

**Summary of the
Physiotherapy
Workforce in NSW,
2004**

Prepared by:

Workforce Development and Leadership Branch, NSW Health

NSW DEPARTMENT OF HEALTH

73 Miller Street
NORTH SYDNEY NSW 2060
Tel. (02) 9391 9000
Fax. (02) 9391 9101
TTY. (02) 9391 9900
www.health.nsw.gov.au

This work is copyright. It may be reproduced in whole or in part for study training purposes subject to the inclusion of an acknowledgement of the source. It may not be reproduced for commercial usage or sale. Reproduction for purposes other than those indicated above requires written permission from the NSW Department of Health.

© NSW Department of Health 2008

Summary of the Physiotherapy Workforce in NSW, 2004

SHPN (WDL) 080086
ISBN 978 1 74187 289 7

Further copies of this document can be downloaded from the NSW Health website www.health.nsw.gov.au

April 2008

2004 Physiotherapist Labourforce Survey

Introduction

Each year, as part of the annual registration process for physiotherapists in NSW, an Annual Labourforce Survey is sent to each physiotherapist currently registered with the Physiotherapists Registration Board of New South Wales. This report provides an overview of information from the 2004 workforce survey.

The response rate to the survey has declined from 2001 with a rate of 91.9%, to 85.3% in 2004. The continued support of the Physiotherapists Registration Board of New South Wales, professional organisations and physiotherapists participating in the survey is appreciated.

Availability of survey information

The most recent profile of physiotherapy survey data was produced in 2005, entitled "Profile of the Physiotherapy Labourforce in New South Wales, 2003".

Strict procedures are followed to ensure the privacy of individual physiotherapists 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.

Category of Physiotherapist Registration

In 2004, there were 6,059 physiotherapists financially registered with the Physiotherapists Registration Board of NSW, a decrease of 106 or 1.7% over the 6,165 physiotherapists registered in 2003. Of these, 4,576 (75.6%) were female and 1,481 (24.4%) were male. Table 1.1 provides an overview of the number of physiotherapists in each category of registration.

Table 1.1: Persons registered as Physiotherapists in NSW, 2004

Category of registration ₁	No. Row %		No. Row %		No. Row %	
	Female		Male		Total	
New registrations(only status)	44	64.7%	24	35.3%	68	100.0%
Restorations	0	0.0%	0	0.0%	0	0.0%
"True" restorations	0	0.0%	0	0.0%	0	0.0%
"Technical" restorations	0	0.0%	0	0.0%	0	0.0%
Renewals ₂	4,466	75.7%	1,435	24.3%	5,901	100.0%
Technical renewals	66	75.0%	22	25.0%	88	100.0%
Deletions	252	71.4%	101	28.6%	353	100.0%
New registrations (total) ₂	231	72.0%	90	28.0%	321	100.0%

Notes:

1 The table includes information on physiotherapists who were financial with the Board during 2004

2 Some physiotherapists are included in more than one category during the twelve month period. There were 322 new registrations in total, but 253 of those were also renewals within the survey period. These have been counted as renewals. One new registration with unknown sex has been excluded

Response rate to Labour force Annual Survey

The response rate to the 2004 Physiotherapy Labour force Annual Survey was 85.3 per cent, lower than the response rate in 2001, but similar to 2003.

Table 1.2: Response Rate to Physiotherapy Annual Labour Force Survey, 2001 to 2004

	No. Rate		No. Rate		No. Rate		No. Rate	
	2001		2002		2003		2004	
Formal response rate								
<i>Survey respondents</i> ¹ who were <i>renewals</i>	4,938		4,971		4,988		5,166	
<i>Total renewals</i> ²	5,373	91.9%	5,819	85.4%	6,037	82.6%	6,059	85.3%

- Notes:**
1. A "survey respondent" is defined as a renewal who provides information to the question on working status. There were 129 persons who returned a form but workforce status could not be determined. 730 physiotherapists 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, technical renewal, 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 physiotherapists are presented in Tables 1.3 and 1.4. The survey process including survey coverage and method of calculating response is described in the Appendix.

Work Status

There were 3,811 working renewal survey respondents in 2004. Working renewals are those respondents who:

- Were financially registered and renewed their registration in 2004
- Returned a labourforce survey indicating their work status; and
- Indicated that their work status was one of the following three categories:
 - Working in physiotherapy only in NSW
 - Working in physiotherapy mainly in NSW, but also in other states
 - Working in physiotherapy in NSW, but on extended leave (see Table 1.3)

Table 1.3: Work status of Physiotherapy Labourforce Survey respondents¹, NSW, in 2004

Work Status	No.	%	No.	%	No.	%	No.	%	%
	Unknown sex		Female		Male		Total		Female
Working in physiotherapy									
Only in NSW	95	72.5%	2662	69.1%	906	76.6%	3,663	70.9%	74.6%
Mainly in other states, but also in NSW	0	0.0%	38	1.0%	19	1.6%	57	1.1%	66.7%
Mainly in NSW, but also in other states	3	2.3%	44	1.1%	21	1.8%	68	1.3%	67.7%
Only in states other than NSW	4	3.1%	80	2.1%	39	3.3%	123	2.4%	67.2%
Overseas	11	8.4%	275	7.1%	113	9.6%	399	7.7%	70.9%
In NSW, but on extended leave	0	0.0%	76	2.0%	4	0.3%	80	1.5%	95.0%
Not Working in physiotherapy		0.0%							
Currently not working, and not looking for work	13	9.9%	428	11.1%	36	3.0%	477	9.2%	92.2%
Currently not working, but looking for work	0	0.0%	52	1.3%	9	0.8%	61	1.2%	85.2%
Currently working but not in physiotherapy	5	3.8%	198	5.1%	35	3.0%	238	4.6%	85.0%
Total	131	100.0%	3,853	100.0%	1,182	100.0%	5,166	100.0%	76.5%
<i>Non-response to survey question¹</i>									
Working in NSW	98	74.8%	2782	72.2%	931	78.8%	3811	73.8%	74.9%

Notes: 1. There were 5,295 forms from physiotherapists renewing their registration, of whom 129 did not reply to the question on work status and a work status could not be derived. (see Note 1 to Table 1.2)

Based on the unadjusted survey response, there were 73.8% of respondent physiotherapists working in New South Wales in 2004.

Physiotherapists seeking work

Table 1.4: Nature of work sought by physiotherapists who were not working in physiotherapy, 2004

Nature of work sought	No.	%	No.	%	No.	%	%
	Female		Male		Total		Female
Looking for work in physiotherapy:							
- either full time or part time	8	13.3%	1	9.1%	9	12.7%	88.9%
- full time	8	13.3%	4	36.4%	12	16.9%	66.7%
- part time	44	73.3%	6	54.5%	50	70.4%	88.0%
-no type of work shown	0	0.0%	0	0.0%	0	0.0%	0.0%
Total	60	100.0%	11	100.0%	71	100.0%	84.5%
<i>Not looking for work</i>	185		33		218		
<i>Unknown</i>	5		0		5		

Note: Table includes those survey respondents in table 1.3 who indicated that they were not currently working but looking for work, or currently working but not in physiotherapy (n = 299). There were five respondents not looking for work with unknown sex not shown above.

Estimating Workforce Size

Table 1.5: Estimating the Size of the Physiotherapist Workforce, 2001-2004

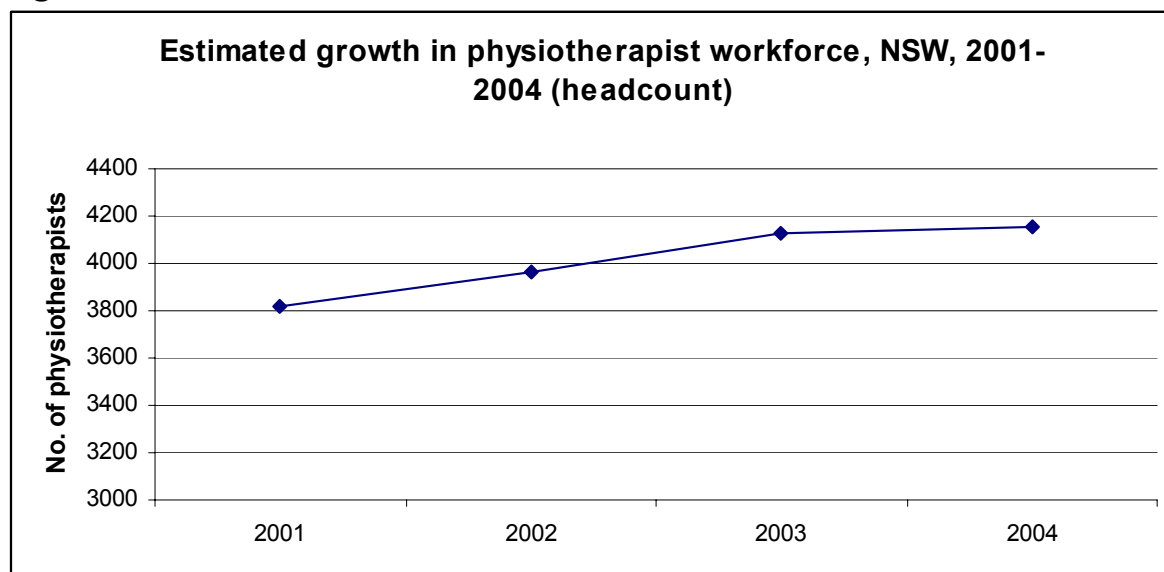
	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
Size of Workforce (excludes any new registrations) ¹	3,532	3,565	3,607	3,683
Adjustment for varying non response	0	90	149	207
Estimated working renewals	3,532	3,655	3,756	3,890
Adjusted respondents (excludes any new registrations) ²	4,839	4,972	5,019	5,374
Estimated % respondents working	73.0%	73.5%	74.8%	72.4%
Estimated new registrations working ³	283	307	369	265
Estimated restorations working ⁴	1	6	1	3
Total Estimated Workforce	3,816	3,968	4,126	4,158
Total number of new registrations	366	345	484	322
Estimated % new registrations working	77.3%	89.0%	76.2%	82.3%
No. of renewals(excluding new registrations)	5,636	5,819	6,039	6,059
Estimated working renewals as % of renewals excluding new registrations	62.7%	62.8%	62.2%	64.2%

- Notes:**
- 1 The unadjusted size of the workforce is based on renewals, technical restorations and technical renewals who answered the work status question as working in NSW. This is the workforce size excluding any new registrations unadjusted for non response.
 - 2 The respondent numbers have been adjusted to allow for changing non response rates (set to 90.1% for 2001) and exclude any new registrations who were also renewals within the year.
 - 3 Based on flow matrix analyses showing work status in two consecutive years
 - 4 Based on flow matrix analyses showing work status in two consecutive years

NOTE: These figures vary from estimates of workforce size documented in previous physiotherapist workforce profiles due to a new method of calculating workforce size. The method is described in detail in the Appendix, Section on Estimating Workforce Size. The estimate for 2004 may be modified in the 2005 profile after analysis of flow matrix data.

Table 1.5 and Fig 1.1 show that the estimated physiotherapist workforce was 3,816 in 2001, increasing to 4,158 in 2004. This is an overall growth rate of 9.0%, with growth of 4.0% between 2001 and 2002, and also between 2002 and 2003, with only a small estimated growth of 0.8% between 2003 and 2004.

Figure 1.1



Estimating Full-Time Equivalent Workforce (FTE)

The numbers of hours worked by physiotherapists on average per week for all jobs together can be converted to full-time equivalents (FTEs), which is a measure of the productive workforce. The total hours worked by physiotherapists are divided by 35 to calculate the FTE workforce. Thirty-five hours is used as the measure of full time work based on labourforce 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. The FTE ratio of 0.9369 applied to the estimated workforce size of 4,158 headcount results in an estimated FTE workforce of 3,895.6 FTE physiotherapists, after adjusting for non response (based on full time being defined as 35 hours worked per week).

Table 1.6: Workforce dynamics for physiotherapists, 2004

Flow dynamics based on the estimated size of the workforce between 2003 and 2004 showed new registrations entering the workforce accounted for 6.4%, re-entry 3.7% and wastage was estimated at 11.3%.

Professional Physiotherapists	Estimated workforce size, 2004	New registrations entering the workforce	Re-entry	Wastage	FTE ratio (Based on 35 hours)
Workforce headcount	4,158	265	153	468	0.9369
Percentage of workforce		6.4%	3.7%	11.3%	

SOURCE: flow matrix change rates from physiotherapist labourforce profile data, 2003 to 2004

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

Age and Gender Distribution for physiotherapists

A typical physiotherapist is female (75%), 41 years old, and working in the private sector (57.6%). **The age profile for physiotherapists indicates a young workforce overall.** The average age of the workforce in total is 40.1 years, with females on average aged 41.4 years and males 36.4 years. Approximately 65% of the workforce are aged less than forty-five years, 23.4% are aged 45 to 54 years. The modal age range is 35 to 39 years (i.e. the age range with the greatest number of working physiotherapists).

Figure 1.2 Age distribution for physiotherapists, 2004

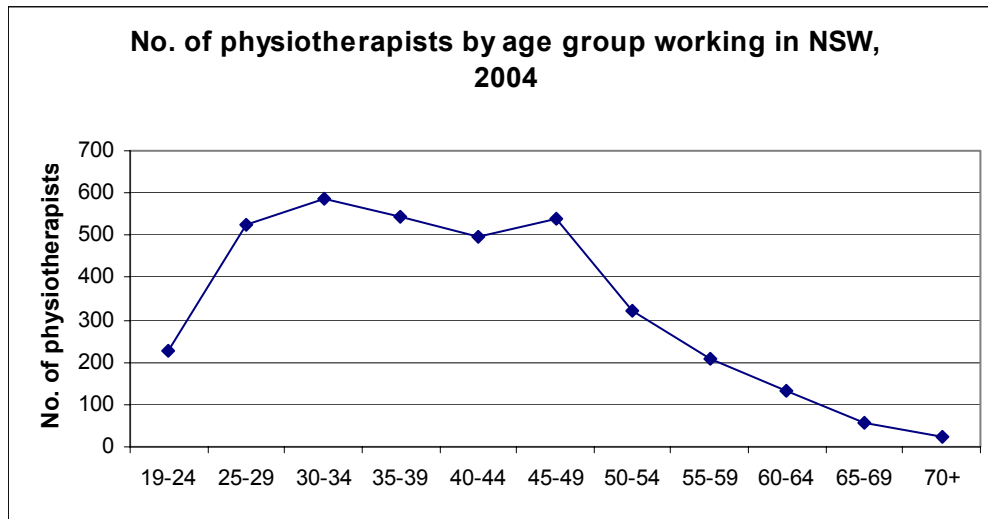


Table 1.7 - Age and gender distribution of physiotherapists working in NSW, 2004

Age group	No.		%		No.	%% Female	
	Female	Male	Female	Male		Total	%
19-24	171	70	6.2%	7.7%	241	6.6%	71.0%
25-29	339	184	12.3%	20.4%	523	14.3%	64.8%
30-34	394	192	14.3%	21.2%	586	16.0%	67.2%
35-39	405	167	14.7%	18.5%	572	15.6%	70.8%
40-44	382	131	13.9%	14.5%	513	14.0%	74.5%
45-49	444	93	16.1%	10.3%	537	14.7%	82.7%
50-54	252	39	9.2%	4.3%	291	8.0%	86.6%
55-59	180	16	6.5%	1.8%	196	5.4%	91.8%
60-64	114	9	4.1%	1.0%	123	3.4%	92.7%
65-69	50	1	1.8%	0.1%	51	1.4%	98.0%
70-74	18	0	0.7%	0.0%	18	0.5%	100.0%
75+	4	2	0.1%	0.2%	6	0.2%	66.7%
Total	2753	904	100.0%	100.0%	3,657	100.0%	75.3%
	40	6	1.4%	0.7%	46	1.2%	

Employment Settings

3,567 physiotherapists responded to the employment setting question in the labourforce survey. Of these, 42.4% (1,618 physiotherapists) reported working in the public sector and 57.6% (2,054 physiotherapists) reported working in the private sector. Of those in the public sector in 2004, 1,186 physiotherapists worked their main job in the public health system (33.2% of total workforce).

Table 1.8 - Total employment settings, physiotherapists working in NSW, 2004

Area Health Service	Private	Public Health	Public Other	Total	Unknown	Grand Total
Greater Southern AHS	79	60	28	167	6	173
Greater Western AHS	49	49	5	103	6	109
Hunter & New England AHS	188	112	35	335	10	345
North Coast AHS	107	78	16	201	11	212
Northern Sydney & Central Coast	588	200	49	837	28	865
South Eastern Sydney & Illawarra	474	277	62	813	37	850
Sydney South West AHS	274	215	43	532	22	554
Sydney West AHS	238	167	69	474	34	508
Unknown	57	28	20	105	94	199
Grand Total	2054	1186	327	3567	248	3815
% by sector	57.6%	33.2%	9.2%	100.0%		

Table 1.9: 2001-2004 Service or business employed or self-employed in - Main job

Business/Service in main job	2001	2002	2003	2004	% Change 2001-04
Private sector					
Medical rooms/centre	1,547	1,439	1,469	1,465	-5.3% decrease
Hospital	207	174	207	214	
Nursing home/ long stay facility	96	113	136	117	
Community centre/ day centre/ health centre	3	9	6	3	
Domiciliary care service	15	16	17	26	
Physical/ developmental disability institution	21	12	19	13	
Tertiary education institution	2	0	2	3	
Sports centre/ clinic	79	87	102	119	
Industry	27	29	35	35	
School system	1	4	1	5	
Other	55	47	61	54	
Total private sector	2,053	1,930	2,055	2,054	0.05% increase
Public sector					
Hospital	1,034	951	1,034	1,080	4.4% increase
Nursing home/ long stay facility	56	44	27	38	
Community centre/ day centre/ health centre	65	65	58	68	
Domiciliary care service	50	32	44	43	
Physical/developmental disability institution	27	34	28	31	
Tertiary education institution	50	60	59	56	
Government department/ organisation	93	86	117	113	
Defence forces	20	17	23	24	
Sports centre/ clinic	19	15	15	6	
School system	9	8	9	7	
Other	23	26	28	47	
Total public sector	1,449	1,338	1,442	1,513	4.4% increase

APPENDIX

Methodology

Timing of the 2004 Survey

Information from the 2004 Annual Labour force Survey relates to the 2004 registration renewal period. Renewal notices and surveys were forwarded in October 2004 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 2004 to December 2004.

Labour force 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 2004.
- **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 2004 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 overestimation 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 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, 2004) 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 2003/04, and use the input/output calculation to determine workforce size between 2001 and 2004. 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, 2003 and 2004 working respondent numbers to account for lower response rates in those years.

¹ NSW Health Department, unpublished ABS data