

Room for improvement: hip fracture care in 2024 National Hip Fracture Database report – methodology

Version 1.0 – August 2025

Methodology of the audit creation and set up

The Falls and Fragility Audit Programme (FFFAP) is a suite of continuous clinical audits. There are three audits covering the following workstreams – the National Hip Fracture Database, the National Audit of Inpatient Falls (NAIF) and the Fracture Liaison Service Database (FLS-DB). The National Hip Fracture Database (NHFD) is a clinically led web-based audit of hip fracture care and secondary prevention in England, Wales and Northern Ireland. It collects data on all patients over 60 admitted to hospital with hip and femoral fractures aiming to improve their care through auditing which is fed back to hospitals through targeted reports and online reporting.

This report presents data describing the care during the 71,885 hospital admissions in 2024 for a hip or femoral fracture.

Audit questions and data entry

The [datasets](#), [user guides](#) and other useful documents for the NHFD can be accessed online in the [resources](#) section.

Services are required to enter data via the audit programme's bespoke webtool, created by Crown Informatics LTD at www.nhfd.co.uk

Data entry to the audit is regularly reviewed by the NHFD team. Where few records are entered or where there is a notable change in participation rates, the NHFD team communicate directly with the service to understand the reasons behind the lack of participation and to provide support where possible. Regular email updates and newsletters are also sent to participants with deadline reminders.

Deadline and data transfer

The data entry deadline for completion of records pertaining to the audit period was February 2025. Thereafter, data were extracted by Crown Informatics and anonymised as follows:

- NHS number replaced by an anonymised patient identifier.
- postcode replaced by a Lower Layer Super Output Area (LSOA) (a geographical area in England and Wales which is large enough to be nonidentifiable to the patient)
- Date of birth replaced by calculated age at admission
- Date of death replaced with a 30-day life status flag.

The anonymised file containing non-identifiable patient data was then sent via secure file transfer to the statistical team at the University of Bristol for analysis.

Key points

This report uses data from patient records of hip and femoral fracture patients admitted between 1 January and 31 December 2024, from England, Wales and Northern Ireland patient records entered into the database. There was no facilities audit in 2024.

NHFD key performance indicators (KPI)s

0. Given nerve-block and admitted to specialist orthogeriatric ward within 4 hours
1. Prompt orthogeriatric assessment (assessed by a senior geriatrician within 72 hours of admission)
2. Prompt surgery (surgery by the day following admission)
3. NICE compliant surgery (surgery procedure consistent with the recommendations of [NICE CG124](#))
4. Prompt mobilisation after surgery (on the day of, or by the day following, surgery)
5. Not delirious when tested after surgery
6. Return to original residence by 120 days
7. Bone protection medication (given a suitable form of bone strengthening treatment and followed up to ensure that they are still receiving this protection at 120 days after fracture)

Patient level data

1. The time intervals of data that were analysed were based on admission dates between 1 January and 31 December 2024.
2. Key points focused on out with KPIs stated above:
 - a. Time spent waiting to be admitted to a specialist ward
 - b. Pressure sore occurrence rates
 - c. Seniority of staff in theatre
 - d. Weightbearing status post surgery
 - e. Non-operative management rates
 - f. 30-day case mix adjusted mortality
3. Key data
 - a. Number of patient records submitted with admission in 2024
 - b. Demographic data at national aggregate level
 - a. Age
 - b. Sex
 - c. Deprivation (IMD quartile)
 - d. Country (England, Wales, Northern Ireland)
 - c. For each KPI:
 - National aggregate data
 - Hospital level data
 - Performance on the above on different fracture types:
 - o Hip
 - o Distal shaft
 - o Femoral shaft
 - o Peri-prosthetic femoral
 - d. 30-day casemix adjusted mortality for hip fracture patients only
 - a. National aggregate data
 - b. Aggregate by country (England, Wales and Northern Ireland)
 - c. Hospital level data

Indicator	Numerator	Denominator
0. Given nerve block and admitted to specialist orthogeriatric ward within 4 hours	Cases where 'nerve block' = 'Yes...' and 'Date and time of ortho. ward admission' minus 'Date and time of presentation to A&E or trauma team' is less than 4 hours.	All cases
1. Prompt orthogeriatric assessment	Cases where the interval between time of admission to A&E or time seen by trauma team and time assessed by geriatrician ≤ 72.0 hours and geriatrician grade = Consultant or SAS or ST3+	All cases
2. Prompt surgery	Cases where date of surgery = date of first presentation or date of surgery = date of presentation + 1 day	All operated cases (cases with no operation performed excluded)
3. NICE compliant surgical approach	NICE 1: Operated cases where type of fracture field has value 'IC- displaced' and ASA grade field has value '1', '2' or '3' and [Pre-fracture mobility field has the value 'Freely mobile without aids' or 'Mobile outdoors with one aid'] and [Pre op AMT4 field has value '0' or AMTS Pre op field has value '8' or '9' or '10'] and [Operation Performed field has value 'Arthroplasty – Primary THR (cemented)' NICE 1)	All operated cases (cases with no operation performed excluded)

Indicator	Numerator	Denominator
	<p>Plus</p> <p>NICE 2: Operated cases where type of fracture field has value 'IC - displaced' and [ASA grade field has value '4' or '5' or Pre-fracture mobility field has the value 'Mobile outdoors with two aids or frame' or 'Some indoor mobility but never goes outside without help' or 'No functional mobility' or Pre op AMT4 field has value '1' or more or AMTS Pre op field has value '7' or less] and [Operation Performed field has value 'Arthroplasty - hemiarthroplasty (cemented)' or 'Arthroplasty – Primary THR (cemented)']</p> <p>Plus</p> <p>NICE 3: Operated cases where Type of fracture field has value 'IC - undisplaced' and [Operation Performed field has value 'Arthroplasty - hemiarthroplasty (cemented)' or 'Arthroplasty – Primary THR (cemented)' or 'Internal fixation – Sliding Hip Screw' or 'Internal fixation – Cannulated screws' or 'Internal fixation - IM nail (long)' or 'Internal fixation – IM nail (short)']</p> <p>Plus</p> <p>NICE 4: Operated cases where Type of fracture field has value 'Subtrochanteric' and [Operation Performed field has value</p>	

Indicator	Numerator	Denominator
	<p>'Internal fixation - IM nail (long)' or 'Internal fixation - IM nail (short)']</p> <p>Plus</p> <p>NICE 5: Operated cases where Type of fracture field has value 'Trochanteric' and Operation Performed field has value 'Internal fixation – Sliding Hip Screw'</p> <p>Plus</p> <p>NICE 6: Operated cases where Type of fracture field has value 'Intertrochanteric / Reverse oblique' and [Operation Performed field has value 'Internal fixation - IM nail (long)' or 'Internal fixation - IM nail (short)' or 'Internal fixation – Sliding Hip Screw']</p>	
4. Prompt mobilisation after surgery	Cases where 'Out of bed on the day of or the day following surgery' equals 'Yes – Physiotherapist' or 'Yes -other ward staff'	All operated cases (cases with no operation performed excluded)
5. Not delirious when tested after operation	All patients in whom 4AT result is recorded within 3 days of surgery and has a total score of 0, 1, 2 or 3	All operated cases (cases with no operation performed excluded)

Indicator	Numerator	Denominator
6. Returned to original residence by 120 days	All cases where interval between date of discharge from trust and date of admission to A&E is <=120 days and discharge destination from trust = Residence before this hospital admission or 120 day residence = Residence before this hospital admission	All cases
7. Bone protection medication: given a suitable form of bone strengthening treatment and followed up to ensure that they are still receiving this protection at 120 days after fracture	<p>All cases where 'Bone protection medication plan at discharge' equals 'Denosumab' or 'Zoledronate' or 'Teriparetide' or Romosozumab</p> <p>Plus</p> <p>all cases where 'Bone protection medication at 120 day follow up' equals ['Yes - continues recommended bone therapy' or 'Yes – switched to another bone therapy']</p>	All cases