

**Australian Health Workforce Advisory Committee**

**ANNUAL REPORT 2002-03**

**AHWAC Report 2003.1**

**September 2003**

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## **ABBREVIATIONS**

ABS	Australian Bureau of Statistics
ACCCN	Australian College of Critical Care Nurses
ACHS	Australian Council of Healthcare Standards
ACT	Australian Capital Territory
AHMAC	Australian Health Ministers' Advisory Council
AHWOC	Australian Health Workforce Officials' Committee
AHWAC	Australian Health Workforce Advisory Committee
AIHW	Australian Institute of Health and Welfare
ANZICS	Australian and New Zealand Intensive Care Society
Aust	Australia
AVCC	Australian Vice Chancellors Committee
DEST	Department of Education, Science and Training
DoHA	Commonwealth Department of Health and Ageing
EN	Enrolled nurse
FTE	Full Time Equivalent
JFICM	Joint Faculty of Intensive Care Medicine
NMHWG	National Mental Health Working Group
NSW	New South Wales
NT	Northern Territory
Qld	Queensland
RN	Registered nurse
SA	South Australia
Tas	Tasmania
Terr	Territory
Vic	Victoria
WA	Western Australia

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## **MEMBERSHIP OF THE AUSTRALIAN HEALTH WORKFORCE ADVISORY COMMITTEE**

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National Health Workforce Secretariat

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Australian Health Workforce Officials' Committee

## CHAIRMAN'S REPORT 2002-2003

### Australian Health Workforce Advisory Committee

The Australian Health Workforce Advisory Committee (AHWAC) was formed in December 2000 to oversee national level, government initiated, health workforce planning in Australia, covering the nursing, midwifery and allied health workforces. AHWAC is funded by each jurisdictional health department through the Australian Health Ministers Advisory Council (AHMAC).

AHWAC provides advice to the AHMAC on a range of nursing and allied health workforce matters, including:

- workforce supply and demand in Australia;
- the composition, balance and distribution of the health workforce in Australia; and
- the establishment and development of data collections concerned with the health workforce.

AHWAC's initial priority has been the specialist nursing and midwifery workforces, and in particular the areas of critical care nursing, midwifery and mental health nursing. Work has also been undertaken on improvements to national level nursing and allied health data collections. AHWAC works to an annual work program approved by AHMAC. The current work program is focused on providing advice on future specialist nursing requirements, allied health workforce planning and improvements to national data collections. Each project is usually overseen by a working party, comprising relevant stakeholders drawn from Commonwealth/State/Territory health departments, the relevant professional bodies, consumers and co-opted experts.

The following is a summary of the work AHWAC has been involved with for the year 2002-2003.

### Nurse Workforce Reviews

AHWAC completed two nurse workforce reviews in 2002 – the midwifery workforce and the critical care nurse workforce. Summaries of these have been included in this report.

During 2002-2003 other work has focused on three overview projects.

- The first project has focused on profiling the health workforce using 2001 Australian Bureau of Statistics (ABS) Census data. The report was being prepared jointly by the Australian Institute of Health and Welfare (AIHW), ABS and AHWAC. The report was published on 30 September 2003.
- The second project focuses on a general overview of recent nurse workforce planning including the National Review of Nursing education and the Australian Council of Deans of Nursing report on Australian Nurse Supply and Demand to 2006 and aims to provide a consolidated report on the nurse workforce to AHMAC.
- The third project focuses on nurse workforce planning process and methodology. This project aims to be used as a resource document to inform members of AHWAC, AHWAC working party members and the wider community involved with health or nurse workforce planning in Australia. The paper will detail the processes, methodologies, calculation tools and data sources currently used for nurse workforce planning in Australia. It will also highlight some of the emerging issues for nurse

workforce planning, such as integrated workforce planning and planning for changing models of care.

The Mental Health Nurse Supply, Recruitment and Retention Project is jointly overseen by the National Mental Health Working Group (NMHWG) and the Australian Health Workforce Officials Committee (AHWOC). The project aims to report on the qualitative issues associated with the supply, recruitment and retention of the Australian mental health nurse workforce, including an overview of recent Australian and International reports regarding recruitment and retention of the mental health nurse workforce, as well as a description of the current pathways into the workforce. The project aims to provide an evidence base for the development of strategies to improve the recruitment and retention of mental health nurses. After initial work to scope the project, consultants were engaged to complete a report in May 2003.

#### Nurse Workforce Data Improvements

In response to issues of timeliness and inconsistencies across the states and territories in relation to nurse workforce data, AHWAC has collaborated with the AIHW, nurse registration authorities, health departments and the Australian Nurses' Federation to produce a standardised national Nurse Labour Force Survey. In 2003 the standardised survey was used by each state and territory (except New South Wales). AHWAC continues to work with the AIHW and the states and territories to move towards central processing of the surveys to further enhance the timeliness of reporting.

#### The Allied Health Workforce

Work has not yet been undertaken in the allied health area, however it is a priority in the 2003-2004 work program. Initial work on the allied health workforce will include:

- Identifying the priority areas (professions within allied health);
- Data development;
- Negotiating agreements for the supply of data relating to the highest priority professions; and
- Compiling, vetting, analysing and publishing data

#### Work Plan for 2003-2004

Work is commencing on three workforce reviews for the year 2003-2004. These are reviews of operating theatre support staff (including operating theatre nurses and anaesthetic technicians); the emergency care workforce (including medical, nursing and allied health staff); and the non-medical radiation-oncology workforce.

There are many individuals and groups to thank for assisting AHWAC during 2002-2003, including the members of the AHWAC working parties, AIHW, DEST, the Commonwealth Department of Health and Ageing, the State and Territory health departments, including the Chief Nurses and Principal Nursing Advisors, the nursing colleges (including the Royal College of Nursing Australia), the Australian Nursing Federation, nurse registration authorities, and members of the nursing profession.

John Ramsay  
Chairman AHWAC

## **AUSTRALIAN NURSING WORKFORCE ISSUES AND TRENDS**

The following is a summary of key workforce issues as well as a summary of recent studies of the Australian nurse workforce.

### Nursing issues

Nurse workforce planning is a high priority for AHWAC as a result of the current shortages being experienced across Australia and internationally. The key issue for the nurse workforce is the need to increase supply to address these shortages. The need to increase supply is being driven by:

- increased workplace demand for nurses
- increased workload (due to increasing patient activity and changes in clinical practice with new technology and treatment patterns);
- a decline in the full time equivalent nursing workforce (due to a decline in the average hours worked per week by nurses);
- an ageing nursing workforce;
- the expanding role of the nurse (eg. nurse practitioners, nurses in general practice); and
- the consequence of static or declining nurse undergraduate commencements and completions throughout the 1990s.

Retention also remains a key issue.

Many organisations from the health service level to the State/Territory and national level are currently involved in developing their workforce planning processes and approaches, in order to respond proactively to the current situation. While nursing shortages have been experienced in the past, due to a number of factors, it appears that this shortage may not be easily resolved. In economic terms, the current shortage is more likely to be “static” rather than “dynamic”. A dynamic shortage is a temporary phenomenon and should disappear with time. Indications of a shortage resolving include observed higher wages for nurses, increased rates of return, increases in employment and participation rates. The production and supply of nurses would increase faster than the demand for nurses over time. A static shortage occurs where large and dramatic increases in wages do not occur, participation rates do not increase, and the production of nurses does not increase to the rate required. (Felstein 1993).

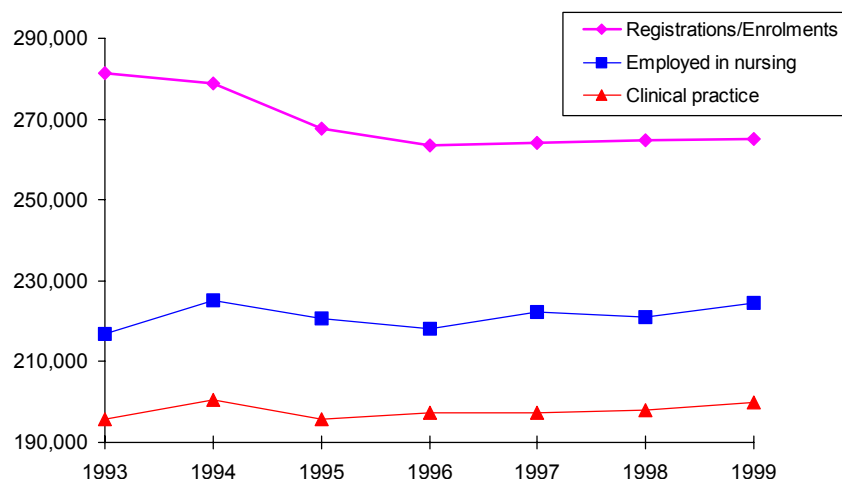
The observations of Kimball and O’Neill (2002) note that any shortage of nurses is likely to be ongoing rather than short lived due to factors such as:

- the ageing population;
- fewer younger people entering the workforce in general;
- an ageing workforce;
- more options for women, allowing women to choose careers other than nursing; and
- the demanding work environment.

The findings from the AIHW Nursing Labour Force 2001 (AIHW 2003) support the proposition that the shortage of nurses in Australia is likely to continue. For example, recent changes highlighted in the report include:

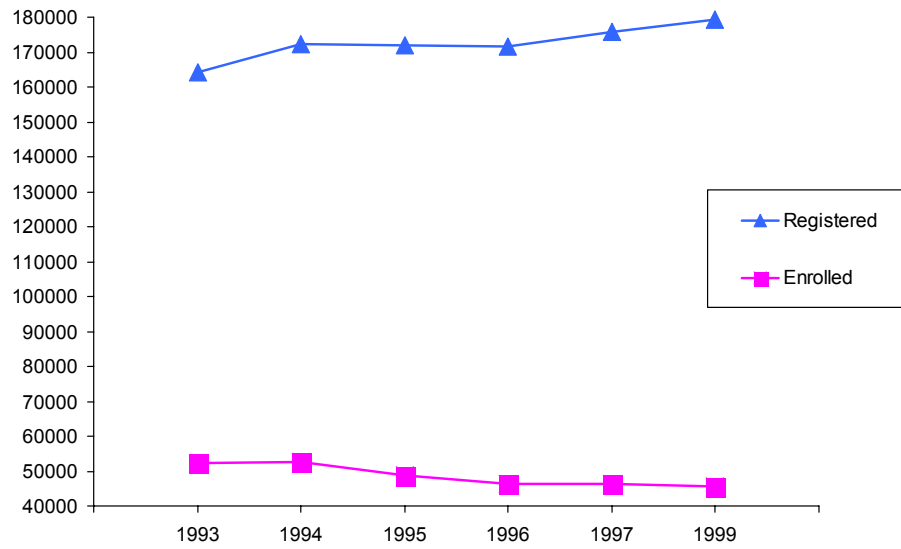
- in 2001, the total number of registrations and enrolments in Australia was 268,873 (an increase of 1.4% from 1999);
- excluding multiple registrations, there were 256,938 registered and enrolled nurses in Australia in 1999
- this was a slight increase (0.5%) since 1997, but was still lower than in 1993;
- the overall increase in number of employed nurses was accompanied by an increase in the proportion of nurses working part-time, and a decrease in average hours worked per week. This resulted in a fall in full time equivalent (FTE) per 100,000 from 1,074 in 1993 to 1,018 in 1999;
- the nursing workforce is ageing: between 1993 and 1999, the average age increased from 39.5 years to 41.6 years
- the number of new entrants to nursing is not expected to increase to the required level over the next few years. Falling numbers entering and completing basic nursing studies (undergraduate nursing courses) were evidenced over recent years. (however, numbers have increased slightly over the years 2002-2003);
- the gender imbalance in the nursing workforce continues. There has been a 17.7% increase in the number of male nurses between 1993 and 1999. However females still make up over 90% of the nursing workforce;
- there has been an overall increase in workload (as measured by hospital separations) from 5.3 million separations in 1995-96 to 6.0 million separations in 1999-2000.

**Figure 1: Nursing workforce, registered and enrolled: total registrations and enrolments, employed in nursing and working in clinical practice, 1993-1999**



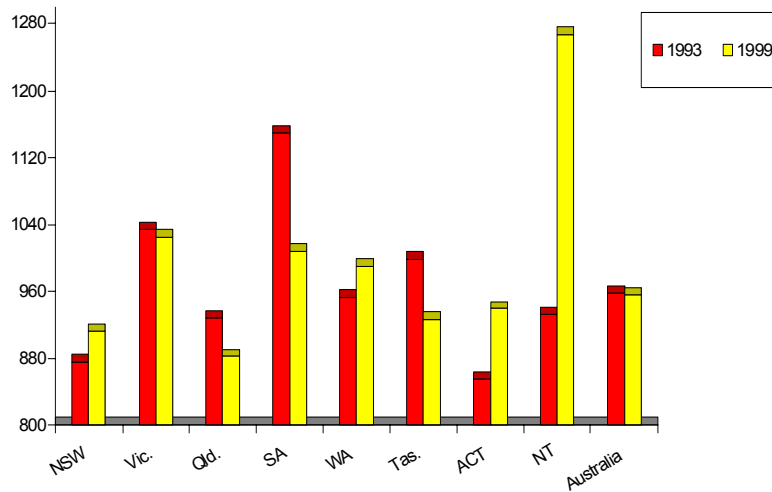
Source: AIHW, 2002, 2003

**Figure 2: Employed nurse workforce, registered and enrolled nurses, 1993 to 1999**



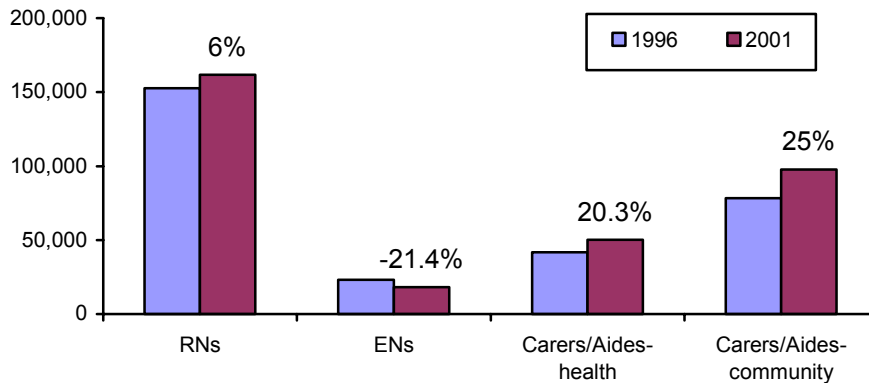
Source: AIHW, 2002, 2003

**Figure 3: Employed nurses, registered and enrolled, FTE per 100,000, by State and Territory, 1993 and 1999**



Source: AIHW 2002, 2003  
 Note: NT data not reliable

**Figure 4: Occupational growth, registered nurses, enrolled nurses, carers and aides, 1996 to 2001**



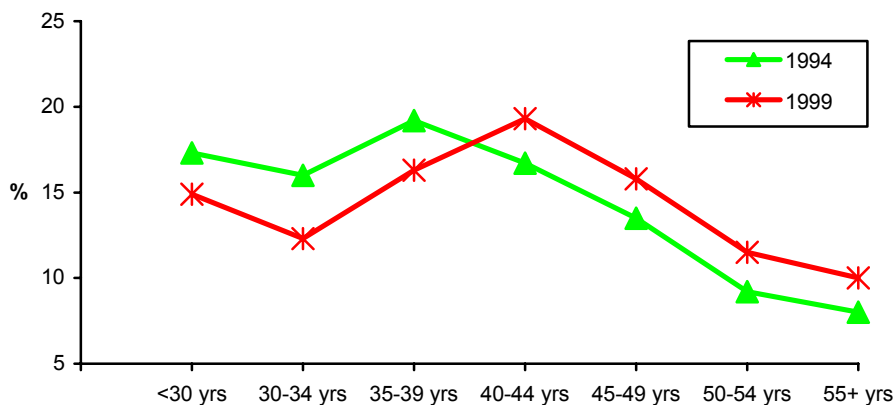
Source: AIHW 2003

### Nursing Workforce Trends

The dynamics of the nursing workforce have been changing over recent years. Losses (attrition) from the nursing workforce are reported to be increasing, and this may be explained largely due to the increasing age of the workforce, but also due to competing interests, such as higher paying jobs in other fields. A large proportion of the nursing workforce is in the age-group that will consider retirement in the next 10 –15 years. The average age of nurses is 41.6 years, with 38% aged over 45 years. Figure 5 illustrates the change in age structure between 1994 and 1999. Workforce participation may also be related to age. Reported trends show an increased proportion of nurses (registered and enrolled) working part-time (from 46% in 1993 to 53% in 1999) and a falling average number of hours worked per week (from 32.2 in 1993 to 30.3 in 1999) (AIHW 2003). Nurses in the 35-44 year age range appear to work fewer hours than those who are older or younger. As a substantial cohort of nurses have entered that age range in recent years, this has tended to reduce the average number of hours worked. It is not yet clear what will happen when that cohort moves into older age ranges during coming years. Figure 6 shows average age of nurses and average hours worked per week.

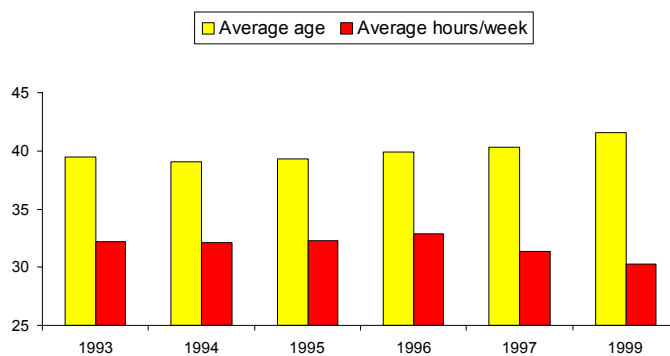
Increasing attrition rates may also be related to organisational factors. Experienced and highly qualified nurses have left the nurse workforce for other careers due to ongoing issues such as lack of recognition for their work (feeling devalued), feeling overworked and underpaid. Recently graduated nurses are leaving due to a mismatch of their expectations of nursing work and the reality of the nursing workplace. Attrition from undergraduate nursing courses is also a concern. While there are alternative career options which may offer more flexibility and better working conditions, there will be a continuing syphoning of nurses from the workforce. The recently produced Inquiry into Nursing Education examines these factors in greater detail (2002).

**Figure 5: Employed nurses, registered and enrolled, change in age structure (percentage in age-groups), 1994 – 1999**



Source: AIHW 2002, 2003

**Figure 6: Employed nurses, registered and enrolled, average age and hours worked, 1993-1999**



Source: AIHW 2003

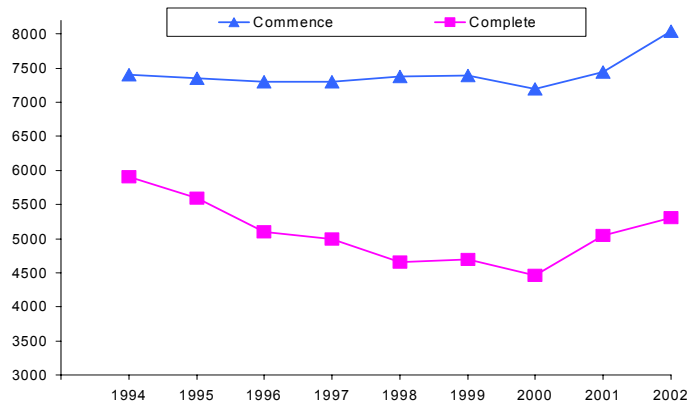
The requirement for nursing services has not declined, but has expanded as the burden of illness has shifted from acute to chronic, and health services are involved in aspects of people's lives once considered not to be health issues (Aiken, 2003). The aged care and community health sector has grown, while hospital care has become more intense. Sicker patients, shorter lengths of stay and higher turnover of patients has increased the workload and productivity of nurses in the acute hospital sector.

### *Undergraduate enrolments and completions*

The “front-end” supply of nurses has been affected by the decreasing rates of domestic students entering and completing undergraduate nursing courses over the last half the 1990s. However data from the Department of Education Science and Training (DEST) indicates a slight increase in both commencements and completions for domestic undergraduate nursing students between 2000 and 2002 (figure 7). The data also indicates a continuing gap between undergraduate nurse commencements and completions, for example, in 1998 there were 7,381 commencements, four years later 5050 completions were estimated. This indicates that a significant proportion of commencing nursing students are either not completing their courses or not completing them within a four year period.

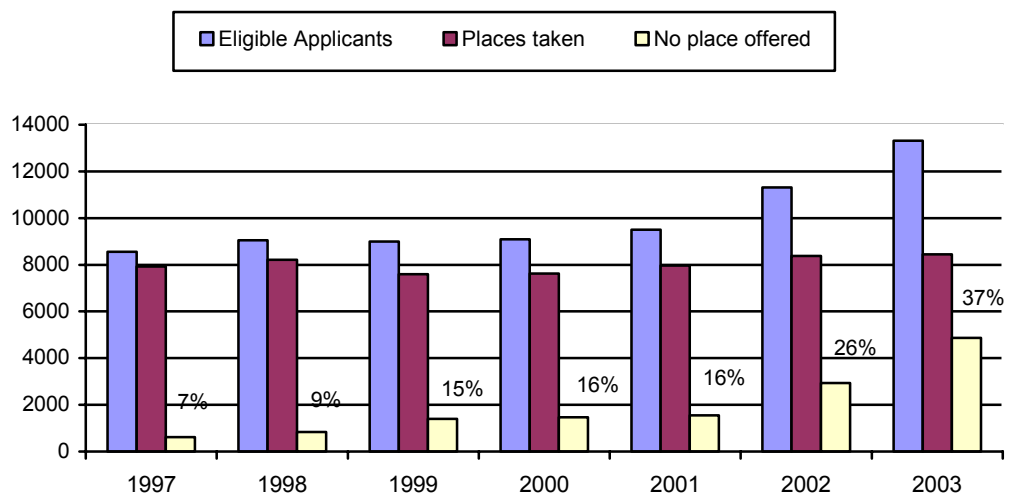
The Australian Vice Chancellors’ Committee (AVCC) collects data on applicants for undergraduate higher education courses. This data indicates an increase in eligible applicants for undergraduate nursing places by Australian students, between 2000 and 2003. However, this increase in demand has not been matched by proportionate increases in places offered (AVCC 2003). Data from the AVCC shows that the percentage of those eligible applicants not receiving offers has increased from 7% in 1997 to 37% in 2003 (figure 8).

**Figure 7: Nursing undergraduate commencements and completions, Australian citizens, 1994-2002**



Source: AIHW 2003, DEST 2003

**Figure 8: Nursing, eligible applicants and offers, 1997-2003**



Source: AVCC 2003

### National Nurse Workforce Planning

The Australian Health Workforce Advisory Committee (AHWAC) was established in December 2000 to provide a strategic approach to health workforce planning in Australia. AHWAC identified the critical care nurse workforce and midwifery workforce as initial priorities for its work, and this work was completed at the end of 2002.

Shortly after the establishment of AHWAC, two other national committees were set up to address issues related to the composition, supply and education of the nursing workforce. In 2001, a national review of nursing education was set up jointly by the Australian Government Ministers for Education, Science and Training, and Health and Ageing. The terms of reference for the review included: models of nurse education and training, types of skills and knowledge required to meet the changing needs of the labour force, and mechanisms for both attracting new recruits and encouraging on going learning of those already engaged in nursing (National Review of Nursing Education, 2002). The National Review of Nursing commissioned two projects to examine the nurse workforce in general and provide projections of supply and demand: Job Growth and Replacement Needs in Nursing Occupations (Shah and Burke 2001), The Nursing Workforce 2010 (Karmel and Li 2002).

In April 2001, the Senate Community Affairs References Committee established an inquiry into nursing. It covered issues such as the shortage of nurses in Australia and the impact this is having on health care service delivery, opportunities to improve current arrangements for the education and training of nurses, and strategies to retain nurses and attract nurses back to the profession. The report produced 85 recommendations related to these issues (Senate Community Affairs References Committee, 2002).

Another national study commissioned by the Australian Council of Deans of Nursing was also completed in June 2002. It provided projections for Australian nurse supply and demand to 2006 (Preston, 2002).

The major findings of the three national general nurse workforce studies (Shah and Burke, Karmel and Li and Preston) were:

1. The Nursing Workforce 2010 (Karmel and Li, 2002) (commissioned by the National Review of Nurse Education and Training)
  - projected annual increase in demand for nurses of 2.56%
  - by 2010 180,522 nurses will be required in Australia
  - projected shortfall to 2010 of 40,000
  - increasing nursing graduates by 120% is projected to balance the workforce in 2020
2. Job Growth and Replacement Need in Nursing Occupations (Shah and Burke, 2001) (commissioned by the National Review of Nurse Education and Training)
  - projected job openings for new graduates between 2001-2006 are 31,000
  - annual rate of growth of 2.5%
3. Australian Nurse Supply and Demand (Preston, 2002) (commissioned by the Australian Council of Deans of Nursing)
  - nurse shortfall of 2.2% by 2006

- projected 2006 requirement for graduates is 10,182 but supply is projected to only be 6,131
- this represents a shortfall of 4,051 graduates (39.8%).

Over a more extended period a number of nurse workforce planning reports have been produced by State and Territory health departments. There are variations in approaches and types of data used; however a common feature of all reports (both national and state/territory levels) is the challenge to find data to accurately describe the workforces in relation to supply dynamics, adequacy, and demand.

A coordinated effort for nurse workforce planning is required, not just at the State and Territory level, but at the national level. This is for three major reasons. Firstly, the production of registered nurses is the responsibility of the Australian government (funding of universities) and secondly nationally consistent data is required to describe not only the nurse workforce supply, but also the requirement for nurses. Thirdly, coordination is required to bring together the key stakeholders (including the education sector; state/territory health departments (planners and funding bodies); health service providers (public and private); the nursing profession; and consumers) involved in the production, development, and management of nursing workforces; and recipients of nursing care.

AHWAC is currently working on a resource document to inform members of AHWAC, AHWAC working party members, jurisdictions, the profession and the wider community involved with health and nurse workforce planning in Australia. The paper will detail the processes, methodologies, calculation tools and data sources currently used for nurse workforce planning in Australia. It will also highlight some of the emerging issues for nurse workforce planning such as integrated care planning and planning for changing models of care.

## AHWAC REPORTS 2002-03

### **The Critical Care Nurse Workforce in Australia, AHWAC Report 2002.1.**

(full copy of the report can be seen on the National Health Workforce Secretariat website: <http://www.healthworkforce.health.nsw.gov.au>)

#### Summary and Recommendations

A nursing shortage is being experienced both in Australia and internationally. Until recently, there has been little quantification of the nursing shortage and little focus on nurse workforce planning in Australia (of either the overall nursing workforce or the specialist nursing workforces). Critical care areas traditionally draw relatively young nurses from the acute hospital sector. Shortages in specialist areas of nursing such as critical care are likely to be caused by a decreased pool of potential new entrants (in this case, new graduate and recently graduated nurses) and an increased rate of attrition from the workforce.

Future demand for critical care services, and thus requirements for critical care nurses, is expected to increase with population growth and ageing. As well as expanded services (in terms of bed numbers), increased productivity of critical care nurses is expected, as the throughput of patients in critical care services increases (due to technological advances).

This report provides an analysis of the current critical care nurse workforce, including the current supply, current requirements and the difference between the two. The current critical care nurse workforce is profiled in terms of numbers, average age, average hours worked per week, and gender. The Australian Institute of Health and Welfare (AIHW) provided much of the data for the workforce profile. Limitations associated with using the AIHW data included the age of the data (data from 1999 being the most recently available) and survey inconsistencies among jurisdictions. However, this source provided the only national workforce information.

The Australian and New Zealand Intensive Care Society (ANZICS) was also a major source of data regarding the permanently employed critical care nurse workforce and vacant positions for critical care nurses, through its Review of Intensive Care Activity Report (1999-2000). It also provided the necessary data to determine critical care nurse requirements, i.e., a description of intensive care bed provision in Australia.

The Australian College of Critical Care Nurses (ACCCN) staffing standards were used as a basis for determining the critical care nurse requirement per intensive care bed. The staffing standards take into account accepted national minimum standards set by the Joint Faculty of Intensive Care Medicine (JFICM) and the Australian Council on Healthcare Standards (ACHS); evidence of the effect of nurse staffing from international studies; as well as "best practice" determined by consensus amongst critical care nurse leaders. The base-line requirement was applied to current available intensive care beds and was used to develop a measure of workforce adequacy when compared with the actual workforce. The JFICM and ACHS standards have not been reviewed since 1997, while the ACCCN staffing standards were developed in 2001.

The total national critical care nurse workforce was estimated to be 9,869 using AIHW data. The estimated requirement for critical care nurses was 10,386 (a net shortfall of 537 across the nation). The total permanently employed critical care nurse workforce (using ANZICS data) was estimated to be at least 5047.1 full-time equivalent (FTE) nurses, with estimated vacancies (FTE) totalling 460.3.

Baseline assessment of supply (under or oversupply) was factored into projection modelling. Because of a lack of data describing new entrants to the workforce and permanent exits each year, a number of scenarios were developed to provide an indication of new entrants required each year to balance the workforce from 2001-2011. The required annual new entrants for workforce balance ranged from 722 to 1,356, depending on the workforce scenario used in the modelling.

To achieve workforce balance the two ends of the workforce require adjustment. Firstly, an increased number of undergraduate nurses (who subsequently enter the nursing workforce) are required. Secondly, an increased rate of retention of experienced critical care nurses is required.

The major limiting factor involved in this report has been the lack of recent, consistent, reliable and longitudinal data to describe the critical care nurse workforce.

The following recommendations have been formulated by the Working Party in order to achieve a balanced workforce. The recommendations are based on the Working Party's view that there is unlikely to be a major change to critical care service provision within the defined projection period, including the model of critical care nursing. Highly specialist areas of healthcare require a highly specialist nursing workforce. Implementation of the following recommendations will require government (Commonwealth, State and Territory), the critical care nursing profession, the university sector, and public and private health services to work together.

Recommendation 1: ensuring an adequate supply of registered nurses to work in critical care (quantity).

That AHMAC coordinate action to improve the supply of critical care nurses in Australia by working with the health and education sectors to ensure sufficient adjustment in new entrants to the critical care nurse workforce, recognising that at least 722 (lowest requirement scenario) and at most 1,356 (highest requirement scenario) new entrants to the critical care nurse workforce are required nationally each year. Noting:

- That in putting in place these actions AHMAC should be guided by the state and territory scenario projections outlined in this report, and that these actions should be informed by the most recently available jurisdictional critical care nurse workforce data.
- Strategies to improve retention of the skilled critical care nurse workforce would ensure that the required new entrants to the workforce is minimised.

Recommendation 2: ensuring an adequate supply of qualified critical care nurses (quality).

State and territory health departments as part of ensuring an adequate supply of critical care nurses note the standards suggesting at least 50% of the critical care nurse workforce and desirably 75% of the critical care nurse workforce should hold critical care qualifications.

That AHMAC note the desirability of a move towards greater consistency in postgraduate critical care courses and the development of a framework for accreditation for postgraduate critical care courses.

Recommendation 3: ensuring adequate data for ongoing and complete workforce supply analysis and requirement analysis.

That AHMAC coordinate improvements to critical care nurse data collections, and overall nurse data collections, noting that reliable, timely data is essential to workforce planning. The following measures are required:

- AIHW surveys: the implementation of a consistent, timely national approach for the collection of nurse labour force surveys via nurse registration boards annually.
- Nurse registration authorities: AHMAC to encourage jurisdictions to work together to ensure a more consistent approach to registration data collection and reporting.
- ANZICS Intensive Care Unit Resource Surveys: AHMAC continue to support the work of ANZICS and ensure the enhancement of the surveys to include additional questions regarding the critical care nurse workforce.
- Improvement of information relating to the nursing education sector.
- Research to measure the relationship between critical care nurse staffing levels (and skill mix) and patient outcomes.

Recommendation 4: monitoring the workforce

That AHMAC coordinate the monitoring of supply and requirement projections of and for the critical care nurse workforce, and that the critical care nurse workforce be reviewed in five years' time.

## **The Midwifery Workforce In Australia, AHWAC Report 2002.2**

(full copy of the report can be seen on the National Health Workforce Secretariat website:  
<http://www.healthworkforce.health.nsw.gov.au>)

### **Executive Summary and Recommendations**

This report describes the current midwifery workforce; assesses its adequacy; projects future supply of and requirements for the midwifery workforce, and makes an assessment of what adjustments may be needed to current arrangements in order to achieve a balanced midwifery workforce (that is, one where supply meets requirements).

In reaching its conclusion that there is a shortage in the current midwifery workforce the Working Party was concerned at the patchy and inconsistent nature of data. Essential information, such as entrants to and exits from the workforce, is unknown in some jurisdictions, and unreliable in others. Consequently the Working Party has made a number of recommendations relating to the collection, analysis and monitoring of midwifery workforce data.

The Working Party also noted its concern at the inconsistency of regulatory environments and required clinical competencies among jurisdictions.

This report by AHWAC is the first attempt to quantify the national shortage of midwives, placing it within the context of a move towards broader health workforce planning.

As midwives are largely drawn from the nursing workforce they are inextricably affected by whatever issues affect the supply and demand of nurses, although there are issues that are peculiar to the midwifery workforce.

The Working Party approached the Australian Institute of Health and Welfare (AIHW) to refine its usual reporting parameters of 'nurses working in midwifery' and instead report on registered nurses with midwifery qualifications indicating midwifery as their principal area of activity. This was based on the principle, agreed by the Working Party, that midwifery care should be provided by people with midwifery qualifications. This resulted in a reduction of more than 2,000 FTE.

The lack of data for both supply and requirements modelling necessitated some assumptions being made by the Working Party.

There is also no recognised calculation tool for determining the adequacy of the midwifery workforce. After considering a range of options the Working Party developed its own approach by surveying maternity units and determining the funded establishment for clinical midwives working in midwifery. This was then compared with data from the AIHW to provide an indication of the over or under supply of the current midwifery workforce. The results of this approach indicated that there was an estimated current undersupply of 1847 in the midwifery workforce. It should be noted that this does not include replacement factors for midwives working in non-clinical areas such as research, education and management.

Supply side modelling used a combination of data (AIHW nurse labour force surveys, data collected by health departments, nurses' registration authorities and data from the

Department of Education Science and Training). Some supply side assumptions were made due to gaps in data, such as the permanent exit rate from the midwifery workforce.

Requirements side planning was carried out by determining the current midwifery staffing profile of maternity units according to their size and seeking advice from state and territory health authorities regarding future distribution of maternity units. The projected age-specific fertility rates by five year age cohort by state and territory were also included. The lack of information in critical areas such as the availability and take up of different models of care and importantly, the lack of best practice guidelines, were noted.

The Working Party projected the required number of new entrants to the midwifery workforce up to and including 2012, producing a range of scenarios based on different rates of permanent exit from the midwifery workforce. Figures vary among jurisdictions, but nationally by 2012 there needs to be between 519 and 1752 new entrants to the midwifery workforce in order to ensure a balanced workforce (that is, one where supply meets requirements), depending on the permanent exit rate per annum. Figures are provided at a national and jurisdictional level, however guidance is not provided as to the distribution of the workforce within individual states and territories.

There is much that is not known about the midwifery workforce and maternity service provision in Australia. This report identifies these gaps in knowledge, addresses some of them, and recommends that others become the subject of analysis, monitoring and research over the coming decade.

## Recommendations

The recommendations have been based on the Working Party's view that there are unlikely to be fundamental changes to the current provision of maternity services in Australia. Highly specialist areas of healthcare require a highly specialist workforce. Implementation of the following recommendations will require government (Commonwealth, state and territory), nurses and midwives, the university sector, and public and private health services to work together.

### Recommendation 1:

That AHMAC co-ordinate action to improve the supply of midwives in Australia by working with the health and education sectors to ensure that there is sufficient adjustment in intakes of midwifery courses (leading to an initial authorisation to practise midwifery), to meet the current shortfall in the midwifery workforce estimated at 1847.

### Recommendation 2:

That in putting in place these actions AHWAC is guided by the state and territory scenario projections outlined in this report, noting that these actions should be informed by the most recent available jurisdictional midwifery workforce data.

### Recommendation 3:

That AHMAC ensure improvements are made to midwifery workforce data collections, noting that reliable and timely data is essential to workforce planning. The following information needs to be routinely collected, analysed and monitored:

- course completions leading to an initial authorisation to practise midwifery;

- annual variations in interstate and international midwifery registrations (including Trans-Tasman registrations);
- re-entrants to the midwifery workforce;
- workforce participation of graduates one year, five years, and ten years after graduation; and
- permanent exits from the midwifery workforce.

The collection of this information will ensure the link is made between qualification, registration and employment.

Recommendation 4:

In order to benefit future workforce planning AHMAC should consider the establishment of a national longitudinal research study that tracks a series of cohorts of midwives over a period of time to examine their workforce participation and organisational behaviour. The cohorts should include midwives from a range of educational backgrounds, such as those completing midwifery courses having already obtained their nursing degrees, and those completing Bachelor of Midwifery courses.

Recommendation 5:

Information and data on the availability and utilisation of different models of care in each state and territory is fundamental to future workforce planning. This information should be collected by state and territory health departments and considered in any future reviews of the midwifery workforce. This process will be best informed if high quality information is available to women on the options available for maternity care.

Recommendation 6:

That AHMAC coordinate the monitoring of supply and requirement projections of and for the midwifery workforce, and that the midwifery workforce be reviewed in five years' time.

Recommendation 7:

That AHMAC ensure that this report is distributed widely.

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