

1 Introduction

Background

In 1990, the Australian Health Ministers' Advisory Council (AHMAC) commissioned the Australian Institute of Health and Welfare 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 labour force planning needs of the health professions, government, service providers and educational institutions. A national medical labour force survey in conjunction with the annual re-registration of medical practitioners commenced in 1993. Prior to 1993, a number of State health authorities, specialist medical Colleges and two publishing companies 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 (AMWAC), which it created in 1994. It concluded that AMWAC should continue for a further five years and that the national 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.

In some States, the coverage may exclude medical practitioners who registered for the first time during the current year. These practitioners are not required to renew their registration at the standard renewal date if the initial registration in that State has occurred within the preceding year.

Method

Each State and Territory medical board conducts an annual renewal of practitioner registration and, except for Western Australia, the survey questionnaire was sent to all medical practitioners as part of the registration renewal process. In Western Australia, the first survey conducted by the Medical Board was in conjunction with the renewal of registration in 1996. Estimates based on the 1996 survey have been included in this publication to provide national aggregates.

Timing

The statistics in this publication relate to registration renewals during the period October to December, 1995. In all States and Territories the renewal notices and the survey were dispatched at the end of September 1995. 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

Based on the total of the registrations in each State and Territory, the response rate (excluding Western Australia) to the survey was 79.6%. The response rate was 91.3% in New South Wales; 73.9% in Victoria; 75.4% in Queensland; 65.0% in South Australia;

65.0% in Tasmania; 67.5% in the Australian Capital Territory; and 67.7% in the Northern Territory. However, complete data were not available for all responding medical practitioners, either because not all survey questions were completed or because medical board initial registration data were incomplete or not provided.

The 1995 data for registered medical practitioners were available by age and sex for some States so it has been possible to calculate survey response rates by these characteristics. These response rates are shown in the table below.

Table 1: Survey response rate, selected States, 1995

State/sex	Age (years)											Total
	<25	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	70+	
(per cent—response)												
New South Wales												
Male	27.7	77.4	79.0	90.7	95.1	97.0	98.2	97.4	98.4	97.5	95.9	92.3
Female	29.3	77.4	84.5	90.8	95.0	96.8	97.0	96.3	97.5	96.0	92.5	88.5
Total	28.5	77.4	81.0	90.7	95.1	97.0	98.0	97.3	98.3	97.3	95.4	91.3
Victoria												
Male	1.2	51.5	67.9	73.1	79.0	79.6	80.9	83.1	87.4	82.6	87.1	74.9
Female	1.4	53.2	72.6	74.9	80.1	80.7	84.4	81.7	84.9	86.7	79.5	70.7
Total	1.3	52.3	69.8	73.7	79.3	79.8	81.4	82.9	87.1	83.2	86.0	73.9
Queensland												
Male	76.4	70.9	71.8	76.5	78.6	78.8	76.9	76.2	75.6	79.1	66.3	75.2
Female	60.6	69.8	76.0	78.6	82.0	83.2	74.8	77.6	70.7	83.0	64.5	75.9
Total	68.3	70.4	73.3	77.2	79.6	79.7	76.6	76.3	74.9	79.5	66.1	75.4
South												
Male	6.6	38.1	51.0	58.4	69.8	73.9	76.9	72.1	74.7	76.1	79.9	65.3
Female	1.4	41.1	54.6	66.3	72.5	77.0	82.2	80.8	75.7	76.0	66.7	60.6
Total	4.1	39.3	52.2	61.3	70.5	74.5	77.7	73.3	74.8	76.1	78.4	65.0
Tasmania												
Male	0.0	32.2	48.0	61.2	71.3	73.0	76.1	69.9	67.1	84.4	72.9	65.0
Female	3.7	46.7	57.5	71.1	83.0	84.2	82.6	85.7	83.3	92.9	75.0	65.0
Total	2.3	38.9	51.5	64.2	74.1	75.0	77.2	71.8	69.1	85.6	73.1	65.0
(number ^(a) —registrations)												
New South Wales												
Male	206	1347	1260	1829	1919	2021	1699	1307	935	990	1327	16234
Female	205	984	729	978	801	499	365	191	158	177	199	5868
Total	411	2331	1989	2807	2720	2520	2064	1498	1093	1167	1526	22102
Victoria												
Male	169	949	1306	1524	1482	1383	1092	750	618	626	753	10667
Female	144	688	860	757	554	336	205	120	93	113	132	4006
Total	313	1639	2166	2281	2036	1719	1297	870	711	739	885	14736
Queensland												
Male	72	605	830	924	926	882	727	562	389	382	502	6825
Female	66	517	455	471	373	226	143	67	58	47	62	2495
Total	139	1122	1285	1395	1299	1108	870	629	447	429	564	9322
South												
Male	76	336	447	522	504	555	480	323	237	213	298	3996
Female	70	224	240	291	178	135	90	52	37	25	36	1382
Total	146	560	688	813	682	690	570	375	274	238	334	5526
Tasmania												
Male	16	87	148	178	171	174	113	103	82	90	107	1272
Female	27	75	87	76	53	38	23	14	12	14	12	437
Total	43	162	235	254	224	212	136	117	94	104	119	1710
(per cent—total reported age)												
	2.1	11.4	12.4	14.8	13.6	12.2	9.7	6.8	5.1	5.2	6.7	100.0

(a) May not sum to totals as a result of 'unknown' sex or age.

It is apparent that medical practitioners under the age of 35 years had a lower response to the survey than had medical practitioners aged 35 years and over. Practitioners aged under 25 years represented 2.1% of registrations, those aged 25–29 years represented 11.4% and those aged 30–34 years represented 12.4%.

The overall response rate can only be estimated, not determined with complete accuracy. It is known that at least some medical practitioners who are 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.

Labour force estimates

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

The estimation of the number and characteristics of currently 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. This process may overestimate the numbers of medical practitioners in the labour force 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 a higher proportion of doctors registered in other jurisdictions, and lower proportions of doctors practising solely in the Territories.

In 1994, the factor used to produce the estimates was the simple ratio of total registrations to total survey responses. In 1995, 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. (See the table above for the difference response rates by sex and age in these States.) Practitioners aged less than 35 years had lower response rates than had practitioners aged over 35 years, and practitioners in the younger age groups also had different characteristics from those of the older ages, so there were differences arising from this improved estimation process. The main differences were:

- an increase of 377 in the estimated total number of practising medical practitioners;
- a significant shift in the sex distribution of practitioners because females were concentrated in the younger age groups. This resulted in a net increase of 640 females and decrease of 263 males; and
- an increase in the number of hospital non-specialist practitioners and specialists-in-training, with a related decrease in the number of primary care and specialist practitioners, because the younger age groups were undergoing training mainly based in hospitals.

The survey was conducted in Western Australia in 1996, but not in 1995. So that national data may be presented, estimates for Western Australia have been included in most tables based on the data from the 1996 survey scaled to the number of registrations in that State in 1995. The response rate to the 1996 Western Australian survey was 47.9%, which may affect the accuracy of all estimates.

Table 2: Difference between estimates using response rate by age and sex and overall response rate, selected States, 1995

	NSW	Vic	Qld	SA	Tas	Total
Registered practitioners only/mainly in home	119	125	-11	9	19	261
Clinicians						
Males:						
Primary care practitioners	-191	-124	-6	-151	8	-464
Hospital non-specialists	258	227	16	53	28	582
Specialists	-232	-235	-28	-127	-7	-629
Specialists-in-training	114	126	20	-29	17	248
<i>Total</i>	<i>-51</i>	<i>-6</i>	<i>2</i>	<i>-254</i>	<i>46</i>	<i>-263</i>
Females:						
Primary care practitioners	-25	0	-26	102	-9	42
Hospital non-specialists	198	169	18	104	31	520
Specialists	-26	-31	-11	19	-6	-55
Specialists-in-training	36	41	5	46	5	133
<i>Total</i>	<i>183</i>	<i>179</i>	<i>-14</i>	<i>271</i>	<i>21</i>	<i>640</i>
Persons						
Primary care practitioners	-216	-124	-32	-49	-1	-422
Hospital non-specialists	456	396	34	157	59	1,102
Specialists	-258	-266	-39	-108	-13	-684
Specialists-in-training	150	167	25	17	22	381
Total	132	173	-12	17	67	377

Comparability with previous year's data

The data in this publication are not directly comparable with previous year's data—mainly as a result of the above improvements in estimation methodology.

In addition, data were collected in Victoria in the standard format for the first time in 1995. Specialists-in-training were not separately identified in the Medical Board of Victoria survey before 1995, and were included in the hospital non-specialist category mainly, with some in the specialist category.

In 1994, the number of registered medical practitioners in New South Wales was understated by 1,595 in statistics provided to the Institute. Some 1,169 of these were employed practitioners with various categories of conditional registration; the balance were identified as non-practising.