

POSTER ABSTRACTS

10th Annual HMO Research Network Conference

May 3-5, 2004 Dearborn, MI

Evaluating Care Delivery 22

The Near Absence of Osteoporosis Treatment in Older Men with Fractures

Adrienne C. Feldstein, MD, MS^{1,3}, Gregory Nichols, PhD¹, Eric Orwoll, MD²,
Patricia J. Elmer, PhD, MS¹, David H. Smith, RPh, MHA, PhD¹, Michael Herson, MD³,
Mikel Aickin, PhD¹

¹Center for Health Research, Kaiser Permanente, Portland OR

²Oregon Health & Sciences University, Bone and Mineral Unit, Portland OR

³Northwest Permanente, Portland OR

Background: The burden of osteoporotic fractures in older men is significant, and treatment rates for secondary prevention are low. The study objectives were to 1) Characterize older men with fractures associated with osteoporosis, 2) Determine if treatment rates for osteoporosis are improving, and 3) Identify patient, healthcare benefit and utilization, and clinician characteristics that are significantly associated with treatment.

Methods Design: Retrospective cohort study used multiple logistic regression to evaluate pre-fracture factors for their association with osteoporosis treatment in the 6-month post-fracture period.

Setting. A non-profit health maintenance organization in the United States.

Participants. 1,171 men aged 65 or older with any new fracture associated with osteoporosis between January 1, 1998, and June 30, 2001.

Main Outcome Measure. Pharmacologic treatment for osteoporosis in the 6 months after the index fracture.

Results: Average age was 76.7 years; 3.3% had a diagnosis of osteoporosis and 15.2% a diagnosis or medication associated with secondary osteoporosis. Only 7.1% of the study population received a medication for osteoporosis following the index fracture, and treatment rates did not improve over time. Seventy-two percent of the treated group had a vertebral fracture. In the multivariate model, a higher value on the Charlson Comorbidity Index (odds ratio 1.26, 95% confidence interval 1.05-1.51), having an osteoporosis diagnosis (odds ratio 8.11, 95% confidence interval 3.08-21.3), chronic steroid use (odds ratio 5.37, 95% confidence interval 2.37-12.2), and a vertebral fracture (odds ratio 16.6, 95% confidence interval 7.8-31.4) were significantly associated with drug treatment. Bone mineral density measurement was rare (n=13, 1.1%).

Conclusions: There is under-ascertainment of osteoporosis and modifiable secondary causes in older men with fractures. Fracture does not prompt sufficient bone mineral density measurement or treatment. Information systems merging diagnostic and treatment information can help delineate gaps in patient management. Interventions showing promise in other conditions should be evaluated to improve care for osteoporosis.