

Capsule Commentary on VanGompel et al., Incidence and Predictors of Repeat Bone Mineral Densitometry: A Longitudinal Cohort Study

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The U.S. Preventive Services Task Force (USPSTF) recommends dual x-ray absorptiometry (DXA) scans in women 65 years of age and older, and in younger women with an increased fracture risk.¹ VanGompel and colleagues studied physicians' use of repeat DXA among 6000 women aged 40–84 who received initial DXA screening within a regional health system in California.² The vast majority (72%) were younger than 65. Osteoporosis was found in 14% of women; 13% had a high risk of progression to osteoporosis, while most (74%) had a low risk of progression. An osteoporosis drug was prescribed for only 68.9% of those with osteoporosis, but was given to 19.1% of women at low risk. Among those untreated, only 60% of high-risk women had follow-up scans within 5 years, though 43% of women at low risk of progression were scanned. Among treated women, median time to repeat DXA was 3 years. Patients in both the treated and untreated groups who were followed by an endocrinologist were more likely to have repeat DXA.

What is disturbing is that only 60% of the untreated high-risk women received a follow-up DXA within 5 years; by this time, half of these women would have already transitioned to osteoporosis.³ And since only 10% of women with normal density or mild osteopenia will transition to osteoporosis in the ensuing 16 years,³ many women in the low-risk group were re-screened too soon.

Important limitations include the source of data from a single health care system, the use of a complicated definition

of low vs. high risk which differs somewhat from national guidelines, and exclusion of 40% of scans due to incomplete T-score data.

Based on this study, and in light of recent literature, resource allocation can be improved by limiting DXA screening to women who meet USPSTF guidelines, focusing on those who would consider osteoporosis treatment if positive, and by avoiding a repeat DXA within 15 years for women with low risk of progression. Ways to improve osteoporosis treatment include treating a higher percentage of women who screen positive, and either treating women who are at high risk of progression^{4, 5} or re-screening them in 2 years.

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Compliance with Ethical Standards:

Conflict of Interest: The author has no conflicts of interest with this article.

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