Reviewer's report

Title: Treatment of Osteoporosis in an Older Home Care Population

Version: 1 Date: 28 October 2004

Reviewer: Tuan V Nguyen

Reviewer's report:

General

The investigators studied the frequency of osteoporosis treatment in older subjects residing in nursing homes. Among 330 subjects aged 65+ years, 24% had either osteoporosis or a recent fracture. Among those with osteoporosis or a recent fracture, approximately 45% were on treatment.

This study adds to a long list of recent studies which showed that a large proportion (probably up to 80%) of high-risk individuals were not being diagnosed or treated. This unfortunate reality calls for major steps, including operational research, to identify mechanisms of risk factors and to remove barriers to more effective prevention for osteoporosis.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Specific comments

1. In the Introduction, I feel that the authors have not spelt out the rationale for their study. While I accept the authors’ argument that older home care individuals may have higher prevalence of osteoporosis treatment, the aims of this study have not been stated clearly.

2. It is not clear what was the authors’ justification for the sample size. Was the study planned in advance or were the subjects drawn from a convenient sample?

3. I am a bit concerned about the definition of osteoporosis in this study. I am sure the authors are aware that the current definition of osteoporosis is based on BMD measurement. The MDS-HC fracture-based definition of osteoporosis may be fine, but some fractures could have been due to high trauma which was presumably not assessed by the authors. This potential misclassification may affect the study’s internal validity.

4. The prevalence of osteoporosis in this population is reported to be 14% (Table 2), which is rather low. Based on BMD measurement, previous studies in the US and Australia have estimated that the prevalence of osteoporosis in this age range was at least 20%. The authors may care to elaborate on this point.

5. While the authors’ Discussion is balance, it would be useful if they consider some potential weaknesses (or strengths) of the study. In fact, it is even more relevant if the authors discuss the implication of their findings within the context of diagnosis and treatment of osteoporosis.
Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No