

## **SAND abstract No. 44 from the BEACH program 2002–03**

### **Subject: Severity of illness**

**Organisation supporting this study:** General Practice Statistics and Classification Unit

**Issues:** This study was undertaken to explore the complex interrelationships between the severity of patient health problems managed at the encounter and the frequency of patient visits and length of consultation. These interrelationships cannot be explored using BEACH encounter data or Medicare data.

**Sample:** 6,742 encounters from 225 GPs. Data collected between 26/2/2002–1/4/2002 and 16/7/2002–19/8/2002.

**Method:** Detailed in the paper entitled 'SAND Method: 2002-03' on the FMRC website ([http://www.fmrc.org.au/publications/SAND\\_abstracts.htm](http://www.fmrc.org.au/publications/SAND_abstracts.htm)).

The Duke University Severity of Illness (DUSOI) analogue scale was used to assess the severity of each problem managed at the encounter and to calculate a total score for each encounter.<sup>1</sup> The GP recorded the start and finish time for the encounter and determined the number of GP visits in the preceding 12 months in consultation with the patient.

### **Summary of results:**

The age and sex distribution of the 6,742 respondents was similar to the distribution for all BEACH encounters.

The mean total DUSOI score was 5.6 (95% CI: 5.3-5.9) based on 5,612 scored encounters. Encounters with patients aged 65 years and over had a significant higher mean total DUSOI score (6.9, 95% CI: 6.3-7.5) than all scored encounters. There was a significant positive linear relationship between total DUSOI score and number of GP visits reported in the previous 12 months ( $p < 0.001$ ). Patients reporting 11 or more GP visits had the highest mean total score of 6.8, and those reporting nil GP visits had the lowest total mean score of 4.2.

There was a significant positive linear relationship between mean total DUSOI score at the encounter and the length of consultation with the consultation length increasing by 0.5 minute for each one unit increase in DUSOI ( $p < 0.001$ ). The DUSOI range was 4.26 for consultations of less than 5 minutes to 8.80 for consultations of more than 25 minutes.

The DUSOI from the 8,118 scored problems had a mean and a median of 4.0. Significantly higher DUSOI scores were recorded for the following problems compared to the DUSOI for all problems (mean 4.0, 95% CI: 3.8-4.2): depression (mean 5.4, 95% CI: 5.1-5.8), back complaint (mean 5.3, 95% CI: 4.8-5.7), ischaemic heart disease (mean 5.2, 95% CI: 4.6-5.9) and fracture (mean 4.9, 95% CI: 4.2-5.6).

Significantly lower DUSOI scores were recorded for the following problems: hypertension (mean 3.4, 95% CI: 3.1-3.7), lipid disorder (mean 3.2, 95% CI: 2.7-3.8), acute upper respiratory infection (mean 3.1, 95% CI: 2.8-3.3), menopausal symptom/complaint (mean 3.0, 95% CI: 2.5-3.5), contact / allergic dermatitis (mean 3.0, 95% CI: 2.5-3.4), and solar keratosis/sunburn (mean 2.5, 95% CI: 2.0-3.1).

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1 Parkerson GR, Jr., Broadhead WE, Tse CK. The Duke Severity of Illness Checklist (DUSOI) for measurement of severity and comorbidity. *J Clin Epidemiol* 1993; 46:379-393.

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