

## **SAND abstract No. 169 from the BEACH program 2010–11**

### **Subject: Hypertension, comorbidity and blood pressure control**

**Organisation supporting this study:** Merck Sharp & Dohme (Australia) Pty Ltd

**Issues:** Prevalence of diagnosed hypertension among patients attending general practice; medications taken for hypertension; comorbidities in patients with hypertension; current blood pressure (BP) and level of control; management steps if BP was not well-controlled.

**Sample:** 2,350 patients from 79 GPs; data collection period: 13/07/2010 – 16/08/2010

**Method:** Detailed in the paper entitled '*SAND Method 2010–11*' on this website: <[www.fmrc.org.au/publications/SAND\\_abstracts.htm](http://www.fmrc.org.au/publications/SAND_abstracts.htm)>. BP levels were defined using the National Heart Foundation guidelines available from <[www.heartfoundation.org.au/SiteCollectionDocuments/HypertensionGuidelines2008to2010Update.pdf](http://www.heartfoundation.org.au/SiteCollectionDocuments/HypertensionGuidelines2008to2010Update.pdf)>

### **Summary of results**

Sex distribution of patients was no different from the total BEACH sample in 2009–10. However, there was a significantly smaller proportion of patients aged 45–64 years (24.5%, 95% CI: 22.7–26.3) compared with the total sample (28.2%, 95% CI: 27.7–28.8).

Among the 2,350 respondents, the prevalence of diagnosed hypertension was 28.3% (95% CI: 24.5–32.0). After adjustment for annual attendance patterns by age-sex of patient, prevalence of hypertension among those attending general practice at least once was 18.9% (95% CI: 16.0–21.8). Among adults in the sample, prevalence rose significantly through the middle age groups, and was highest among patients aged 75 years and over (71.1%). More than 70% of patients with hypertension were aged 65 years or older.

Among 655 respondents with hypertension, 93.7% were on at least one medication. A total of 1,013 medications were listed: ACE inhibitors accounted for 20.4%, and angiotensin II antagonists accounted for 17.5% of these medications. At the generic level, perindopril and irbesartan were the most commonly recorded.

Comorbidity was recorded for 610 respondents with hypertension, 500 (82.0%) of whom had at least one comorbidity: 26.9% had diabetes; 26.7% had coronary heart disease; 11.5% had cerebral vascular disease; 7.4% had peripheral vascular disease; 15.1% had family history of coronary artery disease; 48.5% had dyslipidaemia; 1.8% had proteinuria; 9.2% had chronic kidney disease. There were 21.8% of patients with an other chronic disease (+/- one or more of the above), atrial fibrillation being the most common of these.

Of 638 patients with hypertension whose BP was recorded on the day of the encounter, 47.7% had BP levels in the high-normal category, 44.7% had levels that were higher than high-normal, and 7.7% had normal BP.

Level of BP control was given for 625 patients with hypertension. GPs considered 75.5% of these patients to have well-controlled BP and 24.5% to have not well-controlled BP. For 33.1% of 148 respondents, the main reason BP was not well-controlled, was current medication not efficacious, followed by patient non-compliance (14.2%).

Of 153 patients with BP not well-controlled, the next management step was recorded for 144. For 25.0% of these patients, no change was planned; for 5.6% the next step was to add a diuretic; for 6.9% to add a calcium channel blocker; for 1.4% to add a beta blocker; for 15.3% it was dose titration. Other management steps recorded were prompt review of BP, 24 hr BP monitor and compliance counselling.

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**PLEASE READ CAREFULLY**

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

**INSTRUCTIONS**

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

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

**Hypertension**

Please indicate whether this patient has been **diagnosed with hypertension**.

If 'no' please **end questions here** for this patient.

**Comorbidities**

Please use the tick boxes to advise whether the patient has any of the listed **comorbidities**. Tick all that apply.

If the patient has a **chronic disease** that is not listed please write it in the space provided.

If the patient **does not have** any chronic disease please tick the box labelled 'None'.

**Uncontrolled blood pressure**

For patients who have **uncontrolled blood pressure** please indicate:

**1. Main reason that BP is uncontrolled**

Please indicate the **main reason** that you believe this patient's **blood pressure is uncontrolled**. If the reason is not listed, please tick the box labelled 'other' and write the reason in the space provided. Please tick only one option.

**2. Future management plan**

Please indicate your **next step in managing** this patient's **blood pressure**. If your next step is not listed please write it in the space provided. Tick all that apply.

**Medications**

Please specify the **medication(s) currently taken for hypertension**. Please write the **name, form** and regimen (**dose and frequency**) for **each medication**.

If the patient is **not** currently taking medication for hypertension please tick the box labelled 'no medication'.

**Current blood pressure**

Please **test the patient's blood pressure** and write the level in the space provided.

**Blood pressure control**

Please advise **whether** (in your clinical opinion) the patient's **blood pressure is well controlled**.

<p><b>Has this patient been diagnosed with hypertension?</b></p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No → End questions</p>	<p><b>Current medication(s) for hypertension:</b></p> <table border="1"> <thead> <tr> <th>Name &amp; Form</th> <th>Strength</th> <th>Dose</th> <th>Frequency</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table> <p><input type="checkbox"/> No medication</p>	Name & Form	Strength	Dose	Frequency																	<p><b>Does this patient have:</b></p> <table border="0"> <tr> <td><input type="checkbox"/> Diabetes</td> <td><input type="checkbox"/> Dyslipidaemia</td> </tr> <tr> <td><input type="checkbox"/> Coronary heart disease</td> <td><input type="checkbox"/> Proteinuria (&gt;300mg/day)</td> </tr> <tr> <td><input type="checkbox"/> Cerebral vasc. dis.</td> <td><input type="checkbox"/> Chronic kidney disease</td> </tr> <tr> <td><input type="checkbox"/> Peripheral vasc. dis.</td> <td><input type="checkbox"/> Other chronic disease: (please specify) _____</td> </tr> <tr> <td><input type="checkbox"/> Family Hx of coronary artery disease</td> <td><input type="checkbox"/> None</td> </tr> </table>	<input type="checkbox"/> Diabetes	<input type="checkbox"/> Dyslipidaemia	<input type="checkbox"/> Coronary heart disease	<input type="checkbox"/> Proteinuria (>300mg/day)	<input type="checkbox"/> Cerebral vasc. dis.	<input type="checkbox"/> Chronic kidney disease	<input type="checkbox"/> Peripheral vasc. dis.	<input type="checkbox"/> Other chronic disease: (please specify) _____	<input type="checkbox"/> Family Hx of coronary artery disease	<input type="checkbox"/> None	<p><b>Today's blood pressure is:</b> _____ / _____ mmHg</p> <p><b>Is this patient's BP currently well controlled?</b></p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>	<p><b>If BP is uncontrolled:</b></p> <p><b>1. What is the main reason:</b></p> <p><input type="checkbox"/> Current medication(s) is not efficacious</p> <p><input type="checkbox"/> Patient non-compliance</p> <p><input type="checkbox"/> Alternative medications are unsuitable</p> <p><input type="checkbox"/> Other: _____</p>	<p><b>2. What is the next step in the management plan?</b></p> <p><input type="checkbox"/> NO CHANGE</p> <p><input type="checkbox"/> Add a diuretic</p> <p><input type="checkbox"/> Add a calcium channel blocker</p> <p><input type="checkbox"/> Add a beta blocker</p> <p><input type="checkbox"/> Dose titration</p> <p><input type="checkbox"/> Other: _____</p>
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