

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.

References

- Australian Bureau of Statistics (ABS) 1990. *Australian standard classification of countries for social statistics*. Catalogue no. 1269.0. Canberra: ABS.
- Australian Institute of Health and Welfare (AIHW) 1999a. *The general practice medical workforce in Australia: what the data say*. www.aihw.gov.au/releases/May.
- Australian Institute of Health and Welfare (AIHW) 1999b. *Australian hospital statistics 1997–98*. Canberra: AIHW.
- Australian Institute of Health and Welfare (AIHW) 1998. *Australia's health 1998: the sixth biennial health report of the Australian Institute of Health and Welfare*. Canberra: AIHW.
- Australian Medical Workforce Advisory Committee (AMWAC) 1997. *The emergency medicine workforce in Australia*, AMWAC Report 1997.1. Sydney: AMWAC.
- Australian Medical Workforce Advisory Committee (AMWAC) & Australian Institute of Health and Welfare (AIHW) 1996a. *Australian medical workforce benchmarks*, AMWAC Report 1996.1. Sydney: AMWAC.
- Australian Medical Workforce Advisory Committee (AMWAC) & Australian Institute of Health and Welfare (AIHW) 1996b. *Female participation in the Australian medical workforce*, AMWAC Report 1996.7. Sydney: AMWAC.
- Australian Medical Workforce Advisory Committee (AMWAC) & Australian Institute of Health and Welfare (AIHW) 1998. *Medical workforce supply and demand in Australia – a discussion paper*, AMWAC Report 1998.8, AIHW Catalogue No. HWL12. Sydney: AMWAC.
- Department of Health and Aged Care 1998, *Medical training review panel, second report*, Canberra:AGPS.
- Department of Primary Industries and Energy & Department of Health and Family Services 1994. *Rural, remote and metropolitan areas classification*. Canberra: AGPS.
- Holmes G 1998. *Junior doctors' working hours: an unhealthy tradition?* Medical Journal of Australia Vol. 168, 15 June 1998.
- OECD 1998. *OECD health data 1998 – a comparative analysis of 29 countries* (CD-ROM). Paris: OECD.
- Olsen LG & Ambrogetti A 1998. *Working harder – working dangerously?* Medical Journal of Australia Vol. 168, 15 June 1998.

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- Characteristics of students entering Australian medical schools 1989 to 1997. AMWAC Report 1997.7, AIHW cat. no. HWL6, December 1997.
- Medical workforce supply and demand in Australia – a discussion paper. AMWAC Report 1998.8, AIHW cat. no. HWL12, October 1998.
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