

Moving from a ‘Break and Fix’ to a ‘Predict and Prevent’ Model in Women’s Bone Health Care

Bone diseases often occur without symptoms, remaining hidden until a bone breaks. Prevention, access to care, coverage of critical bone density scans and treatments, and greater education and awareness would improve bone health outcomes for women across the lifespan.

U.S. Bone Health by the Numbers

43.4 million adults over 50 have low bone mass. **Of those, about 52% are women.**

10.2 million adults over 50 have osteoporosis. **Of those, 80% are women.**

Osteoporosis in Women over 50



Source: [Bone Health and Osteoporosis Foundation](#)

BONE HEALTH IN WOMEN

For women, up to 90% of peak bone mass — defined as the point when bones reach their maximum strength and density — is acquired by the age of 18. Although bone tissue can keep growing through young adulthood, bone mass declines with age, especially after menopause.

Low bone mass increases the risk of osteoporosis, the most common form of bone disease. Osteoporosis is the major cause of fractures in postmenopausal women and in older men. Given the growing aging population, the social and clinical burden of fractures is expected to rise.

RISK FACTORS

Age and sex are the greatest risk factors for fractures.

Women are more likely to have fractures than men, with one in two women over 50 expected to have an osteoporosis-related fracture in her lifetime. Other risk factors include:

- Previous fracture
- Diet (e.g., alcohol consumption, poor nutrition)
- Smoking cigarettes
- Medications (e.g., corticosteroids and some psychotropic drugs) and certain treatments (e.g., chemotherapy)
- Chronic medical conditions (e.g., multiple myeloma, diabetes, and Chron’s disease)
- Family history

POLICY’S ROLE IN IMPROVING OUTCOMES AND REDUCING COSTS

Bone fractures are costly. In 2018, osteoporosis-related bone breaks cost \$52 billion to patients, their families, and the health care system. By 2040, those costs are expected to rise to over \$95 billion annually.



Beyond the costs they incur, fractures can significantly impact one’s quality of life, limiting mobility and increasing mortality. For instance, of those who sustain a hip fracture, up to 75% require nursing home placement for rehabilitation or long-term care. Moreover, nearly 1 in 5 Medicare beneficiaries have died from complications within 12 months after an osteoporotic fracture.

Despite this growing burden, osteoporosis is underdiagnosed and undertreated; **84% of Americans are not tested or treated for osteoporosis.** Ensuring the utilization of preventive and treatment measures (e.g., diagnostic tools and pharmacologic therapies) can significantly improve patient outcomes and reduce individual and societal costs.



Policy solutions aimed at identifying those at high risk for fractures and providing effective treatments could yield tremendous benefits.

Together, these efforts could lower the societal and economic burden of annual fractures, “preventing 6.1 million fractures over the next 22 years while reducing payer costs by \$29 billion and societal costs by \$55 billion.”

[Healthcare Policy Changes in Osteoporosis Can Improve Outcomes and Reduce Costs in the United States](#)

THE ROLE OF DXA

Dual-energy X-ray absorptiometry (DXA) is the standard for measuring bone density and identifying individuals at risk of osteoporotic fractures. Yet, the utilization of DXA is low (11.3% in 2014). Despite its demonstrated value, CMS has cut DXA reimbursement significantly, which has resulted in increased cost to CMS and worsened patient outcomes.



CMS Cuts DXA Reimbursement

Since 2006, Medicare has cut DXA reimbursement by more than 70%.



Fewer DXA Providers, Reduced Access and Diagnoses

Since 2008, 44% of the DXA-trained physicians have stopped performing DXA. More than 5.8 million fewer women will receive a DXA scan than projected since 2008.



Increased Fractures Take a Human and Economic Toll

Reduced DXA testing has consequences. For example, prior to 2012, hip fractures were declining. Had that trend continued, there would have been 71,775 fewer hip fractures, avoiding 15,564 unnecessary deaths due to sequelae and saving Medicare nearly \$3 million.

Source: [Fracture Prevention Coalition](#)

PROMOTING OSTEOPOROSIS PREPAREDNESS

Osteoporosis is not necessarily a natural consequence of aging, and in many cases, can be preventable. Nutrition, physical activity, managed weight, smoking cessation, reduced alcohol consumption, and prevention of falls are all key determinants that individuals can control to promote bone health.

Promoting bone health as part of a healthy lifestyle — and promoting it early — is essential for encouraging behaviors that lead to healthy bones and equipping individuals with the information they need to understand and mitigate osteoporosis to the extent possible.

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