UH JABSOM Dept. of Geriatric Medicine welcomes you:

Geriatric Clinic ECHO

Medication Management Through the Lens of the 4Ms

Speaker: Chad Kawakami Pharm.D., BCPS, CDCES
Assistant Professor of Pharmacy Practice
The Daniel K. Inouye College of Pharmacy
chadkkaw@hawaii.edu

Interdisciplinary Team:

Courtnee Nunokawa, APRN; Chad Kawakami, PharmD; Lucas Morgan, PhD; Sara Tompkinson, MSW; Ritabelle Fernandes, MD

Learning Objectives

- Identify the 4M's
- Review the concept of "What Matters" and understand how "Medications" should be incorporated into an age-friendly care plan.
- Apply "Medications" to a clinical case

A health system is "age friendly" when...

A health system is “age friendly” when it’s expertly designed to coordinate all our care as we age, while also making sure our personal needs, values, and preferences are at the heart of that care. Age-friendly health systems pay particular attention to:

- Providing older adults the best care possible.
- Reducing some of the specific harms older adults face more often than others.
- Ensuring older adults, our families, and our caregivers are satisfied with care.
- Improving the value of care for us all, including the professionals who make that care possible.

Source: Age-Friendly Healthcare & You | HealthInAging.org

The 4M's

A framework that identifies the core issues that should drive all decision making in the care of older adults

- **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.
- **Medications:** If medications are necessary, use age-friendly medications that do not interfere with What Matters, Mentation or Mobility.
- **Mentation:** Prevent, identify, treat and manage depression, dementia and delirium across settings of care.
- **Mobility:** Ensure that older adults move safely every day in order to maintain function and do What Matters.

In 2017, a 5th M was added

- **Multicomplexity:** describes the whole person, typically an older adult, living with multiple chronic conditions, advanced illness, and/or with complicated biopsychosocial needs.

MULTICOMPLEXITY

...describes the whole person, typically an older adult, living with multiple chronic conditions, advanced illness, and/or with complicated biopsychosocial needs

MIND	■ Mentation ■ Dementia ■ Delirium ■ Depression
MOBILITY	■ Amount of mobility; function ■ Impaired gait and balance ■ Fall injury prevention
MEDICATIONS	■ Polypharmacy, deprescribing ■ Optimal prescribing ■ Adverse medication effects and medication burden
WHAT MATTERS MOST	■ Each individual's own meaningful health outcome goals and care preferences

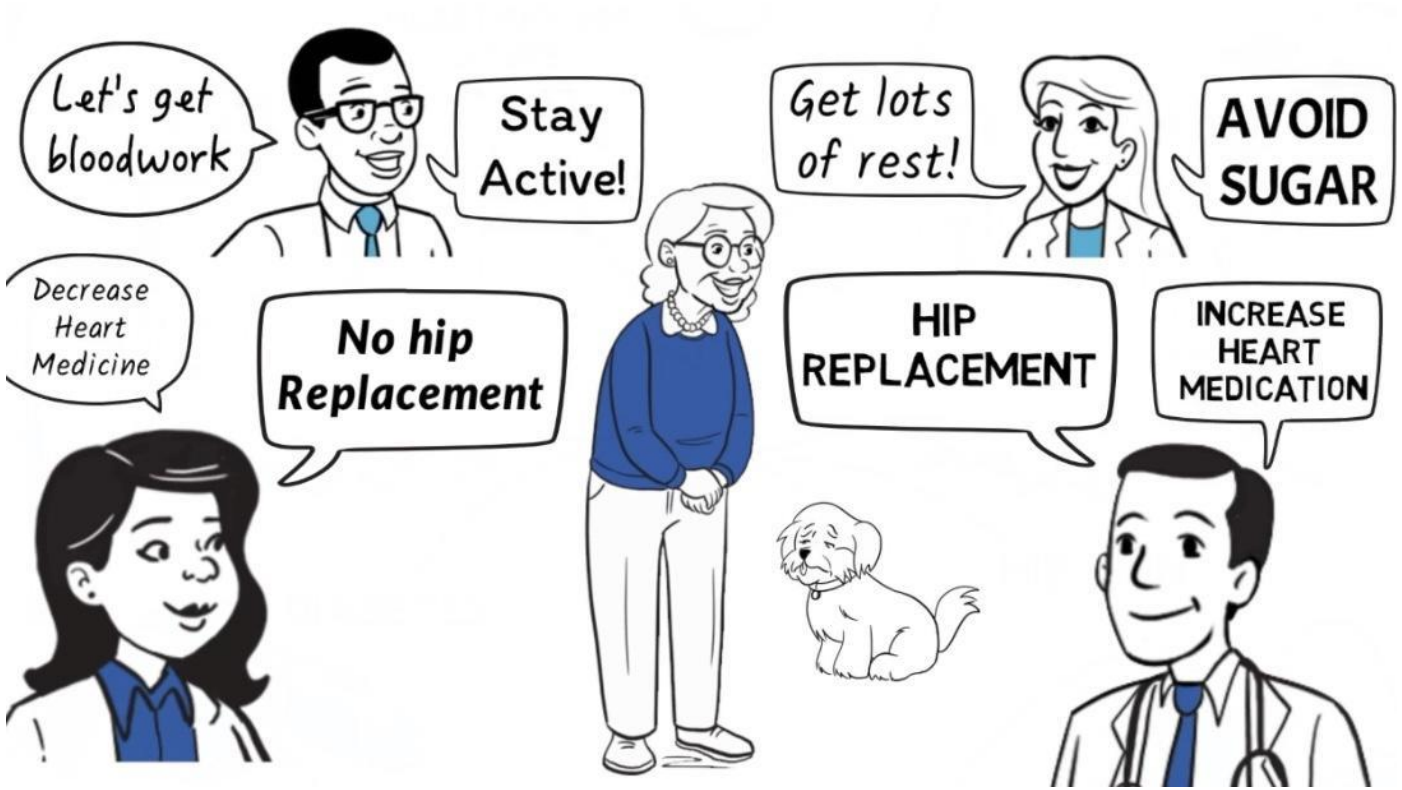
Putting the 4Ms into Practice

Know the 4Ms in Your Health System

- There are two key drivers to age-friendly care:
  - Knowing the 4Ms for EACH older adult in your care
  - Incorporating the Ms into the plan of care

Why is What Matters important?

- Patient Priorities Care



What Matters: Patient Priorities-Aligned Decision Making

Moves decision-making & conversation from:

From: You need (fill in treatment) for your (fill in disease)

To: *"Knowing all your conditions, your overall health, and your health outcome goals and care preferences, I suggest we try (fill in treatment option).*

There is a standard of care for a disease and there is care that is individualized to the patient and their quality of life.

How do you figure out what matters?

Member(s) of health team helps patients identify their health priorities

Clinicians align their care with achieving these health priorities

Health priorities = each patient's specific health outcome goals given their specific care preferences

Ask the older adult What Matters

- If you do not have existing questions to start this conversation, try the following, and adapt as needed
  - "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?"
- For older adults with advanced or serious illness, consider:
  - "What are your most important goals if your health situation worsens?"

Guiding Questions: Understanding Life Context and Priorities

- What is important to you today?
- What brings you joy? What makes you happy? What makes life worth living?
- What do you worry about?
- What are some goals you hope to achieve in the next six months or before your next birthday?
- What would make tomorrow a really great day for you?
- What else would you like us to know about you?
- How do you learn best? For example, listening to someone, reading materials, watching a video.

Guiding Questions: Anchoring Treatment in Goals and Preferences

- What is the one thing about your health care you most want to focus on so that you can do [fill in desired activity] more often or more easily?
- What are your most important goals now and as you think about the future with your health?
- What concerns you most when you think about your health and health care in the future?
- What are your fears or concerns for your family?
- What are you most important goals if your health situation worsens?
- What things about your health care do you think aren't helping you and you find too bothersome or difficult?
- Is there anyone who should be a part of this conversation with us?

What are health outcome goals?

- Health and life outcomes most desired
  - Babysit grandson 3 times/week, walk 2 blocks to poker game, go to Vegas twice a year, be able to age in place
- Distinct from behavioral goals such as stop smoking or disease goals like lower A1C or BP

Examples of Health Outcome Goals

01

…babysit my grandchildren each day to help my daughter while she works

02

…be able to work outside in the garden and push a wheel barrel (fatigue makes this difficult)

03

…do ceramics again and walk ½ mile with my husband everyday

Care is not always aligned with what matters most…

- Patients vary in their health outcome goals when faced with tradeoffs
  - I prefer to maintain function even if don't live as long – 42%
  - I will change medication if it gives relief of symptoms like pain, dyspnea, fatigue – 32%
  - I prefer to stay alive even if less functional – 27%

- Patients vary in their care preferences / treatment burden tolerance (willing and able to do to achieve outcomes)

Montori, Boyd, 2008

When do you have the conversation?

- Regular and annual wellness visits
- New diagnosis or change in health status
- Life-Stage change
    - Retirement, enrolled in Medicare
- Chronic disease management
- Inpatient visits
    - Hospital, nursing home, skilled nursing facility

Ask the older adult What Matters

- What Matters forms the basis from which clinical encounters, decision making, and care planning on what Matters most to older adults
- Any member of the team can be responsible for asking What Matters - but one person should be the primary individual to ensure this gets done
- Can integrate asking What Matters into the Annual Wellness Visit
- May also include What Matters questions in pre-visit paperwork and verify the answers during the visit

Align the care plan with What Matters

- Incorporate What Matters in the goal-oriented plan of care and align the care plan with the older adult's goals and preferences
- Use What Matters to develop the care plan and navigate trade-offs. For example, you may say, "There are several things we could do, but knowing what matters most to you, I suggest we….."
- Consider the patient's priorities (not just diseases) in communicating, decision making, and assessing benefits.

Putting the 4Ms into Practice - Medication

Obtaining the 4Ms – Questions that Focus on Medication

- “What medications do you currently take (name, dose, times per day)?”
- “What other inhalers, drops, creams or injections do you take regularly?”
- “What medications to you buy in the drug store, pharmacy or online?”
- “What herbal or vitamin products do you take regularly?”
- “Do you ever forget to take a medication, if so what do you do?”
- “Are there any of your medications that you think have bad effects for you?”
- “Does any of the medications you take get in the way of what is important to you?”

Medication

If a 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.

Medication – Incorporate into the Plan of Care

Review for high-risk medication use and document it

Deprescribe and dose-adjust high-risk medications and avoid their use whenever possible.

What medications should you screen for regularly?

A. Benzodiazepines
B. Opioids
C. Highly-anticholinergic medications (e.g., diphenhydramine)
D. All prescription and over-the-counter sedatives and sleep medications
E. Muscle relaxants
F. Tricyclic antidepressants
G. Antipsychotics
H. All the above

What if they are on those medications?

- If the older adult takes one or more of these medications, discuss and concerns the patient may have, assess for adverse effects, and discuss deprescribing with the older adult (and prescriber).

Medication Tips to Incorporate into the Plan of Care - Hospital

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

Deprescribing includes both dose reduction and medication discontinuation

Deprescribing is a positive, patient-centered approach, requiring informed patient consent, shared decision making, close monitoring, and compassionate support

Upon discharge from the hospital, do not assume all medications should be sustained. Remove medications the older adult can stop taking.

Medication Tips to Incorporate into the Plan of Care - Hospital

Include a medication list printout as part of standard-check out steps 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 to possibly causing adverse effects

Consult pharmacy

Key players in this “M” is pharmacist or physician, and the patient.

Medication Tips to Incorporate into the Plan of Care – Primary Care

Consider medication review a medication risk assessment and be sure to include over-the-counter medications at least annually

Engage the older adult and family member or other caregiver in providing all medications (including over-the-counter medications) 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.

PATIENT: BACKGROUND

Mrs. Moira Rose, a 74-year-old woman, presents to your clinic with her husband, Johnny, to transfer her care to nursing home.

Chief complaint: Chronic lower back pain, multiple falls at home. Often confused

History: Mrs. Rose has had chronic back pain for several years.

- lumbar, with radiation down the backs of both legs to the knees
- constant, severe, aching and occasional burning sensation to the area
- confusion affects her ADLs

PATIENT CASE: MEDICATIONS

- Ibuprofen 600 mg TID PRN - takes it 2-3x/day
- Oxycodone CR 20 mg BID
- Cyclobenzaprine 10 mg Q6H PRN muscle spasm - takes 4x/day
- Carisoprodol 250 mg Q8H PRN when Cyclobenzaprine doesn’t work (around 3-4 times a week)
- Tylenol PM - over the counter, PRN for insomnia - takes every night

PATIENT CASE: REVIEW OF SYMPTOMS

Per patient:
• lost 10 lbs over the last year • decreased appetite - only eats fruit cups for breakfast • constipated • more depressed • has trouble walking, needs someone to help her • no issues with incontinence

Per Johnny:
• more forgetful • cries more when she thinks no one is looking • sometimes confused and thinks she is in New York • occasional hallucinations that there are crows in her room, talks to crows

PATIENT CASE: SOCIAL HISTORY

No smoking or alcohol. No history of drug use.

Family had recent financial trouble. They went from living in a large house in Waikoloa into a studio apartment outside town.

Son David and daughter Alexa live with them. They can offer some ADL support.

Patient has a few friends in the community and has joined the local women’s singing group. Friends assist her with some errands.

PATIENT CASE: PHYSICAL EXAM

- Vitals: BP 92/45, HR 65, Temp 97.3, RR 18, Weight 113 lbs
- General: Alert and oriented to person and place, no apparent distress
- Heart, lungs, abdomen: unremarkable
- Neuro: Motor - bilateral lower extremities 4/5, decreased sensation left lateral thigh and leg. 3 item recall: 3/3 after 1 minute, 1/3 after 5 minutes.
- Gait: Get up and go test was 28 seconds. Unable to stand from seated without pushing off. Appears fearful and hesitant while walking. Leans forward during ambulation with wide based gait. Pain worse when standing/walking.
- Psych: Confused. Denies current hallucinations.

PATIENT CASE: LABS

CBC: WBC 8.4, Hgb 8.8, Hct 25.9, Platelets 342, MCV 102.5
BMP: Na 140, K 3.3, Cl 105, CO2 28, BUN 9
Liver: AST 48, ALT 23, Alk phos 80, Total Bili 0.5, Total protein 5.5, Albumin 2.9
PT 14.0, INR 1.1

PATIENT CASE: IMAGING

MRI Spine

“Dextroscoliosis of the lumbar spine with superimposed multilevel degenerative changes, most pronounced at the L3-L4 level where a disc bulge and facet joint hypertrophy contribute to the narrowing of the left lateral recess and moderate to severe left neural foraminal stenosis.”

Diagnosis - CHRONIC LOW BACK PAIN (LBP)

TREATMENT GOALS

- Reduce pain enough to allow physical rehabilitation, or to prolong the need for surgery

TREATMENT OF CHRONIC LOW BACK PAIN

For all types of pain, multimodal therapy is recommended - physical rehabilitation

- Psychotherapy (CBT or Behavioral Therapy)
- Pharmacologic

Interventional therapies should also be considered if possible

PHARMACOLOGIC TREATMENT OF CHRONIC LOW BACK PAIN

Non-pharmacologic

Interventional procedures

Pharmacologic :

- First Line: Acetaminophen
- Second Line: NSAIDs
- Third Line: Opioids / tramadol for severe disabling pain
- Gabapentin for radicular pain (pregabalin ineffective)
- Amitriptyline
- Duloxetine for chronic musculoskeletal pain
- Muscle relaxants

PHARMACOTHERAPY: THINGS TO CONSIDER

Patient-Related

- Comorbidities
  - Renal / hepatic/ cardiac
  - Cognitive impairment
- Adherence
- Physical limitations
- Financial status
- Pharmacogenetics

Medication- Related

- Pharmacology
- Pharmacokinetics
- Adverse effects
- Drug interactions
- Cost
- Availability of dosage

DEPRESCRIBE OR AVOID PRESCRIBING HIGH-RISK MEDICATIONS

Specifically AVOID or DEPRESCRIBE the high-risk medications listed below

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

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.

TIPS TO DEPRESCRIBE OR AVOID PRESCRIBING HIGH-RISK MEDICATIONS

These medications may interfere with What Matters, Mentation, and safe Mobility due to increased risk of confusion, delirium, unsteadiness, and falls

Deprescribing includes both dose reduction and medication discontinuation

Deprescribing is a positive, patient-centered approach, requiring informed patient consent, shared decision making, close monitoring, and compassionate support

When possible, avoid prescribing these high-risk medications

Medication – Resources

- Deprescribing.org
- Reducing Inappropriate Medication Use by Implementing Deprescribing Guidelines
- Alternative Medications for Medications Included in the Use f High-Risk Medications in the Elderly and Potentially Harmful Drug-Disease Interactions in the Elderly Quality Measures
- HealthinAging.org
- Crosswalk: Evidence-based Leadership Council Programs and the 4Ms