

Hip fracture rehabilitation in physiotherapy practice: From hospital to home.

Setting CSP standards for high quality rehabilitation after hip fracture to help transform lives and maximising independence

Hip fracture is a serious life-changing injury that affects older people (60 years old +). It is an emergency event the commonest reason that older people need emergency anaesthesia and surgery. More people are living longer following a hip fracture. This means that there is a growing focus on the quality of rehabilitation provided during recovery.

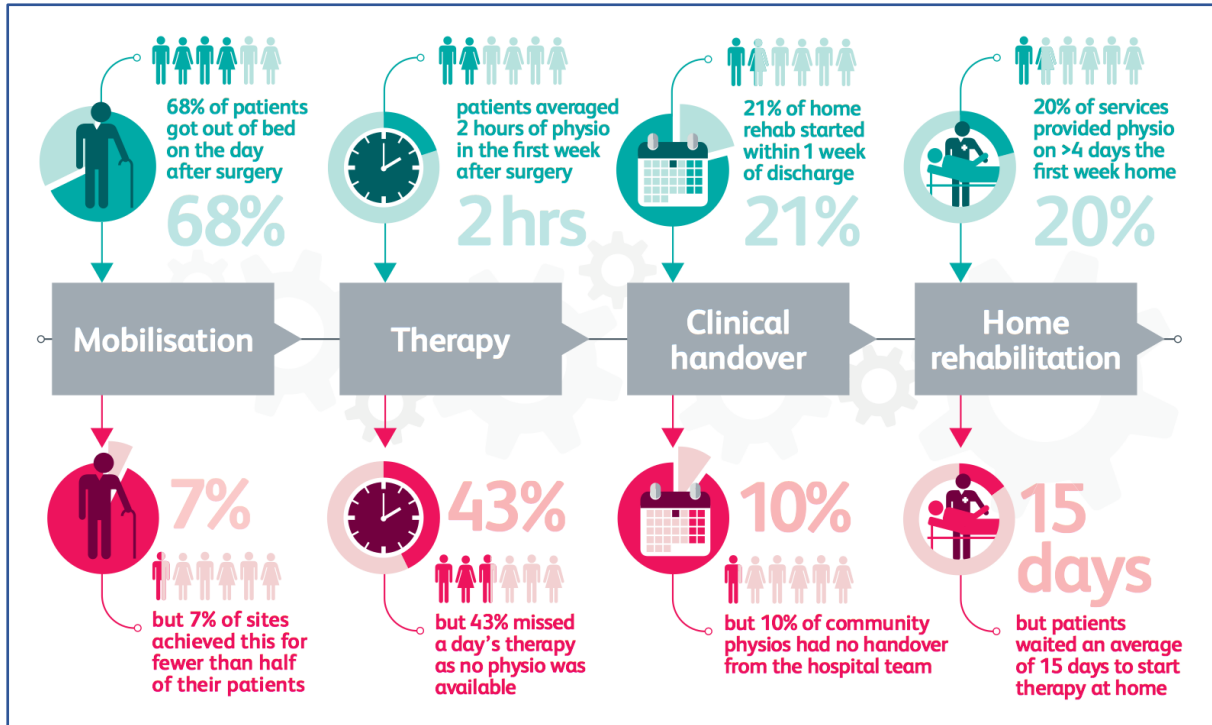
In 2017, the CSP commissioned the Royal College of Physicians to undertake a ‘sprint’ audit of hip fracture rehabilitation provision (1). The sprint audit involved over 130 Acute Trusts, with over 7000 patients with a hip fracture captured by the audit. Patients were followed from their acute stay, through next steps care and into community settings. This gave us the first national snapshot of hip-fracture rehabilitation provision in England and Wales.

The Hip Sprint audit, published in February 2018¹, found wide variations in the extent, quality and duration of hip-fracture rehabilitation. This has prompted the CSP to create new standards for hip fracture rehabilitation from the recommendations of the Hip Sprint audit. They link to existing quality standards and guidelines that are relevant to the rehabilitation of patients with hip fracture. These standards will enable physiotherapy teams to deliver high quality evidence based rehabilitation to their patients, and decrease the national variation currently occurring in hip fracture rehabilitation.

The hip-fracture standards at a glance:

1	A physiotherapist assesses all patients on the day of, or day following, hip fracture surgery
2	All patients are mobilised on the day of, or day following, hip fracture surgery.
3	All patients receive daily physiotherapy that should total at least two hours in the first 7 days post-surgery.
4	All patients receive at least two hours of rehabilitation in subsequent weeks post-surgery until they have achieved their goals.
5	All patients moving from hospital to the next phase of rehabilitation are seen by their new rehabilitation provider within 72 hours.
6	A physiotherapist is part of every Hip Fracture Programme’s monthly clinical governance meeting.
7	Physiotherapists share their assessment findings and rehabilitation plans with all rehabilitation providers to enable clear communication with the MDT.

The key findings from HipSprint audit summarised:



Access data about your local service

<https://www.fffap.org.uk/FFFAP/landing.nsf/phfsa.html>

Find out about hip fracture rehabilitation in your local area by accessing the HipSprint heat-map of services. Search the map for trusts, hospitals, community centres and other physiotherapy services. Compare the data from your own service with other services and the new HipSprint standards to help you identify where local quality improvement works needs to be focused.

Further information:

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Standard 1:

A physiotherapist assesses all patients on the day of, or day following, hip fracture surgery.

Indicators:

- a. A registered physiotherapist must perform the assessment.
- b. The assessment may occur either before or after the operation.
- c. The NHFD data processor is able to identify the specific assessment of the physiotherapist for the purposes of NHFD data entry.
- d. A clear and consistent method for recording the initial physiotherapist assessment is in place.
- e. The physiotherapist assessment is shared with the MDT to facilitate clear communication and efficient care-planning.
- f. A physiotherapist may undertake a delirium assessment using the 4AT screening tool.
- g. A physiotherapist may undertake the multifactorial fracture prevention assessment (falls and bone health).

Evidence:

National Tariff Payment System 2018-19 for Hip Fracture
https://improvement.nhs.uk/documents/1044/2017-18_and_2018-19_National_Tariff_Payment_System.pdf

National Institute for Health and Clinical Excellence. *Hip Fracture: Management* CG124. London: National Institute for Health and Clinical Excellence 2011.
<https://www.nice.org.uk/guidance/cg124>

National Institute for Health and Clinical Excellence. *Delirium: Prevention, diagnosis and management* CG103. London: National Institute for Health and Clinical Excellence 2010.
<https://www.nice.org.uk/guidance/cg103>

National Institute for Health and Clinical Excellence. *Falls in older people: Assessing risk and prevention* CG161. London: National Institute for Health and Clinical Excellence 2013.
<https://www.nice.org.uk/guidance/cg161>

Note:

In England and Wales, to receive full Best Practice Tariff payment under National Hip Fracture Database (NHFD) hospitals must ensure a registered physiotherapist undertakes a direct assessment of the patient. Subsequent care and rehabilitation may be delegated to

members of the physiotherapy team where appropriate. Patients experiencing dementia, delirium, poor pain control or other complicating factors, either pre- or post-operatively may require continued assessment and review from a registered physiotherapist as a part of a multidisciplinary approach to care.

Standard 2:

All patients are mobilised on the day of, or the day following, hip fracture surgery.

Indicators:

- a. Any healthcare worker may perform the task of getting a patient out of bed.
- b. The type of worker(s) involved in getting the patient out of bed is accurately identified.
- c. A clear and consistent method for recording getting out of bed is in place.
- d. The NHFD data processor is able to identify when a patient gets out of bed for the purposes of NHFD data entry.
- e. A physiotherapist leads modifying physiotherapy treatment plans to enable patients experiencing dementia, delirium, pain and hypotension to get out of bed on the day of, or the day following, hip fracture surgery, where possible.
- f. A physiotherapist reviews any patient who does not mobilise within 24 hours.

For patients who do not get out of bed on the day of, or the day following, hip fracture surgery:

- g. A clear record is made of the reason why a patient does not mobilise within 24 hours.
- h. A physiotherapist is involved in the Multidisciplinary Team (MDT) discussion to address the reasons for extended bed-rest.
- i. A clear physiotherapy action plan with timescales is in place to manage the clinical conditions that prevent a patient getting out of bed on the day of, or the day following, hip fracture surgery.
- j. There is a specific range of motion exercise programme in place for patients experiencing delirium

Evidence:

National Institute for Health and Clinical Excellence. *Hip Fracture: Management* CG124. London: National Institute for Health and Clinical Excellence 2011.

<https://www.nice.org.uk/guidance/cg124>

National Institute for Health and Clinical Excellence. *Delirium: Prevention, diagnosis and management* CG103. London: National Institute for Health and Clinical Excellence 2010.

Standard 3:

All patients receive daily physiotherapy which should equal at least two hours overall in the first 7 days post-surgery

Indicators:

- a. The patient's previous activity levels over the last six months is identified to ensure that rehabilitation goals are appropriate.
- b. Any member of the physiotherapy team may provide the identified rehabilitation interventions.
- c. A clear and consistent template for recording rehabilitation goals and activities is in place and shared with the wider MDT.
- d. Each rehabilitation session includes domains of range of movement exercise, strength and balance training, transfers and walking, and functional ability, as appropriate to stage of recovery.
- e. Each rehabilitation session is suited to the patient's identified abilities at the time treatment is given.
- f. There is a specific strength and balance training programme in place for patients at low-moderate risk of falls.
- g. There is a specific multifactorial programme in place, including strength and balance training, for patients at high risk of falls.
- h. An appropriate outcome measure is used to measure progress against each rehabilitation goal.

Patient who do not receive two hours of rehabilitation

- i. A clear record is made of the reason why a patient has not received 2 hours of rehabilitation.
- j. A clear physiotherapy action plan with timescales is in place to manage the clinical conditions that prevent a patient receiving 2 hours of rehab.

Evidence:

National Institute for Health and Clinical Excellence. *Hip Fracture: Management* CG124. London: National Institute for Health and Clinical Excellence 2011.

<https://www.nice.org.uk/guidance/cg124>

National Institute for Health and Clinical Excellence. *Delirium: Prevention, diagnosis and management* CG103. London: National Institute for Health and Clinical Excellence 2010.

<https://www.nice.org.uk/guidance/cg103>



National Institute for Health and Clinical Excellence. *Falls in older people: Assessing risk and prevention* CG161. London: National Institute for Health and Clinical Excellence 2013.

<https://www.nice.org.uk/guidance/cg161>

National Institute for Health and Clinical Excellence. *Hip Fracture in adults* QS16. London: National Institute for Health and Clinical Excellence 2012.

<https://www.nice.org.uk/guidance/qs16>

National Institute for Health and Clinical Excellence. *Falls in older people* QS86. London: National Institute for Health and Clinical Excellence 2015.

<https://www.nice.org.uk/guidance/qs86>

Public Health England. *Muscle and bone strengthening and balance activities for general health benefits in adults and older adults*. London. Public Health England. 2018

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/721874/MBSBA_evidence_review.pdf

NHS Right Care. *Falls and Fragility Fracture Pathway*. London. NHS Right Care 2013.

<https://www.england.nhs.uk/rightcare/wp-content/uploads/sites/40/2017/12/falls-fragility-fractures-pathway-v18.pdf>

Standard 4:

All patients receive at least two hours of rehabilitation per week in subsequent weeks post-surgery until they have achieved their goals.

Indicators:

- a. Any member of the physiotherapy team may provide the identified rehabilitation interventions.
- b. A clear and consistent template for recording rehabilitation goals and activities is in place and shared with the wider MDT.
- c. Each rehabilitation session includes domains of range of movement exercise, strength and balance training, transfers and walking, and functional ability.
- d. Each rehabilitation session is suited to the patient's identified abilities at the time treatment is given.
- e. There is a specific strength and balance training programme in place for patients at low-moderate risk of falls
- f. There is a specific multifactorial programme in place, including strength and balance training, for patients at high risk of falls.
- g. An appropriate outcome measure is used to measure progress against each rehabilitation goal.
- h. Patients who are not able to achieve their pre-fracture activity levels have the reason for this documented after an appropriate MDT assessment.

Patient who do not receive two hours of rehabilitation

- i. A clear record is made of the reason why a patient has not received 2 hours of rehabilitation.
- j. A clear physiotherapy action plan with timescales is in place to manage the clinical conditions that prevent a patient receiving 2 hours of rehab

Evidence:

National Institute for Health and Clinical Excellence. *Hip Fracture: Management* CG124. London: National Institute for Health and Clinical Excellence 2011.

<https://www.nice.org.uk/guidance/cg124>

National Institute for Health and Clinical Excellence. *Falls in older people* QS86. London: National Institute for Health and Clinical Excellence 2015.

<https://www.nice.org.uk/guidance/qs86>

Public Health England. *Muscle and bone strengthening and balance activities for general health benefits in adults and older adults*. London. Public Health England. 2018



https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/721874/MBSBA_evidence_review.pdf

NHS Right Care. *Falls and Fragility Fracture Pathway*. London. NHS Right Care 2013.
<https://www.england.nhs.uk/rightcare/wp-content/uploads/sites/40/2017/12/falls-fragility-fractures-pathway-v18.pdf>

Standard 5:

All patients moving from hospital to the next phase of rehabilitation are seen by their new rehabilitation provider within 72 hours.

Indicators:

- a. Patients know the name of the team taking over the next phase of their rehabilitation when they leave hospital, and how to contact the new service.
- b. A clear and consistent method for providing relevant clinical handover between acute care and next steps/community care is in place.
- c. A clear and consistent template for sharing rehabilitation goals and progress across the whole care pathway is in place.
- d. The transfer of care process does not delay the continuity of rehabilitation established in acute care for more than 72 hours.
- e. Bed based intermediate care should start within 2 days of referral.
- f. There is a mechanism in place between providers to reduce duplication and repetition of common assessment.
- g. Patients begin their onward rehabilitation programme within 72 hours of leaving acute hospital care.

Evidence:

National Institute for Health and Clinical Excellence. *Hip Fracture: Management* CG124. London: National Institute for Health and Clinical Excellence 2011.

<https://www.nice.org.uk/guidance/cg124>

National Institute for Health and Clinical Excellence. *Intermediate Care including reablement*. QS173. London: National Institute for Health and Clinical Excellence 2018

<https://www.nice.org.uk/guidance/qs173>

Note:

Delays in starting onward rehabilitation may lead to deterioration, and reduced the ability of the individual to regain their previous functional status. The model of care used to deliver the care pathway may affect how quickly people are seen after leaving acute care. Rehabilitation must be a continuous pathway with sharing of information. The involvement of different professionals at different times should not introduce unnecessary re-assessment or delays to care.

Standard 6:

Physiotherapists are part of every Hip Fracture Programme's monthly clinical governance meeting

Indicators:

- a. A physiotherapist in the acute hospital attends the Hip Fracture Governance Group.
- b. A physiotherapist in next steps and/or community part of rehabilitation attends the acute hospital Hip Fracture Governance Group.
- c. A process is in place for a physiotherapist to review their own unit and/or area NHFD data.
- d. A physiotherapist contributes to service development plans within the Hip Fracture Governance programme.
- e. A physiotherapist contributes to continuous improvement of rehabilitation delivery within the Hip Fracture Governance programme and the whole care pathway.

Where a physiotherapist is not part of the Hip Fracture Governance Team:

- f. The reason for non-participation is identified.
- g. A plan is in place to ensure physiotherapist participation is secured.

Evidence:

National Institute for Health and Clinical Excellence. *Hip Fracture: Management* CG124. London: National Institute for Health and Clinical Excellence 2011.

<https://www.nice.org.uk/guidance/cg124>

National Institute for Health and Clinical Excellence. *Hip Fracture in adults* QS16. London: National Institute for Health and Clinical Excellence 2012.

<https://www.nice.org.uk/guidance/qs16>

Standard 7:

Physiotherapists share their assessment findings and rehabilitation plans with all rehabilitation providers to enable clear communication with the MDT.

Indicators:

- a. A clear communication pathway between acute providers and next steps and/or community providers is in place and is used.
- b. A clear and consistent method for sharing physiotherapist assessment across the care pathway is in place.
- c. A clear and consistent template for recording common areas of physiotherapy information and rehabilitation goals for the whole pathway is in place.
- d. There is a clear and consistent method for providing clinical handover between acute care and next steps or community care.
- e. The physiotherapy team share clinical information with other clinicians involved in the direct current and/or ongoing care of the patient.
- f. The physiotherapy team have identified patients experiencing dementia and/or delirium which may affect future rehabilitation plans

For patients who are not referred for ongoing rehabilitation, for example who are clinically judged to 'not have any rehabilitation potential':

- g. A clear record is made of the current clinical evidence of why a patient does not have any future rehabilitation potential.
- h. A physiotherapist involves the Multidisciplinary Team (MDT) to consider any other reasons that may be affecting the physiotherapy decision on rehabilitation potential.
- i. The physiotherapist has explicitly assessed for delirium using the 4AT test, to exclude this a temporary reason for affecting rehabilitation potential.
- j. The physiotherapy team have explicitly recorded the patient's previous activity levels in the past six months prior to hip fracture, before making any decision that a patient has no future rehabilitation potential.

Evidence:

National Institute for Health and Clinical Excellence. *Hip Fracture: Management* CG124. London: National Institute for Health and Clinical Excellence 2011.

<https://www.nice.org.uk/guidance/cg124>

Health and Social Care Act 2015 section 251B

<http://www.legislation.gov.uk/ukpga/2015/28>

Note:

All organisations, and individuals, must share patient information where this enables care to be provided for an individual patient. Sharing of information is essential for safe care.

Explanation of Terms

Some terms used within the NHFD have different meaning to various professional groups.

Mobilised	<ul style="list-style-type: none"> • Term used to describe the end of the period of bed-rest following hip fracture surgery. • In terms of hip fracture rehabilitation, it is the point at which the patient can <i>get out of bed</i>. • Any healthcare worker may perform the task of getting a patient out of bed after a hip fracture. • A patient may be sitting out of bed before the physiotherapist has assessed their rehabilitation needs and planned the rehabilitation programme.
Mobilisation (2)	<ul style="list-style-type: none"> • The process of re-establishing the ability to move between postures (for example sit to stand), maintain an upright posture, and to walk with increasing levels of complexity (speed, changes of direction, dual and multi-tasking) • Transfer practice, walking practice, gait re-education and the selection and provision of walking aids are all mobilisation interventions that are parts of a comprehensive rehabilitation programme.
Rehabilitation (3)	<ul style="list-style-type: none"> • Rehabilitation is a personalised, interactive and collaborative process, reflecting the whole person. It enables an individual to maximise their potential to live a full and active life within their family, social networks, education/training and the workplace where appropriate. It may include elements of ...reablement and recovery. • Range of movement exercises, transfer practice, strength and balance exercises, gait re-education and walking practice, and functional activities all form aspects of effective rehabilitation interventions following hip fracture. • Even short periods of bed rest can lead to significant deconditioning which is why early rehabilitation is important.

	<ul style="list-style-type: none"> • Treatment plans should be modified to enable patients experiencing dementia and delirium to engage with rehabilitation where at all possible, rather than remain on extended bed rest. • Any member of the physiotherapy team may plan rehabilitation goals
Reablement (3)	<ul style="list-style-type: none"> • The active process of an individual regaining the skills, confidence and independence to enable them to do things for themselves, rather than having things done for them.

Putting The Standards Into Practice

These Standards

- have been developed from reviewing the findings and recommendations of the Royal College of Physicians Hip Sprint audit.
- are neither a maximum nor a minimum absolute level. Many services in the audit already reached or exceeded these standards. Many services have work to undertake to improve the rehabilitation they offer.
- apply to all members of the physiotherapy workforce delivering rehabilitation to people following hip fracture. This includes registered physiotherapists, physiotherapy students, and physiotherapy support workers. Standards 1, 6 and 7 make specific reference to registered physiotherapists.
- may influence other health care workers who may need to know about these standards if they provide integrated services with physiotherapy.

The standards

- have been developed to address the core reasons for unwarranted variation in rehabilitation identified in the Hip Sprint audit.
- are a tool for members to use to review their service as part of a quality improvement process.
- may be used by members to help make the case for service redesign and influence service commissioners
- can be used by patients to help them understand what rehabilitation they should receive and help them ask question about their own rehabilitation.

There are many tools and resources available to help with service redesign and quality improvement work. As part of reviewing your hip fracture services take a look at these tools and see which ones will help you improve your service.



NHS Improvement: Improvement Hub

<https://improvement.nhs.uk/improvement-hub/>

Quality Service Improvement and Redesign Tools

<https://improvement.nhs.uk/resources/quality-service-improvement-and-redesign-gsir-tools/>

PDSA Cycles and the Model for Improvement

<https://improvement.nhs.uk/resources/pdsa-cycles/>

Sustainability Model

<https://improvement.nhs.uk/documents/2174/sustainability-model.pdf>

Seven Steps to Measurement for Improvement

<https://improvement.nhs.uk/resources/seven-steps-measurement-improvement/>

Patient Experience Improvement Framework

<https://improvement.nhs.uk/resources/patient-experience-improvement-framework/>

Additional References:

1. Royal College of Physicians. *The Physiotherapy Hip Fracture Sprint Audit*. London. 2018

<https://www.fffap.org.uk/FFFAP/landing.nsf/phfsa.html>

2. National Clinical Guideline Centre (UK). *The Management of Hip Fracture in Adults* [Internet]. London: Royal College of Physicians (UK); 2011.

<https://www.ncbi.nlm.nih.gov/books/NBK83001/>

3. NHS England. *Commissioning Guide for Rehabilitation*. London. 2016

<https://www.england.nhs.uk/wp-content/uploads/2016/04/rehabilitation-comms-guid-16-17.pdf>