

9 Medical education and training

The Australian Health Ministers' Advisory Council (AHMAC) recommends to health ministers national medical workforce benchmarks and annual medical student and immigration targets to achieve these benchmarks.

In 1992, AHMAC set a medical workforce benchmark target of 200 practitioners per 100,000 population, to be achieved by annual inputs of 1,200 graduates with a basic medical degree, and net annual additions of 200 overseas-trained doctors per year. The data on Australian medical undergraduate intakes show a fall from 1,392 in 1991 to 1,330 in 1992 and 1,304 in 1993. A changeover to a four-year postgraduate degree course at three universities was responsible for further falls in commencements during the following three years.

In 1996, AHMAC agreed to a new benchmark target of 220 full-time equivalent clinicians per 100,000 population in 2005, and to a fall in medical graduates from 1,200 per year to 1,000 per year from the year 2002. The 1997 intake of 1,233 is likely to exceed this target in 2002. However, AMWAC is reviewing the benchmark during 1998–99 to account for changes in demand and supply indicators since 1996.

The Department of Employment, Education, Training and Youth has provided data on the number of students who enrolled in courses for years up to 1997 and who completed courses for years up to 1996. AIHW analysis of these data has found:

- 1,743 Australian citizen/permanent resident students completed medicine courses in 1996 – 1,327 (76.1%) completed undergraduate courses and 416 (23.9%) completed post-graduate courses. Of these, 832 (47.7%) were female – an overall increase from 38.7% in 1988.
- A further 187 overseas students completed medicine courses at Australian universities in 1996 – 9.7% of all completions.
- 1,233 Australian citizen and permanent resident students enrolled to commence initial medicine courses in 1997. 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 will not reach its planned annual intake of 186 new students until the 1999 academic year.
- 45.8% of the students commencing initial medicine courses in 1997 were female. This is the lowest proportion of females commencing medicine courses since 1992 and is mainly attributed to a very low proportion of females entering the first graduate entry course at the University of Queensland, although the proportion of female students also fell at four other medical schools between 1996 and 1997.
- 88.6% of these commencing students originated from a capital city or other metropolitan area, 10.1% from a rural area and 0.5% from a remote area. In contrast, 71.1% of the population were living in metropolitan areas, 25.9% in rural areas and 3.0% in remote areas.
- The average age of commencing students has increased by 5–8 years at the three universities which introduced graduate entry to initial medical courses. This will decrease the expected lifetime contribution in hours worked of these students to the medical labour supply.

- 8,973 Australian citizen and permanent resident students were enrolled in medicine courses in 1997 – 6,594 (73.5%) in bachelor courses and 2,379 (26.5%) in postgraduate courses.
- 37.4% of these students were born in overseas countries. Most of these (58.8%) were born in Asia – mainly Malaysia, Vietnam and Hong Kong – and a further 13.1% were born in the United Kingdom or Ireland.

Additional analysis of medical student numbers may be found in the 1998 AMWAC and AIHW publication, *Characteristics of Students Entering Australian Medical Schools 1989 to 1997*.

Table 29: Medical student course completions: citizenship and level of course, Australia, 1988–96

Level of course	1988	1989	1990	1991	1992	1993	1994	1995	1996
Australian citizens or permanent residents^(a)									
Bachelor									
Graduate entry	0	0	0	0	2	5	0	6	4
Bachelor honours	26	25	17	204	60	48	57	44	41
Bachelor pass	1,279	1,162	997	940	1,022	1,181	1,178	1,191	1,282
<i>Total</i>	<i>1,305</i>	<i>1,187</i>	<i>1,014</i>	<i>1,144</i>	<i>1,084</i>	<i>1,234</i>	<i>1,235</i>	<i>1,241</i>	<i>1,327</i>
Number of females	515	487	442	467	454	513	576	558	624
% female	39.8	41.0	43.6	40.8	41.9	41.6	46.6	45.0	47.0
Postgraduate									
Higher doctorate	27	33	34	36	35	28	28	39	37
PhD	84	108	130	165	142	135	168	190	228
Masters	27	38	46	76	37	35	54	58	80
Masters qualifying	1	5	0	0	2	0	0	0	0
Diploma/certificate	33	33	32	47	36	73	133	118	71
<i>Total</i>	<i>172</i>	<i>217</i>	<i>242</i>	<i>324</i>	<i>252</i>	<i>274</i>	<i>383</i>	<i>405</i>	<i>416</i>
Total	1,477	1,404	1,256	1,468	1,336	1,508	1,618	1,646	1,743
Number of females	587	569	542	610	573	624	739	771	832
% female	39.7	40.5	43.2	41.6	42.9	41.4	45.7	46.8	47.7
Overseas students									
Bachelor	17	59	44	73	52	67	85	134	150
Postgraduate	15	32	17	34	38	50	41	47	37
Total	32	91	61	107	90	117	126	181	187
Number of females	13	32	22	36	37	40	48	88	79
% female	40.6	35.2	36.1	33.6	41.1	34.2	38.1	48.6	42.2

(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 DEETYA data.

Table 30: Australian citizens and permanent residents commencing undergraduate medicine courses:^(a) university and sex, Australia, 1989–97

University	1989	1990	1991	1992	1993	1994	1995	1996	1997
Flinders University	58	77	70	63	64	8 ^(b)	0 ^(b)	60	58
Monash University	153	153	164	141	139	137	130	139	123
University of Adelaide	107	107	112	105	98	101	103	93	90
University of Melbourne	182	199	185	182	185	193	195	198	204
University of New South Wales	152	142	144	156	140	146	162	175	145
University of Newcastle	67	75	72	69	66	66	69	63	67
University of Queensland	225	241	232	225	218	225	6 ^(b)	2 ^(b)	231
University of Sydney	266	253	235	220	219	167	14 ^(b)	21 ^(b)	139
University of Tasmania	50	49	50	49	50	50	54	54	53
University of Western Australia	119	121	125	120	125	124	123	123	123
Total	1,379	1,417	1,392	1,330	1,304	1,217	860	928	1,233

	(per cent who are female)								
Flinders University	41.4	44.2	52.9	57.1	51.6	25.0	0.0	55.0	41.4
Monash University	42.5	40.5	51.8	47.5	49.6	52.6	61.5	56.1	62.6
University of Adelaide	40.2	48.6	42.9	49.5	39.8	39.6	53.4	43.0	53.3
University of Melbourne	44.5	42.7	43.2	45.1	43.2	47.7	40.2	38.9	41.2
University of New South Wales	42.1	43.0	40.3	36.5	41.4	41.8	39.5	47.4	49.0
University of Newcastle	67.2	73.3	66.7	65.2	57.6	57.6	56.5	60.3	58.2
University of Queensland	42.2	49.0	50.4	41.3	55.5	50.7	50.0	0.0	34.2
University of Sydney	36.5	36.0	43.7	35.0	43.8	47.3	35.7	38.1	43.9
University of Tasmania	60.0	59.2	60.0	59.2	54.0	60.0	44.4	53.7	49.1
University of Western Australia	47.9	42.1	54.4	47.5	46.4	49.2	46.3	52.0	45.5
Total	43.6	45.0	48.5	44.7	47.5	48.4	47.3	48.5	45.8

(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 DEETYA data.