

SAND abstract No. 155 from the BEACH program 2009–10

Subject: Chronic kidney disease among general practice patients

Organisation supporting this study: Abbott Australasia Pty Ltd

Issues: For patients aged 24 years and over attending general practice: the proportion who 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. For patients at stages 3–5 of CKD: the management of blood pressure (BP), total cholesterol (TC), and HbA1c levels; underlying causes of CKD.

Sample: 2,297 patients aged 24 years and over, from 98 GPs; data collection period: 27/10/2009 – 30/11/2009.

Method: Detailed in the paper entitled *SAND method 2009–10* at:

www.fmrc.org.au/publications/SAND_abstracts.htm. **Method for this study:** Stages of disease were defined according to National Kidney Foundation Guidelines.

Summary of results

There were 2,943 patients sampled, 2,353 of whom were 24 years and over, and 2,297 (97.6%) of these responded to kidney test questions. Nearly two-thirds (64.8%, 95% CI: 61.3–68.4) had had at least one kidney function test in the previous 12 months: 40.7% a glomerular filtration rate test, 63.8% a serum creatinine test, and 13.6% 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 had at least one test. There was no significant difference between males and females in the proportion tested.

Responses to risk factors/comorbidities were recorded for 2,268 patients: 34.0% had hypertension; 14.8% were obese (BMI > 30); 11.6% had diabetes; 8.4% were current smokers; and 2.5% had a family history of CKD. One in four patients (26.2%) had no risk factors/comorbidities; 75.7% of the 1,675 patients with at least one risk factor had had a kidney function test; and 35.9% of the 593 with no risk factors had been tested.

Of the 2,255 patients for whom a response was recorded, 259 (11.5%) had been diagnosed with CKD, and 55.6% 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 249 diagnosed patients: 10.2% were at Stage 1; 31.0% were at Stage 2; 47.8% were at Stage 3; 7.1% were at Stage 4; and 1.6% were at Stage 5.

Of the 144 patients at stages 3–5 of CKD, response rates to management questions varied – of 142 respondents, 42.3% had had a renal ultrasound in the previous 5 years; of 140 respondents, 52.1% had the quantity of proteinuria assessed; of 142 respondents, 28.9% had been referred to a nephrologist; and of 137, 73.7% were currently taking an ACE inhibitor/A2RA.

Indicator levels for patients at stages 3–5 (response rates varied by question) showed that 34.5% (of 142) had BP of < 130/80; 29.8% (of 131) had a TC of < 4; and 59.5% (of 42) had an HbA1c of < 7. The underlying cause of CKD had been established for 68 of 112 respondents (60.7%). The most common causal condition was hypertension (27.9%, $n=19$), followed by Type 2 diabetes (20.6%, $n=14$).

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AIHW Australian GP Statistics and Classification Centre, 2010. SAND abstract No. 155 from the BEACH program: Chronic kidney disease among general practice patients. Sydney: AGPSCC University of Sydney. ISSN 1444-9072

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*	Description	GFR (mL/min/1.73m ²)
1	Kidney damage with normal or ↑ GFR	≥ 90
2	Kidney damage with mild ↓ GFR	60 - 89
3	Moderate ↓ GFR	30 - 59
4	Severe ↓ GFR	15 - 29
5	Kidney failure	<15 (or 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 → 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