

SAND Method: 2006–07

Population health and health improvements resulting from interventions and strategies need to be monitored. General practice is commonly identified as a significant intervention point for health care and health promotion because general practitioners (GPs) have considerable exposure to the health of the population. As about 80% of the population visit a GP at least once a year¹, general practice would appear to provide a suitable basis from which to monitor many aspects of the health of the population.

The BEACH (Bettering the Evaluation and Care of Health) program, a continuous national study of general practice activity is largely encounter-based. The participating GPs provide information about the patient seen, the problems managed and the management techniques utilised at each of a series of GP-patient encounters. The database currently incorporates details of over 900,000 encounters. However, the program also facilitates collection of information about other aspects of the health of general practice patients.

Since BEACH began in April 1998 a section on the bottom of each encounter form has been allocated to investigate other aspects of patient health or health care delivery not covered by the consultation-based information. These additional substudies are referred to as SAND (Supplementary Analysis of Nominated Data). Each organisation supporting the BEACH program has access to a subsample of 6,000 encounter forms per year (or two subsamples of 3,000 each) in which to insert a series of questions on a subject or subjects of their choice.

The annual BEACH data collection period is broken down into 10 blocks of recording, each block comprising five weeks. Each block includes data from about 100 GPs over the five weeks, 20 GPs recording per week. Each GP's recording pad is made up of three components (40 A forms, 30 B forms and 30 C forms). Each component covers a different SAND topic, and involves a line of questioning that is asked of the patient and/or the GP in addition to the encounter-based information.

The order of SAND components in the GP's recording pack is randomised, so that 40 A forms may appear first, second or third in the pad. Randomised ordering of the components ensures that there is no order effect on the quality of the information collected.

One SAND form remains constant for the year across the 10 blocks of the BEACH program. All GPs have 40 A forms in their recording pad and these investigate height, weight, smoking status and alcohol use. Questions on B and C forms address other aspects of patient health and health care delivery in general practice, effectively subsampling the overall sample. These SAND topics therefore usually vary from block to block. However, sometimes a topic is repeated to increase the sample size and the statistical power of the study. Results from these sub-studies can also be cross-analysed with data emanating from the encounters with the patients in each sub-study.

In the first BEACH year, all the SAND topics were reported in a separate report. For subsequent BEACH years, patient risk factor data on BMI, smoking status and alcohol consumption have been reported in each annual report. The most recent is *General practice activity in Australia 2005–06* (Britt et. al. 2007)².

The results of the other topics covered in SAND 1999–2006 are summarised in the abstracts on this site <www.fmrc.org.au/publications/SAND_abstracts.htm>. SAND abstracts and research tools are also available in a recently published report³. Topics reported in the 2005–06 abstracts together with the subsample totals are listed below.

Abstract number	Subject	Number of respondents	Number of GPs
95	Cultural background of patients attending general practice ^(a)	6,035	202
96	Inhaled corticosteroid use for asthma management ^(a)	5,911	201
97	Statin medication use among high CHD risk patients attending general practice ^(a)	2,707	94
98	Management of hypertension and angina in general practice patients ^(a)	2,919	98
99	Lipid management in patients with high risk conditions ^(a)	5,372	183
100	Gastrointestinal symptoms in patients attending general practice ^(a)	2,801	97
101	Types of medicine use and patient use of medicines list ^(a)	5,528	187
102	Alzheimer's disease or dementia in patients attending general practice ^(a)	2,863	99
103	Cardiovascular risk in patients attending general practice ^(a)	2,618	99
104	Asthma management and medication use among patients attending general practice ^(a)	2,862	97
105	Measurement of severity of illness in general practice	4,982	166
106	Weight loss attempts and methods	2,164	76
107	Type 2 diabetes and dyslipidaemia	2,331	89
108	Type 2 diabetes among patients attending general practice	2,832	96
109	Secondary prevention of heart attack and stroke	2,471	84
110	Erectile dysfunction	1,930	82

Ethics approval for these sub-studies was obtained from the Human Ethics Committee of the University of Sydney and the Health Ethics Committee of the Australian Institute of Health and Welfare.

Reference

1. Medicare Australia. 2007. Medicare Australia 05-06 annual report. Viewed 6-11-2007, www.medicare.gov.au/about/about_us/annual_report/05_06/statistics/mcare22.shtml
2. Britt H, Miller GC, Charles J, Pan Y, Valenti L, Henderson J, Bayram C, O'Halloran J, Knox S 2007. General practice activity in Australia 2005-06. AIHW Cat. No. GEP 19. Canberra: Australian Institute of Health and Welfare (General Practice Series No. 19).
3. Britt H, Miller GC, Henderson J, Bayram C 2007. Patient-based substudies from BEACH: abstracts and research tools 1999-2006. General practice series no. 20. AIHW cat. no. GEP 20. Canberra: Australian Institute of Health and Welfare.