

# 4 Community and hospital and clinic pharmacists

## 4.1 Community and hospital and clinic pharmacists

The following analysis considers the major occupations of community pharmacists, and hospital and clinic pharmacists separately.

Community pharmacists work in retail pharmacies for over-the-counter dispensing of prescriptions. In 1999 there were 11,829 community pharmacists in Australia, 62.5 per 100,000 population, Australia-wide (tables 6 and A.14). The highest rates were in New South Wales (69.1), Tasmania (65.8) and Victoria (60.8), while the Northern Territory had only 24.9 pharmacists per 100,000 population.

Many people need to visit pharmacies regularly to fill prescriptions or obtain over-the-counter medications. Shopping centres and malls are convenient locations for pharmacies as they allow ready access to the public as they go about their daily activities. The 1999 survey showed that the majority of community pharmacists (69.5%) were located in non-mall shopping centres, while 23.2% were in mall complexes, 6.6% were in medical centres and less than 1% were in other locations (Table A.15).

The proportions of pharmacists working in each location varied considerably across states and territories. In the Northern Territory, 70.3% of community pharmacists were located in mall complexes and only 27.0% in non-mall shopping centres. In Tasmania and Victoria, however, 81.0% and 79.1% of community pharmacists, respectively, were located in non-mall shopping centres. Western Australia and Queensland had a high proportion of community pharmacists attached to medical centres (13.0% and 11.8% respectively), considerably more than the Australian figure (6.6%). As there was no definition of mall complex supplied to respondents, and it was therefore open to individual interpretation, these figures must be treated with caution.

**Table 6: Employed pharmacists per 100,000 population, states and territories, 1999**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Population ('000)	6,438.6	4,700.7	3,508.6	1,854.4	1,499.2	472.0	313.8	194.2	18,984.2
<b>Pharmacists per 100,000 population</b>									
Community pharmacists	69.1	60.8	61.4	59.2	52.7	65.8	49.0	24.9	62.5
Hospital pharmacists	10.2	13.6	9.1	10.2	11.1	12.7	13.1	14.5	11.1
Other pharmacists	5.4	4.6	1.8	3.2	2.6	6.2	21.1	3.6	4.4
<b>Employed pharmacists<sup>(a)</sup></b>	<b>84.7</b>	<b>79.0</b>	<b>72.3</b>	<b>72.7</b>	<b>66.5</b>	<b>84.6</b>	<b>83.2</b>	<b>43.1</b>	<b>77.9</b>

(a) Persons employed as pharmacists, including those on extended leave.

Community pharmacists can be classified according to their degree of responsibility within their business. This tends to relate to their level of ownership, which ranges from sole proprietor or part-owner down to relief worker. The classification profile of the main job of community pharmacists varied across states and territories (Table A.13). Almost one-third of community pharmacists worked as sole proprietors in Tasmania and Western Australia

(32.7% and 32.3% respectively) but accounted for only 13.2% and 13.0% of community pharmacists in the Northern Territory and the Australian Capital Territory, respectively. Most community pharmacists in the Northern Territory (47.3%) worked as pharmacists-in-charge, a much higher proportion than for Australia as a whole (28.5%). The Australian Capital Territory had more relievers than other states and territories, with 26.3% compared with the Australian proportion of 16.7%.

Females made up 68.0% of permanent assistant pharmacists and 61.4% of relievers working in regular locations. However, they only comprised 20.9% of sole proprietors and 27.6% of partner-proprietors.

Hospital and clinic pharmacists supply and control medication in hospitals and provide other special services such as overseeing oncology medication. In 1999 there were 2,093 hospital and clinic pharmacists in Australia, 11.1 per 100,000 population (tables 5 and A.16). The rate varied across states and territories. The Northern Territory had the highest rate, with 14.5 hospital and clinic pharmacists per 100,000 population. Queensland had the lowest rate, with 9.1 per 100,000 population.

Hospital and clinic pharmacists also have varying degrees of responsibility. Their jobs are classified according to their seniority, from director down to pharmacist. The 1999 survey showed that the majority of hospital and clinic pharmacists worked in jobs classified as pharmacists (32.9%) (Table A.16). A further 27.5% and 20.3% were specialist pharmacists and senior pharmacists, respectively. The remainder work as directors and deputy directors (13.6% and 4.9%, respectively). Only 3.0% of hospital and clinic pharmacists in Tasmania and 5.8% of those in the Northern Territory were directors, compared with 16.5% of those in New South Wales and 14.9% of those in South Australia. Females made up 81.3% of specialist pharmacists and 74.8% of pharmacists, but only 44.0% of directors.

## 4.2 Access to pharmacy services

Demand for pharmacists is largely related to the volume of prescriptions for drugs made by medical practitioners, and to the use of non-prescribed medicines. There are two main sources of information on drug prescription and use. These are the BEACH survey and reports from the Pharmaceutical Benefits Scheme.

### The BEACH survey

The BEACH (Bettering the Evaluation and Care of Health) report *General Practice Activity in Australia 2000–01* (Britt et al. 2001) presents data collected between April 2000 and March 2001 from a sample of general practitioners. Doctors are asked about themselves and their patient encounters. The survey found that general practitioners reported managing an average of 144.5 problems per 100 patient encounters. They prescribed, supplied or advised over-the-counter drugs at an overall rate of 108.2 per 100 encounters, or 74.8 per 100 problems. Prescriptions were the second most common reason given by patients for encounters, at 6.1% of all reasons, after check-ups at 8.8%.

Of these medications, 85.2% were prescribed, 8.5% advised for over-the-counter purchase, and 6.3% were supplied. The most frequently prescribed drug was paracetamol (an analgesic, at 3.9 per 100 encounters), followed by amoxicillin (an antibiotic, at 3.2 per 100 encounters), then cephalexin (an antibiotic, at 2.2 per 100 encounters) and paracetamol and codeine (an analgesic, also at 2.2 per 100 encounters). (Analgesics are cheaper for health care cardholders if prescribed rather than purchased over the counter.) The most commonly prescribed drug

groups were antibiotics (17.2% of all prescriptions), cardiovascular drugs (14.7%), central nervous system drugs (12.0%) and psychological drugs (8.1%). The most frequently advised over-the-counter drug was paracetamol, at 26.3% of all drugs advised. Vaccines were the most frequently supplied medication, totalling 26.4% of all medications supplied, and celecoxib (a non-steroidal anti-inflammatory drug) was the most commonly supplied single preparation at 4.8%.

## **Pharmaceutical Benefits Scheme**

The Department of Health and Ageing publishes information relating to the government's Pharmaceutical Benefits Scheme (PBS). In 2000–01, there were over 148 million prescriptions dispensed under the PBS. This was a 7.2% increase from 1999–00 and a 19.0% increase in the total cost of PBS prescriptions, to \$4.6 billion. Of this, \$3.8 billion, or 83.7%, was met by the government and \$0.7 billion was met by patient co-payments (DoHA 2001 and Table A.24).

Nationally, 7.7 scripts per head were issued under the PBS in 2000–01, at an average cost per head of \$237.28. Tasmania had the highest number of scripts and cost per capita, at 8.9 and \$259.89 respectively. The Northern Territory had the lowest, at 2.6 scripts and \$86.31 per head, at least partly because of the availability of state-funded medications such as Section 100 drugs in remote areas of Australia (DoHA 2001).

## **4.3 Current and projected shortage of pharmacists**

The Department of Employment and Workplace Relations identified shortages of both retail and hospital pharmacists in 1999 and these occupations were still in demand nationally in 2002 (DEWR 2003). Skill shortages exist when employers are unable to fill, or have considerable difficulty in filling, vacancies for an occupation, or specialised skill needs within that occupation.

The demand for pharmacy services is likely to increase in the future. The PBS data show that the number of prescriptions dispensed has increased considerably in recent years. The rise is not just due to population growth, as there has been an increase in the number of scripts written per head, from 6.8 in 1999–00 to 7.7 in 2000–01. With the ageing of the population and the well-described tendency for the number of prescriptions written to rise with advancing age (AIHW: Britt et al. 2001) it is expected that the numbers of prescriptions to be dispensed will increase in the future. In addition, the role of pharmacists as health providers is expected to expand because of the increasing complexity and diversity of medications. Increasingly, pharmacists will need to provide more 'cognitive' services such as advice on the most appropriate medication and counselling on its use, rather than just supply of product (HCI 2003).

A report commissioned by the Commonwealth Department of Health and Ageing also concluded that there was an undersupply of community and hospital pharmacists in Australia in 1999, and projected that the shortage would continue beyond 2010 (HCI 2003).