

1 Main findings

- There were an estimated 61,261 registered medical practitioners in Australia in 2003, and 93.1% were in the medical labour force.
- Most of the employed practitioners working in medicine in 2003 were clinicians (92.2%), of whom 42.3% were primary care practitioners (mainly general practitioners), followed by specialists (34.9%); the remainder were either specialists-in-training or hospital non-specialists (both 11.4%).
- The medical labour force was, on average, older in 2003 than in 2000 for employed practitioners (45.9 years and 45.6 years, respectively).
- The proportion of female practitioners continued to rise, with 31.9% in 2003 compared with 30.1% in 2000.
- Medical practitioners worked an average week of 44.4 hours in 2003, a decline from 45.5 hours in 2000. In 2003, medical practitioners across all occupations averaged 39.5 hours per week in clinical work.
- In 2003, 43.7% of practitioners worked 50 hours or more per week, a decline over the four years from 2000 (47.9%). Of clinicians, specialists-in-training (52.9%) and specialists (51.1%) were more likely to have long working weeks in 2003 than other clinicians.
- While average weekly hours reduced from 45.5 to 44.4 between 2000 and 2003, the practitioner rate rose from 267 to 283 practitioners per 100,000 population. The result was an increase in supply of full-time equivalent (FTE) practitioners per 100,000. Based on a 45-hour week, there were 270 FTE practitioners per 100,000 population in 2000 and 279 FTE practitioners per 100,000 population in 2003.
- The supply of practitioners increased in all regions between 2000 and 2003, despite a decrease in average hours during that time. Increases in the FTE rate of supply ranged from 12 FTE per 100,000 population in Major cities and Outer regional areas, to 5 FTE in Very remote areas.
- Between 2000 and 2003, there was an increase in the number of practitioners in all states and territories. In Tasmania (up 16.8%), Victoria (up 13.4%) and Queensland (up 13.0%) there were higher percentage increases than experienced nationally (up 10.0%). When converted to a full-time equivalent practitioner rate, there was an increase in supply in all jurisdictions except Western Australia, which fell from 245 FTE practitioners per 100,000 population in 2000 to 232 in 2003.

2 Introduction

In 2000, significant changes to the survey were introduced in order to improve processing and expand the information collected about the hours worked by medical practitioners. Comparisons with pre-2000 data have been published in previous issues of this report, but treated with caution. Consistent data are now available for the new series from 2000 to 2003 and, therefore, this report presents comparisons over time for these four years, instead of the five-year intervals analysed in previous reports.

3 Medical labour force composition

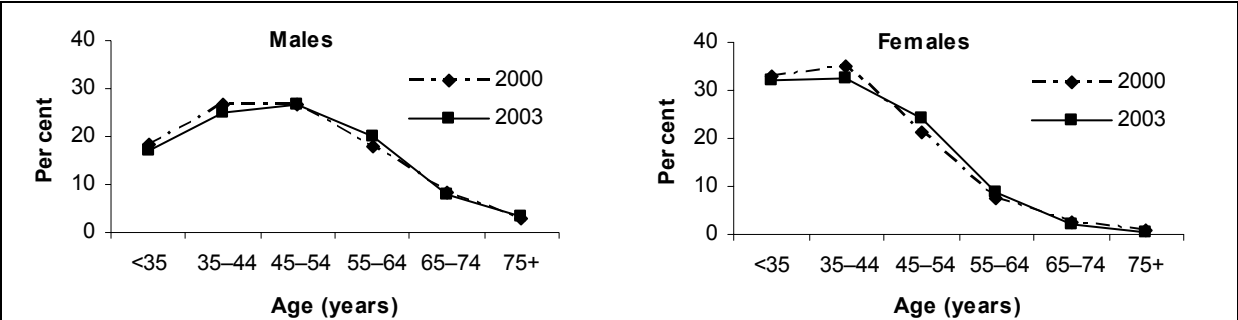
Size

There were 56,207 registered medical practitioners working in medicine in Australia in 2003, a rise of 10.0% from 2000 (Table 1). Most of the employed practitioners in 2003 working in medicine were clinicians (92.2%), of whom 42.3% were primary care practitioners (mainly general practitioners), followed by specialists (34.9%), then specialists-in-training and hospital non-specialists (both 11.4%). Administrators and researchers comprised the largest proportions of the non-clinical workforce (34.0% and 25.3%, respectively), which also included teachers/ educators, public health physicians and occupational health physicians (13.0%, 11.1% and 7.9%, respectively).

Since 2000, the survey has separately identified non-clinicians who spend part of their time in clinical work. In 2003, there were 1,970 'part-time' clinicians, of whom 59.4% (1,170) were specialists (Table A2). These part-time clinicians were 3.7% of all practitioners who undertook some clinical work. This group was similar in 2000, when part-time clinicians represented 3.9% of all practitioners who undertook some clinical work.

Age and sex

The medical labour force was, on average, slightly older in 2003 (45.9 years) than in 2000 (45.6 years) (Table 1). Some 28.8% of male practitioners were aged 55 years or more in 2000; this had risen to 31.3% by 2003 (Figure 1). The proportion of females in this age group grew

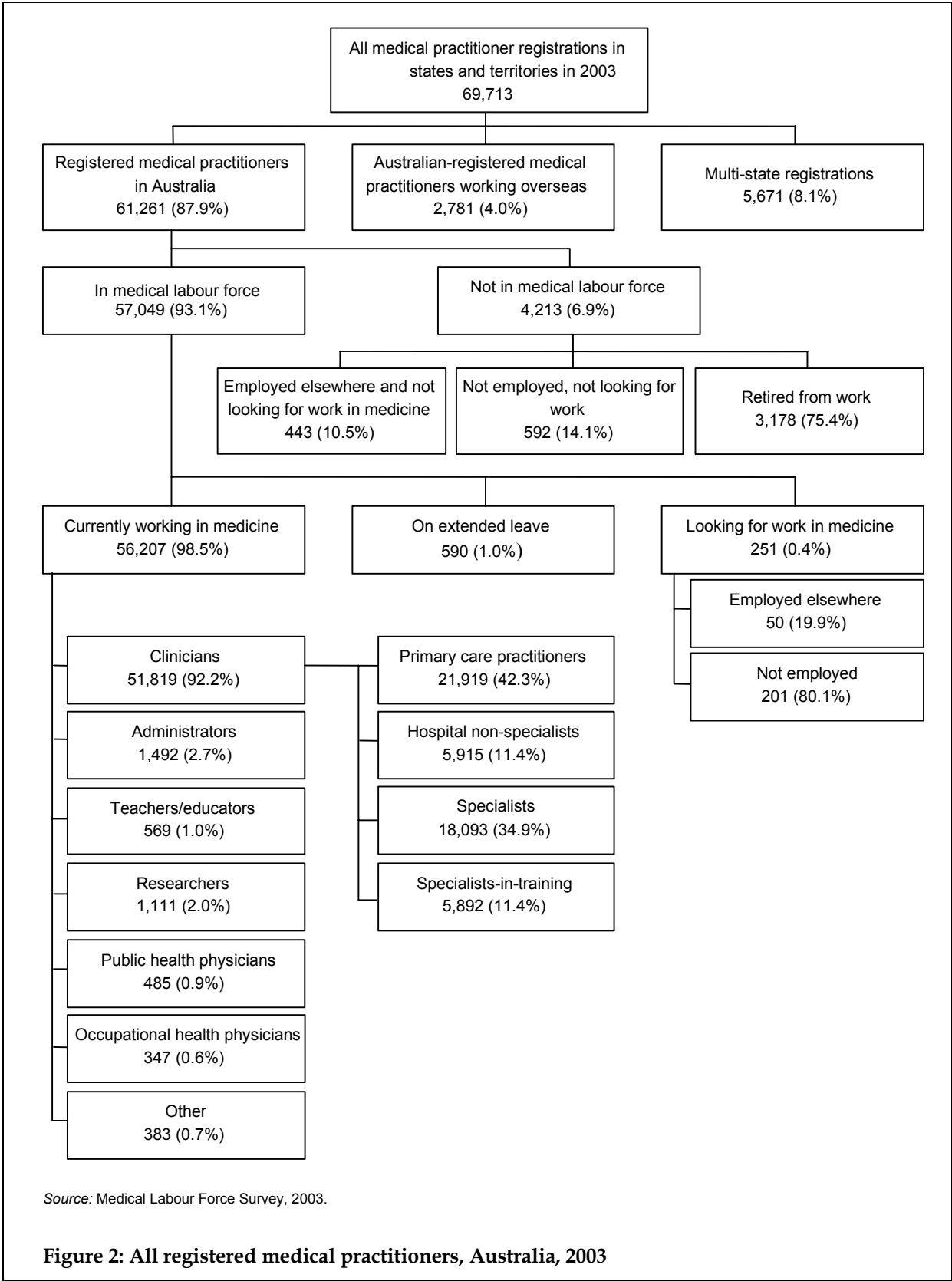


Source: Medical Labour Force Survey, 2000 and 2003.

Figure 1: Employed practitioners: age and sex, 2000 and 2003

from 10.7% to 11.2%. Conversely, the proportions of males and females aged under 45 years decreased between 2000 and 2003 (from 44.8% to 42.2% for males and from 68.2% to 64.5% for females).

The female proportion of the medical labour force also continued to rise, with females forming 30.1% of the medical labour force in 2000; and 31.9% in 2003 (Table 1).



Occupation

Clinicians

The number of clinicians grew by 9.4% from 47,372 in 2000 to 51,819 in 2003 (Table 1). This is equivalent to an increase of 13 clinicians per 100,000 population (from 247 in 2000 to 261 in 2003). Their average age increased very slightly over this period from 45.4 years to 45.6 years and the proportion of females increased by two percentage points.

Of clinicians, growth in the number of primary care practitioners was relatively small (up 4.0%) compared with increases in other clinician numbers. Hospital non-specialists, specialists and specialists-in-training rose by 15.5%, 13.0% and 14.2%, respectively.

Table 1: Employed practitioners: selected characteristics, 2000 and 2003

Main occupation	2000			2003			% change in number from 2000 to 2003
	Number	% female	Average age	Number	% female	Average age	
<i>Clinician</i>	47,372	30.0	45.4	51,819	32.0	45.6	9.4
<i>Primary care</i> ^(a)	21,081	34.0	47.8	21,919	36.2	48.8	4.0
Vocationally registered	18,170	32.4	49.0	18,492	34.7	49.8	1.8
RACGP trainee	1,226	49.5	35.2	1,079	59.1	33.9	-12.0
Other	1,686	39.3	42.9	1,724	36.7	47.8	2.3
<i>Hospital non-specialist</i>	5,121	42.6	32.6	5,915	45.1	33.5	15.5
RMO/intern	3,344	46.3	28.5	3,968	48.6	30.2	18.6
Career and other medical officers	1,776	35.8	39.6	1,947	38.0	40.3	9.6
<i>Specialist</i>	16,008	18.0	49.6	18,093	19.7	49.9	13.0
Internal medicine	4,102	17.9	48.7	4,816	19.6	48.9	17.4
Pathology	853	27.3	49.9	896	29.1	50.9	5.0
Surgery	2,844	6.5	51.5	3,104	5.8	51.2	9.1
Other specialties	8,209	21.0	49.3	9,277	23.4	49.8	13.0
<i>Specialist-in-training</i>	5,162	38.3	32.5	5,892	40.8	32.6	14.2
Internal medicine	1,507	44.3	31.6	1,725	42.7	32.1	14.4
Pathology	162	44.7	33.7	225	50.5	32.2	38.8
Surgery	723	18.8	31.7	914	16.9	31.9	26.5
Other specialties	2,770	39.7	33.1	3,029	46.2	33.2	9.3
<i>Non-clinician</i>	3,733	31.6	47.7	4,388	30.5	48.9	17.5
Administrator	1,205	29.9	48.7	1,492	27.5	49.5	23.9
Teacher/educator	428	37.5	49.1	569	33.6	51.1	33.0
Researcher	950	33.3	41.9	1,111	34.8	43.9	16.9
Public health physician	363	38.3	44.4	485	41.3	44.6	33.8
Occupational health physician	298	20.3	50.1	347	19.2	51.8	16.4
Other	490	29.6	55.6	383	22.0	60.3	-21.8
Total	51,106	30.1	45.6	56,207	31.9	45.9	10.0

(a) A breakdown of Primary care categories is not available for Tasmania. The figures for 'vocationally registered' 'RACGP' and 'other' exclude Tasmania, whereas the sub-total includes Tasmania.

Source: Medical Labour Force Survey, 2000 and 2003.

Primary care practitioners

The 4.0% growth in primary care practitioner numbers between 2000 and 2003 (from 21,081 to 21,919) was similar to the population growth for the same period (3.8%), resulting in the same primary care practitioner rate in both years (110 per 100,000 population) (Tables 1 and A7).

The average age of primary care practitioners increased by one year between 2000 and 2003 (from 47.8 years to 48.8 years). The proportion of female primary care practitioners increased (34.0% in 2000 and 36.2% in 2003) and they were, on average, younger than their male colleagues (44.4 years for females and 51.4 years for males in 2003) (Table 13).

Hospital non-specialists

The hospital non-specialist labour force grew by 15.5% and aged by 0.9 years, on average, between 2000 and 2003 (Table 1). The proportion of females grew from 42.6% in 2000 to 45.1% in 2003. Over this period, the number of RMOs/interns grew by 18.6% and Career and other medical officers grew by 9.6%. In 2003, there were 30 hospital non-specialists per 100,000 population, a rise from 27 per 100,000 population in 2000 (Table A7).

Specialists

The 13.0% increase in specialist numbers between 2000 and 2003 (from 16,008 to 18,093) equates to an increase of 7 specialists per 100,000 population (from 84 to 91) (Tables 1 and A7). Over the four years, there was some variation in the growth across the specialist fields. There was moderate growth in numbers of Internal medicine specialists (up 17.4%), and Other specialists (up 13.0%), representing an increase, per 100,000 population, of three Internal medicine specialists and four Other specialists. Smaller rises occurred in numbers of Surgery specialists (up 9.1%) and Pathology specialists (up 5.0%), equating to an increase of one specialist per 100,000 population, for each specialty group. Surgery was the most male-dominated specialty, with just over one in 20 being female (5.8%) in 2003, followed by Internal medicine in which one in five (19.6%) were female. Surgery was the only specialist group in which the female proportion was lower in 2003 (down from 6.5% in 2000).

Between 2000 and 2003, specialist numbers increased each year; however, the growth roughly halved in each successive year (up 7.0% between 2000 and 2001; up 3.7% between 2001 and 2002; up 1.9% between 2002 and 2003) (Table A2). This is of particular interest because of concern about the effect of the medical indemnity insurance problems on practitioner numbers from 2002 onward (see box).

The specialty fields involving treatment of physical trauma, emergency and surgery, such as obstetrics and emergency medicine, attract high insurance premiums and were thought to be more likely to lose specialists to professional opportunities outside medicine. In comparison, specialties such as psychiatry were expected to be less affected.

Medical indemnity insurance and practitioner numbers

In May 2002, a provisional liquidator was appointed for the country's largest medical insurer. This event raised concerns related to health care litigation, associated costs and the financial viability of medical indemnity insurers. However, the lack of national data made it difficult to quantify the number and cost of claims. A Medical Indemnity Data Working Group (MIDWG) was convened, supported by the Australian Health Ministers' Advisory Council (AHMAC). On 3 July 2002 AHMAC decided to commission the AIHW to work with the MIDWG to further develop its proposals for a national medical indemnity collection for the public sector.

There were related concerns that the cost of insurance could have rendered many medical practices financially unviable. A shortage of practitioners was foreshadowed by key representatives of the medical profession such as the Australian Medical Association and the Australian College of Surgeons.

In October 2002, the Australian Government announced its strategy to underwrite medical insurance.

An analysis of selected specialties shows that practitioner numbers varied over the four surveys, but there was no general pattern of decreasing numbers between 2002 and 2003 (Table 2). Obstetrics and gynaecology (up 5.4%) and Emergency medicine (up 4.4%) experienced the highest growth between 2002 and 2003, while Anaesthesia (up 1.3%) and Psychiatry (up 0.5%) grew at a slower rate than that for all specialties (up 1.9%). Of the selected specialties, General surgery was the only specialty which experienced a small decline in numbers between 2002 (995) and 2003 (990).

Over the four years, the average annual growth in Emergency medicine specialist numbers was relatively high at 11.3% per year (an increase of 129 surgeons over the four surveys). Anaesthesia (6.0%) and Obstetrics and gynaecology (5.6%) had average annual growth rates above that for all specialties (4.2%), whereas Psychiatry (3.1%) and General surgery (0.7%) grew at lower rates than for all specialties.

Table 2: Selected specialties of practice: number of practitioners, 2000 to 2003

Main occupation	2000	2001	2002	2003	% change 2000–03	% change 2002–03	Average annual change (%)
<i>Specialty of practice</i>							
Anaesthesia (incl. intensive care—anaesthesia)	2,120	2,368	2,491	2,524	19.1	1.3	6.0
Emergency medicine	341	442	450	470	38.0	4.4	11.3
General surgery	970	924	995	990	2.0	−0.6	0.7
Obstetrics & gynaecology	1,001	1,123	1,119	1,179	17.7	5.4	5.6
Psychiatry	1,984	1,937	2,167	2,177	9.7	0.5	3.1
All specialties	16,008	17,124	17,762	18,093	13.0	1.9	4.2

Source: Medical Labour Force Survey, 2000 to 2003.

Specialists-in-training

The number of specialists-in-training grew by 14.2% between 2000 and 2003 (from 5,162 to 5,892) and this equates to an increase of 3 per 100,000 population (Tables 1 and A7). Trainee numbers in Pathology grew by 38.8% and in Surgery by 26.5%. Specialists-in-training aged very little, on average, between 2000 (32.5 years) and 2003 (32.6 years).

Over the four years, the proportion of female trainees declined in the specialty groups of Internal medicine (from 44.3% to 42.7%) and Surgery (from 18.8% to 16.9%). This was in contrast to specialists-in-training overall, whose proportion of females grew by two and a half percentage points.

Non-clinicians

The non-clinical labour force increased by 17.5% between 2000 and 2003 (from 3,733 to 4,388) (Table 1). Among the non-clinical occupations, Teachers/educators and Public health physicians increased in number between 2000 and 2003 (by 33.0% and 33.8%, respectively). The average age of non-clinicians increased by 1.2 years and they continued to be older than their clinician colleagues (47.7 years compared with 45.4 in 2000, and 48.9 years compared with 45.6 in 2003). The proportion of females decreased from 31.6% in 2000 to 30.5% in 2003.

4 Working hours

Occupation

The functions of a medical practitioner can vary, and many practitioners allocate their time across more than one medical occupation. Clinical work performed by non-clinicians is of particular interest because it contributes to the provision of direct patient care. Conversely, it is also important to know how much time clinicians spend in non-clinical work.

Medical practitioners across all occupations averaged 39.5 hours per week in clinical work (Table 3). Of clinicians, Specialists-in-training and Hospital non-specialists tended to average relatively high hours in clinical work (46.8 hours and 45.1 hours, respectively). Hospital non-specialists averaged around a day (8.3 hours) per week as Administrators and, conversely, Administrators averaged 11.4 hours in clinical work. Overall, non-clinicians averaged between 9.4 hours and 11.4 hours per week in clinical work, depending on their main occupation.

Table 3: Employed practitioners: average weekly hours in different roles by main occupation, 2003

Main occupation	Medical roles ^(a)						Other	Total
	Clinician	Administrator	Teacher/ educator	Researcher	Public health physician	Occupational health physician		
<i>Clinician</i>	40.7	6.8	4.4	6.3	5.7	5.8	6.3	44.6
Primary care	38.3	6.2	4.0	5.6	5.2	6.1	6.2	40.9
Hospital non-specialist	45.1	8.3	4.4	5.9	5.5	3.6	7.3	46.9
Specialist	40.1	7.1	4.7	6.4	6.3	5.9	6.5	46.8
Specialist-in-training	46.8	5.3	3.5	6.2	6.2	5.0	6.1	49.3
<i>Non-clinician</i>	10.6	26.8	11.5	23.5	30.1	30.2	23.2	42.1
Administrator	11.4	33.1	6.6	8.2	7.2	5.6	5.1	46.0
Teacher/educator	10.0	7.7	21.3	10.7	8.2	3.5	10.7	38.0
Researcher	10.3	7.7	6.2	31.3	10.4	5.6	9.1	44.2
Public health physician	9.4	7.3	5.8	6.3	38.5	3.9	7.5	42.6
Occupational health physician	10.7	6.8	3.4	3.9	10.8	34.4	13.8	38.6
Other	9.7	5.1	4.0	7.4	—	3.9	25.1	29.1
All employed practitioners	39.5	9.8	5.4	11.1	18.2	18.5	11.7	44.4

(a) Table cells do not add to totals because the averages are based on the population reporting hours in each role, rather than all practitioners.

Source: Medical Labour Force Survey, 2003.

Since 1998, the average weekly hours worked by practitioners have steadily reduced (AIHW 2003). In 2003, this trend continued, although the decline has slowed. Between 2000 and 2003, practitioners reduced their average working week by around one hour (from 45.5 to 44.4 hours) (Table 4). Non-clinicians reduced their average weekly hours by more (down by 2.1 hours) than did clinicians (down by 1.0 hour). Across the occupations, Teachers/educators reduced their average working week by 4.3 hours and Researchers by 4.1 hours. Specialists and Specialists-in-training reduced their working week by 1.5 and 1.4 hours, respectively.

The average clinical hours worked per week reduced by 1.5 hours (41.0 hours in 2000 to 39.5 hours in 2003). This was a sharper drop than the 1.1 hours reduction in practitioners' total average weekly hours (Table 4).

Table 4: Employed practitioners: average weekly hours worked, and proportion working 50 hours or more, 2000 and 2003

Occupation	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
	2000			2003		
<i>Clinician</i>	45.6	42.2	48.0	44.6	40.7	43.8
Primary care	41.9	39.7	37.7	40.9	38.3	33.9
Hospital non-specialist	47.4	46.1	51.2	46.9	45.1	48.9
Specialist	48.3	42.2	56.4	46.8	40.1	51.1
Specialist-in-training	50.7	48.4	60.2	49.3	46.8	52.9
<i>Non-clinician</i>	44.2	12.2	47.7	42.1	10.6	42.7
Administrator	47.5	12.4	58.4	46.0	11.4	53.8
Teacher/educator	42.3	11.6	41.4	38.0	10.0	34.2
Researcher	48.3	12.2	55.7	44.2	10.3	45.3
Public health physician	44.0	9.7	41.4	42.6	9.4	38.6
Occupational health physician	39.6	11.6	35.5	38.6	10.7	31.8
Other	33.2	12.9	23.6	29.1	9.7	18.7
All employed practitioners	45.5	41.0	47.9	44.4	39.5	43.7

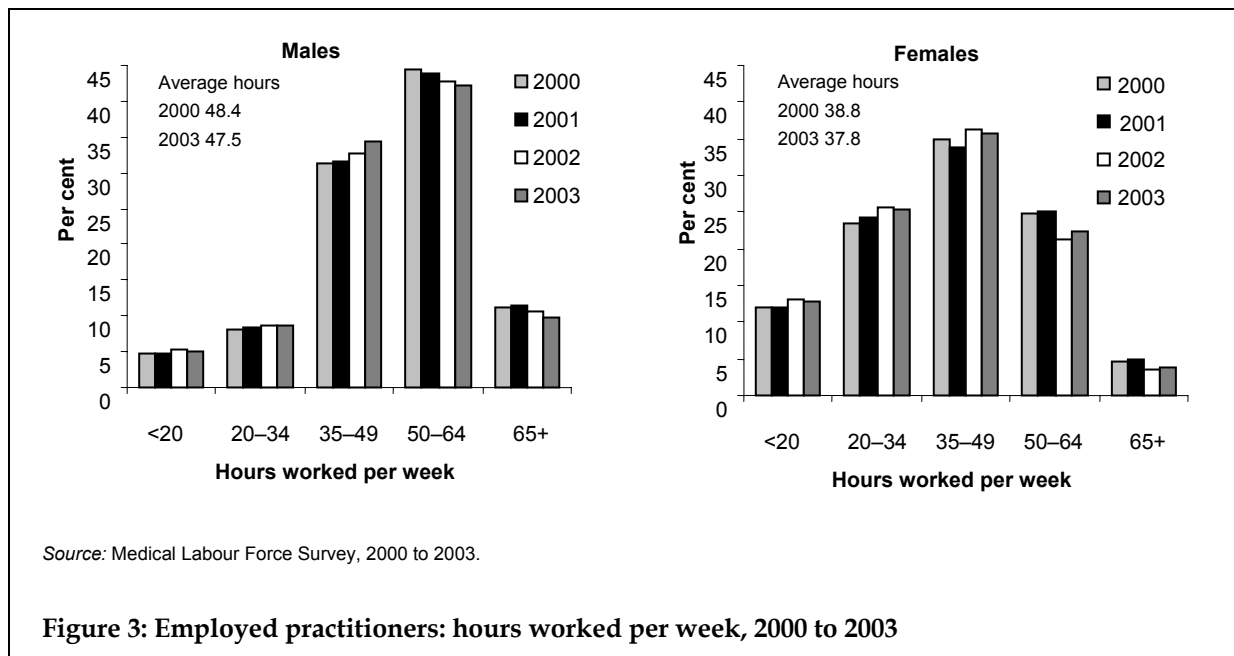
Source: Medical Labour Force Survey, 2000 and 2003.

The proportion of practitioners working 50 or more hours in total per week decreased in all occupations between 2000 and 2003, dropping by 4.2 percentage points overall (from 47.9% to 43.7%). Of clinicians, Primary care practitioners were less likely to work 50 hours or more per week in 2003 (33.9%) than other clinicians, of whom about half worked 50 hours or more (ranging from 48.9% to 52.9%, depending on their occupation) which was similar to the picture in 2000. The largest decrease in the proportion working 50 or more hours per week was 7.3 percentage points for Specialists-in-training (60.2% in 2000 and 52.9% in 2003) and the smallest decrease occurred for Hospital non-specialists, with the proportion working 50 or more hours per week down 2.3 percentage points (from 51.2% in 2000 to 48.9% in 2003). Of non-clinicians, the decrease in the proportion of Researchers working 50 hours or more (down 10.4 percentage points) was comparatively high, against the overall decline of five percentage points.

Sex

Female practitioners have traditionally worked fewer hours than males, a pattern that continued between 2000 and 2003. Throughout this period, males worked between 9.6 and 10.4 hours per week more than females (48.4 compared with 38.8 in 2000 and 2001; 47.7 compared with 37.3 in 2002; and 47.5 compared with 37.8 in 2003) (Figure 3). Despite a continued shift towards working fewer hours, the distribution of hours worked by male practitioners remained skewed towards long working weeks. Around half (51.9%) of male practitioners worked 50 or more hours per week in 2003 (Figure 3). However, the proportion of male practitioners who worked 65 or more hours per week did decrease between 2000 and 2003, from 11.3% to 9.8%.

The distribution of hours worked was less skewed toward longer working weeks for females than for males. In 2003, a higher proportion of female practitioners worked less than 35 hours per week (38.2% compared with 13.7% for males) (Figure 3). The proportion of female practitioners working less than 20 hours per week rose slightly (from 12.1% in 2000 to 12.7% in 2003), whereas the proportion working 65 or more hours per week decreased (from 4.7% in 2000 to 3.8% in 2003).



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 some medical practitioners tend to have long working weeks while others work part-time, their relative contributions to the level of service need 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). For medical practitioners, FTE numbers and rates are generally higher than practitioner numbers and rates, because they work relatively high hours per week.

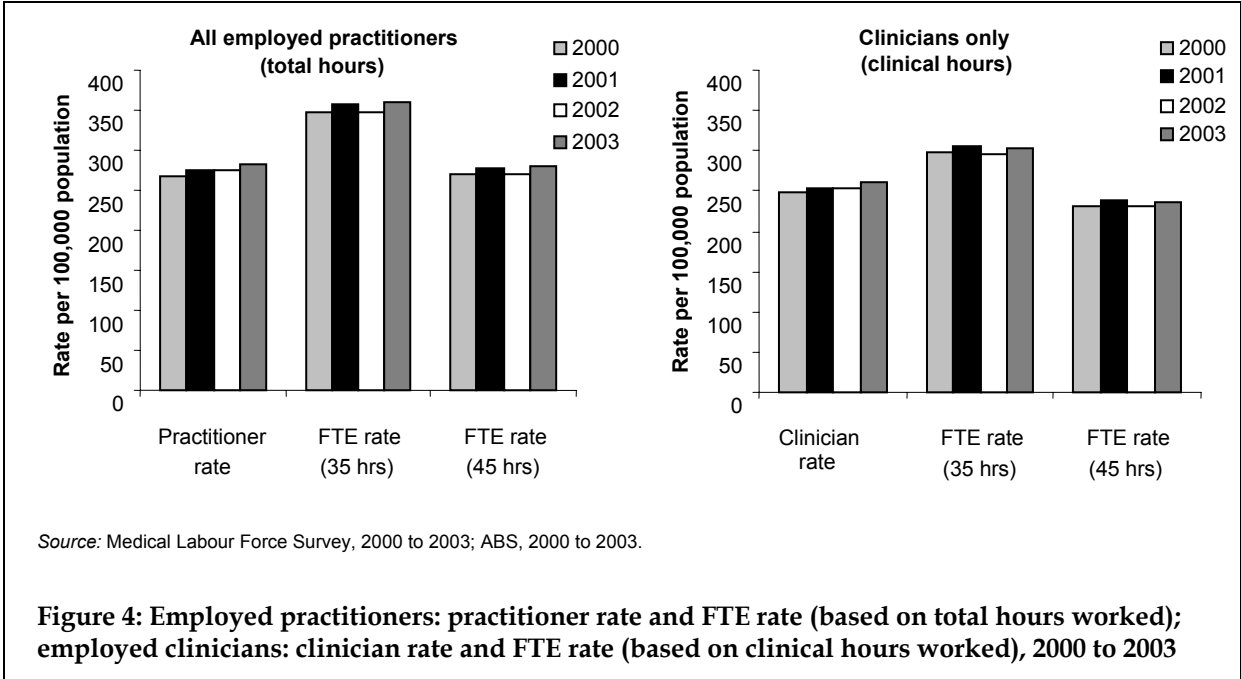
The number of practitioners per 100,000 population (or the 'practitioner rate') in 2003 was 283, an increase of 16 from 2000 (Figure 4). However, when this is converted into an FTE rate, it takes into account the change in average hours worked between 2000 and 2003. The FTE rate shows that the supply of practitioners was higher in 2003 than in 2000 (279 and 270 per 100,000 population, respectively, for a 45-hour week) (Table 12).

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 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 (Figure 4).

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

The practitioner rate for clinicians also increased between 2000 and 2003 (from 247 to 261 per 100,000 population) (Figure 4). However, the decrease in clinical hours (see Table 4) tended to offset the increase in clinician numbers, limiting the growth in supply. In 2000 and 2003, the clinician FTE rates were 298 and 303 per 100,000 population, respectively, for a 35-hour week; and 232 and 236 per 100,000 population, respectively, for a 45-hour week.



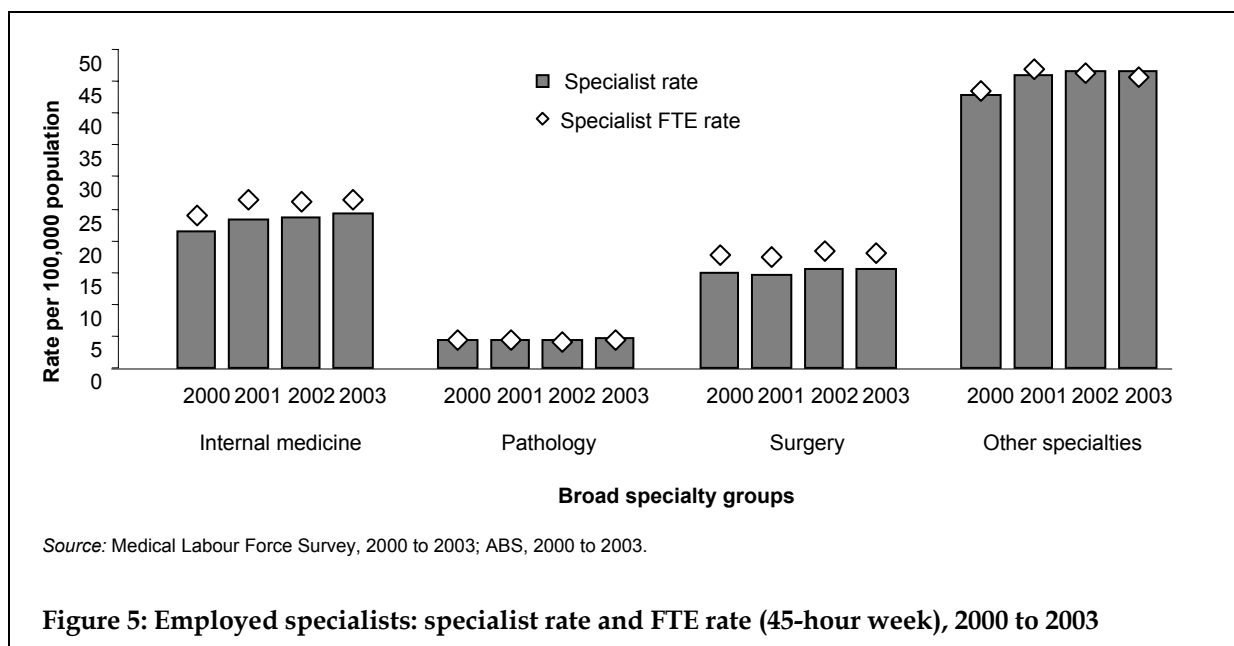
Supply of specialists

Across the broad specialty groups, the specialist rate per 100,000 population rose between 2000 and 2003 in all groups except Pathology (Figure 5). Over the four years, the rate for Internal medicine specialists rose from 21.4 to 24.2 per 100,000 population, Surgeons from 14.8 to 15.6, and specialists in Other specialties from 42.9 to 46.7. Pathologists, on the other hand, remained steady at a rate of 4.5.

This pattern was not reflected in the specialist FTE rates per 100,000 population (or supply of specialists) over the same period. The supply of Internal medicine specialists, based on a 45-hour week, increased between 2000 and 2001, but remained relatively steady over the two subsequent years (FTE rate of 24.0 in 2000, 26.2 in 2001, 25.9 in 2002 and 26.4 in 2003) (Figure 5). The supply of Pathologists was steady over all four surveys, ranging between 4.4 FTE per 100,000 population in 2000 and 4.1 FTE in 2002. The supply of surgeons ranged from a low of 17.3 FTE per 100,000 population in 2001 up to 18.2 in both 2002 and 2003. The supply of specialists in the Other specialties group was at a low point of 43.6 FTE per 100,000 population in 2000, then increased to a high point of 46.8 FTE in 2001, followed by decreases to 46.4 FTE and 45.7 FTE in 2002 and 2003, respectively.

Selected specialties

In 2002, large increases in medical indemnity insurance premiums were reported, leading to fears of an unprecedented decline in specialist numbers. This led to the Australian Government’s strategy to underwrite medical indemnity insurance (see box, page 5). However, no overall decline in specialist numbers was evident from the survey data to 2003. Nor has there been a decline in the specialist rate per 100,000 population.



The selection of specialties shows that between 2000 and 2003, the specialist rate increased for all except General surgeons. Increases were from 11.1 to 12.7 for Anaesthetists, 1.8 to 2.4 for Emergency medicine specialists, 5.2 to 5.9 for Obstetricians/ gynaecologists and 10.4 to 11.0 for Psychiatrists (Figure 6). The rate for General surgeons fell slightly from 5.1 to 5.0 per 100,000 population, despite a mean annual growth in their numbers of 0.5% (Table 2).

After factoring in the effect of decreasing average hours, the FTE rate of supply of these specialists all showed small increases. The FTE supply of Anaesthetists rose from 11.7 to 12.8 per 100,000 population between 2000 and 2003; the Emergency medicine specialist supply rose from 1.9 to 2.3; and the Obstetrician/ gynaecologist supply rose from 5.9 to 6.5.

Of these selected specialties, General surgery was also the only specialty field to decrease in supply between 2000 and 2003 (from 6.0 to 5.6). An increase between 2001 and 2002 was followed by a decrease between 2002 (5.9 FTE) and 2003 (5.6 FTE). Between 2002 and 2003, Psychiatry numbers also decreased in supply, but this was slight (from 10.1 to 9.9 FTE).

