Royal College of Physicians | National Audit of Inpatient Falls (NAIF)

# Stepping towards improvement

## An analysis of 2024 inpatient falls audit data and reflection on 6 years as a continuous audit

The 2025 National Audit of Inpatient Falls (NAIF) report on 2024 clinical data

**1 January – 31 December 2024**

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In association with

British Geriatrics Society
Improving healthcare for older people

British Orthopaedic Association

Royal Osteoporosis Society
Better bone health for everybody

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HQIP
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# Report at a glance

In 2024, 1,894 people sustained a femoral fracture as an inpatient; 1,628 (86%) were due to a fall and included as cases in the National Audit of Inpatient Falls.

This report reflects on six years of continuous audit of patients who have sustained a fall-related inpatient femoral fracture. It presents and explores performance in actions taken to optimise a patient's fitness to stay active without falling (KPI 1) and post-fall actions that align with NICE quality standards 86 (KPIs 2, 3 and 4).

## KPI 1: Proportion of patients with a high-quality multifactorial assessment to optimise safe activity (MASA)

A patient is considered to have had a 'high-quality MASA' if five or more of the six actions below are documented.

### High-quality MASA

**43%** of patients had 5 or more risk factors assessed

In 2023: **39%**

In 2022: **37%**

## KPIs 2, 3 and 4: Post-fall management

### Checked for injury and injury suspected

In 2024: **54%**

In 2023: **53%**

In 2022: **50%**

### Safe method for moving from the floor

In 2024: **38%**

In 2023: **33%**

In 2022: **32%**

### Medical assessment within 30 minutes

In 2024: **86%** (30 mins)

In 2023: **77%**

In 2022: **74%**

## The MASA six actions

### Vision

2024: **59%**

2023: **57%** ▲

2022: **54%** ▲

### LSBP

2024: **47%**

2023: **42%** ▲

2022: **39%** ▲

### Medication review

2024: **79%**

2023: **78%** ▲

2022: **74%** ▲

### Delirium

2024: **53%**

2023: **52%** ▲

2023: **52%** —

### Mobility

2024: **92%**

2023: **92%** —

2023: **92%** —

### Continence

2024: **85%**

2023: **84%** ▲

2023: **82%** ▲

## Spotlights on healthcare improvement

1. Trusts and health boards review their data to select an area for local improvement from one of the three suggestions detailed in the full report.
2. Trusts and health boards to review and refine methods for identifying and inputting cases into the expanded audit.

## Recommendations

1. ICBs in England and health boards in Wales to ensure providers undertake a facilities audit in 2026 and review organisational capacity to:
   a. support patients to move safely while they are in hospital
   b. effectively and safely manage patients who have fallen while in hospital.
2. ICBs and health boards to guarantee that severe harm is always attributed to inpatient fall-related hip fractures.

**Click on** the spotlights and recommendations boxes for more information.
The full FFFAP glossary is available on the RCP website.

# National Audit of Inpatient Falls

This is the final National Audit of Inpatient Falls (NAIF) report from the continuous audit of only those inpatients who had a fall resulting in a femoral fracture. In January 2025, NAIF expanded to collect data on all fractures, head injuries and spinal injuries that occurred as a result of an inpatient fall. Our next report will therefore present national data on patients with these fall-related injuries.

This report presents data from fall-related inpatient femoral fractures (IFFs) sustained between January – December 2024 and introduces, for the first time, statistics that describe the age, sex and index of multiple deprivation for included patients. Live data for the four key performance indicators (KPIs) are available on the Crown webtool. In this report, we will reflect on the 6 years since the inception of the continuous audit of inpatient fall-related femoral fractures, on what has been achieved and where work is still needed.

## Clinical audit methods

Data were collected from health records to evaluate actions taken to enable patients to move safely that occurred before the fall that caused the fracture (MASA), as well as immediate post-fall management. All NHS trusts in England, and health boards (HBs) in Wales with inpatient beds, are eligible to participate in NAIF.

Patients who fell and experienced a femoral fracture while in hospital were identified via the National Hip Fracture Database (NHFD) and were eligible for NAIF if they'd had a femoral fracture that occurred as a result of an inpatient fall.

Data completeness for the 2024 audit can be found here.

## Audit findings

Of the 1,894 femoral fractures classified in the NHFD as occurring in an inpatient setting (IFFs), 1,628 were known to have occurred as a result of a fall, indicating eligibility for NAIF data collection. The proportion of inpatient femoral fractures identified by the NHFD and not thought to be due to an inpatient fall was 14%, which is lower than previous years (18% in 2022 and 2023). This may be a signal that falls reporting is improving (as we would expect this rate to be around 5%). See link for detail on where falls occurred.

The country, age, sex and socioeconomic background of patients is shown in the table below (table 1). The 'Index of Multiple Deprivation' (IMD) can be used to examine the health of people, from most deprived (IMD1) to least deprived (IMD5).

| | | N | % |
|---|---|---|---|
| **Country** | England | 1,389 | 90 |
| | Wales | 149 | 10 |
| **Sex** | Female | 838 | 54 |
| | Male | 707 | 46 |
| **Index of multiple deprivation (IMD) quintile** | 1 Most deprived | 330 | 21 |
| | 2 | 313 | 20 |
| | 3 | 334 | 22 |
| | 4 | 310 | 20 |
| | 5 Least deprived | 251 | 16 |
| **Age** | | Years | |
| | Median | 82 | |
| | Lower quartile | 77 | |
| | Upper quartile | 88 | |

**Table 1. Age, sex and socioeconomic background data for NAIF cases**

# Multifactorial assessment to optimise safe activity (MASA)

The MASA considers six actions that should be taken to ensure patients stay as active as possible while in hospital; the aim being to reduce the risk of falls and prevent deconditioning due to inactivity. A full description of the comprehensive assessment recommended for all inpatients over the age of 65 is provided in NICE clinical guidelines 249.

## KPI 1: High-quality multifactorial assessment to optimise safe activity (MASA)

This is a score calculated from adding together six assessment components for each patient (vision, lying and standing blood pressure (LSBP), medication, delirium, mobility, and continence). A maximum score of six indicates that all were completed for that patient. **A high-quality MASA is defined as a score of five or more out of six.** Modest improvements can be seen since this KPI was introduced (Fig 1).

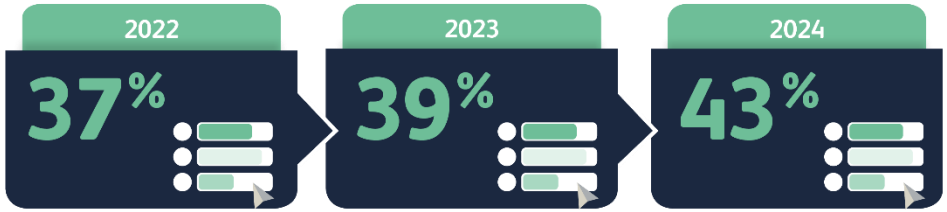


**Fig 1. Change in KPI 1 over time**

Proportions of each MASA assessment component completed are presented in Fig 2, alongside data from the previous 3 years for comparison.

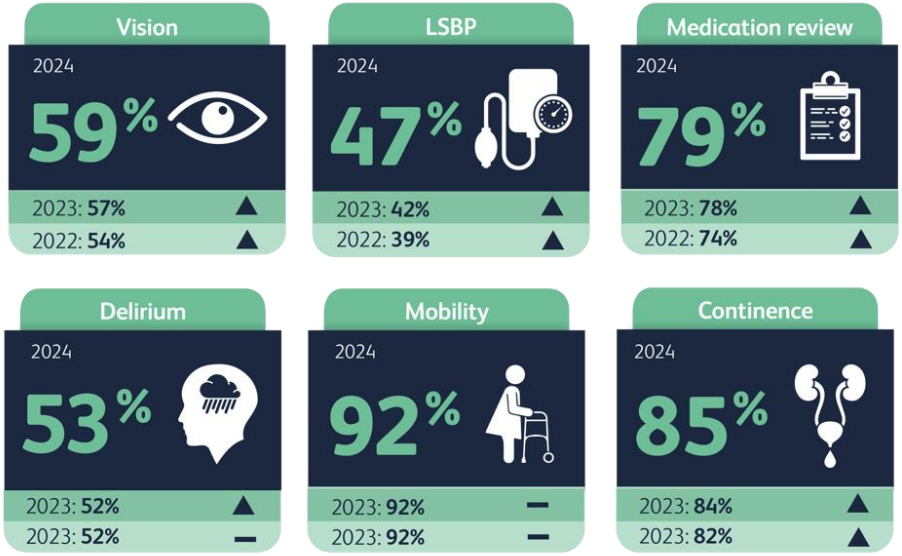


**Fig 2. Proportion of cases with risk factor assessment**

## Clinical assessment in detail

In 2022, we started collecting clinical measurements for some of the assessment components that make up the MASA (LSBP and delirium). Entering actual measures from patient records into the audit webtool is a way of validating data entered in response to a general 'yes/no' question in the webtool.

Table 2a shows that there has been a steady increase in the proportion of patients who have had a LSBP recorded. While the answer to the 'yes/no' LSBP question is completed for almost all patients (see link), actual measurement data was inputted in less than 20% of cases. The reason for this discrepancy is not clear, as to answer the 'yes/no' question we would have expected the LSBP results to have been observed in the health record. This may reflect an issue with where results are recorded and the accessibility to that data.

There is less of a discrepancy for the delirium 'yes/no' question compared to recording of 4AT scores (Table 2b) but note that while rates of screening for delirium are low, they appear to have stabilised with no further decline after 2021.

| | 2022 | 2023 | 2024 |
|---|---|---|---|
| **Lying and standing blood pressure (LSBP)** | | | |
| **General question (in the audit webtool):** Had the patient had a documented lying/standing blood pressure measurement during the admission when the fall that caused the femoral fracture occurred ('yes/no question)? | | | |
| LSBP not possible | 13% | 13% | **12%** |
| LSBP recorded (where not impossible) | 39% | 42% | **47%** |
| **Actual clinical measurement data:** date, time, BP and heart rate measures entered onto the webtool | | | |
| Date and time LSBP recorded | 27% | 31% | **37%** |
| Measure recorded for 5 min supine | 15% | 18% | **20%** |
| Measure recorded for 1 min standing | 8% | 10% | **10%** |
| Measure recorded for 3 min standing | 5% | 6% | **7%** |
| Time from LSBP to fall (days) | 6 days | 5 days | **5 days** |

**Table 2a. Proportion of cases with clinical assessment data recorded.**

| | 2022 | 2023 | 2024 |
|---|---|---|---|
| **Delirium assessment** | | | |
| **General question:** Did the patient have a delirium assessment and corresponding care plan (if required) during the admission when the fall that caused the femoral fracture occurred ('yes/no question)? | | | |
| Delirium assessment recorded | 52% | 52% | **53%** |
| **Actual clinical measurement data:** date, time and 4AT score entered onto the webtool | | | |
| Date and time of 4AT recorded | 21% | 22% | **29%** |
| Time from 4AT to fall (days) | 7 days | 6 days | **5 days** |

**Table 2b. Proportion of cases with clinical assessment data recorded.**

## Collecting NEWS2 measures

In 2023, there was a new question collecting data on National early warning scores 2 (NEWS2) prior to the fall. In 2024, the time and date of the NEWS2 was inputted for **91% of patients**, which was a median of 4 hours before the fall that caused the femoral fracture. This follows the same pattern as findings from 2023, indicating that most patients were not acutely unwell (as indicated by aNEWS2 score or ≥4) at the time of the IFF, and that the 'new confusion' question is less effective in identifying when a patient has delirium than the 4AT (see Table 3). On this basis, we have now stopped asking the question about NEWS2 and continued with 4AT.

| | 2022 | 2023 | 2024 |
|---|---|---|---|
| Orthostatic hypotension at 1 min standing | 28% | 28% | **24%** |
| Orthostatic hypotension at 3 min standing | 22% | 22% | **19%** |
| Median 4AT score | 3 | 3 | **2** |
| 4AT score ≥4 | 45% | 46% | **35%** |
| Median NEWS2 | n/a | 1 | **1** |
| NEWS2 <4 | n/a | 98% | **93%** |
| New confusion on NEWS2 | n/a | 4% | **4%** |

**Table 3. Data from actual clinical measurement**

There appears to have been a small reduction in the rates of orthostatic hypotension and delirium compared to 2023 and 2022 (Table 3). However, more data is needed to determine whether this is a downward trend.

# Post-fall management

Actions taken after a fall have the potential to influence outcomes and patient experience. If a post-fall check indicates that there may be a femoral fracture, this should initiate the use of flat lifting techniques, rapid access to pain relief, and prompt diagnosis and management of the fracture.

KPIs 2, 3 and 4 relate to NICE quality standard 86, statements 4, 5 and 6.

## KPI 2: Check for injury before moving and injury suspected

KPI 2 has changed in this report and now reports on the proportion of patients who were **checked for an injury and where injury was suspected**.

As all patients in this audit had a femoral fracture, this figure should be 100%.

Just over half (54%) of patients had a documented post-fall check which indicated the patient had an injury (Fig 3) and has not changed significantly in the last three years

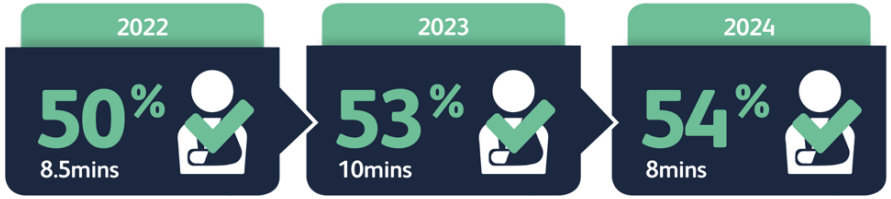


**Fig 3. Changes in proportion who are checked for injury and injury is suspected and the time between the fall and the check.**

## KPI 3: Safe lifting equipment used to move the patient from the floor

Use of flat lifting equipment improved by 5 percentage points since 2023 (Fig 4). However, 'not documented' accounted for 12% of responses – the third most common response to this question (see link for more details).


**Fig 4. Changes in proportion of patients where flat lifting is used to move from the floor**

## KPI 4: Medical assessment within 30 minutes of the fall that caused the IFF

**KPI 4 has changed in accordance with the revised NICE quality standard 86** to reflect that it is no longer stipulated that this assessment is carried out by a doctor. Therefore, this KPI now reflects the proportion of patients who have had an assessment conducted by any healthcare professional (HCP) within 30 minutes of the fall (Table 4). NICE standards implicitly expect that a healthcare professional carrying out an assessment will be competent. Presenting the KPI in this way did not require a change to the question.

| | 2022 | 2023 | 2024 |
|---|---|---|---|
| Medical assessment within 30 mins (**medical only – KPI until 2024**) | **64%** | **65%** | 74% |
| Medical assessment within 30 mins (**any HCP – KPI from 2025**) | 74% | 77% | **86%** |

**Table 4. Old and new KPIs for medical assessment within 30 mins of the fall – new and old KPIs analysed retrospectively.**

## Pain relief after the fracture

The improvements made in 2023 to prompt administration of analgesia have been maintained in 2024, with a quarter of the patients in the audit (28%) receiving pain relief within 30 minutes of the IFF compared to 26% in 2023. Overall, 77% of patients were administered analgesia after the fall that caused the IFF and the median time to administration was 1 hour and 19 minutes after the fall.

## Harm reported after the fracture

In 63% of cases, severe harm was attributed to the fall that caused the fracture (a further 1.6% were recorded as death). This has continued to drop since a peak of 78% in 2021.

## Post-fall reviews

Post-fall debriefs (hot debriefs) were undertaken for 47% of IFFs, and in 30% it was done on the same shift as the fall occurred.

Swarm huddles (or after-action reviews) took place after 63% of IFFs and were held within 5 working days of the fall in 32% of patients.

We do not expect all IFFs to be reviewed using the above methods. Instead, trusts/HBs should consider their bespoke organisational approach to reviewing falls following the principles of the Patient Safety Incident Response Framework (PSIRF). We have provided resources to support this.

## Reflection on six years of audit

NAIF began to collect continuous data on all inpatient fall-related hip and femoral fractures in January 2019. With the hard work of local falls teams and those working at the frontline of inpatient care, there have been improvements in addressing factors that increase the risk of falling and in immediate post-fall management. This can be seen in the difference between data collected first in snapshot audit in 2015, and 2024 data. There are notable improvements lying/standing blood pressure and medication review (see link). Six years of iteration with feedback from stakeholders has refined audit methods, allowing for the smooth expansion to include more fall-related injuries. The report next year will retain the current KPIs but will, for the first time, report on prevalence of other injuries and help us better understand how to improve post-fall management in head and spinal injury.

The audit has contributed to driving healthcare improvement, not only through providing data but also through the development of a range of resources and by growing a supportive network through our stakeholder meetings and webinars.

The improvements observed over the past 6 years have happened at a time of unprecedented pressure for teams providing inpatient services, including during the COVID-19 pandemic. It is a testament to the hard work of local teams that these improvements to patient care have been made.

However, there is still more work to do, and spotlight on health improvement 1 suggests three priorities for local improvement projects to address clinical outcomes: measurement and recording of LSBP, delirium screening and time to analgesia.

# Spotlights on healthcare improvement

## Spotlight on healthcare improvement 1

**Trusts and health boards review their data to select an area for local improvement from one of the three suggestions below**

1. **Improve measurement and recording of LSBP aiming for 60% completion rate**

LSBP is the component of MASA that has been the hardest to achieve. Orthostatic hypotension is common in people admitted to hospital and it negatively affects mobility and increases risk of falling. If it is identified, it can be addressed by changes to medication, hydration and conservative measures. LSBP measurement is a complex process, requiring clinical competency and behaviour change from a range of different healthcare professionals. NAIF data suggest there may also be issues with how LSBP findings are recorded. It is vital that if the measures are taken, they can be easily located by all the multidisciplinary team. Trusts should review and seek to standardise where LSBP is recorded to optimise accessibility. Changes to electronic healthcare records must involve IT teams and senior leadership, including executive support.

2. **Increase delirium screening rates to 65% working together with relevant trust teams**

The drop in delirium screening observed between 2020–22 could be due to external factors such as the withdrawal of the dementia and delirium Commissioning for Quality and Innovation (CQUIN).

Getting It Right First Time(GIRFT) Six Steps to Better Care for Older People recommend all inpatients aged over 65 who are frail have a 4AT and the hospital acute care frailty pathway recommend all non-elective admissions aged over 65 are screened with a 4AT on day 0 of the admission.

3. **Develop new practices that hasten the time to administration of analgesia after fall-related injury**

While time to administration of analgesia has significantly improved, there is scope to progress this further. From this report onwards, the focus on effective checks for injury (check where injury is suspected) is aimed at improving the quality of the check to quickly identify those who may need analgesia. A further factor delaying analgesia may be the time taken to arrange and complete the post-fall medical assessment. Trusts should look at implementing practices that expedite analgesia provision. For example, a review of pain and prescribing could be prioritised once the primary survey is completed. Additionally, those handing over information for the post-fall medical assessment should emphasise analgesia requirements in their SBAR and advocate for their patient when the assessment is underway.

## Spotlight on healthcare improvement 2

**Trusts and health boards to review and refine methods for identifying and inputting cases into the expanded audit**

In January 2025, the audit expanded to include all inpatient fall-related fractures, head injuries and spinal injuries. The data from this is already feeding into live KPIs, and our 2026 report will introduce new KPIs and methods to evaluate case ascertainment. It is important that data for all eligible cases are included in the audit. This ensures high-quality local data to drive and measure improvement activities, as well as national data that can be used to influence strategy.

Trusts/health boards are encouraged to review how they identify eligible cases using the NAIF expansion resources.

# Recommendations

## Recommendation 1

**ICBs and health boards to ensure providers undertake a facilities audit in 2026 and review organisational capacity to:**

a. **support patients to move safely while they are in hospital**
b. **effectively and safely manage patients who have fallen while in hospital**

Trusts and health boards should undertake the facilities audit at least once a year. In 2026, we will be asking all providers to complete this between January – March to allow us to report on the national picture.

While we agree with the philosophy that ensuring patients can move safely is 'everyone's business', there also needs to be executive and senior accountability for falls prevention and management.

**A member of the non-executive and executive boards responsible for falls should:**

- ensure that appropriate governance around fall prevention and management is in place
- discuss falls at regular intervals at board meetings

**A named trust/health board falls lead who is responsible for:**

- ensuring data is inputted into NAIF and findings disseminated and acted on
- leading the falls steering group and overseeing provider strategy
- working with falls specialists to ensure delivery of Patient Safety Incident Response Framework (PSIRF) falls responses and data-driven quality improvement
- communicating with the executive and non-executive board members who have falls in their remit

## Recommendation 1

**A specialist falls service** that recognises that falls are a complex syndrome which require a specialist skill set who, working with the trust/health board lead, are responsible for:

- identifying eligible audit cases and supporting data entry
- oversight of falls trends in the trust/health board, reviewing incident reports, supporting the implementation of the providers PSIRF response to falls
- organising trust/health board-wide staff training and development of competencies for optimising safe activity and post-fall management
- ensuring equity across the organisation with respect to the implementation of NICE guideline compliant falls management. Trusts/health boards should note that we have consistently found that twice as many fall-related hip fractures occur on acute medical wards than older people's wards, meaning falls prevention is an organisation-wide issue
- coordinate high-quality improvement projects – that use NAIF data and incorporate appropriate QI methods with a focus on sustainability and spread – ensuring that learning is shared across the organisation
- provide expert clinical support for the management of selected patients and support ward teams with selected structured debriefs/after-action reviews
- use evidence to build business cases to address trust-wide service gaps (i.e. training or equipment needs)

**All healthcare staff working on inpatient wards should:**

- be proactive in supporting completion of MASA assessments
- work with patients to ensure they remain active and safe while in hospital
- know how to provide safe care when a patient has a fall

## Recommendation 2

**ICBs and health boards to guarantee that severe harm is always attributed to inpatient fall-related hip fractures**

Over the past 2 years, there has been a reduction in the proportion of patients with hip fracture where harm was classified as severe (see Fig 5).

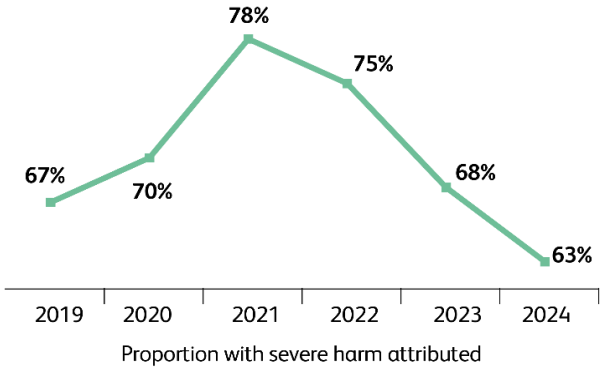


**Fig 5. Proportion of patients where severe harm is attributed after an inpatient femoral fracture**

NAIF recommends using the approach adopted by NHS England of attributing severe harm to all femoral fractures sustained in hospital but is clear that there has been a change of practice with respect to this. It is clear that there has been some misunderstanding of the Patient Safety Incident Response Framework (PSIRF). While PSIRF recommends not necessarily pursuing full reviews of every fall related femoral fracture but taking a more nuanced approach to learning from incidents, the severity of the harm the patient has experienced should still be correctly attributed in incident reporting.

## Recommendation 2

**A hip fracture is a life-changing injury with a high risk of mortality**. One in seven people who fracture their hip as a hospital inpatient will die within 30 days, and fewer than half will return to their usual residence. Even if someone does return home, they will have had major surgery with the associated pain and discomfort, as well as a prolonged hospital admission.

**A patient perspective:**

*For the patient, and their family, a broken hip is all too often life-changing. Even if the patient is not one of those who die within 30 days or within a year (as 30% of all those who break a hip do), life may never be the same again. If the patient is fortunate, they may be able to return home but are unlikely to fully regain their former state of health. They may be less mobile, perhaps housebound and needing more help with day-to-day activities. The fear of further falls may make them reluctant to walk or to go out, they may be in pain. The loss of independence, the inability to do things they previously enjoyed, and worries about the future may result in depression. How can it ever be suggested that an inpatient who has fallen and broken their hip has not suffered serious harm?*

Sarah Brown, member of the Falls and Fragility Fracture Audit, Programme, Patient and Carer Panel

Resources to support improvement and acknowledgements are available on the RCP website.

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