

APPENDIX

Methodology

Timing of the 2003 Survey

Information from the 2003 Annual Labourforce Survey relates to the 2003 registration renewal period. Renewal notices and surveys were forwarded in October 2003 to physiotherapists registered with the Physiotherapists Registration Board of New South Wales at that time. The renewal fee was due by the end of December in order for the physiotherapist to be retained on the register, as non-financial physiotherapists had their status altered by Board consent in mid December. Survey respondents completed the survey with information about their usual working situation at that time. Information regarding the registration status of physiotherapists was provided by the Board which related to the period from January 2003 to December 2003.

Labourforce Survey coverage

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

- **New registrations:** New registrations include new local graduates, interstate graduates and overseas trained physiotherapists registering for the first time with the NSW Board who have had their qualifications recognised in NSW. These persons will normally not receive the labourforce survey, but some new registrants may receive the survey form if they also renew in the same financial year. New registrations are defined as all those physiotherapists who were initial registrations in 2003.
- **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. Some physiotherapists are restorations simply due to late payment and may have returned a survey form, and this group are defined as technical restorations.
- **Technical restorations:** Some physiotherapists are restorations simply due to late payment, as they are removed from the register and then reinstated on receipt of the payment of the renewal fee. These physiotherapists have usually completed a survey form, and therefore if they have provided survey data they have been included in the data analysis for this profile. Prior to this profile, the definition of respondents was those physiotherapists **renewing** their registration who completed or part completed a survey form.
- **Technical renewals:** There are a group of physiotherapists who either pay their registration fee early or who pay in advance and earn a credit as they will not be able to make their payment at the usual time. If these physiotherapists were sent a survey form in the year of renewal and are still financial in that year they have now been included in the survey population, and their returned survey forms included as respondents. This group has now been defined as **technical renewals, even though no transaction may have been recorded for the year of the survey**. This process has occurred for the first time in analysing the 2003 survey data.

The definition of response has been applied to those respondents who completed the question on workforce status. In addition, a number of physiotherapists have not completed the question on workforce status, but have completed the majority of the remainder of the survey form including the provision of a New South Wales postcode for work location, as well as other data such as hours worked. It was therefore decided for data completeness, to include both of those categories in the definition of respondents, as a workforce status could be derived.

The adoption of these changes in the approach to survey coverage, and definition of respondents, means that the data will now be compatible with definitions of the workforce used by the Australian Institute of Health & Welfare in preparing national profiles. However, it also means that the raw data on workforce size may show variation from years previous to 2002.

Care should be taken when interpreting this data as some individual physiotherapists 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 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 physiotherapists 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 3.31: Work location of physiotherapists- second job, n=733) 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.

— denotes not applicable.

Bold is used to indicate a total or subtotal.

n/a denotes data is not available.

The location of home and work for physiotherapists has been analysed by Area Health Service for those respondents working in both the public and private sectors. The NSW Department of Health sets the boundaries of each Area Health Service by postcode, and this approach has been used in the analysis. There is no intent to imply that physiotherapists working in the private sector are employed by Area Health Services, and the approach is used for comparative purposes only.

Estimating Workforce Size

Previous profiles have used a standard approach to estimating workforce size which was first documented in the 1999 Profile of the Medical Workforce in NSW (NSW Health Department, 2003) estimated the size of the medical workforce in New South Wales, This approach involved:

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

However recent analysis of data reported in the 2001 ABS Census has indicated that the workforce estimates calculated in the previous profiles are too high and should be adjusted. The 2001 Census reported that there were 3,408 working physiotherapists in 2001¹. This is 89.3% of the estimated physiotherapist workforce in New South Wales in 2001 using the new method. Using the previous method, the estimate would have been 4,305, and the Census figure would be 79.1% of this estimate. As a result, the new estimates have been developed to minimise the adjustment for non response and to improve the estimate of new registrations and restorations working.

The variation between the Census data and the profile data could be due to physiotherapists working using other titles which would not necessarily be coded to the physiotherapist category in the Census data.

The method is based on the following approach:

- Use the 2001 numbers of working physiotherapists as a baseline as 2001 had the highest response rate.
- Develop flow matrices of workforce dynamics for 2000/01, 2001/02, 2002/03, and use the input/output calculation to determine workforce size between 2001 and 2003. This involves calculations of entry (inter-state and overseas migration and local new graduate entry patterns), re-entry (based on restorations and renewals re-entering the workforce), and wastage (including overseas entrants leaving the following year).
- Adjust the 2002 and 2003 working respondent numbers to account for lower response rates in those years.

Table A1: Workforce dynamics for physiotherapists, 2003

Professional Nurses	Estimated workforce size, 2003	New registrations entering the workforce	Re-entry	Wastage	FTE ratio (based on 35 hours)
Workforce headcount	4,183	394	179	379	0.9616
Percentage of workforce		9.4%	4.3%	7.9%	

SOURCE: flow matrix change rates from physiotherapist labourforce profile data, 2002 to 2003

NOTE: The actual participation rate of 2003 new registrations can only be calculated by category when the 2004 work status is known.

¹ NSW Health Department, unpublished ABS data