

Profile of the Medical Workforce in NSW, 2000

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INTRODUCTION

The annual medical labour force survey

(a) Overview

Each year a labour force survey questionnaire is forwarded to medical practitioners renewing their registration in NSW. Information from the survey contributes to constructive discussion of medical workforce planning issues for the NSW Health Department, Commonwealth Government, Health Services, professional colleges and associations, the NSW Medical Board, medical faculties and other interested bodies.

Response rates to the survey have been high during the past decade, with 87.6% in 1990 and 90.0% in 2000, with the highest rate of 93.1% in 1994. The continued support of the NSW Medical Board, professional organisations and medical practitioners in the distribution and completion of the survey is appreciated.

(b) Availability of survey information

Each year a brief summary of the current year's survey data is prepared by the NSW Health Department and is distributed to all medical practitioners registered in NSW. A copy of the pamphlet is available on request from the Department (contact details are included at the front of this publication).

Additional survey analysis can be obtained by forwarding a written request to the contact address in the front of the publication. Contact should be made to clarify the information required and to determine if a fee may apply. A charging policy is available on request.

The *Profile of the Medical Labour Force* has been published every two years to provide more detailed information about the medical labour force. The last *Profile of the Medical Labour Force* was published in 2001, documenting 1999 data. In addition to comprehensive data from the most recent survey, longitudinal data is included where consistent data is available from the surveys undertaken from 1990 onwards. Longitudinal data in this publication have been fully reviewed to ensure consistent assumptions have been made in the preparation of this report. The information may consequently vary from previously published data (see the note below on longitudinal data, page 3).

Strict procedures are followed to ensure the privacy of individual medical practitioners who respond to the survey. An agreement between NSW Health and the NSW Medical Board prevents access to identifying data. Survey information will not be made available in any format that enables the identification of individual respondents.

Methodology

(a) Timing of the 2000 Survey

Information from the 2000 Annual Medical Labour Force Survey relates to the 2000 registration renewal period. Renewal notices and surveys were forwarded in August to all medical practitioners registered with the NSW Medical Board at that time. The renewal fee was due by 31 October 2000 in order for the medical practitioner to be retained on the register. Survey respondents completed the survey with information about their usual working situation at that time.

Information regarding the registration status of medical practitioners was provided by the NSW Medical Board relating to the period from 1996 to May 2000. In order to match the data on a yearly basis to the 1996 profile, the period from April to end of March in each year was used as a time frame for each year of data. The Board changed its financial year in 1997/98 from the 12 months April to March, to end at June 30th. Subsequent years were from July to end June. This results in only a minor variation in registrants by category, and therefore the April to March timeframe was applied for data comparability. The data on medical practitioners' sex, year of birth and primary qualifications are also provided by the Board to eliminate the need to collect this information annually on the survey.

Figure 1.1 1996 - 2000 Annual Medical Labour Force Survey time frame

	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Mail out of renewal notice and survey form												
Survey completion												
Registration status												

(b) Survey coverage

Information from the medical labour force survey does not cover all registered medical practitioners in NSW. Only those registrants renewing their registration are forwarded a survey. This excludes:

- **New registrants:** New registrants include new local graduates, interstate graduates and overseas trained medical practitioners registering for the first time with the NSW Medical Board. It includes medical practitioners gaining both conditional and full registration in NSW. Some new registrants may receive the current survey if they also renew in the same financial year.
- **Restorations:** Restorations are persons who have been restored to the register after a period in which they were not financial. These persons will not normally receive the annual survey, although some medical practitioners are restorations simply due to late payment and may have returned a survey.

The labour force characteristics of new registrants and restorations may vary from those registrants who are part of the survey target group. Any extrapolation of their demography or work patterns from the survey data should be made with care.

(c) The working renewal cohort

In 1999, 77.8 per cent of the 20,616 respondents to the survey indicated that they were working only or mainly in NSW, or currently working, but on leave for three months or longer. This group of 16,046 survey respondents comprises the "working renewal cohort" and is referred to throughout the publication as medical practitioners working in NSW. The longitudinal data also refer to the working renewal cohort.

Table 1.1 Work status of working renewal cohort and other respondents, NSW, 2000

Work Status	No.		%		No.		%		%
	Sex	Female	Male	Total	Female				
Working in medicine									
Only in NSW	1199	70.7%	4,319	78.7%	9,927	73.9%	15445	74.9%	30.3%
Mainly in NSW	37	2.2%	86	1.6%	360	2.7%	483	2.3%	19.3%
On extended leave	5	0.3%	75	1.4%	38	0.3%	118	0.6%	66.4%
Other renewal respondents									
Not working in medicine in NSW	352	20.7%	742	13.5%	2146	16.0%	3240	15.7%	25.7%
Retired	104	6.1%	264	4.8%	962	7.2%	1,330	6.5%	21.5%
Total	1697		5,486	100.0%	13,433	100.0%	20616	100.0%	29.0%

(d) Sample size, response rate, participation rate and estimate of total workforce size

The table below shows the trends in categories of registration, survey respondents, response rate, participation rate and estimates of total medical practitioner workforce size in NSW between 1990 and 2000.

Table 1.2 Trends in sample size, response rate, participation rate and workforce size 1990-2000

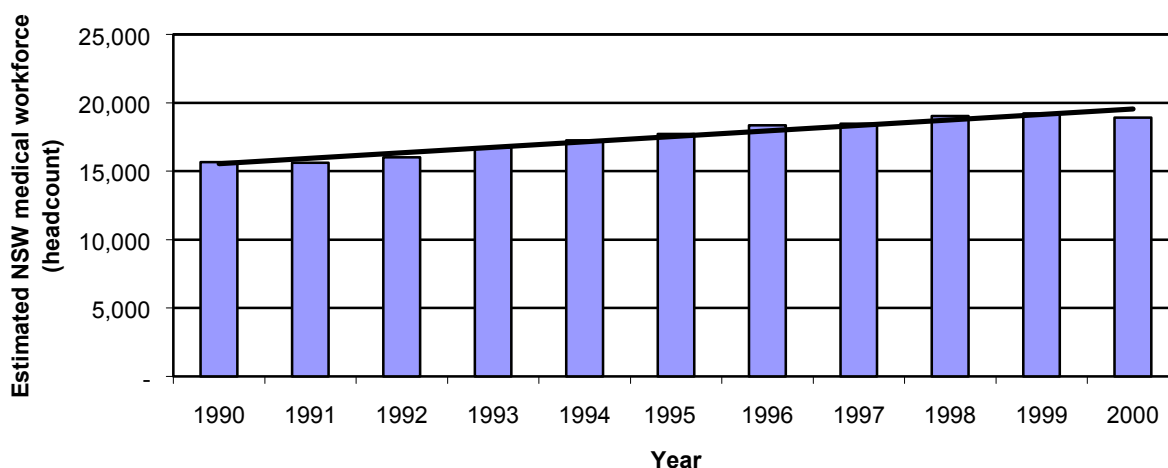
	1990 [†]	1991 [†]	1992 [†]	1993 [†]	1994	1995	1996	1997	1998	1999	2000
New registrants ¹	880	659	894	1,679	1,242	1,256	1,360	846	938	687	974
Renewals ²	19,616	18,833	18,770	18,584	19,745	20,307	20,823	21,820	22,676	23,350	22,908
Restorations/other ³	n/a	520	504	617	540	539	587	178	240	370	261
Temporary registrants ⁴											592
Total Registrants	20,496	20,012	20,168	20,880	21,527	22,102	22,770	22,844	23,854	24,407	24,735
Survey respondents ⁵	17,185	17,163	17,425	16,541	18,376	18,748	19,154	19,399	20,041	19,923	20,616
Working respondents ⁶	13,026	13,312	13,748	13,114	14,620	14,925	15,315	15,626	15,903	15,611	16,046
Survey response ⁷	87.6%	91.1%	92.8%	89.0%	93.1%	92.3%	92.0%	88.9%	88.4%	85.3%	90.0%
Medical practitioners working in NSW ⁸	15,661	15,616	16,017	16,738	17,259	17,728	18,343	18,480	19,030	19,211	18,915
Workforce participation rate ⁹	76.4%	78.0%	79.4%	80.2%	80.2%	80.2%	80.6%	80.9%	79.8%	78.7%	78.3%

Notes

1. New registrants include all persons recorded as registering for the first time during the survey reporting period. The reporting period is normally 12 months, although in 1993 the reporting period was 15 months in order to align it with the NSW Medical Board's financial year.
2. A renewal is defined as a medical practitioner registered in NSW eligible to renew their registration in each year with no other registration actions recorded in that year (deletion, restoration or new registration).
3. Restorations include those persons who paid late as well as those restored to the register after a more significant period in which they were not registered.
4. A temporary registration is defined as a medical practitioner who was granted temporary registration by the Board for a defined time period. In 2000, this included medical practitioners from overseas who visited Australia for the 2000 Olympic games. This group is excluded from the estimation of workforce size as they did not receive a survey form (see note 8).
5. A survey respondent is defined as a person who provides, at a minimum, a response to the question on their working status. This excludes 550 survey responses in 2000 that did not contain information on working status, and 2,237 renewals with no survey data. It also excludes 267 new registrations and restorations who completed survey forms, of whom 157 were working. This group is included in the estimation of the size of the workforce (see note 8).
6. Working respondents are the working renewal cohort: those respondents who indicated that they were working only or mainly in NSW, or currently working but on leave for three months or longer (see page 3).
7. The survey response rate is the proportion of renewals (as defined in note 2) who provided a survey response (as defined in note 5). It should be regarded as a guide only as alternative assumptions may result in a variation in the calculated rate (approximately ± 3 per cent).
8. The estimate has been calculated by assuming: the proportion of survey respondents working in NSW represents the proportion of all renewals working in NSW; and that 90% of new registrants are working in NSW and 80% of other registrants are working in NSW.
9. Estimate of the proportion of medical practitioners registered in NSW who are working in NSW. See notes 7 & 8 for assumptions.

The graph and table shows that the estimated medical practitioner workforce has grown between 1990 and 1999, and shows a small decline in 2000. However, these figures should be interpreted with care as there was a change in survey form design in 2000 as well as a number of survey forms which could not be matched with Board transaction data, resulting in a group with unknown sex and age (see page 6.).

Figure 1.2: Estimated size and growth rate of the NSW medical practitioner workforce, 1990 to 2000



(e) Type of work sought in medicine

Table 1.3: Survey respondents not currently working in medicine, type of work sought by sex, 2000

Type of work sought	No.		%		No.		%		%	
	Sex unknown		Female		Male		Total		Female	
Not looking for work in medicine	35	77.8%	162	83.5%	188	80.0%	385	81.2%	46.3%	
Looking for work in medicine:										
- full time	1	2.2%	6	2.6%	11	2.2%	18	3.8%	35.3%	
- part time	9	20.0%	24	12.4%	35	14.9%	68	14.3%	40.7%	
- type unknown	0	0.0%	2	0.9%	1	0.4%	3	0.6%	66.7%	
Total	45	100.0%	194	100.0%	235	100.0%	474	100.0%	45.2%	
<i>non response/unknown</i>	8	15.1%	13	6.3%	12	4.9%	33	6.5%		
Note:	Table includes only those survey respondents in Table A1.5 who indicated that they were not currently working or currently working but not in medicine (n=507)									

There were only some 89 medical practitioners who were looking for work at the time of the survey. This group were 18.7% of those not currently working in medicine.

Table 1.4: Average intended years remaining in the workforce, medical practitioners working in NSW, 2000

Age	No.		No.			
	Female		Male		Total	
19-24	35		37		36	
25-29	32		34		33	
30-34	27		29		29	
35-39	23		25		24	
40-44	20		21		20	
45-49	16		17		17	
50-54	13		13		13	
55-59	9		10		10	
60-64	7		7		7	
65-69	5		6		6	
70-74	6		5		5	
75+	6		6		6	
All including missing ages	21		18		19	
<i>Non respondents</i>	606		1429		2035	

The above table shows that there is an inverse relationship between age and years intending to remain in the workforce. Female medical practitioners on average have 21 years remaining, while male medical practitioners have on average 18 years remaining in the workforce.

Notes to assist interpreting data in this publication

(a) Unmatched records

In analysing the survey data, a file of survey respondents records is matched with a file of transaction records provided by the NSW Medical Board. The matching process enables the transaction status to be determined. In matching the two data files, there were some 1,747 survey records which did not match with the transaction data file, as recorded identification numbers did not match with the Board file, or had a value of zero. It was decided to include these survey records in the overall analysis as an analysis of workforce status indicated that there was a close match between these records and the total file of matched records. Of these unmatched survey records there were 1,241 records which had a valid workforce status and which met the definition of being in the workforce. These 1,241 records are reported throughout the profile as age and sex unknown as they could not be matched with the data in the transaction file which records age and sex data.

In addition, the resulting number of working respondents was matched with data from previous years and the inclusion of the records led to a workforce size which better matched with data from previous years.

(b) Changes to the survey form in 2000

There were changes made to the questions on the 2000 survey form which have resulted in the need to apply different definitions to the data. One of the major changes was the collection of data on hours worked by location, rather than frequency responses on the number of jobs. Therefore the question on "three main locations where medical practitioners worked over the last four weeks and percentage of hours worked in each locality" (Q. 9) was used to determine the number of respondents working at one, two or three locations. In some cases, the same postcode was recorded for more than location.

The major constraint with this type of question is the high non response which results when respondents are asked to record hours worked. The non response rate in Table 3.4 was twenty percent (p.16).

In addition, the question on work settings was changed to ask "how many hours per week over the last four weeks were worked in each of the following settings?" (Q.8). The non response rate to this question shown in Table 3.6 was seven percent.

These changes to the survey questions have resulted in constraints in the ability to compare data over time. These are documented over the period 1990 to 2000 in the section below.

(c) Longitudinal data may not be directly comparable across all years

Care should be taken when analysing longitudinal data as not all data items are directly comparable across all years. A number of particular issues need to be considered:

- The annual labour force survey has been revised on a number of occasions between 1990 and 2000, with a major revision in 1992, 1994 and again to key questions in 2000. New questions have been added while others have been dropped; new categories have inevitably affected the number of medical practitioners responding to other categories.
- Information on primary care practitioners (section 3), specialists (section 4), specialists in training (section 5) and non-specialist hospital salaried medical practitioners (section 6) will be affected by changes in the way in which this information has been elicited from respondents. A summary of the changes is included in the notes to Table 3.26 on page 28.
- The extension of undergraduate medical training from five to six years resulted in a shortfall of one graduating class in 1990 (affecting new registrant numbers in 1990/91) and again in 1992 (affecting 1992/93).

- In 1993, the survey reporting period was 15 months rather than the usual 12 months in order to bring the period in line with the NSW Medical Board's financial year. This artificially increased the number of new registrants reported in 1993 and reduced the proportion of recent medical graduates in that year's data. This occurred again in 1997, but data from 1996 to 1999 are not adjusted in order to allow comparability of data across this time period.
- Registration categories and the manner in which the data is stored were changed in 1991 and again in 1993. This may affect in particular the classification of registrants as either renewals or restorations.
- The majority of registrants whose age is unknown were first registered between 1984 and 1988 (inclusive). Of the 1,309 persons in the 1996 working renewal cohort for whom age was unknown, 1069 (81.7%) were first registered during this period.

Data from 1994, 1995 and 1996 can be readily compared. Data from 1996 to 1999 can also be compared, apart from minor changes in 1998 to the categories of work status (not working categories only), remunerated hours worked per week (on call hours worked absorbed into direct patient care hours), and number of specialties coded (from 47 to 49 categories). When comparing data from prior to 1994 consideration should be given to the effect of any discontinuities.

(d) Figures have not been adjusted for non-response

Data in this publication have not been adjusted for unknown information (both survey non-response and registration data such as year of birth). When interpreting the tables and graphs, consideration should be given to the impact of unknown data:

- The absence of data due to non-response results in an under-representation of the size of the workforce.
- Data from different years are samples with different response rates. Variations in the response rate from year to year may account for some of the variation evident in longitudinal data (see Table 1.2).
- The labour force characteristics of non-respondents may differ from the characteristics of survey respondents (for example, respondents may be more likely than non-respondents to be in the workforce). Weighting the survey data according to non-response alone may result in an over-estimation or under-estimation in some categories.
- The labour force characteristics of medical practitioners who are not part of the survey target group (that is, new registrants and restorals) may differ from the characteristics of the survey population. In particular, the Australian Institute of Health and Welfare identified from 1995 data that "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 age groups."¹

An estimate of the total workforce size is provided in section 1 (Table 1.2, page 3). These estimates should be regarded as a guide only and may usefully be verified against other data sources.

(e) Calculating total unknown data for the survey

In determining the total unknown data for a particular question, consideration should be given to:

- **Unknown data for the question or questions comprising the table**, as indicated at the foot of each table. This may also include information that is unknown due to registration data (eg, year of birth) being unavailable from the NSW Medical Board.

¹ The Australian Institute of Health and Welfare, *Medical labour force 1995* (Canberra: AIHW, 1997), p. 3.

- **Non-response to any filtering questions.** In particular, data on general practitioners, specialists, specialists in training and non-specialists are affected by non-response to survey question 12. Data on first, second and third location will also be affected by the response rate to Question 9.
- **Non-response to the survey.** Survey response rates are presented in Table 1.2.

It should be noted that limitations in the survey data prevent a distinction between non-response and alternatives such as “no”, “other” or “zero”. Information regarding this is noted at the foot of the relevant tables.

(f) Conventions used in this publication

Throughout this publication, figures within the tables may not add to the total shown where it has been necessary to round numbers. Percentages printed as 0.0 may denote less than 0.05%.

Italics are used to report unknown data.

Bold is used to indicate a total or subtotal.

Vertical lines in tables note significant discontinuities.

- is used in place of zero (0).

— denotes not applicable.

n/a denotes data is not available.

2

MEDICAL PRACTITIONERS WORKING IN NSW

This chapter summarises the characteristics of medical practitioners working in NSW, together with the characteristics of each of the four sub groups of primary care practitioners, specialists and consultants, specialists in training, and non-specialist hospital salaried medical practitioners.

Characteristics of all medical practitioners working in NSW

- From 1990 to 2000, the NSW medical practitioner workforce is estimated to have grown from a headcount of 15,661 to 18,915 (after adjusting for non response, see Table 1.2). This represents a total increase of 20.8% over the period. Annual average growth was 2.3% between 1990 and 1993, 3.2% from 1993 to 1996 and 0.8% from 1996 to 2000, indicating a slowing in the growth rate. There was actually an estimated decline of 296 medical practitioners between 1999 and 2000.
- Workforce participation rates for medical practitioners in NSW increased slightly between 1990 and 2000 (from 76.4% to 78.3%), although the 2000 rate has dropped from a peak of 80.9% in 1997.
- The proportion of women in the medical workforce has increased from 23.4% in 1990 to 30.3% in 2000 (NOTE: there were 1,515 workforce participants where sex was unknown in 2000). Women made up 33.0% of the workforce aged under 40 in 1990 and 42.3% in 2000.
- Since 1990 the proportion of older medical practitioners has increased overall. In 1990, 60.6% of the workforce was forty and older compared with 65.3% in 2000. Those aged 65 years and over were 7.9% of the workforce in 1990, increasing to 10.1% in 2000.
- The public sector accounted for 38.7% of medical practitioners in 2000 in their main job (defined as most hours worked). The largest proportion (81.3%) of these worked in acute care hospitals. The private sector accounted for 61.3% of medical practitioners in 2000. The largest proportion of private sector medical practitioners worked in private medical rooms/surgeries and other private 24 hour centres (87.4%). Female medical practitioners were more likely to work in the public sector (46.0% of all females) than males (36.0% of all males). The employment setting for a second position was much more likely to be the public sector (93.1% of the total with hours in a second setting) while 45.9% were in the public sector in a third setting.
- In 2000, the main job for 13.1% of medical practitioners was located in Rural Area Health Services. This proportion has gradually increased from 1997 levels of 12.3% and numbers have increased from 1,543 in 1990 to 2,010 in 2000, a growth of 467 practitioners, 30.3% or an average annual growth of some three percent.
- Overall, 87.0% of females and 89.4% of men were in clinical roles. Female medical practitioners were slightly more likely than their male counterparts to be in teaching/education or in other positions (proportion working hours in those areas).

- Some 19.4% of medical practitioners reported working part time in terms of total hours worked per week (hours worked less than 35 hours per week). Women were more likely to work part time than men (34.3% compared with 13.1%).
- Of the four in five of medical practitioners (80.2% - see Table 3.25) who reported working in scheduled patient sessions, the largest group were likely to spend 47 to 48 weeks with scheduled patient sessions (33.3% of respondents) while 80.5% of respondents reported working 45 weeks or more per year with scheduled patient sessions.
- Some 8.9% of medical practitioners working in NSW were also registered as a medical practitioner in other states of Australia (9.8% of men and 6.7% of women). These medical practitioners were most likely to be registered in Queensland (36.2%), Victoria (24.2%) or the ACT (21.2%).

Characteristics of primary care practitioners working in NSW

Primary care practitioners engage in general practice or in the primary care of patients. This includes those persons who are vocationally registered general practitioners, Fellows of the Royal Australian College of General Practitioners (RACGP), RACGP trainees and other medical practitioners whose patients are mainly unreferral.

- Between 1990 and 2000 the primary care practitioner workforce grew from 5,255 to 6,689, a growth of 27.3% or 2.7% per annum on average. The proportion of female primary care practitioners increased from 26.3% to 30.8% over that period. Women made up 37.1% of workforce aged under 40 years in 1990 and 50.6% in 2000.
- In 1990, medical practitioners under the age of 40 made up 35.8% of the primary care practitioner workforce, declining to 22.7% in 2000. The proportion of practitioners aged 65 years and over increased from 9.8% to 12.9% between 1990 and 2000.
- Some 34.3% of primary care practitioners in 1996 had two or more employment locations, with men slightly more likely to be working in multiple locations (34.5% compared with 33.2% of women).
- The proportion of the workforce with a main location in a rural area declined slightly between 1990 (18.4%) and 1997 (16.5%); although there was an increase in real terms (from 926 to 1,131); while the proportion in 2000 was 17.8% with 1,161 practitioners.
- In 2000, primary care practitioners were less likely to work in second and third locations in a Rural Health Service area—17.8% of main locations were in rural areas with 14.0% of second locations and 13.0% of third locations.
- Male primary care practitioners generally worked longer hours than female practitioners—49.1% of women reported less than 35 hours worked per week on average in total compared with 16.1% of men.
- Most primary care practitioners (89.2%) were working in private medical rooms, surgeries or private 24 hour centres.
- Some 81.9 % of primary care practitioners were vocationally registered general practitioners, 6.0% were Fellows of the Royal Australian College of General Practitioners, 4.1% were RACGP trainees and 8.0% were other medical practitioners. These data vary from 1999 as the survey question was changed so that medical practitioners only indicated one area in which they primarily practiced (in previous years multiple categories were a standard response). Some 8.0% of primary care practitioners reported working in a special interest area. Female practitioners were more likely to work in a special interest area (10.4% of women compared with 6.6% of men).

Characteristics of specialists and consultants working in NSW

A specialist is a medical practitioner with a qualification awarded by or recognised by the relevant specialist professional college in Australia.

- Between 1990 and 2000 the specialist workforce grew from 4,238 to 5,767, a growth of 36.0% or 3.0% per annum on average. The proportion of female specialists increased from 12.3% in 1990 to 18.9% in 2000. Women made up 20.7% of the specialist workforce aged under 40 years in 1990, and 31.8% in 2000.
- In 1990, specialists under the age of 40 made up 26.5% of the specialist workforce, declining to 18.6% in 2000. The proportion of specialists over the age of 65 increased from 7.9% to 12.4% during the same period.
- Some 61.1% of specialists in 2000 worked in more than one employment location, with men more likely to be working in multiple locations (62.1% of men compared with 54.8% of women).
- The proportion of specialists undertaking their main job in a rural area decreased slightly between 1990 (11.9%) and 2000 (10.4%), although there was an increase in the number of specialists working in rural areas from 476 to 580 over this period. All rural Area Health Services except for the Far West showed an increase in the number of specialists over the ten years. Similar proportions of specialists undertook second and third jobs in rural areas (10.2% and 9.8% respectively).
- Male specialists generally worked longer hours than female specialists; 30.2% of women reported less than 35 hours in terms of total hours worked compared with 13.8% of men.
- The most commonly held specialty qualifications overall in 2000 were other qualifications (12.9%), psychiatry (11.4%), anaesthesia (11.0%), general surgery (7.4%), diagnostic radiology (6.6%), obstetrics and gynaecology (6.1%), paediatric medicine (5.6%) and general medicine (5.5%). For women, the most commonly held areas of specialty qualifications were psychiatry (16.4%), anaesthesia and other qualifications (each 11.9%) and paediatric medicine (8.8%). For men, the most commonly held areas of specialty qualifications were other qualifications (12.7%), anaesthesia (10.9%), psychiatry (10.5%), and general surgery (8.6%).
- Some 5,660 specialists in 2000 reported a total of 7,123 specialty qualifications.
- The major areas of specialty practice in 2000 were psychiatry (10.8%), anaesthesia (10.0%), diagnostic radiology (6.2%), other areas of practice (5.5%), general surgery (5.4%), obstetrics and gynaecology (5.1%), and paediatric medicine (4.7%). However the non response to this question was high at 26.3%, limiting interpretation of this variable.

Characteristics of specialists in training working in NSW

Specialists in training are medical practitioners who are generally working as a registrar and employed in a training position that is accredited and supervised by the relevant specialist professional college.

- Between 1990 and 2000 the specialist in training workforce grew from 1,266 to 1,551, a growth of 22.5% or 2.3% per annum on average. Between 1990 and 2000 the proportion of female specialists in training increased from 28.3% to 37.1%.
- Virtually half of specialists in training are in the 30 to 34 age group (49.8% of the total). Over the past decade, a greater proportion of medical practitioners have tended to undertake specialist training at a later age, with the proportion of specialists in training over the age of 40 rising from 5.9% in 1990 to 10.2% in 2000 (NOTE: non response rates have changed over this period). Female specialists in training tend to be slightly older than their male counterparts, with 10.7% of female specialists in training over the age of 40, compared with 9.9% of males.
- Some 15.4% of female and 17.5% of male specialists in training were also working at second and third locations. The proportion of all specialists in training working in additional locations was 16.8%, although the non response was high at 19.5%.
- Most specialists in training (94.2%) in 2000 were employed in metropolitan areas, although there were 70 specialists in training in rural locations and 17 primarily working interstate.