



Living Wisely

Healthy Living into your 80s and 90s



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The 4Ms Approach: Optimizing Health As We Age

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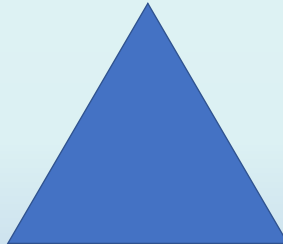
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Agenda:

- Origin of the 4Ms: Age Friendly Health Systems
- *Mentation*: Preserving Cognition & Preventing Dementia
- *Medications*: Awareness of Polypharmacy & Prescribing Cascades
- *Mobility*: The Truth About Falls
- *Matters Most*: Aligning Healthcare Values with Personal Goals
- Takeaways

Origin of Age Friendly Health Systems

AGING POPULATION



COMPLEX NEEDS

SIGNIFICANT HARM

How can we provide evidence-based care on what matters to the older adult & their family reliably in every care setting?

Age-Friendly
Health Systems



The John A. Hartford Foundation



American Hospital Association®



CHA
Catholic Health Association
of the United States

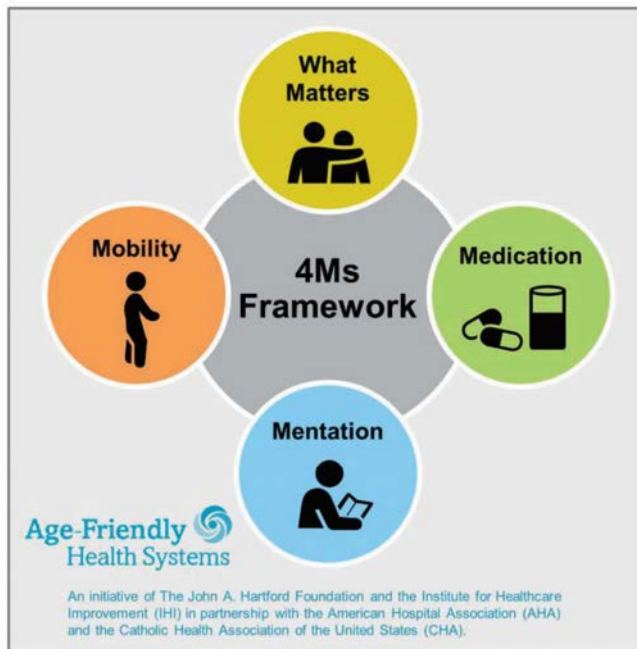
Evidence-based Practice Changes

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

Research review led to over **90 care features** identified

Similar concepts removed: **13 discrete care features** remained

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



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.

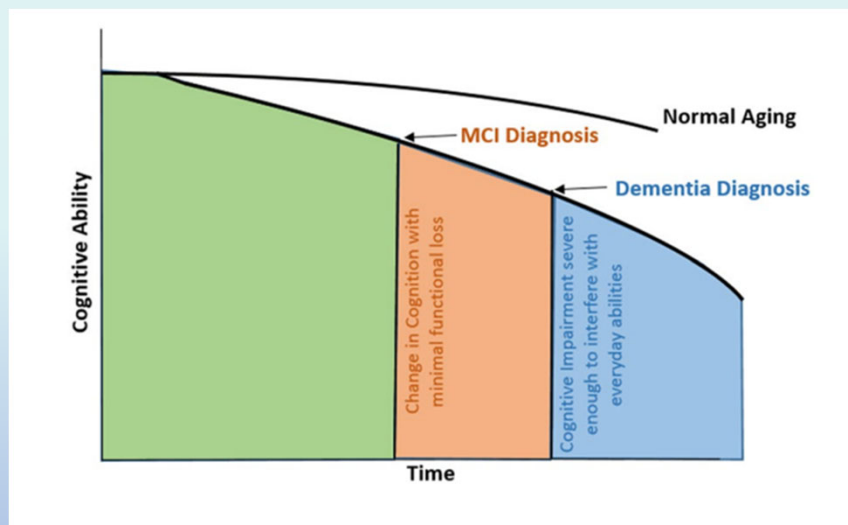
Mentation

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

Mobility

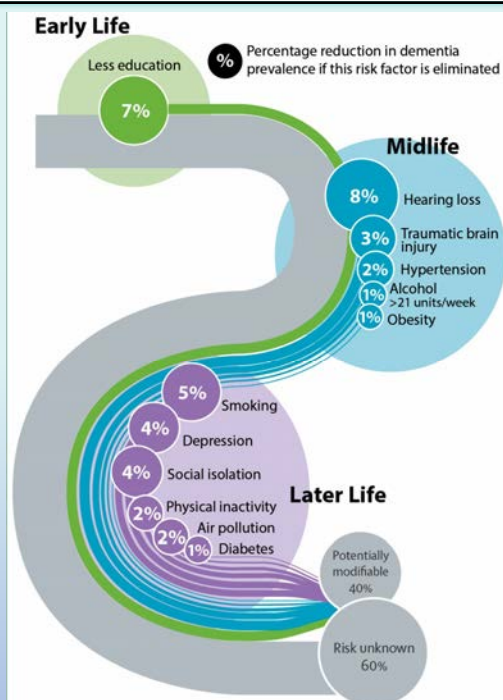
Ensure that older adults move safely every day in order to maintain function and do What Matters.

Mentation: Definitions

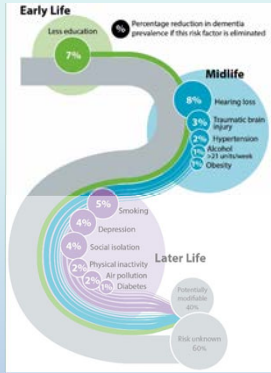


Mentation

- Lancet Commission on Dementia Prevention, Intervention and Care 2017 & 2020
- 9 Modifiable Risk Factors for Dementia Expanded to 12: Head Injury, Excess Alcohol & Air Pollution
- Mid Life (Age 45-65) Risk Factors:
 - Hearing Loss
 - Hypertension
 - Obesity



Mentation



Early Life

Less education

7%

% Percentage reduction in dementia prevalence if this risk factor is eliminated

Midlife

8% Hearing loss

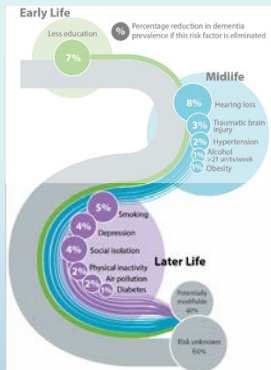
3% Traumatic brain injury

2% Hypertension

1% Alcohol >21 units/week

1% Obesity

Mentation



Later Life

5% Smoking

4% Depression

4% Social isolation

2% Physical inactivity

2% Air pollution

1% Diabetes

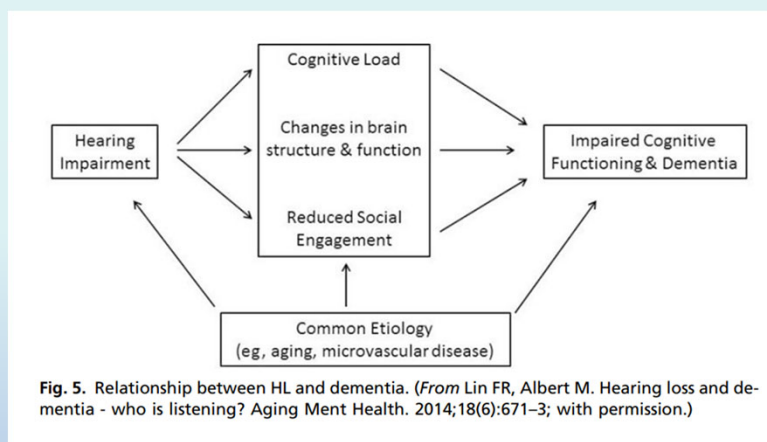
Potentially modifiable
40%

Risk unknown
60%

Mentation: Hearing Loss

- Very common and downplayed; often termed “normal” or “benign”
- Adults > 60 years old, prevalence ~ 50%
Adults > 85 years old, prevalence ~ greater than 80%
- Relationship between hearing loss and cognition is complicated and multifactorial:
 - Increased cognitive stress
 - Changes to brain structure
 - More social isolation

Mentation: Hearing Loss



Hearing loss is a modifiable risk factor as those with hearing aids exhibited better cognition, reduced social isolation and depression

Mentation: Hypertension

- Hypertension is an important midlife contributor to cognitive decline
 - Higher risk of developing dementia in later life
 - More impairments in executive functioning and processing speed
 - Brain atrophy and reduced volumes on head imaging highly correlated with dementia changes
- White matter disease burden is reduced in those with well controlled blood pressure
- Reasonable to lower blood pressure to prevent cognitive impairment and dementia but the exact target to maintain cognitive function remains unclear
 - Discuss and monitor with your Primary Care Physician

Mentation: Obesity

- Obesity Epidemic
 - Estimated that 2/3 of the US population is overweight or obese according to body mass index >25
 - Consequences: increased falls, cognitive decline and decreased quality of life
- Age Related Body Composition Changes
 - Sarcopenia = age related loss of muscle mass and strength
 - Fat Redistribution
- Optimal Approach = multicomponent, caloric restriction + aerobic and resistance program

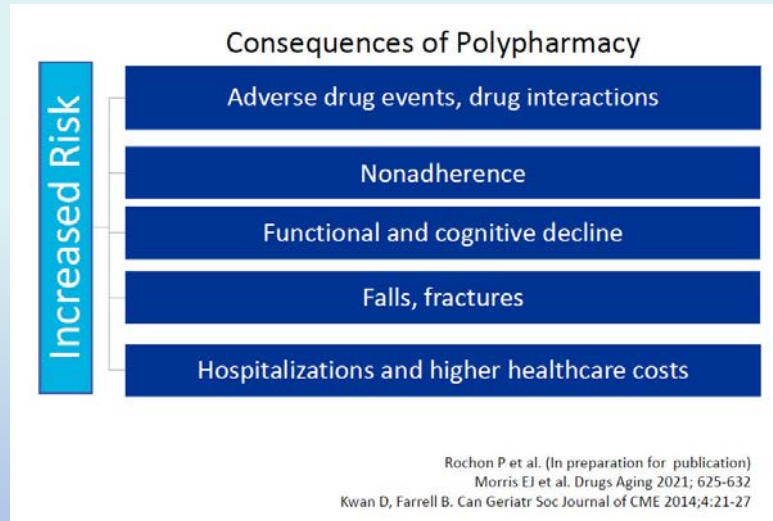
Mentation: Takeaways

To preserve cognition and prevent dementia, there are many modifiable risk factors that can be acted upon such as screening and treating hearing loss, managing hypertension and addressing midlife obesity

Medications: Definitions

- Older adults are prescribed the highest proportion of medications relative to their % of the population
- Polypharmacy: the use of 5 or more medications per day
- Prescribing Cascade: signs and symptoms of an adverse drug effect are misinterpreted as a new medical condition and a new treatment is further added to treat the adverse drug event

Medications: Polypharmacy



Medications: Prescribing Cascades

- 75 y/o Male
- Mild Alzheimer's Dementia
- Donepezil (Aricept)
- Developed urinary incontinence and diarrhea
- Oxybutynin and Dicyclomine to treat these symptoms
- Emergency room for confusion and visual hallucinations



Medications: Questions to ask your Healthcare Provider

- Why am I taking this medication?
- How long should I be on this medication?
- What are the risks and benefits of this medication?
- What side effects should I be on the lookout for?
- Are there any drug-drug interactions I should be worried about?
- Is this the lowest dose of this medication?
- Could the symptom or condition I am having be a side effect of a medication I am taking?

Medications: How to Manage Polypharmacy & Prescribing Cascades

- Review and Discuss with your Primary Care Physician
 - BEERs List of Inappropriate Medications in Older Adults
- “Start Low, Go Slow” Mantra of Geriatric Prescribing
- Deprescribing (reduce dosages or stop and monitor for effect)

Medications: Takeaways

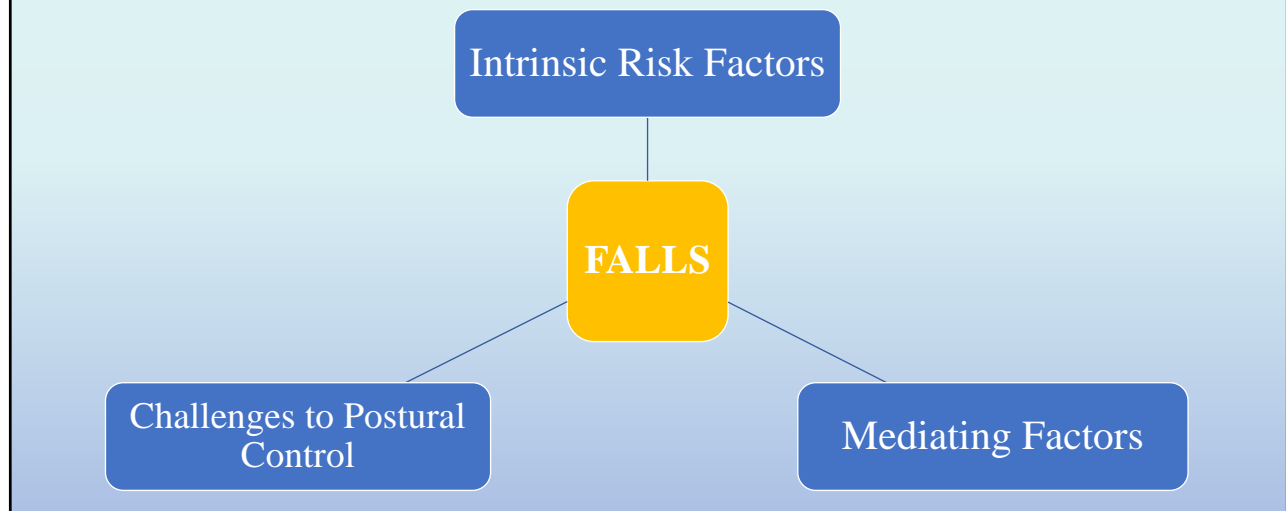
Remain aware of polypharmacy and watch for prescribing cascades. Always consider, could this sign, symptom or medical condition be caused by a drug?

Mobility

- As we get older, how can we ensure we move safely every day?
- Falls = #1 Cause of Trauma & Injury Related Mortality in Older Adults
- ~3 Million Older Adults are treated in the ED for a fall injury annually

Mobility

Falls in Older Adults ~ Rarely a Single Cause



Mobility: Myths About Falls in Older Adults

- “I just tripped and fell, no need to worry”
- Falls are a “just a normal part of aging”
- “Falls cannot be prevented, right?”
- “I know that falling means I will lose my independence”

Mobility

CDC's STEADI Initiative (Stopping Elderly Accidents, Deaths & Injuries)



STEADI Stopping Elderly Accidents, Deaths & Injuries

SCREEN

Check in with your healthcare provider yearly for falls risk or anytime there is a fall

ASSESS

Review modifiable risk factors such as gait, strength, balance, medications, home hazards, blood pressure, vision and footwear

INTERVENE

Refer to exercise programs, PT, OT (for home safety evaluation), Optometry, Podiatry, adjust medications and blood pressure targets

Mobility: Takeaways

Maximize Momentum as We Age!

Seek to identify changes in your mobility,

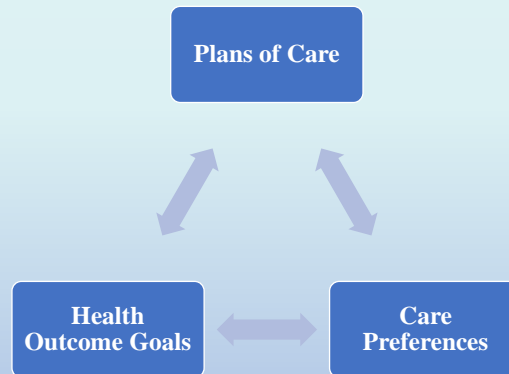
Ask why, and develop strategies to

Maximize momentum for independence and mobility

Be able to go where you want to go!

Matters Most

How do we maintain vitality throughout life's course?



Matters Most

Case Example:

- Mr. X is a 70-year-old male with Type 2 Diabetes Mellitus (DM)
- Active and independent in all his activities (ADL & IADLs)
- Relied on only 1 medication for DM for past 10 years
- Marker for blood sugar control has worsened requiring he starts insulin
- **Mr. X is concerned about costs and difficulties of daily insulin injections**
- Prescribed a whole food-plant based diet with a regimen of exercise and able to avoid starting insulin (blood sugar control improved)

Matters Most: Person Centered Approach

Table 1

Goals and motivations

Goal	Motivation for Individual A—20 y	Motivation for Individual B—40 y	Motivation for Individual C—60 y
Quit smoking	I want more disposable income.	I want a different fate than my father, who just died of lung cancer.	I want better exercise tolerance.
Improve health content of diet	I want to have less acne and lose weight.	I want to model appropriate eating behaviors to my children.	I want to avoid a second heart attack.
Increase fitness	I want to participate in competitive sports.	I want to have more energy during the day.	I want to be independent with ADLs for as long as possible.

Matters Most

- What gives your life meaning?
- What gives you joy?
- Describe how you have adapted to a change or loss in the past?
- Who are the important people and groups in your life?

Takeaways

- ✓ *There are multiple modifiable risk factors (such as mid-life factors of hearing loss, hypertension and obesity) to preserve cognition and prevent dementia*
- ✓ *Awareness of polypharmacy and prescribing cascades can help prevent the negative consequences of medications as we age*
- ✓ *To maximize mobility as we age, engage with your healthcare team to promptly address falls concerns and to implement interventions*
- ✓ *Encourage a discussion with your healthcare team to align healthcare values with personal values goals to optimize life trajectory*

Questions and Comments



Thank You For Your Time!

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