# 1 Main findings

- There were an estimated 58,049 registered medical practitioners in Australia in 2001, and 93.3% were in the medical labour force.
- Most of the practitioners working in medicine in 2001 were clinicians (92.5%), of whom just under half (43.9%) were primary care practitioners (mainly general practitioners), aproximately one-third (34.7%) were specialists, and the remainder were either specialists-in-training or hospital non-specialists (11.0% and 10.5% respectively).
- The medical labour force was, on average, older in 2001 than in 1996, with all employed practitioners averaging 46.1 years and 44.9 years, respectively.
- The proportion of female practitioners continued to rise, with 30.7% in 2001 compared with 27.6% in 1996.
- Medical practitioners worked an average week of 45.4 hours in 2001, a decline from 48.1 hours in 1996. In 2001 medical practitioners across all occupations averaged 40.4 hours per week in clinical work.
- In 2001, almost half (47.4%) of practitioners worked 50 hours or more per week, a decline over the five years from 1996 (52.4%). Of clinicians, specialists-in-training (58.3%) and specialists (56.2%) were more likely to work long working weeks in 2001.
- Average weekly hours dropped from 48.1 to 45.4 between 1996 and 2001, and the practitioner rate rose from 260 to 275 practitioners per 100,000 population. These two factors balanced out, so that the supply of full-time equivalent (FTE) practitioners per 100,000 remained the same in both years. Based on a 35-hour week, there were 357 FTE practitioners per 100,000 population in both years; based on a 45-hour week, there were 278 FTE practitioners per 100,000 population in both years.
- Across regions in 2001, generally the medical practitioner rate decreased and their hours increased as regional population lessened: the rate (per 100,000 population) ranged from 318 in 'Major cities' to 113 in 'Very remote' areas, and average hours per week ranged from 45.1 in 'Major cities' to 52.6 in 'Very remote' areas. The overall picture in 1996 was similar, with the practitioner rate (per 100,000 population) ranging from 299 in 'Major cities' to 92 in 'Very remote' areas and average weekly hours from 47.8 in 'Major cities' to 53.7 in 'Very remote' areas.
- From 1996 to 2001 there was an increase in the number of practitioners in all states and territories. In the Northern Territory (up 47.4%), the Australian Capital Territory (23.9%) and Victoria (18.2%) there were higher percentage increases than experienced nationally (12.2%). When converted to a full-time equivalent practitioner rate, there was an increase in supply in four jurisdictions: Victoria, Tasmania, the Northern Territory and the Australian Capital Territory. Supply in New South Wales and Tasmania remained stable and there were decreases in the remaining states.

# 2 Composition of the medical labour force



## Size

There were 53,384 registered medical practitioners working in medicine in Australia in 2001, a rise of 12.2% from 1996 (Table 1). Most of the employed practitioners in 2001 were clinicians (92.5%), of whom just under half (43.9%) were primary care practitioners (mainly general practitioners), aproximately one-third (34.7%) were specialists, and the remainder were either specialists-in-training or hospital non-specialists (11.0% and 10.5% respectively). Administrators and researchers made up a large proportion of the non-clinical workforce (31.8% and 25.8% respectively), which also included teachers/educators, public health physicians and occupational health physicians (11.3%, 9.4% and 7.1% respectively).

With the survey changes in 2000, it has been possible to identify non-clinicians who spend part of their time in clinical work. In 2001, there were an estimated 1,987 'part-time' clinicians, of whom 56.9% (1,130) were specialists (Table A4). These 'part-time' clinicians represent 3.9% of the total number of practitioners who undertook some clinical work.

#### Break in series

A change to the reporting method for practitioner activity was introduced in 2000 (see 'Break in series' in Appendix B: Explanatory notes) and has affected the distribution of practitioners across occupations. The new method is based on the occupation in which the practitioner spent the most hours. In order to provide some comparisons over time, data from earlier surveys have been re-calculated, resulting in figures that are different from estimates published in the past. The re-calculation method is an approximation only and this should be kept in mind when comparing pre-2000 data with data collected in 2000 and 2001.

## Age and sex

The medical labour force was, on average, older in 2001 (46.1 years) than in 1996 (44.9 years) (Table 1). Just over a quarter (26.3%) of male practitioners were aged 55 years or more in 1996; this rose to 29.2% in 2001 (Figure 2). The proportion of females aged 55 years or more grew from 9.8% to 11.5%. Conversely, the proportions of males and females aged less than 45 years decreased between 1996 and 2001 (from 47.7% to 44.0% for males and from 72.8% to 66.0% for females).

The proportion of females in the medical labour force also continued to increase. In 1996, females formed 27.6% of the medical labour force; this proportion in 2001 was 30.7% (Table 1).



## Occupation

## Clinicians

#### **Primary care practitioners**

The number of primary care practitioners grew by 7.4% between 1996 and 2001 (from 20,185 to 21,671) (Table 1). This is equivalent to an increase of 2 primary care practitioners per 100,000 population (from 110 in 1996 to 112 in 2001).

#### Table 1: Employed practitioners: selected characteristics, 1996 and 2001

	Number	% female	Average age	Number	% female <sup>(a)</sup>	Average age <sup>(b)</sup>	
Main occupation	1996			2001			
Clinician	43,756	27.5	44.6	49,392	30.6	45.9	
Primary care	20,185	32.0	46.3	21,671	34.9	48.3	
Vocationally registered <sup>(c)</sup>	17,176	29.8	47.7	18,787	33.7	49.3	
RACGP trainee	1,184	59.3	31.5	1,265	46.0	37.2	
Other	1,824	35.1	42.8	1,619	40.1	43.5	
Hospital non-specialist	4,199	45.5	30.8	5,169	44.6	34.0	
RMO/intern	3,190	48.8	28.0	3,189	47.6	29.3	
Career and other medical officers	1,010	35.2	40.3	1,980	39.8	40.5	
Specialist	15,236	14.8	49.6	17,124	18.9	49.7	
Internal medicine	3,829	13.1	48.8	4,396	19.1	48.6	
Pathology	757	27.8	49.8	869	29.1	50.2	
Surgery	2,838	3.6	51.6	2,814	7.4	51.6	
Other specialties	7,812	18.4	49.2	9,045	21.4	49.6	
Specialist-in-training	4,136	34.3	31.8	5,429	37.1	33.1	
Internal medicine	1,192	41.0	30.8	1,401	37.7	32.6	
Pathology	143	52.4	32.3	217	58.8	32.4	
Surgery	594	12.6	31.0	876	22.6	32.0	
Other specialties	2,206	35.4	32.6	2,935	39.5	33.7	
Non-clinician	3,817	27.7	48.1	3,991	31.8	48.2	
Administrator	882	25.9	48.6	1,271	28.8	49.2	
Teacher/educator	524	24.0	49.4	452	35.7	50.2	
Researcher	784	28.8	41.8	1,030	34.2	41.4	
Public health physician	464	41.7	43.7	374	40.4	44.1	
Occupational health physician	320	16.6	51.6	285	20.8	51.6	
Other	844	27.3	53.7	579	30.9	56.3	
Total	47,573	27.6	44.9	53,384	30.7	46.1	

(a) Includes imputed sex distribution for Tasmania, based on 1999 Medical Labour Force Survey data.

(b) Excludes data for Tasmania.

(c) Includes RACGP Fellows in 1996; this category was not available in the 2001 survey.

Source: Medical Labour Force Survey, 1996 and 2001.

The average age of primary care practitioners increased by two years between 1996 and 2001 (from 46.3 years to 48.3 years). This was despite the increased proportion of female primary care practitioners (32.0% in 1996 and 34.9% in 2001) who were, on average, younger than their male colleagues (43.9 years for females and 50.6 years for males in 2001).

#### Hospital non-specialists

The hospital non-specialist labour force grew by 23.1% and aged by 3.2 years on average between 1996 and 2001 (Table 1). The growth can be attributed to the near doubling of the number of Career and other medical officers over the period (from 1,010 to 1,980). The number of RMOs/interns remained stable (3,190 and 3,189 respectively). In 2001, there were 27 hospital non-specialists per 100,000 population, a rise of 4 from 1996.

#### **Specialists**

The number of specialists increased by 12.4% between 1996 and 2001 (from 15,236 to 17,124) (Table 1). This is an increase of 5 specialists per 100,000 population (from 83 to 88).

Over the five years, there was some variation in the amount of growth across the specialist fields. Internal medicine, Pathology and Other specialties all increased in the five years from 1996 (by 14.8% for Internal Medicine and Pathology, and 15.8% for Other specialties); however, Surgery decreased slightly (by 0.8%). Surgery was the most male-dominated specialty, with less than one in ten being female (7.4%) in 2001, followed by Internal medicine in which one in five (19.1%) were female.

Unlike most other medical occupations, the average age of specialists changed little between 1996 (49.6 years) and 2001 (49.7 years), and this held true for all the broad specialty areas (Table 1). While the number of females increased in all age groups over the five years, the number of males remained relatively stable in most age groups, apart from three noticeable increases: the number aged 40–44 years increased from 2,096 to 2,413; the number aged 55–59 years increased from 1,530 to 2,118; and the number aged 60–64 years increased from 1,037 to 1,337 (Figure 3).



#### Specialists-in-training

The number of specialists-in-training grew by almost a third between 1996 and 2001 (from 4,136 to 5,429) (Table 1). Trainees in the fields of Pathology grew by 51.6% and in Surgery by 47.4%. Specialists-in-training were slightly older in 2001 (33.1 years) than in 1996 (31.8 years) and the proportion of females increased slightly (from 34.3% to 37.1%). In the specialist field of Pathology, more than half the trainees were female in 2001 (58.8%). Despite an almost doubling of the proportion of female Surgical trainees between the two survey years (from 12.6% to 22.6%), Surgery still remained the speciality field with the lowest proportion of female specialists-in-training.

## **Non-clinicians**

The non-clinical labour force increased slightly (4.6%) between 1996 and 2001 (from 3,817 to 3,991) (Table 1). Among the non-clinical occupations, administrators and researchers increased in number between 1996 and 2001 (by 44.1% and 31.4% respectively). Of the other non-clinical fields, decreases occurred in public health physicians, teachers/educators and occupational health physicians (down by 19.4%, 13.7% and 10.9% respectively). While the average age of non-clinicians remained relatively unchanged, the proportion of females increased from 27.7% in 1996 to 31.8% in 2001.

# **3 Working hours**

## Occupation

The functions of a medical practitioner can vary, and many allocate their time across more than one medical occupation. The level of clinical work performed by non-clinicians is of particular interest because it contributes to the provision of direct patient care. It is also important to know how much time clinicians spend in non-clinical work. The average hours practitioners spent per week in the different medical occupations show the extent to which this occurred (Table 2).

Medical practitioners across all occupations averaged 40.4 hours per week in clinical work. Of clinicians, specialists-in-training tended to average relatively high hours in clinical work (48.6 hours), and they also averaged 15.1 hours as occupational health physicians. Hospital non-specialists averaged 9.8 hours per week as administrators and, conversely, administrators averaged 12.8 hours in clinical work. Overall, non-clinicians averaged between 6.9 hours to 12.8 hours per week in clinical work, depending on their main occupation.

Practitioners continued the trend of working fewer hours (AIHW 2003a, 2003b). Between 1996 and 2001, practitioners reduced their average weekly hours by almost 3 hours (from 48.1 hours to 45.4 hours) (Table 3). Across the occupations, teachers/educators reduced their average working week by 6.4 hours and hospital non-specialists by 4.8 hours. Administrators' weekly hours were stable between 1996 and 2001 (48.1 to 48.2 respectively) although those administrators working 50 or more hours per week rose by 3.4 percentage points (from 55.8% to 59.2%).

	All medical occupations								
Main occupation	Clinician	Administrator	Teacher/ educator	Researcher	Public health physician	Occupational health physician	Other	Total	
Clinician	41.8	7.0	4.4	6.4	6.6	6.9	7.5	45.6	
Primary care	39.4	6.7	3.9	5.1	6.2	6.1	7.0	41.9	
Hospital non-specialist	45.2	9.8	4.3	6.9	9.1	5.1	8.9	47.1	
Specialist	41.5	7.1	4.6	6.7	6.8	8.3	7.5	48.3	
Specialist-in-training	48.6	5.4	3.8	5.7	5.5	15.1	8.8	50.8	
Non-clinician	11.7	28.4	12.0	26.3	32.3	32.2	26.7	43.2	
Administrator	12.8	34.7	6.9	8.2	7.7	9.1	7.0	48.2	
Teacher/educator	10.2	9.9	23.7	11.1	6.8	3.9	5.5	38.1	
Researcher	11.3	7.8	6.6	34.7	12.4	7.3	6.7	45.5	
Public health physician	6.9	10.7	6.2	8.6	42.3	12.0	24.0	44.4	
Occ. health physician	11.6	9.6	4.7	7.4	_	36.3	8.9	39.9	
Other	12.8	2.8	3.0	10.8	3.1	10.0	28.9	32.6	
All employed practitioners	40.4	9.9	5.3	11.8	18.3	19.2	13.1	45.4	

Table 2: Employed practitioners: average weekly hours in all medical occupations, 2001

Source: Medical Labour Force Survey, 2001.

Although clinical hours worked have been calculated on slightly different bases in the two survey years (a result of the changed reporting method initiated in 2000), estimates show the average clinical hours worked per week reduced by 5.0 hours (45.4 hours in 1996 to 40.4 hours in 2001) compared with a reduction of 2.7 hours in practitioners' average total hours (48.1 to 45.4 respectively) (Table 3).

	Average weekly total hours	Average weekly clinical hours	% working 50 hours or more	Average weekly total hours	Average weekly clinical hours	% working 50 hours or more
Occupation		1996			2001	
Clinician	48.4	46.3	53.0	45.6	41.8	47.5
Primary care	44.9	43.5	43.8	41.9	39.4	37.3
Hospital non-specialist	51.9	51.3	64.6	47.1	45.2	50.2
Specialist	50.2	46.5	57.6	48.3	41.5	56.2
Specialist-in-training	54.8	54.0	69.5	50.8	48.6	58.3
Non-clinician	44.5	12.8	45.5	43.2	11.7	46.6
Administrator	48.1	12.2	55.8	48.2	12.8	59.2
Teacher/educator	44.5	14.4	46.6	38.1	10.2	36.1
Researcher	47.7	13.3	52.8	45.5	11.3	50.0
Public health physician	45.5	8.5	44.3	44.4	6.9	43.0
Occupational health physician	41.8	11.4	38.0	39.9	11.6	41.4
Other	38.2	10.6	30.6	32.6	12.8	25.2
All employed practitioners	48.1	45.4	52.4	45.4	40.4	47.4

Table 3: Employed practitioners: average weekly hours worked, and proportion working 50 hours or more, 1996 and 2001

Note: Calculation of 'clinical hours' differed between 1996 and 2001, due to differences in the surveys.

Source: Medical Labour Force Survey, 1996 and 2001.

Overall, the proportion of practitioners working 50 hours or more in total per week declined by 5 percentage points (from 52.4% to 47.4%) (Table 3). Of the clinicians, primary care practitioners were less likely to work 50 hours or more per week in 2001 (37.3%) than other clinicians, of whom at least half worked 50 hours or more (ranging from 50.2% to 58.3%, depending on occupation) and this picture was similar in 1996. The proportion of hospital non-specialists working 50 or more hours per week decreased from around two-thirds (64.6%) in 1996 to a half (50.2%) in 2001 whereas the proportion of specialists who worked 50 or more hours per week remained almost unchanged (57.6% in 1996 and 56.2% in 2001).

## Sex

While female practitioners have traditionally worked fewer hours than males, the gap has closed slightly. In 1996, males worked an average of 51.1 hours and females an average of 40.2 hours per week, a 10.9-hour difference. However, in 2001, males and females worked 48.4 and 38.8 hours per week respectively, a 9.6-hour difference.

Despite a continued shift towards working fewer hours, the distribution of hours worked by male practitioners remained skewed towards long working weeks. More than half (55.2%) of male practitioners worked 50 or more hours per week (Figure 4). However, the proportion of male practitioners who worked 65 or more hours per week did decrease between 1996 and 2001, from 16.7% down to 11.4%.

The distribution of hours worked was less skewed for females than males. In 2001, a higher proportion of female practitioners worked less than 35 hours per week (36.5% compared with 13.2% for males) (Figure 4). The proportion of female practitioners who worked less than 20 hours per week decreased (from 13.3% in 1996 to 12.1% in 2001), as did the proportion who worked 65 or more hours per week (7.5% in 1996 to 4.8% in 2001).



## **Overall supply of practitioners**

Data on the size and characteristics of the medical labour force present a valuable profile of doctors, but do not give a picture of the overall level of service they provide. Because medical practitioners tend to average long working weeks, the contribution which these hours make to the level of service needs to be taken into account to effectively measure the overall supply of practitioners.

Supply can be measured by converting the hours worked into a 'full-time equivalent' (FTE) number of practitioners (see box).

This is a useful measure of supply because it takes into account hours worked. For medical practitioners, FTE numbers and rates are generally higher than practitioner numbers and rates, because they work relatively high hours per week.

The number of practitioners per 100,000 population (or the practitioner rate) in 2001 was 275, an increase of 15 since 1996 (Figure 5). However, when this is converted into an FTE rate, it takes into account the fall in average hours worked between 1996 and 2001. The FTE rate shows that the supply of practitioners was the same in the two survey years (357 and 278 per 100,000 population

#### Full-time equivalent

The number of full-time equivalent practitioners equals the number of practitioners multiplied by the average weekly hours worked, divided by the number of hours in a 'standard' full-time working week. Two alternatives are provided for a 'standard' working week: 35 hours (the general workforce 'standard') and 45 hours (close to the 'standard' or average worked in 2001 by medical practitioners). While a 35-hour or 38-hour week is the standard in many industries, the 'typical' working week varies between occupations. Two 'standard' weeks are shown to more easily enable FTE comparisons across occupations.

*The FTE number is converted to a rate per* 100,000 *population for comparison with the practitioner rate (per 100,000).* 

based on a 35-hour and a 45-hour week, respectively, in both years).

The practitioner rate for clinicians also increased between 1996 and 2001 (from 239 to 254 per 100,000 population) (Figure 5). Again, there was little difference in the FTE rate of clinicians between 1996 and 2001 (331 and 332 per 100,000 population, respectively, for a 35-hour week; and 257 and 258 per 100,000 population, respectively, for a 45-hour week).



## 4 Geographic comparisons

## Regions

There were an estimated 19.4 million resident Australians in 2001 (ABS 2002) and around 53,384 medical practitioners providing services to this population. The geographic distributions of these medical practitioners and the services they provide are important for planning equitable access to health care.

#### Major cities

About 12.87 million (66.3%) Australians lived in 'Major cities' where some 40,919 (79.8%) medical practitioners provided services. The average age of these practitioners was 46.1 years and they worked an average of 45.1 hours per week.

Table 4: Employed practitioners in 'Major cities': 2001

Occupation	Number	Rate <sup>(a)</sup>
Clinicians	37,532	292
Primary care	15,170	118
Hospital non-specialist	3,872	30
Specialist	13,845	108
Specialist-in-training	4,646	36
Non-clinicians	3,387	26
Total	40,919	318

#### Inner regional

About 4.03 million (20.7%) Australians lived in 'Inner regional' areas where some 6,937 (13.5%) medical practitioners provided services. The average age of these practitioners was 46.4 years and they worked an average of 46.6 hours per week.

Fable 5: Employed	I practitioners in	'Inner	regional'	areas:	2001
-------------------	--------------------	--------	-----------	--------	------

Occupation	Number	Rate <sup>(a)</sup>
Clinicians	6,652	165
Primary care	3,706	92
Hospital non-specialist	669	17
Specialist	1,922	48
Specialist-in-training	355	9
Non-clinicians	285	7
Total	6,937	172

Figure 6: Australian Standard Geographic Classification (ASGC) Remoteness Areas



Very Remote Australia Remote Australia Outer Regional Australia Inner Regional Australia Major Cities of Australia

(a) Per 100,000 population.

Source: Medical Labour Force Survey, 2001; ABS 2002.

The Remoteness Area Structure of the ASGC has been used to geographically distribute medical practitioners into the following five regions which are classed by remoteness: 'Major cities', 'Inner regional', 'Outer regional', 'Remote' and 'Very remote'. These areas are mapped (Figure 6) and selected characteristics provide a snapshot of practitioners by their main working location, relative to the Australian population, across the different regions (Tables 4 to 8).



#### Notes

- The sum of the practitioners in each region (Tables 4 to 8) do not add to the total for Australia (53,384) because 2,075 practitioners did not report the region in which they worked.
- The geographic classification used to present regional data has changed. The Remoteness Area Structure of the ASGC was introduced from 2001. Prior to this, the Rural, Remote and Metropolitan Areas (RRMA) classification was used to differentiate between regions (see 'Geographic classification' in the Glossary).

#### **Outer regional**

About 2.01 million (10.4%) Australians lived in 'Outer regional' areas where some 2,849 (5.5%) medical practitioners provided services. The average age of these practitioners was 45.5 years and they worked an average of 47.1 hours per week.

Table 6: Employed practitioners in 'Outer regional' areas	: 2001
-----------------------------------------------------------	--------

Occupation	Number	Rate <sup>(a)</sup>
Clinicians	2,717	135
Primary care	1,718	85
Hospital non-specialist	231	11
Specialist	604	30
Specialist-in-training	165	8
Non-clinicians	132	7
Total	2,849	141

#### Remote

About 0.32 million (1.7%) Australians lived in 'Remote' areas where 401 (0.8%) medical practitioners provided services. The average age of these practitioners was 43.0 years and they worked an average of 48.2 hours per week.

#### Table 7: Employed practitioners in 'Remote' areas: 2001

Occupation	Number	Rate <sup>(a)</sup>
Clinicians	371	114
Primary care	248	76
Hospital non-specialist	56	17
Specialist	51	16
Specialist-in-training	16	5
Non-clinicians	30	9
Total	401	124

#### Very remote

About 0.18 million (0.9%) Australians lived in 'Very remote' areas where some 203 (0.4%) medical practitioners provided services. The average age of these practitioners was 42.6 years and they worked an average of 52.6 hours per week.

Table 8: Employed practitioners in 'Very remote' areas: 2001

Occupation	Number	Rate <sup>(a)</sup>
Clinicians	198	111
Primary care	145	81
Hospital non-specialist	39	22
Specialist	12	7
Specialist-in-training	2	1
Non-clinicians	4	2
Total	203	113

## Practitioner distribution

Overall in 2001, practitioners in 'Very remote' and 'Remote' areas were more likely to be younger and work more hours per week than practitioners in other regions. Compared with their colleagues based in 'Major cities', practitioners in 'Very remote' and 'Remote' areas were, on average, 3 years younger and worked longer weeks by some 7.5 hours and 3 hours respectively (Tables 4 to 8).

The higher average hours worked by practitioners based in less populated (more remote) areas reflects comparatively fewer practitioners being based in these regions. A comparison of the number of practitioners in each region shows that more than three-quarters (79.8%) of practitioners reported providing services to two-thirds (66.3%) of the population (those living in 'Major cities'), with the remaining practitioners distributed across the remaining third (33.7%) of the population (those living in the other regions).

However, just over half of the 40,919 practitioners in 'Major cities' were either specialists (13,845), specialists-in-training (4,646) or non-clinicians (3,387) and are concentrated in 'Major cities' because they are generally associated with hospitals and the services that hospitals provide, together with facilities for research, training and advanced equipment for treatment. In terms of direct access to health care, primary care practitioners (who are mainly general practitioners) are the main providers and, because they are less likely to be hospital-based, their distribution is slightly nearer to the distribution of the population (approximately 72.3% in 'Major cities' and 27.7% in remaining regions<sup>1</sup>).

The supply of primary care practitioners was more even across regions than for all practitioners. This is most apparent when the primary care practitioner rates in 'Major cities' (118 per 100,000 population) and in 'Very remote' areas (81 per 100,000 population) are compared with the rates for all practitioners (318 and 113 per 100,000 population respectively). Indeed, the primary care practitioner rate in 'Very remote' areas (81 per 100,000 population) was actually higher than the rate in 'Remote' areas (76 per 100,000 population). This is in contrast to all practitioners, for whom the rate in 'Remote' areas (124 per 100,000 population) was higher than the rate in 'Very remote' areas (113 per 100,000 population).

The overall picture five years earlier, in 1996, also shows a regional pattern of lower average ages and higher average weekly hours, with increased remoteness. The average age of practitioners ranged from 44.8 years in 'Major cities' to 41.0 years in 'Very remote' areas and average weekly hours from 47.8 in 'Major cities' to 53.7 in 'Very remote' areas (Table A3).

The primary care practitioner rate shows the ratio of such practitioners to the population has remained stable in all regions except 'Very remote' areas where the rate has risen, reducing the disparity between 'Very remote' areas and other regions, in particular with 'Major cities'. In 1996, the primary care practitioner rate in 'Major cities' (116 per 100,000 population) was almost double the rate in 'Very remote' areas (66 per 100,000 population) (Table A2). This compares with 2001 rates of 118 and 81 per 100,000 population, respectively. The primary care practitioner rates in 'Inner regional', 'Outer regional' and 'Remote' regions were, respectively, 90, 82 and 78 per 100,000 population in 1996 and 92, 85 and 76 per 100,000 population in 2001.

<sup>&</sup>lt;sup>1</sup> Note: excludes practitioners who did not report the region in which they worked.

### Inter-regional practices in 2001

Although 'Major cities' had a higher practitioner rate than less populated regions, service provision outside 'Major cities' has been augmented by practitioners with inter-regional practices. In 2001, some 788 practitioners based in 'Major cities' also practised in a less populated region. For example, 32 of these city-based practitioners averaged a day per week (7.3 hours) in 'Remote' areas and 13 averaged a day (6.2 hours) per week in 'Very remote' areas (Table 9). A similar number of practitioners based in 'Outer regional' areas provided services to 'Remote' areas (where 26 of them averaged 19.1 hours per week) and 'Very remote' areas (where 25 of them averaged 8.4 hours per week). In total, 'Remote' and 'Very remote' areas were provided with services from 98 practitioners based outside these regions and when the hours they worked are factored in, they equated to approximately 29 practitioners working a 35-hour week (a supply increase of 11 FTE practitioners per 100,000 population across these two regions).

This example is an approximation rather than a precise measure because not all practitioners reported the regions in which they worked; however, it is indicative of the contribution inter-regional practices made to remote areas.

	Second region										
	Major cities		Inner regional		Outer regional		Remote		Very remote		
Main region	Number	Hours	Number	Hours	Number	Hours	Number	Hours	Number	Hours	
Major cities	14,745	10.8	599	9.5	144	8.7	32	7.3	13	6.2	
Inner regional	360	11.7	1,648	10.1	185	6.8	_	_	2	2.1	
Outer regional	36	10.3	105	6.9	640	12.2	26	19.1	25	8.4	
Remote	4	19.7	3	8.0	8	12.4	72	8.6	18	9.9	
Very remote	4	1.2	_	_	7	9.0	9	6.9	38	14.4	

Table 9: Number of practitioners and hours per week worked in second work location, by region of main work location<sup>(a)</sup>, 2001

(a) Excludes 2,075 practitioners who did not report the regions in which they worked.

Source: Medical Labour Force Survey, 2001.

Practitioner mobility across regions was not limited to the examples above and included some practising in a second region of higher population than their main work location and others working in a second region of the same type. However, of practitioners who practised in a second region of a different type (1,581), two-thirds (66.1%) did so in a less populated region.

## Supply of practitioners

The practitioner rate and average hours worked by region showed, generally, that the practitioner rate decreased while the hours increased with remoteness. When regions are compared using the FTE rate in each (based on a 35-hour working week), the FTE supply in 2001 was higher than the rate of practitioners (Figure 7). The impact of higher average weekly hours worked by those based in 'Very remote' areas (52.6 hours) is apparent when compared with 'Remote' areas (48.2 hours). When the differential hours are considered, the practitioner rates (per 100,000 population) of 113 in 'Very remote' and 124 in 'Remote' areas both result in an FTE rate of 170 practitioners per 100,000 population.



Between 1996 and 2001, FTE rates showed small to moderate increases in areas classed as 'Inner regional' (from 222 to 229 per 100,000 population), 'Remote' (from 164 to 170 per 100,000 population) and 'Very remote' (from 142 to 170 per 100,000 population) (Figure 8).

From 1996 to 2001 there was an increase in the practitioner rates for all regions but this was accompanied by a decrease in practitioners' average weekly hours (Tables 4 to 8 and Table A3). In 'Major cities' and 'Outer regional' areas the increase in practitioner rates and the reduction in average weekly hours balanced out, resulting in little change to the practitioner supply over the five years (Figure 8).



## **States and territories**

## Distribution

In 2001, there were some variations in practitioners' characteristics across jurisdictions. Practitioners in Victoria were more likely to be older (48.2 years compared with 46.1 years nationally), whereas those in the Northern Territory were more likely to be younger (40.7 years) than colleagues elsewhere in Australia (Table 10). Higher proportions of female practitioners were evident in the two territories with the Northern Territory nearing half (44.9%) and the Australian Capital Territory just over a third (34.8%), compared with less than a third (30.7%) nationally.

Between 1996 and 2001, there was an increase in practitioner numbers in all jurisdictions. In the Northern Territory (up 47.4%), the Australian Capital Territory (23.9%) and Victoria (18.2%) there were higher percentage increases than experienced nationally (12.2%).

In 1996, the variation in age across jurisdictions was less apparent than in 2001, with the average age ranging from 43.2 years in the Northern Territory to 46.4 years in the Australian Capital Territory.

	-								
Characteristic	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
					1996				
Number	16,885	11,972	7,852	4,151	4,244	1,117	913	439	47,573
% female	27.6	27.2	27.7	27.5	26.7	26.1	31.3	35.8	27.6
Average age	45.9	44.6	43.6	45.2	44.0	44.9	46.4	43.2	44.9
					2001				
Number	18,677	14,147	8,453	4,529	4,586	1,212	1,131	647	53,384
% female <sup>(a)</sup>	30.4	30.7	30.4	31.9	29.7	25.6	34.8	44.9	30.7
Average age <sup>(b)</sup>	45.8	48.2	45.3	46.1	45.2	n.a.	46.5	40.7	46.1
			% increas	e in practi	tioner num	nbers, 199	6 to 2001		
	10.6	18.2	7.7	9.1	8.1	8.6	23.9	47.4	12.2

Table 10: Employed practitioners: selected characteristics, states and territories, 1996 and
----------------------------------------------------------------------------------------------

(a) Includes imputed sex distribution for Tasmania, based on 1999 Medical Labour Force Survey data.

(b) 2001 data unavailable for Tasmania.

Source: Medical Labour Force Survey, 1996 and 2001.

## Supply of practitioners

The jurisdictions with highest practitioner rates in 2001 were the Australian Capital Territory, the Northern Territory and South Australia (354, 327 and 303 per 100,000 population respectively) (Table 11). The practitioner rate increased from 1996 to 2001 in all jurisdictions except Queensland (which decreased from 235 to 233 per 100,000 population). When converted to an FTE rate, there was an increase in supply in four jurisdictions: Victoria (from 364 to 382 per 100,000 population), Tasmania (from 313 to 318 per 100,000 population), the Northern Territory (from 327 to 426 per 100,000 population) and the Australian Capital Territory (from 396 to 453 per 100,000 population).

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total		
Practitioner rate (per 100,000 population)											
1996	272	263	235	235	288	235	296	241	260		
2001	284	294	233	238	303	257	354	327	275		
FTE practitioner rate (per 100,000 population) based on a 35-hour week											
1996	379	364	317	314	392	313	396	327	357		
2001	371	382	305	305	388	318	453	426	357		
Population as at 31 December											
1996	6,204,728	4,560,142	3,338,690	1,765,256	1,474,253	474,443	308,251	181,843	18,307,606		
2001	6,575,217	4,804,726	3,628,946	1,901,159	1,511,728	471,795	319,317	197,768	19,413,240		

Table 11: Employed medical practitioners: states and territories, 1996 and 2001

Source: Medical Labour Force Survey, 1996 and 2001; ABS, 1997 and 2002.

### **Primary care practitioners**

As the main initial contacts for direct health care, the supply of primary care practitioners is a useful indicator of people's access to these services. Primary care practitioners are more evenly distributed across geographic regions than are other types of practitioner (see section 'Practitioner distribution'). Similarly, it is useful to view state and territory differences in access to health care by comparing their primary care practitioner numbers.

#### Distribution

In 2001, primary care practitioners were, on average, 2.2 years older than medical practitioners overall (48.3 compared with 46.1 years) and included a higher proportion of females (34.9% compared with 30.7% for all practitioners) (Table 12 and Table 1). This national pattern was generally reflected across jurisdictions.

Characteristic	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
					1996				
Number	7,215	4,800	3,398	1,840	1,791	565	379	196	20,185
% female	30.5	32.1	33.1	33.6	30.9	30.7	43.9	46.1	32.0
Average age	48.1	45.5	45.4	46.2	44.6	45.1	46.1	42.8	46.3
					2001				
Number	7,522	5,612	3,455	1,957	1,830	615	420	259	21,671
% female <sup>(a)</sup>	33.7	35.3	35.7	36.5	33.4	26.4	46.8	50.0	34.9
Average age <sup>(b)</sup>	49.0	48.7	47.0	48.2	47.2	n.a.	48.8	44.0	48.3
	% increase in primary care practitioner numbers, 1996 to 2001								
	4.3	16.9	1.7	6.3	2.2	8.8	10.8	32.3	7.4

Table 12: Primary care practitioners: selected characteristics, states and territories, 1996 and 2001

(a) Includes imputed sex distribution for Tasmania, based on 1999 Medical Labour Force Survey data.

(b) 2001 data unavailable for Tasmania.

Source: Medical Labour Force Survey, 1996 and 2001.

In all jurisdictions, primary care practitioners worked lower average weekly hours than medical practitioners overall, ranging from 5.8 hours per week less in the Northern Territory to 2.4 hours per week less in Tasmania (Table 13). This is, in part, a reflection of higher proportions of female practitioners in primary care and the fact that female practitioners generally work fewer hours per week than males (Figure 4).

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
All practitioners									
1996	48.7	48.5	47.2	46.7	47.7	46.6	46.8	47.4	48.1
2001	45.8	45.4	45.9	44.8	44.8	43.3	44.8	45.5	45.4
Primary care practitioners									
1996	47.1	44.3	43.6	42.7	44.7	42.1	40.1	42.6	44.9
2001	42.7	41.0	42.4	41.2	42.3	40.9	39.6	39.7	41.9

Table 13: Employed practitioners: average weekly hours worked, states and territories, 1996 and 2001

Source: Medical Labour Force Survey, 1996 and 2001.

A comparison of the rates for primary care practitioners with the rates for all medical practitioners shows some differences in supply across the states and territories and, effectively, some differences in direct access to health care. While these comparisons can be useful, they are limited in that they do not take into account the different levels of urbanisation across the states and territories, nor the different population profiles.

Although the rate for all practitioners in 2001 was highest in the Australian Capital Territory (354 per 100,000 population), followed by the Northern Territory (327 per 100,000 population, see table 11), the primary care practitioner rates in the two territories differed little (132 and 131 per 100,000 respectively) and were not markedly higher than the other jurisdictions (Table 14).

A comparison of all practitioners with primary care practitioners over time within a jurisdiction can also provide a different picture. In South Australia, for example, the rate for all practitioners increased between 1996 and 2001 (from 288 to 303 per 100,000 population), whereas the primary care practitioner rate was unchanged (121 per 100,000 population in both years) (Table 11 and Table 14).

At a national level, the FTE rate shows that the supply of primary care practitioners declined from 1996 to 2001 (141 to 134 per 100,000). This is in contrast to the FTE for all practitioners, which remained stable (357 per 100,000 in both years) (Table 11 and Table 14).

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total		
			Pract	itioner rate	(per 100,000	population	ı)				
1996	116	105	102	104	121	119	123	108	110		
2001	114	117	95	103	121	130	132	131	112		
	FTE practitioner rate (per 100,000 population) based on 35-hour week										
1996	156	133	127	127	155	143	141	131	141		
2001	140	137	115	121	146	152	149	149	134		

Table 14: Primary	v care	practitioners:	practitioner	and FTE rate.	states and	territories.	1996	and 2001
Tuble 14, I Illian	y cure	practitioners.	practitioner	and I I L late,	, states and	territories,	1))0	una 2001

Source: Medical Labour Force Survey, 1996 and 2001; ABS, 1997 and 2002.