



Fracture Liaison Service
Database (FLS-DB)

Annual report

Improved FLS identification
with gaps in monitoring:
a call to action for national
and regional planners

Data from 1 January 2022
to 31 December 2022

February 2024

In association with



Commissioned by



Key messages and recommendations

Fractures after a fall from standing height or less in adults aged 50 years and over often indicate osteoporosis and increased falls risk. Without urgent management, the risk of serious fractures due to osteoporosis will increase.

Fracture liaison services (FLSs) deliver secondary fracture prevention using clear pathways to identify those with potential osteoporotic fractures, deliver systematic assessment, treatment recommendations in line with national guidelines, and monitoring to ensure recommendations are initiated and adhered to. The delivery of this pathway is mapped across key performance indicators (KPI) to support local FLSs to check and improve their local services.

This report describes the assessment and treatment of osteoporosis by 69 FLSs for 65,843 patients who sustained a fragility fracture in 2022,¹ for use by healthcare professionals, decision-makers and the wider NHS.

Nationally, between 2021 and 2022, despite the significant pressures on the NHS, there was a **major improvement in identification** of patients and falls assessment. This is to be applauded, but there was little improvement in time to DXA² or monitoring. The reporting also found there has been **no improvement in assessment or monitoring, and inequity is demonstrable with poor FLS governance.**

We encourage providers of NHS care at the local and regional level to understand their local population needs and appropriately prioritise

¹ 2022 data were collected in June 2023, meaning that any data submitted for patients who sustained a fragility fracture in 2022 after June 2023 are not included in this report. Live FLS level data for all KPIs are available on the [FLS-DB benchmark tables](#).

² Dual-energy X-ray absorptiometry (DXA) is a bone density scan.

sustainable FLS provision with other healthcare needs. FLSs are an integral part of reducing healthcare demand, therefore supporting the NHS strategy to reduce waiting times for patients and levelling up care. This data should be made available to inform appropriate decision-making and understand the local, regional and national impact of osteoporotic fractures on patient and family outcomes, hospital emergency services, unplanned bed days and surgical capacity – as well as community and social care.

From the FLS-DB in 2022, 65,843 patients were identified, with 12,941 on bone strengthening therapy by 16 weeks. Using the rule of 5,³ there were 99,220 patients who were not identified, and we expect this will lead to 2,100 avoidable fractures over the next 2 years, including 596 hip fractures with significant increased mortality, morbidity, health and social care services use and costs.

These recommendations aim to close this care gap.

Stark gaps in provision of an FLS in many areas, including my own, is very concerning. An FLS should be mandatory and seen as a cost-effective priority.'

Kathleen Briers, patient and carer panel member

³ Rule of 5: estimates the FLS caseload to be approximately five times the number of hip fractures admissions in the same calendar year, see FLS-DB feasibility report (2016)

Key messages and recommendations

Key message	Supporting FLS-DB data	FLS-DB recommendation	Responsibility
1 KPI 2 and 3 (identification): the first step in an FLS is identification, more FLSs are identifying over 80 % caseload.	1/66 (1.5 %) of FLSs submitted over 80 % of their expected non-spine caseload in 2021 versus 12/69 (17 %) in 2022 and 11/69 (16 %) for spine fractures.	More FLSs are now delivering over 80 % identification rates for non-spine fractures. FLS that have prioritised improvement in KPI 2 and 3 should contact these services to share best practice for funding and identification pathways.	FLS
2 KPI 9 (monitoring): given the recognised poor initiation and adherence of bone therapy, early monitoring of patients is critical, so that patients can be considered for another bone therapy and potentially better long-term adherence.	9/66 (14 %) of FLSs in 2021 were able to follow up at least 80 % of patients within 16 weeks, with 11/69 (16 %) of FLSs reaching this level of performance in 2022.	To meet the healthcare recovery targets from the pandemic, FLS funding should be prioritised based on expected number of avoided fractures from a comprehensive service. FLSs should describe their capacity gaps and the expected benefit vs effort from re-organising pathways to ensure that at least 80 % of higher risk patients are checked within 16 weeks of their fracture. This may result in lower rates of identification for lower fracture risk patients.	FLS Hospital contracting leads Regional improvement leads with musculoskeletal or focused on recovery of performance
3 KPI 5 (assessment): ensuring patients are rapidly assessed is a critical component of an effective FLS.	1/69 FLSs assessed 80 % of their patients DXA within 90 days in 2021, with 0 FLSs achieving this in 2022.	FLSs should work with their local DXA providers to ensure access to DXA is based on patient need. This may require FRAX ⁴ before DXA pathways, increasing follow up based on evidence and using FRAX only recommendations to clear backlogs of patients that are unlikely to be cleared in the next 4 months.	FLS DXA providers
4 There is clear inequity of care by geographic, deprivation, sex and care home status.	Differences in participation, KPI for time to assessment (bone, DXA and falls) and monitoring.	FLS care pathways should acknowledge that specific patient groups need a personalised approach to assessment, decision-making and support. This includes providing patient-facing materials that reflect the languages of their local population.	FLS Local and regional equality, diversity and improvement leads
5 FLSs are encouraged to use the live data to identify areas of achievement and improvement as an integrated component of regular governance meetings.	23 FLSs have not set up regular governance meetings; five only had annual meetings. ⁵	All senior executive decision-makers should hold a key stakeholder meeting to explore how local needs for fragility fracture patients can be met. Patient representatives and members of the Royal Osteoporosis Society should be invited to the meeting, and it should plan for effective and sustainably resourced FLSs based and designed on the KPIs from the FLS-DB.	Senior executive decision makers
Key message	Supporting FLS-DB data	FLS-DB recommendation	Responsibility

⁴Fracture Risk Assessment Tool (FRAX) is a clinical tool for assessing the risk of fractures in people with osteoporosis.

⁵Regular governance meetings were defined in the 2022 facilities audit as every 6 weeks, every 2–6 months or every 12 months.

What is an FLS and what is the FLS-DB?

A fracture liaison service (FLS) ensures that patients aged 50 and over who sustain a broken bone after a fall have their bone health and falls risk checked and managed to lower their risk of a subsequent fracture. Made up of a team of healthcare professionals, FLSs bring clear benefits to the patient and the system in the long term and have been shown to be clinically and cost-effective.

The Fracture Liaison Service Database (FLS-DB) collects, measures and reports on the care provided by FLSs. Since it began in January 2016, nearly 500,000 patient records have been entered by FLSs across the NHS in England, Wales and Northern Ireland. This annual report presents the results of secondary fracture prevention care received by over 65,000 patients aged 50 and older following a fragility fracture between January and December 2022 from 69 FLSs.

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

Using the live data online: benchmarks and run charts

The FLS-DB provides FLSs and the public with live data in the form of [run charts](#) and [benchmarking tables](#) for 10 of the 11 KPIs (KPI 1 on data completeness is not included). FLSs are encouraged to use the live data to identify areas of achievement and improvement as an integrated component of regular governance meetings.

Patient resources

The growing repository of FLS-DB patient resources aim to help support, guide and improve people's understanding of secondary fracture prevention care. The resources are developed with guidance from patient and carer representatives who have personal experience of the impact of fragility fractures. This collaboration works to produce manageable, jargon-free resources for both FLSs and patients, all of which are publicly [available online](#) and [listed on page 12](#).

Services are encouraged to actively distribute the resources to the people in their care, and we are delighted with 91% (59/65) of FLSs reporting they used FLS-DB and/or ROS patient resources in the 2023 facilities audit. Our resources are complemented by the patient information provided by the ROS). The ROS also hosts additional support, such as the ROS specialist nurse helpline and Osteoporosis Connect, a peer-to-peer support line to anyone living with the condition.

The National Data Opt Out (NDOO) applies to the FLS-DB and the FLS-DB has produced [resources](#) to support services with removing the records of patients who have opted out both from historical records and prospectively.

National platforms using FLS-DB data

NHS England is utilising FLS-DB data, along with other national platforms to inform their work related to major conditions and diseases in collaboration with the Department of Health and Social Care, to support their work with integrated care systems requesting support related to fracture prevention, and to inform quality improvement resources being developed through [Getting It Right First Time](#).

The [National Clinical Audit Benchmarking](#) and [Model Health System](#) are additional platforms that allow both the public and NHS staff to access benchmarked FLS-DB data to identify areas for improvement. These tools are crucial for NHS decision-makers aiming to establish FLS as a standard part of healthcare delivery in every region. Furthermore, the ROS has used 2022 figures (as of May 2022) from the FLS-DB to configure [a map](#) for the KPI 2: identification of cases.

The FLS-DB also aims to have resources available on [Medical Care – driving change](#), a new open access multidisciplinary resource hosted by the Royal College of Physicians (RCP) for clinicians to support them in the delivery and spread of sustainable improvements.

Methods

Clinical audit

The FLS-DB clinical audit profiles the quality of secondary fracture prevention care received by patients aged 50 and older in England, Wales and Northern Ireland through a series of indicators related to the pathway, including, but not limited to: the identification of patients; the recommendation of bone therapy; and the follow-up of these patients.

Three FLSs were excluded from this report to ensure good data quality as they submitted fewer than 50 cases at the time of data extraction ([appendix A](#)).

In line with international KPIs, KPI 2 has changed from ‘all fractures’ to ‘non-spine fractures’. Furthermore, the expected caseload has been reduced by 6% for non-spine and spine fractures for KPI 2 and 3 respectively, to take into account the National Data Opt Out.

The 2022 data, including a full list of participating services will be available from data.gov.uk in the weeks after the 2024 report is published.

Demographics and data completeness

The FLS-DB team congratulates the achievement of the 69 FLSs across England and Wales that actively participated with the FLS-DB audit and contributed towards this report. Two services from Northern Ireland submitted data for 2022, which is available online. However, its clinical data has been excluded from this report as its participation is not commissioned by HQIP.

42%

of FLSs had good levels of data completeness. This is defined as eight or more key performance indicators (KPIs) with greater than 80% data completion and has been achieved against the backdrop of challenging times in the NHS.



‘ROS recently enabled the All Party Parliamentary Group (APPG) on Osteoporosis to conduct a detailed enquiry into the postcode lottery for fracture liaison services – and, crucially, how to end it. One of our key recommendations was that we need to make even more of the critical asset we have in the FLS Database. The level of transparency and accountability the database allows is a potent force for raising standards, since it allows services to learn from changes in their own performance and that of their neighbours. In light of these benefits, ROS and the APPG recommended that participation in the FLS Database should be made mandatory.’

Craig Jones, chief executive officer of the ROS

Facilities audit

The annual FLS-DB facilities audit⁶ profiles the structure and practices applied within services to identify patients at risk of osteoporosis and falls, in order to create a detailed national picture of how secondary fracture prevention is being delivered. A more detailed description of services will be available from data.gov.uk in the weeks after the 2024 report is published.

65 FLSs completed the 2023 facilities audit, covering the time period January–December 2022.

Service delivery

11 FLSs were delivered by non-acute hospital providers, demonstrating the flexible models for delivering a FLS. We welcomed six new FLSs that started sharing data in 2022.

Funding model

A number of different types of funding model are being used, with many receiving funding that needs to be renewed. Local decision-makers should review why an FLS is a priority for their local population and not a discretionally funded service.

Whole-time equivalents

26 FLSs have no funded consultant cover and it is unclear how bone expertise is accessed by FLSs. Local FLSs should ensure, where consultant cover is provided, that it is recognised. If there is no bone expertise cover, regional pathways should be in place to bring bone expertise to FLSs. 26 FLSs have no administrative support. As a consequence, nurse and allied health professional (AHP) time is spent on administrative tasks, rather than direct patient activity.

Vertebral fracture identification

54 FLSs identified patients who present with vertebral fractures, 22 are using referrals from vertebral fracture assessments, 24 screening radiology reports and seven by reanalysis of radiology images as part of opportunistic identification from radiology. 27 FLSs are still developing services with 25 without funding for vertebral fracture coverage, 33 without an agreed vertebral fracture pathway and 17 lack engagement with radiology.

Excluded fracture types

A variety of patients are excluded from FLSs including fractures of ankle, pelvis, scaphoid, metacarpal, metatarsal facial, rib, patella, avulsion and those resident in nursing homes. This variability may lead to less effective use of FLS resources, given overall identification rates are low.

FLS prescribing bone-sparing treatment

62 FLSs recommend bone therapy, with 21 able to prescribe.

Monitoring patients

FLSs are using a variety of methods to monitor patients including 28 delegating all or some of monitoring to the GP, prescription review (n=20), telephone interview (n=54), postal questionnaires (n=16), remote clinic review (n=13) and in-person clinic review (n=14) and should audit the effectiveness of this approach. FLSs should continue to review the value of ROS resources to support delivery.

Governance meetings

23 FLSs have not set up regular governance meetings with five only having annual meetings. All FLSs should review their governance reporting aiming to meet at least quarterly and ensure at least two patient representatives are involved.

⁶ Northern Ireland services included in the facilities audit analysis for 2021 and 2022.

FLS-DB 2022 clinical audit key findings

All key performance indicators (KPIs) measure performance against technology assessments, guidance on osteoporosis and clinical standards for FLSs from [NICE](#), [ROS](#) and [NOGG](#).

Table 1: FLS-DB KPIs for all patients with an index fragility fracture date in 2021 and 2022. Live FLS-level data for all KPIs is available in the [FLS-DB benchmark tables](#).

KPI	Standard/rationale	2021	2022
KPI 1 – Data completeness⁷ FLSs with a good level of data completeness		38%	45%
KPI 2 – Identification (non-spine fractures)⁸ The percentage of patient records submitted compared with the local estimated caseload	ROS clinical standards for FLSs, standard 1 and NOGG 2021: Clinical guideline for the prevention and treatment of osteoporosis	38%	50%
KPI 3 – Identification (spinal fractures) The percentage of patients with a spine fracture as their index fracture site compared with local estimated caseload	ROS clinical standards for FLSs, standard 1 and NOGG 2021: Clinical guideline for the prevention and treatment of osteoporosis	28%	43%
KPI 4 – Time to FLS assessment The percentage of patients who were assessed by the FLS within 90 days of their fracture	NICE CG146 , NICE CG161 , NICE QS86 and ROS clinical standards for FLSs, standard 2	67%	64%
KPI 5 – Time to DXA The percentage of patients who had a DXA ordered or recommended and were scanned within 90 days of fracture	NICE CG146 and ROS clinical standards for FLSs, standard 2	32%	31%
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%	58%

⁷ Analysis has been updated to reflect the proportion of FLSs with at least 80% of KPIs with complete data (defined as at least 80% of data inputted for each KPI).

⁸ 2022 data analysis includes only the identification of non-spine fragility fractures.

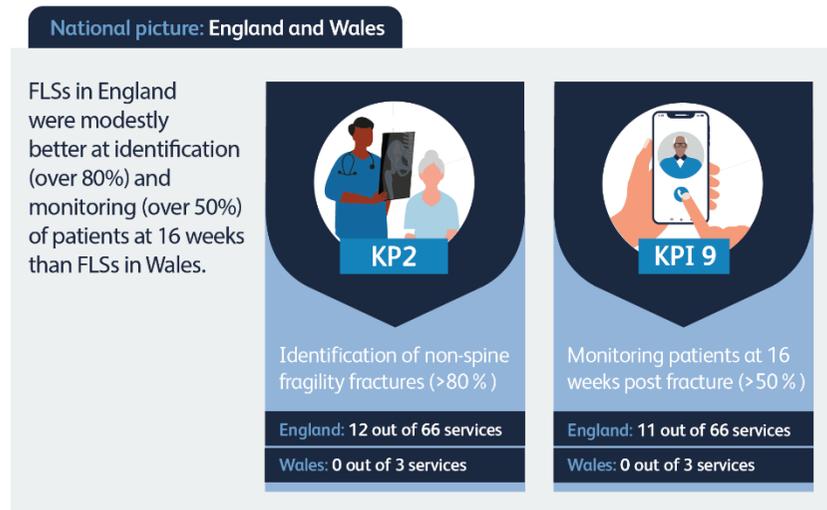
KPI	Standard/rationale	2021	2022
KPI 7 – Bone therapy recommended The percentage of patients who were recommended anti-osteoporosis medication	ROS clinical standards for FLSs, standard 4 , NICE TA161 and NICE QS149	56%	56%
KPI 8 – Strength and balance training The percentage of non-hip fracture patients 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 & 4 and NOGG 2021: Clinical guideline for the prevention and treatment of osteoporosis	5%	6%
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	14%	15%
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	32%	31%
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	25% ⁹	28% ¹⁰

⁹ Patient first seen in 2020 and followed up in 2021

¹⁰ Patient first seen in 2021 and followed up in 2022

FLS-DB service improvement

England and Wales KPI overview



This is the first year that the KPI for identification is focused on non-spine fractures and not all fractures, in order to avoid double counting vertebral fractures in both KPI 2 and 3. In addition, to take into account the National Data Opt Out, there is a 6% reduction in the expected caseload.

Nationally, there was improvement across identification and falls assessment with little change or a reduction in assessment, timely DXA and monitoring (Fig 1). We encourage FLSs to regularly present their audit findings at local governance meetings and join existing or develop regional networks in England and Wales. The networks are vital opportunities to share best practice and work together to deliver a step change in regional and NHS planning and commissioning of effective FLSs across England and Wales at the ICS and health

board regional levels. We fully support NHS Wales's mandate for national FLS provision, as this step change in patient care will realise significant patient, clinical and economic benefits.

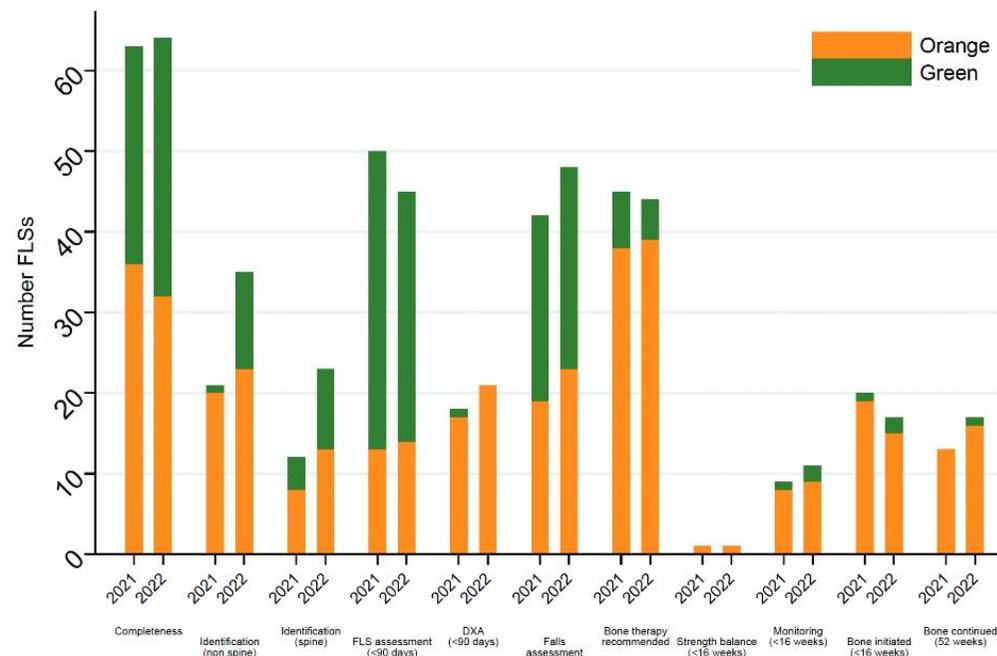


Fig 1. The number of services achieving amber and green status for KPI 1–11 (2021–2022) as per the [FLS-DB benchmarking table definitions](#)

Improvement support

The FLS-DB audit team is committed to exploring new ways to support FLSs driving local service improvements. From the end of 2022 and throughout 2023 the FLS-DB have hosted three interactive exchanges. The exchanges are live 1-hour sessions hosted by the FLS-DB clinical lead and project team specifically aimed at improving understanding for users to work with the database in the

most effective and efficient way. You can view previous sessions focusing on:

- > [using the FLS-DB benchmark tables and run charts to make service improvements](#)
- > [National Data Opt Out support](#)
- > [data entry support for the FLS-DB clinical and facilities audits.](#)

The exchanges join a growing number of improvement resources, which include a webinar recording [Making quality improvement easier for you](#) focusing on how FLSs can use the [live data](#) to identify an area for improvement, and the KPI case studies available in the [FLS-DB improvement repository](#).

To provide a case study to the FLS-DB audit team and share your improvement learning, contact flsdb@rcp.ac.uk for access to the template.

FLS-DB healthcare improvement workbook

The healthcare improvement workbook was developed to support local teams with quality improvement tools and enable service improvements with existing resources and limited budgets.

The FLS-DB workbook provides an easy-to-follow guide for FLSs to follow to improve any aspect of their FLS. The workbook can be [downloaded here](#).

Royal Osteoporosis Society support

Delivering effective secondary fracture for patients aged 50 and over who present with a fragility fracture depends on adequate and sustainable funding of FLSs to meet the local need. All FLSs should ensure they are resourced based on local need with the support of the ROS and local decision-makers. The ROS FLS [implementation toolkit](#) offers support for the development of services from business case through to outcomes and performance measurement, including providing an FLS benefits calculation to cost pathways for the local population.

‘Today, the postcode lottery around fracture liaison services isn’t just about population coverage; it’s also about the quality and performance of services. We hear repeatedly about the difficulties healthcare professionals face in running high-quality services when there is a lack of resourcing and buy-in from commissioners. That’s why we’ve made it a campaigning priority to encourage health leaders to invest properly in FLS, so we can seize the missed opportunities for fracture prevention. ROS’s well-regarded modelling tools can help colleagues make powerful business cases for new and improved FLSs – and all of our guidance and tools are free to access and use’

Craig Jones, chief executive officer of the ROS

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 such fractures. Equal access to FLSs and bone therapy is crucial, alongside the availability of resources for patient support. FLS care pathways should acknowledge that patients need a personalised approach to assessment, decision-making and support.

Age, gender and care home residence

Older patients (75 years and older) (28% vs 32% younger patients) and care home residents (24% vs 31% non-care home residents) were less likely to have a DXA within 90 days if referred, with only a slightly lower percentage for men (30% vs 31% women). Older patients were more likely to be monitored at 16 weeks (46% vs 43% younger patients) with no difference at 52 weeks. Men (24% vs 28% women) and care home residents (17% vs 28% non-care residents) were less likely to be adherent at 12 months.

‘Future research should focus on care home residents. The risk factors need careful monitoring post fracture.’

Kathleen Briers, Patient and Carer Panel member

Regional variation

Maps of England and Wales demonstrate the regional variations in participation with the FLS-DB (non-participating acute hospitals are shown in grey) and the variable identification rates (shown in red, amber and green).

There are clear regions without participation where the regional focus should be to plan for an FLS that is resourced based on local need (2021 and 2022 maps are included in [appendix B](#)).

A direct comparison of Wales and England:

- > More hip fractures were submitted in Wales (40% vs 27% England).
- > FLSs in Wales were able to assess more patients within 90 days (79% vs 64%) including DXA (35% vs 31%).
- > While participating FLSs in Wales recommended bone therapy to more patients (66% vs 55%), fewer patients were monitored at 16 weeks (26% vs 46%) and started treatment by then (19% vs 32%).

Indices of multiple deprivation (IMD)

IMD bring together 37 separate indicators that each reflect a different aspect of deprivation experienced by individuals living in an area. IMD is used to identify those in living in the most and least deprived areas. We report IMD results for the first time. The most deprived IMD, in line with [Core20PLUS5](#), were less likely to have a timely bone health assessment (57% vs 66%) or DXA (25% vs 33%), lower falls assessment (52% vs 60%), recommended bone therapy (48% vs 57%) and follow up at 16 weeks (38% vs 46%).

Increased mortality, multiple health conditions and palliative care may account for some of these observed differences. However, further work is required to gain a deeper understanding of the factors contributing to these findings and to find out how these differences vary between FLSs.

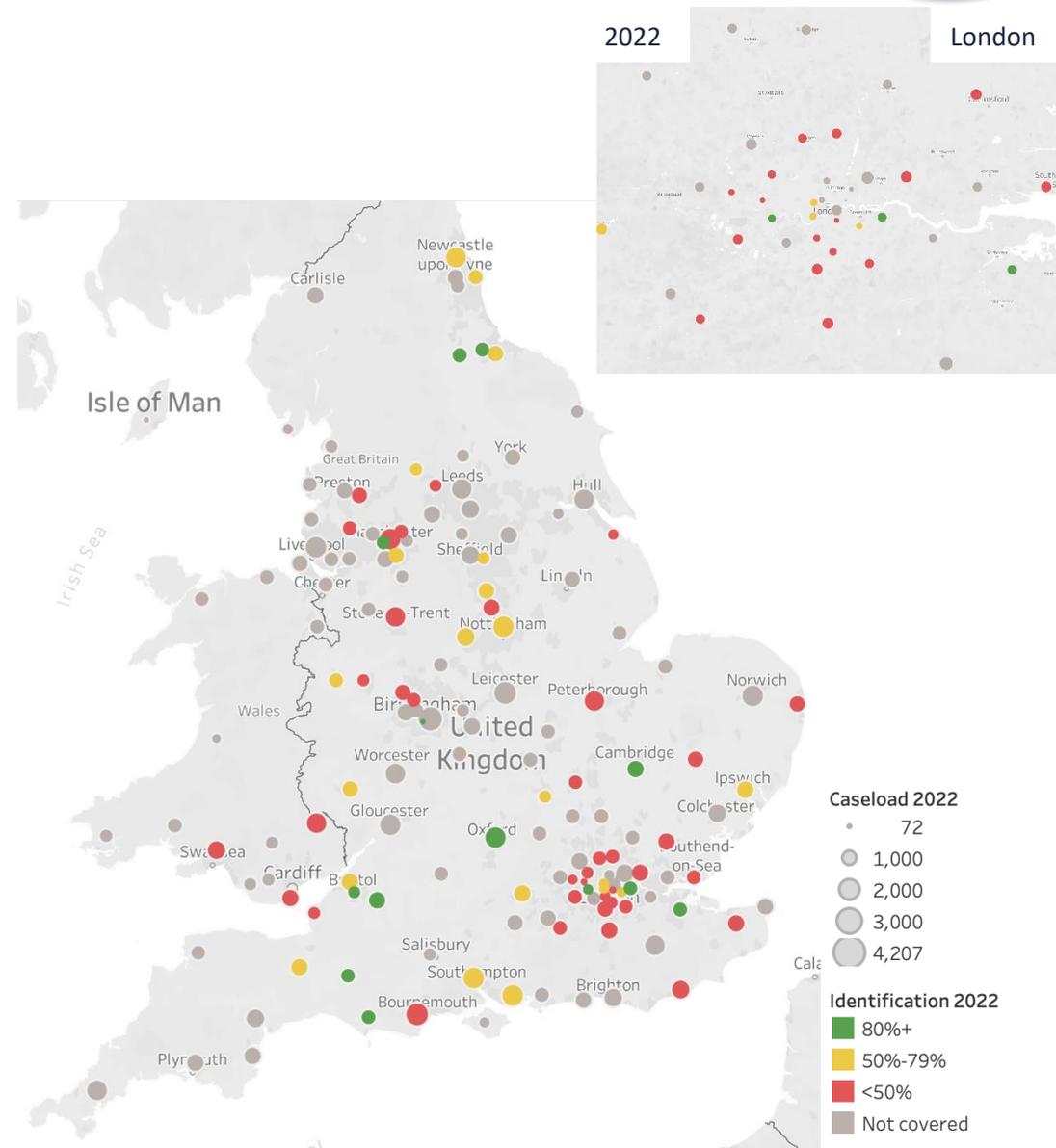


Fig 2. Map of England and Wales showing expected size of local fragility fracture population and achievement of case identification in 2022.

FLS-DB resources

Patient resources

The following FLS-DB [patient resources](#) are available:

- 1 [Strong bones after 50](#) – a guide with jargon-free information for supporting people who have broken a bone following a fall.
- 2 [Strong bones after 50 – staying on treatment](#) – a document that explains why people with fragility fractures are recommended treatment and need to stay on treatment, includes a checklist for patients over the next 3 years.
- 3 [Bone health card](#) – a resource that aims to improve the patient experience when returning home following a fragility fracture.
- 4 [Best practice letter templates](#) – aimed at FLSs to use when communicating with patients and GPs.
- 5 [Six golden rules](#) – a video encouraging patients to have follow-up conversations with their GP after being recommended to take medication by mouth for osteoporosis. FLSs are encouraged to display the video in waiting rooms – a copy of the video can be obtained by contacting flsdb@rcp.ac.uk.
- 6 [What should happen if you or someone you know experiences a fragility fracture?](#) – a summary of three key findings from the 2022 FLS-DB annual report displayed against actions that can be taken by patients and carers.

'How to' resources

- 1 [Using public run charts](#) – a how to video on getting the most out of the FLS-DB public run charts.
- 2 [Using internal charts](#) – a how to guide on getting the most out of your data and how to export your data from the FLS-DB.

Areas of focus for 2024

Dataset update from January 2024

A major change in the FLS-DB will be the introduction of a 'Lite' dataset ([appendix C](#)) to significantly reduce the administrative burden for FLS participating with the FLS-DB by focusing on 18 of the 52 fields (35% of the dataset). The dataset question around site of fracture will be extended to include hip, spine, humerus, wrist and pelvis. Finally, the estimated number of patients not receiving effective secondary fracture prevention care per FLS will be added to the benchmark tables and run charts in 2024/25.

Resources

The FLS-DB team and the [FFFAP Patient and Carer Panel](#) will develop patient-facing resources focusing on men with osteoporosis, to raise awareness of the condition in men and encourage individuals to get checked and treated after breaking a bone following a fall, as well as mental health and osteoporosis.

Inequalities work – ethnicity data 2024-25

Ethnicity data is proposed for 2024/25 pending outputs from related work with the National Hip Fracture Database (NHFD). In the interim, services should ensure the basic availability of patient facing materials that reflect the languages of their local population.

Key performance indicators 2024

We will focus improvement on 4-month monitoring (KPI 9 follow up) and bone protection (KPI 10 and 11) using case studies and KPI-specific improvement guides.

Regular FLS-DB communications

The quarterly exchanges and newsletters communications will continue to encourage and support participation.

Closing statement of thanks

The FLS-DB team is dedicated to supporting FLSs in England, Wales, and Northern Ireland to enhance their services through data-driven improvements, fostering increased effectiveness and efficiency in delivering high-quality patient care.

The team expresses gratitude to the FLS community for their ongoing dedication to participating in the audit, despite the challenges within the NHS.

Citation for this report

Royal College of Physicians. Fracture Liaison Service Database. *Annual report: Improved FLS identification with gaps in monitoring: a call to action for national and regional planners*. RCP, 2024.

References

The references cited in this report and bibliography are available to download from the [FLS-DB website](#) along with the [FFFAP-wide glossary](#) to help with the interpretation of this report.

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With special thanks to the FLS-DB advisory group for their guidance and feedback, and FLS-DB patient representative Kathleen Briers and ROS CEO Craig Jones for providing the quotes used in the report.

Data analysis was performed by: Bristol NIHR Biomedical Research Centre, Musculoskeletal Research Unit, Translational Health Sciences, Bristol Medical School, University of Bristol www.bristolbrc.nihr.ac.uk

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FLS-DB data collection webtool and performance tables are provided by Crown Informatics: www.crowninformatics.com

Falls and Fragility Fracture Audit Programme

The Fracture Liaison Service Database (FLS-DB) is run by the Care Quality Improvement Department (CQID) of the Royal College of Physicians (RCP). It is part of the Falls and Fragility Fracture Audit Programme (FFFAP), one of three workstreams alongside the National Hip Fracture Database (NHFD) and National Audit of Inpatient Falls (NAIF).

Healthcare Quality Improvement Partnership

The Fracture Liaison Service Database (FLS-DB) 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 in particular to increase the impact that clinical audit, outcome review programmes and registries have on healthcare quality in England and Wales. HQIP holds the contract to commission, manage and develop the National Clinical Audit and Patient Outcomes Programme (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

The Royal College of Physicians (RCP) is a registered charity that aims to ensure high-quality care for patients by promoting the highest standards of medical practice. It provides and sets standards in clinical practice, education and training, conducts assessments and examinations, quality assures external audit programmes, supports doctors in their practice of medicine, and advises the government, the public and the profession on healthcare issues.

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ISBN 978-1-86016-882-6

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Registered Charity No. 210508

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ISBN 978-1-86016-882-6



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