

3 The total data set

This study is based on data collected between 1 April 1998 and 31 March 2000. The final participating sample consisted of 2,031 practitioners who provided details pertaining to 203,100 encounters. These GPs represented 38.6% of those who were contacted and available, and 35.0% of those with whom contact was attempted. A comparison of characteristics of participating GPs with those of the total GP population found no significant differences between the groups with the exception of age group. Participants were significantly older and GPs aged less than 35 years were underrepresented.

3.1 GP characteristics

Of the 2,031 participants, 69.8% were male and 58.3% were 45 years of age or older. Three-quarters of the participants (75.7%) had been in general practice for more than 10 years and 13.9% could be regarded as practising part time, working fewer than six sessions per week. Almost one-fifth of participants were in solo practice (18.1%) and the majority (75.1%) had graduated in Australia. One in ten respondents (10.7%) conducted more than half of their consultations in a language other than English (Table 3.1).

Table 3.1: Characteristics of participating GPs

GP characteristic	Number ^(a)	Per cent of GPs ^(a) (<i>n</i> = 2,031)
Sex		
Male	1,418	69.8
Female	613	30.2
Age (missing = 8)		
< 35 years	150	7.4
35–44 years	694	34.3
45–54 years	653	32.3
55+ years	526	26.0
Years in general practice (missing = 20)		
< 5 years	157	7.8
6–10 years	333	16.6
11–19 years	659	32.8
20+ years	862	42.9
Sessions per week (missing = 18)		
< 6 per week	280	13.9
6–10 per week	1,356	67.4
> 10 per week	377	18.7

(continued)

Table 3.1 (continued): Characteristics of participating GPs

GP characteristic	Number ^(a)	Per cent of GPs ^(a) (n = 2,031)
Size of practice (missing = 19)		
Solo	354	17.6
2–4 GPs	816	40.6
5–10 GPs	714	35.5
11+ GPs	128	6.4
Place of graduation (missing = 4)		
Australia	1,517	74.8
UK	177	8.7
Other	333	16.4
More than 50% of consultations in languages other than English (missing = 12)	216	10.7

(a) Missing data removed.

3.2 The patients

Female patients accounted for a greater proportion of GP consultations (58.9 per 100 encounters) than male patients (41.1) (Table 3.2).

Table 3.2: Characteristics of the patients at encounters

Patient variable	Number ^(a)	Per cent of encounters (n = 203,100) ^(a)	95% LCL	95% UCL
Sex (missing = 2,709)				
Males	82,283	41.1	40.5	41.6
Female	118,108	58.9	58.4	59.5
Age group (missing = 1,752)				
< 1 year	4,604	2.3	2.2	2.4
1–4 years	10,144	5.0	4.9	5.2
5–14 years	13,891	6.9	6.7	7.1
15–24 years	20,137	10.0	9.7	10.3
25–44 years	52,644	26.2	25.7	26.6
45–64 years	49,469	24.6	24.2	24.9
65–74 years	24,807	12.3	12.0	12.7
75+ years	25,652	12.7	12.3	13.2
New patient to practice	17,705	8.8	8.3	9.2
Healthcare card holder	80,473	39.6	38.8	40.5
Veterans' Affairs card holder	6,769	3.3	3.1	3.5
Non-English-speaking background	20,567	10.3	9.1	11.5
Aboriginal and/or Torres Strait Islander	2,067	1.0	0.4	1.7

(a) Missing data removed.

Note: LCL—lower confidence limit, UCL—upper confidence limit.

Approximately one in seven encounters were with children aged less than 15 years (14.2%), one in ten were with young adults (10.0%), and approximately one in four with patients in each of the following age groups, 25–44 years (26.2%), 45–64 years (24.6%), and 65 years and older (25.0%).

The patient was new to the practice at 8.8% of encounters and patients who held a healthcare card accounted for 39.6% of all encounters. At 10.3% of encounters the patient was from a non-English-speaking background, and at 1.0% patients indicated they were an Aboriginal person and/or Torres Strait Islander (Table 3.2).

3.3 The encounters

The distribution of encounter types shows the varied nature of general practice (Table 3.3).

Table 3.3: Type of encounter

Variable	Number	Rate per 100 encounters ^(a) (<i>n</i> = 203,100)	95% LCL	95% UCL
General practitioners	2,031	..	..	..
Direct consultations	186,317	96.2	96.0	96.5
No charge	1,420	0.7	0.5	1.0
Medicare-claimable	175,865	90.8	90.3	91.4
Short surgery consultations	2,390	1.2	0.9	1.6
Standard surgery consultations	144,133	74.5	73.7	75.2
Long surgery consultations	16,686	8.6	8.2	9.1
Prolonged surgery consultations	1,663	0.9	0.0	1.8
Home visits	3,687	1.9	1.4	2.4
Hospital	972	0.5	0.0	1.7
Nursing home	1,852	1.0	0.4	1.5
Other items	4,482	2.3	1.9	2.7
Workers compensation claimable	3,672	1.9	1.7	2.1
Other paid (hospital, State, etc.)	5,360	2.8	1.3	4.2
Indirect consultations	7,281	3.8	3.4	4.1
Script	3,888	2.0	1.7	2.3
Referral	984	0.5	0.3	0.7
Certificate	243	0.1	0.0	0.3
Other	2,378	1.2	1.0	1.5
Total encounters	203,100	..	..	..

(a) Missing data for 9,502 encounters removed. Per cent base (*n*) = 193,598.

Note: LCL—lower confidence limit, UCL—upper confidence limit.

Direct consultations (where the patient was seen by the GP) represented 96.2% of all encounters. By far the majority of these were claimable on Medicare. Standard surgery consultations were most common, accounting for 74.5% of all recorded patient contacts. Workers compensation claims represented 1.9% of all recorded encounters. Indirect consultations (patient not seen) represented 3.8% of encounters (Table 3.3).

3.4 The content of the encounters

At the 203,100 recorded encounters there was an average of 148.6 patient reasons for encounter described per 100 encounters. Of the 148.6 problems managed per 100 encounters, 49.2% were considered to be problems new to the patient. Problems regarded by the GP as likely to be work-related (irrespective of whether the encounter was covered by workers compensation) occurred at a rate of 3.6 per 100 encounters (Table 3.4).

Medications were prescribed, advised or supplied at a rate of 108.8 per 100 encounters. Non-pharmacological treatments were recorded less often than medications, with clinical non-procedural treatments (e.g. counselling, advice or psychotherapy) being recorded at a higher rate (34.2% per 100 encounters) than procedural treatments such as excisions and physical therapies (12.4 per 100 encounters).

Table 3.4: The content of the encounters

Variable	Number	Rate per 100 encounters	95% LCL	95% UCL	Rate per 100 problems	95% LCL	95% UCL
General practitioners	2,031	..	..	..	..	..	..
Encounters	203,100	..	..	..	..	..	..
Reasons for encounter	301,793	148.6	147.6	149.6	..	..	..
Problems managed	301,759	148.6	147.4	149.8	..	..	..
New problems	99,883	49.2	48.2	50.1	33.1	32.4	33.8
Old problems	168,555	83.0	81.3	84.7	55.9	54.9	56.8
Work-related	7,371	3.6	3.4	3.8	2.4	2.3	2.6
Medications	221,006	108.8	107.3	110.3	73.2	72.4	74.1
Prescribed	188,352	92.7	91.2	94.3	62.4	61.5	63.4
Advised OTC	17,879	8.8	8.4	9.2	5.9	5.6	6.2
GP supplied	14,775	7.3	6.6	7.9	4.9	4.5	5.3
Other treatments	94,616	46.6	45.3	47.8	31.4	30.6	32.1
Clinical treatments	69,461	34.2	33.1	35.3	23.0	22.3	23.7
Procedural treatments	25,155	12.4	12.0	12.8	8.3	8.1	8.6
Referrals	24,259	12.0	11.6	12.3	8.0	7.8	8.2
Emergency department	150	0.1	0.0	0.3	0.1	0.0	0.2
Hospital	1,592	0.8	0.6	1.0	0.5	0.4	0.6
Specialist	15,906	7.8	7.6	8.1	5.3	5.1	5.4
Allied health services	6,611	3.3	3.1	3.4	2.2	2.1	2.3
Pathology tests ordered	55,563	27.4	26.5	28.2	18.4	17.9	18.9
Imaging test ordered	15,560	7.7	7.4	7.9	5.2	5.0	5.3

Note: LCL—lower confidence limit, UCL—upper confidence limit, OTC—over-the-counter.

Approximately 12 referrals were made per 100 encounters. Orders for a pathology test (or batch of tests, e.g. Full Blood Count (FBC), HIV) were recorded more frequently (27.4 per 100 encounters) than were referrals. Orders for imaging (e.g. X-rays, scans) occurred at a rate of 7.7 per 100 encounters (Table 3.4).

Management actions

The GPs recorded at least one management action at 83.2% of encounters and for 74.7% of problems (Table 3.5). At least one medication was given at more than two-thirds (67.5%) of encounters and for 56.9% of problems managed.

At least one non-pharmacological treatment was given at 36.4% of encounters and for 28.1% of problems, a clinical treatment being approximately three times more likely than a procedure. A referral was made at 11.1% of encounters, for 7.8% of problems. At least one test or investigation was ordered at 19.4% of encounters and for 14.6% of problems. These were most commonly pathology orders, which were reported at 14.3% of encounters (for 10.7% of problems). Imaging orders were placed less frequently at 6.8% of encounters and for 4.7% of problems.

Table 3.5 Encounters and problems in which treatments occurred

Variable	Number of encounters	Rate per 100 encounters (n =203,100) ^(a)	95% LCL	95% UCL	Number of problems	Rate per 100 problems (n =301,759) ^(a)	95% LCL	95% UCL
At least one treatment type	169,006	83.2	82.8	83.6	225,362	74.7	74.2	75.1
At least one medication	137,024	67.5	66.9	68.0	171,772	56.9	56.3	57.5
At least 1 prescription	119,966	59.1	58.4	59.7	149,246	49.5	48.8	50.1
At least 1 OTC advised	15,859	7.8	7.5	8.2	16,213	5.4	5.1	5.6
At least 1 GP supplied	11,145	5.5	5.0	5.9	11,696	3.9	3.5	4.2
At least one non-pharmacological treatment	73,999	36.4	35.7	37.2	84,772	28.1	27.5	28.7
At least 1 clinical treatment	55,546	27.4	26.6	28.1	63,327	21.0	20.4	21.6
At least 1 therapeutic procedure	22,992	11.3	11.0	11.7	23,773	7.9	7.6	8.1
At least 1 referral	22,593	11.1	10.9	11.4	23,576	7.8	7.6	8.0
At least 1 referral to specialist	15,142	7.5	7.3	7.7	15,713	5.2	5.1	5.3
At least 1 referral to allied health	6,358	3.1	3.0	3.3	6,478	2.2	2.1	2.2
At least 1 referral to hospital	1,568	0.8	0.6	0.9	1,591	0.5	0.4	0.6
At least 1 referral to ED	149	0.1	0.0	0.3	150	0.1	0.0	0.2
At least 1 investigation	39,490	19.4	19.0	19.8	44,058	14.6	14.3	14.9
At least 1 pathology order	29,122	14.3	14.0	14.7	32,382	10.7	10.5	11.0
At least 1 imaging order/other test	13,719	6.8	6.5	7.0	14,210	4.7	4.6	4.9

(a) Figures will not total 100.0% as multiple events may occur in one encounter or in the management of one problem at encounter.

Note: LCL—lower confidence limit, UCL—upper confidence limit, ED—emergency department. OTC—over-the-counter.

3.5 The problems

There were 301,759 problems managed at the 203,100 patient encounters, at an average rate of 148.6 problems per 100 encounters. In 64.4% of encounters, one problem was managed, and three or more problems were managed at 10.7% of encounters.

Problems managed by ICPC-2 chapter

Table 3.6 presents (in decreasing order of frequency) the frequency and distribution of problems managed by ICPC-2 chapter (see Appendix 6). In the ICPC classification system, cardiovascular problems are assigned to the 'circulatory' label. Each ICPC-2 chapter and problem managed is expressed as a percentage of all problems managed and as a rate per 100 encounters with 95% confidence intervals.

Table 3.6: Distribution of problems managed by ICPC chapter

Problem label	Number	Per cent of total problems (n = 301,759)	Rate per 100 encounters (n = 203,100)	95% LCL	95% UCL
Respiratory	46,920	15.6	23.1	22.7	23.5
Musculoskeletal	34,961	11.6	17.2	16.8	17.6
Skin	34,270	11.4	16.9	16.6	17.2
Circulatory	33,770	11.2	16.6	16.2	17.1
General & unspecified	28,806	9.6	14.2	13.9	14.5
Psychological	22,763	7.5	11.2	10.8	11.6
Digestive	20,731	6.9	10.2	10.0	10.4
Endocrine & metabolic	18,411	6.1	9.1	8.8	9.3
Female genital system	14,638	4.9	7.2	6.9	7.5
Ear	9,186	3.0	4.5	4.4	4.6
Pregnancy & family planning	8,886	2.9	4.4	4.1	4.6
Neurological	8,172	2.7	4.0	3.9	4.1
Urology	6,164	2.0	3.0	2.9	3.1
Eye	5,715	1.9	2.8	2.7	2.9
Blood	3,578	1.2	1.8	1.6	1.9
Male genital system	2,819	0.9	1.4	1.3	1.5
Social	1,969	0.7	1.0	0.8	1.2
Total	301,759	100.0	148.6	147.4	149.8

Note: LCL—lower confidence limit, UCL—upper confidence limit.

Almost half of the problems managed in general practice (49.8%) related to four major body systems with circulatory problems ranking fourth at a rate of 16.6 per 100 encounters. Respiratory problems were the most frequently managed (23.1 per 100 encounters, followed by problems associated with musculoskeletal and skin systems, at 17.2 and 16.9 per 100 encounters respectively. Psychological problems were also common, as were problems related to the digestive and endocrine and metabolic systems. Problems least frequently managed related to the blood and blood-forming organs and the male genital system, or were of a social nature. Almost 10% of problems managed were not simply related to a single body system and were classified in the general and unspecified chapter.