

Providing Absolute Fracture Risk Affects Osteoporosis Medication Initiation

Before reporting of 10-year fracture risk, more women received osteoporosis medications.

Treatment of osteoporosis generally is guided by dual energy x-ray absorptiometry (DEXA)-measured T-scores. More recently, models have been developed to predict 10-year fracture risk. In this population-based study that involved nearly 6000 women in Manitoba, Canada, researchers evaluated physician prescribing of medications for osteoporosis in 2005, when physicians received only DEXA-measured T-scores, compared with 2006, when physicians also received 10-year absolute fracture risk information based on [a freely available web-based calculator](#). T-scores were categorized as normal, osteopenic, or osteoporotic. Ten-year absolute fracture risk was categorized as low (<10%), moderate (10%–20%), or high (>20%). During 2 years of follow-up, the incidences of osteoporotic fractures in the 2005 and the 2006 cohorts were similar.

The distribution of T-scores was similar across the study's two time periods. Overall, 31% of women were prescribed an osteoporosis medication during 2005, and 24% received one during 2006. The difference was attributable to fewer medications being dispensed to low- and moderate-risk patients. Reporting of absolute fracture risk reclassified 33% of women with osteoporotic or osteopenic T-scores into lower absolute-risk categories, and 10% of women with normal or osteopenic T-scores into higher absolute-risk categories.

Comment: Reporting of absolute fracture risk — as opposed to T-scores alone — was associated with significantly less medication prescribing for osteoporosis. Although no difference was found in rates of osteoporotic fractures, the 2-year follow-up might have been insufficient to detect a difference. Nonetheless, the study suggests that using risk prediction tools such as FRAX ([JW Gen Med Apr 8 2008](#)) improves the appropriateness of drug prescribing for osteoporosis.

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