

Nursing and midwifery workforce 2012







Authoritative information and statistics to promote better health and wellbeing

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Aboriginal and Torres Strait Islander Health Practice Chinese Medicine Chiropractic Dental Medical Medical Radiation Practice Occupational Therapy
Optometry
Osteopathy
Pharmacy
Physiotherapy
Podiatry

Psychology

Australian Health Practitioner Regulation Agency

Nursing and Midwifery

Abbreviations

ABS Australian Bureau of Statistics

AHMAC Australian Health Ministers' Advisory Council

AHPRA Australian Health Practitioner Regulation Agency

AIHW Australian Institute of Health and Welfare

ASGC Australian Standard Geographical Classification

ASGC-RA Australian Standard Geographical Classification – Remoteness Area

COAG Council of Australian Governments

FTE full-time equivalent

GP general practitioner

HWA Health Workforce Australia

NHWDS National Health Workforce Data Set

NMBA Nursing and Midwifery Board of Australia

NRAS National Registration and Accreditation Scheme

RA remoteness areas

VET Vocational Education and Training

Symbols

- nil or rounded to zero
- < less than
- + and over
- negative or minus value
- .. not applicable
- n.a. not available
- n.p. not publishable because of small numbers, confidentiality or other concerns

about the quality of the data

Summary

Size of nursing and midwifery workforce

- In 2012, the total number of nurses and midwives registered in Australia was 334,078, a 6.8% (312,828) increase since 2008.
- There were 35,632 midwives registered and 30,792 employed, almost all of whom were also registered nurses.
- Between 2008 and 2012, the number of nurses and midwives employed in nursing or midwifery increased by 7.5% from 269,909 to 290,144.
- Of these people employed in nursing and midwifery, 238,520 were registered nurses (including midwives) and 51,624 were enrolled nurses.
- Overall, the nursing and midwifery workforce increased by 0.5% between 2008 and 2012, from 1,117.8 to 1,123.6 full-time equivalent nurses and midwives per 100,000 population.
- Nursing and midwifery supply across remoteness areas ranged from 1,071.3 full-time equivalent nurses and midwives per 100,000 population in *Outer regional* areas to 1,302.8 in *Very remote* areas.

Demography

- Nursing and midwifery continued to be a female-dominated profession, with women comprising 89.8% of employed nurses and midwives in 2012 (slightly down from 90.5% in 2008).
- The average age of the nursing and midwifery workforce increased slightly between 2008 and 2012, from 44.1 to 44.6 years.
- The proportion of employed nurses and midwives aged 50 or older increased from 35.1% to 39.1% over this period.

Working arrangements

- The average weekly hours worked by employed nurses and midwives remained the same between 2008 and 2012, at 33.4 hours.
- Of all employed clinical nurses and midwives, almost two-thirds (62.6%) worked in hospitals.
- The principal area of nursing and midwifery with the largest number of workers in 2012 was aged care (41,300).
- There were almost twice as many registered nurses working in the public sector compared to the private sector.
- Nurses employed in the public sector worked more hours on average than those in the private sector.

1 Introduction

Access to reliable, comprehensive, timely and nationally consistent trend data is required to understand the current health labour force and for workforce planning. The size, distribution and expertise of the health workforce are of keen interest to governments, educators, health-care providers and the community. There is particular interest in changes to the size and composition of the various health professions, and in the potential impacts of these changes on health-care delivery.

Recognising this, in 1990 the Australian Health Ministers Advisory Council (AHMAC) commissioned the Australian Institute of Health and Welfare (AIHW) to develop national health labour force statistics on the registrable health professions. Since then AIHW has produced a number of reports on these professions largely based on data collected from separate registration bodies in each state and territory and from survey data.

In 2009, Health Workforce Australia (HWA) was established by the Council of Australian Governments to tackle the challenges of providing a skilled, flexible and innovative health workforce that meets the needs of the community. In 2010 AHMAC established the Australian Health Practitioner Regulation Agency (AHPRA). The AHPRA, which is responsible for the implementation of the National Registration and Accreditation Scheme (NRAS), acts as a central regulatory and registrations body.

This report provides data on the Australian nursing and midwifery workforce in 2012. This is the second report on nurses and midwives in the National Registration and Accreditation Scheme (NRAS) to use information from the new National Health Workforce Data Set (NHWDS): nurses and midwives (Box 1.1). Box 1.2 provides information on the activities of nurses and midwives.

Box 1.1: National Health Workforce Data Set: nurses and midwives

The NHWDS combines data from the NRAS with data collected via an optional survey conducted at the time of annual registration or renewal of registration. The mandatory registration process is administered by the AHPRA. The information in this report focuses on nurses and midwives who make up the workforce; thus, most of the data exclude those not actively working in the nursing and midwifery professions. For this reason, figures in this report are not directly comparable with numbers of registered nurses and midwives released by the AHPRA (see Appendix B).

Box 1.2: What do nurses and midwives do?

In the Australian and New Zealand Standard Classification of Occupations, the Australian Bureau of Statistics (ABS) describes the activities of nurses and midwives as follows:

Nursing and midwifery professionals provide care to mothers and their babies, the elderly, and physically and mentally ill patients in hospitals, nursing homes, medical centres and the community; provide clinical education to midwives and nurses; conduct research into clinical nursing practice; and manage health service units and sub-units.

Midwives provide care and advice to women during pregnancy, labour and childbirth, and postnatal care for women and babies in a range of settings such as the home, community, hospitals, clinics and health units.

Registered nurses provide nursing care to patients in hospitals, aged care and other health-care facilities, and in the community.

Nursing educators and researchers provide clinical and theoretical education to, and promote professional development of, nurses and midwives, and conduct research into nursing practice.

Enrolled and mothercraft nurses provide nursing care to patients in hospitals, aged care and other health-care facilities and in the community; and assist parents in providing care to newborn infants under the supervision of a Registered Nurse or Midwife.

Sources: ABS 2006, 2009.

Registration of nurses and midwives

All nurses and midwives must be registered with the AHPRA to practise in Australia. This applies to both those trained in Australia and overseas.

The AHPRA manages the NRAS, which replaced state and territory-based registration with a single national registration and accreditation system for health professionals in July 2010. As part of this scheme, the AHPRA supports the National Health Practitioner Boards that are responsible for regulating registered health professionals under nationally consistent legislation (see Box 1.3). Registration for each profession is granted by the relevant boards, subject to applicants meeting the standards and policies set by each. The outcome of an application is either 'registration', 'registration with conditions' or 'rejection'.

Box 1.3: The Nursing and Midwifery Board of Australia

The Nursing and Midwifery Board of Australia (the National Board or the NMBA) is the national nursing and midwifery regulator in Australia. It is established under the Health Practitioner Regulation National Law, as in force in each state and territory (the National Law) (AHPRA 2012a).

The functions of the NMBA include:

- registering nursing and midwifery practitioners and students
- developing standards, codes and guidelines for the nursing and midwifery profession
- handling notifications, complaints, investigations and disciplinary hearings
- assessing overseas trained practitioners who wish to practise in Australia
- approving accreditation standards and accredited courses of study.

The NMBA has established state and territory boards to support its work in the national scheme. The NMBA sets policy and professional standards, and the state and territory boards continue to make individual notification and registration decisions affecting individual nurses and midwives, based on the national policies and standards (AHPRA 2012c).

Nursing and midwifery workforce surveys

When the NRAS was introduced, surveys administered by the AHPRA and developed by HWA were included as part of the registration renewal process. The surveys are used to provide nationally consistent estimates of the characteristics of each workforce. They provide data not readily available from other sources, such as: the type of work done by, and job setting of, nurses and midwives; the number of hours worked in clinical or non-clinical roles; and the numbers of years worked in, and intending to remain in, the nursing and midwifery workforce.

The surveys also provide information on those registered nurses and midwives who are not undertaking clinical work or who are not employed.

Copies of the survey are available from the AIHW website. http://www.aihw.gov.au/workforce-publications/ (select link to Nurses and midwives 2012).

Structure of this report

This report summarises the characteristics of those registered and employed across the nursing and midwifery professions. Sections of the report cover workforce status and characteristics of those employed in the profession, including demographic characteristics, work setting, working hours and geographic spread. Finally, there is a section providing information on sources of new entrants to the profession.

Additional information

Before the introduction of the NRAS in 2010, nursing and midwifery registration numbers were published in annual reports of state and territory boards or councils, for professions

that required registration. These figures are now published by the AHPRA (see Appendix B) and are available from the AHPRA website http://www.ahpra.gov.au/>.

An electronic version of this report is available from the AIHW website http://www.aihw.gov.au/workforce-publications/ (select link to Nurses and midwives 2012).

2 Nurses and midwives at a glance

88	In 2012, there were 334,078 registered nurses and midwives in Australia. Of these, 290,144 (87%) were employed in nursing or midwifery.
****	Nine out of 10 nurses and midwives were women.
50	Almost 2 in 5 employed nurses and midwives were aged 50 or older.
0 3	Employed nurses and midwives work on average 33.4 hours per week.
Vo	About 4 in 5 employed nurses and midwives were working in a clinical role.
	In 2011, 8,154 people completed registered nurse higher education qualifications and 4,719 completed enrolled nurse vocational education courses in Australia.

Source: NHWDS: nurses and midwives workforce 2012.

3 Registered nurses and midwives in Australia

Workforce status

Nurses and midwives in Australia can be registered as nurses, as midwives, or as both. In 2012, the total number of nurses and midwives registered in Australia was 334,078. Of these, 237,699 held a 'registered nurse only' registration, 58,370 held an 'enrolled nurse only' registration and 2,274 held a 'midwife only' registration. Of the dual registrations (nurse and midwife), 2,377 held dual registration as registered and enrolled nurses, 33,317 were both a registered nurse and a midwife, 30 were both an enrolled nurse and a midwife, and 11 people were registered in all three categories. This combines to a sum of 367,436 total registrations (Table 3.1).

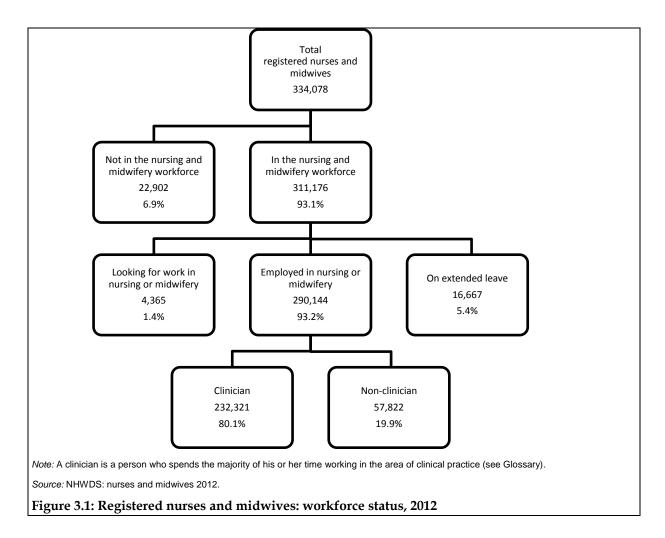
In 2012, almost all midwives were also registered as a registered or as an enrolled nurse. Less than 1% (2,274) of midwife registrants did not also register as a nurse (Table 3.1).

Table 3.1: Nurses and midwives: registration category, number of people registered, 2012

Registration category	Number
Registered nurse only	237,699
Enrolled nurse only	58,370
Midwife only	2,274
Registered and enrolled nurse	2,377
Registered nurse and midwife	33,317
Enrolled nurse and midwife	30
Registered and enrolled nurse and midwife	11
Total nurse registrations	331,804
Total midwife registrations	35,632
Total registrations	367,436
Total people registered	334,078

Source: NHWDS: nurses and midwives 2012.

Of registered nurses and midwives, the majority were in the nursing or midwifery workforce (311,176). Of these, 4,365 were looking for work in nursing and midwifery and 16,667 were on extended leave. These account for 1.4% and 5.4%, respectively, of registered nurses and midwives currently in the nursing and midwifery workforce (Figure 3.1).



Between 2008 and 2012, the number of registered nurses and midwives increased by 8.7%, while the number of enrolled nurses decreased by 1.3%. The number of all nurses and midwives increased from 312,828 in 2008 to 334,078 in 2012 (6.8%) (Table 3.2). However, there are significant comparability issues over this time, such as changes in survey design and content. See Appendix A for more details.

Table 3.2: Nurses and midwives: registered and enrolled, 2008 to 2009 and 2011 to 2012

Division	2008 ^(a)	2009 ^(a)	2011 ^(b)	2012 ^(c)	Change between 2008 and 2012 (per cent)
Registered nurses	253,685	260,121	270,746	275,678	8.7
Enrolled nurses	59,143	60,861	59,934	58,399	-1.3
All nurses	312,828	320,982	330,680	334,078	6.8

⁽a) Data for registered nurses include direct entry midwives 2008 to 2009.

Sources: AIHW Nursing and Midwifery Labour Force Survey, 2008 to 2009; NHWDS: nurses and midwives 2011; NHWDS: nurses and midwives 2012.

⁽b) In 2011, data for registered nurses also includes people registered as 'midwives only'. Data supplied by the AHPRA has been updated and therefore will not match data previously published.

⁽c) In 2012, data for registered nurses also includes people with dual registrations and those who were a 'midwife only'. Note: Due to the transition to the NRAS, no workforce survey was conducted in 2010.

A nurse or midwife who reported working in nursing or midwifery in Australia in the week before the survey was considered to be an 'employed nurse or midwife' (see Glossary). Of those in the workforce, 93.2% (290,144) were employed in nursing or midwifery in Australia in 2012. This proportion decreased slightly from 2011, where 93.6% (286,706) were employed in nursing or midwifery (Table 3.3).

Between 2011 and 2012, the proportion of nurses and midwives who were on extended leave increased from 5.0% to 5.4%, respectively (15,220 to 16,667, respectively). Over the same period, the proportion of total nurses and midwives who were not in the nursing and midwifery workforce decreased, from 7.3% to 6.9%, respectively (24,266 to 22,902, respectively) (Table 3.3).

Between 2008 and 2012, the number of nurses and midwives employed in nursing and midwifery increased by 7.5% (269,909 to 290,144, respectively) and those looking for work in nursing or midwifery increased by 18.8% (3,675 to 4,365, respectively). However, there are significant comparability issues over this time, particularly for the sub-categories (Table 3.3). See Appendix A for further details.

Table 3.3: Nurses and midwives: workforce status, 2008 to 2009 and 2011 to 2012

Workforce status	2008 ^(a)	2009	2011 ^(b)	2012
In the nursing and midwifery workforce	282,968	291,246	306,414	311,176
Employed in nursing or midwifery	269,909	276,751	286,706	290,144
On extended leave	9,383	9,880	15,220	16,667
Looking for work in nursing or midwifery	3,675	4,615	4,488	4,365
Employed elsewhere	1,440	1,815	1,880	1,726
Not employed	2,235	2,801	2,608	2,639
Not in the nursing and midwifery workforce	29,860	29,735	24,266	22,902
Overseas	2,315	3,233	10,719	9,932
Not looking for work in nursing or midwifery	27,544	26,503	11,327	10,586
Employed elsewhere	13,556	13,210	6,172	5,664
Not employed	13,988	13,293	5,155	4,923
Retired from regular work(c)			2,219	2,384
Total nurses and midwives	312,828	320,982	330,680	334,078
Multiple registrations and enrolments ^(d)	12,755	13,046		
Total registrations and enrolments	325,583	334,028	330,680	334,078

⁽a) Data for 2008 have been revised due to the correction of an error in processing data for Victoria.

Note: Due to the transition to the NRAS, no workforce survey was conducted in 2010.

Sources: AIHW Nursing and Midwifery Labour Force Survey, 2008 and 2009; NHWDS: nurses and midwives 2011; NHWDS: nurses and midwives 2012.

In 2012, in line with the Australian population, the majority of the nursing and midwifery workforce were located in New South Wales (86,452), Victoria (85,472) and Queensland

⁽b) For 2011, data supplied by the AHPRA has been updated and therefore will not match data previously published.

⁽c) For 2008 and 2009, retired nurses and midwives were not separately identified.

⁽d) For 2008 and 2009, nurses and midwives may have been registered in more than one state or territory; these numbers represent this potential source of double counting. See Appendix A for further information.

(60,995). Across Australia, the majority of those employed in nursing and midwifery were clinicians (80.1%), followed by those who stated their principal role as being in an 'Other' category (12.3%). There were 4,365 people looking for work in nursing and midwifery in Australia in 2012, with a quarter of this number situated in Victoria (1,130) (Table 3.4).

Table 3.4: Nurses and midwives: workforce status and principal role of main job, state and territory^(a), 2012

Workforce status/Principal role of main job	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia ^(b)
In the nursing and midwifery workforce	86,452	85,472	60,995	32,109	29,327	7,631	5,074	4,036	311,176
Employed in nursing or midwifery	81,176	79,455	56,607	29,712	27,561	7,132	4,734	3,749	290,144
Clinician	65,520	62,132	46,794	23,929	21,415	6,014	3,700	2,807	232,321
Administration	2,564	2,537	1,450	740	722	176	240	138	8,568
Teacher/educator	3,233	3,027	2,096	1,242	803	261	191	196	11,050
Researcher	653	772	505	223	239	55	63	45	2,553
Other	9,206	10,987	5,762	3,578	4,383	626	540	563	35,651
On extended leave	4,212	4,887	3,442	1,866	1,337	375	286	239	16,667
Looking for work in nursing or midwifery	1,064	1,130	947	531	428	124	54	48	4,365
Employed elsewhere	413	459	334	206	211	45	23	22	1,726
Not employed	650	671	613	324	217	80	31	26	2,639
Not in the nursing or midwifery workforce	6,022	3,825	2,858	1,901	1,194	385	471	224	22,902
Overseas	1,132	982	818	540	300	95	200	89	9,932
Not looking for work in nursing or midwifery	3,893	2,368	1,688	1,144	728	221	216	119	10,586
Employed elsewhere	2,484	1,118	807	522	328	112	131	83	5,664
Not employed	1,409	1,250	881	622	400	108	85	35	4,923
Retired from regular work	998	475	352	216	166	70	55	16	2,384
Total nurses and midwives	92,474	89,298	63,854	34,010	30,521	8,016	5,544	4,260	334,078

⁽a) Derived from 'state and territory of main job' where available; otherwise, 'state and territory of principal practice' is used as a proxy. If principal practice details unavailable, 'state and territory of residence' is used. Records with no information on all three locations are coded to 'not stated'.

Source: NHWDS: nurses and midwives 2012.

The proportion of registered and enrolled nurses registered as midwives in 2012 was 10.7%. The highest proportion was seen in the Northern Territory (14.8%) and the lowest proportion was seen in Tasmania (8.5%) (Table 3.5). Total registered numbers across the jurisdictions in Table 3.5 differ slightly to those in Table 3.4 due to the use of survey data (weighted) in Table 3.4, as opposed to the use of registration data (unweighted) in Table 3.5.

⁽b) Data include employed nurses and midwives who did not state or adequately describe their state or territory, and nurses and midwives who reside overseas. Therefore, state and territory totals may not sum to the national total. In particular, the total for working overseas is noticeably higher than the sum of the state and territory figures.

Table 3.5: Persons registered as nurses and midwives in 2012, state and territory(a)

Registration status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia ^(b)
Registered as 'nurse only'	81,413	79,940	56,937	30,698	27,814	7,331	4,841	3,607	298,446
Nurses also registered as midwives	10,615	8,624	6,546	3,114	2,359	670	648	590	33,358
Total persons registered as nurses	92,028	88,564	63,483	33,812	30,173	8,001	5,489	4,197	331,804
Registered as midwife only	438	754	347	235	349	15	52	39	2,274
Total persons registered as midwives ^(c)	11,053	9,378	6,893	3,349	2,708	685	700	629	35,632
Total persons registered as nurses and/or midwives	92,466	89,318	63,830	34,047	30,522	8,016	5,541	4,236	334,078
Total nurse and midwife registrations	103,081	97,942	70,376	37,161	32,881	8,686	6,189	4,826	367,436

⁽a) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. For records with no information on all three locations, they are coded to 'not stated'.

Sources: NHWDS: nurses and midwives 2012.

⁽b) Data include employed nurses and midwives who did not state or adequately describe their state or territory, and nurses and midwives who reside overseas. Therefore, state and territory totals may not sum to the national total.

⁽c) Based on registration as a midwife. For comparability with previous years, persons registered as Midwives are regarded as equivalent to Registered Nurses in qualification and are included in the registered category for other tables.

4 Characteristics of nurses and midwives employed in nursing and midwifery

A nurse or midwife who reported working in nursing or midwifery in Australia in the week before the survey was considered to be an 'employed nurse or midwife' (see Glossary). The characteristics and supply of nurses and midwives employed in Australia are the focus of the remainder of this report.

Age and sex

Nursing and midwifery continued to be a female-dominated profession, with women comprising 89.8% of all employed nurses and midwives in 2012 (down slightly from 90.5% in 2008).

In 2012, enrolled nurses had a higher average age than registered nurses (46.0 years and 44.3 years, respectively) and were more likely to be aged 50 and over. Between 2008 and 2012, the average age of all employed nurses and midwives remained at about 44 years, however the proportion aged 50 and over grew from 35.1% to 39.1% (Table 4.1).

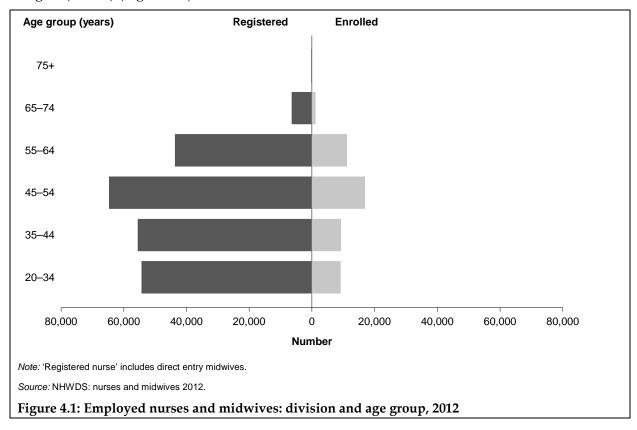
Table 4.1: Employed nurses and midwives: division, age and sex, 2008 and 2012

Division	Number	Men (per cent)	Average age (years)	Aged 50 and over (per cent)
	2008			
Registered nurses	219,646	9.7	44.0	34.6
Enrolled nurses	50,263	8.7	44.7	37.1
All nurses	269,909	9.5	44.1	35.1
	2012 ^(a)			
Registered nurses	238,520	10.4	44.3	37.7
Enrolled nurses	51,624	9.2	46.0	45.5
All nurses	290,144	10.2	44.6	39.1

⁽a) Data for registered nurses include people registered with dual registrations and as a 'midwife only' in 2012.

Sources: AIHW Nursing and Midwifery Labour Force Survey 2008; NHWDS: nurses and midwives 2012.

In 2012, there were more registered nurses than enrolled nurses across all age groups, with the largest group being registered nurses in the 45-54 year age group (68,145), followed by the 35-44 year age group (58,686). For enrolled nurses, the 45-54 year age group was also the largest (18,169) (Figure 4.1).



Aboriginal and Torres Strait Islander nurses and midwives

In 2012, there were 2,301 nurses and midwives employed in Australia who identified as an Aboriginal or Torres Strait Islander. This represents 0.8% of all employed nurses and midwives who provided their Indigenous status. The Northern Territory and Tasmania had the highest proportion of nurses and midwives who identified as an Aboriginal or Torres Strait Islander (1.5% and 1.4%, respectively) (Table 4.2).

Table 4.2: Employed nurses and midwives: division and Indigenous status, state and territory^(a), 2012

Division/Indigenous status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia ^(b)		
Registered nurses ^(c)	69,472	62,258	47,186	25,420	20,691	5,987	4,096	3,393	238,520		
Indigenous	519	201	392	108	107	71	27	47	1,472		
Non-Indigenous	68,741	61,909	46,664	25,242	20,523	5,907	4,051	3,336	236,391		
Not stated	212	148	130	69	61	8	18	10	657		
Enrolled nurses	11,705	17,197	9,421	4,292	6,870	1,145	638	356	51,624		
Indigenous	346	113	195	50	75	30	11	9	829		
Non-Indigenous	11,318	17,048	9,207	4,230	6,774	1,107	626	347	50,656		
Not stated	41	36	19	12	21	8	1	_	139		
Total	81,176	79,455	56,607	29,712	27,561	7,132	4,734	3,749	290,144		
Indigenous	865	313	587	159	182	101	38	56	2,301		
Non-Indigenous	80,057	78,957	55,870	29,472	27,297	7,014	4,677	3,683	287,046		
Not stated	254	184	150	82	82	17	19	10	797		
	Employed nurses who are Indigenous (per cent) ^(d)										
	1.1	0.4	1.0	0.5	0.7	1.4	0.8	1.5	0.8		

⁽a) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details unavailable, state and territory of residence is used. For records with no information on all three locations, they are coded to 'not stated'

Source: NHWDS: nurses and midwives 2012.

Role in nursing and midwifery

The 'principal role in nursing and midwifery in the main job held' category describes the types of work undertaken by employed nurses and midwives in the week before completing the survey. The 2012 survey categorised the roles as clinician, administrator, teacher/educator, researcher and other. In 2012, most employed nurses and midwives in Australia were working as clinicians (232,321 or 80.1%) (Table 4.3).

Nurses and midwives working in the remaining areas are termed 'non-clinicians' (see Glossary). Of the non-clinical workforce, 'teacher/educator' was the role named most

⁽b) Data include employed nurses and midwives who did not state or adequately describe their state or territory, and employed nurses and midwives who reside overseas. Therefore, state and territory totals may not sum to the national total.

⁽c) Data for registered nurses include people registered with dual registrations and as a 'midwife only' in 2012.

⁽d) Percentage of Indigenous nurses employed in nursing excludes the 'not stated' category.

frequently by those who stated their 'principal role of main job' (11,050). However, nursing and midwifery roles in the 'other' category comprised 12.3% (35,651) of employed nurses and midwives (Table 4.3). Given the high response in this category, further investigation should be undertaken to see if there are other subgroups within this category that would be useful to capture in future surveys.

In 2012, nurses and midwives working as clinicians were on average 1.4 years younger than those working in non-clinical roles (44.3 compared with 45.7), and less likely to be aged 50 and over (38.1% compared with 42.7%). Nurses and midwives in clinical roles also worked, on average, fewer hours than non-clinicians (33.2 and 34.5 hours, respectively), while administrators worked the longest average hours per week (38.8 hours). Administrators were also the group with the largest proportion aged 50 and over (57.5%) (Table 4.3).

Table 4.3: Employed nurses and midwives: principal role of main job, selected characteristics, 2012

Principal role of main job	Number	Enrolled (per cent)	Average age (years)	Aged 50 and over (per cent)	Average weekly hours ^(a)
Clinician	232,321	15.6	44.3	38.1	33.2
Non-clinician	57,823	26.5	45.7	42.7	34.5
Administrator	8,568	10.1	50.1	57.5	38.8
Teacher/educator	11,050	5.3	46.7	41.7	34.9
Researcher	2,553	5.0	47.3	44.9	33.5
Other	35,651	38.5	44.2	39.3	33.4
Total	290,144	17.8	44.6	39.1	33.4

⁽a) In 2012 the survey design changed so that the hours reported were split by nursing and midwifery. In 2012 a total of 5,377 nurses and midwives reported working the same number of hours in both nursing and midwifery so the total hours worked in each may be a duplication. This may result in an over-estimate of the total hours worked in the order of 0.2%, or of the total average hours by 0.06. Some groups may be more affected than others.

Sources: NHWDS: nurses and midwives 2012.

Area of nursing and midwifery

In 2012, of all nurses and midwives employed in Australia, 80.1% were clinicians (Table 4.3) and 82.2% were registered nurses (Table 4.2). Nurses and midwives working in aged care comprised the largest group in 'principal area of main job' (41,300), followed by those in 'medical' (25,794) and 'surgical' (23,271) roles. Aged care also recorded the highest Full Time Equivalent (FTE) rate (153.7) of all the 'principal areas of main job' worked by nurses and midwives (Table 4.4).

The group with the highest average age were nurses and midwives working in child and family health (49.4 years). The group with the lowest average age were those nurses and midwives working in paediatrics, at 39.3 years. The highest proportion of male nurses was in the area of mental health, where men comprised 31.5% of that workforce (Table 4.4).

In terms of average weekly hours worked, the greatest number of hours were worked by those in 'management' (40.2 hours), followed by those in 'maternity care' (39.7 hours). The lowest number of weekly hours worked was recorded by those in practice nursing, with 28.8 hours (Table 4.4).

Table 4.4: Employed nurses and midwives: selected characteristics, principal area of main job, 2012

Principal area of main job	Number	Average age (years)	Aged 50 and over (per cent)	Men (per cent)	Registered nurses (per cent)	Clinical nurses (per cent) ^(a)	Average weekly hours worked ^(b)	FTE rate ^{(b)(c)}
Aged care Child and family	41,300	47.9	52.4	8.1	58.8	72.0	32.1	153.7
health	4,639	49.4	54.2	1.1	94.7	87.7	35.1	18.8
Community health	13,487	47.7	48.1	7.7	87.9	85.1	32.4	50.7
Critical care	16,706	39.9	21.3	14.2	97.8	89.0	34.6	67.1
Education	5,321	47.1	43.7	10.2	94.9	10.9	35.4	21.8
Emergency care	15,174	39.4	22.0	15.6	93.2	90.8	34.4	60.5
Health promotion	1,296	46.5	41.6	8.4	89.4	43.2	31.9	4.8
Management	6,891	49.0	51.6	14.3	97.0	41.6	40.2	32.1
Maternity care	5,910	45.1	42.4	0.8	91.9	92.4	39.7	27.2
Medical	25,794	41.9	30.9	9.5	77.8	85.0	33.2	99.2
Mental health	19,048	47.0	47.4	31.5	84.8	89.7	36.4	80.3
Mixed medical/surgical	19,466	43.1	34.9	7.9	78.9	85.1	32.3	72.9
Paediatrics	7,461	39.3	23.0	4.2	92.2	88.0	32.5	28.1
Peri-operative	21,115	43.6	34.7	8.7	89.8	88.6	32.7	80.1
Policy	486	47.9	46.2	11.6	98.6	10.2	36.9	2.1
Practice nursing Rehabilitation and	10,959	47.0	46.0	3.4	78.1	85.6	28.8	36.5
disability	9,025	46.8	47.7	12.2	66.9	77.8	32.9	34.4
Research	1,977	46.9	44.1	8.2	96.7	14.9	33.4	7.7
Surgical	23,271	40.6	27.1	7.7	84.2	86.6	32.7	88.3
Other	22,383	46.6	44.9	7.5	86.0	71.3	33.6	87.0
Completed midwife survey/question	16,915	44.2	37.2	8.9	85.2	82.1	32.4	63.5
Not stated/inadequately described	1,521	51.2	62.8	2.2	100.0	91.0	39.1	6.9
Total	290,144	44.6	39.1	10.2	82.2	80.1	33.4	1,123.6

⁽a) Clinical nurses include those whose nursing or midwifery role in their main job was a 'clinician'.

Source: NHWDS: nurses and midwives 2012.

⁽b) In 2012 the survey design changed so that the hours reported were split by nursing and midwifery. In 2012 a total of 5,377 nurses and midwives reported working the same number of hours in both nursing and midwifery so the total hours worked in each may be a duplication. This may result in an over-estimate of the total hours worked in the order of 0.2%, or of the total average hours by 0.06. Some groups may be more affected than others.

⁽c) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Country of first nursing and midwifery qualification

Information about the country of first nursing or midwifery qualification was collected in previous AIHW Nursing and Midwifery Labour Force Surveys, however this was not included as a survey question in 2012 as it is now collected as part of the NRAS registration data. Although it is understood that 'country of initial nursing or midwifery qualification' is being entered for new registrants, data migrated from some of the previous jurisdiction-based systems did not contain this information in a consistent manner, thus it could not be included in this report due to variability in scope and coverage. It is anticipated that this information will improve over time and will be able to be reported in future years.

Work setting

Of all employed clinical nurses and midwives, almost two-thirds (62.6%) worked in hospitals in 2012. As would be expected, this proportion was much higher than for non-clinical nurses and midwives (46.6%). Of the clinical nurses and midwives, those working in residential health-care facilities were the next largest group, comprising 28,384 or 12.2%. Within this group, the majority (85.3%) worked in residential aged care. Of clinicians, those working in Aboriginal health services worked the most weekly hours (39.8 hours) and those working in a general practitioner (GP) practice worked the least weekly hours, at 27.8 (Table 4.5).

Of the non-clinical nurses and midwives, those working in hospitals also represented the largest group, comprising 26,957 or 46.6%. The next largest group was also residential health-care facilities (10,315 or 17.8%). Of non-clinicians, those working in correctional services worked the most weekly hours (39.2 hours) and those working in a GP practice worked the least weekly hours, at 28.1 (Table 4.5).

Table 4.5: Employed nurses and midwives: work setting of main job and clinician status, number and average weekly hours worked, 2012

	C	linicians ^(a)	Nor	n-Clinicians	All nurses and midwives		
Work setting of main job	Number	Average weekly hours worked ^(b)	Number	Average weekly hours worked ^(b)	Number	Average weekly hours worked ^(b)	
Private practice	12,429	28.4	2,689	28.9	15,117	28.5	
GP practice	7,840	27.8	1,325	28.1	9,165	27.9	
Locum private practice	143	29.1	28	29.0	171	29.1	
Other private practice	4,446	29.4	1,335	29.7	5,781	29.4	
Aboriginal health service	1,083	39.8	262	38.9	1,345	39.6	
Community health-care services	19,439	33.8	3,922	33.4	23,362	33.7	
Community aged care service	3,689	31.5	1,526	32.5	5,215	31.8	
Community mental health service	4,469	37.2	363	37.5	4,833	37.2	
Other community health care service	11,281	33.2	2,033	33.4	13,314	33.2	
Hospital	145,330	33.5	26,957	35.5	172,287	33.8	
Hospital	140,773	33.6	26,188	35.6	166,961	33.9	
Outpatient services	4,557	32.6	769	33.3	5,326	32.7	
Residential health-care facility	28,384	32.0	10,315	33.5	38,698	32.4	
Hospice	630	30.6	103	31.7	733	30.8	
Other residential health-care facility	1,597	32.9	684	33.7	2,280	33.1	
Residential aged care facility	24,209	31.7	9,182	33.4	33,391	32.2	
Residential mental health-care service	1,948	35.7	347	35.6	2,294	35.7	
Commercial/business service	596	33.9	807	33.9	1,403	33.9	
Educational facilities	1,489	31.7	4,089	34.9	5,578	34.1	
School	956	30.2	370	30.7	1,326	30.3	
Tertiary educational facility	427	35.1	2,886	36.1	3,313	36.0	
Other educational facility	106	32.0	833	32.7	939	32.6	
Correctional service	1,130	37.4	113	39.2	1,243	37.5	
Defence forces	526	36.1	307	37.8	832	36.7	
Other government department or agency	1,088	37.0	1,410	37.1	2,498	37.1	
Drug and alcohol service	1,172	34.5	140	35.7	1,311	34.6	
Maternity service	1,045	37.6	163	32.9	1,208	37.0	
Other	4,954	34.3	3,840	34.1	8,794	34.3	
Completed midwife survey/question	12,551	32.3	2,722	32.3	15,273	32.3	
Not stated	1,107	39.0	88	38.5	1,195	38.9	
Total	232,321	33.2	57,823	34.5	290,144	33.4	

⁽a) Clinicians include those whose nursing or midwifery role in their main job was a 'clinician'.

Source: NHWDS: nurses and midwives 2012.

⁽b) In 2012 the survey design changed so that the hours reported were split by nursing and midwifery. In 2012 a total of 5,377 nurses and midwives reported working the same number of hours in both nursing and midwifery so the total hours worked in each may be a duplication. This may result in an over-estimate of the total hours worked in the order of 0.2%, or the total average hours by 0.06. Some groups may be more affected than others.

Working hours

Division of Registration

The hours worked by nurses and midwives differed by division of registration. Enrolled nurses worked fewer hours per week than did registered nurses in 2012 (31.3 hours compared with 33.9 hours, respectively). Almost 3 in 5 enrolled nurses (58.1%) worked part-time hours (less than 35 hours) compared with less than half (45.9%) of registered nurses (Table 4.6).

Almost half (48.2%) of registered nurses recorded working between 35 and 49 hours per week. Few (5.8%) reported working more than 50 hours per week (Table 4.6).

Age

Registered nurses aged between 45 and 54 years represented the largest age category of registered nurses (68,145 or 28.6%), whilst those under 25 years made up the smallest category (11,213 or 4.7%).

Enrolled nurses aged between 45 and 54 years were also the largest group of enrolled nurses, with 18,169 (35.2%), and those under 25 years made up the smallest category (3,167 or 6.1%).

Table 4.6: Employed nurses and midwives: division and age group, number and weekly hours worked in the week before the survey, 2012

_	Total weekly hours worked									
Age _	<20	20–34	35–49	50+	Total	Total				
group (years)		(ro	w per cent)			number of nurses	Average weekly hours worked ^(a)			
Registered nurses ^(b)										
<25	3.0	24.5	68.0	4.4	100.0	11,213	37.6			
25–34	9.7	27.8	58.1	4.5	100.0	47,097	34.9			
35–44	15.6	35.8	44.1	4.5	100.0	58,686	32.1			
45–54	9.4	36.5	46.9	7.2	100.0	68,145	34.6			
55+	13.0	38.2	41.7	7.1	100.0	53,379	33.3			
Total	11.5	34.4	48.2	5.8	100.0	238,520	33.9			
			Enrolle	ed nurses						
<25	18.1	39.3	38.7	3.8	100.0	3,167	30.5			
25–34	17.6	39.2	39.2	4.0	100.0	6,975	30.7			
35–44	16.3	45.0	35.6	3.1	100.0	9,927	30.2			
45–54	10.9	46.0	39.4	3.6	100.0	18,169	31.9			
55+	11.8	46.3	38.6	3.2	100.0	13,385	31.6			
Total	13.5	44.6	38.4	3.5	100.0	51,624	31.3			
			All	nurses						
<25	6.3	27.8	61.6	4.3	100.0	14,380	36.0			
25–34	10.7	29.2	55.6	4.4	100.0	54,072	34.4			
35–44	15.7	37.1	42.9	4.3	100.0	68,614	31.8			
45–54	9.7	38.5	45.3	6.4	100.0	86,314	34.0			
55+	12.8	39.8	41.0	6.3	100.0	66,764	33.0			
Total	11.9	36.2	46.5	5.4	100.0	290,144	33.4			

⁽a) In 2012 the survey design changed so that the hours reported were split by nursing and midwifery. In 2012 a total of 5,377 nurses and midwives reported working the same number of hours in both nursing and midwifery so the total hours worked in each may be a duplication. This may result in an over-estimate of the total hours worked in the order of 0.2%, or the total average hours by 0.06. Some groups may be more affected than others.

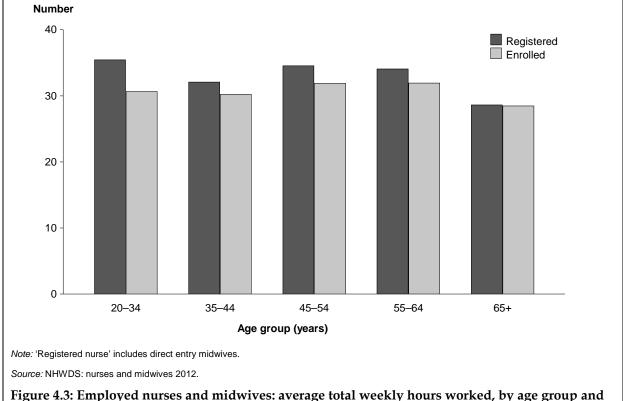
Source: NHWDS: nurses and midwives 2012.

⁽b) Data for registered nurses include people registered with dual registrations and as a 'midwife only' in 2012.

On average, employed nurses and midwives worked 33.4 hours per week in 2012. Almost half (48.1%) worked part time (less than 35 hours per week) (Figure 4.2).



Registered nurses worked 33.9 hour per week on average, while enrolled nurses worked 31.3 hours. This gap remained relatively consistent across the age groups (Figure 4.3).



division, 2012

States and territories

Across the jurisdictions, there was some variation in average weekly hours worked by nurses and midwives in 2012. Nurses and midwives in the Northern Territory worked the highest weekly hours on average (38.5 hours), followed by those working in the Australian Capital Territory (35.6 hours). Nurses and midwives in Victoria reported working the fewest hours on average (32.0) (Table 4.7).

Between 2008 and 2012, there was little or no change in the hours worked by nurses and midwives on average across Australia. The greatest difference in hours for all nurses and midwives between 2008 and 2012 was seen in Tasmania, with a decrease from 33.7 to 32.2 working hours (Table 4.7).

Table 4.7: Employed nurses and midwives: average total weekly hours^(a) worked, division, state and territory^(b), 2008 and 2012

Division	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
2008									
Registered nurses ^(c)	34.7	32.7	33.9	32.8	33.2	33.6	34.7	38.3	33.7
Enrolled nurses	33.4	31.1	32.9	31.7	31.4	34.2	34.3	35.6	32.2
All nurses	34.5	32.3	33.8	32.6	32.8	33.7	34.6	38.0	33.4
				2012					
Registered nurses ^(d)	35.0	32.6	34.3	33.4	33.1	32.4	36.0	38.9	33.9
Enrolled nurses	32.9	30.0	32.2	31.1	30.1	31.0	33.2	34.7	31.3
All nurses	34.7	32.0	33.9	33.1	32.3	32.2	35.6	38.5	33.4
	Change between 2008 and 2012 (per cent)								
All nurses	0.5	-0.9	0.5	1.5	-1.3	-3.9	2.8	1.2	_

⁽a) Care should be taken in interpreting change in the estimates on hours worked due to changes between 2008 and 2012 in the question on hours worked. In 2012 the survey design changed so that the hours reported were split by nursing and midwifery. In 2012,a total of 5,377 nurses and midwives reported working the same number of hours in both nursing and midwifery so the total hours worked in each may be a duplication. This may result in an over-estimate of the total hours worked in the order of 0.2%, or the total average hours by 0.06. Some groups may be more affected than others.

Source: AIHW Nursing and Midwifery Labour Force Survey, 2008; NHWDS: nurses and midwives 2012.

Remoteness areas

In combination with data on hours and population, information on the work location of nurses and midwives is collected and used, to examine variability in the supply of nurses and midwives across Australia.

The Remoteness Areas (RA) categories from the Australian Standard Geographical Classification (ASGC) (ABS 2011) have been used in this report to show data by geographic region. Using the postcode of their main work location (where available), a nurse or midwife is allocated to one of the following in the ASGC-RA: *Major cities, Inner regional, Outer regional, Remote* and *Very remote*. Otherwise, remoteness area of principal practice is used as a proxy; if remoteness area of principal practice is unavailable, remoteness area of residence is used. Records with no information on all three locations are coded to 'not stated' location.

In 2012, all nurses and midwives in *Very remote* areas worked the greatest number of hours, 40.2 hours per week compared with the national average of 33.4. Nurses and midwives in

⁽b) Derived from 'state and territory of main job' where available; otherwise, 'state and territory of principal practice' is used as a proxy. If principal practice details are unavailable, 'state and territory of residence' is used. Records with no information on all three locations, are coded to 'not stated'.

⁽c) Includes direct entry midwives.

⁽d) Data for registered nurses include people registered with dual registrations and as a 'midwife only' in 2012.

Inner regional areas reported working the least hours (32.4). Across all remoteness areas, excluding those not stated, registered nurses reported working more hours than their enrolled nurse counterparts (Table 4.8).

Between 2008 and 2012, change in average total working hours of all nurses and midwives varied across remoteness areas. Nurses and midwives in *Remote* and *Very remote* areas reported an increase in working hours (3.7% and 4.4%, respectively), whereas those nurses and midwives in *Major cities* and *Inner regional* areas reported a slight decrease in working hours (0.3% and 0.9% respectively) (Table 4.8).

Table 4.8: Employed nurses and midwives: average total weekly hours^(a) worked, division, remoteness area^(b) of main job, 2008 and 2012

Division	Major cities	Inner regional	Outer regional	Remote	Very remote ^(c)	Not stated	Australia
			2008				
Registered nurses ^(d)	33.8	33.0	34.0	35.5	39.1	33.1	33.7
Enrolled nurses	32.4	31.6	32.7	32.2	35.8	31.9	32.2
All nurses	33.6	32.7	33.6	34.7	38.5	32.9	33.4
			2012				
Registered nurses ^(e)	33.9	33.0	34.4	36.9	41.1	37.3	33.9
Enrolled nurses	31.4	30.7	31.2	32.5	35.3	41.7	31.3
All nurses	33.5	32.4	33.6	36.0	40.2	37.9	33.4
Change between 2008 and 2012 (per cent)							
All nurses	-0.3	-0.9	_	3.7	4.4	2.7	_

⁽a) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2008 to 2012. In 2012 the survey design changed so that the hours reported were split by nursing and midwifery. In 2012 a total of 5,377 nurses and midwives reported working the same number of hours in both nursing and midwifery so the total hours worked in each may be a duplication. This may result in an over-estimate of the total hours worked in the order of 0.2%, or the total average hours by 0.06. Some groups may be more affected than others.

Sources: AIHW Nursing and Midwifery Labour Force Survey, 2008; NHWDS: nurses and midwives 2012.

⁽b) Derived from 'remoteness area of main job' where available; otherwise, 'remoteness area of principal practice' is used as a proxy. If remoteness area details are unavailable, 'remoteness area of residence' is used. Records with no information on all three locations are coded to 'not stated'.

⁽c) Includes Migratory areas.

⁽d) Includes direct entry midwives.

⁽e) Data for registered nurses include people registered with dual registrations and as a 'midwife only' in 2012.

Employment sector

Registered nurses employed in the public sector worked, on average, 3.9 hours more per week than did registered nurses employed in the private sector (33.6 hours compared to 29.7 hours). Registered nurses in the private sector tended to be older (45.9 years compared to 43.4 years) and were more likely to be aged 55 and over (Table 4.9).

Table 4.9: Employed registered nurses^(a): employment sector of main job^(b), selected characteristics, 2012

Characteristic	Private	Public
Number	90,515	160,804
Average age	45.9	43.4
Aged 55 and over (per cent)	26.4	20.0
Women (per cent)	92.0	88.3
Average weekly hours worked in sector ^(c)	29.7	33.6
FTE number ^(d)	70,631	142,058

⁽a) Data for registered nurses include people registered with dual registrations and as a 'midwife only'.

Source: NHWDS: nurses and midwives 2012.

Enrolled nurses employed in the public sector worked, on average, 1.6 hours more per week than enrolled nurses employed in the private sector (30.5 hours compared to 28.9 hours). They also tended to be older (46.2 years compared to 45.5 years) and were more likely to be aged 55 and over (Table 4.10).

Table 4.10: Employed enrolled nurses: employment sector of main job^(a), selected characteristics, 2012

Characteristic	Private	Public
Number	24,970	29,224
Average age	45.5	46.2
Aged 55 and over (per cent)	24.9	26.4
Women (per cent)	92.3	89.5
Average weekly hours worked in sector ^(b)	28.9	30.5
FTE number ^(c)	18,986	23,475

⁽a) Nurses appear in each sector they reported working in and so may be included in both sectors.

Source: NHWDS: nurses and midwives 2012.

⁽b) Nurses appear in each sector they reported working in and so may be included in both sectors.

⁽c) In 2012 the survey design changed so that the hours reported were split by nursing and midwifery. In 2012 a total of 5,377 nurses and midwives reported working the same number of hours in both nursing and midwifery so the total hours worked in each may be a duplication. This may result in an over-estimate of the total hours worked in the order of 0.2%, or the total average hours by 0.06. Some groups may be more affected than others.

⁽d) Full-time equivalent (FTE) nurses working a standard full-time working week (see Glossary). For 2012, FTE is based on total weekly hours worked (see Glossary) and is based on a 38-hour working week.

⁽b) In 2012 the survey design changed so that the hours reported were split by nursing and midwifery. In 2012, a total of 5,377 nurses and midwives reported working the same number of hours in both nursing and midwifery so the total hours worked in each may be a duplication. This may result in an over-estimate of the total hours worked in the order of 0.2%, or the total average hours by 0.06. Some groups may be more affected than others.

⁽c) Full-time equivalent (FTE) nurses working a standard full-time working week (see Glossary). For 2012, FTE is based on total weekly hours worked (see Glossary) and is based on a 38-hour working week.

5 Supply of nurses and midwives

Supply of employed nurses and midwives

Data on the size and characteristics of the nursing and midwifery workforce present a valuable profile of each profession, but do not give a complete picture of the overall level of service provided. Some nurses and midwives work part time and others full-time; therefore, their relative contributions to the level of service need to be taken into account to measure overall supply effectively.

To measure overall supply, information on the number of weekly hours worked has been used to calculate the FTE number of practitioners, based on a standard full-time working week of 38 hours. ABS estimated resident population figures for 2012 have been used to convert the FTE number to an FTE rate (FTE number per 100,000 population) (see Appendix C).

The overall supply of employed nurses and midwives in Australia increased by 0.5% between 2008 and 2012, from 1,117.8 FTE per 100,000 population in 2008 to 1,123.6 in 2012. Among employed nurses and midwives, registered nurses increased 8.6% in number between 2008 and 2012 (from 219,646 to 238,520) and their average weekly hours worked increased slightly from 33.7 hours to 33.9 (0.5%) over the same period. This resulted in a 2.1% increase in supply between 2008 and 2012, from 917.2 FTE registered nurses per 100,000 population in 2008 to 936.4 in 2012 (Table 5.1).

Between 2008 and 2012, numbers of enrolled nurses increased by 2.7% (from 50,263 in 2008 to 51,624 in 2012). They worked, on average, 32.2 hours per week in 2008 compared with 31.3 hours in 2012, a decrease of 3.0%. This resulted in a 6.8% decrease in supply between 2008 and 2012, from 200.6 FTE enrolled nurses per 100,000 population in 2008 to 187.0 in 2012 (Table 5.1).

Table 5.1: Employed nurses and midwives: number, average total weekly hours^(a) worked, FTE number^(b) and FTE rate^(c), division, 2008 to 2009 and 2011 to 2012

					Change between 2008 and 2012					
Characteristic	2008	2009	2011	2012	(per cent)					
	Regis	tered nurses	(d)							
Number	219,646	225,040	234,052	238,520	8.6					
Average weekly hours worked ^(a)	33.7	33.6	33.1	33.9	0.5					
FTE number ^(b)	194,907	198,924	203,810	212,659	9.1					
FTE rate ^{(c) (e)}	917.2	917.1	912.3	936.4	2.1					
Enrolled nurses										
Number	50,263	51,711	52,654	51,624	2.7					
Average weekly hours worked ^(a)	32.2	32.1	31.4	31.3	-3.0					
FTE number ^(b)	42,631	43,614	43,467	42,467	-0.4					
FTE rate ^{(c) (e)}	200.6	201.1	194.6	187.0	-6.8					
		All nurses								
Number	269,909	276,751	286,706	290,144	7.5					
Average weekly hours worked ^(a)	33.4	33.3	32.8	33.4	-0.1					
FTE number ^(b)	237,520	242,521	247,246	255,174	7.4					
FTE rate ^(c)	1,117.8	1,118.0	1,106.7	1,123.6	0.5					

⁽a) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2008 to 2012.

Sources: AIHW Nursing and Midwifery Labour Force Survey, 2008 and 2009; NHWDS: nurses and midwives 2011; NHWDS: nurses and midwives 2012.

In 2012, the overall supply of employed nurses and midwives was 1,123.6 per 100,000 population; this varied between a low of 1,014.1 per 100,000 population in New South Wales to a high of 1,614.6 in the Northern Territory. Supply in 2008 ranged from 1,024.4 FTE nurses per 100,000 population in New South Wales to 1,832.2 in the Northern Territory (Table 5.2).

The supply of total nurses and midwives between 2008 and 2012 increased for three states and territories, with the Northern Territory reporting the greatest decrease (11.9%). The greatest increase between 2008 and 2012 was seen in Queensland (7.0%) (Table 5.2).

⁽b) Full-time equivalent (FTE) nurses working a standard full-time working week (see Glossary). For 2008 and 2012, FTE is based on total weekly hours worked (see Glossary). For 2008 and 2012, FTE is based on a 38-hour working week. Numbers may vary due to rounding.

⁽c) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary). For 2008 and 2012, FTE is based on a 38-hour working week. Numbers may vary due to rounding.

⁽d) Includes direct entry midwives 2008 to 2009 and people registered as midwives only in 2012.

Table 5.2: Employed nurses and midwives: FTE rate^(a), division, state and territory, 2008^(b) and 2012^(c)

Division	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia				
	2008												
Registered nurses ^(d)	861.3	932.6	872.0	892.7	1,092.8	1,104.9	967.4	1,662.1	917.2				
Enrolled nurses	163.1	265.6	162.8	152.2	322.3	196.4	196.4	169.7	200.6				
All nurses	1,024.4	1,198.6	1,034.8	1,045.0	1,415.6	1,301.4	1,164.0	1,832.2	1,117.8				
	2012												
Registered nurses ^(e)	875.1	948.0	932.6	919.2	1,087.2	996.6	1,034.5	1,476.3	936.4				
Enrolled nurses	138.9	241.1	174.6	144.5	328.9	182.0	148.4	138.4	187.0				
All nurses	1,014.1	1,189.0	1,107.4	1,063.9	1,416.2	1,178.4	1,183.0	1,614.6	1,123.6				
			Change bet	tween 2008	and 2012 (per cent)							
All nurses	-1.0	-0.8	7.0	1.8	_	-9.4	1.6	-11.9	0.5				

⁽a) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary). For 2008 and 2012, FTE is based on a 38-hour working week.

Sources: AIHW Nursing and Midwifery Labour Force Survey 2008; NHWDS: nurses and midwives 2012.

The overall supply of nurses and midwives between 2008 and 2012 increased in *Major Cities* and *Very remote* areas of Australia. For *Inner regional* areas, supply fell from 1,199.9 FTE per 100,000 population in 2008 to 1,085.4 in 2012 (9.5%). The largest increase in supply of total nurses between 2008 and 2012 was seen in *Very remote* areas, increasing from 1,148.5 to 1,302.8 (13.4%) (Table 5.3).

⁽b) State and territory estimates for 2008 are based on state or territory of registration and should be treated with caution due to low response rates in some jurisdictions, particularly the Northern Territory (28.7%). See Appendix A for further information.

⁽c) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. For records with no information on all three locations, they are coded to 'not stated'.

⁽d) Includes direct entry midwives.

⁽e) Includes people registered as midwives only.

Table 5.3: Employed nurses and midwives: FTE rate $^{(a)}$, division, remoteness area $^{(b)}$, 2008 and 2012

Division	Major cities	Inner regional	Outer regional	Remote	Very remote ^(c)	Australia				
		2008	1							
Registered nurses ^(d)	867.5	931.2	819.7	977.7	970.8	917.2				
Enrolled nurses	153.9	268.6	277.4	269.7	177.2	200.6				
All nurses	1,021.3	1,199.9	1,097.2	1,247.0	1,148.5	1,117.8				
		2012	!							
Registered nurses ^(e)	970.0	846.9	820.8	1,007.4	1,125.7	936.4				
Enrolled nurses	164.4	238.5	250.6	233.3	177.2	187.0				
All nurses	1,134.4	1,085.4	1,071.3	1,240.9	1,302.8	1,123.6				
Change between 2008 and 2012 (per cent)										
All nurses	11.1	-9.5	-2.4	-0.5	13.4	0.5				

⁽a) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary). For 2008 and 2012, FTE is based on a 38-hour working week.

Sources: AIHW Nursing and Midwifery Labour Force Survey 2008; NHWDS: nurses and midwives 2012.

⁽b) Derived from remoteness area of main job where available; otherwise, remoteness area of principal practice is used as a proxy. If remoteness area details are unavailable, remoteness area of residence is used. For records with no information on all three locations, they are coded to 'not stated'.

⁽c) Includes Migratory areas.

⁽d) Includes direct entry midwives.

⁽e) Includes people registered as 'midwives only'.

6 Geographic profile of employed nurses and midwives

States and territories

In 2012, nurses and midwives in the Northern Territory worked the greatest number of hours on average per week (38.5 hours), while nurses and midwives in Victoria worked the least number of hours (32.0) (Table 6.1).

The highest average age in 2012 was seen in Tasmania (46.5 years), and the lowest was seen in the Northern Territory (42.7 years). Tasmania also reported the highest average age in 2008 (45.9 years) (Table 6.1).

Of all states and territories, the greatest proportion of male nurses was seen in the Northern Territory, with men comprising 14.4% of the workforce in 2012 (Table 6.1).

Table 6.1: Employed nurses and midwives: selected characteristics, state and territory $^{(a)}$, 2008 and 2012

Characteristic	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				2008					
Number	78,345	74,119	49,120	26,453	26,070	7,327	4,448	4,028	269,909
Average age (years)	44.1	43.9	43.9	44.7	44.4	45.9	44.6	42.6	44.1
Aged 50 and over (per cent)	35.9	34.8	32.9	36.5	35.0	40.6	36.6	30.9	35.1
Men (per cent)	10.5	8.8	9.2	8.7	9.5	10.8	8.0	11.2	9.5
Registered nurses (per cent)	83.6	77.0	83.9	85.0	76.3	85.1	83.0	90.1	81.4
Clinical nurses (per cent) ^(b)	91.2	91.4	91.5	89.1	89.6	92.8	88.2	88.3	90.9
Average weekly hours worked ^(c)	34.5	32.3	33.8	32.6	32.8	33.7	34.6	38.0	33.4
FTE rate ^(d)	1,024.4	1,198.6	1,034.8	1,045.0	1,415.6	1,301.4	1,164.0	1,832.2	1,117.8
				2012					
Number	81,176	79,455	56,607	29,712	27,561	7,132	4,734	3,749	290,144
Average age (years)	45.3	43.8	44.4	44.3	45.0	46.5	44.0	42.7	44.6
Aged 50 and over (per cent)	42.2	36.5	37.4	37.8	41.0	45.6	37.6	34.0	39.1
Men (per cent)	11.2	9.6	10.2	8.8	10.2	11.1	9.5	14.4	10.2
Registered nurses (per cent) ^(e)	85.6	78.4	83.4	85.6	75.1	83.9	86.5	90.5	82.2
Clinical nurses (per cent) ^(f)	80.7	78.2	82.7	80.5	77.7	84.3	78.2	74.9	80.1
Average weekly hours worked ^(c)	34.7	32.0	33.9	33.1	32.3	32.2	35.6	38.5	33.4
FTE rate ^(d)	1,014.1	1,189.0	1,107.4	1,063.9	1,416.2	1,178.4	1,183.0	1,614.6	1,123.6
		Char	nge betwee	en 2008 and	d 2012 (per	cent)			
FTE rate ^(d)	-1.0	-0.8	7.0	1.8	_	-9.4	1.6	-11.9	0.5

⁽a) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. For records with no information on all three locations, they are coded to 'not stated'.

Sources: AIHW Nursing and Midwifery Labour Force Survey 2008; NHWDS: nurses and midwives 2012.

⁽b) Clinical nurses include those whose nursing role in their main job was 'clinical nursing' or 'clinical management and or nurse/midwifery administration/ management' (see Glossary).

⁽c) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2008 to 2012.

⁽d) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

⁽e) Includes people registered as 'midwives only'.

⁽f) Clinician nurses include those whose nursing or midwifery role in their main job was 'clinician'.

Remoteness areas

In 2012, nurses and midwives in *Very remote* areas worked the greatest number of hours (40.2 hours on average per week), while nurses and midwives in *Inner regional* areas worked the least number of hours (32.4) (Table 6.2).

The highest average age in 2012 was seen in *Inner regional* areas (46.6 years) and the lowest was seen in *Major cities* (43.8 years). In comparison, *Inner regional* areas also reported the highest average age in 2008 (45.6 years) (Table 6.2).

Of all remoteness areas, the greatest proportion of male nurses was seen in *Very remote* areas, with men comprising 17.2% of the workforce (Table 6.2).

Table 6.2: Employed nurses and midwives: selected characteristics, remoteness area^(a), 2008 and 2012

			Remotenes	ss area			
Characteristic	Major cities	Inner regional	Outer regional	Remote	Very remote ^(b)	Not stated	Australia
		200	8				
Number	171,415	54,976	24,438	4,197	2,166	12,718	269,909
Average age (years)	43.5	45.6	45.4	44.3	44.6	43.6	44.1
Aged 50 and over (per cent)	33.4	39.1	38.0	35.5	36.1	34.6	35.1
Men (per cent)	10.0	9.0	6.9	7.5	15.1	10.0	9.5
Registered nurses (per cent)(c)	84.4	76.9	74.0	76.7	83.4	76.1	81.4
Clinical nurses (per cent) ^(d)	90.5	91.9	91.9	91.1	90.1	90.6	90.9
Average weekly hours worked ^(e)	33.6	32.7	33.6	34.7	38.5	32.9	33.4
FTE rate ^(f)	1,021.3	1,199.9	1,097.2	1,247.0	1,148.5		1,117.8
		201	2				
Number	205,524	52,921	24,821	4,179	2,540	159	290,144
Average age (years)	43.8	46.6	46.1	44.9	46.2	44.3	44.6
Aged 50 and over (per cent)	36.4	46.2	44.5	41.1	45.6	41.2	39.1
Men (per cent)	10.5	9.5	8.5	9.1	17.2	16.2	10.2
Registered nurses (per cent) ^(g)	84.5	76.8	74.8	79.2	84.5	85.5	82.2
Clinical nurses (per cent) ^(d)	79.5	82.0	80.3	79.3	84.7	64.1	80.1
Average weekly hours worked ^(e)	33.5	32.4	33.6	36.0	40.2	37.9	33.4
FTE rate ^(f)	1,134.4	1,085.4	1,071.3	1,240.9	1,302.8		1,123.6
	Change b	etween 2008	and 2012 (per cent)			
FTE rate ^(f)	11.1	-9.5	-2.4	-0.5	13.4		0.5

⁽a) Derived from remoteness area of main job where available; otherwise, remoteness area of principal practice is used as a proxy. If remoteness area details unavailable, remoteness area of residence is used. For records with no information on all three locations, they are coded to 'not stated'.

Sources: AIHW Nursing and Midwifery Labour Force Survey 2008; NHWDS: nurses and midwives 2012.

⁽b) Includes Migratory areas.

⁽c) Includes direct entry midwives.

⁽d) Clinical nurses include those whose role in their main job was 'clinical nursing' or 'clinical management and/or nurse/midwifery administration' (see Glossary).

⁽e) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2008 to 2012.

⁽f) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

⁽g) Includes people registered as midwives only.

7 Midwives at a glance

	In 2012, there were 30,792 midwives employed in Australia.
50	The average age of employed midwives was 49.5 years, however over 57.2% were aged over 50.
9 - 3	Midwives worked on average 37.6 hours per week.
V	More than 4 in 5 midwives were working in a clinical role and almost two-thirds of employed midwives worked in hospitals.

Source: NHWDS: nurses and midwives 2012.

8 Employed midwives

Age and sex

Midwifery is a female-dominated profession, with women comprising 98.2% of all employed midwives in 2012 (Table 8.1).

Table 8.1: Employed midwives: midwifery status, age and sex, 2012

Division/Midwifery status	Number	Men (per cent)	Average age (years)	Aged 50 and over (per cent)
Registered nurse and midwife	30,767	1.8	49.5	57.3
Enrolled nurse and midwife	25	4.0	34.8	16.8
All midwives	30,792	1.8	49.5	57.2

Source: NHWDS: nurses and midwives 2012.

Aboriginal and Torres Strait Islander midwives

In 2012, there were 200 midwives employed in Australia who identified as an Aboriginal or Torres Strait Islander. This represents 0.7% of all employed midwives who provided their Indigenous status. Victoria had the lowest proportion of midwives who identified as an Aboriginal or Torres Strait Islander (0.3%) (Table 8.2).

Table 8.2: Employed midwives: division and Indigenous status, state and territory(a), 2012

Division/Indigenous status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia ^(b)			
Indigenous	78	22	50	24	14	3	5	4	200			
Non-Indigenous	9,326	8,183	5,983	2,833	2,423	590	598	553	30,492			
Not stated	33	22	20	15	7	1	2	_	100			
Total	9,437	8,227	6,052	2,872	2,444	594	605	557	30,792			
Employed midwives who are Indigenous (per cent) ^(c)												
	0.8	0.3	0.8	0.8	0.6	0.5	0.8	0.7	0.7			

⁽a) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. For records with no information on all three locations, they are

Source: NHWDS: nurses and midwives 2012.

Role in midwifery

In 2012, most employed midwives were working as clinicians (25,963 or 84.3%). Midwives working in the remaining areas are termed 'non clinicians' (see Glossary). In 2012, midwives

⁽b) Data include employed midwives who did not state or adequately describe their state or territory, and employed midwives who reside overseas. Therefore, state and territory totals may not sum to the national total.

⁽c) Percentage of Indigenous employed midwives excludes the 'not stated' category.

working as clinicians were on average 3.5 years younger than those working in non-clinical roles (48.9 years compared with 52.4 years) and less likely to be aged 50 and over (55.2% compared with 68.2%). Midwives in clinical roles also worked, on average, fewer hours than non-clinicians (37.0 and 40.7 hours, respectively), while administrators worked the longest average hours per week (46.0 hours). Administrators were also the group with the largest proportion aged 50 and over (76.5%) (Table 8.3).

Table 8.3: Employed midwives: principal role of main job, selected characteristics, 2012

Principal role of main job	Number	Enrolled (per cent)	Average age (years)	Aged 50 and over (per cent)	Average weekly hours ^(a)
Clinician	25,963	0.1	48.9	55.2	37.0
Non-clinician	4,829	_	52.4	68.2	40.7
Administrator	1,223	_	53.5	76.5	46.0
Teacher/educator	1,652	_	50.7	59.2	38.1
Researcher	351	_	51.9	64.0	38.7
Other	1,603	0.1	53.4	72.1	39.7
Total	30,792	0.1	49.5	57.2	37.6

⁽a) In 2012 the survey design changed so that the hours reported were split by nursing and midwifery. In 2012, a total of 5,377 nurses and midwives reported working the same number of hours in both nursing and midwifery so the total hours worked in each may be a duplication. This may result in an over-estimate of the total hours worked in the order of 0.2%, or the total average hours by 0.06. Some groups may be more affected than others.

Sources: NHWDS: nurses and midwives 2012.

Area of midwifery

In 2012, of all midwives employed in Australia, 84.3% were clinicians and 99.9% were also registered nurses. Midwives working in postnatal care comprised the largest group in principal area of main job of midwifery (6,565) (Table 8.4).

Those with the highest average age were midwives working in policy (52.7 years), and were also most likely to be aged 50 and over (70.2%). The group with the lowest average age were those midwives working in care during labour and birth, at 44.1 years, followed by midwives working in postnatal care (47.9 years) (Table 8.4).

In terms of average weekly hours worked, those in midwifery management worked the longest hours at 47.9 hours, followed by those in policy (45.4 hours). The shortest average weekly hours were for those working in antenatal and postnatal care (both 36.2 hours) (Table 8.4).

Table 8.4: Employed midwives: selected characteristics, principal area of main job, 2012

Principal area of main job	Number	Average age (years)	Aged 50 and over (per cent)	Men (per cent)	Registered nurses (per cent)	Clinical midwives (per cent) ^(a)	Average weekly hours worked ^(b)	FTE rate ^(c)
Antenatal	2,598	48.5	51.7	1.9	99.8	91.0	36.2	10.9
Care during labour and birth	4,614	44.1	37.6	1.0	99.8	96.9	37.8	20.2
Continuum of midwifery care	2,485	48.6	54.1	1.6	99.8	95.0	39.7	11.4
Midwifery education	907	49.6	54.1	2.1	100.0	22.0	39.3	4.1
Midwifery management	1,003	51.4	64.4	4.5	100.0	63.1	47.9	5.6
Midwifery research	238	51.4	63.3	1.9	99.6	20.8	40.9	1.1
Neonatal care	1,871	50.4	60.3	1.3	100.0	91.8	40.2	8.7
Policy	194	52.7	70.2	6.8	100.0	22.7	45.4	1.0
Postnatal care	6,565	47.9	50.9	0.8	99.9	94.7	36.2	27.5
Other	4,062	52.6	69.2	2.9	100.0	65.7	39.2	18.4
Completed nurse survey/question	4,758	53.7	74.9	2.3	100.0	81.5	32.9	18.1
Not stated/inadequately described	1,496	51.1	62.6	2.3	100.0	91.0	39.2	6.8
Total	30,792	49.5	57.2	1.8	99.9	84.3	37.6	134.0

⁽a) Clinical midwives include those whose role in their main job was clinician.

Source: NHWDS: nurses and midwives 2012.

Work setting

Of all employed clinical midwives, almost two-thirds (60.6%) worked in hospitals in 2012. This proportion was much higher than that of non-clinical midwives (39.7%). Of the clinical midwives who stated the 'work setting of main job', those working in community health-care services represented the next highest setting, comprising 2,140 or 8.2%. Those working in a GP practice worked the least weekly hours, at about 31 hours (Table 8.5).

⁽b) In 2012 the survey design changed so that the hours reported were split by nursing and midwifery. In 2012, a total of 5,377 nurses and midwives reported working the same number of hours in both nursing and midwifery so the total hours worked in each may be a duplication. This may result in an over-estimate of the total hours worked in the order of 0.2%, or the total average hours by 0.06. Some groups may be more affected than others.

⁽c) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Of the non-clinical midwives, 'hospitals' was the largest work setting (1,916). Of the non-clinical midwives who stated their 'work setting of main job', 'education facilities' represented the next largest setting, comprising 520 or 10.8%. Those working in a GP practice worked the least weekly hours, at 30.0 hours (Table 8.5).

Table 8.5: Employed midwives: work setting of main job and clinician status, number and average weekly hours worked, 2012

	Clir	nicians ^(a)	Non-C	linician	All midwives		
Work setting of main job	Number	Average weekly hours worked ^(b)	Number	Average weekly hours worked ^(b)	Number	Average weekly hours worked ^(b)	
Private practice	942	33.8	164	33.1	1,106	33.7	
GP practice	422	31.2	47	30.0	469	31.1	
Other private practice	55	33.0	22	33.2	78	33.1	
Private midwifery practice	274	35.4	39	33.9	313	35.2	
Specialist (obstetrician and gynaecology) practice	191	37.3	55	35.1	246	36.8	
Aboriginal health service	299	42.1	64	41.0	363	41.9	
Community health-care services	2,140	39.9	270	40.5	2,410	40.0	
Hospital	15,722	37.6	1,916	43.1	17,638	38.2	
Hospital	15,172	37.7	1,848	43.2	17,020	38.3	
Outpatient services	550	35.9	68	39.6	618	36.3	
Commercial/business service	29	41.3	27	40.5	56	40.9	
Educational facilities	158	39.1	520	43.4	679	42.4	
Tertiary educational facility	124	38.7	<i>4</i> 29	44.1	553	42.9	
Other educational facility	35	40.3	92	40.3	126	40.3	
Correctional service	21	48.5	6	55.9	28	50.2	
Defence forces	10	39.7	5	38.4	15	39.3	
Other government department or agency	215	44.6	202	44.5	417	44.5	
Other	1,488	36.0	676	40.2	2,164	37.3	
Completed nurse survey/question	3,848	32.3	893	35.0	4,741	32.8	
Not stated	1,091	39.1	87	38.5	1,178	39.0	
Total	25,963	37.0	4,829	40.7	30,792	37.6	

⁽a) Clinicians include those who reported their 'role in their main job' was 'clinician'.

Source: NHWDS: nurses and midwives 2012.

⁽b) In 2012 the survey design changed so that the hours reported were split by nursing and midwifery. In 2012, a total of 5,377 nurses and midwives reported working the same number of hours in both nursing and midwifery so the total hours worked in each may be a duplication. This may result in an over-estimate of the total hours worked in the order of 0.2%, or the total average hours by 0.06. Some groups may be more affected than others.

States and territories

The characteristics of midwives varied across jurisdictions in 2012. Midwives in the Northern Territory worked the longest hours on average (43.3 hours on average per week), while midwives in Victoria worked the least number of hours (35.8 hours). Of all states and territories, the greatest proportion of midwives aged 50 years and over was in New South Wales (63.7%) (Table 8.6).

Table 8.6: Employed midwives: selected characteristics, state and territory(a), 2012

Characteristic	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Number	9,437	8,227	6,052	2,872	2,444	594	605	557	30,792
Average age	50.8	49.0	49.0	48.0	48.9	49.0	49.5	48.4	49.5
Aged 50 and over (per cent)	63.7	56.8	52.1	50.2	56.6	51.6	58.9	54.5	57.2
Men (per cent)	2.1	1.1	2.2	1.2	2.0	2.7	1.8	5.0	1.8
Registered nurses (per cent)	100.0	99.8	100.0	100.0	99.8	100.0	99.8	100.0	99.9
Clinical midwives (per cent) ^(b)	82.9	84.4	85.6	85.1	86.6	88.5	79.8	79.9	84.3
Average weekly hours worked ^(c)	37.8	35.8	38.4	38.7	37.2	36.7	42.1	43.3	37.6
FTE rate ^(d)	128.4	137.6	133.8	120.3	144.6	112.0	178.6	269.6	134.0

⁽a) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. For records with no information on all three locations, they are coded to 'not stated'.

Sources: AIHW Nursing and Midwifery Labour Force Survey 2008; NHWDS: nurses and midwives 2012.

Remoteness areas

Information on the work location of midwives is used, in combination with data on hours and population, to examine variability in the supply of midwives across Australia.

The RA categories from the Australian Standard Geographical Classification (ASGC) (ABS 2011) have been used in this report to show data by geographic remoteness. Using the postcode of their main work location (where available), a midwife is allocated to one of the following in the ASGC RA: *Major cities, Inner regional, Outer regional, Remote, Very remote* and *Migratory*. Otherwise, 'remoteness area of principal practice' is used as a proxy; if 'remoteness area of principal practice' is unavailable, 'remoteness area of residence' is used. Records with no information on all three locations are coded as 'not stated'.

⁽b) Clinical midwives include those whose nursing role in their main job was 'clinical nursing' or 'clinical management and or nurse/midwifery administration/ management' (see Glossary).

⁽c) In 2012 the survey design changed so that the hours reported were split by nursing and midwifery. In 2012, a total of 5,377 nurses and midwives reported working the same number of hours in both nursing and midwifery so the total hours worked in each may be a duplication. This may result in an over-estimate of the total hours worked in the order of 0.2%, or the total average hours by 0.06. Some groups may be more affected than others

⁽d) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

In 2012, midwives in *Very remote* areas had the highest FTE rate of all remoteness areas (243.8), followed by *Remote* areas (190.6) and *Outer regional* areas (149.4). Midwives in *Major cities* reported the lowest FTE rate (128.9). Midwives in *Very remote* areas also worked the greatest number of hours (45.4 hours on average per week), while midwives in *Inner regional* areas worked the least number of hours (36.9). Of all remoteness areas, the greatest proportion of midwives aged 50 years or over was in *Very remote* areas (64.0%) (Table 8.7).

Table 8.7: Employed midwives: selected characteristics, remoteness area^(a), 2012

_	Remoteness area									
Characteristic	Major cities	Inner regional	Outer regional	Remote	Very remote ^(b)	Not stated	Australia			
Number	20,959	5,814	3,018	564	420	17	30,792			
Average age (years)	49.2	50.3	49.8	48.8	50.7	51.7	49.5			
Aged 50 and over (per cent)	56.3	59.9	57.7	56.5	64.0	62.4	57.2			
Men (per cent)	1.5	2.2	2.3	3.0	7.1	0.0	1.8			
Registered nurses (per cent)	99.9	100.0	100.0	99.8	100.0	100.0	99.9			
Clinical midwives (per cent) ^(c)	83.5	86.8	85.4	84.2	87.0	62.4	84.3			
Average weekly hours worked ^(d)	37.3	36.9	38.5	41.0	45.4	43.2	37.6			
FTE rate ^(e)	128.9	135.8	149.4	190.6	243.8		134.0			

⁽a) Derived from remoteness area of main job where available; otherwise, remoteness area of principal practice is used as a proxy. If remoteness area details are unavailable, remoteness area of residence is used. For records with no information on all three locations, they are coded to 'not stated'.

Sources: NHWDS: nurses and midwives 2012.

⁽b) Includes Migratory areas.

⁽c) Clinical midwives include those whose role in their main job was 'clinical nursing' or 'clinical management and/or nurse/midwifery administration' (see Glossary).

⁽d) In 2012 the survey design changed so that the hours reported were split by nursing and midwifery. In 2012, a total of 5,377 nurses and midwives reported working the same number of hours in both nursing and midwifery so the total hours worked in each may be a duplication. This may result in an over-estimate of the total hours worked in the order of 0.2%, or the total average hours by 0.06. Some groups may be more affected than others.

⁽e) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

9 Education and training

Information on nursing student commencements and completions of higher education (university) courses are derived from data provided by the former Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education. Data on enrolled nurse training is sourced from the National Centre for Vocational Education Research.

The number of commencements in domestic University-level undergraduate nursing courses required for initial registration as a nurse have increased steadily from 2008 to 2011 (from 11,766 commencements in 2008 to 14,755 in 2011), however only a small increase was seen between 2010 and 2011. Course completions have also grown over this period (from 7,449 completions in 2008 to 8,154 in 2011) (Figure 9.1).

The time involved for education and training for an enrolled nurse is generally shorter than that for a registered nurse, taking between 1 and 2 years to complete. Enrolled nurse training varies across jurisdictions, although there is a national set of competencies (ANMC 2012). Enrolled nurse courses are generally Certificate IV, Diploma or Advanced Diploma level Vocational Education Training (VET) courses. In 2011, there were 21,188 students enrolled in VET nursing courses, with 4,719 student graduations. Numbers of VET nursing enrolments between 2008 and 2011 showed steady increases, but numbers of enrolled nursing graduates have fluctuated very little over this time (Figure 9.1).

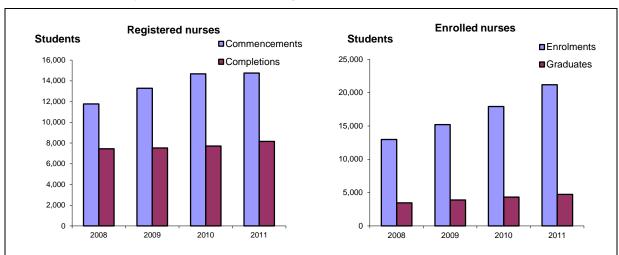


Figure 9.1: Domestic Australian students enrolled in and completing nursing courses, 2008 to 2011

- 1. For registered nurse training, 'course' refers to a higher education general nursing course required for initial registration as a nurse.
- 2. Data on enrolled nurse training refers to training in the VET sector in the field of nursing. Enrolment and graduate data (including Certificate IV and Diploma level) are from VET administrative records. Course enrolment data are for all enrolments (commencing and continuing).
- 3. For higher education students, 'domestic' refers to Australian citizens or permanent residents (excluding New Zealand citizens and includes those on humanitarian visas). For VET graduates, it refers to those with a permanent residential address in Australia.

Sources: Department of Education, Employment and Workplace Relations, unpublished data; National Centre for Vocational Education Research, unpublished data.

10 Nurses and midwives not employed in nursing or midwifery

The Nursing and Midwifery Workforce Survey collects some basic information on those nurses and midwives who are registered or enrolled, but who are not actively employed in nursing or midwifery in Australia: that is, nurses and midwives on extended leave, working overseas, employed elsewhere or not employed. Nurses and midwives who were not registered at the time of the survey are excluded.

In 2012, an estimated 43,934 nurses and midwives were not actively employed as nurses or midwives in Australia. Of these, 10,586 were not looking for work in nursing or midwifery, with about half of these (53.5%) employed elsewhere. A further 16,667 were on extended leave and 9,932 were overseas. The remaining 4,365 (9.9%) stated that they were looking for work in nursing or midwifery (Table 10.1).

Nurses and midwives who were overseas were, on average, younger than other nurses and midwives (38.9 years), while, not surprisingly, those who were retired were the oldest (60.5 years). While almost all of the nurses and midwives who were overseas were registered nurses (98.8%), about two-thirds (68.7%) of nurses and midwives looking for work in nursing or midwifery in Australia were registered nurses (Table 10.1).

Table 10.1: Nurses and midwives not actively employed in nursing or midwifery: selected characteristics, 2012

Workforce status	Number	Men (per cent)	Average age (years)	Aged 50 and over (per cent)	Registered nurse (per cent) ^(a)	Metropolitan residence (per cent) ^{(b)(c)}
Nurses and r	nidwives no	t actively em	ployed in nursin	g or midwifery	/ in Australia	
On extended leave of 3 months or more	16,667	5.1	41.2	28.8	84.2	90.8
Looking for work in nursing or midwifery	4,365	10.1	41.2	30.2	68.7	91.1
Employed elsewhere	1,726	13.0	39.8	26.8	60.4	91.0
Not employed	2,639	8.2	42.0	32.5	74.2	91.1
Overseas	9,932	13.3	38.9	17.2	98.8	92.1
Not looking for work in nursing or midwifery	10,586	9.5	44.9	39.2	78.1	90.4
Employed elsewhere	5,664	13.7	45.4	41.5	75.7	90.4
Not employed	4,923	4.7	44.2	36.5	80.8	90.5
Retired	2,384	6.1	60.5	91.3	86.3	91.3
Total	43,934	10.8	43.9	35.1	87.9	90.8
Nurses ar	nd midwives	s in the nursir	ng and midwifer	y workforce in	Australia	
Total	311,176	9.9	44.3	38.4	82.1	91.5

⁽a) Includes people registered as 'midwives only'.

Source: NHWDS: nurses and midwives 2012.

⁽b) Based on postcode of home residence matched to ASGC regions (See Glossary).

⁽c) Percentage calculations exclude 'not stated' values for ASGC region of home residence. 'Metropolitan' includes Major cities and Inner regional areas.

Appendix A: Data Quality Statement: National Health Workforce Data Set: nurses and midwives 2012

Summary of key issues

The NHWDS: nurses and midwives 2012 contains information on the demographics, employment characteristics, primary work location and work activity of nurses and midwives in Australia who renewed their registration via the National Registration and Accreditation Scheme (NRAS) introduced on 1 July 2010.

This is the second data set published for nurses and midwives from the new national registration scheme. The data set is comprised of registration information provided by the AHPRA and workforce details obtained by surveys.

This data quality statement should be read in conjunction with the footnotes and commentary accompanying tables and graphs throughout the publication.

Description

The NHWDS: nurses and midwives 2012 is a combination of data collected through the nurse and midwife registration renewal process.

Registration data

All nurses and midwives must be registered with the AHPRA to practise in Australia. Nurses and midwives (see Box 1.3) are required by law to renew their registration through the NRAS, either online via the AHPRA website or using a paper form provided by the AHPRA. For initial registration, practitioners must use a paper form and provide supplementary supporting documentation.

Whether for renewal or initial registration, this information is referred to as 'registration data'. Data collected includes demographic information such as age, sex and country of birth; and details of health qualification(s) and registration status. This is the compulsory component of the registration process.

Registration details on NHWDS: nurses and midwives 2012 were collected either from the compulsory registration renewal form, from new registrations or from registration details migrated from the respective state and territory health boards before their dissolution. Copies of registration forms for new registrants are available on the relevant board websites, which can be accessed from the AHPRA website http://www.ahpra.gov.au/>.

Between 2011 and 2012, there was a drop in midwife registrations, from 39,998 to 35,362. This was due to a drop in dual midwife/nurse registrations. In regards to this, the 2012-13 Annual report: AHPRA and National Boards states 'The growth in the number of registrants as either a nurse or a midwife is linked to the decrease in numbers with dual registration. Many registrants who held dual registration when the National Scheme began have, over time, chosen to renew their registration in one of the professions. This is likely to be related to the requirement in the National Scheme for registrants to meet the requirements in the

registration standards for recency of practice and continuing professional development relevant to each profession when they renew their registration.' (AHPRA 2012d, p 61).

Survey data

When nurses and midwives renew their registration online they are asked to complete an online survey customised for each profession. When nurses and midwives renew their registration using a paper form they are also asked to complete a paper version of the relevant survey.

Copies of the survey forms are available from the AIHW website http://www.aihw.gov.au/workforce-publications/ (select link to Nurses and midwives 2012).

Database creation

The AHPRA stores both the online registration data and the survey information in separate databases. They send these two de-identified data sets to the AIHW, where they are merged into a national data set.

When practitioners renew their registration using a paper form they are also asked to complete a paper version of the relevant survey. The paper registration and survey forms are sent to the AHPRA, where the paper registration forms are scanned and merged with the data obtained from the online process. The AHPRA sends the paper survey forms to HWA to be scanned into a data set. HWA sends this data set to AIHW for merging with registration data and data from the online survey forms, and for cleansing and adjustment for non-response to form a nationally consistent data set. The final data set is then known as the National Health Workforce Data Set: nurses and midwives.

Institutional environment

The AIHW is a major national agency set up by the Australian Government under the *Australian Institute of Health and Welfare Act 1987* to provide reliable, regular and relevant information and statistics on Australia's health and welfare. It is an independent statutory authority established in 1987, governed by a management board and accountable to the Australian Parliament through the Health and Ageing portfolio.

The AIHW aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It collects and reports information on a wide range of topics and issues, ranging from health and welfare expenditure, hospitals, disease and injury, and mental health, to ageing, homelessness, disability and child protection.

The Institute also plays a role in developing and maintaining national metadata standards. This work contributes to improving the quality and consistency of national health and welfare statistics. The Institute works closely with governments and with non-government organisations to achieve greater adherence to these standards in administrative data collection to promote national consistency and comparability of data and reporting.

One of the main functions of the AIHW is to work with the states and territories to improve the quality of administrative data and, where possible, to compile national data sets based on data from each jurisdiction; to analyse these data sets; and to disseminate information and statistics.

Compliance with the *Australian Institute of Health and Welfare Act* 1987 and the *Privacy Act* 1988 (Cwlth) ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality. For further information, see the AIHW website http://www.aihw.gov.au.

The AHPRA is the organisation responsible for the implementation of the NRAS across Australia. The AHPRA works with the National Health Practitioner Boards to regulate health practitioners in the public interest and to ensure a competent and flexible health workforce that meets the current and future needs of the Australian community.

HWA are responsible for the development of the workforce surveys.

The AIHW receives registration information on allied health practitioners via the mandatory national registration process administered by the AHPRA and voluntary survey data collected at the time of registration renewal. The registration and survey data are combined, cleansed and adjusted for non-response to form a national data set known as NHWDS: nurses and midwives 2012.

The AIHW is the data custodian of the NHWDS: nurses and midwives 2012.

Timeliness

The NHWDS: nurses and midwives is created annually throughout the national registration renewal process, which is conducted between 1 April and 31 May each year. Although the reference time is notionally the renewal date, legislation allows for a 1 month period of grace. Thus, the final registration closure date is 1 month after the renewal date. The AHPRA allows a further 2 weeks to allow for mail and data entry delays before registrations are considered expired. Consequently the extraction of data occurs a month and a half after the renewal date ('the extraction date').

The survey data are also collected between 1 April and 31 May, as the survey is administered as part of the registration renewal process.

Due to significant delays with release of data from the new national registration system, complete and final data were provided to the AIHW much later than originally scheduled.

The data needed joint reviews by the AHPRA, the AIHW and HWA to manage the range of considerations and data quality issues. This review process improved data quality, data definitions, metadata and data cleansing. The process also led to improvements in the AHPRA's extracting scripts to provide consistency in data exchange specifications. This process delayed the supply of data but improved the overall quality. HWA has provided funding and assistance to the AHPRA to improve their survey tool infrastructure, thereby improving timeliness and quality of data provision in the future.

The AIHW did not receive complete data for 2012 until May 2013, with data initially having been expected in July 2012. The AHPRA have indicated that future data provision is anticipated to be timely and to be provided six weeks from the close of registration on 31 May.

Accessibility

Results from the NHWDS: nurses and midwives 2012 are published in the *Nursing and midwifery workforce* 2012 report. The report and workforce survey questionnaires are

available from the AIHW website http://www.aihw.gov.au/workforce-publications/ (select link to Nurses and midwives workforce 2012).

Users can request data not available online or in reports via the Media and Strategic Engagement Unit on (02) 6244 1032 or via email to info@aihw.gov.au. Requests that take longer than half an hour to compile are charged for on a cost-recovery basis.

Access to the master unit record files may be requested through the AIHW Ethics Committee.

HWA provides a data tabulation tool, including data from the National health workforce dataset, on their website http://www.hwa.gov.au/work-programs/information-analysis-and-planning/health-workforce-data.

Interpretability

Descriptions of data items in the National Health Workforce Data Set: nurses and midwives 2012 are available on request from the Expenditure and Workforce Unit at the AIHW.

The surveys used by nurses and midwives are available from the AIHW website http://www.aihw.gov.au/workforce-publications/ (select link to Nurses and midwives 2012).

Relevance

Scope and coverage

The primary purpose of the National Health Workforce Data Set: nurses and midwives 2012 is to provide information on the number and the demographic and employment characteristics of nurses and midwives in Australia.

The NHWDS: nurses and midwives 2012 is relevant for understanding the size and characteristics of the nursing and midwifery workforce in Australia. It is therefore highly relevant for health agencies involved in workforce planning as well for health policy planning and implementation in general.

The location and distribution of the workforce, as well as demographic details such as age and sex of nurses and midwives, are useful for workforce planning within states and territories and nationally. Information on qualifications is relevant for the relevant professional associations and for educational planning.

Accuracy

Estimation procedures

The AIHW uses registration data together with survey data to derive estimates of the total nursing and midwifery workforce. Not all nurses and midwives who receive a survey respond, because it is not mandatory to do so. In deriving the estimates, two sources of non-response to the survey are accounted for:

- item non-response occurs as some respondents return partially completed surveys. Some survey records were so incomplete that it was decided to omit them from the reported survey data.
- survey non-response occurs because not all registered nurses and midwives who receive a questionnaire respond.

A separate estimation procedure is used for each. Imputation is used to account for item non-response and weighting is used for survey non-response.

Imputation: estimation for item non-response

The imputation process involves an initial examination of all information provided by a respondent. If possible, a reasonable assumption is made about any missing information based on responses to other survey questions. For example, if a respondent provides information on hours worked and the area in which they work, but leaves the workforce question blank, it is reasonable to assume that they were employed.

Missing values remaining after this process are considered for their suitability for further imputation. Suitability is based on the level of non-response to that item. Imputation is usually applied only in cases where the proportion of missing values is less than 5% of the total.

In imputation, the known probabilities of particular responses occurring are used to assign a response category value to each record, using a random number generator. Imputed values are based on the distribution of responses occurring in the responding sample. Therefore, fundamental to imputing missing values for survey respondents who returned partially completed questionnaires is the assumption that respondents who answer various questions are similar to those who do not.

Age and sex values within each state and territory of principal practice are first imputed to account for missing values. Other variables deemed suitable for this process were then imputed. These include hours worked in the week before the survey and principal role of main job.

Weighting: estimation for population non-response

Each survey record (or respondent) is assigned a weight that is calibrated to align with independent data on the population of interest, referred to as 'benchmarks'. In principle, this weight is based on the population number (the benchmark) divided by the number in the responding sample. The resulting fraction becomes the expansion factor applied to the record, referred to as the 'weight', providing an estimate of the population when aggregate output is generated. Therefore, the weight for each record is based on particular characteristics that are known for the whole population.

The total number of registered nurses and midwives in each profession is used to benchmark the survey.

The calculation of weights is usually part of the data processing for a sample survey in which the sample is selected before the survey is done. In the 2012 surveys of nurses and midwives, all renewing registrants were sent a workforce survey questionnaire when registration renewal was due. Therefore, technically, it was a census of nurses and midwives. However, because not all renewing registrants in scope respond to the survey, there is a very large non-response bias in the data. Because the group of respondents in the data set is not random, standard errors are not a suitable means of gauging variability.

The benchmark data used for weighting are the number of registered nurses and midwives in each state and territory (based on the location of principal practice), by age group and by sex within the registration data. Producing estimates for the profession by weighting the data from respondents adjusts for bias in the responding group of nurses and midwives, but only for known population characteristics (such as age and sex, where provided). If information for a variable is not known for the whole population, the variable cannot be used in the calculation of weights and cannot be used in the adjustment process.

For variables not used in the calculation of weights (for the NHWDS: nurses and midwives 2012, that is all variables other than state and territory of principal practice, broad registration category, age and sex), it is assumed, for estimation purposes, that respondents and non-respondents have the same characteristics. If the assumption is incorrect, and non-respondents are different from respondents, then the estimates will have some bias.

The extent of this cannot be measured without obtaining more detailed information about non-respondents. Therefore, there will be some unquantifiable level of bias in the estimates.

Survey responses

The response rates for each of the profession surveys are listed in Table A.1.

Table A1: Survey response rate: state and territory of principal practice^(a), 2007 to 2009^(b) and 2011 to 2012

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Overseas/ Not stated	Australia
2007	65.5	39.9	33.9	36.7	65.4	59.3	60.0	28.7		49.6
2008 ^(c)	63.4	33.2	32.9	34.4	65.8	56.9	46.9	34.9		46.5
2009 ^(d)	64.0	31.6	28.2	35.4	61.4	33.2	45.1	32.8		44.4
2011	86.9	89.3	91.4	61.6	87.8	74.3	76.9	88.7	76.9	85.1
2012	95.3	93.8	96.0	80.9	94.1	95.1	92.4	92.6	89.2	93.3

⁽a) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. For records with no information on all three locations, they are coded to 'Not stated'.

Sources: AIHW Nursing and Midwifery Labour Force Survey, 2007, 2008 and 2009; NHWDS: nurses and midwives 2011.

Data are reported on the basis of the most current address at the time the survey was undertaken, unless stated otherwise. The data include employed nurses and midwives who did not state or adequately describe their location as well as employed nurses and midwives who were overseas. Therefore, the national estimates include these groups.

⁽b) Before 2011, the AIHW Nursing and Midwifery Labour Force Survey collected state and territory of registration and reported in this table. The survey was administered by individual state and territory boards and councils; therefore, some nurses and midwives were registered in more than one jurisdiction.

⁽c) Benchmark data for the Australian Capital Territory and Tasmania were not available for 2008 and were estimated from the average of 2007 and 2009 data for both jurisdictions.

⁽d) The response rate for the Northern Territory is affected by the transient nature of the nursing work force in that jurisdiction. According to the Nursing Board Annual Report 2009, approximately one-third of all nurses do not re-register each year, primarily because they no longer practise in the jurisdiction. There has been some variation across years in the degree to which nurses who are interstate have been removed from the renewal process and hence from the survey. Benchmark data for the Northern Territory in 2009 were estimated by using the total from the Nursing Board quarterly bulletin report pro-rated to the 2008 age distribution.

Coherence

Data collected for NHWDS: nurses and midwives 2012 is comparable with 2011 data, as the same survey data was collected. One minor change was the addition in 2012 of a 'Clinician manager' category in the principal role of main job. Comparisons of clinicians in 2011 need to be made with both clinicians and clinician managers in 2012. There was also a change in population estimates used for calculating full time equivalent rates. In 2011, Estimated Resident Populations (ERPs) based on 2006 census data were used, whereas in 2012, ERPs based on 2012 census data were used. Therefore, the rates based on the two different ERPs are not comparable.

Due to the differences in data collection methods, including differences in the design of surveys and questionnaires, it is recommended that comparisons between workforce data in the NHWDS: nurses and midwives 2011 and 2012 and previous AIHW Nursing and Midwifery Labour Force Survey data be made with caution.

Appendix B: Number of nurses and midwives registered by the Australian Health Practitioner Regulation Agency

Numbers of registrations, as at 31 June 2012, from the Australian Health Practitioner Regulation Agency are contained in Table B.1 for comparison purposes.

Table B.1: Registered nurses and midwives: profession by principal place of practice, reported by the Australian Health Practitioner Regulation Agency, 31 June 2012

Profession	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Not stated	Australia
				Numb	er					
Enrolled Nurse (EN)	13,784	20,057	10,820	5,059	6,092	1,281	646	387	2,357	60,483
Registered Nurse (RN)	64,420	57,486	44,738	24,392	15,642	6,049	3,549	2,664	16,530	235,470
RN and EN	941	1,434	678	354	343	36	29	49	78	3,942
Non-practising RN	1,012	273	135	131	67	57	31	12	143	1,861
Non-practising EN	245	98	28	34	25	19	10	1	24	484
Non-practising RN and EN	2	3	_	_	_	_	_	_	_	5
Registered Midwife (RM)	369	707	295	211	262	9	39	27	223	2,142
Non-practising RM	28	12	_	2	_	_	_	_	3	45
Nurse and Midwife	12,646	10,106	7,182	3,237	1,908	692	638	545	1,354	38,308
Midwife and Non-practising Nurse	134	13	13	6	3	2	3	_	6	180
Nurse and Non-practising Midwife	543	105	40	24	19	12	9	4	27	783
Total registrations	94,124	90,294	63,929	33,450	24,361	8,157	4,954	3,689	20,745	343,703
			Р	er cent						
Enrolled Nurse (EN)	14.6	22.2	16.9	15.1	25.0	15.7	13.0	10.5	11.4	17.6
Registered Nurse (RN)	68.4	63.7	70.0	72.9	64.2	74.2	71.6	72.2	79.7	68.5
RN and EN	1.0	1.6	1.1	1.1	1.4	0.4	0.6	1.3	0.4	1.1
Non-practising RN	1.1	0.3	0.2	0.4	0.3	0.7	0.6	0.3	0.7	0.5
Non-practising EN	0.3	0.1	_	0.1	0.1	0.2	0.2	_	0.1	0.1
Non-practising RN and EN	_	_	_	_	_	_	_	_	_	_
Registered Midwife (RM)	0.4	8.0	0.5	0.6	1.1	0.1	0.8	0.7	1.1	0.6
Non-practising RM	_	_	_	_	_	_	_	_	_	_
Nurse and Midwife	13.4	11.2	11.2	9.7	7.8	8.5	12.9	14.8	6.5	11.1
Midwife and Non-practising Nurse	0.1	_	_	_	_	_	0.1	_	_	0.1
Nurse and Non-practising Midwife	0.6	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2
Total registrations	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: NMBA 2013.

Appendix C: Population estimates

This report presents time series information about nurses and midwives, using measures such as 'number per 100,000 population and full-time equivalent (FTE) rate. To derive these measures, the population estimates (often referred to as 'estimated resident population') are obtained from the ABS. The estimates are as at 30 June for each year and based on the 2012 Census of Population and Housing adjusted for population flows, including births, deaths, net migration, short-term travellers to Australia and absences from Australia.

Table C1: Population estimates at 30 June: remoteness area and state and territory, 2008 to 2012

Remoteness area	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia ^(a)
				2008					
Major cities	5,107,881	3,976,629	2,596,788	1,651,846	1,158,970		347,876		14,839,990
Inner regional	1,358,406	1,029,931	863,106	193,417	168,947	325,472	492		3,940,141
Outer regional	438,057	244,902	626,646	176,221	201,593	161,844		121,210	1,970,473
Remote	30,662	4,913	76,757	94,847	44,693	8,695		46,749	307,316
Very remote ^(b)	8,455		56,208	55,369	14,462	2,557		51,915	191,279
Total ^(c)	6,943,461	5,256,375	4,219,505	2,171,700	1,588,665	498,568	348,368	219,874	21,249,199
				2009					
Major cities	5,199,864	4,077,255	2,669,132	1,706,996	1,175,640		354,266		15,183,153
Inner regional	1,374,502	1,044,258	884,321	200,099	171,992	329,558	519		4,005,616
Outer regional	440,229	245,560	641,253	178,802	201,796	163,617		125,315	1,996,572
Remote	30,742	4,861	77,182	96,141	44,909	8,657		47,856	310,348
Very remote ^(b)	8,418		56,883	58,212	14,565	2,521		52,856	195,964
Total ^(c)	7,053,755	5,371,934	4,328,771	2,240,250	1,608,902	504,353	354,785	226,027	21,691,653
				2010					
Major cities	5,272,006	4,151,390	2,720,602	1,747,535	1,190,175		361,187		15,442,895
Inner regional	1,390,676	1,059,274	898,003	205,605	175,167	332,918	579		4,062,597
Outer regional	442,435	245,605	650,952	179,986	202,148	164,819		127,829	2,013,774
Remote	30,743	4,832	77,543	97,243	45,071	8,615		48,524	312,571
Very remote ^(b)	8,432		57,644	60,476	14,761	2,495		53,425	199,913
Total ^(c)	7,144,292	5,461,101	4,404,744	2,290,845	1,627,322	508,847	361,766	229,778	22,031,750

(continued)

Table C1 (continued): Population estimates at 30 June: remoteness area by state and territory, 2008 to 2012

Remoteness area	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia ^(a)
				2011					
Major cities	5,333,092	4,215,005	2,769,947	1,798,688	1,200,476		367,375		15,684,583
Inner regional	1,403,271	1,072,926	910,332	210,948	177,396	335,138	610		4,111,010
Outer regional	443,177	245,112	659,995	181,852	201,777	165,445		129,106	2,026,464
Remote	30,533	4,774	78,135	98,881	45,164	8,454		48,700	314,641
Very remote ^(b)	8,456		58,369	63,040	14,801	2,446		53,486	203,326
Total ^(c)	7,218,529	5,537,817	4,476,778	2,353,409	1,639,614	511,483	367,985	231,292	22,340,024
				2012					
Major cities ^(d)	5,403,360	4,294,000	2,828,456	1,862,676	1,214,013		374,245		15,976,750
Inner regional ^(d)	1,414,178	1,084,544	927,070	218,830	179,544	335,925	667		4,161,150
Outer regional ^(d)	444,541	245,850	671,853	185,184	202,427	165,639		131,938	2,047,432
Remote ^(d)	30,596	4,728	79,458	101,216	45,459	8,363		49,149	318,969
Very remote ^{(b)(d)}	8,459		58,692	64,800	14,856	2,406		54,095	206,051
Total ^(d)	7,301,134	5,629,122	4,565,529	2,432,706	1,656,299	512,333	374,912	235,182	22,710,352

⁽a) Includes Other territories.

⁽b) Includes Migratory areas.

⁽c) Figures are final population estimates and may not equal the sum of the individual remoteness area estimates.

⁽d) Final population estimates were unavailable from the ABS when this report was prepared; therefore, estimates are preliminary. Source: ABS 2013.

Glossary

Aboriginal: A person of Aboriginal descent who identifies as an Aboriginal and is accepted as such by the community in which he or she lives.

Benchmark data: For the Nursing and Midwifery Workforce Survey 2012, responses were weighted to the number of registered nurses and midwives in each state and territory by sex and age group to take account of survey questionnaire non-response. These numbers are referred to as 'benchmarks' throughout this report.

Clinical area of nursing activity: The area where nurses in clinical roles were working the most hours in the week before the survey. The major categories include medical, surgical, mixed medical/surgical, peri-operative, midwifery, critical care/emergency, family and child health, community health, aged care, mental health and rehabilitation/disability.

Division: Within the nursing profession, the divisions of a nurse include 'registered' or 'enrolled'.

Employed: An employed nurse is one who either:

- worked for a total of 1 hour or more in a nursing role in the week before the survey in a job or business for pay, commission, payment-in-kind or profit, mainly or only in a particular state or territory
- usually worked, but was away on leave (with some pay) for less than 3 months, on strike or locked out, or rostered off.

Enrolled nurse: A nurse who is registered on the NRAS roll, which is maintained by the AHPRA, with a division of 'enrolled nurse'. Before the NRAS was introduced, registration (or enrolment) was by the nursing and midwifery registration board in each state and territory. The minimum educational requirement for an enrolled nurse is a Certificate IV or Diploma from a VET provider, or an equivalent qualification from a recognised hospital-based program. To maintain enrolment, nurses must have practised for a specified minimum period in the previous 5 years (this is referred to as 'recency of practice', with the requirements depending on the registration board). Enrolled nurses include mothercraft and dental nurses where the educational course requirements are less than a 3-year degree course or equivalent. Enrolled nurses usually work with registered nurses to provide patients with basic nursing care, doing less complex procedures than registered nurses.

Full-time equivalent (FTE) number: Measures the number of standard-hour workloads worked by employed nurses and midwives. This provides a useful measure of supply because it takes into account both the number of nurses and midwives who are working and the hours that they work.

FTE number is calculated by the number of employed nurses and midwives in a particular category multiplied by the average hours worked by employed nurses and midwives in the category divided by the standard working week hours. In this report, 38 hours is assumed to be a standard working week and equivalent to 1 FTE.

Full-time equivalent (FTE) rate: The FTE rate (number of FTE nurses and midwives per 100,000 population) is a measure of supply. By defining supply in terms of the FTE rate, meaningful comparisons of supply can be made across geographic areas and over time. FTE rate is calculated as the number of FTE nurses and midwives divided by the relevant population count multiplied by 100,000.

Hours worked: The total number of weekly hours worked is self-reported by nurses and relates to the number of hours worked in nursing jobs in the week before the survey. In editing survey responses, maximum hours worked accepted were 125 hours per week. Reported hours of greater than 125 are considered unreliable and therefore not included in the analysis of total hours worked by nurses.

Hours worked in the week before the survey are used as a proxy for part-time and full-time employment status. In this report, the ABS definition has been used for the cut-off for full-time and part-time work:

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

For data prior to 2012, average weekly hours are calculated only where hours are greater than zero (0). That is, employed respondents where hours worked are 'not stated' are excluded from the calculation.

For 2012 data, 'average weekly hours' was imputed where missing or invalid.

Indigenous: A person of Aboriginal and/or Torres Strait Islander descent who identifies as an Aboriginal and/or Torres Strait Islander and is accepted as such by the community in which he or she lives.

Midwife: Midwives are recognised as a separate profession; to practise as a midwife, a person must have appropriate qualifications in midwifery. There are two paths to these qualifications. Traditionally (and still most common), midwives first qualify as registered nurses and then do additional midwifery training to qualify and register as midwives. Also, midwives may now qualify through direct entry midwifery undergraduate programs—that is, they are not required to first qualify as a registered nurse. Direct entry midwives, as with other midwives, must be registered with the Nursing and Midwifery Board of Australia to practise. Direct entry midwives are restricted to practising midwifery only, whereas other midwives are also able to practise general nursing.

In this report, where a registered and enrolled nurse breakdown is provided, people with 'midwife only' registration are included in the category of 'registered nurses', irrespective of the training path they have followed. Although direct entry midwives are not registered to practise in general nursing, they are included as registered nurses in broad breakdowns of registered and enrolled nurses to ensure that all nurses are represented in these results. This is consistent with previous AIHW Nursing and Midwifery Labour Force reports.

Nursing and midwifery workforce: The nursing and midwifery workforce is defined for this report as:

- registered and enrolled nurses employed in nursing or midwifery in Australia in the week before the survey
- registered and enrolled nurses not employed in nursing or midwifery in Australia but looking for work in nursing in the week before the survey
- registered and enrolled nurses in Australia who, at the time of the survey, were on maternity or other extended leave.

Therefore, those working overseas and those not working in nursing or midwifery but not looking for work in the profession in the week before the survey are excluded.

Nursing role: Unless otherwise stated in this report, the 'role' of the nurse refers to the main role (that is, the core nursing role with the most number of hours worked in the week before the survey) in the nurse's 'main job' (that is, the job with the most number of hours worked

in the week before the survey). Core nursing roles are divided into two main groups, with several categories in each group, as follows:

- Clinical role: Prior to 2012 a registered or enrolled nurse who is mainly involved in the care and treatment of patients, as well as in the supervision and management of clinical nurses. Categories include clinical nurses (direct patient care) and clinical nurse managers and/ or administrators (managing clinical nurses and midwives). For 2012 data, only clinical nurses are included
- *Non-clinical role*: a registered or enrolled nurse other than a clinician. For data prior to 2012 this includes:
 - lecturer, nurse/midwifery educator, supervisor of new nurses/midwives: a person who teaches or trains persons in nursing for their initial qualification or in advanced skills after initial qualification
 - researcher: a person engaged in nursing research
 - other: a job function in nursing which is not one of the above for example, industrial relations or public health activities in nursing.

For 2012 data this includes:

- administrators
- teacher/educator
- researcher
- other.

Remoteness area: The Remoteness Area Structure within the Australian Standard Geographical Classification (ASGC), produced by the Australian Bureau of Statistics, has been used in this report to present regional data for nurses and midwives.

The Remoteness Area Structure of the ASGC is based on the Accessibility/Remoteness Index of Australia, where the remoteness index value of a point is based on the physical road distance to the nearest town or service in each of six population size classifications based on the 2006 Census of Population and Housing. These classes are:

- Major cities
- Inner regional
- Outer regional
- Remote
- Very remote
- Migratory.

Due to the small numbers in the *Migratory* class, they have been combined and reported as *Very remote* in this report.

Torres Strait Islander: A person of Torres Strait Islander descent who identifies as a Torres Strait Islander and is accepted as such by the community in which he or she lives.

Related publications

This report *Nursing and midwifery workforce* 2012 is part of an annual series. This and earlier publications can be downloaded free from the AIHW website http://www.aihw.gov.au/workforce-publications/>.

The following AIHW publications relating to workforce might also be of interest:

AIHW (Australian Institute of Health and Welfare) 2013. Allied health workforce 2012. National health workforce series no. 5. Cat. no. HWL 51. Canberra: AIHW.

AIHW 2013. Dental workforce 2011. National health workforce series no. 4. Cat. no. HWL 50. Canberra: AIHW.

AIHW 2013. Medical workforce 2011. National health workforce series no. 3. Cat. no. HWL 49. Canberra: AIHW.

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ACTH (ACT Health) 2010. ACT Health annual report 2009–10: Annexed reports. Canberra: ACT Health.

AHPRA (Australian Health Practitioner Regulation Agency) 2012a. Annual report of the Australian Health Practitioner Regulation Agency and the National Boards reporting on the National Registration and Accreditation Scheme, 2010–11. Viewed 24 September 2013, http://www.ahpra.gov.au/Legislation-and-Publications/AHPRA-Publications.aspx.

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AHPRA 2012c. Nursing and Midwifery Board of Australia. Viewed 24 September 2013, http://www.nursingmidwiferyboard.gov.au/>.

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ANMC (Australian Nursing and Midwifery Council) 2002. National accreditation guidelines, November 2012. Viewed 24 September 2013,

http://www.anmac.org.au/document/national-accreditation-guidelines>.

NMBA (Nursing and Midwifery Board of Australia) 2013. Nursing and Midwifery Board of Australia — statistics — registration data table — June 2012. Melbourne: AHPRA. Viewed 25 September 2013, http://www.nursingmidwiferyboard.gov.au/About/Statistics.aspx>.

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This report outlines the workforce characteristics of nurses and midwives in 2012. Between 2008 and 2012, the number of nurses and midwives employed in nursing or midwifery increased by 7.5%, from 269,909 to 290,144. During this period, nursing and midwifery supply increased by 0.5%, from 1,117.8 to 1,123.6 full-time equivalent nurses and midwives per 100,000 population. In 2012, the proportion of employed nurses and midwives aged 50 or older was 39.1%, an increase from 35.1% in 2008.

