Osteoporosis screening and treatment may be cost-effective for selected older men

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It may be cost-effective to screen and treat selected older men with osteoporosis, depending on their age and if they have had a prior fracture, according to a study in the August 8 issue of JAMA.

Osteoporotic fractures are recognized as a common and serious health problem among elderly men, with white men at age 60 years having a 29 percent chance of experiencing such a fracture during their remaining lifetime, according to background information in the article. One-third of all hip fractures occur in men and are associated with as much illness and increased risk of death than those that occur in women. Despite the importance of the problem of osteoporosis in men, there is a lack of evidence regarding the cost-effectiveness of common diagnostic and therapeutic interventions.

John T. Schousboe, M.D., M.S., of Park Nicollet Health Services, Minneapolis, and colleagues conducted a study to estimate the lifetime costs and health benefits of bone densitometry (measurement of bone density) followed by 5 years of oral bisphosphonate (a class of drugs used to strengthen bone) therapy for men found to have osteoporosis. The researchers created a computer simulation model for hypothetical groups of white men age 65, 70, 75, 80, or 85 years, with or without prior clinical fracture. Data from several sources were used to estimate fracture costs and population-based age-specific fracture rates and associations among prior fractures, bone density and incident fractures. The authors estimated the costs per quality-adjusted life-years (QALYs) gained for the densitometry and follow-up treatment strategy compared

with no intervention, calculated from lifetime costs and accumulated QALYs for each strategy.

The researchers found that the estimated prevalence of femoral neck osteoporosis among men with a prior fracture ranged from 14.5 percent at age 65 years to 33.6 percent at age 85 years. Osteoporosis prevalence in the absence of a prior clinical fracture was lower, ranging from 7.6 percent at age 65 years to 17.6 percent at age 85 years. The densitometry and treatment strategy modestly reduced the absolute 10-year incidence of clinical fractures by a range of 2.1 percent for 65-year-old men without a prior fracture to 4.5 percent among 85-year-old men with a prior fracture.

Source: JAMA and Archives Journals