
1

INTRODUCTION

The annual pharmacist workforce survey

Introduction

Each year, as part of the annual registration process for pharmacists in NSW, an Annual Workforce Survey is sent to each pharmacist currently registered with the Pharmacy Board of New South Wales. This report provides an overview of information from the 2001 workforce survey.

The response rate to the survey was higher than for 2000, increasing from 79.4% to 83.0%. The continued support of the Pharmacy Board of New South Wales, professional organisations and pharmacists participating in the survey is appreciated.

Availability of survey information

The previous summary of the Annual Survey data was produced in 2002, entitled "Profile of the Pharmacist Workforce in NSW, 2000". This profile reproduces the same data as for the 2000 survey, including the analysis of data on hospital pharmacists. Additional survey analysis data such as additional cross tabulations 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.

Strict procedures are followed to ensure the privacy of individual pharmacists who respond to the Survey. There is no access to identifying data, as individual names and addresses are not provided by the Board on the data file. Survey information will not be made available in any format that enables the identification of individual respondents.

Methodology

Timing of the 2001 Survey

Information from the 2001 Annual Workforce Survey relates to the 2001 registration renewal period. Renewal notices and surveys were forwarded in October 2001 to pharmacists registered with the Pharmacy Registration Board of New South Wales at that time. The renewal fee was due by the end of December in order for the pharmacist to be retained on the register, as non-financial pharmacists had their status altered by Board consent in mid January. Survey respondents completed the survey with information about their usual working situation at that time. Information regarding the registration status of pharmacists was provided by the Board which related to the period for 2001.

Workforce Survey coverage

Information from the Annual Workforce Survey does not cover all registered pharmacists in NSW. Only those registrants renewing their registration are forwarded a survey form. This normally excludes:

- **New registrants:** New registrants include new local graduates, interstate graduates and overseas trained pharmacists registering for the first time with the NSW Board who have had their qualifications recognised in NSW. These persons will normally not receive the Workforce survey, but some new registrants do receive the survey form if they also renew in the same financial year. If new registrants return a survey form, they are reclassified for the purposes of this profile as renewals (see Table 1.1).
- **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 pharmacists are restorations simply due to late payment and may have returned a survey form (defined as "technical restorations").
- **Prior Payments:** persons who have paid for several years' registration in advance. These persons will normally only receive the Work force survey in the first year they are listed as prior payment.
- **Registration status pending:** generally persons due for renewal between October and December who have not re-registered by the end of the survey period. These persons will most likely appear as deletions or restorations in the following year.

Care should be taken when interpreting this data as some individual pharmacists may be included in more than one of the categories during the twelve month period.

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, 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 in individual tables.
- The workforce 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 workforce characteristics of pharmacists who are not part of the survey target group (that is, new registrants and restorations) may differ from the characteristics of the survey population.

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 Board.
- **Non-response to any filtering questions.** Data on second job will be affected by the lack of the explicit question “Do you have a 2nd job?” The number of persons with second jobs has been estimated from the highest response to any one question (Table 3.5: Field of pharmacy- second job, n= 826) and used to estimate unknown data in relevant questions.
- **Non-response to the survey.** Survey response rates are presented in Table 1.1.

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.

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.

0 is used for zero.

Bold is used to indicate a total or subtotal.

— denotes not applicable.

n/a denotes data is not available.

Category of Pharmacist Registration

Table 1.1: Persons registered as Pharmacists in NSW, 2001

Category of registration	No. Row %		No. Row %		No. Row %	
	Female		Male		Total	
New registrations(only status) ²	69	56.0%	54	44.0%	123	100.0%
Restorations	24	66.7%	19	33.3%	43	100.0%
"True" restorations	10	50.0%	8	50.0%	18	100.0%
"Technical" restorations ³	14	75.0%	11	25.0%	25	100.0%
Renewals	3,300	48.8%	3,212	51.2%	6512	100.0%
Deletions	110	44.3%	133	55.7%	243	100.0%
New registrations (total) ²	128	58.4%	91	41.6%	219	100.0%

- Notes:**
- ¹ The table includes information on pharmacists who were financial with the Board during 2001
 - ² Some pharmacists are included in more than one category during the twelve month period. There were 219 new registrations in total, but 96 of those were also renewals within the survey period. These have been counted as renewals.
 - ³ There were 25 restorations of the total of 43 who had survey forms, and are therefore categorised as "technical restorations", because they renewed their registration after the cut off date and were then restored to the register.

In 2001, there were 6,670 pharmacists financially registered with the Pharmacy Board of NSW, a decline of 407 from the 7,077 pharmacists registered in 2000. Of these, 3,387 (50.8%) were female and 3,283 (49.2%) were male. Table 1.1 provides an overview of the number of pharmacists in each category of registration.

Response rate to Workforce Annual Survey

The response rate to the 2001 Pharmacy Workforce Annual Survey was 83.0%, higher than the response rates in 1999 and 2000.

Table 1.2: Response Rate to Pharmacist Annual Workforce Survey, 1999 - 2001

	No.	Rate	No.	Rate
	1999		2000	2001
Formal response rate				
<i>Survey respondents¹ who were renewals²</i>	5,307		5,498	5,427
<i>Total renewals²</i>	6,645	79.9%	6,927	79.4%
				6,537 83.0%

- Notes:**
1. A "survey respondent" is defined as a renewal who provides information to the question on working status. There were 1,004 survey forms with no data on workforce status and workforce status could not be determined. 106 pharmacists did not return any survey form
 2. "Renewal" is defined as a person recorded as renewing their registration although other actions may also have been recorded (technical restoration, new registration).

Determining the response rate to the survey is complicated by the relationship between the survey and the renewal process. While new registrants and restorations do not generally receive the survey, some may if they also receive a renewal notice within the twelve month survey period. Additionally, some persons sent renewal notices do not renew their registration and therefore do not return surveys. All survey responses from financially registered pharmacists are presented in Tables 1.3 and 1.4. Tables 3.1 to 3.29 describe the working renewals cohort only.

Work Status

There were 5,427 pharmacists who provided data on workforce status (including those mentioned in Note 1 to Table 1.2). This resulted in 4,221 working renewal survey respondents in 2001, lower than for the 4,282 working renewal survey respondents in 2000. Working renewals are those respondents who:

- Were financially registered and renewed their registration in 2001
- Returned a workforce survey indicating their work status; and
- Indicated that their work status was one of the following three categories:
 - Working in pharmacy only in NSW
 - Working in pharmacy mainly in NSW, but also in other states
 - Working in pharmacy in NSW, but on extended leave (see Table 1.3)

Table 1.3: Work status of Pharmacist Workforce Survey respondents¹, NSW, in 2001

Work Status	No.	%	No.	%	No.	%	%	%
	Female		Male		Total		Excludes N/R	Female
Working in pharmacy								
Only in NSW	2,087	64.2%	2,056	64.7%	4,143	64.4%	76.3%	50.4%
Mainly in other states, but also in NSW	14	0.4%	24	0.8%	38	0.6%	0.7%	36.8%
Mainly in NSW, but also in other states	16	0.5%	22	0.7%	38	0.6%	0.7%	42.1%
Only in states other than NSW	90	2.8%	139	4.4%	229	3.6%	4.2%	39.3%
Working in NSW but currently on leave	33	1.0%	7	0.2%	40	0.6%	0.7%	82.5%
Working overseas	111	3.4%	78	2.5%	189	2.9%	3.5%	58.7%
Not Working in/ practicing in pharmacy								
Currently not working	216	6.6%	195	6.1%	411	6.4%	7.6%	52.6%
Currently working, not in pharmacy	204	6.3%	135	4.2%	339	5.3%	6.2%	60.2%
Work Status Unknown								
Non-response to survey question ²	480	14.8%	524	16.5%	1,004	15.6%		47.8%
Total	3251	100.0%	3,180	100.0%	6,431	100.0%	100.0%	50.6%

No forms

106

- Notes:**
1. There were 6,431 forms from pharmacists renewing their registration, of whom 1,004 did not reply to the question on working status. (see Note 1 to Table 1.2)
 2. Percentages include the non-response to the survey. These are recalculated to determine the proportion of respondents by work status.

The workforce participation rate was 77.7% in total, with males slightly more likely to be in the workforce than females.

Pharmacists seeking work

Table 1.4: Seeking Work in Pharmacy in NSW, 2001

Nature of work sought	No.	%	No.	%	No.	%	%	
	Female		Male		Total		Female	
Not looking for work in pharmacy	374	91.0%	306	93.9%	680	92.3%	55.0%	
Looking for work in pharmacy:								
- either full time or part time	7	1.7%	4	1.2%	11	1.5%	63.6%	
- full time	3	0.7%	1	0.3%	4	0.5%	75.0%	
- part time	25	6.1%	15	4.6%	40	5.4%	62.5%	
- not specified	2	0.5%	0	0.0%	2	0.3%	100.0%	
Total	411	100.0%	326	100.0%	737	100.0%	55.8%	
<i>non response</i>	9	2.1%	4	1.2%	13	1.7%		

Note: Table includes only those survey respondents in Table 1.3 who indicated that they were not currently working or currently working but not in pharmacy (n=750)

Estimating Workforce Size

The 2001 Profile of the Medical Workforce in NSW (NSW Health Department, 2001) estimated the size of the medical workforce in New South Wales, using the following approach:

- Assume the proportion of survey respondents working in NSW represents the proportion of all renewals working in NSW (77.7% for pharmacists in 2001)
- Assume 90% of new registrants are working in NSW
- Assume 80% of other registrants are working in NSW (excluding deletions)

This results in 5,084 working renewals, 111 working new registrants, and 20 working registrants in other categories, with a total estimated workforce size of 5,215 pharmacists, a reduction of 315 or 5.7% from the estimated 5,530 pharmacists working in 2000.

Estimating Full-Time Equivalent Workforce (FTE)

The numbers of hours worked by pharmacists on average per week for all jobs together (see Table 3.11) can be converted to full-time equivalents (FTEs) which becomes a measure of the productive workforce. This is shown in Table 3.14, where the total hours worked by pharmacists in each age and hours worked group are divided by 35 to calculate the FTE workforce. Thirty five hours is used as the measure of full time work based on workforce definitions developed by the Australian Bureau of Statistics.

A ratio of FTEs to the total headcount workforce can then be calculated, to determine the relative productivity of the workforce.

Table 3.14 has not been adjusted to the estimated size of the workforce accounting for non response, and therefore shows an FTE workforce of 4,468.3 pharmacists compared to a headcount of 4,154 pharmacists (see Table 3.11). Therefore the FTE ratio is 1.076, indicating that pharmacists are 7.6% more productive on average than the workforce equivalent (based on 35 hours per week). The FTE ratio of 1.076 applied to the estimated workforce size of 5,530 headcount calculated above results in an estimated FTE workforce of 5,470.4 pharmacists, a reduction of 490.9 FTE from the estimated workforce of 5,961.3 FTE pharmacists in 2000.