



# Recognizing and Acting on Mentation Concerns

Caregivers are key partners in addressing depression, dementia, and delirium in older adults.

This article is the fourth in a series, *Supporting Family Caregivers in the 4Ms of an Age-Friendly Health System*, published in collaboration with the AARP Public Policy Institute as part of the ongoing *Supporting Family Caregivers: No Longer Home Alone* series. The 4Ms of an Age-Friendly Health System (What Matters, Medication, Mentation, and Mobility) is an evidence-based framework for assessing and acting on critical issues in the care of older adults across settings and transitions of care. Engaging the health care team, including older adults and their family caregivers, with the 4Ms framework can help to ensure that every older adult gets the best care possible, is not harmed by health care, and is satisfied with the care they receive.

The articles in this series present considerations for implementing the 4Ms framework in the inpatient hospital setting and incorporating family caregivers in doing so. Resources for both nurses and family caregivers, including a series of accompanying videos developed by AARP and the Rush Center for Excellence in Aging and funded by The John A. Hartford Foundation, are also provided. Nurses should read the articles first, so they understand how best to help family caregivers. Then they can refer caregivers to the informational tear sheet—*Information for Family Caregivers*—and instructional videos, encouraging them to ask questions. For additional information, see *Resources for Nurses*.

The risk of experiencing chronic conditions and serious illness increases with age<sup>1</sup>—thus increasing the complexity of health care needs. As the number of older adults in the United States continues to grow,<sup>2</sup> it is important for family caregivers and health care professionals to learn how to provide the specialized care that older adults require. Recognizing this necessity, The John A. Hartford Foundation and the Institute for Healthcare Improvement (IHI), in partnership with the American Hospital Association and the Catholic Health Association of the United States, developed the 4Ms of an Age-Friendly Health System framework for assessing and acting on health care issues of relevance to older adults. The 4Ms—What Matters, Medication, Mentation, and Mobility—operate as a set, each affecting the other, and the framework is guided by what matters to the older adult and family caregiver.

The Mentation element of the 4Ms framework focuses on three conditions that if undetected or poorly managed can have significant negative implications for older adults and caregivers: depression, dementia, and delirium.<sup>3,4</sup> Nurses are particularly well positioned to recognize and address these con-

ditions, and also play a key role in engaging family caregivers by explaining how mentation can be altered during hospitalization, encouraging caregivers to share their observations about any changes in the older adult's mental state, and educating them on strategies to support the older adult's mentation in the hospital setting and after discharge. (As the word *mentation* is not often recognized in the community, it may be helpful to use *mind* with older adults and caregivers instead.)

In this article, we offer background information on mentation, including a clinical overview of depression, dementia, and delirium; discuss partnering with family caregivers to assess and act on mentation concerns in hospitalized older adults; and provide resources for clinicians and caregivers.

## BACKGROUND

Nearly 17% of U.S. adults serve as caregivers for family members ages 50 and older.<sup>5</sup> Twenty-seven percent of caregivers report that their family member requires care because of mental health issues, while 32% say care is required because of memory problems, including Alzheimer disease and other dementias.<sup>5</sup> Delirium, which affects up to half of hospitalized older adults,



A nurse talks with an older adult and family caregiver about the older adult's cognitive functioning. Photo courtesy of the AARP Public Policy Institute.

can cause both older adults and their caregivers significant distress.<sup>6,7</sup> The needs of older adults are increasingly complex, and family caregivers often provide care with little or no support or skills training.<sup>5</sup>

**Depression, or major depressive disorder,** is characterized by depressed mood or lack of interest or pleasure in activities usually enjoyed (the latter more common among older adults), along with four or more of the following symptoms on most days over a two-week period<sup>8</sup>:

- appetite changes or weight loss
- sleep changes
- low energy
- feelings of worthlessness or excessive guilt
- psychomotor retardation or agitation
- difficulty concentrating
- thoughts of suicide

These symptoms cause clinically significant distress or impairment and are not caused by substance use or a medical condition. Minor depression, characterized by two or more of the above symptoms for at least two weeks, is also associated with significant functional impairment in older adults.<sup>9</sup> It is notable that care recipient depression has been linked to both caregiver depression and lower relationship satisfaction between the two individuals,<sup>10</sup> highlighting the importance of involving family caregivers in depression assessment and treatment.

**Dementia, or major neurocognitive disorder,** is a general term for progressive chronic changes in thinking abilities or behavior that interfere with

a person's ability to engage in daily activities.<sup>8</sup> The most common cause of dementia is Alzheimer disease, which affects over 6 million people in the United States.<sup>11</sup> Caring for someone with dementia is usually a long-term undertaking, which makes the emotional, physical, and financial impact of dementia on family caregivers profound,<sup>12</sup> particularly those caring for older adults with dementia-related behavioral disturbances.<sup>13</sup>

**Delirium, also known as acute brain failure,** is characterized by acute onset with a fluctuating course, inattention, disorganized thinking, and altered level of consciousness.<sup>8</sup> Hypoactive delirium and hyperactive delirium are two psychomotor subtypes. Older adults with hypoactive delirium are quiet and withdrawn, have a higher rate of mortality, and are often misdiagnosed with major depressive disorder or dementia.<sup>14,15</sup> Hyperactive delirium, which is less common, predominantly involves agitated and restless behaviors.<sup>14,15</sup> Fear and confusion may cause behavioral changes such as yelling or physical aggression.

Common causes of delirium include polypharmacy, administration of psychoactive and sedative-hypnotic medications, use of physical restraints and bladder catheters, electrolyte imbalance, infection, anesthesia, high pain levels, acute illness, and surgery.<sup>6,16,17</sup> Delirium is considered a medical emergency and can increase the risk of medical complications, institutionalization, long-term cognitive decline, and even death.<sup>4,17,18</sup>



### ASSESSMENT

In the 4Ms framework, assessing mentation entails identifying depression, dementia, and delirium, which frequently co-occur in older adults and have overlapping symptoms.<sup>19</sup> A coordinated team approach is needed, as making an accurate diagnosis can be challenging.<sup>19</sup> The family caregiver plays a critical role in diagnosis by providing the history of symptom onset and course along with any known individual and family history of all three conditions. Nurses can include family caregivers throughout the assessment process to help obtain this critical information.

**Depression.** Validated screening tools for depression in older adults include the nine-item Patient Health Questionnaire,<sup>20</sup> or PHQ-9, as well as its shorter version, the PHQ-2, and the Geriatric Depression Scale,<sup>21</sup> which is available in both 15- and 30-item versions. Individuals who screen positive should be referred for further evaluation by a mental health professional to determine whether they meet criteria for major depressive disorder, minor depression, or another illness. Nurses can encourage family caregivers to monitor changes in the older adult's mood, note depressive symptoms, and inform the health care team of any changes or symptoms so the older adult can receive appropriate treatment.

**Dementia.** Assessing dementia usually starts in the primary care office and involves a medical examination, clinical interview, and cognitive assessment. Tools such as the Mini-Cog,<sup>22</sup> the Saint Louis University Mental Status Examination,<sup>23</sup> and the Montreal Cognitive Assessment<sup>24</sup> are appropriate to use to screen for cognitive impairment. While comprehensive dementia assessment in the acute hospital setting is rarely feasible, it is critical to understand the hospi-

talized older adult's baseline cognitive function. The family caregiver can assist with this by communicating information to the health care team about the baseline function, any changes over time, and what matters to the older adult (for example, preferences and values), as well as helping to interpret behavior and communication.

**Delirium** can and should be prevented through a team approach that includes nurses, caregivers, and clinicians.<sup>25-28</sup> Given the adverse outcomes and mortality risk associated with delirium, it is important that the health care team screen for this condition at least twice daily, as symptoms wax and wane over a 24-hour period. Validated screening measures for delirium in the hospital setting include the 2-Item Ultra-Brief Delirium Screen (UB-2)<sup>29</sup> and the 4 'A's Test (4AT).<sup>30</sup> If the patient screens positive on the UB-2 or 4AT, a more comprehensive delirium screening measure, such as the Confusion Assessment Method,<sup>31</sup> should be used.

Family caregivers are pivotal in helping to detect delirium by identifying subtle changes in the hospitalized older adult's cognitive functioning over time.<sup>32</sup> They can monitor the cognition, alertness, and behaviors of the older adult and quickly report any status changes to the health care team. Nurses can facilitate family caregiver engagement by letting them know their observations are welcome and needed, and by asking them for their input and feedback.

Table 1 includes screening tools for depression, dementia, and delirium.

### ACT ON MENTATION

Owing to the impact that depression, dementia, and delirium can have on older adults' health and well-being, acting to address these issues is critical.

**Table 1.** Mentation Screening Tools

Conditions	Screening Tools	Link
Depression	Geriatric Depression Scale Patient Health Questionnaire-9	<a href="https://web.stanford.edu/~yesavage/GDS.html">https://web.stanford.edu/~yesavage/GDS.html</a> <a href="http://www.phqscreener.com">www.phqscreener.com</a>
Dementia	Mini-Cog Cognitive Impairment Screening Saint Louis University Mental Status Examination Montreal Cognitive Assessment	<a href="https://mini-cog.com">https://mini-cog.com</a> <a href="http://www.slu.edu/medicine/internal-medicine/geriatric-medicine/aging-successfully/pdfs/slums_form.pdf">www.slu.edu/medicine/internal-medicine/geriatric-medicine/aging-successfully/pdfs/slums_form.pdf</a> <a href="http://www.mocatest.org">www.mocatest.org</a>
Delirium	4 'A's Test Confusion Assessment Method Nursing Delirium Screening Scale 2-Item Ultra-Brief Delirium Screen	<a href="http://www.the4at.com">www.the4at.com</a> <a href="http://eddelirium.org/delirium-assessment/cam">http://eddelirium.org/delirium-assessment/cam</a> <a href="https://deliriumnetwork.org/wp-content/uploads/2018/05/NuDESC.pdf">https://deliriumnetwork.org/wp-content/uploads/2018/05/NuDESC.pdf</a> <a href="http://www.nursing.psu.edu/wp-content/uploads/2019/03/UB-2-with-disclaimer-fick_Delirium-Pocket-Card_052118.pdf">www.nursing.psu.edu/wp-content/uploads/2019/03/UB-2-with-disclaimer-fick_Delirium-Pocket-Card_052118.pdf</a>



## Information for Family Caregivers

### Tips for Addressing Depression, Dementia, and Delirium in Older Adults

Depression, dementia, and delirium are three medical issues that affect older adults' mental functioning and quality of life.

#### Depression

- Look for the following symptoms in the older adult you care for, both in the hospital and at home. If you notice these symptoms, notify the health care team right away.
  - Depressed mood or lack of interest or pleasure in activities
  - Changes in appetite
  - Sleeping too much or too little
  - Physical agitation, such as not being able to sit still or moving more slowly than usual
  - Fatigue or loss of energy
  - Feelings of worthlessness or excessive guilt
  - Poor concentration
  - Thoughts of suicide
- If the older adult you care for is hospitalized and has previously been diagnosed with depression, inform the hospital care team so they can provide monitoring and treatment.

#### Dementia

- If the person you care for has dementia and is hospitalized, they may experience heightened confusion and anxiety. Do the following to provide orientation and comfort:
  - Remind the older adult about the date and where they are, and that they are safe.
  - Ask health care staff to reintroduce themselves whenever they enter the room.
  - Bring pictures of loved ones to the hospital room.
  - Ensure that the older adult has access to items like hearing aids, glasses, and dentures.

#### Delirium

- Delirium is a state of confusion that comes on suddenly, comes and goes throughout the day, and can last days to weeks. Delirium can start at home or in the hospital, so be sure to tell the health care team if the person you care for seems to be thinking or acting differently. If the person you care for is hospitalized, do the following to help prevent or address delirium:
  - Speak slowly and keep instructions simple.
  - Do not argue about things they see, hear, or believe that are not accurate—instead, reassure them that they are safe.
  - Limit visitors to one or two at a time to prevent overstimulation.
  - Remind the medical team to help the older adult get out of bed at least three times a day if possible.
  - Keep the blinds in the hospital room up during the day and down at night.

#### Resources to Explore

- Family Caregiver Alliance: Caregiver Resources ([www.caregiver.org/caregiver-resources](http://www.caregiver.org/caregiver-resources))
- Alzheimer's Association: Caregiving ([www.alz.org/help-support/caregiving](http://www.alz.org/help-support/caregiving))
- CATCH-ON Learning Modules on Depression, Dementia, and Delirium (<https://catch-on.org/oaf-home/oaf-online-education/online-modules/menu-of-video-modules>)

**A family caregiver instructional video about mentation can be found on AARP's website:**

-  Mentation: Recognizing Dementia, Delirium, and Depression  
<http://links.lww.com/AJN/A220>

For additional information, the AARP Public Policy Institute's Home Alone Alliance website offers publications, training webinars, blog posts, and videos for family caregivers: [www.aarp.org/ppi/initiatives/home-alone-alliance](http://www.aarp.org/ppi/initiatives/home-alone-alliance).



Resources for Nurses

Mentation: Recognizing Dementia, Delirium, and Depression
http://links.lww.com/AJN/A214

Note: Family caregivers can access these videos, as well as additional information and resources, on AARP's Home Alone Alliance web page: www.aarp.org/nolongeralone.

Depression. Nurses can educate older adults and their family caregivers on how to prevent and address major and minor depressive disorders, both during hospitalization and after discharge. It is important to keep the older adult as physically, socially, and cognitively active as they can tolerate, engaging in activities they typically enjoy.

Dementia. Caregivers can provide reassurance and orientation to older adults who might experience heightened confusion and anxiety in the unfamiliar hospital setting. To limit confusion and maximize orientation and comfort, caregivers and nursing staff should ensure that the older adult uses any necessary sensory enhancement devices, such as hearing aids, glasses, and dentures. Family caregivers can also bring familiar items to the hospital from home.

Older adults with dementia are at high risk for developing delirium superimposed on dementia, which can lead to poorer outcomes. Thus, it is imperative that delirium prevention measures be put in place for hospitalized older adults with dementia.

Delirium. Once identified, delirium must be acted on immediately. The first step is finding and treating its cause. Family caregivers can help with this process by providing pertinent medical and medication history to the health care team, including the circumstances of any past delirium episodes.

Simultaneously, patient safety must be ensured. This includes preventing aspiration and maintaining appropriate nutrition and hydration. Nurses can educate family caregivers on these important safety concerns since they are often involved in or at least present at mealtimes and hydration. Promoting safe mobility during the hospital stay—another key

aspect of patient safety—can help prevent falls and skin breakdown. The older adult should be helped out of bed at least three times a day, if possible, or if unable to ambulate, assisted with range of motion exercises or repositioned at least every two hours. Family caregivers can help with safe mobility by routinely reminding older adults to observe fall precautions and asking hospital staff for ambulation assistance. Restraints should be avoided, as they can lead to injuries, increase the risk of developing delirium, and slow delirium recovery.

Nonpharmacological methods used to manage delirium in older adults are also helpful in preventing it. One such strategy is to reduce or remove high-risk medications for older adults, such as anticholinergic, sedating, and psychoactive medications, whenever possible. The American Geriatrics Society Beers Criteria, a list of these high-risk medications, can serve as a helpful reference for nurses. Additionally, behavioral strategies for improving sleep should be implemented, including keeping the blinds open during the day and drawn at night, limiting daytime napping when possible, and minimizing nighttime interruptions. Family caregivers can provide helpful stimulation and reorientation. Overstimulation can be lessened by limiting the number of people in the room at one time, avoiding excessive sensory stimulation (such as television, loud music), and attempting to maintain continuity of nursing staff when possible.

The use of antipsychotic medications to treat older adults with delirium is not supported by current evidence. Pharmacological treatments for delirium should be used only as a last resort for severe agitation that puts the older adult or others around them in danger, as medication can lead to worsening delirium.

RESOURCES FOR CLINICIANS AND CAREGIVERS

Table 2 includes resources for health care clinicians to use in assessing and acting on older adults' mentation concerns. The IHI, the Rush Center for Excellence in Aging, and the CATCH-ON Geriatric Workforce Enhancement Program all provide online education and resources on using the 4Ms framework.

Table 2. Tools for Assessing and Acting on Mentation

Table with 2 columns: Resources and Link. Rows include AARP Family Caregiving How-To Video Series, American Geriatrics Society CoCare: HELP, American Delirium Society: Education, and CATCH-ON Online Modules.

Additionally, nurses can refer family caregivers to the tear sheet, *Information for Family Caregivers*, for tips on addressing depression, dementia, and delirium in hospitalized older adults. ▼

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## REFERENCES

- Boersma P, et al. Prevalence of multiple chronic conditions among US adults, 2018. *Prev Chronic Dis* 2020;17:E106.
- Ortman JM, et al. *An aging nation: the older population in the United States: population estimates and projections*. Washington, DC: U.S. Census Bureau; 2014 May P25-1140. Current population reports; <https://www.census.gov/content/dam/Census/library/publications/2014/demo/p25-1140.pdf>.
- Taylor WD. Clinical practice. Depression in the elderly. *N Engl J Med* 2014;371(13):1228-36.
- Witlox J, et al. Delirium in elderly patients and the risk of postdischarge mortality, institutionalization, and dementia: a meta-analysis. *JAMA* 2010;304(4):443-51.
- AARP and the National Alliance for Caregiving (NAC). *Caregiving in the U.S.: 2020 report*. Washington, DC; 2020 May. Research report; <https://www.caregiving.org/wp-content/uploads/2021/01/full-report-caregiving-in-the-united-states-01-21.pdf>.
- Inouye SK, et al. Delirium in elderly people. *Lancet* 2014;383(9920):911-22.
- Partridge JS, et al. The delirium experience: what is the effect on patients, relatives and staff and what can be done to modify this? *Int J Geriatr Psychiatry* 2013;28(8):804-12.
- American Psychiatric Association. *Diagnostic and statistical manual of mental disorders: DSM-5*. 5th ed. Washington, DC; 2013.
- Meeks TW, et al. A tune in “a minor” can “b major”: a review of epidemiology, illness course, and public health implications of subthreshold depression in older adults. *J Affect Disord* 2011;129(1-3):126-42.
- Monin JK, et al. The impact of both spousal caregivers’ and care recipients’ health on relationship satisfaction in the Caregiver Health Effects Study. *J Health Psychol* 2019;24(12):1744-55.
- Alzheimer’s Association. 2021 Alzheimer’s disease facts and figures. *Alzheimers Dement* 2021.
- Dang S, et al. The dementia caregiver—a primary care approach. *South Med J* 2008;101(12):1246-51.
- Anderson JG, et al. “A fine line that we walk every day”: self-care approaches used by family caregivers of persons with dementia. *Issues Ment Health Nurs* 2019;40(3):252-9.
- Hosker C, Ward D. Hypoactive delirium. *BMJ* 2017;357:j2047.
- Yang FM, et al. Phenomenological subtypes of delirium in older persons: patterns, prevalence, and prognosis. *Psychosomatics* 2009;50(3):248-54.
- Inouye SK, Charpentier PA. Precipitating factors for delirium in hospitalized elderly persons: predictive model and interrelationship with baseline vulnerability. *JAMA* 1996;275(11):852-7.
- Marcantonio ER. Delirium in hospitalized older adults. *N Engl J Med* 2017;377(15):1456-66.
- Inouye SK, et al. The short-term and long-term relationship between delirium and cognitive trajectory in older surgical patients. *Alzheimers Dement* 2016;12(7):766-75.
- Gagliardi JP. Differentiating among depression, delirium, and dementia in elderly patients. *Virtual Mentor* 2008;10(6):383-8.
- Kroenke K, et al. The PHQ-9: validity of a brief depression severity measure. *J Gen Intern Med* 2001;16(9):606-13.
- Yesavage JA, et al. Development and validation of a geriatric depression screening scale: a preliminary report. *J Psychiatry Res* 1982;17(1):37-49.
- Borson S, et al. The Mini-Cog as a screen for dementia: validation in a population-based sample. *J Am Geriatr Soc* 2003;51(10):1451-4.
- Shwartz SK, et al. Psychometric properties of the Saint Louis University Mental Status Examination. *Appl Neuropsychol Adult* 2019;26(2):101-10.
- Nasreddine ZS, et al. The Montreal Cognitive Assessment, MoCA: a brief screening tool for mild cognitive impairment. *J Am Geriatr Soc* 2005;53(4):695-9.
- Blazer DG, et al. *Cognitive aging: progress in understanding and opportunities for action*. Washington, DC: National Academies Press; 2015. Consensus study report; <https://www.nap.edu/catalog/21693/cognitive-aging-progress-in-understanding-and-opportunities-for-action>.
- Fick DM. Promoting cognitive health: some good news and a brief summary of the Institute of Medicine report *Cognitive aging: progress in understanding and opportunities for action*. *J Gerontol Nurs* 2016;42(7):4-6.
- Fick DM. The critical vital sign of cognitive health and delirium: whose responsibility is it? *J Gerontol Nurs* 2018;44(8):3-5.
- Oh ES, et al. Delirium in older persons: advances in diagnosis and treatment. *JAMA* 2017;318(12):1161-74.
- Fick DM, et al. Preliminary development of an ultrabrief two-item bedside test for delirium. *J Hosp Med* 2015;10(10):645-50.
- Bellelli G, et al. Validation of the 4AT, a new instrument for rapid delirium screening: a study in 234 hospitalised older people. *Age Ageing* 2014;43(4):496-502.
- Inouye SK, et al. Clarifying confusion: the confusion assessment method; a new method for detection of delirium. *Ann Intern Med* 1990;113(12):941-8.
- Fick DM, et al. Recognizing delirium superimposed on dementia: assessing nurses’ knowledge using case vignettes. *J Gerontol Nurs* 2007;33(2):40-7.
- Zonsius MC, et al. Acute care for patients with dementia. *Am J Nurs* 2020;120(4):34-42.
- Inouye SK, et al. The Hospital Elder Life program: a model of care to prevent cognitive and functional decline in older hospitalized patients. *J Am Geriatr Soc* 2000;48(12):1697-706.
- Park M, Tang JH. Changing the practice of physical restraint use in acute care. *J Gerontol Nurs* 2007;33(2):9-16.
- American Geriatrics Society Beers Criteria Update Expert Panel. American Geriatrics Society 2019 updated AGS Beers Criteria for potentially inappropriate medication use in older adults. *J Am Geriatr Soc* 2019;67(4):674-94.
- Neufeld KJ, et al. Antipsychotic medication for prevention and treatment of delirium in hospitalized adults: a systematic review and meta-analysis. *J Am Geriatr Soc* 2016;64(4):705-14.
- Barr J, et al. Clinical practice guidelines for the management of pain, agitation, and delirium in adult patients in the intensive care unit. *Crit Care Med* 2013;41(1):263-306.
- Institute for Healthcare Improvement. *Age-friendly health systems: resources to practice age-friendly care*. n.d. <http://www.ihc.org/Engage/Initiatives/Age-Friendly-Health-Systems/Pages/Resources.aspx>.
- Rush University Medical Center. *Rush Center for Excellence in Aging*. n.d. <https://aging.rush.edu>.
- Collaborative Action Team Training for Community Health—Older Adult Network (CATCH-ON). *CATCH-ON 4Ms resources for older adults and caregivers*. 2022. <https://catch-on.org/4msresources>.
- Collaborative Action Team Training for Community Health—Older Adult Network (CATCH-ON). *CATCH-ON: a HRSA geriatric workforce enhancement program*. 2022. <https://catch-on.org>.