

ABSTRACT

Introduction/Background: Osteoporotic (fragility) fractures are a major public health issue, yet only ~30% of patients receive follow-up care within 12 months, increasing risk of subsequent fractures. Fracture Liaison Services (FLS) aim to close this care gap through coordinated, multidisciplinary post-fracture management.

Methods: A systematic review of Ovid (MEDLINE), CINAHL, and Web of Science (2010–2024) identified RCTs and observational studies of patients ≥65 years with incident osteoporotic fractures assessing refracture risk and/or osteoporosis medication initiation.

Results/Discussion: Of 727 screened studies, 49 were included. FLS implementation increased anti-fracture medication initiation by an average of 46.4% (commonly zoledronic acid, denosumab, alendronate). While 11/21 studies showed significant reductions in refracture rates, findings varied by program intensity and patient demographics.

Conclusions: FLS improve medication initiation and may reduce refracture risk, offering a structured approach to post-fracture care. Further research is needed to define best practices for program design and implementation.

INTRODUCTION

Osteoporotic fractures = low-trauma fractures from bone loss

~70% receive no follow-up care within 1 year

Fracture Liaison Services (FLS) =

Multidisciplinary post-fracture care

? Refracture risk

? Osteoporosis treatment rates

OBJECTIVE

To analyze the impact of FLS on patient outcomes, especially refracture risk and osteoporosis medication initiation.

METHODS

Study Population

- Adults (≥65 years) with fractures
- **Criteria:** Focus on refracture risk and/or osteoporosis medication initiation; mean patient age >65; initial osteoporotic fracture

Databases

- Ovid (MEDLINE), CINAHL, Web of Science (2010–2024)
- **Search terms:** ("Fracture Liaison Services") AND ("osteoporotic fractures" OR "osteoporosis")

Outcomes

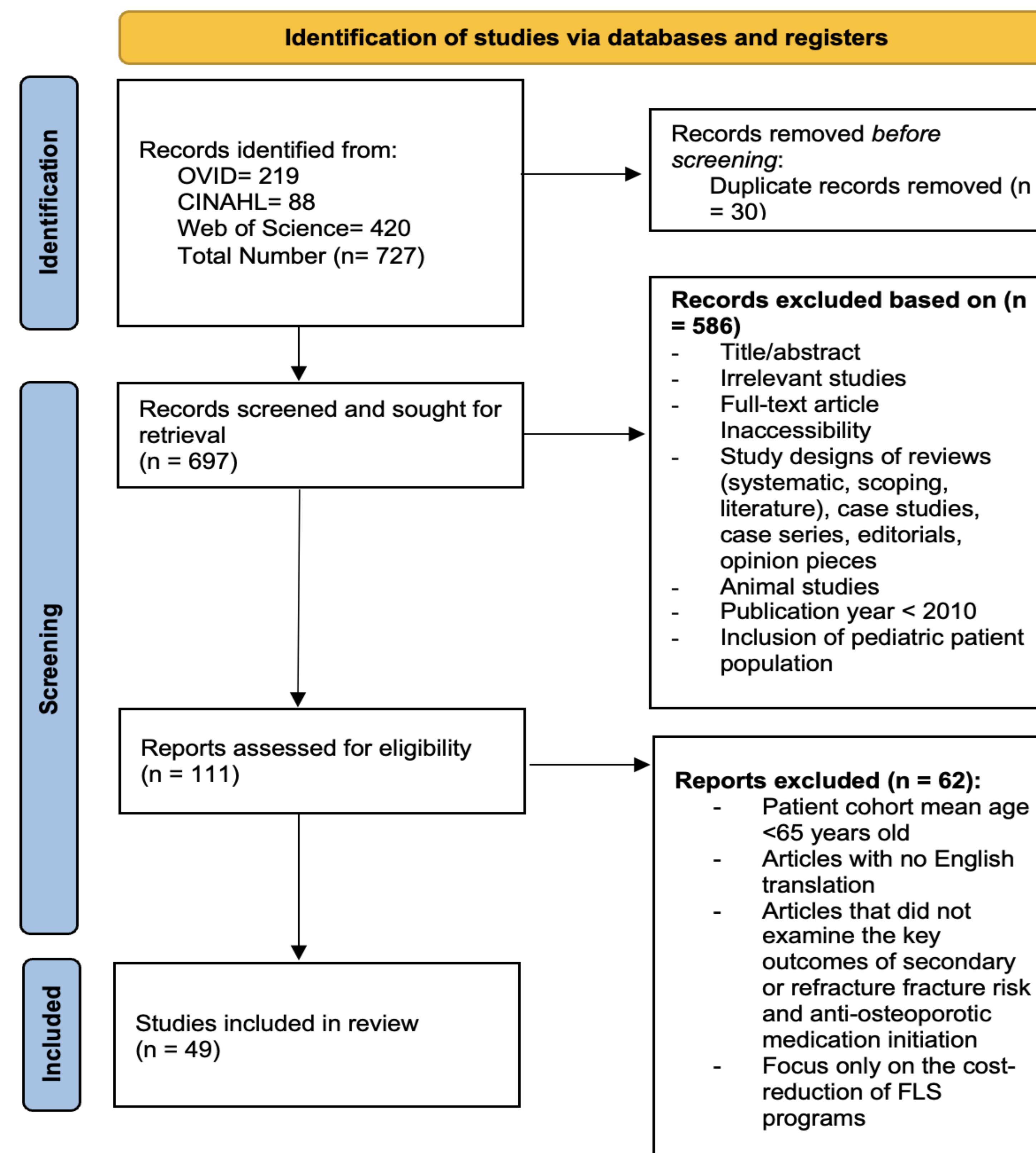
- Initiation of osteoporosis medication before and after FLS
- Changes in refracture fracture risk following FLS implementation

RESULTS

- **FLS implementation** →
 - 46.4% average increase in anti-fracture meds initiation
 - 11/21 studies showed FLS significantly decreased refracture rates
- Variability attributed to program intensity and patient demographics
- **Common meds:** zoledronic acid, denosumab, alendronate

RESULTS

PRISMA Flow Chart Summarizing the Studies



CONCLUSION

- FLS effectively addresses post-fracture care gap in older adults and improves medication initiation and potentially reduces refractures
- **Urgent need to:**
 - evaluate long-term outcomes and cost-effectiveness of different FLS models across healthcare settings.
 - standardize protocols to improve consistency in FLS implementation and patient outcomes.

SIGNIFICANCE

- **Fragility fractures are a leading cause of disability and death in older adults.**
- **Most patients slip through the cracks after their first fracture, but FLS programs can save lives and healthcare dollars.**

REFERENCES

