

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).