



## Osteoporosis Canada: Essential Elements of Fracture Liaison Services (FLS)

---

A Fracture Liaison Service (FLS) is a specific system-based model of care for secondary fracture prevention where a dedicated coordinator:

### Identification

- systematically and proactively identifies patients aged 50 years and older presenting to a hospital with a new fragility fracture and/or with a newly reported vertebral fracture;

### Investigation

- organizes appropriate investigations to determine the patient's fracture risk;

### Initiation

- facilitates the initiation of appropriate osteoporosis medications.

FLS has outperformed all other post-fracture osteoporosis interventions in terms of significant patient outcomes and reduction in healthcare costs<sup>1,2</sup>.

### Essential elements of an FLS:

1. A dedicated coordinator is central to the FLS model of care<sup>2</sup>. The clearly designated FLS coordinator is:
  - a. exclusively responsible and accountable for all the FLS functions  
OR
  - b. exclusively responsible and accountable for the first FLS function (identification) and for the transfer of the second and/or third FLS functions (investigation and initiation) to a clearly designated osteoporosis expert or osteoporosis specialty team.
2. Pro-active, system-wide case finding of new fragility fractures and/or newly reported vertebral fractures:
  - a. For non-spine fractures, the pro-active case finding must be from the hospital's orthopaedic inpatient and/or orthopaedic outpatient service or an equivalent administrative database.
  - b. For radiological vertebral fractures, the pro-active case finding must be through comprehensive screening of ALL of the reports issued directly from the hospital's Diagnostic Imaging Department.
3. The FLS must target at least one of the WHO major osteoporotic fracture types (hip, spine, wrist, shoulder).
4. The FLS model must be at least 2i (identification and investigation) or 3i (identification, investigation and initiation). Flexibility may be needed for FLS models targeting radiological spine fractures where provincial privacy legislation may restrict certain FLS processes from occurring for these particular patients.
5. The FLS must determine the patient's fracture risk by a validated fracture risk assessment tool.



Osteoporosis Canada

Ostéoporose Canada



6. First line osteoporosis medications must be initiated (3i FLS) or recommended (2i FLS) for high risk patients.
7. Integration with primary care is a critical component of any FLS: written communication to the patient's primary care provider must include the patient's fracture risk and all osteoporosis treatments initiated and/or recommended for the patient.
8. Data must be collected to determine the FLS's ability to close the post-fracture care gap, especially in regard to the proportion of high risk patients initiated on first-line osteoporosis medications.

The above notwithstanding, an FLS should strive to attain all of the *"Quality Standards for Fracture Liaison Services in Canada"*.

1. Sale JE, et al. Systematic review on interventions to improve osteoporosis investigation and treatment in fragility fracture patients. *Osteoporos Int.* 2011
2. Ganda K, et al. Models of care for the secondary prevention of osteoporotic fractures: a systematic review and meta-analysis. *Osteoporos Int.* 2012