

Medical labour force 1997

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Medical labour force 1997

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Foreword

In recent years, the size and distribution of Australia's medical labour force has received substantial policy attention, and there have been numerous policy changes to influence it. The Australian Health Ministers' Advisory Council has therefore considered that regular statistical monitoring of the medical labour force is a high priority. The Australian Institute of Health and Welfare, in conjunction with State and Territory health authorities and medical boards, conducts an annual survey of the medical labour force. To provide a comprehensive picture of the supply and distribution of the medical workforce in Australia, the Institute also includes in this report statistics from national immigration, education, Medicare and hospital databases.

Collectively these portray a dynamic workforce:

- the female proportion of new medical students exceeding 50% for the first time;
- the proportion of female doctors in the workforce continuing to steadily increase, with the employment characteristics of these doctors significantly different to those of male doctors;
- State and Territory health authorities employing increasing numbers of temporary resident, overseas-trained doctors;
- strong growth (8.3%) in employment of salaried medical officers in public hospitals during 1997-98;
- an increase of more than 4% in the numbers of specialist physicians during 1997-98;
- much lower growth in the numbers of doctors in other sectors of the medical workforce;
- an increase in the numbers of doctors per 100,000 population working in rural areas, from 142.8 in 1996 to 144.0 in 1997, but the increase is less than in metropolitan areas.

During the last 12 months, there has been a major increase in the numbers of organisations seeking data to assist in medical workforce planning activities. Rural workforce agencies, State workforce agencies and the General Practice Partnership Advisory Committee are among the new organisations engaged in strategic planning and workforce management.

The Institute relies on the cooperation of State and Territory medical boards to conduct its medical labour force survey, and greatly appreciates the cooperation of doctors throughout Australia in providing this valuable resource. Principal authors of the report were Warwick Conn and John Harding with Kathy Southgate the data manager. Our thanks to all.

Richard Madden
Director,
July 1999

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Abbreviations

ABS	Australian Bureau of Statistics
AHMAC	Australian Health Ministers' Advisory Council
AIHW	Australian Institute of Health and Welfare
AMC	Australian Medical Council
AMWAC	Australian Medical Workforce Advisory Committee
CMO	career medical officer
DHAC	Department of Health and Aged Care
ENT	ear, nose and throat
FTE	Full-time equivalent
GP	general practitioner
HMO	hospital medical officer
metro	metropolitan
OECD	Organisation for Economic Cooperation and Development
OMP	other medical practitioner
OTD	overseas-trained doctor
RACGP	Royal Australian College of General Practitioners
RMO	resident medical officer
TRD	temporary resident doctor
VRGP	vocationally registered general practitioner

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1 Main features

Of the health occupations, medicine has been given the highest priority at the national level by government in terms of workforce planning. The difficulties faced by government and by the profession in addressing imbalances in the supply of medical services are discussed in *Medical Workforce Supply and Demand In Australia – A Discussion Paper* (AMWAC and AIHW 1998). That paper provides an overview of interventions in recent years which influence workforce supply. These include changes in recruitment and training of medical students, increasing use of overseas-trained doctors to fill gaps, recruitment and retention incentive schemes for areas of shortage, changes in access to Medicare provider numbers, incentives for practice amalgamation, changes to registration requirements for overseas-trained doctors, an Australian Medical Association campaign to reduce hours worked by junior hospital doctors and a limited expansion by some State health authorities of the role of nurses.

Many of these changes either had not commenced or had yet to impact on the workforce at the time of principal data collection for this report in late 1997. Change in relation to many recent workforce initiatives will therefore only become apparent in future reports. However, the data do demonstrate progress in relation to a number of longstanding programs, with increases seen in rural general practitioner (GP) numbers, in the proportion of rural students entering medical schools, in the supply of specialists, and in the supply of temporary resident overseas-trained doctors.

More detail may be found in analyses in later chapters of this report, in the data presented in this publication and in supplementary statistical tables published on the Institute's Internet site (<http://www.aihw.gov.au>).

Overall numbers

- The Australian medical labour force in December 1997 comprised 49,246 practitioners of whom 48,321 were employed and practising in medicine.
- Of the employed practitioners 45,641 were clinicians and 2,680 were in non-clinical roles as administrators and educators, and in public health and occupational health.
- Of the clinicians, 20,557 (45.0%) were primary care practitioners, 4,475 (9.8%) hospital non-specialists, 15,992 (35.0%) specialists and 4,617 (10.1%) specialists-in-training.
- There were 245.1 clinicians per 100,000 population in Australia in 1997 compared with the average of 253.4 in 1996 in the 29 OECD countries. However, the Australian level of medical workforce provision is significantly greater than in New Zealand and Canada, where the health systems are comparable, and where the medical workforces have a similar structure to that in Australia. These have 209.7 and 210.6 practitioners per 100,000 population respectively in 1996. (OECD 1998).

Growth in numbers of medical practitioners from 1994 to 1997

Medical Workforce Supply and Demand in Australia – A Discussion Paper (AMWAC and AIHW 1998) noted that excessive workforce growth leading to oversupply might be associated with clinically unnecessary servicing and other undesirable outcomes. On the other hand,

workforce shortages disadvantage patients in terms of access and price of services, as well as being associated with excessive working hours for many medical practitioners.

In *Australian Medical Workforce Benchmarks* (1996) an analysis of 1994 data found that although Australia had close to desirable benchmark numbers of doctors in clinical practice per 100,000 population (229.0 compared with a benchmark 221.1), the workforce was poorly distributed. There were excessive numbers of general practitioners in metropolitan areas but shortages in many medical specialties, in the hospital non-specialist workforce and of doctors of all types in rural areas. The two States with medical workforce provision well below the national average were Queensland and Western Australia, while the State with the highest provision was South Australia.

The length of time taken to fully train general practitioners and specialists means that strategies to address underlying structural problems such as too high a recruitment in the past of medical students from non-rural backgrounds may take 20 years to significantly impact on the distribution of the workforce. Hence, positive changes which may have occurred between 1994 and 1997 are most likely to be the result of short-term solutions such as increasing the numbers of temporary resident overseas-trained doctors, or the outcomes of longer term planning which has been in place for several years. The latter includes enhancements to infrastructure in major rural hospitals by State governments; Commonwealth, State and Local Government incentive schemes for rural practice; and efforts by specialist Colleges, the Rural Doctors Association of Australia and others to increase provision of rural medical services.

Between 1994 and 1997, the following changes occurred:

- The population of Australia increased by 3.7%.
- The total medical workforce increased by 5.2%, with clinicians per 100,000 population increasing by 0.7% in metropolitan areas and by 4.5% in rural areas.
- The specialist workforce increased by 4.6% (0.9% per 100,000 population), with the number of practitioners recognised as surgeons increasing by 3.3% and of non-surgeons by 5.0%.
- The hospital non-specialist workforce was unchanged. However, full-time equivalent (FTE) salaried medical officers in public hospitals increased by 17.5% between 1994–95 and 1997–98. These included accident and emergency and other salaried specialists as well as interns, resident medical officers (RMOs), career medical officers (CMOs) and many temporary resident doctors.
- The general practice workforce increased by 6.2%. The Department of Health and Aged Care (DHAC) data show the number of FTE GPs increased by 5.2% in metropolitan areas and by 2.6% in rural areas.
- The medical workforces in Queensland and Western Australia increased by 8.8% and 10.9% respectively.
- The medical workforce in South Australia increased by 2.3%.

The latest figures on annual change indicate:

- a slowing in the growth of the total medical workforce between 1996 and 1997 to 1.2%;
- the numbers of surgeon Medicare providers increasing by 1.7% between 1996–97 and 1997–98 and of non-surgeons by 4.0%;
- the numbers of specialists-in-training increasing by 2.0% between 1997 and 1998, with surgical trainees increasing by 4.2% and non-surgical trainees by 1.7%;

- a slowing in the growth of the general practice workforce to 0.3% in 1997–98, with FTE numbers increasing by 0.9%; and
- FTE salaried hospital medical officers in public hospitals increasing by 8.3% from 1996–97 to 1997–98.

Distribution of medical practitioners

In December 1997 the distribution of the medical workforce had the following features:

- There was a 22.8% difference between the States and Territories with the lowest and highest supply. There were 223.2 clinicians per 100,000 population in Western Australia, 226.7 in Queensland, 230.1 in the Northern Territory, 232.4 in Tasmania, 244.2 in Victoria, 255.7 in New South Wales, 272.1 in South Australia and 274.0 in the Australian Capital Territory. (It should be noted that the ACT provides a significant amount of medical services to New South Wales residents.)
- The numbers of hospital non-specialists per 100,000 population varied among the States and Territories, from 48.3 per 100,000 population in the Northern Territory to 12.4 in Victoria. High employment of salaried doctors in hospitals in the Northern Territory compensated to some extent for below average employment of doctors in private practice, while low hospital non-specialist employment in Victoria was offset by relatively high specialist and specialist-in-training employment.
- There were 85.9 medical specialists per 100,000 population in Australia – up from 85.5 the previous year. Across the States and Territories the rates varied from 100.3 per 100,000 in South Australia and 92.8 in Victoria to 75.1 in Queensland, 69.4 in Tasmania and 56.3 in the Northern Territory.
- There were 108.5 primary care practitioners per 100,000 population in large rural centres (one practitioner per 1,151 population), 95.0 in small rural centres (one per 1,053 population), 76.8 in other rural areas (one per 1,303 population) and 71.7 population in remote areas (one per 1,395 population). In comparison, there were 121.4 primary care practitioners per 100,000 population in capital cities (one per 824 population) and 107.4 in other metropolitan areas (one per 931 population).
- In remote areas the lower provision of primary care practitioners is partially offset by a higher provision of non-specialist hospital doctors. There were 16.9 hospital non-specialists per 100,000 population in remote areas compared with 7.7 in small rural centres and 2.5 in other rural areas.

It is expected that in time an increase in the proportion of medical students with a rural background will result in an increase in the proportion of Australian medical graduates willing to practise in rural areas. In 1998, 13.3% of students commencing initial medical degrees were from rural and remote areas while the proportion ranged between 9.5% and 11.6% for the nine-year period 1989 to 1997. This is still much less than the 25.7% of the 15–24 year old feeder population living in those areas.

Female medical practitioners

In *Female Participation In The Australian Medical Workforce* (AMWAC and AIHW 1996) it was estimated that an average female GP over a lifetime will work 66.0% of the hours of an average male GP, while for the average female specialist this proportion was 74.9%. The data also indicated that female doctors are relatively more likely to practise in metropolitan areas than male doctors, and that female medical students are much more likely than males to choose general practice as a career path and less likely to select specialty practice,

especially surgery. A rising proportion of female doctors in the medical workforce may therefore over time be expected to significantly affect both the supply and distribution of medical services, without intervention to adjust training numbers and to make rural and specialist practice more attractive to female doctors.

Features of the female medical workforce in December 1997 were:

- There were 13,549 female clinicians representing 27.8% of the clinician workforce – up from 25.0% in 1993.
- The age distribution of female medical practitioners reflected the general pattern of increasing female participation in higher education and employment. In 1997, females were 10.0% of employed practitioners over the age of 65 years, 13.7% for those aged 55-64 years, 21.3% of those 45-54 years, 33.1% of those 35-44 years, 42.7% of those 25-34 years and 45.2% of those aged less than 25 years. Female participation will continue to increase as the female portion of students commencing initial medical degrees increased from 43.6% in 1989 to 50.3% in 1998, the first time it has exceeded 50%.
- Female practitioners were 33.0% of the primary care workforce overall but were 53.2% of the primary care workforce aged 25-34 years, 40.4% of those aged 35-44 years and tapered off in line with the overall pattern of female participation. Females were 60.4% of the primary care trainees and a continuation of this pattern will lead to a relatively rapid rise in the proportion of female GPs over the next decade.
- Preliminary analysis of the first nine months of 1998-99 data from the Bettering the Evaluation And Care of Health (BEACH) collection has found significant differences in the practice characteristics of male and female GPs (AIHW 1999a). The General Practice Statistics and Classification Unit, a collaborating unit of AIHW at the University of Sydney conducts this collection.

Hours worked

Hours worked are of particular workforce planning interest because:

- Excessive hours worked per week on a regular basis, such as 65 hours per week or more, have been identified as a leading indicator of workforce shortage.
- Internationally, there have been campaigns to change a medical training culture of excessive hours being the norm for junior hospital doctors. Such hours are considered to be detrimental to doctor performance and therefore not in the interests of quality patient care, while there is also concern about the impact of high levels of stress on doctors from overwork. In 1998 the Australian Medical Association launched a campaign for safer working hours. The *British Medical Journal* (28 November 1998) has reported that the European Commission has proposed making it illegal from 1999 for junior doctors in European Union countries to work more than 54 hours a week on average over four months, and also that governments would be given seven years to reduce this to 48 hours. Such a reduction in working hours suggests the need for a re-engineering of delivery of hospital medical services, possibly involving significant additional employment of hospital non-specialist doctors.
- Increasing part-time employment, particularly with a rising proportion of female doctors, suggests that training numbers may need to be boosted to meet future workforce requirements.

Trends in hours worked between 1994 and 1997 were:

- Average hours worked for all doctors were almost unchanged from 48.1 hours in 1994 to 47.9 hours in 1997.

- The proportion of doctors working 65 or more hours per week increased from 10.8% in 1994 to 14.2% in 1997.
- In general practice, the rise in the proportion of female doctors was accompanied by a slight decline in the average hours worked of all GPs from 44.9 hours in 1994 to 44.7 hours in 1997 and an increase from 9.6% to 11.5% in those working 65 or more hours per week. In rural areas, the rise in the numbers of GPs per 100,000 population was accompanied by a small decline in the average hours worked per week from 49.0 hours to 48.6 hours, and an increase in the proportion of GPs working 65 or more hours per week from 14.4% in 1994 to 16.7% in 1997.
- In the hospital non-specialist workforce, average hours worked were 52.6 in 1994 and 50.4 in 1997 while the proportion working 65 hours or more per week was 7.7% in 1994 and 11.6% in 1997.
- In the surgical specialist workforce where there was 3.3% growth, average hours worked were 54.4 in 1994 and 55.2 in 1997 while the proportion working 65 or more hours per week was 18.5% in 1994 and 28.1% in 1997.
- In the non-surgical specialist workforce, which experienced growth of 5.0%, average hours worked were 48.3 in 1994 and 48.4 in 1997 while the proportion working 65 hours or more per week was 9.3% in 1994 and 14.6% in 1997.
- Among specialists-in-training, where the proportion of females increased from 29.4% to 33.8%, average hours worked were 55.4 in 1994 and 53.5 in 1997 while the proportion working 65 hours or more per week was 22.1% in 1994 and 18.6% in 1997.

Other features of hours worked in December 1997 included the following.

- The highest proportions of doctors reporting working 80 or more hours per week were surgeons (8.9%), specialists-in-training (5.1%), internal medicine specialists (5.0%), and interns and resident medical officers (4.6%). The specialties where more than 10% of the practitioners reported working more than 80 hours per week were medical oncology, forensic pathology, cardiothoracic surgery, neurosurgery, paediatric surgery, and vascular surgery.
- In the primary care practitioner workforce, male vocationally registered general practitioners (VRGPs) worked an average of 51.3 hours per week and female VRGPs worked an average of 33.9 hours per week, mainly because 52.6% of females and only 11.5% of males worked fewer than 35 hours per week.
- Some 4.0% of male and 1.2% of female primary care practitioners respectively worked 80 or more hours per week. These proportions almost doubled in small rural centres, other rural and remote areas (7.2% for males and 2.2% for females).
- Only 4.3% of male and 3.8% of female interns and RMOs worked less than 35 hours per week and 18.4% of males and 15.8% of females worked more than 65 hours per week.
- 60.4% of male specialists worked 50 hours or more per week compared with 32.3% of females. Males worked an average of 51.4 hours per week and females an average of 41.4 hours.
- The supply shortage of medical practitioners in rural and remote regions is reflected in the working hours of practitioners in those areas. Medical practitioners employed in rural and remote areas worked an average of 49.6 hours per week compared with 47.2 hours per week in metropolitan areas. This average was higher in remote areas (50.4 hours) as 87.5% of doctors in remote areas were working full-time (35 hours or more per week). Some 17.1% of rural practitioners and 18.5% of remote practitioners worked 65 hours or more per week, compared with 13.2% in metropolitan centres.

- Average hours per week worked by male VRGPs increased relatively uniformly across all geographic regions, ranging from around 51 hours in metropolitan centres to 55.6 hours in other rural areas and 54.4 hours in remote areas. Female VRGPs worked an average of around 33 hours per week in metropolitan and large and small rural centres, 37.6 hours in other rural areas and 43.6 hours in remote areas.

Aboriginal medical practitioners and health service employment

At the 1996 population census, there were 29 general medical practitioners, 12 medical practitioners in training, 20 specialists and also 21 medical administrators who identified as Aboriginal or Torres Strait Islander. The specialists included five pathologists and four surgeons.

In 1997 there were 49 Aboriginal and Torres Strait Islanders training to be doctors at Australian universities. In 1998, 10 Aboriginal and Torres Strait Islanders commenced undergraduate medical courses at Australian universities.

In December 1997 there were 522 medical practitioners who indicated that the employment setting of their main, second or third job was an Aboriginal health service. For 218 of these, it was their main job. Of these 218:

- 41.9% were female;
- 65.3% were primary care practitioners; 18.3% were specialists; 2.8% were hospital non-specialists; 6.3% were specialists-in-training; and the remaining 7.3% worked in a non-clinical field including administration and education;
- 58.5% were employed in a metropolitan area;
- 63.3% worked full-time (35 or more hours per week). The average was 38.1 hours in 1996 and 37.0 hours per week in 1997.

Medical education and training

In 1998 there were 1,221 Australian citizen and permanent resident students who commenced undergraduate medicine courses. During 1994-96, there was a hiatus in students commencing initial medicine courses while Flinders University, the University of Queensland and the University of Sydney introduced a four-year postgraduate degree medical course in place of the previous six-year undergraduate course. Each university had a two-year transition period, during which only a small number of students with the necessary qualifications were admitted. The first intake to the new course at Flinders University was in 1996 and intakes to the new courses at the University of Queensland and the University of Sydney began in 1997. The University of Sydney is expected to reach its planned annual intake of 186 new students in the 1999 academic year.

General practitioner trainees practise under the supervision of an RACGP Fellow. The Commonwealth Government's Medical Training Review Panel collects data from the medical colleges on the numbers of training positions and trainees. The RACGP reported that there were 1,441 general practice trainees in 1998 (Department of Health and Aged Care 1998).

Characteristics of GP trainees in December 1997 included the following.

- 60.4% were female.
- 40.4% of female trainees worked fewer than 35 hours per week and averaged 35.6 hours per week, compared with 11.5% of males working fewer than 35 hours per week and a weekly average of 46.4 hours.

- 68.9% of male trainees were located in metropolitan centres, 28.7% in rural areas and 2.4% in remote areas. Females were less likely to work in rural areas – 74.4% were located in metropolitan centres, 23.1% in rural areas and 2.5% in remote areas.

There were an estimated 4,617 specialists-in-training enumerated in the AIHW medical labour force survey in 1997. In the labour force survey specialists-in-training are self-identified.

In 1998 the Medical Training Review Panel reported that there were 4,120 clinician specialists-in-training in Australia – 3,307 in advanced training positions and 813 in basic training positions (Department of Health and Aged Care 1998). These data exclude general practice trainees, Australians in overseas training positions and the majority of adult medicine and paediatric medicine basic trainees.

The AIHW survey showed that the specialties with the highest numbers in training were anaesthesia (597), psychiatry (568), emergency medicine (441), paediatric medicine (388), and general medicine (320). The 441 trainees in emergency medicine exceeded the 285 specialists who reported that they practised emergency medicine, while at the other end of the scale some specialties had very low percentages of trainees to specialists – particularly vascular surgery (7.0%), cytopathology (0), clinical chemistry (12.7%) and clinical immunology (10.3%). The relatively high number of emergency medicine trainees reflects emergency medicine being a relatively new and rapidly growing specialty; the numbers of trainees are expected to reduce from 668 in 2000 to 177 in 2010 (AMWAC 1997).

Temporary resident doctors

State health authorities during the 1990s have made increasing use of temporary resident overseas-trained doctors (TRDs) to fill positions in hospitals, general practice and locum services.

In 1997–98, there were 1,713 medical practitioners who were citizens of foreign countries who arrived in Australia to take up temporary employment – 546 for a long-term stay and 1,167 for a short-term stay. Of these, 65.3% had previously resided in the United Kingdom or Ireland and 7.4% in New Zealand. This arrival of temporary resident doctors was a 5.3% increase on 1996–97 which had a 65.9% increase on the 980 in 1995–96, despite changes in access by TRDs to rendering of Medicare services introduced in late 1996.

Occupational trainees represented 23.1% of the 1,713 TRDs entering Australia in 1997–98 and these make a significant contribution to the hospital workforce in most States.

Most entered for a stay of less than 12 months with the average expected stay being one year. Of the overseas-trained temporary resident medical practitioners included in the AIHW medical labour force survey:

- 20.4% were employed in primary care, 41.6% were hospital non-specialists, 13.3% were specialists, 21.1% were specialists-in-training and the remaining 3.6% were non-clinicians.
- 52.9% had obtained their initial qualification in the United Kingdom or Ireland, 19.8% in New Zealand, 10.5% in Asia and 16.6% in other countries.
- 64.1% worked in their main job in a metropolitan area, 25.1% in a rural area and 10.8% in a remote area.
- 73.0% practised in acute care hospitals in their main job and 16.9% from private rooms.

Offsetting the flow of TRDs to Australia was the departure of Australian-trained doctors for overseas to gain experience or for further training. During 1997–98, there were 430 Australian citizen or permanent resident medical practitioners who left Australia to take up

temporary employment overseas for more than a year. Of these, 37.9% were intending to work in the United Kingdom or Ireland, 23.7% in Asia, 20.5% in the United States of America or Canada and 3.7% in New Zealand. Data are not available on the number of Australians departing for employment overseas for periods of less than a year.

Overseas-trained doctors

Overseas-trained doctors (OTDs) have contributed greatly to the supply of medical practitioners in Australia, both as permanent additions to the workforce and as temporary residents. There were 9,873 overseas-trained doctors in the Australian medical workforce in 1997, representing 20.4% of the 48,321 employed medical practitioners.

Because the medical workforce had been increasing at a much faster rate than population growth, national medical workforce policy since 1992 has been to restrict permanent net additions to the Australian workforce of OTDs to around 200 per year. Changes in government policy during 1999 are to allow limited additional numbers of permanent resident overseas-trained doctors, with recognised skills, to practise in designated rural areas.

More than one in four medical practitioners working in Western Australia, Northern Territory and Tasmania obtained their initial qualification overseas. In Western Australia and Tasmania, 18.8% and 16.7% respectively, qualified in the United Kingdom or Ireland. In the Northern Territory, 13.7% of all practising medical practitioners had obtained their initial qualification from Asia, compared with the national average of 5.9%.

Permanent resident overseas-trained medical practitioners were more likely to work in a rural or remote area if graduates from the United Kingdom or Ireland (28.9% worked in rural areas and 2.6% in remote areas), compared with those who had qualified in Asia initially (10.5% in rural areas and 0.7% in remote areas) or New Zealand (12.8% and 1.2% respectively).

During 1997-98, 173 medical practitioners permanently migrated from Australia, of whom 30.0% went to Asia, 26.6% to the United Kingdom or Ireland, and 22.0% to New Zealand.

Permanent migration and Australian Medical Council approvals

A significant source of permanent additions to the Australian medical workforce is overseas-trained medical practitioners who have permanent resident status and who have gained full or conditional eligibility to practise by meeting examination and other requirements of the Australian Medical Council (AMC). In 1997-98, there were 358 medical practitioners who were citizens of foreign countries who permanently migrated to Australia. Of these 32.4% had previously resided in Asia, 19.3% in New Zealand, and 12.3% in the United Kingdom or Ireland. Historically, many of these permanent migrants have been unable to meet Australian registration requirements and have been unable to practise in Australia.

In 1998, a total of 180 permanent resident overseas-trained medical practitioners passed the AMC's clinical examination and were eligible for registration. A further 53 overseas-trained specialists qualified for registration after recognition of their qualifications by a specialty College and the AMC.

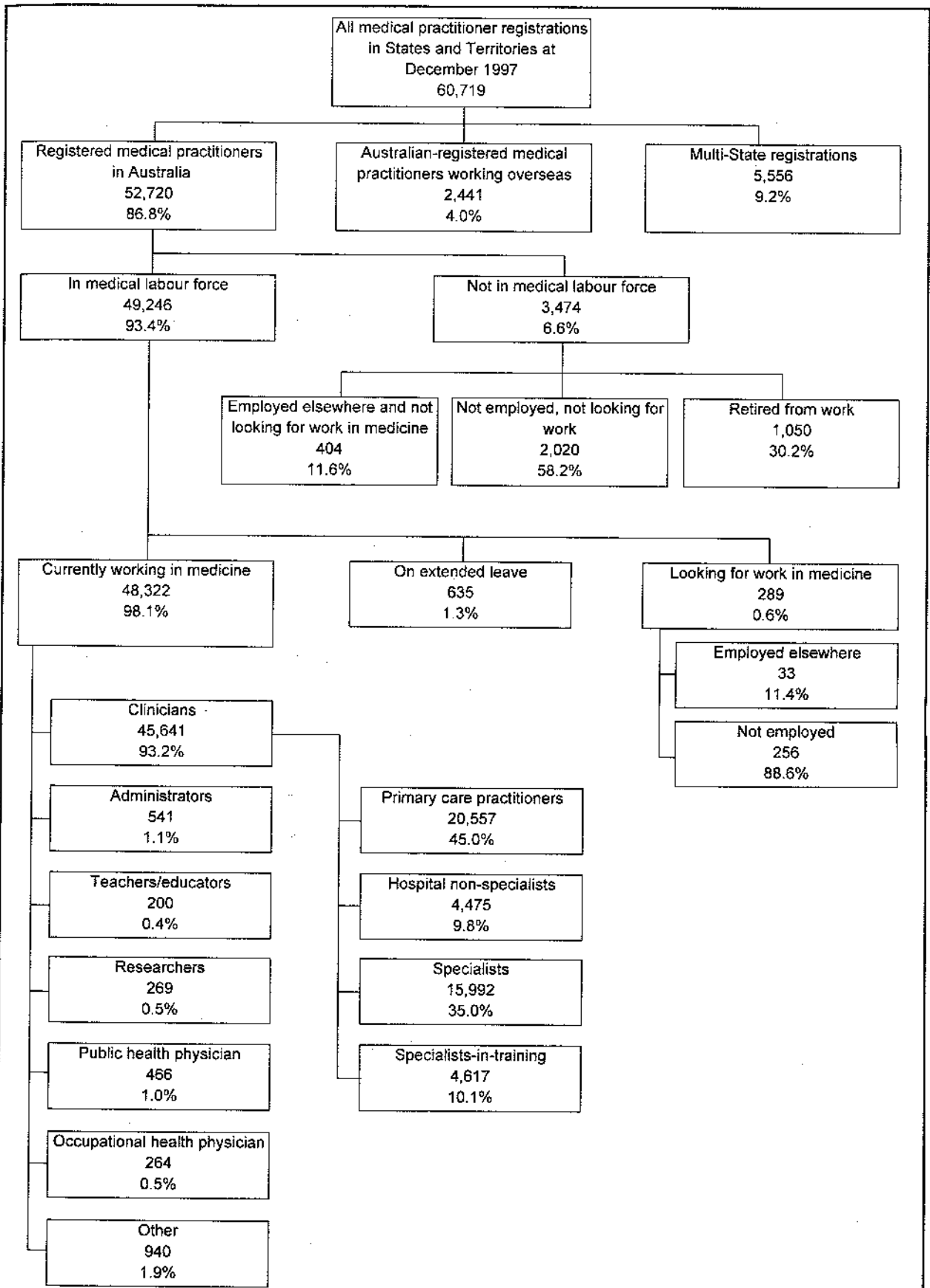


Figure 1: All registered medical practitioners, Australia, 1997

Table 1: Employed clinician medical practitioners: States and Territories, 1993-97

Year	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
1993	15,036	10,659	6,902	3,912	3,597	1,019	398	778	42,300
1994	^(r) 15,456	10,838	7,137	3,951	3,781	1,066	383	791	43,404
1995	^(r) 15,739	11,142	7,430	4,037	3,960	1,067	406	802	44,583
1996	^(r) 16,045	11,304	7,639	4,068	4,015	1,095	414	836	45,416
1997	16,117	11,306	7,767	4,033	4,044	1,098	433	842	45,641

(r) Revision of estimates published in previous reports. See 'Explanatory note'.

Table 2: Employed clinician medical practitioners: occupation and sex, Australia, 1993-97

Type of clinician	1993 ^(r)	1994 ^(r)	1995 ^(r)	1996	1997	% increase 1993 to 1997
Males						
Primary care	13,255	13,364	13,586	13,864	13,781	4.0
Hospital non-specialist ^(a)	2,420	2,620	2,736	2,653	2,594	7.2
Specialist ^(a)	13,177	13,151	13,344	13,438	13,503	2.5
Specialist-in-training ^(a)	2,863	2,969	2,920	3,022	3,058	6.8
Total	31,714	32,104	32,585	32,977	32,935	3.8
Females						
Primary care	5,664	5,989	6,351	6,631	6,776	19.6
Hospital non-specialist ^(a)	1,647	1,890	2,033	2,011	1,881	14.2
Specialist ^(a)	2,064	2,131	2,260	2,343	2,490	20.6
Specialist-in-training ^(a)	1,211	1,289	1,353	1,454	1,559	28.7
Total	10,586	11,299	11,998	12,439	12,706	20.0
Persons						
Primary care	18,918	19,353	19,938	20,495	20,557	8.7
Hospital non-specialist ^(a)	4,067	4,510	4,769	4,664	4,475	10.0
Specialist ^(a)	15,240	15,283	15,604	15,781	15,992	4.9
Specialist-in-training ^(a)	4,074	4,258	4,273	4,476	4,617	13.3
Total	42,300	43,404	44,583	45,416	45,641	7.9
Per cent female						
Primary care	29.9	30.9	31.9	32.4	33.0	..
Hospital non-specialist	40.5	41.9	42.6	43.1	42.0	..
Specialist	13.5	13.9	14.5	14.8	15.6	..
Specialist-in-training	29.7	30.3	31.7	32.5	33.8	..
Total	25.0	26.0	26.9	27.4	27.8	..

(a) Prior to 1995, Victoria used a questionnaire that was not standardised with the other States and Territories. The main effect was that specialists-in-training were included in the data for specialists or hospital non-specialists. Therefore, the 1993 and 1994 Victorian data for occupation have been estimated based on the distribution of these occupations in 1995 and 1996.

(r) Revision of estimates published in previous reports. See 'Explanatory note'.

Table 3: Employed medical practitioners: occupation and sex, States and Territories, 1997

Occupation	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
Males									
<i>Clinician</i>	11,724	8,241	5,552	2,905	2,872	791	277	573	32,935
Primary care	4,886	3,519	2,280	1,188	1,191	376	114	227	13,781
Hospital non-specialist	1,046	382	576	186	241	64	51	49	2,594
Specialist	4,695	3,550	2,201	1,247	1,184	289	89	248	13,503
Specialist-in-training	1,097	791	495	284	256	61	24	49	3,058
<i>Non-clinician</i>	595	449	246	163	234	48	11	91	1,837
Administrator	136	105	56	26	24	5	4	14	370
Teacher/educator	49	35	25	25	12	4	0	1	152
Researcher	64	49	13	16	14	0	1	12	171
Public health physician	56	55	42	65	33	10	5	11	277
Occupational health physician	94	44	23	14	19	8	1	9	211
Other	194	162	87	16	133	21	0	43	656
Total	12,318	8,690	5,798	3,068	3,106	839	288	664	34,772
Females									
<i>Clinician</i>	4,394	3,065	2,215	1,128	1,172	307	156	269	12,706
Primary care	2,240	1,709	1,160	602	620	194	84	168	6,776
Hospital non-specialist	768	195	421	140	217	49	40	52	1,881
Specialist	839	747	372	240	203	39	17	32	2,490
Specialist-in-training	547	414	262	146	133	25	15	17	1,559
<i>Non-clinician</i>	309	163	126	62	104	16	19	44	843
Administrator	79	29	30	11	14	3	1	3	171
Teacher/educator	23	13	4	1	4	0	0	3	48
Researcher	50	26	6	7	6	1	2	0	98
Public health physician	46	29	37	25	20	5	16	11	189
Occupational health physician	22	20	4	6	0	1	0	0	53
Other	89	47	47	10	60	5	0	27	284
Total	4,703	3,228	2,341	1,190	1,276	324	175	313	13,549
Persons									
<i>Clinician</i>	16,117	11,306	7,767	4,033	4,044	1,098	433	842	45,641
Primary care	7,125	5,229	3,440	1,790	1,810	571	198	395	20,557
Hospital non-specialist	1,814	576	996	325	458	113	91	101	4,475
Specialist	5,534	4,296	2,573	1,487	1,386	328	106	280	15,992
Specialist-in-training	1,644	1,205	758	430	389	86	39	66	4,617
<i>Non-clinician</i>	904	612	373	224	338	64	30	134	2,680
Administrator	215	134	85	37	38	8	5	17	541
Teacher/educator	72	48	29	27	16	4	0	4	200
Researcher	115	75	19	24	20	1	3	12	269
Public health physician	102	84	78	91	53	15	21	22	466
Occupational health physician	116	63	27	19	19	9	1	9	264
Other	283	209	134	26	192	26	0	70	940
Total	17,021	11,918	8,139	4,258	4,382	1,163	463	977	48,321

Table 4: Employed medical practitioners: occupation, States and Territories, 1997

Occupation	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
<i>Clinician</i>	16,117	11,306	7,767	4,033	4,044	1,098	433	842	45,641
<i>Primary care</i>	7,125	5,229	3,440	1,790	1,810	571	198	395	20,557
VRGP	5,968	4,446	2,982	1,533	1,512	501	147	346	17,435
RACGP trainee	387	263	167	92	88	41	21	22	1,081
OMPs	771	519	291	165	211	29	30	27	2,042
<i>Hospital non-specialist</i>	1,814	576	996	325	458	113	91	101	4,475
Intern/RMO	1,469	438	643	220	357	96	57	75	3,355
Other	345	139	353	105	101	17	34	27	1,121
<i>Specialist</i>	5,534	4,296	2,573	1,487	1,386	328	106	280	15,992
Internal medicine	1,544	1,104	624	415	361	81	29	81	4,238
Pathology	274	144	123	70	84	18	5	13	730
Surgery	950	760	509	278	251	56	17	47	2,868
Other specialties	2,767	2,289	1,318	724	690	174	55	139	8,156
Specialist-in-training	1,644	1,205	758	430	389	86	39	66	4,617
<i>Non-clinician</i>	904	612	373	224	338	64	30	134	2,680
Administrator	215	134	85	37	38	8	5	17	541
Teacher/educator	72	48	29	27	16	4	0	4	200
Researcher	115	75	19	24	20	1	3	12	269
Public health physician	102	84	78	91	53	15	21	22	466
Occupational health physician	116	63	27	19	19	9	1	9	264
Other	283	209	134	26	192	26	0	70	940
Total employed practitioners	17,021	11,918	8,139	4,258	4,382	1,163	463	977	48,321

(per 100,000 population)

<i>Clinician</i>	255.7	244.2	226.7	272.1	223.2	232.4	230.1	274.0	245.1
<i>Primary care</i>	113.1	113.0	100.4	120.8	99.9	120.7	105.0	128.4	110.4
VRGP	94.7	96.1	87.0	103.4	83.4	106.1	77.9	112.5	93.6
RACGP trainee	6.1	5.7	4.9	6.2	4.8	8.6	11.3	7.3	5.8
OMPs	12.2	11.2	8.5	11.1	11.6	6.1	15.8	8.7	11.0
<i>Hospital non-specialist</i>	28.8	12.4	29.1	22.0	25.3	24.0	48.3	33.0	24.0
Intern/RMO	23.3	9.5	18.8	14.9	19.7	20.3	30.3	24.3	18.0
Other	5.5	3.0	10.3	7.1	5.6	3.6	17.9	8.7	6.0
<i>Specialist</i>	87.8	92.8	75.1	100.3	76.5	69.4	56.3	91.2	85.9
Internal medicine	24.5	23.9	18.2	28.0	19.9	17.1	15.6	26.3	22.8
Pathology	4.3	3.1	3.6	4.8	4.6	3.7	2.4	4.4	3.9
Surgery	15.1	16.4	14.9	18.8	13.9	11.9	8.9	15.2	15.4
Other specialties	43.9	49.4	38.5	48.8	38.1	36.7	29.4	45.4	43.8
Specialist-in-training	26.1	26.0	22.1	29.0	21.5	18.3	20.6	21.4	24.8
<i>Non-clinician</i>	14.3	13.2	10.9	15.1	18.7	13.6	16.0	43.7	14.4
Administrator	3.4	2.9	2.5	2.5	2.1	1.8	2.7	5.7	2.9
Teacher/educator	1.1	1.0	0.8	1.8	0.9	0.8	0.0	1.4	1.1
Researcher	1.8	1.6	0.5	1.6	1.1	0.3	1.7	4.0	1.4
Public health physician	1.6	1.8	2.3	6.1	2.9	3.2	11.1	7.2	2.5
Occupational health physician	1.8	1.4	0.8	1.3	1.0	2.0	0.5	2.8	1.4
Other	4.5	4.5	3.9	1.8	10.6	5.5	0.0	22.7	5.0
Total employed practitioners	270.1	257.5	237.6	287.2	241.8	246.0	246.1	317.8	259.5

Population at 31 Dec. 1997 (prelim)^(a) 6,302,451 4,628,893 3,425,698 1,482,415 1,812,089 472,672 188,266 307,395 18,619,879

(a) Source: AIHW from ABS 30 June 1997 regional data. Excludes Jervis Bay, Cocos Islands and Christmas Island.

Table 5: Employed medical practitioners: occupation and region of main job, 1997

Occupation	Region of main job						Total
	Capital city	Other metro centre	Large rural centre	Small rural centre	Other rural area	Remote area	
<i>Primary care practitioners</i>	14,387	1,511	1,206	1,152	1,898	404	20,557
VRGPs	12,107	1,308	1,058	998	1,662	303	17,435
RACGP trainees	700	81	77	68	128	27	1,081
OMPs	1,580	122	71	86	108	74	2,042
<i>Non-specialist hospital doctors</i>	3,480	404	341	93	61	95	4,475
Interns/RMOs	2,786	291	194	31	16	38	3,356
Other	694	112	148	62	45	58	1,119
<i>Specialists</i>	12,835	1,149	1,178	560	194	77	15,992
Internal medicine	3,503	294	251	130	41	19	4,238
Pathology	589	57	54	24	6	0	730
Surgery	2,181	220	254	132	61	20	2,868
Other specialties	6,563	578	619	275	85	37	8,156
Specialists-in-training	4,095	307	144	33	15	23	4,617
<i>Total clinicians</i>	34,797	3,371	2,869	1,838	2,168	598	45,641
Non-clinicians	2,297	131	120	64	32	35	2,680
Total employed practitioners	37,094	3,502	2,989	1,902	2,200	634	48,321
	(per 100,000 population)						
<i>Primary care practitioners</i>	121.4	107.4	108.5	95.0	76.8	71.7	110.4
VRGPs	102.2	92.9	95.1	82.3	67.2	53.7	93.6
RACGP trainees	5.9	5.8	6.9	5.6	5.2	4.8	5.8
OMPs	13.3	8.7	6.4	7.1	4.4	13.2	11.0
<i>Non-specialist hospital doctors</i>	29.4	28.7	30.7	7.7	2.5	16.9	24.0
Interns/RMOs	23.5	20.7	17.4	2.6	0.7	6.7	18.0
Other	5.9	8.0	13.3	5.2	1.8	10.2	6.0
<i>Specialists</i>	108.3	81.6	105.9	46.2	7.8	13.6	85.9
Internal medicine	29.6	20.9	22.6	10.7	1.7	3.4	22.8
Pathology	5.0	4.0	4.8	2.0	0.3	0.0	3.9
Surgery	18.4	15.7	22.8	10.9	2.5	3.6	15.4
Other specialties	55.4	41.0	55.6	22.6	3.4	6.6	43.8
Specialists-in-training	34.6	21.8	12.9	2.8	0.6	4.0	24.8
<i>Total clinicians</i>	293.6	239.5	257.9	151.6	87.7	106.2	245.1
Non-clinicians	19.4	9.3	10.8	5.3	1.3	6.2	14.4
Total employed practitioners	313.0	248.8	268.8	156.9	89.0	112.5	259.5
Population at 31 December 1997 ^(a)	11,851,779	1,407,470	1,112,164	1,212,722	2,472,354	563,391	18,619,879

(a) Source: AIHW from ABS 30 June 1997 regional data. Excludes Jervis Bay, Cocos Islands and Christmas Island.

Table 6: All registered medical practitioners: employment status and sex, States and Territories, 1997

Employment status	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
Males									
Only in this State	11,925	8,377	5,649	2,870	3,055	822	273	511	33,484
Mainly in this State	393	313	149	198	51	17	15	153	1,288
<i>Total</i>	<i>12,318</i>	<i>8,690</i>	<i>5,798</i>	<i>3,068</i>	<i>3,106</i>	<i>839</i>	<i>288</i>	<i>664</i>	<i>34,772</i>
Mainly in another State	610	213	68	84	80	51	158	178	1,443
Only in other States	916	502	550	269	326	233	129	131	3,057
<i>Total</i>	<i>1,527</i>	<i>716</i>	<i>617</i>	<i>353</i>	<i>407</i>	<i>284</i>	<i>286</i>	<i>309</i>	<i>4,499</i>
On extended leave	62	43	19	10	208	1	0	1	344
Practising overseas	836	479	237	141	11	47	8	44	1,804
Employed, not in medicine	133	83	12	21	37	1	0	8	295
Currently not employed	900	474	72	32	37	12	6	8	1,542
Retired from work	0	0	289	279	240	66	6	0	881
<i>Total</i>	<i>15,775</i>	<i>10,485</i>	<i>7,045</i>	<i>3,904</i>	<i>4,046</i>	<i>1,251</i>	<i>595</i>	<i>1,036</i>	<i>44,137</i>
Females									
Only in this State	4,616	3,167	2,322	1,158	1,272	321	168	280	13,303
Mainly in this State	87	60	20	32	4	4	7	33	248
<i>Total</i>	<i>4,703</i>	<i>3,228</i>	<i>2,341</i>	<i>1,190</i>	<i>1,276</i>	<i>325</i>	<i>175</i>	<i>313</i>	<i>13,551</i>
Mainly in another State	86	45	15	19	13	9	20	33	239
Only in other States	238	183	101	75	101	51	30	39	818
<i>Total</i>	<i>324</i>	<i>228</i>	<i>115</i>	<i>94</i>	<i>114</i>	<i>60</i>	<i>50</i>	<i>72</i>	<i>1,057</i>
On extended leave	85	63	51	16	70	1	3	3	291
Practising overseas	276	177	84	44	28	16	7	6	638
Employed, not in medicine	60	30	13	4	21	7	0	7	142
Currently not employed	384	212	48	41	27	14	2	6	734
Retired from work	0	0	61	43	44	21	0	0	169
<i>Total</i>	<i>5,832</i>	<i>3,937</i>	<i>2,714</i>	<i>1,432</i>	<i>1,581</i>	<i>444</i>	<i>237</i>	<i>406</i>	<i>16,583</i>
Persons									
Only in this State	16,541	11,545	7,970	4,028	4,327	1,143	441	791	46,787
Mainly in this State	480	373	169	230	55	21	22	185	1,536
<i>Total</i>	<i>17,021</i>	<i>11,918</i>	<i>8,139</i>	<i>4,258</i>	<i>4,382</i>	<i>1,164</i>	<i>463</i>	<i>977</i>	<i>48,322</i>
Mainly in another State	696	259	82	103	93	60	178	211	1,682
Only in other States	1,155	685	650	344	428	284	158	170	3,874
<i>Total</i>	<i>1,851</i>	<i>944</i>	<i>733</i>	<i>448</i>	<i>521</i>	<i>344</i>	<i>336</i>	<i>381</i>	<i>5,556</i>
On extended leave	146	105	70	25	279	3	3	4	635
Practising overseas	1,112	656	322	184	39	63	15	49	2,441
Employed, not in medicine	193	113	24	26	58	8	0	16	437
Currently not employed	1,284	686	121	73	63	25	9	14	2,276
Retired from work	0	0	350	322	285	88	6	0	1,050
Total	21,607	14,422	9,759	5,336	5,627	1,695	832	1,441	60,719

Table 7: Employed medical practitioners: occupation, age and sex, Australia, 1997

Occupation	Age (years)							Total
	<25	25-34	35-44	45-54	55-64	65-74	75+	
Males								
Clinician	252	6,217	9,178	8,745	5,077	2,776	690	32,935
Primary care	0	1,590	4,146	4,029	2,116	1,472	429	13,781
Hospital non-specialist	252	1,760	378	133	56	13	1	2,594
Specialist	0	443	4,078	4,525	2,906	1,290	260	13,503
Specialist-in-training	0	2,423	576	58	0	0	0	3,058
Non-clinician	37	207	405	438	354	290	106	1,837
Administrator	0	19	96	128	73	45	10	370
Teacher/educator	0	8	30	35	38	33	8	152
Researcher	0	34	45	25	41	15	10	171
Public health physician	27	60	74	46	40	24	6	277
Occupational health physician	0	13	51	61	48	29	9	211
Other	10	73	109	144	113	143	64	656
Total	289	6,424	9,584	9,183	5,431	3,066	796	34,772
Females								
Clinician	232	4,588	4,461	2,301	751	311	62	12,706
Primary care	0	1,807	2,814	1,479	423	219	35	6,776
Hospital non-specialist	232	1,244	260	96	37	12	0	1,881
Specialist	0	258	1,156	677	292	81	26	2,490
Specialist-in-training	0	1,279	231	49	0	0	0	1,559
Non-clinician	6	203	284	183	109	46	11	843
Administrator	0	19	76	45	26	5	0	171
Teacher/educator	0	1	24	10	9	4	0	48
Researcher	0	37	35	17	6	3	0	98
Public health physician	2	62	60	37	21	8	0	189
Occupational health physician	0	13	18	12	8	1	0	53
Other	4	71	71	62	40	24	11	284
Total	238	4,791	4,745	2,484	860	357	73	13,549
Persons								
Clinician	484	10,805	13,639	11,046	5,828	3,087	752	45,641
Primary care	0	3,397	6,960	5,508	2,539	1,691	464	20,557
Hospital non-specialist	484	3,004	638	229	93	25	1	4,475
Specialist	0	702	5,234	5,202	3,197	1,371	287	15,992
Specialist-in-training	0	3,702	807	107	0	0	0	4,617
Non-clinician	43	410	689	621	463	336	117	2,680
Administrator	0	38	172	172	99	50	10	541
Teacher/educator	0	9	54	45	47	38	8	200
Researcher	0	72	80	42	47	19	10	269
Public health physician	29	122	134	83	60	33	6	466
Occupational health physician	0	26	70	73	56	30	9	264
Other	14	144	181	206	153	167	75	940
Total	527	11,215	14,328	11,667	6,291	3,423	869	48,321

Note: A State and Territory dissection of these data is available on the Internet (<http://www.aihw.gov.au>).

Table 8: Employed medical practitioners: occupation, total hours worked per week and sex, Australia, 1997

Occupation	Total hours worked per week						Total	(per cent)	
	1-19	20-34	35-49	50-64	65-79	80+		65-79	80+
Males									
Primary care	585	1,200	4,293	5,614	1,537	552	13,781	11.2	4.0
VRGP	424	961	3,620	5,127	1,413	492	12,037	11.7	4.1
GP trainees	9	40	221	130	19	9	428	4.4	2.1
OMPs	152	199	452	357	106	51	1,316	8.0	3.8
Hospital non-specialists	38	111	810	1,300	225	110	2,594	8.7	4.2
RMO/interns	17	62	490	1,044	173	86	1,872	9.2	4.6
Other	20	48	321	256	52	24	722	7.2	3.4
Specialists	680	1,026	3,571	5,695	1,809	722	13,503	13.4	5.3
Internal medicine	222	263	791	1,564	553	197	3,589	15.4	5.5
Pathology	27	40	190	245	21	16	539	3.9	2.9
Surgery	129	189	477	1,192	541	246	2,775	19.5	8.9
Other specialties	302	534	2,113	2,694	694	263	6,599	10.5	4.0
Specialists-in-training	14	49	842	1,509	466	178	3,057	15.2	5.8
<i>Total clinicians</i>	<i>1,317</i>	<i>2,386</i>	<i>9,516</i>	<i>14,118</i>	<i>4,037</i>	<i>1,561</i>	<i>32,935</i>	<i>12.3</i>	<i>4.7</i>
Non-clinicians	252	159	569	679	127	51	1,837	6.9	2.8
<i>Total</i>	<i>1,569</i>	<i>2,544</i>	<i>10,085</i>	<i>14,797</i>	<i>4,164</i>	<i>1,613</i>	<i>34,772</i>	<i>12.0</i>	<i>4.6</i>
Females									
Primary care	1,301	2,197	2,091	916	188	84	6,776	2.8	1.2
VRGP	1,027	1,813	1,596	739	154	68	5,397	2.9	1.3
GP trainees	90	174	297	78	6	9	653	1.0	1.3
OMPs	183	211	198	99	27	8	726	3.7	1.1
Hospital non-specialists	87	127	608	868	112	80	1,881	5.9	4.3
RMO/interns	21	35	478	785	94	70	1,483	6.4	4.7
Other	66	93	130	83	17	10	399	4.4	2.6
Specialists	238	569	870	622	131	59	2,490	5.3	2.4
Internal medicine	88	141	198	173	36	13	649	5.6	2.0
Pathology	10	39	81	53	8	1	191	4.0	0.8
Surgery	4	7	31	34	10	8	93	10.3	8.8
Other specialties	137	383	560	362	77	37	1,556	5.0	2.4
Specialists-in-training	16	118	549	669	151	56	1,559	9.7	3.6
<i>Total clinicians</i>	<i>1,642</i>	<i>3,011</i>	<i>4,118</i>	<i>3,075</i>	<i>581</i>	<i>280</i>	<i>12,706</i>	<i>4.6</i>	<i>2.2</i>
Non-clinicians	136	164	313	185	33	12	843	3.9	1.4
<i>Total</i>	<i>1,777</i>	<i>3,176</i>	<i>4,431</i>	<i>3,260</i>	<i>614</i>	<i>292</i>	<i>13,549</i>	<i>4.5</i>	<i>2.2</i>
Persons									
Primary care	1,886	3,397	6,384	6,530	1,725	636	20,557	8.4	3.1
VRGP	1,452	2,774	5,216	5,866	1,567	560	17,435	9.0	3.2
GP trainees	100	213	518	208	25	17	1,081	2.3	1.6
OMPs	335	410	650	456	133	58	2,042	6.5	2.9
Hospital non-specialists	124	238	1,418	2,168	336	190	4,475	7.5	4.3
RMO/interns	38	97	967	1,829	267	156	3,355	8.0	4.6
Other	86	141	451	339	69	34	1,121	6.2	3.1
Specialists	918	1,596	4,440	6,317	1,940	781	15,992	12.1	4.9
Internal medicine	310	404	989	1,736	589	210	4,238	13.9	5.0
Pathology	36	79	271	298	29	17	730	3.9	2.3
Surgery	133	196	508	1,227	550	255	2,868	19.2	8.9
Other specialties	439	918	2,673	3,056	771	300	8,156	9.5	3.7
Specialists-in-training	30	166	1,391	2,177	617	234	4,617	13.4	5.1
<i>Total clinicians</i>	<i>2,958</i>	<i>5,397</i>	<i>13,634</i>	<i>17,192</i>	<i>4,618</i>	<i>1,842</i>	<i>45,641</i>	<i>10.1</i>	<i>4.0</i>
Non-clinicians	387	323	882	864	160	63	2,680	6.0	2.3
<i>Total</i>	<i>3,346</i>	<i>5,720</i>	<i>14,516</i>	<i>18,057</i>	<i>4,778</i>	<i>1,904</i>	<i>48,321</i>	<i>9.9</i>	<i>3.9</i>

Table 9: Employed medical practitioners: occupation, total hours worked per week and geographic location of main job, Australia, 1997

Occupation/ total hours worked per week	Capital city	Other metro centre	Large rural centre	Small rural centre	Other rural area	Remote area	Total
Primary care							
1-19	1,421	120	116	74	128	31	1,889
20-34	2,569	249	168	137	234	29	3,387
35-49	4,660	480	339	315	449	115	6,358
50-64	4,302	474	455	427	704	160	6,520
65-79	1,067	134	110	128	275	46	1,759
80+	369	54	20	71	108	23	645
Total	14,387	1,511	1,206	1,152	1,898	404	20,557
Hospital non-specialist							
1-19	116	6	8	3	0	0	133
20-34	179	28	21	8	2	2	238
35-49	1,091	120	117	30	6	33	1,398
50-64	1,700	214	166	42	32	34	2,188
65-79	258	20	18	3	15	17	330
80+	138	16	11	8	6	9	188
Total	3,480	404	341	93	61	95	4,475
Specialists							
1-19	755	47	52	24	19	6	904
20-34	1,380	85	79	40	18	10	1,612
35-49	3,656	318	280	158	57	16	4,485
50-64	4,953	491	521	225	69	36	6,295
65-79	1,475	152	180	82	16	9	1,914
80+	623	57	61	29	14	0	783
Total	12,843	1,149	1,173	558	193	76	15,992
Specialists-in-training							
1-19	28	5	0	0	0	0	33
20-34	150	16	6	4	0	2	177
35-49	1,222	85	41	13	6	6	1,374
50-64	1,950	138	69	9	3	7	2,176
65-79	542	41	19	8	5	7	621
80+	202	23	9	0	0	1	235
Total	4,095	307	144	33	15	23	4,617
Non-clinicians							
1-19	330	18	15	14	11	0	387
20-34	282	14	12	9	7	0	323
35-49	770	41	37	13	8	13	882
50-64	729	42	52	21	4	18	864
65-79	140	9	3	6	1	0	160
80+	46	8	3	1	0	5	63
Total	2,297	131	120	64	32	35	2,680
Total							
1-19	2,650	196	191	114	159	36	3,346
20-34	4,559	392	286	197	261	42	5,737
35-49	11,400	1,043	814	529	528	184	14,497
50-64	13,634	1,358	1,262	724	813	253	18,043
65-79	3,482	355	329	227	312	78	4,784
80+	1,378	158	103	110	128	39	1,914
Total	37,102	3,502	2,984	1,900	2,200	633	48,321
(per cent of region)							
Primary care							
65-79	7.4	8.9	9.1	11.1	14.5	11.3	8.6
80+	2.6	3.6	1.6	6.2	5.7	5.8	3.1
Hospital non-specialist							
65-79	7.4	4.9	5.2	3.2	24.7	18.1	7.4
80+	4.0	4.1	3.1	8.3	10.0	9.7	4.2
Specialists							
65-79	11.5	13.2	15.3	14.7	8.3	11.5	12.0
80+	4.9	4.9	5.2	5.2	7.0	0.0	4.9
Specialists-in-training							
65-79	13.2	13.2	13.3	23.3	34.1	30.3	13.5
80+	4.9	7.4	6.3	0.0	0.0	5.6	5.1
Total							
65-79	9.4	10.1	11.0	11.9	14.2	12.4	9.9
80+	3.7	4.5	3.4	5.8	5.8	6.1	4.0

2 Primary care practitioners

Primary care practitioners engage in general medical practice or in other fields of the primary care of patients. They include vocationally registered general practitioners (VRGPs), VRGP trainees and other medical practitioners (OMPs) who are not recognised general practitioners but whose Medicare patient billing is mainly for unreferral attendances.

The data in this chapter are presented for various sub-groups of primary care practitioners. The data for VRGPs, VRGP trainees and OMPs are mutually exclusive and sum to the total for primary care practitioners. This is not the case for special interest, locum and deputising service primary care practitioners, who are not mutually exclusive of each other or of the other primary care groups presented.

Monitoring of the primary care workforce is particularly important because:

- growth of the general practice workforce has slowed as a result of the training intake being held constant at 400 per year and other factors such as earlier retirement;
- each year, the proportion of VRGPs has been increasing, and proportion of OMPs declining, reflecting government financial incentives for formal qualifications in general practice, continuing education of primary care practitioners, and restrictions since 1996 on new graduates and temporary resident overseas-trained doctors gaining access to Medicare provider numbers which would enable them to render Medicare services as OMPs;
- the majority of new entrants to the primary care workforce are women, and continuation of this trend is expected to significantly change the work characteristics of the labour force;
- shortages of general practitioners in many rural and remote areas are considered a serious problem and numerous Commonwealth, State and local government incentive schemes have been introduced to attract and retain more rural doctors;
- locum and deputising service practitioners provide essential support to rural and urban practices, and the numbers of these may be affected by broader workforce change in general practice;
- increasing sub-specialisation is a feature of the total medical workforce and of primary care as a result of advances in research, technology and medical knowledge and trends towards specialising in care of sub-groups of the population.

Features of primary care practitioners in 1997 included the following:

- There were 20,557 primary care practitioners, of whom 17,435 were VRGPs (84.8%), 1,081 were RACGP trainees (5.3%) and 2,042 were OMPs (9.9%).
- 6,776 or 33.0% of primary care practitioners were female, compared with 29.9% in 1993.
- 53.2% of primary care practitioners younger than 35 years were female, compared with 46.1% in 1993.
- 60.4% of general practice trainees were female.
- 41.6% of male and 68.2% of female primary care practitioners were younger than 45 years of age.

- 12.9% of male and 51.6% of female primary care practitioners worked fewer than 35 hours per week.
- 4.0% of male and 1.2% of female primary care practitioners respectively worked 80 or more hours per week. These proportions almost doubled in small rural centres, other rural and remote areas (7.2% for males and 2.2% for females).
- 8.6% of primary care practitioners reported practising mainly in a special interest area of care, and the proportion was much higher for OMPs (28.4%).
- Special interest fields of practice were diverse, with the most popular being women's health (7.2% of special interest practitioners), counselling and psychotherapy (7.0%), sports medicine (6.8%) and occupational medicine (5.6%).
- 1.3% of primary care practitioners practised in an Aboriginal health service.
- 1,698 primary care practitioners, representing 8.3% of the primary care workforce, reported employment as locums or in a deputising service – 1,383 as locums, 198 in a deputising service and 117 as both locums and in a deputising service.
- 75.7% of male and 80.6% of female primary care practitioners practised in metropolitan centres.
- 74.7% of male and 79.6% of female primary care practitioners gained their initial qualification in Australia.
- 36.8% of those primary care practitioners who had gained their initial qualification in the United Kingdom or Ireland practised in rural and remote areas, as did 23.5% of those who had qualified in Australia, 25.0% of those who had qualified in New Zealand, 8.5% of those who had qualified in Asia and 14.2% of those who had qualified in other countries.
- The annual growth in the number of Medicare primary care providers peaked at 7.2% in 1986–87. This growth rate declined to 2.6% in 1994–95, 0.7% in 1995–96, 0.6% in 1996–97 and in 1997–98 was negative at -1.2%, mainly because new graduates working in hospitals have been unable since 1996–97 to render Medicare services as OMPs. Between 1996–97 and 1997–98, the Department of Health and Aged Care has calculated that the number of Medicare full-time equivalent primary care providers increased by 0.9%, from 16,200 to 16,353.

The difference between the 20,557 primary care practitioners enumerated in 1997 in the AIHW labour force survey and the 24,230 Medicare providers of general practice services in 1997–98 is explained by about 4,000 salaried hospital non-specialists, medical educators, researchers and others who rendered private practice Medicare services as mainly unreferral attendances in 1997–98. The Health Insurance Commission classifies as OMPs nearly all of these Medicare providers and their level of Medicare activity is low.

This means that the Medicare primary care workforce in 1997–98 of 24,230 comprised:

- 16,912 VRGPs;
- 1,441 VRGP trainees; (Department of Health and Aged Care 1998)
- 2,042 OMPs whose main job was primary care; and
- 3,835 OMPs whose main job was not in primary care.

Vocationally registered general practitioners

The AIHW labour force survey defines VRGPs as primary care practitioners who self-report being either vocationally registered or Fellows of the Royal Australian College of General Practitioners (RACGP).

Features of VRGPs in 1997 included the following.

- The 17,435 VRGPs in 1997 represented 84.8% of all primary care practitioners.
- 12,037 were male (69.0%) and 5,397 were female (31.0%).
- The average age was 49.5 years for males and 42.8 years for females.
- 55.4% of VRGPs younger than 35 years were female.
- 39.0% of males and 65.5% of females were younger than 45 years of age.
- Male VRGPs worked an average of 51.3 hours per week and female VRGPs worked an average of 33.9 hours per week.
- 11.5% of males and 52.6% of females worked fewer than 35 hours per week.
- Average hours per week worked by males increased relatively uniformly across all geographic regions, ranging from around 51 hours in metropolitan centres to 55.6 hours in other rural areas and 54.4 hours in remote areas. Female VRGPs worked an average of around 33 hours per week in metropolitan and large and small rural centres, 37.6 hours in other rural areas and 43.6 hours in remote areas.
- 75.4% of males and 81.7% of females had gained their initial qualification in Australia.
- 74.9% of the primary care practitioners in remote areas were VRGPs, compared with 84.2% in capital cities and around 87% in all other areas.

General practitioner (RACGP) trainees

General practitioner trainees practise under the supervision of an RACGP Fellow. The Commonwealth Government's Medical Training Review Panel collects data from the medical colleges on the numbers of training positions and trainees. The RACGP reported that there were 1,441 general practice trainees in advanced training positions in 1998 (Department of Health and Aged Care 1998).

The AIHW medical labour force survey identified the following characteristics of GP trainees:

- 60.4% were female.
- 40.4% of female trainees worked fewer than 35 hours per week, compared with 11.5% of males.
- Male trainees worked an average of 46.4 hours per week and female trainees averaged 35.6 hours per week. Average hours worked by males ranged from a high of 49.5 in South Australia to a low of 40.0 in the Northern Territory. Females averaged the longest hours in Western Australia (37.1) and the shortest in the Australian Capital Territory (25.6).
- The average age of RACGP trainees was 32.8 years for males and 31.6 years for females.
- 68.9% of male trainees were located in metropolitan centres, 28.7% in rural areas and 2.4% in remote areas. Females were less likely to work in rural areas—74.4% were located in metropolitan centres, 23.1% in rural areas and 2.5% in remote areas.

- The main job of 76.0% of RACGP trainees was in private rooms, compared with 89.3% of all primary care practitioners. A further 16.4% had their main job in acute care hospitals and 2.9% worked mainly in non-residential facilities.
- 75.7% of male trainees and 79.8% of female trainees had gained their initial qualification in Australia.

Other medical practitioners

The AIHW labour force survey defines OMPs as primary care practitioners who do not self-report as being either vocationally registered or training to become vocationally registered. There were 2,042 primary care practitioners in this category in the 1997 survey. The Health Insurance Commission in 1997–98 classified a further 3,835 medical practitioners as OMPs – these were mainly hospital non-specialists with low levels of Medicare billing activity.

The survey data identified the following characteristics of OMPs whose main job was in primary care:

- 1,316 (64.4%) were male and 726 (35.6%) were female. This proportion varied significantly among States and Territories, from a high of 67.7% males in Victoria to a low of 53.0% males in the Australian Capital Territory.
- The average age was 43.4 years for males and 40.0 years for females. Some 33.9% of males and 36.1% of females were younger than 35 years of age.
- 26.6% of males worked fewer than 35 hours per week, compared with 54.2% of females.
- Males worked an average of 44.7 hours per week and females averaged 32.6 hours.
- 84.3% of males and 81.6% of females practised in metropolitan centres.
- 71.5% of OMPs practised from private rooms in their main job, 12.8% in acute care hospitals and 6.0% in non-residential facilities.
- 67.7% of males and 64.3% of females had gained their initial qualification in Australia. Of the remainder, 6.9% gained their initial qualification in New Zealand, 21.6% in the United Kingdom or Ireland, 32.2% in Asia and 39.3% in other countries.

Special interest primary care practitioners

There were 1,778 primary care practitioners practising mainly in a special interest area of primary care in 1997. These represented 8.6% of primary care practitioners – 6.5% of VRGPs and RACGP trainees and 27.8% of OMPs.

Features of special interest primary care practitioners included the following:

- 7.9% of male and 10.2% of female primary care practitioners were practising mainly in a special interest area. This proportion varied among States and Territories: 5.0% of male and 3.7% of female primary care practitioners in Tasmania, compared with 15.8% of males in the Northern Territory and 15.6% of females in Western Australia.
- 48.0% worked in recognised clinical specialties – 53.5% of males and 39.5% of females.
- The largest special interest areas for male practitioners were sports medicine (9.1%) and occupational medicine (8.1%).
- The largest special interest areas for female practitioners were women’s health (17.2%), counselling and psychotherapy (7.7%), obstetrics and gynaecology (4.3%) and sexual health (4.3%).

- 26.6% of all special interest primary care practitioners worked in the four largest special interest areas – women’s health (7.2%), sports medicine (6.8%), counselling and psychotherapy (7.0%) and occupational medicine (5.6%).

Primary care locum tenens

There were 1,383 primary care practitioners who reported current employment as a locum tenens in 1997 and a further 117 practitioners who reported employment as both locum tenens and in a deputising service. Features of the medical practitioners who reported as locum tenens only included the following:

- 470 were female (34.0%), of whom 73.7% were younger than 45 years of age (compared with 42.9% of males).
- 31.6% of males and 4.6% of females were aged 65 years or more.
- 68.9% of female locums were VRGPs, 8.6% were RACGP trainees, and 22.6% were OMPs (compared with 66.4%, 5.1% and 28.5% respectively of males).
- 62.1% of female and 33.3% of male locums worked fewer than 35 hours per week.
- Male locums (22.2%) were more likely to work in a rural or remote area in their main job than female locums (16.0%).
- 66.8% of males and 74.2% of females had gained their initial qualification in Australia. Of those who had gained their initial qualification overseas, 38.6% of males had initially qualified in the United Kingdom or Ireland and 35.6% of females had initially qualified in Asia.
- 83.4% of primary care locums practised in private rooms in their main job and a further 10.5% practised in acute care hospitals.

Primary care deputising service practitioners

There were 198 primary care practitioners who reported current employment as deputising service practitioners in 1997. Features of these medical practitioners included the following:

- 75 were female (37.8%), of whom 79.3% were younger than 45 years of age (compared with 65.6% of males).
- 50.0% of those younger than 35 years were female.
- 42.9% of female deputising service practitioners were VRGPs, 42.5% were RACGP trainees and 14.6% were OMPs (compared with 55.0%, 12.9% and 31.0% respectively of males).
- 40.3% of female and 12.1% of male deputising service practitioners worked less than 35 hours per week.
- 72.1% of males and 61.6% of females had gained their initial qualification in Australia. Of those who had gained their initial qualification overseas, 47.1% of males and 43.4% of females had initially qualified in Asia.
- 74.4% of deputising service practitioners practised in private rooms in their main jobs. A further 13.3% practised in acute care hospitals and 5.7% practised in non-residential facilities.

Primary care practice size

In most States and Territories, the 1997 labour force survey included a question, for the first time, on the number of primary care practitioners in each practice. Unfortunately, this

question was not included in the questionnaires used in New South Wales and Victoria. The following analysis refers to the 8,203 primary care practitioners for whom data were available in Queensland, South Australia, Western Australia, Tasmania, Northern Territory and the Australian Capital Territory. These States and Territories had 39.9% of the primary care practitioners in Australia in 1997.

- 43.3% of primary care practitioners worked in practices with five or more practitioners. These practices were 16.7% of all primary care practices.
- 15.5% of primary care practitioners were in solo practice. Solo practices were 41.9% of all primary care practices.
- There are State differences in the types of practice. Queensland had 13.7% of practitioners in solo practice and 48.2% in practices with five or more practitioners. This contrasted with the Northern Territory with 24.0% of practitioners in solo practice and 31.3% in practices with five or more practitioners.
- 34.5% of primary care practitioners in these States and Territories were female. However, only 18.9% of practitioners in solo practices were female.
- Of those who gained their initial qualification in Asia, 35.0% were in solo practice and 24.8% were in practices with five or more practitioners. This contrasted with those who gained their initial qualification in Australia or New Zealand where 13.9% were in solo practice and 44.2% and 42.8% respectively were in practices with five or more practitioners.
- 51.9% of solo practitioners and 42.9% of practitioners in two practitioner practices worked more than 50 hours per week. Around 36% of practitioners in all other size practices worked more than 50 hours per week.
- 75.3% of male solo practitioners and 59.7% of those in two practitioner practices were 45 years of age or more. In contrast, 54.9% of all male practitioners were aged 45 years or more.
- 51.7% of female solo practitioners and 36.4% of those in two practitioner practices were 45 years of age or more. In contrast, 30.0% of all female practitioners were aged 45 years or more.
- 8.6% of those in practices with five or more practitioners were in 24-hour clinics.

Table 10: Primary care practitioners: selected characteristics, States and Territories, 1997

Characteristic	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total	%
Age group:										
Males										
<35	502	396	274	179	165	27	27	19	1,590	11.5
35-44	1,286	1,128	740	369	379	129	37	79	4,146	30.1
45-54	1,459	1,036	621	371	330	115	26	70	4,029	29.2
55-64	856	473	343	154	179	62	18	32	2,116	15.4
65+	783	487	302	115	138	42	6	27	1,900	13.8
Females										
<35	509	490	332	179	179	51	34	33	1,807	26.7
35-44	908	733	490	243	253	84	35	67	2,814	41.5
45-54	547	319	244	131	127	49	7	54	1,479	21.8
55-64	168	101	54	32	47	8	4	10	423	6.2
65+	108	66	40	18	14	2	3	4	254	3.8
Total hours worked per week:										
Males										
1-19	232	138	82	43	59	13	6	13	586	4.3
20-34	419	350	159	74	129	42	9	20	1,200	8.7
35-49	1,421	1,047	774	359	450	115	42	85	4,293	31.2
50-64	1,876	1,425	1,031	562	412	159	52	96	5,612	40.7
65-79	680	413	177	110	111	35	3	9	1,537	11.2
80+	259	147	56	41	29	13	2	4	552	4.0
Mean	51.2	50.7	48.9	50.5	46.7	49.2	47.3	46.2	50.1	
Median	50.0	50.0	50.0	50.0	47.0	50.0	50.0	48.0	50.0	
Mode	60.0	50.0	50.0	50.0	40.0	60.0	50.0	50.0	50.0	
Females										
1-19	367	383	242	110	131	33	11	23	1,301	19.2
20-34	709	523	371	222	198	81	34	60	2,196	32.4
35-49	702	479	367	189	207	61	23	64	2,091	30.9
50-64	348	242	146	64	71	15	12	18	916	13.5
65-79	72	59	27	12	9	3	3	3	188	2.8
80+	41	25	7	6	4	1	0	0	84	1.2
Mean	35.9	32.8	32.8	32.5	31.4	31.1	35.3	34.5	33.9	
Median	35.0	32.0	32.0	30.0	32.0	30.0	33.0	35.0	33.0	
Mode	40.0	20.0	40.0	40.0	40.0	40.0	25.0	30.0	40.0	
Region of main job:										
Males										
Capital city	3,324	2,600	1,089	937	907	192	52	227	9,327	67.7
Other metro centre	560	133	417	0	0	0	0	0	1,110	8.1
Large rural centre	218	168	342	13	0	73	0	0	814	5.9
Small rural centre	302	224	134	62	94	33	0	0	848	6.2
Other rural area	456	390	225	165	93	77	3	0	1,410	10.2
Remote zone	25	5	73	11	97	1	60	0	272	2.0
Females										
Capital city	1,657	1,339	701	511	516	126	42	168	5,059	74.7
Other metro centre	228	58	116	0	0	0	0	0	402	5.9
Large rural centre	116	89	156	1	0	31	0	0	393	5.8
Small rural centre	105	73	61	21	27	16	0	0	303	4.5
Other rural area	126	148	97	62	31	21	1	0	488	7.2
Remote zone	8	2	30	6	45	0	41	0	132	1.9
Work setting of main job:										
Private rooms	6,203	4,653	3,209	1,650	1,654	517	116	332	18,333	89.2
Non-residential facility	173	123	44	27	20	13	13	14	426	2.1
Aboriginal health service	25	14	18	12	30	1	43	0	143	0.7
Acute care hospital	544	292	62	39	21	14	3	5	980	4.8
Other residential facility	12	3	3	7	9	1	0	0	35	0.2
Educational institution	40	73	25	10	17	7	3	8	183	0.9
Defence forces	46	14	30	8	6	3	11	20	139	0.7
Other	82	57	49	36	54	15	9	17	318	1.5
Males	4,886	3,519	2,280	1,188	1,191	376	114	227	13,781	67.0
Females	2,240	1,709	1,160	602	620	194	84	168	6,776	33.0
Total	7,125	5,229	3,440	1,790	1,810	571	198	395	20,557	100.0

Table 11: Primary care practitioners: selected characteristics, region of main job, Australia, 1997

Characteristic	Region of main job						Total	%
	Capital city	Other metro centre	Large rural centre	Small rural centre	Other rural area	Remote zone		
Average age:								
Males	49.2	50.0	47.4	47.2	47.6	44.0	48.8	..
Females	42.1	41.9	41.4	41.8	41.4	37.6	41.8	..
Total hours worked:								
Males								
1-19	429	48	28	20	41	10	575	4.2
20-34	868	101	54	48	91	10	1,172	8.5
35-49	3,073	354	222	224	322	73	4,267	31.0
50-64	3,685	432	391	377	619	118	5,622	40.8
65-79	953	126	100	116	240	40	1,574	11.4
80+	320	48	19	64	97	21	570	4.1
Mean	49.2	49.9	50.9	54.3	54.5	53.3	50.1	..
Females								
1-19	982	73	89	53	87	20	1,304	19.2
20-34	1,697	149	114	90	141	19	2,210	32.6
35-49	1,597	124	113	89	125	45	2,094	30.9
50-64	614	41	66	55	91	38	905	13.3
65-79	114	8	11	11	33	6	181	2.7
80+	56	6	0	5	11	4	83	1.2
Mean	33.3	32.9	33.1	36.1	37.6	40.9	33.9	..
Work setting of main job:								
Private rooms	12,821	1,350	1,083	1,047	1,778	286	18,366	89.3
Non-residential facility	313	33	23	6	30	10	416	2.0
Aboriginal health service	61	7	8	11	7	56	149	0.7
Acute care hospital	677	77	70	63	62	23	972	4.7
Other residential facility	23	7	2	2	1	0	34	0.2
Educational institution	157	9	5	3	4	1	179	0.9
Defence forces	99	17	6	5	6	1	135	0.7
Other	235	12	10	14	10	27	307	1.5
Country of initial qualification:								
Males								
Australia	6,895	796	641	653	1,105	202	10,291	74.7
New Zealand	125	26	11	18	15	9	204	1.5
United Kingdom/Ireland	577	117	110	106	169	35	1,115	8.1
Asia	1,056	112	22	33	65	6	1,294	9.4
Other countries	674	59	30	38	56	20	877	6.4
Females								
Australia	3,978	334	328	245	414	97	5,395	79.6
New Zealand	62	2	3	5	4	6	83	1.2
United Kingdom/Ireland	275	24	49	37	46	25	456	6.7
Asia	422	28	5	7	11	0	474	7.0
Other countries	323	14	8	9	12	3	369	5.4
Australian residency status:								
Males								
Australian citizen	8,697	1,033	746	782	1,313	225	12,796	92.9
Permanent resident	607	72	58	60	91	30	919	6.7
Not permanent resident	23	4	9	6	6	17	66	0.5
Females								
Australian citizen	4,668	371	353	270	449	106	6,217	91.7
Permanent resident	382	28	37	29	39	7	521	7.7
Not permanent resident	10	3	3	1	0	3	19	0.3
Males	9,327	1,110	814	848	1,410	272	13,781	67.0
Females	5,059	402	393	303	488	132	6,776	33.0
Total	14,387	1,511	1,206	1,152	1,898	404	20,557	100.0

Table 12: Primary care practitioners: sex, qualification and main field of practice, States and Territories, 1997

Qualification/ main field of practice	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
Males									
VRGP									
General practice	4,071	2,787	1,927	1,018	906	336	79	193	11,315
Special interest area	159	282	91	39	119	8	9	14	722
Total	4,231	3,069	2,018	1,057	1,025	344	88	207	12,037
RACGP trainee									
General practice	145	93	71	28	39	10	5	6	397
Special interest area	9	6	1	2	6	3	2	0	31
Total	154	99	73	30	45	13	7	6	428
OMP									
General practice	376	241	157	76	102	11	13	7	982
Special interest area	125	110	32	25	19	8	6	7	333
Total	501	351	189	101	121	19	19	14	1,316
Total									
General practice	4,592	3,120	2,155	1,121	1,047	358	96	206	12,695
Special interest area	294	399	124	67	144	19	18	21	1,086
Total	4,886	3,519	2,280	1,188	1,191	376	114	227	13,781
Females									
VRGP									
General practice	1,618	1,227	916	455	425	153	53	129	4,977
Special interest area	119	150	48	22	61	4	6	9	420
Total	1,737	1,377	964	477	487	158	59	139	5,397
RACGP trainee									
General practice	222	157	92	59	40	27	14	17	627
Special interest area	10	8	2	2	3	0	0	0	26
Total	232	164	95	61	43	27	14	17	653
OMP									
General practice	196	91	68	48	58	6	9	5	480
Special interest area	74	77	34	16	32	3	2	8	246
Total	270	167	102	64	90	9	11	13	726
Total									
General practice	2,036	1,474	1,076	562	523	187	75	151	6,085
Special interest area	204	235	84	40	97	7	8	17	692
Total	2,240	1,709	1,160	602	620	194	84	168	6,776
Persons									
VRGP									
General practice	5,689	4,014	2,842	1,472	1,331	489	131	322	16,292
Special interest area	279	433	139	61	181	12	15	23	1,142
Total	5,968	4,446	2,982	1,533	1,512	501	147	346	17,435
RACGP trainee									
General practice	367	249	164	87	79	38	19	22	1,025
Special interest area	20	14	4	5	9	3	2	0	57
Total	387	263	167	92	88	41	21	22	1,081
OMP									
General practice	572	332	225	124	160	18	21	11	1,463
Special interest area	199	187	66	41	51	11	8	15	579
Total	771	519	291	165	211	29	30	27	2,042
Total									
General practice	6,628	4,595	3,231	1,683	1,570	545	171	356	18,780
Special interest area	498	634	208	107	241	26	26	38	1,778
Total	7,125	5,229	3,440	1,790	1,810	571	198	395	20,557

Note: A further dissection of VRGPs, RACGP trainees and OMPs is available in Tables 50–61 on the Internet (<http://www.aihw.gov.au>).

Table 13: Primary care practitioners: number of practitioners in practice, sex, States and Territories, 1997

No. of practitioners	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
Males									
One	n.a.	n.a.	376	224	259	89	40	41	1,029
Two	n.a.	n.a.	284	176	211	64	18	39	792
Three	n.a.	n.a.	278	141	169	43	19	45	695
Four	n.a.	n.a.	212	124	137	50	9	25	557
Five or more	n.a.	n.a.	1,130	523	415	131	28	77	2,303
Total	<i>n.a.</i>	<i>n.a.</i>	2,280	1,188	1,191	376	114	227	5,376
Females									
One	n.a.	n.a.	94	63	40	15	8	21	240
Two	n.a.	n.a.	182	98	101	29	17	28	454
Three	n.a.	n.a.	195	78	89	36	16	30	444
Four	n.a.	n.a.	162	84	127	35	8	28	444
Five or more	n.a.	n.a.	527	280	263	80	34	61	1,245
Total	<i>n.a.</i>	<i>n.a.</i>	1,160	602	620	194	84	168	2,828
Persons									
One	n.a.	n.a.	470	287	299	104	48	62	1,269
Two	n.a.	n.a.	465	274	312	93	36	67	1,246
Three	n.a.	n.a.	473	219	258	79	35	75	1,139
Four	n.a.	n.a.	374	208	264	84	18	53	1,001
Five or more	n.a.	n.a.	1,657	803	678	211	62	137	3,548
Total	n.a.	n.a.	3,440	1,790	1,810	571	198	395	8,203
(per cent of persons)									
One	n.a.	n.a.	13.7	16.0	16.5	18.2	24.0	15.7	15.5
Two	n.a.	n.a.	13.5	15.3	17.2	16.3	18.1	17.0	15.2
Three	n.a.	n.a.	13.7	12.2	14.3	13.8	17.7	19.0	13.9
Four	n.a.	n.a.	10.9	11.6	14.6	14.8	8.9	13.5	12.2
Five or more	n.a.	n.a.	48.2	44.9	37.4	37.0	31.3	34.8	43.3
Total	n.a.	n.a.	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 14: Estimated number^(a) of primary care practices: size of practice, States and Territories, 1997

No. of practitioners	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
One	n.a.	n.a.	470	287	299	104	48	62	1,269
Two	n.a.	n.a.	233	137	156	46	18	34	623
Three	n.a.	n.a.	158	73	86	26	12	25	380
Four	n.a.	n.a.	93	52	66	21	4	13	250
Five or more	n.a.	n.a.	237	115	97	30	9	20	507
Total	n.a.	n.a.	1,191	663	704	228	90	153	3,029
(per cent of practices)									
One	n.a.	n.a.	39.5	43.3	42.5	45.6	52.6	40.4	41.9
Two	n.a.	n.a.	19.5	20.6	22.1	20.4	19.8	21.8	20.6
Three	n.a.	n.a.	13.2	11.0	12.2	11.5	12.9	16.3	12.5
Four	n.a.	n.a.	7.9	7.8	9.4	9.3	4.8	8.7	8.3
Five or more	n.a.	n.a.	19.9	17.3	13.8	13.2	9.8	12.8	16.7
Total	n.a.	n.a.	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Calculated by dividing the number of practitioners by the number of practitioners in each practice. In practices with five or more practitioners seven was chosen as the divisor.

3 Specialists and specialists-in-training

There are several major influences on workforce planning for the medical specialties.

- Rapid change in demand for, and utilisation of, particular specialist services is frequently generated by advances in research and technology in the fields of medical equipment, drugs, diagnostic medicine, radiation and other treatments, patient prostheses and evidence-based medicine.
- Such changes may greatly improve labour productivity, but they also increase pressure for specialisation into sub-specialty areas.
- Ageing of the population and changing disease and injury patterns.
- Inequities in the distribution of specialists across Australia and changes in the delivery of speciality services including increasing use of specialist outreach and telemedicine programs.
- Much lower proportions of female medical graduates entering most disciplines of specialty practice compared with the proportion entering general practice.
- Lower average hours worked and lower workforce participation by a rising proportion of female specialists increases the overall workforce requirement and therefore the numbers of medical graduates in specialist training. Hours worked and retirement patterns of males are also changing.
- Shortages of medical specialists in any discipline may lead to the following undesirable outcomes for patients: reduced access to services; excessively long waiting times for consultation and treatment; higher charges for services rendered; practitioner fatigue from excessively long hours worked; and increased risk of medical misadventure due to fatigue impairing judgement (Olsen & Ambrogetti 1998; Holmes 1998).
- In contrast, too great a supply of specialists in a discipline in a particular geographic area may lead to insufficient patients for practitioners to adequately maintain skills, endangering patient care. Over-servicing of patients may also occur – incurring unwarranted costs to consumers, government and health insurance funds, and, in some circumstances, incurring unnecessary treatment risks to patients.

These influences are complex and, in Australia, workforce planning for the medical specialties has been addressed through a systematic specialty-by-specialty work program of the Australian Medical Workforce Advisory Committee (AMWAC), assisted by the specialist Colleges and the Australian Institute of Health and Welfare. The AMWAC work program and findings of published reports can be found at the AMWAC Internet website (<http://amwac.health.nsw.gov.au>).

3.1 Specialists

Geographic distribution

- There were 85.9 medical specialists per 100,000 population in Australia – up from 85.5 the previous year. Across the States and Territories the rates varied from 100.3 per 100,000 in South Australia and 92.8 in Victoria to 75.1 in Queensland, 69.4 in Tasmania and 56.3 in the Northern Territory.
- The main job of 80.3% of specialists was located in a capital city, with a further 7.2% in other metropolitan areas and 12.5% in rural and remote areas. Only 77 specialists had a main job in a remote area and nearly 70% of these were in only seven specialties – 14 in general surgery (18.2%), eight in paediatric medicine (10.4%), seven in psychiatry (9.1%), seven in obstetrics and gynaecology (9.1%), six in general medicine (7.8%), six in diagnostic radiology and five in anaesthesia (6.5%).
- Of the specialties, psychiatry (10.3) and anaesthesia (10.0) had the highest number of specialists practising per 100,000 population.

Proportion of female practitioners

- There were 15,992 specialists, of whom 13,503 (84.4%) were male and 2,490 female (15.6%).
- 54.9% of the female specialists worked in psychiatry (519), anaesthesia (347), paediatric medicine (183), diagnostic radiology (165) and obstetrics and gynaecology (152).

Hours worked

- Male specialists generally worked longer hours than their female counterparts, with 60.4% of males working 50 hours or more per week compared with 32.3% of females. Males worked an average of 51.4 hours per week and females an average of 41.4 hours.
- More than 25% of practitioners in the following specialties reported working more than 65 hours per week: medical oncology, thoracic medicine, intensive care, obstetrics and gynaecology and all of the surgical specialties except for otolaryngology and paediatric surgery.
- The specialties where more than 10% of the practitioners reported working more than 80 hours per week were medical oncology, forensic pathology, cardiothoracic surgery, neurosurgery, paediatric surgery and vascular surgery.

Outreach services

- 1.7% of metropolitan specialists reported that they practised in a rural or remote area in a second or third job.

Work setting of employment

- 55.2% of specialists had their main job in private rooms and 30.7% had their main job in an acute care hospital.

Table 15: Specialists: main specialty of practice, States and Territories, 1997

Main specialty of practice	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
<i>Internal medicine</i>	1,544	1,104	624	415	361	81	29	81	4,238
Cardiology	244	137	74	44	30	14	0	6	548
Clinical genetics	0	0	1	4	4	0	0	0	9
Clinical haematology	58	23	26	15	13	4	0	4	144
Clinical immunology	39	24	8	13	9	0	0	4	97
Clinical pharmacology	9	8	6	4	3	0	0	1	31
Endocrinology	86	68	26	18	13	4	0	3	219
Gastroenterology	139	95	57	46	37	7	1	9	391
General medicine	133	137	118	66	56	13	8	9	540
Geriatrics	70	63	19	13	13	4	0	6	187
Infectious diseases	27	44	18	11	4	1	4	3	112
Medical oncology	59	53	13	15	16	6	0	3	165
Neurology	121	79	27	17	20	6	0	4	274
Nuclear medicine	64	20	13	9	12	1	0	4	124
Paediatric medicine	256	188	138	65	68	10	12	13	750
Renal medicine	59	56	16	13	13	3	3	3	165
Rheumatology	78	58	23	26	23	4	0	3	216
Thoracic medicine	103	50	42	34	27	3	1	4	264
<i>Pathology</i>	274	144	123	70	84	18	5	13	730
General pathology	54	22	21	2	7	1	0	2	109
Anatomical pathology	121	63	68	44	46	8	1	9	361
Clinical chemistry	16	12	13	4	7	1	0	1	55
Cytopathology	13	3	0	0	3	0	0	2	20
Forensic pathology	11	3	1	2	0	1	1	0	20
Haematology	20	20	11	6	7	3	0	0	66
Immunology	9	3	0	0	3	0	0	0	15
Microbiology	29	19	8	13	10	3	2	0	84
<i>Surgery</i>	950	760	509	278	251	56	17	47	2,868
General surgery	351	280	183	86	85	20	12	10	1,026
Cardiothoracic surgery	30	34	17	6	7	0	0	1	95
Neurosurgery	32	30	20	15	10	3	0	4	114
Orthopaedic surgery	238	149	126	85	58	14	2	14	687
Otolaryngology (ENT)	103	87	53	31	34	7	1	6	321
Paediatric surgery	20	17	9	7	7	3	1	1	66
Plastic surgery	66	80	36	17	23	3	0	3	226
Urology	70	50	35	18	19	4	0	3	199
Vascular surgery	41	34	30	15	9	3	0	3	134
<i>Other specialties</i>	2,767	2,289	1,318	724	690	174	55	139	8,156
Anaesthesia	587	507	348	170	158	49	10	32	1,862
Dermatology	118	70	48	19	26	1	0	7	289
Diagnostic radiology	364	245	184	90	122	25	9	22	1,061
Emergency medicine	101	93	42	12	20	11	0	6	285
Intensive care	90	45	33	28	17	3	3	2	220
Medical administration	17	15	5	2	6	0	0	1	46
Obstetrics & gynaecology	318	290	183	103	92	25	5	16	1,032
Occupational medicine	50	41	3	8	4	1	0	4	110
Ophthalmology	225	181	110	78	62	8	4	7	675
Psychiatry	609	621	303	180	130	43	12	23	1,921
Public health medicine	21	11	4	0	6	1	8	1	53
Radiation oncology	46	46	26	6	10	4	1	4	144
Rehabilitation medicine	85	43	8	15	7	0	1	6	166
Other	137	81	21	13	30	1	1	7	292
Total	5,534	4,296	2,573	1,487	1,386	328	106	280	15,992

Table 16: All medical specialists^(a) practising in each specialty, sex, Australia, 1997

Specialty of practice	Main field of practice		Second field of practice		Third field of practice		Total		Persons
	Males	Females	Males	Females	Males	Females	Males	Females	
<i>Internal medicine</i>									
Cardiology	505	43	49	3	9	0	564	45	609
Clinical genetics	5	5	3	0	0	0	7	5	12
Clinical haematology	117	26	38	8	5	0	160	34	194
Clinical immunology	86	11	23	3	4	0	113	14	127
Clinical pharmacology	25	6	11	4	12	0	48	10	58
Endocrinology	179	40	58	6	7	0	244	46	290
Gastroenterology	357	34	56	5	10	1	423	40	464
General medicine	493	46	353	38	54	3	900	88	987
Geriatrics	139	48	35	1	5	0	178	49	228
Infectious diseases	87	26	29	6	5	2	121	34	155
Medical oncology	134	31	31	7	15	0	180	38	218
Neurology	250	24	13	2	0	0	263	26	289
Nuclear medicine	114	10	56	5	4	0	174	16	189
Paediatric medicine	567	183	41	10	6	1	614	195	809
Renal medicine	134	31	23	1	4	0	161	32	193
Rheumatology	169	47	24	0	1	0	194	47	241
Thoracic medicine	226	38	44	8	6	1	277	47	324
<i>Pathology</i>									
General pathology	96	13	14	3	13	1	123	18	141
Anatomical pathology	245	116	20	5	2	0	267	121	388
Clinical chemistry	51	4	4	0	5	0	60	4	64
Cytopathology	12	8	65	30	4	0	81	38	119
Forensic pathology	19	1	2	0	5	0	26	1	27
Haematology	40	26	50	13	7	3	98	42	140
Immunology	10	5	23	1	7	0	40	6	46
Microbiology	65	18	21	5	1	0	88	23	112
<i>Surgery</i>									
General surgery	992	34	38	4	5	1	1,034	39	1,074
Cardiothoracic surgery	91	4	9	0	1	0	102	4	106
Neurosurgery	109	4	3	0	3	0	115	4	119
Orthopaedic surgery	679	7	15	2	0	0	694	10	704
Otolaryngology (ENT)	312	10	3	0	1	0	315	10	325
Paediatric surgery	59	7	6	0	5	0	71	7	78
Plastic surgery	205	21	20	2	15	1	240	25	265
Urology	198	2	33	0	7	0	237	2	238
Vascular surgery	130	4	14	2	4	0	148	6	153
<i>Other specialties</i>									
Anaesthesia	1,515	347	68	4	1	0	1,585	350	1,935
Dermatology	209	80	1	1	0	0	211	81	291
Diagnostic radiology	896	165	31	6	6	0	933	171	1,104
Emergency medicine	234	51	21	2	6	1	261	54	315
Intensive care	200	20	143	17	14	2	357	39	396
Medical administration	38	8	67	11	24	0	128	19	147
Obstetrics & gynaecology	880	152	16	8	5	0	902	160	1,062
Occupational medicine	98	12	17	1	3	0	118	13	131
Ophthalmology	604	71	0	0	0	0	604	71	675
Psychiatry	1,401	519	11	2	0	0	1,412	521	1,934
Public health medicine	43	10	26	2	11	1	80	14	94
Radiation oncology	113	31	1	1	1	0	115	32	147
Rehabilitation medicine	134	31	32	2	15	0	182	34	215
Other	232	60	109	13	35	6	376	79	455
Total	13,503	2,490	1,768	248	353	25	15,624	2,763	18,387

(a) Includes all specialists practising in each specialty as their main field of practice, those for whom the specialty is their second field of practice, and those for whom the specialty is a third field of practice only.

Table 17: Specialists: total hours worked per week, age and sex, Australia, 1997

Hours worked	Age (years)						Total	%
	<35	35-44	45-54	55-64	65-74	75+		
Males								
1-19	17	42	58	128	346	124	714	5.3
20-34	25	147	146	291	365	80	1,054	7.8
35-49	163	1,079	1,134	867	307	29	3,579	26.5
50-64	181	1,917	2,200	1,137	197	26	5,657	41.9
65-79	43	643	704	348	48	2	1,787	13.2
80+	14	251	284	136	27	0	712	5.3
Total	443	4,078	4,525	2,906	1,290	260	13,503	100.0
Average hours	50.2	55.1	55.4	50.3	32.9	22.3	51.4	..
Females								
1-19	29	96	37	31	35	14	242	9.7
20-34	54	287	140	57	26	5	570	22.9
35-49	107	393	253	103	10	7	873	35.1
50-64	54	278	195	80	9	0	615	24.7
65-79	9	72	32	16	2	0	132	5.3
80+	5	29	20	4	0	0	58	2.3
Total	258	1,156	677	292	81	26	2,490	100.0
Average hours	39.5	41.9	43.4	41.9	23.8	19.8	41.4	..
Persons								
1-19	46	138	95	158	381	137	956	6.0
20-34	80	434	286	347	391	86	1,623	10.2
35-49	270	1,472	1,387	970	317	36	4,452	27.8
50-64	235	2,195	2,395	1,217	206	26	6,272	39.2
65-79	52	716	736	364	49	2	1,919	12.0
80+	19	280	304	140	27	0	769	4.8
Total	702	5,234	5,202	3,197	1,371	287	15,992	100.0
Average hours	46.4	52.2	53.8	49.5	32.4	22.1	49.8	..

3.2 Specialists-in-training

There were an estimated 4,617 specialists-in-training enumerated in the AIHW medical labour force survey in 1997. In the labour force survey specialists-in-training are self-identified.

The Commonwealth Government's Medical Training Review Panel collects data from the specialist medical colleges on the numbers of training positions and trainees. In 1998 it reported that there were 4,120 clinician specialists-in-training in Australia – 3,307 in advanced training positions and 813 in basic training positions (Department of Health and Aged Care 1998). These data exclude general practice trainees, Australians in overseas training positions and the majority of adult medicine and paediatric medicine basic trainees.

The AIHW survey showed that:

- the specialties with the highest numbers were anaesthesia (597), psychiatry (568), emergency medicine (441), paediatric medicine (388) and general medicine (320). The 441 trainees in emergency medicine exceeded the 285 specialists who reported that they practised emergency medicine, while at the other end of the scale some specialties had very low percentages of trainees to specialists – particularly vascular surgery (7.0%), cytopathology (0), clinical chemistry (12.7%) and clinical immunology (10.3%). The relatively high number of emergency medicine trainees reflects emergency medicine being a relatively new and rapidly growing specialty; the numbers of trainees are expected to reduce from 668 in 2000 to 177 in 2010 (AMWAC 1997).
- 80.2% of specialists-in-training were younger than 35 years, with a further 17.5% aged 35–44 years.
- 34.6% of specialists-in-training younger than 35 years were female. This proportion was considerably less than the 42.8% of total medical practitioners in the same age group who were female.
- 26.7% of the specialists-in-training in 1997 expected to complete training in that year or in 1998, and a further 22.6% expected to finish in 1999.

Table 18: Specialists-in-training: total hours worked per week, age and sex, Australia, 1997

Total hours worked per week	Age (years)			Total	% of sex	% of persons
	Under 35	35–44	45 and over			
Males						
1–19	11	3	0	14	0.5	46.4
20–34	28	18	3	49	1.6	29.2
40–49	619	200	23	842	27.5	60.5
50–64	1,209	273	26	1,509	49.3	69.3
65–79	395	65	6	466	15.2	75.5
80 and over	159	17	1	178	5.8	76.1
<i>Total</i>	<i>2,421</i>	<i>577</i>	<i>59</i>	<i>3,057</i>	<i>100.0</i>	<i>66.2</i>
Females						
1–19	4	8	4	16	1.0	53.6
20–34	72	39	7	118	7.6	70.8
40–49	428	100	21	549	35.2	39.5
50–64	588	66	14	669	42.9	30.7
65–79	138	13	1	151	9.7	24.5
80 and over	48	7	1	56	3.6	23.9
<i>Total</i>	<i>1,279</i>	<i>231</i>	<i>49</i>	<i>1,559</i>	<i>100.0</i>	<i>33.8</i>
Persons						
1–19	15	11	4	30	0.7	100.0
20–34	100	57	9	166	3.6	100.0
40–49	1,048	300	44	1,391	30.1	100.0
50–64	1,798	339	40	2,177	47.2	100.0
65–79	533	78	7	617	13.4	100.0
80 and over	207	24	3	234	5.1	100.0
Total	3,700	808	108	4,617	100.0	100.0

Table 19: Specialists-in-training: specialty of training, States and Territories, 1997

Specialty of training	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
<i>Internal medicine</i>	445	332	225	139	112	28	13	19	1,314
Cardiology	45	27	12	11	8	2	0	1	106
Clinical haematology	11	11	8	0	1	2	0	0	33
Clinical immunology	7	0	0	0	3	0	0	0	10
Clinical pharmacology	0	2	3	2	0	0	0	0	6
Endocrinology	16	7	12	4	3	1	0	0	42
Gastroenterology	23	23	4	4	4	0	0	3	62
General medicine	82	65	81	41	22	16	6	9	320
Geriatrics	18	16	3	8	7	2	0	0	54
Infectious diseases	11	14	7	0	3	0	4	0	39
Medical oncology	13	21	8	2	3	4	0	0	51
Neurology	21	11	3	4	5	2	0	0	45
Nuclear medicine	12	5	3	0	1	0	0	0	21
Paediatric medicine	144	91	66	43	38	0	2	4	388
Renal medicine	13	11	3	4	3	0	1	0	36
Rheumatology	8	10	1	8	4	0	0	1	33
Thoracic medicine	22	18	12	6	6	0	0	0	65
<i>Pathology</i>	45	33	17	12	17	4	2	6	136
General pathology	5	7	0	0	0	0	0	3	15
Anatomical pathology	23	21	12	8	9	4	2	3	82
Clinical chemistry	2	0	3	0	1	0	0	0	7
Cytopathology	0	0	0	0	0	0	0	0	0
Haematology	8	4	1	2	3	0	0	0	19
Immunology	2	0	0	0	0	0	0	0	2
Microbiology	4	0	0	2	4	0	0	0	10
<i>Surgery</i>	233	134	107	67	59	9	0	6	614
General surgery	86	63	48	23	17	9	0	3	251
Cardiothoracic surgery	12	3	4	8	3	0	0	0	30
Neurosurgery	13	3	3	2	4	0	0	0	26
Orthopaedic surgery	71	37	36	10	17	0	0	1	173
Otolaryngology (ENT)	21	8	7	11	7	0	0	0	53
Paediatric surgery	4	5	0	4	2	0	0	0	14
Plastic surgery	8	6	4	4	3	0	0	1	27
Urology	13	7	4	2	4	0	0	0	31
Vascular surgery	4	1	1	2	1	0	0	0	9
<i>Other specialties</i>	922	706	409	212	201	45	23	35	2,552
Anaesthesia	212	168	100	56	45	12	0	4	597
Dermatology	24	19	11	5	1	0	0	0	60
Diagnostic radiology	59	67	27	13	13	4	0	4	187
Emergency medicine	137	137	85	31	31	9	4	7	441
Intensive care	26	14	19	2	9	4	2	6	82
Medical administration	5	0	5	7	0	0	1	0	18
Obstetrics & gynaecology	91	69	52	23	24	4	11	3	277
Occupational medicine	30	16	0	0	6	0	0	0	52
Ophthalmology	41	28	11	8	10	0	0	0	99
Psychiatry	205	152	90	50	56	6	3	6	568
Public health medicine	4	5	0	5	0	0	0	1	16
Radiation oncology	25	13	5	6	1	0	0	1	52
Rehabilitation medicine	32	9	3	2	0	1	0	0	47
Other	30	9	1	5	6	3	2	2	58
Total	1,644	1,205	758	430	389	86	39	66	4,617

4 Hospital non-specialists

The hospital non-specialist workforce makes a major contribution to the provision of medical services in hospitals. This workforce includes doctors in training as interns and resident medical officers (RMOs), and career medical officers (CMOs), hospital medical officers (HMOs) and other salaried hospital doctors who are not specialists or in recognised training programs to become specialists.

Data monitoring is particularly important for two current workforce issues concerning hospital non-specialists:

- shortages of hospital non-specialists;
- managing a reduction in the numbers of hospital non-specialists working excessive hours.

Given a significantly lower response to the AIHW labour force survey by doctors younger than 35 years, the workforce estimates for hospital non-specialists and specialists-in-training are subject to significantly greater estimation error than for other sectors of the medical workforce and should be interpreted with care.

Composition of the hospital non-specialist workforce

- There were 4,475 hospital non-specialists in 1997 – 9.8% of the total clinician workforce.
- 1,881 (42.0%) were females.
- 3,355 (75.0%) were interns or RMOs, and the remaining 1,121 (25.0%) were CMOs, HMOs and other salaried non-specialists.
- 95.5% of interns and RMOs and 85.5% of other hospital non-specialists were employed in the public sector.

Geographic distribution

- The numbers of hospital non-specialists per 100,000 population varied among the States and Territories, from 48.3 per 100,000 population in the Northern Territory to 12.4 in Victoria.
- The number of interns and RMOs varied from a high of 30.3 per 100,000 population in the Northern Territory to a low of 9.5 in Victoria.
- CMOs, HMOs and other salaried non-specialists ranged from 17.9 per 100,000 population in the Northern Territory to 3.0 in Victoria.
- The numbers of hospital non-specialists per 100,000 population varied among regions from 30.7 in large rural centres and 29.4 per 100,000 population in capital cities down to 2.5 in other rural areas and 16.9 in remote areas. This regional variation mainly arises from the location of medical training hospitals with large numbers of interns and RMOs in the large centres, and the role of hospitals in remote centres such as Broome, Katherine and Mount Isa in delivering health services to remote communities.

Age distribution

- 13.5% of male and 15.7% of female interns and RMOs were younger than 25 years.

- Only 8.4% of male and 10.5% of female interns and RMOs were aged 35 years or more.
- 39.9% of CMOs, HMOs and other salaried non-specialists were younger than 35 years, 33.2% were 35–44 years, 16.3% were 45–54 years, and 10.6% were older than 55 years.

Hours worked

- Only 4.3% of male and 3.8% of female interns and RMOs worked fewer than 35 hours per week.
- 13.8% of male and 11.1% of female interns and RMOs worked 65 hours or more per week.
- 4.6% of male and 4.7% of female interns and RMOs worked 80 hours or more per week.
- 9.4% of male and 39.8% of female CMOs and HMOs worked less than 35 hours per week.
- 10.5% of male and 6.8% of female CMOs and HMOs worked 65 hours or more per week.
- 3.3% of male and 2.5% of female CMOs and HMOs worked 80 hours or more per week.

Table 20: Hospital non-specialists: classification, age and sex, States and Territories, 1997

Classification/age	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
Males									
Intern/RMO									
<25	159	2	56	0	30	3	0	1	252
25-34	592	257	262	122	143	45	19	23	1,463
35-44	49	24	25	6	12	4	4	7	133
45-54	6	11	4	0	0	0	0	3	24
Total	806	294	347	128	185	52	23	34	1,872
Other ^(a)									
<35	105	19	96	26	30	4	13	3	297
35-44	83	47	72	18	12	6	4	3	245
45-54	30	11	35	11	9	0	8	6	110
55+	21	10	25	3	5	1	2	3	70
Total	240	87	229	57	56	12	27	14	722
Total									
<25	159	2	56	0	30	3	0	1	252
25-34	698	276	358	148	173	49	32	26	1,760
35-44	132	71	98	24	24	10	8	10	378
45-54	36	22	39	11	9	0	8	9	133
55+	21	10	25	3	5	1	2	3	70
Total	1,046	382	576	186	241	64	51	49	2,594
Females									
Intern/RMO									
<25	105	1	58	26	29	8	2	3	232
25-34	472	136	215	62	122	32	29	25	1,094
35-44	73	6	15	4	18	3	3	11	133
45-54	11	0	8	0	3	0	0	2	23
Total	662	143	296	92	172	44	34	40	1,483
Other ^(a)									
<35	45	11	49	12	22	4	3	4	150
35-44	29	9	43	23	16	1	1	5	127
45-54	20	19	19	9	3	0	1	2	73
55+	11	13	15	4	3	0	1	2	49
Total	106	51	125	48	45	6	7	12	399
Total									
<25	105	1	58	26	29	8	2	3	232
25-34	518	147	264	74	144	37	32	30	1,244
35-44	103	15	58	27	34	4	4	15	260
45-54	31	19	26	9	6	0	1	3	96
55+	11	13	15	4	3	0	1	2	49
Total	768	195	421	140	217	49	40	52	1,881
Persons									
Intern/RMO									
<25	264	3	114	26	60	11	2	4	484
25-34	1,065	393	477	184	265	77	48	48	2,557
35-44	122	30	41	10	30	7	7	18	266
45-54	17	11	12	0	3	0	0	4	47
Total	1,469	438	643	220	357	96	57	75	3,355
Other ^(a)									
<35	151	30	145	38	52	8	16	7	447
35-44	112	56	115	41	28	7	6	7	372
45-54	50	30	54	20	12	0	9	7	182
55+	32	22	40	7	8	1	3	5	119
Total	345	139	353	105	101	17	34	27	1,121
Total									
<25	264	3	114	26	60	11	2	4	484
25-34	1,215	423	622	222	317	86	64	56	3,004
35-44	235	86	156	51	58	15	13	25	638
45-54	67	41	65	20	15	0	9	12	229
55+	32	22	40	7	8	1	3	5	119
Total	1,814	576	996	325	458	113	91	101	4,475

(a) Mainly CMOs, HMOs and other salaried non-specialists.

Table 21: Hospital non-specialists: classification and sector of employment, States and Territories, 1997

Classification/ sector	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
Intern/RMO									
Private sector	65	40	19	9	10	5	0	3	152
Public sector	1,404	397	624	211	347	91	57	72	3,203
<i>All sectors</i>	<i>1,469</i>	<i>438</i>	<i>643</i>	<i>220</i>	<i>357</i>	<i>96</i>	<i>57</i>	<i>75</i>	<i>3,355</i>
Other ^(a)									
Private sector	48	25	49	24	8	9	0	0	162
Public sector	297	114	304	81	93	8	34	27	959
<i>All sectors</i>	<i>345</i>	<i>139</i>	<i>353</i>	<i>105</i>	<i>101</i>	<i>17</i>	<i>34</i>	<i>27</i>	<i>1,121</i>
Total									
Private sector	114	65	68	33	17	14	0	3	314
Public sector	1,700	511	928	292	441	100	91	99	4,162
All sectors	1,814	576	996	325	458	113	91	101	4,475

(a) Mainly CMOs, HMOs and other salaried non-specialists.

Table 22: Interns and RMOs: total hours worked per week, sex, States and Territories, 1997

Total hours worked per week	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
Males									
0-19	16	0	0	0	2	0	0	0	17
20-34	32	22	3	2	0	2	0	1	62
35-49	181	97	75	36	69	11	8	13	490
50-64	454	123	244	79	98	24	8	14	1,044
65-79	83	35	18	9	14	9	5	0	173
80+	40	18	7	2	3	7	3	6	86
<i>Total</i>	<i>806</i>	<i>294</i>	<i>347</i>	<i>128</i>	<i>185</i>	<i>52</i>	<i>23</i>	<i>34</i>	<i>1,872</i>
Females									
0-19	13	3	3	0	2	0	0	0	21
20-34	21	7	0	5	2	0	0	0	35
35-49	185	46	88	34	65	18	26	15	478
50-64	362	69	181	48	76	26	8	15	785
65-79	50	14	5	0	23	0	0	3	94
80+	31	3	19	5	5	0	0	7	70
<i>Total</i>	<i>662</i>	<i>143</i>	<i>296</i>	<i>92</i>	<i>172</i>	<i>44</i>	<i>34</i>	<i>40</i>	<i>1,483</i>
Persons									
0-19	29	3	3	0	3	0	0	0	38
20-34	53	29	3	7	2	2	0	1	97
35-49	366	143	163	70	135	29	34	28	967
50-64	816	192	426	127	174	50	16	29	1,829
65-79	133	49	22	9	36	9	5	3	267
80+	72	21	26	7	8	7	3	13	156
Total	1,469	438	643	220	357	96	57	75	3,355

Table 23: Other hospital medical practitioners^(a): total hours worked per week, sex, States and Territories, 1997

Total hours worked per week	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
Males									
0-19	11	5	1	0	3	0	0	0	20
20-34	28	5	8	4	0	0	4	0	48
35-49	93	45	100	33	20	10	15	6	321
50-64	80	26	92	21	26	0	4	9	256
65-79	18	5	18	0	8	0	4	0	52
80+	9	2	9	0	0	2	2	0	24
<i>Total</i>	<i>240</i>	<i>87</i>	<i>229</i>	<i>57</i>	<i>56</i>	<i>12</i>	<i>27</i>	<i>14</i>	<i>722</i>
Females									
0-19	21	14	12	4	10	2	0	2	66
20-34	26	11	27	13	9	2	2	3	93
35-49	34	15	39	22	13	2	2	3	130
50-64	18	6	35	7	9	0	3	5	83
65-79	3	3	8	0	3	0	0	0	17
80+	3	3	4	0	0	0	0	0	10
<i>Total</i>	<i>106</i>	<i>51</i>	<i>125</i>	<i>48</i>	<i>45</i>	<i>6</i>	<i>7</i>	<i>12</i>	<i>399</i>
Persons									
0-19	33	19	13	4	13	2	0	2	86
20-34	54	16	35	17	9	2	5	3	141
35-49	127	60	139	55	33	12	16	9	451
50-64	98	31	127	28	35	0	7	13	339
65-79	21	7	26	0	11	0	4	0	69
80+	13	5	13	0	0	2	2	0	34
Total	345	139	353	105	101	17	34	27	1,121

(a) Mainly CMOs, HMOs and other salaried non-specialists.

5 Medical workforce in hospitals

In 1997–98, hospitals provided treatment to 5.6 million admitted patients, who spent 22.6 million patient days in hospital (AIHW 1999b).

Thus hospitals, and their medical workforce, make a considerable contribution to the provision of health services in Australia. This chapter contains data on the characteristics of the medical workforces employed in public and private hospitals in 1997, showing considerable differences among metropolitan, regional and small rural hospitals, and between public and private hospitals. It is of particular note that almost two-thirds of medical practitioners in private hospitals were specialists and general practitioners were a further 19.6%. In contrast, specialists represented 47.3%, and general practitioners 11.6%, of doctors employed in public hospitals, where specialists-in-training and hospital non-specialists have a much larger workforce contribution. Much higher proportions of general practitioners were employed in both public and private hospitals in rural areas, than in hospitals in metropolitan areas.

5.1 Public hospitals

The features of public hospital medical practitioners who indicated that their main, second or third job was in a public hospital in 1997 included the following:

- 21,140 medical practitioners worked in public hospitals – 43.7% of all practising medical practitioners.
- 88.7% of all specialists-in-training worked in a public hospital, as did 82.5% of hospital non-specialists, 62.5% of specialists, 11.9% of primary care practitioners and 33.7% of non-clinicians.
- 5,654 of these practitioners were female – 26.7% of the public hospital medical workforce. This proportion was similar across most States and Territories with the lowest proportion in Tasmania (22.1%) and the highest in the Northern Territory (31.3%).
- The distribution of public hospital medical practitioners across the occupation of their main job differed by gender. Among males, 53.7% worked as specialists in their main job; 17.9% as specialists-in-training; 13.4% as hospital non-specialists; 11.1% as primary care practitioners; and the remaining 4.0% as non-clinicians, mainly as administrators (1.3%). The largest occupation group for females was specialists (29.8%), followed by hospital non-specialists (28.5%), specialists-in-training (23.5%), primary care practitioners (13.0%), and the remaining 5.2% as non-clinicians, mainly as administrators (1.4%) and public health physicians (1.1%).
- 84.0% of public hospital medical practitioners who worked as a clinician in their main hospital job were employed in metropolitan centres, along with 14.6% in rural areas and 1.4% in remote areas. By comparison, the distribution of the overall population in 1997 was 71.2% living in metropolitan centres, 25.8% in rural areas and 3.0% in remote areas.
- Specialists represented 47.3% of medical practitioners working in public hospitals, but the medical occupation distribution varied by region. Specialists comprised around 45–50% and hospital non-specialists comprised 17–22% in capital cities, metropolitan centres and large rural centres. Specialists-in-training comprised around 20% of the

public hospital workforce in metropolitan areas, 10.2% in large rural centres declining to 1.0% in small rural areas then increasing to 6.4% in remote areas mainly due to the large hospitals in remote centres such as Alice Springs. Primary care practitioners were 6.3% of the public hospital workforce in capital cities increasing with rurality to 79.3% in small rural areas. In remote areas, primary care practitioners (42.6%) and hospital non-specialists (29.0%) were predominant.

- 82.6% of medical practitioners working in a public hospital had obtained their initial qualification in Australia, while the remainder had qualified in the United Kingdom or Ireland (6.0%), Asian countries (4.8%), New Zealand (2.9%), and other countries (3.8%).
- 2.0% of public hospital medical practitioners enumerated in the AIHW labour force survey were not Australian citizens or permanent residents of Australia. Of these, 14.2% had obtained their initial qualification in Australia and 44.2% had qualified in the United Kingdom or Ireland. However many of the temporary resident overseas-trained doctors employed in hospitals in 1997 would not have been enumerated in the survey because their registration was for a fixed term of less than a year, so that they did not receive a registration renewal notice and survey form.

The AIHW also collects data on salaried medical officers in its national public hospital data collection. These are published in the *Australian hospital statistics* series of publications.

These data are for full-time-equivalent (FTE) salaried medical officers and, in addition to hospital non-specialists, include specialists-in-training and salaried specialists such as medical administrators and emergency medicine, geriatric medicine, rehabilitation medicine and occupational medicine specialists employed in public hospitals.

From 1985–86 to 1997–98, FTE salaried medical officers increased by 65.5% in public and repatriation hospitals (excluding psychiatric hospitals) – rising from 9,300 to 15,387. Over the same period, patient separations increased by 52.9% from 2.5 million to 3.8 million and patient days declined 2.0% from 16.9 million to 16.6 million, reflecting a 35.9% reduction in the average stay from 6.9 days to 4.4 days.

Between 1996–97 and 1997–98, the changes were as follows:

- an 8.3% increase in salaried medical officers, from 14,210 FTE to 15,387 FTE;
- a 3.5% increase for patient separations, from 3,642,000 to 3,771,000; and
- a 3.2% decline for average stay, from 4.5 days to 4.4 days.

Table 24: All medical practitioners working in public hospitals: occupation of main job and region, Australia, 1997

Occupation of main job	Capital city	Other metro centre	Large rural centre	Small rural centre	Other rural area	Remote area	Total
<i>Clinician</i>	15,428	1,575	1,438	710	802	282	20,236
Primary care	1,019	189	185	286	644	124	2,447
Hospital non-specialist	2,753	364	336	96	59	84	3,693
Specialist	8,062	725	763	303	91	55	10,000
Specialist-in-training	3,593	296	154	25	8	19	4,096
<i>Non-clinician</i>	727	56	73	28	10	9	904
Administrator	215	14	31	17	2	3	283
Teacher/educator	43	4	2	0	0	0	49
Researcher	103	0	0	0	0	0	103
Public health physician	121	12	16	2	0	4	154
Occupational health physician	33	3	6	2	0	0	45
Other	212	23	18	7	9	2	271
Total	16,156	1,631	1,511	738	813	291	21,140
	(per cent)						
<i>Clinician</i>	95.5	96.6	95.2	96.2	98.7	97.0	95.7
Primary care	6.3	11.6	12.3	38.7	79.3	42.6	11.6
Hospital non-specialist	17.0	22.3	22.2	13.0	7.2	29.0	17.5
Specialist	49.9	44.5	50.5	41.1	11.2	19.0	47.3
Specialist-in-training	22.2	18.2	10.2	3.4	1.0	6.4	19.4
<i>Non-clinician</i>	4.5	3.4	4.8	3.8	1.3	3.0	4.3
Administrator	1.3	0.9	2.1	2.4	0.2	1.2	1.3
Teacher/educator	0.3	0.2	0.1	0.0	0.0	0.0	0.2
Researcher	0.6	0.0	0.0	0.0	0.0	0.0	0.5
Public health physician	0.8	0.7	1.0	0.2	0.0	1.2	0.7
Occupational health physician	0.2	0.2	0.4	0.3	0.0	0.0	0.2
Other	1.3	1.4	1.2	1.0	1.1	0.6	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

5.2 Private hospitals

The features of private hospital medical practitioners who indicated their main, second or third job was in a private hospital in 1997 included the following:

- 5,092 medical practitioners worked in private hospitals, comprising 10.5% of all employed medical practitioners.
- 853 (16.7%) were female.
- 20.4% of all specialists worked in a private hospital, as did 7.6% of specialists-in-training, 7.4% of hospital non-specialists, 4.9% of primary care practitioners and 5.1% of non-clinicians.
- Similar to the public hospital workforce, the distribution of employment in private hospitals across main occupation differed by gender. Among males, 67.9% worked as specialists in their main job; 17.4% as primary care practitioners; 6.3% as specialists-in-training; 6.0% as hospital non-specialists; and the remaining 2.4% as non-clinicians. Specialists were the largest occupation group (45.1%) for females, followed by primary care practitioners (30.4%), hospital non-specialists (10.6%), specialists-in-training (10.0%), and non-clinicians (3.9%).
- 84.0% of private hospital medical practitioners working as clinicians in their main hospital job were employed in capital cities and other metropolitan centres; 13.8% were employed in large and small rural centres; and 2.2% were employed in other rural and remote areas. By comparison, the distribution of the overall population in 1997 was 71.2% living in capital cities and other metropolitan centres, 12.5% in large and small rural areas and 16.3% in other rural and remote areas.
- Specialists represented 64.1% of medical practitioners working in private hospitals, but the medical occupation distribution varied by region. In capital cities, other metropolitan centres, large rural centres and small rural centres, specialists comprised 56.3% to 73.3% of the private hospital workforce. In other rural and remote areas, primary care practitioners were predominant in the private hospital medical workforce (66.1%).
- 83.7% of medical practitioners working in a private hospital had obtained their initial qualification in Australia, while the remainder had qualified in New Zealand (2.6%), the United Kingdom or Ireland (5.8%), Asian countries (3.9%), and other countries (4.0%).

The Australian Bureau of Statistics also collects data on salaried medical officers and other diagnostic and health professionals in private hospitals. These data are published in the *Private hospitals* series of publications, catalogue number 4390.0.

These data are for full-time-equivalent (FTE) staff and do not separate salaried medical officers from other diagnostic and health professionals.

From 1991–92 to 1996–97, FTE salaried medical officers and other diagnostic and health professionals increased by 75.5% in private acute and psychiatric hospitals – rising from 1,005 to 1,765. Over the same period, patient separations increased by 33.0% from 1.2 million to 1.5 million and patient days increased 19.7% from 4.9 million to 5.9 million, with a 10.0% reduction in the average stay from 4.2 days to 3.8 days.

Table 25: All medical practitioners working in private hospitals: occupation of main job and region, Australia, 1997

Occupation of main job	Capital city	Other metro centre	Large rural centre	Small rural centre	Other rural and remote areas	Total
<i>Clinician</i>	3,693	469	463	221	111	4,956
Primary care	652	113	90	69	74	998
Hospital non-specialist	267	46	23	8	2	345
Specialist	2,469	276	343	141	33	3,262
Specialist-in-training	305	34	7	3	2	352
<i>Non-clinician</i>	106	21	5	2	2	136
Administrator	24	3	2	0	0	29
Teacher/educator	6	3	0	0	0	9
Researcher	3	0	0	0	0	3
Public health physician	11	0	0	0	0	11
Occupational health physician	4	2	0	0	0	6
Other	58	12	4	2	2	78
Total	3,798	490	468	223	112	5,092
			(per cent)			
<i>Clinician</i>	97.2	95.7	98.8	99.2	98.4	97.3
Primary care	17.2	23.0	19.2	30.9	66.1	19.6
Hospital non-specialist	7.0	9.4	4.9	3.6	1.5	6.8
Specialist	65.0	56.3	73.3	63.2	29.3	64.1
Specialist-in-training	8.0	7.0	1.5	1.5	1.5	6.9
<i>Non-clinician</i>	2.8	4.3	1.2	0.8	1.6	2.7
Administrator	0.6	0.7	0.4	0.0	0.0	0.6
Teacher/educator	0.2	0.7	0.0	0.0	0.0	0.2
Researcher	0.1	0.0	0.0	0.0	0.0	0.1
Public health physician	0.3	0.0	0.0	0.0	0.0	0.2
Occupational health physician	0.1	0.4	0.0	0.0	0.0	0.1
Other	1.5	2.5	0.8	0.8	1.6	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

6 Rural and remote medical workforce

In 1997, there were 144.0 practising medical practitioners per 100,000 population employed in their main job in rural and remote areas compared with 142.8 in 1996. This compares with 306.2 per 100,000 population in metropolitan areas in 1997 and 308.2 per 100,000 population in 1996. Remedying this much lower level of medical workforce provision in rural and remote areas has been a planning priority for Commonwealth, State and local governments and medical professional bodies for many years and there are numerous incentive schemes to attract and retain doctors in rural areas.

In this chapter, characteristics of the medical workforce are analysed geographically using the 1994 rural, remote and metropolitan areas classification of the Department of Primary Industries and Energy and the Department of Health and Family Services.

In 1997, there were 7,717 medical practitioners who worked in a rural or remote area in their main job – 16.0% of all medical practitioners. This contrasts with the overall population distribution of 28.8% living in rural and remote areas in 1997. Features of these medical practitioners included the following.

Geographic distribution

- 2,984 (38.7%) worked in their main job in a large rural centre; 1,900 (24.6%) worked in a small rural centre; 2,200 (28.5%) worked in other rural areas; and the remaining 633 (8.2%) worked in remote areas.
- The 144.0 practising medical practitioners per 100,000 population in rural and remote areas varied across geographic region – 268.8 per 100,000 population in large rural centres; 156.9 in small rural centres; 89.0 in other rural areas; and 112.5 in remote areas. It also varied across States and Territories, from a high of 190.0 in the Northern Territory to a low of 99.3 in South Australia.
- In 1997, there were 108.5 primary care practitioners per 100,000 population in large rural centres (one practitioner per 1,151 population), 95.0 per 100,000 in small rural centres (one practitioner per 1,053 population), 76.8 per 100,000 in other rural areas (one per 1,303 population) and 71.7 per 100,000 population in remote areas (one per 1,395 population). In comparison, there were 121.4 primary care practitioners per 100,000 population in capital cities (one per 824 population) and 107.4 per 100,000 in other metropolitan areas (one per 931 population).
- In remote areas the lower provision of primary care practitioners is partially offset by a higher provision of non-specialist hospital doctors with 16.9 practitioners per 100,000 population (one practitioner per 5,917 population) in remote areas compared with 7.7 per 100,000 (one practitioner per 12,987 population) in small rural centres and 2.5 per 100,000 (one practitioner per 40,000 population) in other rural areas.

Sex

- 1,899 (24.6%) medical practitioners in the rural medical workforce were female. This proportion ranged from 21.9% in small rural areas to 30.4% in remote areas.

Occupation

- 60.4% of practitioners working mainly in rural and remote areas were employed in primary care; 25.9% were specialists; 7.7% were hospital non-specialists; 2.8% were specialists-in-training; and the remaining 3.3% were non-clinicians. In comparison, in metropolitan areas 39.2% of all medical practitioners were working in primary care; 34.4% were specialists; 9.6% were hospital non-specialists; 10.8% were specialists-in-training; and 6.0% were non-clinicians.
- The distribution of rural practitioners across occupation differed by gender. For males, 57.5% were employed in primary care and 30.8% were specialists; while 69.3% of females were employed in primary care and 11.1% were specialists.

Work setting in main job

- 73.8% of medical practitioners employed in rural and remote areas worked in their main job in private rooms; 19.9% worked in acute care hospitals; and the remaining 6.3% were employed in other work settings.
- The work setting differed across geographic region and reflected the occupation of the practitioners providing medical services in the regions. The proportion of practitioners working in private rooms increased from 56.6% in capital cities to 89.0% in other rural areas, and that in acute care hospitals declined from 32.8% to 7.7%. Remote areas had the lowest proportion working from private rooms (51.5%), with 25.0% working in acute care hospitals and 12.1% working in an Aboriginal health service.

Hours worked

- Medical practitioners employed in rural and remote areas worked an average of 49.6 hours per week compared with 47.2 hours per week in metropolitan areas. This average was higher in remote areas (50.4 hours) as 87.5% of doctors in remote areas were working full-time (35 hours or more per week).

Overseas graduates

- 23.5% of rural and remote medical practitioners in 1997 had gained their initial qualification overseas – the proportion ranged from 20.7% in other rural areas to 30.6% in remote areas.
- Of rural and remote medical practitioners who gained their initial qualification overseas, 58.3% qualified in the United Kingdom or Ireland, 16.0% in Asia, 9.3% in New Zealand, and the remaining 16.5% in other countries.

Table 26: Medical practitioners: selected characteristics and region of main job, Australia, 1997

Selected characteristics	Geographic location of main job						Total	Metro areas	Rural & remote areas
	Capital city	Other metro area	Large rural centre	Small rural centre	Other rural area	Remote area			
Sex									
Male	26,269	2,684	2,230	1,483	1,664	441	34,772	28,954	5,818
Female	10,833	817	754	417	536	192	13,549	11,650	1,899
% female	29.2	23.3	25.3	21.9	24.4	30.4	28.0	28.7	24.6
Occupation of main job									
Primary care practitioner	14,387	1,511	1,206	1,152	1,898	404	20,557	15,898	4,659
Hospital non-specialist	3,480	404	341	93	61	95	4,475	3,884	591
Specialist	12,843	1,149	1,173	558	193	76	15,992	13,992	2,000
Specialist-in-training	4,095	307	144	33	15	23	4,617	4,402	215
Non-clinician	2,297	131	120	64	32	35	2,680	2,428	252
Age (years)									
Less than 35	9,566	800	580	255	344	196	11,742	10,367	1,375
35–44	10,563	1,047	1,018	665	799	235	14,328	11,610	2,718
45–54	8,841	877	757	540	546	107	11,667	9,718	1,950
55–64	4,815	466	396	262	293	60	6,291	5,281	1,010
65 and over	3,317	311	234	178	218	34	4,292	3,628	664
% aged 65 and over	8.9	8.9	7.8	9.4	9.9	5.4	8.9	8.9	8.6
Average age	45.4	45.4	45.1	47.0	46.7	42.1	45.3	45.4	45.8
Hours worked per week									
Less than 20	2,717	201	194	113	168	36	3,429	2,919	511
20–34	4,630	397	280	198	259	43	5,807	5,027	780
35–49	11,454	1,043	808	526	523	188	14,541	12,496	2,045
50–64	13,481	1,358	1,265	731	821	249	17,906	14,839	3,067
65–79	3,442	350	333	224	303	78	4,730	3,792	937
80 and over	1,379	152	104	109	126	39	1,908	1,531	378
% employed full-time	80.2	82.9	84.1	83.6	80.6	87.5	80.9	80.4	83.3
Average hours worked	47.0	48.4	48.9	50.1	49.7	50.4	47.5	47.2	49.6
Work setting of main job									
Private rooms	20,990	2,087	1,931	1,481	1,958	326	28,773	23,077	5,696
Acute care hospital	12,170	1,107	887	319	170	158	14,811	13,277	1,534
Residential	113	22	4	3	1	2	145	135	10
Aboriginal health service	132	8	16	11	5	77	248	140	108
Non-residential facility	938	104	69	38	47	27	1,222	1,042	180
Educational institution	1,090	82	14	6	0	5	1,196	1,172	24
Defence forces	175	23	12	4	8	2	224	198	26
Other government	807	20	22	19	4	14	886	827	59
Other	687	49	30	20	7	23	817	737	81
Country of initial qualification									
Australia	29,647	2,725	2,306	1,412	1,744	439	38,273	32,372	5,901
New Zealand	844	121	76	43	24	26	1,134	965	169
UK/Ireland	2,539	293	398	278	273	109	3,891	2,832	1,059
Asia	2,388	236	93	83	84	30	2,914	2,624	290
Other countries	1,683	127	111	85	74	29	2,110	1,811	299
Residency status									
Australian citizen	34,237	3,178	2,671	1,696	2,040	521	44,342	37,414	6,928
Not an Australian citizen									
Permanent resident	2,571	269	236	175	151	62	3,463	2,840	623
Not a permanent resident	295	55	78	29	10	50	516	350	166
Medical practitioners per 100,000 population									
	313.0	248.8	268.3	156.7	89.0	112.4	259.5	306.2	144.0
Total	37,102	3,502	2,984	1,900	2,200	633	48,321	40,604	7,717

Table 27: Per cent of clinician practitioners who were female: occupation, region of main job and age, Australia, 1997

Occupation/ region of main job	Age (years)					Total
	<35	35–44	45–54	55–64	65+	
Primary care practitioner						
Capital city	54.3	44.4	29.3	17.6	12.8	35.2
Other metropolitan centre	49.0	36.7	21.6	11.9	6.3	26.6
Large rural centre	52.0	38.1	27.1	17.2	8.1	32.6
Small rural centre	41.2	30.7	22.8	14.7	7.7	26.3
Other rural area	52.3	27.5	16.4	14.7	13.2	25.7
Remote areas	57.7	30.2	10.6	18.6	20.5	32.6
<i>Total</i>	53.2	40.4	26.9	16.7	11.8	33.0
Hospital non-specialist						
Capital city	41.3	45.3	47.8	43.9	55.7	42.2
Other metropolitan centre	46.2	33.3	33.4	60.2	0.0	43.5
Large rural centre	52.9	40.8	43.4	33.2	57.9	49.5
Small rural centre	52.5	0.0	0.0	0.0	0.0	26.8
Other rural area	13.4	23.7	46.7	0.0	0.0	18.0
Remote areas	37.7	28.9	14.2	29.4	0.0	33.0
<i>Total</i>	42.3	40.7	41.9	40.1	43.7	42.0
Specialist						
Capital city	37.7	23.9	14.4	10.0	6.3	16.9
Other metropolitan centre	24.1	13.9	6.6	5.3	10.3	9.8
Large rural centre	26.0	13.4	8.8	7.7	1.8	10.1
Small rural centre	30.2	17.8	6.7	3.6	6.7	9.9
Other rural area	61.1	27.9	9.2	4.1	0.0	11.3
Remote areas	79.8	15.0	10.6	5.1	38.6	20.2
<i>Total</i>	36.8	22.1	13.0	9.1	6.5	15.6
Specialist-in-training						
Capital city	34.5	30.1	48.6	0.0	0.0	34.1
Other metropolitan centre	35.8	17.8	20.3	0.0	0.0	31.6
Large rural centre	27.5	25.3	100.0	0.0	0.0	27.7
Small rural centre	38.5	50.0	0.0	0.0	0.0	50.3
Other rural area	69.4	50.0	0.0	0.0	0.0	47.4
Remote areas	45.5	40.0	0.0	0.0	0.0	5.6
<i>Total</i>	34.5	28.6	45.6	0.0	0.0	33.8
Total						
Capital city	42.1	34.8	22.5	13.6	9.9	29.0
Other metropolitan centre	42.8	26.1	14.5	9.5	7.6	23.3
Large rural centre	46.0	28.1	17.3	11.6	7.1	25.1
Small rural centre	43.6	26.5	16.2	9.1	7.3	21.8
Other rural area	48.7	27.3	15.8	12.3	11.8	24.4
Remote areas	49.8	26.9	10.7	13.9	27.0	30.1
Total	42.7	32.7	20.8	12.9	9.7	27.8

7 Aboriginal health service employment

Australia's Aboriginal and Torres Strait Islander peoples experience much poorer health than the general population, and have a life expectancy at birth more than 15 years less than for other Australians (AIHW 1998, pp. 28–34).

In 1997, AIHW and the National Centre for Epidemiology and Population Health conducted the first comprehensive analysis of expenditure on health services for Aboriginal and Torres Strait Islander peoples. This found that Indigenous peoples receive health services through Medicare and the Pharmaceutical Benefits Scheme at only one-quarter of the rate per person for other Australians. Offsetting this to some extent are services from Indigenous health organisations.

In the work setting question in the AIHW annual national medical labour force survey, doctors are asked to identify whether they are employed in an Aboriginal health service in their main or a second or third job. This chapter presents data on the characteristics of doctors who identified that they were employed in an Aboriginal health service. The AIHW survey did not collect data on the Aboriginality of these doctors because the number of Aboriginal and Torres Strait Islander medical practitioners was too small to protect practitioner confidentiality in tabulations. At the 1996 population census, there were 29 general medical practitioners, 12 medical practitioners in training, 20 specialists and also 21 medical administrators who identified as Aboriginal or Torres Strait Islander. The specialists included five pathologists and four surgeons.

There were 522 medical practitioners in 1997 who indicated that the employment setting of their main, second or third job was an Aboriginal health service. Features of these medical practitioners are shown below.

Geographic distribution

- The way in which health services are provided to Indigenous people, including the extent to which Aboriginal health service organisations are used, varies among the States and Territories. Hence, the distribution of Aboriginal health service clinicians in some States and Territories differed significantly from the distribution of the Indigenous population: 12.3% of these clinicians were in Queensland with 27.3% of the Indigenous population; 15.9% were in Victoria with 5.8% of the population. The other States and Territories had approximately the same proportion of Aboriginal health service clinicians as of Indigenous population.
- 63.0% of Aboriginal health service medical practitioners were located in metropolitan areas where 36.2% of the Indigenous population was located.

Sex

- 174 (33.3%) of the 522 medical practitioners employed in an Aboriginal health service were female. The female proportion was between 28% and 34% across all States and Territories except the Northern Territory (42.7%) and Western Australia (38.9%).

Occupation

- 51.3% of Aboriginal health service medical practitioners were primary care practitioners; 36.4% were specialists; 4.3% were specialists-in-training; 2.8% were hospital non-specialists; and the remaining 5.1% worked in a non-clinical field including administration and education.

Age

- The average age of these medical practitioners was 42.5 years. This average varied across States and Territories, from a high of 51.1 years in Tasmania to a low of 40.0 years in New South Wales.

Hours worked

- Medical practitioners in an Aboriginal health service worked an average of 22.0 hours per week mainly because only 41.8% of these doctors were working in such a service as their main job. Average hours worked varied among States and Territories, from a low of 11.9 hours per week in Tasmania to a high of 28.3 hours per week in the Northern Territory. Most practitioners (68.0%) worked fewer than 35 hours a week in the Aboriginal health service.

Overseas graduates

- 83.9% of Aboriginal health service medical practitioners had gained their initial qualification in Australia. Of those who had gained an initial qualification overseas, 52.7% qualified in the United Kingdom or Ireland.

Aboriginal health service as a main job

- There were 218 medical practitioners who worked in an Aboriginal health service in their main job in 1997. Of these:
 - 41.9% were female.
 - 65.3% were primary care practitioners; 18.3% were specialists; 2.8% were hospital non-specialists; 6.3% were specialists-in-training; and the remaining 7.3% worked in a non-clinical field including administration and education.
 - The average age of these medical practitioners was 39.6 years.
 - 58.5% were employed in their main job as an Aboriginal health service medical practitioner in a metropolitan area.
 - Most medical practitioners whose main job was in an Aboriginal health service (63.3%) worked 35 or more hours per week. The average was 37.0 hours per week in 1996.
 - 80.8% of medical practitioners working in an Aboriginal health service in their main job had gained their initial qualification in Australia. Of those who initially qualified overseas, 52.4% had qualified in the United Kingdom or Ireland.

Table 28: Medical practitioners employed in an Aboriginal health service^(a): selected characteristics, States and Territories, 1997

Selected characteristics	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total	%
Occupation										
<i>Clinician</i>	139	81	64	43	74	14	68	12	496	94.9
Primary care practitioner	62	33	37	23	43	9	54	6	268	51.3
Hospital non-specialist	7	0	3	0	2	0	3	0	15	2.8
Specialist	59	44	20	19	27	5	11	6	190	36.4
Specialist-in-training	11	4	4	1	2	0	0	0	22	4.3
Non-clinician	9	2	0	2	8	0	5	0	27	5.1
Geographic location										
Metropolitan	121	59	41	28	41	7	20	12	329	63.0
Non-metropolitan	27	24	24	17	41	7	54	0	193	37.0
% metropolitan	82.0	71.4	62.9	63.0	50.1	48.3	26.6	100.0	63.0	..
Sex										
Males	107	56	43	32	50	11	42	8	348	66.7
Females	41	27	22	13	32	3	32	4	174	33.3
% female	28.0	32.7	33.6	28.6	38.9	22.4	42.7	37.0	33.3	..
Age (years)										
Average age	40.0	45.3	43.7	47.9	40.7	51.1	40.7	44.1	42.5	..
Less than 35	21	13	11	4	12	0	26	3	92	17.5
35–44	60	36	23	18	37	6	32	2	214	41.1
45–54	45	21	17	12	18	3	8	6	129	24.7
55 and over	21	14	12	11	15	5	8	1	87	16.7
Hours worked per week										
Average hours worked	23.1	14.9	17.1	19.3	29.1	11.9	28.3	16.6	22.0	..
Less than 20	73	46	37	22	27	11	26	8	249	47.8
20–34	22	26	8	11	18	2	15	3	105	20.2
35–49	24	9	14	6	18	2	20	0	94	18.0
50–64	21	0	5	3	14	0	13	2	58	11.1
65–79	6	2	0	2	4	0	0	0	14	2.7
80 and over	2	0	0	0	0	0	0	0	2	0.3
% employed full-time	35.5	13.8	30.0	25.0	44.9	11.2	44.7	12.6	32.1	..
Country of initial qualification										
Australia	127	75	53	42	64	11	59	8	438	83.9
New Zealand	8	0	0	0	0	0	2	2	11	2.2
UK/Ireland	4	6	4	0	14	2	12	3	44	8.5
Asia	4	0	0	3	2	0	2	0	10	2.0
Other countries	5	2	7	0	2	2	0	0	18	3.5
Residency status										
Australian citizen	136	81	51	45	68	12	64	11	468	89.6
Not Australian citizen										
Permanent resident	11	2	8	0	6	2	6	2	37	7.0
Not permanent resident	1	0	5	0	8	0	3	0	18	3.4
Total	148	83	64	45	82	14	74	12	522	100.0
Practitioners per 100,000 Indigenous pop. ^(b)										
	131.9	362.1	59.8	199.1	143.1	89.5	139.9	382.6	132.5	..

(a) All medical practitioners who reported working in an Aboriginal health service in a main, second or third job.

(b) These figures should be used with caution, as they have not been converted to full-time equivalents.

8 Migration of medical practitioners to and from Australia

Overseas-trained doctors (OTDs) have contributed greatly to the supply of medical practitioners in Australia, both as permanent additions to the workforce and as temporary residents. There were 9,873 overseas-trained doctors in the Australian medical workforce in 1997, representing 20.4% of the 48,321 employed medical practitioners.

During the last decade, monitoring of the numbers and distribution of the overseas-trained workforce has taken on increased importance.

- Because the medical workforce had been increasing at a much faster rate than population growth, national medical workforce policy since 1992 has been to restrict permanent net additions to the Australian workforce of OTDs to around 200 per year. Changes in government policy during 1999 are to allow limited additional numbers of permanent resident overseas-trained doctors, with recognised skills, to practise in designated rural areas.
- State health authorities during the 1990s have made increasing use of temporary resident overseas-trained doctors (TRDs) to fill positions in hospitals, general practice and locum services.
- There were 9,873 OTDs in 1997, of whom 1,136 had obtained their initial qualification in New Zealand (11.5%), with a further 3,824 graduates from the United Kingdom or Ireland (38.7%), 2,829 from Asia (28.7%) and the remaining 2,084 from other countries (21.1%).
- These proportions varied across States and Territories. More than one in four medical practitioners working in Western Australia, Northern Territory and Tasmania obtained their initial qualification overseas. In Western Australia and Tasmania, 18.8% and 16.7% respectively, qualified in the United Kingdom or Ireland. In the Northern Territory, 13.7% of medical practitioners had obtained their initial qualification from Asia, compared with the national average of 5.9%.

8.1 Overseas-trained Australian citizen or permanent resident medical practitioners

- 44,396 (91.9%) employed medical practitioners were Australian citizens, 3,414 (7.1%) were non-citizen permanent residents of Australia and the remaining 511 (1.1%) were temporary residents.
- Of the 44,396 practitioners who were Australian citizens, 37,076 (83.5%) were trained in Australia and 7,319 (16.5%) were trained overseas. The 7,319 practitioners who were overseas-trained had an occupation and age profile which differed from the occupation and age profile of the Australian trained doctors who were citizens:
 - 53.6% were employed in primary care and 31.5% were specialists compared with 40.7% and 33.7% respectively of the Australian-trained practitioners.

- The average age of the overseas-trained (except for those from New Zealand) was greater than the Australian-trained for all occupations and was between six and 10 years greater for those trained in Asia.
- 37.6% had initially qualified in the United Kingdom or Ireland, 32.0% in Asia, 6.3% in New Zealand and 24.1% in other countries.
- Of the 3,414 non-citizen permanent resident medical practitioners, 1,307 (38.3%) had obtained their initial qualification in Australia and 2,107 (61.7%) had trained overseas. Of those who were overseas-trained:
 - 42.1% were employed in primary care, 31.9% were specialists, 10.6% were hospital non-specialists, 9.4% were specialists-in-training and the remaining 5.9% were non-clinicians. This was a similar occupation profile to the Australian-trained citizens.
 - 39.7% had initially qualified in the United Kingdom or Ireland, 27.8% in New Zealand, 20.7% in Asia and 11.7% in other countries.
 - 78.4% were employed in their main job in metropolitan areas, 19.9% in a rural area and 1.8% in a remote area.
- Permanent resident overseas-trained medical practitioners were more likely to work in a rural or remote area if graduates from the United Kingdom or Ireland (28.9% worked in rural areas and 2.6% in remote areas), compared with those who had qualified in Asia initially (10.5% in rural areas and 0.7% in remote areas) or New Zealand (12.8% and 1.2% respectively).

Table 29: Employed medical practitioners: occupation and country of initial qualification, States and Territories, 1997

Occupation/country of initial qualification	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total	%
Primary care										
Australia	5,061	4,273	2,768	1,468	1,221	401	143	318	15,653	76.1
New Zealand	99	43	68	15	36	4	8	15	288	1.4
UK/Ireland	428	330	424	90	353	122	27	40	1,813	8.8
Asia	901	353	61	186	136	7	19	20	1,682	8.2
Other countries	637	230	118	32	65	37	2	2	1,122	5.5
<i>Total</i>	<i>7,125</i>	<i>5,229</i>	<i>3,440</i>	<i>1,790</i>	<i>1,810</i>	<i>571</i>	<i>198</i>	<i>395</i>	<i>20,557</i>	<i>100.0</i>
Hospital non-specialist										
Australia	1,557	516	757	293	359	101	65	79	3,728	83.3
New Zealand	67	7	41	10	20	0	6	5	156	3.5
UK/Ireland	22	14	133	8	62	4	3	2	248	5.5
Asia	103	20	24	2	0	4	17	15	186	4.2
Other countries	64	18	41	12	17	4	0	0	157	3.5
<i>Total</i>	<i>1,814</i>	<i>576</i>	<i>996</i>	<i>325</i>	<i>458</i>	<i>113</i>	<i>91</i>	<i>101</i>	<i>4,475</i>	<i>100.0</i>
Specialist										
Australia	4,510	3,688	2,031	1,218	978	230	74	225	12,953	81.0
New Zealand	143	108	99	56	54	10	9	11	489	3.1
UK/Ireland	308	217	292	102	240	53	2	32	1,244	7.8
Asia	295	191	69	80	48	17	18	7	724	4.5
Other countries	279	93	83	32	68	19	3	6	582	3.6
<i>Total</i>	<i>5,534</i>	<i>4,296</i>	<i>2,573</i>	<i>1,487</i>	<i>1,386</i>	<i>328</i>	<i>106</i>	<i>280</i>	<i>15,992</i>	<i>100.0</i>
Specialist-in-training										
Australia	1,451	1,121	616	401	298	77	30	58	4,052	87.8
New Zealand	68	16	11	12	13	2	2	3	126	2.7
UK/Ireland	39	31	73	6	53	4	2	2	210	4.5
Asia	43	24	24	4	6	0	4	3	108	2.3
Other countries	43	13	34	8	19	4	0	0	121	2.6
<i>Total</i>	<i>1,644</i>	<i>1,205</i>	<i>758</i>	<i>430</i>	<i>389</i>	<i>86</i>	<i>39</i>	<i>66</i>	<i>4,617</i>	<i>100.0</i>
Non-clinician										
Australia	719	492	310	184	188	45	20	105	2,063	77.0
New Zealand	20	20	12	13	7	0	0	6	78	2.9
UK/Ireland	59	53	36	18	117	12	4	10	309	11.5
Asia	53	28	6	6	18	1	5	9	128	4.8
Other countries	52	20	9	3	8	6	0	5	102	3.8
<i>Total</i>	<i>904</i>	<i>612</i>	<i>373</i>	<i>224</i>	<i>338</i>	<i>64</i>	<i>30</i>	<i>134</i>	<i>2,680</i>	<i>100.0</i>
Total										
Australia	13,298	10,090	6,482	3,563	3,044	854	333	785	38,448	79.6
New Zealand	397	193	230	105	129	16	24	40	1,136	2.4
UK/Ireland	855	645	958	223	825	194	37	86	3,824	7.9
Asia	1,395	615	185	278	208	30	64	54	2,829	5.9
Other countries	1,076	375	284	88	176	69	5	12	2,084	4.3
Total	17,021	11,918	8,139	4,258	4,382	1,163	463	977	48,321	100.0

Table 30: Permanent resident overseas-trained medical practitioners: occupation, country of initial qualification and region, Australia, 1997

Occupation/ country of initial qualification	Region of main job						Total
	Capital city	Other metro centre	Large rural centre	Small rural centre	Other rural area	Remote zone	
Primary care							
New Zealand	97	15	8	12	11	3	146
UK/Ireland	221	38	50	43	68	18	438
Asia	201	12	3	6	6	0	228
Other countries	46	7	3	4	11	3	74
<i>Total</i>	<i>566</i>	<i>72</i>	<i>64</i>	<i>64</i>	<i>97</i>	<i>24</i>	<i>887</i>
Hospital non-specialist							
New Zealand	66	22	11	0	0	0	100
UK/Ireland	17	0	13	4	2	2	38
Asia	48	3	7	0	0	0	58
Other countries	22	2	2	2	0	0	28
<i>Total</i>	<i>153</i>	<i>28</i>	<i>33</i>	<i>6</i>	<i>2</i>	<i>2</i>	<i>225</i>
Specialist							
New Zealand	173	30	20	6	0	2	230
UK/Ireland	183	17	25	16	3	0	244
Asia	62	7	8	8	6	3	95
Other countries	67	9	12	10	3	3	104
<i>Total</i>	<i>485</i>	<i>63</i>	<i>65</i>	<i>40</i>	<i>12</i>	<i>7</i>	<i>672</i>
Specialist-in-training							
New Zealand	50	15	2	0	3	2	72
UK/Ireland	59	2	4	0	0	0	65
Asia	31	5	0	0	0	0	35
Other countries	18	3	5	0	0	0	27
<i>Total</i>	<i>158</i>	<i>25</i>	<i>11</i>	<i>0</i>	<i>3</i>	<i>2</i>	<i>199</i>
Non-clinician							
New Zealand	35	0	2	2	0	0	38
UK/Ireland	26	9	9	6	0	2	52
Asia	14	5	0	2	0	0	21
Other countries	12	0	0	0	2	0	14
<i>Total</i>	<i>87</i>	<i>14</i>	<i>11</i>	<i>9</i>	<i>2</i>	<i>2</i>	<i>125</i>
Total							
New Zealand	421	83	42	19	14	7	586
UK/Ireland	506	67	100	68	74	22	837
Asia	356	32	18	16	12	3	437
Other countries	166	21	22	17	16	6	247
Total	1,449	202	183	120	116	37	2,107

8.2 International migration by medical practitioners

The Department of Immigration and Multicultural Affairs provides medical practitioner international migration data. The features of these data included the following.

Visas issued

- 290 visas were issued in 1997–98 to persons holding medical qualifications who were permanently migrating to Australia – a decrease of 34.5% on the number issued in 1996–97. The majority of these visas (55.2%) were issued under the ‘preferential family’ category.
- 15.5% of these visas were issued to residents of the People’s Republic of China, a further 26.9% were issued to residents of other Asian countries and 14.8% to residents of the United Kingdom or Ireland.

Permanent migration

- 358 medical practitioners who were citizens of foreign countries permanently migrated to Australia in 1997–98. Of these 32.4% had previously resided in Asia, 19.3% in New Zealand, and 12.3% in the United Kingdom or Ireland.
- During the same year, 173 medical practitioners permanently migrated from Australia, of whom 30.0% went to Asia, 26.6% to the United Kingdom or Ireland, and 22.0% to New Zealand.

Australian Medical Council approvals

A significant source of permanent additions to the Australian medical workforce is overseas-trained medical practitioners who have permanent resident status and who have gained full or conditional eligibility to practise by meeting examination and other requirements of the Australian Medical Council (AMC).

In 1998, a total of 180 permanent resident overseas-trained medical practitioners passed the AMC’s clinical examination and were eligible for registration. A further 53 overseas-trained specialists qualified for registration after recognition of their qualifications by a specialist College and the AMC.

Temporary migration for employment

- 1,703 medical practitioners who were citizens of foreign countries arrived in Australia temporarily in 1997–98 to take up employment – 546 for a long-term stay and 1,167 for a short-term stay. Of these, 65.3% had previously resided in the United Kingdom or Ireland and 7.4% in New Zealand.
- This arrival of temporary resident doctors was a 5.3% increase on 1996–97 which had a 65.9% increase on the 980 in 1995–96, despite changes in access by TRDs to rendering of Medicare services introduced in late 1996.
- Occupational trainees represented 23.1% of the 1,713 TRDs entering Australia in 1997–98 and these make a significant contribution to the hospital workforce in New South Wales and South Australia where they were 37.9% and 84.2% respectively of the arriving TRDs.

- 984 (55.7%) of the arriving TRDs were on medical practitioner visas for area of need positions and 56.3% of the practitioners on this type of visa were intending to stay in Queensland, 13.8% in Victoria and 12.4% in Western Australia.
- 89.6% of the TRDs arriving in Queensland, 59.3% of those in Western Australia and 48.7% of those in Victoria were on visas for area need positions as were around 75% or more of those arriving in Tasmania, the Northern Territory and the Australian Capital Territory.
- Temporary resident doctors arriving in Australia intended to stay for an average of 0.98 of a year.
- It was estimated that 1,652 temporary resident doctors were in Australia at any point in time in 1997.
- 797 medical practitioners who were Australian citizens or permanent residents of Australia returned after a long-term (12 months or more) overseas stay. Of these, 33.8% had been staying in the United Kingdom or Ireland, 27.2% in Asia and 18.4% in the United States of America or Canada.
- 430 Australian citizen or permanent resident medical practitioners left Australia during 1996-97 to take up employment overseas on a long-term basis. Of these, 37.9% were intending to work in the United Kingdom or Ireland, 23.7% in Asia, 20.5% in the United States of America or Canada and 3.7% in New Zealand.
- 824 foreign medical practitioners who had been residing temporarily in Australia for 12 months or more departed from Australia, of whom 40.7% went to the United Kingdom or Ireland.

Temporary resident doctors

Of the 1,713 temporary resident doctors who entered Australia for employment in 1997-98 most entered for a stay of less than 12 months and were not included in the AIHW labour force survey. Therefore the estimates below refer to temporary resident doctors who were re-registering for practice at the general renewal of registration in late 1997.

Of the 511 temporary resident medical practitioners, 446 (87.2%) had trained overseas. Of those who were overseas-trained:

- 20.4% were employed in primary care, 41.6% were hospital non-specialists, 13.3% were specialists, 21.1% were specialists-in-training and the remaining 3.6% were non-clinicians;
- 52.9% had obtained their initial qualification in the United Kingdom or Ireland, 19.8% in New Zealand, 10.5% in Asia and 16.6% in other countries;
- 64.1% worked in their main job in a metropolitan area, 25.1% in a rural area and 10.8% in a remote area; and
- 73.0% practised in acute care hospitals in their main job and 16.9% from private rooms.

Table 31: Permanent migration of medical practitioners to and from Australia, 1992–93 to 1997–98

	1992–93	1993–94	1994–95	1995–96	1996–97	1997–98	Total 1992–98	% 1992–98
Permanent migration to Australia of overseas residents								
Country of previous residence								
New Zealand	39	49	74	71	63	69	365	12.3
Other Oceania	7	5	6	6	5	3	32	1.1
UK/Ireland	105	85	119	87	71	44	511	17.2
Other Europe	103	55	81	63	59	37	398	13.4
Middle East	11	15	22	24	17	16	105	3.5
Hong Kong	46	28	31	30	33	7	175	5.9
China	25	42	58	186	119	45	475	16.0
Other Asia	96	100	110	93	72	71	542	18.3
USA/Canada	13	19	13	25	13	19	102	3.4
South Africa	12	17	26	16	32	29	132	4.4
Other Africa	21	21	14	19	16	13	104	3.5
Other countries	2	9	4	6	0	5	26	0.9
Total	480	445	558	626	500	358	2,967	100.0
Permanent migration from Australia of Australian residents								
Country of future residence								
New Zealand	29	34	52	49	51	38	253	27.3
Other Oceania	1	1	0	2	2	0	6	0.6
UK/Ireland	37	31	41	32	37	46	224	24.2
Other Europe	6	9	7	6	4	8	40	4.3
Middle East	6	10	4	3	8	6	37	4.0
Asia	29	37	36	29	41	52	224	24.2
USA/Canada	22	25	13	27	15	21	123	13.3
Other countries	3	4	1	5	4	2	19	2.1
Total	133	151	154	153	162	173	926	100.0
Net permanent immigration								
Country of residence								
New Zealand	10	15	22	22	12	31	112	5.5
Other Oceania	6	4	6	4	3	3	26	1.3
UK/Ireland	68	54	78	55	34	-2	287	14.1
Other Europe	97	46	74	57	55	29	358	17.5
Middle East	5	5	18	21	9	10	68	3.3
Asia	138	133	163	280	183	71	968	47.4
USA/Canada	-9	-6	0	-2	-2	-2	-21	-1.0
Other countries	32	43	43	36	44	45	243	11.9
Total	347	294	404	473	338	185	2,041	100.0

Source: AIHW from Department of Immigration and Multicultural Affairs data.

Table 32: Australian Medical Council examination results: 1992–98

	1992	1993	1994	1995	1996	1997	1998
Overseas-trained doctors entering through the general registration pathway							
MCQ examination							
Number of candidates presenting	921	812	619	688	858	1,081	540
Number passing/eligible to proceed to clinical examination	298	217	218	220	392	363	264
Clinical examination							
Number of exams conducted	570	439	380	482	512	475	448
Number passing AMC exam and eligible for registration	238	194	212	262	226	222	180
Overseas-trained specialists entering through the AMC/specialist college pathway^(a)							
Number of applications received	264 ^(b)	147	139	174	175	175	167
Number rejected	67 ^(b)	3	10	7	5	3	7
Total qualified for registration	50 ^(b)	10	23	55	63	43	53
Total overseas-trained doctors entering the workforce	295^(c)	203	234	277	289	265	233

(a) 1997 figures are pro-rata estimates of data to July 1998.

(b) Data for the period 1990–92.

(c) Includes AMC/specialist college pathway data for the period 1990–92.

Notes:

1. The total number of examinations conducted is a factor of the number of clinical examination places that the AMC is able to arrange in any one year. In 1993 the number of places was reduced from a target of 600 per year to 400 per year as a result of constraints on the clinical resources used for AMC clinical examinations.
2. A three-year limit for AMC clinical examination came into force on 1 January 1995 for those who passed the multiple choice questionnaire examination.
3. From 1996 the AMC ceased to conduct the multiple choice questionnaire examination overseas.

Source: Australian Medical Council.

Table 33: Temporary migration of non-Australian medical practitioners to and from Australia for employment: type of migration and country of previous or future residence, 1992–93 to 1997–98

	1992–93	1993–94	1994–95	1995–96	1996–97	1997–98	% 1997–98
Migration to Australia for long-term stay							
Country of previous residence							
New Zealand	50	48	63	41	65	53	9.7
UK/Ireland	148	193	241	278	325	341	62.5
Asia	25	32	37	37	56	54	9.9
South Africa	1	3	7	11	33	47	8.6
Other countries	17	22	28	45	49	51	9.3
<i>Total</i>	<i>241</i>	<i>298</i>	<i>376</i>	<i>412</i>	<i>528</i>	<i>546</i>	<i>100.0</i>
Migration to Australia for short-term stay							
Country of previous residence							
New Zealand	52	57	49	56	58	74	6.3
UK/Ireland	334	444	641	277	793	778	66.7
Asia	25	38	46	37	57	103	8.8
USA/Canada	8	25	36	164	111	100	8.6
South Africa	0	3	14	20	50	54	4.6
Other countries	7	28	9	14	29	58	5.0
<i>Total</i>	<i>426</i>	<i>595</i>	<i>795</i>	<i>568</i>	<i>1,098</i>	<i>1,167</i>	<i>100.0</i>
Migration from Australia of temporary visitors after a long-term stay							
Country of future residence							
New Zealand	18	32	20	22	30	49	5.9
Other Oceania	14	9	17	17	20	12	1.5
UK/Ireland	187	161	192	269	265	335	40.7
Other Europe	18	31	35	41	55	49	5.9
Malaysia	32	26	35	31	32	36	4.4
China	38	31	39	39	46	60	7.3
Japan	15	31	25	19	25	24	2.9
Other Asia	83	76	82	124	139	158	19.2
USA/Canada	10	21	17	16	32	35	4.2
South Africa	2	2	4	2	13	26	3.2
Other countries	14	15	14	25	27	40	4.9
<i>Total</i>	<i>431</i>	<i>435</i>	<i>480</i>	<i>605</i>	<i>684</i>	<i>824</i>	<i>100.0</i>

Source: AIHW from Department of Immigration and Multicultural Affairs data.

Table 34: Medical practitioners temporarily migrating to Australia for employment: type of visa and intended duration of stay, States and Territories, 1997-98

Type of visa	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total	%
Duration of stay										
422 Medical practitioner										
0-6 months	10	0	216	0	39	2	10	0	277	29.2
7-11 months	44	74	10	0	0	0	0	15	143	15.1
1 year	26	34	157	4	62	15	7	4	309	32.6
13-17 months	3	10	130	1	13	3	3	0	163	17.2
1.5-2 years	3	9	18	5	3	4	4	1	47	5.0
More than 2 years	0	4	3	1	1	0	0	0	9	0.9
Total	86	131	534	11	118	24	24	20	948	100.0
442 Occupational trainee										
0-6 months	0	12	0	10	39	0	0	0	61	15.5
7-11 months	9	0	0	60	0	0	0	0	69	17.5
1 year	99	40	12	41	2	0	2	1	197	50.0
13-17 months	16	7	0	9	0	1	0	0	33	8.4
1.5-2 years	23	1	0	3	0	0	0	0	27	6.9
More than 2 years	7	0	0	0	0	0	0	0	7	1.8
Total	154	60	12	123	41	1	2	1	394	100.0
New Zealand citizen										
0-6 months	0	0	0	0	0	0	0	0	0	0.0
7-11 months	0	0	0	0	0	0	0	0	0	0.0
1 year	27	14	13	3	3	3	1	0	64	66.7
13-17 months	1	1	0	0	1	0	0	0	3	3.1
1.5-2 years	7	6	0	4	3	1	0	0	21	21.9
More than 2 years	2	2	3	0	1	0	0	0	8	8.3
Total	37	23	16	7	8	4	1	0	96	100.0
Other business visas										
0-6 months	0	39	26	0	0	0	0	0	65	24.5
7-11 months	59	0	0	0	26	0	0	0	85	32.1
1 year	47	5	6	1	2	1	1	2	65	24.5
13-17 months	7	1	1	0	2	0	0	0	11	4.2
1.5-2 years	12	7	0	1	1	1	1	3	26	9.8
More than 2 years	4	3	1	3	1	0	0	1	13	4.9
Total	129	55	34	5	32	2	2	6	265	100.0
Total										
0-6 months	10	51	242	10	78	2	10	0	403	23.7
7-11 months	112	74	10	60	26	0	0	15	297	17.4
1 year	199	93	188	49	69	19	11	7	635	37.3
13-17 months	27	19	131	10	16	4	3	0	210	12.3
1.5-2 years	45	23	18	13	7	6	5	4	121	7.1
More than 2 years	13	9	7	4	3	0	0	1	37	2.2
Total	406	269	596	146	199	31	29	27	1,703	100.0
(average duration of intended stay)										
422 Medical practitioner	0.75	0.96	0.90	1.61	0.89	1.12	0.91	0.98	0.91	..
442 Occupational trainee	1.25	0.87	1.00	0.83	0.52	1.08	1.00	1.00	0.98	..
New Zealand citizens	1.34	1.49	1.50	1.57	1.57	1.25	1.00	0.00	1.43	..
Other business visas	1.07	0.90	0.71	2.45	0.89	1.25	1.50	1.72	1.01	..
Total	1.10	0.98	0.92	0.98	0.84	1.14	0.99	1.22	0.98	..
(expected number of TRDs in Australia at a point in time)										
422 Medical practitioner	64	126	481	18	105	27	22	20	863	..
442 Occupational trainee	192	52	12	102	21	1	2	1	384	..
New Zealand citizens	50	34	24	11	13	5	1	0	137	..
Other business visas	137	49	24	12	28	2	3	10	267	..
Total	444	262	542	143	168	35	28	31	1,652	..

Note: Expected number of TRDs in Australia at a point in time has been calculated by multiplying the number of TRDs entering Australia in 1997-98 by the average duration of intended stay. However it is expected that a number will leave early and others may extend their stay.

Source: AIHW from Department of Immigration and Multicultural Affairs data.

Table 35: Migration of Australian medical practitioners to and from Australia, 1992–93 to 1997–98

	1992–93	1993–94	1994–95	1995–96	1996–97	1997–98	% 1997–98
Migration to Australia of Australian residents returning after a long-term overseas stay							
Country of long-term stay							
New Zealand	14	17	13	18	23	25	3.1
Other Oceania	15	13	24	12	17	16	2.0
UK/Ireland	312	324	289	311	278	269	33.8
Other Europe	38	49	38	43	33	39	4.9
Middle East	28	34	38	44	22	34	4.3
Hong Kong	95	98	120	106	114	110	13.8
Singapore	13	15	14	10	15	15	1.9
Malaysia	20	16	10	14	17	15	1.9
Other Asia	35	39	50	65	44	77	9.7
USA/Canada	137	164	179	166	145	147	18.4
South Africa	15	16	13	9	14	17	2.1
Other Africa	11	10	16	15	14	15	1.9
Other countries	1	3	2	6	8	18	2.3
<i>Total</i>	<i>734</i>	<i>798</i>	<i>806</i>	<i>819</i>	<i>744</i>	<i>797</i>	<i>100.0</i>
Migration from Australia of Australian residents for a long-term overseas stay							
Country of long-term stay							
New Zealand	9	13	12	17	23	16	3.7
Other Oceania	26	21	18	24	17	12	2.8
UK/Ireland	163	140	161	147	147	163	37.9
Other Europe	11	13	12	17	11	9	2.1
Middle East	23	21	23	22	14	22	5.1
Hong Kong	54	56	67	50	72	55	12.8
Other Asia	39	31	36	45	59	47	10.9
USA/Canada	101	69	93	87	90	88	20.5
South Africa	2	5	2	6	0	3	0.7
Other countries	11	10	10	9	9	15	3.5
<i>Total</i>	<i>439</i>	<i>379</i>	<i>434</i>	<i>424</i>	<i>442</i>	<i>430</i>	<i>100.0</i>

Source: AIHW from Department of Immigration and Multicultural Affairs data.

Table 36: Temporary resident overseas-trained medical practitioners^(a): occupation, country of initial qualification and region, Australia, 1997

Occupation/ country of initial qualification	Region of main job						Total
	Capital city	Other metro centre	Large rural centre	Small rural centre	Other rural area	Remote	
Primary care							
New Zealand	9	0	3	1	0	3	15
UK/Ireland	13	6	11	5	4	17	56
Asia	0	0	0	0	0	0	0
Other countries	4	1	0	2	2	11	19
<i>Total</i>	27	7	14	7	6	31	91
Hospital non-specialist							
New Zealand	16	7	2	0	0	3	28
UK/Ireland	65	12	32	8	4	6	127
Asia	4	0	1	1	0	0	7
Other countries	10	1	7	1	1	3	23
<i>Total</i>	96	19	43	10	5	12	186
Specialist							
New Zealand	16	5	3	4	0	0	28
UK/Ireland	9	0	0	0	0	0	9
Asia	9	1	0	1	0	2	13
Other countries	2	0	4	3	0	0	9
<i>Total</i>	36	6	7	8	0	2	59
Specialist-in-training							
New Zealand	12	2	0	0	0	0	14
UK/Ireland	26	4	6	0	0	0	36
Asia	15	6	1	0	0	2	24
Other countries	15	2	1	1	0	0	19
<i>Total</i>	68	14	9	1	0	2	94
Non-clinician							
New Zealand	1	0	0	0	0	1	3
UK/Ireland	8	0	0	0	0	0	8
Asia	3	0	0	0	0	0	3
Other countries	2	0	1	0	0	0	3
<i>Total</i>	13	0	1	0	0	1	16
Total							
New Zealand	54	14	8	5	0	7	88
UK/Ireland	121	22	49	13	7	24	236
Asia	31	7	3	3	0	4	47
Other countries	32	5	14	7	3	13	74
Total	239	47	74	27	11	48	446

(a) There were 980 temporary resident doctors who entered Australia for employment in 1995–96, 1,626 in 1996–97 and 1,703 in 1997–98. Most entered for a stay of less than 12 months and were not included in the AIHW labour force survey. Therefore the estimates in this table refer to temporary resident doctors who were re-registering for practice at the general renewal of registration in late 1997.

9 Medical education and training

The Department of Education, Training and Youth Affairs has provided data on students who enrolled in courses for years up to 1998 and who completed courses for years up to 1997. AIHW analysis of these data has found:

- 1,685 Australian citizen/permanent resident students completed medicine courses in 1997–1,196 (71.0%) completed undergraduate courses and 489 (29.0%) completed post-graduate courses. Of these, 792 (47.0%) were female – an increase from 38.7% in 1988.
- A further 237 overseas students completed medicine courses at Australian universities in 1997 – 12.3% of all completions.
- 1,221 Australian citizen and permanent resident students commenced undergraduate medicine courses in 1998. During 1994–1996, there was a hiatus in students commencing initial medicine courses while Flinders University, the University of Queensland and the University of Sydney introduced a four-year postgraduate degree medical course in place of the previous six-year undergraduate course. Each university had a two-year transition period, during which only a small number of students with the necessary qualifications were admitted. The first intake to the new course at Flinders University was in 1996 and intakes to the new courses at the University of Queensland and the University of Sydney began in 1997. The University of Sydney is expected to reach its planned annual intake of 186 new students in the 1999 academic year.
- 50.3% of the students commencing undergraduate medicine courses in 1998 were female. This was the first time that the proportion of females commencing medicine courses exceeded 50%.
- Over the period 1989–1996, around 93% of commencing undergraduate medical students were aged less than 25 years. With the introduction of postgraduate entry to initial medical courses at three universities this proportion fell to around 82% in 1998. The average age of commencing students has increased by five to eight years at the three universities that introduced graduate entry to initial medical courses. This could decrease the expected lifetime contribution in hours worked of these students to the medical labour supply.
- 86.2% of students commencing an initial medical degree in 1998 originated from a capital city or other metropolitan area and 13.3% from rural and remote areas. This compares with 74.3% of the 15–24 year old population living in metropolitan areas and 25.7% in rural and remote areas. The proportion of students from rural and remote areas ranged from 9.5% to 11.6% over the period 1989 to 1997.
- 31.2% of these commencing students were born in overseas countries. Most of these (54.6%) were born in Asia – mainly Malaysia, China, Vietnam and Hong Kong – and a further 16.5% were born in the United Kingdom or Ireland.
- 10 (0.8%) of the students commencing initial medical qualifications in 1998 were Aboriginal or Torres Strait Islander.
- There were 49 (0.7%) Aboriginal or Torres Strait Islander students studying for an initial medical qualification in 1998. Of these, 22 were at the University of Newcastle.

- 8,777 Australian citizen and permanent resident students were enrolled in medicine courses in 1998 – 6,472 (73.7%) in bachelor courses and 2,305 (26.3%) in postgraduate courses.

Table 37: Medical student course completions: citizenship^(a) and level of course, Australia, 1988–97

Level of course	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Australian citizens or permanent residents										
Bachelor										
Graduate entry	0	0	0	0	2	5	0	6	4	12
Bachelor honours	26	25	17	204	60	48	57	44	41	42
Bachelor pass	1,279	1,162	997	940	1,022	1,181	1,178	1,191	1,282	1,142
Total	1,305	1,187	1,014	1,144	1,084	1,234	1,235	1,241	1,327	1,196
Number of females	519	487	442	467	454	513	576	558	624	538
% female	39.8	41.0	43.6	40.8	41.9	41.6	46.6	45.0	47.0	45.0
Postgraduate										
Higher doctorate	27	33	34	36	35	28	28	39	37	27
PhD	84	108	130	165	142	138	168	190	228	258
Masters	27	38	46	76	37	35	54	58	80	76
Masters qualifying	1	5	0	0	2	0	0	0	0	0
Diploma/certificate	33	33	32	47	36	73	133	118	71	128
Total	172	217	242	324	252	274	383	405	416	489
Total	1,477	1,404	1,256	1,468	1,336	1,508	1,618	1,646	1,743	1,685
Number of females	587	569	542	610	573	624	739	771	832	792
% female	39.7	40.5	43.2	41.6	42.9	41.4	45.7	46.8	47.7	47.0
Overseas students										
Bachelor	17	59	44	73	52	67	85	134	150	180
Postgraduate	15	32	17	34	38	50	41	47	37	57
Total	32	91	61	107	90	117	126	181	187	237
Number of females	13	32	22	36	37	40	48	88	79	91
% female	40.6	35.2	36.1	33.6	41.1	34.2	38.1	48.6	42.2	38.4

(a) Before 1993, not all universities had citizenship information for all students completing courses, so these data include students for whom citizenship/residency status was unknown. Consequently, data before 1993 may slightly overstate the number of course completions by Australian citizen/resident students.

Source: AIHW, from Department of Education, Training and Youth Affairs data.

Table 38: Australian citizens and permanent residents commencing undergraduate^(a) medicine courses: university and sex, Australia, 1990–98

University	1990	1991	1992	1993	1994	1995	1996	1997	1998
Flinders University	77	70	63	64	^(b) 8	^(b) 0	60	58	56
Monash University	153	164	141	139	137	130	139	123	135
University of Adelaide	107	112	105	98	101	103	93	90	91
University of Melbourne	199	185	182	185	193	199	198	204	180
University of New South Wales	142	144	156	140	146	162	175	145	144
University of Newcastle	75	72	69	66	66	69	63	67	64
University of Queensland	241	232	225	218	225	^(b) 6	^(b) 2	231	228
University of Sydney	253	238	220	219	167	^(b) 14	^(b) 21	139	143
University of Tasmania	49	50	49	50	50	54	54	53	59
University of Western Australia	121	125	120	125	124	123	123	123	121
Total	1,417	1,392	1,330	1,304	1,217	860	928	1,233	1,221
(per cent who are female)									
Flinders University	44.2	52.9	57.1	51.6	25.0	0.0	55.0	41.4	50.0
Monash University	40.5	51.8	47.5	49.6	52.6	61.5	56.1	62.6	51.9
University of Adelaide	48.6	42.9	49.5	39.8	39.6	53.4	43.0	53.3	63.7
University of Melbourne	42.7	43.2	45.1	43.2	47.7	40.2	38.9	41.2	46.1
University of New South Wales	43.0	40.3	36.5	41.4	41.8	39.5	47.4	49.0	50.0
University of Newcastle	73.3	66.7	65.2	57.6	57.6	56.5	60.3	58.2	53.1
University of Queensland	49.0	50.4	41.3	55.5	50.7	50.0	0.0	34.2	45.2
University of Sydney	36.0	43.7	35.0	43.8	47.3	35.7	38.1	43.9	56.6
University of Tasmania	59.2	60.0	59.2	54.0	60.0	44.4	53.7	49.1	55.9
University of Western Australia	42.1	54.4	47.5	46.4	49.2	46.3	52.0	45.5	43.0
Total	45.0	48.5	44.7	47.5	48.4	47.3	48.5	45.8	50.3

(a) Includes bachelor pass, bachelor honours and graduate entry bachelor courses.

(b) Flinders University, University of Queensland and University of Sydney have introduced a four-year postgraduate degree medical course in place of the previous six-year undergraduate course. Each university had a two-year transition period during which only a small number of students with the necessary qualifications were admitted. The first intake to the new course at Flinders University was in 1996 and the first intakes to the new courses at the University of Queensland and the University of Sydney were in 1997.

Source: AIHW, from Department of Education, Training and Youth Affairs data.

10 Medicare statistics

The Medicare Estimates and Statistics Section of the Department of Health and Aged Care provided Medicare data. More detailed statistics may be found at the Department's Internet site (<http://www.health.gov.au>), while a description of Medicare and further analysis of Medicare data are included *Australia's Health 1998* (AIHW 1998, pp 215–19).

The Medicare data presented in this chapter exclude the numbers for pathologists and diagnostic imagists. Medicare statistics understate the number of pathologists, since the data relate to claiming rather than rendering practitioners. Medicare statistics overstate the number of diagnostic imagists, since a significant number of practitioners have more than one active provider number. To the extent that some practitioners in the remaining specialties have more than one active provider number, there will be a slight overstatement of the number of practitioners. The main features of the Medicare data in this chapter are as follows.

- From 30 June 1997 to 30 June 1998 the estimated resident population of Australia increased by 1.2% from 18,524,155 to 18,750,982. During the same period:
 - Medicare providers increased by 0.4%;
 - medical practitioner Medicare providers increased by 0.3%;
 - VRGPs increased by 1.5%, offset by a decrease in OMPs of 8.9%, for an overall primary care provider decrease of 1.2%; and
 - recognised medical specialist Medicare providers increased by 2.8%.
- Between 1984–85 and 1997–98, the number of medical practitioners providing Medicare services increased by 50.7% from 25,974 to 39,138. The Australian population increased by 18.8% over the same period.
- Primary care providers, including VRGPs and OMPs, comprised 65.3% of medical practitioners in 1984–85 and, after rising to 66.0% in 1987–88, declined to 61.9% in 1997–98.
- The average number of services undertaken by each Medicare provider in 1997–98 was 3,287, increasing by 0.1% from the 1996–97 average.
- Over the period 1984–85 to 1997–98, Medicare medical practitioners per 100,000 population increased from 164.5 to 208.7 – an increase of 26.9%.
- Over the ten-year period 1988–89 to 1997–98, the average number of Medicare services per person in a year increased by 31.6% from 6.65 services to 8.75 services for males, and by 23.8% from 10.34 services to 12.80 services for females. Care should be exercised in interpreting this change. Much of the increase is a result of structural change in the Medical Benefits Schedule without accompanying change in patient services. For example, early in 1992 pathology 'patient episode initiation' items (to cover overheads with specimen collection) were added to the Medical Benefits Schedule and this resulted in an additional 15 million services with no change in the service to patients.

Table 39: Medicare providers^(a): peer group and specialty, Australia, 1990–91 to 1997–98

Peer group/ specialty	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96	1996–97	1997–98
<i>General</i>	22,152	22,746	23,088	23,587	24,206	24,376	24,526	24,230
Vocationally registered GP	7,471	10,744	14,826	16,280	17,341	17,711	18,078	18,353
Other medical practitioner	14,681	12,002	8,262	7,307	6,865	6,665	6,448	5,877
Obstetrician/gynaecologist	920	923	930	867	899	896	912	925
IVF	n.a.	n.a.	n.a.	63	67	72	72	79
<i>Surgeon</i>	4,005	4,140	4,270	4,418	4,597	4,714	4,816	4,898
Specialist	3,289	3,355	3,433	3,479	3,586	3,598	3,641	3,703
Non-specialist	716	785	837	939	1,011	1,116	1,175	1,195
<i>Anaesthetist</i>	1,680	1,764	1,805	1,892	1,952	2,022	2,076	2,142
Specialist	1,589	1,652	1,702	1,781	1,814	1,859	1,900	1,956
Non-specialist	91	112	103	111	138	163	176	186
Psychiatrist	1,389	1,437	1,501	1,555	1,582	1,615	1,672	1,685
Radiation oncology specialist	100	106	104	113	119	130	131	141
Dermatologist	239	242	245	260	267	275	277	291
Physician	2,980	3,143	3,333	3,477	3,664	3,868	4,069	4,259
Other medical	286	271	298	356	382	438	485	488
<i>Total medical practitioners^(a)</i>	33,751	34,772	35,574	36,588	37,735	38,406	39,036	39,138
Optometrist	1,160	^(b) 2,287	2,356	2,424	2,500	2,576	2,621	2,722
Dental/orthodontist	339	382	382	409	420	409	457	425
Total Medicare providers^(a)	35,250	37,441	38,312	39,421	40,655	41,391	42,114	42,285
(per cent change—year on year increase)								
<i>General</i>	2.3	2.7	1.5	2.2	2.6	0.7	0.6	-1.2
Vocationally registered GP	45.7	43.8	38.0	9.8	6.5	2.1	2.1	1.5
Other medical practitioner	-11.1	-18.2	-31.2	-11.6	-6.0	-2.9	-3.3	-8.9
Obstetrician/gynaecologist	2.3	0.3	0.8	-6.8	3.7	-0.3	1.8	1.4
IVF	n.a.	n.a.	n.a.	n.a.	6.3	7.5	0.0	9.7
<i>Surgeon</i>	3.1	3.4	3.1	3.5	4.1	2.5	2.2	1.7
Specialist	2.1	2.0	2.3	1.3	3.1	0.3	1.2	1.7
Non-specialist	8.2	9.6	6.6	12.2	7.7	10.4	5.3	1.7
<i>Anaesthetist</i>	3.8	5.0	2.3	4.8	3.2	3.6	2.7	3.2
Specialist	3.6	4.0	3.0	4.6	1.9	2.5	2.2	2.9
Non-specialist	8.3	23.1	-8.0	7.8	24.3	18.1	8.0	5.7
Psychiatrist	4.4	3.5	4.5	3.6	1.7	2.1	3.5	0.8
Radiation oncology specialist	-2.0	6.0	-1.9	8.7	5.3	9.2	0.8	7.6
Dermatologist	0.8	1.3	1.2	6.1	2.7	3.0	0.7	5.1
Physician	4.4	5.5	6.0	4.3	5.4	5.6	5.2	4.7
Other medical	16.3	-5.2	10.0	19.5	7.3	14.7	10.7	0.6
<i>Total medical practitioners^(a)</i>	2.8	3.0	2.3	2.9	3.1	1.8	1.6	0.3
Optometrist	2.7	^(b) 97.2	3.0	2.9	3.1	3.0	1.7	3.9
Dental/orthodontist	6.3	12.7	0.0	7.1	2.7	-2.6	11.7	-7.0
Total Medicare providers^(a)	2.9	6.2	-2.3	2.9	3.1	1.8	1.7	0.4

(a) Excludes diagnostic imagists and pathologists, as the number of practitioners is not accurately known.

(b) Prior to 1991–92, optometry services provided by a multi-practitioner practice may have been billed to Medicare under the provider number of the principal. From 1991–92, services were billed to the provider number of each practitioner.

Source: Medicare statistics, Department of Health and Aged Care.

Table 40: Average number of Medicare services per head of population: service type, Australia, 1989–90 to 1997–98

Service type	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96	1996–97	1997–98
GP attendances	4.99	4.91	5.08	5.27	5.41	5.45	5.58	5.53	5.50
Specialist attendances	0.84	0.86	0.89	0.92	0.94	0.97	0.99	0.98	0.97
Obstetrics	0.03	0.03	0.03	0.03	0.04	0.04	0.07	0.09	0.08
Anaesthetics	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Pathology—patient episode initiation	0.25	0.72	0.77	0.83	0.88	0.91	0.93
Pathology tests	1.53	1.51	1.49	1.52	1.63	1.76	1.77	1.80	1.86
Diagnostic imaging	0.45	0.48	0.49	0.52	0.53	0.55	0.57	0.56	0.57
Operations	0.24	0.26	0.27	0.28	0.28	0.28	0.29	0.29	0.29
Assist in operations	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Optometry	0.14	0.15	0.16	0.17	0.18	0.18	0.19	0.20	0.20
Radiotherapy and therapeutic nuclear medicine	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03
Other	0.15	0.16	0.17	0.18	0.20	0.21	0.23	0.23	0.24
Total	8.48	8.48	8.95	9.74	10.09	10.40	10.70	10.73	10.78

Source: Medicare statistics, Department of Health and Aged Care.

Explanatory notes

Background

In 1990, the Australian Health Ministers' Advisory Council (AHMAC) commissioned the AIHW to develop national health labour force statistics about the major registrable health professions. Data collections based on a national minimum data set were developed addressing the workforce planning needs of the health professions, government, service providers and educational institutions. A national medical labour force survey commenced in 1993 in conjunction with the annual registration renewal of medical practitioners. Prior to 1993, a number of State health authorities, specialist medical Colleges and two publishing companies had conducted regular medical workforce surveys, while annual Medicare provider statistics have been available since 1984–85.

In February 1997 AHMAC reviewed medical workforce priorities and the activities of the Australian Medical Workforce Advisory Committee, which had started early in 1995. AHMAC concluded that AMWAC should continue for a further five years and that the AIHW medical labour force survey should continue annually.

Scope and coverage

The scope of the data is all practitioners registered with the medical board in each State and Territory and eligible to practise.

Coverage in some States may exclude medical practitioners who registered for the first time during the current year. Practitioners with a conditional registration, usually for a fixed term, are also excluded in many States. These conditional registrants include interns and temporary resident doctors, who are not required to renew their registration at the standard renewal date.

Method

Each State and Territory medical board conducts an annual renewal of practitioner registration and the survey questionnaire was sent to all medical practitioners as part of the registration renewal process.

Timing

The statistics in this publication relate to registration renewals during the period October–December 1997. The renewal notices and the survey were dispatched in all States and Territories in September 1997. This dispatch date is generally three months before the expiry of registration. Survey data on practice activity refer to the four-week period before completion of the questionnaire by each medical practitioner.

Response rate

The responses to the AIHW medical labour force survey represented 77.1% of the total medical registrations in all States and Territories. The medical boards did not include all

registered practitioners in the survey as interns and some conditionally registered practitioners were not sent registration renewals. In some States, practitioners known to the boards to be not practising because they were retired, overseas or had moved interstate were not included in the survey. The estimated State response rates for those surveyed ranged from 93% in New South Wales to 68% in South Australia.

The overall response rate can only be estimated, not determined with complete accuracy. It is known that at least some medical practitioners who were registered in more than one State or Territory completed a questionnaire in just one State or Territory. The incidence of this occurrence cannot be ascertained because matching survey records among States and Territories is not possible.

Table 41: Medical labour force survey: estimated survey response rate, States and Territories, 1997

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
	(per cent)								
Respondents	92.9	74.7	85.8	67.7	70.9	69.1	69.4	75.4	81.8
Non-respondents	7.1	25.3	14.2	32.3	29.1	30.9	30.6	24.6	18.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Complete data were not available for all responding medical practitioners, either because not all survey questions were completed or because medical boards' initial registration data were incomplete or not provided.

AIHW labour force estimates

Medical practitioners may register in more than one State or Territory. Thus, in estimating the medical labour force, it is important to reduce as much as possible the consequent duplication in statistics.

The estimation of the number and characteristics of employed medical practitioners in each State and Territory was based on the responses of those practitioners employed solely or mainly in the State or Territory of registration. Practitioners who were on leave for three months or more, although employed, were excluded from most tables of employed practitioners because not all States and Territories collected data on practitioners who were on leave.

It was assumed for all estimates that non-respondents to the survey in each State and Territory had the same labour force characteristics as had respondents, and the survey data were scaled up to the registrations by distributing the non-response numbers on the basis of this assumption. In 1997, sex and age data were available for all registered medical practitioners for five States (excluding Western Australia), and for these States the estimation process was based on the response rate by sex and age group. The estimation process may overestimate the numbers of medical practitioners in the workforce in each State and Territory if non-respondents are more likely to be those with multiple registrations not in their home State or Territory or those not in the medical labour force. This survey error will be greater in the two Territories, which have higher proportions of doctors registered in other jurisdictions, and lower proportions of doctors practising solely in the Territories.

The 1996 estimates for practising clinicians were benchmarked against the comparable data from the 1996 Census of Population and Housing conducted in August 1996. The census

data was adjusted in accordance with the census under enumeration in each State and Territory and for non-reporting of occupation. The AIHW medical labour force survey data for clinicians was then benchmarked to the census estimate and the survey data for all other occupations was adjusted in proportion to the clinicians. The 1997 benchmark was the 1996 benchmark adjusted with the change in the number of practitioners receiving Medicare provider numbers.

Revisions to 1994 to 1996 data

Estimates for New South Wales for the years 1994 to 1996 are revised in this publication. A form design fault led to some incorrect reporting by specialists of their specialty of practice and qualification. The main change was to the numbers of specialists practising in each specialty but there was some small change to other data.

Comparability with data for previous years

The data in this publication are not directly comparable with previously published data for 1994 to 1996.

Revised data have been prepared for 1994 to 1996 as described above. Any comparisons between detailed characteristics of previous years and 1997 data should be adjusted by the ratio of the characteristic in the previously published data to that shown in the revised data in this publication.

Glossary

Age

The number of completed years from year of birth to the year of the survey.

Career medical officer (CMO)

Also known as hospital medical officer (HMO) in some States. See *Other salaried hospital career practitioner*.

Clinician

A medical practitioner who is involved in the diagnosis and/or treatment of patients, including recommending preventative action. In this publication, a medical practitioner who engages in clinical practice in any job is classified as a clinician.

Country

The *Australian Standard Classification of Countries for Social Statistics*, (ABS 1990) has been used to classify country of initial qualification into the following categories:

1. *Australia*
2. *New Zealand*
3. *United Kingdom and Ireland*: England, Scotland, Wales, Northern Ireland, Ireland
4. *Asia*: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Viet Nam, People's Republic of China, Hong Kong, Japan, Democratic People's Republic of Korea (North Korea), Republic of Korea (South Korea), Macau, Mongolia, Taiwan, Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka
5. *Other countries*: all countries not specified above.

Deputising service

A medical practitioner, or group of practitioners, who provides after-hours primary care, but not continuing care, to the patients of the subscribing primary care medical practitioners.

Direct patient care hours

The hours per week spent in clinical practice that were self-reported by responding medical practitioners as the average over the four weeks before the survey (including time spent on patient referrals and clinical notes; excluding time spent in administration of a practice and travel to call-outs).

General practitioner (RACGP) trainees

A medical practitioner under the supervision of an RACGP Fellow in a job recognised as leading to the RACGP Fellowship. The Health Insurance Commission classifies these trainees as vocationally registered general practitioners in the Medicare data in this report. See also *Recognised general practitioner* and *Vocationally recognised general practitioner*.

Geographic region classification

The *Rural, Remote and Metropolitan Areas Classification* (Department of Primary Industries and Energy & Department of Health and Family Services 1994) has been used to classify the geographic location of the job of responding medical practitioners. The geographic boundaries of these categories are based on the 1991 population census. The classes of geographic location are listed below.

Metropolitan areas

1. *Capital cities* consist of the State and Territory capital cities: Sydney, Melbourne, Brisbane, Perth, Adelaide, Hobart, Darwin and Canberra.
2. *Other metropolitan centres* consist of one or more statistical subdivisions that have an urban centre of population of 100,000 or more: Newcastle, Wollongong, Queanbeyan (part of Canberra-Queanbeyan), Geelong, Gold Coast-Tweed Heads, Townsville-Thuringowa.

Rural zone

3. *Large rural centres* are statistical local areas where most of the population reside in urban centres of population of 25,000 to 99,999. These centres are: Albury-Wodonga, Dubbo, Lismore, Orange, Port Macquarie, Tamworth, Wagga Wagga (NSW); Ballarat, Bendigo, Shepparton-Mooroopna (Vic); Bundaberg, Cairns, Mackay, Maroochydore-Mooloolaba, Rockhampton, Toowoomba (Qld); Whyalla (SA); and Launceston (Tas).
4. *Small rural centres* are statistical local areas in rural zones containing urban centres of population between 10,000 and 24,999. These centres are Armidale, Ballina, Bathurst, Broken Hill, Casino, Coffs Harbour, Echuca-Moama, Forster-Tuncurry, Goulburn, Grafton, Griffith, Lithgow, Moree Plains, Muswellbrook, Nowra-Bombaderry, Singleton, Taree (NSW); Bairnsdale, Colac, Echuca-Moama, Horsham, Mildura, Moe-Yallourn, Morwell, Ocean Grove-Barwon Heads, Portland, Sale, Traralgon, Wangaratta, Warrnambool (Vic); Caloundra, Gladstone, Gympie, Hervey Bay, Maryborough, Tewantin-Noosa, Warwick (Qld); Mount Gambier, Murray Bridge, Port Augusta, Port Lincoln, Port Pirie (SA); Albany, Bunbury, Geraldton, Mandurah (WA); and Burnie-Somerset, Devonport (Tas).
5. *Other rural areas* are the remaining statistical areas within the rural zone. Examples are Cowra Shire, Temora Shire, Guyra Shire (NSW); Ararat Shire, Cobram Shire (Vic); Cardwell Shire, Whitsunday Shire (Qld); Barossa, Pinnaroo (SA); Moora Shire, York Shire (WA); George Town, Ross (Tas); and Coomalie, Litchfield (NT).

Remote zone

These are generally less densely populated than rural statistical local areas and are hundreds of kilometres from a major urban centre. Data in this publication are reported for the zone which comprises the two areas shown below.

6. *Remote centres* are statistical local areas in the remote zone containing urban centres of population of 5,000 or more: Blackwater, Bowen, Emerald, Mareeba, Moranbah, Mount Isa, Roma (Qld); Broome, Carnarvon, East Pilbara, Esperance, Kalgoorlie/Boulder, Port Hedland, Karratha (WA); and Alice Springs, Katherine (NT).
7. *Other remote areas* are the remaining areas within the remote zone. Examples are: Balranald, Bourke, Cobar, Lord Howe Island (NSW); French Island, Orbost, Walpeup (Vic); Aurukun, Longreach, Quilpie (Qld); Coober Pedy, Murat Bay, Roxby Downs (SA); Coolgardie, Exmouth, Laverton, Shark Bay (WA); King Island, Strahan (Tas); Daly, Jabiru, Nhulunbuy (NT).

Hospital non-specialist

Medical practitioners mainly employed in a salaried position in a hospital who do not have a recognised specialist qualification and who are not undertaking a training program to gain a recognised specialist qualification. They include resident medical officers and interns and other salaried hospital career practitioners and exclude specialists-in-training.

Hours on call not worked

The hours per week for which a medical practitioner was on standby for a call to duty and which were not worked during the four weeks before the survey. Once called to duty, the time spent on duty is counted in total hours worked and direct patient care hours.

Hours worked

The hours per week that were self-reported by responding medical practitioners as the average hours worked in each medical-related job over the four weeks before the survey. Hours worked exclude time spent on travel between work locations (except travel to call-outs) and voluntary professional activities. In the editing of survey responses, maximum hours worked in all jobs have been limited to 126 hours per week.

Indigenous population

The population of persons of Aboriginal or Torres Strait Islander descent who identify as Aboriginal or Torres Strait Islander and are accepted as such in the community in which they live.

Intern

A resident medical practitioner working in a hospital, usually in the first year of service after graduating from medical school.

Locum tenens

A medical practitioner who acts as a substitute for another medical practitioner while that practitioner is temporarily absent from their practice.

Medical labour force

Defined for each State and Territory as:

- registered medical practitioners employed in medicine; plus
- registered medical practitioners not employed in medicine but looking for work in medicine.

Medical practitioners employed in medicine

A registered medical practitioner in an occupation that uses the skills and knowledge of the person's medical qualification. This category includes those on maternity or other extended leave of three months or more.

Medicare providers

Medical practitioners who billed Medicare for at least one private practice occasion of service during a given financial year. The majority of their practice activity under Medicare

is used to classify Medicare providers. For example, a medical practitioner with specialist qualifications whose Medicare private practice income was mainly from unreferral attendances will be classified as either a general practitioner or OMP. Conversely, a general practitioner whose Medicare private practice income was mainly in a field of specialist practice will be classified as a non-specialist in that specialty, not as a general practitioner.

Medicare provider data differ from that collected in the AIHW medical labour force survey in several important respects. The labour force survey data are self-reported and are generally presented for the practitioner's main job as measured by the total hours per week at that job. A salaried hospital non-specialist doctor who does some fee-for-service items in the Medical Benefits Schedule billed to Medicare will appear in the survey data as a hospital non-specialist or a specialist-in-training, and in Medicare data as a recognised general practitioner, OMP or specialist in the appropriate specialist peer group. Similarly, a practitioner with specialist qualifications whose services billed to Medicare are for mainly unreferral attendances will self-report as a specialist in the labour force survey but be classified as a recognised general practitioner or OMP in Medicare data. The data in Medicare for specialists include non-specialists whose main income from Medicare is for services in a specialist field.

Medicare services

Services provided on a 'fee-for-service' basis for which Medicare benefits were paid in the period in question. Medicare benefits are not paid for:

- services rendered free of charge in recognised hospitals;
- services rendered under an entitlement conferred by legislation other than the Health Insurance Act: for example, services rendered to repatriation beneficiaries or defence personnel, or services covered by third party or workers' compensation provisions for which a provisional Medicare benefit has not been paid;
- services rendered for insurance or employment purposes;
- health screening services; and
- services rendered under grant provisions such as the Department of Health and Family Services Program Grant arrangements.

Medicare data reflect the year of processing rather than the year of the service.

The data incorporate the effect of Medicare adjustments, which are made to correct errors in previously processed claims and to reflect adjustments resulting from cheque cancellations. Apart from obstetrics services, these are generally not significant. Any practitioner who had net negative claims in any year (for example, resulting from the fact that one or more stale cheques had been cancelled by the Health Insurance Commission and no other claims for the practitioner were processed in the period) is not included in tables for that year.

Occupation

A description of the job function within the field of medicine of a person with medical qualifications. The occupations are:

- clinician: a medical practitioner mainly involved in the care and treatment of individuals, including diagnosis and preventative action;
- administrator: a person mainly employed in medical administration;
- teacher/educator: a person teaching or training persons in medicine for their initial qualification or in advanced skills after initial qualification;

- researcher: a person primarily engaged in medical research;
- public health physician: a medical practitioner primarily engaged in identifying disease and illness and the conditions for disease and illness, and in implementing preventative measures which affect the health of the general public;
- occupational health physician: a medical practitioner primarily engaged in identifying disease and illness, and the conditions for disease and illness, and implementing preventative measures which arise from employment in particular occupations or industries; and
- other: a job function in medicine which is not one of the above – for example, industrial relations.

Other medical practitioner (OMP)

Primary care practitioners who did not self-report as being vocationally registered or training to become vocationally registered.

In the Medicare data, an OMP is a doctor who bills privately for mainly unreferral attendances in the Medical Benefits Schedule and who is not recognised by the Health Insurance Commission as a general practitioner. The Health Insurance Commission recognises as general practitioners those medical practitioners who are vocationally registered or RACGP Fellows or trainees for vocational registration who are employed in a recognised general practice. OMPs receive a lower payment from Medicare for each unreferral attendance.

This category in the Medicare data includes medical practitioners whose main job may be in primary care, a special interest area of primary care, salaried hospital employment, other salaried employment, public health medicine, occupational health medicine, medical administration, research or education, and employment outside medicine.

Other salaried hospital career practitioner

Generally, a medical practitioner who mainly works in a hospital after completing all professional training and who is referred to as a career medical officer (CMO) or hospital medical officer (HMO) in most States. This category includes some practitioners who have completed an internship and have been registered to practise under supervision.

Overseas-trained doctor (OTD)

A person who obtained an initial medical qualification in a country other than Australia. The qualification must be recognised as equivalent to an Australian medical qualification for the person to obtain registration as a medical practitioner in Australia.

Primary care practitioner

A practitioner engaged in general practice or in the primary care of patients. This category includes practitioners recognised by Medicare as VRGPs, RACGP Fellows, RACGP trainees and other medical practitioners whose main practice is unreferral patient attendances.

Recognised general practitioner

A medical practitioner recognised as a general practitioner by the Health Insurance Commission in respect of Medicare payments for unreferral attendances. Recognised general practitioners attract a higher Medicare payment than other medical practitioners for

unreferred attendances. Recognised general practitioners include vocationally registered general practitioners, Fellows of the RACGP and medical practitioners in training for vocational registration who are employed in a recognised general practice and therefore supervised by recognised general practitioners.

Resident medical officer (RMO)

A medical practitioner undergoing further training in a hospital after completing an internship but who has not commenced a recognised general practice or specialist practice training program.

Special interest area

A primary care practitioner's self-reported main field of practice, excluding general practice. In the labour force survey, primary care practitioners are asked whether they practise mainly in general practice or in a special interest area.

The area of interest may be a particular clinical condition (for example, diabetes), a medical procedure (for example, endoscopy) or an identified population (for example, Indigenous health). Where the interest area equates to a recognised medical specialty, it has been classified according to the specialty classification.

Specialist

A medical practitioner with a qualification awarded by, or which equates to that awarded by, the relevant specialist professional college in Australia. Specialist recognition is normally based on the completion of a program of appropriate supervised training covering a minimum of six years after initial medical graduation and an examination leading to the award of a higher qualification.

The Health Insurance Commission recognises as a specialist a medical practitioner who has made formal application for recognition as a specialist and who:

- is registered as a specialist under State or Territory law; or
- holds a fellowship of a specified specialist college; or
- is considered eligible for recognition as a specialist or consultant physician by a specialist recognition advisory committee.

Where a medical practitioner has been recognised as a specialist or consultant physician for the purposes of the Health Insurance Act, Medicare benefits are payable at the appropriate higher rate for certain services rendered in the practice of the specialty, provided the patient has been referred by:

- another medical practitioner; or
- a registered dental practitioner, where the referral arises out of a dental service; or
- a registered optometrist, where the specialist is an ophthalmologist.

Specialist-in-training

A medical practitioner who has been accepted by a specialist medical college into a training position supervised by a member of the college.

Temporary resident doctor (TRD)

A citizen of another country who has an immigration visa enabling them to be employed as a medical practitioner in Australia. The person's qualifications must be recognised for conditional registration by the relevant State medical board.

Vocationally registered general practitioner (VRGP)

A primary care practitioner who has been registered by the Health Insurance Commission as a recognised general practitioner. The criteria for registration as a vocationally registered general practitioner are certification from either the Royal Australian College of General Practitioners, a Vocational Registration Eligibility Committee, or the Vocational Registration Appeal Committee, that the practitioner's medical practice is predominantly general practice, and that the practitioner has appropriate training and experience in general practice.

In assessing whether a practitioner's medical practice is predominantly general practice, only services eligible for Medicare benefits are considered. To qualify, 50% of the clinical time and services claimed against Medicare must be in general practice as defined. The RACGP and Vocational Registration Eligibility Committee or Vocational Registration Appeal Committee will have regard to whether the practitioner provides a comprehensive primary medical service, including: treating a wide range of patients and conditions using a variety of accepted skills and techniques; providing services away from the practitioner's surgery on request (for example, home visits); and making appropriate provision for the practitioner's patients to have access to after-hours medical care.

The training and experience which the RACGP regards as appropriate for eligibility is the attainment of Fellowship of the RACGP or other postgraduate qualifications and training of a standard equivalent to that accepted for the award of the Fellowship.

Continued vocational registration depends on the practitioner's involvement in appropriate continuing medical education and quality assurance programs approved by the RACGP, and on the practitioner continuing to work predominantly in general practice.

Work setting

The functional use of the premises where a medical job is located.

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- Australian medical workforce benchmarks. AMWAC Report 1996.1, January 1996.
- Female participation in the Australian medical workforce. AMWAC Report 1996.7, September 1996.
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- Medical workforce supply and demand in Australia – a discussion paper. AMWAC Report 1998.8, AIHW cat. no. HWL12, October 1998.
- New Zealand medical graduates in the Australian medical workforce. AMWAC Report 1998.3, AIHW cat. no. HWL7, May 1998.

Other publications

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