

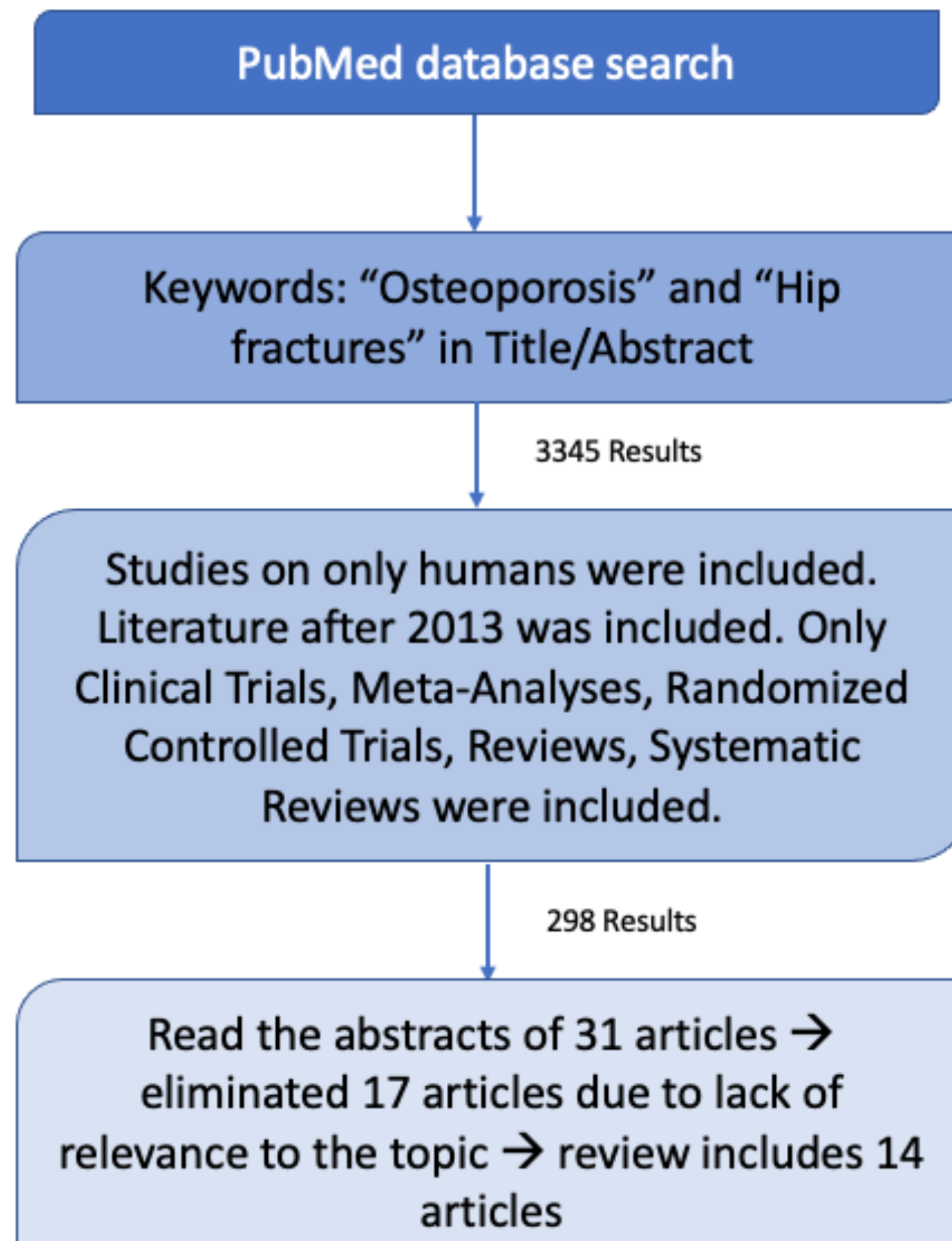
BACKGROUND

Osteoporosis is one of the major causes of fractures in adults. As of 2004, approximately 10 million Americans >50 years old have osteoporosis. Osteoporosis can lead to many fragility fractures, especially hip fractures which are associated with high mortality rates. The cumulative mortality one-year post-hip fracture is 20-40%. Although there are many treatment options available for osteoporosis, the use of these options post hip fracture is low. Of the patients who present with fragility fractures, only 9-20% of the patients are treated for osteoporosis, increasing the chance of re-fracture in untreated patients.

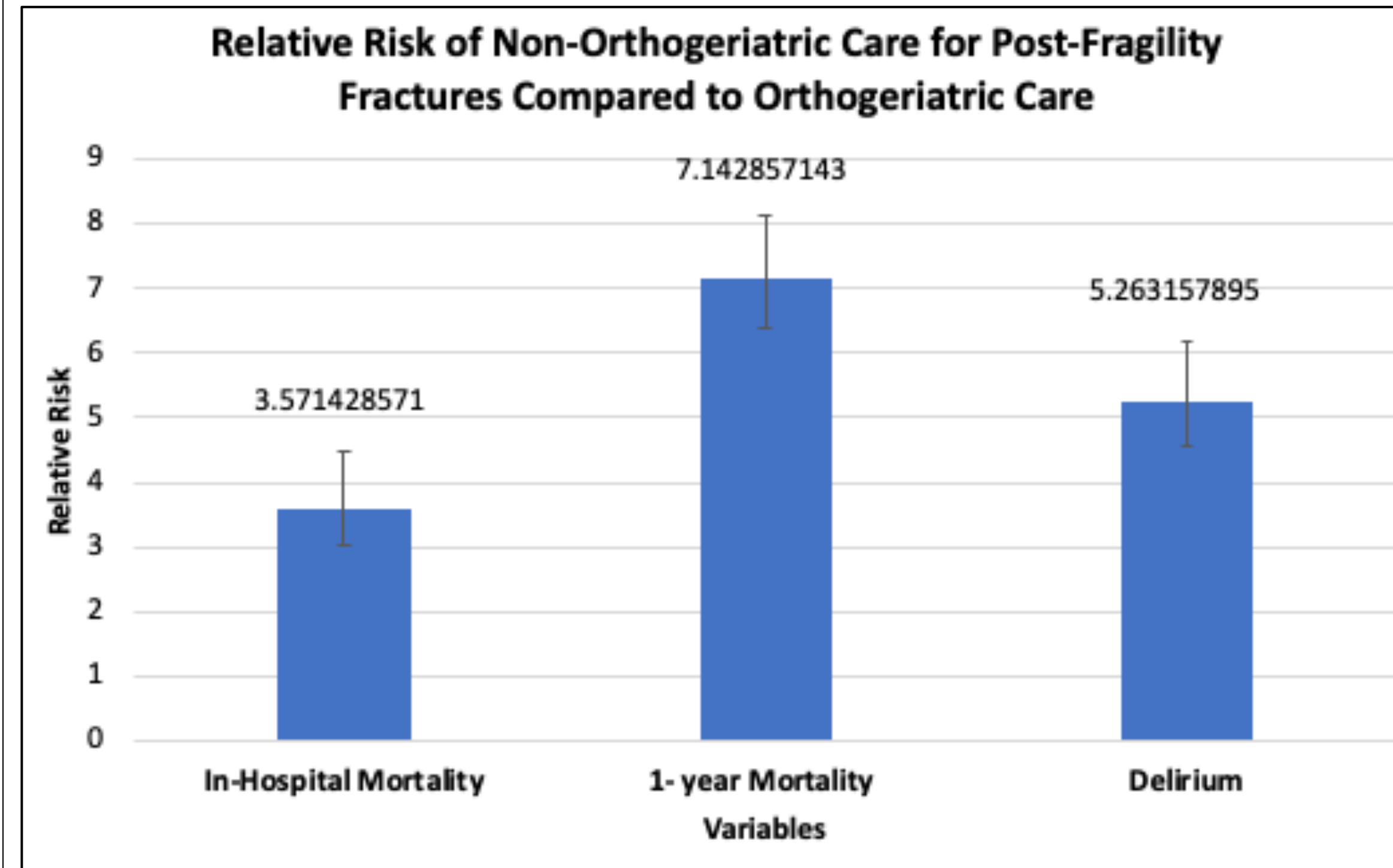
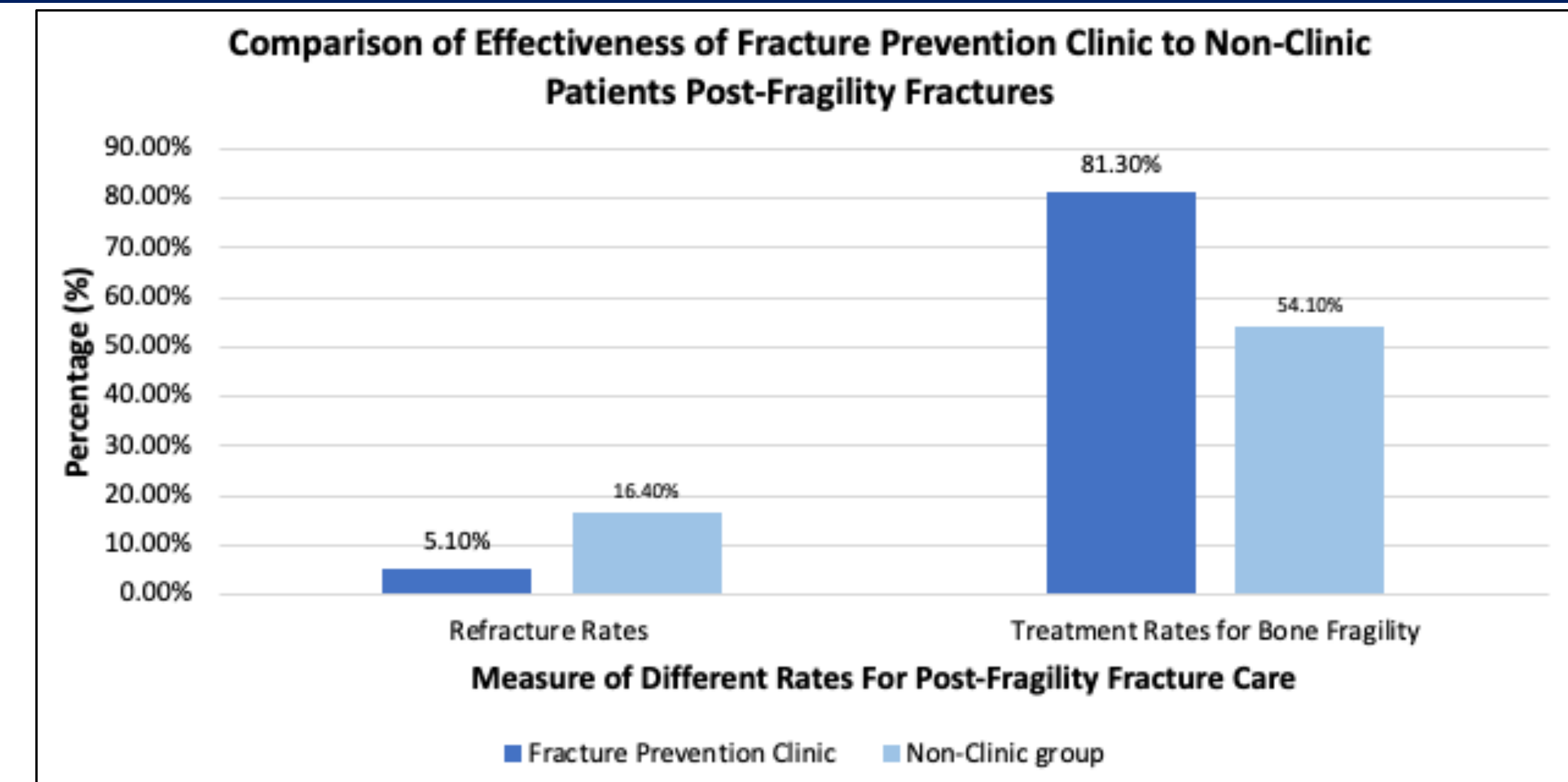
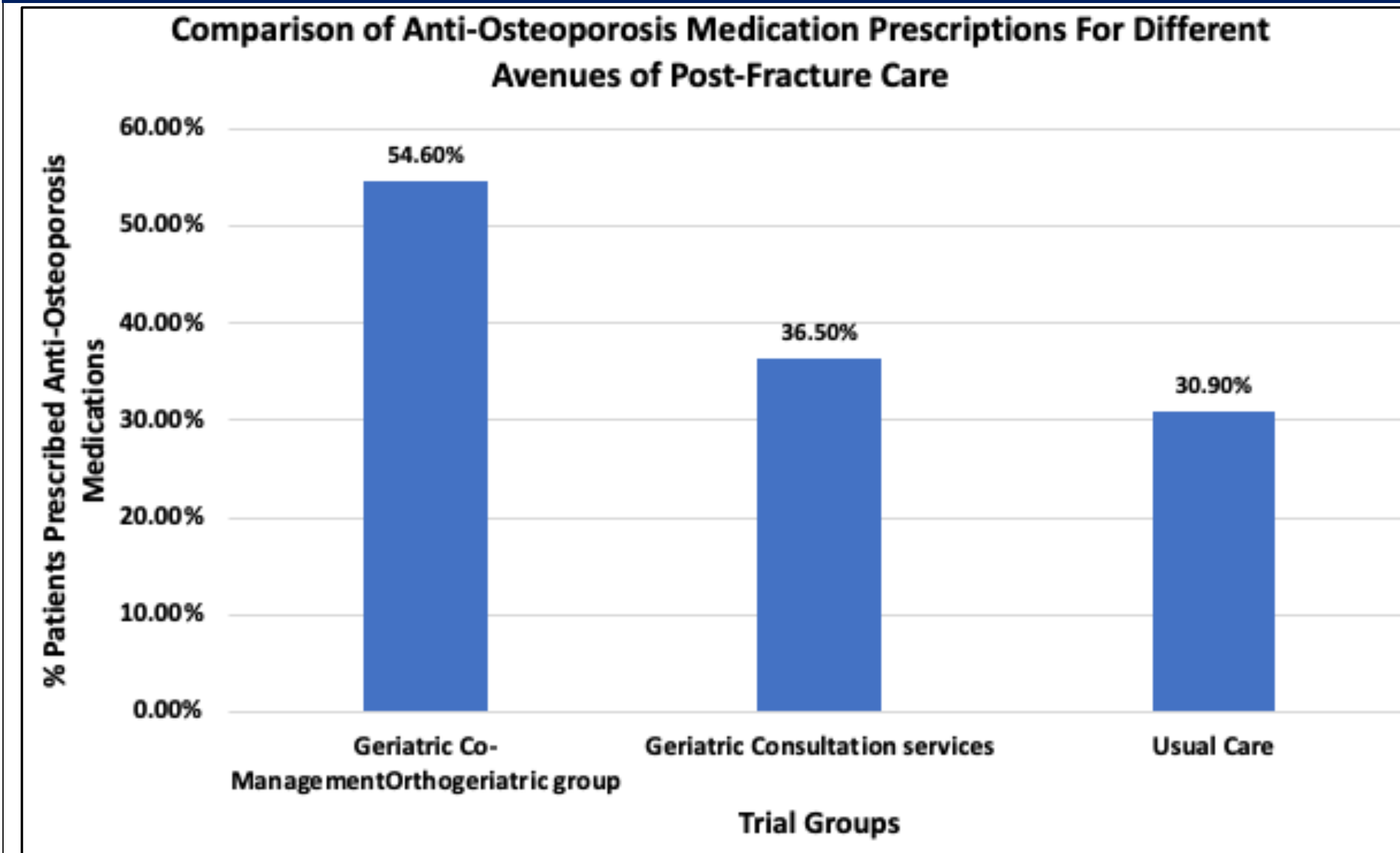
PURPOSE

The goal of this literature review is to show how effective fracture liaison service (FLS) and orthogeriatric service (OGS) are in reducing mortality and morbidity of patients due to osteoporotic hip fractures.

METHODS



RESULTS



Results:

1. FLS is shown to increase the rates of DEXA evaluations, improved prescription initiation rates for osteoporosis medications, and reduction in re-fracture rates. When comparing the effectiveness of FLS at tertiary hospitals, the hospital with FLS approximately 30% reduction in any refractures and 40% reduction in new major fractures over a three-year period.
2. In addition, FLS is shown to be cost-effective as it prevented more fractures and increased quality-adjusted life years (QALYs).
3. OGS is also shown to increase odds of diagnosing osteoporosis, and initiate treatment for osteoporosis.
4. Patients receiving OGS had improved mobility at 12 months post fracture when compared to usual orthopedic care.
5. Implementation of FLS and OGS also shows decrease in mortality within 30 days and within one year in patients with hip fracture.

DISCUSSION AND CONCLUSION

The introduction of FLS and OGS models changed the field of osteoporosis management. These models have been very effective at providing the care and attention that the elderly population with fragility fractures need. With the increase in odds of diagnosing and identifying high risk osteoporotic patients, the risk of the risk of high-morbidity fractures, like hip fractures, is highly reduced. In addition, the initiation and careful management of post hip fracture osteoporosis can reduce the mortality for patients and costs for patients and hospitals. With implementation of more FLS and OGS at hospitals across the country, the risk of mortality and morbidity due to fragility hip fractures and re-fractures can be reduced and can improve the quality of life of elderly population.