



Royal College  
of Physicians

Falls and Fragility Fracture  
Audit Programme (FFFAP)

# State of the nation Wales report 2020

Using national clinical audit to improve the care that patients with fragility fractures and inpatient falls receive in Wales



In association with



Commissioned by





## Introduction

The Falls and Fragility Fracture Audit Programme (FFFAP) is a national clinical audit run by the Royal College of Physicians (RCP) designed to audit and improve the care that patients with fragility fractures and inpatient falls receive in hospital.

### Elements of the programme

The FFFAP comprises the following three workstreams:

**National Hip Fracture Database** (NHFD) – NHFD collects data on all patients over the age of 60 admitted to hospital with hip and femoral fractures. It aims to improve care and outcomes by providing local teams with live feedback of casemix, performance and outcome data through its [website](#).

**Fracture Liaison Service Database** (FLS-DB) – a continuous audit aims to evaluate patterns of assessment and treatment for osteoporosis and fragility fractures across primary and secondary care. It aims to improve care and outcomes by providing local teams with live data through its [website](#).

**National Audit of Inpatient Falls** (NAIF) – audit evaluating both falls prevention activity prior to hip fracture and post-falls care within acute, community and mental health care. It aims to improve care and outcomes by providing local teams with live data through its [website](#).

These workstreams are commissioned by the Healthcare Quality Improvement Partnership (HQIP), funded by Welsh Government and NHS England. The audits are managed and run by the Royal College of Physicians (RCP) in collaboration with a range of stakeholders including patient and carer representatives.

The audits provide a platform for local health boards in Wales to enable quality improvement initiatives. The overall aims are to help local clinical teams and health service managers understand why people fall in hospital, the care that should be provided for fragility fractures, and what can and should be done to prevent future fractures.

This brief report is designed to summarise information about falls and fragility fracture care in different parts of Wales, and to help people to understand what these audits can tell them about the quality of patient care.

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

## The National Hip Fracture Database (NHFD)



Hip fracture is an ideal marker with which to examine the hospital care offered to frail and older people by the NHS in Wales. Hip fractures are the most common serious injury in older people, and nearly all require urgent anaesthesia and surgery. These fractures can have life-changing impacts such as loss of independence, immobility and quality of life.

People need coordinated multidisciplinary assessment if they are to receive prompt surgery and effective rehabilitation. The NHFD collates data on every patient presenting with hip fracture and uses this to examine the quality of assessment, anaesthesia, surgery and rehabilitation, and to set this against patient outcomes (mobilisation, return home and length of stay) as well as providing mortality data to local health boards (LHBs) and the Welsh Government.

## Improving the quality of hip fracture care in Wales

Selecting the location markers on the interactive map allows you to examine performance in individual units (in bold text). These and other data are freely available to patients and the general public on the NHFD [website](#).

During 2019 Welsh Government and the Delivery Unit used these data for a programme of performance management that supported health boards; focusing local QI work on the three KPIs which each identified as priorities for improvement.

As a result, outcomes have improved markedly and in March 2020 mortality within 30 days of hip fracture was just 6.3% compared with the figure of 7.2% last year. (See mortality run-chart appendix)

## Improving care quality

These and other data are freely available to patients and the general public on the NHFD [website](#) – 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 4,191 cases averaged over 12 months to the end of March 2020.

### Prompt orthogeriatric review

**53%**  
March 2019  
**61%**  
March 2020



### Prompt surgery

**63%**  
March 2019  
**65%**  
March 2020



### NICE compliant surgery

**74%**  
March 2019  
**72%**  
March 2020



### Prompt mobilisation

**73%**  
March 2019  
**74%**  
March 2020



### Not delirious post-operation

**36%** March 2019  
**50%** March 2020



### Return to original residence

**74%**  
March 2019  
**74%**  
March 2020



### Casemix adjusted mortality

**7.2%** % (annualised)  
March 2019  
**6.3%**  
March 2020





# Preventing falls among hospital inpatients

## The National Audit of Inpatient Falls (NAIF)



NAIF aims to improve inpatient falls prevention practice and post-fall management through audit and quality improvement.

In January 2019, NAIF became a continuous audit, focusing on inpatient hip and femoral fractures. Inpatient hip fractures are identified on the National Hip Fracture Database and local health board (LHB) falls leads are prompted to answer questions about post-fall management. This allows NAIF to provide LHBs with feedback on their performance in managing fall-related injuries which can then be used within quality improvement initiatives to enhance patient safety and experience. From 2020, NAIF has been collecting information about falls prevention actions in inpatients who go on to sustain a hip fracture.

The [first report](#) of the continuous National Audit of Inpatient Falls was published in March 2020. The key performance indicator for the report was participation – all of the Welsh health boards are participating in NAIF and were included in the data from 2019 that were reported. Data on compliance with [NICE QS86 standards 4, 5 and 6](#) were also collected. These standards will be key performance indicators for the audit going forward. An overview of the Welsh results for these data is given below.

## Falls in hospital

There are approximately 12,500 inpatient falls in Wales each year. These lead to:

- > over 162 hip fractures (2019 NAIF data)
- > loss of confidence and slower recovery
- > distress to families and staff
- > litigation against hospital trusts
- > overall costs to hospitals of £1.5 million per year.

**All of the Welsh health boards are participating in the NAIF**



## KPI overview Wales

Based on average figures from January to August 2019.



**Nationally:** 45% of patients were checked for signs of injury before movement from the floor

**45%**



**Wales:** 46% of patients were checked for signs of injury before movement from the floor

**46%**



**Nationally:** 20% of hospitals used flat lifting manual handling methods to move the patient from the floor

**20%**



**Wales:** 24% of hospitals used flat lifting manual handling methods to move the patient from the floor

**24%**



**Nationally:** 54% of patients had a medical assessment within 30 minutes of the fall

**54%**

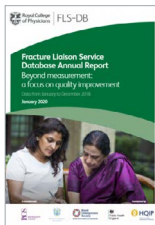


**Wales:** 58% of patients had a medical assessment within 30 minutes of the fall

**58%**

# Offering effective treatment to prevent future fragility fractures

## The Fracture Liaison Service Database (FLS-DB)



The Fracture Liaison Service Database (FLS-DB) is a clinically-led web-based national audit of secondary fracture prevention in England and Wales.

The audit demonstrates that there are areas for improvement for fracture liaison services (FLSs), including developing greater effectiveness and efficiency which will lead to sustainable funding. National coverage of secondary fracture prevention using fracture liaison services is still variable. Of the 13 hospitals registered with the NHFD in Wales, three are covered by an FLS submitting data

to the FLS-DB.

Since the last State of Wales report Aneurin Bevan UHB have registered and participated in the FLS-DB.

## The impact of fracture in Wales

Most patients who suffer 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 300,000 fragility fractures in England and Wales every year in people aged 50 years and over.

## Care quality in different local health boards

Selecting the locations (in bold text) on this interactive map allows you to examine performance in individual units. Please click on the health boards to see their figures, if they are participating in the FLS-DB.

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



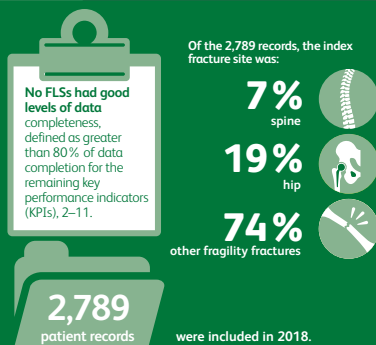
## Key messages – report at a glance

A fracture liaison service (FLS) aims to reduce the risk of subsequent fractures by systematically identifying, assessing, treating and referring to appropriate services all eligible patients aged 50 and over who have suffered a fragility fracture. Based on average figures from January to December 2018

### Demographics and data completeness

We congratulate the achievement of the three FLSs across Wales that submitted data which contributed towards this report (available at: <https://www.rcplondon.ac.uk/projects/outputs/fls-database-annual-report-2020>).

There has been an improvement in most key performance indicators (KPIs) but further work is needed for effective and efficient service delivery.



### Key findings

20%

**Monitoring contact** – Only 20% of patients recommended anti-osteoporosis medication were contacted at 12–16 weeks post fracture.

80%

**Identification** – 10 out of 61 FLSs are now submitting over 80% of their expected caseload and for all fragility fractures. Spine fracture identification has improved to 36% in 2018 from 29% in 2017.

80%

**Assessment** – Despite the increased volume of patients seen, the proportion assessed by FLSs or receiving a dual energy X-ray absorptiometry scan (DXA) within 90 days has remained relatively stable.

80%

**Quality improvement** – Quality improvement was the focus of the latest FLS-DB report where you can review overall improvement and worsening of KPIs.

# FFFAP recommendations for services in Wales

## Care of people with hip fracture

Care after hip fracture has responded to the first year of Welsh Government performance management; using KPI data from the NHFD to encourage local teams to engage in quality improvement.

As a result, outcomes have improved markedly and by March 2020 mortality within 30 days of hip fracture was just 6.3 %; compared with the equivalent figure of 6.4 % in England.

Provision of orthogeriatric care remains patchy; a number of units still have no service, and senior orthogeriatrician job plans in others are insufficient for the number of people presenting with hip and other fragility fractures.

Local health boards should ensure that they have appointed an orthogeriatrician to lead multidisciplinary care in each trauma unit, as this will:

- > avoid delays in surgery for hip fracture
- > avoid patients becoming delirious in hospital
- > avoid delays in mobilisation, rehabilitation and return home.

## Preventing inpatient falls

Local health boards should ensure that falls teams responsible for their acute, community and mental health hospitals are signed up to contribute to, and learn from, the National Audit of Inpatient Falls. Greater data collection and continued development should help to reduce the chances of a fall occurring and an overall better quality of care in hospital.

## Preventing future fractures

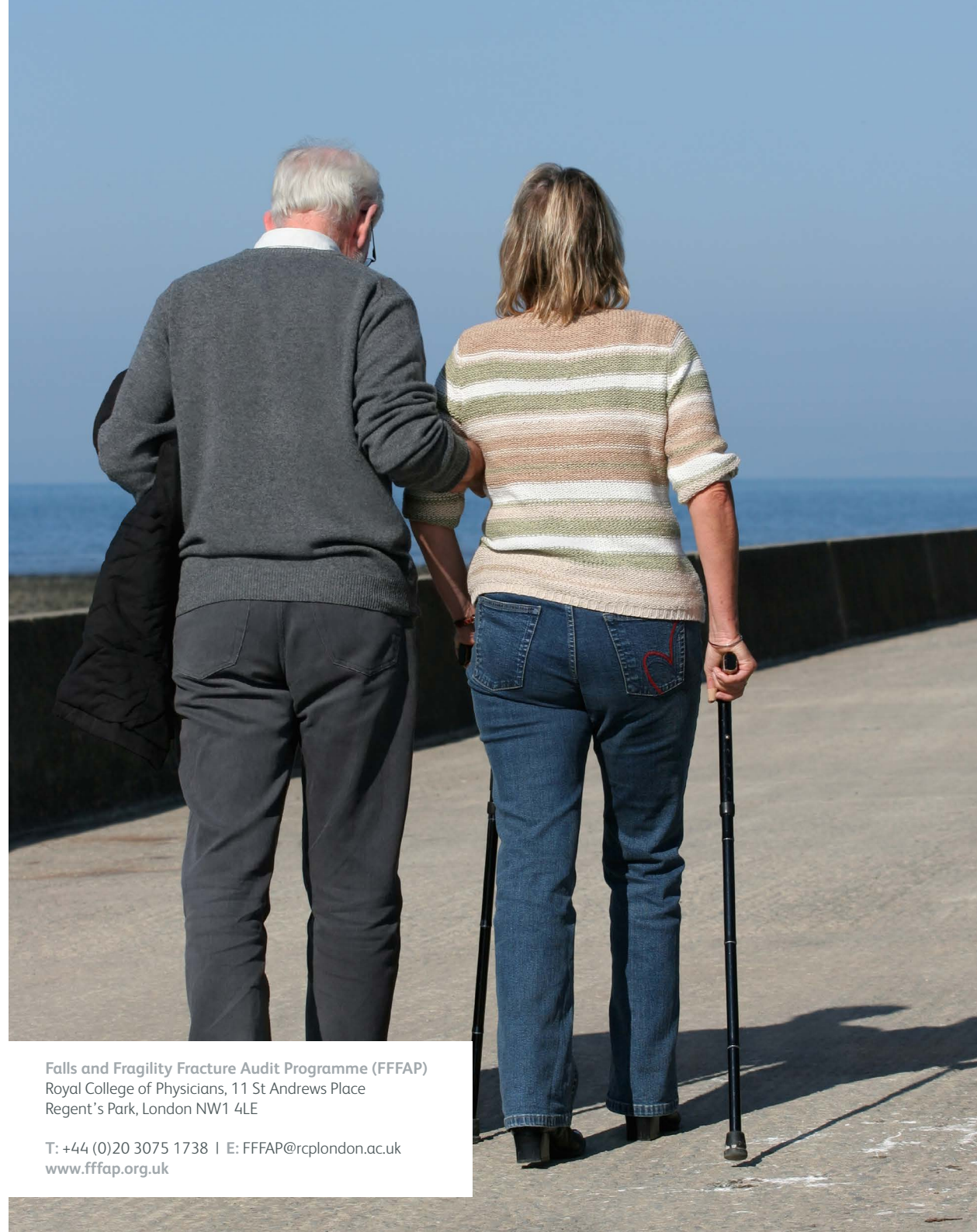
Only three local health boards report that they have established a fracture liaison service (FLS). Their role has been important in providing evidence showing that such services are highly effective in preventing future fractures.

Find out what secondary fracture prevention services are available in your area.

1. Implementing an FLS is an urgent priority for sites without one and they should link with the ROS service delivery team.
2. It is essential to support FLSs where commissioned to effectively participate with the FLS-DB to ensure FLSs are meeting their expected outcomes through the KPI.
3. Support the WOAG and other structures to provide the mentorship for FLS-QI.

For example, in a population of 300,000, an effective FLS will prevent around 250 fragility fractures, of which about 140 would be hip fractures over 5 years. It is estimated that one in 10 hip fracture patients are admitted to a care home rather than returning home. The total expected local savings to the NHS and social care of these prevented fractures is estimated at £2.1 million.

\*In accordance with NHS information governance guidelines, we are obliged to restrict the display of 'small numbers' to avoid disclosing patient identifiable data. Therefore, the charts in the appendix overleaf show a minimum of 5 patients per month, even if the actual number of patients was lower. This adjustment is applied to the data before being displayed on the charts.



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## Appendix: data

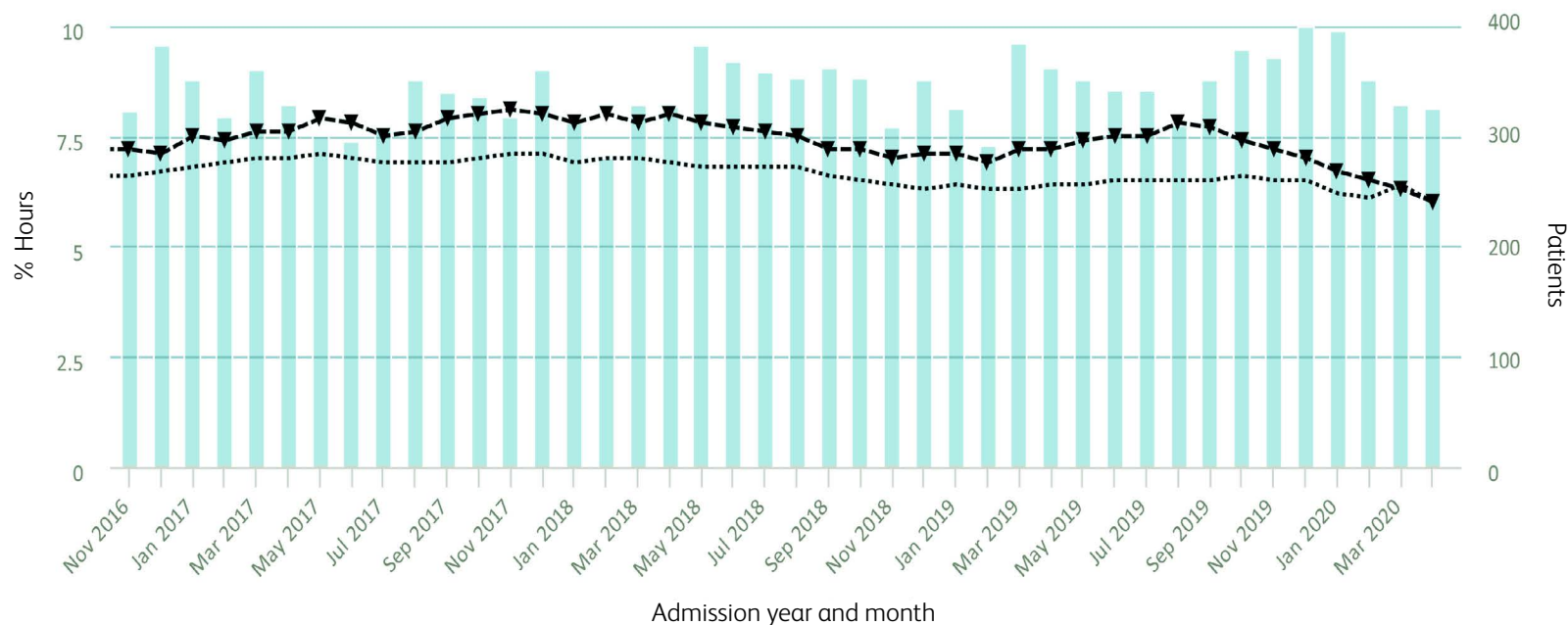
NHFD sites	Prompt orthogeriatric review % (annual)	Prompt surgery % (annual)	NICE compliant surgery % (annual)	Prompt mobilisation % (annual)	Not delirious post-op % (annual)	Return to original residence % (annual)
Glan Clwyd Hospital	42.3	60.7	66.3	79.3	39.1	75.5
Wrexham Maelor Hospital	69.5	70.4	72.2	87	42.6	74.8
Ysbyty Gwynedd Hospital	48.6	74	66.2	82.2	24.9	73.9
Bronglais General Hospital	96.9	42.4	80.5	87.3	90.7	80.8
Withybush General Hospital	72.5	61.2	70.1	52.7	63.2	76.8
West Wales General	34.6	77.7	73.1	70.2	71.6	78.4
Morriston Hospital	79.2	57.6	74.5	73.4	54.6	73.4
Princess of Wales Hospital	1.2	55.9	76.5	81.9	68.9	69.3
Prince Charles Hospital	0	63	38.2	73.1	0	72.5
Royal Glamorgan Hospital	6.9	57	72.6	56.5	6.1	73.2
University Hospital of Wales	86.1	67	81.6	69.6	47.9	72.6
Royal Gwent Hospital	96.2	59.3	74.7	73.6	64.1	72.9
Nevill Hall Hospital	95.9	79.6	77.1	77.1	72	75.4

### Overall performance – Wales

■ Patients  
(number per month)

▼ 30 day mortality  
% (annual)

..... 30 day mortality  
% (national)



## Appendix: data

Welsh health boards – data by HB	NICE QS86 4	NICE QS86 5	NICE QS86 6
NAIF	% checked for suspected injury	% flat lifted	% medically assessed <30 mins
Abertawe Bro Morgannwg University LHB	44	*	75
Aneurin Bevan University Health Board	60	*	20
Betsi Cadwaladr University Health Board	*	*	58
Cardiff and Vale University Health Board	57	57	*
Cwm Taf Morgannwg University Health Board	64	27	91
Hywel Dda University Health Board	41	41	68
Powys Teaching Health Board	n/a	n/a	n/a

FLS name	KPI 1 Number of KPIs with >80% complete data	KPI 2 Identification – all fractures	KPI 3 Identification – spine fractures	KPI 4 Time to FLS assessment within 90 days	KPI 5 Time to DXA within 90 days	KPI 6 Falls assessment done or referred	KPI 7 Bone therapy recommended as appropriate	KPI 8 Strength and balance commenced (patients >75)	KPI 9 Recorded follow-up 12–16 weeks post index fracture	KPI 10 Patient commenced bone therapy at 16 weeks	KPI 11 Patient confirmed adherence to bone therapy at 12 months *
Aneurin Bevan University Health Board	2%	2%	2%	*	29%	0%	40%	0%	0%	0%	n/a
Morrison Hospital	6%	39%	6%	99%	29%	28%	80%	11%	100%	40%	53%
University Hospital Llandough	3%	34%	5%	98%	1%	45%	45%	13%	39%	25%	57%