Interim summary of results

The following results are based on records completed by the first 476 GPs and received by the General Practice Statistics and Classification Unit in time for inclusion in this six-month interim report. Included are data on the characteristics of the participating GPs and the 47,600 encounters they reported. Patient risk factor and health state information will be reported elsewhere.

The participating general practitioners

GP profile questionnaires were completed by 471 of the 476 participating GPs. For the remaining five GPs, data on age group, gender and, for some, country of graduation were gained from information provided by the Commonwealth Department of Health and Aged Care. Of the 476 participants, 73.3% were male and 59.5% were aged 45 years or older. Three-quarters (75.8%) of these GPs had been in general practice for more than 10 years, and only 12.2% could be regarded as practising part time (fewer than six sessions per week). Less than 20% of respondents were in solo practice. The majority (76.5%) had graduated in Australia and 127 (27.5%) were Fellows of the Royal Australian College of General Practitioners (Table 2).

Encounters

An overview of the database at the end of the first six months of **BEACH** data collection is provided in Table 3. The first 476 GPs had submitted 47,600 encounter records by the cut-off date for this report.

The type of encounter was indicated on 44,874 (94.3%) of the 47,600 records. Direct encounters (face to face) represented 95.6% of these, surgery consultations being most common, representing 82.7% of all specified consultations and 86.5% of all direct encounters. Only 3.3% of all specified encounters were conducted in hospitals, nursing homes or the patient's home. Consultations which were covered by organisations other than Medicare accounted for 6.4% of encounters, 28.1% of these being covered by workers compensation.

The patients were more likely to be female (58.2%) and 9.5% were new to the practice. The GPs' workload was almost evenly distributed between four patient age groups. A quarter of the encounters were with patients aged less than 25 years, a quarter were 25–44 years, a quarter 45–64 years, and the remaining quarter aged 65 years or more. Almost half the patients (47.5%) held a Health Care Card and 3.5% held a Department of Veterans Affairs card. While 13.6% of these patients came from a non-English speaking background, only 1.4% stated they were Aboriginal and/or Torres Strait Islander.

The morbidity managed and treatments provided in these encounters are summarised in Table 4. The 69,991 patient reasons for encounter (RFEs) were reported at an average rate of 147.0 per 100 encounters. An average 144.6 problems were managed per 100 encounters providing a total of 68,845 recorded problems/diagnoses. Where the status of the problem (new/old to the patient) was reported (in 75.6% of cases), 47.9% of problems were said to be

new to the patient. The consulting GP regarded 2.7% of all problems managed as being work related.

Table 2: GP characteristics:–*BEACH*, April–September 1998

GP characteristic	n	%[a]
Gender		
Male	349	73.3
Age distribution		
<35 years	32	6.7
35–44 years	161	33.8
45–54 years	155	32.6
55+ years	128	26.9
Years in general practice		
< 6 years	30	6.3
6–10 years	79	16.8
11–19 years	157	33.4
20+ years	204	43.4
Missing	6	
Sessions per week		
< 6 per week	57	12.2
6–10 per week	322	68.7
11+ per week	90	19.2
Missing	7	
Size of practice		
Solo	75	17.6
2–4 GPs	191	44.7
5+ GPs	161	37.7
Missing	49	
Place of graduation		
Australia	364	76.5
United Kingdom	48	10.1
Asia	42	8.8
Other	22	4.6
More than 50% consultations in languages other than English	**57**	**12.1**
Currently in RACGP training program	**13**	**2.9**
Hold FRACGP	**127**	**27.5**

(a) Missing data removed.

Table 3: Summary of services and patients:–*BEACH,* April–September 1998

Variable	Number	Rate per 100 encs[a]	Lower 95% CI	Upper 95% CI	Relative SE[b]
		Encounter type			
Direct (patient seen)	42,885	95.6	95.0	96.1	0
No charge	758	1.7	1.1	2.3	17
Medicare paid	39,722	88.5	87.0	90.1	1
Short surgery consults	649	1.5	0.8	2.1	23
Standard surgery consults	33,038	73.6	71.8	75.4	1
Long surgery consults	3,103	6.9	6.1	7.7	6
Prolonged surgery consults	323	0.7	0.0	3.2	100
Home visits	863	1.9	1.0	29	26
Hospital	217	0.5	0	2.6	100
Nursing home	419	0.9	0	2.3	72
Other Medicare items	1,110	2.5	1.6	3.3	18
Workers compensation	807	1.8	1.3	2.3	14
Other paid (State, hospital etc)	2,060	4.6	1.3	7.9	36
Indirect (patient not seen)	1,989	4.4	3.7	5.2	8
Script	1,136	2.5	1.9	3.1	12
Referral	257	0.6	0.2	0.9	30
Certificate	64	0.1	0.0	0.5	100
Other	569	1.3	0.7	1.8	23
Missing	2,726				
		Patients			
Gender					
Males	19,578	41.8	40.1	42.2	1
Females	27,257	58.2	56.2	58.3	1
Missing	765				
Age group					
<1 year	1,087	2.3	2	2.5	6
1–4 years	2574	5.4	5	5.8	4
5–14 years	3481	7.4	6.9	7.7	3
15–24 years	4,764	10.1	9.5	10.6	3
25–44 years	12,139	25.7	24.5	26.5	2
45–64 years	11,317	24.0	23.1	24.5	2
65–74 years	5,935	12.6	11.8	13.2	3
75+ years	5,853	12.4	11.3	13.3	4
Missing	447				

(continued)

Table 3 (continued): Summary of services and patients:–*BEACH,* April–September 1998

Variable	Number	Rate per 100 encs[a]	Lower 95% CI	Upper 95% CI	Relative SE[b]
Patients					
Other characteristics					
New patient to practice	4,514	9.5	8.6	10.1	5
Health Care Card	20,467	43.0	41.3	44.7	2
Veterans Affairs Gold Card	1,442	3.0	2.6	3.4	7
Veterans' Affairs White Card	205	0.4	0.2	0.7	29
Non-English speaking background	6,282	13.2	11.1	15.3	8
Aboriginal	588	1.2	0.1	2.4	46
Torres Strait Islander	48	0.1	0	0.5	100
Aboriginal and Torres Strait Islander	30	0.1	0	1	100

(a) Missing data removed.

(b) Relative SE: 0–15 reliable; 16–33 slightly unreliable; 34–50 extremely unreliable; 51–100 should not be used.

Table 4: Summary of morbidity and management:–*BEACH*, April–September 1998

Variable	Number	Per 100 encs	Lower 95% CI	Upper 95% CI	Relative SE[a]	Per 100 problems	Lower 95% CI	Upper 95% CI	Relative SE[a]
Reasons for encounter	69,991	147.0	145.0	149.1	1				
Problems managed	68,845	144.6	142.3	147.0	1				
Problem status									
New problems	24,859	52.2	50.4	54.0	2	36.1	34.9	37.4	2
Old problems	27,091	56.9	54.5	59.3	2	39.4	38.1	40.6	2
Missing data	16,895								
Work related	1,825	3.8	3.4	4.3	6	2.7	2.3	3.0	6
Medications	52,382	110.1	106.8	113.3	2	76.1	74.2	78.0	1
Prescribed	44,954	94.4	91.0	97.9	2	65.3	63.2	67.4	2
Advised OTC	4,139	8.7	7.8	9.6	5	6.0	5.4	6.6	5
GP supplied	3,289	6.9	5.6	8.2	10	4.8	3.9	5.6	9
Other treatments	20,039	42.1	39.7	44.5	3	29.1	27.6	30.6	3
Clinical	13,956	29.3	27.2	31.4	4	20.3	18.9	21.6	3
Procedural	6,083	12.8	11.9	13.7	4	8.8	8.2	9.5	4
Referrals (at least one)	5,030	10.6	10.0	11.1	3	7.3	7.0	7.7	2
Emergency department	22	0.1	0.0	1.0	100	0.03	0.0	0.6	100
Hospital	352	0.7	0.5	1.0	15	0.5	0.4	0.7	14
Specialist	3,642	7.7	7.3	8.0	3	5.3	5.0	5.5	2
Allied health services	1,412	3.0	2.7	3.2	5	2.1	1.9	2.2	4
Pathology (at least one)	11,343	23.8	22.4	25.3	3	16.5	15.5	17.4	3
Imaging (at least one)	3,373	7.1	6.6	7.6	4	4.9	4.5	5.3	4

(a) Relative SE: 0–15 reliable; 16–33 slightly unreliable; 34–50 extremely unreliable; 51–100 should not be used.

Medications were prescribed, advised for over-the-counter purchase (OTC) or supplied by the GP at a rate of 110.1 per 100 encounters, or 76.1 per 100 problems managed. The majority (85.8%) of these medications were prescribed, at a rate of 94.5 per 100 encounters or 65.3 per 100 problems managed. Advised OTCs accounted for 7.7% of all medications (advised at a rate of 8.7 per 100 encounters or 6.0 per 100 problems). Drugs supplied by the GP accounted for the remaining 6.3% of medications and were provided at a rate of 6.9 per 100 encounters or 4.8 per 100 problems managed.

Other clinical or procedural treatments were provided by the GP at a rate of 42.1 per 100 encounters. The majority (69.6%) of these management activities were of a clinical nature (e.g. advice, counselling).

Referrals to other services were made at 10.6 per 100 encounters. The majority (67.1%) were referrals to a specialist and 26.0% were to an allied health professional. Very few referrals to hospitals or emergency departments were recorded.

At least one pathology test was ordered at 23.8% of encounters while at least one order for imaging was placed at 7.1% of encounters.

Patient reasons for encounter

The top 10 reasons for encounter (RFEs) accounted for 30.6% of the 69,991 RFEs recorded. The most frequent RFE was a request for a prescription (either a specific type or unspecified, either a repeat or new), which arose at a rate of 8.1 per 100 encounters. Requests for a cardiovascular check-up (usually blood pressure check) were relatively frequent (5.3 per 100), as were patient presentations for immunisation or vaccination (5.1 per 100). The most commonly described symptoms where cough (7.3 per 100 encounters), throat symptoms (3.9 per 100) and back problems (3.5 per 100 encounters) (Table 5).

Table 5: Most frequent patient reasons for encounter:–*BEACH*, April–September 1998

Reason for encounter	Number	% of total RFEs	Per 100 encs	Lower 95% CI	Upper 95% CI	Relative SE[b]
Prescription all[a]	3,869	5.5	8.1	7.5	8.8	4
Cough	3,474	5.0	7.3	6.8	7.8	4
Cardiac check-up[a]	2,517	3.6	5.3	4.7	5.9	6
Immunisation[a]	2,425	3.5	5.1	4.5	5.7	6
Throat symptom/complaint	1,856	2.7	3.9	3.6	4.2	4
Back complaint[a]	1,684	2.4	3.5	3.2	3.8	4
Upper respiratory tract infection	1,553	2.2	3.3	2.9	3.7	6
Rash[a]	1,500	2.1	3.2	2.9	3.4	3
General check-up[a]	1,437	2.1	3.0	2.7	3.3	6
Hypertension[a]	1,119	1.6	2.4	1.9	2.8	11
Total top 10	**21,435**	**30.6**				

(a) Includes multiple ICPC–2 codes.

(b) Relative SE: 0–15–reliable; 16–33–slightly unreliable; 34–50–extremely unreliable; 51-–100 should not be used.

Problems managed

The 10 most frequently managed problems accounted for 28.5% of all problems managed at these encounters. Hypertension was managed at a rate of 8.2 cases per 100 encounters, followed by upper respiratory tract infections (7.4 per 100 encounters), and immunisation (5.4 per 100). Acute bronchitis arose at a rate of 4.0 per 100 encounters and depression at 3.6 per 100. Asthma (3.3 per 100 encounters), back complaints (2.0), diabetes (1.7), lipid disorders (1.5) and osteoarthritis (1.4) were also common conditions managed in general practice (Table 6).

Table 6: Most frequent problems managed:–*BEACH*, April–September 1998

Problem	Number	% of total problems	Rate per 100 encs	Lower 95% CI	Upper 95% CI	Relative SE[b]
Hypertension[a]	3,888	5.7	8.2	7.6	8.7	4
URTI	3,529	5.1	7.4	6.9	8.0	4
Immunisation [a]	2,553	3.7	5.4	4.7	6.0	6
Acute bronchitis	1,881	2.7	4.0	3.6	4.3	5
Depression[a]	1,700	2.5	3.6	3.2	3.9	5
Asthma	1,555	2.3	3.3	3.0	3.5	4
Back complaint[a]	1,362	2.0	2.9	2.6	3.1	5
Diabetes mellitus[a]	1,154	1.7	2.4	2.2	2.7	5
Lipid disorder	1,025	1.5	2.2	1.9	2.4	6
Osteoarthritis[a]	946	1.4	2.2	1.9	2.4	6
Total top 10	**19,593**	**28.5**				

(a) Includes multiple ICPC-2 codes.

(b) Relative SE: 0–15 reliable; 16–33 slightly unreliable; 34–50 extremely unreliable; 51–100 should not be used.

Medications prescribed

Sixteen generic drugs were prescribed at a rate of one or more per 100 encounters and these accounted for one-third of all drugs prescribed. Paracetamol was most often prescribed, at a rate of 4.1 scripts per 100 encounters or 2.8 per 100 problems managed. Amoxycillin was prescribed at a rate of 3.3 per 100 problems managed, and this was followed by paracetamol and codeine (1.7 per 100 problems managed), cefaclor monohydrate 1.7 per 100) and salbutamol (1.7 per 100). GPs made a decision to administer influenza vaccine at a rate of 2.2 per 100 encounters or 2.0 per 100 problems managed. The remainder of the top 16 generic drugs are listed in descending order of frequency in Table 7. The top 16 drugs accounted for 32.3% of all prescribed drugs (N=44,954).

Table 7: Most frequently prescribed medications (>1 prescriptions per 100 encounters, analysed at the generic level):– *BEACH,* **April–September 1998**

Generic drug name	Number	Per 100 encs	Lower 95% CI	Upper 95% CI	Relative SE[a]	Per 100 problems	Lower 95% CI	Upper 95% CI	Relative SE[a]
Paracetamol	1,927	4.1	3.6	4.5	6	2.8	2.5	3.1	6
Amoxycillin	1,585	3.3	2.9	3.7	6	2.3	2.0	2.6	6
Paracetamol and codeine	1,183	2.5	2.2	2.8	6	1.7	1.5	1.9	5
Salbutamol	1,155	2.4	2.2	2.7	5	1.7	1.5	1.8	5
Cefaclor monohydrate	1,140	2.4	2.0	2.8	9	1.7	1.3	2.0	9
Influenza vaccine	1,046	2.2	0.8	3.6	33	1.5	0.6	2.5	32
Roxithromycin	1,043	2.2	1.9	2.5	7	1.5	1.3	1.7	7
Cephalexin	984	2.1	1.8	2.4	7	1.4	1.2	1.6	7
Amoxycillin/potassium clavulanate	881	1.9	1.5	2.2	8	1.3	1.1	1.5	8
Temazepam	694	1.5	1.3	1.7	7	1.1	0.9	1.1	7
Doxycycline HCl	603	1.3	1.0	1.5	10	0.9	0.7	1.0	10
Erythromycin	585	1.3	0.9	1.6	15	0.9	0.6	1.1	15
Diazepam	559	1.2	0.9	1.4	10	0.8	0.7	1.0	10
Levonorgestrel/ethinyl	558	1.2	1.0	1.4	8	0.8	0.7	0.9	9
Diclofenac sodium	516	1.1	0.9	1.3	10	0.8	0.6	0.9	10
Ranitidine	491	1.0	0.9	1.2	8	0.7	0.6	0.8	8
Subtotal: top 16 generics	14,950								

(a) Relative SE: 0–15 reliable; 16–33 slightly unreliable; 34–50 extremely unreliable; 51–100 should not be used.