

Mental health workforce

A number of different health care and community welfare professionals, such as psychiatrists, psychologists, nurses, general practitioners and social workers, provide a range of mental health-related services to Australians. The workforce data for this section is sourced from the National Health Workforce Data Set (NHWDS), which comprises data about [employed](#) health professionals collected through annual registration surveys administered by the Australian Health Practitioners Regulation Agency (AHPRA) since 2010. For further details on the NHWDS and survey arrangements prior to July 2010 see the [data source](#) section. Data on the size and selected characteristics of the workforce is available for the following health care professionals who work principally in mental health care and related areas:

- psychiatrists
- mental health nurses
- registered psychologists.

For a different view of the workforce employed by specialised mental health care facilities see the facilities section.

The number of psychiatrists, mental health nurses and registered psychologists, the average [total hours](#) and [clinical hours](#) worked are reported in this section. To provide a meaningful comparison, [full-time-equivalent](#) (FTE) and [clinical FTE](#) figures have been reported. The FTE measures the number of standard hour week workloads completed, regardless of full-time or part-time working hours. A standard working week is defined as 38 hours for mental health nurses and registered psychologists and 40 hours for psychiatrists.

This is the first year that clinical FTE figures and average clinical hours worked have been reported in this section, where previously only total FTE and average total hours worked have been reported. These clinical FTE figures provide measures of the time psychiatrists, mental health nurses and registered psychologists spent working in a direct clinical role.

Key points

- In 2015, there were an estimated 3,131 psychiatrists, 20,834 mental health nurses and 24,522 registered psychologists in Australia. This equates to 12.7 FTE psychiatrists, 84.2 FTE mental health nurses and 88.0 FTE registered psychologists per 100,000 population.
- In 2015 there were 10.5 clinical FTE psychiatrists, 77.2 clinical FTE mental health nurses and 63.9 clinical FTE registered psychologists per 100,000 population in 2015.
- In 2015, about one-third (31.1%) of mental health nurses were male, compared to around 1 in 10 of the general nursing workforce. About 3 in 5 psychiatrists (62.3%) and one-fifth (21.8%) of registered psychologists were male.
- In 2015, 43.9% of psychiatrists and 31.9% of mental health nurses were aged 55 and older. The age profile of registered psychologists was younger, with 72.1% younger than 55.

Data in this section were last updated in May 2017.

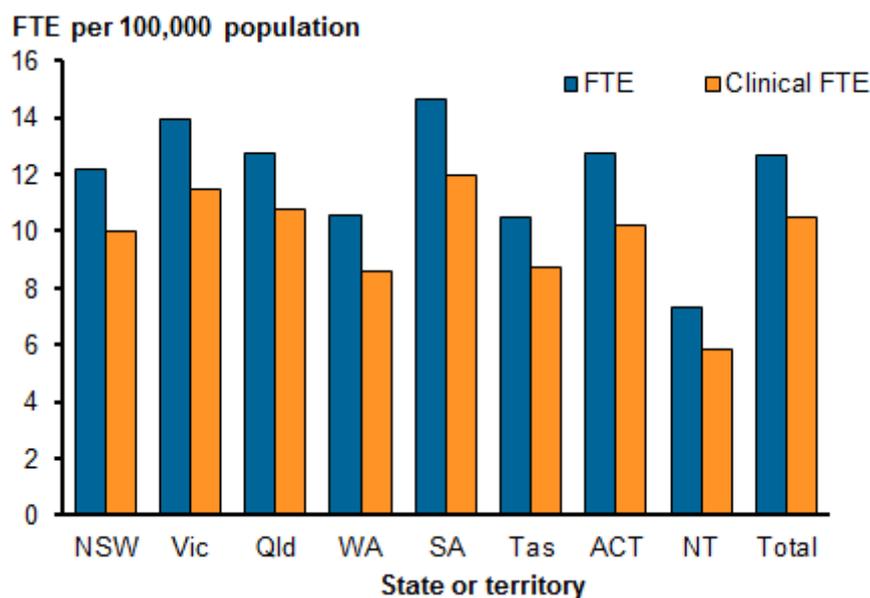
Psychiatric workforce

An estimated 3,131 psychiatrists were working in Australia in 2015, representing 3.5% of all employed medical practitioners and 10.0% of all specialist employed medical practitioners (Table WK.1) (AIHW 2016).

State and territory

At a national level, there were 12.7 FTE psychiatrists per 100,000 population working in Australia in 2015. Rates ranged from 7.3 per 100,000 population in the Northern Territory to 14.7 in South Australia. In terms of time spent as a clinician, there were 10.5 clinical FTE per 100,000 population in Australia in 2015. The clinical FTE rates ranged from 5.8 per 100,000 in the Northern Territory to 12.0 in South Australia (Figure WK.1).

Figure WK.1: Psychiatrists, FTE and clinical FTE per 100,000 population, states and territories, 2015



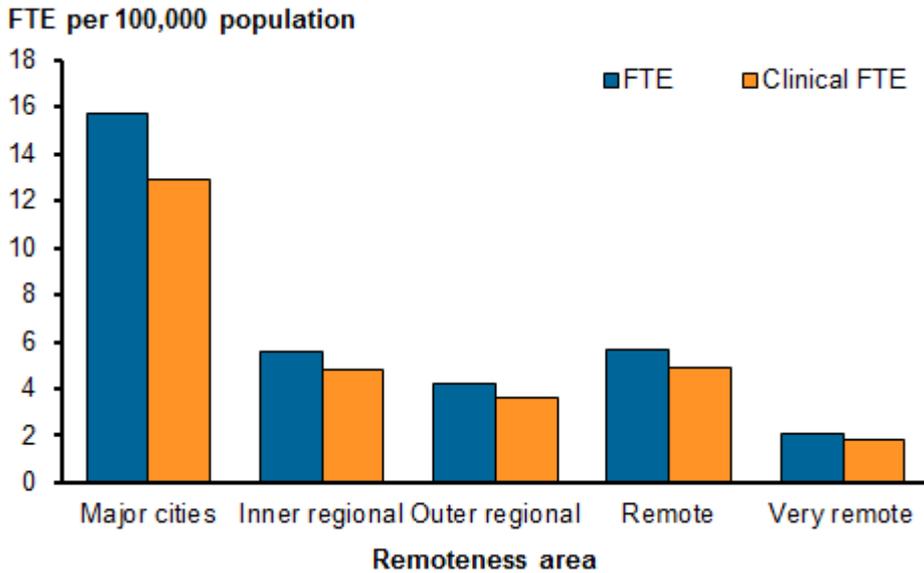
Source: NHWDS: medical practitioners 2015.

Source data: Mental Health Workforce Table WK.3 (1.54MB XLS)

Remoteness area

Almost 9 out of 10 FTE psychiatrists (88.1%) were employed in *Major cities* in 2015. There were 15.8 FTE per 100,000 population in *Major cities*, 5.6 in both *Inner regional* and *Remote* areas, 4.3 in *Outer regional* and 2.1 in *Very remote* areas (Figure WK.2).

Figure WK.2: Psychiatrists, FTE and clinical FTE per 100,000 population by remoteness area, 2015



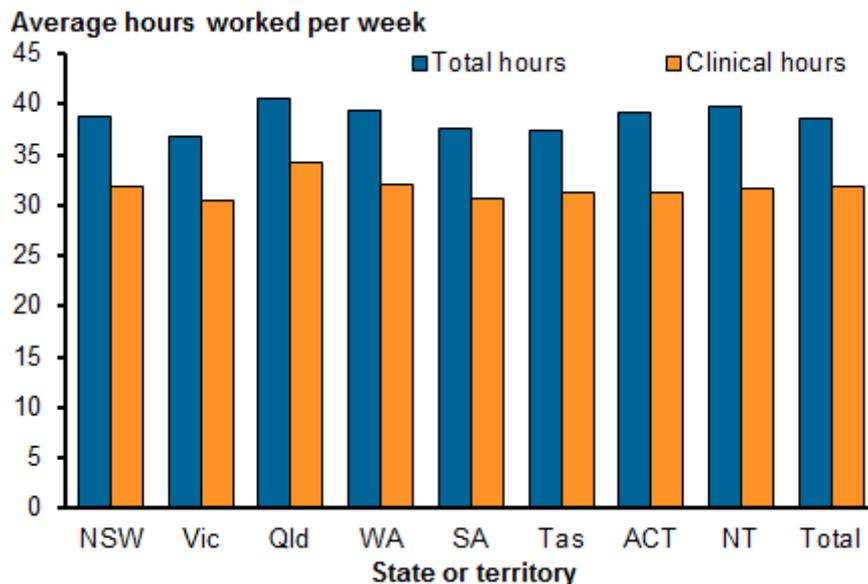
Source: NHWDS: medical practitioners 2015.

Source data Mental Health Workforce Table WK.4 (1.54MB XLS)

Hours worked per week

Psychiatrists reported working an average of 38.5 total hours and 31.8 clinical hours per week in 2015. Average total hours ranged from 36.9 hours per week for Victorian psychiatrists to 40.6 for Queensland psychiatrists (Figure WK.3). Average clinical hours ranged from 30.4 hours for Victorian psychiatrists to 34.3 hours for Queensland psychiatrists (Table WK.3).

Figure WK.3: Employed psychiatrists, average total hours and clinical hours worked per week, states and territories, 2015



Source: NHWDS: medical practitioners 2015.

Source data: Mental Health Workforce Table WK.3 (1.54MB XLS)

On average, male psychiatrists worked 6.9 total hours and 6.1 clinical hours more per week than female psychiatrists (Table WK.2). Psychiatrists employed in *Very remote* and *Remote* areas reported on average working the highest number of total hours (43.2 and 42.6 total hours respectively) and clinical hours per week (37.5 and 36.9 clinical hours respectively). Employed psychiatrists working in the two most remote area categories reported on average working 4–6 hours more total and clinical hours than the national average (Table WK.4).

Characteristics

In 2015, just over 7 in 10 psychiatrists were aged 45 and over (73.2%); over 4 in 10 (43.9%) were aged 55 and over and nearly 2 in 10 employed psychiatrists (18.6%) were aged 65 and over (Table WK.1).

In 2015, almost two-thirds of employed psychiatrists (62.3%) were male in 2015, compared to males comprising 7 in 10 of all medical specialists (70.2%) (AIHW 2016).

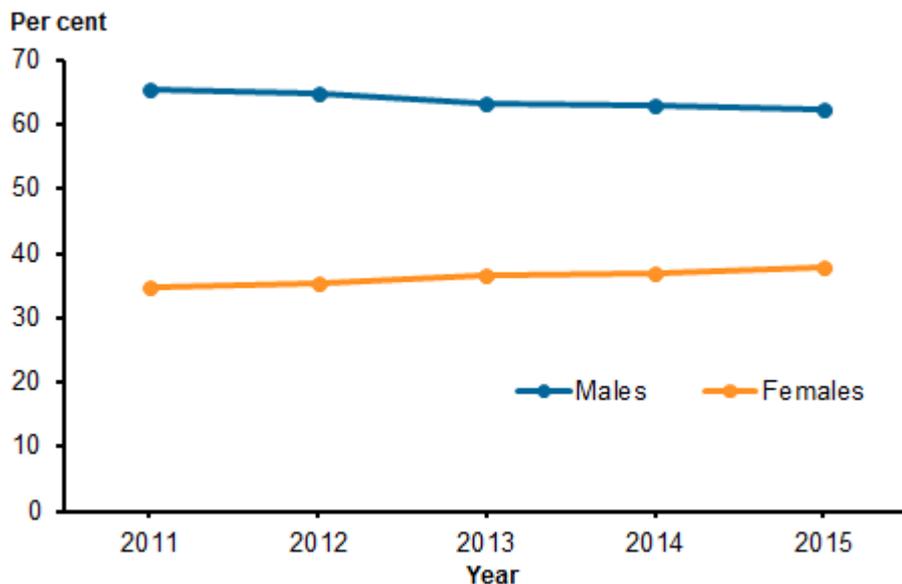
Over time

Nationally, the supply of psychiatrists was relatively stable between 2013 and 2015 (around 12.5 FTE per 100,000). Note that FTE figures for medical practitioners from 2013, including psychiatrists, are based on a 40-hour standard working week; FTE figures prior to 2013 were based on a 38 hour working week. Therefore, FTE figures from 2013 onwards cannot be compared directly with FTE figures prior to 2013.

The age profile of psychiatrists has remained relatively stable over the 5 years to 2015; just over 7 in 10 psychiatrists were aged 45 and over between 2011 and 2015. The average hours worked per week was relatively stable, at around 39 hours per week. Since 2011, the average total hours worked per week by females has remained stable and was consistently lower than that of males (around 34 hours compared to 41 hours).

Nationally, the proportion of psychiatrists who were female has increased incrementally over the past five years, rising from 34.7% in 2011 to 37.7% in 2015 (Figure WK.4).

Figure WK.4: Proportion of employed psychiatrists, by sex, 2011–2015



Sources: NHWDS: medical practitioners 2011–2015.
Source data: Mental Health Workforce Table WK.1 (1.54MB XLS)

Just over 9 in 10 (92.4%) FTE psychiatrists reported their principal area of work to be a clinician, followed by administrator (3.5%), researcher (2.1%) and then teacher or educator (1.2%) (Table WK.7). The most common work setting was private practice (46.7%), followed by hospitals (excluding outpatient services) (25.4%), and community mental health care services (17.2%) (Table WK.8).

Reference

AIHW 2016. Medical practitioners overview 2015. AIHW. Viewed 7th March 2017
<http://www.aihw.gov.au/workforce/medical/additional/>

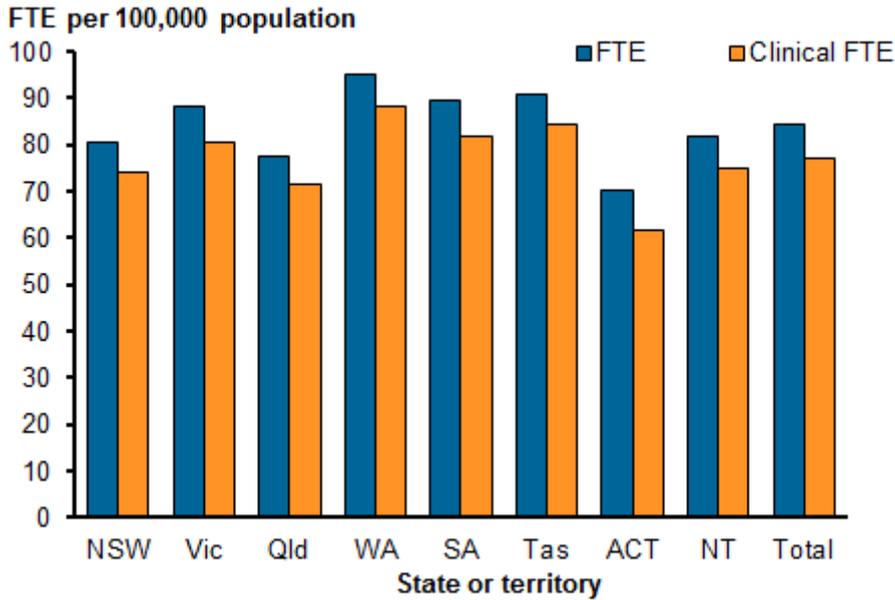
Mental health nursing workforce

In 2015, about 1 in 15 (6.9%) [nurses](#) (both registered and enrolled nurses) employed in Australia indicated they were working principally in mental health. Over 4 in 5 of these were registered nurses (85.4%), the remainder enrolled nurses; a similar profile to the total nursing workforce (AIHW 2016).

State and territory

There were 84.2 FTE mental health nurses per 100,000 population working in Australia in 2015, with rates ranging from 70.3 in the Australian Capital Territory to 95.3 in Western Australia (Figure WK.5). In terms of time spent as a clinician, there were 77.2 clinical FTE mental health nurses per 100,000 population at a national level, ranging from 61.7 in the Australian Capital Territory to 88.0 in Western Australia.

Figure WK.5: Mental health nurses, FTE and clinical FTE per 100,000 population, states and territories, 2015



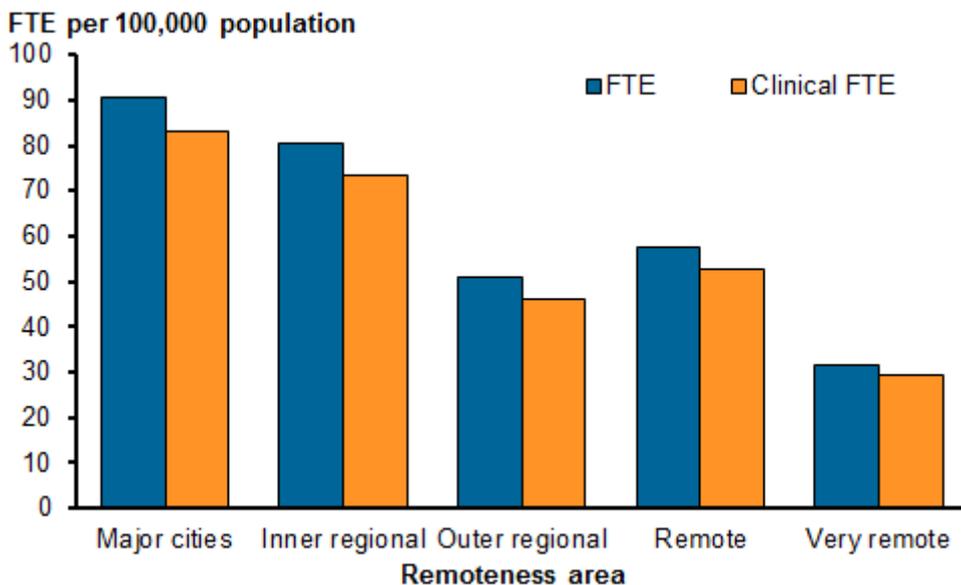
Source: NHWDS: nurses and midwives 2015.

Source data: Mental Health Workforce Table WK.11 (1.54MB XLS)

Remoteness area

Over three-quarters of FTE mental health nurses (76.2 %) were employed in *Major cities* in 2015. *Major cities* had the highest rate of FTE mental health nurses (90.4 FTE per 100,000 population), followed by *Inner regional* (80.3), *Remote* (57.5), *Outer regional* (51.1) and *Very remote* (31.6) areas (Figure WK.6).

Figure WK.6: Mental health nurses, FTE and clinical FTE per 100,000 population by remoteness area, 2015



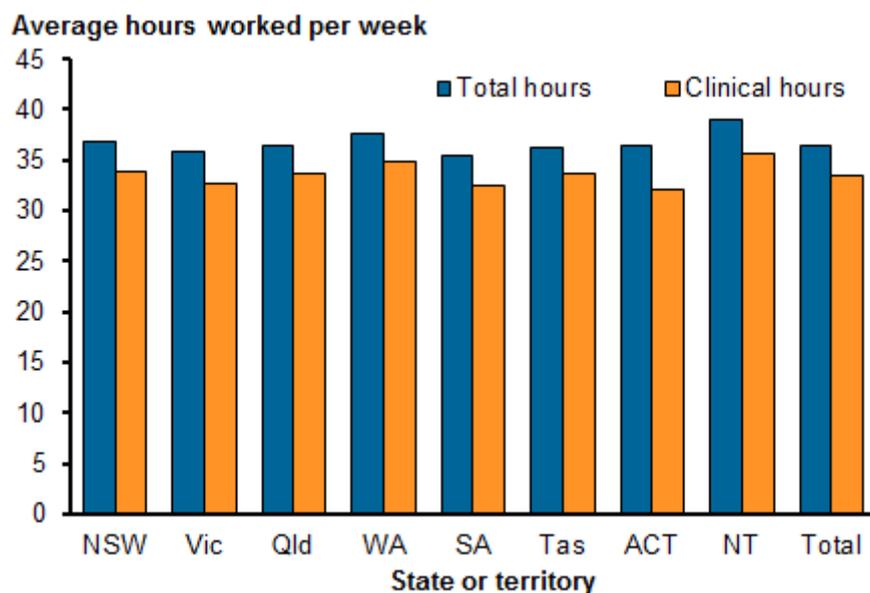
Source: NHWDS: nurses and midwives 2015.

Source data: Mental Health Workforce Table WK.12 (1.54MB XLS).

Hours worked per week

In 2015, mental health nurses reported working an average of 36.5 total hours per week, with averages ranging from 35.5 hours per week in South Australia to 39.0 hours in the Northern Territory (Figure WK.7). The average clinical hours worked per week reported by mental health nurses was 33.5 hours at the national level, ranging from 32.0 hours in the Australian Capital Territory to 35.6 hours in the Northern Territory (Figure WK. 7).

Figure WK.7: Mental health nurses, average total and clinical hours worked per week, states and territories, 2015



Source: NHWDS: nurses and midwives 2015.

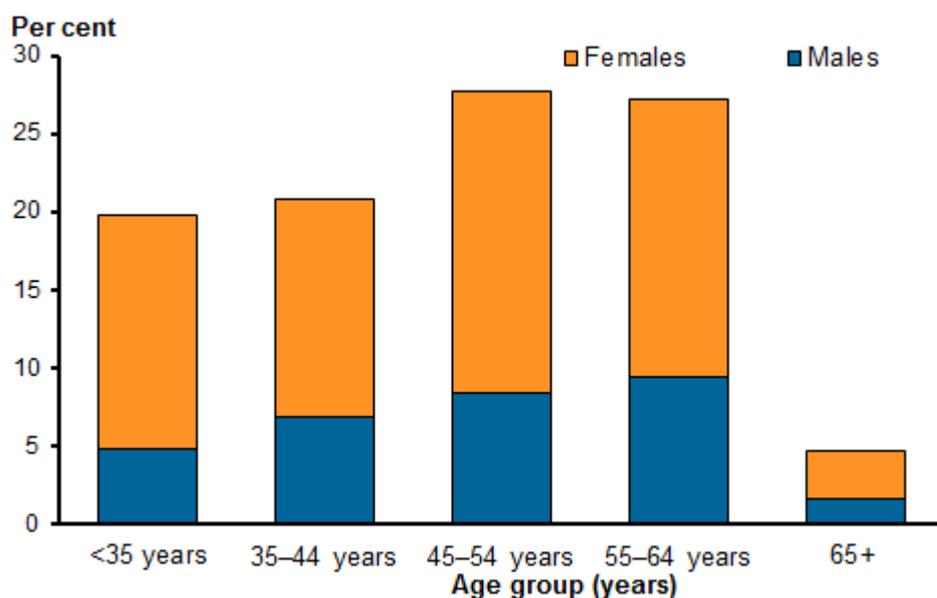
Source data: Mental health workforce Table WK.11 (1.54MB XLS).

Mental health nurses employed in *Very remote* (41.6 hours) and *Remote* (40.8 hours) areas reported working the highest average number of total hours per week in 2015. Mental health nurses employed in *Very remote* areas also reported working the most clinical hours on average (38.4 clinical hours), followed closely by those employed in *Remote* areas (37.4 clinical hours) (Table WK.12).

Characteristics

About 3 in 5 mental health nurses (59.5%) were aged 45 and above in 2015; almost a third (31.9%) were aged 55 and older and about 1 in 20 (4.7%) were aged 65 and over (Figure WK.8). Almost one-third (31.1%) of the mental health nursing workforce were male (Table WK. 9), compared with about 10.7% of all nurses in Australia (AIHW 2016).

Figure WK.8: Mental health nurses, by sex and age group, 2015



Source: NHWDS: nurses and midwives 2015.

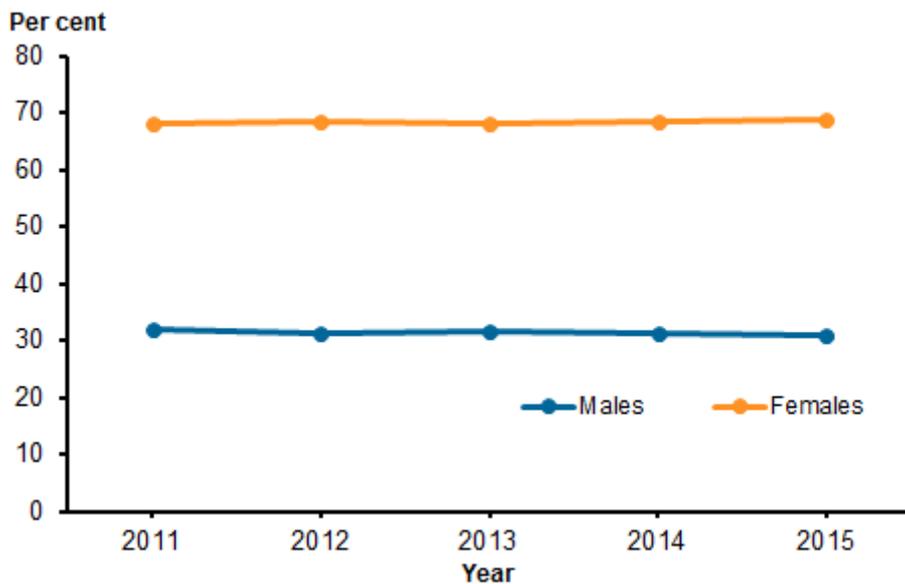
Source data: Mental health workforce Table WK.9 (1.54MB XLS)

Male mental health nurses worked more total and clinical hours per week on average than female nurses (males 38.2 total hours and 34.9 clinical hours; females 35.8 total hours and 32.9 clinical hours) in 2015 (Table WK.10). Registered nurses worked more total hours on average than enrolled nurses (36.8 and 34.8 hours respectively), however, the average clinical hours for both nursing types was similar (33.4 and 33.8 hours respectively) (Table WK.10).

Over time

There was an increase between 2011 and 2015 in the supply of mental health nurses, from 77.0 to 84.2 FTE per 100,000 population. The proportion of male and female mental health nurses remained relatively stable over this time period (Figure WK.9). The proportion of registered nurses also remained fairly stable at around 85% over the same period.

Figure WK.9: Proportion of employed mental health nurses, by sex, 2011–2015



Sources: NHWDS: nurses and midwives 2011–2015

Source data: Mental health workforce Table Wk.9 (1.54MB XLS)

The proportion of the mental health nurse workforce aged 55 and over increased from 27.2% in 2011 to 31.9% in 2015 (Table WK.9).

The average hours worked by mental health nurses remained stable between 2011 and 2015, at about 37 hours for registered nurses and about 35 hours for enrolled nurses (Table WK.10).

Work characteristics

Most FTE mental health nurses (93.4%) reported their principal area of work to be a clinician, followed by administrator (3.7%) and teacher or educator (2.2%) (Table WK.15). The most common work setting reported was hospitals (63.4%, excluding outpatient services), followed by community health care services (21.2%) and residential health care facilities (5.0%) (Table WK.16).

Reference

AIHW 2016. Who are nurses and midwives? Australian Institute of Health and Welfare website. Accessed April 7 2017 < <http://www.aihw.gov.au/workforce/nursing-and-midwifery/who-are-they/> >

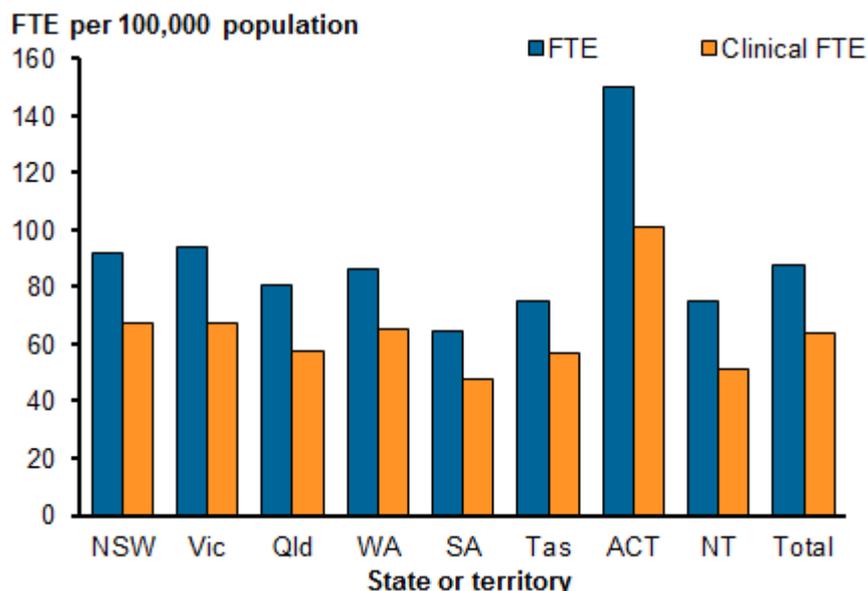
Psychologist workforce

In 2015, an estimated 24,522 [psychologists](#) with full registration were working in Australia. The NHWDS workforce survey response rate for provisionally registered psychologists was too low to be included in workforce analysis breakdowns and are excluded from the analysis presented below. From an alternate data source, there were an additional 4,192 provisionally registered psychologists in Australia in 2015 (Psychology Board of Australia 2015).

State and territory

At a national level, there were 88.0 FTE registered psychologists per 100,000 population working in Australia in 2015. Rates ranged from 64.3 FTE psychologists per 100,000 population in South Australia to 150.2 in the Australian Capital Territory (Figure WK.10). In terms of time spent as a clinician, this corresponds to 63.9 clinical FTE psychologists per 100,000 population employed in Australia, ranging from 47.7 in South Australia to 101.2 in the Australian Capital Territory.

Figure WK.10: Psychologists, FTE and clinical FTE per 100,000 population, states and territories, 2015



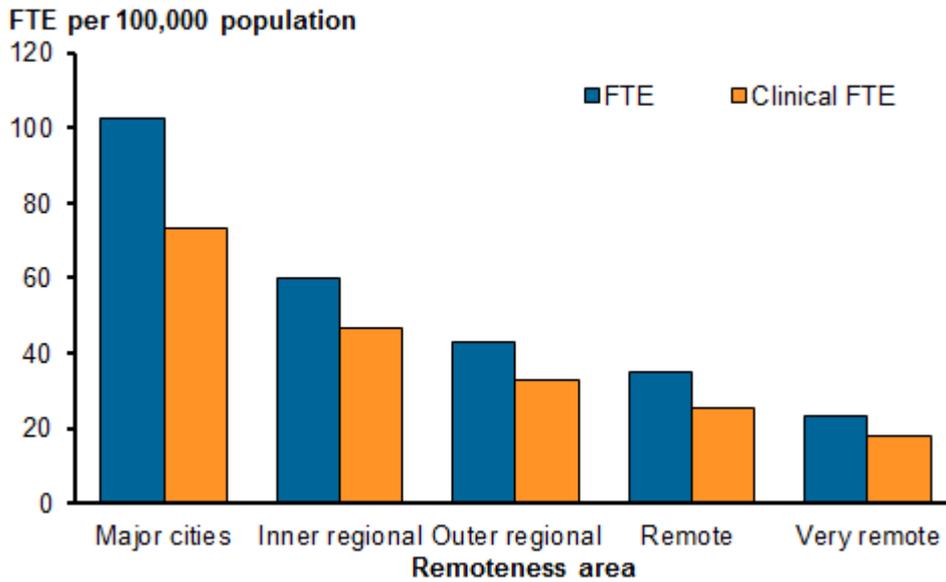
Source: NHWDS: psychologists 2015.

Source data: Mental Health Workforce Table WK.19 (1.54MB XLS)

Remoteness area

Over 8 in 10 FTE registered psychologists (82.6 %) were employed in *Major cities* in 2015. There were 102.6 FTE psychologists per 100,000 population working in *Major cities*, 60.0 in *Inner regional*, 43.1 in *Outer regional*, 34.7 in *Remote* and 23.2 in *Very remote* areas (Figure WK.11).

Figure WK.11: Psychologists, FTE and clinical FTE per 100,000 population by remoteness area, 2015



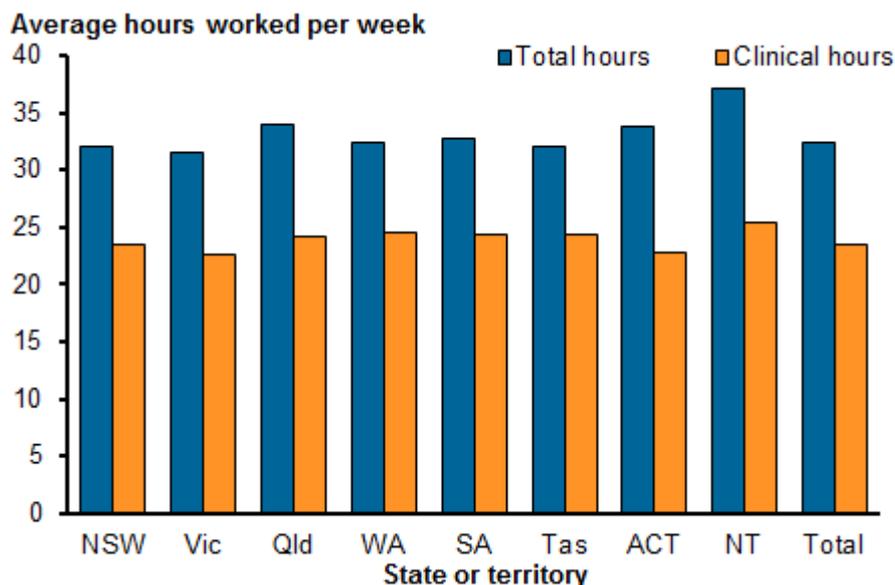
Source: NHWDS: psychologists 2015.

Source data: Mental Health Workforce Table WK.20 (1.54MB XLS)

Hours worked per week

Registered psychologists reported working an average of 32.4 total hours per week in 2015, and an average of 23.5 clinical hours. Average total hours ranged from 31.6 hours per week for psychologists working in Victoria to 37.1 in the Northern Territory (Figure WK.12). The average clinical hours ranged from 22.6 hours for Victorian psychologists, to 25.4 hours for Northern Territory psychologists. Male psychologists worked on average more total and clinical hours than female psychologists (males 36.2 total and 25.2 clinical hours; females 31.4 total and 23.1 clinical hours).

Figure WK.12: Employed psychologists, average total and clinical hours worked per week, states and territories, 2015



Source: NHWDS: psychologists 2015.

Source data: Mental health workforce Table WK.19 (1.54MB XLS)

Over time

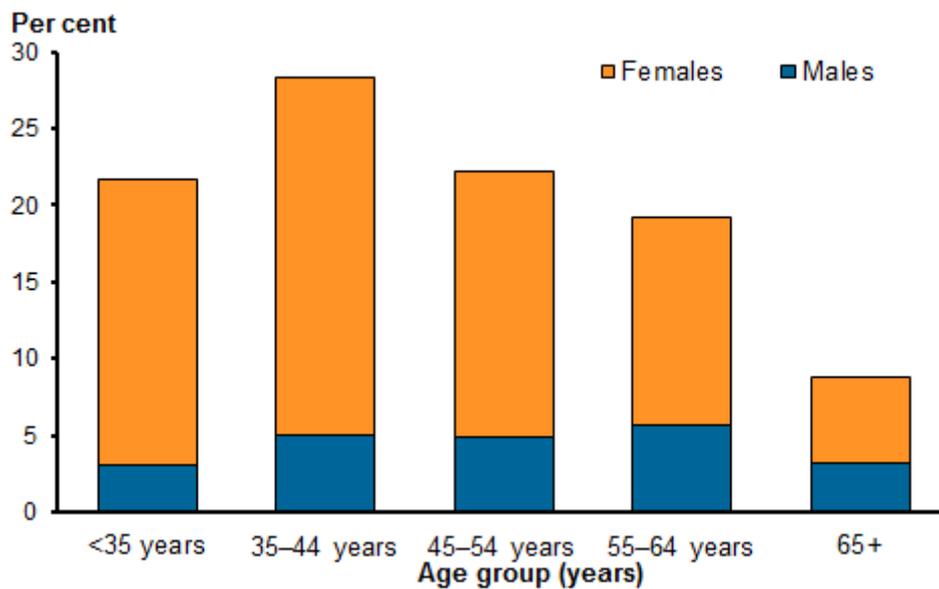
Nationally, there has been an increase in the supply of registered psychologists from 2011 to 2015, increasing from 84.2 to 88.0 FTE per 100,000 population (Table WK.21). The proportion of female registered psychologists has also increased incrementally over this time period; from 76.0% in 2011 to 78.2% in 2015.

The average total hours worked per week by registered psychologists has remained comparatively stable at around 32 hours per week from 2011 to 2015. Since 2011, the average total hours worked per week by males has remained fairly stable and higher than that of females (around 36 hours compared to around 32 hours per week) (Table WK. 18).

Characteristics

Half of all registered psychologists were aged 45 and over (50.1%) in 2015, with more than one-quarter (27.9%) aged 55 and over (Table WK.17) (Figure WK.13). Almost 4 out of 5 of employed psychologists (78.2%) were female (Table WK.17).

Figure WK.13: Employed psychologists, by sex and age group, 2015



Source: NHWDS: psychologists 2015.

Source data: Mental health workforce Table WK.17 (1.54MB XLS)

Work characteristics

The majority (87.2%) of FTE registered psychologists reported their principal area of work to be a clinician, followed by administrator (4.4%) and researcher (3.2%) (Table WK.23). The main area of practice (principal area of main job) nominated by about 2 in 5 (40.7%) FTE psychologists was counselling, followed by mental health intervention (25.8%) and neuropsychological/cognitive assessment (4.5%) (Table WK.24). The most common work setting was private practice (38.0%), followed by an educational facility (18.3%) and community mental health service (8.9%) (Table WK.25).

The principal area 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 (Psychology Board of Australia 2017). In 2015, over one-third (36.3%) of registered psychologists held an area of practice endorsement (AHPRA, 2015). The most commonly held [specialist endorsement](#) was as a Clinical Psychologist, held by about 1 in 4 (26.7%) of all registered psychologists (endorsed and non-endorsed), followed by Counselling Psychologist (3.5%)(AHPRA, 2015).

Reference

Psychology Board of Australia 2017. General registration. Viewed 24th April 2017, <http://www.psychologyboard.gov.au/Registration/General.aspx>

Psychology Board of Australia and Australian Health Practitioners Regulation Agency (AHPRA) 2015. Registrant Data: 31 December 2015. Viewed 14th February 2017, <http://www.psychologyboard.gov.au/About/Statistics.aspx>

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 that receive funding from Australian governments to provide mental health services to people with mental health conditions, their families and carers, and the broader community. NGOs are typically not-for-profit, but some are for-profit. Not-for-profit organisations are also called 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 some data about the mental health NGO workforce (National Health Workforce Planning and Research Collaboration 2011).

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 a large majority (84%) of 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.

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. Low coverage of the sector in these information sources may mean that the findings may be true for the respondents but not generalisable to the whole sector.

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.

A detailed description of the 2015 NHWDS for [medical practitioners including psychiatrists](#) and [nurses and midwives](#) are available from the AIHW Metadata Online Registry. A detailed description of the 2015 NHWDS for allied health professionals including psychologists is not available at this time.

Response rates

The overall response rate to the Medical Workforce Survey in 2015 was 94.8%, that is, the number of responses to the survey represented 94.8% of registered medical practitioners (Department of Health, 2017). New South Wales (95.6%), Victoria (95.1%) and Tasmania (94.8%) had the highest response rates. Northern Territory (93.4%) and South Australia (93.0%) had the lowest response rates.

The overall response rate to the Nursing and Midwifery Workforce Survey 2015 was 91.5% (Department of Health, 2017). Tasmania (92.6%), Western Australia (91.9%), New South Wales (91.7%), and Victoria (91.5%) had the highest response rates. The lowest response rate was for Northern Territory at 89.4%.

The overall response rate to the Psychology Workforce Survey by psychologists with a full registration was 97.2% (Department of Health, 2017). Victoria (97.7%), Queensland (97.5%), Australian Capital Territory (97.3%) and New South Wales (97.2%) had the highest response rates. The lowest response rate was for South Australia at 95.4%.

Estimation procedures

The AIHW uses registration data together with survey data to derive estimates of the total health practitioner workforce. Not all practitioners who receive a survey respond, as it is not mandatory. 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 incomplete to such an extent that it was decided to omit them from the reported survey data.
- Survey non-response—occurs because not all registered practitioners who receive a questionnaire respond.

Imputation methods are used account for item non-response and 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.

In imputation, the known probabilities of particular responses occurring are used to assign a response to each record. 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 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, principal role of main job, principal area of main job and work setting of main job.

Imputation: estimation for population non-response

In 2013, the methodology for population non-response was changed from a weighting-based methodology to a randomised sequential hot deck-based imputation.

The data were sorted into strata, so imputations were made using survey data from records that have similar registration details. The strata used for imputation were registration type (with limited registrants grouped together and specialist registrants grouped with those who also had general registration), a derived primary specialty categorisation, sex, age group, remoteness area and state, in that order.

Donor records were spaced evenly within strata to ensure records were used within the strata an equal number of times plus or minus 1, and that most strata within the hot deck were restricted to within strata imputations. For example, if there were 5 respondents and 12 non-respondents in a cell, the expected number of uses would be 2.4, resulting in each donor being used either 2 or 3 times. This is almost equivalent to a weighting strategy, except that instead of all the data being weighted only the non-registration data are weighted.

Because the data were imputed and not weighted, some data may be affected in different ways from those previously published. For example, because a practitioner's location of main job is most likely to be the same as their registration address, this has been used for the location estimation of non-respondents. Using this estimate rather than weighting will improve the accuracy of estimates for small geographic areas, as previously weighted data would scale up data for individuals across the state/territory and the registration information for records would not be taken into account.

For variables not used in the imputation (that is, all variables other than the registration type, remoteness area, state and territory of principal practice, 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.

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.

AIHW Labour Force Surveys

Prior to the introduction of the NRAS and the NHWDS in 2010, 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%, ranging from 32% for Queensland to 79% for New South Wales (AIHW 2011a).

For the Nursing and Midwifery Labour Force Survey, the response rate declined from 61% in 2004 to 45% in 2009. In 2009, response rates in Queensland, Tasmania, the Northern Territory, Victoria and Western Australia ranged from 28% to 35% (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.

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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).
Clinical FTE	Clinical FTE measures the number of standard-hour workloads worked by employed health professionals in a direct clinical role. Clinical FTE is calculated by the number of health professionals in a category multiplied by the average clinical hours worked by those employed in the category divided by the standard working week hours. The NHWDS considers a standard working week to be 38 hours for nurses and psychologists and 40 hours for psychiatrists.
Clinical hours	Clinical hours are the total clinical hours worked per week in the profession, including paid and unpaid work. The average weekly clinical hours is the average of the clinical hours reported by all employed professionals, not only those who define their principal area of work as clinician. Average clinical weekly hours are calculated only for those people who reported their clinical hours (those who did not report them are excluded).
Employed	<p>In this report, an employed health professional is defined as one who:</p> <ul style="list-style-type: none">• 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. <p>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.</p>

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, a standard working week for nurses and psychologists is assumed to be 38 hours and equivalent to 1 FTE. Like other medical practitioners, FTE measures for psychiatrists are based on a 40 hour standard working week. 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.
Nurse	To qualify for registration as a registered or enrolled nurse in Australia, an individual must have completed an approved program of study (AHPRA, 2017). 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. A mental health nurse is an enrolled or registered nurse that indicates their principal area of work is mental health.
Psychiatrist	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).
Psychologist	Psychologists with general registration who 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 2015). 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.
Specialist endorsement	Registered psychologists who practice in an approved area of psychology may be eligible for a specialist endorsement (Psychology Board of Australia, 2017). In order to obtain a specialist endorsement, a registered psychologist must complete formal accredited tertiary study in an approved area of practice, followed by a period supervised practice (Psychology Board of Australia, 2017).
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).

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