Australian Government
Australian Institute of Health and Welfare

Mental health in aged care

Web report | Last updated: **19 Jul 2024** | Topic: Aged care

About

Understanding mental wellbeing, the presence of mental health conditions, and incidence of self-injury in aged care service users is important to establish needs and plan for policy and service delivery.

This web report provides a snapshot of what is known about the mental health needs of individuals at the time of assessment for aged care services (that is, prior to, or at, entry to care) and of deaths due to suicide while accessing aged care, using linked data from the National Aged Care Data Clearinghouse and the National Death Index.

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Findings from this report:

- Just under 1 in 4 people that received a home care package was recorded with a mental health condition
- About 58% of people entering residential aged care are recorded with a mental health condition
- Death by suicide is more common among people using home care packages than among those living in residential aged care
- Mental health conditions are less commonly recorded for aged care users with increasing age

Summary

Mental distress and mental health conditions (for example, depression, anxiety) are common in late life (Dijk and Mierau 2023).

Older individuals (that is, non-Indigenous people aged 65 years and older and Aboriginal and/or Torres Strait Islander (First Nations) people aged 50 years and over) accessing aged care services may be susceptible to mental illbeing because of the health and function limitations that lead them to access these services, in combination with high rates of loneliness and bereavement (Ogrin et al. 2021).

This analysis uses available data from aged care assessments and other existing data sources to describe the mental health of people using aged care services in Australia, including incidence of suicide in this population.

Included in this report are people using home care packages and people using permanent residential aged care. Home care packages offer comprehensive home-based support including personal care, social support and other supports to promote independence. On 30 June 2022, around 216,000 people were receiving a home care package.

Permanent residential aged care provides support and accommodation for people who have been assessed as needing higher levels of care than can be provided in the home, including 24-hour nursing care. On 30 June 2022, approximately 181,000 people were living in permanent residential aged care.

Key findings

Between 1 July 2017 and 30 June 2022, the key findings were as follows:

- When first receiving a home care package, on average 23.1% of all people aged 65 years and over and 31.1% of Aboriginal and Torres Strait Islander (First Nations) people aged 50 years and over were recorded with a mental health condition on their aged care eligibility assessment.
- At entry to permanent residential aged care, on average 57.7% of all people aged 65 years and over and 58.6% of First Nations people aged 50 years and over were recorded with a mental health condition on their aged care eligibility assessment or their residential aged care funding assessment.
- These proportions are higher than the reported prevalence of mental health conditions in the general population of older adults in the 2022 National Study of Mental Health and Wellbeing (9.6% of people aged 65 to 85 years) (ABS 2020–2022). This may reflect a decline in mental health as care needs increase, and/or may in part be attributable to differences in data collection.
- Mental health conditions were less commonly recorded in aged care assessments with increasing age. Across all age groups, mental health conditions were more commonly recorded among those living alone.
- For people aged 65 years and over that entered residential aged care, a Cornell Scale for Depression tool estimated that 62.5% had at least mild symptoms of depression. About 16% were recorded with major symptoms of depression.
- The average yearly age-standardised suicide rate among people aged 65 years and over receiving a home care package was 21.5 deaths per 100,000 users, and among those living in permanent residential aged care was 13.0 deaths per 100,000 users. This compares to an average yearly rate of 12.9 deaths per 100,000 people in Australia aged 65 years and over.
- Most aged care users who died by suicide were men and suicide deaths became less common with older age.

These data demonstrate that people accessing aged care services commonly experience poor mental health. However, there are important limitations of the available data sources, including that recording of mental health conditions usually occurs only at the time of assessment before receiving care. While some people are re-assessed later, for most people this means that we don't know about their mental health needs after their assessments and during their time using care. Collectively, these limitations highlight opportunities to improve data collection and reporting on the mental health and other health care needs of aged care users.

References

ABS (Australian Bureau of Statistics) (2020–2022), National Study of Mental Health and Wellbeing - external site opens in new window, ABS Website, accessed 11 April 2024.

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Mental health in older people

Mental health is a core component of overall health and wellbeing, enabling people to cope with stress, achieve to their abilities, and contribute to their community. Mental health problems occur on a spectrum that includes mental distress, mental health conditions, and suicidal ideation and behaviour (World Health Organisation 2021).

Mental distress and mental health conditions are common in late life (Dijk and Mierau 2023). The 2020–2022 National Study of Mental Health and Wellbeing identified that 7.9% and 11.1% of men and women, respectively, aged 65 years and older have experienced a mental health condition in the past 12 months (not including dementias) (ABS 2020–2022). Dementia is not considered a mental health condition for the purposes of this report.

Mental health conditions

Mental health conditions are clinically significant disturbances in an individual's cognition, emotional regulation, and/or behaviour. A mental health condition is usually associated with distress and/or impairment in important areas of functioning (World Health Organization 2021).

There are many types of mental health conditions, and they can be categorised based on shared features. Common conditions include:

- Mood disorders: characterised by disturbances in mood, enjoyment, and engagement in life. Examples of mood disorders are major depressive disorder and bipolar disorder.
- Anxiety disorders: characterised by excessive fear and worry, resulting in distress and behavioural disturbance. Anxiety disorders include phobias and social anxiety disorder.
- Stress disorders: these disorders develop after exposure to psychologically distressing or traumatic events, and include post-traumatic stress disorder and acute stress disorder.
- Psychotic disorders: characterised by impairments in perception (for example, delusions, hallucinations) and disorganised behaviour or thinking. The most common psychotic disorder is schizophrenia.

Other disorders include (but are not limited to) personality disorders, eating disorders, and alcohol and other drug dependence disorders.

More information about mental health conditions can be found on the Australian Institute of Health and Welfare mental health sub-site.

Older adults with a mental health condition are more likely to experience disability and reduced health-related quality of life (Porensky et al. 2009). In addition, men aged 85 years and older record the highest age-specific suicide rate of any group (Australian Institute of Health and Welfare 2024).

Mental health in aged care service users

The Australian aged care system offers a range of services to meet the needs of older adults. Services range from supports to remain living independently at home through to full-time care in a residential setting.

There are 3 main types of services in the Australian aged care system:

- Home support (Commonwealth Home Support Programme), which provides entry-level services focused on supporting individuals to undertake tasks of daily living to enable them to be more independent at home and in the community.
- Home care (Home Care Packages Program), which is a more structured, more comprehensive package of home-based support, provided over 4 levels ranging from basic care (Level 1) to more intensive care (Level 4).
- Residential aged care, which provides support and accommodation for people who have been assessed as needing higher levels of care than can be provided in the home, and the option for 24-hour nursing care. Residential care is provided on either a permanent, or a temporary (respite) basis.

There are also several types of flexible care and services for specific population groups available that extend across the spectrum from home support to residential aged care. For more information on aged care services in Australia see the Report on the operation of the Aged Care Act - external site opens in new window, or visit the Department of Health and Aged Care website - external site opens in

new window.

Older individuals accessing aged care services may be susceptible to poorer mental health because of the health and functioning limitations that lead them to access these services. In addition, approximately half of older adults using residential aged care services have dementia (Harrison et al. 2020), and many experience loneliness (Ogrin et al. 2021).

These changes in circumstances, health conditions and other factors increase older individual's risk for poor mental health (Dijk and Mierau 2023). Understanding mental wellbeing, the presence of mental health conditions, and incidence of self-injury in aged care service users is important to establish needs and plan for policy and service delivery.

This web report provides a snapshot of what data is available about mental health in aged care. It describes what is known about mental health needs at the time of assessment for aged care services (that is, prior to receiving care) and of deaths due to suicide while accessing aged care.

Full details of the methods used for this analysis can be found in the Technical notes.

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ABS (Australian Bureau of Statistics) (2020–2022), National Study of Mental Health and Wellbeing - external site opens in new window, ABS, Australian Government, accessed 11 April 2024.

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What is available in existing national aged care data sets about mental health?

On this page:

There are several sources of information in national data sets that can be used to examine the mental health of people using aged care services, including aged care assessments, death records, medication data, healthcare data, and information from hospitalisations.

Aged care assessments

People seeking to access aged care services undergo assessments to determine their eligibility to receive Australian Government-subsidised aged care services, including permanent residential aged care and home care packages. Assessments are conducted by Aged Care Assessment Teams which operate in all states and territories. These assessments are completed using the National Screening and Assessment Form.

People accessing residential aged care also participate in an assessment to determine their care and funding needs. Until 30 September 2022, this assessment was completed using the Aged Care Funding Instrument - external site opens in new window (ACFI).

Included in both assessments are items identifying diagnosed mental health conditions and measures of psychological wellbeing.

Mental health conditions in aged care assessments

Mental health conditions can be identified in aged care assessments where they are recorded in the list of a person's health conditions. In aged care eligibility assessments, assessors record any major diseases or disorders that have an impact on the person’s need for assistance.

Assessors also record a 'primary health condition' considered to be the primary influence on the person's care needs. Assessors may record different primary health conditions on different assessments, depending on the person’s needs at the time.

Health conditions in aged care assessments are reported by the person being assessed and/or support people present during the assessment (professionals or family/friends), and/or are taken from medical notes. From 1 July 2017 to 30 June 2022, 17.5% of recorded mental health conditions were recorded as 'client reported', 39.5% 'GP confirmed', 27.6% 'hospital confirmed', and 10.2% 'other health practitioner diagnosis'. 3.7% had more than one recorded mental health condition, each with different record sources, and 1.5% had no recorded source.

All people accessing the aged care services included here (including Aboriginal and Torres Strait Islander (First Nations) people) must complete an aged care eligibility assessment and be approved for a service before receiving that service. All aged care eligibility assessments include recording of health conditions. As such, all people have an opportunity to be recorded as living with a mental health condition. More information about these records can be found in the Technical notes.

Until October 2022, in entry into residential care assessments, assessors recorded up to 3 major diseases or disorders that have an impact on the person’s need for assistance (with an emphasis on conditions that will most affect funding needs).

It is mandatory that aged care eligibility and entry into residential care assessments record at least one health condition, or record 'no health conditions present'.

Codes used to identify mental health conditions are displayed in the Technical notes.

Supplementary Assessment Tools in the National Screening and Assessment Form

Comprehensive assessment for aged care eligibility, using the National Screening and Assessment Form, includes Supplementary Assessment Tools that assessors can choose to complete during their assessment.

These tools include 2 validated scales of mental wellbeing:

- Geriatric Depression Scale: a 15-item measure of depressive symptoms in which the person records whether they have experienced specified symptoms of depression over the past week (for example, 'Do you feel that your life is empty?'). Scores are summed and a score >5 is indicative of depression (Sheikh and Yesavage 1986).
- Kessler-10: a 10-item measure of psychological distress in which a person indicates how often they experienced symptoms of distress over the past 4 weeks (for example, 'In the past 4 weeks, about how often did you feel tired out for no good reason?') on a scale from 'None of the time' (1) to 'All of the time' (5). Scores are summed, with higher scores indicating higher distress (Kessler et al. 2003).

The Geriatric Depression Scale and the Kessler-10 have both been culturally adapted and validated for many ethnically diverse populations and are therefore suitable for many culturally and linguistically diverse communities. Importantly however, neither tool is culturally validated for use with First Nations people (McNamara et al. 2014; Russell et al. 2022).

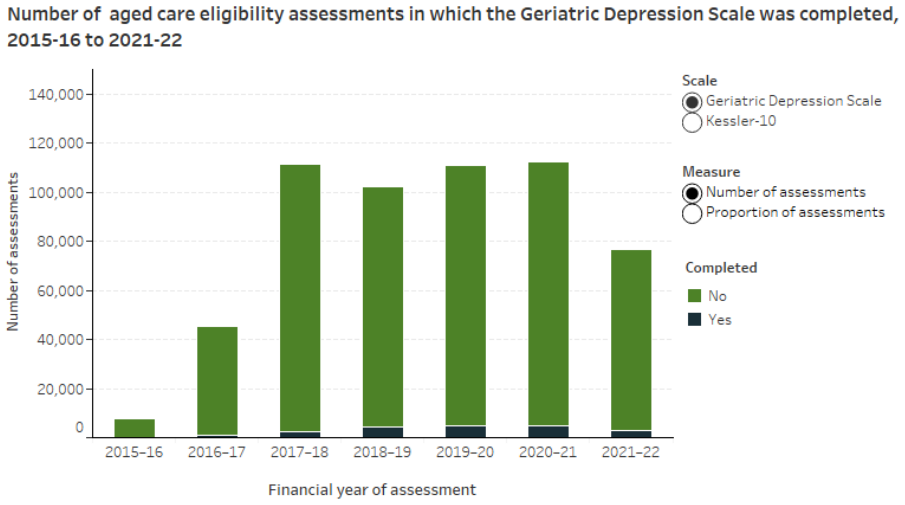
The Supplementary Assessment Tools also include 5 binary (that is, yes/no) items regarding the presence or absence of loneliness, social isolation, insomnia, nervousness/ depression, and anxiety.

However, these tools are rarely completed during assessments in practice. The My Aged Care – National Screening and Assessment Form fact sheet - external site opens in new window state that the use of these tools is recommended (but not mandatory) where there is an identified need for a greater level of assessment. Figure 1 demonstrates the very low rates of completion of these tools each year.

Figure 1: Completion rates of Geriatric Depression Scale and Kessler-10 in aged care eligibility assessments, 2015–16 to 2021–22

The stacked column graph shows that the proportion of aged care eligibility assessments in which the Geriatric Depression Scale and the Kessler-10 were completed remained low throughout the period from 2015-16 to 2021-22 with all completed rate under 5%.

The number aged care eligibility assessments in which the Geriatric Depression Scale and the Kessler-10 were completed was highest in 2019-20 with 5,005 Geriatric Depression Scale completed records and 1,816 Kessler-10 completed records out of 110,782 aged care eligibility assessments.



Note: Total n=566,928 people aged 65 years and over that completed a comprehensive assessment from 1 July 2015 to 30 June 2022 and were approved for a home care package or permanent residential aged care.
Source: the National Aged Care Data Clearinghouse 2021-22.
https://www.aihw.gov.au/

Given the very low completion rates for these tools, valid and reliable information about mental wellbeing in the whole aged care user (for example, home care, residential aged care) population cannot be drawn from them. As such, reporting on these tools is not included in this report.

Cornell Scale for Depression in Dementia in the Aged Care Funding Instrument

For people in permanent residential aged care, assessments until end of October 2022 included a modified version of the Cornell Scale for Depression in Dementia. This is a measure of depressive symptoms completed by both the resident (if possible) and by an informant (carer, staff member) (Alexopoulos et al. 1988).

The Cornell Scale for Depression in Dementia tool used in entry to residential care assessments consists of 19 questions covering 5 areas:

- mood-related signs
- behavioural disturbance
- physical signs
- cyclic functions
- ideation disturbance.

It is designed to be administered by a clinician. A Cornell Scale for Depression in Dementia may be completed for all people entering residential aged care, whether or not they have dementia.

The Cornell Scale for Depression in Dementia is scored on a 38-point scale with a score of 0–8 indicating minimal or no symptoms of depression. Scores are categorised:

- 'minimal or no symptoms of depression (less than 9)
- 'mild symptoms of depression' (9–13)
- 'moderate symptoms of depression' (14–18)
- 'major symptoms of depression' (19–38).

Death by suicide and other causes

When data about aged care service users are linked to data about death, deaths due to suicide can be identified. Date and causes of death are provided to the National Death Index from state and territory Registrars of Births, Deaths and Marriages, the National Coronial Information System, and the Australian Bureau of Statistics.

Deaths due to suicide can be identified from the primary cause of death (as derived by the Australian Bureau of Statistics from death certificates) using the International Classification of Disease and Related Health Problems – Tenth Revision (ICD-10) codes ranging from X60-X84, Y87.0 (injury, poisoning, and certain other consequences of other external causes). These criteria have been previously defined by the AIHW Suicide and Self-Harm Monitoring Unit (AIHW 2024).

In addition, deaths caused by drug and alcohol poisoning (both accidental and undetermined intent – X40–45, Y10-15, Y45, Y47, Y49) and deaths due to chronic liver diseases and cirrhosis (K70, K73-74) can be identified as potential (but not exhaustive) proxy measures of deaths related to chronic mental distress. Data available on Suicide and Self-Harm Monitoring shows the rates of these deaths in the general population.

Other potential data sources

When data about aged care service users are linked to other administrative data sources it is possible to report on the rate of hospitalisations and emergency department presentations for self-injury. Suicide and Self-Harm Monitoring provides data about these events for the Australian population. These events can provide information about the mental wellbeing of people while they are using aged care services. Data about self-injury (that did not result in death) in aged care services users is not currently described in this report but will be added in future updates.

Medication data can also be used to indicate mental health needs, particularly psychotropic medication use. Mental health-related prescriptions include data about use of these medications in the Australian population.

Data about use of Medicare-subsidised mental health services can also be used to indicate use of services for mental health needs. The AIHW reporting on mental health service use includes date about use of these services in the Australian population.

Finally, quarterly reporting for the National Mandatory Residential Aged Care Quality Indicator program is a requirement for all Government-subsidised residential aged care facilities in Australia. Since April 2023, the program has included a 'Quality of Life' indicator in which providers must administer the Quality of Life – Aged Care Consumers tool (Hutchinson et al. 2021) with each resident (or their proxy) every 3 months. Results are published on GEN Aged Care - external site opens in new window.

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Mental health conditions in aged care service users

On this page:

The proportion of all people aged 65 years and over, and Aboriginal and Torres Strait Islander (First Nations) people aged 50 years and over, with mental health conditions as identified in aged care assessment data was examined for all people prior to receiving a home care package or permanent residential aged care for the first time from 2017–18 to 2021–22. Note that dementia was not considered a mental health condition for the purposes of this report; included conditions are described in the Technical notes.

There are also important limitations of the data sources used here, described more in the Notes on data quality section. The mental health conditions reported here may under- or over-estimate the true prevalence of mental health conditions in the population of users of Australian aged care services.

Key findings

- On average, 23.1% of all people aged 65 years and over receiving a home care package between 1 July 2017 and 30 June 2022, and 31.1% of Aboriginal and Torres Strait Islander (First Nations) people aged 50 years and over, were recorded with a mental health condition on their aged care eligibility assessment.
- On average, 57.7% of all people aged 65 years and over entering permanent residential aged care between 1 July 2017 and 30 June 2022, and 58.6% of First Nations people aged 50 years and over, were recorded with a mental health condition on their aged care eligibility assessment or their residential aged care funding assessment.
- These proportions are higher than the reported prevalence of mental health conditions in the general population of older adults in the 2022 National Study of Mental Health and Wellbeing (9.6% of people aged 65 to 85 years) (Australian Bureau of Statistics, 2020–2022). This may reflect a decline in mental health as care needs and other health problems increase, and/or may in part be attributable to differences in data collection.
- Mental health conditions were less commonly recorded in aged care assessments with increasing age.
- Mental health conditions were more commonly recorded in aged care assessments among people living alone at the time of assessment.

People using aged care aged 65 years and over

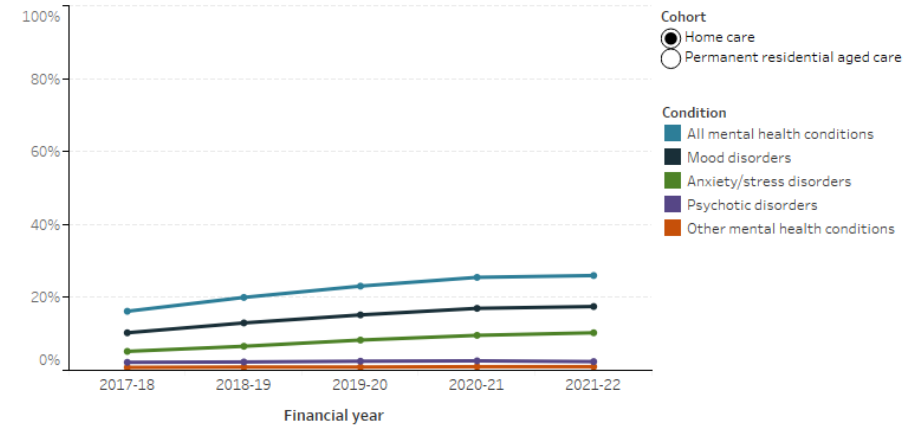
Figure 2 shows the proportion of people aged 65 years and over using a home care package or entering permanent residential aged care with a mental health condition in the period 2017–18 to 2021–22.

Figure 2: Proportion of people aged 65 years and over using aged care services with a mental health condition, 2017–18 to 2021–22

The line graph shows a gradual increase in the proportion of people aged 65 years and over using home care service with a mental health condition, rising from 16.2% in 2017-18 to 26.0% in 2021-22. Specifically, the proportion of those with mood disorders increased from 10.3% to 17.5%, and those with anxiety/stress disorders from 5.2% to 10.3%. The proportions of people with psychotic disorders and other mental health conditions remained consistently low, with psychotic disorders under 2.5% and other mental health conditions under 1% each year from 2017-18 to 2021-22.

The line graph shows a slight increase in the proportion of people aged 65 years and over entering permanent residential aged care with a mental health condition, rising from 54.5% in 2017-18 to 58.8% in 2021-22, with a peak of 61.1% in 2020-21. Specifically, the proportion of those with mood disorders increased from 42.8% to 44.4%, and those with anxiety/stress disorders from 25.3% to 31.4%. The proportions of people with psychotic disorders and other mental health conditions remained consistently low, under 4.5% each year from 2017-18 to 2021-22.

Proportion of people aged 65 years and over receiving a home care package with a mental health condition, 2017–18 to 2021–22



Source: the National Aged Care Data Clearinghouse 2021-22.
https://www.aihw.gov.au/

See notes >

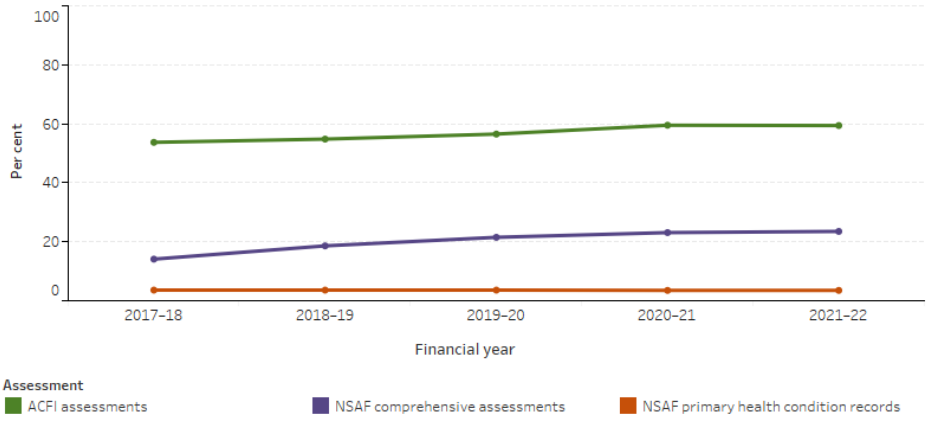
Of the 289,763 people aged 65 years and over that started receiving a home care package from 1 July 2017 to 30 June 2022, 66,997 (23.1%) were recorded as having at least one mental health condition.

Of the 296,217 people aged 65 years and over that entered permanent residential aged care from 1 July 2017 to 30 June 2022, 171,005 (57.7%) were recorded as having at least one mental health condition on an assessment.

For people entering permanent residential aged care, there were differences in the proportion of mental health conditions according to data source (Figure 3). The proportion of people with any condition was higher when assessed using entry to residential care assessments compared to aged care eligibility assessments using the National Screening and Assessment Form.

Figure 3: Proportion of people aged 65 years and over entering permanent residential aged care with a mental health condition, by assessment source, 2017–18 to 2021–22

The line graph illustrates the differences in the proportion of people aged 65 years and over entering permanent residential aged care with a mental health condition as captured by different assessment sources. The proportion was highest in the Aged Care Funding Instrument (ACFI) assessments, increasing from 53.7% in 2017-18 to 59.4% in 2021-22. This was followed by the National Screening and Assessment Form (NSAF) comprehensive assessments, which rose from 14.1% to 23.5%, and NSAF primary health condition records, which remained steady at 3.5-3.6% each year.



ACFI: Aged Care Funding Instrument; NSAF: National Screening and Assessment Form
Note: More information about the different record types is available in the 'About this analysis' section.
Source: the National Aged Care Data Clearinghouse 2021-22.
http://www.aihw.gov.au/

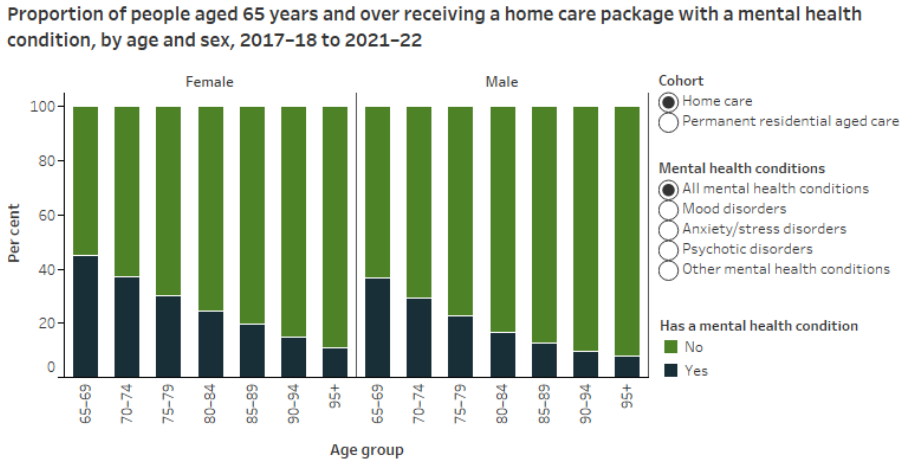
This difference may be because an entry to residential care assessment occurred on average 2.3 days (median 0 days, standard deviation 18.3 days) before or after entry to permanent residential aged care, while a comprehensive assessment occurred on average 244.3 days (median 87 days, standard deviation 356.8 days) before or after entry to permanent residential aged care. However, it may also be due to differences in data collection (see What is available in aged care data about mental health).

In both men and women, the proportion of people receiving home care packages or living in permanent residential aged care who were recorded with an assessed mental health condition at the time of their eligibility assessment decreased with increasing age (Figure 4).

Figure 4: Proportion of people aged 65 years and over using aged care services with a mental health condition, by age and sex, 2017–18 to 2021–22

The stacked column graph shows that for the period 2017-18 to 2021-22, the proportion of people aged 65 years and over using home care service with a mental health condition gradually decreased with increasing age for both female and male care recipients. For females, the proportion decreased from 45.1% in the 65-69 age group to 11.1% in the 95-and-over age group. For males, it decreased from 36.9% to 7.8%. This decreasing pattern with increasing age was consistent across all mental health conditions, including mood disorders, anxiety/stress disorders, psychotic disorders, and other mental health conditions, for both female and male care recipients.

The stacked column graph shows that for the period 2017-18 to 2021-22, the proportion of people aged 65 years and over entering permanent residential aged care with a mental health condition gradually decreased with increasing age for both female and male care recipients. For females, the proportion decreased from 76.5% in the 65-69 age group to 49.7% in the 95-and-over age group. For males, it decreased from 70.4% to 45.1%. This decreasing pattern with increasing age was consistent across all mental health conditions, including mood disorders, anxiety/stress disorders, psychotic disorders, and other mental health conditions, for both female and male care recipients.



Note: This visualisation excludes people for whom the sex status was recorded as 'unknown' or 'intersex or indeterminate' in their assessment (n<10).
Source: the National Aged Care Data Clearinghouse 2021-22.
https://www.aihw.gov.au/

Figure 5 shows the age distribution of people with recorded mental health conditions by sex. In both men and women, the proportion with mood disorders and anxiety disorders decreased with increasing age.

Figure 5: Age distribution of people aged 65 years and over using aged care services with a mental health condition, by sex, 2017–18 to 2021–22

The butterfly chart on the **age distribution** of people aged 65 years and over using aged care services with a mental health condition shows a standard age distribution by sex in both home care service and permanent residential aged care for the period 2017-18 to 2021-22.

In *home care service*, the highest proportions were in the middle age groups for both female and male care recipients. For females, 21.4% were in the 75-79 age group and 23.2% in the 80-84 age group. For males, 22.1% were in the 75-79 age group and 21.5% in the 80-84 age group. Mood disorders and anxiety/stress disorders followed a similar pattern in both sexes. The number of female and male care recipients with psychotic disorders and other mental health conditions was more prevalent in the younger age groups.

In *permanent residential aged care*, the highest proportions were in the 80-84 and 85-89 age groups for both female and male care recipients. For females, 21.3% were in the 80-84 age group and 26.7% in the 85-89 age group. For males, 21.8% were in the 80-84 age group and 23.6% in the 85-89 age group. Mood disorders, anxiety/stress disorders, and psychotic disorders in both sexes, as well as other mental health conditions in females, followed a similar pattern. The number of male care recipients with other mental health conditions was more prevalent in the younger age groups.

The butterfly chart shows that the **age-and-sex-specific crude rate (per 1,000 users)** of people aged 65 years and over using aged care services with a mental health condition decreases as age increases. The rates are similar among females and males in both home care and permanent residential aged care for the period 2017-18 to 2021-22.

In *home care services*, for females, there were 451 people with a mental health condition per 1,000 female care recipients in the 65-69 age group and 111 in the 95-and-over age group. For males, the numbers were 369 and 78 per 1,000 care recipients, respectively.

In *permanent residential aged care*, the crude rate per 1,000 users was similar for both female and male care recipients. There were over 700 care recipients with a mental health condition per 1,000 users in the 65-69 age group and over 450 per 1,000 users in the 95-and-over age group.

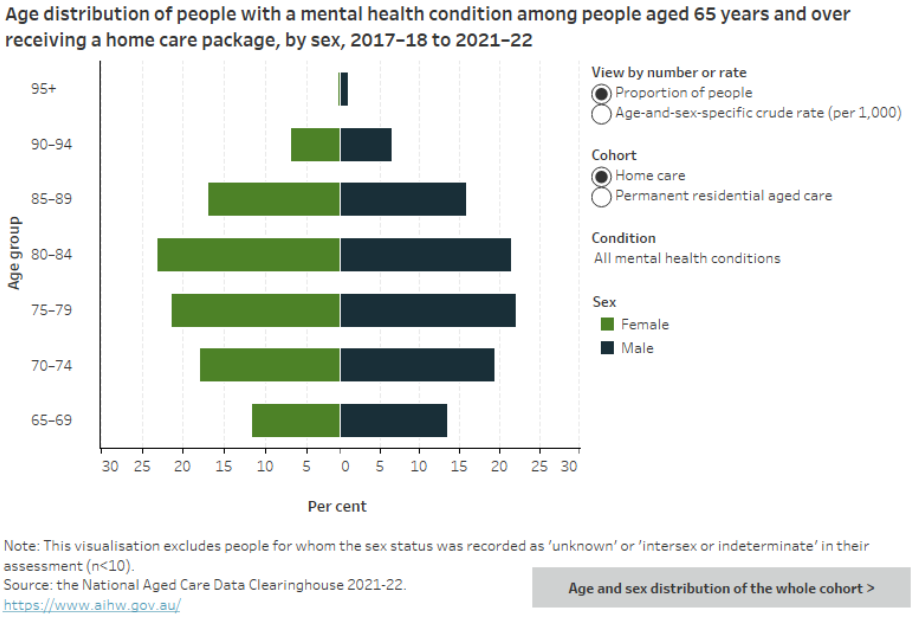


Figure 6 shows the proportion of people using home care packages or living in residential aged care with mental health conditions, by state and territory. The denominator for these proportions is the total number of people using the aged care type in that state or territory. There was little variation in the proportion of people using home care packages with mental health conditions by state and territory. For people living in residential aged care there was more variation – the proportion with mental health conditions ranged from 44.9% in the Northern Territory to 66.3% in Victoria.

Among people using home care packages aged 65 years and over, mental health conditions were slightly more commonly recorded among people with dementia than among people without dementia, among First Nations people than non-Indigenous people, and among people living alone than those not living alone.

Among people living in residential aged care aged 65 years and over, mental health conditions were slightly more commonly recorded among people living alone than those not living alone prior to entry to care, among people without dementia compared to those with dementia, and among people living in an urban area than people not living in a metropolitan area.

Figure 6: Proportion of people aged 65 years and over using aged care services with a mental health condition, by characteristic, 2017–18 to 2021–22

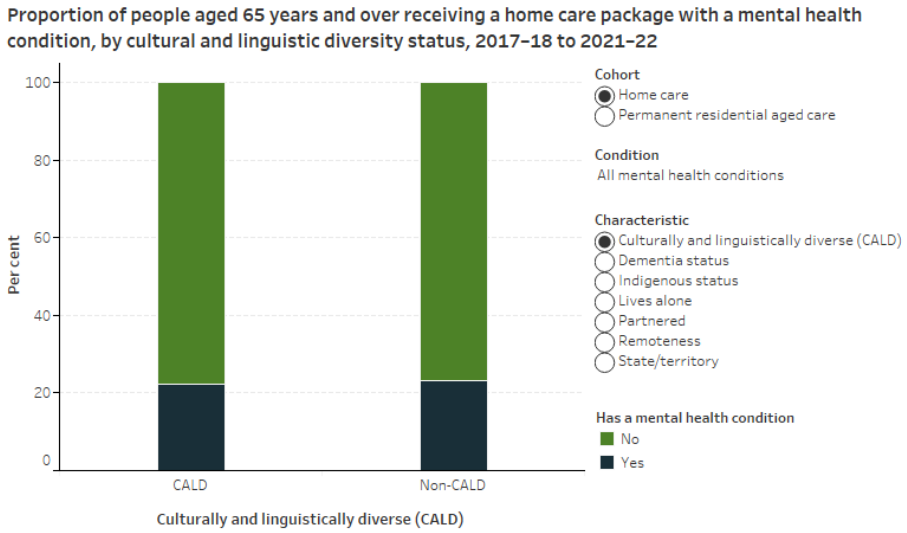
The chart shows the proportions of people aged 65 years and over using home care service with a mental health condition across different demographic groups for the period 2017-18 to 2021-22.

- Those with dementia, First Nations people, or those living alone have slightly higher proportions of mental health conditions compared to their counterparts (24.2% vs 22.9%, 25.7% vs 23%, and 25.6% vs 21.5%, respectively).
- People with a culturally and linguistically diverse (CALD) background or with a partner have lower proportions of mental health conditions compared to those without a CALD background or without a partner (22.3% vs 23.3% and 21% vs 25.1%, respectively).
- The difference between metropolitan (MM1) and regional, rural, and remote areas (MM2-7) is minimal, with metropolitan areas showing a slightly higher proportion. Among states and territories, the Australian Capital Territory (ACT) has the lowest proportion at 19.3%, while Victoria (Vic) has the highest at 24.9%.

The chart shows the proportions of people aged 65 years and over entering permanent residential aged care with a mental health condition across different demographic groups for the period 2017-18 to 2021-22.

- Those without dementia, those living alone, those without a partner, or those living in regional, rural, and remote areas (MM2-7) have higher proportions of mental health conditions compared to their counterparts (61.4% vs 53.7%, 59% vs 56.8%, 68.7% vs 56.6%, and 58.9% vs 55.8%, respectively).

- The difference between people with a culturally and linguistically diverse (CALD) and non-CALD background and between First Nations people and non-Indigenous people are minimal (58.1% vs 57.8% and 57% vs 57.7%, respectively).
- Among states and territories, the Northern Territory (NT) has the lowest proportion at 44.9%, while Victoria (Vic) has the highest at 66.3%.



Note: This visualisation excludes people for whom the cultural and linguistic diversity status was not recorded in their assessment.
Source: the National Aged Care Data Clearinghouse 2021-22.
https://www.aihw.gov.au/

First Nations people aged 50 years and over using aged care services

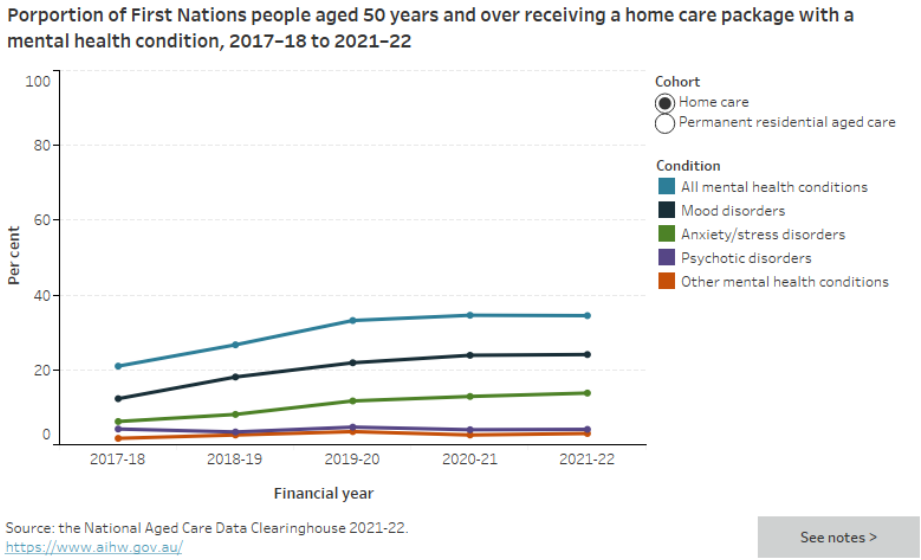
During the 5 years from 2017–18 to 2021–22, 10,535 First Nations people aged 50 years and over started receiving a home care package. Of these, 31.1% (3,276) had at least one mental health condition recorded on their aged care eligibility assessment (Figure 7).

During the 5 years from 2017-18 to 2021–22, 6,757 First Nations people aged 50 years and over entered residential aged care. Of these, 58.6% (3,958) had at least one mental health condition recorded one or more of their assessments (Figure 7).

Figure 7: Proportion of First Nations people aged 50 and over using aged care services with a mental health condition, 2017–18 to 2021–22

The line graph shows a gradual increase in the proportion of First Nations people aged 50 years and over using home care service with a mental health condition, rising from 21.0% in 2017-18 to 34.5% in 2021-22. Specifically, the proportion of those with mood disorders increased from 12.3% to 24.1%, and those with anxiety/stress disorders from 6.2% to 13.8%. The proportions of people with psychotic disorders and other mental health conditions remained consistently low, under 5.0% each year from 2017-18 to 2021-22.

The line graph shows a slight increase in the proportion of First Nations people aged 50 years and over entering permanent residential aged care with a mental health condition, rising from 56.0% in 2017-18 to 58.4% in 2021-22, with a peak of 60.8% in 2020-21. Specifically, the proportion of those with mood disorders increased from 40.2% to 42.7%, and those with anxiety/stress disorders from 24.5% to 27.7%. The proportions of people with psychotic disorders and other mental health conditions remained consistently about 8.0% or under each year from 2017-18 to 2021-22.



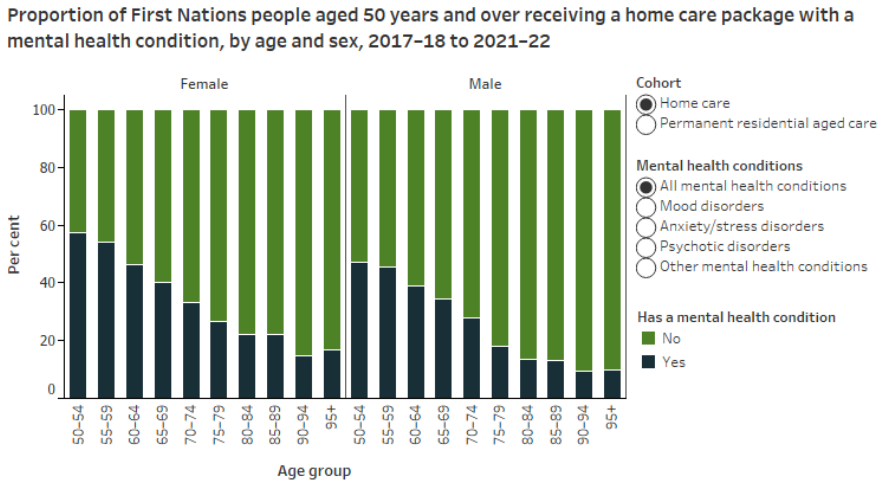
Among First Nations people aged 50 years and over using home care packages, mental health conditions became less common with increasing age (Figure 8).

Among First Nations people aged 50 years and over living in permanent residential aged care, mental health conditions generally became less common with increasing age in both men and women. However, small numbers of First Nations people aged 85 years and over using permanent residential aged care may have caused the variability seen in the reported proportions (Figure 8).

Figure 8: Proportion of First Nations people aged 50 and over using aged care services with a mental health condition, by age and sex, 2017–18 to 2021–22

The stacked column graph shows that for the period 2017-18 to 2021-22, the proportion of First Nations people aged 50 years and over using home care service with a mental health condition gradually decreased with increasing age for both female and male care recipients. For females, the proportion decreased from 57.3% in the 65-69 age group to 16.7% in the 95-and-over age group. For males, it decreased from 47.0% to 10.0%. This decreasing pattern with increasing age was consistent across all mental health conditions, including mood disorders, anxiety/stress disorders, psychotic disorders, and other mental health conditions, for both female and male care recipients.

The stacked column graph shows that for the period 2017-18 to 2021-22, the proportion of First Nations people aged 50 years and over entering permanent residential aged care with a mental health condition gradually decreased with increasing age for both female and male care recipients. For females, the proportion decreased from 72.3% in the 65-69 age group to 47.2% in the 95-and-over age group. For males, it decreased from 74.1% to 46.5%, with a sudden spike to 56.7% in the 90-94 age group. However, there are mixed patterns in specific mental health condition groups among both female and male First Nations people aged 50 years and over.



Notes:
1. This visualisation excludes people for whom the sex status was recorded as 'unknown' or 'intersex or indeterminate' in their assessment (n<5).
2. Age groupings are aggregated as required to avoid small counts <3 being shown.
Source: the National Aged Care Data Clearinghouse 2021-22.
https://www.aihw.gov.au/

Among First Nations people aged 50 years and over with a mental health condition using home care packages during the study period, most were in younger age groups at the time of their eligibility assessment (Figure 9).

The age distribution of First Nations people entering permanent residential aged care with a mental health condition differed by sex (Figure 9).

Figure 9: Age distribution of First Nations people aged 50 and over using aged care services with a mental health condition, by sex, 2017–18 to 2021–22

The butterfly chart on the **age distribution** of First Nations people aged 50 years and over using aged care services with a mental health condition shows a standard distribution in both sexes in home care service and permanent residential aged care for the period 2017-18 to 2021-22.

In *home care service*, the highest proportion of females was 17.1% in the 65-69 age group, followed by 15.0% in the 70-74 age group. For males, the highest proportion was 20.2% in the 65-69 age group, followed by 17.8% in the 70-74 age group. However, there are mixed patterns in specific mental health condition groups among both females and males.

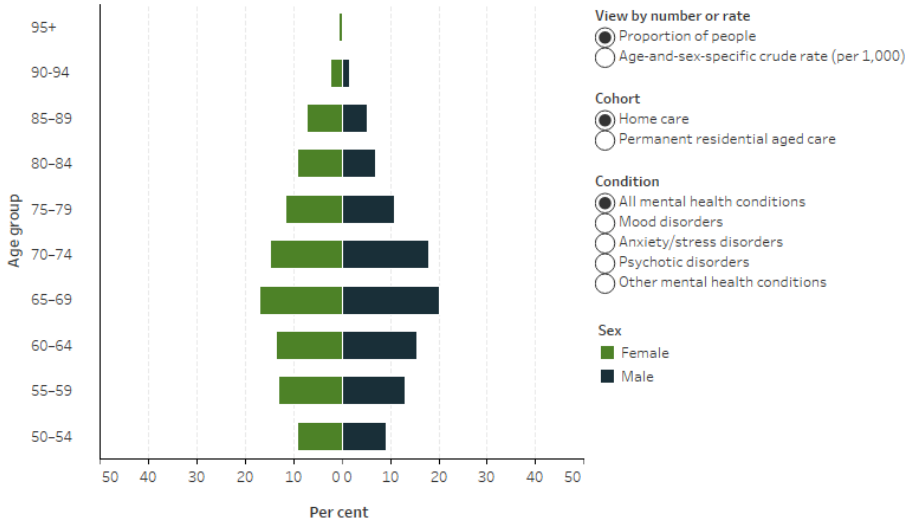
In *permanent residential aged care*, the highest proportion of females was 20.8% in the 85-89 age group, followed by 18.5% in the 80-84 age group. For males, the highest proportion was about 15% across the 70-74, 75-79, and 80-84 age groups. However, there are mixed patterns in specific mental health condition groups among both females and males.

The butterfly chart shows that, in general, the **age-and-sex-specific crude rate (per 1,000 users)** of people aged 50 years and over using aged care services with a mental health condition decreases with age in both home care and permanent residential aged care for the period 2017-18 to 2021-22.

In home care services, there were 573 females with a mental health condition per 1,000 in the 50-54 age group, decreasing to 167 per 1,000 in the 95-and-over age group. For males, the numbers were 470 and 100 per 1,000, respectively.

In permanent residential aged care, the crude rate per 1,000 users was similar for both females and males: over 700 per 1,000 in the 50-54 age group, decreasing to 465 per 1,000 in the 95-and-over age group.

Age distribution of people with a mental health condition among First Nations people aged 50 years and over receiving a home care package, by sex, 2017–18 to 2021–22



Notes:
1. This visualisation excludes people for whom the sex status was recorded as 'unknown' or 'intersex or indeterminate' in their assessment (n<5).
2. Age groupings are aggregated as required to avoid small counts <3 being shown.
Source: the National Aged Care Data Clearinghouse 2021-22.
https://www.aihw.gov.au/

Age and sex distribution of the whole First Nations cohort >

Notes on data quality

These data should be interpreted in the context of their strengths and limitations. The primary strength of aged care assessments in reporting on mental health conditions in aged care users is their coverage. All people accessing the aged care services in Australia must complete an aged care eligibility assessment and be approved for a service before receiving that service. All aged care eligibility assessments include the recording of health conditions. As such, all people have an opportunity to be recorded as living with a mental health condition.

However, there are important limitations of these data sources. These include:

- Human bias in recording. Aged care eligibility and funding assessments are clinician or aged care provider assessments of need, and are confined to pre-determined definitions of need. Per the program guidelines, whether an assessor records a mental health condition at the time of assessment will depend on the perceived importance of that condition to the person's care needs. Whether a condition is recorded will be affected by the other health conditions experienced by the person, and this may change with age. This may, in part, explain why mental health conditions were less commonly recorded as aged care users increased in age in this analysis.
- People with mental health conditions experience a shorter average life expectancy than people without conditions, and may not live to an age to be eligible to use aged care services (Momen et al. 2022).
- The ACFI assessment tool was used to inform funding requirements. Health conditions listed in this tool may reflect those most likely to affect funding needs, rather than those most disabling to the person. Whether mental health conditions are considered to affect funding needs is at the discretion of the assessor.
- Assessments for aged care eligibility occur before entry to care. For people who received a home care package during the study period, assessment occurred on average around 290 days prior to receiving the package. For people in residential aged care (and only until October 2022, see below), assessments for funding using the ACFI occurred at entry to care. While these data sources can therefore provide some information of the presence or absence of mental health conditions at the time of assessment, they cannot indicate whether the prevalence of these conditions changes over time or indicate the mental wellbeing of people after entry to care. Mental health conditions may change by the time of care entry or over the time of care use.
- Recording also relies on the accurate diagnosis of mental health conditions prior to the assessment, which is known to be limited in older adults (Faisal-Cury et al. 2022; Lavingia et al. 2020).
- The quality and missingness of aged care eligibility and funding data requires evaluation. In particular, inter-rater reliability may be low as there is considerable variation across assessors and jurisdictions.
- There is potential for reporting bias or inappropriate use of assessment tools where there are cultural or other factors affecting communication between individuals and assessors. Cultural differences may limit comparability between groups.

There have also been recent changes in funding instruments used when entering residential aged care, and these will affect monitoring of mental health conditions in the future. In October 2022 the ACFI was replaced as the funding assessment instrument for people entering permanent residential aged care with the Australian National Aged Care Classification (AN-ACC) tool. The AN-ACC tool does not include recording of health conditions (including mental health conditions) or any assessment tools to identify mental health needs. It is therefore no longer possible to use these assessments at entry to residential aged care to ascertain how common mental health conditions are in people entering residential aged care.

Other notable aged care data limitations are that there is no ongoing systematic collection of information about the health conditions or care needs of people using aged care beyond the data sources described here. Hence it is not possible, for example, to look at changes over time in the health and functioning of older people using these services.

Finally, because there is no unique person identifier for people using different aged care programs over time the analysis in this report is based on post-hoc data linkage. While linkage rates are generally very high, it was not possible to produce sufficiently high linkage rates for the Commonwealth Home Support Program (which supports around 800,000 older Australians per year). This program has currently been excluded from this analysis with plans to include this cohort in a future edition of this report.

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Symptoms of depression in people aged 65 and over living in residential aged care

On this page:

For people in permanent residential aged care, entry to care assessments until October 2022 included a modified version of the Cornell Scale for Depression in Dementia, a 19-item measure of depressive symptoms completed by both the resident (if possible) and by an informant (carer, staff member). The Cornell Scale for Depression in Dementia was used for all people entering residential aged care, whether or not they have dementia.

Key findings

On the Cornell Scale for Depression in Dementia, 62.5% of people aged 65 years and over that entered residential aged care from 1 July 2017 to 30 June 2022 were recorded as having at least mild symptoms of depression. About 16% were recorded with major symptoms of depression.

People with dementia were slightly less likely to be recorded with any symptoms of depression (59.6%) than people without dementia (65.1%).

Since October 2022, the Cornell Scale for Depression in Dementia is no longer included in funding assessments in residential aged care. These assessments no longer include any items assessing mental health needs.

Two estimates are calculated from the Cornell Scale for Depression in Dementia.

1. A total score. Some people will not have a total score recorded because assessors can choose not to complete the Cornell Scale for Depression in Dementia. Of the 296,217 people aged 65 years and over that entered residential aged care in the study period, 76,314 people (25.8%) did not complete a Cornell Scale for Depression in Dementia and do not have a total score recorded.
2. An assigned category, based on the total score (that is, minimal or no, mild, moderate, major symptoms). Of the 76,314 people that did not complete a Cornell Scale for Depression in Dementia, 76,171 were recorded with the explanation that this was because there were no symptoms of depression present. These people were categorised by the assessor in the 'Minimal or no symptoms' category.

Figure 10: Distribution of scores on the Cornell Scale for Depression in Dementia among people aged 65 years and over entering permanent residential aged care, 2017–18 to 2021–22

The bar graph shows the number of residents aged 65 years and over by their Cornell Scale for Depression score in Dementia (Cornell scale) for the period 2017-18 to 2021-22, categorised into four Cornell groups according to the severity of the symptoms: minimal or no symptoms (score 0-8), mild symptoms (9-13), moderate symptoms (14-18), and major symptoms (19-38). The x-axis represents the Cornell Scale scores ranging from 0 to 38, and the y-axis represents the number of residents, ranging from 0 to 25,000. The graph shows that the highest number of residents falls within the 9-10 score range, corresponding to the mild symptoms category. The number of residents decreases as the score increases, with the fewest residents in the highest score ranges (31-38), which are part of the major symptoms group. Additionally, total scores tend to spike when moving from one category to the next.

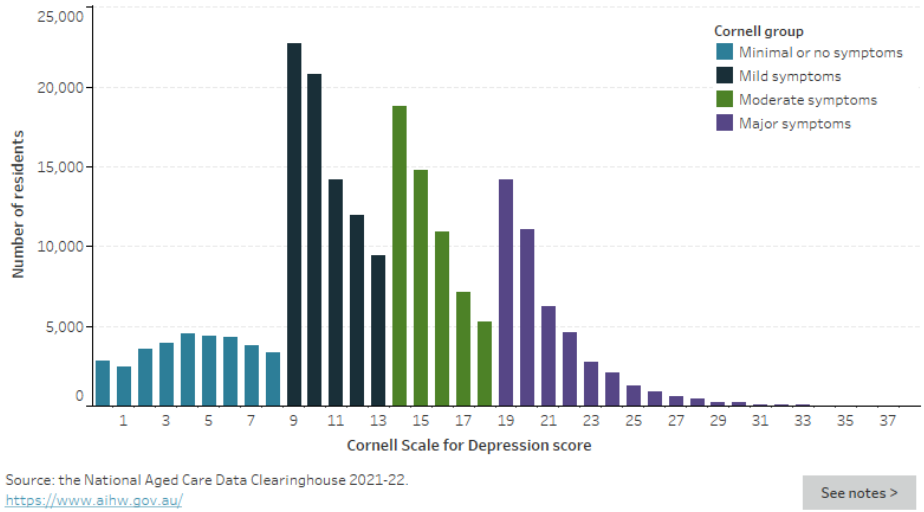


Figure 10 shows the distribution of scores on the Cornell Scale for Depression in Dementia in people aged 65 years and over who entered permanent residential aged care from 1 July 2017 to 30 June 2022 (excluding 76,314 people without a Cornell Scale for Depression in Dementia total score). Total scores tended to spike when moving from one category to the next.

Among 290,224 people aged 65 years and over who entered permanent residential aged care between July 2017 and June 2022 and were assigned a category using the Cornell Scale for Depression in Dementia, 181,332 (62.5%) were recorded as having at least mild symptoms of depression (Table 1). About 16% were recorded with major symptoms of depression.

Table 1: Proportion of people aged 65 years and over entering permanent residential aged care recorded in each category of symptoms of depression by financial year, 2017–18 to 2021–22

Financial year	2017–18	2018–19	2019–20	2020–21	2021–22	Total
(1) Minimal or no symptoms, or no scale completed: n (%)	23,253 (39.0%)	22,527 (38.4%)	21,948 (37.2%)	20,431 (35.8%)	20,733 (37.1%)	108,892 (37.5%)
(2) Mild symptoms: n (%)	16,128 (27.0%)	16,111 (27.5%)	16,251 (27.5%)	15,742 (27.6%)	15,059 (26.9%)	79,291 (27.3%)
(3) Moderate symptoms: n (%)	10,891 (18.3%)	11,030 (18.8%)	11,704 (19.8%)	11,934 (20.9%)	11,400 (20.4%)	56,959 (19.6%)
(4) Major symptoms: n (%)	9,360 (15.7%)	8,942 (15.3%)	9,140 (15.5%)	8,896 (15.6%)	8,744 (15.6%)	45,082 (15.5%)
All with symptoms (2–4): n (%)	36,379 (61.0%)	36,083 (61.6%)	37,095 (62.8%)	36,572 (64.2%)	35,203 (62.9%)	181,332 (62.5%)
Total: n (%)	59,632 (100%)	58,610 (100%)	59,043 (100%)	57,003 (100%)	55,936 (100%)	290,224 (100%)

In entry to residential care assessments, people with dementia were slightly less likely to be recorded with symptoms of depression (59.6%) than people without dementia (65.1%) (Table 2).

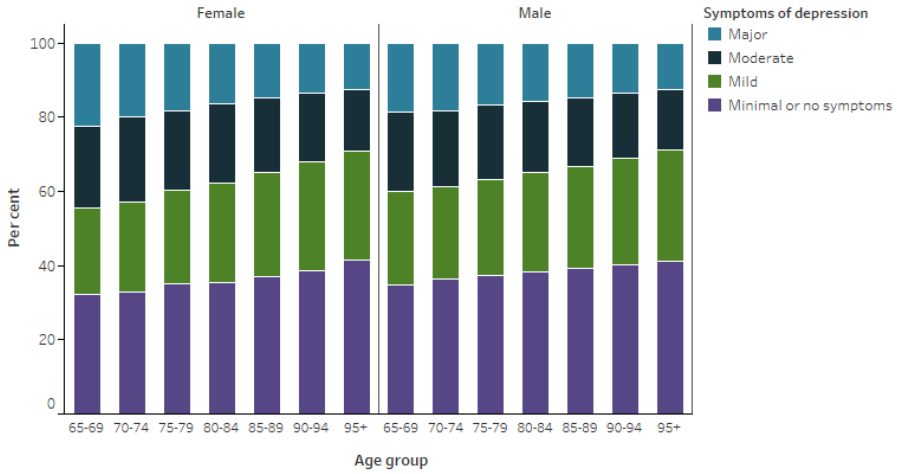
Table 2: Proportion of people aged 65 years and over entering permanent residential aged care recorded in each category of symptoms of depression by dementia status, 2017–18 to 2021–22

Dementia status	With dementia	Without dementia	Total
(1) Minimal or no symptoms, or no scale completed: n	56,308 (40.4%)	52,584 (34.9%)	108,892 (37.5%)
(2) Mild symptoms: n (%)	38,350 (27.5%)	40,941 (27.2%)	79,291 (27.3%)
(3) Moderate symptoms: n (%)	25,945 (18.6%)	31,014 (20.6%)	56,959 (19.6%)
(4) Major symptoms: n (%)	18,850 (13.5%)	26,232 (17.4%)	45,082 (15.5%)
All with symptoms (2–4): n (%)	83,145 (59.6%)	98,187 (65.1%)	181,332 (62.5%)
Total: n (%)	139,453 (100%)	150,771 (100%)	290,224 (100%)

In both men and women, symptoms of depression became less common with increasing age (Figure 11).

Figure 11: Cornell Scale for Depression in Dementia assigned categories among people aged 65 years and over entering permanent residential aged care, by age and sex, 2017–18 to 2021–22

The stacked bar graph shows the percentage of residents aged 65 years and over with different symptoms of depression across various age groups for both females and males for the period 2017-18 to 2021-22. The symptoms of depression are categorised into four groups: minimal or no symptoms (purple), mild symptoms (green), moderate symptoms (dark blue), and major symptoms (light blue). The x-axis represents age groups ranging from 65-69 to 95+, and the y-axis represents the percentage, ranging from 0% to 100%. The graph shows a similar pattern for both females and males. In all age groups, minimal or no symptoms (purple) account for the highest proportion, followed by mild symptoms (green), moderate symptoms (dark blue), and major symptoms (light blue). The proportion of residents with minimal or no symptoms (purple) and mild symptoms (green) increases as age increases, while the proportions of residents with moderate (dark blue) and major symptoms (light blue) decrease as age increases.



Note: This visualisation excludes people for whom the sex status was recorded as 'unknown' or 'intersex or indeterminate' in their assessment (n<10).
Source: the National Aged Care Data Clearinghouse 2021-22.
https://www.aihw.gov.au/

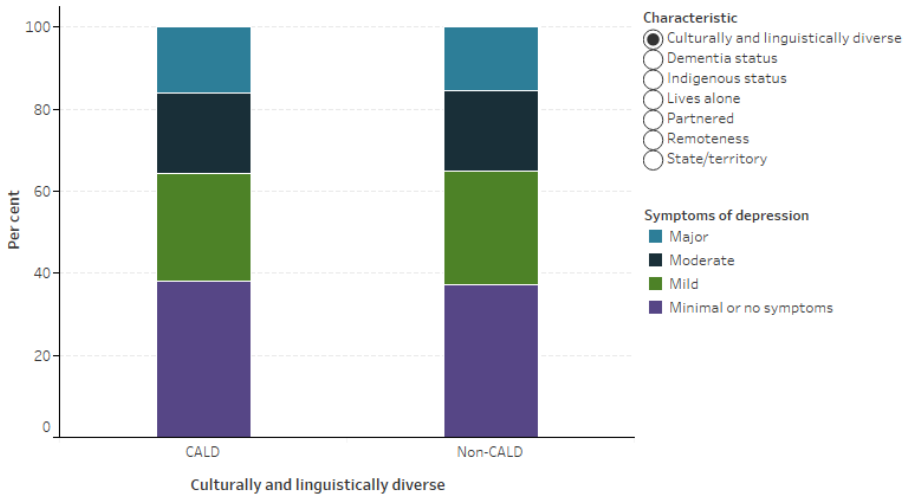
The percentage of residents recording 'Major symptoms' ranged from 9% in Northern Territory and Western Australia, to 22% in Victoria (Figure 12).

Figure 12: Cornell Scale for Depression in Dementia assigned categories among people entering permanent residential aged care, by characteristic, 2017–18 to 2021–22

The bar graph shows the Cornell Scale for Depression in Dementia assigned categories among people aged 65 years and over entering permanent residential aged care, by characteristic, for the period 2017-18 to 2021-22. The x-axis represents different characteristics, and the y-axis represents the percentage, ranging from 0% to 100%. The bars are stacked to show the proportion of residents in each of four symptoms of depression categories: minimal or no symptoms (purple), mild symptoms (green), moderate symptoms (dark blue), and major symptoms (light blue).

The graph is dynamic, allowing users to filter by various characteristics such as cultural and linguistic diversity status, dementia status, indigenous status, living alone, partnered, remoteness, and state/territory. By clicking on each characteristic option provided, the sub-title and the data displayed in the graph will change accordingly.

Cornell Scale for Depression in Dementia assigned categories among people aged 65 years and over entering permanent residential aged care, by cultural and linguistic diversity status, 2017-18 to 2021-22



Note: This visualisation excludes people for whom the cultural and linguistic diversity status was not recorded in their assessment.
Source: the National Aged Care Data Clearinghouse 2021-22.
https://www.aihw.gov.au/

Notably, there was variation by region in the proportion of people entering residential aged care for whom no Cornell Scale for Depression in Dementia was completed. Of all people entering residential aged care, a Cornell Scale for Depression in Dementia was not completed for:

- 17.3% of those in Victoria
- 20.2% in Tasmania and Australian Capital Territory
- 26.0% in New South Wales
- 27.6% in Queensland
- 28.3% in South Australia
- 41.8% in Western Australia
- 44.0% in Northern Territory.

This may reflect regional differences in approaches to assessment, demographic diversity within people entering care, or other factors.

There was little variation in assigned categories by other demographic factors (Figure 12).

Notes on data quality

Data from the Cornell Scale for Depression in Dementia provides a snapshot of symptoms of depression at entry to permanent residential aged care. The tool has been validated for use in Australian residential aged care settings by clinicians (McCabe et al. 2006). However, it has not been validated for use by aged care staff, and the training and experience of aged care staff administering the tool may vary.

The English-language version of the Cornell Scale for Depression in Dementia, used in entry to residential care assessments, is also not validated for use with people for whom English is not their first language, or for First Nations people.

As mentioned above, the ACFI was used until October 2022 to inform funding requirements. It is possible that the needs of people accessing residential aged care were at times overestimated to maximise funding. Since October 2022, the Cornell Scale for Depression in Dementia is no longer included in care needs assessments at entry to residential aged care to determine funding.

References

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Deaths by suicide and drug and alcohol use in aged care users

On this page:

Key findings

- The average yearly age-standardised suicide rate among people aged 65 years and over receiving a home care package from 1 July 2017 to 30 June 2022 was 21.5 per 100,000 users.
- The average yearly age-standardised suicide rate among people aged 65 years and over living in permanent residential aged care 1 July 2017 to 30 June 2022 was 13.0 per 100,000 users.
- This compares to an average yearly rate of 12.9 deaths per 100,000 people in Australia aged 65 years and over that died by suicide during the same time period.
- Most aged care users that died by suicide were men.
- Suicide deaths among aged care users became less common with age. This is different to the general population of older adults, in which the rate of suicide increases with increasing age. This is due to differences in the underlying distribution of people using aged care compared to the general population of older adults. People using aged care are older than the general population of older adults, with most aged 80–89 years. In contrast, the size of the general population gets smaller with increasing age over 65 years.
- Most people using a home care package that died by suicide were living alone at the time of their death.

Death by suicide in aged care users

Suicide deaths were examined for all people aged 65 years and over who used a home care package or lived in permanent residential aged care before or at the time of their death in 2017–18 to 2021–22. Deaths that occurred in people using aged care aged under 65 years are not reported here due to small numbers.

Home care packages

Out of 371,864 people aged 65 years and over who were receiving a home care package from 2017–18 to 2021–22, 135 had died by suicide by 30 June 2022. The average yearly crude suicide rate in this group was 15.0 per 100,000 users. Additionally, the average yearly age-standardised suicide rate, which adjusts for differences in age among the population, among these people was 21.5 suicides per 100,000 users.

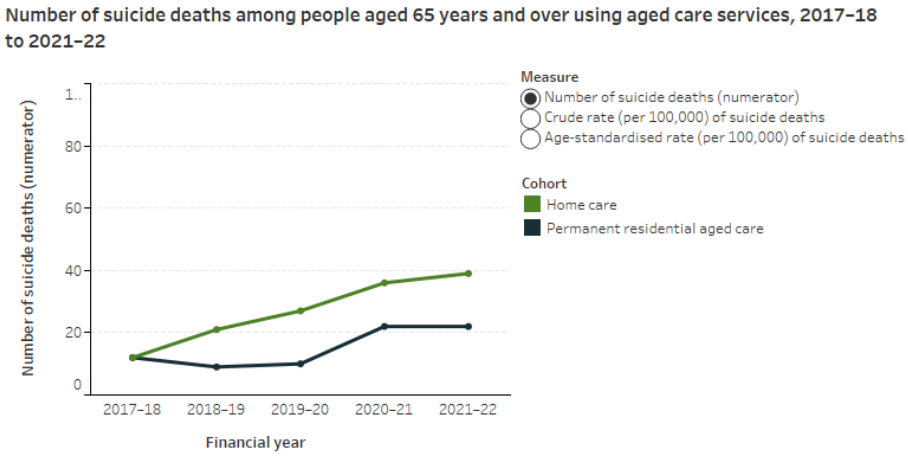
Permanent residential aged care

Out of 475,060 people aged 65 years and over living in residential aged care from 2017–18 to 2021–22, 75 died by suicide by 30 June 2022. The average yearly crude suicide rate in this group was 6.3 per 100,000 users. The average yearly age-standardised suicide rate, which adjusts for differences in age among the population, among these people was 13.0 suicides per 100,000 users.

Figure 13: Age-standardised rate (per 100,000) of suicide deaths among people aged 65 years and over using aged care services, 2017–18 to 2021–22

The line graph shows measures related to suicide deaths among people aged 65 years and over using aged care services from 2017-18 to 2021-22. The graph is dynamic, allowing users to filter by different measures: 'Number of suicide deaths (numerator)', 'Crude rate (per 100,000) of suicide deaths', and 'Age-standardised rate (per 100,000) of suicide deaths'. The sub-title, y-axis and data will update based on the selected measure. The x-axis is unchanged and represents the financial years. The graph includes two cohorts: home care (green line) and permanent residential aged care (dark blue line).

The green line for home care shows a steady increase in the number of suicide deaths over the years, while the dark blue line for permanent residential aged care shows fluctuations but eventually stabilises. To explore specific data, please use the 'Measure' filter options provided.



Source: The National Death Index (NDI). Deaths registered in 2019 and earlier are based on the final version of cause of death data; deaths registered in 2020 are based on the revised version; and deaths registered in 2021 and 2022 are based on the preliminary version. Revised and preliminary versions are subject to further revision by the Australian Bureau of Statistics (ABS).
https://www.aihw.gov.au/

Most suicide deaths in aged care users occurred in men. Suicide deaths became less common with increasing age (Figure 14).

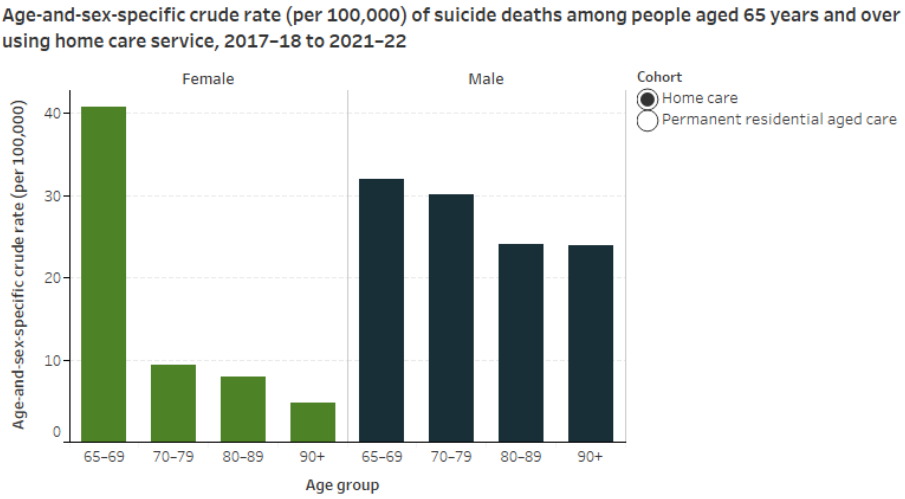
This pattern is different to the pattern of suicide deaths in the general population of Australians aged 65 years and over, in which the rate of suicide increases with increasing age (see Suicide & self-harm monitoring – Deaths by suicide over time). This is because of differences in the distribution of the population of people using aged care, compared to the general population of older adults. People using aged care are older than the general population of older people, with most aged 80–89 years at the time of entry to care. In contrast, in the general population the number of people decreases with increasing age.

Figure 14: Age-and-sex-specific crude rate (per 100,000) of suicide deaths among people aged 65 years and over using aged care services, 2017–18 to 2021–22

The bar graph shows the age-and-sex-specific crude rate (per 100,000) of suicide deaths among people aged 65 years and over using aged care services in the period 2017-18 to 2021-22. The x-axis represents age groups, ranging from 65-69 to 100+, and is divided into two sections for females and males. The y-axis represents the crude rate of suicide deaths per 100,000 people.

The graph is dynamic, allowing users to filter by cohort: home care or permanent residential aged care. The sub-title and data will update based on the selected cohort. To explore specific data, please use the 'Cohort' filter options provided.

In both home care and permanent residential aged care, for females, the green bars indicate that the highest crude rate is in the 65-69 age group, with a noticeable decline in older age groups. For males, the dark blue bars show a more consistent rate across the age groups, with the highest rates also in the 65-69 and 70-79 age groups.



Note: This visualisation excludes people for whom the sex status was recorded as 'unknown' in their assessment (n<3).
Source: The National Death Index (NDI). Deaths registered in 2019 and earlier are based on the final version of cause of death data; deaths registered in 2020 are based on the revised version; and deaths registered in 2021 and 2022 are based on the preliminary version. Revised and preliminary versions are subject to further revision by the Australian Bureau of Statistics (ABS).
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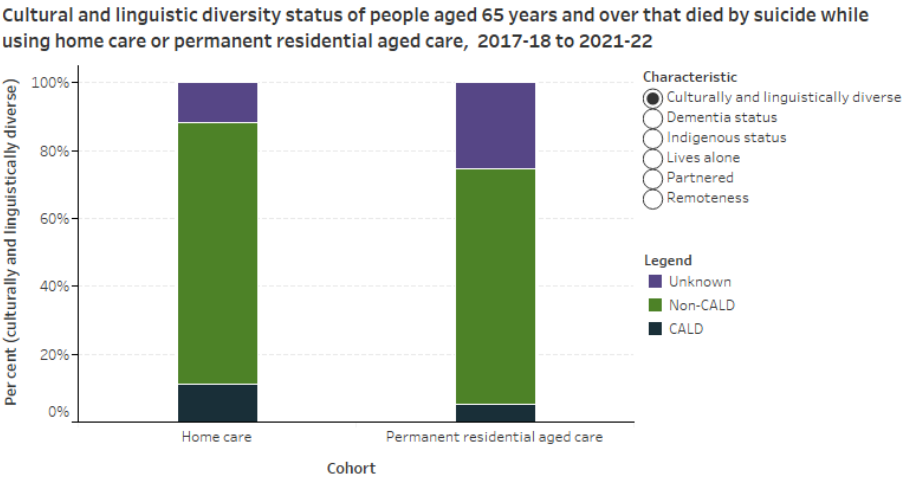
Among aged care users aged 65 years and over who died by suicide, most were living alone and about two-thirds were unpartnered at the time of their assessment (Figure 15).

Figure 15: Characteristics of people aged 65 years and over that died by suicide while using a home care package or permanent residential aged care, 2017–18 to 2021–22

The bar graph shows the characteristics of people aged 65 years and over that died by suicide while using home care packages or permanent residential aged care in the period 2017-18 to 2021-22. The graph is dynamic, allowing users to filter by various characteristics such as culturally and linguistically diverse, dementia status, indigenous status, living alone, partnered, and remoteness. The sub-title and data will update based on the selected characteristic. To explore specific data, please use the 'Characteristic' filter options provided. Some characteristics were not reported to protect confidentiality as some small cells that contain only one or two people.

The x-axis represents the cohort, divided into 'Home care' and 'Permanent residential aged care'. The y-axis represents the percentage, ranging from 0% to 100%. The bars are stacked to show the proportion of residents in three categories: 'Unknown' status (purple) if any, and two specific characteristics (dark blue and green) which vary based on the selected filter.



Note: Some characteristics were not reported because of small cells that contain only one or two people.
Source: the National Aged Care Data Clearinghouse 2021-22.
The National Death Index (NDI). Deaths registered in 2019 and earlier are based on the final version of cause of death data; deaths registered in 2020 are based on the revised version; and deaths registered in 2021 and 2022 are based on the preliminary version. Revised and preliminary versions are subject to further revision by the Australian Bureau of Statistics (ABS).
https://www.aihw.gov.au/

Alcohol and other drug related deaths

In addition to suicide, other causes of deaths can be reflective of mental distress and/or self-neglect. Data about drug and alcohol poisoning (both accidental and undetermined intent) and deaths due to chronic liver diseases and cirrhosis are included here as one proxy (though not exhaustive) indicator of long-term mental distress in aged care users. (Figure 16)

Home care packages

Out of 371,864 people aged 65 years and over who were receiving a home care package from 2017–18 to 2021–22, 51 had died by drug and alcohol poisoning by 30 June 2022. The average yearly crude rate of death by drug and alcohol poisoning in this group was 6.3 per 100,000 users. The average yearly age-standardised rate, which adjusts for differences in age among the population, was 13.2 deaths per 100,000 users.

In addition, 325 people aged 65 years and over receiving a home care package died due to chronic liver diseases and cirrhosis. The average yearly crude rate of death due to chronic liver diseases and cirrhosis in this group was 36.8 per 100,000 users. Additionally, the average yearly age-standardised rate, which adjusts for differences in age among the population, was 68.5 deaths per 100,000 users.

Permanent residential aged care

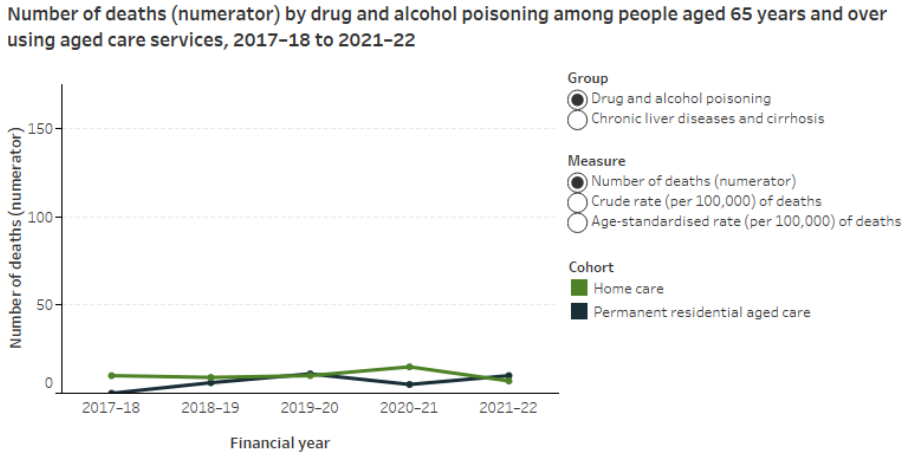
Out of 475,060 people aged 65 years and over that lived in residential aged care from 2017–18 to 2021–22, 32 had died by drug and alcohol poisoning by 30 June 2022. The average yearly crude rate of death by drug and alcohol poisoning in this group was 2.7 per 100,000 users. The average yearly age-standardised rate, which adjusts for differences in age among the population, was 3.4 deaths per 100,000 users.

In addition, 704 people aged 65 years and over living in residential aged care died due to chronic liver diseases and cirrhosis. The average yearly crude rate of death due to chronic liver diseases and cirrhosis in this group was 59.3 per 100,000 users. The average yearly age-standardised rate, which adjusts for differences in age among the population, was 151.3 deaths per 100,000 users.

Figure 16: Age-standardised rate (per 100,000) of deaths by drug and alcohol poisoning and chronic liver disease and cirrhosis among people aged 65 years and over using aged care services, 2017–18 to 2021–22

The line graph shows measures related to deaths by drug and alcohol poisonings and chronic liver disease and cirrhosis among people aged 65 years and over using aged care services from 2017-18 to 2021-22. The graph is dynamic, allowing users to filter by groups – 'Drug and alcohol poisoning' or 'Chronic liver diseases and cirrhosis' – with different measures: 'Number of deaths (numerator)', 'Crude rate (per 100,000) of deaths', or 'Age-standardised rate (per 100,000) of deaths'. The sub-title, y-axis, and data will update based on the selected measure. The x-axis is unchanged and represents the financial years from 2017-18 to 2021-22. The graph includes two cohorts: home care (green line) and permanent residential aged care (dark blue line).

To explore specific data, please use the 'Group' and 'Measure' filter options provided.



Source: The National Death Index (NDI). Deaths registered in 2019 and earlier are based on the final version of cause of death data; deaths registered in 2020 are based on the revised version; and deaths registered in 2021 and 2022 are based on the preliminary version. Revised and preliminary versions are subject to further revision by the Australian Bureau of Statistics (ABS).
https://www.aihw.gov.au/

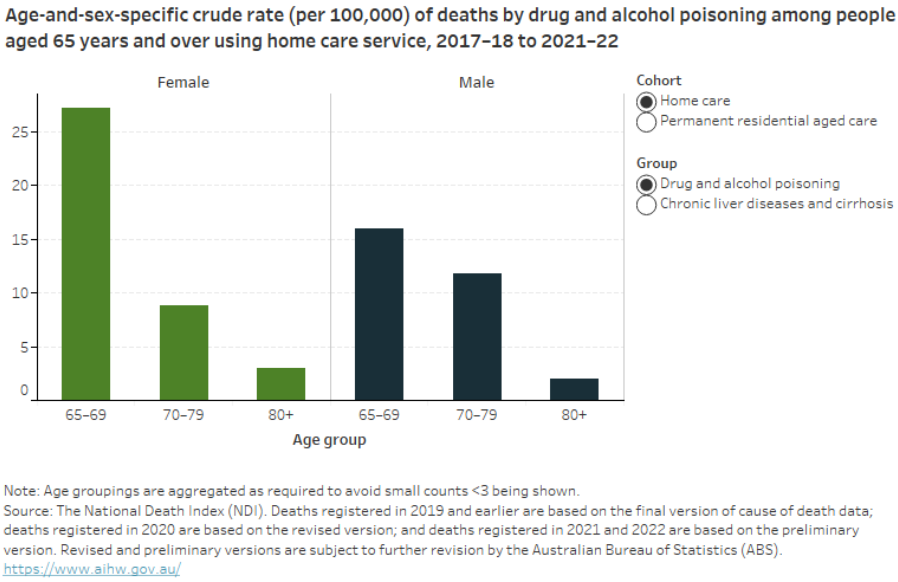
Most deaths caused by drug and alcohol poisoning and chronic liver disease and cirrhosis in aged care users occurred in men. These deaths became less common with increasing age (Figure 17).

Figure 17: Age-and-sex-specific crude rate (per 100,000) of deaths by drug and alcohol poisoning and chronic liver disease and cirrhosis among people aged 65 years and over using aged care services, 2017–18 to 2021–22

The bar graph shows the age-and-sex-specific crude rate (per 100,000) of deaths by drug and alcohol poisoning and chronic liver disease and cirrhosis among people aged 65 years and over using home care services from 2017-18 to 2021-22. The graph is dynamic, allowing users to filter by cohort (home care or permanent residential aged care) and group (drug and alcohol poisoning or chronic liver diseases and cirrhosis).

The x-axis represents age groups and is divided into two sections for females (green bars) and males (dark blue bars). Age grouping is adjusted when needed to protect confidentiality by suppressing small cells that contain only one or two people. The y-axis represents the crude rate of deaths per 100,000 people.

The subtitle and data will update based on the selected filters. To explore specific data, please use the 'Cohort' and 'Group' filter options provided.



Note: Age groupings are aggregated as required to avoid small counts <3 being shown.
Source: The National Death Index (NDI). Deaths registered in 2019 and earlier are based on the final version of cause of death data; deaths registered in 2020 are based on the revised version; and deaths registered in 2021 and 2022 are based on the preliminary version. Revised and preliminary versions are subject to further revision by the Australian Bureau of Statistics (ABS).
https://www.aihw.gov.au/

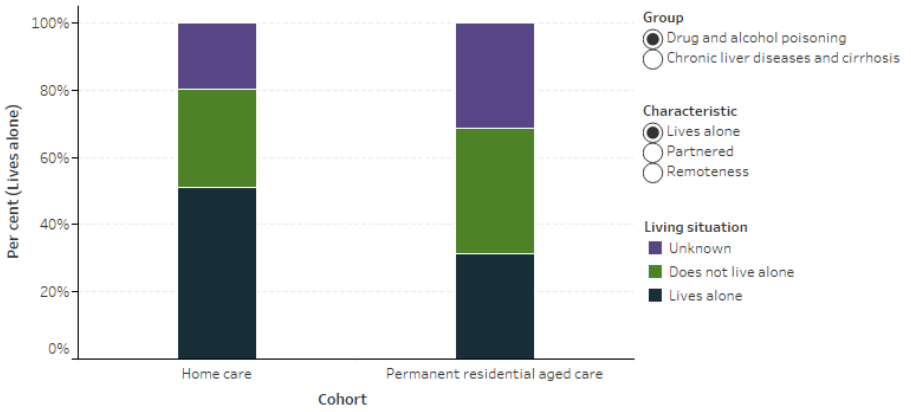
Among those that died by these causes of death, about a third were living outside urban areas (Figure 18). Note that some characteristics are not displayed in Figure 18 to protect confidentiality.

Figure 18: Characteristics of people aged 65 years and over that died by drug and alcohol poisoning and chronic liver disease and cirrhosis while using a home care package or permanent residential aged care, 2017–18 to 2021–22

The bar graph shows the characteristics of people aged 65 years and over that died by drug and alcohol poisoning and chronic liver disease and cirrhosis while using home care packages or permanent residential aged care in the period 2017-18 to 2021-22. The graph is dynamic, allowing users to filter by various characteristics such as culturally and living alone, partnered, and remoteness. The sub-title and data will update based on the selected characteristic. To explore specific data, please use the 'Group' and 'Characteristic' filter options provided. Some characteristics were not reported to protect confidentiality as some small cells that contain only one or two people.

The x-axis represents the cohort, divided into 'Home care' and 'Permanent residential aged care'. The y-axis represents the percentage, ranging from 0% to 100%. The bars are stacked to show the proportion of residents in three categories: 'Unknown' status (purple) if any, and two specific characteristics (dark blue and green) which vary based on the selected filter.

Living situation of people aged 65 years and over that died by drug and alcohol poisoning while using a home care package or permanent residential aged care, 2017-18 to 2021-22



Note: Some characteristics were not reported because of small cells that contain only one or two people.
Source: the National Aged Care Data Clearinghouse 2021-22.
The National Death Index (NDI). Deaths registered in 2019 and earlier are based on the final version of cause of death data; deaths registered in 2020 are based on the revised version; and deaths registered in 2021 and 2022 are based on the preliminary version. Revised and preliminary versions are subject to further revision by the Australian Bureau of Statistics (ABS).
https://www.aihw.gov.au/

Notes on data quality

The National Death Index provides national data with scope to include all deaths in Australia since 1980.

Limitations of this data source include that deaths by suicide reported in death certificates are vulnerable to underreporting, because there is an inherent ambiguity in the intent of the person who has died and potential bias in the person assessing that intent.

Coding quality can also be affected where a Coroner's case is not yet closed or where not all information is yet available. In these cases, less specific codes are applied until the case is closed (ABS 2023).

The quality of coding of causes of death in aged care service users who died by suicide (and the frequency of the problems described above) has not been established. To align with previous analysis of suicide and other deaths data by the Institute, only main cause of death codes were used for this analysis. This analysis excludes people who had suicide or other death recorded as an 'other cause of death' but not the main cause.

The context in which a death occurred is not available within the available data sets. Suicide deaths in people using aged care services may or may not reflect underlying mental distress. Similarly, deaths caused by drug and alcohol poisoning and chronic liver disease and cirrhosis may or may not reflect long-term distress and self-neglect.

References

ABS (Australian Bureau of Statistics_ (2022), *Causes of Death, Australia* - external site opens in new window, ABS, Australian Government, accessed 11 April 2024.

Conclusions and future directions

This analysis demonstrates that many people aged 65 years and over, and many Aboriginal and Torres Strait Islander (First Nations) people aged 50 years and over, accessing Australian aged care services in 2017–2022 were recorded with a mental health condition at the time of their eligibility and/or funding assessment. On average, 23.1% of all people aged 65 years and over that started receiving a home care package and 57.7% of all people aged 65 years and over entering permanent residential aged care were recorded with a mental health condition, respectively.

This proportion is higher than the reported prevalence of mental health conditions in the general population of older adults in the 2022 National Study of Mental Health and Wellbeing (7.9% of men and 11.1% of women aged 65 to 85 years) (ABS 2020–2022). This may reflect a decline in mental health as care needs increase, and/or may in part be attributable to differences in data collection.

In addition, data from the National Death Index indicates that the average yearly age-standardised suicide rate among people aged 65 years and over using home care (22.5/100,000 users) is higher than the average yearly rate in permanent residential aged care (13.0/100,000 users) and in the general population of people in Australia aged 65 years and over (12.9/100,000 people). This may reflect that receiving residential aged care is protective against suicide risk among those requiring care, limits access to means, and/or that the functional impairments that necessitate care limit the ability to engage in lethal self-harm.

Future directions

These data provide an important snapshot of mental health needs at the time of assessment for aged care services and at the time of death. They demonstrate that people accessing aged care services commonly experience mental distress and mental health conditions. However, they do not provide a full picture of the mental health needs of aged care users.

The limitations of the available data sources, described earlier in this report, highlight opportunities to improve data collection and reporting on the mental health needs of aged care users.

Opportunities for data improvement might include:

- Expansion of current aged care funding assessments (that is, within AN-ACC or future classification tools) to identify mental health conditions and mental health needs, for example similar to items in the prior ACFI tool.
- Efforts to improve uptake of Supplementary Assessment Tools within the National Screening and Assessment Form (and other future tools).
- Ability within the National Screening and Assessment Form to specify whether mental health conditions were diagnosed recently or are long-standing. These data would be helpful to identify those in need of longer-term care and those experiencing a mental health response to their changing life circumstances.
- Implementation of routine monitoring of mental health needs after entry to aged care services.
- Monitoring of uptake of mental health services among aged care users, and comprehensive examination of the impact of stigma and ageism on help seeking among people using aged care services (Temple et al. 2021).
- Inclusion of people living in residential aged care in national prevalence surveys, including the National Study of Mental Health and Wellbeing.
- Improved integration of aged care data sets with health, hospital, and medication data sets so that other aspects of mental health can be examined.
- Comprehensive evaluation of the mental health needs of carers of older adults requiring care, given that these needs can affect those of the person receiving care (Camões-Costa et al. 2024).

Improving the collection, availability, and reporting of data about mental health in aged care users can guide policy planning and service delivery to promote mental wellbeing.

References

ABS (Australian Bureau of Statistics) (2020–2022), *National Study of Mental Health and Wellbeing* - external site opens in new window, ABS, Australian Government, accessed 11 April 2024.

Camões-Costa V, Taylor B, Barton C, Chakraborty S, Hewitt A, Lin X, Brijnath B (2024), 'Mental health outcomes of family carers after admission to aged care: A cross-sectional survey study'. *Australasian Journal on Ageing*, Early View.

Temple JB, Brijnath B, Enticott J, Utomo A, Williams R, Kelaher M (2021), 'Discrimination reported by older adults living with mental health conditions: types, contexts and association with healthcare barriers', *Social Psychiatry and Psychiatric Epidemiology*. 56(6):1003–1014.

Technical notes

On this page:

This analysis uses available data from aged care assessments and other data sources to describe the mental health of people using aged care services in Australia.

Included in this report were all people aged 65 years and over, and Aboriginal and Torres Strait Islander (First Nations) people aged 50 years and over, who accessed home care packages and/or permanent residential aged care from 1 July 2017 to 30 June 2022.

People who did not receive any of these services but did receive other types of aged care (for example, home support services funded by the Commonwealth Home Support Programme, transition care packages, respite care) are outside the current scope of this analysis and were excluded. Future updates of this report will include these groups.

About the data sources

The Pathways in Aged Care (PIAC) 2022 link map was used for this analysis. The Pathways in Aged Care link map brings together information from different aged care data sources about the same person. This is achieved using privacy-preserving linkage techniques that assign a unique identifier for each person in each data source. The Pathways in Aged Care link map is a set of links to all records for each person. This allows us to construct a chronological sequence of aged care events and present a more complete picture of aged care use, all the way from assessment and admission through to discharge and death.

The Pathways in Aged Care 2022 link map was used to create the following analysis data sets:

1. A recipient table with demographic data for each person.
2. An events table, including data collected during aged care assessments, data about service use (including entry and exit dates where available), and deaths.
3. A services table describing organisations providing aged care.

These tables are populated with data from:

- the National Aged Care Data Clearinghouse (NACDC), including aged care assessment data and aged care service use
- the National Death Index (NDI), describing date and causes of death.

For more information about the Pathways in Aged Care link map, see the Pathways in Aged Care 2020: Technical Guide - external site opens in new window.

Aged care assessment data

Assessment data used for this project were collected using the National Screening and Assessment Form (NSAF) – part of the National Aged Care Data Clearinghouse. The National Screening and Assessment Form is a comprehensive assessment form that captures demographic factors and care needs at the time of assessment for aged care services. The data also include approval outcomes, indicating which services the person is approved for.

Two data tables containing information about health conditions are linked from the National Screening and Assessment Form. The first contains all health conditions listed by the assessor on the given assessment. The second contains all health conditions that have been nominated as the ‘primary health condition’ on an assessment. As individuals can complete more than one assessment over time, more than one primary health condition can be recorded in this data table.

Box 1.1: About aged care eligibility assessments

The National Screening and Assessment Form (NSAF) is used to screen and assess a person's aged care needs. The National Screening Assessment Form was introduced for aged care assessments on 1 July 2015, and full coverage was achieved in June 2016. The National Screening and Assessment Form has 3 components:

- screening
- home support assessments
- comprehensive assessments.

Screening is conducted over-the-phone by My Aged Care contact centre staff after a person requests aged care services using My Aged Care. Contact centre staff may refer people for a home support assessment or comprehensive assessment.

Home support assessments are generally conducted face-to-face by Regional Assessment Service (RAS) assessors who provide assessment, information and advice to people requiring low level support. They assess eligibility for the Commonwealth Home Support Programme. Regional Assessment Services may also refer the person for a comprehensive assessment if they recognise that the person requires a higher level of support.

Comprehensive assessments are conducted face-to-face by Aged Care Assessment Teams (ACATs), comprising medical, nursing and allied health professionals managed by state and territory governments. Aged Care Assessment Teams assess eligibility for home care packages, permanent and respite residential aged care, transition care, and short-term restorative care. Approval can be given for more than one program and re-assessment can occur as needs change.

Data were also taken from the Aged Care Funding Instrument. The Aged Care Funding Instrument (ACFI) was used to assess the care needs of permanent residential aged care recipients from 20 March 2008 until 30 September 2022. The ACFI consisted of 12 questions about assessed care needs across 3 domains – activities of daily living, cognition and behaviour, and complex health care – and 2 diagnostic sections for health conditions that most affect the person's care needs. While the ACFI captures details of up to 3 mental and behavioural disorders and up to 3 other health conditions for permanent residential aged care recipients, these are only recorded where the condition affects their current care needs. People can be re-assessed as their care needs change.

Aged care service use data

The National Aged Care Data Clearinghouse (NACDC) records episodes of aged care service use including for home support, home care packages, permanent and respite (that is, temporary) residential aged care, transition care, and short-term restorative care. For this report, data sourced from the National Aged Care Data Clearinghouse included the start (entry) date of the service (where available) and the service type (including home care package level). For more information about the National Aged Care Data Clearinghouse, see National Aged Care Data Clearinghouse: user guide - external site opens in new window.

Deaths data

The National Death Index (NDI) is a database developed and maintained by the Australian Institute of Health and Welfare. The database is a listing of all deaths that have occurred in Australia since 1980. The National Death Index contains person-level records of the date of all deaths occurring in Australia since 1980 obtained from the Registrars of Births, Deaths and Marriage in each state and territory. The National Death Index records are supplemented with cause of death information using data linkage with the National Mortality Database.

Cause of Death Unit Record File data are provided to the Australian Institute of Health and Welfare (AIHW) by the Registrars of Births, Deaths and Marriages and the National Coronial Information System (managed by the Victorian Department of Justice) and include cause of death coded by the Australian Bureau of Statistics (ABS). The data are maintained by the AIHW in the National Mortality Database.

More information about the National Death Index can be found on National Death Index.

Methods for this analysis

Defining the cohort

Included in this report were all people aged 65 years and over who started accessing home care packages and/or permanent residential aged care (for mental health conditions) or who were using these services at the time of their death (for suicide and other deaths data) from 1 July 2017 to 30 June 2022. People who did not receive any of these services but did receive other types of aged care (for example, home support, transition care packages, respite care) are outside the scope of this project and were excluded from these analyses.

People who received one of these care types prior to 1 July 2017 are also excluded from this analysis. People aged under 65 years were excluded from this analysis due to their small numbers. However, report sections specifically reporting on First Nations people include those aged 50 years and older.

The Sankey diagram below (Figure 19) demonstrates the data available for each user of aged care services during the study period.

- All people using a home care package or entering permanent residential care completes an aged care eligibility assessment using the National Screening and Assessment Form. As such, every person in our cohort completed an aged care eligibility assessment and was recorded with a list of health conditions that may or may not include mental health conditions.
- In addition, all people entering permanent residential aged care complete a funding assessment using the Aged Care Funding Instrument, which includes a list of health conditions. People entering permanent residential aged care are considered to have a recorded mental health condition if one of the included conditions is recorded in either their aged care eligibility assessment or their aged care funding assessment.
- A Cornell Scale for Depression in Dementia is included in aged care funding assessments for people entering permanent residential aged care. The Cornell Scale for Depression in Dementia is therefore not available for people receiving home care packages.

Figure 19: Defining the mental health analysis cohort of people aged 65 years and over who started accessing aged care services, 2017–18 to 2021–22

The Sankey diagram shows the process of defining the mental health analysis cohorts of people aged 65 years and over who started accessing home care (HC) and permanent residential aged care (PRAC) from 2017-18 to 2021-22. The diagram can be flipped to show data for either home care or permanent residential aged care using the flipping option located at the lower right corner.

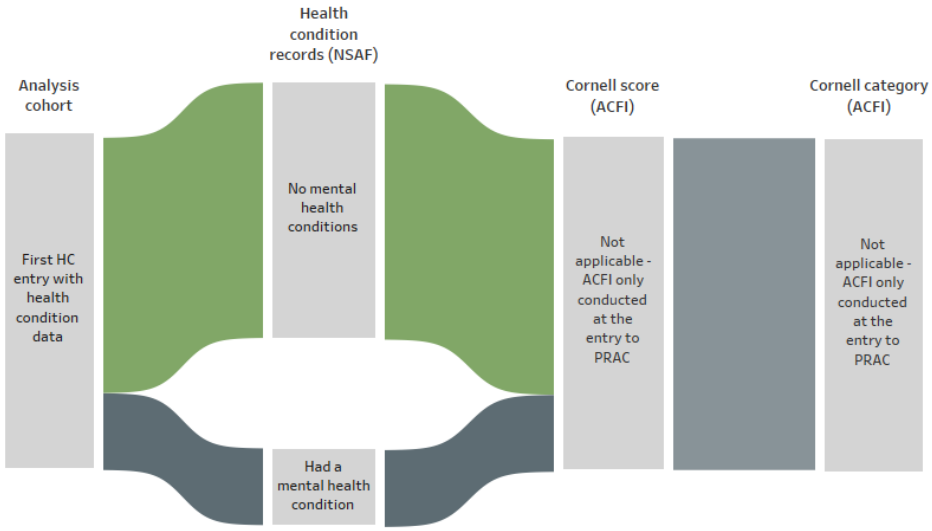
The diagram flows from left to right, showing the transition of data through various stages:

1. **Analysis cohort:** The starting point is identifying the first aged care service (HC or PRAC) entry that had health condition data records. 163 people (0.01%) in the home care cohort and 6,775 people (2.3%) in the permanent residential aged care cohort had no record of health conditions available in the linked dataset and were excluded from the analysis, which are not shown in the Sankey diagram.
2. **Health condition records (NSAF):** Identifying if care recipients had health condition records in the National Screening and Assessment Form (NSAF). This stage is divided into two branches – 'No mental health conditions' (upper branch) and 'Had a mental health condition' (lower branch).
3. **Cornell score (ACFI):** Identifying if care recipients had been assessed and had a Cornell score recorded in the Aged Care Funding Instrument (ACFI). This only applies to the cohort of people who entered permanent residential aged care. For the permanent residential aged care cohort, this stage is further divided into 'No Cornell scores' and 'Had a Cornell score'.
4. **Cornell category (ACFI):** Identifying if care recipients had been assigned a Cornell category in ACFI (only applied to the cohort of people who entered permanent residential aged care). For the permanent residential aged care cohort, this stage is further divided into 'No Cornell category' and 'Assigned a Cornell category'.

In the home care cohort, both branches from stage 2 lead to 'Not applicable - ACFI only conducted at the entry to PRAC'.

Hover over the nodes in each stage to display the number of people using the care service in that node and the proportion of people in that node over the total number of the analysis cohort. Hover over a connecting line to the right of the node to display the number of people identified from that node to the next and the proportion of people coming from that node.

Defining the mental health analysis cohort for home care first admissions, 2017–18 to 2021–22



ACFI: Aged Care Funding instrument; HC: home care; NSAF: National Screening and Assessment Form; PRAC: permanent residential aged care

Notes:
1. 163 people (0.01%) had no record of health conditions available in the linked dataset and were excluded from the analysis.
2. Sankey based on the work of Olivier Catherin and Jeffrey Shaffer. Sankey calculations and data template from Kevin and Ken Flerlage.

Source: PIAC 2022 – Pathways in aged care linked data asset, the National Aged Care Data Clearinghouse 2021-22, the Aged Care Funding instrument (ACFI).
https://www.aihw.gov.au/

Permanent residential aged care first admissions >

Mental health conditions

In reporting on the number of people using aged care living with mental health conditions (based on available information in assessment forms), the cohort was divided based on the first entry to each care type during the study period – home care packages and permanent residential aged care.

Defining the cohort in this way means that a person may have used more than one care type over the study period, and if so is included in more than one group of reported proportions. This ensures that the reported proportions are reflective of all people entering each service type during the study period.

Data from aged care eligibility assessments were taken from the aged care assessment that occurred closest to the date of entry to that care type (before or after entry date). For people entering permanent residential aged care, data were also taken from the first ACFI available in the study period.

The data therefore provide information on the proportion of people with mental health conditions at the time of assessment only, as a proxy measure of mental health at the time of entry to care. People can experience an extended elapsed time between an aged care eligibility assessment and entry to care. As such, mental health captured at the time of assessment may have changed at the time of care entry.

The presence of mental health conditions was calculated as the proportion (in percentage) of individuals accessing the included aged care services who had a recorded mental health disorder in their assessment data. The denominator was all eligible cohort members during the study period.

People living in permanent residential aged care were considered to have a mental health condition if one of the eligible conditions was recorded in their aged care eligibility assessment *or* in their ACFI.

Depression in people entering permanent residential aged care

The proportion of people entering permanent residential aged care recorded with symptoms of depression on the Cornell Scale for Depression in Dementia was calculated. Categories were defined according to the pre-determined categories used in the ACFI:

- ‘minimal or no symptoms of depression’ (less than 9)
- ‘mild symptoms of depression’ (9–13)

- ‘moderate symptoms of depression’ (14–18)
- ‘major symptoms of depression’ (19–38).

Death by suicide

Deaths by suicide were categorised by the type of aged care service that was being accessed at the time of death. Categories were mutually exclusive, such that each person that died by suicide was categorised only into the service they were using at the time of death (that is, the last service they used).

Age-specific crude suicide rates were calculated using the total number of people using each service type in the financial year as the denominator. To allow for comparison with other populations, age-standardised suicide rates were also calculated using direct standardisation against the Estimated Resident Population (ERP) of Australia at 30 June 2001 from the 2001 Census.

Because of their very small numbers, causing instability of rates and potential risk of identification, people aged under 65 years using aged care services were excluded from this analysis. Age groups are combined to protect confidentiality in the case of small numbers (defined here as $n<3$).

Variables used in the analysis

Data about mental health conditions, mental wellbeing, and death by suicide were used for this analysis, together with demographic information and data about aged care service use. Table 3 describes the variables used for this analysis.

Table 3: Description of variables used in analysis

No.	Variable	Variable type	Original or generated (source)	Description
1	AIHW PPN	Character	Original from AIHW’s linked aged care program IDs (PIAC)	An AIHW-derived project-specific person number, or person identifier. The AIHW PPNs were output alongside all linked aged care program-specific client identifiers (program IDs) to create the Pathways in Aged Care 2022 link map.
2	Assessment ID	Character	Original (NSAF, ACFI)	Unique ID of an assessment in National Screening and Assessment Form or of an assessment in the Aged Care Funding Instrument.
3	Exit date of the closest comprehensive assessment	Date	Original (NSAF)	The completed date of the comprehensive assessment that occurred closest to the date of the first entry to the care type in the cohort of interest (before or after entry date).
4	Exit date of the closest assessment in the Aged Care Funding Instrument	Date	Original (ACFI)	The entry date of the assessment in the Aged Care Funding Instrument that occurred closest to the date of the first entry to permanent residential aged care.
5	Date of primary health condition record in National Screening and Assessment Form	Date	Original (NSAF)	Effective start date of the user record in National Screening and Assessment Form that was closest to the date of the first entry to the care type in the cohort of interest (before or after entry date).
6	Days from assessment to service entry	Num	Generated (NSAF, ACFI)	Days from the assessment that occurred closest to the date of the first entry to the care type in the cohort of interest: (i) Home care service: assessments in National Screening and Assessment Form (ii) Permanent residential aged care: assessments in either National Screening and Assessment Form or the Aged Care Funding Instrument.
7	Financial year of service entry	Categorical	Original from entry financial year variable in events table (PIAC)	Financial year of the first entry to the service in each cohort.

8	Sex	Binary (Male/Female)	Generated (PIAC)	Whether the person is male or female. 18 individuals (17 in Mental health condition section and one in Suicide section) recorded as 'Intersex or indeterminate' or 'unknown' were excluded in sex related demographic description.
9	Age group	Categorical	Generated (PIAC)	Age groups (at the service entry) were: 50-54; 55-59; 60-64; 65-69; 70-74; 75-79; 80–84; 85-89; 90-94; 95 or over. In some cases, to reduce the risk of disclosure it was aggregated at 80 or 85 or 90 or 95 years whichever ensured it was at least 3 people in each cell.
10	First Nations People	Binary (Yes/No)	Generated from the Indigenous description field (PIAC)	Whether the person is First Nations (that is, Aboriginal and/or Torres Strait Islander).
11	Culturally and linguistically diverse background	Binary (Yes/No)	Original (NSAF)	Whether the person was from a culturally and linguistically diverse background, as recorded by the assessor in the National Screening and Assessment Form.
12	MMM (not presented)	Categorical	Original (NSAF)	Remoteness of primary address, as defined by Modified Monash Model (2019) classifications: MM 1: Metropolitan MM 2: Regional centres MM 3: Large rural towns MM 4: Medium rural towns MM 5: Small rural towns MM 6: Remote communities MM 7: Very remote communities.
13	MMM group categories	Num	Generated from 'MMM' field (NSAF)	Remoteness categories grouped into 2 groups: Metropolitan (MM 1) Regional, rural and remote (MM 2–7)
14	State/territory	Categorical	Original (NSAF, SPARC)	• Home care service cohort: state/territory recorded in state/ territory name field of the assessment in the National Screening and Assessment Form. • Permanent residential aged care cohort: state/territory recorded in state/territory name field of the assessment in the National Screening and Assessment Form. If not available, using state/territory in state field in of National Aged Care Data Clearinghouse for the state/territory at the point of permanent residential aged care service entry.
15	Lives alone	Binary (Yes/No)	Generated from 'lives with' categorical field (NSAF)	Whether the person lives alone or not, as recorded by the assessor in the National Screening and Assessment Form.
16	Partnered	Binary (Yes/No)	Generated from 'marital status' categorical field (NSAF)	Whether the person married (registered/de facto) or not, as recorded in the closest user record in the National Screening and Assessment Form to the service entry date in each cohort.

17	Dementia	Binary (Yes/No)	Generated (NSAF, ACFI)	• Home care service cohort: whether the person has dementia as indicated by the assessor in either the 'assessed health condition' or 'primary health condition' fields of National Screening and Assessment Form (code 500–532, 542, 584). • Permanent residential aged care cohort: whether the person has dementia as indicated by the assessor in either (i) the 'assessed health condition' or 'primary health condition' fields of National Screening and Assessment Form (code 500–532, 542, 584) or (ii) the question 13 of the Aged Care Funding Instrument (500, 510, 520, 530).
18	Mental health condition	Binary (Yes/No)	Generated (NSAF, ACFI)	• Home care service cohort: whether the person has a mental health condition as indicated by the assessor in the 'assessed health condition' or 'primary health condition' fields of National Screening and Assessment Form (code 550-553, 560-564, 580-582, 586, 599). • Permanent residential aged care cohort: whether the person has a mental health condition as indicated by the assessor in either (i) the 'assessed health condition' or 'primary health condition' fields of National Screening and Assessment Form (code 550-553, 560- 564, 580-582, 586, 599) or (ii) question 13 of the Aged Care Funding Instrument (550A, 550B, 560, 580).
19	Mood disorders	Binary (Yes/No)	Generated (NSAF, ACFI)	• Home care service cohort: whether the person has a mood disorder as indicated by the assessor in the 'assessed health condition' or 'primary health condition' fields of National Screening and Assessment Form (code 552). Permanent residential aged care cohort: whether the person has a mood disorder as indicated by the assessor in either (i) the 'assessed health condition' or 'primary health condition' fields of National Screening and Assessment Form (code 552) or (ii) question 13 of the Aged Care Funding Instrument (550A).
20	Anxiety/stress disorders	Binary (Yes/No)	Generated (NSAF, ACFI)	• Home care service cohort: whether the person has an anxiety/stress disorder as indicated by the assessor in the 'assessed health condition' or 'primary health condition' fields of National Screening and Assessment Form (code 560, 561, 562). Permanent residential aged care cohort: whether the person has an anxiety/stress disorder as indicated by the assessor in either (i) the 'assessed health condition' or 'primary health condition' fields of National Screening and Assessment Form (code 560, 561, 562) or (ii) question 13 of the Aged Care Funding Instrument (560).

21	Psychotic disorders	Binary (Yes/No)	Generated (NSAF, ACFI)	• Home care service cohort: whether the person has a psychotic disorder as indicated by the assessor in the 'assessed health condition' or 'primary health condition' fields of National Screening and Assessment Form (code 550, 551, 553). Permanent residential aged care cohort: whether the person has a psychotic disorder as indicated by the assessor in either (i) the 'assessed health condition' or 'primary health condition' fields of National Screening and Assessment Form (code 550, 551, 553) or (ii) question 13 of the Aged Care Funding Instrument (550B).
22	Other mental health disorders	Binary (Yes/No)	Generated (NSAF, ACFI)	• Home care service cohort: whether the person has another mental health condition as indicated by the assessor in the 'assessed health condition' or 'primary health condition' fields of National Screening and Assessment Form (code 580, 581, 582, 599). Permanent residential aged care cohort: whether the person has another mental health condition as indicated by the assessor in either (i) the 'assessed health condition' or 'primary health condition' fields of National Screening and Assessment Form (code 580, 581, 582, 599) or (ii) question 13 of the Aged Care Funding Instrument (580).
23	Date of death	Date	Generated from day of death, month of death, year of death columns (NDI)	Date of death of care recipients as specified by the National Death Index.
24	Main cause of death	Categorical	Original (NDI)	Main cause of death specified in the National Death Index. Cause of death codes from the ICD-10-AM.
25	Suicide death flag	Binary (Yes/No)	Generated from 'main cause of death' column (NDI)	Whether the person has suicide recorded as the main cause of death (codes X60–X84, Y87.0).
26	Other deaths of interest	Binary (Yes/No)	Generated from 'main cause of death' column (NDI)	Whether the person has a main cause of death of (1) suicide (codes X60–X84, Y87.0), (2) alcoholic liver disease and cirrhosis (codes K70, K73–74), or (3) accidental poisoning (codes X40–X45, Y10–Y15, Y45, Y47, Y49).
27	Event pathway	Binary (Yes/No)	Generated from 'date of death' variable and aged care events table (PIAC)	Whether the person had used permanent residential care, home care (home care packages program) or home support (Commonwealth Home Support Programme) any time prior to the date of death.
28	Event closest to death	Categorical	Generated from 'event pathway' variable (PIAC)	Where an aged care service was used prior to the date of death, which aged care event happened closest to death.

ACFI: Aged Care Funding Instrument; MMM: Modified Monash Model; NDI: National Death Index NSAF; NSAF: National Screening and Assessment Form; PIAC: Pathways in Aged Care; PRAC permanent residential aged care; PPN: project-specific person number; SPARC: System for the Payment of Aged Residential Care.

Codes used to identify and categorise mental health conditions in aged care eligibility and funding assessments are described in Table 4a and 4b.

Table 4a: Codes used to identify mental health conditions in aged care assessments – Aged Care Funding Instrument

Description	Code	Grouping

Depression, mood and affective disorders, Bipolar disorder	0550A	Mood disorders
Psychoses (for example, schizophrenia, paranoid states)	0550B	Psychotic disorders
Neurotic, stress related, anxiety, somatoform disorders (for example, post-traumatic stress disorder, phobic and anxiety disorders, nervous tension/stress, obsessive-compulsive disorder)	0560	Anxiety / stress disorders
Other mental and behavioural disorders (for example, due to alcohol or psychoactive substances (includes alcoholism, Korsakov's psychosis), adult personality and behavioural disorders).	0580	Other

Table 4b: Codes used to identify mental health conditions in aged care assessments – Aged Care eligibility assessments

Description	Code	Grouping
Psychoses & depression/mood affective disorders	550	Psychotic disorders
Schizophrenia	551	Psychotic disorders
Depression/Mood affective disorders	552	Mood disorders
Other psychoses (includes paranoid states, hallucinations)	553	Psychotic disorders
Neurotic, stress related & somatoform disorders	560	Anxiety / stress disorders
Phobic & anxiety disorders (includes agoraphobia, panic disorder)	561	Anxiety / stress disorders
Nervous tension/stress	562	Anxiety / stress disorders
Obsessive-compulsive disorder	563	Anxiety / stress disorders
Other neurotic, stress related & somatoform disorders	564	Anxiety / stress disorders
Other mental & behavioural disorders	580	Other
Mental and behavioural disorders due to alcohol & other psychoactive substance use (includes alcoholism, Korsakov's psychosis (alcoholic))	581	Other
Adult personality & behavioural disorders	582	Other
Post-traumatic stress disorder	586	Anxiety / stress disorders
Other mental & behavioural disorders not otherwise specified or not elsewhere classified (includes harmful use of non-dependent substances for example, laxatives analgesics, antidepressants, eating disorders for example, anorexia nervosa, bulimia nervosa, mental disorders not otherwise specified)	599	Other

Table 5a: Codes used to identify suicide and other deaths of interest – Suicide (X60–X84, Y87.0)

Description	ICD-10 Code
Intentional self-poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics	X60
Intentional self-poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere specified	X61
Intentional self-poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified	X62
Intentional self-poisoning by and exposure to other drugs acting on the autonomic nervous system	X63
Intentional self-poisoning by and exposure to other and unspecified drugs, medicaments and biological substances	X64
Intentional self-poisoning by and exposure to alcohol	X65
Intentional self-poisoning by and exposure to organic solvents and halogenated hydrocarbons and their vapours	X66
Intentional self-poisoning by and exposure to other gases and vapours	X67
Intentional self-poisoning by and exposure to pesticides	X68
Intentional self-poisoning by and exposure to other and unspecified chemicals and noxious substances	X69
Intentional self-harm by hanging, strangulation and suffocation	X70
Intentional self-harm by drowning and submersion	X71
Intentional self-harm by handgun discharge	X72
Intentional self-harm by rifle, shotgun and larger firearm discharge	X73
Intentional self-harm by other and unspecified firearm discharge	X74
Intentional self-harm by explosive material	X75
Intentional self-harm by smoke, fire and flames	X76
Intentional self-harm by steam, hot vapours and hot objects	X77
Intentional self-harm by sharp object	X78
Intentional self-harm by blunt object	X79
Intentional self-harm by jumping from a high place	X80

Intentional self-harm by jumping or lying before moving object	X81
Intentional self-harm by crashing of motor vehicle	X82
Intentional self-harm by other specified means	X83
Intentional self-harm by unspecified means	X84
Sequelae of intentional self-harm	Y87.0

Table 5b: Codes used to identify suicide and other deaths of interest – Alcoholic liver disease and cirrhosis (K70, K73–74)

Description	ICD-10 Code
Alcoholic liver disease	K70
Chronic hepatitis, not elsewhere classified	K73
Fibrosis and cirrhosis of liver	K74

Table 5c: Codes used to identify suicide and other deaths of interest – Accidental poisoning (X40–X45, Y10–Y15, Y45, Y47, Y49)

Description	ICD-10 Code
Accidental poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics	X40
Accidental poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified	X41
Accidental poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified	X42
Accidental poisoning by and exposure to other drugs acting on the autonomic nervous system	X43
Accidental poisoning by and exposure to other and unspecified drugs, medicaments and biological substances	X44
Accidental poisoning by and exposure to alcohol	X45
Poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics, undetermined intent	Y10
Poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified, undetermined intent	Y11
Poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified, undetermined intent	Y12
Poisoning by and exposure to other drugs acting on the autonomic nervous system, undetermined intent	Y13
Poisoning by and exposure to other and unspecified drugs, medicaments and biological substances, undetermined intent	Y14
Poisoning by and exposure to alcohol, undetermined intent	Y15
Accidental poisoning by and exposure to alcohol	Y45
Accidental poisoning by and exposure to other gases and vapours	Y47
Accidental poisoning by and exposure to other and unspecified chemicals and noxious substances	Y49

Abbreviations

Table 6: Abbreviations

Terms	Description
ACAT	Aged Care Assessment Team
ACFI	Aged Care Funding Instrument
AIHW	Australian Institute of Health and Welfare
CALD	Culturally and linguistically diverse
CHSP	Commonwealth Home Support Programme
HCP	Home Care Packages Program
MMM	Modified Monash Model
NACDC	National Aged Care Data Clearinghouse
NDI	National Death Index
NSAF	National Screening and Assessment Form
PIAC	Pathways in Aged Care
PRAC	Permanent residential aged care
PPN	Project-specific person number
PRAC	Permanent residential aged care
SPARC	System for the Payment of Aged Residential Care

Notes

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Cause of Death Unit Record File data are provided to the Australian Institute of Health and Welfare (AIHW) by the Registrars of Births, Deaths and Marriages and the National Coronial Information System (managed by the Victorian Department of Justice) and include cause of death coded by the Australian Bureau of Statistics (ABS). The data are maintained by the AIHW in the National Mortality Database.

Data quality statement

Data quality statements for the National Aged Care Data Clearinghouse and the National Death Index are available on the METEOR website at:

- National Aged Care Data Clearinghouse Data Quality Statement - external site opens in new window
- National Death Index Data Quality Statement - external site opens in new window.

Australian Government
Australian Institute of Health and Welfare

Data

Data tables: Mental health in aged care

Data
XLSX 164Kb

Related material

Related topics

- Aged care
- Mental health
- Older people
- Suicide & self-harm monitoring