

<b>Hospital Pharmacist, Retail Pharmacist</b>		<b>New South Wales (NSW)</b>
<b>ANZSCO Code:</b> 2515-11, 13	June 2009	
<b>Labour market rating</b>	Hospital pharmacist: No shortage Retail pharmacist: Shortage (regional)	
<b>Comment:</b> <i>Shortages of retail pharmacists are evident in regional NSW.</i>		

### **Occupational demand**

Underlying demand for pharmacists has increased moderately in recent years. The number of admissions/separations occurring in NSW hospitals grew by 2.9 per cent a year over the five years to June 2008. Demand for retail pharmacists has been less strong: the volume of prescriptions dispensed under the pharmaceutical benefits scheme was flat over the four years to 2008 and the number of pharmacies in NSW grew by only 2.3 per cent over the same period. ABS Census data show that the number of employed pharmacists in NSW was stable from 2001 to 2006 and it is likely that growth since then has been subdued.

### **Occupational supply**

DEEWR estimates that completions of entry-level pharmacy courses at NSW universities increased by forty per cent in the three years to 2008 as the first cohorts of students completed the recently-introduced Masters degrees in pharmacy. This gives a training rate (course completions as a percentage of employed pharmacists) of 5.9 per cent per annum. Net immigration of pharmacists from overseas to NSW averaged 140 persons per annum in the two years to 2007-08, which compares with an average of 100 per annum in the previous five years. Registration data suggest that wastage from the occupation was quite high at over 10 per cent per annum between 2004 and 2007.

### **Employer and industry comments/current labour market**

A DEEWR survey of employers who had recently advertised for pharmacists showed that 91 per cent of vacancies for hospital pharmacists and 50 per cent of vacancies for retail pharmacists were filled within six weeks of advertising. This compares with a success rate of 45 per cent for hospital pharmacists and 80 per cent for retail pharmacists in 2007. Vacancies for retail pharmacists in Sydney were mostly easily filled and, on average, attracted 3.2 suitable applicants per vacancy. On the other hand, the majority of vacancies for retail pharmacists in regional areas remained unfilled or took up to 12 months to fill. Regional retail pharmacy vacancies attracted an average 0.6 suitable applicants per vacancy although over half attracted no suitable applicants.

The consensus among employers of hospital pharmacists was that there are now more applicants for vacancies than has been the case for a very long period of time. This was attributed to the economic downturn and the increase in new university graduates. The economic downturn has reduced the number of positions available in the retail sector as well as making the hospital sector seem a more secure option notwithstanding that the potential rewards in the retail sector are higher. On average, each hospital pharmacy vacancy attracted 2.7 suitable applicants. Several hospital pharmacies stated they had received an unusually high number of unsolicited applications from experienced retail pharmacists. Employers from both the hospital and retail sectors reported no difficulty in filling new graduate positions. Because of the pharmacy course at Charles Sturt University at Wagga Wagga, employers in the Riverina region appear to have less difficulty in filling vacancies than other regional areas in NSW.

### **Labour market outlook**

DEEWR projections indicate that the supply of new graduates will remain high in 2009-10. However, the significant wastage rate from the occupation and the problem in attracting and retaining experienced pharmacists in some regional areas are structural in nature and likely to persist over the short term.

<b>Hospital and Retail Pharmacist</b>		<b>Victoria</b>
<b>ANZSCO Code: 2515-11, 13</b>		June 2009
<b>Labour market rating:</b>	Hospital pharmacist - no shortage. Retail pharmacist - no shortage	
<b>Comment:</b>		

### **Occupational demand**

Pharmacists supply, dispense and manufacture medicines and drugs. A hospital pharmacist operates as part of a healthcare team and prepares drugs, counsels patients and advises health professionals. A retail pharmacist prepares and dispenses drugs, provides primary health care advice and supports and advises health professionals on drug selection and usage. After completing a period of supervised training, graduates must register with the Pharmacy Board of Victoria before commencing practice.

Demand for pharmacological services is broadly in line with the rate of population growth but with demand increasing with age. Between 2004 and 2007 the average population growth rate in Victoria varied between 1.2 and 1.5 per cent per annum and the median age increased slightly from 36.5 years to 36.9 years over the same period. The median age varies with geography and ranges from 36.1 in Melbourne to 43.1 years in East Gippsland.

### **Occupational supply**

The supply of pharmacists has increased due to a number of factors. Education data show a marked increase in the number of completions in the period 2004-07 when an average of 181 persons attained the required bachelor degree in each year compared with an average of 123 in each of the preceding three years.

Migration data show a relatively stable net increase of an average of 70 persons in each of the years 2004-05 to 2007-08 compared with just 21 persons in 2003-04. All overseas trained pharmacists (except those from New Zealand) are required to have their qualifications assessed. Those qualified in the UK, Ireland, USA or Canada must complete a period of supervised practice and pass an assessment by the Board. Applicants with qualifications obtained in other countries require formal examinations, longer periods of supervised practice and a final assessment of competency.

Registrant numbers have increased by up to 4 per cent in each of the past four years with 5040 registrants in 2004 and 5365 in 2007. The number of new registrants has increased appreciably from 149 in 2004 to 239 in 2007, with growth in this period exceeding the population growth rate.

### **Employer and industry comments/current labour market**

A survey of employers who had recently advertised for pharmacists found that 91 per cent of vacancies were filled, attracting 3.4 suitable applicants per vacancy. Employers were generally very satisfied with the quality of applicants. Respondents found these recent recruitment exercises relatively easy to fill as a result of a trend increase in the number of graduates over the last decade and, to a lesser extent, due to increased immigration. Additionally, recent EU regulatory changes mean that Australian qualified pharmacists are no longer streamlined for registration in the UK thus reducing emigration to that destination.

Hospital pharmacists were a little more difficult to recruit due to the different set of skills involving more complex formulations for critical illness treatment. Some respondents reported that hospital pharmacists sometimes work additional hours as part time or casual retail pharmacists and that the generally higher remuneration of retail pharmacists tends to attract more candidates. Some employers suggested there are far fewer locum positions as pharmacists now seek more secure full time work. One agency reported that they have 200 locums on their database. In 2001 the state government introduced an expanded pharmacy intern program and a coordinated recruitment and retention strategy. In six years, the number of positions rose from 444 in 2001 to 606 in 2007 and the vacancy rate also improved from 8 per cent to 2 per cent.

### **Labour market outlook**

The labour market is not expected to change over the outlook period.

<b>Hospital and Retail Pharmacists</b>		<b>Queensland</b>
<b>ANZSCO Code:</b> 2515-11,13		June 2009
<b>Labour market rating</b>	Shortage	
<b>Comment:</b>		

### **Occupational demand**

The majority of pharmacists supply, dispense and manufacture medicines and drugs in retail pharmacies and hospitals and advise on their appropriate use. Others conduct research into the formulation, production, storage, quality control and distribution of medicines and drugs. Demand for pharmacists continues to be generated by population growth, the health and ageing of the population and new developments in medicine and medications. In the retail sector, demand has grown with the number of local medical practitioners opening and community pressure for additional pharmaceutical supplies and services. Data from the Private Health Insurance Administration Council show that privately funded pharmacy services in Queensland increased by 5.8 per cent or by 29 297 services over the year to March 2009. In the public sector, demand for hospital pharmacists has been buoyed by State Government investment in health services including the recruitment of additional allied health professionals needed to provide those services.

### **Occupational supply**

It is mandatory that pharmacists in Queensland be registered with the Pharmacists Board of Queensland. As at June 2009, there were 4997 pharmacists registered in Queensland. Registration requires the completion of an undergraduate pharmacy degree, or the combination of an undergraduate and masters program in pharmacy and at least 1824 hours of supervised practical training. The latest available data from the Department of Education, Employment and Workplace Relations indicate the number of students entering pharmacy programs has increased by approximately 15 per cent each year since 2003, with the total intake in 2007 reaching 421. The number of students graduating from pharmacy programs has grown accordingly and with an historical average attrition rate of 10 per cent for this profession, it is expected that approximately 280 newly qualified pharmacists will enter the labour market at the end of 2009. Arrivals and departures data from the Department of Education, Employment and Workplace Relations suggest that overseas migration contributed 82 self-identified pharmacists to Queensland in 2007-08.

### **Employer and industry comments/current labour market**

Based on this year's survey, the vacancy-filled rate for pharmacists in Queensland was 62 per cent, higher than the 39 per cent recorded in the last report. Employers considered only one in four applicants as suitable, citing no qualifications, no registration or no experience in the advertised role as the main reasons for unsuitability. The majority of unregistered applicants were from overseas and employers advised that they rarely consider these candidates because of the time and cost associated with the immigration process and the attainment of Queensland registration. Recruitment difficulties were reported for pharmacy managers and clinical pharmacists, particularly in the aged care sector where pharmacists need accreditation to perform annual medication reviews. Recruitment specialists reported it is generally easier to fill retail positions compared with hospital or aged care facility vacancies and they attribute this to the differences in remuneration and working conditions offered in each sector. Respondents generally agreed that supply and recruitment at the graduate level is unproblematic; demand is currently for experienced pharmacists; demand from the private sector has eased over the last six months and public sector demand continues to hold steady.

### **Labour market outlook**

Demand for pharmacists in Queensland is expected to increase in line with the State's growing and ageing population. Supply to the profession is improving with ascending student numbers, but it will be some years before the new graduates are able to qualify as pharmacy managers or accredited clinical pharmacists. In the meantime, the labour market for this profession has been found to be in shortage and this outlook is not likely to change over 2009-10.

<b>Hospital &amp; Retail Pharmacist</b>		<b>South Australia</b>
<b>ANZSCO Code:</b> 2515-11, 2515-13	May 2009	
<b>Labour market rating</b>	Hospital Pharmacist – Shortage; Retail Pharmacist – No Shortage	
<b>Comment</b>		

### **Occupational demand**

As at June 2008, there were 1469 practising pharmacists on the Pharmacy Board of South Australia register. This represented a 5.4 per cent increase compared to a year earlier. According to the 2006 ABS Census, around 11 per cent of pharmacists are hospital pharmacists and 85 per cent are retail pharmacists (the remainder are classified as industrial pharmacists). In December 2006, the South Australian Government agreed to participate in the Commonwealth Government's pharmaceutical reform in public hospitals. As a consequence, public hospitals have been advertising additional positions funded by this reform. This was reflected in DEEWR's Skilled Vacancies Index data which recorded a significant increase in newspaper vacancies in 2007 followed by a further substantial increase in 2008. Private sector employers reported no change in their workforce sizes over the past year, while there was a considerable increase in the number of employed pharmacists in large public hospitals. Although private sector employers had no plans to recruit additional staff in the short-term, the opposite was the case for public sector contacts.

### **Occupational supply**

The main source of supply is university training. The number of Australian students completing a four-year Bachelor of Pharmacy degree averaged 69 per annum over the five years to 2008. The number of students commencing a pharmacy degree rose to 101 in 2007, compared with 94 the year before. Although there was a subsequent fall to 88 commencements in 2008, the upward trend in commencements to 2007 suggests supply is likely to increase over the medium term. In addition to local occupational supply, there was a net migration inflow of 55 pharmacists to South Australia in 2007-08, compared to 36 in 2006-07. The GCCA Graduate Destination Survey reported that 97 per cent of South Australian pharmacy graduates seeking full-time employment were successfully employed in 2008, slightly less than the 98 per cent recorded in 2007.

### **Employer and industry comments/current labour market**

A survey of hospital and community pharmacies showed that 53 per cent of all recently advertised pharmacist vacancies were filled within six weeks. However, while the vacancy filled rate for retail pharmacists was 100 per cent, for hospital pharmacist vacancies it was 33 per cent. Hospital-based vacancies received 0.6 suitable applicants per vacancy compared to a ratio of 1.3 for retail pharmacy vacancies. There were also greater difficulties in filling positions located in regional or remote localities. Most hospital pharmacist vacancies were difficult to fill because the positions required high levels of experience, including team leadership and provision of educational services to hospital staff. Community pharmacies contacted for this report were able to fill all of their recently advertised vacancies, although there was a limited choice of suitable applicants overall. Poor communication skills, inexperience and/or an inability to work the required hours were the main reasons for rejecting unsuitable applicants for these positions. The labour market for hospital pharmacists is rated as being in shortage but there appears to be no shortage of retail pharmacists.

### **Labour market outlook**

Demand for hospital pharmacists has grown over recent years due to the national health reforms and this may continue in the short-term. However, demand will eventually stabilise over the next 12 months and demand in the community pharmacy sector is expected to remain stable. Further, there is likely to be a steady increase in university pharmacy graduates over the next few years. Consequently, the current shortage of hospital pharmacists is unlikely to persist over the next 12 months.

<b>Retail Pharmacist</b>	<b>Western Australia</b>
ANZSCO Code: 2515-13	June 2009
Labour market rating:	Regional shortage
Comment: <i>Shortages are restricted to regional areas.</i>	

### Occupational demand

The 2006 Australian Bureau of Statistics (ABS) census data show that in WA the majority (90 per cent) of retail pharmacists work in the major industry division of Retail Trade with the number of retail pharmacists having increased between 2001 and 2006 by nine per cent to 1299.

Practicing pharmacists are required to be registered with the Pharmaceutical Council of WA. The number of registered pharmacists grew by 6 per cent in the year to December 2008, from 1639 to 1739. The Pharmaceutical Council of WA report that there are currently 517 retail or 'community' pharmacies as well as six retail pharmacies located physically within major hospitals. At these outlets, 1807 pharmacists work as sole owners, partners or employees. A further 473 pharmacists work in other environments such as hospitals and universities.

### Occupational supply

Curtin University is the only WA institution offering a Bachelor of Pharmacy (for four years full time). Recent graduate numbers of domestic Bachelor of Pharmacy students from Curtin University have been 77 in 2007 and 140 in 2006. The University of WA and Murdoch University both offer a two year Master of Pharmacy designed to complement a Bachelor of Science degree as an entry to the pharmacist profession. A total of 33 graduates completed the courses in 2007, the first year there were any graduates.

Before applying for registration with the Pharmaceutical Council of WA, pharmacy graduates must successfully complete 2500 hours of supervised training and practical experience. Many pharmacists continue to be employed by the pharmacy providing training, following their registration. Overseas migration to WA has provided a net gain of 30 retail pharmacists in 2007-08, which was an increase from 27 in 2006-07.

### Employer and industry comments/current labour market

DEEWR research of recently advertised vacancies showed that this occupation is very rarely advertised so a number of employers who employ pharmacists were canvassed for their experiences. The survey included large and small employers and employers located in the metropolitan, rural and remote areas of WA. Large employers of retail pharmacists who operate predominantly in the metropolitan area reported no difficulty in the recruitment of qualified retail pharmacists. This was a change from the previous year when employers were seeking his assistance to find suitable people. He attributed this to an increase in the availability of registered retail pharmacists.

Owners of pharmacies located in the north and remote areas of WA who were contacted reported difficulty in recruitment, due to location. Owners of pharmacies located in the southern regions of WA indicated they had been successful in their previous recruitment drives. Overall, employers surveyed did not think there was a shortage of retail pharmacists but a general reluctance for retail pharmacists to work outside of the metropolitan area.

A spokesperson for the Industry Body pertaining to pharmacists in WA said that they no longer advertised pharmacist vacancies, adding that jobs were often secured following the preregistration training program. If not, recent graduates, seeking employment contacted employers directly.

### Labour market outlook

Labour market research indicates an increase in availability of retail pharmacists and no shortages are expected for the metropolitan area in the medium term. Shortages in regional and remote areas are likely to persist.

<b>Pharmacist</b>	<b>Tasmania</b>
ANZSCO Code: 2515-11,13	June 2009
Labour market rating	Shortage
Comment: <i>Vacancies for experienced pharmacists and those in rural areas were hardest to fill.</i>	

### Occupational demand

The total number of pharmacists in Tasmania recorded at the 2006 Census was 407, an increase of just over 10 per cent on the 2001 figure. As at May 2009, there were 542 pharmacists registered to practice in the State, but not all of these would actually be practicing. This is due to circumstances such as women who have temporarily withdrawn from the workforce for child rearing purposes wishing to maintain their registration, and also to interstate owners of pharmacies not actually living here, but still required to register in the State. According to 2006 Census data, 84.2 per cent of pharmacists are working as retail pharmacists, 13.1 per cent as hospital pharmacists, and just under 3 per cent as industrial pharmacists. Demand for pharmacists is linked to the frequency of medical conditions in the community that require medication. The opening hours of pharmacies can also influence demand for pharmacists, as can the hours pharmacists wish to work. In the hospital sector, turnover of patients is the major demand factor. Industry sources suggest that the trend now is for shorter patient stays in hospitals, which means they are discharged more often, and this usually results in an increase in demand for pharmacy services. Industry sources also indicated an increasing tendency for pharmacists to prefer part-time work due to both the ageing of the workforce and the increasing numbers of female pharmacists wishing to combine work and family responsibilities. This means a larger number of pharmacists is required to provide the same number of pharmacist hours.

### Occupational supply

The University of Tasmania offers a four year Bachelor of Pharmacy degree at its Hobart Campus. There has been an average of around 32 pharmacy graduates per year over the 10 years to 2007. However, approximately 30 per cent of total enrolments in all years are overseas students who are likely to return to their countries of origin and will therefore not contribute to supply for the local labour market. According to Census data, 54 pharmacists arrived in the State between 2001 and 2006, with 12 coming from overseas and the remainder from interstate.

### Employer and industry comments/current labour market

A survey of employers who had recently advertised for pharmacists was undertaken for this report. Around half the employers reported they had successfully filled their positions, but all advised that the successful applicant was already employed in another pharmacy. All of the advertised vacancies were in the retail/community sector. Hospitals that were contacted about hospital pharmacists advised that they believed it would be difficult to fill vacancies if they had them, indicating that community pharmacists tend to get paid significantly more than those in the hospital, sector making it more difficult to attract and retain staff. A major public hospital advised that they regularly have positions unfilled for lengthy periods due to their inability to attract suitable applicants. The point was also made that it is much harder to recruit experienced pharmacists than new graduates, particularly in the hospital sector.

### Labour market outlook

The low filled rate of vacancies, combined with other industry feedback suggests that there is a shortage of pharmacists in Tasmania, particularly experienced ones. Contacts report it is particularly difficult to fill vacancies outside the major urban centres, and hospitals have greater difficulty than the retail sector. This is unlikely to change in at least the next 12 months.

<b>Hospital / Retail Pharmacist</b>		<b>Northern Territory</b>
<b>ANZSCO Code:</b> 2515-11, 13		May 2009
<b>Labour market rating</b>	No Shortage	
<b>Comment:</b>		

### **Occupational demand**

The Australian Bureau of Statistics (ABS) Census data show that there were 92 hospital and retail pharmacists employed in the Northern Territory (NT) in 2006, a 30 per cent increase from the 2001 figure. The Australian Government Private Health Insurance Administration Council reported 2887 pharmacy general claims in the NT through private health insurance in the March 2009 quarter and the quarterly number of claims has remained steady since March 2005.

### **Occupational supply**

In 2006 Charles Darwin University (CDU) introduced a full pharmacy degree course and had their first graduates (4) for the course in 2008. The number of continuing students in the pharmacy degrees at CDU has increased over the past three years. ABS Census data indicate that recruits from interstate frequently leave the Northern Territory within a short period of time. As an indication (based on ABS Census data) on the reliance of interstate recruitment for pharmacists, in 2006 17 per cent of pharmacists employed in the NT had moved to the NT from interstate within the previous year and 37 per cent had moved to the NT within the previous five years. These figures indicate a moderately higher reliance on interstate supply for physiotherapists than for professionals overall.

### **Employer and industry comments/current labour market**

Employers contacted for both hospital and retail pharmacy roles were able to fill all of their advertised vacancies, a significant improvement from 2007 fill rate of 50 per cent. Nearly half (47 per cent) of all applicants were considered suitable. Hospital pharmacy employers indicated they were seeking applicants with hospital experience and that most unsuitable applicants lacked this experience or weren't qualified. Employers tended to advertise in local and national newspapers and online websites in an effort to attract applicants. Some employers found it difficult to attract people to the NT which commonly is perceived as unattractive by potential applicants because of its small size, relative isolation and cost of living. Employers offered relocation expenses, accommodation assistance and, for the hospital pharmacists, retention bonuses as incentives to attract applicants.

Demand for pharmacists has typically been driven by turnover of existing staff rather than growth in the overall number of positions. There is currently a strong focus on attracting local pharmacists for vacancies and high turnover is an issue with graduate pharmacists often returning interstate to work within one or two years of working in the NT. Hospital pharmacy employers suggested remuneration for hospital roles was now more competitive compared with retail pharmacy roles, and that retail pharmacists may begin looking at hospital pharmacy roles for better remuneration and regular hours.

The majority of employers have a graduate recruitment program. Employers surveyed noticed an increase in supply of graduates attributed to the CDU pharmacy course and expected a further supply increase of local graduates in the coming year. Retail pharmacy employers commonly indicated that demand had fallen and they have reduced pharmacists' hours from full-time to part-time. They attributed this fall in demand to reduced sales resulting from the global recession.

### **Labour market outlook**

Over the next year increased local graduate supply is expected and the labour market for pharmacists is expected to remain steady with no shortage. Demand will vary according to economic conditions but increased demand associated with economic recovery is not expected to create a shortage of pharmacists in the NT within the next year.

<b>Hospital Pharmacist, Retail Pharmacist</b>		<b>ACT</b>
<b>ANZSCO Code: 2515-11,13</b>		June 2009
<b>Labour market rating</b>	No Shortage	
<b>Comment</b>		

### **Occupational demand**

In the ACT in 2006, the ABS Census recorded total retail and hospital pharmacist employment of 204 and 30 respectively, representing growth of approximately seven per cent in the five years from 2001. The Australian government's funding of the Pharmaceutical Benefits Scheme (PBS) ensures a continuing demand for the services of pharmacists. In the year to 30 June 2007 PBS expenditure grew 4.3 per cent from the previous year, having grown by 2.7 per cent in the 12 months to June 2006. Australia's ageing and growing population is likely to support continuing increases in demand for all types of pharmacists.

### **Occupational supply**

To become a pharmacist, a person needs to complete a higher education course recognised by the Australian Pharmacy Council, and complete 12 months of supervised practice with a registered pharmacist. Since 2004, the University of Canberra has offered a Master of Pharmacy program. This is the only recognised course for pharmacists in the ACT. It produced 12 graduates in 2006 and 13 in 2007. If these graduates remain in Canberra, this represents a considerable increase in the available supply of Pharmacists in the ACT. Department of Immigration and Citizenship data show a net total of 19 self identifying pharmacists migrating to the ACT over the five years until June 2008.

### **Employer and industry comments/current labour market.**

A DEEWR survey of employers who recently advertised for retail and hospital pharmacists in the ACT showed all the positions were filled within six weeks after the close of applications. There were a total of 7.6 applicants per vacancy and average of 3.0 suitable candidates for each vacancy, an increase over that recorded when the occupation was assessed nationally in June 2008. Most employers indicated no difficulty in attracting pharmacists, whereas previously a number of them have had difficulty attracting suitably qualified applicants.

### **Labour market outlook**

There is no evidence to suggest that the labour market for retail and hospital pharmacists will change significantly in the next six months.