

POSTER ABSTRACTS
8th Annual HMO Research Network Conference
April 9-10, 2002 Long Beach, CA

Evaluating Care Delivery
12

Screening and Treatment for Osteoporosis in Older Individuals with Fractures

Adrienne Feldstein, MD, MS - Kaiser Permanente Northwest Center for Health Research
Patricia J.Elmer, PhD, MS - Kaiser Permanente Northwest Center for Health Research
Eric Orwoll, MD - Oregon Health & Science University
Michael Herson, MD - Northwest Permanente
Teresa Hillier, MD, MS - Kaiser Permanente Northwest Center for Health Research

Background: Many osteoporotic fractures are preventable. Evidence-based clinical practice guidelines agree that because of the high risk for future fractures, a prior fracture in an older individual warrants either direct initiation of pharmacologic treatment or bone mineral density (BMD) screening followed by treatment according to BMD. The purpose of our study was to compare screening and treatment for osteoporosis in an older population who had fractures with this guideline treatment and screening recommendation.

Methods: Our study was conducted at a Pacific Northwest group model HMO with 448,000 members. Electronic data systems provided demographic, medical history, procedure, and pharmacy data. We identified women aged 50-89 and men aged 65-89 who sustained any clinical fracture (except skull, facial, finger, toe, ankle, or any open fracture) during 1998 and 1999. We determined those who had BMD screening by dual x-ray absorptiometry (BMD DXA) and with any dispensing of a treatment for osteoporosis (bisphosphonate or estrogen) during the 2 years.

Results: Out of 70,513 members in the eligible age groups, there were a total of 2804 study fractures (490 hip, 269 vertebral, 2044 other clinical), 81% in women. In women, we found 2,264 study fractures; 8% BMD DXA and 42% treatment, 79% of which was estrogen alone. BMD DXA was done in 5%, 8%, and 9%, and treatment in 43%, 71%, and 39% of hip, vertebral, and other clinical fractures, respectively.

In men, we found 539 study fractures with 1% BMD DXA and 3% treatment. BMD DXA was done in 2%, 7%, and 0.3 % and treatment in 2%, 13%, and 0.9% of hip, vertebral, and other clinical fractures, respectively.

Screening and treatment frequencies decrease significantly with age in both men and women.

Conclusions: Screening and treatment rates for osteoporosis in older individuals with fractures fall far below national recommendations. Screening and treatment rates fall with age, when risk increases, representing a missed opportunity to prevent re-fracture.