

## **SAND abstract No. 128 from the BEACH program 2008–09**

### **Subject: Chronic kidney disease among general practice patients**

**Organisation supporting this study:** Abbott Australasia Pty Ltd

**Issues:** For adult patients attending general practice – the proportion who have had their kidney function assessed in the previous 12 months; the proportion with comorbidities and/or risk factors for chronic kidney disease (CKD); the prevalence of CKD; the stages of kidney disease for patients with CKD; the management of CKD; levels of BP, total cholesterol and HbA1c in patients at Stages 3–5 of CKD; the underlying causes of CKD.

**Sample:** 2,536 patients aged 24 years and over, from 103 GPs; data collection period: 06/05/2008 – 09/06/2008.

**Method:** Detailed in the paper entitled 'SAND Method 2008–09' available at: <[www.fmrc.org.au/publications/SAND\\_abstracts.htm](http://www.fmrc.org.au/publications/SAND_abstracts.htm)>. Stages of disease were defined according to National Kidney Foundation Guidelines.

### **Summary of results**

There were 3,088 patients sampled, 2,536 of whom were 24 years and over, and 2,498 (98.5%) of these responded to kidney test questions. Nearly two-thirds (65.6%, 95% CI: 61.8–69.5) had had at least one kidney function test in the previous 12 months: 43.4% a glomerular function test, 62.3% a serum creatinine test, and 13.8% a proteinuria/microalbuminuria test.

Age-specific test rates showed that the likelihood of being tested increased significantly with patient age, with 86.3% of patients aged 75 years and over having been tested. There was no significant difference between males and females in the proportion tested.

Responses to risk factors/comorbidities were recorded for 2,479 patients: 38.2% had hypertension; 13.5% were obese (BMI > 30); 12.1% had diabetes; 9.6% were current smokers; 2.1% had a family history of CKD. One in five patients (20.6%) had no risk factors/comorbidities; 74.9% of the 1,968 patients with at least one risk factor had had a kidney function test; 31.5% of those with no risk factors had been tested.

Of the 2,474 patients for whom a response was recorded, 258 (10.4%) had been diagnosed with CKD, and 61.2% of those were aged 75 years and over. There was no significant difference in diagnosed prevalence between males and females. Stage of disease was provided for 254 diagnosed patients: 11.4% were at Stage 1; 30.7% at Stage 2; 45.7% were at Stage 3; 9.1% were at Stage 4; and 1.6% were at Stage 5.

Of the 143 patients at Stages 3–5 of CKD, response rates to management questions varied – of 136 respondents, half (51.5%) had had a renal ultrasound in the past 5 years and 58.1% had the quantity of proteinuria assessed; of 139 respondents, 38.1% had been referred to a nephrologist, and 75.5% were currently taking an ACE inhibitor/A2RA.

Indicator levels for patients at Stages 3–5 (response rates again varied by question) showed 33.6% had BP of < 130/80; 23.4% had a TC of < 4; and 52.5% had an HbA1c of < 7. The underlying cause of CKD had been established for 70.4% of 125 respondents. The most common causal condition was hypertension (33.0%,  $n = 29$ ) followed by Type 2 diabetes (26.1%;  $n = 23$ ).

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# PLEASE READ CAREFULLY

The shaded section of the following forms asks questions about **CHRONIC KIDNEY DISEASE**.  
 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.

## Management of CKD

The remaining questions are for patients at stages **3-5 only**. If at stages **1 or 2** you should **end the questions** here.

Please provide the **test, referral and medication** information requested, using the tick boxes provided.

## Assessment of renal function

Please use the tick boxes to advise whether this patient has had their **kidney function** tested in the past 12 months, and with **what test/s**. Please tick as many as apply.

## Diagnosis

Please advise whether the patient has been **diagnosed** with **Chronic Kidney Disease (CKD)**, either today or prior to today's consultation.

If the patient has **never** been diagnosed with CKD **please end the questions here**.

## Stage of disease\*

If the patient has been diagnosed with CKD, please advise what **stage of the disease** currently applies to this patient.

If you **do not know** (e.g if test results are not available) please tick the box labelled 'don't know'

- \*Stage 1 - GFR  $\geq$  90 ml/min
- \*Stage 2 - GFR 60 - 89 ml/min
- \*Stage 3 - GFR 30 - 59 ml/min
- \*Stage 4 - GFR 15 - 29 ml/min
- \*Stage 5 - GFR  $<$ 15 ml/min + dialysis

\*Stages classified as per National Kidney Foundation Guidelines Part 4 - 'Definition and Stages of Chronic Kidney Disease'.

## Indicator levels

From the most recent test, please provide the patient's levels of BP, total cholesterol and HbA1c.

## Underlying Cause of CKD

Please specify the underlying cause of CKD for this patient, if one has been identified.

If a specific cause has not yet been determined, please tick the box labelled 'unknown'.

## Risk factors and comorbidities

Please advise whether the patient **also has** any of the **listed risk factors or conditions**. Tick as many as apply.

If the patient has **none** of the listed risk factors or conditions please tick the box labelled '**none of the above**'.

### In the past 12 months has this patient had their kidney function assessed?

- Yes - glomerular filtration test
- Yes - serum creatinine test
- Yes - other proteinuria/micro-albuminuria test
- No
- Don't know

(tick all that apply)

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### Does the patient have:

- Diabetes (tick all that apply)
- Hypertension
- Current smoker
- Obesity (BMI  $>$ 30)
- Aboriginal or Torres St Islander ancestry
- Family history of CKD
- None of the above

### Has the patient been diagnosed with Chronic Kidney Disease (CKD)?

- Yes
- No  $\rightarrow$  end

### If 'yes' what is their Stage\* of disease?

- Stage 1 (see definitions on green sheet)
- Stage 2
- Stage 3
- Stage 4
- Stage 5
- Don't know

### Remaining Q's for patients at Stages 3 - 5 only:

#### Has/is the patient...

- |   | Yes                      | No                       |
|---|--------------------------|--------------------------|
| - Had a renal ultrasound in the past 5 years? | <input type="checkbox"/> | <input type="checkbox"/> |
| - Had the quantity of proteinuria assessed?   | <input type="checkbox"/> | <input type="checkbox"/> |
| - Been referred to a nephrologist?            | <input type="checkbox"/> | <input type="checkbox"/> |
| - Currently taking an ACE inhibitor / A2RA?   | <input type="checkbox"/> | <input type="checkbox"/> |

### What are the patient's most recent levels of:

BP \_\_\_\_\_ / \_\_\_\_\_ mmHg  
 Total chol \_\_\_\_\_ mm/L  
 HbA1c \_\_\_\_\_ %

### The underlying cause of CKD is:

\_\_\_\_\_ (please specify)  Unknown