Project scope: Digital Fracture Liaison Service

23 October 2024

Research question

Are digital fracture liaison services effective in preventing further fractures and reducing waiting times for adults at risk of osteoporosis who have had a 'fragility fracture', compared to non-digital approaches?

Inclusion criteria

The selection of studies for inclusion in the literature review element of the project will be based on the following criteria:

Population	Adult patients aged 50 years and older who: • have had a 'fragility fracture' (broken bone caused by a fall from a standing height or less) • are 'at risk' of further fractures due to undiagnosed osteoporosis.
Intervention	Any digital-based software or automated systems for fracture liaison services (FLS), including cloud-based, use of artificial intelligence (AI), 'off the shelf' and 'bespoke' solutions, that can be integrated with local clinical systems.
Comparator	Non-digital or manual approaches. For instance, review by clinical staff or a multidisciplinary team, without support from automated digital solutions or systems.
Outcomes	**Improved patient outcomes:** • reduced risk of fragility fractures • reduction in numbers of second fractures • fewer falls and associated adverse impacts • increased diagnoses of osteoporosis • improved adherence to treatment (eg bone sparing drug) • improved quality of life, health and wellbeing. **Improved system outcomes:** • reduction in the number of unprocessed scans

	• identification of all fragility fractures, including spine fractures
	• reduced waiting times for triage
	• reduced waiting times for assessment (eg FLS, falls) and diagnosis (eg bone density scan [DXA])
	• reduced time to follow-up post index fracture
	• reduced waiting times for treatment (eg including recommendation for and start of bone therapy)
	• increased capacity (eg patients)
	• audit capability.
	
	Improved economic outcomes:
	• cost-effectiveness
	• healthcare resource utilisation.
	
	Patient and staff perspectives
	• any patient and staff perspective available (eg before, during and post-implementation of a digital solution for FLS):
	  ○ for patients: improvement in quality of life, health and wellbeing
	  ○ for staff: reduction in workload and administrative burden, increasing efficiency, minimise errors. Any evidence of variation in benefits across health disciplines.
	
	Safety
	• any safety evidence available.
	
	Equality
	• any equality evidence available.

Limits	English language Previous 10 years Any type of evidence available Any type of healthcare setting

Planned activities

SHTG have agreed on the following activities to support the development of an SHTG IMTO on Digital FLS:

1. A comprehensive search of the literature.
2. A review and summary of the evidence base, based on our findings.

End products

At the end of the project, SHTG will publish:

- an IMTO
- a plain language summary.

Timescales (approximate)

December 2024