

# The impact of the new National Bone Health Alliance (NBHA) diagnostic criteria on the prevalence of osteoporosis in the United States: supplementary presentation

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**Abstract** We evaluated the prevalence of osteoporosis using the osteoporosis diagnostic criteria developed by the National Bone Health Alliance (NBHA), which includes qualified fractures, FRAX score in addition to BMD. The expanded definition increases the prevalence compared to BMD alone definitions; however, it may better identify those at elevated fracture risk. Recently an NBHA working Group published a paper in OI with recommendations for expanding the criteria that would constitute an osteoporosis diagnosis in postmenopausal women and in men over age 50 for use in the US – Siris et al., *Osteoporosis International* 25(%): 1439–1443, 2014. The recommendations have now been endorsed by NOF, ASBMR and a number of professional medical groups and appear in the NOF Clinician’s Guide. The new diagnostic criteria continue to include a T-score by DXA of spine or hip that is less

than or equal to  $-2.5$ , but alternatively also include a hip fracture with or without BMD testing or a vertebral, pelvis, proximal humerus and in some cases a distal forearm fracture in a person with low bone mass, or a FRAX score that meets or exceeds the NOF Guide osteoporosis treatment cut point.

**Keywords** Diagnostic criteria · Epidemiology · Fracture prevention · Fracture risk assessment · Osteoporosis

## Key scientific question

The scientific question addressed in the present paper was to determine the proportion of US women and men age 50 and over who would be diagnosed as having osteoporosis based on the new diagnostic criteria [1].

## Key findings

Using NHANES data we found that 16% of US men and 29.9% of US women age 50 and over have osteoporosis based on the new expanded criteria.

## Importance, timeliness and interest

This increases the proportion with osteoporosis diagnosed by T-score criteria alone and identifies a greater number of individuals at risk for osteoporosis related fractures. Interestingly the number of men and women recommended to be treated for osteoporosis in the US by the NOF

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Clinician's Guide is similar to the number diagnosed by the new criteria.

### Significance of findings

This work is of importance as an indicator that without the expanded criteria for diagnosis, many at risk for fractures would not be identified. Appropriate management of this larger population of at risk individuals may help to lower the overall burden of fractures in older Americans.

**Compliance with ethical standards**

**Conflicts of interest** None.

### Reference

1. Wright NC, Saag KG, Dawson-Hughes B, Khosla S, Siris ES (2017) The impact of the new National Bone Health Alliance (NBHA) diagnostic criteria on the prevalence of osteoporosis in the United States. *Osteoporos Int* 28(4):1225–1232