Royal College of Physicians

Fracture Liaison Service
Database (FLS-DB)

Annual report

You've had a fracture;
how can we prevent another?

**Data from 1 January 2023
– 31 December 2023**

January 2025

In association with

BGS British Geriatrics Society
Improving healthcare
for older people

British Orthopaedic
Association

Royal
Osteoporosis
Society
Better bone health for everybody
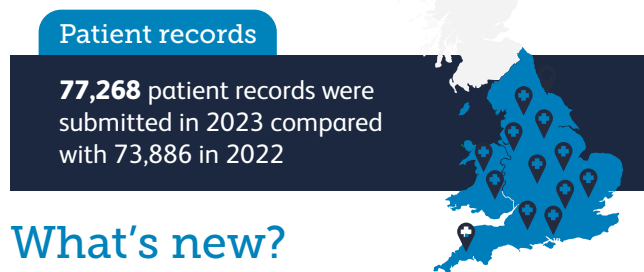
Commissioned by

HQIP
Healthcare Quality
Improvement Partnership

Report at a glance

In England and Wales there are around 180,000 fractures each year as a result of osteoporosis. One in three women and one in five men will sustain a fracture in their lifetime.[*] The Fracture Liaison Service Database (FLS-DB) captures the data of patients who have sustained fractures with the aim of preventing secondary fractures.

H 69

fracture liaison services (FLSs) across England and Wales actively participated in the FLS-DB audit and contributed towards our annual report

Patient records

77,268 patient records were submitted in 2023 compared with 73,886 in 2022

What's new?

> This is the first year we compare the number of patients on **anti-osteoporosis treatment** at 16 and 52 weeks. The data are included in appendix A.

> Men are less likely to use FLSs than women, so we have created a specific resource for male patients explaining what to do in the event of a fracture.

You've had a fracture; how can we prevent another?

The focus of this year's annual report is on ensuring that patients who are at high risk of another broken bone have started treatment within 16 weeks of their first broken bone.

KPI 10 – Commenced bone therapy by the first follow-up
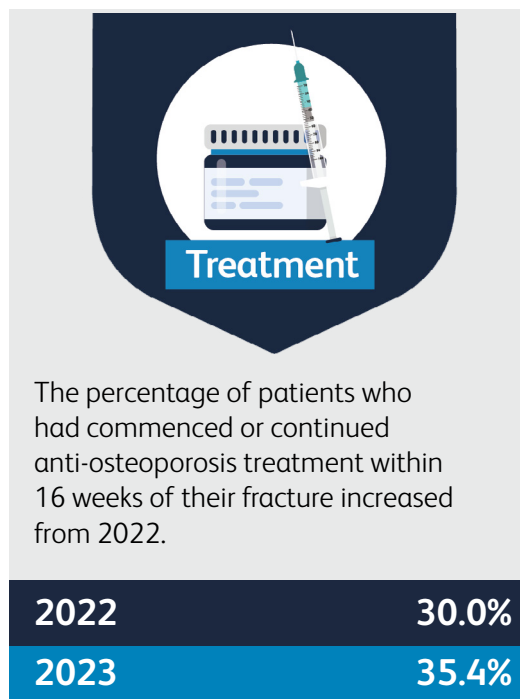
Treatment

The percentage of patients who had commenced or continued anti-osteoporosis treatment within 16 weeks of their fracture increased from 2022.

2022	30.0%
2023	35.4%

A glance at our recommendations

100% of all ICBs and Welsh health boards should report the regional impact of fragility fractures in adults aged 50 or over and publish a high-level strategic plan to improve secondary fracture prevention for their population, focusing on delivering KPI 10.

This should be achieved by:

> convening a multi-stakeholder FLS working group, including representatives from the ICB/Welsh health board, secondary care, primary care and patient groups

> describing the current regional delivery of FLS-DB KPIs and the expected annual number of avoidable fractures by working with the Royal Osteoporosis Society FLS service delivery team (FLS@theros.org.uk)

> identifying funding pathways needed to support the equitable delivery of FLS identification, assessment, treatment recommendation, initiation and adherence focusing on delivery (KPI 10)

> committing to a timescale for initiating a phased introduction and improvement of FLSs in their regions.

* https://cks.nice.org.uk/topics/osteoporosis-prevention-of-fragility-fractures/background-information/prevalence/

Contents

Key messages and recommendations

People who sustain a bone break after minimal trauma (eg a fall from a standing height) occupy more hospital bed days than those who have had heart attacks and strokes. Half of all adults aged 50 or over who break a bone after minimal trauma are at high risk of another fracture in the next few years, with over 50 % of subsequent fractures in the next 10 years occurring within 2 years (the imminent fracture risk period).

Preventing subsequent fractures is therefore a clinical and cost-effective priority for the NHS. These patients should be offered anti-osteoporosis treatment in line with NICE recommendations based on their fracture risk.

All fracture liaison services (FLSs) aim to close this treatment gap effectively by systematically identifying patients at high risk of another fracture and organising an assessment to recommend, start and continue anti-osteoporosis treatment based on fracture risk and comorbidities. To achieve this, FLSs should initiate anti-osteoporosis treatment within 16 weeks of the fracture diagnosis for patients with high fracture risk.

In 2023, 77,268 patient records were submitted to the Fracture Liaison Service Database (FLS-DB), with 45,401 recommended or referred for anti-osteoporosis treatment. A total of 15,599 patients were started on anti-osteoporosis treatment within 16 weeks of fracture diagnosis. For fractures that occurred in 2022, 12,446 were followed up in 2023 and on anti-osteoporosis treatment at 52 weeks.

Overall, there was a small improvement in most of the KPIs in 2023, apart from data completion (KPI 1). However, many of the outcomes remain low. Getting high-risk patients onto anti-osteoporosis treatment as soon as possible is a priority. The next challenge for FLSs is to ensure that within 16 weeks of a fracture diagnosis, over half of patients at a very high fracture risk have started NICE-recommended anti-osteoporosis treatment.

What is a fracture liaison service (FLS)?

FLSs reduce the risk of future fractures in patients aged 50 or over who have recently sustained a fracture. Patients will be assessed and receive appropriate treatment to lower their risk of subsequent fractures or osteoporosis.

FLSs are made up of healthcare professionals and can be based in hospitals or GP surgeries. FLSs are shown to be clinically cost-effective and bring clear benefits to the healthcare system in the long term.

NHS England and Welsh health boards should support local services to reduce the rates of refracture risk by ensuring that high fracture risk patients have commenced appropriate osteoporosis treatment within 16 weeks of the fracture diagnosis date.

	Supporting FLS-DB data	FLS-DB recommendation
1	**35.4% KPI 10** – commencing bone therapy by first follow-up	**All integrated care boards (ICBs) and Welsh health boards should provide a strategic plan for effective secondary fracture prevention for their locality. This should be based on relevant NICE recommendations and FLS-DB key performance indicators specifically focusing on KPI 10, which measures the treatment initiation in patients at high fracture risk.**
2	**35.4% KPI 10** – commencing bone therapy by first follow-up	**100% of all ICBs and Welsh health boards should report the regional impact of fragility fractures in adults aged 50 or over and publish a high-level strategic plan to improve secondary fracture prevention for their population, focusing on delivering KPI 10.**
		This should be achieved by:
		> convening a multi-stakeholder FLS working group, including representatives from the ICB/Welsh health board, secondary care, primary care and patient groups
		> describing the current regional delivery of FLS-DB KPIs and the expected annual number of avoidable fractures by working with the Royal Osteoporosis Society FLS service delivery team (fls@theros.org.uk)
		> identifying funding pathways needed to support the equitable delivery of FLS identification, assessment, treatment recommendation, initiation and adherence focusing on delivery (KPI 10)
		> committing to a timescale for initiating a phased introduction and improvement of FLSs in their regions.
3	**35.4% KPI 10** – commencing bone therapy by first follow-up **11.9% KPI 11** – adherence to prescribed anti-osteoporosis medication at 12 months post fracture	**ICBs and Welsh health boards should facilitate local FLS clinical leads to complete at least one service improvement cycle to improve KPI 10, initiation of appropriate treatment by 16 weeks after fracture diagnosis or adherence at 52 weeks after fracture diagnosis.**
		This is in line with the findings from KPI 10 and KPI 11 outlined in <u>appendix A</u>, which demonstrate the lack of availability and prescription of anti-osteoporosis treatment among FLSs. FLSs can utilise the resources created by the FLS-DB to implement this initiative; this includes:
		> the FLS-DB resources, including the <u>improvement workbook</u> and <u>FLS-DB quality improvement video</u>, to upskill on methods for effective and efficient service improvement
		> forming a multi-stakeholder improvement group, including 2–3 patients and primary care representatives (<u>refer to FFFAP improvement workbook</u>)

	Supporting FLS-DB data	FLS-DB recommendation
3	**35.4% KPI 10** – commencing bone therapy by first follow-up **11.9% KPI 11** – adherence to prescribed anti-osteoporosis medication at 12 months post fracture	> exporting local service data for 2023–24 from the <u>FLS-DB website</u>, and examining the number of patients who had started on each type of osteoporosis treatment by 16 weeks against local/regional osteoporosis treatment recommendations > using these data to co-develop a set of SMART aims and outcomes for FLSs to improve KPI 10 > using service improvement methods to understand the reasons for this current service gap, including reviewing KPI 1–7 to prioritise scalable and sustainable interventions to improve performance; utilising the FLS-DB webinar on <u>how to implement an improvement project</u> > evaluating, learning and modifying changes to practice based on KPI changes, and sharing improvement performance by submitting learnings to the <u>FLS-DB improvement repository</u> through the <u>KPI case study form</u> to share with other FLSs.
4	**55.2% KPI 2** – identification (non-spine) **34.4% KPI 3** – identification (spine fractures) **28% KPI 9** – monitoring contact 12–16 weeks post fracture	**ICBs and Welsh health boards should support regional advocacy groups for the establishment and improvement of FLSs. These advocacy groups would increase the quality of patient/caregiver engagement for local FLSs service improvement teams and establish the implementation of FLSs in areas without coverage. This is with the aim of increasing identification of patients who require fragility fracture care and ensuring that they receive the appropriate follow-up care.** This can be achieved by: > utilising FLS-DB <u>integrated care board data</u> to identify gaps in FLS coverage > supporting new, and enhancing existing local advocacy groups to support regional FLS delivery, such as an ROS local support group > engaging with local clinicians to support the implementation of effective FLSs in the region > supporting local clinical teams to co-develop, implement and improve.
5	**35.4% KPI 10** – commencing bone therapy by first follow-up **11.9% KPI 11** – adherence to prescribed anti-osteoporosis medication at 12 months post fracture	**ICBs and Welsh health boards should work with FLSs and primary/community care in the co-production of sustainable patient pathways for primary care delivery of anti-osteoporosis treatment, such as injectable treatments. This is with the aim of facilitating better communication and transition of patient management between primary/community care and FLSs. This is in line with the findings from KPI 10 and KPI 11 outlined in <u>appendix A,</u> which demonstrate the lack of availability and prescription of anti-osteoporosis treatment among FLSs.**

What is the Fracture Liaison Service Database?

The FLS-DB is an online national audit that collects, measures and reports on the care provided by FLSs. The FLS-DB began in 2016 and since then has collected over 500,000 patient episodes from England, Wales and Northern Ireland.* The data collected in this annual report were captured from 1 January 2023 – 31 December 2023, from 69 FLSs submitting the results of secondary fracture prevention care received by patients aged 50 or over.

Data are displayed against the 11 FLS-DB key performance indicators (KPIs) derived from NICE technology appraisals and guidance on osteoporosis. This falls alongside the Royal Osteoporosis Society clinical standards for FLSs, as well as quality standards for osteoporosis and prevention of fragility fractures.

Platforms using FLS-DB data

The National Clinical Audit Benchmarking allows the public and NHS to view FLS-DB data benchmarked by services to support the identification of service improvements. It can be utilised by NHS decision-makers, such as ICBs and Welsh health boards, when they plan services at regional and local levels. The FLS-DB is also adding resources on Medical Care – driving change, a collaborative resource hub space hosted by the Royal College of Physicians to support clinicians and teams in delivering sustainable improvement.

Methods: clinical audit

The FLS-DB clinical audit aims to profile the quality of fracture prevention care received by patients aged 50 and over in England and Wales. This is achieved by a series of indicators related to the patient pathway, including identification of patients, recommendation of bone therapy, and follow-up of patients. One FLS that submitted fewer than 50 fracture records for 2023 was excluded.[†] This is the first year we have included a table comparing the number of patients on anti-osteoporosis treatment by 16 and 52 weeks per patient record submitted, captured in appendix A. NICE has recommended anti-osteoporosis treatment with distinct target populations.

Live FLS-DB data – benchmarks and run charts

The FLS-DB uses information that is routinely collected to inform patient care and improve the care received by patients. FLSs can view their data in real time run charts and benchmarking tables. Data include 10 of the 11 KPIs (excluding data completeness). FLSs are encouraged to use this live data to identify service improvement opportunities and monitor the progress they are making. This allows them to make data-driven decisions and share their data in governance meetings. As of 2024, the FLS-DB benchmark tables include integrated care board (ICB) data.

Demographics and data completeness

We welcome Queen Elizabeth Hospital King's Lynn as a newly participating FLS, as well as Ealing Hospital and Guy's and St Thomas' NHS Foundation Trust FLSs, which have restarted active participation.

Services that did not participate in 2023 are captured on the FLS-DB benchmark tables.

77,268
Records submitted in 2023

We congratulate the achievement of 69 FLSs across England and Wales that submitted 77,268 patient records in 2023, compared with 73,886 in 2022.

* Data from Northern Ireland are not analysed as part of this report as their participation is not commissioned by the Healthcare Quality Improvement Partnership (HQIP).

† For the KPI data to be meaningful, only data from services with 50 or more cases are analysed as part of the report.

FLS-DB 2023 clinical audit key findings

Table 1: FLS-DB KPIs for all patients with an index fragility fracture date in 2022 and 2023 (for KPIs 1–11).
Live FLS-level data for all KPIs are available on the FLS-DB benchmark tables.

| Key performance indicators (KPIs)	Standard/rationale	2022	2023
KPI 1 – Data completeness FLSs with a good level of data completeness	Defined as fewer than five fields with more than 20 % of data missing	43.5 %	39.1 %
KPI 2 – Identification (non-spine fractures) The percentage of patient records submitted compared with the local estimated caseload	ROS clinical standards for FLSs, standard 1 and NOGG: Clinical guideline for the prevention and treatment of osteoporosis	53.9 %	55.2 %
KPI 3 – Identification (spinal fractures) The percentage of patient records submitted compared with the local estimated caseload	ROS clinical standards for FLSs, standard 1 and NOGG: Clinical guideline for the prevention and treatment of osteoporosis	27.4 %	34.4 %
KPI 4 – Time to FLS assessment The percentage of patients assessed by the FLS within 90 days of their fracture	NICE CG146, NICE CG161, NICE QS86 and ROS clinical standards for FLSs, standard 2	64.5 %	65.2 %
KPI 5 – Time to bone densitometry scan/assessment (DXA) The percentage of patients who had a DXA ordered or recommended and were scanned within 90 days of fracture	NICE CG161, NICE QS86 and ROS clinical standards for FLSs, standard 2	31.2 %	34.1 %
KPI 6 – Falls assessment The percentage of patients who received a falls assessment or were referred or recommended for a falls assessment	NICE CG161, NICE QS86, and ROS clinical standards for FLSs, standard 2	58.5 %	60.3 %
KPI 7 – Bone therapy recommended The percentage of patients who were recommended anti-osteoporosis medication	ROS clinical standards for FLSs, standard 4, NICE TA161, NICE TA204, NICE TA464, NICE TA791 and NICE QS149	56.0 %	58.8 %

Key performance indicators (KPIs)	Standard/rationale	2022	2023
KPI 8 – Strength and balance training The percentage of non-hip fracture patients over 75 who had started strength and balance training within 16 weeks of their fracture	NICE CG161, NICE QS86, ROS clinical standards for FLSs standards 3 and 4 and NOGG: Clinical guidelines for the prevention and treatment of osteoporosis	6.2%	8.2%
KPI 9 – Monitoring contact 12–16 weeks post fracture The percentage of patients who were followed up within 16 weeks of their fracture	NICE QS149, statement 3, ROS clinical standards for FLSs, standard 4 and ROS quality standards for osteoporosis and prevention of fragility fractures, standard 5	27.1%	28.0%
KPI 10 – Commenced bone therapy by first follow-up The percentage of patients who had commenced (or were continuing) anti-osteoporosis medication within 16 weeks of their fracture	NICE QS149 statement 3, ROS clinical standards for FLSs, standard 4 and ROS quality standards for osteoporosis and prevention of fragility fractures, standard 5	30.9%	35.4%
KPI 11 – Adherence to prescribed anti-osteoporosis medication at 12 months post fracture The percentage of patients who had confirmed adherence to a prescribed anti-osteoporosis medication at 12 months post fracture	NICE QS149 statement 3, ROS clinical standards for FLSs, standard 4 and ROS quality standards for osteoporosis and prevention of fragility fractures, standard 5	10.2%	11.9%

FLS-DB service improvement

Figure 1 shows the levels of performance of FLSs against each KPI in 2022 vs 2023. For the 1-year adherence (KPI 11), data are displayed comparing 2021 and 2022. Overall, there was an increase in the number of FLSs identifying spine fractures (KPI 3), patients receiving an FLS assessment within 90 days (KPI 4), falls and proportion recommended bone therapy (KPI 7), and monitoring (KPI 9). The number of FLSs achieving DXA within 90 days (KPI 5) and monitoring remains low (KPI 9).

Appendix A reports the type of anti-osteoporosis treatment that is initiated by 16 weeks and prescribed at 52 weeks. The data from 2023 show that many FLSs are not making these treatments available for patients, and there is wide variation in the types of osteoporosis treatments used and often no association with the numbers of fracture records submitted.

We encourage FLSs to examine their KPI 10 data by type of anti-osteoporosis treatment as the first step in a service improvement cycle to improve equity of access to treatment. These data will be available for services to view in transparency data, that is released after the publication of the report.
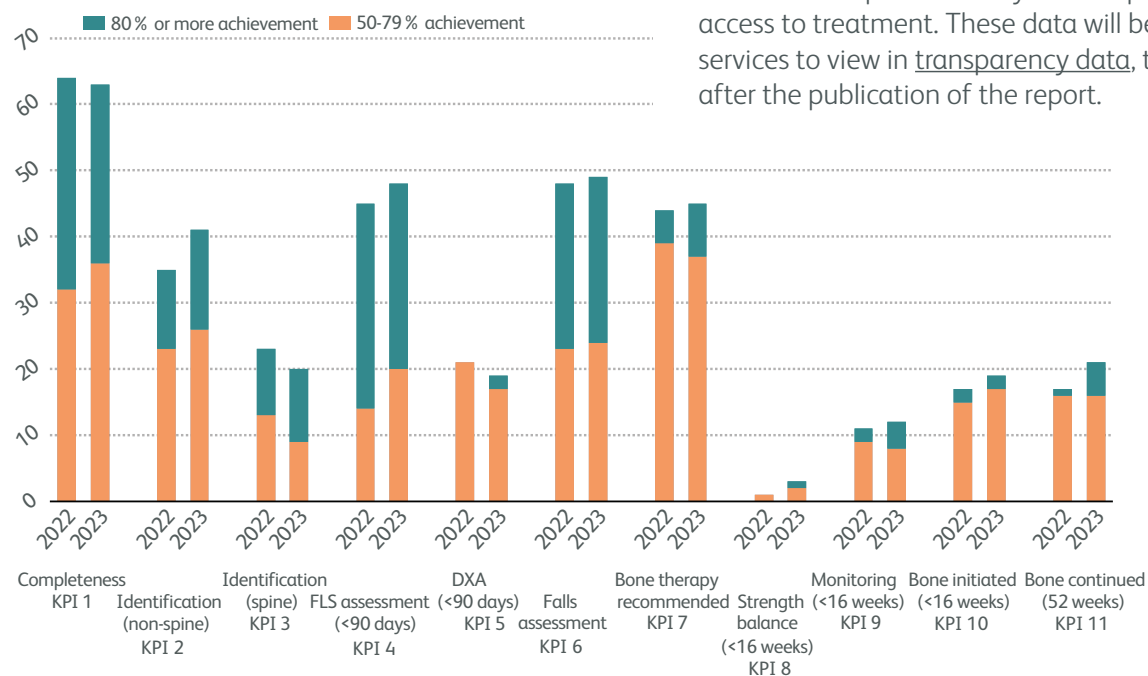
Improvement support

The FLS-DB team always seeks new ways to support FLSs to maximise usage of FLS-DB data to drive local service improvement. This support includes the delivery of virtual webinars known as 'exchanges' quarterly and other video resources. Our most recent exchanges and videos include:

1. Data entry support on the FLS-DB website
2. Using data to make service improvements
3. FLS-DB lite dataset
4. How to use FLS-DB data in governance meetings
5. How to use the FFFAP improvement workbook in an away day
6. How to deliver an FLS in an orthopaedic setting
7. How to implement the National Data Opt-out
8. How to use FLS-DB ICS data

If you would like to attend one of our upcoming exchanges, please email us at flsdb@rcp.ac.uk to be added to the circulation list.

FLS-DB lite dataset

In 2024 the FLS-DB launched its lite dataset, with the aim of reducing the burden of data collection on services. This dataset reduces the amount of data a service is required to submit, with the aim of increasing data completeness, as well as mapping the patient journey for wrist, humerus and pelvis fractures. Improved data completeness will allow more accurate benchmarking for the key performance indicators.

Legend: ■ 80% or more achievement ■ 50-79% achievement

X-axis categories:
Completeness KPI 1 (2022, 2023); Identification (non-spine) KPI 2 (2022, 2023); Identification (spine) KPI 3 (2022, 2023); FLS assessment (<90 days) KPI 4 (2022, 2023); DXA (<90 days) KPI 5 (2022, 2023); Falls assessment KPI 6 (2022, 2023); Bone therapy recommended KPI 7 (2022, 2023); Strength balance (<16 weeks) KPI 8 (2022, 2023); Monitoring (<16 weeks) KPI 9 (2022, 2023); Bone initiated (<16 weeks) KPI 10 (2022, 2023); Bone continued (52 weeks) KPI 11 (2022, 2023)

Note: KPI 11 reports 52-week outcomes for patients seen in 2021 and 2022, respectively

Fig 1. Green bar indicates 80% or more achievement, amber indicates 50–79% achievement (except for KPI 3 spine fractures where green demonstrates >20%, and amber between 11–19%). Green bar for KPI 7 indicates achievement is >50%.

FLS-DB starter pack

In collaboration with the FLS-DB Advisory Group, the FLS-DB team have created a starter pack. This provides a comprehensive overview of the FLS-DB, including detailed information on the data entry process, a summary of the KPIs and the resources available for services and patients.

Royal Osteoporosis Society support

The Royal Osteoporosis Society (ROS) is the UK's largest national charity dedicated to improving bone health and beating osteoporosis The ROS provides resources for patients, carers, clinicians and FLSs.

It recently led a successful campaign to work towards 100% coverage of FLSs as part of its 'better bones' campaign. The ROS provides a range of resources for FLSs and can be contacted for support.

The FLS-DB starter pack will be a useful resource for staff who are aiming to establish and grow their FLS. The pack provides a useful overview of the audit and should be utilised by all established and up and coming FLSs. It is concerning to see that there is little improvement in adherence to anti-osteoporosis medication and minimal change for those on bone therapy medication at 16 weeks – this should be further investigated.

Kathleen Briers, FFFAP patient and carer panel member

Impact of health inequalities

Health inequalities contribute to poorer health outcomes and preventable morbidity and mortality. Patients from lower income households are at a higher risk of experiencing hip fractures and face poorer outcomes following FLSs identification, including timely health assessment, falls assessment and monitoring.
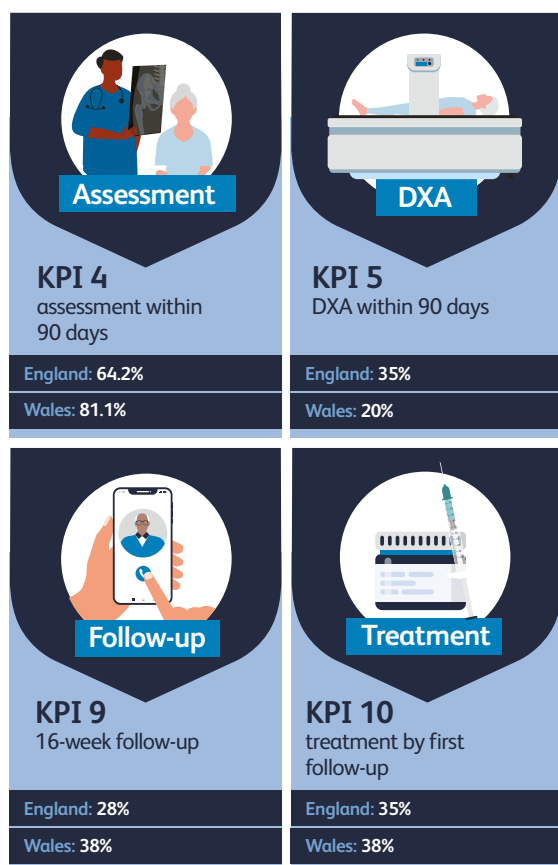
Age, gender and care home residence

Compared with last year, older people (aged 50 and over) are more likely to have a bone density scan (DXA) within 90 days (KPI 5) and more likely to be monitored at 16 weeks (KPI 9). Men remain less likely to have a falls assessment (KPI 4) and initiate and adhere to anti-osteoporosis treatment than women. Access to timely DXA was also lower among care home residents than non-residents.

Older people are more likely to have a DXA within 90 days

2023: **33%**
2022: **28%**

Access to timely DXA was lower among care home residents

Home residents: **28%**
Non-residents: **34%**
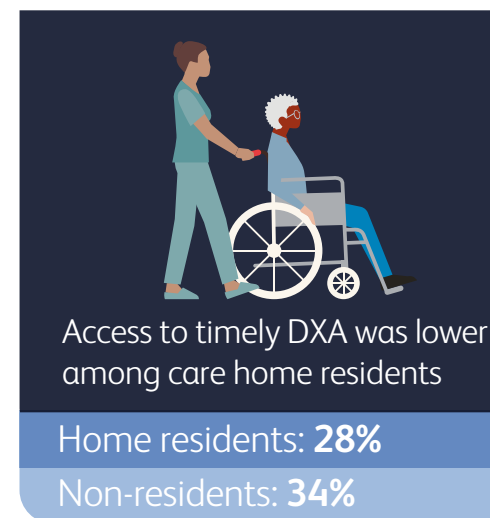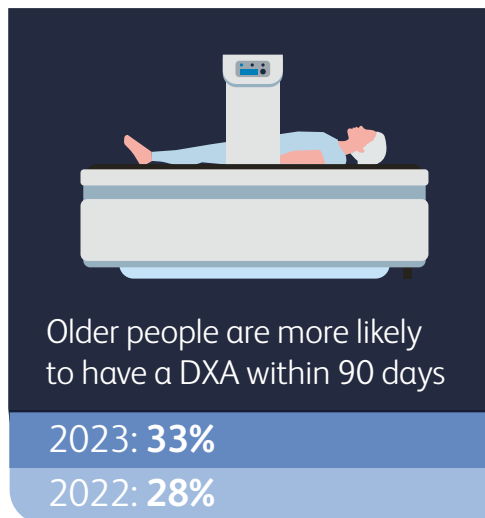
Regional variation

Maps of England and Wales demonstrate trends in regional variation with poorer identification rates in coastal areas. Wales had more hip fractures submitted than England, with fewer spine fractures. A more detailed and direct comparison of Wales and England demonstrated the following significant differences:

Assessment

KPI 4
assessment within 90 days

England: **64.2%**

Wales: **81.1%**

DXA

KPI 5
DXA within 90 days

England: **35%**

Wales: **20%**

Follow-up

KPI 9
16-week follow-up

England: **28%**

Wales: **38%**

Treatment

KPI 10
treatment by first follow-up

England: **35%**

Wales: **38%**

Indices of multiple deprivation (IMDs)

IMDs bring together 37 separate indicators that each reflect a different aspect of deprivation experienced by individuals living in an area. IMDs are used to identify those living in the most and least deprived areas. Comparing fractures diagnosed in 2023 and 2022, there has been little or no improvement in care delivery for the most deprived quintile for the measures shown in the graphic below.

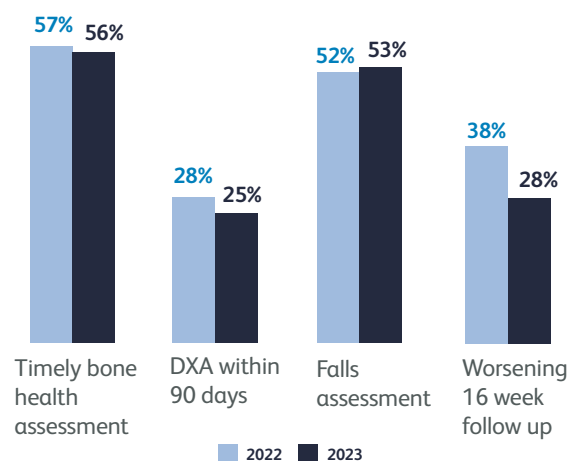|	2022	2023
Timely bone health assessment	57%	56%
DXA within 90 days	28%	25%
Falls assessment	52%	53%
Worsening 16 week follow up	38%	28%

Figure 2 demonstrates the variations in participation in the FLS-DB and where ICBs can work towards FLS coverage, based on local needs. While increased mortality, multiple health conditions and palliative care may account for some of these observed differences, FLSs should assess what additional support may be needed. This is with the intention of providing equity of care for this patient group while also gaining a deeper understanding of the factors contributing to these findings and to uncover how differences vary between FLSs.
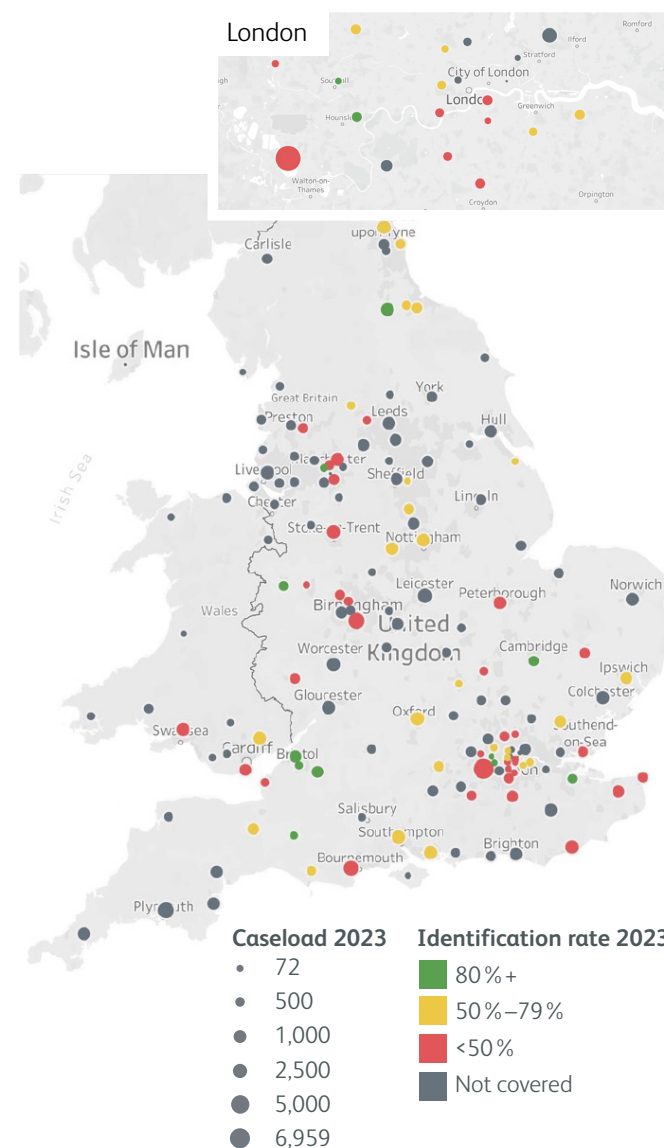

London

Caseload 2023
- 72
- 500
- 1,000
- 2,500
- 5,000
- 6,959

Identification rate 2023
- 80%+
- 50%–79%
- <50%
- Not covered

Fig 2. Map of England and Wales showing expected size of local fragility fracture population and achievement of case identification in 2023. View a larger copy of this map in appendix B. The sizes of the dots will vary according to the figures for each area.

FLS-DB resources

Patient resources

The FLS-DB works closely with the Fragility Fracture Audit Programme patient and carer panel, a group of patients and carers with lived experience of sustaining a fragility fracture or caring for someone with a fracture. We have created the following resources that help to improve understanding of FLSs and the benefits of secondary fracture prevention care:

> Strong bones after 50 – provides an overview of FLSs and the FLS-DB for patients and families.
> Bone health card – an information sheet for staying on treatment.

> Best practice letter templates – examples of best practice GP and patient letters.
> Six golden rules – a short video intended to encourage patients to have follow-up conversations with their GP after being recommended to take oral medication for osteoporosis.
> What should happen if you or someone you know experiences a fragility fracture? – steps you should take if you have experienced a fracture.
> Men and FLS resource – men are known to use FLSs at a lower rate than women and often have worse outcomes when they break a bone. This leaflet outlines the benefits of using an FLS and how it affects men with different health profiles.

Non-participating services

In 2024, the FLS-DB team started publishing data on parts of the country that do not enter patient data on the FLS-DB website. This included areas that do not currently have an FLS or are not yet registered with the audit to enter data. This allows ICBs, Welsh health boards and service managers to see the extent to which people in their area are missing out on the benefits of avoiding future fractures. In conjunction with this, we will be launching an outlier policy, outlining the process of contacting non-participating sites and registered sites with low participation numbers, based on the HQIP outlier management policy.

Future developments

Mental health and osteoporosis

Alongside the physical impact of osteoporosis and fragility fractures, patients will also experience a mental toll from their condition. We are developing a new resource that will support carers and patients who have had a fragility fracture. Please contact us if you wish to contribute towards the resource: flsdb@rcp.ac.uk.

Reviewing key performance indicators

In 2025, we will review KPI 8: strength and balance. This KPI relates to the treatment patients receive once they have experienced a fall, such as physiotherapy.

Collecting ethnicity data

Over the next 12 months, we propose introducing ethnicity data for the FLS-DB dataset so that we can investigate health inequalities. This is likely to be included in the 2026 dataset.

Importing/exporting between FLS-DB and National Hip Fracture Database (NHFD)

In 2025, the FLS-DB and NHFD will be developing a pathway for local sites to export data from the NHFD and import it into the FLS-DB, and vice versa. This will reduce the burden of participation and foster regional collaboration.

Staying up to date

Each quarter, the team circulates a newsletter providing an overview of developments in the audit, as well as resources available.

Email us at flsdb@rcp.ac.uk to be added to the distribution list.

The FLS-DB has produced a supporting document on the report analysis methodology, which is available to download.

Fracture Liaison Service
Database (FLS-DB)

Royal College of Physicians
11 St Andrews Place
Regent's Park
London NW1 4LE

Tel: +44 (0)20 3075 1511
Email: flsdb@rcp.ac.uk

www.fffap.org.uk

www.rcp.ac.uk

@rcp_fffap
#FLS-DB

Royal College of Physicians | Fracture Liaison Service
Database (FLS-DB)