

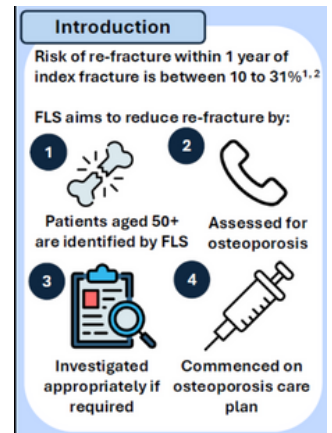
Fracture Liaison Service: Upholding Equity of Care, Value-Based Patient Experience and Improving Clinical Outcomes

Dr Inder Singh, Consultant Geriatrician, ABUHB and National Clinical Lead, Bone Health, Wales

| Contact: inder.singh@wales.nhs.uk

Context and Approach:

- Fragility fractures are common worldwide, affecting 1 in 3 women and 1 in 5 men over 50. Around 3 million people in the UK live with osteoporosis, similar to the EU average. Prevalence rises from 2% at age 50 to nearly 50% over 80.
- More than a 'silent condition', osteoporosis is often diagnosed after a fragility fracture. Subsequent fractures worsen health over time in what is known as the 'fracture cascade'—a cycle of accumulating fracture-related morbidity that impacts long-term quality of life.
- Risk of re-fracture within 1 year of index fracture is between 10 to 31%.
- Issue – Fragility fractures not identified and treated, particularly in older people.
- Objective for Phase 1: Improve case identification and equity of care by implementing Fracture Liaison Service (FLS) across Wales.
- Co-production and use of digital technology to identify fracture cases and monitoring of data as per national Key Performance Indicators (KPI) through Fracture Liaison Service Database (FLS-DB).



Planned Activity:

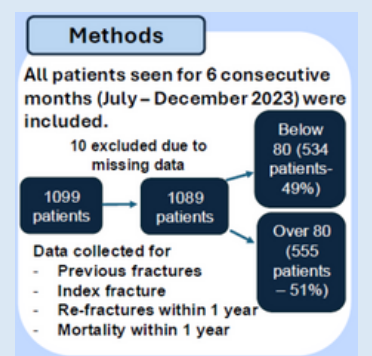
Research:

Research questions:

1. Why equity of care is essential?
2. Measure Value-Based patient experience
3. What are the clinical outcomes and mortality benefits of FLS?

Plans for Publication:

1. Presented poster at the Welsh Orthopaedic Society meeting on 23rd May 2025. (Received Best Medical Student Poster Presentation).
2. Submitted phase 2 (12 months to British Geriatric Society Autumn Meeting, Nottingham, November 2025).
3. First publication on equity of care to be submitted in September 2025.



Leadership:

Work with stakeholders, clinicians and administrators to develop national pathways for osteoporosis care based on prudent healthcare principles. Improving efficiencies and capacity by implementing innovative ideas and managing increased demand by reducing waste and building Value-Based protocols, for example DXA scan referral pathways.

Education/teaching :

1. Engaging with stakeholders which included patients. Partnership with Education Programme for Patients (EPP) Cymru.
2. Training Nurses, staff and medical students on osteoporosis and bone health

Progress to date:

1. Phase 1 – Six months (July to December 2023) data analysis completed
2. Phase 2 – Currently working on the another 6 months (January to June 2023) analysis
3. Complete Clinical outcomes by August 2025

Reflections:

- Partnership with key stakeholders established
- Empowered professionals to transform old model of outpatient referral system to sustainable and automated identification using digital technology
- Service transformation highlights equity of care with more targeted intervention for older people at great risk of re-fracture
- Predicted Enablers: We have Ministerial Mandate for FLS coverage across Wales
- Barriers: Case identification and lack of digital technology
- We need Welsh FLS Pathways to reduce variability across Wales

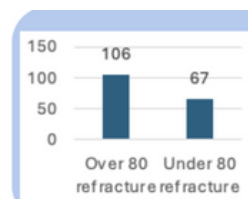


Figure 1: Refracture within 1 year

Above 80 years = 61%
Under 80 years = 39%
($p < 0.0001$)

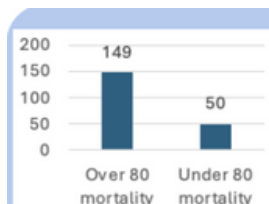


Figure 2: Mortality within 1 year

Above 80 years = 75%
Under 80 years = 25%
($p < 0.0001$)