These skills apply to hip fracture in adults, irrespective of age.

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

- length of hospital stay
- readmission to hospital.

**How this quality standard supports delivery of outcome frameworks**

NICE quality standards are a concise set of prioritised statements designed to drive measurable improvements in the 3 dimensions of quality – safety, experience and effectiveness of care – for 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:
• **NHS Outcomes Framework 2015–16**
• **Adult Social Care Outcomes Framework 2015–16**
• **Public Health Outcomes Framework 2013–16**.

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

**Table 1  **NHS Outcomes Framework 2015–16**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Overarching indicators and improvement areas</th>
</tr>
</thead>
</table>
| 1 Preventing people from dying prematurely | **Overarching indicators**  
1a Potential Years of Life Lost (PYLL) from causes considered amenable to healthcare  
i Adults  
1b Life expectancy at 75  
i Males ii Females |
| 3 Helping people to recover from episodes of ill health or following injury | **Overarching indicators**  
3b Emergency readmissions within 30 days of discharge from hospital*  

**Improvement areas**  
**Improving outcomes from planned treatments**  
3.1 Total health gain as assessed by patients for elective procedures  
i Physical health-related procedures  
**Improving recovery from injuries and trauma**  
3.3 Survival from major trauma  
**Improving recovery from fragility fractures**  
3.5 Proportion of patients recovering to their previous levels of mobility/walking ability at i 30 and ii 120 days  
**Helping older people to recover their independence after illness or injury**  
3.6 i Proportion of older people (65 and over) who were still at home 91 days after discharge from hospital into reablement/rehabilitation service*  
i Proportion offered rehabilitation following discharge from acute or community hospital |
4 Ensuring that people have a positive experience of care

**Overarching indicators**
- 4b Patient experience of hospital care
- 4c Friends and family test
- 4d Patient experience characterised as poor or worse
  - i Primary care
  - ii Hospital care

**Improvement areas**
- Improving people’s experience of hospital care
- Improving hospitals’ responsiveness to personal needs
- Improving people’s experience of accident and emergency services

5 Treating and caring for people in a safe environment and protecting them from avoidable harm

**Overarching indicators**
- 5a Deaths attributable to problems in healthcare
- 5b Severe harm attributable to problems in healthcare

**Improvement areas**
- Reducing the incidence of avoidable harm

<table>
<thead>
<tr>
<th>Alignment with Adult Social Care Outcomes Framework and/or Public Health Outcomes Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Indicator is shared</td>
</tr>
<tr>
<td>Indicators in italics in development</td>
</tr>
</tbody>
</table>

### Table 2 The Adult Social Care Outcomes Framework 2015–16

<table>
<thead>
<tr>
<th>Domain</th>
<th>Overarching and outcome measures</th>
</tr>
</thead>
</table>
| 2 Delaying and reducing the need for care and support | **Overarching measure**
  - 2A Permanent admissions to residential and nursing care homes, per 100,000 population

**Outcome measures**
- Everybody has the opportunity to have the best health and wellbeing throughout their life, and can access support and information to help them manage their care needs
- Earlier diagnosis, intervention and reablement means that people and their carers are less dependent on intensive services
  - 2B Proportion of older people (65 and over) who were still at home 91 days after discharge from hospital into
**Quality standard for hip fracture**

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**Alignment with NHS Outcomes Framework and/or Public Health Outcomes Framework**

* Indicator is shared

Indicators in italics in development

<table>
<thead>
<tr>
<th>Domain</th>
<th>Objectives and indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Healthcare public health and preventing premature mortality</td>
<td><strong>Objective</strong> Reduced numbers of people living with preventable ill health and people dying prematurely, whilst reducing the gap between communities <strong>Indicators</strong> 4.11 Emergency readmissions within 30 days of discharge from hospital* 4.13 Health-related quality of life for older people 4.14 Hip fractures in people aged 65 and over</td>
</tr>
</tbody>
</table>

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**Table 3** Public health outcomes framework for England, 2013–16

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**Safety and people’s experience of care**

Ensuring that care is safe and that people have a positive experience of care is vital in a high-quality service. It is important to consider these factors when planning and delivering services relevant to hip fracture.

NICE has developed guidance and an associated 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 this quality standard.

They specify that people receiving care should be treated with dignity, have opportunities to discuss their preferences, and be supported to understand their options and make fully informed decisions. They also cover the provision of...
information to people using services. Quality statements on these aspects of patient experience are not usually included in topic-specific quality standards. However, recommendations in the development sources for quality standards that affect people’s experience of using services and are specific to the topic are considered during quality statement development.

**Coordinated services**

The quality standard for hip fracture specifies that services should be commissioned from and coordinated across all relevant agencies encompassing the whole hip fracture care pathway. A person-centred, integrated approach to providing services is fundamental to delivering high-quality care to adults with hip fracture in secondary care.

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 a high-quality hip fracture service 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 practitioners involved in assessing, caring for and treating people with hip fracture should have sufficient and appropriate training and competencies to deliver the actions and interventions described in the quality standard. Quality statements on staff training and competency are not usually included in quality standards. However, recommendations in the development source(s) on specific types of training for the topic that exceed standard professional training are considered during quality statement development.

**Role of families and carers**

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

**Resource impact**

The resource impact and affordability of achieving the quality statements is considered during development. Information is provided for each statement to help organisations to assess the local resource impact.

**List of quality statements**

**Statement 1.** Adults presenting with hip fracture receive prompt pain management that is based on an assessment of their pain. [2012, updated 2016]

**Statement 2.** Adults with hip fracture have surgery on the day of, or the day after, admission under the supervision of senior surgeons and anaesthetists. [2012, updated 2016]

**Statement 3.** Adults with displaced intracapsular hip fracture receive cemented arthroplasty, and those who are assessed as clinically eligible are offered a total hip replacement. [2012, updated 2016]

**Statement 4.** Adults with hip fracture start daily mobilisation on the day after surgery. [2012, updated 2016]

**Statement 5.** Adults with hip fracture are offered a formal orthogeriatric-led Hip Fracture Programme when admitted to hospital. [2012, updated 2016]

**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 the data for the proposed quality measures? If not, how feasible would it be for these systems and structures to be put in place?
**Question 3** Do you have an example from practice of implementing the NICE guideline(s) that underpins this quality standard? If so, please submit your example to the [NICE local practice collection](#) on the NICE website. Examples of using NICE quality standards can also be submitted.

**Question 4** Do you think each of the statements in this draft quality standard would be achievable by local services given the net resources required 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 5** For draft quality statement 2: Do most hip fracture surgeries currently take place under the supervision of senior staff?
Quality statement 1: Pain management

**Quality statement**

Adults presenting with hip fracture receive prompt pain management that is based on an assessment of their pain. [2012, updated 2016]

**Rationale**

Pain management is very important when a person presents with hip fracture to minimise the associated discomfort and physiological stress. People experience and tolerate pain differently, and so a pain assessment is needed to determine the degree of pain management needed for a person. Getting the appropriate and adequate pain relief allows the person to perform movements necessary for interventions and nursing care, reducing the need for opiate drugs and generally making the period till surgery more bearable.

**Quality measures**

**Structure**

Evidence of local arrangements to ensure that people presenting with hip fracture receive prompt pain management that is based on an assessment of their pain.

**Data source:** Local data collection.

**Process**

a) Proportion of presentations of hip fracture where pain is assessed immediately on presentation to accident and emergency (A&E) department.

Numerator – The number in the denominator in which pain is assessed immediately on presentation to accident and emergency.

Denominator – The number of presentations of hip fracture in the A&E department.

**Data source:** Local data collection.

b) Proportion of presentations of hip fracture in which the person is given paracetamol as first-line analgesia on admission.
Numerator – the number in the denominator in which the person is given paracetamol as first-line analgesia on admission.

Denominator – the number of presentations of hip fracture.

**Data source:** Local data collection.

c) Proportion of presentations of hip fracture in which the person receives pain assessment within 30 minutes of initial analgesic administration.

Numerator – The number in the denominator in which the person receives pain assessment within 30 minutes of initial analgesic administration.

Denominator – The number of presentations of hip fracture.

**Data source:** Local data collection.

d) Proportion of surgeries for hip fracture where the person receives paracetamol as first-line analgesia every 6 hours preoperatively.

Numerator – the number of presentations in the denominator for which the person receives paracetamol as first-line analgesia every 6 hours preoperatively.

Denominator – the number of surgeries for hip fracture.

**Data source:** Local data collection.

**Outcome**

a) Patient satisfaction with pain management.

**Data source:** Local data collection.

b) Post-operative patient mobilisation.

**Data source:** Local data collection.
What the quality statement means for service providers, healthcare professionals and commissioners

Service providers ensure that systems are in place for people presenting with hip fracture to receive prompt pain management that is based on an assessment of their pain.

Healthcare professionals (such as specialists and nurses) follow written clinical protocols to ensure that people presenting with hip fracture receive prompt pain management that is based on an assessment of their pain.

Commissioners (such as clinical commissioning groups and NHS England) ensure that they commission services that have written protocols for people presenting with hip fracture to receive prompt pain management that is based on an assessment of their pain.

What the quality statement means for patients, service users and carers

People admitted to hospital with hip fracture receive pain relief quickly after fracturing their hip and until they have an operation. The type and amount of pain relief should be based on an assessment of their pain.

Source guidance

- Hip fracture: management (2011) NICE guideline CG124, recommendations 1.3.1-5, 1.3.7 and 1.3.8.

Resource impact considerations

No significant resource impact is anticipated to result from providing prompt and effective pain management to people with hip fracture.

Definitions of terms used in this quality statement

Assessment of their pain

The person’s pain should be measured using a pain assessment tool and recorded. It should include assessment of the impact of pain on movement, and re-assessment
should be carried out after pain relief is given. The assessment should take into account the rehabilitation and medical needs of the individual. [Expert opinion]

**Equality and diversity considerations**

Some patients with hip fracture may be unable to express their pain, either because of cognitive impairment, delirium or an underlying expressive dysphasia. Healthcare professionals need to take those factors into account when they are assessing pain.
Quality statement 2: Timing of surgery with senior supervision

Quality statement

Adults with hip fracture have surgery on the day of, or the day after, admission under the supervision of senior surgeons and anaesthetists. [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, length of hospital stay and return to mobility. Therefore, it is important to avoid any unnecessary delays. Senior staff supervision can help to reduce the risk of complications during the surgery.

Quality measures

Structure

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

Data source: Local data collection.

b) Evidence of local arrangements to ensure that people with hip fracture have surgery under the supervision of senior surgeons and anaesthetists.

Data source: Local data collection.

Process

b) Proportion of surgeries 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 surgeries for hip fracture.
**Data source:** Local data collection. The Health and Social Care Information Centre’s *Compendium of Clinical and Health Indicators* records emergency hospital admissions and timely surgery: fractured proximal femur.

b) Proportion of surgeries for hip fracture that are performed under the supervision of senior surgeons and anaesthetists.

Numerator – the number in the denominator that are performed under the supervision of senior surgeons and anaesthetists.

Denominator – the number of surgeries for hip fracture.

**Data source:** Local data collection. The *National Hip Fracture Database* records data on the level of senior cover during the operation.

**Outcome**

a) Post-operative complications.

**Data source:** Local data collection.

b) Pain control following hip fracture.

**Data source:** Local data collection.

c) Post-operative delirium.

**Data source:** Local data collection.

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

**Data source:** Local data collection.

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

**Data source:** Local data collection.

f) Mortality of people with hip fracture.

**Data source:** Local data collection.
**What the quality statement means for service providers, healthcare professionals and commissioners**

**Service providers** (hospitals) ensure that systems are in place for people with hip fracture to have surgery on the day of, or the day after, admission under the supervision of senior surgeons and anaesthetists.

**Healthcare professionals** (such as specialists, orthogeriatricians and anaesthetists) ensure that people with hip fracture have surgery on the day of, or the day after, admission under the supervision of senior surgeons and anaesthetists.

**Commissioners** (such as clinical commissioning groups and NHS England) ensure that they commission services that have systems in place for people with hip fracture to have surgery on the day of, or the day after, admission under the supervision of senior surgeons and anaesthetists.

**What the quality statement means for patients, service users and carers**

People admitted to hospital with hip fracture have an operation on the day they are admitted or the next day. The operation is supervised by senior surgeons and anaesthetists.

**Source guidance**

- [Hip fracture: management](#) (2011) NICE guideline CG124, recommendations 1.2.1 (key priority for implementation) and 1.5.2.

**Resource impact considerations**

The number of operations performed for people with a hip fracture having surgery on the day of, or the day after, admission is increasing (from 65% in 2012 to 72.1% in 2015). However the hip fracture database indicates wide variations across the country (from 14.7% to 95.3%) so a resource impact is anticipated in some areas.

Performing surgery on the day of, or the day after, admission is expected to be achieved by creating additional theatre capacity. There will be no additional activity, therefore the costs would affect the provider.
The costing report and costing template for NICE’s guideline on hip fracture estimated an annual cost of £6.9 million in England for implementing the recommendation on timing of surgery.

This is based on the following assumptions:

- Around 70% of people with hip fracture already have surgery on the day of, or the day after admission.
- Around 90% of people with hip fracture are expected to have surgery on the day of, or the day after admission in the future.
- 6,084 additional theatre lists would be required in England.
- The cost of an additional theatre list is estimated to be £1,128, comprising both pay and non-pay costs.

Where current practice is for all people with hip fracture have surgery on the day of, or the day after, admission under the supervision of senior staff, it is not anticipated that there will be any additional resource impact of this quality statement.

However, where it is not current practice, the average additional cost for a local population of 100,000 people is £13,400 based on 12 additional lists.

Costs may be offset by additional income from best practice tariff for hip fracture. This is made up of two components: a base tariff and a conditional payment. The base tariff is payable for all activity irrespective of whether the characteristics of best practice were met. The conditional payment is payable if all seven characteristics (one of which is ‘time to surgery within 36 hours’) are achieved. The conditional payment is £1,339 for 2015/16.

Achievement of the quality statements for timing of surgery, mobilisation strategies and multi-disciplinary management are together anticipated to result in more efficient management of adults with hip fracture and may lead to a reduction in length of stay. It is not possible to estimate the potential savings to provider organisations from a reduced length of stay because different acute hospitals transfer different proportions of patients for postoperative care or rehabilitation. Such rehabilitation beds might include hospitals closer to the patients’ homes, specialist rehabilitation units, community trusts and NHS-funded care home beds. Currently, there is a lack of
sufficient data around rehabilitation length of stay. Organisations are encouraged to review their own services to calculate potential savings from increased efficiency and reduced length of stay.

**Questions for consultation**

Do most hip fracture surgeries currently take place under the supervision of senior surgeons and anaesthetists?
Quality statement 3: Intracapsular fracture

**Quality statement**
Adults with displaced intracapsular hip fracture receive cemented arthroplasty, and those who are assessed as clinically eligible are offered a total hip replacement. [2012, updated 2016]

**Rationale**
Cemented arthroplasty is a preferred option for adults with displaced intracapsular fracture because it can result in less pain and reduced need for surgical revision than other options. It is usually carried out by hemiarthroplasty, but may also be carried out by total hip replacement in people who are clinically eligible for the procedure. Total hip replacement may prevent the need for further surgery in the future. This saves the discomfort and risks associated with additional surgery as well as the cost for the health service.

**Quality measures**

**Structure**
Evidence of local arrangements to ensure that people with displaced intracapsular fracture receive cemented arthroplasty, with the offer of total hip replacement if assessed as clinically eligible.

*Data source:* Local data collection.

**Process**
a) Proportion of presentations of displaced intracapsular fracture for which the person receives cemented arthroplasty.

Numerator – the number in the denominator for which the person receives cemented arthroplasty.

Denominator – the number of presentations of displaced intracapsular fracture.

*Data source:* Local data collection. The [National Hip Fracture Database](https://www.nationalhipfracturedatabase.org/) records procedure type for intracapsular displaced fracture and cementing of arthroplasties.
b) Proportion of presentations of displaced intracapsular fracture for which the person receives total hip replacement if they are assessed as clinically eligible.

Numerator – the number in the denominator for which the person receives total hip replacement.

Denominator – the number of presentations of displaced intracapsular fractures where the person is eligible for total hip replacement.

**Data source:** Local data collection. The [National Hip Fracture Database](https://www.hipfracturedatabase.org) records procedure type for intracapsular displaced fracture and cementing of arthroplasties.

**Outcome**

Number of people with hip fracture receiving total surgical revision.

**Data source:** Local data collection.

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

**Service providers** (such as hospitals) ensure that systems are in place for people with displaced intracapsular fracture to receive cemented arthroplasty, with the offer of total hip replacement if they are assessed as clinically eligible.

**Healthcare professionals** (specialists and orthogeriatricians) ensure that people with displaced intracapsular fracture receive cemented arthroplasty, with the offer of total hip replacement if they are assessed as clinically eligible.

**Commissioners** (such as clinical commissioning groups and NHS England) ensure that they commission services where people with displaced intracapsular fracture receive cemented arthroplasty, with the offer of total hip replacement if assessed as clinically eligible.

### What the quality statement means for patients, service users and carers

People admitted to hospital with a fracture inside the socket of their hip joint and where the bones have moved out of position (called a displaced
**intracapsular fracture** have an operation to replace the broken part of the hip joint (the ‘ball’ of the joint) with an artificial part. However, some people are offered a total hip replacement operation to replace both parts of the hip joint (the ball and socket) with artificial parts. This is a bigger operation and only people who are fit and active before the fracture and are assessed as well enough to have the operation are offered this.

**Source guidance**

- [Hip fracture: management](https://www.nice.org.uk/guidance/cg124) (2011) NICE guideline CG124, recommendations 1.6.2, 1.6.3 (key priorities for implementation) and 1.6.5.

**Definitions of terms used in this quality statement**

**Cemented arthroplasty**

Surgical procedure for hip replacement that involves the use of cement to fill the gaps between the metal prosthesis and the bone. [Hip fracture](https://www.nice.org.uk/guidance/cg124) (NICE full guideline CG124)

**Clinically eligible**

Total hip replacements should be offered to patients with a displaced intracapsular fracture who:

- were able to walk independently out of doors with no more than the use of a stick
  and
- are not cognitively impaired and
- are medically fit for anaesthesia and the procedure.

[Hip fracture: management](https://www.nice.org.uk/guidance/cg124) (NICE guideline CG124) recommendation 1.6.3

**Intracapsular fractures**

Fractures above the insertion of the capsular attachment of the hip joint are called intracapsular. [Hip fracture](https://www.nice.org.uk/guidance/cg124) (NICE full guideline CG124)
Resource impact considerations

The National Hip Fracture Database annual report 2015 states that, in England, 11,722 adults (18.2% of all hip fractures) met the clinical criteria to be offered a total hip replacement, but only 26.1% (around 3,000) of these adults had the procedure.

No additional costs are anticipated for commissioners because the tariff payment for total hip replacement is the same as for hemiarthroplasty (HA11 Major Hip Procedures for Trauma Category 2).

There would be an additional cost for the purchase of metallic head implants used for total hip replacement of between £91 and £909 each (NHS Supply Chain catalogue). However, overall the health economic evidence included within the full guideline showed that total hip replacement is cost saving compared to hemiarthroplasty when costs of prostheses and reoperation were considered. The mean cost for providers for hemiarthroplasty was found to be £9,897 and the mean cost of total hip replacement was found to be £9,399.

It is anticipated that there would be savings for providers if more people who are clinically eligible have a total hip replacement. For example, if the proportion of eligible people receiving total hip replacement increased from 26.1% to 70% the number of people in England receiving total hip replacement each year would increase from around 3,000 to around 8,200, saving approximately £2.6 million in England each year. In a population of 100,000 the number of people receiving total hip replacement each year would increase from around 6 to around 16, saving approximately £5,000 each year.

It is anticipated that there would be savings for commissioners if more people who are clinically eligible have a total hip replacement because of a reduction in tariff payments for readmission and reoperation.

Equality and diversity considerations

Healthcare professionals should be aware that some people with hip fracture may have additional needs in understanding the information given to them which can affect whether they choose total hip replacement. This includes people with learning disabilities and those who are not fluent in English.
Quality statement 4: Mobilisation after surgery

Quality statement

Adults with hip fracture start daily mobilisation on 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. People who have had hip fracture surgery should have a physiotherapist assessment to ensure that early mobilisation is not contraindicated. People should be offered support with mobilisation at least every day while in hospital and this should continue once they are discharged from hospital. Effective post-operative analgesia can help with early mobilisation.

Quality measures

Structure

Evidence of local arrangements to ensure that people with hip fracture start daily mobilisation on the day after surgery.

Data source: Local data collection.

Process

Proportion of hip fracture surgeries after which people start daily mobilisation on the day after surgery, if they have no contraindications for physiotherapy.

Numerator – the number in the denominator where people start daily mobilisation from the day after surgery.

Denominator – the number of hip fracture surgeries after which the person has no contraindications for physiotherapy.

Data source: Local data collection.
Outcome

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

*Data source:* Local data collection.

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

*Data source:* Local data collection.

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

*Data source:* Local data collection.

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

**Service providers** (such as hospitals) ensure that systems are in place for people with hip fracture to start daily mobilisation on the day after surgery.

**Healthcare professionals** (such as physiotherapists and nurses) ensure that they offer daily mobilisation starting on the day after surgery to people with hip fracture.

**Commissioners** (such as clinical commissioning groups and NHS England) ensure that they commission services in which people with hip fracture start daily mobilisation on the day after surgery.

**What the quality statement means for patients, service users and carers**

People who have had an operation to treat a hip fracture are offered support to start exercises on the day after their operation, unless there is a medical or surgical reason not to. The exercises (called mobilisation) are to improve movement, strength and help with their recovery.

**Source guidance**

- [Hip fracture: management](#) (2011) NICE guideline CG124, recommendations 1.7.1 and 1.7.2.
Definitions of terms used in this quality statement

Mobilisation
Mobilisation is the process of re-establishing the ability to move between postures (for example to stand), maintain an upright posture, and to ambulate with increasing levels of complexity (speed, changes of direction, dual and multi-tasking). [Hip fracture (NICE full guideline CG124)]

Contraindications to mobilisation
Physiotherapist assessment determines whether the patient is not suitable for early mobilisation. For some people, mobilisation may be contraindicated because they were unable to walk before the operation, they have severe pain or they have excessive fatigue. Sometimes the operating surgeon may give instruction not to mobilise the patient for a period of time. [Hip fracture (NICE full guideline CG124) and expert opinion]

Resource impact considerations
The costing report and costing template for NICE’s guideline on hip fracture estimated that offering mobilisation strategies to all people having hip fracture surgery in England would have an annual cost of £4.4 million.

This is based on the following assumptions:

- Mobilisation involves a physiotherapist or occupational therapist.
- Around 70% of people with hip fracture already receive daily mobilisation.
- Around 90% of people with hip fracture are expected to receive daily mobilisation in the future.
- An average of 8.5 hours of physiotherapist time is needed per patient, costing £235.
- An average of 5 hours of occupational therapist time is needed per patient, costing £138.

Where hospitals already have arrangements in place to ensure that people with hip fracture receive daily mobilisation (including weekends and public holidays) starting on the day after surgery, no additional resource impact is anticipated.
Where this is not current practice, the estimated additional cost, based on the assumptions above, is £8,500 for a population of 100,000 people. Where the mobilisation is provided by other healthcare staff members following an initial assessment by a physiotherapist, the additional cost may be lower.

However, there should be cost savings associated with an earlier recovery, which may lead to a reduced length of stay. It is not possible to estimate the potential savings to provider organisations from a reduced length of stay because different acute hospitals transfer different proportions of patients for postoperative care or rehabilitation. Such rehabilitation beds might include hospitals closer to the patients’ homes, specialist rehabilitation units, community trusts and NHS-funded care home beds. Currently, there is a lack of sufficient data around rehabilitation length of stay. Organisations are encouraged to review their own services to calculate potential savings from increased efficiency and reduced length of stay.

**Equality and diversity considerations**

Healthcare professionals should be aware that some people with hip fracture may have additional needs in understanding the information given to them which can determine whether they fully understand the purpose of early mobilisation. This includes adults with learning disabilities, cognitive impairment and those who are not fluent in English.
Quality statement 5: Multidisciplinary management

**Quality statement**

Adults with hip fracture are offered a formal orthogeriatric-led Hip Fracture Programme when admitted to hospital. [2012, updated 2016]

**Rationale**

Hip fracture patients often have comorbidities and complex care needs. The multidisciplinary input of the Hip Fracture Programme, with regular assessment and continuous rehabilitation, has been found to better meet those needs and lead to reduction in mortality and readmission to hospital. In addition, the orthogeriatrician has a key role in the integration of initial assessment and perioperative care as most people with hip fracture have comorbidities. This does not apply to people with high-energy hip fracture.

**Quality measures**

**Structure**

Evidence of local arrangements to ensure that people with hip fracture are offered a formal orthogeriatric-led Hip Fracture Programme on admission to hospital.

*Data source:* Local data collection

**Process**

a) Proportion of presentations of hip fracture where the person receives care through a formal orthogeriatric-led Hip Fracture Programme on admission to hospital.

Numerator – the number in the denominator where the person receives care through a formal orthogeriatric-led Hip Fracture Programme on admission to hospital.

Denominator – the number of presentations of hip fracture for which the person is admitted to hospital.

*Data source:* Local data collection and the National Hip Fracture Database.
b) Proportion of presentations of hip fracture where the person receives an orthogeriatric assessment.

Numerator – the number in the denominator where the person receives an orthogeriatric assessment.

Denominator – the number of presentations of hip fracture.

*Data source:* Local data collection and the [National Hip Fracture Database](https://www.ahrq.gov/clinic/summaries/hipfracture/index.html).

c) Proportion of presentations of hip fracture where the person receives rapid optimisation of fitness for surgery.

Numerator – the number in the denominator where the person receives rapid optimisation of fitness for surgery.

Denominator – the number of presentations of hip fracture.

*Data source:* Local data collection and the [National Hip Fracture Database](https://www.ahrq.gov/clinic/summaries/hipfracture/index.html).

d) Proportion of presentations of hip fracture where the person has early identification of their goals for multidisciplinary rehabilitation.

Numerator – the number in the denominator where the person has early identification of their goals for multidisciplinary rehabilitation.

Denominator – the number of presentations of hip fracture.

*Data source:* Local data collection and the [National Hip Fracture Database](https://www.ahrq.gov/clinic/summaries/hipfracture/index.html).

e) Proportion of presentations of hip fracture where the person has orthogeriatric and multidisciplinary review.

Numerator – the number in the denominator where the person has orthogeriatric and multidisciplinary review.

Denominator – the number of presentations of hip fracture.

*Data source:* Local data collection and the [National Hip Fracture Database](https://www.ahrq.gov/clinic/summaries/hipfracture/index.html).
Outcome

a) Mortality for people with hip fracture.

Data source: Local data collection.

b) Hospital readmissions for people with hip fracture.

Data source: Local data collection.

b) Morbidity for people with hip fracture.

Data source: Local data collection.

b) Hospital length of stay for people with hip fracture.

Data source: Local data collection.

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

Service providers (such as hospitals) ensure that systems are in place that offer people with hip fracture a formal orthogeriatric-led Hip Fracture Programme on admission to hospital.

Healthcare professionals (such as orthogeriatricians, nurses and social workers) ensure that people with hip fracture receive care through a formal orthogeriatric-led Hip Fracture Programme on admission to hospital.

Commissioners (such as clinical commissioning groups and NHS England) ensure that they commission hip fracture services with a formal orthogeriatric-led Hip Fracture Programme and that these are offered to people with hip fracture on admission to hospital.

What the quality statement means for patients, service users and carers

People with hip fracture are offered a programme of care, called a Hip Fracture Programme, when they are admitted to hospital. This involves a team of healthcare professionals with different skills working together to provide care, and is led by a
specialist in the care of older people with hip fractures (an orthogeriatrician). Hip Fracture Programmes include regular assessment, and coordination of care and rehabilitation in hospital and after discharge.

**Source guidance**


**Definitions of terms used in this quality statement**

**Hip Fracture Programme**

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.

[Hip fracture](https://www.nice.org.uk/guidance/cg124) (NICE full guideline CG124)

**Orthogeriatrician**

A doctor specialising in the care of the elderly with an interest in fracture care.

[expert opinion]
Resource impact considerations

The costing report and costing template for NICE’s guideline on hip fracture estimated an additional annual cost for commissioners in England of £4.1 million for implementing the recommendation on orthogeriatric-led multidisciplinary management. This is based on the following assumptions:

- Orthogeriatric assessment is the only component of multidisciplinary management that was anticipated to have a significant resource impact.
- 33% of people with hip fracture were assessed preoperatively by a geriatrician (based on the 2010 National Hip Fracture Database).
- 90% of people with hip fracture will receive orthogeriatrician-led multidisciplinary management in the future.
- Each additional orthogeriatrician consultation costs £122.75.

The National Hip Fracture Database 2015 reports that 85.3% of people with hip fracture now receive orthogeriatrician assessment in the perioperative period, however there are some units that still do not have an orthogeriatric service.

For units that do not currently have a service, the estimated additional cost is £12,500. Where units currently have an orthogeriatrician-led Hip Fracture Programme, there are not anticipated to be any additional costs.

The health economic evaluation in the full guideline on hip fracture found that any additional costs of hospital multidisciplinary rehabilitation are likely to be offset by:

- a reduction in the acute hospital stay costs, including those associated with complications such as delirium and pressure sores
- a reduction in the level of domiciliary social care costs as a result of improved independence in activities of daily living
- a reduction in costs for long-term care in a residential or a nursing home.

Equality and diversity considerations

Health and social care practitioners should be aware that some people with hip fracture may have additional needs in understanding the information given to them.
This includes people with learning disabilities, cognitive impairment and those who are not fluent in English.
Status of this quality standard

This is the draft quality standard released for consultation from 5 April to 4 May 2016. It is not NICE’s final quality standard on hip fracture. 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 4 May 2016. 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 August 2016.

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.

NICE’s quality standard service improvement template helps providers to make an initial assessment of their service compared with a selection of quality statements. It includes assessing current practice, recording an action plan and monitoring quality improvement.

**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 [add correct link] are available.

Good communication between health, public health and social care practitioners and people with hip fracture is essential. Treatment, care and support, and the information given about it, should be culturally appropriate. It should also be accessible to people with additional needs such as physical, sensory or learning disabilities, and to people who do not speak or read English. People with hip fracture in hospital 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.
**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.

- **Hip fracture: management** (2011) NICE guideline CG124

**Policy context**

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

- Royal College of Physicians (2015) *Secondary fracture prevention: first steps to a national audit*
- **Hip fracture** [QS16] (2015) NICE uptake data

**Definitions and data sources for the quality measures**

- Health and Social Care Information Centre, *Compendium of Clinical and Health Indicators*

**Related NICE quality standards**

**Published**

- **Falls in older people** (2015) NICE quality standard 86
- **Delirium in adults** (2014) NICE quality standard 63

**In development**

- **Falls: prevention**. Publication expected January 2017

**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:

- Falls: regaining independence for older people who experience a fall
- Osteoporosis
- Regaining independence (Reablement): short term interventions to help people to regain independence

The full list of quality standard topics referred to NICE is available from the quality standards topic library on the NICE website.

**Quality Standards Advisory Committee and NICE project team**

**Quality Standards Advisory Committee**

This quality standard has been developed by Quality Standards Advisory Committee 4. Membership of this committee is as follows:

**Miss Alison Allam**
Lay member

**Dr Harry Allen**
Consultant Old Age Psychiatrist, Manchester Mental Health and Social Care Trust

**Mrs Moyra Amess**
Associate Director, Assurance and Accreditation, CASPE Health Knowledge Systems

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Neurology Nurse Consultant, Nationwide

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Primary Care Pharmacist, NHS Bath and North East Somerset

Mr Michael Varrow  
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Mr David Weaver
Head of Quality and Safety, North Kent Clinical Commissioning Group

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

Mr Tim Chesser
Consultant Trauma and Orthopaedic Surgeon, North Bristol NHS Trust

Miss Ruth Halliday
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Dr Antony Johansen
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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 has been incorporated into the NICE pathway on hip fracture.

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.

Update information

In 2016, this quality standard was updated and statements prioritised in 2012 were replaced.
Statements are marked as [2012, updated 2016] because the statement covers an area for quality improvement included in the 2012 quality standard and has been updated.

Statements numbered 1, 4, 5, 7 and 9 in the 2012 version have been updated and included in the updated quality standard, marked as [2012, updated 2016].

The statements below from the 2012 version (numbered 2, 3, 6, 8, 10, 11 and 12) are no longer considered national priorities for improvement but may still be useful at a local level:

- The Hip Fracture Programme team retains a comprehensive and continuing clinical and service governance lead for all stages of the pathway of care, including the policies and criteria for both intermediate care and early supported discharge.
- People with hip fracture have their cognitive status assessed, measured and recorded from admission.
- People with hip fracture have their surgery scheduled on a planned trauma list, with consultant or senior staff supervision.
- People with trochanteric fractures above and including the lesser trochanter (AO classification types A1 and A2) receive extramedullary implants such as a sliding hip screw in preference to an intramedullary nail.
- People with hip fracture are offered early supported discharge (if they are eligible), led by the Hip Fracture Programme team.
- People with hip fracture are offered a multifactorial risk assessment to identify and address future falls risk, and are offered individualised intervention if appropriate.
- People with hip fracture are offered a bone health assessment to identify future fracture risk and offered pharmacological intervention as needed before discharge from hospital.

A pdf version of the 2012 quality standard is available here.

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