

Measures Management System
Information Session

Advancing Age-Friendly Care: From the 4Ms Framework to the CMS Inpatient Quality Measure

Presenters:

KellyAnne Johnson, MPH

Rani Snyder, MPA

Katie Drago, MD, FACP

Evelyn Ivy Wambui Mwangi, MBChB, CMD, MPH, FACP

Want to Ask a Question?

- Audience questions will be answered during the Q&A session at the end of the presentation.
- Instructions on how to submit questions:
 - Zoom Q&A Function
 - Please feel free to submit questions throughout the presentation.
- Note: If your question is not answered during the live Q&A, we will post FAQs to the CMS MMS Hub in a few weeks!

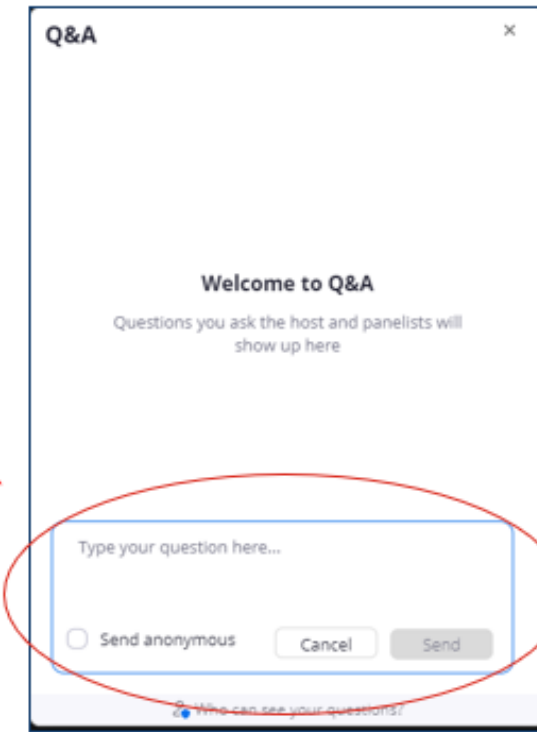
Want to Ask a Question?

Use the Zoom Q&A Function

Open the Zoom Q&A function



- Type your **question** into the question box
- Press **send** to submit



Advancing Age-Friendly Care: From the 4Ms Framework to the CMS Inpatient Quality Measure

Meeting Objectives

By the end of this session, participants will be able to:

- Describe the development and domains of the Age-Friendly Health Systems 4Ms Framework.
- Explain the alignment between the 4Ms Framework and the new CMS inpatient quality measure for age-friendly care.
- Examine how Luminis Health implemented the 4Ms Framework, identifying practical strategies and lessons for the new CMS age-friendly measure.

Meet the Panel



Facilitated by
KellyAnne Johnson, MPH
Senior Director
Institute for Healthcare Improvement



Rani Snyder, MPA
Acting President and Vice President,
Program
The John A. Hartford Foundation



Katie Drago, MD, FACP
IHI Expert Faculty



Evelyn Ivy Wambui Mwangi,
MBChB, CMD, MPH, FACP
IHI Expert Faculty

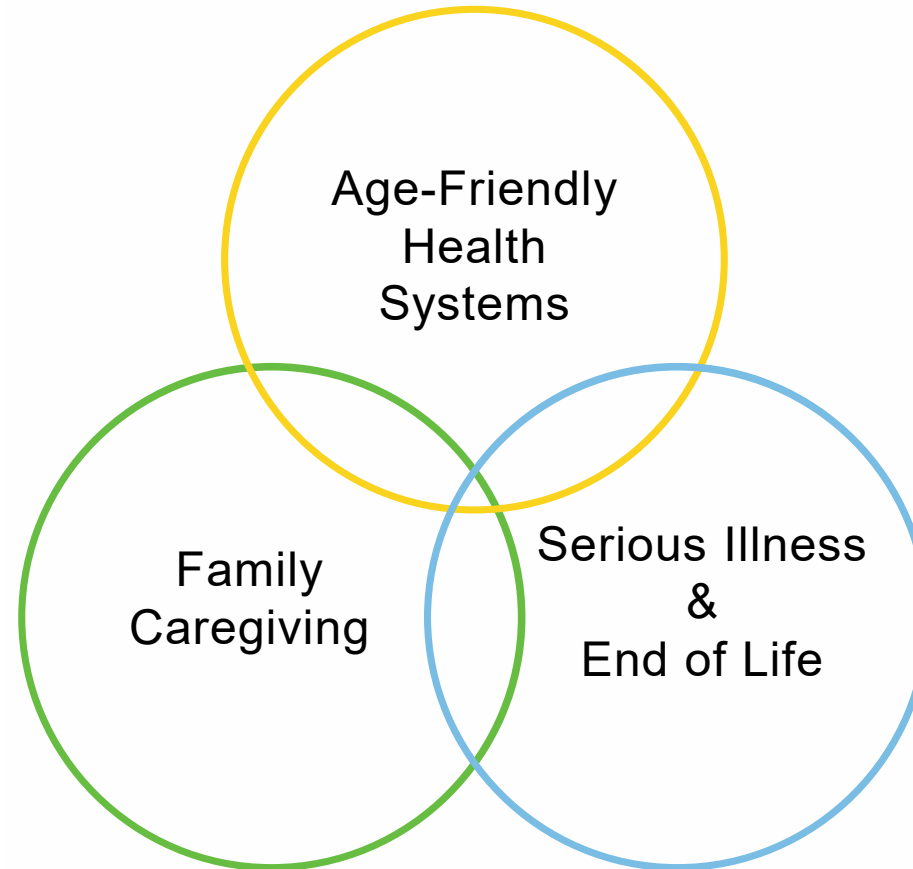
Mission & Priorities



The
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DEDICATED TO IMPROVING THE CARE OF OLDER ADULTS

PRIORITY AREAS



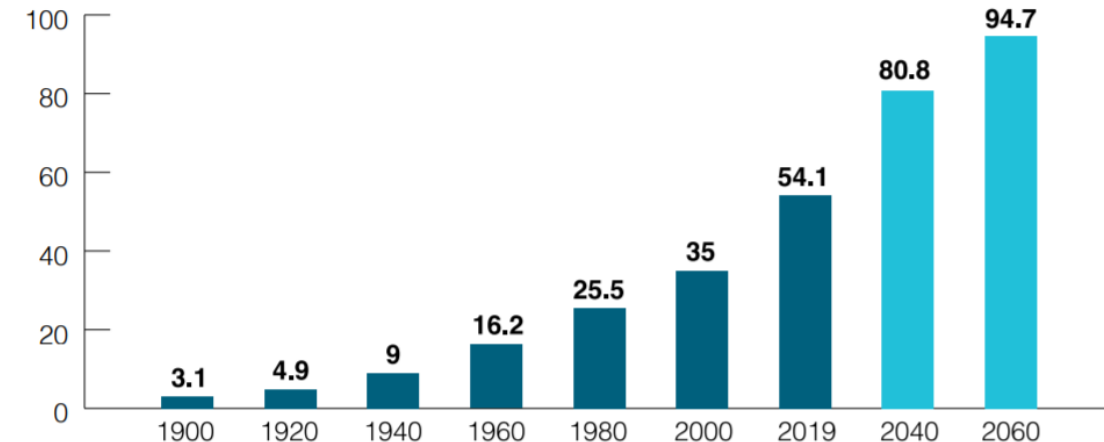
DEDICATED TO IMPROVING THE CARE OF OLDER ADULTS



Why Age-Friendly Health Care

- **Demography:** # of older adults rapidly growing, more diverse
- **Complexity:** multiple chronic conditions, dementia, disability, isolation, social drivers of health
- **Disproportionate Harm:** higher rates of health care-related harm, discoordination, poor preparation for disasters

Number of Persons Age 65 and Older, 1900 - 2060
(numbers in millions)



Note: Increments in years are uneven. Lighter bars (2040 and 2060) indicate projections.

Source: U.S. Census Bureau, Population Estimates and Projections



Review of Evidence-Based Care Models



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Methods: Reviewed 17 care models with level 1 or 2a evidence of impact for model features

90 care features
identified in pre-work

Redundant concepts
removed and **13
discrete features** found
by IHI team

Expert Meeting led to
the selection of the “vital
few”: **the 4Ms**

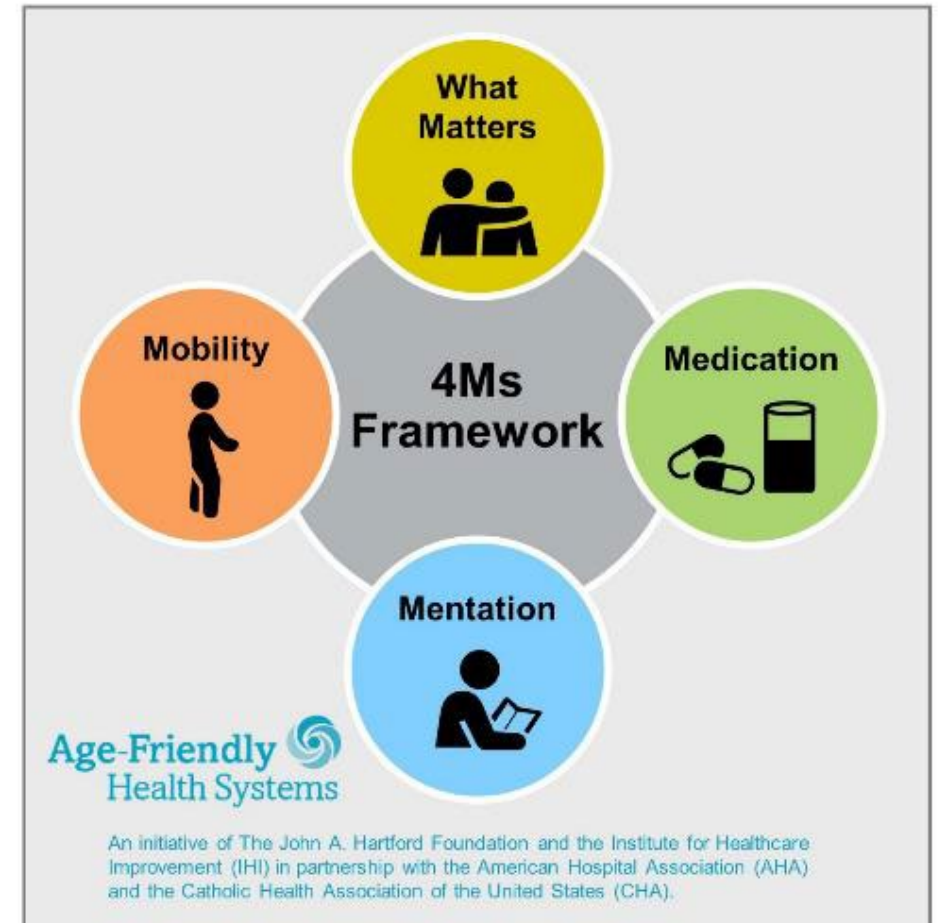
Age-Friendly Health Systems: Aim



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Build a movement so ***all care*** with older adults is **equitable** and **age-friendly**:

- Guided by an essential set of evidence-based practices (4Ms)
- Causes no harm
- Is consistent with *What Matters* to the older adult and their family



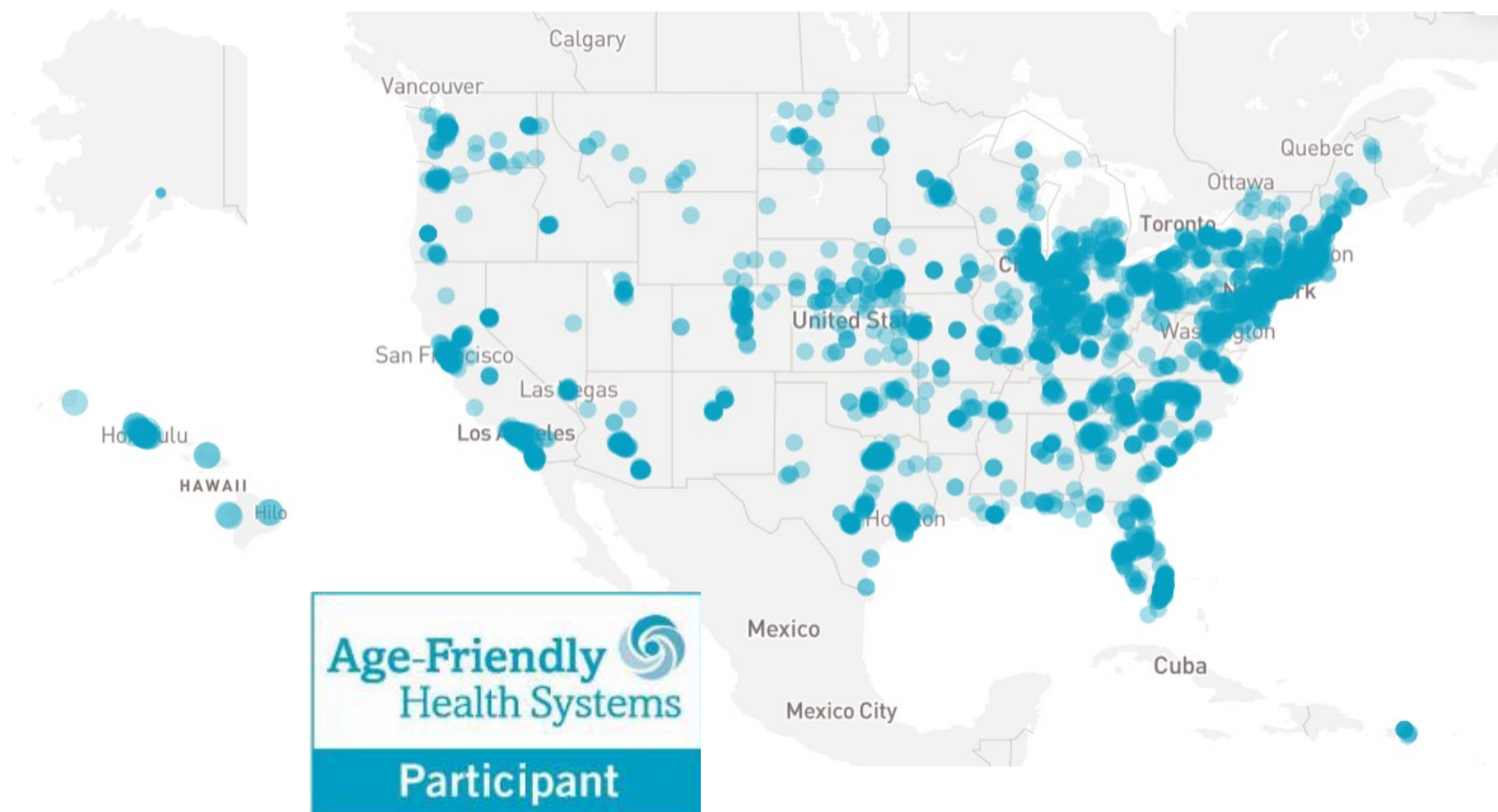
Fulmer, T., Mate, K. S., & Berman, A. (2018). The age-friendly health system imperative. *Journal of the American Geriatrics Society*, 66(1), 22-24.



A Growing Movement!



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5,200+ hospitals, practices,
convenient care clinics and
nursing homes
(and growing globally)

More than **5,480,000** older
adults have been reached
with 4Ms care

As of June 2025

ihi.org/Engage/Initiatives/Age-Friendly-Health-Systems/Pages/Background.aspx

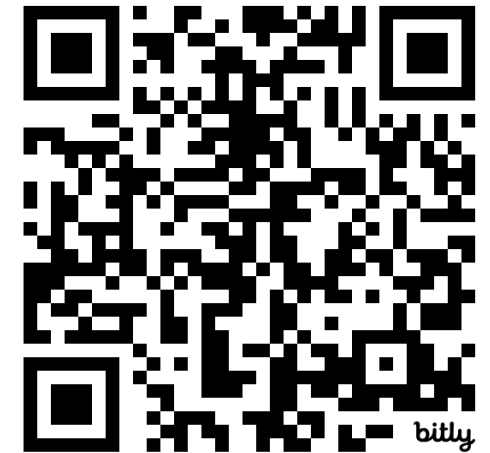


Age-Friendly Hospital Measure – Built on the 4Ms of Age-Friendly Care



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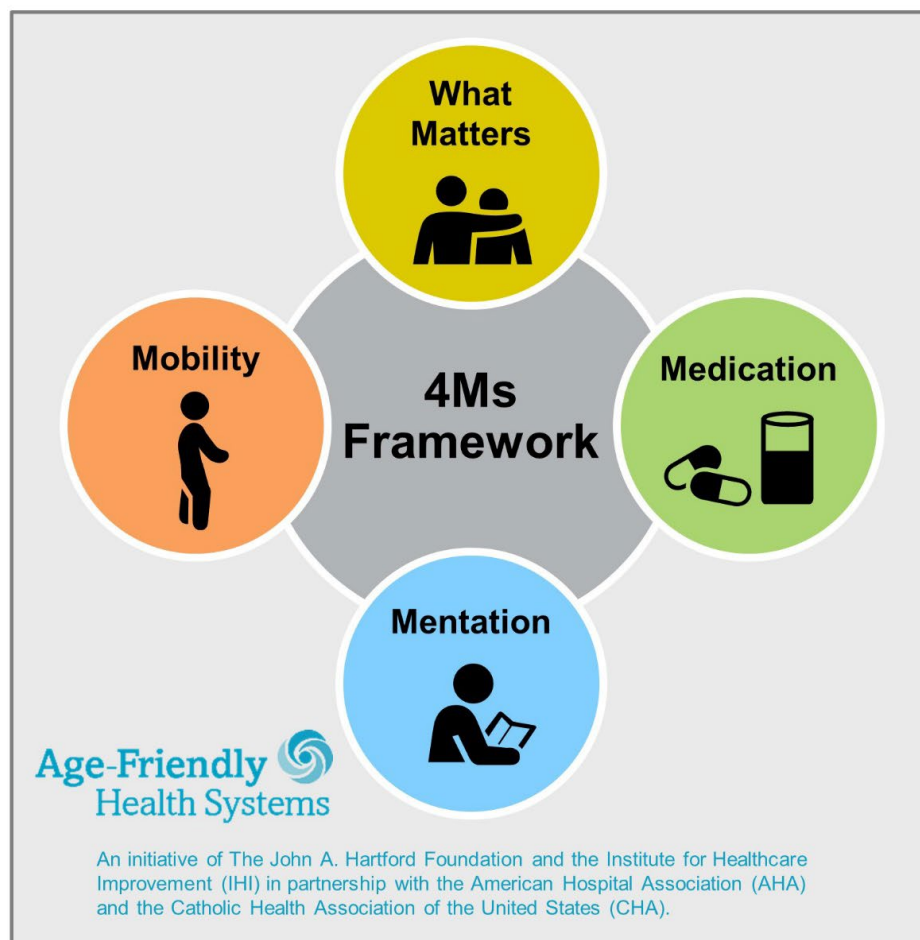
- FY2025 Hospital Inpatient Quality Reporting Program (pay-for-reporting)
- All participating hospitals required to report on all elements within 5 domains:
 - **Elicit Patient Healthcare Goals (what **Matters**)**
 - **Manage **Medication****
 - **Implement Frailty Screening (**Mentation** and **Mobility**)**
 - **Assess Social Vulnerability**
 - **Designate Age-Friendly Care Leaders**
- Data collected will be publicly available on Medicare Care Compare
- Age-Friendly Health Systems and related initiatives can help hospitals meet measure



bit.ly/CMS_AFMeasure



The 4Ms of Age-Friendly Care



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.

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

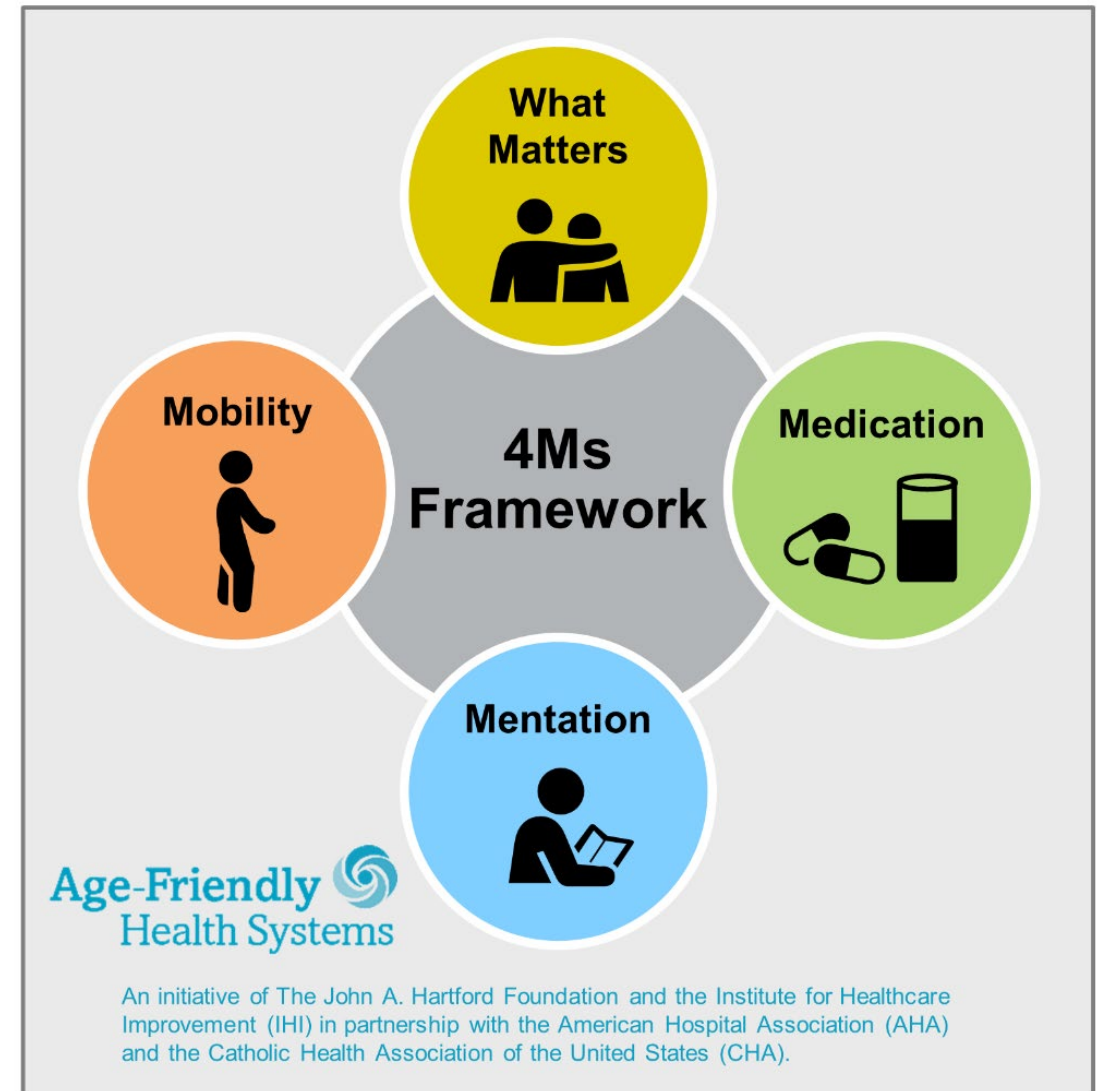
Why the 4Ms?

Represents core health issues for older adults

Builds on strong evidence base

Simplifies and reduces implementation and measurement burden on systems while increasing effect

Components are synergistic and reinforce one another



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

Evidence for the 4Ms: Interactions and Outcomes across the Care Continuum





Kedar Mate ¹, Terry Fulmer ², Leslie Pelton ¹, Amy Berman ², Alice Bonner ¹, Wendy Huang ³, Jinghan Zhang ³

Affiliations + expand
PMID: 33555233 DOI: 10.1177/0898264321991658

Free article

Age-Friendly Health Systems—Original Research

Effect of Age-Friendly Care on Days at Home Post-Hospital Discharge for Traditional Medicare Patients: A Cross-Sectional Study

Kathleen Drago, MD¹ , Bryanna De Lima, MPH¹ , Sophie Rasmussen, MBA², Alaina Ena, RN, MN¹, Elizabeth Eckstrom, MD, MPH¹ , and Ella Bowman, MD, PhD¹ 



Patients receiving at least 3Ms spent significantly fewer days in a facility within 30 days of hospital discharge

DOI: 10.1111/jgs.19083

MODELS OF GERIATRIC CARE, QUALITY IMPROVEMENT, AND PROGRAM DISSEMINATION

Journal of the
American Geriatrics Society

Early clinical and quality impacts of the Age-Friendly Health System in a Veterans Affairs skilled nursing facility

Sarah E. King MD^{1,2}  | Marcus D. Ruopp MD^{1,3} | Chi T. Mac PharmD¹ | Kelly A. O'Malley PhD^{1,3,4} | Jordana L. Meyerson MD, MSc^{1,3} | Lindsay Lefers PT, DPT¹ | Jonathan F. Bean MD, MPH^{4,5,6} | Jane A. Driver MD, MPH^{1,3,7} | Andrea Wershof Schwartz MD, MPH, AGSF^{1,3,4,7,8} 

Short Stay (Rehab)	Long Term Care
↓48% ED utilization	↓73% ED utilization
↓30% rehospitalization (30d)	↓64% hospitalizations
↑19% discharge to community	

Investigating system-level outcomes

Cross-sectional analysis including 13,396 hospital admissions between September 2020 – September 2022 among 10,630 unique patients 65 years+

Cohort divided into recipients and non-recipients of 4Ms care

Recipients had to receive care for all 4Ms during their stay

Partial 4Ms care was considered non-recipient

Outcomes: overall length of stay, ICU length of stay, total charges, 30-day readmissions

Adjusted for covariates (age, sex, ethnicity, race, smoking status, admission type (medical vs surgical vs trauma vs emergent), Medicaid status) and propensity score matched

Outcome	Overall (% Change)	High CMI (% Change)	Low CMI (% Change)
Total Charges	- \$18,697.29 (- 20%)	- \$41,825.90 (- 27%)	- \$8,965.31 (- 16%)
Length of Stay	- 0.31 days (- 6%)	- 1 day (- 15%)	+ 0.2 days (+ 4.4%)
ICU Length of Stay	- 0.3 days (- 12%)	- 0.6 days (- 19%)	- 0.31 days (- 15%)
30-day readmission	NS	- 14%	NS

Inpatient Utilization

Most of the benefit is experienced by the more seriously ill inpatients

- Severe, complex acute illness, moderate acute illness on top of stable chronic illness, mild acute illness on top of severe, end stage chronic illness

CMS Measure Domain	Crosswalk to the 4Ms
Eliciting patient healthcare goals: This domain focuses on obtaining patients' health-related goals and treatment preferences, which will inform shared decision-making and goal-concordant care.	What Matters
Responsible medication management: This domain aims to optimize medication management by monitoring the pharmacological record for drugs that may be considered inappropriate in older adults due to increased risk of harm.	Medication
Frailty screening and intervention: This domain aims to screen patients for geriatric issues related to frailty, including cognitive impairment/delirium, physical function/mobility, and malnutrition, for the purpose of early detection and intervention where appropriate.	Mentation, Mobility, and Medication
Social vulnerability: This domain seeks to ensure that hospitals recognize the importance of social vulnerability screening of older adults and have systems in place to ensure that social issues are identified and addressed as part of the care plan.	What Matters, Mentation Plus Burden Scale for Family Caregivers; Rush University Caring for Caregivers Program
Age-friendly care leadership: This domain seeks to ensure consistent quality of care for older adults through the identification of an age-friendly champion and/or interprofessional committee tasked with ensuring compliance with all components of this measure.	All 4Ms, including measuring the 4Ms and sustaining 4Ms care

Advancing Age-Friendly Care: From the 4Ms Framework to the CMS Inpatient Quality Measure: The Luminis Health Experience

Evelyn Ivy Mwangi MD MPH FACP
Geriatric Hospitalist
Anne Arundel Medical Center
Luminis Health, Annapolis, MD



95

million in community benefit

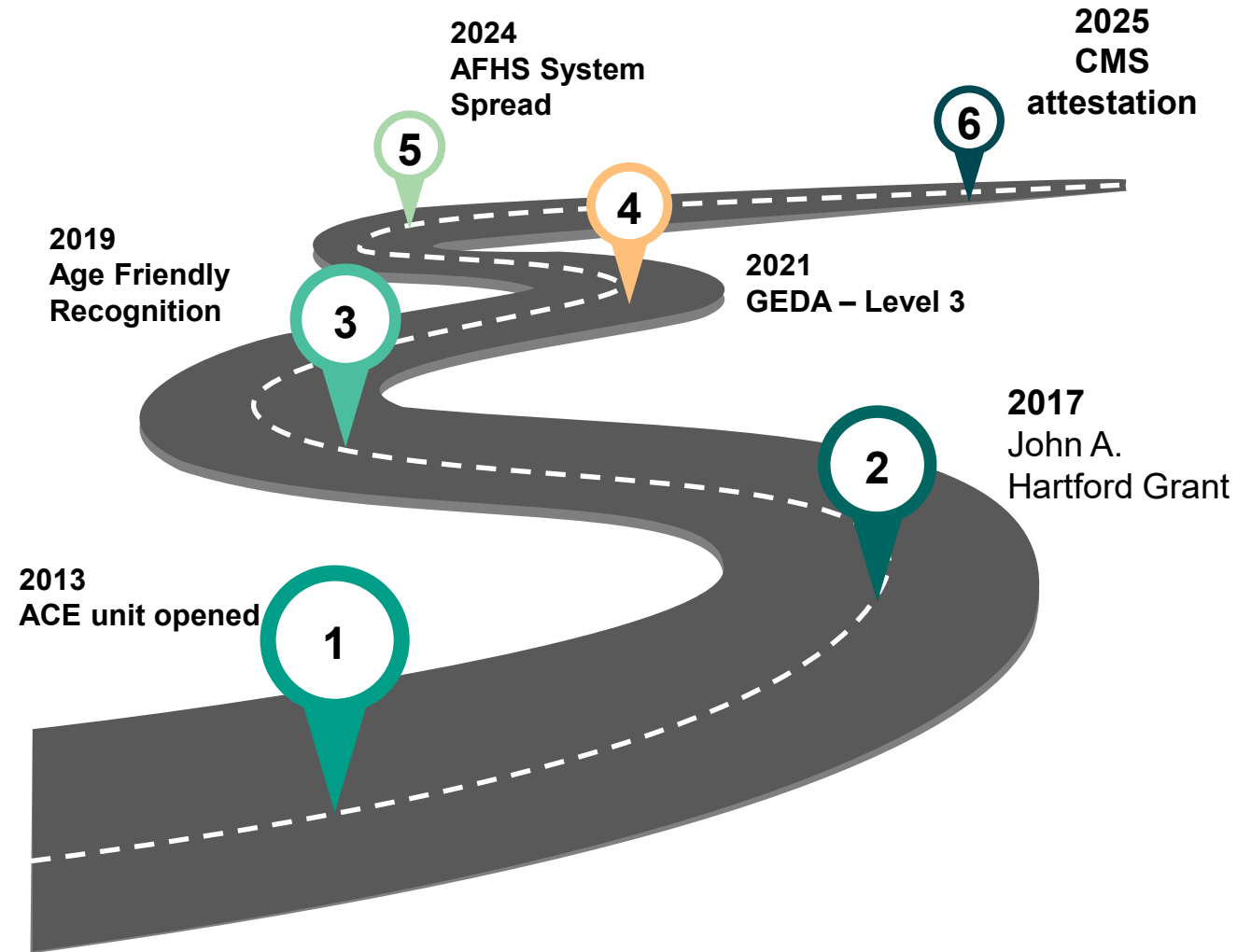
8800

plus team of staff, employees
and volunteers

140500

Annual Emergency Visits

Our Age Friendly Health System Journey



Domains

Eliciting patient healthcare goals: This domain focuses on obtaining patients' health-related goals and treatment preferences, which will inform shared decision-making and goal-concordant care.

Responsible medication management: This domain aims to optimize medication management by monitoring the pharmacological record for medications that may be considered inappropriate in older adults due to increased risk of harm.

Frailty screening and intervention: This domain aims to screen patients for geriatric issues related to frailty, including cognitive impairment/delirium, physical function/mobility, and malnutrition, for the purpose of early detection and intervention where appropriate.

Social vulnerability: This domain seeks to ensure that hospitals recognize the importance of social vulnerability screening of older adults and have systems in place to ensure that social issues are identified and addressed as part of the care plan.

Age-friendly care leadership: This domain seeks to ensure consistent quality of care for older adults through the identification of an age-friendly champion and/or interprofessional committee tasked with ensuring compliance with all components of this measure.

Checklist

4Ms	Setting	Assessment Tool	Staff	Frequency	Act On	Data
Mentation	Ambulatory	PHQ-2 PHQ-9	RN MD	Annual Wellnes s Visit	Treatment Non- pharmacologica l interventions	Healthy Aging Dashboard
	ED	bCAM	RN	Initial evaluation	De escalation proto col	
	In patient	bCAM	RN	Every shift	Delirium protocol	
	ICU	CAM-ICU	RN	Every shift	ABCDF bundle	

Multidisciplinary interfacility team

Physicians

Nursing

PT/OT/SLP

Informatics

Executive Leadership support

President

Chief Medical Officer

Chief Nursing Officer



Comprehensive Geriatric Evaluation in the Emergency Department

Target population

- Community, Assisted Living or Skilled Nursing Facility resident
- Low Acuity, high complexity patient


Intervention

Fast track to comprehensive geriatric evaluation using 4Ms framework via telemedicine

Outcomes

- reduce length of stay in ED
- Facilitate early and safe discharge from the ED
- Support in the first 30 days post discharge
- If admitted – reduce length of stay
- Patient and family satisfaction

The 4Ms at Luminis Health

**Anne Arundel Medical Center**
Living Healthier Together

Today's Date: **MENTATION**
MON TUE WED THU FRI SAT SUN
Room# **668** Phone# **443-924-2668**

Welcome to ACE
Acute Care of the Elderly

Personal Health Care Team
Physician:
Nurse:
PCT:
Charge Nurse #3604
Other:
Family Contact Number:
Relationship:
Approximate Discharge Date







What Matters To You?

WHAT MATTERS


Plan for the Day

Questions for the Care Team

in Goal
Pain Medication is given as needed, please call your nurse.
Next dose due:
MEDICATIONS

Diet Plan
Blood Sugar:
☐ Nothing by Mouth
Activity Level
MOBILITY
☐ Self ☐ 1 ☐ 2 ☐ BR ☐ Lif
Assistive Devices:   
EYEGLASSES **HEARING AID** **DENTURES or BRIDGEWORK**
  
YES / NO YES / NO YES / NO
L / R

We are partners in care so we do bedside shift reports. We would like you to participate along with anyone you choose to keep you informed. This report happens at the bedside 7am and 7pm.



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Hospital – Patient Stories



Mentation: Delirium management in the hospital

Orders

ED Geriatric De-escalation Orderset

General

Activity

☒ Up in chair as tolerated

Routine, 3 TIMES DAILY, First occurrence today at 1800, Until Specified

If safe and able

☐ Ambulate patient as tolerated

Routine, 3 TIMES DAILY, If safe and able

Nursing Assessments

☒ Routine toileting as tolerated

Routine, CONTINUOUS, Starting today at 1330, Until Specified

upon walking, post meals, bedtime and prn

☒ Encourage oral fluid and food intake unless contraindicated

Routine, CONTINUOUS, Starting today at 1330, Until Specified

Nursing Interventions

☒ Attempt to de-escalate agitation through REDIRECTION and VERBAL confrontation, provide short/simple instructions, use gentle persuasive

Routine, CONTINUOUS, Starting today at 1330, Until Specified

☒ Manage unmet needs – pain, hunger, heat, cold, toileting, vision, he

Routine, CONTINUOUS, Starting today at 1330, Until Specified

☒ Ensure access to sensory devices (hearing aids or amplifiers, glasses

Routine, CONTINUOUS, Starting today at 1330, Until Specified

☒ Manage environmental triggers – (noise, overstimulation, and lightir

Routine, CONTINUOUS, Starting today at 1330, Until Specified

☒ Avoid restraints – assess continuing need for lines, tubes and contini

Routine, CONTINUOUS, Starting today at 1330, Until Specified

☒ Consider delaying interventions until agitation is improving. Consult

Routine, CONTINUOUS, Starting today at 1330, Until Specified

☒ Consult with Provider to delay imaging studies if not critically necessary for treatment and stabilization. Do not sedate for non-emergent imaging studies.

Routine, CONTINUOUS, Starting today at 1330, Until Specified

☒ Request for family presence at the bedside.

Routine, CONTINUOUS, Starting today at 1330, Until Specified

☒ Reassess if telemetry is required and request discontinuation of cardiac monitoring unless there is cardiac instability

Routine, CONTINUOUS, Starting today at 1330, Until Specified

Clear All Orders

Medications

Delirium Prevention for 65 years or older

☒ Delirium Prevention for 65 years or older

☒ Bladder scan

Routine, ONE TIME, today at 1100, For 1 occurrence

PVR with bladder scan post void x1 - do not perform if patient has foley catheter

☒ Ambulate patient

Routine, 3 TIMES DAILY, First occurrence today at 1300, Until Specified

Ambulate three times a day, if activity order allows

☒ melatonin tablet 3 mg (\$)

3 mg BEDTIME (0.0562 mg/kg), Oral, First dose today at 2200, Until Discontinued

Hold for sedation.

Give dose 30 to 60 minutes before bedtime.

Typical starting dose is 3 - 6 mg nightly.

☒ acetaminophen (TYLENOL) tablet 650 mg (\$)

650 mg 3 TIMES DAILY (12.2 mg/kg), Oral, First dose today at 1600, Until Discontinued

Maximum dose for Infants and Children for acetaminophen is 75 mg/kg/day or no more than 5 doses in 24 hours. Maximum dose for Adults for acetaminophen is 4000 mg from all sources in 24 hours.

☒ polyethylene glycol (MIRALAX) packet 17 g (\$)

17 g DAILY (0.318 g/kg), Oral, First dose tomorrow at 1000, Until Discontinued

Hold for diarrhea.

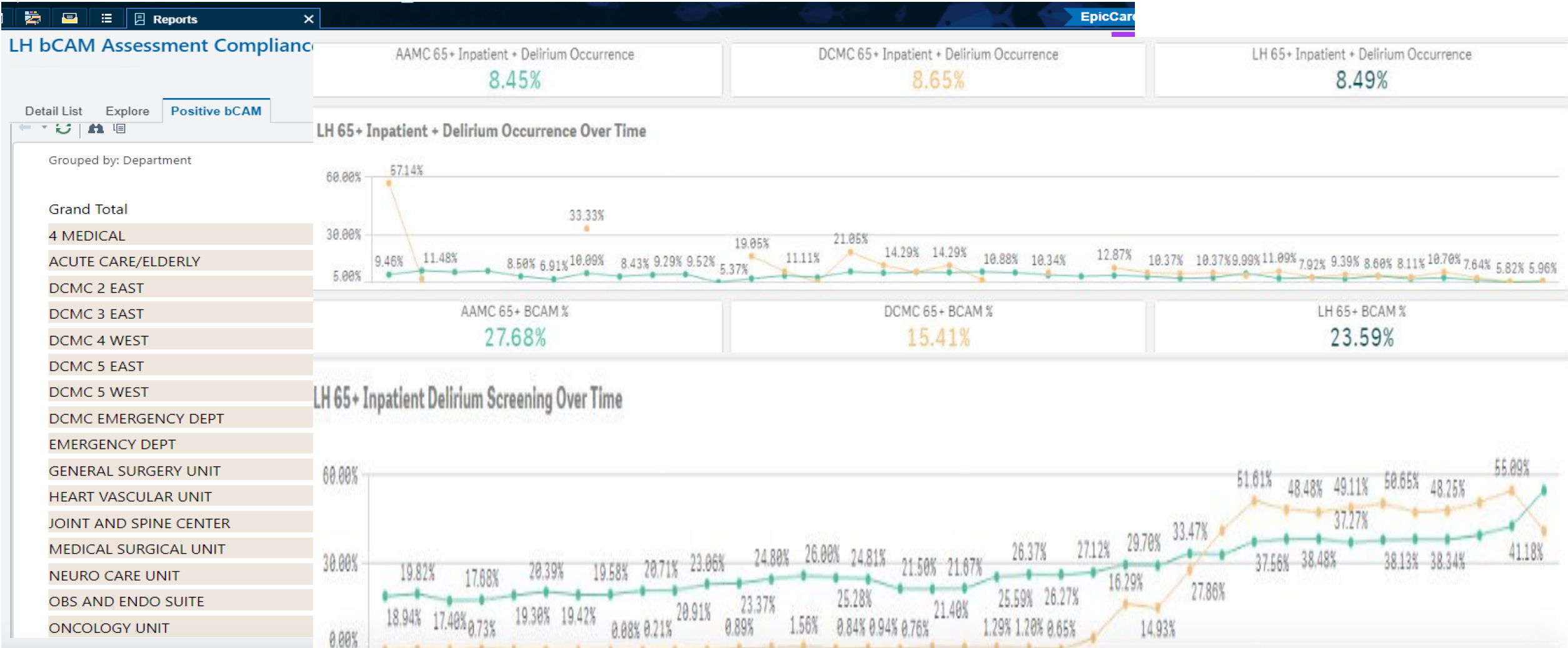
Dissolve in 8 ounces of water.

Dissolve in 8 ounces of water.

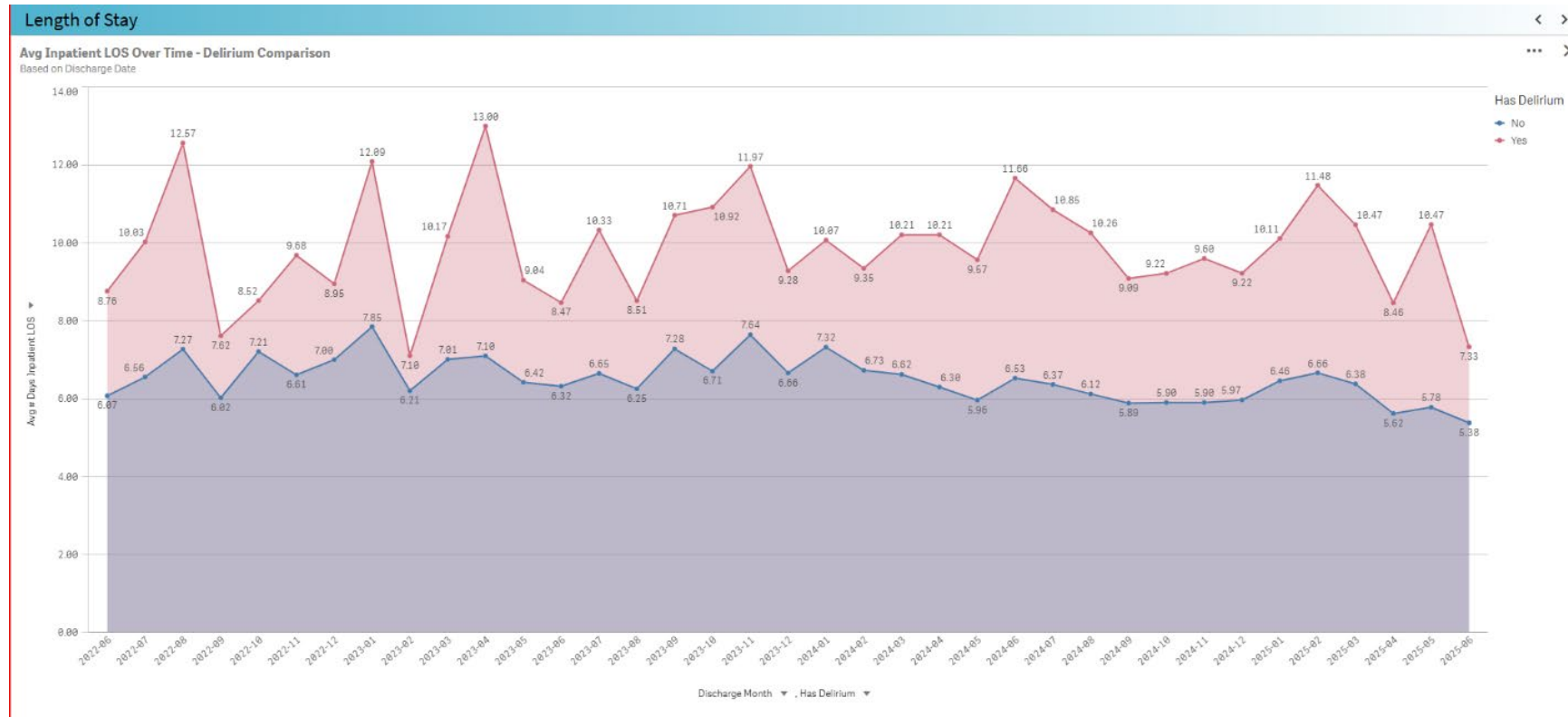
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Mentation: Measurement of Delirium screening in the hospital



Outcomes and Impact



LOS for patients with vs without delirium

Daily cost of inpatient stay x LOS for patients with vs without delirium

Discharge – new institutionalization vs community

Medications



Medication reconciliation project is underway

BEERS Criteria

haloperidol lactate (HALDOL) Intravenous injection 2 mg ✓ Accept ✗ Cancel

Reference Links: [Adult IV Push List](#) [Micromedex](#) [Black Box Warning](#)
[Pediatric Dose](#) [Purpose and Side Effects](#) [AAMC Catch Up Schedule](#)

Order Instructions: **Beers Criteria: Use caution or avoid use as potentially inappropriate in older adults.**
Doses greater than 100mg/day have increased risk of torsades de pointes.
Continuous electrocardiographic monitoring (CEM) required for IV push administration.
Maximum approved IV push single dose: 10 mg

Dose: 2 mg **2 mg** 5 mg
Calculated dose: 0.4 mL

Route: Intramuscular **Intravenous**

Frequency: EVERY 6 HOURS PRN Once Q2H PRN Q4H PRN **Q6H PRN** Q8H PRN

PRN Reasons
☐ Anxiety ☒ **Delirium** ☐ Hallucinations ☐ Psychosis ☐ Nausea/Vomiting - 1st Choice
☐ Nausea/Vomiting - 2nd Choice

PRN Comment

Starting 6/13/2025 **Today** Tomorrow For **Doses** Hours Days
At 1014 Ending at:

Starting: Today 1014 Ending: Until Discontinued

ⓘ There are no scheduled times based on the current order parameters.

Admin Instructions: [When ordered for IV push: Continuous electrocardiographic monitoring \(CEM\) required doses over 10 mg. Maximum appro...](#)

Priority: **STAT** Routine

⌵ Additional Order Details

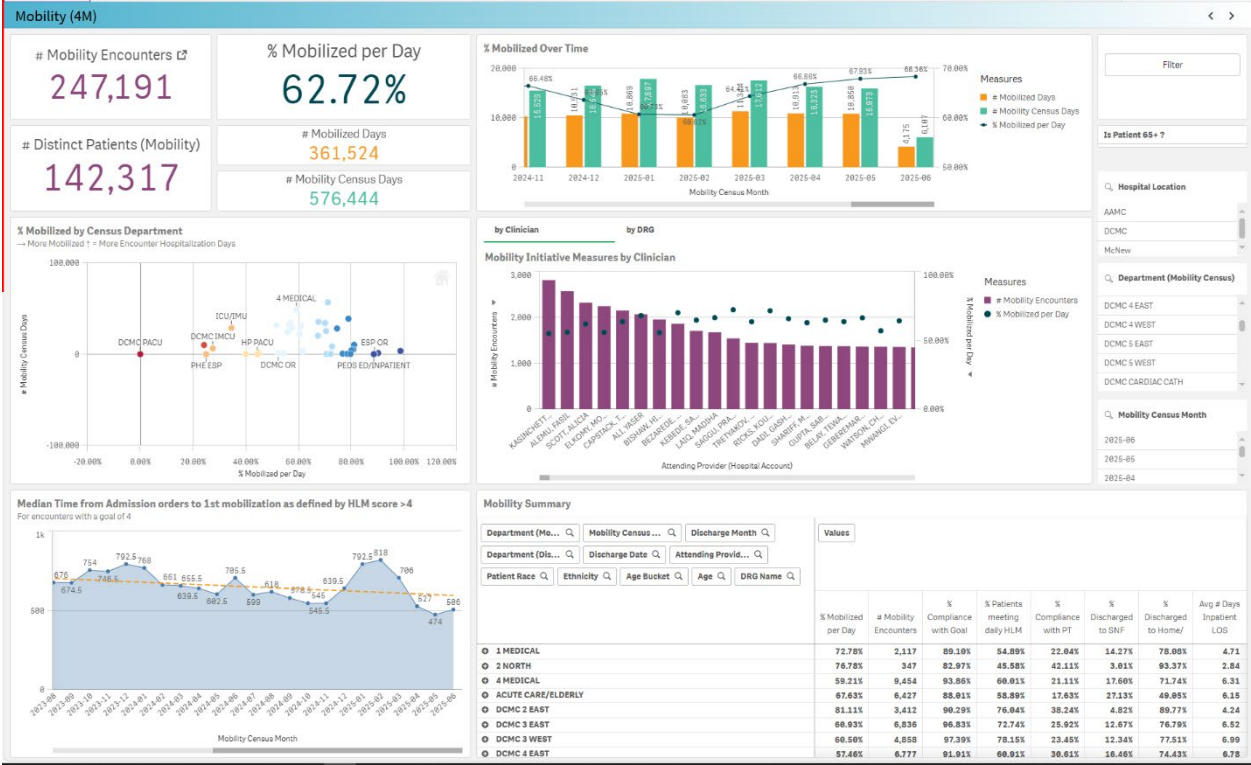
ⓘ Next Required Link Order ✓ Accept ✗ Cancel

Mobility-Hospital

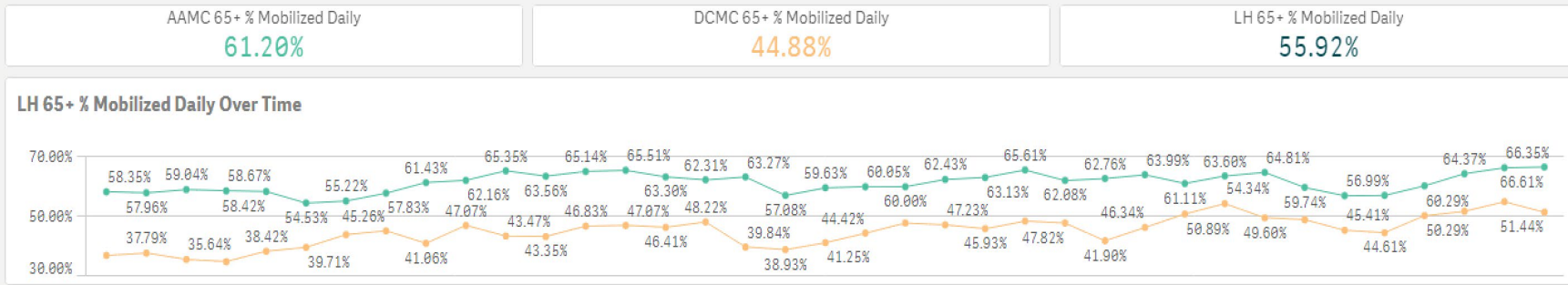
Tool - JHLM

Metrics – feet to floor

Timing – from admission



Healthy Aging Dashboard



Screening for social isolation (loneliness)

Caregiver Involvement

Advance Care Planning

Health Care Agents

+ Add Contact

Show: ☐ Inactive Contacts ☒ All Patient Contacts

Active HCA	Name	Relationship	Health Care Agent	Legal Guardian?	Primary Phone	Associated Document
<input type="checkbox"/>	mom,mom	Mother			412-898-5656 (H)	Attach

Close

Previous Next

Involvement in Care

Family/Support System, Persons

Involvement in Care

Family/Support System, P... ↑ ↓

Select multiple options (F5)

- caregiver
- daughter
- durable/healthcare power of attorney
- family
- father
- foster parent
- friend
- grandparent
- guardian
- mother
- patient
- sibling
- significant other
- son
- spouse
- step-parent
- other (see comments)

Comments (Alt+M)

Involvement in Care ↑ ↓

Select multiple options (F5)

- at bedside
- attentive to patient
- disruptive to patient
- interacting with patient
- no interaction with patient
- not attentive to patient
- not participating in care
- not present at bedside
- participating in care
- supportive of patient
- other (see comments)

Comments (Alt+M)

Tips for Avoiding Caregiver Burnout

Caregiving can take its toll on you emotionally and physically. To be able to take care of others you need to take care of yourself.

- **Identify your support system.** Make a list of key people in your life and those of your loved one. These people could be family, friends, neighbors, or members of your place of worship.
- **Keep a visible calendar.** It should be large and hung in a place where every visitor can see it. You can track appointments, needs, and visitors. You may want to highlight items or tasks that still need to be covered.
- **Don't be afraid to ask for help.** Most people genuinely want to lend a hand, but they don't know what you need. When someone says, "Let me know what I can do to help," give them a specific task (or choice of tasks). If you leave it vague, they won't know how to help — or they may assume you have all the help you need.
- **Make a list of specific activities for helpers.** That could include housework, shopping, laundry, delivering meals, visits, driving them to their doctor's appointments or other outings, or simply providing you with a few hours of respite.
- **Schedule daily and weekly breaks.** Sometimes just getting out for a couple hours — whether you have coffee with a friend, take in a movie, or go for a walk — can refresh and energize you.

NEXT STEPS

Frailty

SDOH

Patient Satisfaction

Patient outcomes

- readmissions
- length of stay
- institutionalization
- morbidity and mortality



Appendix

Resources

- [One-pager for Hospitals](#)
- [Download an example checklist](#) from Luminis Health Anne Arundel Medical Center as a starting point for documenting and monitoring progress towards attestation.
- To stay updated on new opportunities to engage with the movement, sign up for the [Friends of Age-Friendly email newsletter](#).
- [Link to proposed rule](#)
- [Link to CMS fact sheet](#)

The Age-Friendly Health System movement is an initiative of 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). Learn more at ihi.org/agefriendly or AFHS@ihi.org.

On-Ramps to Join the Movement

Action Communities for teams to learn about and practice the 4Ms with the support of expert faculty and a community of peers. Action Communities are facilitated by IHI, AHA, and other movement partners.

Online Course with Coaching Designed for individuals seeking continuing education and support with building the business case and developing leadership buy-in.



My Health Checklist





My Health Checklist

A guide to help you prepare for your medical appointment

Name

Date

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 (CHAU).

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This guide is designed to help you get ready for your medical appointment.

It's meant especially for older adults.


First, it will help you think about different aspects of your health and living well. Then it will help you identify the most important questions or concerns you want to talk about with your provider. A provider is a doctor, nurse practitioner, primary care practitioner (PCP), etc.

Being prepared for your appointment can help you get the care that's right for you. You are part of the team. You can have a say in your care.


This guide focuses on four areas that can help you think about your health.




What Matters
to you in
your life



Medication
you may take



Your Mind
and sense of
well-being



Your Mobility

The 4Ms

For each of the 4Ms, we'll ask you about your situation now, what's going well, and what could be better. Then you can write down any questions you have or things you want to share with your provider.

2 Age-Friendly Health Systems



Questions?



Battelle
MMSSupport@battelle.org

CMS
Gequincia Polk
gequincia.polk@cms.hhs.gov