

SAND abstract No. 137 from the BEACH program 2008–09

Subject: Osteoporosis in general practice patients

Organisation supporting this study: National Prescribing Service Ltd

Issues: Medications taken by patients for prevention and treatment of osteoporosis; risk factors for osteoporosis; prevalence of fractures after minor trauma; screening for osteoporosis; frequency of osteoporosis diagnosis after previous screening.

Sample: 2,766 patients from 94 GPs; data collection period: 28/10/2008 – 01/12/2008.

Method: Detailed in the paper entitled 'SAND Method 2008–09' available at: www.fmrc.org.au/publications/SAND_abstracts.htm.

Summary of results

The age and sex distributions of this sample of patients were similar to all patients at 2007–08 BEACH encounters. Of 2,345 respondents to the medication question, 354 (15.1%, 95% CI: 12.3–17.9) were using at least one of the listed medications. A calcium supplement was taken by 224 patients (9.6%), a vitamin D supplement was taken by 181 patients (7.7%), and 111 patients (4.7%) were taking bisphosphonates.

Of 2,743 patients for whom risk factor information was provided, 625 (22.8%) had at least one risk factor for osteoporosis. The proportion of patients with risk factors rose significantly with patient age, from 1.7% of those aged less than 25 years to 52.4% of those aged 75+ years. Among male patients, 15.6% (95% CI: 12.5–18.7) had one or more risk factors. Among female patients, the figure was significantly higher at 27.5% (95% CI: 23.5–31.5).

Of 2,659 respondents to the question on fracture after minor trauma, 190 (7.2%) had experienced this. The incidence was significantly higher among females (7.7%, 95% CI: 6.0–9.3) than among males (3.8%, 95% CI: 2.4–5.2). Incidence of fractures was rare in patients aged less than 45 years (1.3%), then rose with age: 5.4% in those aged 45–54 years, 10.0% in those aged 65–74 years, and 20.1% among those aged 75 years and over.

Of the 653 patients who had at least one of the risk factors and/or fracture after minor trauma, 115 (17.6%) had been referred that day for screening, with the majority (77.7%) being referred for bone mineral density scan. Three hundred and six (46.9%) patients had been referred previously for screening. Of the 653 risk factor and/or fracture patients, 37.2% had never been screened. A significantly higher proportion of female patients were referred for screening compared with male patients.

Of 297 screened respondents, 142 (47.8%) had been diagnosed with osteoporosis. Age was known for 140 of these patients, and over half (56.4%) were aged 75 years and over. Sex of patient was known for 140 of the 142 patients diagnosed with osteoporosis and 85.0% were female. However, there was no significant difference between screened male and female patients in the proportion who had been diagnosed with osteoporosis after screening.

Of 126 patients with diagnosed osteoporosis and fracture information, 67.5% had had at least one fracture, and of 134 patients with osteoporosis with osteoporosis medication details, nine out of ten (89.6%) were taking at least one osteoporosis-related medication.

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AIHW Australian GP Statistics and Classification Centre, 2009. SAND abstract No.137 from the BEACH program: Osteoporosis in general practice patients. Sydney: AGPSCC University of Sydney. ISSN 1444-9072

Please read this card and tell your doctor if you answer 'yes' to 1 or more of the questions. You do not have to tell the doctor which questions you have answered 'yes' to, unless you wish to do so.

The One-Minute Osteoporosis Risk Test**

1. Have either of your parents broken a hip after a minor bump or fall?
2. Have you broken a bone after a minor bump or fall?
3. For Women: Did you undergo menopause before the age of 45?
4. For women: Have your periods stopped for 12 months or more (other than because of pregnancy)?
5. For Men: Have you ever suffered from impotence, lack of libido or other symptoms related to low testosterone levels?
6. Have you taken corticosteroids tablets (cortisone, prednisone, etc) for more than 6 months?
7. Have you lost more than 5 cm (2 inches) in height?
8. Do you regularly drink heavily (in excess of safe drinking limits)?
(Safe = 4 standard drinks daily for men, 2 daily for women)*
9. Do you suffer frequently from diarrhoea (caused by problems such as coeliac disease or Crohn's disease)?

** Test designed by the International Osteoporosis Foundation

* Pols R.G. & Hawkes D.V (1992) *Is there a safe level of daily consumption of alcohol for men and women?* Australian Government Publishing service, Canberra .

PLEASE READ CAREFULLY

The shaded section of the following forms asks questions about **OSTEOPOROSIS**.
 You may tear out this page as a guide to completing the following section of forms.

INSTRUCTIONS

Ask **ALL** of the **next 30 PATIENTS** the following questions in the **order in which the patients are seen**.

Please **DO NOT** select patients to suit the topic being investigated.

Medications

Please use the tick boxes to advise whether the patient is taking any of the **listed medications**.

For **bisphosphonate (including combination products), raloxifene and HRT**, please write the approximate **length of time** the patient has been taking these medications by writing a **number** in the space provided and **circling** either 'months' or 'years'

For **Vitamin D and Calcium supplement**, please write the **daily dose** in the space provided, eg 500mg.

Risk factors for Osteoporosis

This question refers to the **risk factors listed on the card**. Please ask the patient to read the card and advise whether or not they have **1 or more** of the **risk factors** listed.

(NB - The patient is not required to indicate which risk factor/s they have, just whether they have one or more.)

Body site

If the patient has suffered **fractures** following **minor trauma**, please write the total **number** of fractures and which **body sites** were involved.

For example, if the patient fractured a wrist two months ago and a hip seven months ago, the total would be **2** and the body sites would be

1. wrist
2. hip

Fractures

Please ask the patient if they have ever suffered **fracture/s** following **minor trauma**.

Screening

This question refers to **X-ray** and **Bone Mineral Density (BMD)** testing. Please use the tick boxes to advise whether this patient has been **referred today** for screening, has ever been **screened previously**, or has **never been screened or referred** for screening. Please **circle** the **type** of screening which the patient has been referred for or previously received.

For example, if you are referring the patient today for BMD and the patient was previously screened with X-ray, please write:

- Type of screen
- Referred today for screening? X-ray / **(BMD)** / both
- Screened previously? **(X-ray)** / BMD / both
- Never screened or referred?

Diagnosis from screening

If **previously screened**, was the patient diagnosed with **osteoporosis (i.e. BMD T-score of <2.5 or less)** as a result of that screening?

Is the patient currently taking:

- | | | |
|---|---------------------------------------|------------------------------|
| <input type="checkbox"/> Bisphosphonate | <u>Duration of use</u> _____ mths/yrs | <i>(tick all that apply)</i> |
| <input type="checkbox"/> Raloxifene (Evista)..... | _____ mths/yrs | |
| <input type="checkbox"/> HRT | _____ mths/yrs | |
| <input type="checkbox"/> Teriparatide (Forteo) | _____ mths/yrs | |
| <input type="checkbox"/> Strontium (Protos) | <u>Daily dose</u> _____ | |
| <input type="checkbox"/> Vitamin D supplement | _____ | |
| <input type="checkbox"/> Calcium supplement | _____ | |
| <input type="checkbox"/> None of the above | | |

BL107C

Does this patient have **1 or more** of the **risk factors listed on the enclosed card**?

- Yes No

Has this patient ever suffered **fracture/s** following **minor trauma**?

- Yes No

If '**NO**' to both, end questions **HERE**
 If '**yes**' to either, please continue →

If '**yes**' how many **fractures?** _____

Which **body site?**
 (e.g. vertebral, hip, wrist)

1. _____
2. _____
3. _____

Has this patient been:
(tick all that apply)

- Referred today for screening?
- Screened previously?
- Never screened or referred?

Type of screen
(please circle)

- X-ray / BMD / both
- X-ray / BMD / both

If **previously screened**, was the patient diagnosed with **osteoporosis?**

- Yes
 No