4 Future growth in the medical labour force

Estimated net growth, 1995–99

Additions to the Australian medical labour force occur through two channels—the training of new practitioners permanently residing in Australia and the immigration of qualified overseas practitioners. Some churning occurs among those who leave the workforce temporarily (for example, to raise their family or for a temporary break). Losses occur mainly through retirement, death, permanent emigration and increases in temporary migration.

Between 1996 and 1999 a total of 4,970 Australian citizens or permanent residents completed medical undergraduate degrees (Table A.17), and between 1996–97 and 1999–00, inclusively, another 1,928 overseas-trained medical practitioners entered the labour force through the Australian Medical Council (AMC) examination and specialist assessment results (Table 16) and there was a net increase of 965 in temporary immigration of medical practitioners for a short-term stay (Table A.18). While it is not known how many medical practitioners retired or died in any one year, an estimate can be calculated from the progressive decreases over the time period in the cohorts moving into and through the age brackets of 55 years and over. It is assumed that practitioners in these age groups who cease practice do not return, and that all those aged 75 and over are retired (even though some do indicate on their survey form that they work for at least one hour each week).

Using this method, an estimated 2,013 medical practitioners ceased practice from retirement or death between 1996 and 1999 (Table A.21). Between 1995–96 and 1999–2001, a further 2,567 emigrated permanently or for a long-term stay to other countries (Tables A.18 and A.19). Ignoring the effects of churning, this amounts, roughly, to a net gain of 3,283 medical practitioners to the medical workforce between 1995 and 1999. Given the differences in scope, methodology and time periods, and the uncertainty surrounding the assumptions concerning retirement, this is a figure which is in broad agreement with the growth of 2,998 in the number of employed medical practitioners, as obtained from the 1995 and 1999 labour force surveys.

The following sections discuss some of the above components of the flow into and from the medical workforce (education, training and migration) in more detail.

4.1 Education

Medical practitioners undertake many years of training after a highly competitive selection process at the end of their Year 12 schooling. Medical undergraduate degree courses usually take about six years to complete, after which new graduates may spend up to two more years as hospital interns gaining intensive experience in a wide range of medical conditions. This may be followed by postgraduate training to become specialists or vocationally registered general practitioners (VRGPs). Once qualified as a practitioner, doctors are required to uphold high professional standards to maintain their registration.

After such an investment, it is not surprising that nearly all (98.7%) of registered medical practitioners in the medical labour force are employed and practising in medicine.

4.1.1 Medical students in university

Traditionally, people interested in becoming a medical practitioner could apply to study a Bachelor of Medicine/Bachelor of Surgery (MBBS) immediately after finishing their secondary education. However, increasingly more universities are accepting into such courses only those students who have already completed a bachelor degree in another discipline. This has resulted in a relatively large increase in the average age of students commencing undergraduate medicine degrees (from 18.9 years in 1991 to 20.6 years in 2000) (Table 14). The effect of this can also be seen in the decreasing number of employed medical practitioners aged less than 35 years (Table A.4).

Table 14: Australian citizens and permanent residents commencing undergraduate[(a)] medicine courses: university and average age, and proportion female, 1991–2000

University	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Flinders University	20.6	20.0	20.1	n.p.[(b)]	n.p.[(b)]	25.5	24.9	25.7	26.3	26.2
James Cook University	. .	. .	. .	. .	. .	. .	. .	. .	. .	18.7
Monash University	18.5	17.8	18.0	18.1	17.8	17.8	18.0	17.7	19.3	18.2
University of Adelaide	18.5	18.7	18.7	18.1	18.0	18.1	17.6	17.7	20.1	18.3
University of Melbourne	18.2	18.2	18.4	18.3	18.6	18.1	18.2	18.1	19.5	18.3
University of New South Wales	18.3	18.2	18.2	18.5	18.4	18.3	18.3	18.3	19.0	18.2
University of Newcastle	22.1	20.9	20.6	22.4	22.4	21.7	22.1	22.1	21.3	21.3
University of Queensland	18.5	18.6	18.1	18.4	n.p.[(b)]	n.p.[(b)]	26.5	23.8	24.6	23.3
University of Sydney	19.7	19.8	20.1	18.9	n.p.[(b)]	n.p.[(b)]	24.5	24.2	23.6	24.2
University of Tasmania	18.2	18.4	17.5	18.8	19.7	19.4	19.2	21.0	23.0	20.1
University of Western Australia	18.2	18.3	18.3	18.3	18.1	18.1	18.5	18.8	19.5	18.2
Total	**18.9**	**18.8**	**18.7**	**18.7**	**18.8**	**19.1**	**21.0**	**20.6**	**21.5**	**20.6**
Proportion female	**48.5**	**44.7**	**47.5**	**48.4**	**47.3**	**48.5**	**45.8**	**50.3**	**52.7**	**53.6**

(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 graduate-entry bachelor 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.

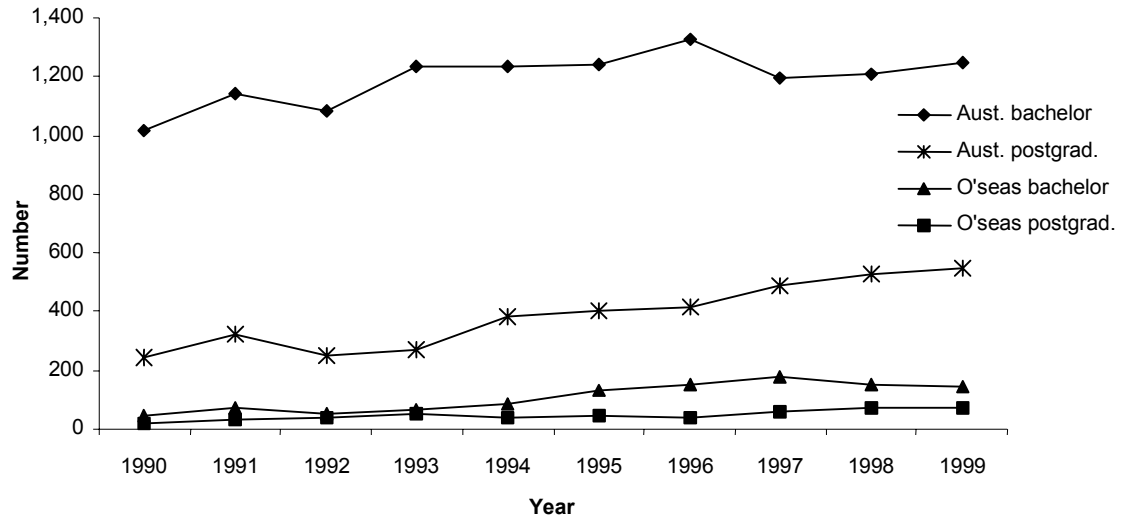
Source: AIHW analysis of DEST data.

Between 1990 and 1999 there was a gradual increase in the number of Australian permanent residents completing undergraduate degrees in medicine, from 1,014 in 1990 to 1,248 in 1999 (Figure 13). The number of Australian permanent residents graduating from postgraduate medicine courses also increased (from 242 students in 1990 to 546 in 1999).

The number of overseas students completing medicine courses in Australia also increased in the 1990s. In 1990, 61 overseas students completed their medical degrees in Australia (Figure 13). This number grew to 222 in 1999, with a peak of 237 in 1997. These students generally return to their home countries after they have completed their studies in Australia.

The proportion of females completing degrees in medicine has been increasing. In 1990, 43.6% of undergraduate medical students and 41.3% of postgraduates were female (Table A.17). These figures had grown to 48.0% and 54.4% respectively by 1999.

The proportion of female practitioners in the medical labour force is likely to continue to increase beyond 1999. Between 1994 and 2000 the percentage of female students commencing undergraduate medicine courses increased from 48.4% to 53.6% (Table 14). These students will start completing their courses and entering the medical profession from 2000.



Source: Table A.17.

Figure 13: Medicine student course completions: residency and level of course, Australia, 1990–99

4.1.2 Postgraduate specialist training

Following the completion of undergraduate or postgraduate university degree and internship, the cream of recently-qualified young doctors are invited to take up a specialist (or general practice) training position. The number of training places available in each specialty is determined by the specialty colleges, and are based on estimates of the future demand for practitioners ('fellows') in each specialty area. The Australian Medical Workforce Advisory Committee (AMWAC) periodically reviews the needs of each specialty and makes recommendations to the colleges. AMWAC reviews typically use AIHW medical labour force and national hospital morbidity data, Department of Health and Ageing Medicare statistics, ABS population projections and other information, applied to the current supply in the specialty field (acquired from college data holdings) to project future requirements.

Practitioners who are not offered, or who do not accept, a training position may register to practise as hospital non-specialists, under supervision, or as 'Other medical practitioners' (OMPs). OMPs are primary care practitioners who may treat patients, but not as an unsupervised general practitioner.

In 1999, there were 5,645 trainees in the specialist colleges, representing a growth of 91, or 1.6% since 1998. In both years, just over a quarter were registered with the Royal Australian College of General Practitioners. Another 13% in each of those years were registered with the Royal Australasian College of Physicians. Other large specialties were emergency medicine (12%), psychiatry (11%) and anaesthetics (10%) (Table 15).

Each year, the Medical Training Review Panel obtains information from the specialty colleges, through AMWAC, about current and likely training opportunities for medical practitioners. According to the Panel, there are likely to be 1,483 first-year places available in 2000 for new trainees (MTRP 2000). This is an increase of 9.9% on the 1,350 first-year places estimated for the previous year. Trainees typically undertake a program lasting between three and five years before being elected to fellowship of their college.

Table 15: Vocational training positions 1998 and 1999, and available first-year places 1999 and 2000, Australian specialist colleges

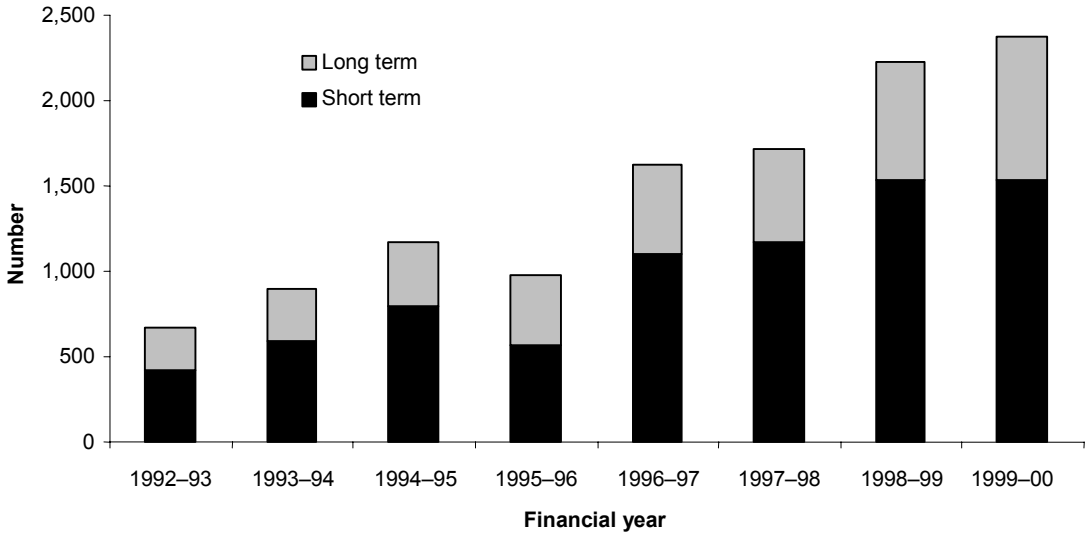
	All training places		Expected first-year training places	
Specialist college	**1998**	**1999**	**1999**	**2000**
Australian and New Zealand College of Anaesthetists	578	559	165	148
Australasian College of Dermatologists	43	50	8	6
Australasian College for Emergency Medicine	678	655	121	150
Royal Australian College of General Practitioners	1,441	1,478	400	410
Royal Australian College of Medical Administrators	99	99	20	20
Royal Australian College of Obstetricians and Gynaecologists	317	333	55	50
Royal Australasian College of Ophthalmologists	90	91	24	18
Royal College of Pathologists of Australasia	224	221	43	49
Royal Australasian College of Physicians	742	726	199	313
Royal Australian and New Zealand College of Psychiatrists	615	652	122	118
Royal Australian and New Zealand College of Radiologists	236	240	54	62
Royal Australasian College of Surgeons	498	541	139	139
Total	**5,561**	**5,645**	**1,350**	**1,483**

Source: Medical colleges.

In 2000 AMWAC undertook a survey of 1993–99 medical graduates, which aimed to find out how many planned to access a vocational training placement at some time in the future. Of the 842 respondents, 814 (96.7%) indicated they would seek entry into a medical college training program (or to change into a different training program) in the future. Of these, the bulk indicated a preference for general practice (19.1%), anaesthesia (11.6%), adult medicine (11.2%) and general surgery (10.9%). Although there is a high demand for some disciplines where there are limited opportunities, the reverse is also true. For example, 4.7% indicated dermatology as their preferred specialty area, but only 0.6% of likely training places were in dermatology, and 2.6% indicated psychiatry yet 7.7% of likely training places were in psychiatry (AMWAC 2000).

4.2 Migration

Educating potential doctors from the time they start university to the day they are fully qualified and practising takes many years, especially for those who undertake vocational specialty training. Therefore, using education as a tool to fill short-term planning requirements is very difficult, and it is for this reason that temporary resident doctors play an important role in the Australian medical labour force in this respect. Depending upon current needs, State, Territory and Federal governments have used various incentives to encourage doctors trained overseas to work in Australia temporarily to fill specific positions in hospitals, general practice, and deputising and locum services, particularly in localities nominated as 'areas of need'. These practitioners are termed 'temporary resident doctors' (TRDs) (AMWAC 1999).



Source: Table A.18.

Figure 14: Temporary migration of non-Australian medical practitioners to Australia for employment: length of migration, 1992–93 to 1999–00

As indicated in Figure 14, it seems that incentives have had an effect on the number of doctors entering Australia temporarily for the purpose of employment. In most years since 1992 there was an increase in the number of doctors entering Australia on a temporary visa, and there was a total increase over the period from 667 in 1992–93 to 2,372 doctors in 1999–00. Approximately two in three of these medical practitioners stay for less than 12 months.

Overseas-trained medical practitioners who wish to practise in Australia long term are required to pass a series of exams and assessments conducted by the Australian Medical Council. In order to become a fully registered primary care practitioner or hospital non-specialist, the overseas-trained practitioner must enter through the general registration pathway and pass both a multiple choice questions (MCQ) examination and a clinical examination. Overseas-trained specialists must enter through the AMC/specialist medical college pathway for assessment of their overseas training and experience by the relevant specialist college for the purpose of conditional registration as a specialist. In the financial year 1999–00, 219 candidates passed the general examination process and were eligible for full registration in Australia (Table 16). In the same year, 54 candidates qualified for conditional registration through the specialist pathway.

While many foreign doctors come to Australia permanently for the purpose of employment, it is also true that some Australian doctors migrate permanently to other countries for the same purpose. Between 1992–93 and 1996–97, the number of Australian medical practitioners leaving Australia permanently remained relatively constant at around 150 doctors per year (Figure 15). From 1997–98 onwards, this number steadily increased to 296 doctors per year in 1999–00. During this time, the number of overseas doctors permanently migrating to Australia fluctuated from a peak of 626 in 1995–96, to a low of 358 in 1997–98.

Table 16: Australian Medical Council examination and specialist assessment results, 1992–93 to 1999–00

	1992–93	1993–94	1994–95	1995–96	1996–97	1997–98	1998–99	1999–00
Overseas-trained doctors entering through the general registration pathway								
MCQ examination:								
Number of candidates presenting	812	619	688	. .[a]	1,382	779	669	769
Number passing/eligible to proceed to clinical examination	297	343	391	. .[a]	612	234	372	304
Clinical examination:								
Number exams conducted	434	418	404	518	556	427	459	434
Number passing AMC exam and eligible for registration	*193*	*211*	*222*	*266*	*266*	*151*	*220*	*219*
Overseas-trained specialists entering through the AMC/specialist medical college pathway								
Number of applications received	86[b]	191	162	178	151	123	132	220
Total qualified for registration [c]	*18*	*69*	*67*	*66*	*63*	*52*	*47*	*54*
Total overseas-trained doctors entering the workforce	211	280	289	332	329	203	267	273

(a) No MCQ examination was held in 1995–96.

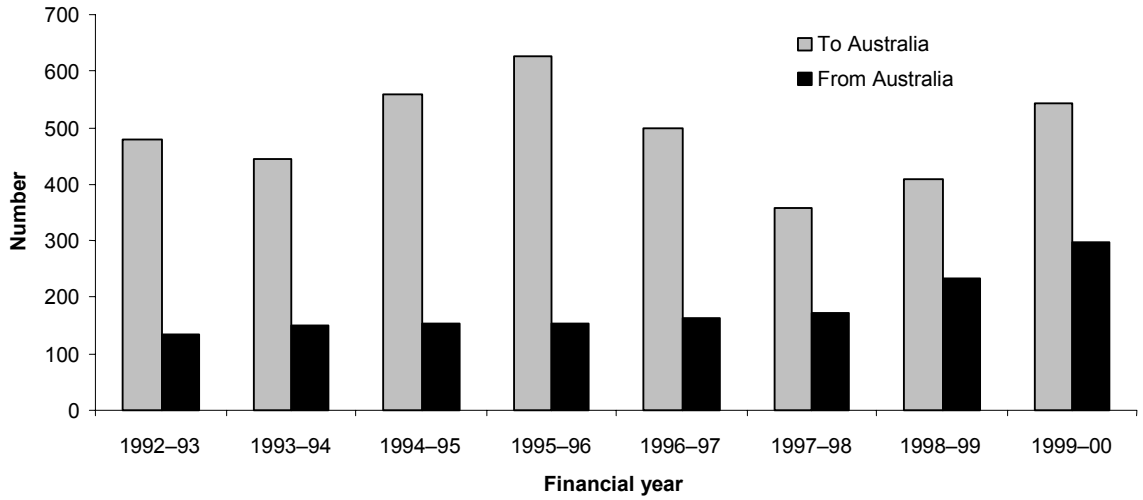
(b) Part-year figure only. AMC/specialist medical college procedures commenced in January 1993.

(c) Applicants qualifying in a particular year may have submitted their applications in a previous year.

Note: This table contains information that has been revised since the previous *Medical Labour Force 1998* publication.

Source: Australian Medical Council.

It can be seen from Figure 15 that in every year since 1992–93, there was a net gain of doctors, although the size of this gain has been smaller since 1997–98 than in the preceding years. It may be that with a general ageing of populations in other developed countries, there have been competing demands for health professionals, including medical practitioners, willing to emigrate from any country, either short term or permanently.



Source: Table A.19.

Figure 15: Permanent migration of Australian medical practitioners from Australia and non-Australian medical practitioners to Australia for the purpose of employment, 1992–93 to 1999–00