

Age-Friendly Health Systems: Guide to Electronic Health Record Requirements for Adoption of the 4Ms

An Implementation Guide for Health Systems
with Cerner Examples

September 2019

This content was created especially for:

Age-Friendly 
Health Systems

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

Acknowledgments

This work was supported by a grant from The SCAN Foundation. The SCAN Foundation works to advance a coordinated and easily navigated system of high-quality services for older adults that preserve dignity and independence. For more information, visit www.TheSCANFoundation.org.

This work was also made possible by The John A. Hartford Foundation, a private, nonpartisan, national philanthropy dedicated to improving the care of older adults. For more information, visit www.johnahartford.org.

IHI would like to thank our partners, the American Hospital Association (AHA) and the Catholic Health Association of the United States (CHA), for their leadership and support of the Age-Friendly Health Systems initiative. Learn more at ihi.org/AgeFriendly.

Our deepest gratitude to Jenn Hamilton, MHA, RN, CPHIMS and Tam Duong, MSPH for the composition of this guide. Thank you to the University of Alabama at Birmingham Hospital for partnering closely with us and providing invaluable time and guidance throughout the development of this guide.

Thank you to the five prototype health systems — Anne Arundel Medical Center, Ascension, Kaiser Permanente, Providence St. Joseph Health, and Trinity — for stepping forward to learn what it takes to become an Age-Friendly Health System. Finally, our thanks to Cayla Saret of IHI for her support in editing this guide. The authors assume full responsibility for any errors or misrepresentations.

For more than 25 years, the Institute for Healthcare Improvement (IHI) has used improvement science to advance and sustain better outcomes in health and health systems across the world. We bring awareness of safety and quality to millions, accelerate learning and the systematic improvement of care, develop solutions to previously intractable challenges, and mobilize health systems, communities, regions, and nations to reduce harm and deaths. We work in collaboration with the growing IHI community to spark bold, inventive ways to improve the health of individuals and populations. We generate optimism, harvest fresh ideas, and support anyone, anywhere who wants to profoundly change health and health care for the better. Learn more at ihi.org.

Copyright © 2019 Institute for Healthcare Improvement. All rights reserved. Individuals may photocopy these materials for educational, not-for-profit uses, provided that the contents are not altered in any way and that proper attribution is given to IHI as the source of the content. These materials may not be reproduced for commercial, for-profit use in any form or by any means, or republished under any circumstances, without the written permission of the Institute for Healthcare Improvement.

Contents

Introduction	4
Inpatient Implementation	6
Transitions of Care	11
Ambulatory Implementation	12
Reporting	16
Conclusion	18
Appendix A: Example DTA for What Matters – Inpatient	19
Appendix B: Example 4Ms Doc Set – Inpatient	20
Appendix C: Example IPOC 4Ms Build Instructions	22
Appendix D: Example DTA for What Matters – Ambulatory	23
References	24

Introduction

Age-Friendly Health Systems Overview

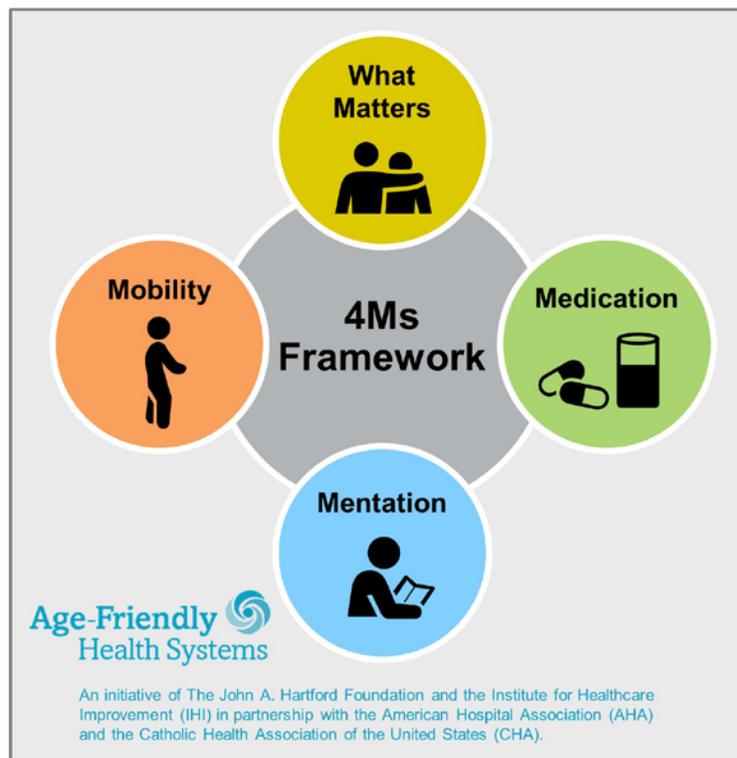
The United States is aging. The number of older adults, individuals ages 65 years and older, is growing rapidly. As we age, care often becomes more complex. Health systems frequently are not prepared for this complexity, and older adults suffer a disproportionate amount of harm while in the care of the health system.

To address these challenges, in 2017, 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), set a bold vision to build a social movement so that all care with older adults is age-friendly care, which:

- Follows an essential set of evidence-based practices (4Ms);
- Causes no harm; and
- Aligns with What Matters to older adults and their family caregivers.

Becoming an Age-Friendly Health System entails reliably providing a set of 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 shift by health systems to focus on the needs of older adults (see Figure 1).

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

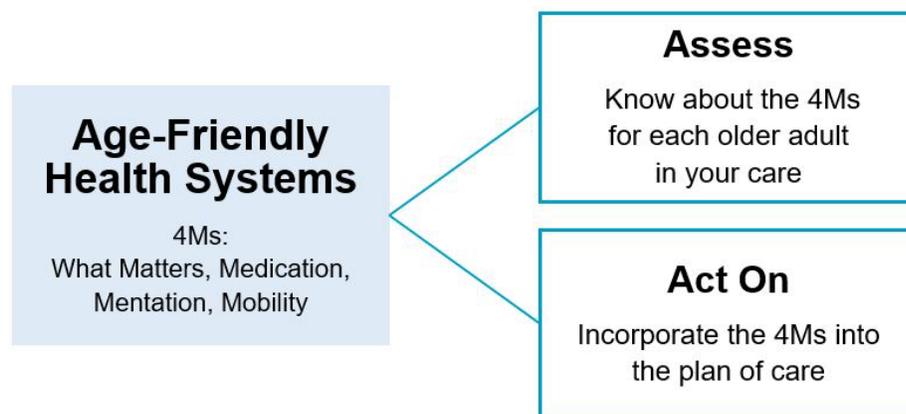
The 4Ms – What Matters, Medication, Mentation, and Mobility – make care of older adults that can be complex, more manageable. The 4Ms identify the core issues that should drive all care and decision making with older adults. They organize care and focus on the older adult’s wellness and strengths rather than solely on disease. The 4Ms are relevant regardless of an older adult’s individual condition(s). They apply regardless of the number of functional problems an older adult may have, or that person’s cultural, ethnic, or religious background.¹

The 4Ms are a framework, not a program, to guide all care of older adults wherever and whenever they touch health system’s services. There are two key drivers of age-friendly care: knowing about the 4Ms for each older adult in care (“assess”) and incorporating the 4Ms into the plan of care accordingly (“act on”) (see Figure 2).

There are many ways to improve care for older adults; however, there is a finite set of key actions. The [Age-Friendly Health Systems: Guide to Using the 4Ms in the Care of Older Adults](#) summarizes the key actions that can dramatically improve care when implemented together (Guide to Using the 4Ms, pages 11-12) and offers a list of key actions, tips, and resources to get started with each element in your setting (Guide to Using the 4Ms, Appendix D). This list of actions is considered the gateway to your journey to becoming an Age-Friendly Health System.

Integrating the 4Ms into the electronic health record (EHR) is a mechanism to ensure reliable practice of these essential elements across care settings. This implementation guide was designed as a resource for health systems to build the 4Ms, and associated care practices, into the EHR. It addresses how to incorporate both the “assess” and “act on” drivers of the 4Ms into the EHR. The guidance is not specific to a particular EHR vendor; however, specific suggestions and examples are provided that apply to the Cerner platform. Note that each organization using Cerner will have a unique build that may might enhance or negate these examples. Please ensure the content and workflow is validated within your organization and modified as needed for appropriate incorporation into existing workflows.

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



Inpatient Implementation

When using these guidelines to implement the 4Ms in your EHR, validate both content and workflow inside your organization. Provide 4Ms documentation for all specialties across the continuum of care.

What Matters

What Matters means *knowing and aligning 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*. The [“What Matters” to Older Adults? A Toolkit for Health Systems to Design Better Care With Older Adults](#) and www.ihf.org/AgeFriendly website have more detailed guidance about how to put What Matters into practice as part of the 4Ms.

Assess

First, in required documentation at admission, provide prompts in row details (additional information) for clinicians to ask about What Matters to the older adult and about the older adult's goals related to health and health care. If you do not have existing prompts, try the following and adapt as needed:

- For all older adults: “Older adult/family caregiver focus for stay.”
- For older adults with advanced or serious illness: “Most important goals if condition worsens.”

Document the older adult's answer in the EHR. A multi-response answer may be used to list the most common responses to What Matters. Examples of potential answer choices include: family connections, comfort, understanding care plans, clinical care needs, or other (with space for comments). Validate a comprehensive list of options across the continuum of care.

A free text field may be used for a specific statement of What Matters to older adults in their own words, such as attending an upcoming family event or rejoining a group or class each week. Include the information documented here on the older adult's summary report in a conspicuous location. Ensure it appears to care team members across the continuum of care by updating smart templates and the Results Review tab.

In Cerner:

- For those using an Admission History PowerForm for the initial patient assessment: Create a new section that walks clinicians through assessing the 4Ms of the older adult. Age flex the Discrete Task Assay (DTA) (65 and older) and make crucial fields required. (See Appendix A for a suggested build.)
- For clients using iView for the initial patient assessment: Create an order (suggested name: 4Ms Assessment). This order will create a task for the nurse. The task will open an area in iView (Doc Set) that will contain a series of fields common to most Cerner builds. These fields allow the nurse to document the initial assessment of the 4Ms. (See Appendix B for a suggested build; however, you may choose to create net new fields in your Doc Set.)

Use separate DTAs to for inpatient and ambulatory assessments, to allow for different prompts for the older adults in the assessments for each of the two settings.

The results of this documentation in either form will flow to a specialty results tab in Results Review, Interdisciplinary Summary Pages, Nursing, and Care Management Summary Pages.

Act On

Use the information documented in the assessment to align the care plan with What Matters. The answers to the What Matters flowsheet can drive an alert or advisory which will, in turn, prompt clinicians to add care plans appropriate to the older adult's priorities. For example, if an older adult identifies managing pain as a priority, a pain management care plan should be suggested or automatically added based on the earlier flowsheet documentation.

An option for "other" should be available both for initial documentation of the older adult's information as well as within care plan documentation. Clinicians should individualize the care plan for each older adult, considering the person's goals and preferences. Add appropriate patient education for enabling older adult's goals and preferences. Some content may be generated from flowsheet and/or care plan documentation via alerts, prompts, or behind-the-scenes rules.

In Cerner:

- Create a 4Ms Interdisciplinary Plan of Care (IPOC). See Appendix C for an example build.
- Based on documentation in either the PowerForm or iView, suggest the IPOC. If using the PowerForm in an inpatient setting, a label can be placed on the PowerForm to remind nurses to initiate the 4Ms IPOC.
- Continue to address IPOC once daily during the admission.
- Add Patient Education during the Admissions that appropriately addresses the older adult's identified concerns and goals.

Consider incorporating What Matters to the older adult into the clinician admission note template along with space for actions taken. For organizations with existing templates or significant customization amongst clinicians, consider updating the templates or creating a specialty flowsheet within the Results Review tab.

In Cerner:

- If organization clinicians are using PowerNote, consider creating shared macros that contain language that conveys the clinician has acknowledged the older adult's wishes. Smart templates can also be coded to pull documented elements of the 4Ms into the clinician note, such as DTAs from the PowerForm assessments of What Matters, Mobility, and dementia screens. Home medications will pull into the note.
- If using Dynamic Documentation (DynDoc), the same smart template recommendation can be employed, and the same home medication information will be pulled into the note.

Incorporate this information into the 4Ms report mentioned at the beginning of this document. In addition to incorporating What Matters, consider including code status, advance directives, and Medical Orders for Life-Sustaining Treatment (MOLST)/Physician Orders for Life-Sustaining Treatment (POLST) documentation to encourage their use in clinical decision making. Alternatively, or additionally, create a navigator dedicated to 4Ms documentation and review. If a navigator is created, consider restricting to patients 65 and older.

In Cerner: Most organizations are collecting advance directive information at the time of admission as a regulatory requirement. Addressing What Matters for the older adult is a separate conversation. Document and assess it separately.

Medication

If medication is necessary, use age-friendly medication that does not interfere with What Matters to the older adult, Mentation, or Mobility across settings of care. [*The Guide to Using the 4Ms in the Care of Older Adults*](#), pages 31 and 34-35, provides information about assessing and acting on Medication in the context of an Age-Friendly Health System in an inpatient setting.

Assess

Review for high-risk medication use. Potentially inappropriate medications for older adults include the following:

- Benzodiazepines
- Opioids
- Highly-anticholinergic medications (e.g., diphenhydramine)
- All prescription and over-the-counter sedatives and sleep medications
- Muscle relaxants

- Tricyclic antidepressants
- Antipsychotics

In Cerner: Medication Reconciliation is a required step for physicians during the admission process.

Consider creating an age-appropriate Admission PowerPlan that offers a medication profile that is more suitable for the older population. Consider including orders for non-pharmacologic alternatives for sleep and relaxation.

Act On

Avoid the high-risk medications listed above. If the older adult takes one or more of the medications listed, discuss any concerns the patient may have, assess for adverse effects, and discuss deprescribing with the older adult.

In Cerner: If your health system is open to creating medication alerts, consider including alerts to remind clinicians to avoid or deprescribe the high-risk medications during the ordering process. These will alert physicians about high-risk medications when added to the scratchpad.

Mentation

Prevent, identify, treat, and manage dementia, depression, and delirium across settings of care. [The Guide to Using the 4Ms in the Care of Older Adults](#), pages 32 and 35-36, provides information about assessing and acting on Mentation in the context of an Age-Friendly Health System in an inpatient setting.

Assess

Screen for delirium at least every 12 hours. Incorporate your delirium screening tool into required admission and shift documentation. If you do not have an existing tool, try using the [Ultra-Brief 2-Item Screener \(UB-2\)](#).

In Cerner:

- For nursing, mentation assessment is performed in either iView or PowerForm. Continued documentation against the 4Ms IPOC will serve as a reminder for nurses to address the most important aspects of care with this group of patients (See Appendix C for an example 4Ms IPOC). There are several mentation assessment tools that can be built into iView, depending on organizational alignment and preference. However, Confusion Assessment Method for the ICU (CAM-ICU) is the only screening tool found in model content.
- For clinicians, mentation assessment is performed in Dynamic Documentation (DynDoc). Orders can be placed via PowerPlan to direct patient care to the specific mentation issues.

Act On

Note that interventions below may support other goals within the 4Ms framework in addition to Mentation.

Ensure Sufficient Oral Hydration

Make fields available to clinicians for documentation when prompting or encouraging older adults to drink (in addition to fields for oral fluid intake) within the intake and output and daily cares flowsheet templates or another location specified by your organization. Ensure an option is available for documentation of fluid restriction and/or nothing by mouth (NPO) status.

Orient Older Adults to Time, Place, and Situation

Document orientation status during assessments. If the older adult is disoriented, document use of gentle reorientation and/or orienting cues and any actions taken.

Ensure Older Adults Have Their Personal Adaptive Equipment

Document Environmental Safety and Sensory Deficits in iView.

Prevent Sleep Interruptions and Use Non-pharmacological Interventions to Support Sleep

Ensure that EHR documentation windows reflect policy and that clinicians can avoid sleep interruptions for older adults' assessments by clustering care.

Document non-pharmacological interventions as options in Bedtime Readiness: sleep aids (e.g., earplugs, sleep masks, or muscle relaxation), lights dimmed, noise minimized, music played, sleep kit offered, and other for RN or aide documentation.

In Cerner: Include these care strategies in the 4Ms IPOC design and make them available for documentation in iView.

Mobility

Ensure that older adults move safely every day to maintain function and do What Matters. [The Guide to Using the 4Ms in the Care of Older Adults](#), pages 32-33 and 37, provides information about assessing and acting on Mobility in the context of an Age-Friendly Health System in an inpatient setting.

Assess

Screen for mobility limitations. Incorporate your mobility screening tool into required admission documentation. If you do not have an existing tool, try using the [Timed Up & Go \(TUG\) assessment](#).

Act On

Ensure early, frequent, and safe mobility. Manage impairments that reduce mobility. Include pain scores, catheters, IV lines, telemetry orders, or other tethers such as continuous pulse oximetry, electroencephalogram (EEG), or restraints on the patient overview, rounding, and nursing handoff reports along with mobility documentation.

Within the care plan, provide a place for the RN to document the older adult's daily mobility goal and the steps needed to achieve the day's goal.

Document patient activity with activities of daily living.

In Cerner:

If making a specific Geriatric PowerPlan, add Case Management and Social Work referrals orders as pre-checked to make the plan standard.

Add specific patient education to discharge instructions, as validated by your organization (e.g., fall prevention, mobility, or medication education).

Transitions of Care

At discharge, manage impairments that reduce mobility and support creation of a safe home environment. Checklists may assist older adults and family caregivers in creating a home friendly to aging-in-place. Consider adding checklists, such as the [Check for Safety – A Home Fall Prevention Checklist for Older Adults](#) from the Centers for Disease Control and Prevention (CDC), and handouts, such as the [MyMobility Plan](#) from the CDC, in patient handouts printed directly from the EHR with the after-visit summary.

Ensure older adults have timely outpatient follow-ups scheduled with primary care, specialists, and/or physical therapy and occupational therapy as necessary. Additionally, provide options for

referrals to area agencies on aging (AAAs), community-based organizations, and/or centers for independent living (CILs).

In Cerner: Follow-up can be scheduled during the Depart Process to ensure there is no gap in care and that the older adult or family caregiver understands how to complete this task.

Care management should ensure that adaptive/assistive devices and medications are available to older adults and that support systems are in place for assisting older adults in pursuing continued appropriate prevention, identification, treatment, and management of dementia, depression, and delirium. Further, ensure care managers have available documentation for medication availability and understanding following education.

In Cerner: If your organization is using Cerner's Care Management Component, a custom worklist can be created for patients 65 and older. Care managers will be crucial in developing a discharge plan and assessment that best serves the patient's need, in alignment with What Matters to the patient.

Ambulatory Implementation

When using these guidelines for implementing the 4Ms in your EHR, validate both content and workflow inside your organization. Provide 4Ms documentation for all specialties across the continuum of care.

In Cerner: If the organization has the ability to create screening questionnaires in advance of the patient's scheduled visit, consider creating a 4Ms document for the patient to complete prior to the appointment. If your older adult population is less inclined to use patient portal technology, consider mailing the questionnaires in advance. The answers can be transcribed by the medical assistant or RN into the EHR to make the data discrete and actionable.

What Matters

What Matters means knowing and aligning 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. The ["What Matters" to Older Adults? A Toolkit for Health Systems to Design Better Care With Older Adults](#) and www.ihf.org/AgeFriendly website has more detailed guidance about how to put What Matters into practice as part of the 4Ms.

Assess

Include What Matters documentation in both initial intake documentation and office visit documentation.

Document the older adult's answer in the EHR if not already documented via patient portal. A multi-response answer may be used to list the most common responses to What Matters. Examples of potential answers include: family connections, social activity, independence, decline to discuss, or other (with space for comments). Validate a comprehensive list of options with clinicians across the continuum of care.

In addition, use a flowsheet row or patient questionnaire for a specific response of What Matters to older adults in their own words, such as attending an upcoming family event or rejoining a group or class each week. Include the information documented here on the older adult's summary report in a conspicuous location. Ensure it appears to care team members across the continuum of care. Ask all patients What Matters, regardless of age.

In Cerner:

- For organizations using an Ambulatory Intake PowerForm or Annual Wellness Visit Form, create a new section that walks clinicians through assessing the 4Ms of the patient. (See Appendix D for a suggested build.)
- If your organization uses both forms, remember to add the section to both.

Use separate DTAs to for inpatient and ambulatory assessments, to allow for different prompts for the older adults in the assessments for each of the two settings.

Using the screening tool of the organization's choice, insert another section in the Intake Form to assess Mobility and dementia.

A specialty flow sheet can be added to the Results tab for quick review by clinicians before developing the patient's plan.

Act On

Use the information documented in the assessment to align the care plan with What Matters. Within clinician notes, include documentation of what will be done to address What Matters to each older adult.

In Cerner:

- If organization clinicians are using PowerNote, consider creating shared macros that contain language that convey the clinician has acknowledged the older adult's wishes. Smart templates can also be coded to pull documented elements of the 4Ms into the clinician note, such as DTAs from the PowerForm assessments of What Matters, Mobility, and dementia screens. Home medications will pull into the note.
- If using Dynamic Documentation (DynDoc), the same smart template recommendation can be employed, and the same home medication information will be pulled into the note.

Medication

If medication is necessary, use age-friendly medication that does not interfere with What Matters to the older adult, Mentation, or Mobility across settings of care. [The Guide to Using the 4Ms in the Care of Older Adults](#), pages 39 and 42-43, provides information about assessing and acting on Medication in the context of an Age-Friendly Health System in an ambulatory setting.

Assess

Review for high-risk medication use. Potentially inappropriate medications for older adults include the following:

- Benzodiazepines
- Opioids
- Highly-anticholinergic medications (e.g., diphenhydramine)
- All prescription and over-the-counter sedatives and sleep medications
- Muscle relaxants
- Tricyclic antidepressants
- Antipsychotics

Display medication alternative alerts to all specialties across the continuum of care for older adults 65 and older.

Act On

Avoid or deprescribe the high-risk medications listed above. If the older adult takes one or more of the medications listed, discuss any concerns the patient may have, assess for adverse effects, and discuss deprescribing with the older adult.

In Cerner: If your health system is open to creating medication alerts, consider including alerts to remind clinicians to avoid or deprescribe the high-risk medications during the ordering process. These will alert physicians about high-risk medications when added to the scratchpad.

You can also consider open chart alerts based on age that remind the clinician to avoid high-risk medications.

Mentation

Prevent, identify, treat, and manage dementia, depression, and delirium across settings of care. [The Guide to Using the 4Ms in the Care of Older Adults](#), pages 39-40 and 43-44, provides information about assessing and acting on Mentation in the context of an Age-Friendly Health System in an ambulatory setting.

Assess

Screen for dementia or cognitive impairment and depression. Incorporate your dementia and depression screening tools into your intake and office visit assessment tools. If you do not have an existing tool for dementia screening, try using the [Mini-Cog®](#) screening tool. If you do not have an existing tool for depression screening, consider implementing the [Patient Health Questionnaire-2 \(PHQ-2\)](#) within your organization.

In Cerner: PHQ-2 and PHQ-9 are common sections in most Intake Forms.
Other standardized assessments can be built into the Intake Form.

Act On

Consider the impact of dementia on other problems, such as difficulty remembering complicated medication regimens or other treatments, and assist older adults and family caregivers with education and support.

When clinicians add dementia or similar issues to the problem list, enable suggestions for after-visit summary text and supportive resources on which clinicians can also counsel (e.g., the Alzheimer's Association) or consultation with specialty clinicians as necessary.

In Cerner: Patient education is suggested based on diagnosis. Ensure the appropriate education is selected to meet the older adult's needs. If the organization lacks education specific to Mentation and Mobility, create custom discharge instructions and upload them into Cerner. Medication leaflets are generated with new prescriptions and can be pulled into patient education as needed.

Identify and Manage Factors Contributing to Depression

Based on the results of the depression screen, clinicians should manage factors that contribute to depressive symptoms, including sensory limitations (vision, hearing), social isolation, losses of aging (job, income, societal roles), bereavement, and medications.

Consider the need for counseling and/or pharmacological treatment of depression or refer to a mental health clinician if appropriate.

Consider implementing tools suggesting items for the problem list based on the completed screen score, including order sets or order set components, note templates, or components of an after-visit summary.

Mobility

Ensure that older adults move safely every day to maintain function and do What Matters. [The Guide to Using the 4Ms in the Care of Older Adults](#), pages 40-41 and 44, provides information about assessing and acting on Mobility in the context of an Age-Friendly Health System in an ambulatory setting.

Assess

Screen for mobility limitations. Incorporate your mobility screening tool into assessments or questionnaires. If you do not have an existing tool, try using the [Timed Up & Go \(TUG\) assessment](#).

In Cerner: Consider adding mobility assessment sections to the Ambulatory Intake and Annual Wellness Visit PowerForms. Age flex the build to make these required fields for those 65 and older.

Act On

Ensure safe mobility. Manage impairments that reduce mobility and support creation of a safe home environment. Include pain scores; strength, balance, or gait; and hazards in home, such as stairs, loose carpet or rugs, and loose or broken handrails on the patient overview reports along with mobility documentation.

Checklists may assist older adults in creating an aging-in-place friendly home. Consider adding checklists, such as the “[Check for Safety – A Home Fall Prevention Checklist for Older Adults](#)” from the Centers for Disease Control and Prevention (CDC), and handouts, such as the “[MyMobility Plan](#)” from the CDC, in patient handouts printed directly from your EHR with the after-visit summary.

When appropriate, consider adding orders for consult to physical and/or occupational therapy to order suggestions for impairments that often limit mobility.

Implement mobility goal tracking and reporting from older adults with follow up and support from clinical staff.

Include a section within your follow-up visit workspaces for mobility goals and progress since the older adult’s last visit.

Reporting

Inpatient Settings

Within the inpatient context, build reports to review compliance with your definition of the 4Ms. Include patient list reports, short- and mid-term documentation compliance, and reporting of medication ordering alerts in addition to long-term outcome reporting. Filter these reports to include older adults ages 65 and older. Preferably, implement views allowing for filtering to see breakdowns of older adults ages 65–74, 75–84, and 85 and over. Compliance should be reviewed per policy and protocol at your organization by nursing and physician leadership in addition to quality and reporting staff to pursue opportunities for improvement.

For long term reports, include 30-day readmission rates, Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), and length of stay metrics as well as options for filtering older adults ages 65–74, 75–84, and 85 and over in addition to an overall view of older

adults 65 and older. In addition to EHR reporting, pull baseline harms reporting (not documented within an EHR) for comparison with levels following 4Ms implementation.

For any existing reports, run reports to save baseline data of patient outcomes before 4Ms implementation for later comparison.

In Cerner: Create a custom DA2 report, or CCL report if a more detailed report is desired, that aggregates data from areas of the chart that include age-friendly documentation. Suggested reports that can be developed based on organizations' 4Ms implementation preference include:

- 4M PowerPlan usage (if this report has been developed)
- 4M IPOC utilization
- 4M DTA utilization
- Patient volume based on age to perform manual audits on Medication Reconciliation, Discharge Medication List, and patient follow up.

Ambulatory Settings

Within the outpatient context, build reports to review compliance with your definition of the 4Ms. Include short- and mid-term documentation compliance in addition to reporting of medication ordering alerts. Filter these reports to older adults ages 65 and older. Preferably, implement views allowing for filtering to see breakdowns of older adults ages 65–74, 75–84, and 85 and over. Compliance should be reviewed per policy and protocol at your organization by nursing and physician leadership in addition to quality and reporting staff to pursue opportunities for improvement.

For long term reports, include information regarding older adults with and without referral or treatment orders based on a corresponding scoring system. For example, when possible, report on older adults with and without a referral to physical or occupational therapy based on the corresponding TUG score. In additional long-term reports, include data on falls, Consumer Assessment of Healthcare Providers and Systems Clinician and Group Survey (CG-CAHPS), and emergency department visit rates for older adults ages 65 and over seen since implementation of the 4Ms and within a given reporting period (e.g., 1, 3, and 6 months).

In Cerner: All of these data elements can be easily pulled into a custom DA2 report.

Conclusion

While there is still a larger need to ensure that all EHRs support the documentation and implementation of the 4Ms model, this guide was designed to help health systems get started. All content and workflow should be validated inside your health system and all policies and procedures should be updated to reflect any adopted build. Further, building the 4Ms in the EHR is simply a starting point. Health systems should consider the barriers to making electronic data useable and interoperable, understand how this tool might integrate into existing clinical workflows, and plan to train staff on how workflows will change. The goal is to ensure the 4Ms can be documented and used in a reliable and efficient way to ensure that care is consistent with the 4Ms across care settings.

We welcome feedback and shared learnings. Email us at: AFHS@IHI.org.

Appendix A: Example DTA for What Matters – Inpatient

New DTA: What Matters – Inpatient

Age flexed to 65 and older, required field

During this hospital stay, What Matters to you? *

- Family connections
- Comfort
- Understanding care plans
- Clinical/physical care needs
- Decline to discuss
- Other

Reference text

It might be helpful to explain the nature of the question by helping the older adult understand we want to customize our care around the issues most important to the individual during this admission.

Subjective statement from the older adult (Note: do not use Rich Text field as there is a character limit for free text on MPages).

Appendix B: Example 4Ms Doc Set – Inpatient

A Doc Set is a section of iView that opens from a task. The task is generated from an order that is placed, with the suggested name 4Ms Assessment. This order can be a stand-alone order or placed in a physician’s admission PowerPlan. Any of the fields in a doc set can be made required, as seen fit by the organization. This is an example of an inpatient documentation workflow.

The DTAs shown below are pulled from iView sections found in model content and are used as a suggested starting point for similar DTAs in each individual client build.

What Matters DTA (will pull forward if documented in PowerForm)	
▾ Mental Status/Cognition	
Level of Consciousness	
AVPU	
Orientation Assessment	
Ability to Pay Attention	
Disorganized Thought Process	
◇ Cognition	
◇ Ability to Follow Command	
◇ Yes/No Reliability	
◇ Memory	
◇ Safety/Judgment	
◇ Problem Solving	
▾ Activities of Daily Living	
▾ Functional Assessment	
◇ ADLs	
Bed Mobility Assistance	
Ambulation Assistance	
▾ Activity	
◇ Environmental Safety Implemented	
◇ Side Rail Location	
◇ Name Band Location	
Response to Restraint Alternatives	
Manage Sensory Impairment	
Assistive Device	

▾ PSYCHOSOCIAL	
Affect/Behavior	
Appearance	
Disorganized Thought Process	
Hallucinations Present	
Pt/SO/Parent Stated Psychosocial Symp	
Other Psychosocial Comment	
Patient Coping	
Patient Feelings/Concerns	
Patient Interaction w/ Care Team	
Appropriate Activity for Situation	
Call Light & Personal Items Within Reach	
Elimination Needs Addressed	
Pain Present	
Psychosocial & Safety Needs Addressed	
Level of Consciousness	
Patient Refused	

Appendix C: Example IPOC 4Ms Build Instructions

	Default Indicator (Include, Exclude, Required)	Component Type (Goal, Indicator, Intervention, Note)	DTA Description	Order Sentence
4Ms of the care of older adults		Persistent note	The 4Ms – What Matters, Medication, Mentation, and Mobility – make care of older adults that can be complex, more manageable. The 4Ms identify the core issues that should drive all care and decision making with 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 condition(s).	
Interdisciplinary	Include	Goal chart in plan	What Matters is discussed with the patient and captured in the Admission Assessment.	
	Include	Goal chart in plan	Home medications are reviewed at admission to screen for high-risk medications.	
Fires as suggested based on age of 65 or older	Include	Goal chart in plan	Encourage mobility	
	Include	Indicator chart in plan	Level of consciousness	
	Include	Indicator chart in plan	Orientation Assessment	
	Include	Indicator chart in plan	Cognition	
	Include	Indicator chart in plan	CAM-ICU Result	
	Include	Intervention	Offer orientation reminders	
	Include	Intervention	Monitor hydration status	
	Include	Intervention	Keep adaptive equipment in easy reach and accessible to patient	
	Include	Intervention	Prevent sleep interruptions	
	Include	Intervention	Consider non-pharmacologic sleep interventions such as earplugs, sleep masks, or muscle relaxation	
	Include	Intervention	Educated patient and/or family	
	Include	Intervention	Plan of care reviewed	

Appendix D: Example DTA for What Matters – Ambulatory

New DTA: What Matters – Ambulatory

Age flexed to 65 and older, required field

During this hospital stay, What Matters to you? *

- Family connections
- Social activity
- Independence
- Decline to discuss
- Other

Reference text

It might be helpful to explain the nature of the question by helping the older adult understand we want to customize our care around the issues most important to the individual in both the current home environment and the larger medical journey.

Subjective statement from the older adult (Note: do not use Rich Text field as there is a character limit for free text on MPages).

References

¹ Adapted from Tinetti M. How focusing on What Matters simplifies complex care for older adults. Institute for Healthcare Improvement website. <http://www.ihl.org/communities/blogs/how-focusing-on-what-matters-simplifies-complex-care-for-older-adult>. Published January 23, 2019. Accessed March 7, 2019.