4 The participating GPs

4.1 Annual results, 2006–07

Characteristics of the GP participants

All participants returned a GP profile questionnaire, although some were incomplete. The results are provided in Table 4.1. Of the 930 participants:

- 66% were male and 35% were aged 55 years or older
- more than half had been in general practice for more than 20 years
- almost half were in practices of five or more GPs and 8% were in solo practice
- 74% had graduated in Australia
- 66% practised in major cities (classified using the Australian Standard Geographical Classification)
- 23% conducted some consultations in a language other than English
- 46% were Fellows of the RACGP
- 91% worked in an accredited practice
- 68% worked in a practice that employed practice nurse(s)
- 73% did 6–10 clinical sessions per week, while 17% worked fewer than six sessions per week, but only 10% worked more than 10 sessions per week.
- 40% spent more than 40 hours each week on direct patient care services
- nearly half had provided care in a residential aged care facility in the previous month
- one in 10 had worked as a salaried/sessional hospital medical officer at some time in the previous month
- half provided their own or cooperative after-hours care and nearly half employed a deputising service for after-hours patient care (multiple responses allowed)
- about one-quarter bulk-billed Medicare for all patients; 43% bulk-billed for all consultations with pensioner/Commonwealth concession care holders and one-third bulk-billed for all consultations with children (multiple responses allowed)
- more than half worked in a teaching practice for undergraduates or registrars, or both.

GP cl	naracteristic	Number ^(a)	Per cent of GPs ^(a) (<i>n</i> = 930)
Sex	Male	613	65.9
	Female	317	34.1
Age (nissing = 11)		
	< 35 years	62	6.7
	35–44 years	208	22.6
	45–54 years	327	35.6
	55+ years	322	35.0
rears	in general practice (missing = 13)		
	< 2 years	5	0.5
	2–5 years	72	7.9
	6-10 years	102	11.1
	11–19 years	215	23.4
	20+ years	523	57.0
Size o	of practice (missing = 6)		
	Solo	76	8.2
	2–4 GPs	434	47.0
	5+ GPs	414	44.8
Practi	ce location by RRMA (missing = 0)		
	Capital	594	63.9
	Other metropolitan	68	7.3
	Large rural	73	7.9
	Small rural	50	5.4
	Other rural	126	13.6
	Remote central	9	1.0
	Other remote, offshore	10	1.1
Practi	ce location by ASGC Remoteness structure (missing = 0)		
	Major cities	617	66.3
	Inner regional	211	22.7
	Outer regional	87	9.4
	Remote	12	1.3
	Very remote	3	0.3
Place	of graduation (missing = 1)		
	Australia	684	73.6
	United Kingdom	68	7.3
	Asia	94	10.1
	Europe	16	1.7
	Africa	47	5.1
	New Zealand	13	1.4

Table 4.1: Characteristics of participating GPs and their practices, 2006–07

GP characteristic	Number ^(a)	Per cent of GPs ^{(a} (<i>n</i> = 930)
Consult in languages other than English (missing = 0)	210	22.6
< 25% of consultations	168	18.1
25–50% of consultations	15	2.7
> 50% of consultations	27	2.9
Currently in general practice training program (missing = 13)	27	2.9
Department of Veterans' Affairs registered (missing = 20)	834	91.6
Fellow of RACGP (missing = 6)	428	46.3
Accredited practice (missing = 2)	783	91.3
Practice nurse at major practice address (missing = 1)	629	67.7
Sessions per week (missing = 7)		
< 6 per week	157	17.0
6–10 per week	677	73.3
11+ per week	89	9.6
Direct patient care hours (worked) per week (missing = 28)		
<= 10 hours	6	0.7
11–20 hours	102	11.3
21–40 hours	432	47.9
41–60 hours	333	36.9
60+ hours	29	3.2
Patient care provided in previous month ^(b) (missing = 11)		
As a locum	34	3.7
In a deputising service	18	2.0
In a residential aged care facility	434	47.2
As a salaried/sessional hospital medical officer	93	10.1
None of the above	431	46.9
After-hours arrangements ^(b) (missing = 3)		
Practice does its own	321	34.6
Cooperative with other practices	144	15.5
Deputing service	446	48.1
Referral to other service (e.g. A&E)	142	15.3
Other arrangement	42	4.5
Bulk-billing ^(b) (missing = 0)		
All patients	229	24.6
All pension/Commonwealth concession card holders	396	42.6
Some pension/Commonwealth concession card holders	244	26.2
All children	302	32.4
Some children	260	28.0
Selected other patients	576	61.9

Table 4.1 (continued): Characteristics of participating GPs and their practices, 2006-07

GP characteristic	Number ^(a)	Per cent of GPs ^(a) (<i>n</i> = 930)
Major practice a teaching practice (missing = 2)		
Not a teaching practice	386	41.6
Yes—for undergraduates only	236	25.4
Yes—for GP registrars only	81	8.7
Yes—for both undergraduates and registrars	225	24.3

Table 4.1 (continued): Characteristics of participating GPs and their practices, 2006-07

(a) Missing data removed.

(b) Multiple responses allowed.

Note: RRMA—Rural, Remote and Metropolitan Areas classification; ASGC—Australian Standard Geographical Classification; RACGP—Royal Australian College of General Practitioners; A&E—accident and emergency hospital department.

Computer use at GP practices

Table 4.2 shows the proportion of participating GPs who worked in a practice in which computers were used for each of five listed activities.

- Only 3.4% of GPs worked in a non-computerised practice.
- Computers were used mainly for prescribing and billing purposes.
- Four-fifths had computers available for administrative purposes.
- Four-fifths had computers available for medical records.
- Nearly four-fifths were in practices that had Internet and/or email available.

Computer use	Number	Per cent of GPs (<i>n</i> = 930) ^(a)	Per cent of GPs with computers $(n = 898)^{(a)}$
Not at all	32	3.4	_
Billing	803	86.3	89.4
Prescribing	826	88.8	92.0
Medical records	750	80.6	83.5
Other administrative	740	79.6	82.4
Internet/email	733	78.8	81.6
Missing	0		_

Table 4.2: Computer use at major practice address, 2006-07

(a) Missing data removed.

Table 4.3 lists the top 10 combinations of computer use by participants' practices.

- 61% of GPs indicated that their practice used computers for all five listed purposes billing, prescribing, medical records, other administrative purposes and Internet/email.
- Within the top 10 combinations, more than two-thirds of GPs reported computer use for both medical records and Internet/email purposes.
- Prescribing was the only use included in all of the top 10 combinations.
- Within other top 10 combinations of purposes for computer use, billing was the second most frequently available function, with medical records and Internet/email usage ranking equal third.

Combination	Number	Per cent of GPs (<i>n</i> = 930) ^(a)	Per cent of GPs with computers (<i>n</i> = 898) ^(a)
All five uses	569	61.2	63.4
Billing + prescribing + medical records + other administrative	55	5.9	6.1
Billing + prescribing + medical records + Internet/email	38	4.1	4.2
Billing + prescribing + other admin + Internet/email	37	4.0	4.1
Billing + prescribing + medical records	28	3.0	3.1
Billing + prescribing	16	1.7	1.8
Prescribing + medical records + other admin + Internet/email	16	1.7	1.8
Prescribing + medical records + Internet/email	15	1.6	1.7
Billing + prescribing + Internet/email	10	1.1	1.1
Billing + prescribing + other administrative	9	1.0	1.0

Table 4.3: Top 10 combinations of computer use for GPs, 2006-07

(a) Missing data removed.

Note that these results refer to computer availability at the practice level. Information about reported individual GP's use of computers at the practice can be found in Henderson et al. 'Extent and utilisation of computerisation in Australian general practice'.¹⁹

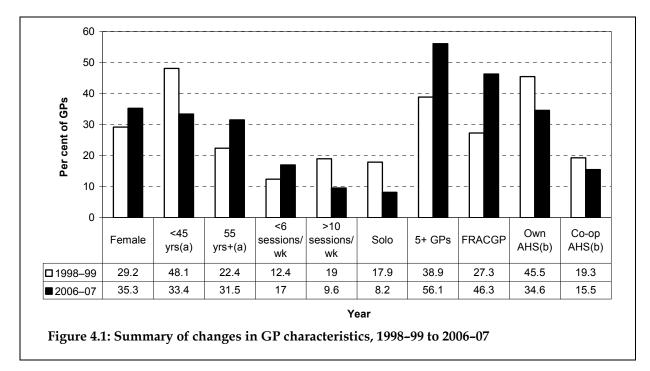
4.2 Changes over time, 1998–99 to 2006–07

Since BEACH began in 1998–99 some trends have emerged in the characteristics of GP participants (Table 4.4). The most noticeable changes over the 9 years of the study are listed below and some are presented graphically in Figure 4.1.

- The feminisation of the general practice workforce is reflected in the larger proportion of GP participants who are female. The proportion of female participants increased from 30.0% in 1998–99 to 34.1% in 2006–07, and reflects the change in the sample frame of all recognised GPs claiming more than 375 A1 items in the previous quarter in Australia, as provided each year by DoHA from Medicare claims data. In 1998–99, the proportion of female GPs in the sample frame was 29.2% (Table 4.1 in *General practice activity in Australia 1998–99*)⁵⁴ and in 2006–07 the proportion was 35.3% (Table 3.2 of this report).
- There has been a considerable decrease in the proportion of GPs aged 35-44 years (from 36.3% in 1998-99 to 22.6% in 2006-07) and an increase in the proportion aged 55 years or more (from 25.2% in 1998-99 to 35.0% in 2006-07). Again, these changes reflect the differences observed in the sample frame from Medicare data. Since 1998-99 the proportion of GPs aged less than 35 years and 35-44 years decreased from 14.8% and 33.4% respectively to 9.0% and 24.3% respectively in 2006-07. Over the same time period, the proportion of GPs in the Medicare data sample frame increased from 29.5% to 35.1% in the 45-54 year age group, and from 22.4% to 31.5% in the 55 years or older age group (1998-99 data from Table 4.1 in *General practice activity in Australia 1998-99*⁵⁴ and 2006-07 data from Table 3.2 of this report). (For further information see Charles et al. 'The independent effect of age of general practitioner on clinical practice'⁵⁵ and 'The evolution of the general practice workforce in Australia, 1991-2003.⁵⁶)
- Reflecting the change in age groups, there has been a reduction in the proportion of GPs working in general practice for fewer than 2 years, from 0.8% in 1998–99 to 0.5% in

2006–07, and an increase in the proportion practising for 20 years or more, from 42.2% to 57.0%. There has also been a decrease in the proportion working in general practice for 11–19 years, from 33.7% in 1998–99 to 23.4% in 2006–07.

- There has been a considerable increase in the proportion of GPs working fewer than six sessions per week, and a significant decrease in the proportion working 11 or more sessions per week. This was thought to partially reflect the larger proportion of female GPs working part-time in conjunction with motherhood. However, Charles et al. (2004) found that, while female GPs were much more likely to work fewer sessions, no significant change had occurred between 1999 and 2003. They found the proportion of males working fewer than six sessions per week rose from 6.1% in 1998–99 to 11.4% in 2002–03.⁵⁶ There has also been a significant increase in the proportion of GPs working 6–10 sessions per week, from 68.5% in 1998–99 to 73.3% in 2006–07. The proportion of GPs working 11 or more sessions per week decreased by nearly half, from 19.0% to 9.6% over this period.
- The proportion of participants in solo practice has halved over the 9 years, and the proportion in smaller practices of 2–4 GPs has also decreased considerably. There has been an associated significant increase in the proportion of GPs working in practices with 5 or more practitioners, from 38.9% in 1998–99 to 56.1% in 2006–07.



(a) Per cent of GPs in the sample frame from which the GP participants were drawn: all recognised GPs who had claimed at least 375 A1 items of service in the most recent 3 month Medicare Australia data period (provided by DoHA).

(b) Data about after hours services (AHS) were only collected from 2000–01 onward. This figure compares the results from 2000–01 and 2006–07.

Note: Yrs—years of age; wk—week; FRACGP—Fellows of the Royal Australian College of General Practitioners; Own AHS—the practice provides its own after-hours service for their patients; Co-op AHS—the practice provides after-hours services in a cooperative arrangement with other practices.

• The results for consultations in a language other than English reflect a change in question design. Between 1998–99 and 2000–01 GPs were asked only one question: 'Do you conduct more than 50% of consultations in a language other than English?'. The question was removed for the following 2 years, but was replaced as the issue again

became of interest to some stakeholders. A new question was designed to collect more specific data. The recent results suggest that about one-quarter of participants provide some consultations in a language other than English, but few are doing so at more than 50% of their consultations. It would appear that, in the survey's original format, those GPs who did consult in another language were keen to let that be known, and the '> 50%' category was the only avenue available to them.

- The proportion of GP participants holding Fellowship of the RACGP has significantly increased, from 27.3% in 1998–99 to 46.3% in 2006–07.
- Although the data range covers only 7 years, there has been a significant reduction (*p* = <0.001) in the proportion of GPs providing their own after-hours services, from 45.5% (95% CI: 42.5–48.6) in 2000–01 to 34.6% (95% CI: 31.6–37.7) in 2006–07 and those who provide after-hours services in cooperation with other practices, from 19.3% (95% CI: 16.9–21.8) in 2000–01 to 15.5% (95% CI: 13.2–17.9) in 2006–07.
- Over the same period there has been a significant increase in the proportion of GPs with a computer available at their major practice address, for either administrative or clinical use, or both, from 87.4% in 2000–01 to 96.6% in 2006–07.

				Pei	r cent of GPs ^(a)				
—	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07
GP characteristic	(<i>n</i> = 984)	(<i>n</i> = 1,047)	(<i>n</i> = 999)	(<i>n</i> = 983)	(<i>n</i> = 1,008)	(<i>n</i> = 1,000)	(<i>n</i> = 953)	(<i>n</i> = 1,017)	(<i>n</i> = 930)
Sex $(\chi^2 = 4.49, p = 0.03)$ (missing <i>n</i>)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Male	70.0	69.6	68.4	64.2	64.8	67.3	67.9	62.8	65.9
Female	30.0	30.4	31.6	35.8	35.2	32.7	32.1	37.2	34.1
Age $(\chi^2 = 35.18, p < 0.001)$ (missing <i>n</i>)	(4)	(4)	(9)	(1)	(0)	(1)	(1)	(18)	(11)
< 35 years	6.3	8.4	6.7	7.1	7.3	5.8	8.9	4.7	6.7
35–44 years	36.3	32.4	28.4	26.8	26.6	24.9	25.5	22.3	22.6
45–54 years	32.1	32.4	34.2	36.5	35.2	36.5	31.8	34.2	35.6
55+ years	25.2	26.7	29.7	29.5	30.9	32.7	33.6	38.7	35.0
Years in general practice $(\chi^2 = 53.33, p < 0.001)$ (missing <i>n</i>)	(12)	(8)	(6)	(4)	(6)	(9)	(5)	(13)	(13)
< 2 years	0.8	0.7	0.5	0.3	0.6	1.3	0.4	0.6	0.5
2–5 years	6.1	8.0	6.4	7.2	7.5	5.3	10.3	4.9	7.9
6–10 years	17.2	15.9	13.7	13.4	13.5	10.7	12.6	12.1	11.1
11–19 years	33.7	31.9	29.9	28.4	28.0	28.1	25.4	24.0	23.4
20+ years	42.2	43.5	48.8	50.3	50.4	54.6	51.3	58.5	57.0
Sessions per week $(\chi^2 = 38.73, p < 0.001)$ (missing <i>n</i>)	(12)	(6)	(16)	(15)	(8)	(7)	(8)	(6)	(7)
< 6 per week	12.4	15.3	15.9	16.0	18.7	17.2	14.4	17.3	17.0
6–10 per week	68.5	66.0	66.3	67.8	67.9	68.2	71.2	70.7	73.3
11+ per week	19.0	18.3	16.2	14.8	13.4	13.6	11.4	12.0	9.6

Table 4.4: GP characteristics, summary of annual results, BEACH, 1998–99 to 2006–07

	Per cent of GPs ^(a)									
-	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	
GP characteristic	(<i>n</i> = 984)	(<i>n</i> = 1,047)	(<i>n</i> = 999)	(<i>n</i> = 983)	(<i>n</i> = 1,008)	(<i>n</i> = 1,000)	(<i>n</i> = 953)	(<i>n</i> = 1,017)	(<i>n</i> = 930)	
Size of practice (χ^2 = 38.33, <i>p</i> < 0.001) (missing <i>n</i>)	(62)	(5)	(28)	(4)	(8)	(10)	(6)	(9)	(6)	
Solo	17.9	18.1	19.3	15.3	13.7	10.6	12.2	13.1		
									8.2	
2–4 GPs	43.2	46.1	38.6	39.7	38.4	37.8	36.4	35.2	35.7	
5+ GPs	38.9	35.8	42.1	44.7	47.9	51.6	51.3	51.7	56.1	
Place of graduation $(\chi^2 = 2.15, p = 0.142)$										
(missing <i>n</i>)	(4)	(2)	(0)	(0)	(0)	(1)	(1)	(6)	(1)	
Australia	76.5	73.3	72.7	76.1	72.6	73.5	69.8	72.0	73.6	
United Kingdom	9.0	8.5	8.2	7.6	9.1	7.2	7.6	8.1	7.3	
Asia	8.6	9.4	4.7	8.6	9.9	9.5	10.9	10.9	10.1	
Europe	2.4	1.9	1.9	1.8	1.6	2.3	3.8	2.1	1.7	
Africa	1.5	2.4	1.5	3.7	4.3	5.4	5.4	4.5	5.1	
New Zealand	1.1	1.5	1.5	0.5	2.2	1.0	1.3	1.9	1.4	
Other	0.9	2.8	9.5	1.6	0.9	1.0	1.3	0.6	0.8	
Practice location by RRMA (χ^2 = 9.60, p = 0.142)										
(missing <i>n</i>)	(0)	(0)	(0)	(1)	(0)	(2)	(1)	(1)	(0)	
Capital	68.2	65.2	68.1	69.3	64.7	62.4	64.9	69.1	63.9	
Other metropolitan	7.5	7.4	6.9	8.1	8.5	6.4	6.7	6.8	7.3	
Large rural	6.2	7.6	5.6	5.9	5.1	7.0	5.4	5.7	7.9	
Small rural	6.1	6.2	5.6	4.9	7.7	7.0	6.9	6.0	5.4	

Table 4.4 (continued): GP characteristics, summary of annual results, BEACH, 1998–99 to 2006–07

				Pe	r cent of GPs ^(a)				
	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07
GP characteristic	(<i>n</i> = 984)	(<i>n</i> = 1,047)	(<i>n</i> = 999)	(<i>n</i> = 983)	(<i>n</i> = 1,008)	(<i>n</i> = 1,000)	(<i>n</i> = 953)	(<i>n</i> = 1,017)	(<i>n</i> = 930)
Other rural	11.0	12.2	12.2	10.5	12.0	14.2	13.0	11.1	13.6
Remote central	0.5	0.4	1.0	0.5	0.6	0.9	1.3	0.5	1.0
Other remote, offshore	0.5	1.0	0.7	0.8	1.4	2.0	1.8	0.8	1.1
Practice location by ASGC ($\chi^2 = 7.36$, $p = 0.117$) (missing <i>n</i>)	(0)	(0)	(1)	(0)	(0)	(2)	(2)	(0)	(0)
Major cities	70.9	68.6	70.9	71.4	69.4	65.4	67.6	72.1	66.3
Inner regional	18.2	20.3	18.9	17.3	19.1	21.8	20.1	18.8	22.7
Outer regional	9.6	9.7	8.4	10.1	9.3	10.1	10.1	7.8	9.4
Remote	1.2	1.2	1.4	0.9	1.6	1.6	1.5	0.8	1.3
Very remote	0.1	0.2	0.3	0.3	0.7	1.0	0.7	0.6	0.3
Consultations in languages other than English (missing n) [†]	_	_	_	_	_	(6)	(1)	(10)	(0)
< 25%	NAv	NAv	NAv	NAv	NAv	17.8	21.7	21.0	18.1
25–50%	NAv	NAv	NAv	NAv	NAv	2.9	2.4	3.6	2.7
> 50%	11.3	10.6	13.5	NAv	NAv	2.4	3.4	3.4	2.9
Currently in a general practice vocational training program ($\chi^2 = 1.156$, $p = 0.282$)	2.2	2.2	2.5	2.5	2.9	4.4	3.5	2.6	2.9
Fellow of RACGP (χ^2 = 77.153, <i>p</i> < 0.001)	27.3	31.0	31.4	35.1	35.5	33.5	42.3	40.7	46.3

Table 4.4 (continued): GP characteristics, summary of annual results, BEACH, 1998–99 to 2006–07

Table 4.4 (continued): GP characteristics, summary of annual results, BEACH, 1998-99 to 2006-07

	Per cent of GPs ^(a)									
—	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	
GP characteristic	(<i>n</i> = 984)	(<i>n</i> = 1,047)	(<i>n</i> = 999)	(<i>n</i> = 983)	(<i>n</i> = 1,008)	(<i>n</i> = 1,000)	(<i>n</i> =v953)	(<i>n</i> = 1,017)	(<i>n</i> = 930)	
After-hours arrangements ^{$+$} (χ^2 = 72.894, <i>p</i> < 0.001)										
(missing <i>n</i>)	NAv	NAv	_	_	(5)	(5)	(8)	(14)	(3)	
Practice does its own	NAv	NAv	45.5	41.6	42.8	43.6	35.9	34.6	34.6	
Cooperative with other practices	NAv	NAv	19.3	19.4	16.7	20.0	16.2	15.7	15.5	
Computer use at practice (χ^2 =53.87, <i>p</i> <0.001)	NAv	NAv	87.4	89.7	91.3	95.0	93.7	96.4	96.6	

(a) Missing data removed.

† Data for all three groupings only available from 2003–04.

Ŧ Multiple responses were allowed.

Note: NAv-not available; RRMA-Rural, Remote and Metropolitan Areas classification; ASGC-Australian Standard Geographical Classification; RACGP-Royal Australian College of General Practitioners.