

6 Hospital and clinic pharmacists

This section presents data for pharmacists employed as hospital (and clinic) pharmacists in their main job. The features of hospital pharmacists include:

- There were an estimated 1,973 hospital pharmacists working in Australia in 1994, 14.8% of all employed pharmacists. Over two-thirds (67.3%) of these were female (excluding the Australian Capital Territory). This proportion varied across States and Territories from 54.8% in Western Australia to 74.0% in New South Wales.
- Most male hospital pharmacists were employed as directors (32.6%) and staff pharmacists (21.7%) and senior pharmacists (20.8%), and most females were staff pharmacists (33.3%) and specialist pharmacists (31.3%). An estimated 80.8% and 75.9% of all specialist and staff pharmacists respectively were female, but only 40.0% of all directors were female.
- 45.9% of female hospital pharmacists were aged between 30 and 44 years whereas 47.7% of males were aged between 45 and 64 years.
- 31.3% of female hospital pharmacists worked part-time, compared with 6.3% of males. Females were more likely to work part-time between the ages of 30 and 44 years, with 40.6% of females in this age group working part-time hours.
- Females working as staff pharmacists were more likely to work part-time with 43.0% of female staff pharmacists working part-time compared with 9.4% of female directors and 9.5% of female deputy directors.
- Hospital pharmacists worked an average of 36.8 hours per week (40.7 hours for males and 34.8 hours for females). Hours worked were similar across all geographic locations with the exception of other remote areas where males and females averaged shorter hours (23.5 and 28.5 hours respectively).
- Almost all (89.6%) hospital pharmacists were working in the public sector and, of those, 89.5% were working in a public hospital (excluding psychiatric hospitals).
- 76.4% of hospital pharmacists worked in a capital city and 3.9% worked in other rural and remote areas. In comparison, 63.2% of the population lived in capital cities and 16.1% lived in other rural and remote areas.

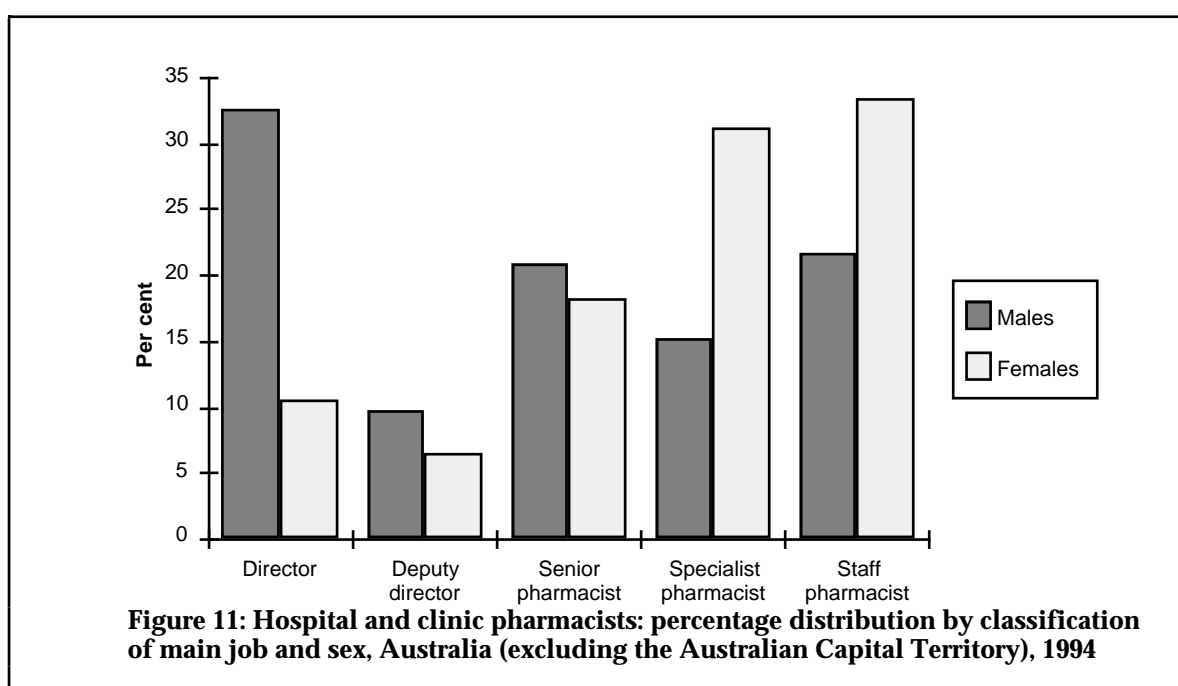


Table 17: Hospital and clinic pharmacists: classification of main job, sex and States and Territories, 1994

Classification	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Males									
Director	47	81	29	27	15	5	n.a.	3	207
Deputy director	10	35	5	4	5	2	n.a.	0	61
Senior pharmacist	18	32	16	30	26	4	n.a.	6	132
Specialist pharmacist	31	31	17	18	..	0	n.a.	..	97
Staff pharmacist	36	14	54	8	20	6	n.a.	0	138
Total	143	192	121	87	66	16	n.a.	9	635
Females									
Director	68	37	13	9	4	1	n.a.	6	138
Deputy director	15	53	4	4	6	1	n.a.	2	84
Senior pharmacist	53	112	21	23	24	3	n.a.	2	239
Specialist pharmacist	105	240	27	32	..	3	n.a.	..	408
Staff pharmacist	166	19	132	38	48	28	n.a.	4	435
Total	408	460	197	106	82	37	n.a.	13	1,304
Persons									
Director	116	118	42	36	19	6	3	9	347
Deputy director	25	87	9	8	11	3	3	2	148
Senior pharmacist	72	144	36	54	50	7	4	8	374
Specialist pharmacist	137	271	44	50	..	3	17	..	521
Staff pharmacist	202	33	187	46	68	33	9	4	582
Total	551	652	318	194	149	53	35	22	1,973
(per cent)									
Director	21.0	18.1	13.2	18.6	12.6	11.0	7.4	38.9	17.6
Deputy director	4.6	13.4	2.8	3.9	7.6	6.6	7.4	8.3	7.5
Senior pharmacist	13.0	22.0	11.4	27.6	33.9	13.1	11.1	36.1	19.0
Specialist pharmacist	24.8	41.5	13.8	26.0	..	6.5	48.1	..	26.4
Staff pharmacist	36.6	5.1	58.8	23.8	45.9	62.9	25.9	16.7	29.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(females as a percentage of persons)									
Director	59.1	31.6	32.1	24.0	20.3	19.7	n.a.	64.3	40.1
Deputy director	59.2	60.4	41.5	48.6	56.0	33.0	n.a.	100.0	57.9
Senior pharmacist	74.3	77.7	57.2	43.9	47.9	49.6	n.a.	23.1	64.4
Specialist pharmacist	77.2	88.7	61.5	63.7	..	100.0	n.a.	..	80.8
Staff pharmacist	82.2	57.8	70.8	83.0	70.7	82.5	n.a.	100.0	75.9
Total	74.0	70.6	62.1	54.8	55.5	69.2	n.a.	58.3	67.3

Note: The questionnaires for South Australia and the Northern Territory did not include 'Specialist pharmacist' as an option for classification of main job.

Table 18: Hospital and clinic pharmacists: classification of main job, full-time and part-time status, age and sex, Australia^(a), 1994

Sex/classification	Age (years)				Total	% total
	Less than 30	30-44	45-64	65 and over		
Full time						
Males						
Director	2	72	125	4	203	34.1
Deputy director	2	35	20	0	57	9.6
Senior pharmacist	11	60	51	0	123	20.6
Specialist pharmacist	27	27	33	3	89	15.0
Staff pharmacist	30	36	52	4	123	20.6
<i>Total</i>	<i>74</i>	<i>230</i>	<i>280</i>	<i>11</i>	<i>595</i>	<i>100.0</i>
Females						
Director	7	58	57	2	125	13.9
Deputy director	13	45	19	0	76	8.5
Senior pharmacist	46	99	42	0	187	20.8
Specialist pharmacist	143	71	46	0	260	29.0
Staff pharmacist	111	83	54	0	248	27.7
<i>Total</i>	<i>321</i>	<i>355</i>	<i>218</i>	<i>2</i>	<i>896</i>	<i>100.0</i>
Part time						
Males						
Director	0	0	2	2	4	9.7
Deputy director	0	0	4	0	4	9.6
Senior pharmacist	0	1	5	3	9	23.2
Specialist pharmacist	0	0	6	1	8	19.4
Staff pharmacist	2	4	5	4	15	38.1
<i>Total</i>	<i>2</i>	<i>5</i>	<i>23</i>	<i>10</i>	<i>40</i>	<i>100.0</i>
Females						
Director	1	7	5	0	13	3.3
Deputy director	0	2	5	0	8	1.9
Senior pharmacist	4	35	14	0	52	12.8
Specialist pharmacist	7	86	53	1	148	36.3
Staff pharmacist	10	112	65	0	187	45.8
<i>Total</i>	<i>22</i>	<i>243</i>	<i>141</i>	<i>1</i>	<i>408</i>	<i>100.0</i>
Total						
Males						
Director	2	72	127	6	207	32.6
Deputy director	2	35	24	0	61	9.6
Senior pharmacist	11	62	56	3	132	20.8
Specialist pharmacist	27	27	39	4	97	15.3
Staff pharmacist	33	40	57	8	138	21.7
<i>Total</i>	<i>76</i>	<i>234</i>	<i>303</i>	<i>21</i>	<i>635</i>	<i>100.0</i>
Females						
Director	9	65	62	2	138	10.6
Deputy director	13	47	24	0	84	6.4
Senior pharmacist	50	133	56	0	239	18.3
Specialist pharmacist	151	157	99	1	408	31.3
Staff pharmacist	121	195	119	0	435	33.4
<i>Total</i>	<i>343</i>	<i>598</i>	<i>359</i>	<i>4</i>	<i>1,304</i>	<i>100.0</i>
Persons						
Director	11	137	189	8	344	17.8
Deputy director	15	82	48	0	145	7.5
Senior pharmacist	61	195	112	3	370	19.1
Specialist pharmacist	178	184	138	5	505	26.1
Staff pharmacist	154	235	176	8	573	29.6
Total	419	833	662	24	1,938	100.0

(a) Excluding the Australian Capital Territory.

Table 19: Hospital and clinic pharmacists: classification of main job, full-time and part-time status and industry, Australia^(a), 1994

Industry	Classification of main job					Total
	Director	Deputy director	Senior pharmacist	Specialist pharmacist	Staff pharmacist	
Full time						
Community pharmacy	5	0	2	3	0	10
Public sector						
Hospital (excl. psych. hospital)	246	117	247	296	297	1,204
Psychiatric hospital	22	3	12	24	20	81
Nursing home	9	0	4	2	1	17
Government department	4	0	6	0	4	13
Defence forces	1	0	1	0	12	15
Other	4	0	3	0	3	9
Total public sector	286	120	274	323	337	1,339
Private sector						
Hospital (excl. psych. hospital)	33	14	31	23	31	132
Psychiatric hospital	1	0	1	0	1	4
Other	1	0	1	0	1	4
Total private sector	0	0	0	0	0	140
Not stated	35	14	34	23	34	0
Total	327	134	309	349	371	1,489
Part time						
Community pharmacy	0	0	0	0	3	3
Public sector						
Hospital (excl. psych. hospital)	13	8	49	132	148	351
Psychiatric hospital	3	0	1	8	13	25
Nursing home	0	0	0	4	1	5
Government department	0	3	1	0	1	6
Defence forces	0	0	1	0	1	3
Other	0	0	0	2	7	8
Total public sector	16	11	52	146	171	397
Private sector						
Hospital (excl. psych. hospital)	0	0	7	10	20	37
Psychiatric hospital	0	0	0	0	4	4
Other	1	0	2	0	3	7
Total private sector	1	0	9	10	28	48
Total	17	11	61	156	202	448
Total						
Community pharmacy	5	0	2	3	3	13
Public sector						
Hospital (excl. psych. hospital)	259	125	296	429	445	1,554
Psychiatric hospital	24	3	14	32	33	106
Nursing home	9	0	4	6	3	22
Government department	4	3	7	0	5	19
Defence forces	1	0	3	0	13	17
Other	4	0	3	2	9	17
Total public sector	302	131	326	469	508	1,736
Private sector						
Hospital (excl. psych. hospital)	33	14	38	33	52	169
Psychiatric hospital	1	0	1	0	5	8
Other	3	0	3	0	5	11
Total private sector	37	14	43	33	62	188
Total	344	145	370	505	573	1,938

(a) Excluding the Australian Capital Territory.

Table 20: Hospital and clinic pharmacists: hours worked, geographic location and sex, Australia^(a), 1994

Hours worked per week	Geographic location						Total
	Capital city	Other major urban	Major rural	Rural other	Major remote	Other remote	
Males							
1-9	6	0	0	0	0	2	8
10-19	6	0	4	1	0	0	11
20-29	9	1	1	0	0	0	11
30-34	11	0	0	0	0	0	11
35-39	135	22	37	8	2	1	205
40-49	217	29	50	9	8	0	313
50-59	47	5	4	1	0	0	57
60 and over	15	3	1	0	0	0	19
<i>Total</i>	<i>445</i>	<i>60</i>	<i>98</i>	<i>19</i>	<i>10</i>	<i>3</i>	<i>635</i>
<i>Average weekly hours</i>	<i>41.2</i>	<i>41.7</i>	<i>39.4</i>	<i>37.7</i>	<i>40.2</i>	<i>23.5</i>	<i>40.7</i>
Females							
1-9	30	5	3	0	0	0	38
10-19	98	9	14	3	0	1	125
20-29	138	12	24	7	1	0	182
30-34	46	14	0	1	1	0	62
35-39	252	28	29	8	3	0	320
40-49	415	35	45	9	5	3	512
50-59	46	5	1	0	0	0	52
60 and over	13	0	0	0	0	0	13
<i>Total</i>	<i>1,037</i>	<i>108</i>	<i>115</i>	<i>29</i>	<i>11</i>	<i>4</i>	<i>1,304</i>
<i>Average weekly hours</i>	<i>35.2</i>	<i>34.0</i>	<i>33.1</i>	<i>33.1</i>	<i>37.8</i>	<i>28.5</i>	<i>34.8</i>
Persons							
1-9	36	5	3	0	0	2	46
10-19	104	9	18	4	0	1	136
20-29	146	13	25	7	1	0	193
30-34	57	14	0	1	1	0	73
35-39	387	50	66	16	5	1	525
40-49	631	64	95	19	13	3	825
50-59	93	10	5	1	0	0	109
60 and over	28	3	1	0	0	0	32
Total	1,482	168	213	48	21	7	1,939
Average weekly hours	37.0	36.6	36.0	34.9	38.8	26.0	36.8
(per cent)							
1-9	2.4	3.2	1.3	0.0	0.0	26.5	2.3
10-19	7.0	5.3	8.5	8.1	0.0	18.1	7.0
20-29	9.9	8.0	11.6	14.7	6.5	0.0	10.0
30-34	3.8	8.3	0.0	2.8	6.1	0.0	3.8
35-39	26.1	29.6	30.9	33.2	25.0	18.7	27.1
40-49	42.6	38.1	44.8	38.5	62.4	36.7	42.5
50-59	6.3	6.0	2.4	2.7	0.0	0.0	5.6
60 and over	1.9	1.6	0.6	0.0	0.0	0.0	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Excluding the Australian Capital Territory.

7 Entrants to the pharmacy labour force

The Australian Institute of Health and Welfare obtains data from the Department of Immigration and Multicultural Affairs on the number of pharmacists who arrive and leave Australia for the purpose of education and employment.

In 1994, 89 Australian citizen or permanent resident pharmacists left Australia for 12 months or more to take up employment overseas, and 6 left for the purpose of education. During the same period, 10 pharmacists who were citizens of foreign countries arrived in Australia for 12 months or more to take up employment and 10 arrived for education purposes.

Data on the number of students who enrolled in or completed courses in pharmacy were obtained from the Department of Employment, Education, Training and Youth Affairs.

The number of students completing Bachelor degree courses in pharmacy has remained relatively steady over the last six years, with a low of 383 completions in 1992 and a high of 422 completions in 1993. In 1994, 404 pharmacy students completed Bachelor degrees with 258 (63.9%) being female. This proportion increased 1.3 percentage points in 1994 after decreasing in each of the previous two years.

Overseas students who were not permanent residents of Australia accounted for 12.8% of students completing pharmacy courses.

In 1994, there were 1,901 students enrolled in pharmacy courses. Of these

- 60.8% were female;
- 14.1% were overseas students; and
- 81.9% were enrolled as full-time students.

Of the 1,633 Australian citizen or permanent resident pharmacy students, 58.8% were born in Australia. The largest overseas-born group was from Vietnam with 246 (15.1%) students, followed by Hong Kong with 79 (4.8%) students.

The number of Australian citizen or permanent resident pharmacy students per 100,000 population was 9.2 in 1994. The number by source of geographic area of residence ranged from 12.2 per 100,000 population in capital cities to only 1.1 in remote areas.

An estimated 85.0% of Australian citizen or permanent resident pharmacy students originated from a capital city whereas only 63.2% of the population lived in capital cities in 1994. In comparison, only 9.8% of pharmacy students were from rural areas which represented 24.5% of the population.

Male pharmacy students were more likely to have come from a capital city than female students (88.0% compared with 83.0%), and female students were more likely to have come from a rural area than male students (11.3% compared with 7.7%).

Table 21: Total long-term movement of pharmacists to and from Australia, 1992 to 1994

Purpose of visit	1992	1993	1994
Employment			
Arrivals of foreign residents	12	8	10
Departures of Australian residents	127	127	89
Education			
Arrivals of foreign residents	9	16	10
Departures of Australian residents	4	3	6

Note: Long-term means 12 months or longer.

Source: Department of Immigration and Multicultural Affairs, unpublished data.

Table 22: Students completing pharmacy courses: type of course and year of completion, Australia, 1989 to 1994

Course type	1989	1990	1991	1992	1993	1994
Bachelor	404	389	388	383	422	404
Number of females	272	220	259	246	264	258
% female	67.3	56.6	66.8	64.2	62.6	63.9
Postgraduate						
Diploma/certificate	4	21	9	25	30	34
Masters qualifying	5	5	7	6	3	2
Masters	11	11	4	8	11	9
PhD	5	12	7	10	13	12
Total	429	438	415	432	479	461
Number of females	286	244	274	278	301	295
% female	66.7	55.7	66.0	64.4	62.8	64.0

Source: Department of Education, Employment, Training and Youth Affairs, unpublished data.

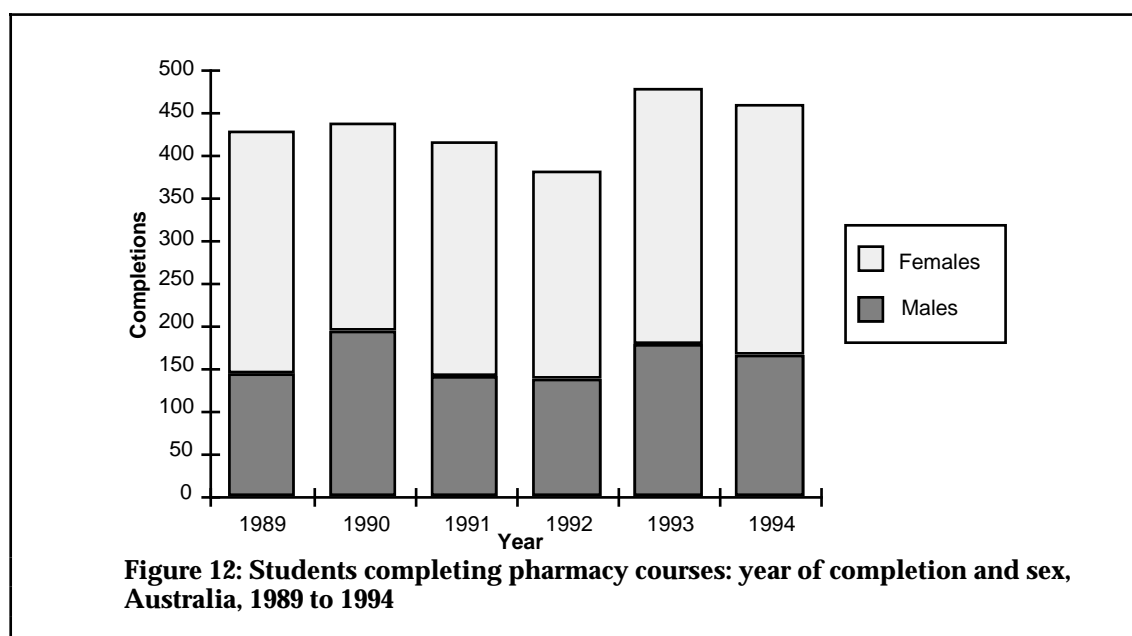


Table 23: Students completing pharmacy courses: type of course and sex, Australia, 1994

Course type	Males	Females	Total	% female
Bachelor	146	258	404	63.9
Postgraduate				
Diploma/certificate	8	26	34	76.5
Masters qualifying	1	1	2	50.0
Masters	4	5	9	55.6
PhD	7	5	12	41.7
Total	166	295	461	64.0

Source: Department of Education, Employment, Training and Youth Affairs, unpublished data.

Table 24: Students completing pharmacy courses: residency and sex, Australia, 1994

Residency	Males	Females	Total	% of total
Australian permanent resident students	148	254	402	87.2
Overseas students	18	41	59	12.8
Total	166	295	461	100.0

Source: Department of Education, Employment, Training and Youth Affairs, unpublished data.

Table 25: Students completing pharmacy courses: institution and sex, Australia, 1994

Institution	Males	Females	Total	% of total
University of Sydney	49	82	131	28.4
Victorian College of Pharmacy (Monash)	40	83	123	26.7
University of Queensland	35	59	94	20.4
Curtin University	33	27	60	13.0
University of South Australia	9	21	30	6.5
University of Tasmania	6	17	23	5.0
Total	172	289	461	100.0

Source: Department of Education, Employment, Training and Youth Affairs, unpublished data.

Table 26: Students enrolled in pharmacy courses: type of course and sex, Australia, 1994

Course type	Males	Females	Persons	% female
Bachelor	659	1,029	1,688	61.0
Postgraduate				
Diploma/certificate	15	38	53	71.7
Masters qualifying	5	15	20	75.0
Masters	18	31	49	63.3
PhD	48	43	91	47.3
Total	745	1,156	1,901	60.8

Source: Department of Education, Employment, Training and Youth Affairs, unpublished data.

Table 27: Students enrolled in pharmacy courses: residency and sex, Australia, 1994

Residency	Males	Females	Persons	% female
Australian permanent resident students	658	975	1,633	59.7
Overseas students	87	181	268	67.5
Total	745	1,156	1,901	60.8

Source: Department of Education, Employment, Training and Youth Affairs, unpublished data.

Table 28: Students enrolled in pharmacy courses: type of enrolment and sex, Australia, 1994

Type of enrolment	Males	Females	Persons	% of total
Part time	150	195	345	18.1
Full time	595	961	1,556	81.9
Total	745	1,156	1,901	100.0

Source: Department of Education, Employment, Training and Youth Affairs, unpublished data.

Table 29: Students enrolled in pharmacy courses: institution and sex, Australia, 1994

Institution	Males	Females	Persons	% of total
University of Sydney	223	344	567	29.8
Victorian College of Pharmacy (Monash)	177	293	470	24.7
Curtin University	136	190	326	17.1
University of Queensland	126	163	289	15.2
University of South Australia	62	93	155	8.2
University of Tasmania	21	73	94	4.9
Total	745	1,156	1,901	100.0

Source: Department of Education, Employment, Training and Youth Affairs, unpublished data.

Table 30: Australian citizen or permanent resident pharmacy students: country of birth and sex, Australia, 1994

Country of birth	Males	Females	Total	% of total
Australia	391	570	961	58.8
New Zealand	3	2	5	0.3
Other Oceania	6	8	14	0.9
Vietnam	92	154	246	15.1
Hong Kong	29	50	79	4.8
Malaysia	17	29	46	2.8
China/Taiwan	12	20	32	2.0
Kampuchea	7	11	18	1.1
South Korea	6	10	16	1.0
Other Asia	20	25	45	2.8
Lebanon	11	8	19	1.2
Iran	4	12	16	1.0
Other Middle East/Africa	24	19	43	2.6
UK/Ireland	10	19	29	1.8
Other Europe/Russian Federation	18	23	41	2.5
North/South America	3	6	9	0.6
Not stated	5	9	14	0.9
Total	658	975	1,633	100.0

Source: Department of Education, Employment, Training and Youth Affairs, unpublished data.

Table 31: Australian citizen or permanent resident pharmacy students: source geographic area of residence per 100,000 population, Australia, 1994

	Source geographic area of residence						Total
	Capital city	Other major urban	Major rural	Rural other	Remote	Not stated/overseas	
Male students							
Number	572	27	28	22	1	8	658
Per cent	88.0	4.2	4.3	3.4	0.2	..	100.0
Female students							
Number	803	51	47	62	5	7	975
Per cent	83.0	5.3	4.9	6.4	0.5	..	100.0
All students							
Number	1,375	78	75	84	6	15	1,633
Per cent	85.0	4.8	4.6	5.2	0.4	..	100.0
Population ('000)(a)	11,272.0	1,629.8	2,051.2	2,325.2	557.1	..	17,835.7
Per cent	63.2	9.1	11.5	13.0	3.1	..	100.0
Number of students per 100,000 population	12.2	4.8	3.7	3.6	1.1	..	9.2

(a) Estimated resident population as at 30 June 1994. Total population includes 458 people in 'other offshore areas'.

Note: Calculations of percentages exclude 'not stated/overseas'.

Sources: Department of Education, Employment, Training and Youth Affairs, unpublished data; Department of Health and Family Services.

8 Restructuring of the community pharmacy industry

During the 1980s there were increasing concerns about an oversupply of pharmacists in urban areas. In 1990 the Pharmacy Guild entered into an agreement with the Commonwealth Government to encourage a target of 1,000 suburban pharmacies to exit the industry. This agreement included assistance in redundancies and by July 1995 there were 630 closures and 64 amalgamations at a cost of \$42 million and \$4 million respectively. During this time, 365 applications for approval of new pharmacies were received by the Pharmacy Restructuring Authority and only 72 were approved, 28 under the unmet public needs criteria.

Table 32: Restructuring of the community pharmacy industry: summary of restructuring to July 1995

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Applications:									
Closure packages	465	241	219	63	139	17	23	2	1,169
Amalgamation packages	43	16	14	10	6	7	5	0	101
Essential Pharmacy Allowance	169	133	126	68	81	31	2	5	615
Taken up:									
Closure packages	247	162	111	25	59	8	17	1	630
Amalgamation packages	24	12	11	6	4	3	4	0	64
Essential Pharmacy Allowance	137	108	112	62	58	23	0	5	505
Payments (\$'000):									
Closure packages	17,075	10,585	7,332	1,640	4,000	500	1,075	50	42,257
Amalgamation packages	1,575	725	705	370	275	130	220	0	4,000
Section 90(a):									
Applications	926	582	611	334	239	52	25	8	2,777
Approvals	809	544	472	253	219	42	20	5	2,364

(a) Section 90 of the *National Health Act 1953* approves persons and institutions to dispense pharmaceutical benefit prescriptions.

Source: Department of Health and Family Services.

9 Utilisation of pharmacy services

Prescription drugs

Prescription drugs are dispensed under the Pharmaceutical Benefits Scheme (PBS) and Repatriation Pharmaceutical Benefits Scheme (RPBS) programs, as private prescriptions, through hospitals, and through a group of smaller Commonwealth Government programs.

The Pharmaceutical Benefits Scheme (PBS) subsidises the cost of a wide range of drugs and medicinal preparations. Its aim is to ensure that individuals are not financially precluded from access to these items. The items that attract benefits are reviewed frequently, and the price of every item covered is negotiated with the supplier.

Patients are grouped into two classes. Concessional beneficiaries, that is, holders of Pensioner Health Benefits Cards and certain other entitlement cards issued by the Department of Social Security, pay a set contribution for each item. This contribution was \$2.60 in 1994. General beneficiaries, that is, all others, paid the first \$16 for each item. Both classes of beneficiary pay additional amounts where the brand dispensed costs more than the basic price for the item. The pharmacist then claims the remainder of the dispensed price of the item from the Health Insurance Commission.

The PBS also includes a safety net arrangement, which has been modified many times since its introduction in 1986. In 1994, after a family of general beneficiaries had spent \$400 on pharmaceutical benefits, they became entitled to benefits at the concessional rate of \$2.60 for the rest of the calendar year.

For concessional beneficiaries, the safety net operated differently. After a purchase of 52 items at the concessional rate, pensioners and other concessional beneficiaries became entitled to receive Pharmaceutical Benefits items free for the rest of the calendar year.

The Commonwealth also helps in provision and purchase of drugs through the Repatriation Pharmaceutical Benefits Scheme (RPBS), which provides assistance to specific groups of Australian war veterans and dependants. It is generally similar to the PBS for concessional beneficiaries.

The items that attract benefits are revised frequently. Unsubsidised prescribed items can also be bought at pharmacies, and many remedies can be purchased without prescription.

Under the Pharmaceutical Benefits Scheme, Commonwealth Government payments and patients' contributions on benefit prescriptions amounted to \$2,326 million in 1994–95, an increase of 11.8% since 1993–94 and 76.5% since 1990–91.

Just over 30% of prescriptions dispensed under the Pharmaceutical Benefits Scheme were from three medicine groups—anti-hypertensives (11.1%), antacids and drugs for treatment of peptic ulcers (10.6%) and anti-asthmatics (8.9%).

Additional analyses of drug utilisation in Australia can be found in *Australia's health 1994* and *Australia's health 1996*.

Household expenditure on pharmaceuticals

In 1993–94, the Australian Bureau of Statistics conducted a Household Expenditure Survey (HES) which collected detailed information about the expenditure, income and household characteristics of households resident in private dwellings throughout Australia. Features of household expenditure on pharmaceutical products include:

- Australian households spent an average of \$6.20 per week on medicines, pharmaceutical products, therapeutic appliances and equipment. Queensland households spent the most money on these items with an average of \$6.67 per week and Tasmanian households recorded the lowest expenditure (\$5.29 per week).

- An average of \$2.17 of this was spent on prescriptions per week. Household expenditure on prescriptions varied from a high of \$2.44 per week in South Australia to a low of \$1.68 in the Northern Territory.
- As a proportion of total average weekly household expenditure, Australian households have increased their spending on medicines, pharmaceutical products, therapeutic appliances and equipment over the last 10 years from 0.59% in 1984 to 0.76% in 1993–94. This increase occurred across all States and Territories except in Tasmania and the Northern Territory.
- Queensland households spent the greatest proportion of household income on these items (0.88% of total average weekly expenditure in 1993–94), and households in the Australian Capital Territory recorded the lowest (0.55%).

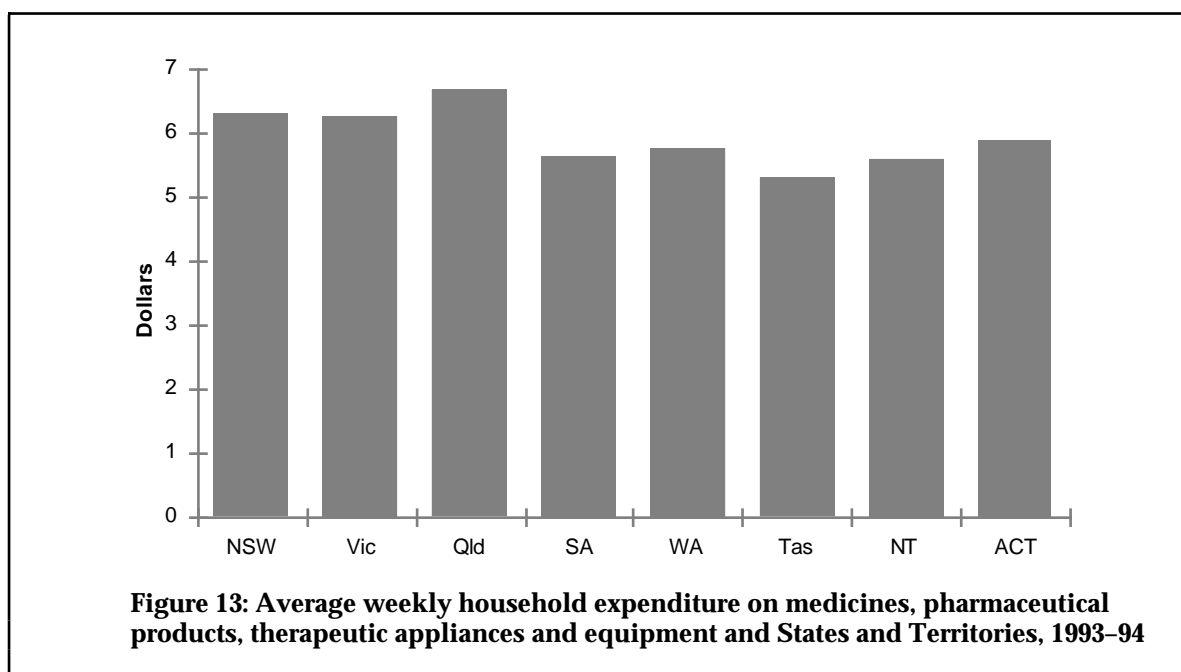


Table 33: Pharmaceutical Benefits Scheme: cost of pharmaceutical benefits, 1990–91 to 1994–95

	1990–91	1991–92	1992–93	1993–94	1994–95
	(\$'000)				
Commonwealth Government payments:					
General benefit prescriptions	157,783	221,341	312,825	367,362	384,204
Concessional benefit prescriptions	936,680	911,125	1,104,670	1,317,238	1,497,476
<i>Total</i>	<i>1,094,463</i>	<i>1,132,466</i>	<i>1,417,495</i>	<i>1,684,599</i>	<i>1,881,680</i>
Patients' contributions on:					
General benefit prescriptions	132,121	135,030	172,898	194,084	230,303
Concessional benefit prescriptions	91,672	173,196	186,629	201,592	214,240
<i>Total</i>	<i>223,793</i>	<i>308,226</i>	<i>359,527</i>	<i>395,676</i>	<i>444,542</i>
Total cost of benefit prescriptions (including patients' contributions)	1,318,256	1,440,692	1,777,022	2,080,279	2,326,222
Commonwealth Government payments through miscellaneous services	64,800	100,877	101,552	116,697	109,621
<i>Total cost of pharmaceutical benefits</i>	<i>1,383,056</i>	<i>1,541,569</i>	<i>1,878,575</i>	<i>2,196,976</i>	<i>2,435,843</i>
Total Commonwealth Government payments	1,159,263	1,233,343	1,519,047	1,801,296	1,991,301

Source: Department of Health and Family Services.

Table 34: Pharmaceutical Benefits Scheme: summary of the thirty highest cost medicine groups, 1994–95

Medicine group	Prescription volume	Group cost (\$)	% of total cost	% increase over 1993–94
Anti-hypertensives	8,330,404	259,693,828	11.09	10.83
Antacids, drugs for treatment of peptic ulcers	6,696,941	248,492,748	10.61	24.30
Anti-asthmatics	8,964,540	207,987,638	8.88	-0.35
Anti-bacterials for systemic use	13,865,353	185,145,738	7.91	2.82
Calcium channel blockers	6,495,562	159,824,964	6.82	13.33
Serumlipid reducing agents	3,042,593	149,497,012	6.38	14.39
Psychoanaleptics	4,629,398	111,563,083	4.76	61.38
Sex hormones and modulators	4,965,714	97,791,753	4.18	6.95
Analgesics	8,546,672	77,381,674	3.30	13.95
Drugs used in diabetes	2,027,419	69,626,203	2.97	8.99
Cardiac therapy	3,281,071	63,690,146	2.72	2.71
Anti-inflammatory and anti-rheumatics	4,631,833	58,043,902	2.48	-3.84
Psycholeptics	8,044,619	55,303,888	2.36	8.71
Ophthalmologicals	4,809,841	51,851,380	2.21	7.86
Endocrine therapy	277,937	43,257,984	1.85	26.25
Anti-epileptics	1,196,420	40,944,971	1.75	19.12
Beta blocking agents	3,483,968	40,909,251	1.75	-0.49
Vaccines	1,935,922	37,206,829	1.59	9.35
Diuretics	2,930,264	32,518,701	1.39	4.45
Anti-virals for systemic use	141,114	30,209,597	1.29	13.07
Anti-Parkinson drugs	566,467	21,836,891	0.93	3.11
Anti-diarrhoeals, intestinal anti-inflammatory	873,259	20,071,911	0.86	9.66
Corticosteroids, dermatological	2,572,241	19,971,840	0.85	3.84
Anti-acne preparations	105,951	19,507,429	0.83	19.22
Anti-spasmodic and anti-cholinergics	1,143,274	16,216,154	0.69	22.96
Diagnostic agents	379,465	15,790,848	0.67	2.80
Anti-fungals for dermatological use	870,919	15,367,808	0.66	103.07
Extemporaneous and other	1,525,872	14,491,242	0.62	1.27
Nasal preparations	742,228	13,121,649	0.56	15.54
Mineral supplements	1,133,239	12,159,620	0.52	-0.82
Other groups	10,509,425	152,420,667	6.51	39.87
Total	118,719,925	2,341,897,349	100.00	11.68

Note: Includes patients' contributions and excludes expenditure on miscellaneous items other than Doctor's Bag (\$15,781).

Source: Department of Health and Family Services.

Table 35: Average weekly household expenditure on medicines, pharmaceutical products, therapeutic appliances and equipment, States and Territories, 1993–94

Expenditure item	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
	(dollars)								
Prescriptions	2.09	2.41	2.16	2.44	1.70	2.02	1.68	2.01	2.17
Proprietary pain relievers									
(powders, liquids & tablets)	0.44	0.48	0.59	0.49	0.47	0.40	0.48	0.49	0.49
Proprietary ointments & lotions	0.53	0.54	0.64	0.42	0.75	0.43	0.70	0.60	0.56
Proprietary medicines n.e.c.	1.66	1.61	1.91	1.66	1.53	1.53	1.39	1.60	1.67
Creams, tablets & medicines									
undefined	0.71	0.66	0.46	0.28	0.56	0.34	0.55	0.69	0.59
Surgical dressings	0.21	0.15	0.26	0.18	0.19	0.18	0.27	0.20	0.20
Therapeutic appliances & equipment,									
& pharmaceutical products, n.e.c.	0.33	0.25	0.52	0.12	0.14	0.08	0.30	0.13	0.29
Medicines & pharmaceutical									
products undefined	0.35	0.17	0.13	0.08	0.43	0.31	0.20	0.18	0.24
Total medicines, pharmaceutical									
 products, therapeutic									
 appliances & equipment	6.31	6.26	6.67	5.66	5.77	5.29	5.58	5.88	6.20

Source: HES: Detailed expenditure items, Australia, 1993–94 (ABS Catalogue No. 6535.0).

Table 36: Average weekly household expenditure on medicines, pharmaceutical products, therapeutic appliances and equipment, States and Territories, 1984, 1988–89 and 1993–94

States and Territories	1984	1988–89	1993–94
	(dollars)		
New South Wales	2.76	4.69	6.31
Victoria	2.79	4.26	6.26
Queensland	3.23	4.75	6.67
South Australia	2.59	3.77	5.66
Western Australia	2.37	4.29	5.77
Tasmania	3.02	4.18	5.29
Northern Territory	4.49	3.87	5.58
Australian Capital Territory	3.22	4.45	5.88
Total	2.81	4.45	6.20

Source: HES: Detailed expenditure items, Australia, 1984, 1988–89 and 1993–94 (ABS Catalogue No. 6535.0).

Table 37: Total average weekly household expenditure, States and Territories, 1984, 1988–89 and 1993–94

States and Territories	1984	1988–89	1993–94
	(dollars)		
New South Wales	497.55	718.47	851.92
Victoria	490.85	709.60	804.38
Queensland	438.23	575.52	758.24
South Australia	417.18	586.84	742.62
Western Australia	481.83	686.06	811.26
Tasmania	400.09	544.35	704.46
Northern Territory	620.67	723.76	970.57
Australian Capital Territory	659.91	831.33	1,071.02
Total	477.91	673.52	811.67

Source: HES: Detailed expenditure items, Australia, 1984, 1988–89 and 1993–94 (ABS Catalogue No. 6535.0).

Table 38: Proportion of average weekly household expenditure used on medicines, pharmaceutical products, therapeutic appliances and equipment, States and Territories, 1984, 1988–89 and 1993–94

States and Territories	1984	1988–89	1993–94
	(per cent)		
New South Wales	0.55	0.65	0.74
Victoria	0.57	0.60	0.78
Queensland	0.74	0.83	0.88
South Australia	0.62	0.64	0.76
Western Australia	0.49	0.63	0.71
Tasmania	0.75	0.77	0.75
Northern Territory	0.72	0.53	0.57
Australian Capital Territory	0.49	0.54	0.55
Total	0.59	0.66	0.76

Source: HES: Detailed expenditure items, Australia, 1984, 1988–89 and 1993–94 (ABS Catalogue No. 6535.0).

10 International comparison

Summary data for Organisation for Economic Co-operation and Development (OECD) countries is shown in Table 39. Unfortunately, not all OECD countries use the same definition for practising community pharmacists. A footnote has been used to indicate where the definitions are known to differ from the standard OECD definition. These differences make comparisons with the OECD 'average' not meaningful.

Canada appears to be the only other OECD country for which community pharmacist figures are definitely comparable with the Australian data. Canada is also demographically similar to Australia in that the proportion of the population aged 65 or more is similar, 11.2% compared with 11.8%. Canada had 61.5 practising community pharmacists per 100,000 population in 1991 and Australia had 59.6 in 1994.

Table 39: Number of active (practising) community pharmacists, OECD countries, 1994

Country	Practising pharmacists(a)	Population ('000)	Per cent of population aged 65+	Pharmacists per 100,000 population
Australia	10,639	17,843	11.8	59.6
Austria	4,009	8,030	15.0	49.9
Belgium(b)	13,657	10,116	15.6('93)	135.0
Canada (1991)	17,296	28,118	11.2	61.5
Czech Republic(c)	3,334	10,336	13.1	32.3
Denmark (1993)	964	5,189	15.4	18.6
Finland(d)	7,113	5,038	14.2	141.2
France (1993)	52,879	57,530	14.5	91.9
Germany	43,822	81,338	15.2	53.9
Greece(e)	8,147	10,206	14.8('93)	79.8
Hungary	3,306	10,261	14.0	32.2
Iceland (1990)	223	255	10.6	87.5
Ireland(f)	1,135	3,571	11.5	31.8
Italy (1992)	54,693	56,757	14.5('89)	96.4
Japan	106,419	124,960	14.0	85.2
Luxembourg (1993)(b)	336	385	13.4('89)	87.3
Netherlands (1993)(g)	2,464	15,290	13.1	16.1
New Zealand	2,285	3,480	11.5	65.7
Norway (1989)	1,909	4,227	16.3	45.2
Portugal	12,273	9,912	14.4	123.8
Spain (1993)(b)	39,608	39,083	14.2	101.3
Sweden	5,786	8,816	17.4	65.6
Switzerland (1990)	3,342	6,712	15.0	49.8
Turkey	17,164	60,576	2.8	28.3
United Kingdom (1993)	34,418	58,191	15.6('90)	59.1
United States (1992)	198,000	265,100	12.3	74.7
Total	645,221	901,320	..	71.6

(a) The OECD definition of practising pharmacists is the number of pharmacists self-employed or employed by others including foreign pharmacists licensed to practise. It excludes full-time salaried pharmacists working in hospitals and in pharmaceutical manufacturing corporations as well as pharmacists working abroad.

(b) Refers to pharmacists entitled to practise.

(c) Refers to full-time equivalents.

(d) Refers to pharmacists entitled to practise aged up to 62 years.

(e) Refers to the number of pharmacies.

(f) Refers to pharmacists entitled to practise including those working in industry, administration and research.

(g) Refers to all registered established pharmacists, physicians with pharmacies, assistant pharmacists and pharmaceutical assistants.

Source: OECD Health Data File, 1996.