Royal College of Physicians

Falls and Fragility Fracture Audit Programme (FFFAP)

State of the nation Wales report 2022

Using national clinical audit to improve the care of people with fragility fractures and inpatient falls in Wales

In association with

British Geriatrics Society
Improving healthcare for older people

British Orthopaedic Association

Royal Osteoporosis Society
Better bone health for everybody

Commissioned by

HQIP
Healthcare Quality Improvement Partnership


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AIR
Nurse in Charge
Judith

Introduction

The Falls and Fragility Fractures Audit Programme (FFFAP) is commissioned by the Healthcare Quality Improvement Partnership (HQIP) on behalf of the Welsh Government, to audit and improve the care that patients with fragility fractures and inpatient falls receive. FFFAP is run by the Royal College of Physicians in collaboration with a range of stakeholders, including patient and carer representatives.

The programme comprises three workstreams:

National Hip Fracture Database (NHFD) – examines the experience of people presenting to hospital after a hip fracture; aiming to improve their care by providing live casemix, performance and outcome data to clinical teams, hospital managers and the general public through its website.

National Audit of Inpatient Falls (NAIF) – evaluates falls prevention before, and the care offered after, inpatient femoral fractures in acute, community and mental health hospitals. It provides local falls teams with real-time data, including key performance indicators and annual reports.

Fracture Liaison Service Database (FLS-DB) – collects data on the identification, assessment, treatment and monitoring of people over the age of 50 who break a bone after a fall. It aims to improve care and outcomes by providing local teams with live run charts and benchmarks through its website.

Supporting healthcare improvement

During 2021–22, FFFAP delivered **improvement collaboratives** with two separate teams from Wales. The course was designed to help multidisciplinary teams identify areas for improvement by interpreting and using the data collected by the audits. The main aim was to upskill participating teams in data analysis and quality improvement (QI) methods and techniques, which could be applied and embedded across other areas within their hospital or health board.

The audits provide a platform for local health boards in Wales to enable improvement in the care of patients. They help clinical teams and health service managers understand how to prevent inpatient falls, post-fall management, the care that should be provided for patients with fragility fractures, and what can and should be done to prevent future fractures.

This summary report examines how the care of inpatient falls and fragility fracture has changed since 2020, showing what the three audits reveal about the quality of patient care, and the impact of the COVID-19 pandemic.

Care of people with a broken hip in Wales – a life-changing impact

National Hip Fracture Database (NHFD)

Hip fractures are the most common serious injury affecting older people – nearly all require urgent anaesthesia and surgery, and all require coordinated multidisciplinary care and rehabilitation.

The NHFD collates data on everyone presenting with a fracture of the hip, and examines the quality of their assessment, anaesthesia, surgery, recovery and rehabilitation. The number of hip fractures changed very little during the pandemic, so this is an ideal marker of the pandemic's impact on the care of frail and older people and shows how successive waves of COVID-19 affected outcomes (mobility, return home, length of stay and mortality) in Wales.

Improving the quality of hip fracture care in Wales

The Welsh Government and the NHS Wales Delivery Unit have been using quarterly updates of NHFD data to drive a programme of performance management; focusing work in health boards on the three KPIs that aligned to their own improvement priorities.

This audit has improved management of delirium; the commonest serious complication of surgery (or any hospital admission) in older people. Across Wales, six NHFD KPIs were maintained or improved during 2020 in spite of the pandemic, though the promptness with which patients received surgery has deteriorated since then. The impact of this audit is demonstrated by the fall in 30-day mortality in Wales that has been seen since performance management started in 2019.

Care quality in different local health boards

These and other data are freely available to patients and the general public on the NHFD website. The data are designed to provide clinical teams and health board managers with a platform for local audit and quality improvement.

KPI overview:
Wales annualised values based on 4,113 cases in 2020, and 4,006 cases in 2021.

KPI 0

Given nerve block and admitted within 4 hours

2020	2021
12%	5%

KPI 1

Prompt orthogeriatric review

2020	2021
60%	64%

KPI 2

Prompt surgery

2020	2021
67%	65%

KPI 3

NICE compliant surgery

2020	2021
73%	72%

KPI 4

Prompt mobilisation

2020	2021
75%	75%

KPI 5

Not delirious post-operation

2020	2021
54%	60%

KPI 6

Return to original residence

2020	2021
75%	75%

KPI 7

Bone protection medication

2020	2021
27%	30%

Mortality

Casemix adjusted mortality

2020	2021
7.6%	6.3%

Preventing falls among hospital inpatients

National Audit of Inpatient Falls (NAIF)

NAIF aims to improve inpatient falls prevention practice and post-fall management through data-led quality improvement. Inpatient femoral fractures are identified on the National Hip Fracture Database and local health board falls leads are prompted to answer questions about fall prevention actions and post-fall management for each patient.

The key performance indicators for the report are highlighted in the fourth annual report of the continuous National Audit of Inpatient Falls published in November 2022.

Falls in hospital

There were approximately 12,500 inpatient falls in 2021. These led to:

- over 195 hip fractures (2021 NAIF data)
- loss of confidence and slower recovery
- distress to families and staff
- litigation against health boards

A new KPI – using the six risk factor assessments to create a measure of the quality of multi-factorial fall risk assessment (MFRA)

This is a score calculated from adding together the six risk factor assessments (delirium, continence, vision, lying/standing blood pressure, mobility, and medication review) for each patient. A maximum score of 6 indicates all assessment components were completed for that patient. A high-quality MFRA is defined as a score of 5 or more out of 6. Falls are multi-factorial, hence, MFRA needs to include a range of components to be considered high quality.

MFRA quality score

The median MFRA quality score for Wales in 2021 was

4 (IQR 0–5)

KPI overview: based on average figures from January to December in 2020 and 2021.

KPI 1

New:
What proportion of patients received a high-quality MFRA score?

2020	2021
–	44%

KPI 2

What proportion of patients who sustained an inpatient hip fracture were checked for injury before moving?

2020	2021
74%	80%

KPI 3

What proportion of patients who sustained an inpatient hip fracture were assisted from the floor using flat lifting equipment?

2020	2021
20%	18%

KPI 4

What proportion of patients who sustained an inpatient hip fracture were assessed by a medical practitioner within 30 minutes of falling?

2020	2021
67%	62%

Offering effective treatment to prevent future fragility fractures

Fracture Liaison Service Database (FLS-DB)

The impact of fracture in Wales

Most patients who sustain a fracture do not receive appropriate assessment and treatment to prevent future fractures. Having a fragility fracture approximately doubles the risk of another fracture, and these fractures are most likely to occur in the following 2 years. There are over 20,000 fragility fractures in Wales every year in patients aged 50 years and over. NICE-approved treatments significantly reduce fracture risk. Without effective secondary fracture prevention, these patients develop worsening bone health and suffer avoidable life changing fractures.

A fracture liaison service (FLS) is a nurse-led service that ensures that all people who sustain a fragility fracture are assessed, offered appropriate treatment, and supported to continue with treatment to avoid another fracture in the future. In a population of 300,000, an effective FLS will prevent around 250 fractures (of which about 140 would be hip fractures) over 5 years. It is estimated that one in ten hip fracture patients are admitted to a care home rather than returning home, so the total expected local savings to the NHS and social care of preventing fractures is estimated to be £2.1 million.

The FLS-DB is a clinically led web-based mandatory national audit of secondary fracture prevention in England and Wales. The audit demonstrates areas for improvement for FLSs to develop greater effectiveness and efficiency which will lead to sustainable funding. Participation in the FLS-DB audit for Wales has increased since the 2019 state of the nation report for Wales was published, with three out of the seven health boards now participating.

Care quality in different local health boards

National coverage of secondary fracture prevention using FLSs is still variable. These and other data are freely available to patients and the general public on the FLS-DB website in the form of benchmarks and run charts – designed to provide clinical teams and health board managers with a platform for local quality improvement.

KPI overview:
Annual values for Wales based on 1,956 fragility fractures in 2020 and 2,033 fragility fractures in 2021.

KPI 2
Identification (all fragility fractures)

2020	2021
21%	22%

KPI 3
Identification (spinal fractures)

2020	2021
11%	12%

KPI 4
Time to FLS assessment within12 weeks

2020	2021
64%	65%

KPI 5
Time to DXA within 12 weeks

2020	2021
9%	21%

KPI 6
Falls assessment

2020	2021
57%	65%

KPI 7
Bone therapy recommended

2020	2021
57%	65%

KPI 8
Strength and balance training

2020	2021
3%	4%

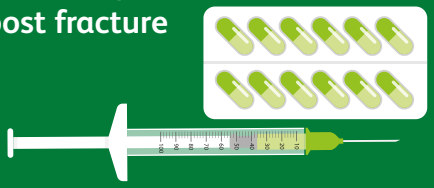
KPI 9
Monitoring contact 12–16 weeks post fracture

2020	2021
18%	13%

KPI 10
Commenced bone therapy by first follow-up

2020	2021
13%	10%

KPI 11
Adherence to prescribed anti-osteoporosis medication at 12 months post fracture



2020	2021
18%	27%

FFFAP recommendations for services in Wales

Care of people with hip fracture

Recent increases in hospital length of stay after hip fracture will have implications for how quickly services, including elective orthopaedic surgery, recover following the COVID-19 pandemic.

NICE guidance (NICE CG124) shows that combined care with an orthogeriatrician saves costs, since it improves the quality and outcome of individual patient's hospital care, and their need for long-term social care. Without an orthogeriatrician, patients will not receive bone-strengthening treatment that could prevent one in ten of them returning with another fracture.

Despite this, some units in Wales have yet to establish an orthogeriatric service.

Recommendation:

Local health boards should ensure that they have appointed an orthogeriatrician and that they actively support their leadership of multidisciplinary care in each trauma unit.

Preventing inpatient falls

Recommendations:

1. Local health boards should ensure that falls teams in acute, community and mental health hospitals are included in quality improvement activities and are using the data from the National Audit of Inpatient Falls.
2. With falls teams reviewing health board level data and implementing focused quality improvement interventions should help improve the quality and safety of care in hospitals.

Preventing future fractures

Only three health boards are currently reporting performance data for a FLS, but these show how effective such services are at preventing future fractures.

On World Osteoporosis Day on 20 October 2022, the Welsh Government ran its first all-Wales FLS study day: 'The future of bone health in Wales'. The day was addressed by the minister for health and social care, the chief executive of NHS Wales and the deputy chief medical officer, and demonstrated the Welsh Government's commitment to the establishment of an FLS in every health board.

Recommendations:

1. Health boards without an FLS should contact the Royal Osteoporosis Society and use their implementation toolkit to support them in preparing a business case.
2. Health boards that already have an FLS should ensure it is actively participating in the FLS-DB, and meeting its expected outcomes as defined by the FLS-DB's set of KPIs.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State of the nation for Wales report 2022

This report was prepared by the Falls and Fragility Fractures Audit Programme team:

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Healthcare Quality Improvement Partnership

The Falls and Fragility Fracture Audit Programme is commissioned by the Healthcare Quality Improvement partnership (HQIP) as part of the National Clinical Audit and Patient Outcomes Programme (NCAPOP). HQIP is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing, and National Voices. Its aim is to promote quality improvement in patient outcomes, and to increase the impact of clinical audit, outcome review programmes and registries on healthcare quality in England and Wales. HQIP commissions, manages and develops NCAPOP, comprising around 40 projects covering care provided to people with a wide range of medical, surgical and mental health conditions. The programme is funded by NHS England, the Welsh government and, with some individual projects, other devolved administrations and crown dependencies www.hqip.org.uk/national-programmes.

The Royal College of Physicians

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