



# Screening tools

## MENTAL HEALTH & WELLBEING

This evidence theme on screening tools for mental health conditions in aged care populations is a summary of one of the key topics identified by a scoping review of older people's mental health and wellbeing research.

### Key points

- Anxiety and depression are common in residential aged care yet often remain undetected.
- Several screening tools are available for detecting signs and symptoms of anxiety and depression in older adults in residential aged care. These tools can be used by aged care staff to determine if a person should be referred for a formal mental health assessment with a health professional.

### What are screening tools for mental health?

Screening tools help differentiate people who may have mental health conditions (or those at risk of having them) from those who do not. [1] They cannot be used to diagnose people. [2] Rather, they are informal symptom checks, usually in the form of a brief list of questions or a checklist. Responses to questions may be scored with the score

indicating if a person is likely or unlikely to have the condition in question (e.g., depression or anxiety). A positive score on a screening tool should then initiate a more detailed assessment with a mental health professional, with the aim of reaching a diagnosis. [2] There is a growing number of screening tools for detecting depression or anxiety in older adults, [3] including ones suitable for use with people with dementia.

### Why is mental health screening important in aged care?

Anxiety and depression are relatively common in older people. [4, 5] They are especially common in those living in residential aged care facilities, [6] perhaps more since the onset of facility lockdowns due to COVID-19. [7] Despite the high prevalence of these mental health conditions in residential aged care, depression and anxiety often remain undetected. [8] This can lead to people not receiving the mental health care they need and are entitled to. [9]

There are several reasons why aged care staff might not notice signs of depression and/or anxiety among people in their care. They may lack training in recognising the signs and symptoms of mental health conditions in later life or view them as a normal part of ageing. [3] Service providers may not have integrated screening for depression or anxiety into routine care practices or provided staff with the time to conduct screening. Furthermore, symptoms of anxiety such as palpitations or shortness of breath might be mistaken for symptoms of physical conditions commonly seen in older populations or the side effects of medications. [10] A depressed person's lack of interest in usual activities or reduced concentration may also be perceived as a sign of dementia. [3]

Screening tools that have been carefully designed to distinguish between mental health concerns and other, non-related problems may increase the rate of detection of mental health conditions in aged care settings.

## Choosing an appropriate screening tool

No one screening tool for mental health conditions will be applicable to all people in all contexts. [2] Therefore, aged care staff undertaking screening should be aware of the different attributes of the many tools available and pick the tool most appropriate for their circumstances. For example, tools designed for detecting depression in people without cognitive impairment are unlikely to be effective in screening people living with dementia. Similarly, those tools developed based on people in residential aged care may not be appropriate for people living in the community who are often younger [11] and may be less physically or cognitively impaired.

There are several factors to consider when choosing an appropriate tool for a specific situation. These include tool performance (or its 'psychometric properties'), the number of questions asked by the tool and the time required to complete it (tool length), and how information is collected and by whom.

### Tool performance

While no tools are perfect, users should look for ones that have been formally tested ('validated') for their ability to accurately identify people known to have a specific condition. Ideally, tools should be able to correctly identify people with a specific condition while not falsely identifying people as having a condition when they do not. Validated tools will provide users with information on their 'psychometric properties' to help them decide if the tool is right for a particular purpose. These performance metrics relate specifically to the types of people included in the tool's testing and validation. It is therefore important for tool users to question the applicability of any tool to more diverse populations and settings. [2]

### Tool length and time to complete

Tools vary widely in the number of questions (or 'items') they include. Shorter tools are easier and quicker to apply

in aged care settings and may be better suited for use with people with physical or cognitive impairments who may tire when trying to answer lots of questions.

### How information is collected

Some tools are designed for the person being screened to answer on their own (self-report). Others require an interview style questioning of the person being screened, their family members, or carers who have been in close contact with the person. Information might also be gained by simply observing someone and how they behave over a period.

Tools may use a basic yes/no response structure or provide a more complex list of response options (e.g., on a scale from 1 – 5) to capture the extent to which someone agrees with a statement. Some tools should only be administered by a trained clinician. However, others designed specifically for residential aged care can be administered by non-clinical staff. This includes personal care workers who are often in the best position to observe and report symptoms affecting those in their care.

## Mental health screening tools suitable for aged care

We identified seven reviews describing validated depression and anxiety screening tools designed for, or which demonstrate effectiveness in, aged care populations. [3, 10, 12–16] Five of these reviews focused on tools for residential aged care settings [3, 10, 12, 15]. The remaining two focused respectively on older adults generally [16] and people with dementia living in the community and receiving home care. [14]

## Screening tools for depression

Four reviews suggest the following tools may be the most feasible and best suited to screening for depression in aged care settings. [3, 12, 13, 14]

### Cornell Scale for Depression in Dementia (CSDD)

This tool is widely used in residential aged care settings as it is specific to people living with dementia who are showing signs and symptoms of major depression. [3] The tool looks at the person's depressive symptoms over the previous week using comprehensive interviews with the person and someone who has been in regular contact with them. Its length (19 items taking 20–30 minutes to administer) and complexity make it suitable for administration by a trained clinician. [3] This tool has been shown to perform well in detecting depression. [13] A 4-item version of this tool is also available which also performed well in screening people with dementia for depression in residential aged care. [12] The need to interview a carer may limit the usefulness of both versions of this tool in the home care setting where older adults often live on their own. [14] There is also a

version of the CSDD designed for use by staff working in residential aged care. [12, 13] However, one review stated that this tool may not be very accurate in detecting depression. [13]

## Geriatric Depression Scale (GDS)

The GDS comes in 30-item, 15-item, and 8-item versions which are all designed to be used with people with no, or only mild, cognitive impairment. A 12-item version (GDS-12R) specifically focused on depression in residential aged care is suitable for use with people with moderate to severe cognitive impairment. [3] All versions can be completed by the person being screened on their own or given in an interview format. As these tools use a simple yes/no response format, they do not require training to administer. The GDS-15 takes 5-7 minutes to complete compared to 10-15 minutes for the GDS-30. This may make the shorter version a better choice for use with those who are ill or living with mild dementia, [3] or in places where there is limited staff time and resources for screening. [12] It is not known how long the GDS-12R takes to complete, although its brevity suggests it would be quick to administer. [3] One review highlighted concerns about the accuracy of the GDS in detecting depression when the tool is administered by someone other than the older person being screened. [13]

## Mood Questionnaire (a modified version of the Patient Health Questionnaire (PHQ-9))

The Mood Questionnaire is a screening tool for depression that is mandated for use in residential aged care facilities in the United States and Canada. [3] It is short (9 items) and takes 2-3 minutes to complete using a yes/no response format. It also comes in self-report, interview, and observational formats. The Mood Questionnaire requires training to administer but can be used to detect depression in people with or without dementia. The original version of this tool, the 9-item Patient Health Questionnaire, showed moderate performance when tested in the home care setting with people with dementia. However, this finding needs to be carefully considered as the tool has not been validated in this setting. [14]

## Nursing Homes Short Depression Inventory (NH-SDI)

In two reviews, this 16-item tool designed for use in residential aged care outperformed all other depression screening tools, [12] and was judged to be accurate in detecting depression. [13] It was designed to be administered by nursing staff and easily integrated into nursing procedures. [12]

## Screening tools for anxiety

Four reviews focused on tools for detecting anxiety in older adults. [10, 13, 15, 16] Two of the most used tools for screening for anxiety in residential aged care are described here. Other commonly used tools such as the Hospital Anxiety and Depression Scale - Anxiety subscale (HAD-S) and State-Trait Anxiety Inventory (STAI) are not included

as they may not have been validated in older populations [16] or more research needs to be done on their level of performance in a residential aged care setting. [10]

## Geriatric Anxiety Inventory (GAI)

The GAI is a 20-item self-report screening tool for identifying the presence of generalised anxiety over the course of the previous week. [16] According to one review, the GAI showed the most accurate detection rate of the examined tools. [14] It was specifically designed for older adults and uses less clinical language to describe anxiety symptoms (e.g., butterflies in the stomach). Responses are given using an agree/disagree answer format. Its user-friendliness makes it suitable to use with people with mild cognitive impairment or lower levels of education. [10]

## Rating Anxiety in Dementia Scale (RAID)

This 18-item scale is designed for assessing anxiety symptoms in people with dementia over a period of two weeks. It takes 20 minutes to complete and uses information gained from clinician interviews with the person with dementia and a second person who has been in close contact with the individual. Despite this being the most commonly used scale in residential aged care facilities, training and time required to complete this tool may make it difficult to integrate into routine screening in aged care. [10]

## Evidence limitations

The reviews used in this evidence theme highlighted concerns about the methods used in some of their included screening tool studies. This reduces the degree of certainty we might have about the abilities of some tools for detecting mental health conditions in aged care settings. For example:

- Some studies only had a small number of participants. [15]
- Few studies of tool performance provided details on the diversity of the people included in the testing of the tool. This includes information on cognitive impairment, medication use, age, gender, race, ethnicity, comorbid conditions, and level of pain. This makes it difficult to determine who this tool may be appropriate for. [3, 12, 15]
- The high average age of participants across studies (82.7 years in one review) might make it difficult to anticipate how well the tool will perform when used with younger aged care residents. [12]
- People with higher levels of cognitive impairment were often excluded from tool validation studies. [14]
- Evidence for the usefulness of the GAI and RAID tools in detecting anxiety in residential aged care is based on only two studies. [10]

## What can an individual do?

- Staff might familiarise themselves with some of the tools for screening for depression and anxiety in aged care settings.



- Trialling some of the easier to administer tools may develop staff confidence in recognising and questioning for signs and symptoms of anxiety and depression in aged care settings.

## What can the organisation do?

- Provide staff with training about mental health and wellbeing.
- Allocate time for staff to conduct routine screening of people in their care for early detection of depression and anxiety.
- Systematically schedule mental health screening for people soon after they enter residential aged care as this is a risk period for depression. [13]
- Establish a clear protocol for escalating concerns raised by a screening test to the appropriate health professional for a more detailed assessment.

## References

1. Department of Health, Victoria. Screening [Internet]. 2022 [cited 2023 Jun 26]. Available from: <https://www.health.vic.gov.au/patient-care/screening>
2. Pachana NA, Helmes E, Byrne GJ, Edelstein BA, Konnert CA, Pot AM. Screening for mental disorders in residential aged care facilities. *Int Psychogeriatr*. 2010;22(7):1107-20.
3. Azulai A, Walsh CA. Screening for geriatric depression in residential care facilities: A systematic narrative review. *J Gerontol Soc Work*. 2015;58(1):20-45.
4. Gonçalves DC, Pachana NA, Byrne GJ. Prevalence and correlates of generalized anxiety disorder among older adults in the Australian National Survey of Mental Health and Well-Being. *J Affect Disord*. 2011;132(1-2):223-30.
5. Beyond Blue. Our work with older adults [Internet]. n.d. [cited 2023 Jun 26]. Available from: <https://www.beyondblue.org.au/about-us/about-our-work/older-adults-program>
6. Bhar S. Reducing depression in nursing homes requires more than just antidepressants. *The Conversation* [Internet]. 2015 [cited 2023 Jun 26]; Jul 28. Available from: <https://theconversation.com/reducing-depression-in-nursing-homes-requires-more-than-just-antidepressants-38970>
7. Brydon A, Bhar S, Doyle C, Batchelor F, Lovelock H, Almond H, et al. National survey on the impact of COVID-19 on the mental health of Australian residential aged care residents and staff. *Clin Gerontol*. 2022;45(1):58-70.
8. McCusker J, Cole MG, Voyer P, Monette J, Champoux N, Ciampi A, et al. Observer-rated depression in long-term care: Frequency and risk factors. *Arch Gerontol Geriatr*. 2014;58(3):332-8.
9. Bern-Klug M, Kramer KW, Sharr P. Depression screening in nursing homes: involvement of social services departments. *Am J Geriatr Psychiatry*. 2010;18(3):266-75.
10. Creighton AS, Davison TE, Kissane DW. The assessment of anxiety in aged care residents: a systematic review of the psychometric properties of commonly used measures. *Int Psychogeriatr*. 2018;30(7):967-79.
11. Australian Institute of Health and Welfare. Australia's health 2020 data insights [Internet]. Canberra: Australian Institute of Health and Welfare; 2020 [cited 2023 Jun 26]. Available from: [https://apo.org.au/sites/default/files/resource-files/2020-07/apo-nid307044\\_0.pdf](https://apo.org.au/sites/default/files/resource-files/2020-07/apo-nid307044_0.pdf)
12. Mele B, Watt J, Wu P, Azeem F, Lew G, Holroyd-Leduc J, et al. Detecting depression in persons living in long-term care: A systematic review and meta-analysis of diagnostic test accuracy studies. *Age Ageing*. 2022;51(3):1-12.
13. Toulouse É, Carrier D, Villemure MP, Roy-Desruisseaux J, Rochefort CM. Accuracy of observer-rated measurement scales for depression assessment in patients with major neurocognitive disorders residing in long-term care centers: A systematic review. *Dement Geriatr Cogn Disord*. 2023;52(1):4-15.
14. Niculescu I, Arora T, Iaboni A. Screening for depression in older adults with cognitive impairment in the homecare setting: A systematic review. *Aging Ment Health*. 2021;25(9):1585-94.
15. Atchison K, Shafiq S, Ewert D, Leung AA, Goodarzi Z. Detecting anxiety in long-term care residents: A systematic review. *Can J Aging*. 2022;1-10.
16. Therrien Z, Hunsley J. Assessment of anxiety in older adults: A systematic review of commonly used measures. *Aging Ment Health*. 2012;16(1):1-16.

Cite as: ARIIA Knowledge & Implementation Hub. Screening tools: Mental health & wellbeing. Evidence Theme. Adelaide, SA: ARIIA; 2022 [updated 2023 Jul].

[www.ariia.org.au](http://www.ariia.org.au)

For more information email [ariia@ariia.org.au](mailto:ariia@ariia.org.au) or call 08 7421 9134

ARIIA - Level 2, Tonsley Hub, South Rd, Tonsley SA 5042

ARIIA was established as an independent, not-for-profit organisation, set up to lead the advancement of the aged care workforce capability by promoting and facilitating innovation and research to improve the quality of aged care for all Australians.

**ariia** Aged Care Research  
& Industry Innovation  
Australia

 **Flinders  
University**

 **Australian Government**  
Department of Health  
and Aged Care