



The 4Ms of an Age-Friendly Health System

An evidence-based framework to ensure older adults receive the highest quality care.

This article is the first in a new 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 new 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—*Guide to the 4Ms of an Age-Friendly Health System for Family Caregivers*—and instructional videos, encouraging them to ask questions. For additional information, see *Resources for Nurses*.

The number of adults ages 65 and older in the United States is expected to nearly double by 2050.¹ Older adults have more chronic conditions, serious illnesses, and complex health care needs than younger adults and require specialized care. To support the health of this growing population, 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 Age-Friendly Health Systems initiative, which aims to ensure older adults get the best care possible, are not harmed by health care, and are satisfied with the care they receive.² This initiative calls for the implementation of an evidence-based framework, the 4Ms of an Age-Friendly Health System, that encompasses four core elements of care: What Matters, Medication, Mentation, and Mobility (see Figure 1). The framework is intended to be used with every older adult during every interaction and across all settings and transitions of care. As of press time, 615 U.S. hospitals and health care practices have been recognized by the IHI as Age-Friendly Health Systems

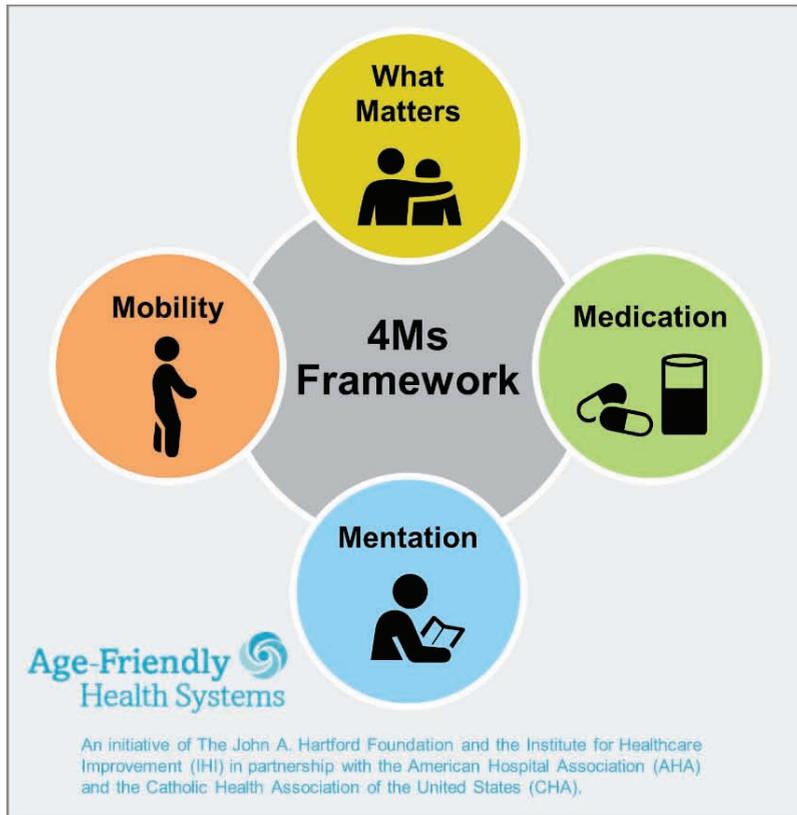
for implementing the 4Ms framework, and 2,401 have formally committed to implementing it.²

An estimated 41.8 million Americans were caregivers of an older adult relative or friend in 2020³—a number that will continue to increase with the expanding older adult population. To promote high-quality care for older adults, it is vital that they, their caregivers, and their health care providers are educated on and engaged with the 4Ms framework. In this article, we outline the framework and discuss how it can be implemented by the health care team, including nurses and family caregivers, in the inpatient hospital setting. We also offer resources for health care providers and family caregivers, including accompanying videos by the AARP Public Policy Institute and the Rush Center for Excellence in Aging. This article is the first in a series that will explore each of the 4Ms of an Age-Friendly Health System in greater detail.

BACKGROUND

Nearly 64% of Americans ages 65 and older have two or more chronic conditions, and this percentage is even higher (76.9%) among older adults who are eligible for both Medicare and Medicaid.⁴ To

Figure 1. The 4Ms of an Age-Friendly Health System



What Matters

Know and align care with each older adult's specific health outcome goals and care preferences including, but not limited to, end-of-life care, and across settings of care.

Medication

If medication is necessary, use Age-Friendly medication that does not interfere with What Matters to the older adult, Mobility, or Mentation across settings of care.

Mentation

Prevent, identify, treat, and manage dementia, depression, and delirium across settings of care.

Mobility

Ensure that older adults move safely every day in order to maintain function and do What Matters.

manage these conditions, older adult Medicare recipients visit, on average, two primary care providers and five specialists annually,⁵ most of whom do not communicate with each other or with other allied health care providers.⁶ This fragmented care of older adults with chronic conditions leads to increased ED visits and hospitalizations.^{7,8} Care across the hospital-based team often remains fragmented and is not reflective of older adults' unique needs.⁶ In the hospital, older adults, particularly those with cognitive impairment, are at increased risk for delirium, declining mobility, falls, and malnutrition, which can extend length of stay and lead to poorer overall outcomes.^{9,10}

THE 4Ms

To minimize the risks associated with hospitalization and improve outcomes for older adults and their families, health systems can implement the 4Ms of an Age-Friendly Health System. The 4Ms framework is based on a foundation of existing geriatric care models and provides a structure to

help nurses and the health care team organize care.¹¹ While aspects of each of the 4Ms are often a part of regular nursing practice, the key for nurses is to reliably *assess* and *act on* them as a set with every older adult at each point of care, recognizing that each of the 4Ms impacts the others.¹¹

Including family caregivers in implementing the 4Ms framework is critical to ensuring optimal care, as caregivers can provide additional context for assessment in the hospital and are often responsible for managing the care plan—which is shaped by the framework—after discharge. The framework also facilitates education and support for family caregivers in addressing the older adult's identified needs, such as medication management. Additionally, 19% of caregivers of older adults are older adults themselves.³ While using the 4Ms framework to help guide the care of the older adult, they can use the same principles to maximize their own health and wellness. Older adult caregivers need to attend to what matters to them and ensure that their own medications, mentation, and mobility are helping them achieve it.



Resources for Nurses

- Identifying What Matters
<http://links.lww.com/AJN/A212>
- What to Know About Medication
<http://links.lww.com/AJN/A213>
- Mentation: Recognizing Dementia, Delirium, and Depression
<http://links.lww.com/AJN/A214>
- Why Mobility Matters
<http://links.lww.com/AJN/A215>

Related videos

- Preparing for a Hospital Stay: What to Know Before You Go
<http://links.lww.com/AJN/A216>
- Planning for Discharge and Next Steps
<http://links.lww.com/AJN/A217>

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.

The following is a brief overview of each of the 4Ms.

What Matters. Exploring what matters to the older adult is a critical starting point for implementing the 4Ms framework. By assessing what is important to older adults in both their health care and their personal lives, the team can align the care plan with the individual's goals and preferences. Areas of importance commonly identified by older adults include pain management (for example, preferences concerning lucidity versus pain control), staying connected with family and friends, and being able to return to their prior level of activity.¹² Assessing what matters in the hospital setting can include asking questions such as, "What are your hopes for this hospitalization?"¹³

Acting on what matters means ensuring that the whole care team is aware of what matters to the older adult and aligning the care plan accordingly. Writing what matters to them on the whiteboard and communicating their preferences during rounds and shift report are common ways to keep the health care team informed. Caregivers serve an important role in identifying these preferences and advocating for addressing them.

Older adults' preferences about advance directives are also key to understanding what matters to them. Initiating goals of care conversations with the older adult and family caregiver and completing or reviewing health care power of attorney forms pro-

vides opportunities for older adults to make their preferences known.¹⁴

Medications. In the 4Ms framework, assessing medications includes reviewing the medical necessity of all prescribed medications and identifying any deemed high risk for older adults (for example, opioids, benzodiazepines, long-acting diabetes medications, anticoagulants, and anticholinergics; see the American Geriatrics Society's Beers Criteria for Potentially Inappropriate Medication Use in Older Adults).¹⁵

Acting on the medications element of the framework means deprescribing high-risk medications and the overall number of medications when appropriate. Deprescribing high-risk medications reduces the risk of adverse effects and drug-drug interactions, thus reducing negative effects on mentation and mobility and helping enable older adults to do what matters to them. Establishing the simplest medication regimen possible and holding a family conference to provide training and address caregiver concerns can facilitate optimal care after discharge.

Mentation. Assessing and acting on the mentation element of the 4Ms entails identification and management of delirium, depression, and dementia. Additionally, to prepare family caregivers for providing care, they should be educated on the ways in which these conditions may present.

Delirium, or acute brain failure, is present in one-third of hospitalized adults ages 70 and older; half present with delirium upon admission, while the other half develop it while hospitalized.¹⁶ Delirium increases length of stay, cognitive decline, and mortality.^{17,18} In the hospital setting, screening for delirium at least twice daily is critical, as symptoms vary during the day. Once identified, the etiology (most commonly a combination of multiple factors, including infection or medication) must be determined and addressed immediately.¹⁹

Older adults should be screened for depression and offered appropriate treatment. They should also be screened for dementia and provided appropriate resources, though this is not always feasible in the inpatient setting.

Mobility. Assessing overall mobility and functional status goals, as well as fall risk, is important for all older adults at every fitness level. In the hospital setting, acting on the mobility element of the 4Ms includes getting older adults out of bed three times a day if possible and ambulating to their maximum ability with the goal of maintaining or improving preadmission functional status. For those unable to ambulate, maximizing activity—by doing range of motion exercises, for instance—is critical for maintaining the highest level of function. Mobilizing older



Guide to the 4Ms of an Age-Friendly Health System for Family Caregivers

The 4Ms of an Age-Friendly Health System is a framework that will help you ensure that the person you care for is receiving the best health care possible. Each of the 4Ms affects the others, so it is important to think of them as a set.

What Matters: Make sure the health care team knows what is important to the person you care for so they can align care with what matters to that person most. Also make sure the person has a completed health care power of attorney. Keep a copy for yourself and ensure that the health care team also has a copy on file.

Medication: It is critical to understand the medications the person you're caring for is taking. Some medications affect people in different ways as they age, causing side effects such as confusion or balance problems. Talk with the health care team to make sure the medications prescribed are necessary and help the person you're caring for do what matters to them.

Mind: Dementia (losing mental abilities over time due to a disease), delirium (sudden confusion), and depression (ongoing sadness or loss of interest) affect some older adults, but none of these are a part of normal aging. Make sure the older adult you're caring for is screened for these issues and that they are treated if detected.

Mobility: Moving safely as much as possible is important for overall health and functioning. Talk with the health care providers of the person you're caring for about how the person can get around safely when in the hospital. Ask the health care team to train you in how to help the person be as mobile as possible.

Family caregiver videos about the 4Ms can be found on AARP's website:

 Identifying What Matters

<http://links.lww.com/AJN/A218>

 What to Know About Medication

<http://links.lww.com/AJN/A219>

 Mentation: Recognizing Dementia, Delirium, and Depression

<http://links.lww.com/AJN/A220>

 Why Mobility Matters

<http://links.lww.com/AJN/A221>

Related videos

 Preparing for a Hospital Stay: What to Know Before You Go

<http://links.lww.com/AJN/A222>

 Planning for Discharge and Next Steps

<http://links.lww.com/AJN/A223>

For additional information, visit AARP's Home Alone Alliance web page: www.aarp.org/nolongeralone. For more information and resources on the 4Ms, visit <http://catch-on.org/4msresources> or scan the QR code below.





Table 1. Health Care Professional Resources and Tools for Assessing and Acting on the 4Ms

| 4Ms | Resources | Link |
|---------------------|---|--|
| What Matters | VitalTalk | www.vitaltalk.org |
| | Patient Priorities Care | https://patientprioritiescare.org |
| | The Conversation Project | https://theconversationproject.org |
| Medication | Deprescribing.org: Resources for Patients and Health Care Providers | https://deprescribing.org/resources |
| | 2019 Updated AGS Beers Criteria for Potentially Inappropriate Medication Use in Older Adults | https://pubmed.ncbi.nlm.nih.gov/30693946 |
| Mentation | AGS CoCare: HELP | www.americangeriatrics.org/programs/ags-cocarer-help |
| | CATCH-ON Online Modules | http://catch-on.org/hp-home/hp-education |
| Mobility | CDC: <i>Preventing Falls: A Guide to Implementing Effective Community-Based Fall Prevention Programs</i> | www.cdc.gov/homeandrecreationsafety/pdf/falls/fallpreventionguide-2015-a.pdf |
| | Johns Hopkins Medicine: Activity and Mobility Promotion | www.hopkinsmedicine.org/physical_medicine_rehabilitation/education_training/amp/toolkit.html |
| | Measures | Link |
| What Matters | Patient Priorities Care: Resources for Clinicians and Health Systems | https://patientprioritiescare.org/resources/clinicians-and-health-systems |
| Medication | STOPP/START Toolkit Supporting Medication Review | www.valeoforkccg.nhs.uk/seecmsfile/?id=3035&inline=1 |
| Mentation | Delirium Screening <ul style="list-style-type: none"> • UB-2 Delirium Screen • CAM • Nu-DESC | UB-2: www.nursing.psu.edu/wp-content/uploads/2019/03/UB-2-with-disclaimer-fick_Delirium-Pocket-Card_052118.pdf CAM: http://eddelirium.org/delirium-assessment/cam Nu-DESC: https://deliriumnetwork.org/wp-content/uploads/2018/05/NuDESC.pdf |
| | Dementia Screening <ul style="list-style-type: none"> • Mini-Cog Cognitive Impairment Screening • SLUMS Examination • MoCA | Mini-Cog: https://mini-cog.com SLUMS: www.slu.edu/medicine/internal-medicine/geriatric-medicine/aging-successfully/pdfs/slums_form.pdf MoCA: www.mocatest.org |
| | Depression Screening <ul style="list-style-type: none"> • PHQ-2 • PHQ-9 • GDS | PHQ-2: www.chpscc.org/_literature_243927/The_Patient_Health_Questionnaire_(PHQ-2) PHQ-9: www.phqscreener.com/images/sites/g/files/g10060481/f/201412/PHQ-9_English.pdf GDS: https://web.stanford.edu/~yesavage/GDS.html |
| Mobility | CDC Timed Up and Go Mobility Assessment | www.cdc.gov/steady/pdf/TUG_test-print.pdf |
| | Johns Hopkins Highest Level of Mobility Scale | www.hopkinsmedicine.org/physical_medicine_rehabilitation/downloads/jh-hlm-faq.pdf |
| | Tinetti Performance Oriented Mobility Assessment | www.leadingagemn.org/assets/docs/Tinetti-Balance-Gait-POMA.pdf |
| | Barthel Index of Activities of Daily Living | www.sralab.org/rehabilitation-measures/barthel-index |

AGS = American Geriatrics Society; CAM = Confusion Assessment Method; CDC = Centers for Disease Control and Prevention; GDS = Geriatric Depression Scale; MoCA = Montreal Cognitive Assessment; Nu-DESC = Nursing Delirium Screening Scale; PHQ-2 = Patient Health Questionnaire-2; PHQ-9 = Patient Health Questionnaire-9; SLUMS = Saint Louis University Mental Status; START = Screening Tool to Alert to Right Treatment; STOPP = Screening Tool of Older Persons' Prescriptions; UB-2 = 2-Item Ultra-Brief.

adults in the hospital improves both physical and mental health outcomes, including delirium; helps to prevent falls; and decreases length of stay.²⁰ Further, evidence suggests that including family caregivers in mobility interventions during hospitalization improves hospital outcomes and decreases 30-day readmissions.²¹ Nurses or physical therapists can teach family caregivers to safely assist the older adult with ambulation while in the hospital, which not only decreases the burden on staff,²¹ but also provides critical training for the caregiver to use at home.

RESOURCES FOR CLINICIANS AND CAREGIVERS

A helpful tool to use in implementing the 4Ms framework is the IHI's *Age-Friendly Health Systems: Guide to Using the 4Ms in the Care of Older Adults*.²² This guide provides information about conducting a facility assessment to identify practices that may already incorporate the 4Ms, as well as opportunities for practice change. It also offers recommendations for assessment tools and protocols to follow in the event of a positive screen—such as referral to a mental health professional in the case of a positive depression screen.

Additional education on the 4Ms is available online via a collection of resources from the IHI (www.ihl.org/Engage/Initiatives/Age-Friendly-Health-Systems/Pages/Resources.aspx) as well as videos and online learning modules from the Rush Center for Excellence in Aging (<https://aging.rush.edu/professional-older-adult-family-care/age-friendly-health-system>) and the CATCH-ON Geriatric Workforce Enhancement Program (<http://catch-on.org/hp-home/hp-education>). Table 1 contains a list of tools health care professionals can use to assess and act on the 4Ms. Nurses can also refer family caregivers to the tear sheet, *Guide to the 4Ms of an Age-Friendly Health System for Family Caregivers*, to introduce them to the 4Ms framework. (Note that this tear sheet uses the term “Mind” in place of “Mentation,” as our research with older adults and caregivers identified this as preferred language.²³) ▼

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