

## SAND abstract No. 177 from the BEACH program 2010–11

### Subject: Multiple morbidity and chronic heart failure

**Organisation supporting this study:** CSL Ltd

**Issues:** In patients attending general practice, prevalence of: selected chronic conditions and pattern of multiple morbidity; other chronic conditions and pattern of multiple morbidity. For patients with chronic heart failure (CHF): patterns of comorbidities; stage of CHF; other health professionals involved in management of CHF; proportion currently taking medication for CHF; types and prescribed dosage of these medications; whether a beta-blocker is used in CHF management.

**Sample:** 2,952 patients from 104 GPs; data collection period: 30/11/2010 – 17/01/2011

**Method:** Detailed in the paper entitled *SAND method 2010–11* at:

[www.fmrc.org.au/publications/SAND\\_abstracts.htm](http://www.fmrc.org.au/publications/SAND_abstracts.htm). **Method for this study:** Stages of heart failure were defined according to the Heart Failure Society of America. A card defining the stages of heart failure was provided to assist with the completion of the form.

### 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 < 1 year (1.2%, 95% CI: 0.8–1.6) and 1–4 years (3.1%, 95% CI: 2.2–4.0) compared with the total sample (2.1% aged < 1 year, 95% CI: 1.9–2.3, and 4.7% aged 1–4 years, 95% CI: 4.5–5.0).

Of 2,952 patients, 1,361 (46.1%, 95% CI: 41.7–50.5) had at least one of the ten listed conditions. Hypertension was most prevalent ( $n = 901$ ; 30.5%), followed by chronic arthritic pain (12.6%), diabetes (10.8%), chronic back pain (10.3%), chronic obstructive pulmonary disease (5.1%), CHF (4.3%), benign prostatic hypertrophy (2.7%), dementia/Alzheimer's (2.3%), psoriasis (1.3%) and chronic cancer pain (1.1%). One-quarter (24.0%;  $n = 707$ ) had one of the listed conditions, 13.4% had two and 8.8% had three or more conditions. There were 1,519 additional chronic conditions recorded for 804 patients. Circulatory problems accounted for 19.2% and endocrine/metabolic problems for 18.6%.

Of the 127 CHF patients, over two-thirds (67.7%) were aged 75 years and over and the sex distribution did not differ from all patients in this sample. Of 120 respondents for staged CHF, almost half (47.5%) had Mild Stage II CHF, 28.3% had Mild Stage I, and 20.0% had Moderate Stage III CHF. Three patients had Severe Stage IV CHF and for two patients, stage of CHF was not known. None of the listed morbidities were present in 11.8% of CHF patients; 26.8% had one listed comorbidity, 29.1% had two and 32.3% had three or more listed comorbidities. The most common combinations of comorbidities were: CHF and hypertension (11.8%); CHF and hypertension and diabetes (7.9%); and CHF and hypertension and chronic arthritic pain (6.3%).

Details on current referrals for CHF were available for 101 of the 127 patients with CHF. Multiple responses were allowed. Referrals to cardiologists were recorded for 87.1% of patients, referrals to general physicians for 12.9% and referrals to geriatricians for 8.9%.

Of 123 CHF patients with medication details, 118 were currently taking medication for their CHF. A total of 315 medications were recorded, with beta-blocking agents being most common ( $n = 74$ ; 23.5%). There were 49 patients who were not taking a beta-blocker, the main reason being advanced age (> 70 years), given for 57.1% of these patients.

*Correspondence to: Jan Charles, FMRC*

Family Medicine Research Centre, University of Sydney. SAND abstract No. 177 from the BEACH program: Multiple morbidity and chronic heart failure. Sydney: FMRC University of Sydney, 2011. ISSN 1444-9072

## The Stages of Heart Failure

Class	Patient Symptoms
Class I (Mild)	No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, or dyspnoea (shortness of breath).
Class II (Mild)	Slight limitation of physical activity. Comfortable at rest, but ordinary physical activity results in fatigue, palpitation, or dyspnoea.
Class III (Moderate)	Marked limitation of physical activity. Comfortable at rest, but less than ordinary activity causes fatigue, palpitation, or dyspnoea.
Class IV (Severe)	Unable to carry out any physical activity without discomfort. Symptoms of cardiac insufficiency at rest. If any physical activity is undertaken, discomfort is increased.

Source: Heart Failure Society of America. New York Heart Association (NYHA) functional classification system. 2002 [cited 2010 Oct 10]. Available from [http://www.abouthf.org/questions\\_stages.htm](http://www.abouthf.org/questions_stages.htm)

**PLEASE READ CAREFULLY**

The shaded section of the following forms asks questions about **MULTIPLE MORBIDITY AND CHRONIC HEART FAILURE**.  
 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.

**Prevalence of selected conditions**

Please use the tick boxes to indicate whether the patient has been **diagnosed with any of the listed conditions**. Please tick as many as apply.

If the patient has **none of the listed conditions** please tick the box labelled 'none of the above' and **end questions here for this patient**.

**Chronic heart failure**

The remaining questions on this SAND form are for patients with **chronic heart failure (CHF)**. If the patient does not have CHF you may **end questions here**.

**Stage of chronic heart failure**

Referring to the **New York Heart Association functional classification system (see definition on card)** please indicate the patient's **stage of CHF**.

**Current CHF medications**

Please write the **name and form** of the **current medication(s)** taken by the patient for management of CHF.

Please indicate the regimen (i.e. **strength, dose and frequency**) of the medication(s).

If the patient is **not currently taking a medication** for CHF please tick the box labelled '**No CHF medication**'.

**Beta-blocker use**

For patients who **do not currently use a beta-blocker** please indicate the **reason(s)** that a beta-blocker is not used. Please tick all that apply.

**Other chronic conditions**

If the patient suffers from **any other chronic conditions** please write the conditions in the space provided.

**Referrals for CHF**

Please use the tick boxes to indicate the **current referral(s)** this patient has for the management of their CHF. Please tick all that apply.

**Has the patient been diagnosed with:**

- Chronic heart failure (CHF)
- Benign prostatic hyperplasia
- Psoriasis
- Diabetes
- Hypertension
- COPD
- Dementia/Alzheimer's
- Chronic arthritic pain
- Chronic back pain
- Chronic cancer pain
- None of the above

BL128C

**End questions** ←

**Other chronic conditions for this patient:**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**Remaining Qs are for patients with CHF**  
 If no CHF → **End Qs**

- Stage of CHF is:**
- Mild I (See definition on card)
  - Mild II
  - Moderate III
  - Severe IV
  - Don't know

**Current referrals for CHF are:**

- Cardiologist
- Geriatrician
- General physician
- Other: \_\_\_\_\_

**Current medication(s) for CHF:**

Name & Form	Strength	Dose	Frequency
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
<input type="checkbox"/> <b>No CHF medication</b>			

**If beta-blocker is not taken, why not?**

- Advanced age (>70 yrs)
- COPD
- Diabetes
- Hypotension
- Renal impairment
- Liver impairment
- Peripheral vasc. disease
- 2° or 3° AV block
- Bradycardia
- Other: \_\_\_\_\_