Nursing labour force
2001

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Preface

The National Review of Nursing Education (DEST 2002) and the Senate Community Affairs Committee Inquiry into Nursing (SCAC 2002) are two of several recent inquiries concerning issues associated with nursing shortages. These issues include the ageing of the nursing labour force, the high attrition rates of nurses, particularly those recently graduated, and the increasing use of agency nursing, nursing aides and personal carers, especially in the aged care sector. In addition, despite the overall increase in nursing numbers, the trend towards part-time work has had the net effect of reducing the supply of nurses. Recognition of these factors is crucial in workforce planning to ensure that the supply of nurses in the future is adequate.

This publication reports on the results of the 1999 Nursing Labour Force Survey in the context of the concerns raised by the recent inquiries into nursing, and is supplemented by information from other sources to provide a more detailed and up-to-date picture of the nursing labour force. Comparisons are made with 1993 to show trends that have emerged over the previous 6 years, and student enrolment and migration data provide an indication of future supply.

A special feature on aged care nursing is included in this publication, in recognition of the increasing importance of aged care nursing due to the ageing of the Australian population.

Following an Australian Health Ministers' Advisory Council decision based on the recommendation of the Australian Health Workforce Officials Committee, from 2003 the Nursing Labour Force Survey will be conducted annually across Australia. This will enable jurisdictions to more closely examine the issues raised in the recent inquiries. We look forward to the continued cooperation of nurses, registration boards and state/territory health departments in the collection of data on this important area of workforce planning.

Richard Madden

Director

May 2003

Acknowledgments

Abbreviations

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ADON	Assistant director of nursing
AHMAC	Australian Health Ministers' Advisory Council
ANCI	Australian Nursing Council Incorporated
DETYA	Department of Education, Training and Youth Affairs
DEWRSB	Department of Employment, Workplace Relations and Small Business
DON	Director of nursing
FTE	Full-time equivalent
LEO	Labour Economics Office
NSW	New South Wales
NT	Northern Territory
OECD	Organisation for Economic Co-operation and Development
Qld	Queensland
RNO	Regional nursing officer
SA	South Australia
Tas	Tasmania
UK	United Kingdom
USA	United States of America
Vic	Victoria
WA	Western Australia

Symbols and other usages

Throughout this publication, data may not add to the totals shown due to the estimation process for non-response. Percentages may not add to 100.0 due to rounding.

Italics within a table denote a subtotal.

Percentage printed as 0.0 may denote less than 0.05%.

. . denotes not applicable.

— denotes nil.

n.a. denotes not available.

n.p. denotes not publishable.

Nursing labour force trends

Explanatory notes

Background

In 1990, the Australian Health Ministers' Advisory Council commissioned the Australian Institute of Health and Welfare to develop national health labour force statistics about the major registrable health professions. Data collections based on a national minimum data set were developed covering the labour force planning needs of the health professions, government, service providers and educational institutions. In addition to nursing, published data from the collections are available for medicine, dentistry, pharmacy, podiatry, optometry and physiotherapy.

In 1997, the National Health Information Management Group reviewed national health labour information requirements. A decision was made that future national collections would be conducted annually for medicine, biennially for nursing, and on a rolling 3-year cycle for dentistry and several allied health occupations. The first biennial collection for nursing was conducted in 1997 and the second in 1999.

This report on the nursing labour force draws information from a range of sources including the 1999 Nursing Labour Force Survey, state and territory nursing registration boards, the Australian Nursing Federation, the Australian Institute of Health and Welfare, the Australian Bureau of Statistics, the Commonwealth Department of Education, Science and Training, the Department of Immigration and Multicultural and Indigenous Affairs, and the Department of Employment, Workplace Relations and Small Business.

Scope and coverage

The Nursing Labour Force Survey, which is conducted in association with renewal of registration and enrolment, covers all nurses registered or enrolled with the nurses' board or nursing council in each state and territory, and eligible to practise.

The coverage may exclude nurses who registered for the first time during the current year. These nurses may not be required to renew their registration at the standard renewal date if the initial registration in that state or territory had occurred during the preceding 12 months.

Method

The labour force data in this publication were obtained from a nursing labour force survey conducted by each state and territory nurses registration board on behalf of the AIHW. Each state and territory nurses registration board conducts an annual renewal of registrations and a survey questionnaire is sent to all nurses as part of the registration renewal process. Each state and territory health authority then forwards a computer file of the survey data to the AIHW for aggregation into a national data set.

Nurse labour force survey response rate

Based on the total of the registrations in each state and territory, the response rate to the survey was 87%. The response rate was 97% in New South Wales, 77% in Victoria, 95% in Queensland, 70% in Western Australia, 99% in South Australia, 79% in Tasmania, 36% in the Australian Capital Territory and 56% in the Northern Territory. However, complete data were not available for all responding nurses, either because not all survey questions were completed or because nurses board initial registration data were incomplete or not provided.

The overall response rate can only be estimated, and not determined with complete accuracy. It is known that at least some nurses who were registered in more than one state or territory completed a questionnaire in just one state or territory. It is not known how often this occurred because it is not possible to match survey records among states and territories.

Labour force estimates

Nurses may register in more than one state or territory. In estimating the nursing labour force, it is therefore important to reduce as much as possible the consequent duplication in statistics.

The estimation of the number and characteristics of currently employed nurses in each state and territory was based on the responses of those nurses employed solely or mainly in the state or territory of registration. Nurses who were on leave for 3 months or more, although employed, were excluded from most tables of employed nurses because not all states and territories collected data from nurses who were on leave.

It is assumed, for all estimates, that non-respondents to the survey had the same labour force characteristics as had respondents. The survey data were scaled up to the registrations in each state and territory by distributing the non-response numbers on the basis of this assumption. This process may overestimate the numbers of nurses in the labour force in each state and territory if non-respondents are more likely to be those with multiple registration or those not in the nurse labour force. This survey error will be greater in the two territories, which have a higher proportion of nurses registered in other jurisdictions, and lower proportions of nurses practising solely in the territories.

Northern Territory data is 1997 Labour Force Survey data scaled up to the number of registrations recorded and an estimate of the number of enrolments in 1999. Consequently, data for enrolled and total nurses in the Northern Territory is to be considered less reliable than comparable data for the other jurisdictions.

Collection timing

The labour force survey is conducted by the nurses' registration board in each state and territory in conjunction with the annual renewal of licenses to practise. Therefore, the timing of the survey depends on the licence renewal procedure that operates in each state and territory. Nurses registering for the first time are not included in the survey at initial registration because they would generally have no previous nursing job for which details could be provided.

As the renewal of registration in New South Wales is due on the anniversary of initial registration, the survey is conducted throughout the calendar year. South Australia has four renewal periods each year with about a quarter of nurses registered in each period. The remaining states and territories have annual renewals due by a fixed date. The collection period in each state and territory is shown schematically in Table 1.

Table 1: Nursing labour force survey: data collection period, states and territories, 1999

State/territory	Nov 98	Dec 98	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
New South Wales			▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓
Victoria		▓	▓	▓	▓									
Queensland					▓	▓	▓	▓						
Western Australia													▓	▓
South Australia	▓		▓	▓		▓	▓		▓	▓				
Tasmania									▓	▓				
Australian Capital Territory				▓	▓									
Northern Territory							▓	▓						

Source: State and territory registration boards.

Time series data

This publication presents statistics on the numbers of registered and enrolled nurses from 1993 to 2001, and the results of the 1999 Nurse Labour Force Survey. Where possible, broad comparisons have been made from 1993 to 1999, but owing to limitations of the data, some comparisons are for the period from 1994 to 1999.

Additional data sources

Additional data in this report came from a variety of sources:

- state and territory nurse registration boards
- the Australian Bureau of Statistics
- the Department of Education, Science and Training
- the Department of Immigration and Multicultural and Indigenous Affairs.

State and territory nurse registration boards

All nurses are required to maintain annual registration or enrolment, with their relevant state or territory nursing board. All figures provided by the registration boards relate to the year ending 30 June.

The Australian Bureau of Statistics

The Labour Force Survey is a component of the Monthly Population Survey conducted by the Australian Bureau of Statistics (ABS). The Monthly Population Survey is based on a multistage area sample of private dwellings (currently about 30,000 houses, flats, etc.) and a list sample of non-private dwellings (hotels, motels, etc.), and covers 0.5% of the population of Australia. Table B.1 in the 'Additional tables' chapter of this publication shows the number of enrolled and registered nurses who, during the reference week of the labour force survey, were employed. That is they:

- worked for 1 hour or more for pay, profit, commission or payment in kind, in a job
- worked for 1 hour or more without pay in a family business

- were employees who had a job but were not at work and were:
  - away from work for less than 4 weeks up to the end of the reference week
  - away from work for more than 4 weeks up to the end of the reference week and received pay for some or all of the 4-week period to the end of the reference week
  - away from work as a standard work or shift arrangement
  - on strike or locked out
  - on workers' compensation and expected to be returning to their job
  - were employers or own-account workers, who had a job or business, but were not at work.

Quarterly estimates for each year have been combined to produce yearly nursing figures for the years 1993–2001.

The ABS also conducts an annual census of private hospitals and free-standing day hospitals. This information has been used to provide trend data for staffing levels.

The Department of Education, Science and Training

The Department of Education, Science and Training requires all universities to provide data on students commencing, enrolling in and completing all university courses. This information provides the number and characteristics of new entrants to nursing courses, those currently enrolled and those who graduate with nursing qualifications.

The Department of Immigration and Multicultural and Indigenous Affairs

The Department of Immigration and Multicultural and Indigenous Affairs obtains data on the number of nurses arriving both temporarily and permanently in Australia to work. Information is also gathered on the number of nurses leaving Australia temporarily to find employment overseas, as well as those who plan to permanently settle in another country. This information is retrieved from incoming and outgoing passenger cards distributed to all air and sea passengers.

Main findings

- In 2001 the total number of registrations and enrolments in Australia was 268,873, increasing from 265,076 in 1999, a 1.4% increase (Table A.1).

- Excluding multiple registrations, there were 256,938 registered and enrolled nurses in Australia in 1999.

- This was a slight increase (0.5%) since 1997, but was still lower than in 1993 (270,720). Against the overall decrease since 1993:
  - the number of nurses actually employed in nursing increased from 216,696 to 224,595, a 3.6% increase
  - the number of employed registered nurses increased from 164,252 to 179,177, a 9.1% increase
  - the number of employed enrolled nurses fell from 52,444 to 45,418, a 13.4% decrease (Tables C.1, C.35, C.36).

- The overall increase in the number of employed nurses was accompanied by an increase in the proportion of nurses working part time, from 46.8% in 1993 to 53.8% in 1999, and a decrease in average hours worked per week from 32.2 hours to 30.3 hours (Table 17). This resulted in a fall in the national supply of nurses from 1,074 full-time equivalent (FTE) nurses per 100,000 population in 1993 to 1,018 in 1999.

- Across jurisdictions, the supply ranged from 944 FTE nurses per 100,000 population in Queensland to 1,086 in Victoria (Table C.5).

- Across geographic locations, the supply ranged from 731 FTE nurses per 100,000 population in other rural areas to 1,553 in large rural centres (Table C.6).

- There was an overall increase in workload in the hospital setting (as measured by the number of hospital separations). According to Australian hospital statistics, the number of separations for public and private acute and psychiatric hospitals increased from 5.3 million in 1995–96 to 6.0 million in 1999–2000 (Tables D.3, E.1–E2).

- The nursing workforce is ageing, and the number of new entrants is not likely to increase over the next few years:
  - Between 1993 and 1999, the average age of nurses rose from 39.5 years to 41.6 years
  - The number of Australian students completing basic nursing studies decreased from 6,397 in 1993 to 4,465 in 2000
  - The number of Australian students commencing basic nursing studies decreased from 8,010 in 1993 to 7,195 in 2000 (Tables C.37, F.1, F.2).

- The number of male nurses increased from 16,096 in 1995 to 17,835 in 1999, a 17.7% increase (Table C.35).

- Between 1993 and 1999, there was an increase in the number of employed nurses in all jurisdictions except South Australia and Tasmania (Table 5).

- The number of clinical nurses in the field of geriatrics/gerontology (aged care) decreased markedly between 1994 and 1999, from 41,334 to 33,335, a 19.4% decrease (Table 27).

Overview

Overall number of nurses in 1999

The renewal of nurse registration and enrolments, conducted by state and territory registration boards, identified a total of 265,076 nurses in 1999. This comprised 212,026 registered nurses and 53,050 enrolled nurses. Allowing for multiple registrations (nurses who were registered or enrolled in more than one jurisdiction), the total number of nurses identified by the Nursing Labour Force Survey was 256,938, comprising 205,003 registered and 51,935 enrolled nurses respectively.

The majority of nurses (91.1% or 233,982), were in the nurse labour force. The remaining 8.9% (22,956) were either employed elsewhere and not looking for work in nursing (8,869), not employed and not looking for work in nursing (9,998), or overseas (4,088).

Of those in the nurse labour force, 1.5% (3,458) were on extended leave for a period greater than 3 months, and 2.5% (5,929) were looking for work in nursing. The remaining 96.0% (224,595) were employed in nursing. This group was composed of 89.1% (200,048) clinicians, 5.6% (12,499) administrators, 2.6% (5,928) teachers/educators and 0.8% (1,729) researchers (Figure 1). Over half of all employed nurses (54%) worked part time.

Composition of the nurse labour force

Nurses are classified into two broad categories: registered nurses, who make up the majority of all nurses, and enrolled nurses. The minimum educational requirement for a registered nurse is a 3-year degree from a tertiary institution or the equivalent from a recognised hospital-based program. The minimum educational requirement for an enrolled nurse is a 1-year diploma from a vocational education and training institution (VET) or equivalent from a recognised hospital-based program. Although the level of expertise varies within these groups, in general registered nurses perform more complex medical procedures and hold more responsibility than do enrolled nurses. For instance, in most jurisdictions, only registered nurses have the authority to administer medications.

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                          ┌──────────────────────────┐
                          │  Registered and enrolled │
                          │   (including multiples)  │
                          │         265,076          │
                          └──────────────────────────┘
                 ┌─────────────────────┴─────────────────────┐
        ┌──────────────────┐                         ┌────────────────────────┐
        │   All nurses     │                         │ Multiple registrations │
        │    256,938       │                         │         8,138          │
        │    96.9%         │                         │         3.1%           │
        └──────────────────┘                         └────────────────────────┘
     ┌────────────┴──────────────────┐
┌────────────────────────┐     ┌──────────────────────────┐
│  In nurse labour force │     │ Not in nurse labour force│
│        233,982         │     │          22,956          │
│         91.1%          │     │           8.9%           │
└────────────────────────┘     └──────────────────────────┘
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Employed in nursing 224,595 96.0%	**On extended leave** 3,458 1.5%	**Looking for work in nursing** 5,929 2.5%

	Employed elsewhere 2,025 34.2%
	Not employed 3,905 65.9%

Employed elsewhere and not looking for work in nursing 8,869 38.6%
Not employed, not looking for work 9,998 43.6%
Overseas 4,088 17.8%

Clinical nurses(a) 200,048 89.1%	**Medical/surgical** 59,861 29.9%
Administrators 12,499 5.6%	**Geriatric/gerontology** 33,335 16.7%
Teachers/educators 5,928 2.6%	**Midwifery** 14,291 7.1%
Researchers 1,729 0.8%	**Perioperative/operating theatre/recovery** 14,535 7.3%
Other 4,390 2.0%	**Mental health/psychiatric** 12,173 6.1%
	Critical care/intensive care 9,646 4.8%
	Other 56,207 28.1%

(a) Includes nurse clinicians and clinical nurse managers.

Source: Nursing Labour Force Survey, 1999.

Figure 1: Registered and enrolled nurses, Australia, 1999

Registered nurses

Allowing for multiple registrations, there were 205,003 registered nurses in 1999, of whom 186,294 (90.9%) were in the nurse labour force. Of the 18,709 (9.1%) nurses not in the nurse labour force, 6,822 were employed elsewhere and not looking for work in nursing, 7,945 were not employed and not looking for work in nursing, and 3,942 were overseas   (Figure 2).

In the nursing labour force, 2,925 (1.6%) were on extended leave for a period greater than   3 months. An additional 4,192 (2.3%) were looking for work in nursing, with the remaining 179,178 (96.2%) actively employed in nursing.

- This represents a 9.1% increase in the number of employed registered nurses from 1993 (Table C.35).

The majority (88.0%) of employed registered nurses in 1999 were clinical, which includes nurse clinicians and clinical nurse managers. Administrators made up 6.6%; teachers/ educators made up 3.1%; and researchers made up 0.9%.

Since 1993 there were increases in the number of nurses across all categories. There was a 7.0% increase in the number of clinical nurses from 147,238 in 1993 to 157,613 in 1999; a 41.8% increase in administrators from 8,360 to 11,856, a 32.0% increase in teachers/ educators from 4,174 to 5,510; and an increase in researchers from 626 to 1,619 (Table C.35).

Enrolled nurses

Allowing for multiple registrations, there were 51,935 enrolled nurses in 1999, of whom 47,688 (91.8%) were in the enrolled nurse labour force. The remaining 4,247 (8.2%) were not in the nurse labour force and were either overseas or not looking for work in nursing. Of those in the nursing labour force, 533 (1.1%) were on extended leave, 1,737 (3.6%) were looking for work in nursing, with the remaining 45,418 (95.2%) actively employed in nursing (Figure 3).

The majority (93.4%) of employed enrolled nurses in 1999 were clinical nurses. Administrators made up 1.4%, teachers/educators made up 0.9%, and researchers made up 0.2%. Since 1993, these proportions have increased slightly for all categories except for teachers/educators, which hovered between 0.5% and 0.9% (Table C.36).

- The number of employed enrolled nurses fell from 52,444 in 1993 to 45,418 in 1999, representing a 13.4% reduction. The largest decrease was for clinician nurses, dropping from 48,499 in 1993 to 42,436 in 1999, a reduction of 12.5%. There was an increase in the number of administrators, from 178 to 643, as well as researchers, from 11 to 110   (Table C.36).

Movements since 1993

Movements in the number of registrations and enrolments

Since the first Nursing Labour Force Survey in 1993, the total number of registrations and enrolments (including multiple registrations/enrolments) declined from 281,455 to 263,448 in 1996, and then increased to 268,873 in 2001. Total registrations (including multiple registrations) dropped from 212,630 in 1993 to 207,038 in 1996, representing a 2.6% decrease. However, by 2001 total registrations (including multiple registrations) had recovered to above 1993 levels (216,473). Total enrolments (including multiple enrolments) decreased from 68,825 in 1993 to 52,400 in 2001, a 23.9% decrease (Figure 4). All jurisdictions, except the Northern Territory, experienced a decline in enrolments during this period. Victoria

experienced the greatest decline (35.9%) followed by Queensland (35.2%) and Tasmania (31.7%) (Table A.1).

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                          ┌─────────────────────────┐
                          │   Registered nurses     │
                          │  (including multiples)  │
                          │        212,026          │
                          └────────────┬────────────┘
              ┌────────────────────────┴────────────────────────┐
   ┌──────────────────────┐                      ┌──────────────────────┐
   │  Registered nurses   │                      │ Multiple registrations│
   │      205,003         │                      │        7,023          │
   │       96.7%          │                      │        3.3%           │
   └──────────┬───────────┘                      └───────────────────────┘
   ┌──────────┴───────────┐                      ┌──────────────────────┐
   │ In nurse labour force│                      │Not in nurse labour force│
   │      186,294         │                      │       18,709          │
   │       90.9%          │                      │        9.1%           │
   └──────────┬───────────┘                      └───────────────────────┘
```

| Employed in nursing 179,178 96.2% | On extended leave 2,925 1.6% | Looking for work in nursing 4,192 2.3% |

| Employed elsewhere 1,319 31.5% |
| Not employed 2,872 68.5% |

| Employed elsewhere and not looking for work in nursing 6,822 36.5% |
| Not employed, not looking for work 7,945 42.5% |
| Overseas 3,942 21.1% |

Clinical nurses 157,613 88.0%	Medical/surgical 45,216 28.7%
Administrators 11,856 6.6%	Geriatric/gerontology 19,517 12.4%
Teachers/educators 5,510 3.1%	Midwifery 13,846 8.8%
Researchers 1,619 0.9%	Perioperative/operating theatre/recovery 12,440 7.9%
Other 2,579 1.4%	Mental health/psychiatric 9,958 6.3%
	Critical care/intensive care 9,474 6.0%
	Other 47,163 29.9%

(a) Includes nurse clinicians and clinical nurse managers.

Source: Nursing Labour Force Survey, 1999.

Figure 2: Registered nurses, Australia, 1999

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                          ┌─────────────────────────┐
                          │    Enrolled nurses       │
                          │  (including multiples)   │
                          │       53,050             │
                          └─────────────────────────┘
                    ┌───────────────┴──────────────────┐
        ┌──────────────────────┐          ┌──────────────────────┐
        │   Enrolled nurses    │          │ Multiple registrations│
        │      51,935          │          │        1,115          │
        │      97.9%           │          │        2.1%           │
        └──────────────────────┘          └──────────────────────┘
        ┌──────────────────────┐          ┌──────────────────────┐
        │ In nurse labour force│          │Not in nurse labour force│
        │      47,688          │          │        4,247          │
        │      91.8%           │          │        8.2%           │
        └──────────────────────┘          └──────────────────────┘
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| Employed in nursing 45,418 95.2% | On extended leave 533 1.1% | Looking for work in nursing 1,737 3.6% |

Employed elsewhere 705 40.6%

Not employed 1,032 59.4%

Employed elsewhere and not looking for work in nursing 2,047 48.2%

Not employed, not looking for work 2,053 48.3%

Overseas 146 3.4%

Clinical nurses[a] 42,436 93.4%

Administrators 643 1.4%

Teachers/educators 418 0.9%

Researchers 110 0.2%

Other 1,811 4.0%

Medical/surgical 14,646 34.5%

Geriatric/gerontology 13,818 32.6%

Midwifery 445 1.0%

Perioperative/operating theatre/recovery 2,096 4.9%

Mental health/psychiatric 2,215 5.2%

Critical care/intensive care 171 0.4%

Other 9,044 21.3%

(a) Includes nurse clinicians and clinical nurse managers.

Source: Nursing Labour Force Survey, 1999.

Figure 3: Enrolled nurses, Australia, 1999

Figure 4: Total registrations and enrolments, 1993 to 2001

There are a number of factors that may have contributed to the decline in enrolled nurse numbers, some of which include salary and conditions, the option to upgrade qualifications from the certificate or advanced diploma (enrolled nurse) to a degree (registered nurse), and the reduction in the number of training courses for enrolled nurses (DEST 2001). There has also been an increasing tendency to employ unregulated health workers such as nurses' aides instead of enrolled nurses in areas such as aged care (see the chapter 'Aged care nursing').

Also, as a result of the 1993 Nurses Act, most jurisdictions require registered nurses to have practised at some time in the previous 5-year period in order to maintain their registration. This, as well as increasing fees, may have resulted in nurses deciding not to renew their registration (SCAC 2002). Figure 5 highlights this, showing that the proportion of nurses who renewed their registration/enrolment but who were not looking for work in nursing dropped from 12.5% in 1993 to 9.4% in 1995, and then to 7.3% in 1999.

The fall in the number of nurse enrolments between 1993 and 1999 is reflected in the decline in the number of employed enrolled nurses. According to the ABS Labour Force Survey, the number of employed enrolled nurses declined by 36.3% during this period (from 44,900 to 28,600) (see Table B.1).

Between 1993 and 1999 the proportion of nurses looking for work in nursing declined from 4.9% to 2.3% of the total number of registered and enrolled nurses. This suggests that nurses who were looking for work were more likely to find a job in 1999 than previously. It could also be indicative of a relative increase in nursing shortages. There has been very little change in the proportion of nurses going overseas or on extended leave (see Figure 5).
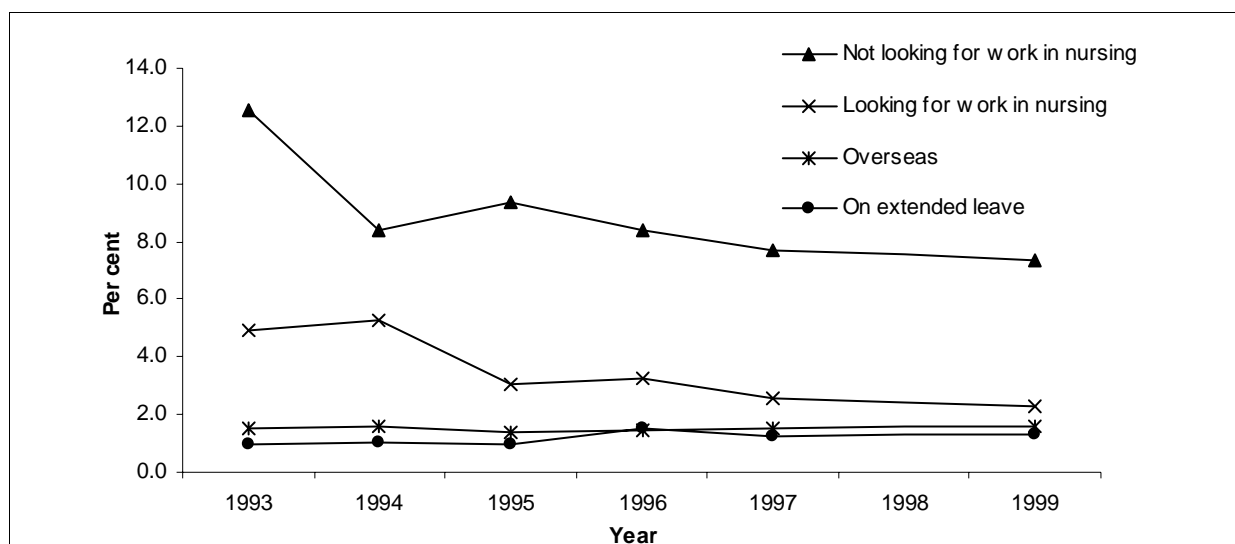
Note: The Nursing Labour Force Survey has been conducted biennially since 1997. Consequently, data from 1998 are not available.

Source: Table C.1.

Figure 5: Nurses not actively employed in the nursing labour force as a percentage of the total number of registered and enrolled nurses (excluding multiple registrations/enrolments), 1993 to 1999

Movements in the number of employed nurses between the 1997 and 1999 surveys

Between 1997 and 1999 the number of nurses employed in nursing increased by 1.1%, from 222,211 to 224,595. Victoria and Tasmania were the only jurisdictions to experience a decrease in the number of employed nurses during this period, with a decrease of 0.3% and 9.0% respectively (Table 2).

The total number of employed registered nurses increased from 175,937 in 1997 to 179,178 in 1999, a 1.8% increase. The number of employed registered nurses increased in all jurisdictions except Tasmania, where there was a 5.7% decrease, from 4,945 to 4,664. The total number of employed enrolled nurses decreased during the same period, from 46,274 to 45,418 (Table 2).

Table 2: Registered and enrolled nurses, state and territories, 1997 to 1999

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT[(a)]	Australia
1997									
Employed registered nurses	57,133	46,032	30,325	17,135	15,634	4,945	2,851	1,882	175,937
Employed enrolled nurses	12,827	15,609	6,488	4,576	4,831	1,069	533	341	46,274
Total employed nurses	69,960	61,641	36,813	21,711	20,465	6,014	3,384	2,223	222,211
Total registrations/enrolments	91,136	70,141	41,629	24,477	22,425	6,551	4,317	3,441	264,082
1999									
Employed registered nurses	57,749	46,295	31,195	18,034	15,983	4,664	2,856	2,401	179,178
Employed enrolled nurses	12,506	15,154	6,379	4,733	4,776	810	688	372	45,418
Total employed nurses	70,255	61,449	37,574	22,767	20,759	5,474	3,543	2,773	224,595
Total registrations/enrolments	91,515	68,923	42,407	25,309	22,337	5,863	4,438	4,284	265,076

(a)   Estimates for enrolled and total nurses in the Northern Territory in 1999 are considered as being less reliable than those of the other jurisdictions (see explanatory notes).

Source: AIHW.

Demographics

Age

The average age of nurses increased from 39.5 years in 1993 to 41.6 years in 1999. The proportion aged less than 25 years increased slightly from 4.0% to 4.3% and the proportion aged over 45 years increased from 30.0% to 37.3% (Table C.37).

There was a decrease in the proportion of enrolled nurses aged under 25 years (from 4.8% in 1993 to 3.2% in 1999) compared with an increase for registered nurses (from 3.8% in 1993 to 4.5% in 1999). The proportion of nurses aged over 45 years increased (from 21.9% to 34.4% for enrolled nurses and from 32.3% to 38.0% for registered nurses) (Figure 6).

Source: AIHW.
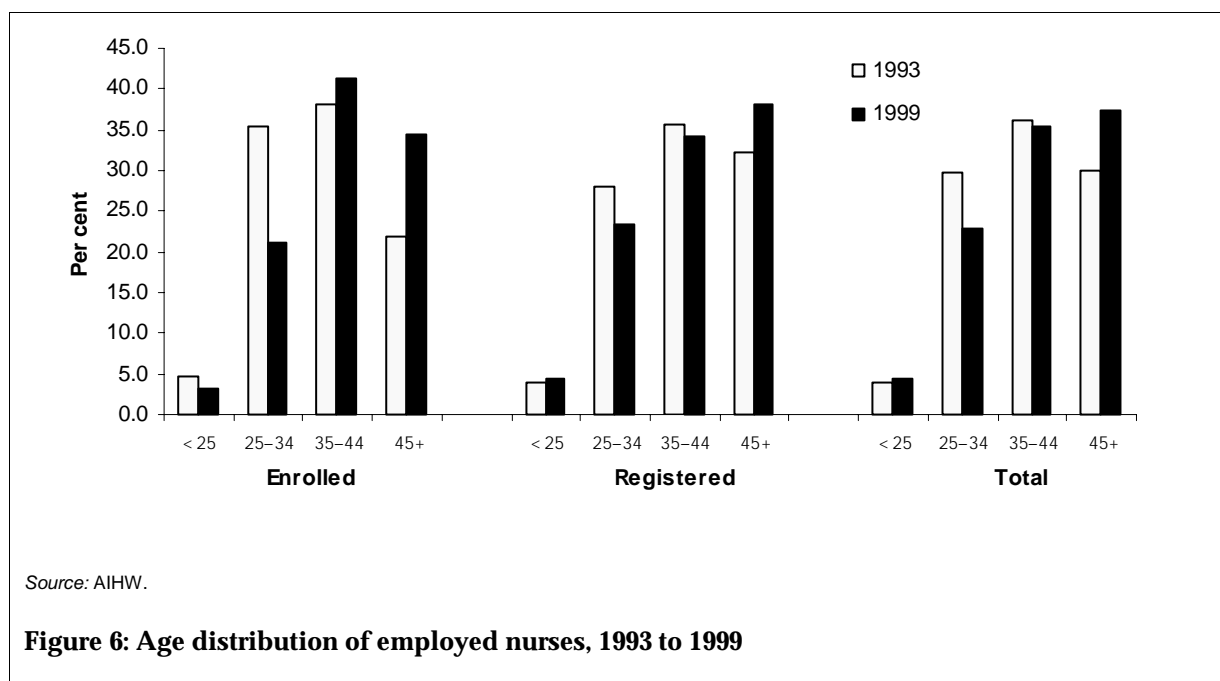
Figure 6: Age distribution of employed nurses, 1993 to 1999

Sex

Nursing is a predominantly female profession, with over 90% of nurses being female. Between 1995 and 1999, the number of employed male nurses increased from 16,096 to 17,835, representing a 10.8% increase. [1] For females, there was a 1.1% increase from 204,570 to 206,759. This resulted in a rise in the proportion of employed males in the nurse labour force from 7.3% to 7.9% (Table C.37).

Between 1995 and 1999 the number of male registered nurses increased by 12.5% (from 13,123 to 14,760). The number of female registered nurses increased by 3.6% (from 158,651 to 164,417). The proportion of registered nurses who were male rose from 7.6% to 8.2%. For employed enrolled nurses, there was a 3.4% increase in the number of males (from 2,973 to

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1. Information on sex was not available for the Northern Territory for 1993 and 1994.

3,075) with a 7.8% decrease in the number of females (from 45,919 to 42,342). The proportion of enrolled nurses who were male rose from 6.1% to 6.8% (Tables C.23, C.24).

Regional distribution

The healthcare needs of rural and remote areas have received a lot of attention in recent years due to a number of reviews, inquiries and research projects. For example, the 2002 Senate inquiry into nursing highlighted issues such as nursing recruitment difficulties, shortage of appropriately trained nurses, ageing of the nursing workforce and high attrition rates as areas of concern in rural and remote nursing (SCAC 2002).

Nurses constitute the largest group in the rural and remote health workforce and in most areas they are the first line of contact in healthcare services. In smaller, more remote areas, nurses receive very little support as there may be only an on-call or part-time doctor in the area, or perhaps no other health workers at all (see the subsection 'Community nursing'). A decline in nursing services in these areas, therefore, would have more impact on these communities than in more populated areas (SCAC 2002).

This chapter presents the characteristics of employed nurses by geographical location using the Rural, Remote and Metropolitan Areas Classification. The Department of Primary Industries and Energy, and the Department of Health and Family Services in 1994 developed this classification.

Of the 224,594 employed registered and enrolled nurses in 1999, 141,216 (62.9%) worked in capital cities, 17,959 (8.0%) in other metropolitan centres, 20,284 (9.0%) in large rural centres, 16,338 (7.3%) in small rural centres, 22,679 (10.1%) in other rural areas, 2,538 (1.1%) in remote centres, and 3,579 (1.6%) in other remote areas. These proportions closely reflect the distribution of the population in the different geographical regions, although large rural centres have an over-representation of nurses of 3 percentage points and other rural areas have an under-representation of 3 percentage points (Table 3).

Table 3: Employed registered and enrolled nurses by geographic location of main job, 1993 and 1999

	Capital city	Other metropolitan centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area	Australia
				1993				
Registered nurses	105,439	13,321	15,801	11,019	14,713	1,592	2,367	164,252
Enrolled nurses	26,054	4,341	5,117	5,333	9,517	801	1,283	52,446
Total	*131,493*	*17,662*	*20,918*	*16,352*	*24,230*	*2,393*	*3,650*	*216,698*
				1999				
Registered nurses	117,782	14,179	16,060	11,864	14,781	1,909	2,601	179,177
Enrolled nurses	23,434	3,780	4,225	4,474	7,898	629	978	45,418
Total	*141,216*	*17,959*	*20,284*	*16,338*	*22,679*	*2,538*	*3,579*	*224,594*
				Percentage				
				1993				
Registered nurses	64.2	8.1	9.6	6.7	9.0	1.0	1.4	100.0
Enrolled nurses	49.7	8.3	9.8	10.2	18.1	1.5	2.4	100.0
Total	*60.7*	*8.2*	*9.7*	*7.5*	*11.2*	*1.1*	*1.7*	*100.0*
				1999				
Registered nurses	65.7	7.9	9.0	6.6	8.2	1.1	1.5	100.0
Enrolled nurses	51.6	8.3	9.3	9.9	17.4	1.4	2.2	100.0
Total	*62.9*	*8.0*	*9.0*	*7.3*	*10.1*	*1.1*	*1.6*	*100.0*
1999 population	63.9	7.6	6.0	6.5	13.1	1.2	1.8	100.0

There were small increases in the number of registered nurses in all geographical areas (Table 3). In terms of the proportion of registered nurses working in different areas, there was a decrease in large rural centres (from 9.6% in 1993 to 9.0% in 1999), other rural areas (from 9.0% in 1993 to 8.2% in 1999) and a slight increase in capital cities (from 64.2% to 65.7%).

There was a slightly different pattern with enrolled nurses, showing a decrease in numbers across all areas. There was also a decrease in the proportion of nurses working in rural and remote areas, with the largest reduction occurring in other rural areas, from 18.1% in 1993 to 17.4% in 1999. Capital cities were the only geographic location in which an increase occurred, from 49.7% to 51.6%.

Age

The age profile of nurses varied across geographic locations. Nurses tended to be older in other rural areas and small rural centres, but younger in remote centres. For example, the proportions of nurses aged 25–34 years were lowest in other rural areas (15.6%) and small rural centres (18.5%), and highest in other remote areas (26.1%) and remote centres (25.9%). The proportion of nurses in the age group 45–54 years was lowest in remote centres (24.6%) and other remote areas (25.1%), and highest in other rural areas (31.0%) and small rural centres (28.9%) (Table 4).

The average age of nurses ranged from 40.7 years in remote centres to 43.5 years in other rural areas. The average age of registered nurses ranged from 40.7 years in remote centres to 44.3 years in other rural areas. The average age of enrolled nurses ranged from 39.6 years in other metropolitan centres to 41.7 years in other rural areas (Table C.22).

Table 4: Age distribution of all employed nurses by geographic location of main job, 1999

Age	Capital city	Other metropolitan centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area	Total
< 25	5.0	4.3	3.5	2.6	1.9	4.3	2.6	4.3
25–34	24.5	23.5	22.8	18.5	15.6	25.9	26.1	22.9
35–44	33.5	38.4	38.4	40.4	39.6	36.5	35.5	35.5
45–54	26.9	25.5	26.7	28.9	31.0	24.6	25.1	27.3
55+	10.1	8.4	8.6	9.6	11.9	8.7	10.6	10.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Average age	*41.3*	*41.2*	*41.3*	*42.3*	*43.5*	*40.7*	*41.5*	*41.6*

Between 1993 and 1999, there was a general shift in the distribution of age such that, overall, the employed nurse labour force is ageing. This occurred in every geographic area and is demonstrated in Figure 7. At the national level the proportion of nurses under the age of 35 years decreased from 33.9% in 1993 to 27.2% in 1999. At the same time, the proportion over 45 years of age increased from 29.9% to 37.3%. The reduction in nurses under the age of 35 years was most noticeable in remote centres (from 41.6% to 30.2%) and other remote areas (from 36.7% to 28.7%).

Source: AIHW.
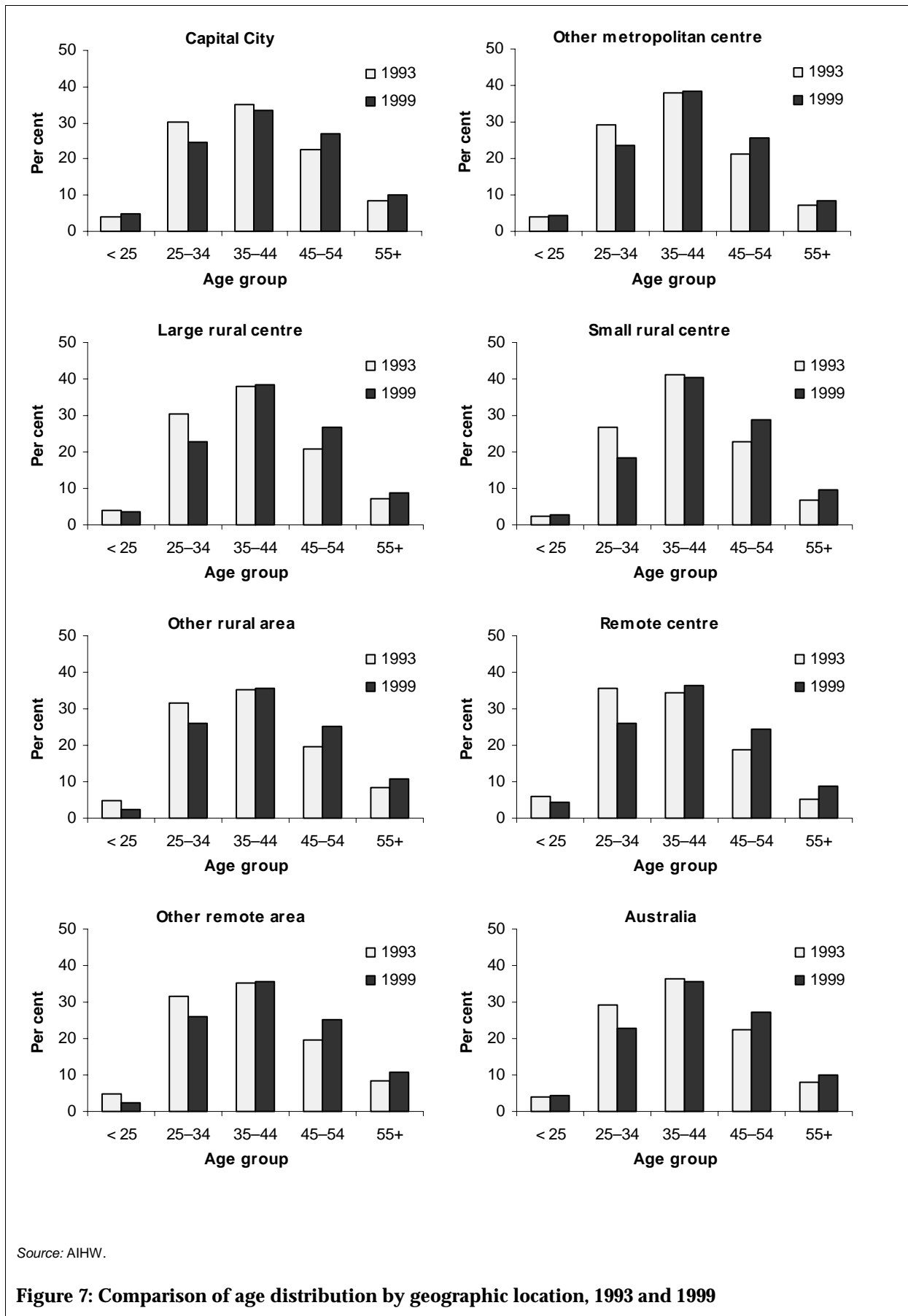
Figure 7: Comparison of age distribution by geographic location, 1993 and 1999

State/territory comparisons

Currently in Australia, state and territory health departments are responsible for the planning and delivery of public health services including public hospitals, public health and the regulation of health workers in both public and private sectors. As noted by the 2002 Senate Community Affairs Committee Report on the Inquiry into Nursing, current strategies of workforce planning are based on 'ad hoc' responses by States and Territories, often without reference to other jurisdictions. As there is no national level of nurse workforce planning, one of the recommendations made by the Senate inquiry included the development of a national nursing workforce strategy (SCAC 2002).

To develop a national strategy it is important to have an understanding of how the characteristics of nurses vary across jurisdictions. This section presents the characteristics of employed registered and enrolled nurses across jurisdictions. These include the total number of nurses in each jurisdiction, age and sex distribution and total hours worked (for further state/territory analyses see the chapters 'Patterns of Employment' and 'Supply of Nurses').

In 1999 there were 224,595 employed nurses in Australia, an increase of 3.6% from 1993. Jurisdictions reporting an overall increase were New South Wales (6.9%), Queensland (3.6%), Western Australia (11.5%) and the Australian Capital Territory (11.9%). Tasmania had the greatest percentage decrease in the number of nurses (11.9%) between 1993 and 1999 (Table 5).

The national increase was due to an increase in the number of registered nurses. Nationally, there was a 9.1% increase in the number of registered nurses between 1993 and 1999. South Australia and Tasmania were the only states where there was a decrease in the number of registered nurses. Data for the Northern Territory is not considered reliable, partly because of the transient nature of the nursing labour force in this jurisdiction, especially during peak tourist seasons. No clear explanation could be found for the apparent large increase in the number of registered nurses in the Northern Territory (50.4%).

Table 5: Employed registered and enrolled nurses, states and territories, 1993 and 1999

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT[a]	Australia
1993									
Registered nurses	53,599	41,222	28,393	15,411	16,245	5,172	2,614	1,596	164,252
Enrolled nurses	12,150	19,848	7,864	5,011	5,732	1,038	552	249	52,444
Total	*65,749*	*61,070*	*36,257*	*20,422*	*21,977*	*6,210*	*3,166*	*1,845*	*216,696*
Nurses per 100,000[b]	1,096	1,368	1,164	1,218	1,502	1,317	1,059	1,090	1,227
1999									
Registered nurses	57,749	46,295	31,195	18,034	15,983	4,664	2,856	2,401	179,178
Enrolled nurses	12,506	15,154	6,379	4,733	4,776	810	688	372	45,418
Total	*70,255*	*61,449*	*37,574*	*22,767*	*20,759*	*5,474*	*3,543*	*2,773*	*224,595*
Nurses per 100,000[b]	1,093	1,297	1,062	1,217	1,389	1,163	1,143	1,429	1,179
Percentage change between 1993 and 1999									
Registered nurses	7.7	12.3	9.9	17.0	−1.6	−9.8	9.2	50.4	9.1
Enrolled nurses	2.9	−23.6	−18.9	−5.5	−16.7	−22.0	24.6	n.p.	−13.4
Total	*6.9*	*0.6*	*3.6*	*11.5*	*−5.5*	*−11.9*	*11.9*	*n.p.*	*3.6*

(a)   Estimates for enrolled and total nurses in the Northern Territory in 1999 are considered less reliable than those of the other jurisdictions (see explanatory notes). Consequently, the percentage change between 1993 and 1999 has not been published.

Source: AIHW.

Age

The age profile of nurses varied across jurisdictions. Overall, they tended to be older in the Australian Capital Territory, Tasmania and Western Australia than in the other states/territories. The proportion of nurses aged between 25 and 34 years was lowest in the Australian Capital Territory (14.6%) and Tasmania (16.5%), and highest in the Northern Territory (29.9%) and Queensland (24.0%). Conversely, the proportion of nurses aged between 45 and 54 years of age was highest in the Australian Capital Territory (34.7%) and Tasmania (31.9%), with the Northern Territory having the lowest (22.4%) (Table 6).

The average age of employed nurses in 1999 was 41.6 years, ranging from 41.2 in Victoria to 43.9 in the Australian Capital Territory. For registered nurses, the average across Australia was 41.4 years, ranging from 40.9 in Victoria to 44.0 in the Australian Capital Territory. The average age for enrolled nurses was lower than that of registered nurses, with an overall average age of 41.3 years, ranging from 39.3 in New South Wales to 43.6 in both Tasmania and the Australian Capital Territory (Tables 6, C.7, C.8).

Table 6: Age distribution of all employed nurses, states and territories, 1999

Age (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
				(Per cent)					
< 25	5.3	3.8	4.5	2.9	4.3	2.4	1.1	3.3	4.3
25–34	23.6	23.6	24.0	20.4	21.8	16.5	14.6	29.9	22.9
35–44	35.9	34.7	33.7	35.3	38.8	39.0	36.7	37.9	35.5
45–54	25.6	28.2	26.7	29.3	27.3	31.9	34.7	22.4	27.3
55+	9.6	9.7	11.1	12.0	7.9	10.2	12.9	6.5	10.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Average age	*41.7*	*41.2*	*41.3*	*42.3*	*41.4*	*42.6*	*43.9*	*41.3*	*41.6*

Source: AIHW.

The nurse labour force is ageing in all jurisdictions except the Northern Territory. Figure 8 shows that the proportion of nurses in the 45–54 year age group increased between 1993 and 1999 across all jurisdictions except the Northern Territory. There was also a noticeable decrease in the proportion of younger nurses (less than 35 years of age) across all jurisdictions except the Northern Territory, where there was a noticeable increase.

Sex

In 1999, 7.9% of all employed nurses were male, ranging from 4.6% in the Australian Capital Territory to 9.0% in New South Wales. The proportion was higher for registered nurses (8.2%), with the Australian Capital Territory having the lowest proportion (4.6%) and both South Australia and the Northern Territory having the highest (9.9%). For enrolled nurses, the proportion who were male was lower (6.8%), ranging from 4.0% in Western Australia to 8.3% in New South Wales (Table 7).

Table 7: Proportion of male nurses, states and territories, 1999

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Enrolled nurses	8.3	6.3	8.2	4.0	5.4	7.5	4.5	7.4	6.8
Registered nurses	9.2	7.0	8.5	6.9	9.9	7.3	4.6	9.9	8.2
All nurses	**9.0**	**6.8**	**8.5**	**6.3**	**8.9**	**7.4**	**4.6**	**9.5**	**7.9**
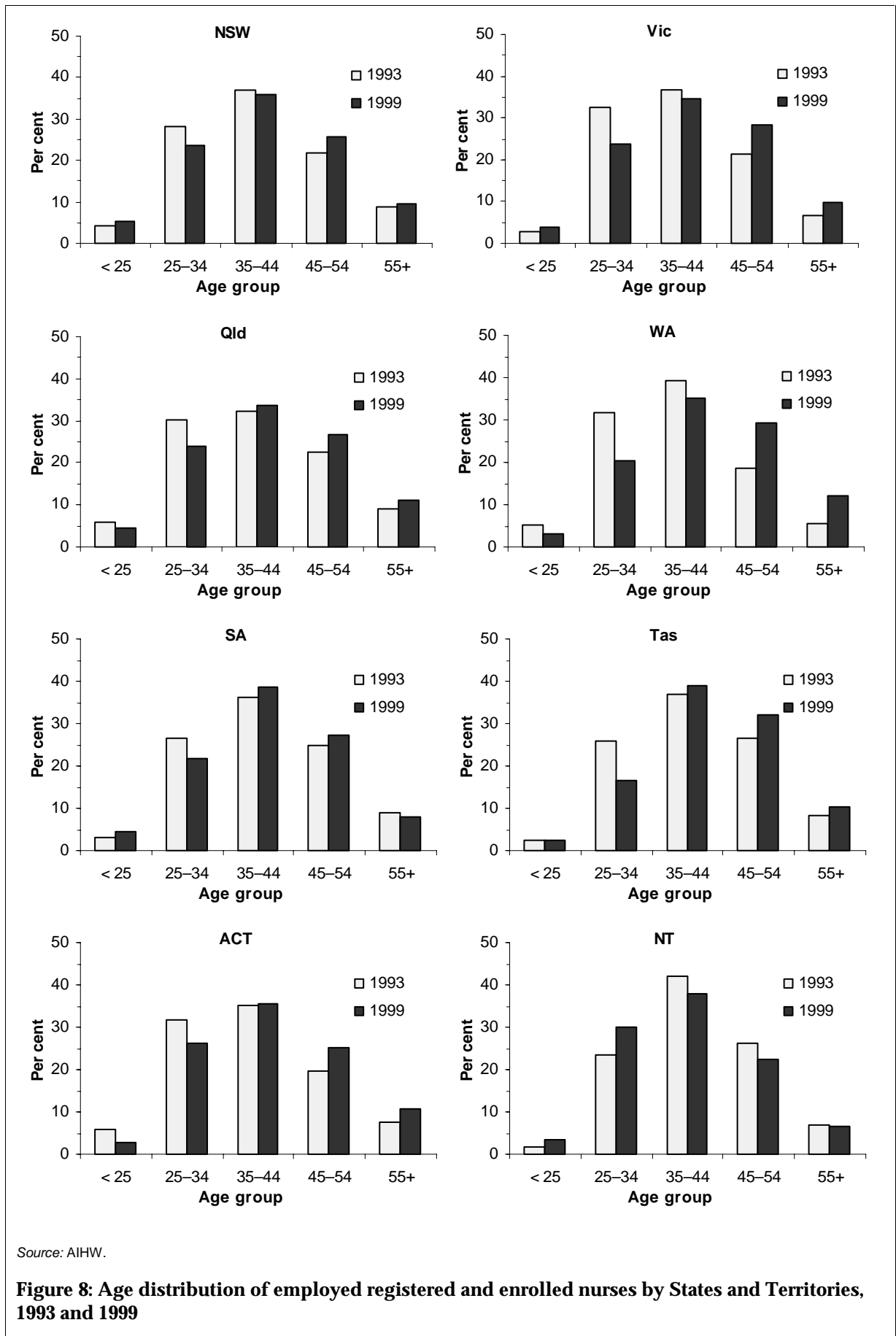
Source: AIHW.

Figure 8: Age distribution of employed registered and enrolled nurses by States and Territories, 1993 and 1999

Patterns of employment

Nursing is a very broad profession. Nurses perform several roles in many different areas of practice at a variety of different locations (work settings), both in the public and private sectors. This chapter describes their pattern of employment across these roles, work settings and areas of nursing.

Nursing roles

The majority of employed nurses work as clinical nurses (nurse clinicians and clinical nurse managers), and their numbers increased from 195,737 in 1993 to 204,749 in 1994, and then dropped to 195,692 in 1995. This was followed by a gradual increase to 200,049 in 1999 (Table 8). In 1999, clinical nurses made up 89.1% of the employed nurse labour force.

The number of nurses working in administrative roles increased from 8,538 in 1993 to 12,499 in 1999, an increase of 46.4%. The proportion of nurses who worked as administrators increased from 3.9% in 1993 to 5.6% in 1999. The number of teachers/nurse educators increased from 4,623 in 1993 to 5,928 in 1999, an increase of 28.2%. The number of researchers also increased, from 637 to 1,729.

Table 8: Employed registered and enrolled nurses by nursing role, 1993–99

Field of nursing	1993	1994	1995	1996	1997	1999	1993–1999
			Numbers				Percentage change
Clinical nurses[a]	195,737	204,749	195,692	197,458	197,211	200,049	2.2
Administrator	8,538	8,534	10,026	9,159	11,940	12,499	46.4
Teacher/educator	4,623	4,717	4,717	3,796	5,158	5,928	28.2
Researcher	637	627	884	719	1,173	1,729	171.4
Other	7,161	6,485	9,347	7,040	6,728	4,389	–38.7
			Per cent				
Clinical nurses[a]	90.3	91.0	88.7	90.5	88.7	89.1	
Administrator	3.9	3.8	4.5	4.2	5.4	5.6	
Teacher/educator	2.1	2.1	2.1	1.7	2.3	2.6	
Researcher	0.3	0.3	0.4	0.3	0.5	0.8	
Other	3.3	2.9	4.2	3.2	3.0	2.0	

(a)   Includes nurse clinicians and clinical nurse managers.

Source: AIHW.

Job classification and salary ranges

The classification of nurses at a national level is complicated by different classification systems across jurisdictions. In order to consolidate these systems, annual salary ranges based on state and territory awards are used as a proxy classification system in this publication (see Table G.1 for a detailed concordance). For example, nurses in the lowest

salary range are enrolled nurses and those in the top range are nurse managers. Table 9 shows the six ranges of annual salary used.

Table 9: Approximate salary range to job classification concordance, 1999

Salary range	Classification level[a]
From $26,593 to $30,355	Enrolled nurse
From $29,578 to $45,277	Registered nurse level/grade 1 or 2
From $44,158 to $65,530	Registered nurse level/grade 3, clinical nurse consultant, nurse manager
From $54,428 to $68,530	Registered nurse level/grade 4/5, management
From $63,315 to $84,396	Director of nursing
$76,642 and over	Director of nursing

(a)   These classification levels are approximate.

Source: Table G.1.

Using these ranges, Table 10 indicates that over half (57.0%) of all employed nurses were in the $29,578 to $45,277 range, with 18.3% in the $26,593 to $30,355 range and 13.1% in the $44,158 to $65,530 range. This means that three-quarters (75.3%) of all nurses are classified at the bottom two levels: enrolled nurse (lowest salary range) and registered nurse level/grade 1 and 2 (second salary range). Another 13% are classified as specialist nurses or low-level managers or educators. Only 7.4% progress to high levels of management, which command salaries in the top three ranges (Table 10).

Male nurses tended to be slightly under-represented in the lower levels (and salary ranges) and over-represented in the higher levels. For example, male nurses made up 7.9% of all employed nurses, yet they made up only 6.6% of nurses in the $26,593–$30,355 range and 11.0% in the $54,428– $68,530 range. This corresponds with a lower proportion of males who were enrolled nurses and a higher proportion of males who were at the level of registered nurse level 3/clinical nurses specialist or higher (see Table G.1 for the concordance).

Table 10: Employed registered and enrolled nurses: distribution of nurses by salary range of main job, states and territories, 1999

Annual salary range	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust	Proportion male
					Per cent					
$26,593–$30,355	16.8	21.2	16.8	19.9	19.2	13.0	14.1	11.0	18.3	6.6
$29,578–$45,277	54.1	44.0	68.5	69.1	68.3	72.1	55.7	54.2	57.0	7.7
$44,158–$65,530	11.8	21.9	7.2	6.9	6.4	8.5	23.2	29.2	13.1	9.2
$54,428–$68,530	8.7	6.9	1.5	1.1	0.7	0.9	1.6	1.6	5.1	11.0
$63,315–$84,396	1.3	2.7	3.3	1.5	1.6	1.0	1.9	0.6	2.1	9.8
$76,642–$87,755	0.5	0.0	0.0	0.0	0.0	0.8	0.0	0.6	0.2	9.5
Other nurses										
Lecturer, higher education	0.6	0.8	0.6	0.8	0.7	0.7	0.9	0.8	0.7	12.0
Other	6.2	2.5	2.0	0.6	3.1	3.0	2.6	2.0	3.5	8.7
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**7.9**

Note: Classifications are based on state and territory nursing awards and therefore may not accurately reflect salaries of nurses covered by Certified Agreements or Australian Workplace Agreements.

Source: AIHW.

Award rates of pay have become less relevant due to the increasing number of nurses being covered by Certified Agreements (CAs) and Australian Workplace Agreements (AWAs) (ANF 2002). The 1996 Workplace Relations Act resulted in a move away from awards towards CAs and AWAs. Pay rates under these agreements tend to differ from award rates of pay, the latter acting as a safety net, providing a minimum enforceable level of pay and conditions. Consequently, caution needs to be observed when using this classification to determine average salaries earned by nurses.

A more reliable source of weekly total earnings is the ABS Survey of Employee Earnings and Hours conducted biennially. In May 2000, the average weekly total earnings of non-managerial nurses who worked full time was $898.30 for registered nurses and $692.70 for enrolled nurses. Nurses in general were paid less than medical practitioners and other allied health professionals (Table 11).

Overall, when compared with the average for all occupations, registered nurses earned above the average weekly salary ($783.50), and enrolled nurses were least paid.

Table 11: Average weekly total earnings and hours paid for, full-time adult non-managerial employees, May 2000

Profession	Average weekly earnings ($)	Hours paid for
Nursing professionals (registered nurses)	898.30	38.0
Enrolled nurses	692.70	38.4
Medical practitioners	1,737.80	42.8
Other health professionals	928.60	38.7
All occupations	783.50	39.8

Note: Figures are for full-time adult, non-managerial employees and includes ordinary time and overtime earnings. *Source:* ABS 2001.

Work setting of main job

In 1999 the majority of nurses worked in acute/psychiatric hospitals (64.4%), residential aged care (15.4%), community health services (6.4%) and private medical rooms (2.9%) (Table 12). The remaining 11.0% of nurses were employed in areas which included education institutions, mental health services, private industries and disability services (Table C.12).

Table 12: Employed registered and enrolled nurses: work setting of main job, 1993 to 1999

Work setting of main job	1993	1994	1995	1996	1997	1999	1993–1999
			Number				(percentage change)
Acute/psychiatric hospital	125,625	131,774	132,429	132,060	137,680	144,582	15.1
Residential aged care[a]	42,769	42,112	38,551	37,323	37,652	34,492	−19.4
Community health service	7,931	9,595	10,206	10,425	12,053	14,364	81.1
Private medical rooms[b]	4,943	6,342	6,665	6,720	6,815	6,416	29.8
Other	35,427	35,286	32,815	31,645	28,011	24,740	−30.2
Total	**216,696**	**225,111**	**220,666**	**218,173**	**222,211**	**224,594**	**3.6**
			Per cent				
Acute/psychiatric hospital	58.0	58.5	60.0	60.5	62.0	64.4	
Residential aged care[a]	19.7	18.7	17.5	17.1	16.9	15.4	
Community health service	3.7	4.3	4.6	4.8	5.4	6.4	
Private medical rooms[b]	2.3	2.8	3.0	3.1	3.1	2.9	
Other	16.3	15.7	14.9	14.5	12.6	11.0	
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	

(a)   Includes nursing homes and aged accommodation.

(b)   Includes doctors rooms/medical practice and private practice.

Source: AIHW.

Acute care/psychiatric hospitals

Acute care/psychiatric hospitals are the main employers of nurses in Australia, employing 144,582 (64.4%) of all nurses. The number of nurses employed in hospitals has increased from 125,625 in 1993, an increase of 15.1% (Table 12). Of the 144,582 nurses, 120,029 (83.0%) were registered nurses and 24,553 (17.0%) were enrolled nurses (Tables C.35, C.36).

The geographic distribution of nurses employed in acute care/psychiatric hospitals is similar to the geographic distribution of the Australian population and of hospitals. However, these nurses were over represented in large rural centres (9.4% of nurses employed in acute care/psychiatric hospitals compared with 6.0% of the population), and under represented in other rural areas (9.2% of nurses compared with 13.1% of the population) (Tables C.18, 3).

There were 111,815 nurses employed in public acute care hospitals in 1999, accounting for nearly half of all employed nurses (49.8%). This represents a 12.6% increase since 1993 (Table C.37). Registered nurses accounted for 82.0% of nurses employed in public hospitals Tables C.35, C.37).

In private hospitals, there were 32,767 nurses employed in 1999, compared with 26,313 in 1993, an increase of 24.5%. They accounted for 14.6% of all employed nurses (up from 12.1% in 1993). Registered nurses made up 86.6% of nurses employed in private hospitals (Tables C.35, C.37).

Residential aged care

There was a decrease in the number of nurses working in residential aged care from 42,769 in 1993 to 34,492 in 1999, a 19.4% decrease (Table 12). The number of registered nurses declined by 8.5% (from 23,206 in 1993 to 21,235 in 1999) and the number of enrolled nurses declined by 32.2% (from 19,563 to 13,257). The decline in the number of nurses working in residential aged care is associated with the deinstitutionalisation of aged care services, which has been occurring in Australia since the early 1980s (AIHW 2001a) (see the chapter 'Aged Care Nursing').

In public nursing homes the number of nurses fell from 22,209 in 1993 to 17,249 in 1999, a 22.3% decrease. The number of registered nurses fell from 10,706 to 9,735, a 9.1% decrease. The largest decrease was for enrolled nurses, dropping from 11,503 to 7,515, a 34.7% decrease (Tables C.35, C.36, C.37).

In private nursing homes, a similar picture emerged, with nurse numbers dropping from 20,560 to 17,243, a reduction of 16.1%. Once again, the reduction in enrolled nurses (28.8%) was more pronounced than that in registered nurses (8.0%).

Community health service

In the early 1980s there was a shift towards the de-institutionalisation of aged care from nursing homes into the community. This process was consolidated with the implementation of the Home and Community Care program in 1985. The aim of this program was to reduce the reliance on intensive nursing home care by providing a range of services in the community. These services included, among other things, home help, personal care and home nursing (AIHW 2001a).

The shift to community-based nursing is associated with an increase in the number of nurses employed in community health services, from 7,931 in 1993 to 14,364 in 1999, an increase of 81.1% (Table 12).

Just over half (52.9%) of those working in community health centres worked in capital cities, 7.6% in other metropolitan centres and the remaining 39.5% in rural and remote areas (Table C.18). Community centres, generally publicly funded, may be more important outside of major cities as a first point of contact for health services, and are more viable to fund and administer than large hospitals in areas of low population. This would explain why the proportion of nurses in rural and remote areas is greater for community services than for acute hospitals.

Private medical rooms

There is an increasing trend towards corporatisation of general practices in an attempt to facilitate management and support services (AIHW 2002a). The formation of these health centres is also associated with a 29.8% increase in the number of nurses working in private medical rooms since 1993. In 1999, 6,416 nurses were employed in this setting, of whom 4,952 (77.2%) were registered nurses (Table C.12).

Clinical area of nursing

Of the 200,048 employed clinical nurses, the largest proportions were employed in the areas of medical and surgical practice (29.9%), geriatrics and gerontology (16.7%), perioperative, operating theatre and recovery nursing (7.3%), midwifery, obstetrics and gynaecology (7.1%) and mental health/psychiatric nursing (6.1%) (Table 13). Together, these clinical areas accounted for two-thirds (67%) of all clinical nurses.

Table 13: Proportion of employed clinical nurses[a] by selected clinical areas of nursing, states and territories, 1999

Clinical area of nursing	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Medical and surgical	30.5	27.1	29.0	36.3	35.1	21.9	25.6	20.4	29.9
Geriatric/gerontology	14.8	22.9	14.0	11.8	15.7	21.6	10.3	6.3	16.7
Perioperative/operating theatre/recovery	7.9	6.6	7.6	6.7	7.5	7.0	9.2	4.8	7.3
Midwifery/obstetrics/ gynaecology	7.0	7.2	6.5	6.8	7.4	8.4	11.8	10.9	7.1
Mental health/psychiatric	6.9	5.3	6.4	5.5	6.8	5.0	4.5	3.3	6.1
Critical care/intensive care	6.0	4.2	4.6	4.1	4.7	1.0	6.8	4.3	4.8
Community nursing	3.3	4.1	3.4	4.9	4.4	7.3	5.2	11.4	4.0
Other	23.6	22.6	28.5	23.9	18.4	27.8	26.6	38.6	24.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a)   Includes nurse clinicians and clinical nurse managers.

Source: Table C.15.

Medical and surgical nursing

In the nursing labour force survey, the area of medical and surgical nursing includes a range of nursing activities from general medicine to specialised activities such as post-surgical care and diagnostics (including medical imaging).

In 1999 there were 59,861 nurses working in medical or surgical nursing, a 4.4% decrease since 1993 (Table C.37). The proportion of these nurses who were registered has remained relatively constant, increasing slightly from 75.0% in 1993 to 75.5% in 1999 (Tables C.35, C.37).

The majority of these nurses were employed in acute/psychiatric hospitals (88.2%) with 3.8% working in private medical rooms, 1.3% in community health centres, 1.5% in aged care and the remaining 5.1% in areas such as hospices, day procedure centres and employment agencies.

The average age of these nurses was 39.3 years, ranging from 38.4 years in Queensland to 41.9 years in the Australian Capital Territory.

Nationally, medical and surgical nurses worked an average of 29.7 hours per week. Nurses in the Northern Territory worked the longest hours on average (35.6 hours per week), whereas nurses in South Australia worked the shortest (25.8 hours per week). This corresponds with the Northern Territory having the lowest proportion of medical and surgical nurses who worked part-time (22.2%) and South Australia having the highest (71.5%) (Table 14).

Table 14: Employed clinical nurses[a] by selected clinical areas of nursing, states and territories, 1999

Clinical area of nursing	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Proportion working part time (%)									
Medical and surgical	49.4	64.3	53.0	58.2	71.5	65.7	66.7	22.2	57.5
Geriatric/gerontology	66.0	76.6	67.8	70.5	83.8	76.4	79.7	65.3	72.6
Perioperative/operating theatre/recovery	44.4	54.2	44.1	46.4	65.9	51.2	33.2	21.7	48.8
Midwifery, obstetrics and gynaecology	54.9	74.5	65.7	63.0	79.6	75.5	74.0	34.0	65.9
Mental health/psychiatric	31.5	31.8	26.7	22.2	42.9	28.2	32.1	16.6	30.9
Critical care/intensive care	38.6	55.2	50.2	53.7	62.5	71.8	53.1	18.4	48.2
Community nursing	46.8	65.7	43.9	52.6	68.5	56.7	44.5	31.1	54.5
Average hours worked (per week)									
Medical and surgical	30.8	28.8	30.6	29.5	25.8	29.3	29.9	35.6	29.7
Geriatric/gerontology	28.4	26.4	28.7	28.0	24.0	27.0	27.3	28.9	27.3
Perioperative/operating theatre/recovery	32.0	30.7	32.2	31.6	26.7	31.1	34.0	36.3	31.3
Midwifery, obstetrics and gynaecology	29.6	26.6	28.5	28.5	24.1	27.5	28.4	33.6	28.0
Mental health/psychiatric	34.6	34.7	35.4	35.8	31.4	34.7	34.6	35.2	34.6
Critical care/intensive care	33.0	31.3	31.9	30.7	28.2	28.5	31.4	35.4	31.7
Community nursing	30.2	27.6	31.1	30.3	25.7	28.9	33.4	35.6	29.3

(a)   Includes nurse clinicians and clinical nurse managers.

Source: AIHW.

Geriatrics and gerontology

In 1999 there were 33,335 nurses working in geriatrics and gerontology, a reduction of 20.0% since 1993 (Table C.37). The composition of nurses working in this area differed from other areas because of the higher proportion of enrolled nurses. In 1999, 41.5% of nurses working in geriatrics and gerontology were enrolled (compared with 21.2% of all clinical nurses) (Tables C.36, C.37). Between 1993 and 1999 the number of registered nurses declined by 12.3%, from 22,259 to 19,517 and the number of enrolled nurses declined by 28.9%, from 19,427 to 13,818 (see the chapter 'Aged care nursing').

In 1999, the majority of these nurses were employed in aged care facilities (83.5%), with 12.0% employed in acute hospitals, 1.6% in community health centres, 0.6% in private medical rooms and the remaining 2.3% employed in other areas such as hospices and day procedure centres.

With an average age of 45.2 years, nurses in this area tended to be older than the general nurse workforce (41.6 years). They ranged from 43.8 years in Victoria to 48.3 years in the Australian Capital Territory.

Nurses working in geriatrics and gerontology are far more likely to work part time, with 72.6% doing so compared with 56.4% of all clinical nurses. Reflecting this, their average weekly hours worked (27.3 hours) was lower than that for all clinical nurses (31.1 hours per week). Nurses in the Northern Territory worked the longest hours on average (28.9 hours per week) with South Australia working the shortest (24.0 hours per week). In South Australia, 83.8% of nurses worked part time, compared with 65.3% for the Northern Territory (Tables 14, C.27).

Perioperative, operating theatre and recovery nursing

In 1999 there were 14,535 nurses working in operating theatre-related areas such as perioperative, operating theatre and recovery, a 23.5% increase from 1993. The proportion of nurses who were registered increased from 80.7% in 1993 to 85.6% in 1999 (Tables C.35, C37).

As surgical procedures are usually performed in hospitals, 92.5% of these nurses are employed in this work setting, with 6.0% employed in day procedure units. These nurses were younger than the general nurse labour force, and they tended to work longer hours.

The average age of nurses working in operating theatre-related areas was 39.9 years, ranging from 39.4 years in New South Wales and Queensland to 41.4 years in Tasmania.

The average weekly hours worked by nurses in the area of perioperative, operating theatre and recovery was 31.3 hours per week. Nurses in the Northern Territory worked, on average, the longest hours (36.3 hours per week) with nurses in South Australia working the shortest (26.7 hours per week). South Australia had the greatest proportion of nurses working part-time (65.9%), with the Northern Territory having the lowest (21.7%)   (Table 14).

Midwifery, obstetrics and gynaecology

The report into the midwifery workforce, conducted by the Australian Health Workforce Advisory Committee (AHWAC), identified a shortage of midwives (AHWAC 2002a). According to the report, the shortage of midwives is linked to the general shortage in nurses. This is because the pool of midwives in Australia is largely drawn from those who have entered the nursing workforce. Therefore, factors affecting the general nursing workforce also affect the midwifery workforce. However, as identified by the report, there are a number of issues that are specific to midwives.

One of the main contributing factors to the decline in midwifery numbers is the statutory requirement for individuals to be registered as midwives. Registration is conditional on the satisfactory completion of a midwifery program recognised by the regulatory authority in the relevant jurisdiction. Therefore, to practise as a midwife, a nurse is required to complete a normal nursing degree, followed by postgraduate studies in midwifery. This is problematic for many people mainly because of the costs involved in post graduate studies, difficulties being released from work and the length and structure of some of the programs, especially clinical placements (AHWAC 2002a).

In 1999, there were 14,291 nurses working in the area of midwifery, obstetrics and gynaecology, a 3.9% decrease from 1993. The proportion of nurses who were registered increased from 94.8% in 1993 to 96.9% in 1999.

The majority of nurses in the area of midwifery, obstetrics and gynaecology were employed in acute hospitals (97.2%), with 0.9% employed in private medical rooms or private nursing practise, 0.8% in community health centres, 0.6% by employment agencies and the remaining 0.6% in other areas.

The average age of nurses working in midwifery, obstetrics and gynaecology was 41.1 years, ranging from 39.7 years in the Northern Territory to 44.1 years in the Australian Capital Territory.

Nationally, midwifery, obstetrics and gynaecology nurses worked an average of 28.0 hours per week, ranging from 24.1 hours per week in South Australia to 33.6 hours per week in the Northern Territory. The proportion of nurses working part time ranged from 34.0% in the Northern Territory to 79.6% in South Australia (Table 14).

Mental health/psychiatric nursing

In 1999 there were 12,173 nurses working in mental health or psychiatric nursing, a 7.2% increase from 1993. Males made up 32.7% of all nurses working in this area, the highest of all clinical areas.

Consistent with the de-institutionalisation of mental health services, which has been occurring over the past three decades (AIHW 2001a), the proportion of mental health/psychiatric nurses employed in acute care/psychiatric hospitals has declined from 75.7% in 1994 to 62.0% in 1999. The remaining nurses were employed in mental health services (19.1%) and community health services (10.2%) in 1999.

The average age of nurses working in mental health/psychiatric nursing was 42.5 years, ranging from 41.0 years in Victoria to 44.0 years in Tasmania.

Nationally, mental health/psychiatric nurses worked an average of 34.6 hours per week. Nurses in Western Australia worked, on average, the longest hours (35.8 hours per week), and nurses in South Australia worked the shortest (31.4 hours per week). In terms of the proportion of nurses working part time, South Australia had the highest proportion (42.9%) and the Northern Territory had the lowest (16.6%) (Table 14).

Critical/intensive care

The area of intensive or critical care involves a highly specialised nursing workforce that provides care to patients with life-threatening or potentially life-threatening conditions. Nurses in this area take all observations; provide respiratory care including physiotherapy and routine ventilator setting manipulations with blood gas analysis; comprehensively manage continuous renal replacement therapy and equipment; and take and interpret

electro-cardiograms, blood samples and other diagnostics samples in consultation with medical colleagues. In addition, nurses also provide personal care and provide support for family and friends of the patient. The work is, therefore, both physically and emotionally demanding, with nurses required to work a higher proportion of their time on night duty than other acute hospital nurses (AHWAC 2002b).

Despite the high level of specialisation, there is no mandatory requirement for nurses to have postgraduate qualifications before entering this field of nursing. The Australian minimum standards suggest that the majority of registered nurses in intensive care should hold postgraduate qualifications. According to consultations conducted by AHWAC, access to and completion of the relevant postgraduate study is often problematic for nurses. As with other specialty areas, issues include the cost of education, difficulties of being released from work, the length of some of the programs and the lack of recognition for prior learning and experience (AHWAC 2002b).

The Australian College of Critical Care Nurses (ACCCN) in their submission to the senate inquiry into nursing indicated that the shortage of critical care nurses occurred for a number of reasons. These include the expansion of demand for intensive care units and beds; advances in technology; the increasing acuity of patients; and the poor retention of nursing staff in the specialty (SCAC 2002). The shortage of critical care nurses is also due to more of these nurses working shorter hours. In 1994, 40.0% of critical care nurses worked part time. In 1999 this had increased to 48.2%.

In addition to an increase in the proportion of nurses working part time, there has also been an overall decrease in the number of hours worked in excess of 35 hours per week. Between 1996 and 1999, the average hours worked by full-time nurses decreased from 43.5 hours to 39.6 hours per week (Table 15). One explanation for the decrease in hours worked by full-time nurses is that many experienced critical care nurses may have left the permanent workforce to work casually or with nursing agencies, leaving the permanent staff with an increased burden in terms of added responsibility and more rigid rosters (AHWAC 2002b).

Table 15: Average hours worked per week by part-time/full-time nurses employed in   critical care nursing in Australia, 1993 to 1999

	1993	1994	1995	1996	1997	1999
	Average hours worked per week					
Part time[a]	23.1	23.3	23.0	23.7	23.6	23.7
Full time[b]	41.6	42.0	41.8	43.5	41.6	39.6
Total	**34.4**	**34.5**	**33.8**	**34.7**	**33.2**	**31.7**

(a)   Working less than 35 hours per week.

(b)   Working more than 35 hours per week.

Source: AIHW.

In 1999, there were 9,646 nurses working in critical care or intensive care, an increase of 14.0% since 1993. The proportion of these nurses who were registered was stable, around 98% in both years.

Nearly all critical care nurses worked in acute hospitals (98.1%), with 1.0% employed by nursing agencies, and the remaining 0.8% working in other areas. Due to the geographic distribution of hospitals, the majority of critical care nurses worked in capital cities or other metropolitan areas (85.7%), with 12.6% in large or small rural centres, 1.0% in other rural areas and 0.7% in remote centres.

Critical care nurses were younger than the general nurse labour force, with an average age of 36.2 years compared with 41.6 years. Across jurisdictions the average age ranged from 35.0 years in Victoria to 39.9 years in Tasmania.

The average weekly hours worked by critical care/intensive care nurses was 31.7 hours per week. Nurses in the Northern Territory worked, on average, the longest hours (35.4 hours per week) with those in South Australia working the shortest (28.2 hours per week). Tasmania had the greatest proportion of nurses working part time (71.8%), with the Northern Territory having the lowest (18.4%) (Table 14).

Community nursing

The largest growth in nursing was in community nursing with 8,043 nurses employed in 1999, an increase of 36.3% since 1993. This is in line with the de-institutionalisation of health care as well as the reduction in the length of hospital stays. These trends imply that there has been an increased emphasis on post-acute care in the community resulting in increases in the complexity of care and workloads of community nurses (SCAC 2002). This has resulted in an increasing need for nurses working in this area to have and maintain a broader range of skills and experience to cater for the range of health needs of patients.

The proportion of community nurses who were registered was 88.3%, down from 91.1% in 1993, and ranged from 65.4% in the Australian Capital Territory to 97.8% in the Northern Territory (Tables C.13, C.15). The high proportion in the Northern Territory may be due to nurses being a person's first contact with health-care, especially in the more remote areas.

In 1999 community nurses were over represented in rural and remote areas and under-represented in capital and other metropolitan centres, compared with the general population (Figure 9). As reported by the Senate inquiry into nursing, the lack of other health personnel in more remote areas results in nurses being called on to provide a range of health services (SCAC 2002), increasing their importance in the provision of health services in these areas.

In 1999 community nurses were older than nurses generally, with an average age of 43.3 years, compared with 41.6 years for employed registered and enrolled nurses (Table C.9). This higher average age may be associated with the requirement of these nurses to have a broad range of experience. In addition, with limited opportunity to undertake further education in community nursing (SCAC 2002), thus resulting in a limited career path, community nursing may be unattractive to younger nurses.

Nationally, nurses employed as community nurses worked an average of 29.3 hours per week, ranging from 25.7 hours per week in South Australia to 35.6 hours in the Northern Territory. The proportion of these nurses working part time was 54.5% and ranged from 31.1% in the Northern Territory to 68.5% in South Australia (Table 14).
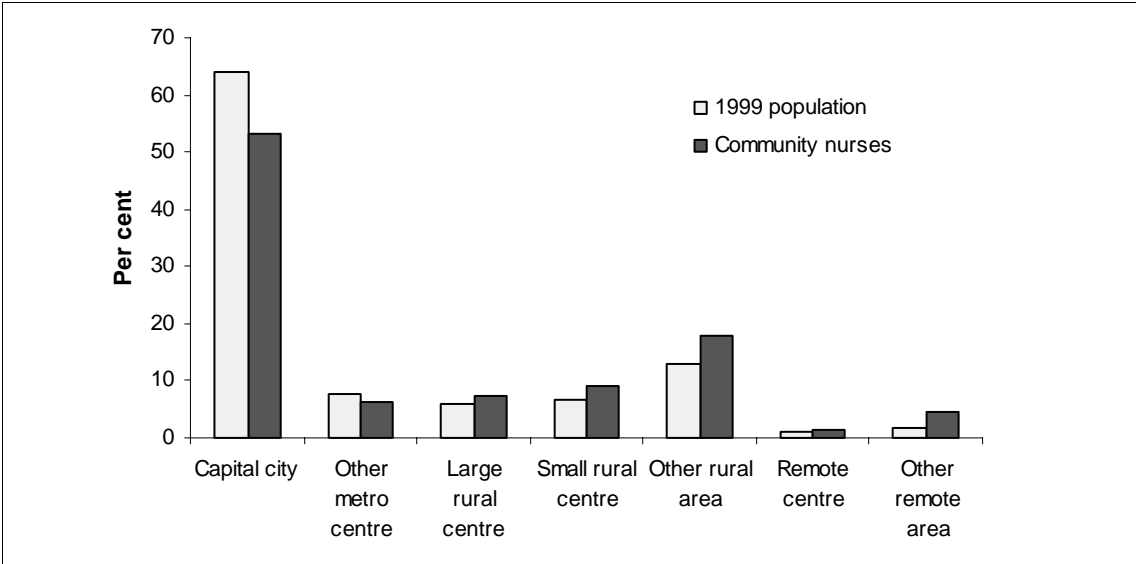
Source: Tables C.21, 3.

Figure 9: Distribution of community nurses and the general population by geographic location, 1999

Supply of nurses

Hours worked

As with any workforce, supply is a product of the number of nurses and the hours they work. An important factor affecting the supply of nursing, identified by the Senate inquiry into nursing, was the high proportion of part-time nurses. This is because with an increasing proportion of nurses working part time, more nurses are needed to provide the same level of service (SCAC 2002).

This chapter reports, in particular, on the impact of part-time employment on the supply of nurses, and hours worked per week by employed registered and enrolled nurses.

Longer term national trends in employment

According to the Australian Bureau of Statistics (ABS), in the decade to 1998 there has been a general decrease in the proportion of persons working a 'standard' working week of 35–44 hours with corresponding increases in the proportions of persons working at least 45 hours per week and of persons working part time (ABS 1999b). This is partly because of increasing numbers of women entering the workforce: females are more likely than males to work part time. In 1998, 53.0% of employed females worked part time compared with 24.4% of employed males.

In nursing, already a female-dominated profession, increases in the proportion working part time are driven by increases in the propensity of females to work fewer hours. Between 1988 and 1998, the proportion of female nurses working part time increased from 40.0% to 45.8% (Table 16). This trend towards working shorter hours contributed to a decrease in the supply of nursing services between 1993 and 1999 even though the actual number of nurses increased during this period (see the subsection 'Full-time Equivalent Nurses').

The increasing tendency to work part time is not confined to nursing. Females working in allied health (including areas such as physiotherapy, medical imaging and occupational therapy) also tended towards part-time work, with the proportion increasing from 39.0% in 1988 to 44.7% in 1998 (Table 16).

Table 16: Proportion of workers in selected occupations working part time[a], 1988 to 1998

Occupation	1988			1998			Change, 1988 to 1998		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
	Per cent						Percentage points		
Total nurses	9.2	40.0	37.4	12.5	45.8	42.8	3.3	5.8	5.4
Allied health	7.9	39.0	24.7	8.3	44.7	30.0	0.5	5.6	5.2
Total employed	*21.0*	*50.2*	*32.8*	*24.4*	*53.0*	*36.9*	*3.4*	*2.8*	*4.1*

(a)   Less than 35 hours per week.

Source: ABS labour force quarterly estimates (ABS Cat. No. 6291.0.40.001); ABS 1999b.

Recent changes in hours worked

Figures from the AIHW Nursing Labour Force Survey confirm the trends from the ABS Labour Force Survey. Between 1993 and 1999 there was an increase in the proportion of employed nurses working part time, from 46.8% to 53.8%. This increasing tendency to work part time occurred for both registered nurses, from 45.0% in 1993 to 51.7% in 1999, and enrolled nurses, from 53.8% to 61.9% (Table 17).

Table 17: Proportion of nurses working part-time[a] and average hours worked per week, 1993 to 1999

	1993	1994	1995	1996	1997	1999
Registered nurses						
% part time	45.0	46.3	46.8	47.0	49.7	51.7
Average hours	32.6	32.5	32.7	33.2	31.8	30.6
Enrolled nurses						
% part time	53.8	56.1	55.9	57.0	60.0	61.9
Average hours	31.1	30.9	31.1	31.6	29.9	28.9
Total nurses						
% part time	46.8	48.6	48.8	49.1	51.8	53.8
Average hours	32.2	32.1	32.3	32.9	31.4	30.3

(a)   Less than 35 hours per week. *Source:* AIHW.

The distribution of hours worked by employed nurses in 1999 is represented by the 'All sectors' bar in Figure 10. The largest proportion of nurses (43.7%) worked between 35 and 44 hours per week. Additionally, 20.9% worked between 25 and 34 hours, 25.8% worked between 15 and 24 hours, with the remaining 7.1% working less than 14 hours (Table C.24).

As nursing is a broad field, there is some variation in the hours worked due to a number of factors. Some of these include the sector of employment (i.e. public vs. private), the role nurses are employed in (e.g. clinicians, administrators etc.), the work setting (e.g. hospitals, aged accommodation etc.), and the clinical area of nursing.
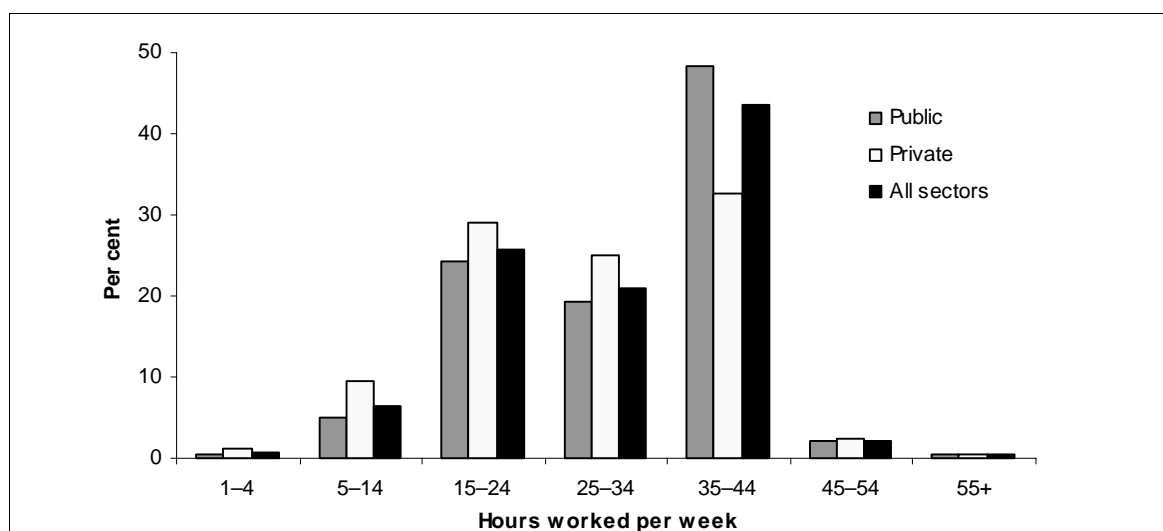
Source: AIHW.

Figure 10: Hours worked per week by registered and enrolled nurses, by sector of employment, 1999

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Public/private sector

Nurses working in the public sector were more likely to work 'standard' hours (between 35 and 44 hours per week) than nurses working in the private sector. Figure 10 highlights the greater tendency for nurses in the private sector to work part time, with a smaller proportion working 35–44 hours, and a greater proportion working less than 35 hours per week compared with the public sector. The average number of hours worked was 31.2 for the public sector and 28.1 hours for the private sector (Table C.28).

Nursing roles

Clinical nurses (nurse clinicians and clinician nurse managers) worked an average of 29.9 hours per week. Administrators, teachers/educators and researchers worked an average of 36.0, 32.5 and 31.3 hours per week respectively. Figure 11 shows that nurse administrators were most likely to work more than 35 hours per week (79.5%) possibly because of the need to conform to normal office-hours. In contrast, the variability in the work pattern for clinical nurses may reflect the difference in the number and length of shifts worked. For example, a clinical nurse working penalty shifts may work fewer shifts. Another clinical nurse may work short shifts due to family obligations. Clinical nurses were the most likely to work part time (56.4%) (Table C.27).

Note: Clinical nurse includes clinicians and clinical nurse managers.

Source: Table C.27.

Figure 11: Hours worked per week by nursing role, registered and enrolled nurses, 1999
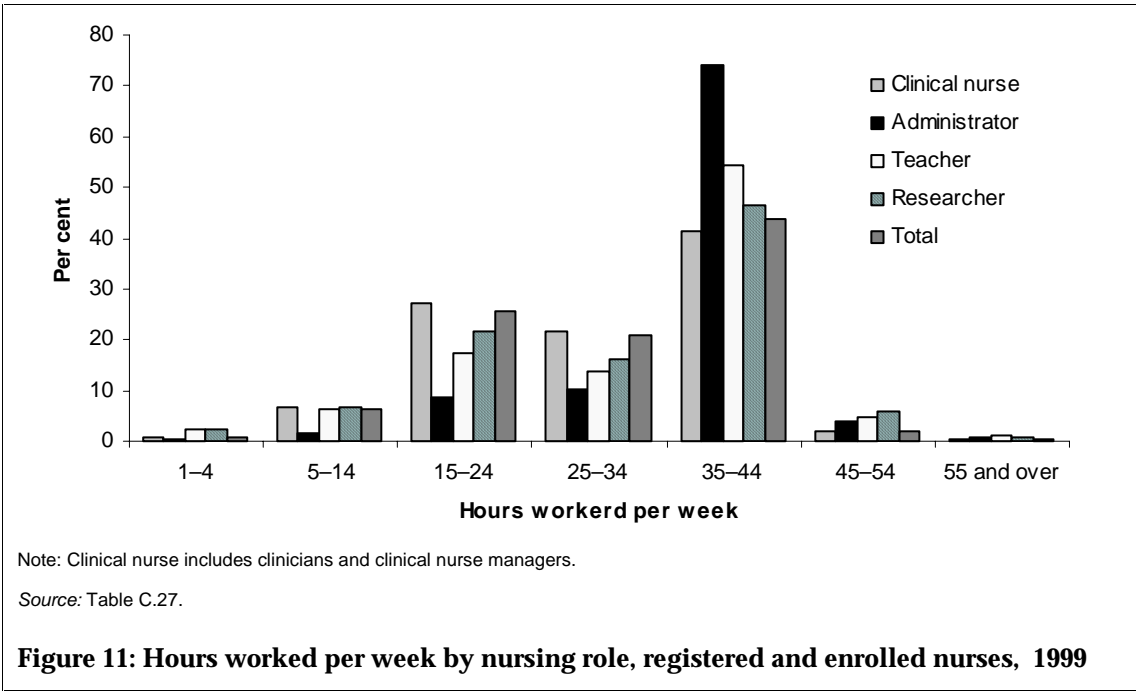
Work setting

Part-time nurses made up the majority of nurses working in day procedure centres (63.6%), aged accommodation (63.9%), nursing homes (69.0%), hospices (66.4%), doctors' rooms/private medical practices (74.6%) and private practice (66.4%).

In acute care/psychiatric hospitals (where almost two-thirds of all nurses worked in 1999), over half (51.2%) worked part time (Table C.26). According to the Senate inquiry into nursing, the shortage of nurses has increased the reliance of hospitals on agency nurses. These nurses are able to demand higher pay, especially in specialist areas such as critical care. The higher pay and greater flexibility of working hours allow agency nurses to more

easily balance work, family and other commitments (SCAC 2002). In 1999, 77.2% of nurses employed by an employment agency worked part time.

Clinical area

Clinical areas in which part-time work was more prevalent include: geriatrics and gerontology (72.6%), midwifery (65.9%) and medical and surgical nursing (57.5%).

Nurses in the clinical areas of Aboriginal health and mental health/psychiatric nursing were less likely to work part time (29.8% and 30.9% respectively) (Table C.34). This may be due to the shortage of nurses working in these areas, as identified by the Senate inquiry into nursing (SCAC 2002). Due to the lack of available staff, nurses in these areas may be required to work longer hours in order to maintain an acceptable level of service.

See the chapter 'Patterns of Employment' for a fuller description of nurses in each nursing role, work setting and the larger areas of practice.

Geographic location

Nationally, employed nurses worked an average of 30.3 hours per week in 1999, compared with 32.3 hours per week in 1993. The reduction in the average hours worked was influenced by an increase in the proportion of nurses working part time (from 46.8% in 1993 to 53.8% in 1999). A reduction in the average weekly hours worked occurred across all geographic regions (Table 18).

In 1999 nurses working in remote centres and other remote areas worked, on average, the longest hours (32.1 hours and 31.2 hours per week, respectively). This may be partly due to the extra time nurses spend travelling to patients in these regions, especially for community nurses. Another reason may be the lower provision of other health professionals in remote areas (DEST 2002), hence increasing the range of services provided by nurses and, potentially, increasing their workload. Nurses working in other rural areas and small rural centres worked the least hours per week on average (28.1 hours per week and 29.4 hours per week respectively).

Table 18: Average weekly hours worked and proportion who work part time[a] by all employed nurses: geographic location of main job, 1993 and 1999

Year	Capital city	Other metropolitan centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area	Australia
				Average weekly hours worked				
1993	32.7	32.4	32.3	31.2	30.1	33.7	33.3	32.3
1999	30.6	30.7	30.5	29.4	28.1	32.1	31.2	30.3
				Per cent part time				
1993	44.4	44.8	45.9	51.4	57.1	42.2	43.0	46.8
1999	51.7	52.0	54.3	59.9	65.8	40.1	45.7	53.8

(a)   Less than 35 hours per week.

Source: AIHW.

Both in 1993 and 1999, nurses were more likely to work between 35 and 44 hours per week, but the proportion doing so decreased from 48.0% to 43.7% over the period. The proportion of nurses working between 35 and 44 hours per week decreased in all geographic areas except remote centres (increasing from 50.5% to 56.9%) and other remote areas (increasing

from 48.8% to 51.4%) during this period (Table C.24). The increase in these areas was associated with issues including the restructuring of services in remote areas from acute medical services to primary care, expansion of midwifery and surgical services and the development of multipurpose services and centres (DEST 2002).

There was a corresponding increase in the proportion of nurses working between 25 and 34 hours per week overall (from 14.4% to 20.9%) and across all areas. This reflected an increase in the proportion of nurses who worked part time (less than 35 hours per week) in all areas except in remote centres (where the proportion of nurses working part time decreased from 42.2% in 1993 to 40.1% in 1999). In 1999, the proportion of nurses working part time ranged from 40.1% in remote centres to 65.8% in other rural areas (Table C.24).

State and territory comparison

The proportion of nurses working part time increased across all jurisdictions with the greatest increase occurring in South Australia, from 52.3% in 1993 to 67.8% in 1999, and the smallest increase in Tasmania, from 57.5% to 60.9% (Table 19).

The tendency to work part time contributed to a reduction in the average weekly hours worked, decreasing from 32.2 hours per week in 1993 to 30.2 in 1999. On average, nurses in South Australia worked the shortest hours in 1999 (26.4 hours per week) and those in the Northern Territory worked the longest (34.4 hours per weeks) (Table 19).

Table 19: Average weekly hours worked and proportion who work part time[(a)] by employed registered and enrolled nurses: states and territories, 1993 and 1999

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Average weekly hours worked									
1993	33.0	31.2	33.0	32.4	30.7	30.2	33.5	36.5	32.2
1999	31.5	29.3	31.1	30.3	26.4	29.6	30.8	34.4	30.2
Per cent part time									
1993	41.1	53.6	43.5	49.5	52.3	57.5	50.1	26.8	46.8
1999	45.6	61.2	50.0	53.2	67.8	60.9	57.3	30.9	53.8

(a)   Working less than 35 hours per week.

Source: Table C.26.

Current supply

In estimating the supply of nurses the use of raw counts of the number of people employed in nursing do not, by themselves, give an accurate indication of the supply of nurses in the labour force. Comparing the number of nurses in New South Wales with the number of nurses in Tasmania, for example, is not a valid comparison given the fact that Tasmania has a much smaller population than New South Wales.

A population-standardised head-count, such as the number of nurses per 100,000 population may be more valid than raw counts, as it provides the rate of nurses based on the size of the population. This measure shows that there was a decrease in nurses from 1,227 nurses per 100,000 population in 1993 to 1,179 in 1999 (Figure 12). This rate varied from 1,062 nurses per 100,000 population in Queensland to 1,389 nurses per 100,000 population in South Australia in 1999 (Table C.5).

Full-time equivalent nurses

The use of the population-standardised head-count is limited to a comparison of the distribution of nurses across different jurisdictions and geographic areas, rather than an indicator of nurse supply. The reason for this is that, as indicated in the previous section, a high proportion of nurses work part time. For this reason, it is more appropriate to assess the supply of labour through numbers of full-time equivalent (FTE) nurses, which have been adjusted for the number of hours worked.

The concept of a full-time equivalent depends on what may reasonably be regarded as a full-time job, and this may vary depending on the time period under consideration. For example, in the early 1900s, the agreed working hours for full-time employees was about 49 hours per week. By 1948 all the state industrial tribunals and the Commonwealth Court of Conciliation and Arbitration had adopted a 40-hour week. Since the early 1980s a 35 or 38-hour week has been the standard in many industries (ABS 1995). The ABS defines full-time work as being at least 35 hours per week, and many FTE calculations are based on this (AIHW 2003).

In this report, two methods are used to calculate FTE. The first, FTE(resources), counts any nurse working 35 hours or more as one FTE, with anything less than this being counted as a proportion of an FTE. For example, a nurse working 45 hours represents 1 FTE and a nurse working 28 hours represents 0.8 FTE. This method converts the number of part-time nurses into an equivalent number of full-time nurses, providing the estimated equivalent number of nurses working at least 35 hours per week, a conversion that is useful in resource planning.

The alternative method, FTE(supply) is based on the total hours worked, divided by 35 hours for all nurses. For example, a nurse working 70 hours per week represents 2 FTE and one working 21 hours represents 0.6 FTE. This method provides a measure of the actual supply of nursing because it takes into account nurses working more than 35 hours per week. It therefore takes into account nurses who, due to difficulties filling rosters, work additional shifts to maintain the same level of service. Consequently, FTE(supply) measures how many 35-hour week workloads are being worked by nurses.

The ratio of the two—FTE(supply)/FTE(resources)—provides an indication of hours worked in excess of 35 hours per week. Table 20 shows that this ratio increased from 1.12 in 1993 to 1.14 in 1996, followed by a decrease to 1.07 in 1999.

Table 20: The number and full-time equivalent number of nurses employed in Australia, 1993 to 1999

	1993	1994	1995	1996	1997	1999
Total number of employed nurses	216,696	225,110	220,666	218,172	222,211	224,595
FTE[a]	169,137	177,989	172,817	170,479	182,020	181,808
FTE[b]	189,555	199,362	194,823	194,776	199,355	193,794
FTE[b]/FTE[a]	1.12	1.12	1.13	1.14	1.10	1.07

(a) FTE(resources): calculated on the basis that all nurses working 35 or more hours per week are counted as one full-time equivalent (FTE) and all working less than 35 hours per week are a portion of an FTE.

(b) FTE(supply): calculated on the basis that hours worked are divided by 35 for all nurses, e.g. a nurse working 70 hours per week equals 2 FTE, one working 21 hours equals 0.6 FTE.

Source: AIHW.

Between 1996 and 1997, both the level of staffing, FTE(resources), and the actual level of supply, FTE(supply), increased, but the increase in actual level of supply did not match the increase in staffing levels. Between 1997 and 1999 both the staffing levels and actual level of supply decreased. The decline in the ratio, particularly between 1996 and 1999, shows an increasing tendency for full-time nurses to work shorter hours (i.e. closer to 35 hours per week). This reinforces the issue raised by the Senate inquiry that with an increasing

proportion of nurses working part time, more nurses are required to maintain the same level of service (SCAC 2002).

The remainder of this chapter focuses on the actual supply of nursing and, therefore, relates only to FTE(supply).

Full-time equivalent nurses per 100,000 population

As discussed previously, to allow for meaningful comparisons to be made across jurisdictions and geographical regions, the measures of full-time equivalent (FTE) nurses need to be population standardised.

Standardising for the population, the actual level of nursing supplied during the 1993–99 period ranged from a high of 1,118 FTE nurses per 100,000 population in 1994 to a low of 1,018 in 1999.

(a)   Calculated on the basis that hours worked are divided by 35 for all nurses, i.e. a nurse working 70 hours per week equals 2 FTE, one working 21 hours equals 0.6 FTE.

Source: Table C.5.

Figure 12: Employed registered and enrolled nurses and full-time equivalent nurses (FTE) per 100,000 population, 1993 to 1999
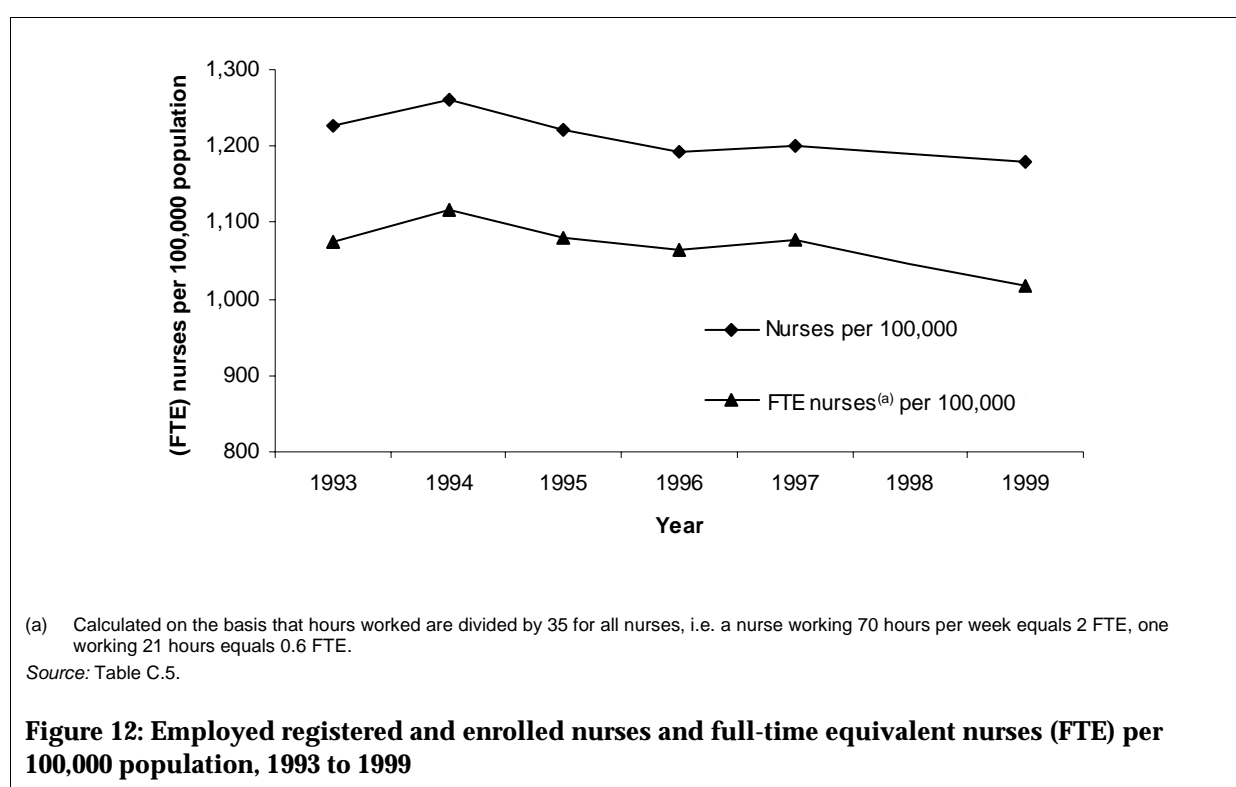
Regional distribution

Across geographic regions in 1999, the level of supply of registered and enrolled nurses in 1999 ranged from 731 FTE nurses per 100,000 population in other rural areas to 1,553 in large rural centres. Between 1993 and 1999, the only geographic locations that experienced an increase were remote centres (5.9%) and other remote centres (3.2%). Of the remaining locations, the largest decrease occurred in large rural centres (10.4%) and other metropolitan centres (9.2%) (Table 21).

In 1999 the supply of registered nurses ranged from 482 FTE nurses per 100,000 population in other rural areas to 1,247 in large rural centres. Between 1993 and 1999, both remote centres (11.8%) and other remote areas (9.3%) experienced an increase, with declines in the remaining locations. The greatest decrease occurred in large rural centres (10.2%), other metropolitan centres (9.0%) and other rural areas (7.4%) (Table 21).

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For enrolled nurses, in 1999 the level of supply ranged from 162 FTE nurses per 100,000 population in capital cities to 307 in large rural centres. Between 1993 and 1999, a decrease occurred across all geographic regions, ranging from a 4.2% in capital cities to 11.4% in other remote areas (Table 21).

Table 21: Employed registered and enrolled nurses: FTE(a) per 100,000 population, geographic location of main job, 1999

	Capital city	Other metropolitan centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area	Australia
FTE nurses per 100,000 population								
1999								
Enrolled nurses	162	216	307	297	249	243	242	197
Registered nurses	852	865	1,247	815	482	791	706	822
Total nurses	1,013	1,081	1,553	1,112	731	1,034	949	1,019
Per cent change 1993–99								
Enrolled nurses	−4.2	−10.4	−11.2	−6.2	−7.8	−9.6	−11.4	−6.7
Registered nurses	−3.8	−9.0	−10.2	−3.9	−7.4	11.8	9.3	-4.6
Total nurses	−3.9	−9.2	−10.4	−4.5	−7.6	5.9	3.2	−5.0

(a)   Calculated on the basis that hours worked are divided by 35 for all nurses, e.g. a nurse working 70 hours per week equals 2 FTE, one working 21 hours equals 0.6 FTE.

Source: Table C.22.

State/territory comparisons

In 1999 the supply of registered and enrolled nurses ranged from 944 FTE nurses per 100,000 population in Queensland to 1,086 in Victoria. The Australian Capital Territory was the only jurisdiction to experience an increase in supply, increasing by 2.8% between 1993 and 1999. Of the remaining states, decreases ranged from 0.8% in New South Wales to 16.3% in South Australia (Table 22).

Table 22: Employed registered and enrolled nurses: FTE(a) per 100,000 population, states and territories, 1999

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT(b)	Australia
FTE nurses per 100,000 population									
1999									
Enrolled nurses	172	252	153	210	225	138	191	174	196
Registered nurses	808	832	791	846	819	841	808	1,234	823
Total nurses	980	1,086	944	1,054	1,047	980	1,002	1,408	1,018
Per cent change 1993–99									
Enrolled nurses	1.7	−10.7	−25.5	−11.4	−19.4	−24.6	30.1	n.p.	−9.2
Registered nurses	−1.3	−3.1	−4.7	1.0	−15.9	−8.4	−2.5	32.7	−3.4
Total nurses	−0.8	−4.8	−8.9	−2.0	−16.3	−10.9	2.8	n.p.	−4.7

(a)   Calculated on the basis that hours worked are divided by 35 for all nurses, e.g. a nurse working 70 hours per week equals 2 FTE, one working 21 hours equals 0.6 FTE.

(b)   Estimates for enrolled and all nurses in the Northern Territory are considered less reliable than those of the other jurisdictions (see explanatory notes). Consequently, the percentage change between 1993 and 1999 for enrolled nurses and all nurses in the Northern Territory has not been published.

Source: AIHW.

The supply of registered nurses ranged from 791 in Queensland to 1,234 in the Northern Territory. In Western Australia and the Northern Territory there was an increase in supply of 1.0% and 32.7% respectively. The large increase in supply in the Northern Territory may reflect the transient nature of the nursing labour force in this jurisdiction. The remaining jurisdictions experienced a decrease in supply, ranging from 1.3% in New South Wales to 15.9% in South Australia (Table 22).

The supply of enrolled nurses ranged from 138 in Tasmania to 252 in Victoria. Between 1993 and 1999, there was a 9.2% decrease in the supply of nursing provided by enrolled nurses, decreasing the most in Queensland (25.5%) and Tasmania (24.6%). New South Wales and Australian Capital Territory were the only jurisdictions that experienced an increase in supply (Table 22).

Nursing supply in hospitals

Hospitals are the largest single component of the healthcare system. There were 1,257 hospitals in Australia in 1998–99, providing a total of 77,631 beds for admitted patients. With a total expenditure of about $17.4 billion, these hospitals discharged over 5.7 million patients, managed another 36 million occasions of service for non-admitted patients and employed over 219,900 full-time equivalent (FTE) staff during that year. Nurses are much more likely to work in hospitals than in any other establishment (64% of all employed nurses in 1999), and they are the largest group of hospital employees, making up almost 48% of full-time equivalent hospital staff in 1998–99 (AIHW 2001a).

For these reasons, changes in the number, mix and level of skills, work profile and personal characteristics of hospital nurses may have a profound effect on the way hospitals are managed and on the quality of care for patients, and indeed on the healthcare system itself.

To establish whether changes in the numbers of FTE staff result in a relative shortfall or oversupply against demand, they should be considered against changes in the workload of nurses. In hospitals, their workload is a function of the number of occupied beds, patient throughput (the number of patients treated, counted as they separate from hospital) and the average length of time spent in hospital. Some of the indicators include separations per FTE staffing, and patient-days per FTE staffing. However, these do not allow for variations in the types of conditions treated, nor inpatient demographics.

The annual Australian public hospitals data collection by the Australian Institute of Health and Welfare includes FTE staffing numbers in nursing and various other categories (AIHW 1999b, 2001b). Data relating to private hospitals are from the ABS publication *Private Hospitals, Australia, 1999–2000* (ABS Cat. No. 4390.0).

Public hospitals

During the period from 1995–96 to 1999–00, there was a decline in FTE nursing staff in public hospitals of 1.9% from 80,570 to 79,006. Some variations were observed between states and territories, with New South Wales and Tasmania having the largest decreases (8.7% and 8.8% respectively) (Table D.1).

The number of separations increased by 7.8% between 1995–96 and 1999–00, resulting in an increase in the number of separations per FTE nurse from 45 to 49. There was a slight decrease (2%) in the number of patient bed-days, but this did not affect the rate of patient bed-days per FTE nurse, which remained constant at 205. There was also a slight decrease in the average length of stay in hospital from 4.6 days in 1995–96 to 4.2 days in 1999–00 (Table D.3). The combination of a decrease in FTE staff, an increase in the number of separations per

FTE, and a decrease in the average length of stay in hospital tends to suggest that the workload of nurses in public hospitals has increased between 1995–96 and 1999–00.

Private hospitals

The number of FTE nurses working in private hospitals increased from 23,136 in 1995–96 to 25,670 in 1999–00, an increase of 11.0%. Along with this, there was a 23.9% increase in the number of separations, an increase in the rate of separations per nurse from 63 to 70, and a 6.6% increase in the number of patient bed-days. The average length of stay in hospital was 3.5 days in 1999–00, compared with 4.0 days in 1995–96. The rate of patient bed-days per FTE nurse decreased from 253 to 243 per year, a reduction of 4.0%, owing mainly to the increase in staffing levels (Table E.1).

Although staffing levels increased, so too did the number of separations and the number of separations per FTE nurse. This, along with a shortening in the time patients spend in hospital suggests that the workload of nurses in private hospitals also increased between 1995–96 and 1999–00.

Private free-standing day hospitals

Free-standing day hospitals are those that provide facilities for investigations and treatment of acute conditions on a day-only basis and are approved by the Commonwealth for the purposes of basic table health insurance benefits. Compared with public hospitals and other private hospitals, private free-standing day hospitals are small, and few statistics are available. The number of full-time equivalent nursing staff working in day hospitals was 838 in 1999–00, an increase of 68.6% from 1995–1996. The number of separations increased by 67.1% during the same period, translating to a slight decrease in separations per FTE nurse from 420 in 1995–96 to 417 in 1999–00 (Table E.2).

Current skill shortages

Information on shortages of registered nurses in various occupations was obtained from the Department of Employment and Workplace Relations (DEWR), which monitors occupational labour markets in Australia and assesses whether skill shortages exist.

The department defines skills shortages as follows:

> 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, at current levels of remuneration and conditions of employment, and reasonably accessible location. Shortages are typically for specialised and experienced workers, and can coexist with relatively high unemployment overall or in the occupation. An occupation may be assessed in shortage even though not all specialisations may be in shortage. Occupations may be in shortage in particular geographical areas and not in others. (http://www.workplace.gov.au/Workplace)

The department does not quantify the skill shortage of the occupations that it identifies are in shortage at a particular point in time.

In January 2000 there was a general shortage across most nurse occupations identified in Table 23, with the exception of community health, Indigenous health, oncology, perioperative, and renal/dialysis.

Table 23: Shortages in nursing occupations, states and territories, January 2000

Nursing occupation in demand	Australia	NSW/ACT	Vic	Qld	WA	SA	Tas	NT
Registered nurse (general)	N	S	S	S	S	. .	S	S
Accident/emergency	N	S	S	S	S	. .	S	S
Aged care	N	S	. .	S	S	S	S	S
Cardiothoracic	N	S	S	S		. .	S	S
Community	. .	. .	. .	S	R	. .	. .	. .
Critical/intensive care	N	S	S	S	S	S	S	S
Indigenous health	. .	. .	. .	S	. .	. .	. .	. .
Neo-natal intensive care	N	S	. .	S	. .	. .	S	S
Neurology	N	S	S	. .	. .	. .	. .	S
Oncology	. .	S	. .	S	. .	. .	. .	S
Operating theatre	N	S	S	S	S	S	S	S
Paediatric	N	S	. .	S	. .	. .	. .	S
Perioperative	. .	. .	S	S	R	. .	. .	. .
Renal/dialysis	. .	S	. .	S	. .	. .	. .	S
Registered midwife	N	M	S	S	S	. .	S	S
Registered mental health	N	S	S	S	S	. .	S	S

Note: N = National shortage, S = State-wide shortage, M = Shortage in metropolitan, R = Shortage in regional areas.

Source: DEWR national and state skills shortage lists.

Future supply

Potentially, the supply of nurses could be increased by tapping into the pool of nurses who have maintained their registration/enrolment but who are not employed in nursing. In 1999, the Nursing Labour Force Survey identified 32,343 nurses who were not actively employed in nursing (Figure 1).

Another potential source of supply is the pool of inactive nurses who have allowed their registration/enrolments to lapse. Recent research in New South Wales has indicated that there is a sizeable pool of trained nurses who would consider returning to nursing (Nursing and Health Services Research Consortium 2000). Many jurisdictions have implemented recruitment strategies aimed at attracting these nurses back into nursing. For example, NSW Health has introduced the Re-Connect program, offering clinically focused and individually tailored re-entry plans whereby nurses are employed and paid while undertaking their refresher training (see SCAC 2002).

The main source of supply of nurses is via the training of new graduates, but the length of time required for students to enter the workforce means that any acute change in the demand for nurses cannot be met by this group. An alternative short-term solution is to recruit nurses from overseas.

The following sections discuss the components of education and migration as the main sources of supply.

Nurse education

The main supply of new nurses is graduates from universities and vocational education and training (VET) institutions. These graduates form a general pool from which the different specialties can draw upon. Therefore, an undersupply of graduates, either from decreasing

enrolment numbers or a reduction in the number of places in educational institutions, affects not only the general number of nurses, but also the number that are potentially available to meet the shortfalls in the specialty areas of nursing.

Registered nurses

In Australia prior to 1984, registered nurses gained their initial qualifications through hospital-based training in apprenticeship-type training programs. As a result of recommendations from the Committee of Inquiry into Nursing Education and Training, general nursing education was transferred into the higher education system between 1984 and 1993. This transfer was a staged process that varied in timing between states and territories (DEST 2001).

 A number of reasons were given for this recommendation, including nurses requiring knowledge of new technologies in health, a perceived inadequacy of traditional training programs to meet the healthcare needs of the community and the educational needs of students, and a need to develop a more professional approach to nursing (e.g. by teaching nurses behavioural sciences because of their involvement with people who are in crisis) (DEST 2001).

Some of the implications of higher education-based training include an increase in the cost of education for students, a change in the type and number of students attracted to nursing, and a change in the pattern of labour used in hospitals, with student nurses no longer employed as part of their training (DEST 2002). Currently, registered nurses gain their initial qualification through a minimum 3-year university degree throughout Australia.

Information on nursing student commencements, enrolments or completions of higher education courses are derived from information provided by the Department of Education, Science and Training. Due to inconsistencies in classifying courses between universities, two main categories are used: basic nursing and post-basic nursing.

Basic nursing courses are defined as preliminary, pre-registration or initial courses in health care, and are undertaken in higher education institutions. Post-basic courses relate to post-registration courses conducted in higher education institutions, including upgrading of skills or qualifications and postgraduate specialisation in specific areas of nursing.

Enrolled nurse training is undertaken through technical and further education institutions in each state, and therefore is not included in this data.

In 2001, there were 13,427 students (including Australian citizens/residents and overseas students) who commenced nursing studies, making up 43.0% of all nursing course enrolments. Of those who commenced nursing studies, 8,630 (64.3%) commenced basic nursing courses, and 4,797 (35.7%) commenced post-basic courses. Of those commencing nursing studies, 88.7% were female (Table F.2).

The number of Australian citizen or permanent resident students who commenced basic nursing courses dropped from 8,010 in 1993 to 6,821 in 1996 and then increased slightly to 7,152 in 2001 (Figure 13). The number of Australian students completing basic nursing courses decreased from 6,397 in 1993 to 4,465 in 2000.

Source: AIHW analysis from DEST unpublished data.

Figure 13: Australian citizen and permanent resident students commencing and completing basic nursing courses, 1993 to 2001
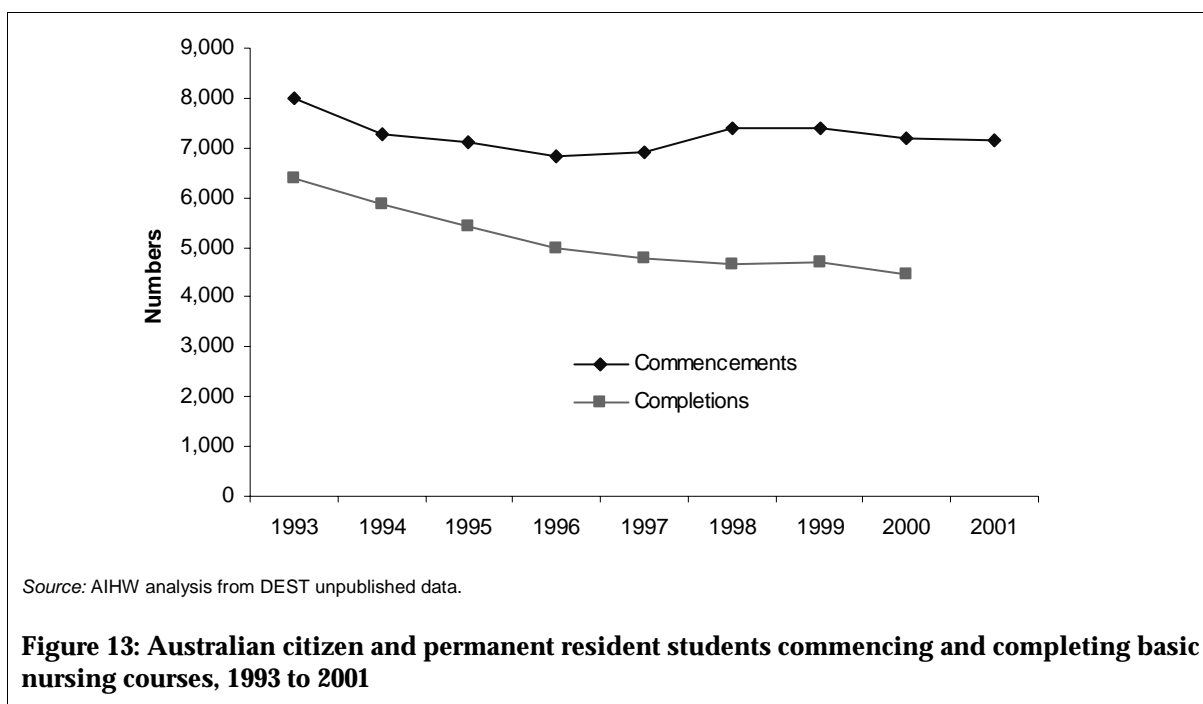
In 2000, 9,464 students completed nursing courses at Australian universities, of whom 4,585 (48.4%) completed basic nursing studies, and 4,879 (51.6%) completed post-basic nursing studies.

In terms of workforce planning, the attrition rate of nursing students needs to be taken into account as this can have a significant impact on registered nurse numbers in the future. According to a submission to the Senate inquiry, attrition rates in the first year of nursing studies ranged from 15% to 20%, with a reduction in rates in subsequent years. Despite these apparently high rates, the report indicated that the overall retention rate in university nursing courses was 78%, the third highest of all courses (SCAC 2002).

As indicated in Figure 13, there is a marked discrepancy between the number of nurse commencements and completions. This discrepancy may be associated with the attrition of students from nursing courses. Unfortunately, information about attrition/retention rates for nursing students over time is scarce due to the difficulties in obtaining accurate estimates. Therefore, a crude method of achieving this is to examine the ratio of the number of course completions to the number of course commencements, allowing for a 3-year lag between commencement of nursing studies and subsequent completion. This method is based on the assumption that an average nursing course takes 3 years to complete and the proportion of students studying part time and the number of students transferring into and out of nursing courses are consistent across time.

Using this estimate, the ratio for the cohort commencing in 1991 and completing in 1993 (1991–93 cohort) was 0.69, remaining relatively constant until the 1997–99 cohort (between 0.67 and 0.69), after which there was a decline to 0.60 for the 1998–00 cohort (Figure 14). This decline may indicate a lower retention than usual in the 1998–00 cohort, verifying the need to take student attrition rates into account when planning workforce needs.
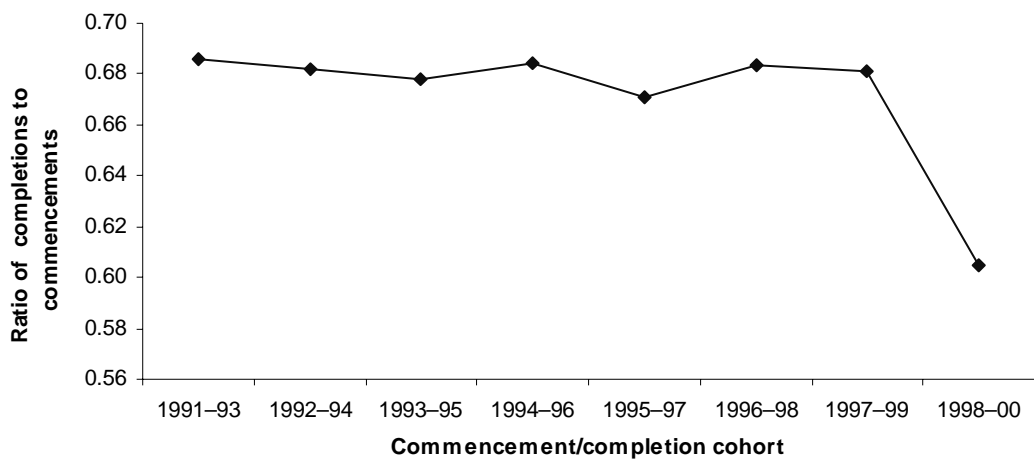
Figure 14: Ratio of student nurse commencements to completions

Between 1990 and 1996, the number of Australian permanent resident students who completed post-basic courses in nursing increased from 1,437 to 5,133, after which there was a steady decrease to 3,147 in 2000. The number of students commencing post-basic nursing courses increased between 1990 and 1996 from 3,605 to 6,203 followed by a decline to 4,012 in 2001 (Figure 15). The decline in commencements could be partly due to the financial disincentives to undertake post-basic nursing courses. There has also been concern from some state health authorities that shortages in specialist fields of nursing practice are being exacerbated by the costs of course fees and time out of the workforce to undertake post-basic training (SCAC 2002).
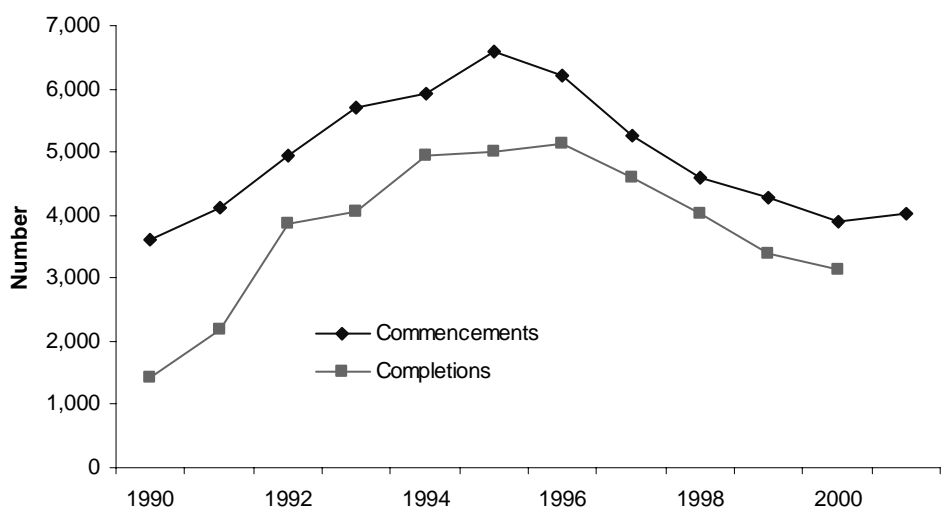
Figure 15: Australian citizen and permanent resident students commencing and completing post-basic nursing courses, 1990 to 2001

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Enrolled nurses

Prior to the 1990s, enrolled nurses were trained by hospitals offering training courses accredited by the relevant nursing authorities. In parallel with the transfer of registered nurse training to the higher education sector during the 1990s, training for enrolled nurses gradually moved into the vocational education and training (VET) sector. This sector consists of state government-funded technical and further education (TAFE) institutions and some organisations registered as training providers (McKenna et al. 2001).

Enrolled nurse training varies considerably across jurisdictions in terms of curriculum, the length and level of the training and the flexibility of the programs. For example, New South Wales and Western Australia offer only full-time programs. Other jurisdictions offer more flexible programs. Additionally, the length of the program varies from 12 to 18 months, with the level of the course varying from a Certificate IV to a Diploma in Enrolled Nursing (DEST 2002; McKenna et al. 2001).

According to the National Centre for Vocational Education Research (NCVER, cited in McKenna et al. 2001), there has been a 26.1% increase in the number of enrolled nurse program commencements between 1997 and 2000, with a 63.5% increase in the number of course completions (Table 24).

Table 24: Enrolled nurse enrolments, commencements and completions, 1997 to 2000

	1997	1998	1999	2000
Course enrolments	4,540	4,646	5,751	5,834
Course commencements	3,688	3,789	4,641	4,650
Course completions	n.a.	1,187	1,398	1,941
Completion rates	n.a.	32.2	36.9	41.8

Source: McKenna et al. 2001.

One of the contributing factors to the increase in the average age of employed enrolled nurses (from 37.6 years in 1993 to 41.3 years in 1999) is the age of student enrolled nurses. In 2000, the proportion of student enrolled nurses under the age of 25 years was 26.3% compared with 62.9% for student registered nurses undertaking a basic nursing course. In contrast, the proportion of students studying enrolled nursing aged over 40 years was 33.6%, compared with 10.3% for student registered nurses (Table 25).

Table 25: Nurse enrolments: age distribution, 2000

Type of nursing study	Age							
	15–19	20–24	25–29	30–39	40–49	50+	Unknown	Total
	Per cent							
Enrolled nursing	10.8	15.5	13.3	26.0	25.4	8.2	0.7	100.0
Registered nursing	34.3	28.6	11.0	15.8	9.1	1.2	—	100.0

Source: McKenna et al. 2001; AIHW analysis of DEST unpublished data.

Nurse migration

Nursing is listed on Migration of Occupations in Demand List by the Department of Immigration and Multicultural and Indigenous Affairs (DIMIA). As of July 1999, DIMIA introduced a pre-application skills assessment (PASA) for persons intending to migrate to Australia. Nurse qualifications are assessed by the Australian Nursing Council Incorporated (ANCI) against the national nursing competency standards. Once an applicant's qualifications are assessed as being suitable, extra points are awarded towards their application. According to the 1999–2000 ANCI annual report, the introduction of the PASA has resulted in an increase in the number of applications for assessment received by ANCI, from 826 in 1998 to 920 in 1999 (ANCI 1998, 2000).

In the financial year 1999–00, 854 nurses entered Australia on temporary work visas, compared with 772 in 1998–99 and 248 in 1993–94. Of those entering in 1999–00, 489 (57.3%) were from United Kingdom/Ireland, and 251 (29.4%) were from New Zealand. In addition, 1,866 nurses returned from long-term stays overseas. Of these, 1,164 (62.4%) returned from United Kingdom/Ireland, 231 (12.4%) from United States/Canada, 192 (10.3%) from Asia and 129 (6.9%) from the Middle East.

Offsetting these increases in nurse numbers, 834 nurses with temporary visas left from Australia in 1999–00. Of these, 323 (38.7%) went to United Kingdom/Ireland, 216 (25.9%) to Asia and 113 (13.5%) to New Zealand. In addition, 932 Australian nurses departed on long-term overseas trips. Of these, 455 (48.8%) went to United Kingdom/Ireland (Table H.1).

In terms of permanent migration flows, in 1999–00 there were 1,158 nurses from other countries who permanently migrated to Australia. Just over a third of these were from New Zealand (37.3%), 23.5% from United Kingdom/Ireland and 18.5% from Asia. In comparison, 752 nurses permanently migrated overseas, of whom 34.3% migrated to United Kingdom/Ireland, 28.1% to New Zealand and 18.8% to United States/Canada. Overall, there was a net gain of 406 nurses as a result of permanent migration (Table H.2). Figure 16 shows that the net gain has increased since the 1996–97 financial year, indicating an increase in recruitment from overseas countries.

In terms of migration for education purposes, in 1999–00 there were 181 nurses entering on temporary visas to study in Australia, compared with 35 Australians leaving for long-term overseas stays to study in another country (Table H.3).
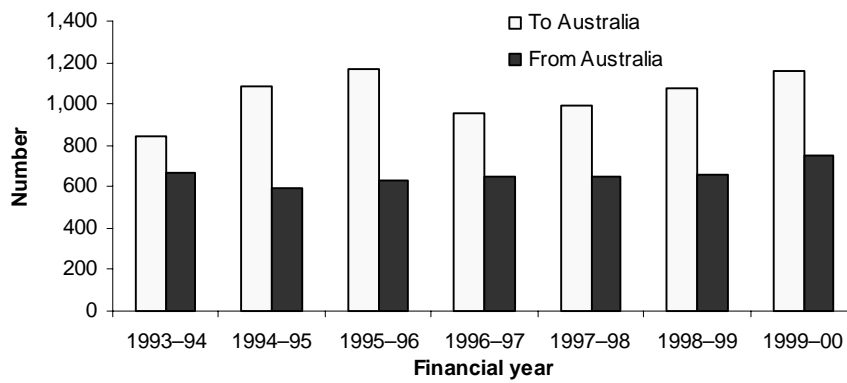
Figure 16: Permanent migration of Australian nurses from Australia and non-Australian nurses to Australia for the purpose of employment, 1993–94 to 1999–00

International comparison

The Organisation for Economic Co-operation and Development (OECD) separates certified nurses into two categories: First Level—those who have had a minimum of 3 years of formal training; and Second Level—those who have had between 1 and 2 years of formal training. These categories correspond to *registered* and *enrolled* nurses respectively in Australia.

Not all OECD countries use the same definition for certified nurses, and formal training varies considerably across countries. A footnote has been used in Table 26 to indicate where the definitions are known to differ from the standard OECD definition.

These differences mean that comparisons with the OECD 'average' are limited and caution should be used in the interpretation of these values. Australia appears, however, to have a higher provision of nurses per 1,000 population compared with many other countries in the OECD. Australia's level of 10.5 nurses per 1,000 population is ranked fourth highest after Finland (14.7), Iceland (14.2), and the Netherlands (13.0) (Table 26).

Table 26: Certified nurses, OECD countries, 2000

Country	Certified nurses[a]	Population ('000)	Nurses per 1,000
Australia (1999)	200,049	19,044	11.8
Austria	74,601	8,112	9.2
Canada[b]	232,412	30,750	7.6
Czech Republic[c]	86,694	10,272	8.4
Denmark (1999)	38,601	5,319	7.3
Finland (1997)	76,240	5,140	14.7
France[c, d]	347,918	58,892	5.9
Germany[c]	765,000	82,205	9.3
Greece (1999)	41,151	10,538	3.9
Hungary	48,709	10,024	4.9
Iceland (1999)	3,926	277	14.2
Ireland[c]	35,013	3,787	9.2
Italy[e] (1999)	256,860	57,646	4.5
Japan (1998)	985,821	126,486	7.8
Korea	65,898	47,275	1.4
Luxembourg[c, f]	3,120	438	7.1
Mexico[g]	105,495	97,379	1.1
Netherlands	206,500	15,926	13.0
New Zealand[h]	36,976	3,831	9.7
Norway[c]	46,128	4,491	10.3
Poland	189,632	38,646	4.9
Portugal	37,477	10,211	3.7
Slovak Republic	39,650	5,401	7.3
Spain[e]	147,500	39,466	3.7
Sweden[d] (1999)	74,657	8,858	8.4
Switzerland[d] (1990)	93,781	6,712	14.0
Turkey[d]	71,344	66,835	1.1
United Kingdom[c, e]	318,693	59,756	5.3
United States[d] (1999)	2,271,300	272,691	8.3

(a)   The OECD definition of certified nurses is the number of nurses certified or registered and actively practising in public and private hospitals, clinics and other health facilities. It excludes nurses who are working abroad, and those working in administration, research or industry. Numbers should be reported as full-time equivalents, but in most cases are reported as head counts: those that are reported as full-time equivalents are noted. Most countries include nursing auxiliaries numbers, where this category exists.

(b)   Excludes licensed nursing assistants, psychiatric nurses, nurse aides and orderlies; includes nurses working administration, education, research and industry.

(c)   Numbers reported as full-time equivalent.

(d)   Includes nurses in industry, education, administration and research.

(e)   Includes nurses working in the National Health System only.

(f)   Includes nurses working in hospitals only.

(g)   Includes nurses in public institutions only.

(h)   includes all nurses on the nursing register.

Source: OECD 2002.

Aged care nursing

The Senate Community Affairs Committee Inquiry into Nursing identified aged care as the area of nursing in greatest crisis. Nursing shortages in this area affect the quality of care provided, especially in aged accommodation (SCAC 2002). This is of great concern especially in the context of an ageing population. This chapter focuses on this area of nursing in more detail.

Aged care covers a broad range of services ranging from residential aged care facilities and acute hospitals through to community health services such as home and community aged care packages (DEST 2002). With the introduction of the Home and Community Care program in the 1980s, the reliance on intensive nursing home care was shifted into the community through the provision of a range of services such as home-help, home nursing services and home and centre-based respite care. Also, the introduction of community aged care packages, providing home-based care to frail or disabled older people living in the community, has helped people to remain in their homes instead of entering low-level residential aged care (DEST 2002).

The ageing population

Australia's population has gradually aged over the last 100 years, with the proportion of people aged over 65 increasing from 4% in 1901 to 12% in 2001 (ABS 2002). Within this group, the proportion of people aged over 85 has increased from 8% in 1991 to 11% in 2001. In 2021 it is projected that 50% of people currently over 65 years will be 85 years and over (AIHW 2002b).

In terms of the proportion of people over 85 years of age requiring substantial assistance due to severe or profound core activity restriction, there has been an increase from 26% in 1991 to 32% in 2001. This increase is highlighted by the increase in the provision of aged care through programs such as the Home and Community Care (HACC) program, Community Aged Care Packages (CACP) and residential care places. For instance, the number of community aged care packages has increased rapidly since its inception, from 235 packages in 1992 to 6,124 in 1997 and 24,430 in 2001 (AIHW 2002b).

In terms of residential aged care facilities, the number of people over the age of 65 years in permanent residential aged care has increased gradually from 125,402 in 1998, to 128,056 in 2001. Consequently, the level of dependency has also increased, with the proportion of residents requiring high levels of care increasing from 7% in 1998 to 17% in 2001 (AIHW 2002b).

Nurses employed in aged care

For the purposes of the Nursing Labour Force Survey, nurses who indicated that their principal area of nursing was geriatrics/gerontology were assumed to be working in aged care. In 1999 there were 33,335 clinician nurses working in aged care as their main job, a 19.4% decrease since 1994. The greatest decreases occurred in Western Australia (27.4%) and New South Wales (24.8%).

The decrease in the number of nurses working in aged care was more pronounced for enrolled nurses than for registered nurses. Between 1994 and 1999 there was a 26.0%

decrease in the number of enrolled nurses, compared with a 13.9% decrease in the number of registered nurses. The decrease in the number of enrolled nurses occurred across all the states and ranged from a 22.9% decrease in South Australia to a 40.6% decrease in Western Australia (Table 27).

Table 27: Registered and enrolled clinical nurses[a] employed in the area of geriatrics/gerontology, 1994 to 1999

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT[b]	Australia
1994									
Enrolled nurses	4,045	9,465	1,840	1,400	1,335	393	133	60	18,671
Registered nurses	7,996	6,122	3,780	1,892	1,901	717	190	65	22,663
Total nurses	*12,041*	*15,587*	*5,620*	*3,292*	*3,236*	*1,110*	*323*	*125*	*41,334*
1999									
Enrolled nurses	2,845	7,240	1,388	831	1,029	276	138	71	13,818
Registered nurses	6,208	5,310	3,470	1,558	1,927	784	178	82	19,517
Total nurses	*9,053*	*12,550*	*4,858*	*2,389*	*2,956*	*1,060*	*316*	*153*	*33,335*
Percentage change between 1994 and 1999									
Enrolled nurses	−29.7	−23.5	−24.6	−40.6	−22.9	−29.8	3.8	n.p.	−26.0
Registered nurses	−22.4	−13.3	−8.2	−17.7	1.4	9.3	−6.3	26.2	−13.9
Total nurses	**−24.8**	**−19.5**	**−13.6**	**−27.4**	**−8.7**	**−4.5**	**−2.2**	**n.p.**	**−19.4**

(a)   Includes nurse clinicians and clinical nurse managers.

(b)   Estimates for enrolled and total nurses in the Northern Territory in 1999 are considered less reliable than those of the other jurisdictions (see explanatory notes). Consequently, the percentage change between 1994 and 1999 for enrolled and total nurses has not been published.

Source: AIHW.

Residential aged care

Residential aged care facilities are the main employers of nurses in the fields of geriatrics/gerontology. In 1999, 27,822 nurses were employed in residential aged care, a 17.8% decrease from 1994.

In 1999, 11,481 enrolled nurses were employed in residential aged care, a 21.0% decrease since 1994. The largest decrease occurred between 1994 and 1995, from 14,535 to 11,555 (Table 28).

Table 28: Aged care nurses employed in residential aged care, 1994 to 1999

	1994	1995	1996	1997	1999
Public sector					
Enrolled nurses	8,301	5,718	5,858	6,184	6,481
Registered nurses	8,157	6,978	7,149	7,836	7,418
Total nurses	*16,458*	*12,696*	*13,007*	*14,020*	*13,899*
Private sector					
Enrolled nurses	6,234	5,837	5,429	4,902	5,000
Registered nurses	11,149	11,866	11,036	10,261	8,923
Total nurses	*17,383*	*17,703*	*16,465*	*15,163*	*13,923*
Total					
Enrolled nurses	14,535	11,555	11,287	11,086	11,481
Registered nurses	19,306	18,844	18,185	18,097	16,341
Total nurses	**33,841**	**30,399**	**29,472**	**29,183**	**27,822**

According to the Senate Community Affairs Committee, the decrease in the number of enrolled nurses in aged care was associated with the substitution of unqualified personnel (nursing aides and personal carers) (SCAC 2002). Obtaining a reliable estimate of the number of unqualified personnel is difficult because these employees are not regulated, and therefore do not have any from of registration. The ABS, through the quarterly Labour Force Survey, provides the best estimates available, but these are also complicated by a number of factors. For instance, the coding system used, the Australian Standard Classification of Occupations (ASCO), does not differentiate between different work settings such as hospital and aged accommodation. There is considerable overlap between the job characteristics of personal care and nursing assistants, and the subcategories of the special care workers group. Additionally, a time series of personal care and nursing assistants is also complicated by changes made to ASCO in 1996. Care should, therefore, be taken when making direct comparisons between pre-1996 and post-1996 data.

Using the categories of personal care assistants and nursing assistants, Figure 17 indicates that their numbers increased between 1993 and 1998. For the purposes of comparison, enrolled nurses were also included for the same period. The increase in personal carers/ nursing assistants was associated with a decrease in the number of enrolled nurses. However, these values represent personnel in all areas of nursing and personal care; therefore, the effect on aged care can not be ascertained.

Note

1. During 1996, the second edition of the ASCO classification was introduced, creating a break in the time series for personal care assistants.

2. Enrolled nurses based on ABS figures are also included for comparison.

Source: ABS Cat. No. 6291.0.40.001.

Figure 17: Personal care and nursing assistants and enrolled nurses, 1993 to 2001
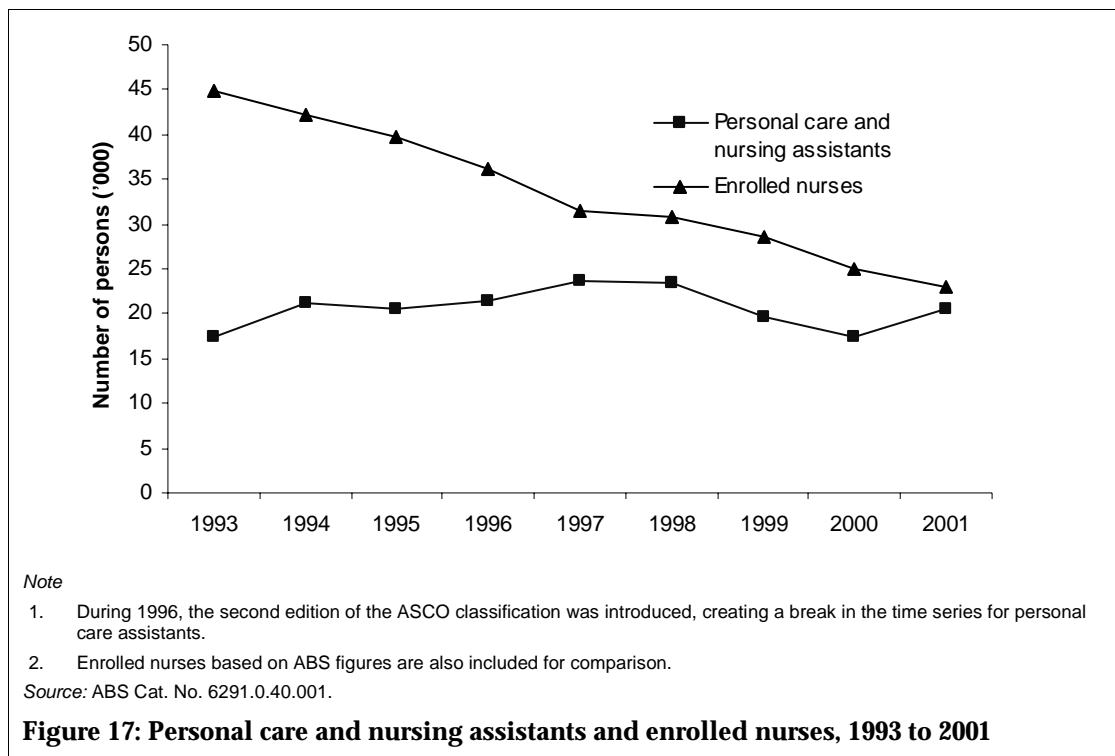
Against this background, a report conducted by the working group on aged care worker qualifications highlighted that the changing roles of enrolled nurses and other care workers have meant that these workers have been asked to perform tasks that may be outside their currently acknowledged scope of practice. This is especially the case for medication assistance and administration (WGACWQ 2001). In a submission to the Senate Community Affairs Committee Inquiry into Nursing, the Queensland Nurses Union stated that the

nursing skill mix and staffing levels in many hostels are failing to meet the acuity levels of residents (SCAC 2002). In addition, with continued shortages, organisations are increasingly reliant on agency staff. Consequently, residents have to cope with a constantly changing workforce and are unable to develop relationships with staff, affecting both their care and quality of life (SCAC 2002).

In an attempt to address the concerns that unqualified workers were administering medications, and as an attempt to increase career opportunities for enrolled nurses, the working group on aged care worker qualifications proposed that the role of enrolled nurses could be enhanced. It was proposed that, after the completion of an appropriate level of training, the role of enrolled nurses should be expanded to enable them to administer up to and including schedule 4 (S4) medications. The implications of this include a reduced level of supervision required from registered nurses and a reduction of risk associated with unqualified personnel administering medications (WGACWQ 2001).

In 1997 nursing homes and hostels were amalgamated into a single system of residential care. Additional to this, the Resident Classification Scale (RCS) was introduced as a means of determining the level of funding each facility was entitled to, based on the level of dependency of the residents (AIHW 2001a). A decline in the number of registered nurses in residential aged care between 1994 and 1999 (from 19,306 to 16,341, a decline of 15.4%, Table 28) has coincided with an increase in dependency levels of residents. Between 30 June 1998 and 30 June 2001 the proportion of residents classified as high care (RCS 1 to 4) rose from 58% to 63%, whereas those classified as low care (RCS 5 to 8) fell from 42% to 37%. This represents the continuation of a trend towards higher dependency, which was already evident before the introduction of the single system in 1997 (AIHW 2002c). The substantial skill loss resulting from the loss of registered nurses from this sector and the increase in dependency levels has placed further pressure on the residential aged care sector.

The issue of wage disparity between aged care and other fields of nursing has been proposed as an explanation for the reduction of nurse numbers (SCAC 2002; DEST 2001). According to the Australian Nursing Federation (ANF 2002), a comparison between public sector award/agreement rates and the private residential aged care award rates reveals that the private residential aged care award was lower in each jurisdiction (Table 29). As at 1 January 2001 the difference between the two awards ranged from 3.9% in New South Wales to 16.4% in Victoria for registered nurses at an equivalent level (RN Grade 2/Year 8 in Victoria and Tasmania, RN Grade 1/Year 8 in other jurisdictions).

Table 29: Comparison of public hospital and private residential aged care wage rates as at 1 January 2001

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Public sector rates ($)	870.50	851.20	819.30	798.10	783.87	797.25	801.07	806.00
Aged care awards ($)	836.70	711.30	743.90	707.60	725.40	721.15	709.79	727.40
% difference	3.9	16.4	9.2	11.3	7.5	9.5	11.4	9.8

Note: Rates relate to RN Grade 1/Year 8, with the exception of Victoria and Tasmania where rates refer to RN Grade 2/Year 8.

Source: ANF 2002.

Age distribution of nurses working in aged care

Between 1994 and 1999, this sector of nursing aged at a faster rate than the nursing labour force overall. The average age of nurses employed in the aged care sector increased from 41.7 years in 1994 to 45.2 years in 1999, compared with 39.1 and 41.6 years, respectively, for employed registered and employed nurses (Tables C.35, C.36). This is demonstrated in Figure 18 which shows that the proportion of nurses in age groups under 45 years has declined since 1994, from 61.1% to 47.4%, and the proportion in older age groups has risen accordingly.

Source: Table C.38.

Figure 18: Age distribution of clinical nurses working in aged care, 1994 to 1999
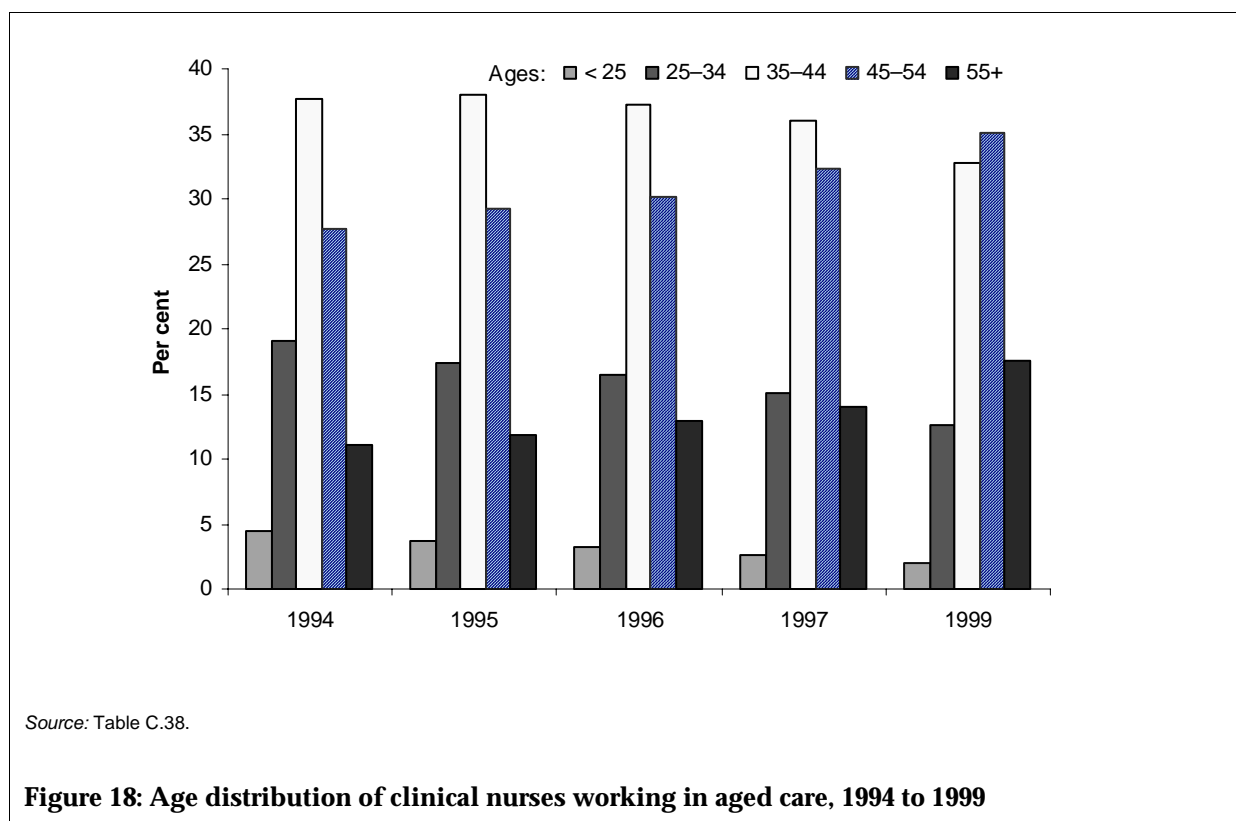
Additional tables

Table A.1: Registrations and enrolments, states and territories, 1993 to 2001

Year	NSW	Vic	Qld	WA[a]	SA[a]	Tas	ACT	NT	Australia
Registrations									
1993	71,361	54,246	37,515	18,643	17,969	6,440	3,906	2,550	212,630
1994	71,960	55,163	38,221	18,430	17,613	6,103	3,817	2,261	213,568
1995	73,178	52,699	34,073	18,359	17,283	6,083	3,930	2,305	207,910
1996	74,131	49,716	34,924	18,709	17,250	5,640	3,905	2,763	207,038
1997	74,659	52,245	34,278	19,346	17,046	5,375	3,681	2,895	209,500
1998	74,895	52,783	34,703	19,374	17,071	5,224	3,632	3,020	210,528
1999	75,204	51,903	35,239	20,090	17,163	4,988	3,745	3,694	212,026
2000	76,188	52,555	35,889	n.a.	17,231	5,623	3,764	n.p. [b]	n.a.
2001	76,190	53,551	36,832	19,352	17,411	5,661	3,745	3,731	216,473
Enrolments									
1993	16,569	26,285	10,952	6,054	6,369	1,390	822	384	68,825
1994	16,521	24,796	9,145	5,855	6,090	1,390	787	523	65,107
1995	16,565	20,323	8,188	6,146	5,770	1,387	780	466	59,625
1996	16,578	17,965	8,039	5,688	5,618	1,267	719	536	56,410
1997	16,477	17,896	7,351	5,131	5,379	1,176	636	546	54,582
1998	16,343	17,771	7,230	5,279	5,221	1,092	649	551	54,080
1999	16,311	17,020	7,168	5,219	5,174	875	693	590[c]	53,050
2000	16,136	16,748	7,120	n.a.	5,115	970	705	n.p. [b]	n.a.
2001	15,987	16,836	7,095	4,904	5,304	950	722	602	52,400
Total									
1993	87,930	80,531	48,467	24,697	24,338	7,830	4,728	2,934	281,455
1994	88,481	79,959	47,366	24,285	23,703	7,493	4,604	2,784	278,675
1995	89,743	73,022	42,261	24,505	23,053	7,470	4,710	2,771	267,535
1996	90,709	67,681	42,963	24,397	21,023	6,907	4,624	3,299	263,448
1997	91,136	70,141	41,629	24,477	22,425	6,551	4,317	3,441	264,082
1998	91,238	70,554	41,933	24,653	22,292	6,316	4,281	3,571	264,608
1999	91,515	68,923	42,407	25,309	22,337	5,863	4,438	4,284[c]	265,076
2000	92,324	69,303	43,009	n.a.	22,346	6,593	4,469	n.p. [b]	n.a.
2001	92,177	70,387	43,927	24,256	22,715	6,611	4,467	4,333	268,873

(a)   Values have been revised from the 1999 nursing labour force publication.

(b)   Registration and enrolment numbers for the Northern Territory were not considered sufficiently reliable for publication in 2000.

(c)   Estimates for enrolled and total nurses in the Northern Territory are considered less reliable than those of the other jurisdictions (see explanatory notes).

Source: State and territory nurse registration boards.

Table B.1: Employed registered and enrolled nurses, Australia, 1993 to 2001

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia	Employed part time
				('000)						
Employed registered nurses										(per cent)
1993	53.9	39.9	24.7	15.0	15.1	5.2	2.0	1.6	157.4	40.5
1994	58.1	33.6	25.5	13.7	12.7	5.2	2.5	1.4	152.6	41.4
1995	56.4	41.0	23.9	14.4	13.7	5.6	2.7	1.2	158.7	42.9
1996	57.1	42.4	26.6	13.8	14.2	5.0	2.3	1.7	162.5	42.4
1997	52.0	43.1	30.5	14.8	13.8	5.1	2.1	1.7	162.9	41.2
1998	58.5	47.2	27.6	15.3	12.4	4.9	2.8	1.7	170.4	42.1
1999	58.8	42.8	28.1	15.4	12.9	4.9	2.6	2.0	167.4	43.2
2000	58.4	49.6	32.1	15.4	13.5	5.8	2.9	2.4	180.1	42.3
2001	58.6	55.4	29.4	16.2	14.2	4.1	2.5	1.6	181.9	42.8
Employed enrolled nurses										(per cent)
1993	11.4	15.3	6.4	5.0	4.3	1.9	0.5	0.2	44.9	52.6
1994	9.7	16.0	7.6	3.0	4.2	1.5	0.3	0.1	42.2	53.6
1995	10.0	12.3	6.8	4.6	3.7	1.8	0.4	0.2	39.6	49.7
1996	7.3	12.0	6.3	3.8	5.0	1.1	0.2	0.3	36.1	50.4
1997	9.1	9.3	5.9	2.9	3.8	0.3	0.2	0.2	31.5	51.4
1998	8.0	8.1	6.1	3.8	4.5	0.2	0.2	0.2	30.9	47.2
1999	7.1	6.8	7.2	2.2	4.5	0.4	0.3	0.1	28.6	49.3
2000	6.0	4.2	6.2	3.2	4.5	0.5	0.3	0.1	25.0	45.9
2001	6.3	3.3	5.1	3.1	4.1	0.3	0.5	0.4	23.1	49.2
Employed registered and enrolled nurses										(per cent)
1993	65.3	55.1	31.1	20.0	19.4	7.1	2.5	1.8	202.2	43.2
1994	67.8	49.6	33.1	16.7	16.8	6.6	2.8	1.5	194.8	44.0
1995	66.3	53.3	30.7	19.0	17.4	7.3	3.0	1.3	198.4	44.3
1996	64.4	54.4	32.9	17.6	19.2	6.1	2.5	2.0	198.6	43.9
1997	61.1	52.4	36.3	17.6	17.6	5.3	2.3	1.9	194.3	42.8
1998	66.5	55.2	33.6	19.2	16.9	5.1	3.0	1.9	201.3	42.9
1999	65.9	49.6	35.3	17.6	17.4	5.2	2.9	2.1	196.0	44.1
2000	64.4	53.8	38.3	18.7	17.9	6.3	3.2	2.5	205.1	42.7
2001	64.9	58.7	34.5	19.4	18.3	4.4	2.9	2.0	205.0	43.5
Employed enrolled nurses as a percentage of all employed nurses										
				(per cent)						
1993	17.5	27.7	20.6	25.1	22.0	26.2	20.4	11.0	22.2	. .
1999	10.7	13.7	20.4	12.6	25.9	6.7	10.3	4.9	14.6	. .
2001	9.7	5.7	14.7	16.1	22.4	6.8	15.4	19.2	11.2	. .

Notes

1. The above annual estimates are the average of the four quarterly estimates.

2. Estimates less than 4,400 have a relative standard error greater than 25%.

Source: ABS labour force quarterly estimates (ABS Cat. No. 6291.0.40.001).

Table C.1: Registered and enrolled nurses: professional employment status, nursing role, Australia, 1993 to 1999[a]

Employment status/nursing role	1993	1994	1995	1996	1997	1999
Employed in nursing, only or mainly in state/territory						
Clinical nurse[b]	195,737	204,748	195,692	197,458	197,211	200,048
Administrator	8,538	8,534	10,027	9,159	11,940	12,499
Teacher/educator	4,623	4,717	4,717	3,796	5,158	5,928
Researcher	637	627	884	719	1,173	1,729
Other	7,161	6,484	9,347	7,040	6,729	4,390
Employed in nursing	*216,696*	*225,110*	*220,666*	*218,172*	*222,211*	*224,595*
On extended leave	2,535	2,856	2,594	3,943	3,149	3,458
Looking for work in nursing						
Employed elsewhere	4,306	4,280	2,447	3,260	2,188	2,025
Not employed	9,066	9,979	5,456	5,143	4,344	3,905
Total	13,372	14,259	7,902	8,403	6,532	5,929
Nursing labour force	*232,603*	*242,225*	*231,163*	*230,519*	*231,892*	*233,982*
Overseas	4,142	4,218	3,675	3,667	3,939	4,088
Not looking for work in nursing						
Employed elsewhere	13,410	9,831	10,501	9,298	8,732	8,869
Not employed	20,565	12,696	13,820	12,120	10,989	9,998
Total	33,975	22,527	24,321	21,419	19,721	18,868
Not in nursing labour force	*38,117*	*26,745*	*27,996*	*25,085*	*23,659*	*22,956*
Total registered and enrolled nurses	*270,720*	*268,970*	*259,159*	*255,604*	*255,551*	*256,938*
Multiple registrations and enrolments	10,733	9,703	8,376	7,975	8,531	8,138
Total registrations and enrolments	**281,453**	**278,673**	**267,535**	**263,579**	**264,082**	**265,076**
	(per cent of total registered and enrolled nurses)					
Employed in nursing	80.0	83.7	85.1	85.4	87.0	87.4
On extended leave	0.9	1.1	1.0	1.5	1.2	1.3
Looking for work in nursing	4.9	5.3	3.0	3.3	2.6	2.3
Nursing labour force	*85.9*	*90.1*	*89.2*	*90.2*	*90.7*	*91.1*
Overseas	1.5	1.6	1.4	1.4	1.5	1.6
Not looking for work in nursing	12.5	8.4	9.4	8.4	7.7	7.3
Not in nursing labour force	*14.1*	*9.9*	*10.8*	*9.8*	*9.3*	*8.9*
Total registered and enrolled nurses	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	(per cent of employed nurses)					
Employed in nursing						
Clinical nurse[b]	90.3	91.0	88.7	90.5	88.7	89.1
Administrator	3.9	3.8	4.5	4.2	5.4	5.6
Teacher/educator	2.1	2.1	2.1	1.7	2.3	2.6
Researcher	0.3	0.3	0.4	0.3	0.5	0.8
Other	3.3	2.9	4.2	3.2	3.0	2.0
Total employed in nursing	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a)   The Nursing Labour Force Survey has been conducted biennially since 1997. Consequently, no data is available for 1998.

(b)   Includes nurse clinicians and clinical nurse managers.

Source: AIHW.

Table C.2: Registered nurses: professional employment status, nursing role, states and territories, 1999

Professional employment status/nursing role	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Employed in nursing, only or mainly in this state									
Nurse clinician	46,578	37,957	27,267	15,103	13,832	3,936	2,288	2,078	149,041
Clinical nurse manager[a]	2,582	2,778	1,337	854	596	251	174	n.a.	8,572
Administrator	5,425	2,879	1,343	852	836	223	148	150	11,856
Teacher/educator	2,385	1,224	721	526	372	89	94	99	5,510
Researcher	606	422	196	188	158	22	8	19	1,619
Other	172	1,035	331	512	188	143	143	54	2,579
Employed in nursing	*57,749*	*46,295*	*31,195*	*18,034*	*15,983*	*4,664*	*2,856*	*2,401*	*179,178*
On extended leave	714	963	489	217	294	82	59	109	2,925
Looking for work in nursing									
Employed elsewhere	683	270	138	74	75	23	13	43	1,319
Not employed	1,267	636	427	189	175	50	52	76	2,872
Total	*1,950*	*906*	*566*	*263*	*251*	*72*	*64*	*120*	*4,192*
Nursing labour force	*60,413*	*48,164*	*32,249*	*18,514*	*16,527*	*4,818*	*2,979*	*2,630*	*186,294*
Overseas	1,842	678	773	421	93	8	41	85	3,942
Not looking for work in nursing									
Employed elsewhere	4,845	612	418	306	173	36	264	169	6,822
Not employed	5,044	1,051	709	477	222	65	218	159	7,945
Total	*9,889*	*1,664*	*1,127*	*783*	*395*	*101*	*482*	*328*	*14,767*
Not in nursing labour force	*11,731*	*2,341*	*1,900*	*1,204*	*488*	*109*	*523*	*413*	*18,709*
Total registered nurses	*72,144*	*50,505*	*34,150*	*19,718*	*17,015*	*4,927*	*3,501*	*3,043*	*205,003*
Multiple registrations	3,060	1,398	1,089	372	148	61	244	651	7,023
Total registrations	**75,204**	**51,903**	**35,239**	**20,090**	**17,163**	**4,988**	**3,745**	**3,694**	**212,026**
				(per cent of total registered nurses)					
Employed in nursing	80.0	91.7	91.3	91.5	93.9	94.7	81.6	78.9	87.4
On extended leave	1.0	1.9	1.4	1.1	1.7	1.7	1.7	3.6	1.4
Looking for work in nursing	2.7	1.8	1.7	1.3	1.5	1.5	1.8	3.9	2.0
Nursing labour force	*83.7*	*95.4*	*94.4*	*93.9*	*97.1*	*97.8*	*85.1*	*86.4*	*90.9*
Overseas	2.6	1.3	2.3	2.1	0.5	0.2	1.2	2.8	1.9
Not looking for work in nursing	13.7	3.3	3.3	4.0	2.3	2.1	13.8	10.8	7.2
Not in nursing labour force	*16.3*	*4.6*	*5.6*	*6.1*	*2.9*	*2.2*	*14.9*	*13.6*	*9.1*
Total registered nurses	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
				(per cent of employed nurses)					
Employed in nursing									
Nurse clinician	80.7	82.0	87.4	83.7	86.5	84.4	80.1	86.6	83.2
Clinical nurse manager[a]	4.5	6.0	4.3	4.7	3.7	5.4	6.1	n.a.	4.8
Administrator	9.4	6.2	4.3	4.7	5.2	4.8	5.2	6.2	6.6
Teacher/educator	4.1	2.6	2.3	2.9	2.3	1.9	3.3	4.1	3.1
Researcher	1.0	0.9	0.6	1.0	1.0	0.5	0.3	0.8	0.9
Other	0.3	2.2	1.1	2.8	1.2	3.1	5.0	2.3	1.4
Total employed in nursing	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a)   Included with clinicians for the Northern Territory.

Source: AIHW.

Table C.3: Enrolled nurses: professional employment status, nursing role, states and   territories, 1999

Professional employment status/nursing role	NSW	Vic	Qld	WA	SA	Tas	ACT	NT[a]	Australia
Employed in nursing, only or mainly in this state									
Nurse clinician	11,747	13,983	6,079	4,296	4,443	715	603	357	42,224
Clinical nurse manager[b]	83	88	18	17	4	n.p.	—	n.a.	212
Administrator	289	224	45	47	20	10	5	3	643
Teacher/educator	236	129	9	25	8	—	6	5	418
Researcher	69	24	7	8	n.p.	—	—	—	110
Other	83	707	220	339	299	82	74	7	1,811
Employed in nursing	*12,506*	*15,154*	*6,379*	*4,733*	*4,776*	*810*	*688*	*372*	*45,418*
On extended leave	132	193	70	35	76	12	—	14	533
Looking for work in nursing									
Employed elsewhere	298	205	89	38	51	6	—	18	705
Not employed	423	307	163	58	59	9	—	14	1,032
Total	*721*	*512*	*252*	*95*	*110*	*15*	—	*32*	*1,737*
Nursing labour force	*13,360*	*15,859*	*6,700*	*4,864*	*4,962*	*837*	*688*	*418*	*47,688*
Overseas	54	43	19	24	3	—	—	3	146
Not looking for work in nursing									
Employed elsewhere	1,248	390	133	112	83	17	—	65	2,047
Not employed	1,165	404	172	159	105	17	—	32	2,053
Total	*2,412*	*793*	*305*	*272*	*187*	*34*	—	*97*	*4,100*
Not in nursing labour force	*2,466*	*837*	*324*	*296*	*191*	*34*	—	*100*	*4,247*
Total enrolled nurses	*15,826*	*16,696*	*7,024*	*5,159*	*5,153*	*871*	*688*	*518*	*51,935*
Multiple enrolments	485	324	144	60	21	4	5	71	1,115
Total enrolments	**16,311**	**17,020**	**7,168**	**5,219**	**5,174**	**875**	**693**	**590**	**53,050**
	(per cent of total enrolled nurses)								
Employed in nursing	79.0	90.8	90.8	91.7	92.7	93.0	100.0	71.7	87.5
On extended leave	0.8	1.2	1.0	0.7	1.5	1.4	—	2.8	1.0
Looking for work in nursing	4.6	3.1	3.6	1.9	2.1	1.8	—	6.2	3.3
Nursing labour force	*84.4*	*95.0*	*95.4*	*94.3*	*96.3*	*96.1*	*100.0*	*80.7*	*91.8*
Overseas	0.3	0.3	0.3	0.5	0.1	—	—	0.6	0.3
Not looking for work in nursing	15.2	4.8	4.3	5.3	3.6	3.9	—	18.7	7.9
Not in nursing labour force	*15.6*	*5.0*	*4.6*	*5.7*	*3.7*	*3.9*	—	*19.3*	*8.2*
Total enrolled nurses	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	(per cent of employed nurses)								
Employed in nursing									
Nurse clinician	93.9	92.3	95.3	90.8	93.0	88.3	87.6	96.1	93.0
Clinical nurse manager[b]	0.7	0.6	0.3	0.4	0.1	0.2	—	n.a.	0.5
Administrator	2.3	1.5	0.7	1.0	0.4	1.3	0.7	0.9	1.4
Teacher/educator	1.9	0.9	0.1	0.5	0.2	—	0.9	1.2	0.9
Researcher	0.5	0.2	0.1	0.2	—	—	—	—	0.2
Other	0.7	4.7	3.5	7.2	6.3	10.2	10.8	1.8	4.0
Total employed in nursing	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a)   Estimates for enrolled nurses in the Northern Territory are considered less reliable than those of the other jurisdictions (see explanatory notes).

(b)   Included with clinicians for the Northern Territory.

Source: AIHW.

Table C.4: Registered and enrolled nurses: professional employment status, nursing role, states and territories, 1999

Professional employment status/nursing role	NSW	Vic	Qld	WA	SA	Tas	ACT	NT[a]	Australia
Employed in nursing, only or mainly in this state									
Nurse clinician	58,326	51,940	33,346	19,398	18,275	4,651	2,891	2,436	191,264
Clinical nurse manager[b]	2,665	2,865	1,356	871	600	253	174	n.a.	8,784
Administrator	5,714	3,104	1,387	899	856	233	153	153	12,499
Teacher/educator	2,622	1,352	729	551	381	89	100	104	5,928
Researcher	674	446	203	196	160	22	8	19	1,729
Other	255	1,742	552	851	487	225	217	61	4,390
Employed in nursing	*70,255*	*61,449*	*37,574*	*22,767*	*20,759*	*5,474*	*3,543*	*2,773*	*224,595*
On extended leave	846	1,156	559	252	370	94	59	123	3,458
Looking for work in nursing									
Employed elsewhere	981	475	227	112	127	29	13	62	2,025
Not employed	1,690	942	590	247	234	59	52	90	3,905
Total	*2,671*	*1,417*	*817*	*358*	*361*	*88*	*64*	*152*	*5,929*
Nursing labour force	*73,773*	*64,023*	*38,950*	*23,378*	*21,489*	*5,655*	*3,667*	*3,048*	*233,982*
Overseas	1,896	721	792	446	96	8	41	88	4,088
Not looking for work in nursing									
Employed elsewhere	6,092	1,002	551	418	255	53	264	234	8,869
Not employed	6,209	1,455	881	637	326	82	218	191	9,998
Total	*12,301*	*2,457*	*1,432*	*1,054*	*582*	*135*	*482*	*425*	*18,868*
Not in nursing labour force	*14,197*	*3,178*	*2,224*	*1,500*	*678*	*143*	*523*	*513*	*22,956*
Total registered and enrolled nurses	*87,970*	*67,201*	*41,174*	*24,878*	*22,168*	*5,798*	*4,189*	*3,561*	*256,938*
Multiple registrations	3,545	1,722	1,233	431	169	65	249	723	8,138
Total registrations and enrolments	**91,515**	**68,923**	**42,407**	**25,309**	**22,337**	**5,863**	**4,438**	**4,284**	**265,076**
					(per cent of total registered and enrolled nurses)				
Employed in nursing	79.9	91.4	91.3	91.5	93.6	94.4	84.6	77.9	87.4
On extended leave	1.0	1.7	1.4	1.0	1.7	1.6	1.4	3.5	1.3
Looking for work in nursing	3.0	2.1	2.0	1.4	1.6	1.5	1.5	4.3	2.3
Nursing labour force	*83.9*	*95.3*	*94.6*	*94.0*	*96.9*	*97.5*	*87.5*	*85.6*	*91.1*
Overseas	2.2	1.1	1.9	1.8	0.4	0.1	1.0	2.5	1.6
Not looking for work in nursing	14.0	3.7	3.5	4.2	2.6	2.3	11.5	11.9	7.3
Not in nursing labour force	*16.1*	*4.7*	*5.4*	*6.0*	*3.1*	*2.5*	*12.5*	*14.4*	*8.9*
Total registered nurses	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
					(per cent of employed nurses)				
Employed in nursing									
Nurse clinician	83.0	84.5	88.7	85.2	88.0	85.0	81.6	87.8	85.2
Clinical nurse manager[b]	3.8	4.7	3.6	3.8	2.9	4.6	4.9	n.a.	3.9
Administrator	8.1	5.1	3.7	3.9	4.1	4.3	4.3	5.5	5.6
Teacher/educator	3.7	2.2	1.9	2.4	1.8	1.6	2.8	3.8	2.6
Researcher	1.0	0.7	0.5	0.9	0.8	0.4	0.2	0.7	0.8
Other	0.4	2.8	1.5	3.7	2.3	4.1	6.1	2.2	2.0
Total employed in nursing	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Estimates for registered and enrolled nurses in the Northern Territory are considered less reliable than those of the other jurisdictions (see explanatory notes).

(b) Included with clinicians for the Northern Territory.

Source: AIHW.

Table C.5: Employed nurses and full-time equivalent nurses per 100,000 population: states and territories, 1993 to 1999

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Number of nurses per 100,000 population, 1993									
Total nurses	1,096	1,368	1,164	1,218	1,502	1,317	1,059	1,090	1,227
FTE[a] nurses	876	1,034	928	953	1,149	998	855	932	958
FTE[b] nurses	994	1,145	1,047	1,093	1,252	1,103	978	1,089	1,074
Number of nurses per 100,000 population, 1994									
Total nurses	1,093	1,500	1,214	1,223	1,457	1,257	1,018	1,071	1,262
FTE[a] nurses	881	1,162	984	960	1,114	952	835	918	998
FTE[b] nurses	999	1,282	1,115	1,083	1,214	1,053	979	1,061	1,118
Number of nurses per 100,000 population, 1995									
Total nurses	1,105	1,420	1,070	1,238	1,423	1,376	1,098	1,062	1,222
FTE[a] nurses	824	1,133	868	1,004	1,099	1,077	884	923	957
FTE[b] nurses	934	1,284	952	1,173	1,201	1,212	1,006	1,106	1,079
Number of nurses per 100,000 population, 1996									
Total nurses	1,100	1,309	1,092	1,212	1,413	1,271	1,064	1,213	1,192
FTE[a] nurses	819	1,043	887	1,137	939	995	953	948	931
FTE[b] nurses	984	1,178	962	1,236	1,097	1,120	1,142	1,079	1,064
Number of nurses per 100,000 population, 1997									
Total nurses	1,115	1,339	1,084	1,208	1,383	1,270	1,099	1,189	1,200
FTE[a] nurses	916	1,060	910	982	1,090	998	908	1,066	976
FTE[b] nurses	1,026	1,157	980	1,121	1,193	1,090	1,009	1,294	1,077
Number of nurses per 100,000 population, 1999									
Total nurses	1,093	1,297	1,062	1,217	1,389	1,163	1,143	1,429[c]	1,179
FTE[a] nurses	912	1,025	882	990	1,007	926	939	1,267[c]	955
FTE[b] nurses	980	1,086	944	1,054	1,047	980	1,002	1,408[c]	1,018

(a)   FTE(resources): Calculated on the basis that all nurses working 35 or more hours per week are counted as one full-time equivalent (FTE) and all working less than 35 hours per week are a portion of an FTE.

(b)   FTE(supply): Calculated on the basis that hours worked are divided by 35 for all nurses, i.e. a nurse working 70 hours per week equals   2 FTE, one working 21 hours equals 0.6 FTE.

(c)   Estimates for the Northern Territory are considered less reliable than those of the other jurisdictions (see explanatory notes).

Source: AIHW.

Table C.6: Employed nurses and full-time equivalent nurses per 100,000 population, geographic location of main job, 1993 to 1999

	Capital city	Other metropolitan centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area
Number of nurses per 100,000 population, 1993							
Total nurses	1,172	1,356	1,993	1,415	1,017	1,102	1,078
FTE[(a)] nurses	939	1,067	1,554	1,047	711	845	789
FTE[(b)] nurses	1,054	1,191	1,734	1,165	790	977	919
Number of nurses per 100,000 population, 1994							
Total nurses	1,204	1,393	2,092	1,439	1,047	1,065	1,056
FTE[(a)] nurses	1,001	1,148	1,712	1,145	800	892	877
FTE[(b)] nurses	1,122	1,290	1,912	1,267	886	1,029	1,028
Number of nurses per 100,000 population, 1995							
Total nurses	1,185	1,233	1,894	1,450	999	1,090	1,094
FTE[(a)] nurses	986	1,020	1,560	1,159	773	904	900
FTE[(b)] nurses	1,111	1,135	1,732	1,297	865	993	1,047
Number of nurses per 100,000 population, 1996							
Total nurses	1,183	1,078	1,705	1,363	982	1,219	1,177
FTE[(a)] nurses	984	887	1,405	1,091	762	1,023	973
FTE[(b)] nurses	1,119	1,019	1,593	1,246	872	1,129	1,143
Number of nurses per 100,000 population, 1997							
Total nurses	1,182	1,100	1,734	1,410	1,001	1,214	879
FTE[(a)] nurses	985	903	1,430	1,130	780	1,008	729
FTE[(b)] nurses	1,077	980	1,536	1,220	838	1,183	834
Number of nurses per 100,000 population, 1999							
Total nurses	1,160	1,233	1,789	1,328	910	1,129	1,063
FTE[(a)] nurses	948	1,011	1,459	1,053	691	957	871
FTE[(b)] nurses	1,013	1,081	1,553	1,112	731	1,034	949

(a)   FTE(resources): Calculated on the basis that all nurses working 35 or more hours per week are counted as one full-time equivalent   (FTE) and all working less than 35 hours per week are a portion of an FTE.

(b)   FTE(supply): Calculated on the basis that hours worked is divided by 35 for all nurses, i.e. a nurse working 70 hours per week equals   2 FTE, one working 21 hours equals 0.6 FTE.

Source: AIHW.

Table C.7: Employed registered nurses: age and sex, states and territories, 1999

Age (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Males									
Under 25	281	102	171	13	53	6	—	4	630
25–29	731	422	421	134	169	20	13	38	1,947
30–34	737	534	477	168	232	48	10	31	2,235
35–39	769	571	392	178	276	71	10	47	2,314
40–44	1,076	679	483	282	364	85	40	63	3,072
45–49	939	501	353	187	275	53	37	28	2,374
50–54	472	275	204	137	124	35	10	15	1,271
55–59	186	104	93	90	57	12	3	9	555
60–64	78	60	46	45	28	12	9	n.p.	281
65 and over	26	9	21	15	10	—	—	—	82
Total	*5,294*	*3,257*	*2,661*	*1,250*	*1,589*	*342*	*131*	*237*	*14,761*
Average age	40.6	39.5	38.5	42.0	40.9	41.1	43.6	40.6	40.0
Females									
Under 25	2,621	1,907	1,425	506	758	126	33	80	7,455
25–29	6,086	5,251	3,125	1,660	1,510	253	159	292	18,336
30–34	5,632	5,398	3,724	1,998	1,659	481	208	354	19,453
35–39	7,910	6,531	4,538	2,671	2,328	740	473	397	25,589
40–44	10,301	7,504	4,644	2,980	2,847	881	534	379	30,069
45–49	8,142	6,725	4,209	2,646	2,344	782	518	281	25,647
50–54	5,995	5,166	3,463	2,201	1,663	589	440	219	19,736
55–59	3,630	2,921	2,168	1,412	894	351	241	110	11,728
60–64	1,557	1,333	948	577	310	109	105	36	4,975
65 and over	581	300	290	135	83	12	14	16	1,430
Total	*52,455*	*43,038*	*28,534*	*16,785*	*14,395*	*4,322*	*2,724*	*2,164*	*164,417*
Average age	42.4	41.0	41.4	42.1	41.7	42.6	44.0	41.5	41.8
Persons									
Under 25	2,902	2,009	1,596	519	811	132	33	84	8,085
25–29	6,817	5,673	3,545	1,794	1,679	273	172	330	20,283
30–34	6,368	5,932	4,201	2,165	1,890	529	218	385	21,688
35–39	8,679	7,103	4,930	2,849	2,605	811	482	444	27,903
40–44	11,377	8,183	5,126	3,262	3,211	966	575	442	33,141
45–49	9,081	7,227	4,563	2,833	2,619	835	554	309	28,021
50–54	6,466	5,441	3,667	2,338	1,787	623	450	234	21,007
55–59	3,816	3,025	2,261	1,502	951	363	244	119	12,283
60–64	1,635	1,393	994	622	338	121	115	37	5,256
65 and over	607	310	311	150	93	12	14	16	1,511
Total	**57,749**	**46,295**	**31,195**	**18,034**	**15,983**	**4,664**	**2,856**	**2,401**	**179,178**
Average age	42.2	40.9	41.2	42.1	41.6	42.5	44.0	41.5	41.4

Source: AIHW.

Table C.8: Employed enrolled nurses: age and sex, states and territories, 1999

Age (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT[a]	Australia
Males									
Under 25	105	29	18	—	5	—	—	—	158
25–29	216	78	43	9	18	n.p.	—	8	374
30–34	175	139	84	25	50	9	10	10	502
35–39	178	216	93	31	58	5	5	n.p.	588
40–44	168	171	92	39	64	21	5	3	563
45–49	86	150	86	35	33	11	—	6	407
50–54	59	90	61	19	15	9	5	—	258
55–59	31	44	33	22	9	n.p.	—	—	141
60–64	16	30	13	9	4	n.p.	5	—	80
65 and over	—	n.p.	3	—	—	—	—	—	5
Total	*1,037*	*949*	*526*	*189*	*256*	*61*	*31*	*27*	*3,075*
Average age	37.3	40.7	41.2	44.2	40.6	43.3	42.8	36.7	40.0
Females									
Under 25	694	289	75	150	86	n.p.	6	7	1,309
25–29	1,388	945	382	212	263	21	23	42	3,276
30–34	1,611	1,766	761	445	615	71	93	54	5,416
35–39	2,172	2,690	1,069	816	934	153	105	84	8,022
40–44	2,659	2,961	1,352	1,045	1,173	177	128	78	9,573
45–49	1,441	2,578	1,021	821	785	162	145	53	7,007
50–54	851	1,818	653	621	426	106	76	18	4,569
55–59	426	826	350	339	171	44	41	7	2,203
60–64	179	261	152	75	56	6	41	n.p.	772
65 and over	47	72	38	19	11	8	—	—	195
Total	*11,470*	*14,206*	*5,853*	*4,544*	*4,520*	*749*	*657*	*344*	*42,342*
Average age	39.5	41.9	42.1	42.5	41.2	43.6	43.7	40.8	41.4
Persons									
Under 25	800	318	94	150	91	n.p.	6	7	1,467
25–29	1,604	1,022	425	221	281	22	23	50	3,650
30–34	1,787	1,905	845	470	665	79	103	64	5,919
35–39	2,350	2,905	1,162	846	992	159	110	85	8,610
40–44	2,827	3,132	1,444	1,084	1,237	198	133	80	10,136
45–49	1,528	2,729	1,107	856	818	173	145	59	7,414
50–54	911	1,908	714	640	441	115	81	18	4,828
55–59	457	870	383	361	180	46	41	7	2,344
60–64	195	291	165	85	60	8	46	n.p.	852
65 and over	47	74	41	19	11	8	—	—	199
Total	**12,506**	**15,154**	**6,379**	**4,733**	**4,776**	**810**	**688**	**372**	**45,418**
Average age	39.3	41.8	42.1	42.7	41.2	43.6	43.6	40.5	41.3

(a)   Estimates for the Northern Territory are considered less reliable than those of the other jurisdictions (see explanatory notes).

Source: AIHW.

Table C.9: Employed registered and enrolled nurses: age and sex, states and territories, 1999

Age (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT[a]	Australia
Males									
Under 25	386	131	190	13	58	6	—	4	788
25–29	947	500	464	142	187	22	13	46	2,321
30–34	912	673	560	193	282	56	20	41	2,737
35–39	947	787	485	209	335	76	15	48	2,902
40–44	1,244	850	575	321	428	106	45	66	3,635
45–49	1,025	651	439	222	308	64	37	34	2,780
50–54	531	365	265	156	139	44	15	15	1,530
55–59	217	148	126	112	66	14	3	9	696
60–64	94	90	59	55	32	14	15	n.p.	361
65 and over	26	11	24	15	10	—	—	—	86
Total	*6,331*	*4,206*	*3,187*	*1,438*	*1,845*	*402*	*162*	*265*	*17,836*
Average age	40.2	39.7	38.9	42.3	40.9	41.4	43.5	40.2	40.0
Females									
Under 25	3,316	2,196	1,500	656	844	127	39	87	8,764
25–29	7,474	6,196	3,507	1,872	1,773	274	182	333	21,612
30–34	7,243	7,164	4,485	2,443	2,273	552	301	408	24,869
35–39	10,082	9,221	5,607	3,487	3,262	893	578	481	33,611
40–44	12,960	10,465	5,995	4,025	4,020	1,057	662	457	39,642
45–49	9,583	9,304	5,231	3,467	3,129	944	663	335	32,654
50–54	6,846	6,984	4,116	2,822	2,089	695	516	237	24,305
55–59	4,056	3,748	2,518	1,751	1,065	395	281	116	13,931
60–64	1,737	1,594	1,100	652	366	115	146	37	5,747
65 and over	628	372	328	154	94	20	14	16	1,624
Total	*63,925*	*57,243*	*34,387*	*21,329*	*18,914*	*5,071*	*3,381*	*2,509*	*206,759*
Average age	42.0	41.2	41.5	42.2	41.6	42.7	44.0	41.4	41.7
Persons									
Under 25	3,702	2,327	1,689	669	902	133	39	91	9,552
25–29	8,422	6,696	3,971	2,015	1,961	295	195	380	23,933
30–34	8,155	7,837	5,045	2,636	2,555	608	321	450	27,606
35–39	11,030	10,008	6,092	3,696	3,597	969	593	529	36,514
40–44	14,204	11,315	6,570	4,346	4,448	1,164	708	523	43,277
45–49	10,608	9,955	5,670	3,689	3,437	1,008	699	368	35,435
50–54	7,377	7,349	4,381	2,978	2,228	739	531	252	25,834
55–59	4,273	3,896	2,644	1,863	1,131	409	284	126	14,627
60–64	1,830	1,684	1,159	707	398	129	160	39	6,107
65 and over	654	383	352	169	104	20	14	16	1,711
Total	**70,255**	**61,449**	**37,574**	**22,767**	**20,759**	**5,474**	**3,543**	**2,773**	**224,595**
Average age	41.7	41.2	41.3	42.3	41.4	42.6	43.9	41.3	41.6

(a)   Estimates for the Northern Territory are considered less reliable than those of the other jurisdictions (see explanatory notes).

Source: AIHW

Table C.10: Employed nurses: type of nurse, citizenship/residency status, states and territories, 1999

Citizenship	NSW	Vic	Qld	WA	SA	Tas	ACT	NT[(a)]	Australia
				Enrolled nurses					
Australian citizen	12,000	14,370	5,943	4,449	4,377	778	635	355	42,906
Not Australian citizen									
Permanent resident	501	774	431	281	399	28	53	16	2,485
Not permanent resident	5	10	5	n.p.	—	3	—	n.p.	27
Total	*506*	*785*	*436*	*284*	*399*	*31*	*53*	*17*	*2,511*
Total	*12,506*	*15,154*	*6,379*	*4,733*	*4,776*	*810*	*688*	*372*	*45,418*
				Registered nurses					
Australian citizen	53,852	43,451	29,294	16,919	14,306	4,439	2,666	2,285	167,213
Not Australian citizen									
Permanent resident	3,706	2,742	1,805	1,042	1,655	222	182	108	11,461
Not permanent resident	191	101	96	74	22	3	8	8	503
Total	*3,897*	*2,844*	*1,901*	*1,116*	*1,677*	*225*	*189*	*116*	*11,964*
Total	*57,749*	*46,295*	*31,195*	*18,034*	*15,983*	*4,664*	*2,856*	*2,401*	*179,178*
				Registered and enrolled nurses					
Australian citizen	65,852	57,821	35,237	21,368	18,683	5,218	3,301	2,640	210,119
Not Australian citizen									
Permanent resident	4,206	3,516	2,237	1,323	2,054	250	235	124	13,946
Not permanent resident	197	112	100	76	22	6	8	10	530
Total	*4,403*	*3,628*	*2,337*	*1,399*	*2,076*	*256*	*242*	*133*	*14,476*
Total	**70,255**	**61,449**	**37,574**	**22,767**	**20,759**	**5,474**	**3,543**	**2,773**	**224,595**

(a)   In 1999 estimates for enrolled nurses and registered and enrolled nurses in the Northern Territory are considered less reliable than those of the other jurisdictions (see explanatory notes).

Source: AIHW.

Table C.11: Employed nurses: type of nurse, country of birth, states and territories, 1999

Country of birth	NSW	Vic	Qld	WA	SA	Tas	ACT	NT[a,b]	Australia[c]
				Enrolled nurses					
Other Oceania	84	—	49	—	—	—	—	. .	133
Australia	10,375	12,686	5,155	3,424	3,921	753	546	. .	36,859
New Zealand	319	278	360	194	53	6	16	. .	1,227
Other Europe	330	603	131	136	121	6	16	. .	1,344
UK/Ireland	815	1,141	518	796	643	41	82	. .	4,037
Middle East/North Africa	35	—	3	—	—	—	—	. .	39
Asia	339	446	104	183	37	3	27	. .	1,141
North America	23	—	24	—	—	—	—	. .	47
Central/South America	137	—	9	—	—	—	—	. .	146
East/West Africa	50	—	24	—	—	—	—	. .	74
Total	*12,506*	*15,154*	*6,379*	*4,733*	*4,776*	*810*	*688*	*372*	*45,418[d]*
				Registered nurses					
Other Oceania	437	—	305	—	—	—	—	. .	742
Australia	43,441	37,011	24,785	11,539	12,689	4,094	2,304	. .	135,863
New Zealand	1,337	789	1,308	781	180	51	62	. .	4,508
Other Europe	1,394	1,351	667	464	481	82	78	. .	4,517
UK/Ireland	5,025	3,899	2,733	4,022	2,252	387	282	. .	18,600
Middle East/North Africa	231	—	38	—	—	—	—	. .	269
Asia	4,526	3,245	763	1,229	380	51	129	. .	10,323
North America	404	—	239	—	—	—	—	. .	643
Central/South America	420	—	46	—	—	—	—	. .	466
East/West Africa	534	—	311	—	—	—	—	. .	846
Total	*57,749*	*46,295*	*31,195*	*18,034*	*15,983*	*4,664*	*2,856*	*2,401*	*179,178[d]*
				Registered and enrolled nurses					
Other Oceania	521	—	354	—	—	—	—	. .	875
Australia	53,815	49,697	29,941	14,963	16,611	4,846	2,850	. .	172,723
New Zealand	1,656	1,067	1,669	975	233	57	78	. .	5,735
Other Europe	1,724	1,954	799	600	602	89	94	. .	5,861
UK/Ireland	5,840	5,040	3,251	4,817	2,896	428	364	. .	22,637
Middle East/North Africa	267	—	41	—	—	—	—	. .	308
Asia	4,865	3,691	867	1,413	418	54	156	. .	11,464
North America	427	—	262	—	—	—	—	. .	690
Central/South America	556	—	55	—	—	—	—	. .	611
East/West Africa	584	—	335	—	—	—	—	. .	919
Total	**70,255**	**61,449**	**37,574**	**22,767**	**20,759**	**5,474**	**3,543**	**2,773**	**224,595[d]**

(a)   The data for Northern Territory were not available.

(b)   Estimates for enrolled nurses and registered and enrolled nurses in the Northern Territory are considered less reliable than those of the other jurisdictions (see explanatory notes).

(c)   Totals for country of birth do not include Northern Territory.

(d)   Includes Northern Territory.

Source: AIHW.

Table C.12: Employed registered and enrolled nurses: work setting of main job, sector of employment, states and territories, 1999

Work setting of main job	NSW	Vic	Qld	WA	SA	Tas	ACT	NT[a]	Australia
Public sector									
Acute care hospital	37,655	27,114	19,200	11,713	10,778	2,253	1,694	1,408	111,815
Day procedure centre	356	370	100	104	73	65	14	34	1,116
Aged accommodation[b]	. .	603	384	75	111	72	33	---	1,279
Nursing home	5,448	6,474	1,533	628	1,050	690	84	63	15,970
Hospice	235	293	30	104	51	29	75	16	833
Community health service	5,328	3,188	1,369	1,204	691	388	276	424	12,867
Aboriginal health service[b]	. .	31	76	74	25	22	8	. .	236
Mental health service[b]	. .	1,131	661	331	351	186	70	. .	2,730
Development disability service	1,821	405	99	56	97	52	11	n.p.	2,542
Defence forces[b]	148	139	87	16	10	. .	42	29	470
School	128	185	85	79	4	9	15	42	548
Tertiary education institution	749	686	321	234	216	39	53	40	2,338
Corrective services	336	59	123	90	n.p.	13	6	10	639
Other	1,391	1,396	66	496	130	330	58	210	4,076
Total	*53,595*	*42,075*	*24,134*	*15,205*	*13,587*	*4,150*	*2,440*	*2,276*	*157,462*
Private sector									
Acute care hospital	7,977	9,588	7,031	3,667	2,970	778	565	190	32,767
Day procedure centre	455	421	286	238	100	31	59	10	1,600
Aged accommodation	. .	320	830	174	168	150	57	6	1,705
Nursing home[b]	4,551	5,041	2,168	1,584	1,890	. .	191	111	15,537
Hospice	29	22	36	116	46	9	3	---	262
Community health service[b]	351	140	625	265	39	66	11	. .	1,497
Aboriginal health service[b]	. .	---	5	27	13	20	---	. .	66
Mental health service[b]	. .	33	37	18	8	25	---	. .	122
Development disability service	47	34	21	40	61	19	9	---	230
School[b]	49	55	73	29	19	. .	5	8	239
Tertiary education institution[b]	32	30	17	8	3	. .	---	n.p.	92
Corrective services	14	43	15	3	40	—	---	. .	115
Doctors rooms/medical practice	1,708	1,615	1,363	669	716	151	129	65	6,416
Nursing in private practice	638	494	307	163	147	25	27	7	1,806
Employment agency[b]	. .	746	203	288	562	16	19	13	1,846
Mining, industry or commercial sector	244	227	251	184	81	23	5	27	1,042
Other	565	566	169	352	47	9	41	42	1,790
Total	*16,660*	*19,375*	*13,439*	*7,824*	*6,910*	*1,324*	*1,121*	*480*	*67,133*

(continued)

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Table C.12 (continued): Employed registered and enrolled nurses: work setting of main job, sector of employment, states and territories, 1999

Work setting of main job	NSW	Vic	Qld	WA	SA	Tas	ACT	NT[a]	Australia
				All sectors					
Acute care hospital	45,632	36,702	26,232	15,380	13,749	3,031	2,259	1,597	144,582
Day procedure centre	811	791	386	342	173	96	73	44	2,716
Aged accommodation[b]	. .	923	1,215	249	280	222	90	6	2,985
Nursing home	10,000	11,515	3,701	2,213	2,939	690	276	174	31,508
Hospice	264	315	66	220	97	39	78	16	1,095
Community health service	5,679	3,328	1,994	1,468	730	454	287	424	14,364
Aboriginal health service[b]	. .	31	81	101	38	43	8	. .	302
Mental health service[b]	. .	1,165	698	349	359	212	70	. .	2,852
Development disability service	1,868	439	120	96	158	71	20	n.p.	2,773
Defence forces[b]	148	139	87	16	10	. .	42	29	470
School[b]	177	241	159	108	23	9	20	49	787
Tertiary education institution	781	717	338	242	219	39	53	42	2,431
Corrective services	350	102	139	93	41	13	6	10	754
Doctors rooms/medical practice	1,708	1,615	1,363	669	716	151	129	65	6,416
Nursing in private practice	638	494	307	163	147	25	27	7	1,806
Employment agency [b]	. .	746	203	288	562	16	19	13	1,846
Mining, industry or commercial sector	244	227	251	184	81	23	5	27	1,042
Other	1,956	1,962	234	847	178	339	99	251	5,866
Total	**70,255**	**61,449**	**37,573**	**23,029**	**20,497**	**5,474**	**3,561**	**2,756**	**224,594**

(a)   Estimates for the Northern Territory are considered less reliable than those of the other jurisdictions (see explanatory notes).

(b)   These categories were not available in the work setting question in some states.

Source: AIHW.

Table C.13: Registered nurses employed as clinical nurses[a]: area of clinical nursing, states and territories, 1999

Area of clinical nursing	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Mixed medical and surgical	2,498	7,463	3,799	2,654	2,596	169	217	189	19,585
Medical	6,430	1,724	1,519	1,049	921	385	127	81	12,236
Surgical	5,130	2,528	2,424	1,610	1,016	364	199	125	13,395
Coronary care or surgery[b]	1,563	994	614	321	289	136	68	. .	3,985
Geriatric/gerontology	6,208	5,310	3,470	1,558	1,927	784	178	82	19,517
Oncology[b]	948	898	615	228	226	66	40	. .	3,022
Perioperative/operating theatre/recovery	3,929	3,344	2,252	1,144	1,107	335	235	94	12,440
Rehabilitation[b]	923	1,055	317	242	. .	58	29	. .	2,624
Renal[b]	493	465	286	148	170	37	43	. .	1,643
Respiratory medicine/asthma[b]	380	75	128	41	. .	7	3	. .	635
Critical care/intensive care[c]	3,642	2,224	1,577	796	883	44	208	100	9,474
Casualty accident/emergency	2,331	1,459	1,109	683	475	156	105	136	6,455
Midwifery	4,215	3,741	2,185	1,304	1,376	403	362	261	13,846
Mental health/psychiatric	3,589	2,127	1,844	913	1,073	209	132	72	9,958
Community nursing	1,740	2,077	1,089	824	681	317	104	272	7,104
Developmental disability	1,107	279	56	70	113	31	11	—	1,668
Occupational health	174	183	135	100	89	8	7	19	714
Paediatric	887	913	903	466	422	98	81	153	3,922
Aboriginal health[b]	60	17	65	73	16	n.p.	—	. .	233
Child and family health	769	976	563	220	206	125	67	34	2,961
School children's health	164	170	125	133	16	8	14	29	660
No one principal area	603	647	420	478	249	160	74	179	2,811
Other	1,377	2,065	3,110	900	577	284	161	253	8,726
Total	**49,161**	**40,735**	**28,604**	**15,957**	**14,428**	**4,188**	**2,462**	**2,078**	**157,613**

(a)   Includes nurse clinicians and clinical nurse managers.

(b)   These categories were not available in the principal area of activity question in some states.

(c)   Values for Tasmania are very low. This may be due to the amalgamation of intensive care units and coronary care units, especially in smaller units due to the amount of resources required to maintain both units. This is also valid in other smaller units throughout Australia, especially in the more rural and remote regions.

Source: AIHW.

Table C.14: Enrolled nurses employed as clinical nurses[a]: area of clinical nursing, states and territories, 1999

Area of clinical nursing	NSW	Vic	Qld	WA	SA	Tas	ACT	NT[b]	Australia
Mixed medical and surgical	1,145	2,103	1,699	1,214	1,481	47	98	56	7,842
Medical	2,266	712	334	485	398	81	53	20	4,350
Surgical	1,156	323	273	339	219	28	91	25	2,454
Coronary care or surgery[c]	225	75	26	25	12	—	—	. .	362
Geriatric/gerontology	2,845	7,240	1,388	831	1,029	276	138	71	13,818
Oncology[c]	94	104	51	31	32	n.p.	—	. .	315
Perioperative/operating theatre/recovery	875	255	377	207	303	9	47	23	2,096
Rehabilitation[c]	646	754	152	124	. .	31	—	. .	1,708
Renal[c]	39	18	26	21	9	—	—	. .	113
Respiratory medicine/asthma[c]	58	23	10	5	. .	—	—	. .	96
Critical care/intensive care[d]	37	53	32	34	4	5	—	6	171
Casualty accident/emergency	85	100	106	60	61	11	12	11	445
Midwifery	72	212	57	69	24	7	—	4	445
Mental health/psychiatric	629	766	367	196	208	36	6	8	2,215
Community nursing	249	195	79	173	143	40	55	6	939
Developmental disability	444	18	65	26	62	25	—	n.p.	641
Occupational health	8	36	13	12	n.p.	—	—	—	72
Paediatric	132	135	101	108	83	11	28	49	647
Aboriginal health[c]	23	10	7	8	6	3	—	. .	57
Child and family health	25	36	6	28	5	9	23	n.p.	135
School children's health	7	28	4	9	3	—	—	—	51
No one principal area	166	298	160	123	113	37	9	34	938
Other	604	575	766	186	250	59	44	41	2,525
Total	**11,830**	**14,071**	**6,098**	**4,313**	**4,447**	**717**	**603**	**357**	**42,436**

(a)   Includes nurse clinicians and clinical nurse managers.

(b)   Estimates for enrolled nurses in the Northern Territory are considered less reliable than those of the other jurisdictions (see explanatory notes).

(c)   These categories were not available in the principal area of activity question in some states.

(d)   Values for Tasmania are very low. This may be due to the amalgamation of intensive care units and coronary care units, especially in smaller units due to the amount of resources required to maintain both units. This is also valid in other smaller units throughout Australia, especially in the more rural and remote regions.

Source: AIHW.

Table C.15: Registered and enrolled nurses employed as clinical nurses[a]: area of clinical nursing, states and territories, 1999

Area of clinical nursing	NSW	Vic	Qld	WA	SA	Tas	ACT	NT[b]	Australia
Mixed medical and surgical	3,643	9,566	5,497	3,868	4,076	216	315	246	27,427
Medical	8,696	2,436	1,853	1,534	1,320	466	179	101	16,585
Surgical	6,286	2,851	2,698	1,949	1,234	392	290	150	15,849
Coronary care or surgery[c]	1,788	1,068	641	346	301	136	68	. .	4,347
Geriatric/gerontology	9,054	12,549	4,858	2,389	2,956	1,059	316	153	33,335
Oncology[c]	1,043	1,002	666	260	259	68	40	. .	3,337
Perioperative/operating theatre/recovery	4,804	3,599	2,629	1,351	1,409	344	282	117	14,535
Rehabilitation[c]	1,569	1,809	469	366	. .	89	29	. .	4,332
Renal[c]	532	484	312	169	179	37	43	. .	1,756
Respiratory medicine/asthma[c]	438	98	138	46	. .	7	3	. .	731
Critical care/intensive care[d]	3,679	2,277	1,609	830	888	50	208	106	9,646
Casualty accident/emergency	2,416	1,559	1,215	743	536	167	116	147	6,900
Midwifery	4,286	3,953	2,241	1,373	1,400	410	362	265	14,291
Mental health/psychiatric	4,218	2,893	2,210	1,109	1,281	245	138	80	12,173
Community nursing	1,989	2,272	1,168	997	824	356	159	278	8,043
Developmental disability	1,551	297	121	96	175	57	11	n.p.	2,310
Occupational health	182	219	148	112	92	8	7	19	786
Paediatric	1,019	1,048	1,004	574	506	109	109	202	4,569
Aboriginal health[c]	82	27	71	81	22	5	—	. .	290
Child and family health	794	1,013	569	248	211	135	90	36	3,095
School children's health	172	199	129	142	19	8	14	29	711
No one principal area	769	945	580	601	361	198	82	213	3,749
Other	1,980	2,640	3,876	1,086	827	343	206	293	11,251
Total	**60,991**	**54,806**	**34,702**	**20,270**	**18,875**	**4,904**	**3,065**	**2,436**	**200,049**

(a)   Includes nurse clinicians and clinical nurse managers.

(b)   Estimates for the Northern Territory are considered less reliable than those of the other jurisdictions (see explanatory notes).

(c)   These categories were not available in the principal area of activity question in some states.

(d)   Values for Tasmania are very low. This may be due to the amalgamation of intensive care units and coronary care units, especially in smaller units, due to the amount of resources required to maintain both units. This is also valid in other smaller units throughout Australia, especially in the more rural and remote regions.

Source: AIHW.

Table C.16: Employed registered and enrolled nurses: annual salary range[a] and sex, states and territories, 1999

Annual salary range	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Per cent of male nurses									
$26,593–$30,355	13.9	19.3	15.9	13.0	12.2	12.2	10.7	7.5	15.1
$29,578–$45,277	49.6	44.6	66.4	65.0	69.4	65.2	48.2	42.5	54.9
$44,158–$65,530	13.4	21.9	9.4	13.2	12.9	12.8	37.5	40.8	15.2
$54,428–$68,530	13.8	5.8	1.9	1.1	2.6	1.4	0.0	2.5	7.0
$63,315–$84,396	2.1	3.2	3.2	3.0	1.7	0.7	0.0	3.3	2.6
$76,642–$87,755	0.6	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.2
Other nurses									
Lecturer, higher education	0.9	1.5	0.5	0.9	1.2	2.4	0.0	0.8	1.0
Other	5.6	3.8	2.6	3.8	0.0	5.4	1.8	2.5	3.8
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Per cent of female nurses									
$26,593–$30,355	17.1	21.3	16.9	19.6	20.7	13.1	11.0	14.8	18.6
$29,578–$45,277	54.5	44.0	68.7	68.5	69.1	72.7	54.5	57.1	57.2
$44,158–$65,530	11.6	21.9	7.0	6.0	6.3	8.1	28.8	21.4	12.9
$54,428–$68,530	8.2	7.0	1.5	0.7	1.0	0.9	1.7	1.5	4.9
$63,315–$84,396	1.3	2.7	3.3	1.5	1.5	1.0	0.6	1.7	2.0
$76,642–$87,755	0.5	0.0	0.0	0.0	0.0	0.8	0.5	0.0	0.2
Other nurses									
Lecturer, higher education	0.5	0.7	0.6	0.7	0.8	0.6	0.9	0.9	0.7
Other	6.3	2.4	2.0	3.0	0.7	2.8	2.0	2.6	3.5
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Per cent of nurses									
$26,593–$30,355	16.8	21.2	16.8	19.2	19.9	13.0	11.0	14.1	18.3
$29,578–$45,277	54.1	44.0	68.5	68.3	69.1	72.1	54.2	55.7	57.0
$44,158–$65,530	11.8	21.9	7.2	6.4	6.9	8.5	29.2	23.2	13.1
$54,428–$68,530	8.7	6.9	1.5	0.7	1.1	0.9	1.6	1.6	5.1
$63,315–$84,396	1.3	2.7	3.3	1.6	1.5	1.0	0.6	1.9	2.1
$76,642–$87,755	0.5	0.0	0.0	0.0	0.0	0.8	0.6	0.0	0.2
Other nurses									
Lecturer, higher education	0.6	0.8	0.6	0.7	0.8	0.7	0.8	0.9	0.7
Other	6.2	2.5	2.0	3.1	0.6	3.0	2.0	2.6	3.5
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*

(a) Data on salary range are based on award rates of pay for nurses in the relative jurisdictions. With the introduction of Certified Agreements and Australian Workplace Agreements, determining the proportion of nurses in each salary range is not possible due to the unknown number of nurses subject to these agreements. Consequently, this table classifies nurses into groups based on the concordance in   Table G.1.

Source: AIHW.

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Table C.17: Employed registered and enrolled nurses: nursing role, geographic location of main job, type of nurse, 1999

Nursing role	Capital city	Other metropolitan centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area	Australia
				Enrolled nurses				
Clinical nurse[a]	21,631	3,590	3,988	4,185	7,533	572	937	42,436
Administrator	373	55	59	64	76	n.p.	15	643
Teacher	245	41	41	31	55	3	n.p.	418
Researcher	55	12	14	7	11	6	5	110
Other	1,130	83	122	187	222	47	21	1,811
Total	*23,434*	*3,780*	*4,224*	*4,474*	*7,898*	*629*	*979*	*45,418*
				Registered nurses				
Clinical nurse[a]	102,962	12,524	14,361	10,501	13,280	1,664	2,320	157,613
Administrator	7,799	1,013	911	826	1,026	117	164	11,856
Teacher	3,820	447	553	341	239	57	52	5,510
Researcher	1,371	101	67	39	25	n.p.	14	1,619
Other	1,830	94	165	160	211	67	51	2,578
Total	*117,782*	*14,179*	*16,059*	*11,865*	*14,782*	*1,908*	*2,601*	*179,177*
				Registered and enrolled nurses				
Clinical nurse[a]	124,593	16,114	18,350	14,685	20,813	2,236	3,257	200,049
Administrator	8,172	1,067	970	890	1,102	119	179	12,499
Teacher	4,065	488	594	372	295	60	54	5,928
Researcher	1,426	113	82	46	36	8	19	1,729
Other	2,960	177	287	346	434	114	72	4,389
Total	**141,216**	**17,959**	**20,283**	**16,339**	**22,680**	**2,537**	**3,581**	**224,594**

(a)   Includes nurse clinicians and clinical nurse managers.

Source: AIHW.

76

Table C.18: Employed registered and enrolled nurses: work setting, sector, geographic location of main job, 1999

Work setting	Capital city	Other metropolitan centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area	Australia
				Public sector				
Acute care hospital	68,505	8,464	10,002	8,302	12,677	1,616	2,249	111,815
Day procedure centre	761	99	113	77	54	8	4	1,116
Aged accommodation	733	114	128	99	184	13	9	1,279
Nursing home	8,109	1,534	1,502	1,544	3,094	89	98	15,970
Hospice	650	52	69	32	17	—	13	833
Community health service	6,761	964	981	1,294	2,115	197	555	12,867
Aboriginal health service	58	9	24	21	37	29	58	236
Mental health service	1,781	127	463	178	147	27	8	2,730
Development disability service	1,361	646	176	256	101	—	n.p.	2,542
Defence forces	346	34	46	8	32	n.p.	n.p.	470
School	366	26	46	30	46	25	11	548
Tertiary education institution	1,613	182	259	160	98	16	12	2,338
Corrective services	395	44	12	97	60	29	n.p.	639
Other	2,445	265	298	305	446	104	212	4,076
Total	*93,882*	*12,561*	*14,120*	*12,403*	*19,108*	*2,153*	*3,234*	*157,462*
				Private sector				
Acute care hospital	24,212	2,839	3,536	1,455	679	20	26	32,767
Day procedure centre	1,256	126	129	42	37	6	4	1,600
Aged accommodation	1,077	124	202	117	165	16	6	1,705
Nursing home	10,548	1,241	1,077	1,210	1,316	99	48	15,537
Hospice	221	5	14	16	7	—	—	262
Community health service	842	129	173	114	186	26	27	1,497
Aboriginal health service	17	—	7	8	n.p.	13	19	66
Mental health service	90	15	7	3	6	—	n.p.	122
Development disability service	180	10	8	20	12	—	—	230
School	163	15	28	7	17	3	4	239
Tertiary education institution	74	4	10	3	—	n.p.	—	92
Corrective services	59	4	n.p.	26	25	—	—	115
Doctors rooms/medical practice	3,947	485	605	573	684	65	58	6,416
Nursing in private practice	1,118	161	171	143	185	15	14	1,807
Employment agency	1,735	22	37	22	12	6	12	1,846
Mining, industry or commercial sector	607	95	46	61	93	74	65	1,042
Other	1,186	124	113	119	146	42	60	1,790
Total	*47,334*	*5,398*	*6,164*	*3,935*	*3,571*	*385*	*345*	*67,133*

(continued)

Table C.18 (continued): Employed registered and enrolled nurses: work setting, sector, geographic location of main job, 1999

Work setting	Capital city	Other metropolitan centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area	Australia
				All sectors				
Acute care/psychiatric hospital	92,717	11,303	13,538	9,757	13,356	1,636	2,275	144,582
Day procedure centre	2,017	225	243	119	90	14	8	2,716
Aged accommodation	1,810	238	330	216	348	28	15	2,985
Nursing home	18,656	2,775	2,579	2,753	4,410	188	147	31,508
Hospice	871	57	83	48	24	—	13	1,095
Community health service	7,604	1,093	1,154	1,407	2,301	223	582	14,364
Aboriginal health service	75	9	31	29	39	42	77	302
Mental health service	1,871	141	470	181	153	27	9	2,852
Development disability service	1,541	656	184	276	114	—	n.p.	2,773
Defence forces	346	34	46	8	32	n.p.	n.p.	470
School	529	41	74	37	63	28	15	787
Tertiary education institution	1,687	186	269	163	98	17	12	2,431
Corrective services	454	48	14	123	84	29	n.p.	754
Doctors rooms/medical practice	3,947	485	605	573	684	65	58	6,416
Nursing in private practice	1,118	161	171	143	185	15	14	1,807
Employment agency	1,735	22	37	22	12	6	12	1,846
Mining, industry or commercial sector	607	95	46	61	93	74	65	1,042
Other	3,630	390	411	424	592	147	272	5,866
Total	**141,216**	**17,959**	**20,284**	**16,338**	**22,679**	**2,538**	**3,579**	**224,594**

Source: AIHW.

Table C.19: Registered nurses employed as clinical nurses[a]: area of clinical nursing, geographic location of main job, 1999

Area of clinical nursing	Capital city	Other metropolitan centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area	Australia
Mixed medical and surgical	11,475	935	1,714	1,757	2,955	291	458	19,585
Medical	7,099	1,171	1,128	894	1,669	74	202	12,236
Surgical	9,780	1,292	1,334	641	281	48	19	13,395
Coronary care or surgery[b]	3,253	394	224	61	47	4	3	3,985
Geriatric/gerontology	12,180	1,476	1,543	1,433	2,607	152	125	19,517
Oncology[b]	2,513	261	167	51	30	—	—	3,022
Perioperative/operating theatre/recovery	8,696	1,078	1,283	814	478	62	29	12,440
Rehabilitation[b]	1,981	212	258	105	59	6	3	2,624
Renal[b]	1,177	170	169	86	30	6	4	1,643
Respiratory medicine/asthma[b]	540	64	19	6	4	—	n.p.	635
Critical care/intensive care[c]	7,232	893	743	450	92	47	18	9,474
Casualty accident/emergency	3,961	550	596	649	451	120	128	6,455
Midwifery	9,348	1,024	1,424	947	782	196	125	13,846
Mental health/psychiatric	6,930	846	1,271	497	335	42	38	9,958
Community nursing	3,759	443	550	625	1,271	112	345	7,104
Developmental disability	951	384	111	165	56	—	n.p.	1,668
Occupational health	450	64	33	44	43	34	47	714
Paediatric	2,857	248	383	243	71	85	35	3,922
Aboriginal health[b]	42	11	16	26	43	34	61	233
Child and family health	1,895	207	229	215	303	55	55	2,961
School children's health	446	30	54	41	53	21	15	660
No one principal area	1,288	129	198	201	650	98	247	2,811
Other	5,113	640	917	549	969	178	360	8,726
Total	**102,962**	**12,524**	**14,361**	**10,501**	**13,280**	**1,664**	**2,320**	**157,613**

(a) Includes nurse clinicians and clinical nurse managers.

(b) These categories were not available in the principal area of activity question in some states.

(c) Values for intensive care may be underestimated, especially in more rural and remote regions due to the amalgamation of intensive care units and coronary care units, due to the amount of resources required to maintain both units.

Source: AIHW.

Table C.20: Enrolled nurses employed as clinical nurses[a]: area of clinical nursing, geographic location of main job, 1999

Area of clinical nursing	Capital city	Other metropolitan centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area	Australia
Mixed medical and surgical	3,136	396	721	888	2,106	248	348	7,842
Medical	1,789	355	344	447	1,190	35	190	4,350
Surgical	1,518	267	279	239	122	24	5	2,454
Coronary care or surgery [b]	267	45	23	6	14	4	n.p.	362
Geriatric/gerontology	6,564	1,213	1,324	1,487	3,017	66	147	13,818
Oncology[b]	241	37	28	4	5	—	—	315
Perioperative/operating theatre/recovery	1,332	252	205	186	107	12	n.p.	2,096
Rehabilitation[b]	1,118	175	193	131	83	5	n.p.	1,708
Renal[b]	80	15	9	6	n.p.	—	n.p.	113
Respiratory medicine/asthma[b]	84	9	n.p.	—	—	—	n.p.	96
Critical care/intensive care[c]	124	17	14	12	n.p.	—	n.p.	171
Casualty accident/emergency	247	37	23	46	36	35	22	445
Midwifery	307	34	36	38	18	11	—	445
Mental health/psychiatric	1,416	192	322	201	78	3	n.p.	2,215
Community nursing	529	69	40	114	154	12	22	939
Developmental disability	364	161	46	57	13	—	—	641
Occupational health	51	n.p.	4	n.p.	8	5	—	72
Paediatric	433	46	61	47	7	38	16	647
Aboriginal health[b]	7	4	—	10	18	n.p.	16	57
Child and family health	98	9	7	15	4	—	n.p.	135
School children's health	40	—	n.p.	—	6	—	3	51
No one principal area	389	49	68	68	263	40	62	938
Other	1,496	207	240	180	280	32	90	2,525
Total	**21,631**	**3,590**	**3,988**	**4,185**	**7,533**	**572**	**937**	**42,436**

(a)   Includes nurse clinicians and clinical nurse managers.

(b)   These categories were not available in the principal area of activity question in some states.

(c)   Values for intensive care may be underestimated, especially in more rural and remote regions, due to the amalgamation of intensive care units and coronary care units, due to the amount of resources required to maintain both units.

Source: AIHW.

Table C.21: Registered and enrolled nurses employed as clinical nurses[a]: area of clinical nursing, geographic location of main job, 1999

Area of clinical nursing	Capital city	Other metropolitan centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area	Australia
Mixed medical and surgical	14,610	1,331	2,435	2,645	5,060	539	806	27,427
Medical	8,887	1,526	1,472	1,341	2,858	109	392	16,585
Surgical	11,298	1,560	1,613	880	403	72	24	15,849
Coronary care or surgery[b]	3,520	439	247	67	61	7	6	4,347
Geriatric/gerontology	18,744	2,689	2,867	2,920	5,623	219	272	33,335
Oncology[b]	2,754	298	194	56	36	—	—	3,337
Perioperative/operating theatre/recovery	10,028	1,330	1,488	999	585	74	30	14,535
Rehabilitation[b]	3,099	387	451	236	142	11	6	4,332
Renal[b]	1,256	184	178	92	33	6	6	1,756
Respiratory medicine/asthma[b]	624	73	21	6	4	—	3	731
Critical care/intensive care[c]	7,356	910	758	462	94	47	20	9,646
Casualty accident/emergency	4,208	586	618	696	487	154	150	6,900
Midwifery	9,656	1,058	1,459	985	801	207	125	14,291
Mental health/psychiatric	8,345	1,037	1,593	699	414	45	40	12,173
Community nursing	4,288	512	589	739	1,425	124	367	8,043
Developmental disability	1,315	545	157	223	69	—	n.p.	2,310
Occupational health	501	65	37	46	52	38	47	786
Paediatric	3,290	294	444	289	78	123	51	4,569
Aboriginal health[b]	49	15	16	36	61	36	76	290
Child and family health	1,993	217	236	230	307	55	57	3,095
School children's health	486	30	55	41	59	21	18	711
No one principal area	1,677	179	266	269	913	138	309	3,749
Other	6,609	847	1,157	729	1,249	211	450	11,251
Total	**124,593**	**16,114**	**18,350**	**14,685**	**20,813**	**2,236**	**3,257**	**200,049**

(a)   Includes nurse clinicians and clinical nurse managers.

(b)   These categories were not available in the principal area of activity question in some states.

(c)   Values for intensive care may be underestimated, especially in more rural and remote regions, due to the amalgamation of intensive care units and coronary care units, due to the amount of resources required to maintain both units.

Source: AIHW.

Table C.22: Employed registered and enrolled nurses: characteristics, geographical location of main job, states and territories, 1999

Characteristics	Capital city	Other metropolitan centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area	Australia
Enrolled nurses								
Average age	41.6	39.6	40.5	41.2	41.7	40.5	41.1	41.3
Average hours worked (per week)	29.4	29.1	28.8	28.6	27.5	30.5	29.2	28.9
Proportion male (%)	7.7	7.8	8.0	5.9	4.1	1.9	4.0	6.8
Proportion Australian citizens (%)	92.2	93.7	97.1	97.3	97.7	94.1	97.7	94.5
Nurses per 100,000 population	193	260	373	364	317	280	291	238
FTE nurses[a] per 100,000 population	152	203	291	283	237	227	225	186
FTE nurses[b] per 100,000 population	162	216	307	297	249	243	242	197
Registered nurses								
Average age	41.2	41.5	41.5	42.7	44.3	40.7	41.7	41.4
Average hours worked (per week)	30.8	31.1	30.8	29.6	28.4	32.6	32.0	30.6
Proportion male (%)	8.4	9.5	9.8	7.5	5.2	5.6	8.8	8.2
Proportion Australian citizens (%)	92.3	94.1	95.3	95.7	96.2	92.4	93.7	93.3
Nurses per 100,000 population	968	973	1,417	964	593	849	773	941
FTE nurses[a] per 100,000 population	797	808	1,170	771	455	730	647	770
FTE nurses[b] per 100,000 population	852	865	1,247	815	482	791	706	822
Registered and enrolled nurses								
Average age	41.3	41.2	41.3	42.3	43.5	40.7	41.5	41.6
Average hours worked (per week)	30.6	30.7	30.5	29.4	28.1	32.1	31.2	30.3
Proportion male (%)	8.2	9.1	9.4	7.0	4.8	4.6	7.5	7.9
Proportion Australian citizens (%)	92.3	94.0	95.7	96.1	96.7	92.9	94.9	93.6
Nurses per 100,000 population	1,160	1,233	1,789	1,328	910	1,129	1,063	1,179
FTE nurses[a] per 100,000 population	949	1,011	1,461	1,054	692	957	871	956
FTE nurses[b] per 100,000 population	1,013	1,081	1,553	1,112	731	1,034	949	1,019

(a) FTE(resources): Calculated on the basis that all nurses working 35 or more hours per week are counted as one full-time equivalent (FTE) and all working less than 35 hours per week are a portion of an FTE. Calculated by multiplying the average hours worked by the number of nurses and dividing by 35 (as the standard FTE hours).

(b) FTE(supply): Calculated on the basis that hours worked are divided by 35 for all nurses, i.e. a nurse working 70 hours per week equals 2 FTE, while one working 21 hours equals 0.6 FTE.

Source: AIHW.

Table C.23: Employed registered and enrolled nurses: total hours worked per week, geographic location of main job, type of nurse, 1999

Hours worked per week	Capital city	Other metropolitan centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area	Australia
				(per cent)				
				Enrolled nurses				
1–4	0.8	1.0	0.8	1.0	1.3	0.6	2.3	0.9
5–14	7.9	6.7	6.8	7.2	9.1	8.4	8.1	7.8
15–24	26.3	31.4	31.2	29.6	33.5	22.0	29.3	28.8
25–34	24.1	21.8	24.1	27.0	26.2	21.6	17.6	24.4
35–44	36.6	37.0	35.6	32.8	28.4	43.1	42.4	34.9
45–54	3.8	1.9	1.0	2.4	1.2	2.6	0.1	2.7
55 and over	0.6	0.3	0.5	0.1	0.2	1.7	0.2	0.4
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Average weekly hours	29.4	29.1	28.8	28.6	27.5	30.5	29.2	28.9
				Registered nurses				
1–4	0.6	0.4	0.6	0.9	1.3	0.7	1.5	0.7
5–14	6.1	4.5	4.6	6.1	7.7	5.7	5.8	6.0
15–24	23.6	26.0	26.3	28.2	33.3	17.4	19.3	25.0
25–34	20.0	18.8	20.5	22.9	21.1	12.1	14.9	20.0
35–44	46.9	48.2	46.4	40.5	35.4	61.4	54.8	45.9
45–54	2.3	1.8	1.3	1.2	1.0	2.3	3.3	2.0
55 and over	0.5	0.4	0.3	0.3	0.2	0.3	0.5	0.4
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Average weekly hours	30.8	31.1	30.8	29.6	28.4	32.6	32.0	30.6
				Registered and enrolled nurses				
1–4	0.7	0.5	0.6	0.9	1.3	0.7	1.7	0.8
5–14	6.4	4.9	5.1	6.4	8.2	6.4	6.4	6.3
15–24	24.0	27.1	27.3	28.6	33.4	18.6	22.0	25.8
25–34	20.7	19.4	21.3	24.0	22.9	14.4	15.6	20.9
35–44	45.2	45.9	44.1	38.4	32.9	56.9	51.4	43.7
45–54	2.5	1.8	1.3	1.5	1.1	2.4	2.4	2.1
55 and over	0.5	0.4	0.3	0.2	0.2	0.7	0.4	0.4
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Average weekly hours	30.6	30.7	30.5	29.4	28.1	32.1	31.2	30.3

Source: AIHW.

Table C.24: Hours worked by employed registered and enrolled nurses by geographic location of main job, 1993 and 1999

Hours worked per week	Capital city	Other metropolitan centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area	Australia
				(per cent)				
				1993				
1–4	0.5	0.5	0.6	0.8	1.2	1.4	1.0	0.6
5–14	5.8	5.5	5.3	6.3	7.7	6.4	7.8	6.0
15–24	23.3	26.5	26.9	29.1	32.9	21.1	23.5	25.3
25–34	14.8	12.3	13.1	15.2	15.3	13.4	10.7	14.4
35–44	49.6	50.2	49.7	43.7	38.3	50.5	48.8	48.0
45–54	2.5	1.8	1.3	1.4	1.1	2.3	2.4	2.1
55 and over	3.5	3.2	3.1	3.4	3.5	4.9	5.7	3.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Average weekly hours	32.7	32.4	32.3	31.2	30.1	33.7	33.3	32.3
				1999				
1–4	0.7	0.5	0.6	0.9	1.3	0.7	1.7	0.8
5–14	6.4	4.9	5.1	6.4	8.2	6.4	6.4	6.3
15–24	24.0	27.1	27.3	28.6	33.4	18.6	22.0	25.8
25–34	20.7	19.4	21.3	24.0	22.9	14.4	15.6	20.9
35–44	45.2	45.9	44.1	38.4	32.9	56.9	51.4	43.7
45–54	2.5	1.8	1.3	1.5	1.1	2.4	2.4	2.1
55 and over	0.5	0.4	0.3	0.2	0.2	0.7	0.4	0.4
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Average weekly hours	30.6	30.7	30.5	29.4	28.1	32.1	31.2	30.3

Source: AIHW.

Table C.25: Proportion of nurses working part time[a] and average hours worked per week, geographic location of main job, 1993 and 1999

	Capital city	Other metropolitan centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area	Australia
Proportion working part time (per cent)								
1993								
Enrolled	51.9	50.4	52.3	56.9	58.7	51.0	47.3	53.8
Registered	42.9	43.3	44.2	49.3	56.1	38.7	41.1	45.0
Total	**44.4**	**44.8**	**45.9**	**51.4**	**57.0**	**42.2**	**43.0**	**46.8**
1999								
Enrolled	59.1	60.9	62.9	64.7	70.2	52.6	57.2	61.9
Registered	50.3	49.6	52.0	58.1	63.4	35.9	41.4	51.7
Total	**51.7**	**52.0**	**54.3**	**59.9**	**65.8**	**40.1**	**45.7**	**53.8**
Average hours worked per week								
1993								
Enrolled	31.4	31.4	31.2	30.5	30.2	31.9	32.4	31.1
Registered	33.0	32.6	32.6	31.5	30.0	34.4	33.7	32.6
Total	**32.7**	**32.4**	**32.3**	**31.2**	**30.1**	**33.7**	**33.3**	**32.3**
1999								
Enrolled	29.4	29.1	28.8	28.6	27.5	30.5	29.2	28.9
Registered	30.8	31.1	30.8	29.6	28.4	32.6	32.0	30.6
Total	**30.6**	**30.7**	**30.5**	**29.4**	**28.1**	**32.1**	**31.2**	**30.3**

(a)   Working less than 35 hours per week.

Source: AIHW.

Table C.26: Proportion of nurses working part time[a] and average hours worked per week, states and territories, 1993 and 1999

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Proportion working part time									
1993									
Enrolled	43.1	61.6	47.8	57.5	65.8	62.8	56.7	41.5	53.8
Registered	40.7	50.8	42.4	47.1	47.9	56.4	49.0	24.3	45.0
Total	**41.1**	**53.6**	**43.5**	**49.5**	**52.3**	**57.5**	**50.1**	**26.8**	**46.8**
1999									
Enrolled	50.4	69.1	58.0	60.3	76.3	69.5	61.3	44.1	61.9
Registered	44.5	58.5	48.4	51.3	65.2	59.4	56.3	28.8	51.7
Total	**45.6**	**61.2**	**50.0**	**53.2**	**67.8**	**60.9**	**57.3**	**30.9**	**53.8**
Average hours worked per week									
1993									
Enrolled	33.3	29.5	32.1	30.7	28.0	29.2	34.3	33.3	31.1
Registered	33.0	31.7	33.2	33.0	31.6	30.4	33.4	37.0	32.6
Total	**33.0**	**31.2**	**33.0**	**32.4**	**30.7**	**30.2**	**33.5**	**36.5**	**32.2**
1999									
Enrolled	31.0	27.6	29.7	29.2	24.6	28.0	30.1	31.8	28.8
Registered	31.5	29.8	31.4	30.7	26.8	29.7	30.7	34.9	30.6
Total	**31.5**	**29.3**	**31.1**	**30.3**	**26.4**	**29.6**	**30.8**	**34.4**	**30.2**

(a)   Working less than 35 hours per week.

Source: AIHW.

Table C.27: Employed registered and enrolled nurses: nursing role, hours worked per week, 1999

Nursing role	Hours worked per week								Total number	Average hours worked
	1–4	5–14	15–24	25–34	35–44	45–54	55 and over	Total		
	(per cent)									
	Enrolled nurses									
Clinical nurse[a]	0.9	7.9	29.2	25.1	34.7	1.8	0.4	100.0	42,436	28.7
Administrator	0.8	2.8	11.5	9.2	39.8	34.0	1.9	100.0	643	35.2
Teacher	1.2	7.6	26.0	8.9	31.9	23.1	1.3	100.0	418	29.9
Researcher	3.0	1.7	30.5	2.4	25.2	33.4	3.9	100.0	110	32.7
Other	1.0	6.9	25.3	18.4	40.7	6.9	0.9	100.0	1,811	29.7
Total	*0.9*	*7.8*	*28.8*	*24.4*	*34.9*	*2.7*	*0.4*	*100.0*	*45,418*	*28.9*
	Registered nurses									
Clinical nurse[a]	0.6	6.2	26.6	21.0	43.3	1.9	0.4	100.0	157,613	30.1
Administrator	0.3	1.7	8.4	10.4	76.1	2.5	0.6	100.0	11,856	36.0
Teacher	2.3	6.2	16.5	14.2	56.2	3.4	1.1	100.0	5,510	32.6
Researcher	2.2	6.9	21.2	17.2	47.8	4.2	0.6	100.0	1,619	31.2
Other	2.0	8.7	22.6	20.1	42.4	3.3	0.8	100.0	2,578	30.1
Total	*0.7*	*6.0*	*25.0*	*20.0*	*45.9*	*2.0*	*0.4*	*100.0*	*179,177*	*30.6*
	Registered and enrolled nurses									
Clinical nurse[a]	0.7	6.6	27.2	21.9	41.4	1.9	0.4	100.0	200,049	29.9
Administrator	0.3	1.8	8.6	10.3	74.3	4.1	0.6	100.0	12,499	36.0
Teacher	2.2	6.3	17.2	13.8	54.5	4.8	1.1	100.0	5,928	32.5
Researcher	2.2	6.6	21.7	16.3	46.3	6.0	0.8	100.0	1,729	31.3
Other	1.6	8.0	23.7	19.4	41.7	4.8	0.8	100.0	4,389	30.0
Total	**0.8**	**6.3**	**25.8**	**20.9**	**43.7**	**2.1**	**0.4**	**100.0**	**224,594**	**30.3**

(a)   Includes clinicians and clinical nurse managers.

Source: AIHW.

Table C.28: Employed registered and enrolled nurses: hours worked per week, work setting of main job, and sector, 1999

Work setting of main job	1–4	5–14	15–24	25–34	35–44	45–54	55 and over	Total	Total number	Average hours
				(per cent)						
				Public sector						
Acute care hospital	0.5	4.4	24.3	18.8	49.5	2.1	0.4	100.0	111,815	31.5
Day procedure centre	1.3	7.4	28.2	23.8	37.9	1.2	0.2	100.0	1,116	29.0
Aged accommodation	0.1	9.6	28.2	26.6	34.3	1.1	0.1	100.0	1,279	28.4
Nursing home	0.7	7.5	31.2	29.3	29.4	1.5	0.3	100.0	15,970	28.1
Hospice	—	3.6	24.9	35.6	32.9	2.3	0.6	100.0	833	30.7
Community health service	1.2	6.1	23.7	14.6	52.3	1.6	0.3	100.0	12,867	31.1
Aboriginal health service	—	5.3	11.4	11.3	67.4	3.5	1.1	100.0	236	34.1
Mental health service	0.3	1.5	11.7	9.3	74.5	2.1	0.6	100.0	2,730	35.6
Development disability service	0.1	2.2	18.6	8.5	67.5	2.4	0.7	100.0	2,542	34.2
Defence forces	0.3	3.8	12.5	14.4	56.7	10.5	2.0	100.0	470	35.1
School	0.5	6.5	22.3	22.0	42.5	5.6	0.5	100.0	548	30.2
Tertiary education institution	2.1	7.8	15.2	12.6	55.9	4.5	2.0	100.0	2,338	32.3
Corrective services	1.3	3.0	15.2	11.5	63.7	4.2	1.1	100.0	639	34.6
Other	1.2	6.2	20.2	16.8	52.1	3.0	0.4	100.0	4,076	31.6
Total	*0.6*	*5.0*	*24.4*	*19.2*	*48.4*	*2.1*	*0.4*	*100.0*	*157,462*	*31.2*
				Private sector						
Acute care hospital	0.6	7.9	29.3	24.5	35.5	1.9	0.3	100.0	32,767	28.8
Day procedure centre	1.8	12.9	27.5	23.4	32.3	1.9	0.1	100.0	1,600	27.3
Aged accommodation	0.3	8.8	25.5	29.0	34.3	1.7	0.5	100.0	1,705	28.7
Nursing home	0.7	8.9	30.1	29.5	27.6	2.7	0.5	100.0	15,537	28.0
Hospice	—	8.0	31.8	33.6	25.3	0.7	0.6	100.0	262	27.6
Community health service	2.5	12.3	24.4	18.4	40.0	2.2	0.2	100.0	1,497	28.2
Aboriginal health service	—	13.4	18.1	20.8	47.7	—	—	100.0	66	30.2
Mental health service	1.0	4.0	17.7	32.7	37.9	6.7	—	100.0	122	31.7
Development disability service	1.1	4.1	23.4	17.5	45.4	7.8	0.7	100.0	230	31.5
School	1.2	10.7	22.1	17.1	45.3	2.9	0.8	100.0	239	29.3
Tertiary education institution	6.0	9.6	20.2	13.4	38.6	12.2	0.0	100.0	92	29.7
Corrective services	1.3	6.2	25.4	7.3	55.3	3.2	1.3	100.0	115	31.7
Doctors rooms/medical practice	2.7	15.4	33.7	22.8	23.5	1.6	0.2	100.0	6,416	24.7
Nursing in private practice	3.8	14.3	25.8	22.5	29.8	3.3	0.4	100.0	1,806	26.3
Employment agency	5.0	19.6	29.7	22.9	20.7	1.7	0.4	100.0	1,846	24.0
Mining, industry or commercial sector	2.2	5.6	16.1	15.7	54.3	5.9	0.1	100.0	1,042	32.5
Other	2.4	8.5	20.7	18.1	44.8	4.9	0.6	100.0	1,790	30.3
Total	*1.2*	*9.5*	*29.1*	*25.0*	*32.6*	*2.3*	*0.4*	*100.0*	*67,133*	*28.1*

(continued)

Table C.28 (continued): Employed registered and enrolled nurses: hours worked per week, work setting of main job, and sector, 1999

Work setting of main job	1–4	5–14	15–24	25–34	35–44	45–54	55 and over	Total	Total number	Average hours
					(per cent)					
					All sectors					
Acute care hospital	0.5	5.2	25.4	20.1	46.3	2.0	0.4	100.0	144,582	30.9
Day procedure centre	1.6	10.7	27.8	23.5	34.6	1.6	0.2	100.0	2,716	28.0
Aged accommodation	0.2	9.1	26.6	28.0	34.3	1.4	0.3	100.0	2,985	28.6
Nursing home	0.7	8.2	30.7	29.4	28.5	2.1	0.4	100.0	31,508	28.0
Hospice	—	4.7	26.6	35.1	31.1	1.9	0.6	100.0	1,095	29.9
Community health service	1.3	6.8	23.8	15.0	51.0	1.7	0.3	100.0	14,364	30.8
Aboriginal health service	—	7.1	12.8	13.4	63.1	2.8	0.9	100.0	302	33.4
Mental health service	0.3	1.6	11.9	10.3	72.9	2.3	0.6	100.0	2,852	35.4
Development disability service	0.2	2.3	19.0	9.2	65.7	2.8	0.7	100.0	2,773	34.0
Defence forces	0.3	3.8	12.5	14.4	56.7	10.5	2.0	100.0	470	35.1
School	0.7	7.8	22.3	20.5	43.3	4.8	0.6	100.0	787	29.9
Tertiary education institution	2.2	7.9	15.4	12.6	55.2	4.8	1.9	100.0	2,431	32.2
Corrective services	1.3	3.5	16.8	10.8	62.4	4.1	1.1	100.0	754	34.2
Doctors rooms/medical practice	2.7	15.4	33.7	22.8	23.5	1.6	0.2	100.0	6,416	24.7
Nursing in private practice	3.8	14.3	25.8	22.5	29.8	3.3	0.4	100.0	1,806	26.3
Employment agency	5.0	19.6	29.7	22.9	20.7	1.7	0.4	100.0	1,846	24.0
Mining, industry or commercial sector	2.2	5.6	16.1	15.7	54.3	5.9	0.1	100.0	1,042	32.5
Other	1.6	6.9	20.4	17.2	49.8	3.6	0.5	100.0	5,866	31.2
Total	**0.8**	**6.3**	**25.8**	**20.9**	**43.7**	**2.1**	**0.4**	**100.0**	**224,594**	**30.3**

Source: AIHW.

Table C.29: Employed registered nurses: average hours worked per week by work setting of main job, sector, states and territories, 1999

Work setting of main job	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Public sector									
Acute care hospital	32.7	30.9	32.6	32.0	28.1	30.5	31.9	36.3	31.8
Day procedure centre	30.3	29.3	29.4	28.3	24.7	27.9	30.0	37.8	29.4
Aged accommodation[a]	. .	30.1	28.9	28.8	26.4	28.6	21.3	—	29.1
Nursing home	29.2	27.7	30.1	28.3	25.2	26.6	25.6	30.8	28.5
Hospice	34.3	29.8	26.9	29.5	28.0	27.4	30.6	35.8	30.9
Community health service	32.7	28.7	33.3	31.7	26.5	29.8	32.8	35.6	31.3
Aboriginal health service[a]	. .	27.3	35.5	34.1	34.2	35.5	39.3	. .	34.0
Mental health service[a]	. .	36.6	36.5	35.7	33.1	35.1	35.7	. .	35.9
Development disability service	34.2	36.0	30.9	26.8	34.8	36.0	36.5	5.0	34.4
Defence forces[a]	35.1	31.1	36.8	29.5	32.8	. .	32.6	35.8	33.8
School	30.8	29.2	29.1	30.6	23.8	32.7	29.2	38.3	30.3
Tertiary education institution	32.1	33.3	33.4	32.2	28.6	32.6	34.4	30.9	32.4
Corrective services	34.9	34.1	36.3	34.1	19.0	36.8	11.0	32.5	34.9
Other	32.1	30.8	34.2	31.3	29.0	31.7	27.1	35.1	31.6
Total	*32.4*	*30.6*	*32.6*	*31.9*	*28.1*	*30.2*	*31.7*	*35.8*	*31.6*
Private sector									
Acute care hospital	30.0	28.2	30.0	28.9	25.0	29.0	30.3	28.8	28.9
Day procedure centre	28.3	27.2	28.2	25.4	22.0	27.5	24.8	40.0	27.2
Aged accommodation[a]	. .	30.4	28.8	30.2	27.7	28.4	31.4	31.5	29.0
Nursing home[a]	29.6	27.7	28.3	28.9	25.0	. .	30.0	30.0	28.3
Hospice	25.6	27.8	28.8	28.2	26.2	32.2	20.0	—	27.7
Community health service[a]	25.9	29.9	29.5	29.6	22.0	27.8	31.3	. .	28.5
Aboriginal health service[a]	. .	—	25.3	37.4	30.1	24.0	0.0	. .	32.1
Mental health service[a]	. .	32.7	30.9	31.1	38.7	34.1	0.0	. .	32.4
Development disability service	29.2	33.5	30.0	28.5	32.6	33.5	34.7	—	31.4
School[a]	29.5	28.1	31.4	25.6	27.1	. .	31.0	38.7	29.5
Tertiary education institution[a]	27.8	31.9	32.3	29.6	19.0	. .	—	46.0	30.1
Corrective services[a]	31.2	33.0	37.2	40.0	27.9	—	—	. .	31.8
Doctors rooms/medical practice	25.0	24.2	25.3	23.8	20.2	22.0	23.8	26.6	24.2
Nursing in private practice	25.2	27.4	26.8	29.0	23.1	26.6	24.2	34.0	26.1
Employment agency	. .	26.1	27.3	26.9	21.1	29.9	14.3	20.0	25.1
Mining, industry or commercial sector	32.0	34.4	30.3	35.2	30.7	35.2	39.0	32.5	32.5
Other	29.9	30.1	31.9	30.3	30.4	—	32.0	34.6	30.4
Total	*29.0*	*27.9*	*29.1*	*28.6*	*24.6*	*28.4*	*28.9*	*30.0*	*28.3*

(continued)

Table C.29 (continued): Employed registered nurses: average hours worked per week by work setting of main job, sector, states and territories, 1999

Work setting of main job	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				All sectors					
Acute care hospital	32.2	30.2	31.9	31.2	27.4	30.1	31.5	35.4	31.1
Day procedure centre	29.2	28.1	28.5	26.3	23.0	27.8	25.9	37.9	28.1
Aged accommodation[a]	. .	30.2	28.8	29.8	27.2	28.5	29.5	31.5	29.1
Nursing home	29.4	27.7	29.0	28.8	25.1	26.6	28.4	30.3	28.4
Hospice	33.1	29.6	28.2	28.8	27.2	28.6	30.0	35.8	30.0
Community health service	32.3	28.8	32.1	31.3	26.3	29.5	32.7	35.6	31.0
Aboriginal health service[a]	. .	27.3	35.0	35.1	32.8	31.7	39.3	. .	33.7
Mental health service[a]	. .	36.5	36.2	35.6	33.2	35.0	35.7	. .	35.8
Development disability service	34.0	35.8	30.7	27.5	33.9	35.2	35.7	5.0	34.1
Defence forces[a]	35.1	31.1	36.8	29.5	32.8	. .	32.6	35.8	33.8
School	30.4	29.0	30.2	29.2	26.4	32.7	29.7	38.4	30.1
Tertiary education institution	31.9	33.3	33.3	32.0	28.5	32.6	34.4	31.6	32.3
Corrective services	34.7	33.6	36.4	34.2	27.6	36.8	11.0	32.5	34.4
Doctors rooms/medical practice	25.0	24.2	25.3	23.8	20.2	22.0	23.8	26.6	24.2
Nursing in private practice	25.2	27.4	26.8	29.0	23.1	26.6	24.2	34.0	26.1
Employment agency[a]	. .	26.1	27.3	26.9	21.1	29.9	14.3	20.0	25.1
Mining, industry or commercial sector	32.0	34.4	30.3	35.2	30.7	35.2	39.0	32.5	32.5
Other	31.5	30.6	32.5	30.9	29.4	31.7	29.1	35.0	31.2
Total	**31.6**	**29.8**	**31.3**	**30.7**	**26.8**	**29.8**	**30.9**	**34.9**	**30.6**

(a)   These categories were not available in the work setting question of the survey for certain states.

Source: AIHW.

Table C.30: Employed enrolled nurses: average hours worked per week by work setting of main job, sector, states and territories, 1999

Work setting of main job	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				Public sector					
Acute care hospital	32.1	29.0	30.5	29.8	25.5	30.9	32.0	34.5	30.1
Day procedure centre	27.1	26.6	29.2	28.4	22.9	25.0	—	39.0	27.2
Aged accommodation[a]	. .	27.0	28.8	29.7	24.4	27.4	23.2	—	27.4
Nursing home	29.4	26.4	30.4	28.5	23.9	25.7	29.7	31.7	27.5
Hospice	32.3	30.2	28.0	23.2	17.3	31.8	28.3	—	30.0
Community health service	29.9	26.8	28.0	27.9	26.1	31.6	32.4	27.0	28.5
Aboriginal health service[a]	. .	35.0	34.2	34.2	—	35.8	—	. .	34.6
Mental health service[a]	. .	34.1	33.9	35.3	33.3	33.0	39.3	. .	34.1
Development disability service	33.7	36.1	32.1	35.9	27.6	30.8	—	—	33.6
Defence forces[a]	39.4	33.7	36.0	44.3	37.0	. .	38.0	39.6	36.9
School	31.8	29.9	29.2	25.6	26.0	—	—	15.0	29.3
Tertiary education institution	26.4	28.9	31.1	34.0	20.0	—	18.0	—	29.2
Corrective services	29.3	27.5	—	8.0	—	—	—	—	27.8
Other	31.1	32.7	37.3	32.6	30.1	27.7	40.0	29.9	31.8
Total	*31.5*	*28.2*	*30.6*	*29.8*	*25.4*	*29.0*	*31.2*	*33.7*	*29.6*
				Private sector					
Acute care hospital	29.2	27.1	28.3	30.0	23.6	25.4	31.2	31.3	28.0
Day procedure centre	28.1	28.0	29.4	28.8	20.9	25.0	21.0	34.3	28.1
Aged accommodation[a]	. .	28.0	28.0	29.7	23.8	27.1	27.7	20.0	27.7
Nursing home[a]	29.5	26.5	28.3	27.5	24.3	. .	27.6	26.8	27.2
Hospice	26.7	25.0	30.8	27.5	24.2	—	—	—	27.0
Community health service[a]	27.5	19.1	26.4	25.6	14.5	19.3	—	. .	25.4
Aboriginal health service[a]	. .	—	30.0	29.0	—	15.5	—	. .	21.4
Mental health service[a]	. .	34.8	31.7	21.3	—	27.8	—	. .	28.4
Development disability service	30.5	27.0	30.3	33.6	—	32.3	—	—	31.5
School[a]	35.6	22.4	26.6	22.5	38.0	. .	—	—	27.7
Tertiary education institution[a]	10.0	27.0	30.5	—	—	. .	—	—	25.6
Corrective services[a]	40.0	26.5	—	—	—	—	—	. .	31.0
Doctors rooms/medical practice	29.2	26.7	26.2	25.2	23.4	22.2	27.5	30.2	26.4
Nursing in private practice	26.8	27.3	29.7	26.8	18.8	34.0	—	20.0	27.1
Employment agency[a]	. .	23.9	23.1	21.6	16.3	24.7	4.0	27.0	21.2
Mining, industry or commercial sector	25.6	33.4	34.6	33.0	38.0	15.0	—	—	32.0
Other	29.6	30.1	30.8	29.8	15.0	28.4	30.0	22.0	29.8
Total	*29.2*	*26.8*	*28.1*	*27.9*	*22.9*	*25.1*	*28.5*	*28.5*	*27.3*

(continued)

Table C.30 (continued): Employed enrolled nurses: average hours worked per week by work setting of main job, sector, states and territories, 1999

Work setting of main job	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				All sectors					
Acute care hospital	31.6	28.7	30.0	29.8	25.3	29.5	31.7	34.1	29.7
Day procedure centre	27.6	27.4	29.3	28.7	21.7	25.0	21.0	36.2	27.7
Aged accommodation[a]	. .	27.3	28.3	29.7	24.1	27.2	24.7	20.0	27.5
Nursing home	29.5	26.4	29.4	27.8	24.1	25.7	28.3	28.7	27.4
Hospice	31.9	29.9	28.9	25.8	21.9	31.8	28.3	—	29.4
Community health service	29.7	26.4	27.6	27.4	25.8	30.2	32.4	27.0	28.1
Aboriginal health service[a]	. .	35.0	33.5	33.5	—	25.6	—	. .	31.7
Mental health service[a]	. .	34.1	33.8	33.9	33.3	32.1	39.3	. .	33.8
Development disability service	33.6	35.2	31.8	34.8	27.6	31.2	—	—	33.5
Defence forces[a]	39.4	33.7	36.0	44.3	37.0	. .	38.0	39.6	36.9
School	32.5	28.7	28.0	24.7	34.0	—	—	15.0	28.9
Tertiary education institution	24.1	28.7	31.0	34.0	20.0	—	18.0	0.0	28.7
Corrective services	30.0	27.3	—	8.0	—	—	—	—	28.2
Doctors rooms/medical practice	29.2	26.7	26.2	25.2	23.4	22.2	27.5	30.2	26.4
Nursing in private practice	26.8	27.3	29.7	26.8	18.8	34.0	—	20.0	27.1
Employment agency[a]	. .	23.9	23.1	21.6	16.3	24.7	4.0	27.0	21.2
Mining, industry or commercial sector	25.6	33.4	34.6	33.0	38.0	15.0	—	—	32.0
Other	30.6	31.7	32.1	31.4	28.3	27.8	35.0	29.0	31.0
Total	**31.0**	**27.7**	**29.8**	**29.2**	**24.7**	**28.0**	**30.2**	**32.1**	**28.9**

(a)   These categories were not available in the work setting question of the survey for certain states.

Source: AIHW.

Table C.31: Employed registered and enrolled nurses: average hours worked per week by work setting of main job, sector, states and territories, 1999

Work setting of main job	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				Public sector					
Acute care hospital	32.6	30.6	32.3	31.5	27.6	30.6	31.9	36.0	31.5
Day procedure centre	29.7	28.8	29.3	28.3	24.4	27.8	30.0	37.9	29.0
Aged accommodation[a]	. .	28.6	28.9	29.1	25.8	28.3	22.6	—	28.4
Nursing home	29.3	26.9	30.2	28.4	24.7	26.4	26.6	31.1	28.1
Hospice	33.7	29.9	27.3	28.5	27.1	28.2	30.2	35.8	30.7
Community health service	32.5	28.6	32.9	31.2	26.4	30.0	32.7	35.4	31.1
Aboriginal health service[a]	. .	28.6	35.4	34.1	34.2	35.6	39.3	. .	34.1
Mental health service[a]	. .	36.1	36.1	35.6	33.1	34.7	36.2	. .	35.6
Development disability service	34.1	36.0	31.4	29.9	34.4	34.2	36.5	5.0	34.2
Defence forces[a]	37.0	32.1	36.5	34.4	35.3	. .	33.1	38.5	35.1
School	30.9	29.3	29.1	29.7	24.2	32.7	29.2	37.3	30.2
Tertiary education institution	32.0	33.1	33.3	32.3	28.5	32.6	33.2	30.9	32.3
Corrective services	34.6	33.2	36.3	33.6	19.0	36.8	11.0	32.5	34.6
Other	31.9	31.2	34.4	31.5	29.1	31.4	27.9	34.7	31.6
Total	*32.3*	*30.1*	*32.2*	*31.4*	*27.5*	*30.1*	*31.7*	*35.5*	*31.2*
				Private sector					
Acute care hospital	29.9	28.1	29.8	29.0	24.8	28.7	30.4	29.1	28.8
Day procedure centre	28.3	27.3	28.4	26.4	21.8	27.3	24.4	35.8	27.3
Aged accommodation[a]	. .	29.6	28.6	30.1	26.9	28.1	30.7	27.7	28.7
Nursing home[a]	29.6	27.1	28.3	28.4	24.9	. .	29.3	28.7	28.0
Hospice	25.7	27.3	29.1	28.0	25.8	32.2	20.0	—	27.6
Community health service[a]	26.1	29.0	29.3	28.8	21.4	27.1	31.3	. .	28.2
Aboriginal health service[a]	. .	—	26.5	36.5	30.1	20.6	—	. .	30.2
Mental health service[a]	. .	32.9	31.1	27.5	38.7	32.4	—	. .	31.7
Development disability service	29.5	33.0	30.1	30.6	32.6	33.2	34.7	—	31.5
School[a]	30.1	27.3	31.0	25.0	28.5	. .	31.0	38.7	29.3
Tertiary education institution[a]	27.0	31.0	32.1	29.6	19.0	. .	—	46.0	29.7
Corrective services[a]	31.8	32.6	37.2	40.0	27.9	—	—	. .	31.7
Doctors rooms/medical practice	25.5	25.0	25.4	24.1	20.9	22.1	24.0	28.2	24.7
Nursing in private practice	25.5	27.4	27.3	28.4	22.6	27.7	24.2	29.3	26.3
Employment agency[a]	. .	25.5	26.7	25.6	19.7	28.3	11.8	22.3	24.0
Mining, industry or commercial sector	31.7	34.3	30.7	35.0	30.9	33.9	39.0	32.5	32.5
Other	29.8	30.1	31.7	30.2	30.0	28.4	31.8	34.0	30.3
Total	*29.0*	*27.7*	*28.9*	*28.5*	*24.3*	*27.9*	*28.8*	*29.6*	*28.1*

(continued)

Table C.31 (continued): Employed registered and enrolled nurses: average hours worked per week by work setting of main job, sector, states and territories, 1999

Work setting of main job	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				All sectors					
Acute care hospital	32.1	30.0	31.6	30.9	27.0	30.1	31.5	35.2	30.9
Day procedure centre	28.9	28.0	28.6	27.0	22.8	27.6	25.4	37.5	28.0
Aged accommodation[(a)]	. .	29.0	28.7	29.8	26.5	28.1	27.8	27.7	28.6
Nursing home	29.4	27.0	29.1	28.4	24.8	26.4	28.4	29.6	28.0
Hospice	32.8	29.7	28.3	28.2	26.5	29.1	29.8	35.8	29.9
Community health service	32.1	28.6	31.7	30.7	26.2	29.6	32.7	35.4	30.8
Aboriginal health service[(a)]	. .	28.6	34.9	34.7	32.8	29.8	39.3	. .	33.4
Mental health service[(a)]	. .	36.0	35.8	35.3	33.2	34.5	36.2	. .	35.4
Development disability service	33.9	35.8	31.2	30.2	33.7	33.9	35.7	5.0	34.0
Defence forces[(a)]	37.0	32.1	36.5	34.4	35.3	. .	33.1	38.5	35.1
School	30.7	28.9	30.0	28.4	27.5	32.7	29.7	37.4	29.9
Tertiary education institution	31.8	33.0	33.2	32.1	28.4	32.6	33.2	31.6	32.2
Corrective services	34.4	33.0	36.4	33.8	27.6	36.8	11.0	32.5	34.2
Doctors rooms/medical practice	25.5	25.0	25.4	24.1	20.9	22.1	24.0	28.2	24.7
Nursing in private practice	25.5	27.4	27.3	28.4	22.6	27.7	24.2	29.3	26.3
Employment agency[(a)]	. .	25.5	26.7	25.6	19.7	28.3	11.8	22.3	24.0
Mining, industry or commercial sector	31.7	34.3	30.7	35.0	30.9	33.9	39.0	32.5	32.5
Other	31.2	30.9	32.5	31.0	29.3	31.3	29.5	34.6	31.2
Total	**31.5**	**29.3**	**31.1**	**30.4**	**26.4**	**29.6**	**30.8**	**34.5**	**30.3**

(a)   These categories were not available in the work setting question of the survey for certain states.

Source: AIHW.

Table C.32: Registered nurses employed as clinical nurses[a]: hours worked per week, area of clinical nursing, 1999

Area of clinical nursing	Hours worked per week							Total	Total number	Average hours
	1–4	5–14	15–24	25–34	35–44	45–54	55 and over			
	Per cent									
Mixed medical and surgical	0.9	8.6	30.6	23.8	34.4	1.4	0.3	100.0	19,585	28.8
Medical	0.5	4.9	26.1	19.8	46.7	1.6	0.4	100.0	12,236	31.0
Surgical	0.4	4.5	24.6	19.4	49.2	1.7	0.3	100.0	13,395	31.4
Coronary care or surgery	0.3	4.4	22.6	20.9	47.8	3.2	0.7	100.0	3,985	31.8
Geriatric/gerontology	0.7	8.3	33.8	28.8	26.3	1.7	0.4	100.0	19,517	28.6
Oncology	0.0	2.9	18.5	20.9	55.9	1.6	0.2	100.0	3,022	32.9
Perioperative/operating theatre/recovery	0.6	5.7	22.4	19.5	49.1	2.4	0.3	100.0	12,440	31.6
Rehabilitation	0.2	4.4	24.8	24.8	43.5	1.8	0.4	100.0	2,624	31.4
Renal	0.3	3.8	23.6	17.7	52.0	2.3	0.2	100.0	1,643	32.3
Respiratory medicine/asthma	0.5	2.5	19.9	16.1	60.0	1.0	0.0	100.0	635	32.8
Critical care/intensive care	0.3	4.9	21.7	21.3	48.2	3.0	0.7	100.0	9,474	32.0
Casualty accident/emergency	0.3	4.4	23.4	21.5	47.8	2.1	0.6	100.0	6,455	31.6
Midwifery	0.9	7.2	35.1	22.7	32.8	1.1	0.3	100.0	13,846	28.2
Mental health/psychiatric	0.4	2.3	15.0	11.9	66.4	3.2	0.8	100.0	9,958	34.9
Community nursing	1.1	8.6	27.7	16.0	44.9	1.5	0.2	100.0	7,104	29.9
Developmental disability	0.2	3.1	22.3	10.4	60.7	2.5	0.8	100.0	1,668	33.9
Occupational health	1.4	5.6	18.1	17.2	52.8	4.9	—	100.0	714	32.8
Paediatric	0.5	5.7	27.3	19.0	46.5	0.8	0.1	100.0	3,922	30.4
Aboriginal health	—	3.0	10.8	16.8	65.3	3.0	1.0	100.0	233	35.0
Child and family health	1.6	8.4	27.2	17.4	44.4	0.7	0.3	100.0	2,961	29.4
School children's health	0.4	6.3	22.5	15.5	51.3	3.8	0.2	100.0	660	30.9
No one principal area	1.1	9.9	28.3	21.7	36.7	1.8	0.5	100.0	2,811	30.4
Other	1.1	7.3	25.5	19.5	44.4	1.9	0.3	100.0	8,726	30.9
Total	**0.6**	**6.2**	**26.6**	**21.0**	**43.3**	**1.9**	**0.4**	**100.0**	**157,613**	**30.6**

(a)   Includes nurse clinicians and clinical nurse managers.

Source: AIHW.

Table C.33: Enrolled nurses employed as clinical nurses[a]: hours worked per week, area of clinical nursing, 1999

Area of clinical nursing	Hours worked per week							Total	Total number	Average hours
	1–4	5–14	15–24	25–34	35–44	45–54	55 and over			
	Per cent									
Mixed medical and surgical	1.4	9.8	33.0	23.2	30.8	1.5	0.4	100.0	7,842	27.6
Medical	0.8	6.3	27.8	22.3	40.8	1.7	0.3	100.0	4,350	29.9
Surgical	0.3	4.4	29.0	20.6	43.4	1.8	0.5	100.0	2,454	30.8
Coronary care or surgery	—	7.6	26.2	17.1	44.6	3.4	1.2	100.0	362	31.2
Geriatric/gerontology	1.0	9.5	30.7	32.8	24.1	1.5	0.3	100.0	13,818	27.3
Oncology	0.4	5.2	33.2	19.3	39.9	1.9	—	100.0	315	29.7
Perioperative/operating theatre/recovery	0.9	5.6	27.7	18.1	46.1	1.3	0.3	100.0	2,096	31.2
Rehabilitation	—	3.9	24.2	25.1	43.8	2.7	0.3	100.0	1,708	31.5
Renal	—	2.8	24.4	14.7	56.4	1.7	—	100.0	113	32.1
Respiratory medicine/asthma	—	5.8	24.8	13.5	53.9	1.9	—	100.0	96	32.7
Critical care/intensive care	—	4.7	26.2	24.1	41.4	1.0	2.7	100.0	171	30.8
Casualty accident/emergency	—	6.2	29.6	21.2	40.5	2.4	—	100.0	445	30.2
Midwifery	0.4	7.7	36.6	22.6	31.0	1.1	0.8	100.0	445	27.9
Mental health/psychiatric	0.3	4.0	17.2	15.2	59.0	3.7	0.6	100.0	2,215	33.5
Community nursing	3.0	9.9	25.1	24.9	36.1	1.0	—	100.0	939	27.8
Developmental disability	0.5	5.5	23.2	11.7	56.8	1.7	0.6	100.0	641	32.4
Occupational health	—	4.5	18.1	15.7	61.7	—	—	100.0	72	32.5
Paediatric	0.5	7.8	31.2	20.3	38.9	1.1	0.2	100.0	647	29.0
Aboriginal health	4.0	—	6.9	15.4	70.8	2.9	—	100.0	57	36.0
Child and family health	2.6	16.0	31.5	19.5	28.6	1.8	—	100.0	135	26.4
School children's health	4.7	—	35.2	24.2	35.9	—	—	100.0	51	30.2
No one principal area	2.2	12.4	33.3	22.8	26.8	2.2	0.4	100.0	938	26.8
Other	0.6	7.8	28.0	22.8	38.2	2.3	0.4	100.0	2,525	30.1
Total	**0.9**	**7.9**	**29.2**	**25.1**	**34.7**	**1.8**	**0.4**	**100.0**	**42,436**	**28.8**

(a)   Includes nurse clinicians and clinical nurse managers.

Source: AIHW.

Table C.34: Registered and enrolled nurses employed as clinical nurses[a]: area of clinical nursing, distribution of hours worked per week, 1999

Clinical area of nursing	Hours worked per week								Total number	Average hours
	1–4	5–14	15–24	25–34	35–44	45–54	55 and over	Total		
	Per cent									
Mixed medical and surgical	1.0	8.9	31.3	23.6	33.4	1.4	0.4	100.0	27,427	28.5
Medical	0.6	5.3	26.6	20.5	45.2	1.6	0.3	100.0	16,585	30.8
Surgical	0.4	4.5	25.3	19.6	48.3	1.7	0.3	100.0	15,849	31.3
Coronary care or surgery	0.3	4.7	22.9	20.5	47.6	3.2	0.8	100.0	4,347	31.8
Geriatric/gerontology	0.8	8.8	32.5	30.5	25.4	1.7	0.3	100.0	33,335	28.1
Oncology	0.1	3.1	19.9	20.8	54.4	1.6	0.2	100.0	3,337	32.6
Perioperative/operating theatre/recovery	0.6	5.7	23.2	19.3	48.7	2.2	0.3	100.0	14,535	31.5
Rehabilitation	0.1	4.2	24.6	24.9	43.6	2.2	0.4	100.0	4,332	31.4
Renal	0.3	3.7	23.6	17.5	52.3	2.3	0.2	100.0	1,756	32.3
Respiratory medicine/asthma	0.4	3.0	20.5	15.8	59.2	1.1	—	100.0	731	32.8
Critical care/intensive care	0.3	4.9	21.8	21.3	48.1	3.0	0.7	100.0	9,646	32.0
Casualty accident/emergency	0.2	4.5	23.8	21.4	47.3	2.1	0.6	100.0	6,900	31.6
Midwifery	0.9	7.2	35.2	22.7	32.7	1.1	0.3	100.0	14,291	28.2
Mental health/psychiatric	0.4	2.6	15.4	12.5	65.1	3.3	0.8	100.0	12,173	34.7
Community nursing	1.4	8.8	27.4	17.0	43.9	1.4	0.2	100.0	8,043	29.7
Developmental disability	0.3	3.8	22.5	10.7	59.6	2.3	0.7	100.0	2,310	33.6
Occupational health	1.3	5.5	18.1	17.0	53.6	4.5	—	100.0	786	32.7
Paediatric	0.5	6.0	27.8	19.2	45.4	0.9	0.1	100.0	4,569	30.2
Aboriginal health	0.8	2.4	10.0	16.6	66.4	3.0	0.8	100.0	290	35.1
Child and family health	1.6	8.8	27.4	17.5	43.7	0.8	0.3	100.0	3,095	29.3
School children's health	0.7	5.8	23.5	16.1	50.2	3.5	0.2	100.0	711	30.8
No one principal area	1.3	10.5	29.6	22.0	34.2	1.9	0.5	100.0	3,749	29.8
Other	1.0	7.4	26.0	20.2	43.0	2.0	0.3	100.0	11,251	30.7
Total	**0.7**	**6.6**	**27.2**	**21.9**	**41.4**	**1.9**	**0.4**	**100.0**	**200,049**	**30.2**

(a)   Includes nurse clinicians and clinical nurse managers.

Source: AIHW.

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Table C.35: Employed registered nurses: characteristics, Australia, 1993 to 1999

Characteristics	1993	1994	1995	1996	1997	1999	1993–99
							Percentage change
Sex							
Males	12,166[a]	12,924[a]	13,123	13,642	14,081	14,760	21.3
Females	150,490[a]	158,020[a]	158,651	158,043	161,856	164,417	9.3
Persons	164,252	172,434	171,774	171,684	175,937	179,177	9.1
Average age	40.0	39.6	39.6	40.1	40.5	41.4	. .
Average hours worked (per week)	32.6	32.5	32.7	33.2	31.8	30.6	−6.1
Geographic location							
Capital city	105,439	110,131	111,488	114,236	116,052	117,782	11.7
Other metropolitan centre	13,321	13,966	12,810	11,503	11,930	14,179	6.4
Large rural centre	15,801	16,830	15,783	14,417	14,912	16,060	1.6
Small rural centre	11,019	11,719	12,001	11,534	12,220	11,864	7.7
Other rural area	14,713	15,738	15,422	15,277	16,030	14,781	0.5
Remote centre	1,592	1,648	1,642	1,887	1,936	1,909	19.9
Other remote area	2,367	2,403	2,538	2,831	2,857	2,601	9.9
Nursing role							
Clinical nurse[b]	147,238	155,752	151,485	154,210	154,388	157,613	7.0
Administrator	8,360	8,359	9,735	8,915	11,339	11,856	41.8
Teacher/educator	4,174	4,309	4,298	3,553	4,797	5,510	32.0
Researcher	626	613	849	700	1,129	1,619	158.6
Other	3,854	3,402	5,408	4,306	4,283	2,578	−33.1
Work setting of main job							
Public sector							
Acute/psychiatric hospital	81,155	85,458	85,009	84,852	86,850	91,647	12.9
Nursing home[c]	10,706	10,084	8,524	9,182	10,060	9,735	−9.1
Community	7,203	8,760	9,325	9,557	11,051	11,699	62.4
Other	17,011	17,158	16,135	15,907	13,753	12,670	−25.5
Total	*116,077*	*121,461*	*118,993*	*119,498*	*121,714*	*125,751*	*8.3*
Private sector							
Acute/psychiatric hospital	21,923	23,313	24,398	24,936	27,384	28,381	29.5
Nursing home[c]	12,500	13,177	13,711	12,688	12,761	11,501	−8.0
Private medical rooms	3,901	4,995	5,236	5,273	5,372	4,952	26.9
Other	9,852	9,488	9,436	9,290	8,706	8,592	−12.8
Total	*48,175*	*50,973*	*52,781*	*52,187*	*54,223*	*53,426*	*10.9*
Area of clinical nursing							
Medical/surgical	46,986	51,731	50,733	49,526	46,828	45,216	−3.8
Operating theatres[d]	9,491	10,538	10,652	11,222	11,795	12,440	31.1
Midwifery/obstetrics/gynaecology	13,049	14,095	14,838	14,067	13,675	13,846	6.1
Psychiatric/ mental health	9,066	9,408	9,428	9,415	10,112	9,958	9.8
Gerontology/geriatric	22,259	22,663	22,129	22,111	20,661	19,517	−12.3
Other	46,387	47,317	43,705	47,869	51,317	56,637	22.1
Nurses per 100,000 population	930.3	966.8	951.6	926.4	949.8	940.9	1.1
Total	**164,252**	**172,434**	**171,774**	**171,684**	**175,937**	**179,177**	**9.1**

(a)   Does not include Northern Territory.

(b)   Includes clinicians and clinical nurse managers.

(c)   Includes aged accommodation.

(d)   Includes perioperative/operating theatre/recovery nursing.

Table C.36: Employed enrolled nurses: characteristics, Australia, 1993 to 1999

Characteristics	1993	1994	1995	1996	1997	1999	1993–99
							Percentage change
Sex							
Males	2,986[a]	3,242[a]	2,973	2,852	2,922	3,075	3.0
Females	49,209[a]	49,092[a]	45,919	43,636	43,352	42,342	−14.0
Persons	52,444	52,676	48,892	46,488	46,274	45,418	−13.4
Average age	37.6	37.3	37.9	38.7	39.6	41.3	. .
Average hours worked (per week)	31.1	30.9	31.1	31.6	29.9	28.9	−7.1
Geographic location							
Capital city	26,054	26,317	24,543	23,548	23,311	23,434	−10.1
Other metropolitan centre	4,341	4,495	3,869	3,328	3,455	3,780	−12.9
Large rural centre	5,117	5,473	4,711	4,260	4,265	4,225	−17.4
Small rural centre	5,333	5,118	5,148	4,748	4,784	4,474	−16.1
Other rural area	9,517	9,456	8,768	8,702	8,600	7,898	−17.0
Remote centre	801	658	721	776	752	629	−21.5
Other remote area	1,283	1,159	1,132	1,125	1,107	978	−23.8
Nursing role							
Clinical nurse[b]	48,499	48,997	44,207	43,248	42,823	42,436	−12.5
Administrator	178	175	291	244	601	643	261.3
Teacher/educator	449	408	419	243	361	418	−7.0
Researcher	11	14	35	19	44	110	900.1
Other	3,307	3,083	3,939	2,734	2,445	1,811	−45.2
Work setting of main job							
Public sector							
Acute/psychiatric hospital	18,157	18,780	18,924	18,479	19,228	20,167	11.1
Nursing home[c]	11,503	11,035	8,455	8,394	8,457	7,515	−34.7
Community	728	835	881	868	1,002	1,169	60.6
Other	5,402	5,862	4,565	4,003	3,416	2,859	−47.1
Total	*35,790*	*36,512*	*32,825*	*31,744*	*32,103*	*31,710*	*−11.4*
Private sector							
Acute/psychiatric hospital	4,390	4,223	4,098	3,793	4,218	4,386	−0.1
Nursing home[c]	8,060	7,816	7,861	7,059	6,374	5,742	−28.8
Private medical rooms	1,042	1,347	1,429	1,447	1,443	1,464	40.5
Other	3,162	2,778	2,679	2,445	2,136	2,115	−33.1
Total	*16,654*	*16,164*	*16,067*	*14,744*	*14,171*	*13,707*	*−17.7*
Area of clinical nursing							
Medical/surgical	15,655	16,259	15,693	14,528	14,931	14,645	−6.4
Operating theatres[d]	2,276	2,299	2,284	2,229	2,180	2,096	−7.9
Midwifery/obstetrics/gynaecology	710	711	614	575	517	445	−37.4
Psychiatric/ mental health	2,068	1,944	1,820	1,840	2,181	2,215	7.1
Gerontology/geriatric	19,427	18,671	16,533	16,160	14,632	13,818	−28.9
Other	8,363	9,113	7,263	7,916	8,382	11,432	36.7
Nurses per 100,000 population	296.8	295.0	270.5	253.9	249.8	238.5	−19.6
Total	**52,444**	**52,676**	**48,892**	**46,488**	**46,274**	**45,418**	**−13.4**

(a)   Does not include Northern Territory.

(b)   Includes clinicians and clinical nurse managers.

(c)   Includes aged accommodation.

(d)   Includes perioperative/operating theatre/recovery nursing.

Source: AIHW.

Table C.37: Employed registered and enrolled nurses: characteristics, Australia, 1993 to 1999

Characteristics	1993	1994	1995	1996	1997	1999	1993–99
							Percentage change
Sex							
Males	15,152[a]	16,166[a]	16,096	16,494	17,003	17,835	17.7
Females	199,699[a]	207,112[a]	204,570	201,679	205,208	206,759	3.5
Persons	216,696	225,110	220,666	218,172	222,211	224,594	3.6
Average age	39.5	39.1	39.3	39.9	40.3	41.6	. .
Average hours worked (per week)	32.2	32.1	32.3	32.9	31.4	30.3	−5.9
Geographic location							
Capital city	131,493	136,448	136,031	137,784	139,363	141,216	7.4
Other metropolitan centre	17,662	18,461	16,679	14,831	15,385	17,959	1.7
Large rural centre	20,918	22,303	20,494	18,677	19,177	20,284	−3.0
Small rural centre	16,352	16,837	17,149	16,282	17,004	16,338	−0.1
Other rural area	24,230	25,194	24,190	23,979	24,630	22,679	−6.4
Remote centre	2,393	2,306	2,363	2,663	2,688	2,538	6.1
Other remote area	3,650	3,562	3,670	3,956	2,964	3,579	−1.9
Nursing role							
Clinical nurse[b]	195,737	204,749	195,692	197,458	197,211	200,049	2.2
Administrator	8,538	8,534	10,026	9,159	11,940	12,499	46.4
Teacher/educator	4,623	4,717	4,717	3,796	5,158	5,928	28.2
Researcher	637	627	884	719	1,173	1,729	171.4
Other	7,161	6,485	9,347	7,040	6,728	4,389	−38.7
Work setting of main job							
Public sector							
Acute/psychiatric hospital	99,312	104,238	103,933	103,331	106,078	111,815	12.6
Nursing home[c]	22,209	21,119	16,979	17,576	18,517	17,249	−22.3
Community	7,931	9,595	10,206	10,425	12,053	12,867	62.2
Other	22,413	23,020	20,700	19,910	17,169	15,530	−30.7
Total	*151,865*	*157,972*	*151,818*	*151,242*	*153,817*	*157,462*	*3.7*
Private sector							
Acute/psychiatric hospital	26,313	27,536	28,496	28,729	31,602	32,767	24.5
Nursing home[c]	20,560	20,993	21,572	19,747	19,135	17,243	−16.1
Private medical rooms	4,943	6,342	6,665	6,720	6,815	6,416	29.8
Other	13,014	12,266	12,115	11,735	10,842	10,707	−17.7
Total	*64,829*	*67,137*	*68,848*	*66,931*	*68,394*	*67,133*	*3.6*
Area of clinical nursing							
Medical/surgical	62,641	67,990	66,426	64,054	61,759	59,861	−4.4
Operating theatres[d]	11,767	12,837	12,936	13,451	13,975	14,535	23.5
Midwifery/obstetrics/gynaecology	13,759	16,039	16,658	15,907	15,856	14,291	3.9
Gerontology/geriatric	41,686	41,334	38,662	38,271	35,293	33,335	−20.0
Psychiatric/ mental health	11,134	11,352	11,248	11,255	12,293	12,173	7.2
Other	54,750	45,078	39,720	44,530	47,406	55,896	2.1
Nurses per 100,000 population	1,227	1,262	1,222	1,180	1,200	1,179	−3.9
Total	**216,696**	**225,110**	**220,666**	**218,172**	**222,211**	**224,594**	**3.6**

(a)   Does not include Northern Territory.

(b)   Includes clinicians and clinical nurse managers.

(c)   Includes aged accommodation.

(d)   Includes perioperative/operating theatre/recovery nursing.

Source: AIHW.

Table C.38: Registered and enrolled nurses employed as clinical nurses[a] in geriatrics/gerontology: characteristics, Australia, 1994 to 1999

Characteristics	1994	1995	1996	1997	1999
Type of nurse					
Registered nurses	22,663	22,129	22,111	20,662	19,517
Enrolled nurses	18,671	16,533	16,160	14,632	13,818
Total	*41,334*	*38,662*	*38,271*	*35,294*	*33,335*
Sex[b]					
Males	1,622	1,503	1,540	1,446	1,464
Females	39,586	37,160	36,731	33,848	31,871
Geographic location of main job					
Capital city	23,229	21,374	21,683	20,061	18,744
Other metropolitan centre	3,614	3,441	2,817	2,404	2,689
Large rural centre	3,860	3,663	3,203	3,045	2,867
Small rural centre	3,533	3,434	3,465	3,130	2,920
Other rural area	6,581	6,170	6,567	5,996	5,623
Remote centre	176	225	123	251	219
Other remote area	342	356	413	408	272
Age (years)[b]					
Average	41.7	42.4	42.9	43.5	45.2
< 25	1,863	1,399	1,239	923	680
25–34	7,868	6,703	6,274	5,327	4,199
35–44	15,541	14,683	14,267	12,724	10,937
45–54	11,396	11,289	11,532	11,401	11,669
55+	4,541	4,588	4,960	4,919	5,849
Hours worked per week					
Average	27.9	28.6	29.3	27.8	27.3
Part time (< 35 hours)	28,887	26,496	26,275	25,319	24,208
Full time (35+ hours)	12,448	12,166	11,996	9,975	9,127
Work setting of main job					
Public sector					
Hospital	3,886	4,360	4,536	3,589	3,709
Nursing home	16,458	12,696	13,007	14,020	13,899
Community	597	731	716	562	436
Other	1,512	1,396	1,738	994	372
Total	*22,453*	*19,182*	*19,997*	*19,165*	*18,415*
Private sector					
Hospital	299	668	578	246	306
Nursing home	17,383	17,703	16,465	15,163	13,923
Agency	508	512	440	198	202
Nursing practise	375	336	416	199	182
Other	316	260	374	323	307
Total	*18,881*	*19,480*	*18,274*	*16,129*	*14,920*
Employed nurses per 100,000 population					
Registered nurses	127.1	122.6	119.3	111.5	102.5
Enrolled nurses	104.7	91.6	87.2	79	72.6
All nurses	*231.7*	*214.2*	*206.5*	*190.5*	*175.0*
Total all nurses	**41,334**	**38,662**	**38,271**	**35,294**	**33,335**

(a)   Includes clinician nurses and clinical nurse managers.

(b)   Excludes data for the Northern Territory in 1994.

Source: AIHW.

Table D.1: Full-time equivalent (FTE) nursing staff in public acute and psychiatric hospitals, states and territories, 1995–96 to 1999–00

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					1995–96				
FTE nursing staff	30,399	18,000	13,879	6,914	7,132	2,048	1,393	805	80,570
Average available beds	21,560	13,139	11,113	5,547	5,543	1,468	780	570	59,720
FTE nursing staff per bed	1.4	1.4	1.2	1.2	1.3	1.4	1.8	1.4	1.3
FTE nursing staff per 1,000 separations	24.3	19.7	22.0	19.3	22.0	27.0	24.8	17.5	22.0
FTE nursing staff per 1,000 patient-days	4.8	4.1	5.1	4.8	4.6	3.7	5.8	5.3	4.6
					1996–97				
FTE nursing staff	28,471	17,211	13,973	6,252	7,248	1,903	1,365	967	77,390
Average available beds	20,705	12,134	10,881	5,177	5,250	1,328	784	577	56,836
FTE nursing staff per bed	1.4	1.4	1.3	1.2	1.4	1.4	1.7	1.7	1.4
FTE nursing staff per 1,000 separations	23.0	19.2	21.5	18.0	22.0	24.9	23.2	20.0	21.2
FTE nursing staff per 1,000 patient-days	4.7	4.6	4.5	4.3	4.8	4.2	5.7	5.3	4.6
					1997–98				
FTE nursing staff	28,517	16,714	14,246	7,598	7,371	1,520	1,329	944	78,239
Average available beds	19,705	12,337	10,809	5,263	5,198	1,078	768	577	55,735
FTE nursing staff per bed	1.5	1.4	1.3	1.4	1.4	1.4	1.7	1.6	1.4
FTE nursing staff per 1,000 separations	22.4	18.0	20.8	21.9	21.3	20.3	22.7	17.9	20.7
FTE nursing staff per 1,000 patient-days	4.7	4.5	4.6	5.2	5.0	5.4	5.4	5.0	4.7
					1998–99				
FTE nursing staff	28,218	17,214	14,219	7,514	7,358	1,463	1,359	974	78,319
Average available beds	18,757	11,638	10,643	5,336	5,095	1,139	710	567	53,885
FTE nursing staff per bed	1.5	1.5	1.3	1.4	1.4	1.3	1.9	1.7	1.5
FTE nursing staff per 1,000 separations	22.2	17.7	20.1	21.0	20.7	18.2	23.2	17.7	20.3
FTE nursing staff per 1,000 patient-days	4.8	4.6	4.7	5.3	5.1	3.8	6.3	5.1	4.8
					1999–00				
FTE nursing staff	28,288	17,660	14,052	7,525	7,335	1,867	1,299	980	79,006
Average available beds	17,754	12,162	10,320	5,299	5,045	1,152	675	540	52,947
FTE nursing staff per bed	1.6	1.5	1.4	1.4	1.5	1.6	1.9	1.8	1.5
FTE nursing staff per 1,000 separations	22.7	17.6	19.8	20.9	20.4	24.6	21.4	16.9	20.4
FTE nursing staff per 1,000 patient-days	4.9	4.6	4.6	5.6	5.0	5.2	6.2	5.0	4.9

Source: Australian hospital statistics, AIHW.

Table D.2: Average full-time equivalent (FTE) nursing staff in public hospitals: states and territories, 1995–96 to 1999–00

Classification	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				1995–96					
Registered nurses	25,559	n.a.	11,280	n.a.	5,488	n.a.	1,194	654	n.a.
Enrolled nurses	4,142	n.a.	2,415	n.a.	1,546	n.a.	199	140	n.a.
Student nurses	—	n.a.	158	n.a.	—	n.a.	—	11	n.a.
Trainee/pupil nurses	691	n.a.	27	n.a.	99	n.a.	—	—	n.a.
Total	**30,399**	**18,000**	**13,879**	**6,914**	**7,132**	**2,048**	**1,393**	**805**	**80,570**
				1996–97					
Registered nurses	n.a.	14,790	11,462	n.a.	5,637	n.a.	1,169	836	n.a.
Enrolled nurses	n.a.	2,121	2,396	n.a.	1,532	n.a.	195	131	n.a.
Student nurses	n.a.	n.a.	85	n.a.	—	n.a.	—	—	n.a.
Trainee/pupil nurses	n.a.	n.a.	30	n.a.	79	n.a.	—	—	n.a.
Total	**28,471**	**17,211**	**13,973**	**6,252**	**7,248**	**1,903**	**1,365**	**967**	**77,390**
				1997–98					
Registered nurses	n.a.	14,457	11,983	6,848	5,790	n.a.	1,143	800	n.a.
Enrolled nurses	n.a.	2,257	2,263	746	1,527	n.a.	186	141	n.a.
Student nurses	n.a.	—	—	4	—	n.a.	—	3	n.a.
Trainee/pupil nurses	n.a.	—	—	n.a.	54	n.a.	—	—	n.a.
Total	**28,517**	**16,714**	**14,246**	**7,598**	**7,371**	**1,520**	**1,329**	**944**	**78,239**
				1998–99					
Registered nurses	n.a.	14,887	11,935	7,021	5,861	n.a.	1,167	828	n.a.
Enrolled nurses	n.a.	2,327	2,284	489	1,497	n.a.	192	146	n.a.
Student nurses	n.a.	—	—	4	—	n.a.	—	—	n.a.
Trainee/pupil nurses	n.a.	—	—	n.a.	—	n.a.	—	—	n.a.
Total	**28,218**	**17,214**	**14,219**	**7,514**	**7,358**	**1,463**	**1,359**	**974**	**78,319**
				1999–00					
Registered nurses	n.a.	15,221	11,823	6,796	5,850	n.a.	1,122	824	n.a.
Enrolled nurses	n.a.	2,439	2,229	729	1,485	n.a.	177	156	n.a.
Student nurses	n.a.	. .	. .	n.a.	. .	n.a.	. .	—	n.a.
Trainee/pupil nurses	n.a.	. .	. .	n.a.	. .	n.a.	. .	—	n.a.
Total	**28,288**	**17,660**	**14,052**	**7,525**	**7,335**	**1,867**	**1,299**	**980**	**79,006**

Source: Australian hospital statistics, AIHW.

Table D.3: Patient and staffing statistics, public acute and psychiatric hospitals, Australia, 1995–96 to 1999–00

Item	1995–96	1996–97	1997–98	1998–99	1999–00	% change from 1995–96
Patient statistics						
Separations ('000)	3,593.3	3,642.0	3,770.1	3,859.7	3,872.2	23.9
Patient bed days ('000)	16,555.2	16,531.7	16,560.4	16,274.2	16,230.2	6.6
Average stay (days)	4.6	4.5	4.4	4.2	4.2	–12.5
FTE staffing						
Salaried medical officers	13,361	14,210	15,387	16,458	16,688	41.7
Nurses	80,570	77,390	78,239	78,319	79,006	11.0
Other personal care staff[(a)]	4,901	5,389	4,544	2,289	n.a.	13.8
Diagnostic and health professionals	24,299	22,360	22,748	22,686	n.a.	–4.8
Administrative and clerical staff	26,213	24,418	24,894	26,410	n.a.	14.2
Domestic and other staff	35,159	30,927	29,212	29,373	n.a.	0.7
Total staff	**184,494**	**174,695**	**175,024**	**175,535**	**175,291**	**10.3**
Separations per FTE						
Salaried medical officers	269	256	245	235	232	–12.6
Nurses	45	47	48	49	49	11.7
Other personal care staff[(a)]	733	676	830	1,686	n.a.	8.8
Diagnostic and health professionals	148	163	166	170	n.a.	30.1
Administrative and clerical staff	137	149	151	146	n.a.	8.4
Domestic and other staff	102	118	129	131	n.a.	23.0
Total staff	**19**	**21**	**22**	**22**	**22**	**12.3**
Patient bed-days per FTE						
Salaried medical officers	1,239	1,163	1,076	989	973	–24.8
Nurses	205	214	212	208	205	–3.9
Other personal care staff	3,378	3,068	3,644	7,110	n.a.	–6.3
Diagnostic and health professionals	681	739	728	717	n.a.	12.0
Administrative and clerical staff	632	677	665	616	n.a.	–6.7
Domestic and other staff	471	535	567	554	n.a.	5.9
Total staff	**90**	**95**	**95**	**93**	**93**	**–3.3**

(a)   Other personal care staff were included with diagnostic and health professionals or with domestic and other staff by several states in 1998–99. Figures were not available for 1999–00.

Source: Australian hospital statistics, AIHW.

Table E.1: Patient and staffing statistics, private acute and psychiatric hospitals, Australia, 1993–94 to 1999–00

Item	1993–94	1994–95	1995–96	1996–97	1997–98	1998–99	1999–00	% change from 1995–96
Patient statistics								
Separations ('000)	1,250.7	1,346.7	1,452.3	1,539.4	1,585.3	1,684.2	1,799.1	7.8
Patient bed days ('000)	5,172.4	5,421.9	5,844.2	5,853.6	5,858.8	6,040.7	6,231.9	–2.0
Average stay (days)	4.1	4.0	4.0	3.8	3.7	3.6	3.5	–8.7
FTE staffing								
Salaried medical officers and other diagnostic and health professionals	1,310	1,609	1,653	1,765	2,055	2,125	2,343	24.9
Nursing staff	20,033	21,512	23,136	24,193	24,567	25,670	25,670	–1.9
Registered	16,362	18,112	19,546	20,702	21,131	22,412	22,252	n.a.
Other	3,672	3,401	3,590	3,492	3,436	3,258	3,418	n.a.
Administrative and clerical staff	4,125	4,593	5,106	5,225	5,419	5,687	5,833	n.a.
Domestic and other staff	8,290	8,875	9,206	9,725	9,525	9,571	9,274	n.a.
Total staff	**33,758**	**36,589**	**39,100**	**40,908**	**41,566**	**43,053**	**43,120**	**–5.0**
Separations per FTE								
Salaried medical officers and other diagnostic and health professionals	955	837	879	872	771	793	768	–13.7
Nursing staff	62	63	63	64	65	66	70	9.9
Registered	76	74	74	74	75	75	81	n.a.
Other	341	396	405	441	461	517	526	n.a.
Administrative and clerical staff	303	293	284	295	293	296	308	n.a.
Domestic and other staff	151	152	158	158	166	176	194	n.a.
Total staff	**37**	**37**	**37**	**38**	**38**	**39**	**42**	**13.4**
Patient bed-days per FTE								
Salaried medical officers and other diagnostic and health professionals	3,948	3,370	3,537	3,317	2,851	2,843	2,660	–21.5
Nursing staff	258	252	253	242	238	235	243	0.0
Registered	316	299	299	283	277	270	280	n.a.
Other	1,409	1,594	1,628	1,677	1,705	1,854	1,823	n.a.
Administrative and clerical staff	1,254	1,180	1,145	1,120	1,081	1,062	1,068	n.a.
Domestic and other staff	624	611	635	602	615	631	672	n.a.
Total staff	**153**	**148**	**149**	**143**	**141**	**140**	**145**	**3.2**

Source: ABS, *Private Hospitals,* Cat. No. 4390.0.

Table E.2: Patient and staffing statistics, private free-standing day hospitals, Australia, 1993–94 to 1999–00

	1993–94	1994–95	1995–96	1996–97	1997–98	1998–99	1999–00
Patient statistics							
Separations ('000)	182.2	189.9	208.8	226.3	271.7	302.1	349.0
FTE staffing							
Nursing staff	360	410	497	571	696	746	838
Administrative and clerical staff	212	244	291	332	398	443	541
Other staff	82	101	102	108	126	130	159
Total staff	**653**	**755**	**890**	**1,011**	**1,220**	**1,319**	**1,537**
Separations per FTE							
Nursing staff	506	464	420	396	391	405	417
Administrative and clerical staff	861	777	718	682	683	682	645
Other staff	2,235	1,874	2,055	2,103	2,150	2,326	2,201
Total staff	**279**	**251**	**235**	**224**	**223**	**229**	**227**

Source: ABS, *Private Hospitals,* Cat. No. 4390.0.

Table F.1: Nursing course completions: type and level of course, residency and year of completion, Australia, 1989 to 2000

Type/level of course	1989	1990	1991	1992	1993	1994	1995	1996[a]	1997	1998	1999	2000
					Australian permanent resident students							
Basic nursing												
Bachelor (postgraduate)	—	—	—	—	—	—	—	—	—	8	—	13
Bachelor (pass/honours)	—	16	203	2,149	5,232	5,670	5,384	4,970	4,753	4,645	4,683	4,451
Diploma/other	3,035	3,759	4,254	2,673	1,165	180	46	7	12	8	14	1
Total basic nursing	*3,035*	*3,775*	*4,457*	*4,822*	*6,397*	*5,850*	*5,430*	*4,977*	*4,765*	*4,661*	*4,697*	*4,465*
Proportion female (%)	88.4	87.5	88.3	88.6	88.3	87.6	87.7	87.8	87.4	87.1	87.5	88.5
Post-basic nursing												
PhD/Masters/higher doctorate	2	14	42	51	113	131	154	187	298	313	361	336
Postgraduate qualifying	—	—	13	1	—	—	—	—	—	—	—	—
Postgraduate diploma	62	177	289	359	584	921	1,025	1,458	1,622	1,556	1,473	1,156
Bachelor (postgraduate)	—	—	67	—	149	103	100	75	38	15	67	114
Bachelor (pass/honours)	1,048	1,164	1,745	3,386	3,064	3,611	3,504	3,059	2,282	1,731	1,054	944
Graduate certificate	—	—	23	56	157	149	201	334	324	399	447	572
Diploma/assoc. dip./other	393	82	18	8	—	13	17	20	27	12	2	25
Total post-basic nursing	*1,505*	*1,437*	*2,197*	*3,861*	*4,067*	*4,928*	*5,001*	*5,133*	*4,591*	*4,026*	*3,404*	*3,147*
Proportion female (%)	88.2	87.7	88.2	90.1	91.3	91.5	91.1	91.5	91.5	90.7	91.4	91.3
Total	**4,540**	**5,212**	**6,654**	**8,683**	**10,464**	**10,778**	**10,431**	**10,110**	**9,356**	**8,687**	**8,101**	**7,612**
Proportion female (%)	88.4	88.3	87.6	88.3	89.3	89.4	89.4	89.3	89.7	89.4	89.1	89.7
					Overseas students							
Basic nursing												
Bachelor (pass/honours)	—	—	n.p.	160	473	460	336	167	488	365	361	120
Diploma/other	78	53	68	91	22	3	3	—	—	—	3	—
Total basic nursing	*78*	*53*	*70*	*251*	*495*	*463*	*339*	*167*	*488*	*365*	*364*	*120*
Proportion female (%)	93.6	81.1	84.3	80.5	88.5	86.8	88.8	91.0	90.4	92.6	89.8	90.0
Post-basic nursing												
PhD/Masters/higher doctorate	4	n.p.	4	n.p.	6	14	15	26	53	62	87	103
Postgraduate diploma	4	12	14	8	20	34	62	24	48	53	60	31
Bachelor (postgraduate)	—	—	n.p.	—	34	14	15	20	6	n.p.	—	4
Bachelor (pass/honours)	76	153	215	410	207	290	311	425	679	916	1,060	1,562
Graduate certificate	—	—	—	n.p.	n.p.	n.p.	n.p.	n.p.	24	10	12	30
Diploma/assoc. dip./other	14	62	69	—	—	—	n.p.	—	n.p.	n.p.	—	n.p.
Total post-basic nursing	*98*	*229*	*303*	*421*	*269*	*353*	*405*	*496*	*811*	*1,045*	*1,219*	*1,732*
Proportion female (%)	90.8	92.1	94.1	92.2	88.8	93.8	92.8	95.6	94.0	94.7	93.5	92.8
Total	**176**	**282**	**373**	**672**	**764**	**816**	**744**	**663**	**1,299**	**1,410**	**1,583**	**1,852**
Proportion female (%)	92	90.1	92.2	87.8	88.6	89.8	91.0	94.4	92.6	94.2	92.7	92.6

(a)   Includes a small number of New Zealand citizens, who were included with Australian permanent resident students data for 1996.

Note: Some courses have been reclassified from basic nursing to post-basic nursing, and vice versa. Therefore these figures may not match previously published data.

Source: AIHW analysis of DEST unpublished data.

Table F.2: Nursing course commencements: type and level of course, residency and year of commencement, Australia, 1990 to 2001

Type/level of course	1990	1991	1992	1993	1994	1995	1996	1997[a]	1998	1999	2000	2001[b]
	Australian citizens and permanent resident students											
Basic nursing												
Bachelor (postgraduate)	—	—	—	—	—	—	—	12	13	18	—	80
Bachelor (pass/honours)	184	779	8,232	7,889	7,264	7,088	6,818	6,881	7,368	7,370	7,170	7,043
Diploma/other	7,635	8,546	347	121	13	11	3	6	—	—	25	29
Total basic nursing	*7,819*	*9,325*	*8,579*	*8,010*	*7,277*	*7,099*	*6,821*	*6,899*	*7,381*	*7,388*	*7,195*	*7,152*
Proportion female (%)	86.6	85.6	85.3	84.9	85.5	84.6	84.7	85.7	86.1	86.3	86.7	87.7
Post-basic nursing												
PhD/Masters/higher doctorate	135	261	293	434	458	637	693	872	841	843	834	902
Postgraduate qualifying	12	43	12	14	3	—	3	—	—	—	—	—
Postgraduate diploma	354	501	692	1,034	1,397	1,843	2,038	2,075	1,725	1,757	1,464	1,564
Bachelor (postgraduate)	—	98	—	—	115	108	47	7	59	171	151	57
Bachelor (pass/honours)	2,969	3,148	3,866	3,962	3,705	3,670	2,964	1,942	1,484	1,027	854	842
Graduate certificate	—	46	87	233	225	301	439	337	488	445	590	647
Diploma/assoc. dip./other	135	15	7	15	8	18	19	23	11	24	3	—
Total post-basic nursing	*3,605*	*4,112*	*4,957*	*5,692*	*5,911*	*6,577*	*6,203*	*5,256*	*4,608*	*4,267*	*3,896*	*4,012*
Proportion female (%)	88.8	89.3	89.2	91.0	91.3	89.7	89.9	89.7	89.9	89.6	89.3	89.1
Total	**11,424**	**13,437**	**13,536**	**13,702**	**13,188**	**13,676**	**13,024**	**12,155**	**11,989**	**11,655**	**11,091**	**11,164**
Proportion female (%)	87.3	86.8	86.7	87.4	88.1	87.1	87.2	87.4	87.6	87.5	87.6	88.2
	Overseas students											
Basic nursing												
Bachelor (pass/honours)	6	28	389	354	465	441	429	429	371	415	616	1,477
Diploma/other	170	194	19	13	—	—	—	—	—	—	4	n.p.
Total basic nursing	*176*	*222*	*408*	*367*	*465*	*441*	*429*	*429*	*371*	*415*	*620*	*1,478*
Proportion female (%)	92	86.0	85.8	87.7	87.1	88.7	90.4	94.4	88.2	88.4	88.7	91.1
Post-basic nursing												
PhD/Masters/higher doctorate	3	14	17	31	38	36	46	90	140	163	124	282
Postgraduate qualifying	—	n.p.	—	n.p.	—	—	—	—	—	—	—	—
Postgraduate diploma	10	18	28	33	47	63	54	44	61	56	43	63
Bachelor (postgraduate)	—	n.p.	—	—	17	3	17	4	n.p.	n.p.	n.p.	8
Bachelor (pass/honours)	206	266	389	276	260	398	480	821	1,077	1,008	1,291	399
Graduate certificate	—	n.p.	n.p.	3	3	5	18	26	12	16	17	27
Diploma/assoc. dip./other	31	29	—	n.p.	—	n.p.	n.p.	—	—	3	—	6
Total post-basic nursing	*250*	*331*	*436*	*346*	*365*	*506*	*616*	*985*	*1,292*	*1,248*	*1,477*	*785*
Proportion female (%)	90.8	91.9	90.2	92.5	91.8	92.1	95.5	92.7	92.3	93	92.3	90.7
Total	**426**	**553**	**844**	**713**	**830**	**947**	**1,045**	**1,414**	**1,664**	**1,663**	**2,097**	**2,263**
Proportion female (%)	91.3	89.5	88.0	90.0	89.2	90.5	93.4	93.2	91.3	91.9	91.3	90.9

(a) Includes a small number of New Zealand citizens, who were included with Australian permanent resident student data for 1997.

(b) In 2001, the classification of nursing courses changed from basic nursing and post-basic nursing into their relevant specialist areas. Basic nursing, therefore, relates to the category of general nursing.

Note: Some courses have been reclassified from basic nursing to post-basic nursing, and vice versa. Therefore these figures may not match previously published data.

Source: AIHW analysis of DEST unpublished data.

Table F.3: Nursing course enrolments: type and level of course, residency and year of enrolment, Australia, 1990 to 2001

Type/level of course	1990	1991	1992	1993	1994	1995	1996	1997[a]	1998	1999	2000	2001[b]
						Australian permanent resident students						
Basic nursing												
Bachelor (postgraduate)	—	—	—	—	—	—	—	12	24	31	—	143
Bachelor (pass/honours)	347	1,239	14,470	20,755	21,015	19,663	18,871	18,757	19,200	19,598	19,810	19,826
Diploma/other	17,919	20,405	8,228	2,320	257	66	10	12	—	—	28	35
Total basic nursing	*18,266*	*21,644*	*22,698*	*23,075*	*21,272*	*19,729*	*18,881*	*18,781*	*19,224*	*19,629*	*19,838*	*20,004*
Proportion female (%)	86.9	86.7	86.4	86.0	86.2	86.0	85.7	85.9	86.2	86.7	87.1	87.8
Post-basic nursing												
PhD/Masters/higher doctorate	265	472	605	821	954	1,217	1,351	1,669	1,660	1,685	1,684	1,968
Postgraduate qualifying	12	62	17	19	5	—	3	—	—	—	—	n.p.
Postgraduate diploma	463	753	1,073	1,511	2,088	2,641	3,205	3,226	2,847	2,667	2,149	2,257
Bachelor (postgraduate)	—	348	—	—	189	192	125	48	59	201	264	85
Bachelor (pass/honours)	5,635	6,827	8,442	8,682	7,846	7,638	6,615	5,075	3,911	3,008	2,371	2,033
Graduate certificate	—	46	106	251	272	321	485	401	531	516	676	763
Diploma/assoc. dip./other	355	20	31	15	8	20	27	30	13	25	4	—
Total post-basic nursing	*6,730*	*8,528*	*10,274*	*11,299*	*11,362*	*12,029*	*11,811*	*10,449*	*9,021*	*8,102*	*7,148*	*7,107*
Proportion female (%)	88.6	89.2	89.8	90.6	91.3	90.4	90.6	90.3	90.2	90.1	90.4	88.8
Total	**24,996**	**30,172**	**32,972**	**34,374**	**32,634**	**31,758**	**30,692**	**29,230**	**28,245**	**27,731**	**26,986**	**27,111**
Proportion female (%)	87.3	87.4	87.5	87.5	88.0	87.6	87.6	87.5	87.5	87.7	88.0	88.1
						Overseas students						
Basic nursing												
Bachelor (pass/honours)	7	40	608	760	758	916	870	826	803	799	822	3,187
Diploma/other	362	413	168	69	9	n.p.	—	—	—	—	5	n.p.
Total basic nursing	*369*	*453*	*776*	*829*	*767*	*918*	*870*	*826*	*803*	*799*	*827*	*3,189*
Proportion female (%)	87.5	86.5	85.7	87.9	87.4	87.3	88.7	90.8	90.2	88.9	88.4	91.3
Post-basic nursing												
PhD/Masters/higher doctorate	7	18	30	47	67	82	91	121	227	275	271	451
Postgraduate qualifying	—	n.p.	—	n.p.	—	—	—	—	—	—	—	—
Postgraduate diploma	12	23	31	44	60	81	74	47	75	74	53	70
Bachelor (postgraduate)	—	7	—	—	20	5	17	4	n.p.	n.p.	4	8
Bachelor (pass/honours)	371	438	571	406	398	587	716	1,146	1,684	1,784	2,303	427
Graduate certificate	—	n.p.	3	5	4	5	19	26	13	18	19	28
Diploma/assoc. dip./other	34	30	n.p.	n.p.	—	n.p.	n.p.	—	—	3	—	6
Total post-basic nursing	*424*	*518*	*637*	*505*	*549*	*761*	*918*	*1,344*	*2,001*	*2,156*	*2,650*	*990*
Proportion female (%)	91.0	92.5	89.7	90.9	92.3	92.8	95.3	92.6	92.5	92.9	92.2	91.3
Total	**793**	**971**	**1,413**	**1,334**	**1,316**	**1,679**	**1,788**	**2,170**	**2,804**	**2,955**	**3,477**	**4,179**
Proportion female (%)	89.4	89.7	87.5	89.1	89.4	89.8	92.1	91.9	91.8	91.8	91.3	91.3

(a)   Includes New Zealand citizens, who were included with Australian permanent resident students data for 1997. Numbers, however, are now small because New Zealand citizens are required to pay HECS fees up front at Australian universities.

(b)   In 2001, the classification of nursing courses changed from basic nursing and post-basic nursing into their relevant specialist areas. Basic nursing, therefore, relates to the category of general nursing.

Note: Some courses have been reclassified from basic nursing to post-basic nursing, and vice versa. Therefore these figures may not match previously published data.

Source: AIHW analysis of DEST unpublished data.

Table G.1: Registered and enrolled nurses: nurses employed under a nursing award, classification of job concordance, states and territories, 1999

Salary range	NSW	Vic	Qld	WA
		Job classification		
$26,593–$30,355	Enrolled Nurse	Enrolled Nurse	Enrolled Nurse	Enrolled Nurse
$29,578–$45,277	Registered Nurse/Midwife	Registered Nurse Gr1 Registered nurse Gr2 Clinical nurse Specialist Division 3 unspecified	L1 Registered Nurse	L1 Registered Nurse L2 Area Manager L2 Clinical Nurse L2 Staff Devt. Nurse
$44,158–$65,530	Clinical Nurse Speclst. Clinical Nurse Educ. Nurse Educator	Registered Nurse Gr 3 Registered Nurse Gr 4	L3 Nurse Manager L3 Clinical Nurse Conslt L3 Nurse Practise Coord. L3 Researcher	L3 Nurse Manager L3 Clinical Conslt/Spclst L3 Staff Devt/Education
$54,428–$68,530	Nurse Manager Gr 1 Nurse Manager Gr 2 Nurse Manager Gr 3 Clinical Nurse Conslt Nursing Unit Manager	Registered Nurse Gr 5 Registered Nurse Gr 6	L4 Clinical L4 Management L4 Clinical/Mngmt L4 Staff Devt/Education L4 Research	L4 Asst DON: Clinical L4 Asst DON: Mngmt L4 Asst DON: Mangmt
$63,315–$84,396	Nurse Manager Gr 4 Nurse Manager Gr 5 Nurse Manager Gr 6 Nurse Researcher	Registered Nurse Gr 7	L5 Director of Nursing	L4 Nurse Researcher L5 Director of Nursing
$76,642–$87,755	Nurse Manager Gr 7 Nurse Manager Gr 8 Nurse Manager Gr 9			

(continued)

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Table G.1 (continued): Registered and enrolled nurses: nurses employed under a nursing award, classification of job concordance, states and territories, 1999

Salary range	SA	Tas	ACT	NT
		Job classification		
$26,593–$30,355	Enrolled Nurse Enrolled (Mothercraft)	Enrolled Nurse	Enrolled Nurse	Enrolled Nurse Enrolled (Mothercraft)
$29,578–$45,277	L1 Registered Nurse L2 Clinical nurse	Registered Nurse L1 Clinical L2	Registered Nurse L1 Registered Nurse L2 Y1/2	L1 Registered Nurse L2 Clinical Nurse
$44,158–$65,530	L3 Nurse Manager L3 Clinical Nurse Conslt L3 Clinical Nurse Spclst L3 Staff Devt/Education	Staff Devt/Education L3 Clinical Nurse Conslt L3 Nurse Manager L3	Registered Nurse L2 Y3/4 Registered Nurse L3	L3 Nurse Manager L3 Clinical Nurse Conslt L3 Clinical Nurse Spclst L3 Staff Devt/Education
$54,428–$68,530	L4 Staff Devt/Education L4 Clinical L4 Management	Registered Nurse L4	Registered Nurse L4/5 Gr 1/2 Registered Nurse L5 Gr 2	L4 Clinical Nurse L4 Management L4 Staff Devt/Education
$63,315–$84,396	L5 Director of Nursing	Registered Nurse L5 Grs 1–4	Registered Nurse L4 Gr 3 Registered Nurse L5 Gr 3/4	L5 Director of Nursing
$76,642–$87,755		Registered Nurse L5 Grs 5/6	Registered Nurse L5 Grs 5/7	

Source: Australian Nursing Federation.

Table H.1: Temporary migration of nurses to and from Australia for employment, 1993–94 to 1999–00

Category/country of previous residence	1993–94	1994–95	1995–96	1996–97	1997–98	1998–99	1999–00
Migration to Australia for short-term stay							
New Zealand	51	56	44	62	58	117	123
UK/Ireland	54	45	53	65	137	189	243
Other countries	25	23	7	12	25	16	29
Total	**130**	**124**	**104**	**139**	**220**	**322**	**395**
Migration to Australia for long-term stay							
New Zealand	69	66	77	72	74	136	128
UK/Ireland	26	32	45	54	170	250	246
Other countries	23	15	24	22	32	64	85
Total	**118**	**113**	**146**	**148**	**276**	**450**	**459**
Migration to Australia by Australian residents returning after a long-term overseas stay							
New Zealand	68	49	70	79	81	71	52
Other Oceania	41	45	36	34	17	3	n.p.
UK/Ireland	965	985	958	998	990	901	1,164
Other Europe	120	128	137	123	117	66	82
Middle East	207	236	196	202	174	85	91
Africa	36	44	35	48	28	23	38
Asia	223	245	225	225	220	201	192
USA/Canada	267	270	267	251	224	185	215
Other countries	28	13	30	20	27	17	31
Total	**1,955**	**2,015**	**1,954**	**1,980**	**1,878**	**1,552**	**1866**
Migration of Australian residents from Australia for long-term overseas stay							
New Zealand	26	32	27	30	42	34	44
Other Oceania	22	30	30	20	4	10	12
UK/Ireland	175	185	231	299	345	438	455
Other Europe	27	16	26	15	20	24	23
Middle East	235	224	233	192	162	150	190
Asia	119	144	139	162	140	112	95
USA/Canada	98	68	71	69	71	58	81
Other countries	18	26	29	20	31	25	32
Total	**720**	**725**	**786**	**807**	**815**	**851**	**932**
Temporary visitor departing after long-term stay in Australia							
New Zealand	77	60	67	62	54	112	113
Other Oceania	30	20	28	16	14	9	50
UK/Ireland	82	130	162	213	279	184	323
Other Europe	35	26	39	52	56	36	48
Asia	79	91	90	117	190	229	216
USA/Canada	21	32	32	23	36	44	48
Other countries	8	9	10	18	37	39	78
Total	**332**	**368**	**428**	**501**	**666**	**653**	**834**

Note: Long-term movements refer to those involving 12 months or more. Short-term movements refer to those involving less than 12 months.

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

Table H.2: Permanent migration of nurses to and from Australia, 1993–94 to 1999–00

Category/country	1993–94	1994–95	1995–96	1996–97	1997–98	1998–99	1999–00
Country of previous residence							
New Zealand	147	170	210	230	245	331	432
Other Oceania	18	5	17	19	n.p.	n.p.	13
UK/Ireland	325	396	364	287	328	285	272
Other Europe	101	114	102	73	75	61	64
Middle East	10	32	31	35	35	29	41
Africa	20	28	45	42	58	61	69
Asia	185	282	338	211	182	242	214
USA/Canada	37	50	54	55	55	30	26
Other countries	4	4	5	3	15	39	40
Total	**847**	**1,081**	**1,166**	**955**	**994**	**1,080**	**1,158**
Country of future residence							
New Zealand	236	207	207	207	183	170	211
Other Oceania	9	5	5	12	3	6	4
UK/Ireland	225	195	225	241	273	224	256
Other Europe	33	42	43	38	32	32	40
Middle East	16	16	24	25	17	17	23
Asia	43	35	49	52	41	72	63
USA/Canada	79	85	76	71	84	129	140
Other countries	25	6	4	5	18	13	15
Total	**666**	**591**	**633**	**651**	**651**	**661**	**752**

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

Table H.3: Temporary migration of nurses to and from Australia for education, 1993–94 to 1999–00

Category/country of previous residence	1993–94	1994–95	1995–96	1996–97	1997–98	1998–99	1999–00
Migration to Australia for long-term stay							
New Zealand	11	9	n.p.	4	11	10	9
Other Oceania	26	15	14	18	11	10	13
Asia	74	78	54	96	57	57	91
Other countries	17	14	36	23	26	44	39
Total	**128**	**116**	**105**	**141**	**105**	**121**	**152**
Migration to Australia for short-term stay							
New Zealand	4	4	n.p.	6	4	6	6
Other Oceania	15	12	11	11	n.p.	n.p.	—
Asia	85	110	108	43	45	33	4
USA/Canada	n.p.	3	3	—	—	—	—
Other countries	10	11	6	—	34	10	19
Total	**115**	**140**	**129**	**60**	**84**	**51**	**29**
Migration of Australian residents from Australia for long-term overseas stay							
Country of long-term stay							
UK/Ireland	24	32	24	18	24	20	18
Other countries	24	23	16	20	26	19	17
Total	**48**	**55**	**40**	**38**	**50**	**39**	**35**

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

Glossary

Clinician

A registered or enrolled nurse who is mainly involved in the care and treatment of patients, including nursing diagnosis and preventive action.

Country

The Australian Bureau of Statistics, *Australian Standard Classification of Countries for Social Statistics,* Cat. No. 1269.0 has been used to classify country of initial qualification and country of birth into the following categories:

1. *Australia*
2. *New Zealand*
3. *United Kingdom and Ireland:* England, Scotland, Wales, Northern Ireland, Ireland
4. *Asia:* Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam, People's Republic of China, Hong Kong, Japan, Democratic People's Republic of Korea (North Korea), Republic of Korea (South Korea), Macau, Mongolia, Formosa, Taiwan, Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka
5. *Other countries:* all countries not specified above.

Enrolled nurse

A nurse who is on the roll maintained by the state or territory nurses board or nursing council to practise nursing in that state or territory. The minimum educational requirement for an enrolled nurse is a 1-year diploma from a higher education institution or equivalent from a recognised hospital-based program. It is necessary for a nurse to have practised for a specified minimum period in the past 5 years to maintain enrolment. Enrolled nurses include mothercraft and dental nurses where the educational course requirements may be greater than 1 year but less than a 3-year degree course or equivalent.

Hospital staffing

- *Salaried medical officers:* Medical officers engaged by the hospital on a full time or part time salaried basis.
- *Nurses*
  - *Enrolled nurses:* Second-level nurses who are enrolled in all states and territories except Victoria where they are registered by the state registration board to practise in this capacity. Includes general enrolled nurses and specialist enrolled nurses (e.g. mothercraft nurses in some states and territories).
  - *Registered nurses:* Nurses with at least a 3-year training certificate and nurses holding postgraduate qualifications. Registered nurses must be registered with a state or territory registration board.

- *Other personal care staff:* This category includes attendants, assistants or home assistants, home companions, family aides, ward helpers, orderlies, ward assistants and nursing assistants engaged primarily in the provision of personal care to patients or residents, who are formally qualified or undergoing training in nursing or allied health professions.

- *Diagnostic and health professionals:* Qualified staff (other than qualified medical and nursing staff) engaged in duties of a diagnostic, professional or technical nature (but also including diagnostic and health professionals whose duties are primarily or partly of an administrative nature). This category includes all allied health professionals and laboratory technicians but excludes civil engineers and computing staff.

- *Administrative and clerical staff:* Staff engaged in administrative and clerical duties. Civil engineers and computing staff are included in this category. Medical staff and nursing staff, diagnostic and health professionals and any domestic staff primarily or partly engaged in administrative and clerical duties are excluded.

- *Domestic and other staff:* Staff engaged in the provision of food and cleaning services. They include domestic staff, such as food services managers, primarily engaged in administrative duties. This category also includes all staff not elsewhere included (primarily maintenance staff, tradespersons and gardening staff).

Hours worked

The total number of hours worked per week self-reported by responding nurses as the usual number of hours worked per week in all nursing-related jobs over the 4 weeks before the survey. Note that the Queensland and South Australian surveys did not specify the 4-week period.

Hours worked exclude time spent on travel between work locations (except travel to call-outs) and unpaid professional and/or voluntary activities. In the editing of survey responses, maximum hours worked per week was limited to 99 hours per week for main, second and subsequent jobs and 126 hours per week for total hours worked.

The cut-off for full-time and part-time work varies among the states and territories. In this publication the Australian Bureau of Statistics definition has been used:

- *full time:* 35 hours or more per week
- *part time:* less than 35 hours per week.

Job classification

The classification of the registered nurse varies according to the industrial award in each state and territory. With the introduction of certified agreements and Australian workplace agreements the use of industrial awards is limited as a form of classification. The concordance among the reported classifications and the published classification is shown in Table G.1.

Geographic classification

The *Rural, Remote and Metropolitan Areas Classification* (RRMA), November 1994, of the Department of Primary Industries and Energy and the Department of Health and Aged Care has been used to classify the geographic location of the main job of responding nurses in the following seven categories.

Metropolitan areas:

1. *Capital cities* consist of the state and territory capital cities of Sydney, Melbourne, Brisbane, Perth, Adelaide, Hobart, Darwin and Canberra.

2. *Other metropolitan centres* consist of one or more statistical subdivisions with an urban centre of population of 100,000 or more in size. These centres are: Newcastle, Wollongong, Queanbeyan (part of Canberra–Queanbeyan), Geelong, Gold Coast–Tweed Heads, Townsville–Thuringowa.

Rural zones:

3. *Large rural centres* are statistical local areas where most of the population resides in urban centres of population of 25,000 to 99,999. These centres are Albury–Wodonga, Dubbo, Lismore, Orange, Port Macquarie, Tamworth, Wagga Wagga (NSW); Ballarat, Bendigo, Shepparton–Mooroopna (Vic); Bundaberg, Cairns, Mackay, Maroochydore–Mooloolaba, Rockhampton, Toowoomba (Qld); Whyalla (SA); and Launceston (Tas).

4. *Small rural centres* are statistical local areas in rural zones containing urban centres of population between 10,000 and 24,999. These centres are Armidale, Ballina, Bathurst, Broken Hill, Casino, Coffs Harbour, Forster–Tuncurry, Goulburn, Grafton, Griffith, Lithgow, Moree Plains, Muswellbrook, Nowra–Bombaderry, Singleton, Taree (NSW); Bairnsdale, Colac, Echuca–Moama, Horsham, Mildura, Moe–Yallourn, Morwell, Ocean Grove–Barwon Heads, Portland, Sale, Traralgon, Wangaratta, Warrnambool (Vic); Caloundra, Gladstone, Gympie, Hervey Bay, Maryborough, Tewantin–Noosa, Warwick (Qld); Mount Gambier, Murray Bridge, Port Augusta, Port Lincoln, Port Pirie (SA); Albany, Bunbury, Geraldton, Mandurah (WA); Burnie–Somerset, Devonport (Tas).

5. *Other rural areas* are the remaining statistical areas within the rural zone. Examples are Cowra Shire, Temora Shire, Guyra Shire (NSW); Ararat Shire, Cobram Shire (Vic); Cardwell Shire, Whitsunday Shire (Qld); Barossa, Pinnaroo (SA); Moora Shire, York Shire (WA); George Town, Ross (Tas); Coomalie, Litchfield (NT).

Remote zones: These are generally less densely populated than rural statistical local areas and hundreds of kilometres from a major urban centre. Data in this publication are reported for the zone that comprises the two areas shown below:

6. *Remote centres* are statistical local areas in the remote zone containing urban centres of population of 5,000 or more. These centres are Blackwater, Bowen, Emerald, Mareeba, Moranbah, Mount Isa, Roma (Qld); Broome, Carnarvon, East Pilbara, Esperance, Kalgoorlie/Boulder, Port Hedland, Karratha (WA); Alice Springs, Katherine (NT).

7. *Other remote areas* are the remaining areas within the remote zone. Examples are Balranald, Bourke, Cobar, Lord Howe Island (NSW); French Island, Orbost, Walpeup (Vic); Aurukun, Longreach, Quilpie (Qld); Coober Pedy, Murat Bay, Roxby Downs (SA); Coolgardie, Exmouth, Laverton, Shark Bay (WA); King Island, Strahan (Tas); Daly, Jabiru, Nhulunbuy (NT).

Nursing labour force

The nursing labour force (registered and enrolled nurses) in each state and territory includes nurses currently employed in nursing and nurses who are not employed in nursing but are looking for work in nursing.

Registered and enrolled nurses who, at the time of the survey, were on maternity or other extended leave for more than 3 months are employed, and thus part of the nursing labour force. However, in most cross-classified tables for employed nurses, those on extended leave have not been included because not all states and territories collected data on their employment characteristics prior to commencement of leave.

Nursing role

A description of the job function within the field of nursing of a person with nursing qualifications. The occupations are:

- *Nurse clinician:* A registered or enrolled nurse who is mainly involved in the care and treatment of patients, including nursing diagnosis and preventive action.

- *Clinician nurse manager:* A registered or enrolled nurse who manages a hospital nursing care unit or other sub-unit of a hospital, nursing home or health care facility, or supervises nursing staff for a particular unit or shift.

- *Administrator:* A person mainly employed in nursing administration.

- *Teacher/Educator:* A person who teaches or trains persons in nursing for their initial qualification or in advanced skills after initial qualification.

- *Researcher:* A person engaged in nursing research.

- *Other:* A job function in nursing which is not one of the above—for example, industrial relations or public health activities in nursing.

Registered nurse

A nurse who is on the register maintained by the state or territory nurses board or nursing council to practise nursing in that state or territory. The minimum educational requirement for a registered nurse is a 3-year degree from a tertiary education institution or equivalent from a recognised hospital-based program. Registered nurses may have their practise certificate endorsed to practice in a specific clinical area (for example, midwifery) on completion of a recognised postgraduate course. To maintain registration, it is necessary for a nurse to have practised for a specified minimum period in the field of nursing in the past 5 years.

Work setting

The functional use of the premises where a nursing job is located.

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Related publications

The following publications relating to the health labour force have been issued by the Australian Institute of Health and Welfare.

National health labour force series

No. 1: Pharmacy labour force 1992

No. 2: Podiatry labour force 1992

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No. 4: Physiotherapy labour force 1993

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No. 9: Nursing labour force 1993 and 1994

No. 10: Medical labour force 1995

No. 11: Nursing labour force 1995

No. 12: Pharmacy labour force 1995

No. 13: Medical labour force 1996

No. 14: Nursing labour force 1998

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Other publications

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Australia hospital statistics 1993–95: an overview

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Australian hospital statistics 1998–99

Australian hospital statistics 1999–00

Internet access

Additional tables on the 1999 nursing labour force survey and a selection of material produced by the Australian Institute of Health and Welfare is published on the Institute's website at <http://www.aihw.gov.au>. This includes the Institute's medical and nursing labour force publications and the publications catalogue ordering information.