Mental health workforce

A number of different health care professions, including psychiatrists, psychologists, nurses, general practitioners and social workers, provide the various mental health-related support services available in Australia. However, workforce data are currently only available for the following health care professionals who work principally in mental health care and related areas:

- psychiatrists
- nurses
- psychologists.

This section describes the size and selected characteristics of the workforce for these 3 groups.

To provide a more meaningful comparison, full-time-equivalent (FTE) figures have been reported in addition to the number of psychiatrists, nurses and psychologists, and the average total hours worked. The FTE measures the number of 38 hour week workloads completed, regardless of full-time or part-time working hours.

Key points

- Nationally, there were 13.1 FTE psychiatrists, 80.3 FTE mental health nurses and 84.6 FTE psychologists per 100,000 population in 2012.
- For psychiatrists, mental health nurses and psychologists, the highest rates were seen in *Major cities* (16.3 FTE, 85.3 FTE and 98.4 FTE per 100,000 population respectively).
- In 2012 about one-third of mental health nurses were male, compared to around 1 in 10 of the general nursing workforce. About two-thirds of psychiatrists were male compared to three-quarters of all medical specialists. About one-quarter of psychologists were male.
- The proportion of mental health nurses aged 55 and over increased from 23.3% in 2008 to 29.2% in 2012. Psychiatrists aged 55 and over made up around 40% of the psychiatry workforce in 2012, which has been stable since 2008. Just over one quarter of psychologists were aged 55 and over in 2012.

From July 2010 the annual AIHW Labour Force Surveys for medical practitioners and nurses and midwives were replaced by the National Health Workforce Data Set (NHWDS). The NHWDS includes data collected under the National Registration and Accreditation Scheme (NRAS) for health professionals. These estimates are based on those who self-identified as an employed health professional in the week before the survey.

Estimates of the mental health workforce prior to 2010 were derived from responses to the AIHW Nursing and Midwifery Labour Force Survey and Medical Labour Force survey; with responses weighted to available registration data from each state and territory. Prior to 2011, the most recent AIHW Psychology labour force survey was conducted in 2003. For further details on these surveys see the data source section.

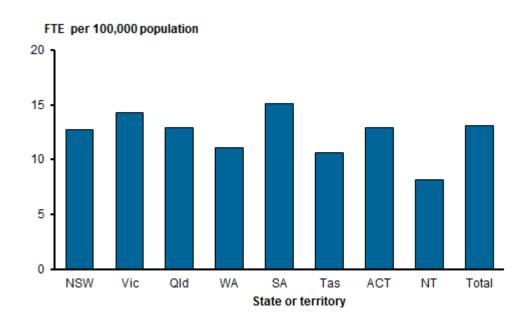
Psychiatric workforce

A psychiatrist is a qualified medical doctor who has completed specialist training in the diagnosis, treatment and prevention of mental illness and emotional problems. To practice as a psychiatrist in Australia, an individual must be admitted as a Fellow of the Royal Australian & New Zealand College of Psychiatrists (RANZCP). Psychiatrists first train as a medical doctor, then undertake a medical internship followed by a minimum of 5 years specialist training in psychiatry (RANZCP 2013). From the 2012 National Health Workforce Data Set of medical practitioners it was estimated that 2,913 psychiatrists were working in Australia, representing about 1 in 10 (10.3%) of all specialist medical practitioners (AIHW 2014). The NHWDS does not include information relating to specialists-in-training.

Psychiatric workforce by state and territory

At a national level, there were 13.1 FTE psychiatrists per 100,000 population working in Australia in 2012. Rates ranged from 8.2 per 100,000 population for the Northern Territory to 15.1 for South Australia (Figure WK.1).

Figure WK.1: Psychiatrists, FTE per 100,000 population, states and territories, 2012.



Source: NHWDS: medical practitioners 2012.

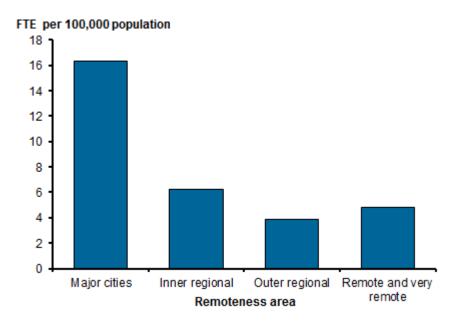
Source data Mental Health Workforce Table WK.3 (690KB XLS)

Alt text: Vertical bar chart showing the rate per 100,000 population of FTE psychiatrists working in Australia by jurisdiction. NSW 12.7, Vic 14.3, Qld 12.9, WA 11.0, SA 15.1, Tas 10.6, ACT 12.9, NT 8.2, Total 13.1 per 100,000 population. Refer to Table WK.3

Psychiatric workforce by remoteness area

Almost 9 out of 10 FTE psychiatrists (87.8%) were employed in *Major cities* in 2012. There were 16.3 FTE per 100,000 population for *Major cities*, 6.2 for *Inner regional*, 3.9 for *Outer regional* and 4.8 for *Remote and Very remote* areas (Figure WK.2).

Figure WK.2: Psychiatrists, FTE per 100,000 population by remoteness area, 2012.



Source: NHWDS: medical practitioners 2012.

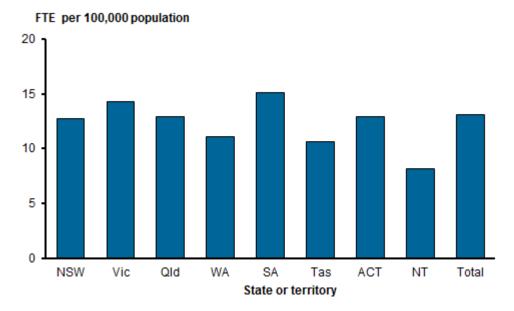
Source data Mental Health Workforce Table WK.4 (690KB XLS)

Alt text: Vertical bar chart showing the rate per 100,000 population of FTE psychiatrists working in Australia by remoteness area. Major cities 16.3, Inner regional 6.2, Outer regional 3.9, Remote and Very remote areas 4.8. Refer to Table WK.4

Hours worked per week

Psychiatrists reported working an average of 38.7 hours per week in 2012, including both clinical and non-clinical hours. Average hours ranged from 36.2 hours per week for Tasmanian psychiatrists to 41.3 for Queensland psychiatrists (Figure WK.3). Male psychiatrists worked about 8 more hours than female psychiatrists on average (41.4 hours compared with 33.8 hours).

Figure WK.3: Employed psychiatrists, average total hours worked per week, states and territories, 2012.



Source: NHWDS: medical practitioners 2012. Source data Mental Health Workforce Table WK.3 (690KB XLS)

Alt text: Vertical bar chart showing the average hours worked per week by employed psychiatrists by states and territories. NSW 38.4, Vic 36.9, Old 41.3, WA 40.7, SA 37.8, Tas 36.2, ACT 40.8, NT 40.7, Total 38.7. Refer to Table WK.3

Psychiatric workforce characteristics

The average age of psychiatrists in 2012 was about 53. Just over 7 in 10 psychiatrists were aged 45 and over (71.9%) and 2 in 5 (41.9%) were aged 55 and over. More than 1 in 6 employed psychiatrists (17.1%) were aged 65 and over.

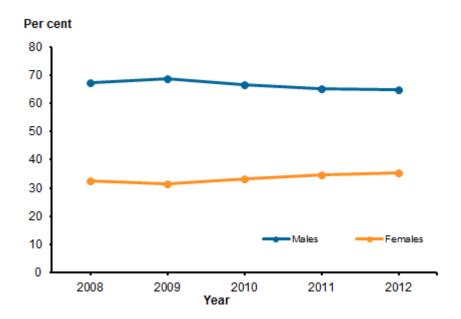
In 2012 about two-thirds of employed psychiatrists (64.7%) were male. About three–quarters of all medical specialists (72.9%) were male in 2012 (AIHW 2014).

The psychiatric workforce over time

Nationally, the supply of psychiatrists, measured as a population rate of FTE per 100,000 population stayed largely stable between 2008 and 2012 (13.1 FTE per 100,000).

The proportion of psychiatrists who were female increased slightly between 2008 and 2012 at the national level rising from 32.6% to 35.3% (Figure WK.4).

Figure WK.4: Employed psychiatrists, by sex, 2008-2012



Sources: AIHW Medical Labour Force Surveys 2008 and 2009; NHWDS: medical practitioners 2010–2012.

Source data Mental Health Workforce Table WK.1 (690KB XLS)

Alt text: Line graph with two lines showing male and female employed psychiatrists over 5 years from 2008 to 2012. 2008 67.4 males and 32.6 females, 2009 68.6 males and 31.4 females, 2010 66.7 males and 33.3 females, 2011 65.3 males and 34.7 females, 2012 64.7 males and 35.3 females. Refer to Table WK.1

The age profile of psychiatrists has remained relatively stable between 2008 and 2012.

The average hours worked per week remained relatively stable over the 5 years to 2012, ranging from 38.5 to 38.7 hours.

Psychiatrist work characteristics

Just over 9 in 10 (93.2%) FTE psychiatrists reported their principal role to be clinician, followed by administrator (2.5%) and researcher (2.2%). The most common work setting was private practice (43.9%), followed by hospitals (28.9%) and community health services (18.4%).

Reference

RANZCP 2013. Melbourne: Royal Australian & New Zealand College of Psychiatrists. Viewed 22 October 2013, < https://www.ranzcp.org.

AIHW 2014. Medical Workforce 2012. National health workforce series no. 8. Cat. no. HWL 54. Canberra: AIHW.

Mental health nursing workforce

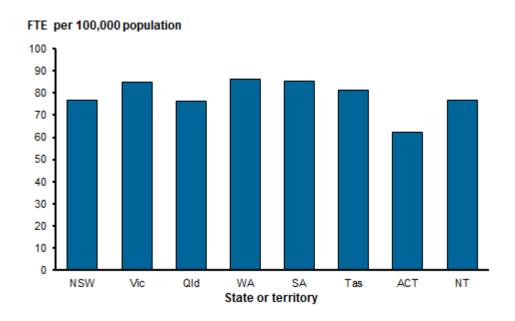
The 2012 National Health Workforce Dataset shows that employed nurses (both registered and enrolled nurses) who indicated they were working principally in mental health comprised about 1 in 16 (6.6% or an estimated 19,048) nurses employed in Australia (290,144).

The usual minimum educational requirement for a registered nurse is a 3-year degree or equivalent. For enrolled nurses the usual minimum educational requirement is a 1-year diploma or equivalent. Over 4 in 5 of all nurses working principally in mental health in 2012 were registered (84.8%) and more than 1 in 7 (15.2%) were enrolled nurses. This is similar to the profile of the general nursing workforce (AIHW 2012).

Mental health nursing workforce by state and territory

There were 80.3 FTE mental health nurses per 100,000 population working in Australia in 2012, with rates ranging from 62.1 per 100,000 for the Australian Capital Territory to 86.3 per 100,000 for Western Australia (Figure WK.5).

Figure WK.5: Mental health nurses, FTE per 100,000 population, states and territories, 2012



Source: NHWDS: nurses and midwives 2012.

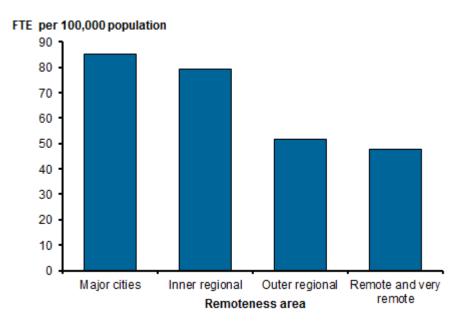
Source data Mental Health Workforce Table WK.11 (690KB XLS)

Alt text: Vertical bar chart showing the rate of FTE for mental health nurses by states and territories in 2012. NSW 76.9, Vic 84.7, Qld 76.4, WA 86.3, SA 85.5, Tas 81.5, ACT 62.1, NT 76.7. Refer to Table WK.11

Mental health nursing workforce by remoteness area

Almost three-quarters of FTE mental health nurses (74.7%) were employed in *Major cities* in 2012. *Major cities* had the highest rate of FTE mental health nurses—85.3 FTE per 100,000 population, followed by 79.5 for *Inner regional*, 51.5 for *Outer regional* and 47.8 for *Remote* and *Very remote* areas (Figure WK.6).

Figure WK.6: Mental health nurses, FTE per 100,000 population by remoteness area, 2012



Source: NHWDS: nurses and midwives 2012.

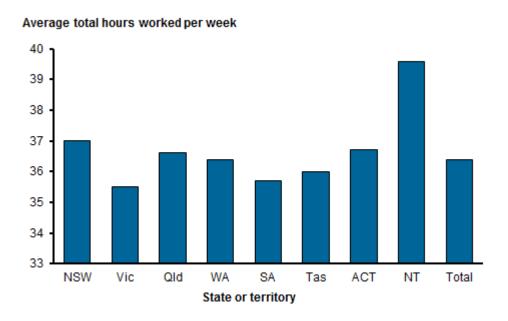
Source data Mental Health Workforce Table WK.12 (690KB XLS).

Alt text: Vertical bar chart showing the rate per 100,000 population of FTE mental health nurses working in Australia by remoteness area. Major cities 85.3, Inner regional 79.5, Outer regional 51.5, Remote and Very remote areas 47.8. Refer to Table WK.12

Hours worked per week

Mental health nurses reported working an average of 36.4 total hours per week in 2012, with average hours ranging from 35.5 hours per week for Victoria to 39.6 for the Northern Territory (Figure WK.7).

Figure WK.7: Mental health nurses, average total hours worked per week, states and territories, 2012



Source: NHWDS: nurses and midwives 2012.

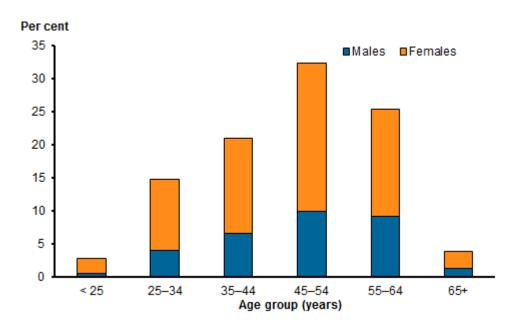
Source data Mental health workforce Table WK.11 (690KB XLS).

Alt text: Vertical bar chart showing the average hours worked weekly by mental health nurses by states and territories in 2012. NSW 37.0, Vic 35.5, Qld 36.6, WA 36.4, SA 35.7, Tas 36.0, ACT 36.7, NT 39.6, Total 36.4. Refer to Table WK.11

Mental health nurse workforce characteristics

The average age for mental health nurses in 2012 was 47. About three-fifths (61.6%) were aged 45 (Figure WK.8) and over a quarter (29.2%) were aged 55 and older. Less than 1 in 20 mental health nurses (3.8%) were aged 65 and over.

Figure WK.8: Mental health nurses, by sex and age group, 2012



Source: NHWDS: nurses and midwives 2012.

Source data Mental health workforce Table WK.9 (690KB XLS)

Alt text: Vertical bar chart showing the per cent of mental health nurses by sex and age group for 2012. less than 25 Males 1% and females 2%, 25-34 years males 4% females 11%, 35-44 years males 7% and females 14%, 45-54 years males 10% and females 22%, 55-64 years males 9% and females 16% and 65 years plus males 1% and females 3%. Refer to Table WK.9

Almost one-third (31.5%) of the mental health nursing workforce in 2012 were male, compared with about 10% of all nurses in Australia (AIHW 2013a).

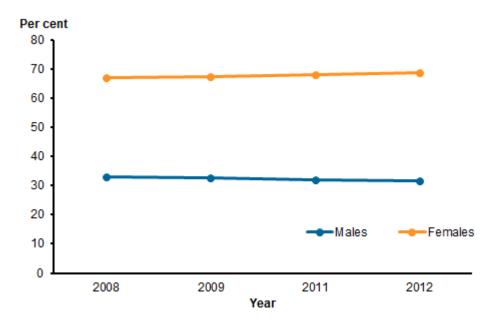
Male mental health nurses worked more hours per week on average than female nurses (38.0 hours compared with 35.6 hours). Registered nurses worked more hours than enrolled nurses (36.6 and 34.9 hours respectively).

The mental health nursing workforce over time

There was an apparent increase between 2008 and 2012 in the supply of mental health nurses, from 69.3 to 80.3 FTE per 100,000 population. However, caution should be used when interpreting changes over time due to the change in data collection methodology.

The ratio of males to females for the mental health nursing workforce remained stable between 2008 and 2012 (Figure WK.9). The proportion of registered nurses also remained fairly stable between 83.1% and 84.8% over the same period.

Figure WK.9: Employed mental health nurses, by sex, 2008–2012



Note: The Nursing and Midwifery Labour Force Survey was not conducted nationally in 2010. Reporting of the nursing and midwives workforce commenced under NRAS in 2011.

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

Source data Mental health workforce Table WK.9 (690KB XLS)

Alt text: Line graph with two lines showing the per cent of mental health employed nurses by sex over 5 years from 2008 to 2012. 2008 males 33.1 and females 66.9, 2009 males 32.5 and females 67.5, 2011 males 32.0 and females 68.0 and 2012 males 31.5 and females 68.5. Refer to Table WK.9

While the average age of the mental health nursing workforce remained fairly stable over the 5 years to 2012 (46.2 in 2008 and 47.0 in 2012) the proportion aged 55 and over increased from 23.3% in 2008 to 29.2% in 2012.

The average hours worked by mental health nurses remained stable over the 5 years to 2012, from 37.4 to 36.6 hours for registered nurses and 35.3 to 34.9 hours for enrolled nurses.

Reference

AIHW 2013a. Nursing and midwifery workforce 2012. National Health Workforce Series no. 6. Cat. no. HWL 52. Canberra: AIHW.

Psychologist workforce

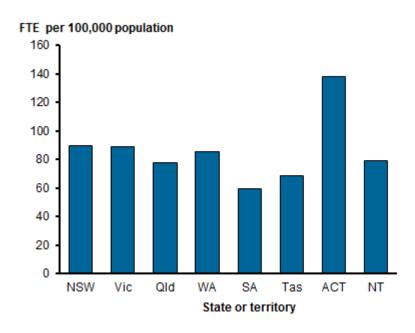
From the 2012 National Health Workforce Data Set (NHWDS) it was estimated that 22,404 registered psychologists (full registration) were working in Australia. Not all psychologists are employed in a clinical or mental health role. Although the NHWDS does identify provisionally registered psychologists, the workforce survey response rate from them was too low to be included in workforce analysis breakdowns. The education and training requirement for general (full) registration is a 6 year sequence comprising a 4 year accredited sequence of study such as an honours degree followed by 2 years of supervised practice as a Provisional Psychologist. The 2 years of supervised practice as a Provisional Psychologist may be undertaken through an internship program or professional postgraduate degree. In addition to registered psychologists, there were 3,737 provisionally registered psychologists in Australia in 2012 (AIHW 2013b).

Psychologists with general registration that have a recognised higher degree and advanced supervised practice in a particular area of practice can apply for an area of practice endorsement on their general registration (Psychology Board of Australia 2013).

Psychologist workforce by state and territory

At a national level, there were 84.6 FTE psychologists per 100,000 population working in Australia in 2012. Rates ranged from 59.3 per 100,000 population for South Australia to 138.4 for the Australian Capital Territory (Figure WK.10).

Figure WK.10: Psychologists, FTE per 100,000 population, states and territories, 2012.



Source: NHWDS: allied health practitioners 2012.

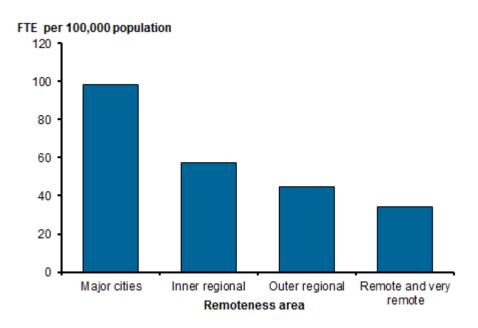
Source data Mental Health Workforce Table WK.19 (690KB XLS)

Alt text: Vertical bar chart showing the rate of employed psychologists per 100,000 population by states and territories for 2012. NSW 89.9, Vic 88.7, Old 77.9, WA 85.3, SA 59.3, Tas 68.3, ACT 138.4 & NT 79.0. Refer to Table WK.19

Psychologist workforce by remoteness area

More than 8 in 10 psychologists (81.9%) were employed in *Major cities* in 2012. There were 98.4 FTE per 100,000 population for *Major cities*, 57.2 for *Inner regional*, 44.7 for *Outer regional* and 34.3 for *Remote* and *Very remote* areas (Figure WK.11).

Figure WK.11: Psychologists, FTE per 100,000 population by remoteness area, 2012.



Source: NHWDS: allied health practitioners 2012.

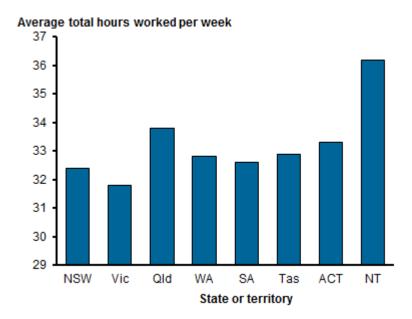
Source data Mental Health Workforce Table WK.20 (690KB XLS)

Alt text: Vertical bar chart showing the rate per 100,000 population of FTE psychologists working in Australia by remoteness area. Major cities 98.4, Inner regional 57.2, Outer regional 44.7, Remote and Very remote areas 34.3. Refer to Table WK.20

Hours worked per week

Psychologists reported working an average of 32.6 hours per week in 2012, including both clinical and non-clinical hours. Average hours ranged from 31.8 hours per week for Victorian psychologists to 36.2 for Northern Territory psychologists (Figure WK.12). Male psychologists worked more hours than female psychologists on average (36.2 hours compared with 31.6 hours).

Figure WK.12: Employed psychologists, average total hours worked per week, states and territories, 2012



Source: NHWDS: allied health practitioners 2012.

Source data Mental health workforce Table WK.19 (690KB XLS)

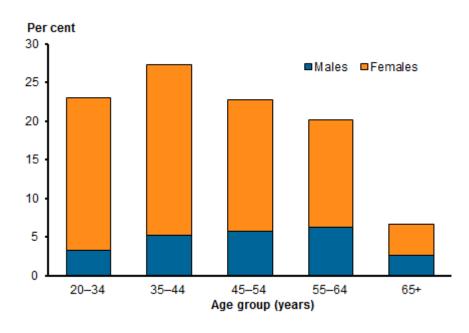
Alt text: Vertical bar chart showing the average total hours worked by employed psychologists by states and territories for 2012. NSW 32.4, Vic 31.8, Old 33.8, WA 32.8, SA 32.6, Tas 32.9, ACT 33.3 & NT 36.2. Refer to Table WK.19

Psychologist workforce characteristics

The average age of psychologists in 2012 was around 46. About half of all psychologists were aged 45 and over (49.7%) and just over one-quarter (26.9%) were aged 55 and over.

In 2012 more than three-quarters of employed psychologists (76.7%) were female.

Figure WK.13: Employed psychologists, by sex and age group, 2012



Source: NHWDS: allied health practitioners 2012.

Source data Mental health workforce Table WK.17 (690KB XLS)

Alt text: Vertical bar chart showing the per cent of employed psychologists by sex and age group for 2012. 20-34 years; males 3.3% and females 19.8%, 35-44 years; males 5.3% and females 22.0%, 45-54 years; males 5.8% and females 17.0%, 55-64 years; males 6.3% and females 13.9% and 65+ years; males 2.7% and females 4.1%. Refer to Table WK.17

Psychologist work characteristics

Around 8 in 10 (80.8%) FTE psychologists reported their principal role to be clinician, followed by administrator (5.5%) and other (4.8%). The main area of practice (principal area of main job) nominated by more than a third (36.8%) of FTE psychologists was counselling, followed by psychological/mental health intervention (24.9%) and psychology management/administration (4.4%). The most common work setting was private practice (34.5%), followed by an educational facility (19.3%) and community health service (15.6%).

The principal role nominated by a psychologist does not imply that they hold specialist endorsement in that area. To be eligible to apply for an area of practice endorsement and use the associated title, a psychologist must have advanced training (an accredited qualification in the area of practice followed by a period of supervised practice) over the requirements for general registration. In 2012, almost one-third (31.6%) of employed psychologists held an area of practice endorsement. The most commonly held specialist endorsement was clinical psychologist, held by about 1 in 5 (22.6%) employed psychologists, followed by counselling psychologist (3.6%) (AIHW 2013b).

Reference

Psychology Board of Australia 2013. Canberra: Australian Health Practitioners Regulation Agency. Viewed 23 September 2013, <www.psychologyboard.gov.au>.

AIHW 2013b. Allied health workforce 2012. National health workforce series no. 5. Cat. no. HWL 51. Canberra: AIHW

Community-managed mental health workforce

Non-government organisations (NGOs) play an important role in Australia's mental health system. Mental health NGOs are private organisations (typically not-for-profit, but also for-profit) that receive Australian government and/or state or territory government funding specifically for the provision of services where the principal intent is to improve mental health and well-being and services are delivered to people affected by mental health conditions, their families and carers, or the broader community. Not-for-profit organisations are also referred to as community-managed organisations (CMOs), reflecting their governance structure.

Estimating the size of the mental health NGO workforce is difficult. A 2009 national mental health NGO landscape survey and a 2010 workforce scoping survey provide approximate data about the mental health NGO workforce.

These surveys estimated that there are approximately 800 mental health NGOs in Australia with a total workforce in excess of 12,000 FTE employees. Findings indicate that 43% of the workforce have a bachelor degree or higher qualification in one of the health disciplines and 34% have a certificate or diploma level qualification. Survey findings also suggest that over 4 in 5 (84%) mental health NGO organisations operate in only one state or territory, with almost 1 in 10 (9%) operating nationally. Over 2 in 5 organisations (42%) had been in operation for over 20 years.

It is important to note that care should be taken when interpreting these findings due to coverage issues with both surveys. The landscape survey coverage was estimated at 34% of the sector and the workforce scoping survey was a pilot study which covered approximately 5% of the workforce.

Reference

National Health Workforce Planning and Research Collaboration 2011: Mental Health Non-Government Organisation Workforce Project Final Report. Adelaide: Health Workforce Australia.

Data sources

National Health Workforce Data Set (NHWDS)

In 2010, the National Registration and Accreditation Scheme (NRAS) was introduced and the AIHW Labour Force Surveys were replaced with workforce surveys administered under the NRAS. These new national surveys are administered by the Australian Health Practitioners Regulation Agency (AHPRA) and are included as part of the registration renewal process. The surveys are voluntary, and are used to provide nationally consistent estimates of the health workforce. They provide data not readily available from other sources, such as:

- the type of work done by, and job setting of health professionals
- the number of hours worked in a clinical or non-clinical role, and in total and
- the numbers of years worked in, and intended to remain in, the health workforce.

The survey also provides information on those registered health professionals who are not undertaking clinical work or who are not employed. The information from the workforce surveys combined with registration data items make up the NHWDS.

Response rates

The overall response rate to the Medical Workforce Survey in 2012 was 90.1%, which was higher than any previous AIHW Medical Labour Force Survey (AIHW 2014). Victoria, New South Wales and Australian Capital Territory had the highest response rates at 91.4%, 91.3% and 90.5%, respectively. Western Australia had the lowest response rate at 84.7%.

The overall response rate to the Nursing and Midwifery Workforce Survey 2012 was 93.3% (AIHW 2013a). Queensland, New South Wales and Tasmania had the highest response rates of 96.0%, 95.3%, and 95.1% respectively. The lowest response rate was for Western Australia at 80.9%.

The overall response rate to the Psychology Workforce Survey 2012 was 84.8% (AIHW 2013b). New South Wales, South Australia and Northern Territory had the highest response rates of 88.0%, 85.1% and 84.9%. The lowest response rate was for Victoria at 82.0%.

References

AIHW 2013a. Nursing and midwifery workforce 2012. National Health Workforce Series no. 6. Cat. no. HWL 52. Canberra: AIHW.

AIHW 2013b. Allied health workforce 2012. National health workforce series no. 5. Cat. No. HWL 51. Canberra: AIHW.

AIHW 2014. Medical Workforce 2012. National health workforce series no. 8. Cat. no. HWL 54. Canberra: AIHW.

Weighting and benchmarks

Responses to the surveys have been weighted to benchmark figures to account for non-response based on registration data supplied by AHPRA. For medical practitioners, the benchmarks used are the number of medical practitioners registered by state and territory (using place of principal practice) by main specialty of practice by sex and age group. For nurses and midwives, the benchmark data used are the number of registered practitioners in each state and territory (based on location of principal practice) by division of registration, age group and sex. For psychologists, the benchmarks used are the number of registered practitioners in each state and territory (based on the location of principal practice), by broad registration type by age group by sex within the registration data. Weighting included an identification of persons with an endorsement of 'clinical psychology', 'clinical neuropsychology' and 'other' (all other psychologists).

Location

State and territory is 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'. Remote and very remote areas include migratory areas.

In 2010, data for medical practitioners exclude Queensland and Western Australia due to their registration period closing after the national registration deadline on 30 September 2010.

Past and present surveys have different collection and estimation methodologies, questionnaire designs and response rates. As a result, care should be taken in comparing historical data from the AIHW Labour Force Surveys with data from the National Health Workforce Data Set.

A detailed description of the Medical Workforce Survey 2012, Nursing and Midwifery Workforce Survey 2012, including a summary of changes from the previous AIHW Labour Force Surveys is provided in Appendix A of the *Medical workforce 2011* and *Nursing and midwifery workforce 2012* reports. A description of the Psychology Workforce Survey 2012 is provided in the *Allied Health Workforce 2012* report. Copies of all the NRAS workforce survey forms are available from the AIHW website http://www.aihw.gov.au/workforce-publications/ (select link to Allied health workforce 2012).

AIHW Labour Force Surveys

Prior to the introduction of the NRAS, the AIHW Medical Labour Force Survey and the Nursing and Midwifery Labour Force Survey were conducted by the state and territory departments of health with the cooperation of the medical and nursing registration boards in each jurisdiction, and in consultation with the AIHW. The AIHW was the data custodian for these national collections and was responsible for collating, editing and weighting the survey data to provide nationally consistent estimates.

The AIHW Medical Labour Force Survey was a survey of all registered medical practitioners in each state and territory in Australia. The AIHW Nursing and Midwifery Labour Force Survey was a survey of all registered nurses and midwives in each state and territory in Australia. The surveys were mail-outs conducted in association with the annual registration renewal process. The Medical Labour Force Survey was conducted annually from 1993. The Nursing and Midwifery Labour Force Survey was conducted every 2 years from 1995 to 2003, and annually from 2003 to 2009, excluding 2006. Other AIHW health workforce surveys were conducted irregularly. The Psychology Labour Force Survey was last conducted in 2003 (AIHW 2006).

In the surveys, information on demographic details, main areas and specialty of work, qualifications and hours worked was collected from registered professionals. The data collected generally related to the week before the survey for medical practitioners and nurses. Survey responses were weighted by state, age and sex (and the number of registered and enrolled nurses for nursing) to produce state and territory and

national estimates of the total medical labour force and nursing and midwifery labour force. Benchmarks for weighting came from registration information provided by state and territory registration boards.

The response rates to these surveys varied from year to year and among jurisdictions. In 2009, the estimated national response rate for the Medical Labour Force Survey was 53.1%, ranging from 31.9% for Queensland to 79.1% for New South Wales (AIHW 2011a).

For the Nursing and Midwifery Labour Force Survey, the response rate declined from 61.1% in 2004 to 44.4% in 2009. In 2009, response rates in Queensland, Tasmania, the Northern Territory, Victoria and Western Australia ranged from 28.2% to 35.4% (AIHW 2011b). As a result, historical estimates for states and territories included in this report should be treated with care. The national estimates were based on census results from all jurisdictions, as the effect of any bias in responses from states with low response rates was likely to be relatively small at the national level.

The survey questionnaire has varied over time and across jurisdictions for both surveys (although more so for the nursing than for the medical survey). Mapping of data items has been undertaken to provide time series data. However, because of this and the variation in response rates, some caution should be used in interpreting changes over time and differences across jurisdictions.

More detailed information about how these surveys were conducted is available from the *Medical labour force 2009* (AIHW 2011a), *Nursing and midwifery labour force 2009* (AIHW 2011b) and *Psychology labour force 2003* (AIHW 2006).

References

AIHW 2006. Psychology labour force 2003. AIHW cat. no. HWL 34. Canberra: AIHW (National Health Labour Force Series no. 33).

AIHW 2011a. Medical labour force 2009. AIHW bulletin no. 89. Cat. no. AUS 138. Canberra: AIHW.

AIHW 2011b. Nursing and midwifery labour force 2009. AIHW bulletin no. 90. Cat. no. AUS 139. Canberra: AIHW.

Key concepts

Mental health workforce

Key Concept	Description
Benchmark data	Responses to the surveys have been weighted to benchmark figures to account for non-response based on registration data supplied by AHPRA. For medical practitioners, the benchmark data used are the number of medical practitioners registered by state and territory (using place of principal practice) by main specialty of practice by sex and age group. For nurses and midwives, the benchmark data used are the number of registered practitioners in each state and territory (based on location of principal practice) by division of registration, age group and sex. For psychologists, the benchmark data used are the number of registered practitioners in each state and territory (based on the location of principal practice), by broad registration type by age group by sex. Weighting included an identification of persons with an endorsement of 'clinical psychology', 'clinical neuropsychology' and 'other' (all other psychologists).
Employed	 In this report, an employed health professional is defined as one who: worked for a total of 1 hour or more, principally in the relevant profession, for pay, commission, payment in kind or profit; mainly or only in a particular state or territory during a specified period, or usually worked but was away on leave (with some pay) for less than 3 months, on strike or locked out, or rostered off. This includes those involved in clinical and non-clinical roles, for example education, research, and administration. 'Employed' people are referred to as the 'workforce'. This excludes those medical practitioners practising psychiatry as a second or third speciality, those who were on extended leave for 3 months or more and those who were not employed.
Full-time-equivalent	Full-time-equivalent (FTE) measures the number of standard-hour workloads worked by employed health professionals. FTE is calculated by the number of health professionals in a category multiplied by the average hours worked by those employed 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. This differs from the approach used in Mental health services in Australia reports published before 2004–05, and with some earlier AIHW labour force reports. FTE numbers presented in this section will therefore not be easily comparable with those reports.
Total hours	Total hours are the total hours worked per week in the profession, including paid and unpaid work. Average total weekly hours are calculated only for those people who reported their hours (that is, those who did not report them are excluded).