



Introduction

Concerns about the current and future capacity of the nursing workforce have led to a number of national reviews, including the *National Review of Nursing Education* (DEST 2002) and the Senate Community Affairs Committee Inquiry into Nursing (SCAC 2002). Data show an overall increase in nurse numbers over the decade to 2003 (AIHW 2003) but, despite this, the pattern of increase in part-time work, combined with population growth, had the net effect of reducing nursing supply per head of population.

Over that decade, South Australia has seen its nursing supply levels shift from being well above the national rate to almost the same, before rising again. Although the South Australian nursing supply declined at a quicker rate than nationally, data show it has also recovered sooner, experiencing its lowest point in 1999, while the lowest point for national supply occurred in 2001. Nursing supply in South Australia continued to grow more quickly than national supply and was again well above the national rate by 2003.

In 2002, the then South Australian Department of Human Services developed the Strategic Directions Plan which focused on the recruitment and retention of nurses and midwives in that state. Data in this report provide a base profile of nurses and midwives. The report was commissioned and funded by the South Australian Department of Health to assist with policy strategies and with the evaluation of its Strategic Directions Plan. The report focuses on changes in nurses' work patterns over time, particularly in hours worked and areas of clinical work.

Where appropriate, comparisons have been made with data drawn from earlier Nursing and Midwifery Labour Force surveys. To view the full range of information available, please visit the Institute's web site at http://www.aihw.gov.au/publications/html.

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Overview

This overview summarises the detailed nursing and midwifery labour force survey data presented in this publication. It aims to integrate, at a broad level, the main analyses and findings.

Nurses and midwives have contributed to the information in this report but, for ease of discussion, throughout this report the term 'nurse' includes midwife.

Context

During the mid- to late 1990s, there was a noticeable trend in the nursing labour force towards part-time work. Increases in nurse numbers did not keep pace, and this led to a period of steady decline in nursing supply relative to the population. From 2001, the average hours worked by nurses began to increase at a time when the population growth in South Australia was comparatively small. This enabled supply to strengthen earlier than it did nationally.

Findings

The report begins by examining the characteristics of the 25,359 nurses registered in South Australia in 2004. The first issue addressed is whether there are differences between the 23,099 nurses who were employed in nursing in South Australia and the 2,260 who were not. Data show that citizenship and country of initial qualifications did not affect whether or not they were employed in nursing. Nurses in 2004 were older, on average (by 2.9 years), than in 1997; however, age was not a large factor in whether they were employed. Location of residence showed small differences between registered and enrolled nurses, but little difference in their labour force status. Possession of post-registration qualifications had some relationship with employment. Employed nurses in South Australia were more likely to hold post-registration qualifications than were nurses not employed in nursing.

The report then focuses on the actual supply of nurses in 2004 and changes over the previous few years, followed by an analysis of changes in working patterns of those delivering nursing care. Over the period 1997 to 1999, despite a small increase in the number of nurses working in nursing (the nurse workforce), there was a reduction in South Australia's nursing supply. This is because, at the same time, the number of nurses working part-time increased, reducing their contribution to nursing supply. In 2001 there was a reversal of this trend, and by 2004 the level of nursing supply had grown by nearly a third from that of 1999. This reversal was underpinned by the smaller growth in the South Australian general population (3.6%) than in the nurse workforce (12.9%).

Finally, the distribution of nurses' post-registration qualifications across areas of nursing is explored. For workforce planning, nurses' qualifications and their utility in nursing is valuable information for gauging skill supply across the different areas of nursing. In 2004, 40.7% (9,408) of employed nurses held post-registration qualifications, but only around half (56.3%) of those nurses worked in an area of nursing activity directly corresponding to their qualification field. Further, of the post-registration qualifications collectively available in the nurse workforce, the proportion directly matching the qualification holder's work area varied across nursing areas. For example, of nurses who held post-registration qualifications, nearly all working directly in midwifery held midwifery qualifications, but there were considerably more holders of midwifery qualifications who were not working in midwifery. The reverse was the case in some other areas of activity.

All of these comparisons provide useful information to address specific shortages in the nurse workforce.

All nurse registrations

Size

There were 25,359 nurse registrations in South Australia in 2004, and the majority (94.0% or 23,836) were in the South Australian nurse labour force (Figure 1). Of these, 23,099 (96.9%) were employed in nursing, 474 (2.0%) were on extended leave for 3 months or more and 263 (1.1%) were looking for work in nursing. Of nurses registered in South Australia who were not in the South Australian nurse labour force (1,523 nurses), just over one in three (36.1% or 550) were employed in other occupations and not looking for work in nursing, just under one in three (30.6% or 466) were not employed and not looking for work, and around one in five (21.1% or 322) were employed in nursing but mainly or only working interstate.

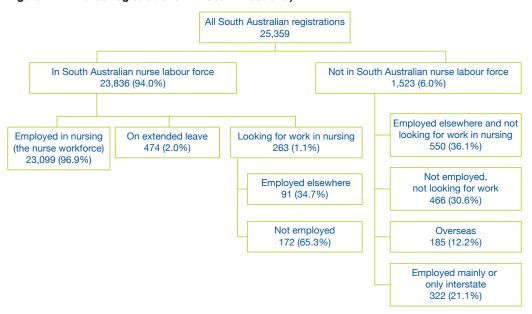


Figure 1: All nurse registrations(a) in South Australia, 2004

(a) Comprises registered nurses and enrolled nurses.

Source: Nursing and Midwifery Labour Force Survey, South Australia, 2004.

The 23,099 nurses working in nursing in South Australia (the nurse workforce) in 2004 was a 5.6% increase from 2003 (21,883), representing the largest percentage increase over the 1997 to 2004 period (Table A1). This rise is calculated over a one-year period, whereas the earlier changes are calculated at two-year intervals. The earlier periods show steady, small increases from 1997 to 1999 (up 1.4%) and 1999 to 2001 (up 1.5%), followed by the first more substantial jump in 2003 (up 3.9% from 2001).

The number of nurses looking for work in nursing in 2004 (263) was an increase of 6.0% from 2003 (248), which was the lowest level over the period. Overall, from 1997 to 2004, the number of nurses looking for work dropped by 31.0%, most of this occurring between 1999 and 2001 (down from 361 to 252).

Over the period 1997 to 2004, the South Australian nursing labour force increased by 11.5% (from 21,384 to 23,836), while the general population in South Australia increased by 3.6% (from 1,481,357 to 1,534,250 people) (ABS 2004).

Nurses who were not employed in nursing and not looking for work in nursing were quite stable in number from 1997 to 2001, ranging from 599 to 610. However, by 2003 this group had more than doubled to 1,304 nurses, the highest over the period from 1997 to 2004. This was followed by a decrease to 1,016 nurses in 2004, resulting in an overall rise of 69.7% from 1997.

Labour force status

Demographics

This section summarises selected characteristics of registered and enrolled nurses and looks at whether they were working in nursing.

In 2004, age did not appear to be a large factor in whether or not nurses were employed, although those not looking for work tended to be older, on average, and those on extended leave or overseas tended to be younger, the differentials being greater for registered nurses. Figures show that registered nurses employed in nursing were, on average, younger (42.9 years) than their enrolled colleagues (43.6 years), and registered nurses looking for work in nursing were slightly younger on average (42.7 years and 43.0 years, respectively) (Table 1). Employed registered nurses were more likely to be male (10.1% male compared with 6.3% for enrolled nurses) whereas nurses looking for work showed little difference in the proportions who were male (5.0% for registered and 5.1% for enrolled).

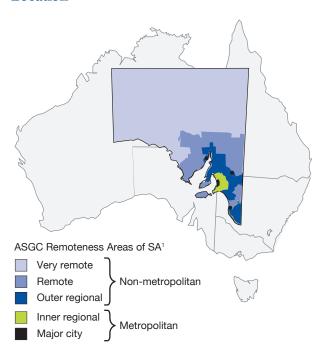
Characteristics of citizenship and country of initial qualifications also had little influence on labour force status (Table A2). The proportions of employed Australian citizen nurses were 93.3% for registered nurses and 93.8% for enrolled nurses, and the proportions for those who were not employed in nursing were 91.8% and 94.4%, respectively. The proportions of employed nurses who obtained their initial qualification in Australia were 89.6% for registered nurses and 96.5% for enrolled nurses and, of those who were not employed in nursing, the proportions were 89.1% and 96.9%, respectively.

Table 1: Nurse registrations: labour force status, average age and proportion male, 2004

	Registered nurses			Enre	olled nurses	i	All nurses		
		Average	%		Average	%		Average	%
	Number	age	male	Number	age	male	Number	age	male
Employed in nursing, mainly									
or only in South Australia	17,427	42.9	10.1	5,673	43.6	6.3	23,099	43.1	9.1
On extended leave	397	36.7	3.0	77	38.6	8.4	474	37.0	3.9
Looking for work in nursing	184	42.7	5.0	79	43.0	5.1	263	42.8	5.0
Overseas	175	38.0	14.8	10	42.3	_	185	38.2	13.9
Not looking for work in									
nursing	687	45.4	6.6	329	44.0	4.5	1,016	44.9	5.9
Employed mainly or only									
interstate	273	43.4	11.0	49	44.4	5.8	322	43.6	10.2
Total nurse registrations	19,142	42.8	9.8	6,217	43.6	6.2	25,359	43.0	8.9

Source: Nursing and Midwifery Labour Force Survey, South Australia, 2004.

Location



In 2004, most nurses (84.6%) with registration in South Australia reported residing in metropolitan areas (Table 2). This aligned with the proportion of the South Australian population living in metropolitan areas (84.6%). ²

The metropolitan/non-metropolitan distribution of nurses was different when registered nurses were compared with enrolled nurses. Registered nurses were more likely to live in metropolitan areas (87.2%) than their enrolled colleagues (76.6%).

The picture was similar for registered nurses employed only or mainly in South Australia, those looking for work in nursing and those not looking for work in nursing (between 84.6% and 87.9% residing in metropolitan areas). For enrolled nurses, around three-quarters (77.2%) of those employed only or mainly in South Australia and a slightly higher proportion (80.4%) of those looking for work in nursing lived in metropolitan areas, whereas for those not looking for work in nursing around two-thirds (68.2%) lived in metropolitan areas.

Table 2: Nurse registrations: labour force status and location(a) of residential address, 2004

	Registere	ed nurses	Enrolled	l nurses		Total		
	Metropolitan area	Non- metropolitan area	Metropolitan area	Non- metropolitan area	Metropolitan area	Non- metropolitan area	Overseas (b)	Not stated (c)
Employed in nursing, only or mainly in South Australia	15,207	2,098	4,352	1,285	19,559	3,384	_	156
On extended leave Looking for work in	314	80	60	16	374	95	1	3
nursing	153	26	63	15	216	42	3	3
Overseas Not looking for work in	68	3	2	2	69	5	96	15
nursing Employed only or	570	104	224	104	794	208	6	8
mainly interstate	166	104	24	25	190	129	-	3
Total nurse registrations	16,478	2,415	4,725	1,447	21,203	3,862	106	188

⁽a) See 'Geographic classification' in the Glossary.

Source: Nursing and Midwifery Labour Force Survey, South Australia, 2004.

⁽b) Percentage calculations in the text exclude nurses with an overseas address.

⁽c) Comprises nurses who did not provide their location.

¹ Metropolitan/non-metropolitan relate to the Australian Bureau of Statistics' ASGC Remoteness Areas. See 'Geographic classification' in the Glossary.

² Figures are based on ABS preliminary population estimates for 2004 and are subject to revision.

Qualifications

In 2004, employed nurses in South Australia were more likely to hold post-registration qualifications (40.7% or 9,408) than nurses who were not employed in nursing (36.5% or 707) (Table 3). Of those employed, almost half of registered nurses (46.8% or 8,156) held post-registration qualifications compared with around one in five (22.1% or 1,252) enrolled nurses. The proportions were lower but differences between the two groups were similar for those not employed in nursing, with 42.8% of registered and 17.9% of enrolled nurses holding such qualifications. With a total of 2,429 qualifications³, Critical care/emergency predominated for working nurses, followed by Midwifery qualifications (2,294). For nurses not working, qualifications in the fields of Critical care/emergency and Midwifery again predominated (178 and 182 qualifications, respectively). Qualifications in Disability and Rehabilitation were less common, irrespective of whether or not nurses were employed in nursing.

Enrolled nurses' qualifications were distributed differently from the overall pattern. They were more likely to be in the fields of Medical/surgical and Aged care (270 and 216, respectively for qualification holders employed in nursing; and 20 and 23, respectively, for qualification holders not employed in nursing).

Table 3: Nurse registrations: post-registration qualifications, 2004(a)

	Employed in nursing			Not emp	loyed in nurs	ing ^(b)
Field of qualification	Registered nurses	Enrolled nurses	Total	Registered nurses	Enrolled nurses	Total
Nurses without post-registration qualifications	9,270	4,421	13,691	825	406	1,231
Nurses with post-registration qualifications	8,156	1,252	9,408	618	89	707
Total nurses	17,427	5,673	23,099	1,443	495	1,938
Qualifications held ^(c)						
Critical care/emergency	2,319	110	2,429	175	3	178
Perioperative	715	87	802	56	4	61
Medical/surgical, incl. gynaecology	1,581	270	1,851	88	20	109
Midwifery	2,242	52	2,294	182	_	182
Paediatric and child health	792	49	841	73	4	77
Community health	895	101	996	55	6	61
Mental health	862	178	1,040	59	13	71
Aged care	699	216	915	41	23	64
Disability	61	15	76	4	_	4
Rehabilitation	120	75	195	5	7	12
Management/administration	827	61	887	63	8	71
Education	292	47	339	35	7	41
Generic and other courses	2,487	630	3,117	204	29	233

⁽a) Includes hospital-based certificates and tertiary qualifications in nurse management and clinical nursing. In 2003, the scope of qualifications/ courses changed to exclude in-service/continuing education sessions, refresher/re-entry courses or those less than 6 months' duration.

Source: Nursing and Midwifery Labour Force Survey, South Australia, 2004

⁽b) Includes nurses on extended leave, overseas, nurses working but not in nursing and nurses not working. Excludes nurses working interstate.

⁽c) Qualifications total more than the number of nurses because nurses can hold more than one qualification.

³ Qualifications total more than the number of nurses because nurses can hold more than one qualification.

The nurse workforce

The supply of nurses is a cornerstone of health workforce planning. Nursing supply in South Australia shows changes in average hours worked directly affecting supply over the period from 1997 to 2004. The nursing supply has increased in recent years, in part as a result of an increase in average hours worked by nurses but also because the South Australian population has grown at a slower rate than the number of employed nurses.

This section presents information on employed nurses (the nurse workforce), their characteristics and how the pattern of their work affects overall supply.

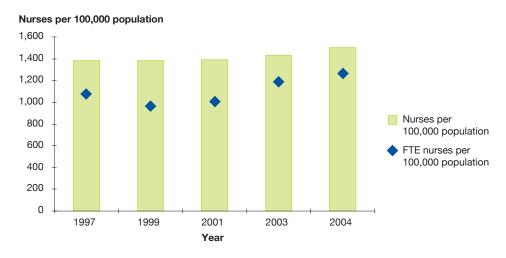
Overall nursing supply

Because a high proportion of nurses work part-time and the proportion doing so can vary from year to year, the use of the population-standardised head-count is limited as an indicator of nurse supply. It is more appropriate to assess the supply of labour through full-time equivalent (FTE) nurse numbers, 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. FTE calculations in this publication are based on the standard full-time working week for nurses in South Australia of 38 hours per week. The FTE (supply) in this report is based on the total hours worked, divided by 38 hours for all nurses.

A feature of the nurse workforce is a lower FTE per 100,000 population of nursing supply than the rate of nurses in the population. This is because the hours they work per week (31.9 in 2004) average less than 38 (Table 5).

Figure 2: Employed nurses: nurse rate and full-time equivalent (FTE) rate $^{(a)}$ in South Australia, 1997 to 2004



(a) Calculations of FTE are based on a 38-hour week.

Sources: Nursing Labour Force surveys, South Australia, 1997 to 2001; Nursing and Midwifery Labour Force surveys, South Australia, 2003 and 2004.

For example, a nurse working 68 hours per week represents 1.8 FTE, and one working 19 hours represents 0.5 FTE.

This method provides a measure of the actual supply of nursing by taking into account nurses working part-time and those regularly working more than 38 hours per week as well as nurses who, due to difficulties filling rosters, work additional shifts to maintain the same level of service.

FTE (supply) measures how many 38-hour week workloads are being worked by nurses.

The measure of supply also hinges on population size, and for this reason FTE per 100,000 population (the FTE rate) is used to compare supply over time or between areas, as well as the number of nurses per 100,000 population (the nurse rate). On this basis, the South Australian FTE rate in 2004 was 1,264 FTE per 100,000 population and the nurse rate was 1,506 per 100,000, both of which show an overall rise from the level in 1997 (1,076 FTE and 1,382 nurses per 100,000 population) (Figure 2). Between those years, however, there was a dip in both the nurse rate and the FTE rate, and in 1999 and 2001 the gap between the two measures was wider, as proportions of part-time nurses (those working less than 38 hours per week) rose.

Work patterns

Demographics

Table 4: Employed nurses: average hours worked per week^(a), proportion working part-time^(b) and average age, by sex and division, 1997 to 2004

	1997	1999	2001	2003	2004			
	1007		Registered nurse		2004			
	Males							
Average hours	37.2	32.7	34.0	38.0	38.5			
% part-time	22.2	41.8	38.7	27.8	30.4			
Average age	39.5	40.1	41.9	42.6	42.9			
, werege age	30.0		Females	.2.0	.2.0			
Average hours	29.5	26.5	27.1	31.3	31.6			
% part-time	62.4	72.2	72.8	62.5	61.7			
Average age	40.5	40.9	42.4	42.5	42.9			
	Enrolled nurses							
			Males					
Average hours	34.8	29.4	33.0	35.3	35.9			
% part-time	41.3	60.6	50.5	47.5	44.8			
Average age	37.7	39.6	41.3	41.9	41.7			
			Females					
Average hours	27.0	24.4	26.1	29.3	30.1			
% part-time	77.9	84.0	82.4	74.5	71.9			
Average age	39.6	41.0	43.1	43.2	43.7			
			Total nurses					
			Males					
Average hours	36.8	32.2	33.8	37.5	38.1			
% part-time	25.0	44.5	40.5	30.9	32.8			
Average age	39.2	40.1	41.8	42.5	42.7			
			Females					
Average hours	28.9	26.0	26.9	30.8	31.2			
% part-time	66.2	75.0	75.1	65.4	64.2			
Average age	40.3	40.9	42.5	42.7	43.1			

⁽a) Based on the total number of hours worked per week self-reported by responding nurses. See Glossary for more information on hours.

Source: Nursing Labour Force surveys, South Australia, 1997 to 2001; Nursing and Midwifery Labour Force surveys, South Australia, 2003 and 2004.

⁽b) Less than 38 hours per week.

In 2004, the average total weekly hours worked by both males (38.1) and females (31.2) were higher than average hours in 1997 (36.8 and 28.9 hours, respectively). Again, there was a dip over the period, with the lowest level in 1999 (32.2 and 26.0 hours, respectively) (Table 4).

Consistent with this, the pattern of both male and female part-time nurses over time shows an inverse trend. Although the majority of males work full-time, in 1997 a quarter of males (25.0%) worked part-time. By 1999 this had peaked at 44.5% and in 2004 had fallen to a third (32.8%). Two-thirds (66.2%) of females worked part-time in 1997 and this peaked at three-quarters in 1999 and 2001 (75.0% and 75.1%, respectively), a rise of almost 9 percentage points. A drop followed and by 2004 around two-thirds (64.2%) of females were part-time (Table 4).

Overall, in 1997, just under two-thirds of all nurses (62.7%) were part-time and by 1999 this had reached almost three-quarters (72.3%). This increase was most evident for nurses working less than 15 hours a week, whose proportion increased by almost 6 percentage points from 1997 (7.0%) to 1999 (12.7%). At the same time, the proportion who worked 15–24 hours per week increased by 4.8 percentage points (29.2% in 1997 and 34.0% in 1999) (Table A3).⁴ After the peak in 1999, there was a decline in the number of part-time nurses, with a sharp drop evident from 2001 to 2003 (71.9% to 62.3%, respectively). In 2004, the proportion of part-time nurses remained steady at 61.4%.

Between 1997 and 2004, the South Australian nurse workforce aged by 2.9 years. Most of this rise occurred between 1999 and 2001 when their average age rose by 1.6 years. With females comprising 90% of the nurse workforce, this pattern was reflected in their age trend (a rise of 2.8 years overall and a jump of 1.6 years in their average age between 1999 and 2001). Males were younger than females on average, but between 1997 and 2004, males aged by 3.5 years overall, closing the gap between their average age and that of females (Table 4).

Sector of employment and work setting

Sector of employment relates to whether the facility in which nurses work is public or private, and work setting of nurses refers to the type of facility in which they work.

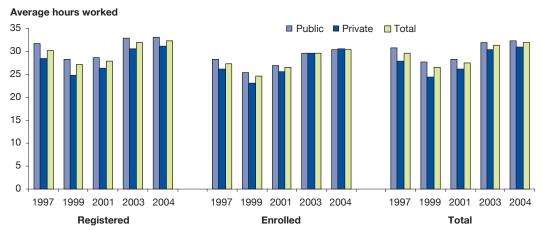


Figure 3: Employed nurses: average hours worked per week and employment sector, 1997 to 2004

Sources: Nursing Labour Force surveys, South Australia, 1997 to 2001; Nursing and Midwifery Labour Force surveys, South Australia, 2003 and 2004.

⁴ Not all nurses provided the number of hours worked, and those nurses who did not are excluded from the percentage calculations.

Sector of employment

In 2004, nurses in the public sector worked, on average, 1.4 hours per week more than their colleagues in the private sector (32.4 hours compared with 31.0 hours) (Figure 3). This held true for registered nurses, who worked an average of 1.8 hours more per week in the public sector than in the private sector (33.0 hours compared with 31.2 hours), whereas for enrolled nurses there was little difference (30.4 and 30.5 hours per week, respectively).

Between 1997 and 2004, nurses employed in the private sector experienced a larger rise in their average weekly hours than their colleagues in the public sector (up by 3.1 hours and 1.6 hours, respectively). This pattern was evident for both registered and enrolled nurses, with increases in weekly hours of 2.8 hours and 1.3 hours, respectively for registered nurses and 4.4 hours and 2.1 hours, respectively for enrolled nurses.

Work setting

Across work settings in 2004, the weekly hours worked by nurses in Tertiary education institutions (37.5 hours) and Developmental disability services (36.9 hours) were, on average, higher than those of their colleagues working in other settings (Table 5). Furthermore, nurses employed in these two work settings were more likely to work 45 hours or more per week (22.6% and 15.1%, respectively) and, correspondingly, less likely to work part-time (35.1% and 33.2%, respectively) than other nurses. The picture in 1997 was similar, in that nurses in these two work settings tended to work more hours.

Between 1997 and 2004, the proportion working 45 hours or more in Tertiary education institutions in 1997 changed little (23.1%) and the proportion working 45 hours or more in Developmental disability services increased considerably (from 4.0% in 1997 to 15.1% in 2004). Also, nurses working in Developmental disability services showed the largest increase in part-time workers (from 25.6% in 1997, up by 7.6 percentage points in 2004).

Table 5: Employed nurses: main job work setting, selected aspects of hours worked, 1997 and 2004

		1997			2004	
_	Average	% working	0/	Average	% working	0/
Work setting	hours	hours or more per week	% part- time	hours	45 hours or more per week	% part- time
Hospital (incl. psychiatric)	30.4	3.1	58.3	31.8	7.8	61.5
Mental health facility ^(a)				35.4	14.1	43.7
Day procedure centre	27.9	0.8	66.7	29.8	6.1	67.1
Hospice	27.1	_	88.4	30.5	5.2	75.7
Community health centre/ domiciliary care	30.3	3.2	53.3	31.6	7.7	57.2
Doctors' rooms/medical practice	25.0	2.4	79.5	27.2	4.9	77.2
Residential aged care service	27.3	2.8	79.3	32.0	12.3	65.7
Developmental disability service	35.3	4.0	25.6	36.9	15.1	33.2
School	27.2	9.2	77.1	32.6	14.4	59.9
Tertiary education institution	38.5	23.1	31.6	37.5	22.6	35.1
Remote area service/ multipurpose service(a) (b)				31.5	9.6	64.8
Other	28.7	4.7	64.3	34.4	13.7	45.9
Total	29.6	3.5	62.7	31.9	9.1	61.4

⁽a) This category was not separately available on the 1997 questionnaire.

Sources: Nursing Labour Force surveys, South Australia, 1997; Nursing and Midwifery Labour Force surveys, South Australia, 2004.

⁽b) Includes rural/remote health and Indigenous health.

Across settings, generally the proportions of nurses working 45 hours or more rose in 2004 to at least double the levels in 1997. The two exceptions were Tertiary education institutions, where the proportion remained stable, and Schools, where the proportion did not quite double (from 9.2% to 14.4%). The largest increases from 1997 to 2004 were experienced by nurses in Developmental disability services, up 11.1 percentage points (from 4.0% to 15.1%) and in Residential aged care facilities, up 9.5 percentage points (from 2.8% to 12.3%), followed by nurses in Day procedure centres, up 5.3 percentage points (from 0.8% to 6.1%).

Although the overall proportion of part-time nurses declined from 1997 to 2004, there was variation across work settings. Schools, Residential aged care facilities, Hospices and Doctors' rooms conformed to the picture, where the proportions working part-time fell by 17.2, 13.6, 12.7 and 2.3 percentage points, respectively. Conversely, Developmental disability services, Community health centres, Tertiary education institutions and Hospitals were against the state trend, with proportions increasing by 7.6, 3.9, 3.5 and 3.3 percentage points, respectively. The proportion of part-time nurses in Day procedure centres remained stable.

Distribution across areas of activity

Nursing encompasses a wide range of work settings and nurses perform a wide variety of roles across different areas of practice. In this publication, the area of nursing in which nurses primarily work is referred to as their area of activity. This section gives an overview of their characteristics and employment patterns across these roles and their areas of activity.

Overview in 2004

In 2004, the majority of employed nurses (84.8%, or 19,582) were nurse clinicians⁵, that is, they worked in a clinical role, followed by nurse administrators (4.9% or 1,141) and nurse clinician managers (3.8% or 871) (Table 6). Nurse administrators tended to be older, with an average age of 46.7 years compared with 43.1 years for all employed nurses. They also tended to work more than average hours (40.0 per week compared with 31.9 for all nurses), followed closely by nurse clinician managers (39.3 hours per week).

Of employed nurse clinicians, nearly a third (31.2%) worked in Medical/surgical nursing, followed by 14.9% in Aged care, 10.0% in Critical care and 9.0% in Community health. Just over one in three (35.6%) nurses employed in Community health and one in five (22.6%) Aged care nurses worked in non-metropolitan areas, compared with 15.0% of all nurse clinicians.

Nurse clinicians working in the areas of Mental health, Disability and Aged care tended to be older, with average ages of 47.4, 47.1 and 46.7 years, respectively. In contrast, nurses tended to be younger in the areas of Critical care/emergency (37.9 years) and Medical/surgical nursing (40.3 years).

Nurse clinicians employed in Management/administration worked, on average, the longest weeks (39.3 hours), followed by nurses in Mental health facilities (36.0 hours) and nurses in Disability areas (34.7 hours). The relatively long working weeks of these nurses corresponded with low proportions working part-time (29.6%, 39.6% and 41.6%, respectively, compared with 66.1% for all nurse clinicians) and, with the exception of Management/administration, also corresponded with high proportions of males. The proportions of male nurses in Mental health facilities (31.6%) and in Disability areas (35.7%) were high, compared with Management/administration (9.5%) and nurse clinicians overall (8.5%).

⁵ Defined in the Nursing and Midwifery Labour Force Survey as a nurse/midwife working in a clinical role, i.e., is mainly involved in the care and treatment of patients, including nursing diagnosis and preventive action.

Table 6: Employed nurses: nurse role by area of activity of work, selected characteristics, 2004

			%	Average weekly hours	%	% working 45 hours or more	% in non- metropolitan
Nurse role/main area of activity	Number	Average age	male	worked	part-time	per week	areas ^(a)
Clinical nursing role	19,582	42.7	8.5	30.9	66.1	7.0	15.0
Critical care/emergency	1,965	37.9	14.2	32.6	61.0	7.4	5.5
Perioperative	1,517	41.6	7.3	31.3	62.4	8.1	8.6
Medical/surgical nursing (incl. gynaecology)	6,105	40.3	7.3	30.5	67.2	5.6	12.1
Midwifery	1,195	43.5	1.0	28.1	79.9	3.8	11.5
Paediatric and child health	575	42.6	3.1	30.4	66.8	5.7	11.9
Community health	1,759	44.2	5.7	29.4	68.4	5.6	35.6
Mental health	1,005	47.4	31.6	36.0	39.6	14.2	5.0
Aged care	2,927	46.7	5.0	30.2	72.7	7.8	22.6
Disability	129	47.1	35.7	34.7	41.6	12.3	4.5
Rehabilitation	427	45.4	11.3	31.5	67.2	6.0	1.2
Management/administration	122	45.4	9.5	39.3	29.6	22.8	13.7
Education	8	43.8	_	28.4	51.4	_	_
Research	43	43.4	3.0	28.4	74.3	7.2	12.0
Other	1,806	45.0	7.0	30.8	67.2	7.8	23.9
Other nursing role	3,517	45.0	12.6	37.3	35.3	21.1	14.0
Manager of nurse clinicians	871	44.5	14.9	39.3	28.7	21.6	12.0
Supervision/support for students/ new nurses	220	41.2	8.4	34.7	46.0	12.4	12.1
Nurse administrator	1,141	46.7	12.9	40.0	25.1	28.7	18.9
Nurse educator	405	45.7	16.8	36.0	40.7	20.9	12.9
Researcher	238	43.2	10.7	33.6	48.0	14.3	2.5
Other	643	44.2	8.3	33.0	50.8	12.1	13.6
Total nurses	23,099	43.1	9.1	31.9	61.4	9.1	14.8

⁽a) Based on the Australian Bureau of Statistics' ASGC Remoteness Areas. See 'Geographic classification' in the Glossary.

Source: Nursing and Midwifery Labour Force Survey, South Australia, 2004.

Working hours

The average hours worked by nurse clinicians (Table 6) primarily relate to patient care. When nurses in non-clinical roles nominate a principal clinical area of work, their hours can be factored into the total worked by all nurses in each clinical area (Table 7).

There was a decline in average weekly hours from 29.6 in 1997 to 26.5 in 1999, then a slight rise to 27.5 in 2001, a jump to 31.4 in 2003, followed by levelling out to 31.9 in 2004 (Table 7).

Across clinical areas, average hours varied. Again, there was a general pattern of decreases in all areas between 1997 and 1999 and subsequent rises, returning to just above 1997 levels by 2003. In 2004, average hours generally stabilised. Two exceptions were nurses working in Aged care and in Management/administration. The weekly hours for nurses in both those areas jumped in 2003 to well above 1997 levels, and then levelled to an overall increase of 4.1 and 6.6 hours, respectively, from 1997 to 2004. This compares with 2.3 hours for all nurses. In 2004, nurses working in Management/administration worked the most hours (39.7 hours, on average), while nurses working in Community health worked the fewest (30.2 hours, on average).

Table 7: Employed nurses: average weekly hours worked by main area of activity, 1997 to 2004

Main area of activity	1997	1999	2001	2003	2004
Critical care/emergency	32.4	28.2	28.7	32.3	33.1
Perioperative	30.6	27.1	27.6	31.3	31.6
Medical/surgical nursing (incl. gynaecology)	29.3	26.4	27.0	30.3	30.8
Midwifery	28.5	24.7	25.6	28.0	28.5
Paediatric and child health	30.3	26.8	28.1	31.0	30.9
Community health	28.7	24.9	25.7	29.9	30.2
Mental health	35.3	30.1	32.2	36.0	36.3
Aged care	27.5	25.0	26.4	31.1	31.6
Disability	32.2	30.1	32.7	34.2	36.8
Rehabilitation ^(a)			29.1	32.1	32.3
Management/administration	33.1	31.8	31.4	39.1	39.7
Education(b)		28.4	30.6	38.6	37.7
Research(b)		23.4	26.8	33.3	32.8
Other	28.1	26.4	28.4	31.2	31.5
Total	29.6	26.5	27.5	31.4	31.9

⁽a) The area of activity category of Rehabilitation was not collected separately in 1997 and 1999.

Sources: Nursing Labour Force surveys, South Australia, 1997 to 2001; Nursing and Midwifery Labour Force surveys, South Australia, 2003 and 2004.

Qualifications and area of activity

For workforce planning purposes, nurses' qualifications and the level to which they are utilised in their nursing work is important information for gauging skill supply across the different areas of nursing.

The area of nursing in which nurses primarily work is referred to as their area of activity. The following data present the relationship between nurses' area of activity and the field of their qualification(s) using a 'one-to-one' concordance⁶ between the two (see box).

Qualifications

This segment focuses on the qualifications held by employed nurses.

In 2004, 9,408 nurses collectively held 15,782 post-registration qualifications; in 2003, the numbers were 9,080 nurses and 15,615 qualifications (Table A4). Across fields in 2004, qualifications in Critical care/emergency (2,429) and Midwifery (2,294) were most commonly held. However, those qualifications were less likely to be used in a corresponding area of activity than several other less widely held qualifications. In the fields of Perioperative care (66.9%) and Mental health (52.3%), for example, qualifications were more likely to be utilised in a corresponding area of activity than were qualifications in Critical care/emergency (42.7%) or Midwifery (29.7%).

This section presents data on:

- the number of post-registration qualifications, by study field, and whether qualifications were being utilised in the corresponding area of activity; and
- the number of nurses with post-registration qualifications in each area of activity, and whether this and the qualification field corresponded.

The number of qualifications held is an approximation of 'skill availability' in a specific nursing area because nurses with multiple post-registration qualifications in different study fields can be counted against more than one area of activity, although they can only work in one.

Also, some individual qualifications can relate to multiple areas of activity and the 'one-to-one' concordance does not show this.

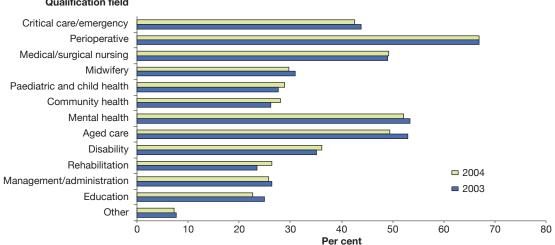
⁽b) The area of activity categories of Education and Research were not collected separately in 1997.

⁶ See 'Area of activity' in the Glossary.

Between 2003 and 2004, the largest changes in the utility of qualifications in a corresponding work area were in Rehabilitation, the proportion increasing by 2.9 percentage points, and Aged care, the proportion decreasing by 3.5 percentage points (Table A4). The number of qualifications held in Rehabilitation in 2004 was less than in 2003 (down from 211 to 195), and in 2004 around a quarter (26.4%) were used in a corresponding area of work activity. Qualifications held in Aged care also decreased over the period (from 929 to 915) but in 2004 around half were being utilised in a corresponding area of work activity. In contrast, qualifications in Perioperative grew slightly in number and, in both 2003 and 2004, two out of three (66.9%) were being utilised in a corresponding area of activity (Table A4 and Figure 4).

Figure 4: Post-registration qualifications held: field of qualification, per cent of qualifications held by nurses working in a directly corresponding^(a) area of activity, 2003 and 2004^(b)

Qualification field



⁽a) A 'corresponding' area of activity is defined as a current main area of activity in the same field in which a post-graduate qualification is held. Nurses who undertook mental health or midwifery undergraduate courses are included.

Sources: Nursing and Midwifery Labour Force surveys, South Australia, 2003 and 2004.

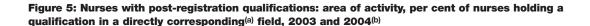
Area of activity

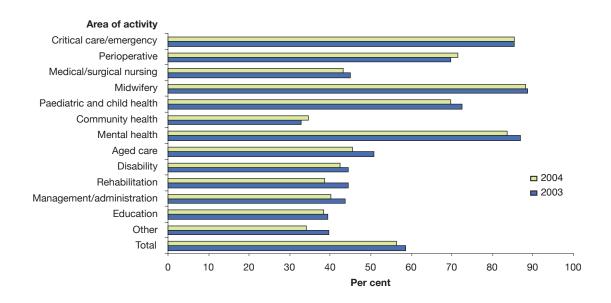
This segment focuses on nurses in each area of activity with post-registration qualifications and provides another dimension of the picture.

In 2004, 40.7% (9,408) of employed nurses held post-registration qualifications, a slight decline from the 2003 proportion (41.5% or 9,080) (Table A5). Of nurses with post-registration qualifications, there was a decrease in the proportion whose area of nursing activity corresponded to the field of their qualifications (58.5% in 2003 and 56.3% in 2004).

Between 2003 and 2004, most nursing areas experienced decreases in the proportion of nurses with qualifications in a corresponding field. Across the specific areas, the largest decrease was in Rehabilitation (by 5.8 percentage points), followed by Aged care (by 5.2 percentage points). Increases were experienced in the nursing areas of Community health and Perioperative care (both by 1.8 percentage points).

⁽b) Time series shows 2003 and 2004 data because the scope change to qualifications introduced for the 2003 survey prevents comparisons with earlier years.





⁽a) A 'corresponding' area of activity is defined as a current main area of activity in the same field in which a post-registration qualification is held. Nurses who undertook mental health or midwifery undergraduate courses are included.

Sources: Nursing and Midwifery Labour Force surveys, South Australia, 2003 and 2004.

In both 2003 and 2004, nurses with qualifications and working in the areas of Midwifery, Critical care/emergency and Mental health were more likely than nurses in other areas to hold qualifications in a field corresponding to their work area. Over the two years, the proportions in Midwifery (88.5% and 88.2%, respectively) and Critical care/emergency (85.3% in both years) were stable, while the proportion in Mental health declined (86.8% to 83.7%, respectively).

In 2004, although most nurses working in Midwifery had corresponding qualifications, under a third (29.7%) of the 2,294 Midwifery qualifications collectively available were being used in Midwifery areas (Figure 5; tables A4 and A5).

Of nurses with qualifications and working in Medical/surgical areas, 43.1% held post-registration qualifications in the field whereas, of the Medical/surgical qualifications collectively available, just half (49.3%) were being utilised in Medical/surgical areas. Further, over two-thirds of nurses working in Paediatric and child health (69.8%) held corresponding post-registration qualifications, while a somewhat smaller proportion (28.8%) of qualifications collectively held in this field were being utilised in Paediatric and child health nursing.

Overall, in most areas of nursing practice, there were more nurses holding a related post-registration qualification than were practising in that same field.

⁽b) This figure shows 2003 and 2004 data because the scope change to qualifications introduced for the 2003 survey prevents comparisons with earlier years.