

SAND abstract No. 118 from the BEACH program 2007–08

Subject: Risk factors for osteoporosis among general practice patients

Organisation supporting this study: National Prescribing Service Ltd

Issues: The proportion of patients on medication for osteoporosis; type of medication taken: bisphosphonate, raloxifene, HRT, teriparatide, strontium, vitamin D, calcium; risk factors and history of fracture after minor trauma; proportion with history of fracture referred for bone mineral density (BMD) scan or x-ray; proportion diagnosed with osteoporosis.

Sample: 2,613 patients from 89 GPs; data collection period: 17/07/2007 – 20/08/2007.

Method: Detailed in the paper entitled 'SAND Method 2007-08' on this website: <www.fmrc.org.au/publications/SAND_abstracts.htm>. Osteoporosis risk factor test from International Osteoporosis Foundation: <www.iofbonehealth.org>

Summary of results

The age-sex distribution of respondents was similar to the distribution for all BEACH encounters, with the majority of patients (60.0%) being female.

Of 2,218 respondents to the medication question, 343 (15.5%, 95% CI: 12.7–18.3) were using at least one of the listed medications for osteoporosis: 204 patients (9.2%) used a calcium supplement; 142 (6.4%) a bisphosphonate, 84 patients (3.8%) a vitamin D supplement, and 52 patients (2.3%) used hormone replacement therapy.

There were 617 patients (23.8% of 2,592 respondents) who had at least one risk factor and/or had suffered a fracture after minor trauma, and the incidence was significantly higher for female patients (28.9%, 95% CI: 25.1–32.7) than for male patients (15.9%, 95% CI: 12.4–19.3). The likelihood of risk factor and/or fracture after minor trauma rose significantly with age of patient: 11.0% (95% CI: 8.0–14.1) among those aged 25–44 years, 30.2% (95% CI: 25.2–35.2) among those aged 45–64 years, 39.9% (95% CI: 33.9–45.8) among those aged 65–74 years, and a marginally higher rate, 52.9% (95% CI: 45.8–60.0), among patients aged 75 years and over.

More than half (51.9%) of the 617 patients who had at least one of the risk factors and/or fracture had been referred previously for screening. Of the 293 patients for whom screening method was known, 47.8% were referred for bone mineral density scan, 37.2% for both x-ray and BMD, and 15.0% for an x-ray only. A significantly greater proportion of female patients were referred for screening compared with male patients: of 446 female patients, 59.4% (95% CI: 53.0–65.9) had been referred for screening, while among 163 male patients, 31.3% (95% CI: 21.7–40.8) had been referred.

Of 312 respondents who had been screened, just over half ($n=162$, 51.9%) were diagnosed with osteoporosis. Over half (54.1%) of the 159 patients whose aged was known were aged 75 years and over. There was no significant difference between screened male and female patients in the likelihood of diagnosed osteoporosis. Fracture information was available for 154 of the 162 osteoporosis patients, with over two-thirds (68.2%) having had a fracture. Of 156 respondents with osteoporosis, 92.3% were taking at least one of the listed medications.

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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 |
| <input type="checkbox"/> Raloxifene (Evista)..... | _____ mths/yrs | |
| <input type="checkbox"/> HRT | _____ mths/yrs | |
| <input type="checkbox"/> Teriparatide (Forteo) | | |
| <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 | | |

(tick all that apply)

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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? X-ray / BMD / both
- 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