

Age-Friendly Health Systems:

Guide to Using the 4Ms in the Care of Older Adults in Hospitals and Ambulatory Care Practices

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ihi.org/AgeFriendly

This content was created especially for:

Age-Friendly 
Health Systems

An initiative of The John A. Hartford Foundation and the Institute for Healthcare Improvement (IHI) in partnership with the American Hospital Association (AHA) and the Catholic Health Association of the United States (CHA).



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Age-Friendly Health Systems Overview

The United States is aging and becoming increasingly diverse. As of 2020, 1 in 6 people in the US is an older adult — that is, an individual age 65 years or older — and that proportion grew over the preceding 10 years faster than it has in more than a century.¹ From 2010 to 2020, the share of older adults who identify as Black or African American, Asian, American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, multiple races, or some other race other than White grew from 15 percent to 23 percent, while the Hispanic or Latino population of older adults increased from nearly 7 to nearly 9 percent.²

As we age, care often becomes more complex. Health systems are frequently unprepared for this complexity, and older adults suffer a disproportionate amount of harm while in the care of the health system. Older adults from historically marginalized communities suffer from disparate treatment that negatively influences health outcomes.

To address these challenges, in 2017, The John A. Hartford Foundation (JAHF) and the Institute for Healthcare Improvement (IHI), in partnership with the American Hospital Association (AHA) and the Catholic Health Association of the United States (CHA), set a bold vision to build a social movement so that all care with older adults is age-friendly care.

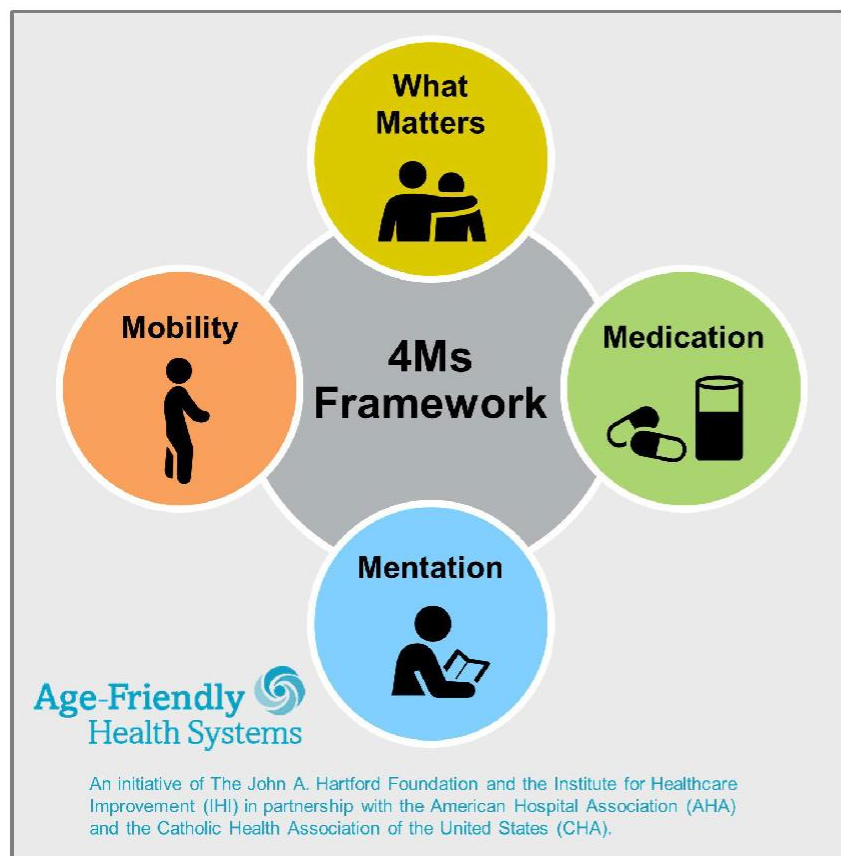
According to our definition, age-friendly care:

- Follows an essential set of evidence-based practices, known as the 4Ms;
- Causes no harm; and
- Aligns with What Matters to the older adult and their family or other caregivers.

Becoming an Age-Friendly Health System entails reliably providing a set of four evidence-based elements of high-quality care, known as the “4Ms,” to all older adults in your system. When implemented together, the 4Ms represent a broad shift by health systems to focus on the needs of older adults (see Figure 1).

The Age-Friendly Health Systems movement now comprises more than 3,700 hospitals, ambulatory practices (including primary care practices), convenient care clinics, and nursing homes (including post-acute and long-term care settings — e.g., skilled nursing and rehabilitation facilities and nursing facilities) working to reliably deliver evidence-based care with and for older adults. IHI and JAHF celebrate the participation of organizations that have committed to practicing age-friendly 4Ms care. Learn more about how you can join the movement and show your commitment to better care for older adults at ihi.org/AgeFriendly.

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



For related work, this graphic may be used in its entirety without requesting permission.
Graphic files and guidance at ihi.org/AgeFriendly

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.

The 4Ms — What Matters, Medication, Mentation, and Mobility — make care of older adults, which can be complex, more manageable. The 4Ms identify core issues that should drive decision making in the care of older adults. They organize care and focus on the older adult's wellness and strengths rather than solely on disease. The 4Ms are relevant regardless of an older adult's individual disease(s). They apply regardless of the number of functional problems an older adult may have; that person's cultural, racial, ethnic, or religious background; or their socioeconomic status.³

The 4Ms are a framework, not a program, to guide care of older adults wherever and whenever they come into contact with a health system's care and services. The intention is to equitably incorporate the 4Ms into existing care, rather than layering them on top, in order to organize the efficient delivery of effective care. This integration is achieved primarily through redeploying existing health system resources.

Many health systems have found that they already provide care aligned with one or more of the 4Ms for many of their older adult patients. Opportunities for improvement lie in organizing care equitably so that all 4Ms, as a set of evidence-based practices, guide every encounter with every older adult and, when appropriate, their family or other designated care partners.¹

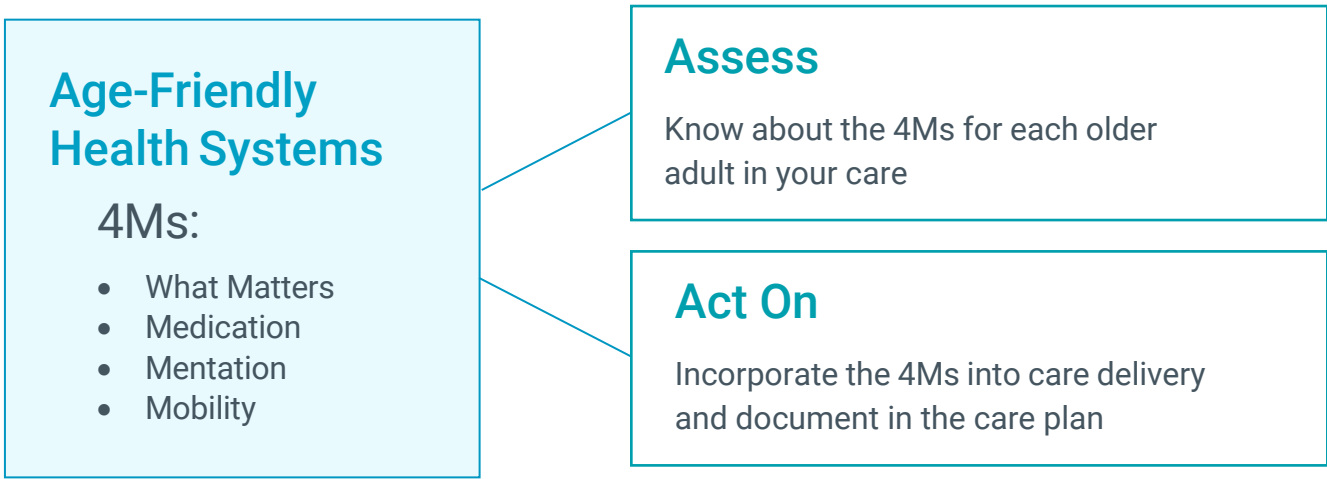
¹ **Care partner or caregiver:** A person (family member, friend, neighbor, coworker, other) who supports an older adult/patient/resident with physical, psychological, financial, spiritual, or other issues related to health.

4Ms Framework: Not a Program, But a Shift in Care

- The 4Ms Framework is not a program, but a shift in how we provide care to older adults.
- The 4Ms are implemented together (i.e., all 4Ms as a set of evidence-based elements of high-quality care for older adults).
- Your system probably practices at least a few of the 4Ms in some places, at some times. Engage existing champions for each of the 4Ms, build on what you already do, and spread it across your system.
- The 4Ms must be practiced reliably and equitably (i.e., for all older adults, in all settings and across settings, in every interaction).

There are two key drivers of age-friendly care (see Figure 2): knowing about the 4Ms for each older adult in your care (“assess”), and incorporating the 4Ms into care delivery and documenting them in the care plan (“act on”). Both must be supported by documentation and communication across settings and disciplines.

Figure 2. Two Key Drivers of Age-Friendly Health Systems



Developed with our [expert faculty and advisors](#) and five pioneering health systems, this Guide to Using the 4Ms in the Care of Older Adults is designed to help care teams test and implement a specific set of evidence-based best practices that correspond to each of the 4Ms. Though the practices of assessing and acting on the 4Ms are similar in most care settings, there are some differences. This Guide begins by outlining the 4Ms for hospital-based and ambulatory/primary care-based settings and then provides practical guidance for implementation.

Putting the 4Ms into Practice

A story of 4Ms care: Learning about an older adult's priorities and motivations

I was doing care management, following older adults across settings of care...This was the very first time that I had met this older adult. She was 90 years old. I'll call her Juanita.

I got a call: "Juanita is in the hospital." They put her on a psychiatric unit because she had pulled the fire alarm in her low-income housing building, and she was confused.

I got to know her over a period of over two years. That first day, she had acute confusion (delirium) on top of a long-term chronic confusion (dementia). **Why?**

What Mattered to her was going out to lunch with her friends. She had worked as a telephone operator during war, and on Wednesdays she would go out with them.

She lived alone. She had arthritis, urinary incontinence, and irritable bowel disease. She was on several **Medications** that interacted. That day, she didn't want to be incontinent as she went out to her lunch (**Mobility**). So, she doubled a dose of a medication called oxybutynin. She was also dehydrated. She arrived at the hospital, and her **Mentation** hadn't been assessed. The team didn't recognize that she had delirium on top of dementia.

You can see how all the 4Ms made a difference. We were able to address them. We were able to taper Medications in partnership with her primary care physician that were interfering with her cognition. We were able to assess her baseline dementia (Mentation) and bring in supports in her home to improve her function so she could do What Mattered to her. She stayed in her home for another year, and later entered a nursing home.

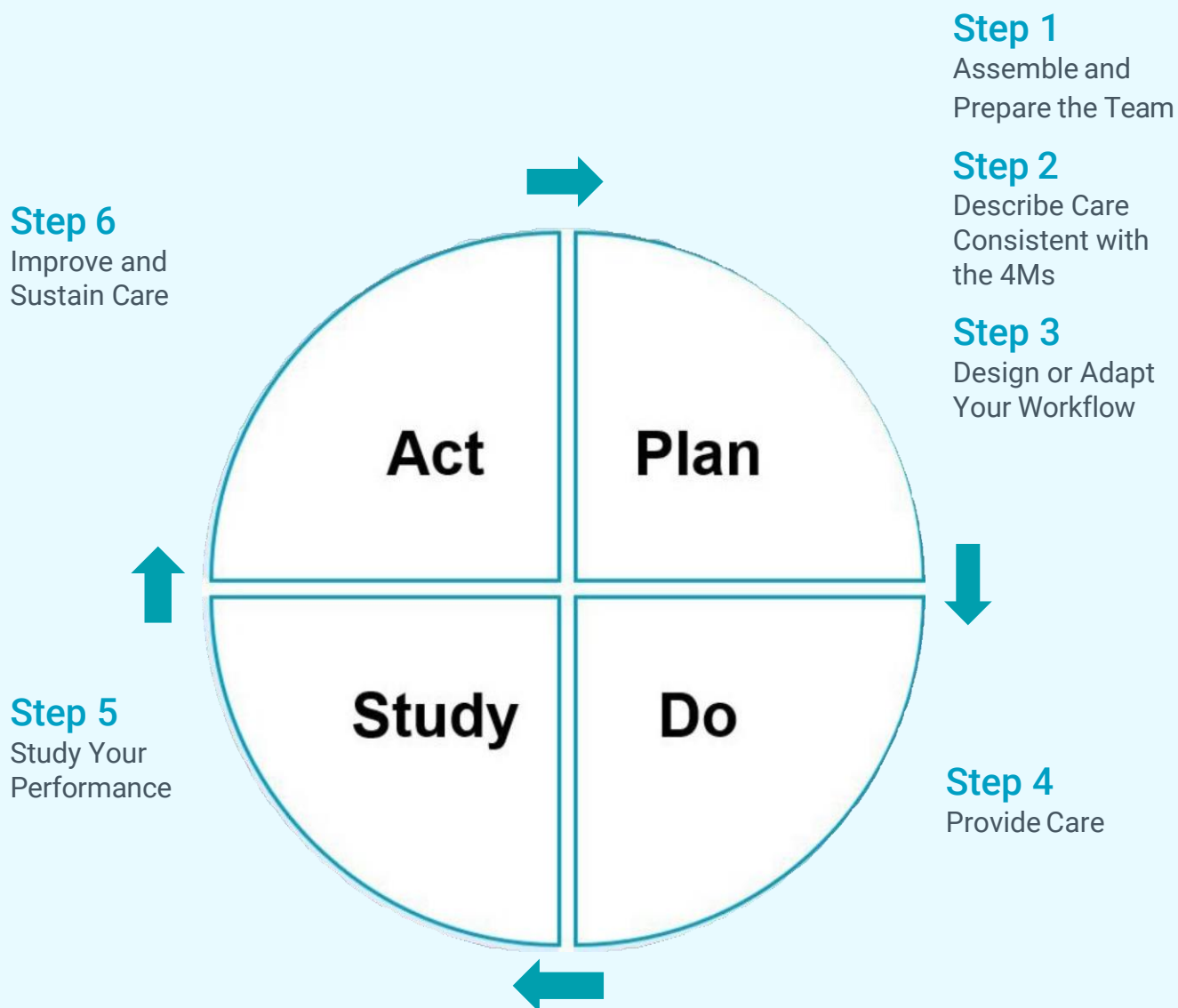
—Donna Fick, PhD, RN

The 4Ms as a set may be integrated into care by following six steps:

1. Understand your current state.
2. Describe care consistent with the 4Ms.
3. Design or adapt your workflow to deliver care consistent with the 4Ms.
4. Provide care consistent with the 4Ms.
5. Study your performance.
6. Improve and sustain care consistent with the 4Ms.

While we present the six steps as a sequence, in practice you can approach steps 2 through 6 as a loop aligned with [Plan-Do-Study-Act \(PDSA\) cycles](#) (see Figure 3).

Figure 3. Integrating the 4Ms into Care Using the PDSA Cycle



Improved outcomes: The impact of 4Ms care

In the first year of a program for older adult inpatients with fractures, Cedars-Sinai Medical Center (Los Angeles, California) observed:

- 11 percent reduction in length of stay
- 41 percent reduction in time of surgery for geriatric inpatients
- \$300,000 direct cost savings
- Projected \$1 million savings as the program expands to serve 300 patients/year

At Providence Health (Oregon), provider champions were trained in 12 primary care clinics. Patients 65+ at the clinics:

- Experienced a 2-7 percent decrease in hospitalizations
- Were 2x as likely to be screened for fall risk and cognitive impairment
- Were 4x more likely to receive fall-risk interventions

One champion said, "These have been my best weeks since I left chief resident year. I'm more connected to my colleagues, more confident in my patient care, more hopeful about the future of medicine."

Using limited resources as a critical access hospital, St. James Parish Hospital (Lutcher, Louisiana) achieved:

- A 62 percent decrease in readmissions from January to September 2020 during the COVID-19 pandemic
- \$93,000 cost savings

Falls with injury continue to decrease.

For more details about these and other case studies across settings and locations, visit <https://www.ihl.org/initiatives/age-friendly-health-systems/resources-and-news>

Step 1. Understand Your Current State

The aim of an Age-Friendly Health System is to reliably apply the two key drivers of age-friendly care: knowing about the 4Ms for each older adult in your care (“assess”), and incorporating the 4Ms into care delivery and documenting in the care plan (“act on”). Almost all systems integrate some of the 4Ms into care, some of the time, with some older adults, in some place in their system. With an understanding of your current experience and capacity to engage in 4Ms care, you can build on that good work until the 4Ms are reliably practiced with all older adults.

The following steps help you prepare for your journey to becoming an Age-Friendly Health System by understanding your current state – knowing the older adults and the status of the 4Ms in your health system currently – and then selecting a care setting and establishing a team to begin testing.

Know the Older Adults in Your Health System

Estimate the number of adult patients served in each age group in the last month (see Table 1).

Table 1. Adult Patients Served in the Last Month (by Age Group)

Age Group	Number	Percent of Total Patients
18–64 years		
65–74 years		
75–84 years		
85+ years		
Total Number of Adult Patients		100%

For adult patients ages 65 and older, specify their languages, races/ethnicities, religious and cultural preferences, and health literacy levels (see Table 2). To screen for health literacy, try using a tool like the Short Assessment of Health Literacy–Spanish and English, Rapid Estimate of Adult Literacy in Medicine–Short Form, or Short Assessment of Health Literacy for Spanish Adults, which are all [freely available online](#) from the Agency for Healthcare Research and Quality (AHRQ).

Table 2. Language, Race, Ethnicity, Religious and Cultural Preferences, and Health Literacy Level of Patients 65 Years and Older

Primary or Preferred Language:	Percent of Total Patients Ages 65+
Race	Percent of Total Patients Ages 65+
Ethnicity	Percent of Total Patients Ages 65+
Religious Preferences	Percent of Total Patients Ages 65+
Cultural Preferences	Percent of Total Patients Ages 65+
Health Literacy Level	Percent of Total Patients Ages 65+
Low	
Moderate	
High	

Know the 4Ms in Your Health System

To identify where the 4Ms are being implemented in your health system, walk through activities as if you were an older adult or family member or other caregiver/care partner. In an ambulatory setting, that may include making an appointment for an Annual Wellness Visit, preparing to come to an Annual Wellness Visit, observing an appointment, and understanding who on the care team takes responsibility for each of the 4Ms. In an inpatient setting, go through registration, spend time on a unit, and sit quietly in the hall of a unit. Look for the 4Ms in action. Find bright spots, opportunities, and champions of each of the 4Ms in your system.

- Use the form provided in [Appendix A](#) to note what you learn.
- Explore equity as it relates to existing work.

An Age-Friendly Health System is one that provides 4Ms care to all older adults. To ensure that the 4Ms are being provided equitably, we encourage systems to specifically explore what disparities might exist and address them throughout their journey.⁴ To start, identify what equity-related activities are already taking place in the organization and how older adults are represented in that work (which may be referred to as “diversity and inclusion”). Have a conversation about how to align efforts to improve outcomes for older adults, especially at the intersection of race, ethnicity, language, sexual orientation, gender identity, and age.

Specifically, systems can explore:

- What is happening internally to address systemic racism, ageism, and bias?
- How are older adults represented in conversations about existing inequities in care?
- What is your capability for reliable and accurate data collection and data stratification (e.g., by race, ethnicity, and language (REaL), sexual orientation and gender identity (SOGI), or other factors)?
- What does your system already know about inequities based on stratification of outcomes by REaL and SOGI? How do those inequities affect older adults?
- What is the historical relationship between the health system and older adults belonging to groups that have been marginalized in your community?
- What is the experience at your organization of older adults who belong to groups that have been marginalized? Form connections with older adults with lived experience to solicit feedback on what is working well and less well.

Select a Care Setting to Begin Testing

Once you know about the older adults in your care and identify where the 4Ms currently exist in your health system, select a care setting in which to begin testing age-friendly interventions. Some questions to consider when selecting a site:

- Is there a setting where a larger number of older adults regularly receive care?
- Is there will at this setting to become age-friendly and improve care for older adults? Is there a champion?
- Is this setting relatively stable (i.e., not undergoing major changes already)?
- Does this setting have access to data, including stratified data? (See the “Study Your Performance” section below for more on measurement.)
- Can this setting be a model for the rest of the organization? (Modeling is not necessary, but can be useful to scale up efforts.)
- Is there a setting where your team members have experience with the 4Ms either individually or in combination? Do they already have some processes, tools, and/or resources to support the 4Ms?
- Is there a setting where the health literacy levels, language skills, and cultural preferences of your patients match the assets of the staff and the resources provided by your health system?

Set Up a Team

- Based on our experience, teams that include certain roles and/or functions, as outlined in Table 3, are most likely to succeed. As you establish your team to begin testing age-friendly interventions, consider the following questions:
 - Does the team represent a diversity of perspectives? Consider all the different roles within the health system that may be involved in practicing the 4Ms with older adults. Additionally, is the team representative of the race, ethnicity, culture, and language diversity of the older adult population?
 - How do power dynamics affect the team? How might you ensure that all team members are able to actively participate in identifying and testing change ideas? Can you protect time for all team members to participate in the improvement process, including by providing coverage for patient

Table 3. Team Member Roles

Team Member	Description
An Older Adult and Caregiver	<p>Patients and families or other caregivers bring critical expertise to any improvement team. They have a different experience with the system than providers and can identify key issues. We highly recommend that each team include at least one older adult, and one family member or other caregiver (ideally more than one), or a way to elicit feedback directly from these individuals (e.g., through a Patient and Family Advisory Council).</p> <p>Additional information about appropriately engaging patients and families in improvement efforts can be found in the IHI blog post Valuing Lived Experience: Why Science Is Not Enough, on the Institute for Patient- and Family-Centered Care website, and from the RUSH Caring for Caregivers program.</p>
Leader/Sponsor	<p>This person champions, authorizes, and supports team activities, as well as engages senior leaders and other groups within the organization to remove barriers and support implementation and scale-up efforts. Although they may not do the “on-the-ground” work, the leader/sponsor is responsible for:</p> <ul style="list-style-type: none"> • Building a case for change that is based on strategic priorities and the calculated return on investment • Encouraging the improvement team to set goals at an appropriate level • Providing the team with needed resources, including staff time and operating funds • Ensuring that improvement capability and other technical resources, especially those related to data collection and analysis, information technology (IT), and electronic health records (EHRs), are available to the team • Developing a plan to scale up successful changes from the improvement team to the rest of the organization
Administrative Partner	<p>This person represents the disciplines involved in the 4Ms and works effectively with the clinicians, other technical experts, and leaders within the organization. We recommend placing the manager of the unit/clinic where changes are being tested in this role because that individual can likely move nimbly to take necessary action to test and implement the recommended changes in the unit and is invested in sustaining changes that result in improvement.</p>

Clinicians Who Represent the Disciplines Involved in the 4Ms	<p>These individuals may include a physician, nurse, physical therapist, social worker, pharmacist, chaplain, and/or others who represent the 4Ms in your context. We strongly encourage interprofessional representation on your team and urge you to enlist more than one clinical champion.</p> <p>These champions should have good working relationships with colleagues and be interested in driving change to achieve an Age-Friendly Health System. Consider professionals who are opinion leaders in the organization, who are sought out by others for advice, and who are not afraid to test and implement change.</p>
Others	<ul style="list-style-type: none"> • Improvement coach • Data analyst/EHR analyst • Finance representative • Other staff members who interact with older adults (e.g., environmental services staff)

In addition to this core team, it is often useful to have the following groups:

- Advisory Group – other champions, those who have worked or are working on related efforts, and skeptics who can advise the team, support the effort to stay on track, and champion the effort broadly in the organization.
- Interest Group – those at any level in the organization who have shown interest in care for older adults. Have a regular, consistent time to convene this group for education, discussion, and question-and-answer sessions (e.g., conduct a “lunch and learn” every other Wednesday at 12:00 pm).

Key Points about What Matters

- The goal of asking What Matters is to understand and align care with each older adult’s specific health outcome goals and care preferences, across settings of care.
- Health outcome goals relate to values and activities — for example, babysitting a grandchild, walking with friends in the morning, or volunteering in the community. They help motivate the individual to sustain and improve health. Health outcomes goals may change if there is a decline in health.
- Care preferences include the care activities (e.g., medications, self-management tasks, health care visits, testing, and procedures) that older adults are willing and able (or not) to do or receive.
- While advance care planning and end of life are important, What Matters extends to **all** care with older adults across their lifespan.

Step 2. Describe Care Consistent with the 4Ms

There are many ways to improve care for older adults. However, there is a specific set of key actions, summarized below, that touch on all 4Ms and dramatically improve care when implemented together (see Table 4). This list of actions is considered the gateway to your journey to becoming an Age-Friendly Health System. In [Appendix B](#) you will find a list of these key actions and ways to get started with each one in your setting, as well as additional tips and resources. Be sure to plan how you will document and make visible the 4Ms across the care team and settings.

Using the 4Ms Care Description Worksheet, available at <https://www.ihl.org/Initiatives/Age-Friendly-Health-Systems/Recognition>, describe a plan for how your system will provide care consistent with the 4Ms. This worksheet helps you to assess, document, and act on the 4Ms as a set, while customizing the approach for your context. To be considered an Age-Friendly Health System, your system must assess people ages 65 and older for all 4Ms, document 4Ms information, and act on the 4Ms accordingly. As you test the 4Ms, you may make updates to your Care Description based on what you learn about the tools and methods that work best in your context.

Consider what you already know about inequities in access to care and supports and how that might affect the ability of all older adults to receive 4Ms care in the manner you are describing. Where you have questions about equity in access, seek to understand through existing data and discussion with older adults from traditionally marginalized groups as well as their caregivers.

Questions to consider:

- How does your current state compare to the actions outlined in the 4Ms Age-Friendly Care Description Worksheet?
- Which of the 4Ms do you already incorporate? How reliably are they practiced?
 - For example: Do you already ask and document What Matters, review for high-risk medication use; screen for and follow up on delirium, dementia, and depression; and screen for and follow up on mobility for each older adult? How reliably are these steps completed? Can you find this information for each older adult in your care for the past week? For the past month?
- Where are there gaps in your processes to assess, document, and act on the 4Ms? What ideas do you have to fill the gaps? Some ideas for how to get started filling those gaps are provided in [Appendix B](#). In this step, describe the initial plan for 4Ms care for the older adults you serve.

Key Points about Mobility

- The focus is on **ensuring early, frequent, and safe mobility**, not just preventing falls. While asking about falls is important, it is not sufficient.
- A mobility screen allows the care team to understand the strengths of the older adult and identify potential opportunities to assess and manage impairments that may reduce mobility.
- It's essential to support older adults in identifying and setting a daily mobility goal that aligns with What Matters to them.

Set an Aim

Given your current state, set an aim for this initial effort that includes addressing the experience of inequities in care. An aim articulates what you are trying to accomplish — what, how much, by when, for whom. It serves as the focus for your team’s work and enables you to measure your progress. Below is an aim statement template that requires you to think about the equitable reach of 4Ms. We suggest starting with what you want to accomplish in the next six months.

Aim Statement Template

By [DATE], [NAME OF ORGANIZATION] will articulate how it operationalizes 4Ms care and will have provided that 4Ms care equitably for [NUMBER] patients 65+ years old.

Step 3. Design or Adapt Your Workflow

After review of your system, you may discover many 4Ms practices already in place. These you can maintain, improve, and expand where necessary. You will likely also discover other ideas you still need to test and implement. The subsequent steps provide guidance for testing and implementing. The key is to ensure that these practices are reliable — happening every time in every setting for every older adult (and their caregivers).

In this Guide, we use terms such as “screening,” “assessment,” and “staging” to describe the purpose of a particular tool or process. See [Appendix H](#) for definitions for these terms as they relate to Age-Friendly Health Systems.

To address known and suspected inequities in care for older adults, examine workflows and test change ideas related to assessing and acting on the 4Ms. Different groups may not have equitable access to regular appointments such as Annual Wellness Visits, to technology such as telehealth or patient portals, or even to acute care support programs such as AGS (American Geriatrics Society) CoCare®: HELP.⁵ To uncover inequities in access, begin by stratifying the data about patients who access your programs by race and ethnicity, as well as other factors relevant to your community. Compare that data to the overall census in your system and in the community. Where you see differences between those who access certain visits, programs, or supports and the census in your system or community, seek to understand why.

Table 4. Age-Friendly Health Systems Summary of Key Actions

	Assess	Act On
	Know about the 4Ms for each older adult	Incorporate the 4Ms into care delivery and document in the care plan
Hospital	Key Actions	
	<ul style="list-style-type: none"> • Ask the older adult What Matters, including their health outcome goals and care preferences • Document What Matters • Document the older adult's preferred support person or caregiver • Review medications and document high-risk medication use • Screen for delirium at least every 12 hours and upon any change in function or behavior • Screen for mobility limitations 	<ul style="list-style-type: none"> • Align the care plan with What Matters • Deprescribe, adjust doses, and avoid high-risk medications • Ensure sufficient oral hydration • Orient to time, place, and situation (or validation and orienting cues with dementia) • Ensure that older adults have their personal adaptive equipment and hearing and vision devices • Prevent sleep interruptions; use nonpharmacological interventions to support sleep • Ensure early, frequent, and safe mobility
Ambulatory	Key Actions (to occur at least annually or after change in condition):	
	<ul style="list-style-type: none"> • Ask the older adult What Matters • Document What Matters • Document the older adult's preferred support person or caregiver • Review medications and document high-risk medication use • Screen for dementia/cognitive impairment. (Consider using a staging tool for older adults who have been diagnosed with dementia.) • Screen for depression • Screen for mobility limitations 	<ul style="list-style-type: none"> • Align and provide care according to What Matters • Deprescribe, adjust doses, and avoid high-risk medications • If screen is positive for cognitive impairment, refer for further evaluation and manage manifestations of cognitive impairment • If depression screen is positive, identify and manage factors contributing to depression and initiate, or refer out for, treatment • Ensure safe mobility, including safe home environment; identify and set a daily mobility goal

Supporting actions:

- Use the 4Ms to organize care and focus on the older adult, wellness, and strengths rather than solely on disease or lack of functionality.
- Integrate the 4Ms into care or existing workflows whenever possible.
- Identify which activities you can stop doing to reallocate resources to reliably practice the 4Ms.
- Document all 4Ms and consider grouping the 4Ms together in the EHR. Find ways to highlight What Matters in the record and care plan as a way to guide care.
- Make the 4Ms visible across the care team and settings.
- Form an interdisciplinary care team that reviews the 4Ms in daily huddles and/or rounds.
- Educate older adults, caregivers, and the community about the 4Ms.
- Link the 4Ms to community resources and supports to achieve improved health outcomes.

Overall, look for opportunities to combine or redesign activities, processes, and workflows around the 4Ms. In this effort you may find that you can stop certain activities and reallocate resources to support age-friendly care.

If you have process flow diagrams or value-stream maps of your daily care, edit these views of your workflow to include the key actions above and your description of age-friendly care.

You may start with a high-level workflow like the examples shown below (see Figures 4 and 5).

Figure 4. Age-Friendly Care Workflow Example for Hospitals: Core Functions

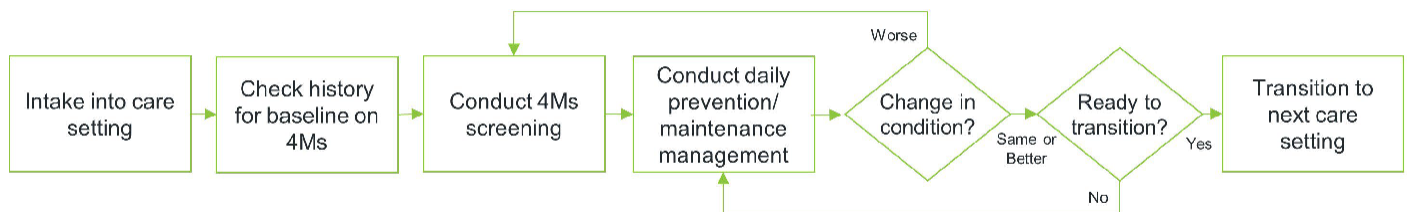
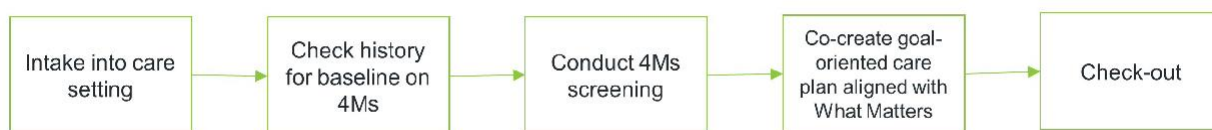


Figure 5. Age-Friendly Care Workflow Example for Primary Care: Core Functions for New Patient, Annual Visit, or Change in Health Status



Then work through the details in the space below each high-level block to show how you will incorporate the 4Ms. Be specific about who will do what, where, when, how, and how it will be documented. Examples are included in [Appendix D](#).

Outline what you still need to learn and identify what you will test (e.g., using the Timed Up & Go Test to evaluate mobility and fall risk). Consider use of a structured equity lens when evaluating potential change ideas. For ideas, review the questions in [Table 1](#) of this piece: [Weaving Equity into Every Step of Performance Improvement](#).

Step 4. Provide Care

Learn as you move toward reliable 4Ms care. Begin to test the key actions with one older adult and their family or other caregivers as soon as you have notes for Step 2 (Describe Care Consistent with the 4Ms) and Step 3 (Design or Adapt Your Workflow). Do not wait to have your forms or EHR screens finalized before you test with one older adult. Use the [PDSA tool](#) to learn more from your tests. Then, scale up your tests. For example:

- Apply your draft standard procedure and workflow first with one patient. Can your team follow the procedure in your work environment?
- If necessary, modify your procedure. Then, apply it with five patients. What lessons do you learn from applying 4Ms care with these patients? What impact does learning about all 4Ms have on care plans?
- If necessary, modify your procedure. Then, apply with 25 patients and keep going. Are you getting close to being able to use your procedure for every patient? Are you getting good results?
- Examples of PDSA cycles can be found in [Appendix E](#).

Based on the inequities you have found in your data, identify adaptations needed to address them. Leverage existing outreach programs that serve older adults who experience barriers to accessing care or belong to groups that have been marginalized.

Step 5. Study Your Performance

How reliable is your 4Ms care? What impact does your 4Ms care have? Here is an approach to study your performance.

Observe and Seek to Understand

Observe: Start your study with direct observation of your draft 4Ms Care Description in action.

- Can your team follow the Care Description and successfully assess and act on the 4Ms with older adults?
- Do care plans reflect 4Ms care?

In the first month, do this for at least one patient each week. Then, for the next six months, observe 4Ms care for at least five patients each month.

Ask Your Team: At least once per month for the first six months of your efforts, ask your team two open-ended questions and reflect on the answers:

- What are we doing well to assess and act on the 4Ms?
- What do we need to change to translate the 4Ms into more effective care?
- What do we need to address to ensure that older adults are experiencing the 4Ms equitably?

Plan with your team how and when you will continue to reflect together, using open-ended questions on an ongoing basis.

Ask Older Adults and Caregivers: At least once in the first month of your effort, ask an older adult and family or other caregiver two open-ended questions and reflect on the answers:

- What went well in your care today?
- What could we do better to understand what age-friendly care means to you?

Then try the questions with five additional older adults in the second month. Plan with your team how and when you will continue to talk with older adults using open-ended questions on an ongoing basis. Consider engaging one or more older adults as a member of the team that is working to adopt the 4Ms. State where you will document the feedback received during these conversations. When identifying older adults to speak with, ensure that you are connecting with older adults who represent the diversity in your system and have a range of experiences.

Measure How Many Patients Receive 4Ms Care

There are three options to start measuring the number of patient encounters that include 4Ms care. We recommend Option 1 because it focuses close attention to the 4Ms work and takes less effort than conducting retrospective chart audits or building a specific EHR report.

Option 1: Real-Time Observation

Use real-time observation and staff reporting of the work to tally your 4Ms counts on a whiteboard or on paper. An example for patients seen in a primary care clinic might look like the chart below (see Figure 6).

Figure 6. Example of Real-Time Observation in a Primary Care Clinic*

*Delirium screening and assessment required in hospitals but not ambulatory practices.

Date	4Ms Care according to our site description					
	All 4Ms	What Matters	Medications	Depression	Dementia	Mobility
Pt ID	if N, check details					
101	Y N	Y N	Y N	Y N	Y N	Y N
102	Y N	Y N	Y N	Y N	Y N	Y N
103	Y N	Y N	Y N	Y N	Y N	Y N
104	Y N	Y N	Y N	Y N	Y N	Y N
105	Y N	Y N	Y N	Y N	Y N	Y N
106	Y N	Y N	Y N	Y N	Y N	Y N
107	Y N	Y N	Y N	Y N	Y N	Y N
108	Y N	Y N	Y N	Y N	Y N	Y N
109	Y N	Y N	Y N	Y N	Y N	Y N
110	Y N	Y N	Y N	Y N	Y N	Y N
111	Y N	Y N	Y N	Y N	Y N	Y N
112	Y N	Y N	Y N	Y N	Y N	Y N
113	Y N	Y N	Y N	Y N	Y N	Y N
114	Y N	Y N	Y N	Y N	Y N	Y N
115	Y N	Y N	Y N	Y N	Y N	Y N

Option 2: Chart Review

If real-time observation is not feasible, consider a sampling strategy using chart review. Using a tally sheet like the example discussed in Option 1, review charts for evidence of 4Ms care. At the start of your work to test implementing the 4Ms:

- Review charts of older adults with whom you have tested (i.e., intended to provide) 4Ms care in a particular time period to confirm proper documentation of 4Ms care. To estimate the number of older adults receiving 4Ms care in that particular time period (e.g., monthly), randomly sample 20 charts.
- In the 20 sample charts, observe how many older adults received your described 4Ms care (noted as “C” in the calculation below). Example: 100 older adults seen on the unit were eligible to receive 4Ms care this month. Of those 100 older adults, we reviewed 20 charts, and 10 received 4Ms care according to our description. So $(10/20) \times 100 = 50$ older adults received 4Ms care this month (estimated).
- Calculate the approximate number of older adults receiving 4Ms care in the time period as follows:

Estimated number of older adults receiving 4Ms care =

$$(C \div 20) \times \text{Total number of older adults eligible for 4Ms care}$$

Option 3: EHR Report

You may be able to run EHR reports, especially on assessment of the 4Ms, to estimate the number of patient encounters that include 4Ms care in a particular time period. It may take a lot of effort to create a suitable report, so we do not recommend this option as your first choice. However, for ongoing process control, some organizations may wish to develop reports that show 4Ms performance; you can request report development from your IT service while starting with Option 1 or 2.

Routine Counting of Patients

Once your site provides 4Ms care with high reliability (see [Appendix E](#)), then the estimate of the number of patient encounters that include 4Ms care is tantamount to the volume of patients receiving care from your site during the measurement period.

Additional Measurement Guidance and Recommendations

The tables below provide additional guidance for counting the number of patients receiving 4Ms care. (See the [Age-Friendly Health Systems: Measures Guide](#) for guidance about recommended process, outcome, and balancing measures to inform age-friendly care.)

Hospital Site of Care	
Measure Name	Older Adults Receiving Age-Friendly (4Ms) Care
Measure Description	Number of patients 65 years and older who receive 4Ms care as described by the hospital
Site	Hospital unit, hospital, or set of hospitals
Population Measured	Patients 65 years and older
Measurement Period	Monthly
Count	Inclusion: All patients 65 years and older with length of stay (LOS) greater than or equal to 1 day present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period who receive the unit’s description of 4Ms care

Measure Notes	<ul style="list-style-type: none"> The measure may be applied to units within a system as well as the entire system. See the 4Ms Age-Friendly Care Description Worksheet to describe 4Ms care for your unit. For it to be considered age-friendly (4Ms) care, you must screen all patients 65 years and older for all 4Ms, document the results, and act on them as appropriate. If a total count is not possible, you can sample (e.g., audit 20 patient charts) and estimate the total as number of patient encounters using 4Ms care/20 x total number of patients cared for in the measurement period. If you are sampling, please note that when sharing data. Once you have established 4Ms care as the standard of care on your unit, validated by regular observation and process review, you can estimate the number of patients receiving 4Ms care as the number of patients cared for by the unit. You do not need to filter the number of patients by unique medical record number (MRN).
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Ambulatory/Primary Care Site of Care	
Measure Name	Older Adults Receiving Age-Friendly (4Ms) Care
Measure Description	Number of patients 65 years and older who receive age-friendly (4Ms) care as described by the measuring unit
Site	Ambulatory/primary care
Population Measured	Patients 65 years and older
Measurement Period	Monthly
Count	Inclusion: All patients 65 years and older in the population considered to be patients of the ambulatory or primary care practice (e.g., patient assigned to a care team panel and seen by the practice within the past three years) who have an office visit, home visit, or telemedicine visit with the practice during the measurement period and who receive 4Ms care as described by the site.
Measure Notes	<ul style="list-style-type: none"> The measure may be applied to units within a system as well as the entire system. See the 4Ms Care Description Worksheet to describe 4Ms care for your unit. For it to be considered age-friendly (4Ms) care, you must screen all patients 65 years and older for all 4Ms, document the results, and act on them as appropriate. Note that the 4Ms screening in primary care may be defined as screening within the previous 12 months. If a total count is not possible, you can sample (e.g., audit 20 patient charts) and estimate the total as the number of patients receiving 4Ms care/20 x total number of patients cared for in the measurement period. If you are sampling, please note that when sharing data. Once you have established 4Ms care as the standard of care on your unit, validated by regular observation and process review, you can estimate the number of patients receiving 4Ms care as the number of patients cared for by the unit. You do not need to filter the number of patients by unique medical record number (MRN).

See [Appendix G](#) for additional recommendations on measuring the impact of 4Ms care.

Stratify Your Data by Race, Ethnicity and Language

Based on your exploration in previous steps, you have hopefully discovered what capabilities exist in your system(s) to stratify data by current self-reported categories, including race, ethnicity, and language (REaL) as well as sexual orientation and gender identity (SOGI) data collection, and how to access stratified measures.

Teams that are new to stratification can start with stratifying one measure that is most reliably collected and work toward stratifying all 4Ms measures being collected.

Examine your data in this way to identify any gaps in care and explore what adjustments to your current processes are required to close these gaps and provide equitable access to 4Ms care.

Health equity requires that health systems stratify key performance measures by these factors to reveal disparities and provoke action to eliminate them. For Age-Friendly Health Systems, we encourage stratifying outcome measures for older adults using the Office of Management and Budget core race and ethnicity factors to identify disparities in patient care and experience. We also encourage participation in the Human Rights Campaign Healthcare Equality Index, which promotes LGBTQ-friendly patient-centered care.

Step 6. Improve and Sustain Care

While working to fully embed the 4Ms into your care, adapt approaches and resources to different languages, literacy levels, sexual orientations, and cultures. Before widely or permanently implementing a change, test it with diverse older adults and modify as necessary to meet the needs of all who access care.

For example, do resources represent care relationships across different sexual orientations? Do providers who talk about health care proxies and wishes for care through the end of life understand the nuances of how these conversations may vary in different cultures? How can conversations be adapted to suit different cultural norms?

For more information about how to improve and sustain your 4Ms care, please see the IHI white paper [Sustaining Improvement](#).

When considering the sustainability of your changes over time, use MOCHA (Measurement, Ownership, Communication, Hardwire the change, Assess the workload) to help identify areas for focus (see Table 6).

Table 6. MOCHA Questions for Sustainability of the 4Ms

Measurement	<ul style="list-style-type: none">• What measures are we tracking that will allow us to know how reliable our 4Ms care is for older adults in our system?• How will we know what impact the 4Ms are having on key outcomes?• Who is responsible for ensuring measures are tracked and monitored over time?• How are our measures being shared with leadership and staff involved in providing 4Ms care?
Ownership	<ul style="list-style-type: none">• Who is the lead for the 4Ms in our system? Do they have what they need to support spread of the 4Ms over time?• Who is our leadership champion? How are they involved in supporting this work over time?
Communication	<ul style="list-style-type: none">• How are we sharing what we learn about the 4Ms and their impact on care?• Do all staff who are involved in providing 4Ms care know about the advantages of providing 4Ms care?

	<ul style="list-style-type: none"> • Are we training new and current staff on how to assess and act on the 4Ms? • How are we communicating about our needs and successes at all levels in the system? • How are we communicating about the 4Ms to older adults?
Hardwire the change	<ul style="list-style-type: none"> • Are the 4Ms integrated into workflows? • Do the EHR and other key support tools reflect the 4Ms? • Have we integrated the 4Ms into regular huddles and care planning conferences to maximize impact? • Have we listed assessing and acting on the 4Ms as part of key responsibilities for relevant care roles?
Assess the workload	<ul style="list-style-type: none"> • Do we know what impact assessing and acting on the 4Ms has on the current workload of staff? • If we have added to responsibilities, have we adjusted other responsibilities as needed?

Reminder: Integrating the 4Ms As a Cycle

While we present the steps as a sequence, in practice Steps 2 through 6 are a cycle aligned with the Plan-Do-Study-Act method. As you establish your age-friendly care, you may cycle through these steps many times over the course of several months in order to achieve reliability and then turn your efforts to sustainability and monitoring (quality control) over time.

Appendix A: Process Walk-Through: Know the 4Ms in Your Health System

There are two key drivers to age-friendly care: knowing about the 4Ms for each older adult in your care (“assess”) and incorporating the 4Ms into the plan of care (“act on”). The aim in an Age-Friendly Health System is to reliably assess and act on the 4Ms with all older adults. Just about all systems have integrated some of the 4Ms into care, some of the time, with some older adults, in some places in their systems. The work now is to understand where that is happening and build on that good work so that all 4Ms occur reliably for all older adults in all care settings.

How do you already assess and act on each of the 4Ms in your setting? One way to find out is to spend time in your unit, your practice, or your hospital observing the care. As you do, note your observations in response to the questions below as you learn more about how the 4Ms are already in practice in your system.

- ☐ What are current activities and services related to each of the 4Ms? What processes, tools, and resources to support the 4Ms do we already have in place here or elsewhere in the system?
- ☐ Where is the prompt or documentation available in the EHR or elsewhere for all clinicians and the care team? Is there a place to see the 4Ms (individually or together) accessible to all team members? Across settings?
- ☐ What experience do your team members have with the 4Ms? What assets do you already have on the team? What challenges have they faced? How have they overcome them?
- ☐ What internal or community-based resources do you commonly refer to, and for which of the 4Ms? For which of the 4Ms do you need additional internal and/or community-based resources?
- ☐ Do your current 4Ms activities and services appear to be having a positive impact on older adults and/or family or other caregivers? Do you have a way to hear about the older adults’ experience?
- ☐ Do your current 4Ms activities and services appear to be having a positive impact on clinicians and staff?
- ☐ Which languages do older adults and their family or other caregivers speak? Read?
- ☐ Do the health literacy levels, language skills, and cultural preferences of older adults match the assets of your team and the resources provided by your health system?
- ☐ What activities are taking place in your organization related to equity (may be called “diversity and inclusion”) and how are older adults represented in this work?
- ☐ What programs exist to support older adults related to the social determinants of health? How can they complement work on the 4Ms?
- ☐ What works well?
- ☐ What could be improved?

4Ms	Specifically, Look for How Do We...	Current Practice and Observations
<p>What Matters: Know and align care with each older adult's specific health outcome goals and care preferences, including, but not limited to, advance care planning and end of life, across settings of care.</p>	<ul style="list-style-type: none"> • Ask the older adult What Matters most, including each person's health outcome goals and care preferences, using previously validated questions or tools, document the answers, and share What Matters across the care team. • Align and provide care according to What Matters to each older adult, including each person's health outcome goals and care preferences. • Adapt the What Matters process based on language, culture, or other patient factors to ensure that it aligns to the needs of all patients. 	
<p>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.</p>	<ul style="list-style-type: none"> • Review all medications. • Identify and document high-risk and potentially inappropriate medication use. • Deprescribe (includes dose reduction and medication discontinuation) • Understand any variations in prescribing through stratification by race and ethnicity. 	
<p>Mentation: Prevent, identify, treat, and manage dementia, depression, and delirium across settings of care.</p>	<p>Hospital:</p> <ul style="list-style-type: none"> • Screen for delirium at least every 12 hours and document and act on the results. • Ensure sufficient oral hydration. • Orient to time, place, and situation (validation and orienting cues if they have dementia). • Ensure that older adults have their personal adaptive equipment. • Avoid high-risk medication that may cause delirium. • Prevent sleep interruptions; use nonpharmacological interventions to support sleep. • Treat delirium with hydration, safe mobility, and good sleep practice, following best practice guidelines, including avoiding medications (there is no approved medication for delirium treatment as of 2022, and most medications worsen delirium), 	

4Ms	Specifically, Look for How Do We...	Current Practice and Observations
	<p>search for a cause of the delirium, keep the older adult mobile and safe to avoid complications that are common in delirium, restore function, and educate family and care partners to prevent future delirium.</p> <ul style="list-style-type: none"> • Provide screening and follow-up for patients exhibiting signs or symptoms of dementia or cognitive impairment. <p>Ambulatory Practice:</p> <ul style="list-style-type: none"> • Screen for cognitive impairment and document the results. • If cognitive impairment screen is positive, refer for further evaluation, rule out reversible causes, and manage manifestations of cognitive impairment including support and/or referrals for living with dementia for the person with dementia and the care partner. • Provide support to people with an established diagnosis of dementia according to stage of disease. • Take steps to mitigate any stigma related to cognitive impairment. • Screen for depression and document the results. • If depression screen is positive, identify and manage factors contributing to depression, and initiate, or refer out for, treatment. 	
<p>Mobility: Ensure that each older adult moves safely every day in order to maintain function and do What Matters.</p>	<p>Hospital</p> <ul style="list-style-type: none"> • Screen for mobility limitations and document and act on the results. • Mobilize three times a day or as directed by the clinical team. • Facilitate patient getting out of bed or leaving room for meals, therapy, or activities. • Initiate physical therapy intervention, if appropriate. • Avoid restraints (physical or chemical). • Remove catheters and other tethering devices, if appropriate. • Assess for medications that may limit mobility • Understand any variations in assessing and acting on Mobility through stratification by race and ethnicity. 	

4Ms	Specifically, Look for How Do We...	Current Practice and Observations
	<p>Ambulatory Practice</p> <ul style="list-style-type: none">• Educate older adults and caregivers about safe mobility.• Manage mobility challenges.• Ensure safe home environment for mobility.• Identify and set a daily mobility goal.• Avoid high-risk medications.• Refer to physical therapy, if appropriate.• Understand any variations in assessing and acting on Mobility through stratification by race and ethnicity.	

Appendix B: Key Actions and Getting Started with Age-Friendly Care

Assess: Know about the 4Ms for Each Older Adult in Your Care		
Key Actions	Getting Started	Tips and Resources ²
Ask the older adult What Matters	<p>Giving patients an opportunity to share their fears and concerns about their health and about being in the hospital helps you tailor treatment and education to help address these concerns.</p> <p><i>“What concerns you most when you think about your health, including your cancer and its treatment?”</i></p> <p><i>Or:</i></p> <p><i>“What fears and worries do you have about your health, including your cancer and its treatment?”</i></p> <p>Identifying a desired outcome that patients want to achieve through treatment or being in the hospital helps to align care with what matters most to each person.</p> <p><i>“What outcome do you most want from being in the hospital?”</i></p> <p><i>“What would you most like to be able to do as a result of being in the hospital?”</i></p> <p>For older adults with advanced or serious illness, consider: <i>“What are your most important goals if your health situation worsens?”⁶</i></p>	<p>Tips</p> <ul style="list-style-type: none"> • This action focuses clinical encounters, decision making, and care planning for What Matters to the older adult. • Consider segmenting your population by healthy older adults, those with chronic conditions, those with serious illness, and individuals at the end of life. How you ask What Matters to each segment may differ. • Knowing What Matters has two purposes. One is getting to know the person, which helps provide better care. Ask questions such as, “What is a good day for you?”; “Who is important to you?”; “What brings you joy?”; and “What makes life worth living?” The second purpose is to align care with What Matters. The desired outcomes and fears, concerns, and questions are useful to know in the hospital setting. • Review the “How to Have Conversations with Older Adults About ‘What Matters’: A Guide for Getting Started” and check the resources listed below. Then select one of these approaches to identifying What Matters to use with older adults who are healthy or have chronic conditions and one to use with older adults with serious illness or who are near the end of life. • Responsibility for asking What Matters can rest with any member of the care team; however, one person needs to be identified as responsible to ensure it is reliably done. • You may decide to include family members or other caregivers in a discussion about What Matters; however, it is important to also ask the older adult individually. • Ask people with dementia What Matters. Ask people with delirium What Matters at a time when they are suffering least from delirium symptoms. • Consider what variations might be required in the approach to What Matters based on race, ethnicity, and language. • Leverage What Matters conversations to hear the voices and wishes of traditionally marginalized older adults. <p>Resources</p> <ul style="list-style-type: none"> • “What Matters” to Older Adults?: A Toolkit for Health Systems to Design Better Care with Older Adults • “How to have Conversations with Older Adults About ‘What Matters’: A Guide for Getting Started”

² Many free tools and resources are included throughout this Appendix and Guide; however, some may have associated costs. Contact the owner of the resource for more information about pricing.

Assess: Know about the 4Ms for Each Older Adult in Your Care		
Key Actions	Getting Started	Tips and Resources
Document What Matters		<ul style="list-style-type: none"> • The Conversation Project and "Conversation Ready" • Patient Priorities Care • Serious Illness Conversation Guide • "What Matters to You?" Instructional Video and A Guide to Having Conversations about What Matters (BC Patient Safety & Quality Council) <p>We recognize that members of different groups have diverse needs. There are resources available that are specific to various communities. For example, the following resources can help to integrate an LGBTQ lens into this action:</p> <ul style="list-style-type: none"> • Caregiving in the LGBT Community: https://www.lgbtagingcenter.org/resources/resource.cfm?r=883 • Create Your Care Plan: https://www.lgbtagingcenter.org/resources/resource.cfm?r=879 • My Personal Directions: https://www.lgbtagingcenter.org/resources/resource.cfm?r=916 • Advocating for Yourself: https://www.lgbtagingcenter.org/resources/resource.cfm?r=950 • Supporting LGBT People Living with Dementia: https://www.lgbtagingcenter.org/resources/resource.cfm?r=967 • Issue Brief: LGBT People and Dementia: https://www.lgbtagingcenter.org/resources/resource.cfm?r=945 • Inclusive Services for LGBT Older Adults: A Practical Guide to Creating Welcoming Agencies: https://www.lgbtagingcenter.org/resources/resource.cfm?r=487
	Documentation can be on paper, on a whiteboard, or in the electronic health record (EHR), where it is accessible to the whole care team across settings. ⁷	<p>Tips</p> <ul style="list-style-type: none"> • Convert whiteboards to What Matters boards and include information about the older adults (e.g., what name they like to be called, the pronouns they use, favorite foods, favorite activities, what concerns or upsets them, what soothes them, assistive devices, the names and phone numbers of family members or other caregivers, and their desired goals and outcomes of the hospitalization). Identify who on the care team is responsible for ensuring that the information is updated. • Identify where health and health care goals and priorities can be captured in your EHR and available across care teams and settings.

Assess: Know about the 4Ms for Each Older Adult in Your Care		
Key Actions	Getting Started	Tips and Resources
Review for high-risk and potentially inappropriate medication use		<ul style="list-style-type: none"> Consider documentation of What Matters to the older adult on paper that they can bring to appointments and other sites of care. Review What Matters documentation across older adult patients to ensure they are specific to each person (i.e., watch out for generic or the same answers across all patients, which suggests that a deeper discussion of What Matters is warranted). <p>Resources</p> <ul style="list-style-type: none"> “What Matters to You?” Instructional Video and A Guide to Having Conversations about What Matters (BC Patient Safety & Quality Council) “All about Me” Board: Do you know your patient? Knowing individuals with dementia combined with evidence-based care promotes function and satisfaction in hospitalized older adults.
	<p>Specifically, look for:</p> <ul style="list-style-type: none"> Benzodiazepines Opioids Highly anticholinergic medications (e.g., diphenhydramine) All prescription and over-the-counter sedatives and sleep medications Muscle relaxants Tricyclic antidepressants Antipsychotics^{8,9,10} Mood stabilizers 	<p>Tips</p> <ul style="list-style-type: none"> If you decide to limit the number of medications to focus on, identify those most frequently dispensed in your hospital or unit, or those for which there is a champion to deprescribe. Target medications that: <ul style="list-style-type: none"> Are without indication Have not had the intended response Are no longer needed Duplicate effects (both benefits and harms) Are not being taken and adherence is not critical <p>Resources</p> <ul style="list-style-type: none"> American Geriatrics Society 2023 Updated AGS Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults AGS 2023 Beers Criteria® Pocketcard STOPP (Screening Tool of Older Persons’ Prescriptions) and START (Screening Tool to Alert to Right Treatment) TaperMD tool to help optimize medication regimens

Assess: Know about the 4Ms for Each Older Adult in Your Care		
Key Actions	Getting Started	Tips and Resources
Screen for delirium at least every 12 hours	If you do not have an existing tool, try using the Ultra-Brief Confusion Assessment Method .	<p>Tips</p> <ul style="list-style-type: none"> Decide on the evidence-informed tool that best fits your care team culture. Train staff at least annually in delirium screening competency, as the accuracy falls if not done correctly. Be aware that low prevalence rates of delirium before the 4Ms are in place may indicate inaccurate or inadequate use of a screening or assessment tool. It is critical to use any tool only as instructed and to do ongoing training (yearly competency and orientation for new staff) to make sure it is being used correctly. Also critical is pairing any screening/assessment with prevention and best-practice treatment of the behaviors that may occur with delirium. Behavior is a form of communication. Delayed recognition of delirium and failure to properly manage (e.g., prescribing and administering excessive medication) often leads to complications. Share with older adults and family caregivers that being in the hospital puts the older adults at risk of experiencing delirium. So, it is important to understand their brain health while in the hospital, and it needs to be assessed regularly like blood pressure and other vital signs. Establish a relationship with the older adult to put them at ease, using a nonjudgmental approach that increases comfort with the screening (e.g., "These are routine tests and an important part of your health care. Just do your best."). Ask questions in a way that emphasizes the older adult's strengths (e.g., "Please tell me the day of the week" rather than "Do you know what day it is today?"). Be prepared to train and support providers who are uncomfortable with testing or have the desire to cue the older adult because they "feel bad" when the older adult gets it wrong. Educate family members or other caregivers on the signs of delirium and enlist their support to alert the care team to any changes as soon as they notice them. Ask them if their loved one seems "like themselves." Document mental status in the chart to measure changes shift-to-shift. Until ruled out, consider a change in mental status to be delirium and raise awareness among the care team and family members or other caregivers about the risk of delirium superimposed on dementia. Delirium can and often does occur on top of an existing dementia, and it can be treated and reversed. Note: Delirium has an underlying cause and is preventable and treatable in most cases. Care teams need to take a multi-pronged approach: <ol style="list-style-type: none"> Remove or treat underlying cause(s). <ul style="list-style-type: none"> Most common causes to consider: Medications (anticholinergic), infections (urinary tract infection, respiratory), dehydration, electrolyte imbalance, impaired oxygenation, severe pain, sleep deprivation. Manage and understand delirium behaviors. Restore or maintain cognitive and physical function (mobilize).

Assess: Know about the 4Ms for Each Older Adult in Your Care		
Key Actions	Getting Started	Tips and Resources
		<ul style="list-style-type: none">Understand how screening for Mentation might be viewed in different cultures and ensure culturally appropriate support for older adults and their caregivers. <p>Resources</p> <ul style="list-style-type: none">Confusion Assessment Method (CAM)UB-CAM appNursing Delirium Screening Scale (Nu-DESC)Network for Investigation of Delirium (NIDUS)Critical Illness, Brain Dysfunction, and Survivorship (CIBS) CenterAmerican Delirium SocietyDelirium in Older Persons: Advances in Diagnosis and TreatmentThe Evaluation and Management of Delirium among Older Persons – includes an example of a restraint-free, nonpharmacologic management approach called the TA-DAA approach (tolerate, anticipate, don’t agitate, and ambulate)Age Friendly - Providing Delirium Prevention in Age-Friendly CareAGS CoCare®: HELP program: Related Age-Friendly Resources

Screen for dementia/cognitive impairment	<p>If you do not have an existing tool, try using the Mini-Cog®.¹²</p> <p>If screen is positive, refer to primary care physician or specialist for further assessment.</p>	<p>Tips</p> <ul style="list-style-type: none"> • Promote comfort during cognitive screening with patients. For example, say “I’m going to check your brain health like we check your blood pressure, or your heart and lungs.” • Emphasize an older adult’s strengths when screening and document them so that all providers have a baseline cognitive screen. • Co-design a process with your team to follow up if screening is positive. • Consider the Annual Wellness Visit or the annual visit with their primary care physician or nurse practitioner as an opportunity to do screening. <p>Resources</p> <ul style="list-style-type: none"> • Saint Louis University Mental Status (SLUMS) Exam • Montreal Cognitive Assessment (MoCA)
Screen for mobility limitations	<p>If you do not have an existing tool, try using Timed Up & Go (TUG).^{13,14} Or, try observing the Up & Go without timing to assess mobility and determine what supports are needed.</p>	<p>Tips</p> <ul style="list-style-type: none"> • Recognize that older adults may be worried about having their mobility screened.

Assess: Know about the 4Ms for Each Older Adult in Your Care		
Key Actions	Getting Started	Tips and Resources
		<ul style="list-style-type: none">• Underscore that a mobility screen allows the care team to know the strengths of the older adult.• You can learn a lot about a person’s mobility by observing them turning over in bed, getting in and out of bed and a chair, and walking to the bathroom. It doesn’t have to take extra time. Rather, get into the habit of observing and interpreting older adults’ movements.• Have a walker on hand in case needed. A gait belt may be helpful as well.• Co-design a process with your team to follow up on the results of the screen. <p>Resources</p> <ul style="list-style-type: none">• Johns Hopkins – Highest Level of Mobility (JH-HLM) Scale• Short Physical Performance Battery (SPPB) and Gait speed• Performance-Oriented Mobility Assessment/Tinetti Mobility Test• 4-Item Dynamic Gait Index (DGI)• Hierarchical Assessment of Balance and Mobility (HABAM)• Banner Mobility Assessment Tool• Functional Independence Measure (FIM)

Act on: Incorporate the 4Ms into the Plan of Care		
Key Actions	Getting Started	Tips and Resources
Align the care plan with What Matters	Incorporate What Matters into the goal-oriented plan of care and align care decisions with the older adult's goals and preferences ^{15 16 17} (i.e., What Matters).	<p>Tips</p> <ul style="list-style-type: none">• Health outcome goals are the activities that matter most to an individual, such as babysitting a grandchild, walking with friends in the morning, or continuing to work as a teacher. Health care preferences include the medications, health care visits, testing, and self-management tasks that an individual is able and willing to do.• When you focus on the older adult's priorities, Medication, Mentation, and Mobility usually come up because addressing them enables people to do more of What Matters to them.• Consider how care while in the hospital can be modified to align with What Matters.• Consider What Matters to the older adult when discussing and making plans for the transition from the hospital.• Use What Matters to develop the care plan and navigate tradeoffs. For example, you may say, "There are several things we could do, but knowing what matters most to you, I suggest we..."• Use the older adult's priorities (not just diseases) in communicating, decision making, and assessing benefits.• Use collaborative negotiations; agree that there is no best answer and brainstorm alternatives together. For example, you may say, "I know you don't like the CPAP mask, but are you willing to try it for two weeks to see if it helps you be less tired, so you can get back to volunteering, which you said was most important to you?"• Care options may involve input from many disciplines (e.g., physical therapy, social work, community organizations, and so on). Using patients' health outcome goals as the target of care for all disciplines puts everyone on the same page. Patients' goals are the only thing that can integrate the care across disciplines and settings. <p>Resources</p> <ul style="list-style-type: none">• "What Matters" to Older Adults?: A Toolkit for Health Systems to Design Better Care with Older Adults• "How to have Conversations with Older Adults About 'What Matters': A Guide for Getting Started"• Patient Priorities Care• Serious Illness Conversation Guide• "What Matters to You?" Instructional Video and A Guide to Having Conversations about What Matters (BC Patient Safety & Quality Council)

Act on: Incorporate the 4Ms into the Plan of Care		
Key Actions	Getting Started	Tips and Resources
Deprescribe or do not prescribe high-risk or potentially inappropriate medications**	<p>Specifically avoid or deprescribe the high-risk medications listed below.</p> <ul style="list-style-type: none"> • Benzodiazepines • Opioids • Highly anticholinergic medications (e.g., diphenhydramine) • All prescription and over-the-counter sedatives and sleep medications • Muscle relaxants • Tricyclic and other antidepressants • Antipsychotics^{18, 19, 20, 21} • Mood stabilizers <p>If the older adult takes one or more of these medications, discuss any concerns the patient may have, assess for adverse effects, and discuss deprescribing with the older adult.²²</p>	<p>Tips</p> <ul style="list-style-type: none"> • These medications, individually and in combination, may interfere with What Matters, Mentation, and safe Mobility of older adults because they increase the risk of confusion, delirium, unsteadiness, and falls.²³ • Deprescribing includes both dose reduction and medication discontinuation. Many medications will need to be tapered off and should not be stopped abruptly (e.g., benzodiazepines). • Deprescribing is a person-centered approach, involving shared decision making, close monitoring, and compassionate support. • When possible, avoid prescribing these high-risk medications (prevention); consider changing order sets in the EHR to change prescribing patterns (e.g., adjust/reduce doses, change medications available). • Your institution should have delirium and falls prevention and management protocols that include guidance to avoid and minimize use of high-risk medications. • Offer nonpharmacological options to support sleep and manage pain. • Upon discharge, do not assume that all medications should be sustained. Remove medications the older adult can stop taking upon discharge. • Include a medication list printout as part of standard check-out steps during care transitions and ensure that the older adult and family or other caregivers understand what their medications are for, how to take them, why they are taking them, and how to monitor whether they are helping or possibly causing adverse effects. • Inform the patient's ambulatory clinicians of medication changes throughout the stay and upon discharge from the facility. • Consult pharmacy to assist with medication optimization approaches. • When instituting an age-friendly approach to medications: <ul style="list-style-type: none"> ○ Identify who on your team is going to be the champion for Medication as part of 4Ms care. The champion may not be a pharmacist, but it is vital to have a pharmacist or physician, as well as a patient, work on the plan. ○ Review your setting or system's data, if possible, to identify medications that may be high-risk (e.g., anticoagulants, insulin, opioids) or potentially inappropriate (e.g., anticholinergics). ○ Determine your goal(s) with respect to your medication(s) identified in the previous step. ○ Conduct a series of PDSA cycles to achieve your goal(s). <p>Resources</p>

Act on: Incorporate the 4Ms into the Plan of Care		
Key Actions	Getting Started	Tips and Resources
Ensure sufficient oral hydration**		<ul style="list-style-type: none"> • deprescribing.org • How to implement deprescribing into clinical practice • Deprescribing and Medication Optimization Overview • Alternative Medications for Medications Included in the Use of High-Risk Medications in the Elderly and Potentially Harmful Drug–Disease Interactions in the Elderly Quality Measures • Crosswalk: Evidence-Based Leadership Council Programs and the 4Ms • Effectiveness of Multicomponent Nonpharmacological Delirium Interventions: A Meta-analysis • Mitigating the Dangers of Polypharmacy in Community-Dwelling Older Adults • Lown Institute: Medication Overload and Older Americans • HealthinAging.org (provides expert health information for older adults and caregivers about critical issues we all face as we age) • Handouts for older adults and family caregivers: <ul style="list-style-type: none"> ○ American Geriatrics Society Health in Aging: Care for Medications ○ American Society of Consultant Pharmacists: Printable Fact Sheets ○ NeedyMeds BeMedWise: Free Printable Resources
	Identify a target amount of oral hydration appropriate for the older adult and monitor to confirm it is met.	Tips <ul style="list-style-type: none"> • Ensure that water and other patient-preferred, noncaffeinated fluids are available at the bedside and accessible to the older adult. • The focus here is on oral hydration so that the patient is not on an IV that may interfere with Mobility. • Establish a delirium prevention and management protocol that includes oral hydration. • Replace pitchers with straw water bottles for easier use by older adults.
	<p>Make sure day and date are updated on the whiteboard.</p> <p>Provide an accurate clock with large face visible to older adults.</p> <p>Consider using tools such as an “All about Me” board or poster/card that shows what makes the older adults calm and</p>	Tips <ul style="list-style-type: none"> • For older adults with dementia, consider gentle re-orientation or use of orienting cues; avoid repeated testing of orientation if the older adult appears confused or frustrated.²⁴ • Conduct orientation during every nursing shift as appropriate. • Establish a delirium prevention and management protocol that includes orientation as appropriate. • Identify person-centered environmental and personal approaches to orienting the older adult. • Train staff in recognizing behavior as a form of communication for older adults with a

	<p>pre-existing cognitive impairment or dementia and non-drug approaches to managing behavior such as the DICE Approach (Describe, Investigate, Create, Evaluate), TA-DAA approach (tolerate, anticipate, don't agitate, and ambulate), and others.</p> <ul style="list-style-type: none">• Delirium may occur on top of an existing dementia. If it occurs, potential causes of delirium (such as constipation, dehydration, illness, medications, and others) should be assessed and treated with best practices, including avoiding medication use.• If delirium occurs, continue with hydration and good sleep practice. Use best practice guidelines for delirium treatment, including avoiding medications (there is no approved medication for delirium treatment as of 2024, and most medications worsen delirium). Search for a cause of the delirium. Keep the older adult mobile and safe to avoid complications and restore function. Educate family or care partners to help prevent future delirium.
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Act on: Incorporate the 4Ms into the Plan of Care		
Key Actions	Getting Started	Tips and Resources
Ensure older adults have their personal adaptive equipment**	<p>happy, who is important to them, names of pets, etc.</p> <p>Make current or recent newspapers and periodicals available in patient rooms.</p> <p>Invite family or other caregivers to bring familiar and orienting items from home (e.g., family pictures).</p>	
	<p>Incorporate routine intake and documentation of the older adults' personal adaptive equipment.</p> <p>At the start of each shift, check for sensory aides and offer to clean them. If needed, offer a listening device or hearing amplifier from the unit.</p>	<p>Tips</p> <ul style="list-style-type: none"> • Personal adaptive equipment includes glasses, hearing aids, dentures, canes, wheelchairs, and walkers. • Establish a delirium prevention and management protocol that includes personal adaptive equipment. • Note use of personal adaptive equipment on the whiteboard. • Confirm need for personal adaptive equipment with family or other caregivers. • Assess for mobility aid needs that may be different during the hospital stay than at home (e.g., using a cane or walker in the hospital that they do not usually use).
Prevent sleep interruptions; use nonpharmacological interventions to support sleep**	<p>Avoid overnight vital checks and blood draws unless absolutely necessary.</p> <p>Create and use sleep kits^{25, 26} that include items such as a small CD player, CD with relaxing music, lotion for a backrub or hand massage, noncaffeinated tea, lavender, sleep hygiene educational cards (e.g., discouraging caffeine after 11:00 AM or promoting physical activity). These can be placed in a</p>	<p>Tips</p> <ul style="list-style-type: none"> • Nonpharmacological sleep aids include earplugs, sleeping masks, muscle relaxation such as hand massage, posture and relaxation training, white noise and music, and educational strategies. • Sleep hygiene tips: Minimize/avoid daytime napping, avoid sedative drugs, limit/avoid caffeine after 11:00 AM, encourage exposure to sunlight, mobilize/keep active, as tolerated, during daytime hours, help older adults understand normal aging changes with sleep architecture.²⁷ • Sleep protocol tips: Reduce noise and distractions, keep lights low or off, increase comfort with a favorite pillow or blanket, provide a warm drink (e.g., milk or decaffeinated tea), provide slow-stroke back massage using body location for at least five minutes, play relaxing music to block out unwanted noise. These steps can be made into a nighttime routine.²⁸

Act on: Incorporate the 4Ms into the Plan of Care		
Key Actions	Getting Started	Tips and Resources
Ensure early, frequent, and safe mobility** ^{29, 30, 31}	box on the unit to use in patient rooms as needed.	<ul style="list-style-type: none"> Your institution should have a delirium prevention and management protocol that includes nonpharmacological sleep support. Make a sleep kit available for order in the EHR. Engage family or other caregivers to support sleep with methods that are familiar to the older adult.
	<p>Ambulate at least three times a day or as directed by the clinical team.</p> <p>Set, monitor, and meet a daily mobility goal with each older adult.</p> <p>Get patients out of bed or have them leave the room for meals, therapy, or other activities.</p>	<p>Tips</p> <ul style="list-style-type: none"> Assess and manage impairments that reduce mobility; for example: <ul style="list-style-type: none"> Manage pain Assess impairments in strength, balance, or gait (using Timed Up & Go or a similar assessment) Facilitate patient getting out of bed or leaving room for meals Remove catheters, IV lines, telemetry, and other tethering devices as soon as possible Avoid restraints (physical or chemical) Avoid sedatives and drugs that immobilize the older adult Refer to physical therapy; have physical therapy interventions to help with balance, gait, strength, gait training, or an exercise program if needed. Use a white board to document daily mobility goals. Establish a delirium prevention and management protocol that includes mobility. The same interventions that prevent delirium also support safe mobility, further reinforcing the interconnectedness of the 4Ms. Remember: All behavior has meaning. If older adults seem restless, they may need to move. Engage the older adult and family or other caregivers directly with daily mobility goals (unless contraindicated, which is rare). Link mobility goals to What Matters and the desired outcome of the hospitalization: e.g., “<i>You said you wanted to be strong enough to get to your class reunion next weekend, and walking farther each day will help you get there.</i>” Offer exercises that can be done in bed for patients who are unable to get out of bed (e.g., put appropriate exercises on a placemat that remains in the room).

**These activities are also key to preventing and managing delirium³² and falls.

Appendix C: Key Actions and Getting Started with Age-Friendly Care — Ambulatory/Primary Care Practice

Assess: Know about the 4Ms for Each Older Adult in Your Care		
Key Actions	Getting Started	Tips and Resources ³
Ask the older adult What Matters	<p>If you do not have existing questions to start this conversation, try the following, and adapt as needed.</p> <p>“What is the one thing about your health or health care you most want to focus on related to ___ (fill in health problem OR the health care task) so that you can do ___ (fill in desired activity) more often or more easily?”^{33,34,35}</p> <p>For older adults with advanced or serious illness, consider:</p> <p>“What are your most important goals if your health situation worsens?”³⁶</p>	<p>Tips</p> <ul style="list-style-type: none"> • This action focuses clinical encounters, decision making, and care planning on What Matters to older adults. • Consider segmenting your population by healthy older adults, those with chronic conditions, those with serious illness, and individuals at the end of life. How you ask What Matters of each segment may differ. <ul style="list-style-type: none"> ◦ Knowing What Matters has two purposes. One is getting to know the person, which helps provide better care. Ask questions such as, “<i>What is a good day for you?</i>”; “<i>Who is important to you?</i>”; “<i>What brings you joy?</i>”; and “<i>What makes life worth living?</i>” The second purpose is to align care with What Matters. The desired outcomes and fears, concerns, and questions are useful to know in the hospital setting. • Responsibility for asking What Matters can rest with any member of the care team; however, one person needs to be identified as responsible to ensure it is reliably done. • Ask older adults if it is OK to include family or other caregivers in the discussion about What Matters; however, it is most important to learn What Matters to the older adult. • Ask people with dementia What Matters. • Integrate asking What Matters into Welcome to Medicare and the Medicare Annual Wellness Visit. • You may include “getting to know you” What Matters questions in pre-visit paperwork and verify the answers during the visit. However, identifying older adults’ health outcome goals and care preferences requires guidance to ensure that the goals and preferences are specific, reliable, and actionable enough to inform decision making and care. For older adults who are comfortable with technology or have family who can help, Myhealhtpriorities.org provides a self-directed guide to identifying goals and care preferences. The resulting template can be brought to clinical encounters. • Consider what variations might be required in how What Matters is approached, based on culture and language. • Leverage What Matters conversations to hear the voices and wishes of traditionally marginalized older adults.

³ Many free tools and resources are included throughout this Appendix and Guide; however, some may have associated costs. Contact the owner of the resource for more information about pricing.

Assess: Know about the 4Ms for Each Older Adult in Your Care		
Key Actions	Getting Started	Tips and Resources
		<p>Resources</p> <ul style="list-style-type: none">• “What Matters” to Older Adults?: A Toolkit for Health Systems to Design Better Care with Older Adults• The Conversation Project and “Conversation Ready”• Patient Priorities Care• Serious Illness Conversation Guide• Stanford Letter Project• “What Matters to You?” Instructional Video and A Guide to Having Conversations about What Matters (BC Patient Safety & Quality Council)• End-of-Life Care Conversations: Medicare Reimbursement FAQs

Assess: Know about the 4Ms for Each Older Adult in Your Care

Key Actions	Getting Started	Tips and Resources
Document What Matters	Documentation can be on paper or in the EHR, where it is accessible to the whole care team across settings. ³⁷	<p>Tips</p> <ul style="list-style-type: none"> Identify where health and health care goals and priorities can be captured in your EHR and available across care teams and settings. Consider documentation of What Matters to the older adult on paper that they can bring to appointments and other sites of care. Invite older adults to document What Matters to them on your patient portal. <p>Resources</p> <ul style="list-style-type: none"> MY STORY® “What Matters to You?” Instructional Video and A Guide to Having Conversations about What Matters (BC Patient Safety & Quality Council) Age-Friendly Health Systems: Guide to Electronic Health Record Requirements for Adoption of the 4Ms (Cerner examples) Age-Friendly Health Systems: Guide to Electronic Health Record Requirements for Adoption of the 4Ms (Epic examples)
Review for high-risk and potentially inappropriate medication use	<p>Specifically, look for:</p> <ul style="list-style-type: none"> Benzodiazepines Opioids Highly anticholinergic medications (e.g., diphenhydramine) All prescription and over-the-counter sedatives and sleep medications Muscle relaxants Tricyclic antidepressants Antipsychotics^{38, 39, 40} Mood stabilizers 	<p>Tips</p> <ul style="list-style-type: none"> Consider this review a medication risk assessment and be sure to include over-the-counter medications at least annually in this assessment. Engage the older adult and family member or other caregiver in providing all medications (including over-the-counter medicines) for review. Medicare beneficiaries may be eligible for an annual comprehensive medication review. Medication reconciliation, part of the Medicare Annual Wellness Visit, may be an important step in identifying high-risk medications. Target medications that: <ul style="list-style-type: none"> Are without indication Have not had the intended response Are no longer needed Duplicate effects (both benefits and harms) Are not being taken and adherence is not critical

Assess: Know about the 4Ms for Each Older Adult in Your Care		
Key Actions	Getting Started	Tips and Resources
Screen for dementia / cognitive impairment		Resources <ul style="list-style-type: none"> American Geriatrics Society 2023 Updated AGS Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults AGS 2023 Beers Criteria® Pocketcard STOPP (Screening Tool of Older Persons' Prescriptions) and START (Screening Tool to Alert to Right Treatment) TaperMD tool to help optimize medication regimens Medicare Interactive: Annual Wellness Visit CDC Medication Personal Action Plan CDC Personal Medicines List Medication Management Instrument for Deficiencies in the Elderly (MedMaIDE)
	<p>If you do not have an existing tool, try using the Mini-Cog®.⁴¹</p> <p>If screen is positive, consider using an assessment tool such as MoCA or SLUMS for a more detailed assessment and staging, or refer to primary care physician or specialist for further assessment.</p> <p>For older adults with an established diagnosis of dementia, consider using a staging tool such as the Global Deterioration Scale, FAST, or MoCA for annual or episodic visits.</p>	Tips <ul style="list-style-type: none"> Normalize cognitive screening for patients. For example, say “I’m going to assess your cognitive health like we check your blood pressure, or your heart and lungs.” Emphasize an older adult’s strengths when screening and document it so that all providers have a baseline cognitive screen. If they have a sudden change in cognition, consider and rule out delirium. Screening for cognitive impairment is part of Welcome to Medicare and the Medicare Annual Wellness Visit. Co-design a process with your team to follow up if a screening is positive. Train staff in recognizing behavior as a form of communication for older adults with a pre-existing cognitive impairment or dementia and non-drug approaches to managing behavior such as the DICE Approach (Describe, Investigate, Create, Evaluate⁴³), TA-DAA approach (tolerate, anticipate, don’t agitate, and ambulate), and others. Resources <ul style="list-style-type: none"> Saint Louis University Mental Status (SLUMS) Exam Montreal Cognitive Assessment (MoCA) Global Deterioration Scale Functional Assessment Staging Tool (FAST)
	<p>If you do not have an existing tool, try using the Patient Health Questionnaire – 2 (PHQ-2).⁴²</p>	Tips <ul style="list-style-type: none"> Screen if there is concern about depression. Screening for depression is part of Welcome to Medicare and the Medicare Annual Wellness Visit. Co-design a process with your team to follow up if a screening is positive.

Assess: Know about the 4Ms for Each Older Adult in Your Care

Key Actions	Getting Started	Tips and Resources
Screen and assess for mobility limitations		Resources <ul style="list-style-type: none"> • Patient Health Questionnaire – 9 (PHQ-9) • Geriatric Depression Scale (GDS) and GDS: Short Form
	<p>If you do not have an existing tool, try using Timed Up & Go (TUG).^{43,44} Or, try observing the Up & Go without timing to assess mobility and determine what supports are needed.</p>	Tips <ul style="list-style-type: none"> • Recognize that older adults may be worried about having their mobility screened. • Underscore that a mobility screen allows the care team to know the strengths of the older adult and is key to functioning and doing What Matters. • Screening for mobility is part of Welcome to Medicare and the Medicare Annual Wellness Visit. • Consider engaging the full care team in assessing mobility. Does the person walk into the waiting room? Are they able to stand up from the waiting room chair when called? Can they walk to the exam room? What ambulatory devices do they use? • Co-design a process with your team to follow up on the results of the screen. • While asking about falls is important, it is not sufficient. The focus is ensuring safe mobility, not only preventing falls. • Consider also conducting a functional assessment. Common tools include: <ul style="list-style-type: none"> ○ Barthel Index of ADLs (in Epic) ○ The Lawton Instrumental Activities of Daily Living (IADL) Scale ○ Katz Index of Independence in Activities of Daily Living (ADL) Resources <ul style="list-style-type: none"> • Performance-Oriented Mobility Assessment (POMA)⁴⁵

Act on: Incorporate the 4Ms into the Plan of Care		
Key Actions	Getting Started	Tips and Resources
Align the care plan with What Matters	Align the plan of care with the older adult's goals and preferences (i.e., What Matters). ^{46, 47, 48}	<p>Tips</p> <ul style="list-style-type: none"> Health outcome goals are the activities that matter most to an individual, such as babysitting a grandchild, walking with friends in the morning, or continuing to work as a teacher. Health care preferences include the medications, health care visits, testing, and self-management tasks that an individual is able and willing to do. When you focus on the older adult's priorities, Medication, Mentation (cognition and depression), and Mobility usually come up because addressing them enables people to do What Matters to them. Use What Matters to develop the care plan and navigate tradeoffs. For example, you may say, "There are several things we could do, but knowing what matters most to you, I suggest we..." Consider the older adult's priorities (not just diseases) in communicating, decision making, and assessing benefits. Use collaborative negotiations; agree that there is no best answer and brainstorm alternatives together. For example, you may say, "I know you don't like the CPAP mask, but are you willing to try it for two weeks to see if it helps you be less tired, so you can get back to volunteering, which you said was most important to you?" Care options involve input from many disciplines (e.g., physical therapy, social work, community organizations, and so on). Using patients' health outcome goals as the target of care for all disciplines puts everyone on the same page. Patients' goals are the only thing that can integrate the care across disciplines and settings. <p>Resources</p> <ul style="list-style-type: none"> "What Matters" to Older Adults?: A Toolkit for Health Systems to Design Better Care with Older Adults Patient Priorities Care Serious Illness Conversation Guide "What Matters to You?" Instructional Video and A Guide to Having Conversations about What Matters (BC Patient Safety & Quality Council)
Deprescribe or avoid prescribing high-risk or potentially inappropriate medications**	<p>Specifically avoid or deprescribe the high-risk medications listed below:</p> <ul style="list-style-type: none"> Benzodiazepines Opioids 	<p>Tips</p> <ul style="list-style-type: none"> These medications, individually and in combination, may interfere with What Matters, Mentation, and safe Mobility of older adults because they increase the risk of confusion, delirium, unsteadiness, and falls.⁴⁹

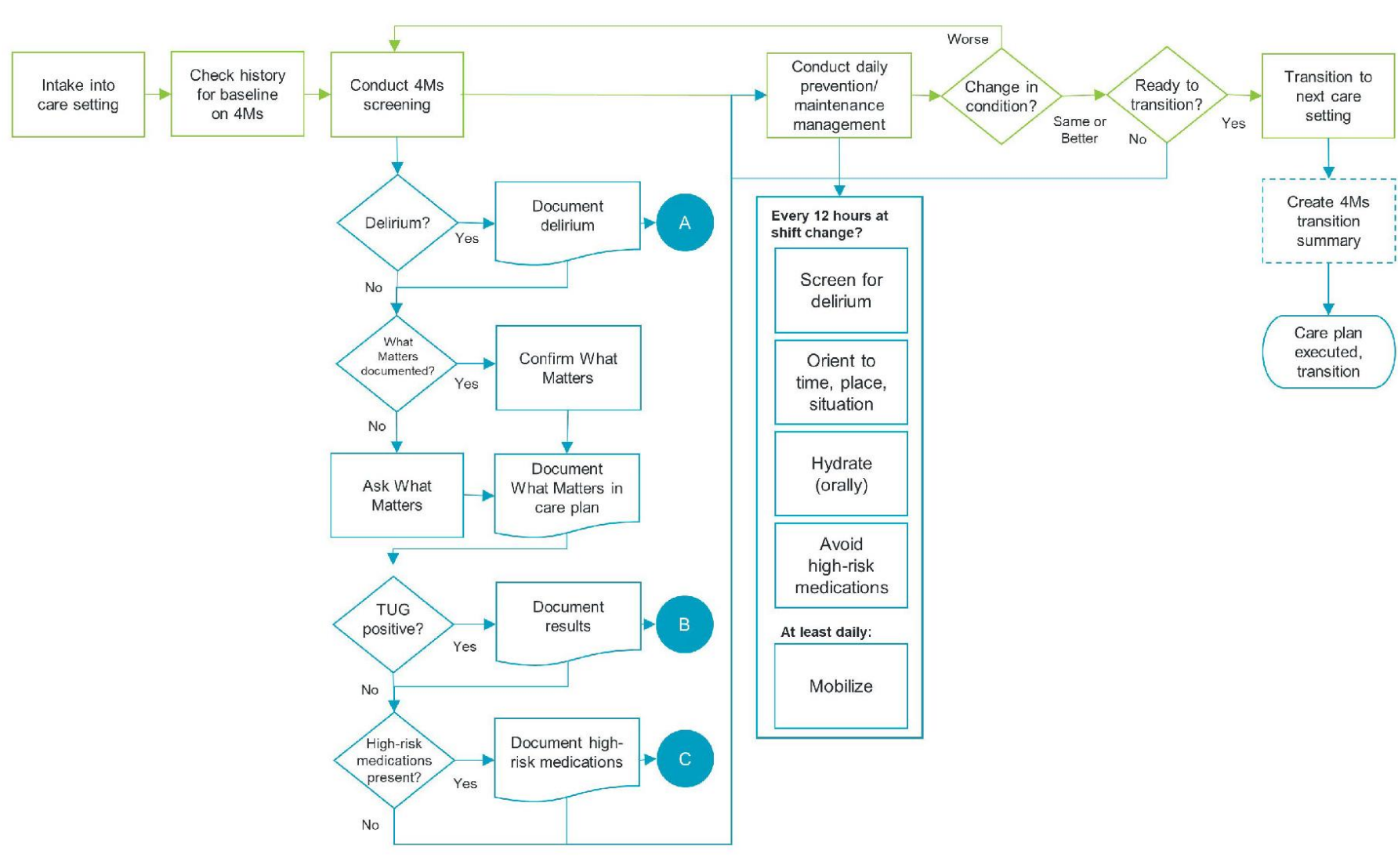
Act on: Incorporate the 4Ms into the Plan of Care		
Key Actions	Getting Started	Tips and Resources
	<ul style="list-style-type: none"> Highly anticholinergic medications (e.g., diphenhydramine) All prescription and over-the-counter sedatives and sleep medications Muscle relaxants Tricyclic antidepressants Antipsychotics^{50, 51, 52, 53} <p>If the older adult takes one or more of these medications, discuss any concerns the patient may have, assess for adverse effects, and discuss deprescribing with the older adult.⁵⁴</p>	<ul style="list-style-type: none"> Deprescribing includes both dose reduction and medication discontinuation. Many drugs will need to be tapered off and should not be stopped abruptly. Deprescribing is a person-centered approach, involving shared decision making, close monitoring, and compassionate support. When possible, avoid prescribing these high-risk medications (prevention). Consider changing order sets in the EHR to change prescribing patterns (e.g., adjust/reduce doses or change medications available). Provide ongoing patient/caregiver education about potentially high-risk medications through all care settings (e.g., outpatient pharmacy) to help improve safe medication use and informed decision making. Consider community resources to support pain management with nonpharmacological interventions, including referral to community-based resources. Communicate changes in medications across clinicians and settings of care, and with the primary pharmacy working with the older adult. When instituting an age-friendly approach to medications: <ul style="list-style-type: none"> Identify who on your team is going to be the champion of this “M.” The champion may not be a pharmacist, but it is vital to have a pharmacist or physician, as well as a patient, work on the plan. Review your setting’s or system’s data, if possible, to identify medications that may be high-risk (e.g., anticoagulants, insulin, opioids) or potentially inappropriate (e.g., anticholinergics). Determine your goal(s) with respect to your medication(s) identified in the previous step. Conduct a series of PDSA cycles to achieve your goal(s). <p>Resources</p> <ul style="list-style-type: none"> deprescribing.org How to implement deprescribing into clinical practice Deprescribing and Medication Optimization Overview Alternative Medications for Medications Included in the Use of High-Risk Medications in the Elderly and Potentially Harmful Drug–Disease Interactions in the Elderly Quality Measures Crosswalk: Evidence-Based Leadership Council Programs and the 4Ms Handouts for older adults and family caregivers: <ul style="list-style-type: none"> American Geriatrics Society Health in Aging: Care for Medications American Society of Consultant Pharmacists: Printable Fact Sheets NeedyMeds BeMedWise: Free Printable Resources Safe Medicine Use: A Guide for Older Adults and Caregivers: Free Printable Resource

Act on: Incorporate the 4Ms into the Plan of Care		
Key Actions	Getting Started	Tips and Resources
Consider further evaluation and manage manifestations of dementia, or refer to geriatrics, psychiatry, or neurology as needed	<p>Share the results with the older adult and caregiver.</p> <p>Assess for modifiable contributors to cognitive impairment.</p> <p>Consider further diagnostic evaluation if appropriate.</p> <p>Follow current guidelines for treatment of dementia and resulting behavioral manifestations OR refer to geriatrics, psychiatry, or neurology for management of dementia-related issues.</p> <p>Provide educational materials to the older adult and family member or other caregiver.</p> <p>Refer the older adult, family, and other caregivers to supportive resources, such as the Alzheimer's Association.⁵⁵</p>	<p>Tips</p> <ul style="list-style-type: none"> • Know about and refer older adults and their caregivers to local community-based organizations and resources to support them with education and/or support. • Include family caregivers. They provide a source of information and support. To identify these individuals, ask the older adult, "Who would you go to for help?" and recommend that they bring that person to the next visit. • Consider assessing and managing caregiver burden. • Ensure follow-through on any referrals. • If a memory disturbance is found, avoid medications that will make cognitive health worse. • Do not prescribe medications that can exacerbate cognitive impairment, such as benzodiazepines and anticholinergics. • If there is a diagnosis of dementia, include it on the problem list. • Older adults with dementia will be at high risk of delirium, especially if hospitalized, so educate family or other caregivers and providers on delirium prevention. • Understand how screening for Mentation might be viewed in different cultures and ensure culturally appropriate support for older adults and their caregivers. <p>Resources</p> <ul style="list-style-type: none"> • Alzheimer's Association • Local Area Agency on Aging • Community Resource Finder • Center to Advance Palliative Care (CAPC): Implementing Best Practices in Dementia Care • Zarit Burden Interview (for caregivers) • Dementia Friendly America
	<p>Identify and manage factors that contribute to depressive symptoms, including sensory limitations (vision, hearing), social isolation, losses associated with aging (job, income, societal roles), bereavement, and medications.</p> <p>Consider the need for counseling and/or pharmacological treatment of</p>	<p>Tips</p> <ul style="list-style-type: none"> • Educate the patient and caregiver about depression in older adults. • Recognize social isolation as a risk factor for depression and identify community-based resources that support social connections. • Understand how screening for Mentation might be viewed in different cultures and ensure culturally appropriate support for older adults and their caregivers.

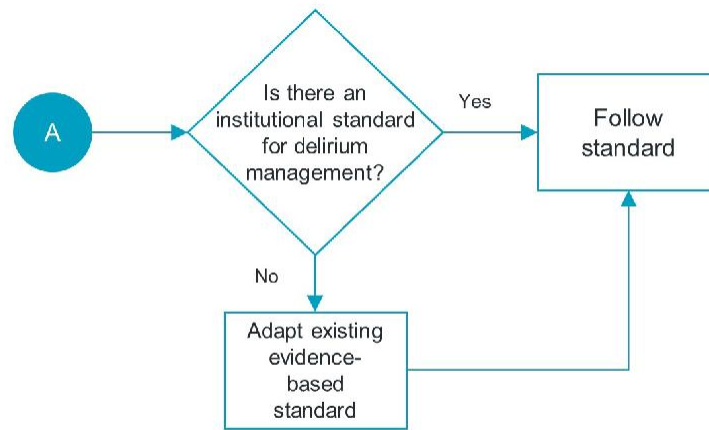
Act on: Incorporate the 4Ms into the Plan of Care		
Key Actions	Getting Started	Tips and Resources
Ensure safe mobility ^{56 57 58}	depression, or refer to a mental health provider if appropriate.	Resources <ul style="list-style-type: none"> • Local Area Agency on Aging • Crosswalk: Evidence-Based Leadership Council Programs and the 4Ms
	<p>Assess and manage impairments that reduce mobility; such as:</p> <ul style="list-style-type: none"> • Pain • Impairments in strength, balance, or gait • Hazards in home (e.g., stairs, loose carpet or rugs, loose or broken handrails) • High-risk medications <p>Refer to physical therapy if appropriate.</p> <p>Support older adults, families, and other caregivers to create a home environment that is safe for mobility.⁵⁹</p> <p>Support older adults to identify and set a daily mobility goal that supports What Matters.</p> <p>Review and support progress toward the mobility goal in subsequent interactions.</p>	Tips <ul style="list-style-type: none"> • Have a multifactorial safe mobility protocol (e.g., STEADI) that includes: <ul style="list-style-type: none"> ○ Educating the patient/family/other caregivers ○ Managing impairments that reduce mobility (e.g., pain, balance, gait, strength) ○ Ensuring a safe home environment for mobility ○ Identifying and setting a daily mobility goal with the patient that supports What Matters, and then reviewing and supporting progress toward the mobility goal ○ Avoiding high-risk medications ○ Referring to physical therapy • Tie mobility to desired activities. • Consider driving and other transportation in addressing Mobility so that older adults can do What Matters. Resources <ul style="list-style-type: none"> • Stopping Elderly Accidents, Deaths & Injuries (STEADI) • CDC: MyMobility Plan • CAPABLE: Aging in Place

Appendix D: Age-Friendly Care Workflow Examples

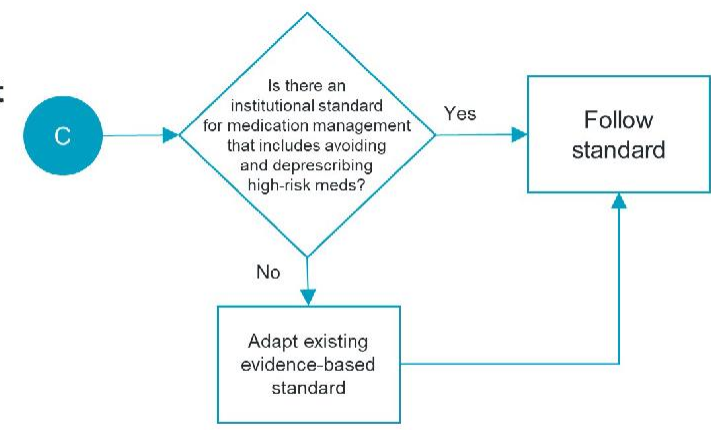
Hospital-Based Care Workflows: Core Functions



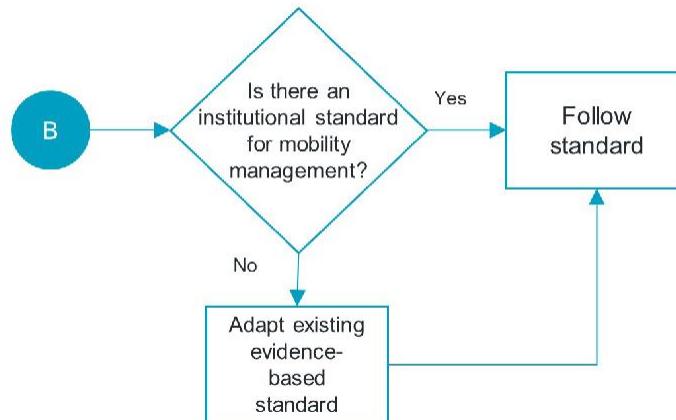
Delirium Workflow



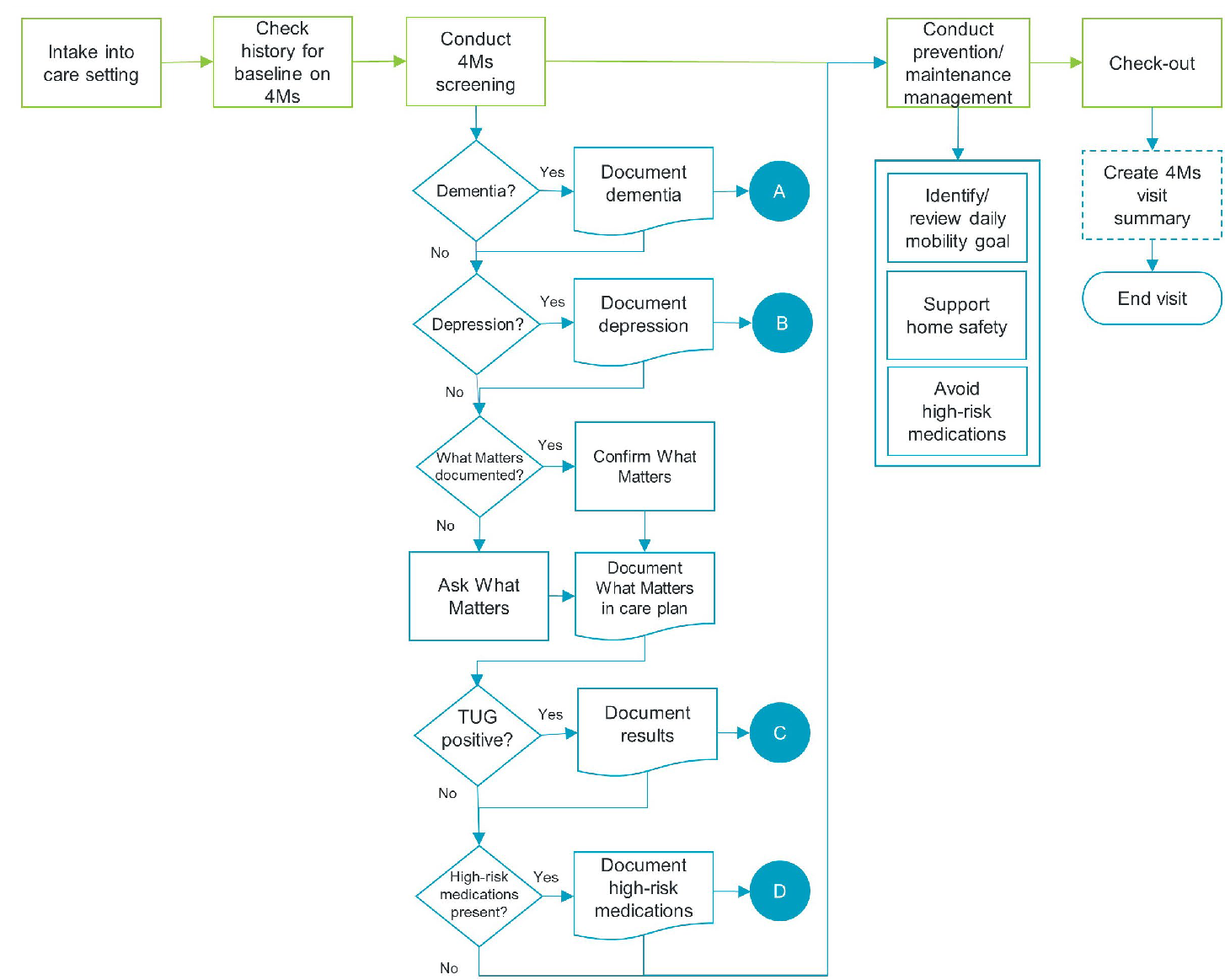
Medication Management Workflow



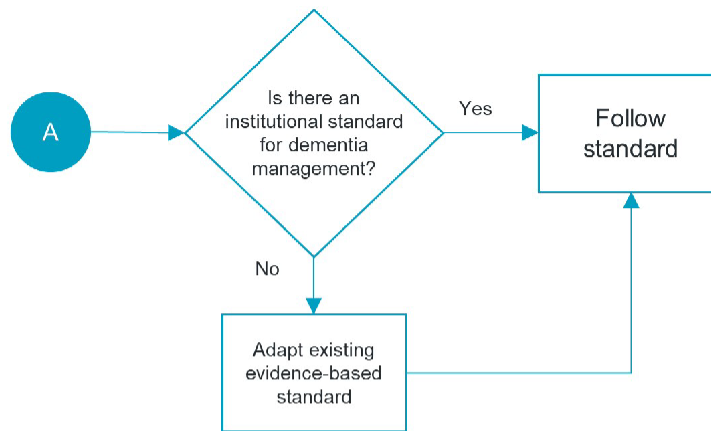
Mobility Workflow



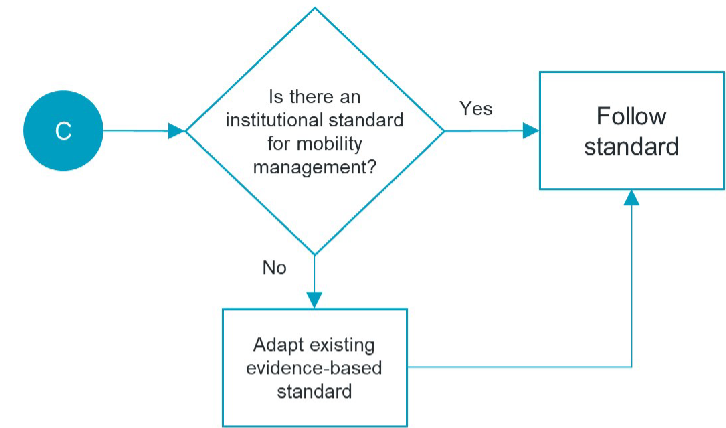
Ambulatory/Primary Care Workflows: Core Functions for New Patient, Annual Visit, or Change in Health Status



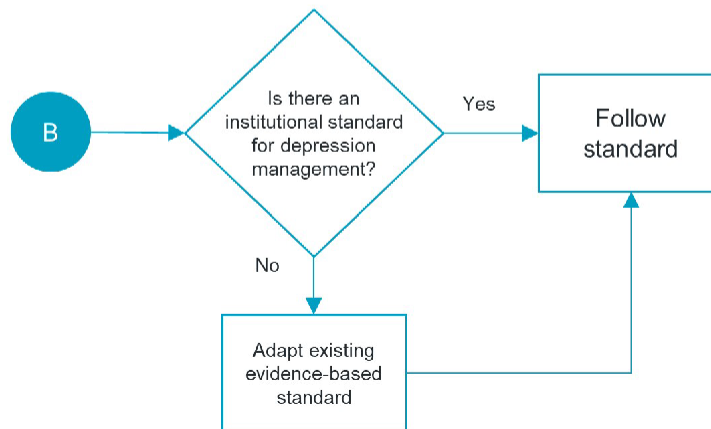
Dementia Workflow



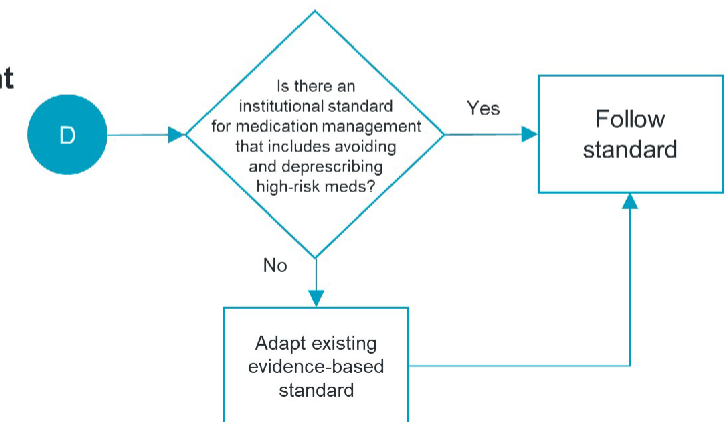
Mobility Workflow



Depression Workflow

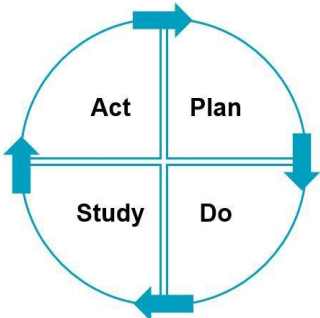





Medication Management Workflow



Appendix E: Examples of PDSA Cycles for Age-Friendly Care

Example: Testing What Matters Engagement with Hospitalized Older Adult Patients

Plan-Do-Study-Act Record	NAME OF HEALTH SYSTEM: Camden University Medical Center NAME OF PERSON COMPLETING FORM: Erin Rush, RN DATE: March 29, 2019			
	Change Idea to ____develop or <u>X</u> test or ____ implement			
	Description: Cycle 1: Test a What Matters engagement with a hospitalized patient. Essential Ingredients <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <ul style="list-style-type: none"> • Who? • When? • Using what question(s)? </div> <div style="text-align: center;">  <ul style="list-style-type: none"> • Who? • What? • Where? </div> <div style="text-align: center;">  <ul style="list-style-type: none"> • Who? • How do we know if that has happened? </div> </div>			
PLAN:				
Questions: What do we want to know?				
<ul style="list-style-type: none"> • Can physicians incorporate What Matters engagements into rounds with older adult patients? • Will physicians learn something useful from this What Matters engagement relevant to care planning? 				
Predictions: What do we think will happen?				
<ul style="list-style-type: none"> • Physicians can incorporate What Matters engagements into rounds with older adult patients. • Physicians can learn something useful from What Matters engagements relevant to care planning. 				
Plan for the change or test: Who, What, When, Where. What are we going to do to make our test happen?				
List the tasks necessary to complete this test (What)	Person responsible	When	Where	
Orient Dr. M (hospitalist) to this test	Erin	Monday morning	4 South	
Select older adult patient for test	Erin and Dr. M	Monday morning	4 South	
Ask older adult patient, "What's important to you in the next few days as you recover from your illness?"	Dr. M	Monday	TBD	
Debrief test and complete PDSA cycle	Erin and Dr. M	Tuesday morning	4 South	
Plan for data collection: Who, What, When, Where. How will we compare predictions to actual?				

Erin and Dr. M to meet the next day to debrief test, capture what happened, impressions, how that compared to predictions, next steps.

DO: Carry out the change or test; collect data and begin analysis; describe the test/what happened.

- Dr. M asked 1, and then 4 more, older patients – went beyond testing with just 1 patient!
- Some answers were very health/condition-related (e.g., a patient with shortness of breath/cough stated, “I just want my cough to be better and to be able to breathe.”).
- Other answers were more life-related, for example:
 - A patient being treated for stroke, who is a performance artist, shared a video of performance and indicated that What Matters is to be able to return to performing.
 - A patient with multiple falls wants to be able to stand to cook again.

STUDY: Complete analysis of data; summarize what was learned; compare what happened to predictions above.

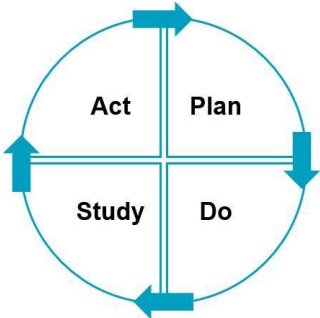
- Asking a single question is not sufficient. Need the opportunity for follow-up questions and listening. For example: A patient with congestive heart failure and arthritis has an immediate goal to reduce swelling in her legs. Further probing revealed a desire to stay in her home and be able to cook to avoid delivered salty foods and to avoid rehospitalization. Possible solution: Prescription for homemaker assistance.
- Dr. M regularly engages patients with What Matters in an outpatient setting. New for inpatient rounds, but feasible to include.
- Worthwhile if there is time for follow-up (not just one question and one answer in 30 seconds).
- No patients responded with goals or needs that could not be addressed somehow in the care plan.
- Asking a What Matters question feels awkward. Need to build a relationship first before asking an “intimate” question. For example, asking on the second day of rounding feels better than asking on the first day.
- Asking a What Matters question helped Dr. M bond with the patients.
- There was a lack of clarity on what to do with the information learned from the What Matters engagement (e.g., how to document, how to share).
- Still have a concern about not knowing what to do if a patient expresses a need or goal beyond the specific health condition or issues that the physician (Dr. M) is trained to address.

ACT: Are we ready to make a change? Plan for the next cycle.

Test again. Questions to explore through more testing include:

- Is it better to ask the What Matters question at the beginning or end of the encounter?
- How can we get at What Matters for our patients with cognitive impairment?
- Where is the best place to document the information from the What Matters engagement?
 - White board: “Anyone” can use the white board. Can this be done effectively?
 - Epic documentation agreement (meetings underway with Epic team to discuss options).
- Are the daily multidisciplinary rounds/huddles the best place to discuss what’s learned from What Matters engagements?
 - Do we need to coordinate our engagement about What Matters? Nursing, care management, and physicians all could be asking variants of What Matters.
- Could the nurse or case manager have a What Matters conversation and document it so that it is available for physicians to reference in a consult visit or rounding?

Example: Testing a 4Ms Screening for Older Adults in Primary Care

Plan-Do-Study-Act Record	NAME OF HEALTH SYSTEM: Name NAME OF PERSON COMPLETING FORM: Name DATE: Date			
	Change Idea to ____develop or <u>X</u> test or ____ implement			
	Description: Cycle 1: Test a 4Ms “screening set” with one older adult patient in your care. <ul style="list-style-type: none"> • What Matters: <ul style="list-style-type: none"> ○ Ask, “What makes life worth living?”; “What would make tomorrow a really great day for you?”; “What concerns you most when you think about your health and health care in the future?” ○ Confirm the presence of a health care proxy (proxy’s name, contact information) • Medication: <ul style="list-style-type: none"> ○ Identify use of high-risk medications • Mentation: <ul style="list-style-type: none"> ○ Administer the Mini-Cog ○ Administer the PHQ-2 • Mobility: <ul style="list-style-type: none"> ○ Conduct the TUG Test 			
PLAN:				
Questions: What do we want to know? [Add or edit questions below, as needed.]				
<ol style="list-style-type: none"> 1. Can we practice all 4Ms items (above) on intake for one older adult patient? 2. How long does it take? 3. How does it feel for the staff conducting the assessment? (e.g., What went well? What could be improved?) 4. How does it feel for the patient/family receiving the assessment? (e.g., What went well? What could be improved?) 5. What are we learning from conducting this 4Ms screening set? Did we learn anything about this patient that will improve our care, service, and/or processes? 				
Predictions: What do we think will happen? [Edit draft answers below, as needed.]				
<ol style="list-style-type: none"> 1. Yes 2. 10 minutes 3. Staff will give at least two ideas/identify two issues with the 4Ms screening set. 4. Patient/family will give at least one idea/issue with the screening set use. 5. Staff will get at least one actionable insight/“aha” regarding care for the patient from the screening set. 				
Plan for the change or test: Who, What, When, Where. What are we going to do to make our test happen? [Edit the draft tasks below, as needed.]				
List the tasks necessary to complete this test (What)	Person responsible	When	Where	
<ol style="list-style-type: none"> 1. Select an older adult patient with whom we are likely to be able to conduct this test in the next three days. Identify a 				

patient who we might “easily” engage on all items of the 4Ms screening set.				
2. Select a staff person who will conduct the test, and brief her/him.				
3. Decide on what you will say to invite the patient/family to participate in testing the 4Ms screening set. For example, “We are testing ways to know our patients better to develop the right care plan. Would you be willing to test a set of questions today and give your opinion about this experience?”				

Plan for data collection: Who, What, When, Where. How will we compare predictions to actual? [Adapt or edit the sample data collection form below, as needed.]

- Fill in data collection plan (Who, What, When, Where) [example below]:

4Ms Screening Set Test: NAME OF HEALTH SYSTEM							
4Ms Screening Set Test: NAME OF CONTACT PERSON		Patient 1	Patient 2	Patient 3	Patient 4	Patient 5	Patient 6
Date							
What Matters	Asked: What makes life worth living? (yes/no)	Y N	Y N	Y N	Y N	Y N	Y N
	Asked: What would make tomorrow a really great day for you? (yes/no)	Y N	Y N	Y N	Y N	Y N	Y N
	Asked: What concerns you most when you think about your health and health care in the future? (yes/no)	Y N	Y N	Y N	Y N	Y N	Y N
	Has health care agent? (yes/no/didn't review)	Y N DR	Y N DR	Y N DR	Y N DR	Y N DR	Y N DR
Medication	Identified use of high-risk medication (yes/no/didn't review)	Y N DR	Y N DR	Y N DR	Y N DR	Y N DR	Y N DR
Mentation	Administered the Mini-Cog (yes/no)	Y N	Y N	Y N	Y N	Y N	Y N
	Administered the PHQ-2 (yes/no)	Y N	Y N	Y N	Y N	Y N	Y N
Mobility	Conducted TUG Test (yes/no)	Y N	Y N	Y N	Y N	Y N	Y N
Amount of time to complete							
Staff feedback							
Patient/family feedback							
Other notes and/or questions that came up from this test							

DO: Carry out the change or test; collect data and begin analysis; describe the test/what happened.

- Fill in during or after conducting the test

STUDY: Complete analysis of data; summarize what was learned; compare what happened to predictions above.

- Fill in after conducting the test

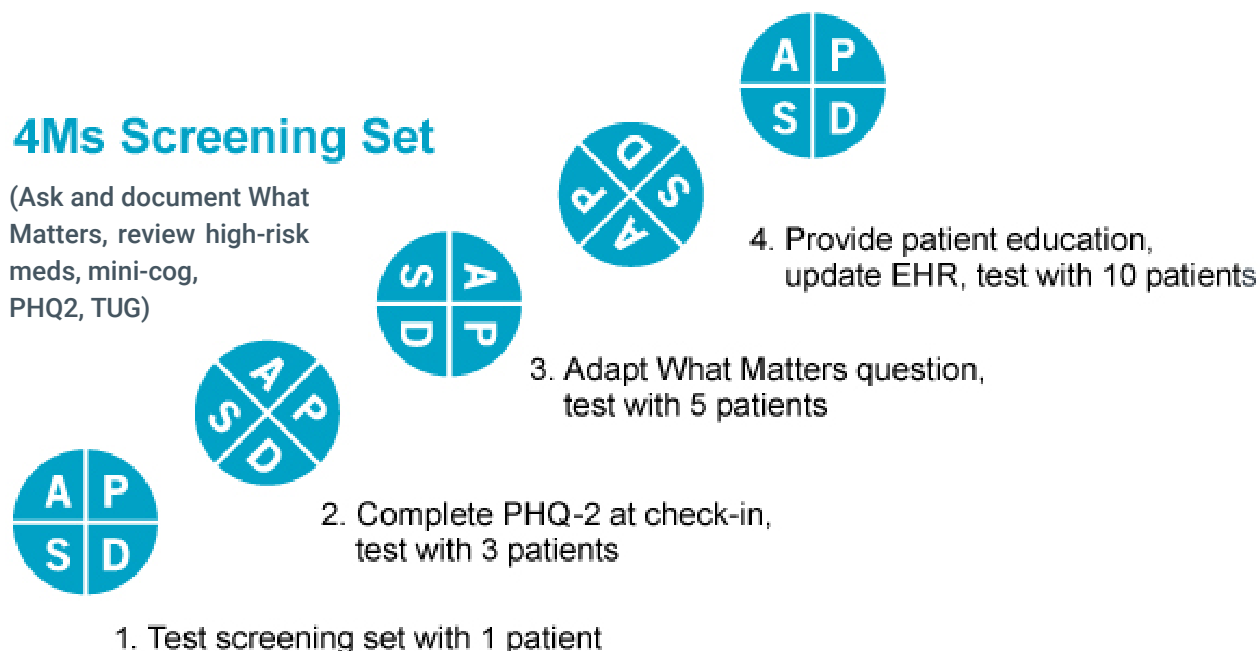
ACT: Are we ready to make a change? Plan for the next cycle.

- Fill in after conducting the study. Will you adopt, adapt, abandon, or run the test again? For example, PDSA Cycle 2: Conduct test again with five patients making the following adjustments...

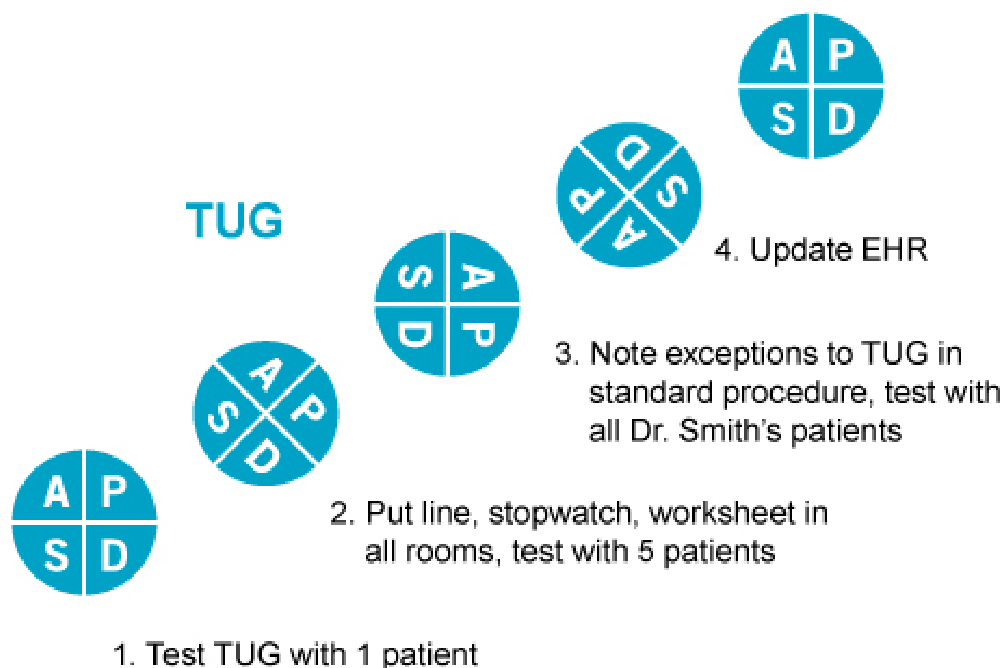
Example: Ambulatory/Primary Care Multiple PDSA Cycles

4Ms Screening Set

(Ask and document What Matters, review high-risk meds, mini-cog, PHQ2, TUG)



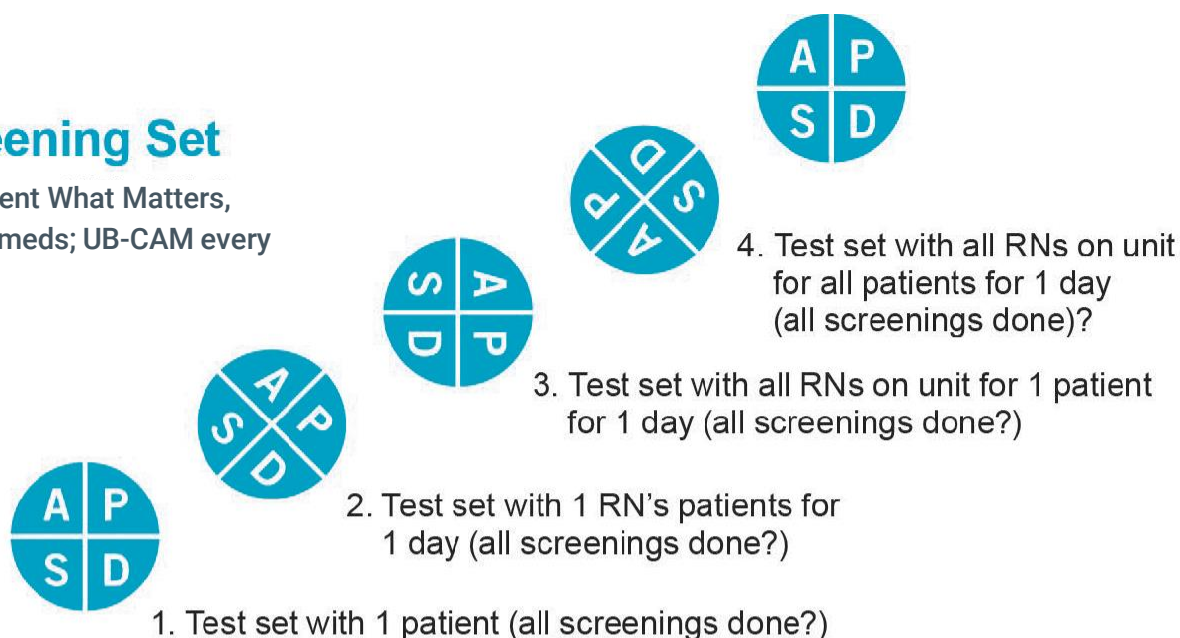
TUG



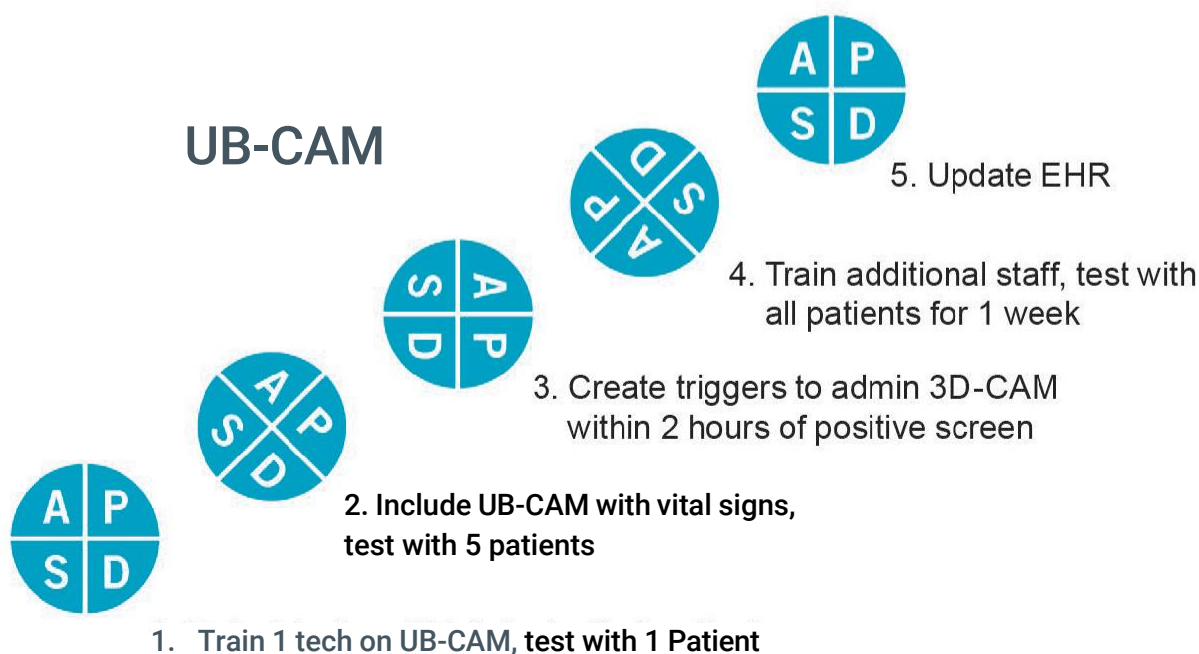
Example: Hospital-Based Care Multiple PDSA Cycles

4Ms Screening Set

(Ask and document What Matters, review high-risk meds; UB-CAM every 12 hours; TUG)



UB-CAM



Appendix F: Implementing Reliable 4Ms Age-Friendly Care

The goal is to reliably integrate the 4Ms into the way you provide care for every older adult, in every setting, every time. How will you know that 4Ms care, as described by your site, is reliably in place?

The best way is to observe the work directly, using your 4Ms Age-Friendly Care Description Worksheet as an observation guide. Another way is to review patient records to confirm completeness of 4Ms documentation and alignment of care team actions with information obtained in assessment. Note that you only need a handful of patient records to tell you that your 4Ms performance is not at a high level (say, 95 percent or higher).⁶⁰ For example, if you see three instances of incomplete 4Ms care in a random sample of 10 records, you have strong evidence that your system is not performing in a way that 95 percent or more of your patients are experiencing 4Ms care.

If an outside reviewer visited your care setting, they would look for evidence that your site has the foundation for reliable 4Ms care, including the following:

- If the reviewer asks five staff members, the staff will use the same explanation for WHY your site does the 4Ms work.
- If the reviewer asks five staff members, the staff will use the same explanation for HOW your site does the 4Ms work.
- Staff at your site will have documentation for the 4Ms work; they can access your 4Ms Care Description and additional standard supporting operating procedures, flowcharts, and/or checklists.
- Training/orientation introduces new staff to the 4Ms work.
- Job descriptions outline elements of the 4Ms work as appropriate to the role.
- Performance evaluation refers to the 4Ms work.

Reviewers would also expect to learn about regular observation of 4Ms work by site supervisors and leaders who seek to understand and work **with staff to remove barriers to reliable 4Ms care**.

Appendix G: Measuring the Impact of 4Ms Age-Friendly Care

We highly recommend that you create and monitor an age-friendly measurement dashboard to understand the impact of your efforts. This can be accomplished in two ways:

- 1. Segment an existing dashboard by age and monitor performance for older adults (ages 65 years and older); or
- 2. Focus on a small set of basic outcome measures for older adults.

The tables below list outcome measures that IHI identified to help health systems understand the impact of 4Ms age-friendly care. These measures are not designed to compare or rank health systems in “age-friendliness.” We seek to outline measures that are “good enough” to establish baseline performance and are sensitive to improvements, while paying attention to the feasibility of collecting, analyzing, and acting on the results of these data for health systems with a range of skills and capacity in measurement. See the [Age-Friendly Health Systems: Measures Guide](#) for additional details on these measures, as well as suggested process and balancing measures.

Basic Outcome Measures	Hospital Site of Care	Ambulatory/Primary Care Site of Care
30-day all-cause readmission rate	X	
Rate of emergency department (ED) visits		X
Consumer Assessment of Healthcare Providers and Systems (CAHPS) – Select survey questions	HCAHPS	CG-CAHPS
Average length of stay	X	

Advanced Outcome Measures	Hospital Site of Care	Ambulatory/Primary Care Site of Care
Older adults with diagnosis of delirium	X	
Survey of care concordance with What Matters collaboRATE (or similar tool adopted by your site to measure goal-concordant care)	X	X

Additional Stratification: Impact of Race and Ethnicity

We recognize the persistence of important differences in treatment and health outcomes associated with race, ethnicity, and other social factors. Health equity requires that health systems stratify key performance measures by these factors to reveal disparities and provoke action to eliminate them. For Age-Friendly Health Systems, we encourage stratifying outcome measures for older adults using the Office of Management and Budget core race and ethnicity factors to identify disparities in patient care and experience. We also encourage participation in the Human Rights Campaign Healthcare Equality Index, which promotes LGBTQ patient-centered care.

Appendix H: Definitions for Screening, Assessing, and Staging in Age-Friendly Health Systems

In this guide, we use terms such as “screening,” “assessment,” and “staging” to describe the purpose of a particular tool or process. Included below are definitions of these terms as they relate to Age-Friendly Health Systems. These tools alone are not enough; acting on the results of screening, assessment, and staging tools and processes is necessary to improve care.

Screening tools and processes. A screening tool is a brief measure designed to identify individuals who may have signs or symptoms of a particular condition (such as dementia) or may be at greater risk of developing certain conditions. A positive result on a screening tool indicates that the person requires a more detailed evaluation by a trained clinician using an evidence-based or evidence-informed tool or set of assessment protocols. Screening tools may identify older adults early enough to provide treatment and avoid or reduce symptoms and other consequences.

Assessment tools and processes. For older adults who have a positive screen, or those at higher risk for a particular condition, a set of assessments and actions provides additional information about the person’s condition that can further focus the care plan process and interventions. Assessment tools may include more detailed surveys, laboratory tests, radiology or imaging studies, quantitative and/or qualitative assessments by a skilled, trained clinician or team of clinicians. For example, a clinician’s review of a Timed Up and Go may reveal issues with an older adult’s gait and balance (e.g., weakness, unsteadiness while turning). Based on that initial screen, a more in-depth assessment by a physical therapist determines specific aspects of the older person’s walking, turning, balance, strength, sensation, and cognition that will inform the design and implementation of the best care plan for that individual. Assessments may also be used to track changes in an older person’s status over time.

Staging tools and processes. Some (not all) conditions may have standardized staging criteria applied to individual cases to indicate which stage of an illness or condition they are in, and to track changes (improvement, decline) over time. Certain conditions (such as dementia) may have more than one staging method; therefore, it is important to know which methods are evidence-based and clinically appropriate. IHI does not require organizations to have specific staging tools or processes in order to be recognized as an Age-Friendly Health System. However, if staging is part of clinical care and care planning, we recommend that it be conducted by trained clinicians and documented in a place where all relevant team members may access the information.

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