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### Tina Stanco, MD- NONE

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# Objectives

- Identify common challenges in managing chronic diseases for individuals living with dementia
- Introduce the "4Ms" framework as a practical tool for dementiafriendly care in the management of chronic diseases

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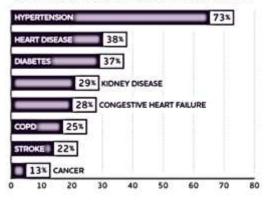
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# What is dementia?

- Dementia is an umbrella term for symptoms affecting memory, language, problem-solving, and thinking abilities which are progressive in nature and interfere with daily activities.
- · Alzheimer's disease is the most common type of dementia (60-80%).
- Other types of dementia include vascular, Lewy body, frontotemporal, mixed.
- Dementia is not a normal part of aging; it is caused by an underlying disease of the brain.
- Dementia is a growing global health concern:
  - Worldwide: 55 million (projected to 152.8 million by 2050).
  - oUS: 6.9 million aged 65+ in 2024 (projected to 12.7 million by 2050).

# Dementia and Chronic Disease Management

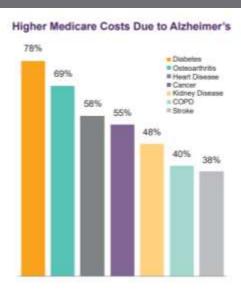
Percentage of People with Alzheimer's or Another Dementia Who Also Have...

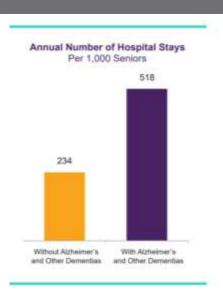


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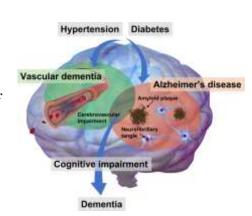
# The Cost of Dementia on Chronic Disease Management





### Why Dementia Complicates Chronic Disease Management

- Core Issue: Dementia impairs specific cognitive domains crucial for self-care:
- Memory: Forgetting medications, appointments, instructions.
- Executive Function: Difficulty planning, organizing (meal prep), problem-solving, sequencing tasks (inhaler use).
- Language/Communication: Trouble understanding explanations, expressing symptoms accurately.
- Judgment/Insight: Underestimation of illness severity, poor safety awareness.
- Behavioral Impact: BPSD (Agitation, apathy, depression) can directly interfere with care delivery and adherence.



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# Challenge 1: Di Sym Pa (tt Sy Co Pa de Dia Rin Mon In B O in Risk

Challenge 1: Diagnosis and Monitoring

- Symptom Reporting:
- Patients may struggle to accurately report symptom details (timing, quality, severity).
- Symptoms may be vague, atypical, or masked by cognitive/behavioral changes.
- Pain assessment requires specific tools and approaches in dementia.
- Diagnostic Difficulties:
  - Reduced cooperation with tests/procedures due to cognitive impairment.
- Monitoring Hurdles:
  - Inability or resistance to self-monitoring (e.g., blood glucose, BP, weight).
  - Over-reliance on caregiver reports, requiring careful interpretation.
- Risk of diagnostic overshadowing (attributing physical symptoms solely to dementia).

- Polypharmacy: High prevalence in this population increases risk.
- Medication Management Errors:
  - Forgetting, incorrect dosing, and timing errors are common.
  - Difficulty with complex administration techniques (inhalers, injections).
  - Resistance to taking medications.

Increased Risk: Higher potential for adverse drug events (ADEs), drug-disease, and drug-drug interactions.



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# Challenge 3: Treatment Adherence



### Dietary Modifications:

- Difficulty understanding, remembering, or implementing restrictions (e.g., fluid restrictions in HF, low salt in HTN, renal diet in CKD, or diabetic diet).
- Reliance on others for meals.
- Changes in appetite, food preferences, swallowing difficulties are common.

### Physical Activity:

- Challenges with initiation, motivation, and adherence to recommendations.
- Increased safety concerns (e.g., falls risk) require adaptation.

### Self-Care:

• Difficulties with condition-specific tasks (e.g., foot care in diabetes, DME use to prevent falls).

# **Challenge 4: Communication Barriers**

### Patient Communication:

- Impaired comprehension and expression necessitate adapted communication techniques.
- May having sight or hearing impairments that must be overcome.

### Caregiver Role:

 Caregivers are vital informants but experience significant burden, impacting their ability to manage care tasks and report accurately. Support is crucial.

### · Clinician Communication:

 Requires patience, simplification, checking understanding (e.g., teach-back), and often relies heavily on caregiver input.



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# Challenge 5: Behavioral and Psychological Symptoms (BPSD)

### · Direct Interference:

 Agitation, aggression, apathy, or delusions can impede examinations, medication administration, and adherence to care plans.

### Management:

 Non-pharmacological approaches should be prioritized for managing BPSD. Identifying and addressing triggers (e.g., pain, unmet needs) is key.



# Challenge 6: Care Coordination and System Navigation

Fragmented Care:
Managing multiple
specialists and
appointments is
challenging for patients
and caregivers.

Transitions of Care:
High-risk periods (e.g.,
hospital discharge)
requiring clear, simplified
instructions and follow-up.

Caregiver Burden:
Significant time and effort
required to coordinate
care.

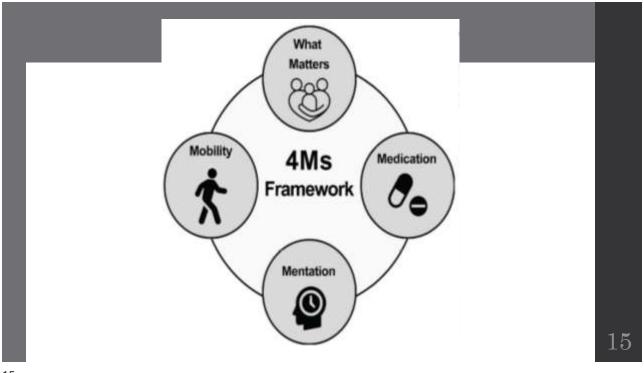
Access to Care:
Inability to get to
appointments
(transportation, mobility),
use of telehealth and
patient portals.

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# Challenge 7: Ethical Considerations and Goal Setting

- **Decision-Making Capacity:** Must be assessed for specific healthcare decisions and may fluctuate.
- Goal Setting: Often requires shifting focus from strict guideline targets towards individualized goals emphasizing quality of life, function, and safety.
- Treatment Burden: Balancing potential benefits against the burden of treatment (e.g., complex monitoring, side effects) is crucial.
- Advance Care Planning: Essential to initiate early while capacity allows; identify proxy decision-makers.





### What Matters

- Focuses on understanding each older adult's health goals and care preferences.
- Aligns care with individual values and priorities.
- In dementia care, "What Matters" might include comfort, independence in daily activities, or family connections.
- Influences treatment decisions for coexisting conditions.

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# What Matters

- Eliciting "What Matters" requires proactive and sensitive communication.
- · Directly ask patients about concerns, goals, and wishes.
- · Use open-ended questions and active listening.
- Involve family/caregivers for insights into past preferences and current priorities.
- · Create a safe and supportive environment for sharing.
- · Integrate "What Matters" into the care plan.
- Document preferences clearly in the medical record.
- Communicate preferences during team rounds and shift reports.
- Fosters consistent and person-centered care.



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# What Matters Summary Table

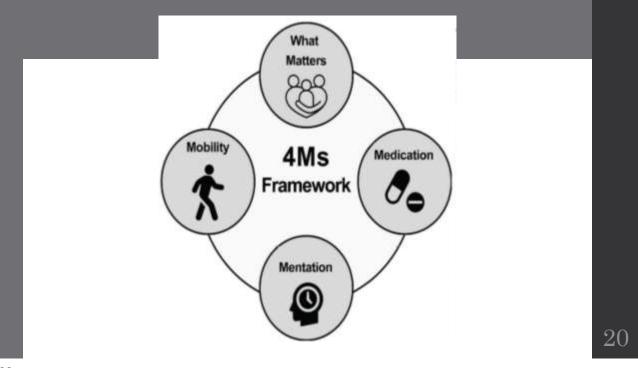
Component	Definition in Dementia Care	Importance in Chronic Disease Management	Practical Implementation Strategies
What Matters	Understanding the patient's individual goals, values, preferences, and priorities for care and life.	Ensures treatment plans align with what is most important to the patient, enhancing quality of life and potentially influencing the intensity of interventions.	Ask open-ended questions about concerns, goals, and wishes; involve family/caregivers in discussions; actively listen; document preferences clearly; communicate preferences to the entire care team.



# Case Study 1 (10 minutes)

- Patient: "Rhonda" is an 82-year-old woman with Alzheimer's, type 2 diabetes, and heart failure. She lives at home with her daughter who is her primary caregiver.
- · What matters: Family, aging in place, gardening and listening to music from her younger years.
- · Recent Issues: Poorly controlled diabetes and increased shortness of breath.
- Task: Discuss what might be most important to this patient regarding her health and life. How would understanding these priorities influence your approach to managing her diabetes and heart failure? Consider what brings her enjoyment, living situation, and caregiver burden.

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# Medications

- Managing medications for individuals with dementia and chronic conditions is challenging.
- Polypharmacy increases risk of drug interactions and adverse effects.
- Cognitive impairments lead to difficulties with medication adherence (forgetting doses, incorrect dosages).
- Older adults with dementia may have altered drug metabolism and increased sensitivity to side effects.

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Key principles for safe and effective medication management Conservative approach: "Say NO, start low, go slow".

Regular and comprehensive medication reviews involving patient (if possible), caregivers, physicians, and pharmacists.

Simplify medication regimen: pill organizers, reminders, alternative formulations.

Be vigilant in avoiding/minimizing high-risk medications (benzodiazepines, anticholinergics, antihistamines).

Use hypnotics and antipsychotics only when nonpharmacological approaches fail.

Carefully weigh benefits against risks for each medication.

Regularly reassess the ongoing need for each medication.

# Why Deprescribe?

- · Medication-related misadventures
- · Adverse drug events
  - · Falls
  - · Worsening cognition
- · Caregiver strain
  - · Administration challenges
- Improving Quality of Life <u>Not</u> Withdrawing Care



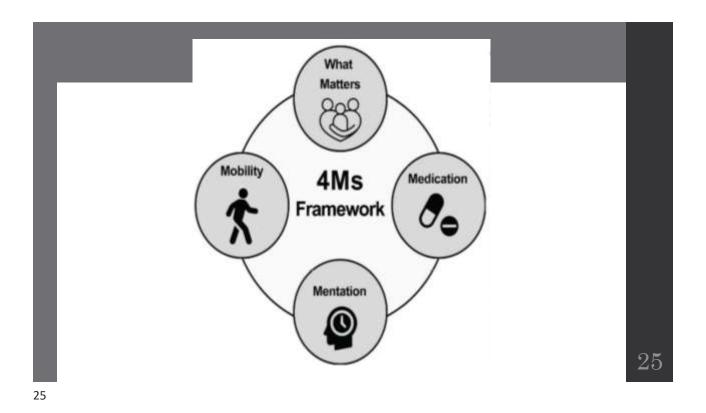
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# Case 2 (15 minutes)

- Patient: "Joe" is a 79-year-old man with vascular dementia, hypertension, osteoarthritis, benign prostatic hyperplasia, urinary incontinent and mild heart failure. He lives with his wife who is his primary caregiver.
- Medications: Aspirin 81mg daily, metoprolol tartrate 25mg twice daily, lisinopril 20mg daily, atorvastatin 40mg daily, hydrochlorothiazide 25mg daily, tamsulosin 0.4mg daily, oxybutynin 5mg twice daily, acetaminophen 500mg as needed, ibuprofen 600mg three times a day as needed, lorazepam 0.5mg at bedtime.
- Task: At your table, review this medication list and identify any potential issues related to polypharmacy, drug interactions, or medications that might be inappropriate for someone with dementia. Suggest strategies for simplifying his medication regimen, considering his cognitive impairment and co-existing conditions.



### Mentation



Encompasses assessment and management of cognitive and psychiatric health (dementia, depression, delirium).

Regular assessment of cognitive function is vital.

Brief cognitive screening tools can be incorporated into routine visits.

Identify individuals needing more comprehensive neuropsychological evaluation.

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# Nonpharmacologic Treatments

Modality	Type of dementia	Evidence
Enjoyable leisure activities (per patient preference)	Mild cognitive impairment, mild to moderate dementia	Decreased neuropsychiatric symptoms and functional capacity, slowing of memory loss
Mental stimulation programs (e.g., puzzles, word games, past/reminiscence therapy, indoor gardening, baking)	Mild to moderate dementia	Improved cognition and self-reported quality of life and well-being; no effect on functional status, mood, or behavior
Occupational therapy training in coping strategies and cognitive aides	Mild to moderate dementia	Improved cognition
Structured physical exercise programs	Mild to severe Alzheimer disease	Improved physical function, reduced neuropsychiatric symptoms (including depression), slower rate of functional decline, no improvement in cognition

Epperly T, Dunay MA, Boice JL. Alzheimer Disease: Pharmacologic and Nonpharmacologic Therapies for Cognitive and Functional Symptoms. Am Fam Physician. 2017 Jun 15:95(2):771-778. PMID: 28671413

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# Mentation



Supporting cognitive function involves a multifaceted approach:



Environmental modifications: reduce clutter/noise.



Cognitive stimulation activities: puzzles, games, reminiscence therapy.



Address co-occurring conditions: depression and anxiety.



Non-pharmacological strategies BPSD as first-line intervention:



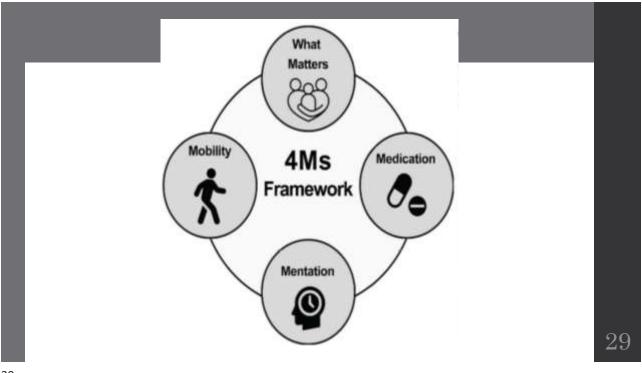
Calm and predictable environment, routines, music therapy, understanding unmet needs.



Pharmacological interventions for BPSD reserved for when non-pharmacological approaches fail or risk to self/others.



Use lowest effective dose for shortest duration.





- Emphasizes maintaining physical function and promoting safe movement.
- Improved cardiovascular health, strength, balance and mood.
- · Potential slowing of cognitive decline.

### Mobility

- Encourage tailored exercise programs considering individual abilities and chronic conditions.
- · Consult with physical therapists for appropriate plans
- Environmental adaptations support safe mobility: uncluttered pathways, good lighting, assistive devices.

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# Mobility

- Fall prevention is critical.
- Regular comprehensive fall risk assessment.
- Home modifications: remove hazards, install grab bars, ensure good lighting.
- Review medication list for drugs increasing fall risk.
- Ensure appropriate footwear and use of assistive devices.



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### Developing a Comprehensive 4Ms Care Plan (15 minutes)

- Patient: "Pat" is an 88-year-old man with Lewy body dementia and COPD. Increasing confusion, frequent falls, difficulty managing COPD meds. Lives alone, limited social support. Mini-Cog 1/5, needs help with some ADLs.
- Medications: Aspirin, Rivastigmine, Quetiapine, Melatonin, Umeclidinium/vilanterol inhaler, and an Albuterol inhaler.
- Goal: Remain living in his own home as long as possible.
- Task: Working in groups, develop a brief outline of a care plan addressing each of the 4Ms – What Matters, Medication, Mentation, and Mobility for this patient. Consider his stated goal, cognitive and physical limitations, and social circumstances.



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### Summary

- Dementia presents a significant challenge in managing chronic diseases.
- A dementia-friendly, patient-centered approach is essential.
- The 4Ms framework (What Matters, Medication, Mentation, Mobility) provides a valuable structure for optimizing care.
- Understanding dementia, applying patient-centered principles, and using the 4Ms can improve quality of life and reduce adverse outcomes.
- Continued education and implementation of practical strategies are crucial for fostering dementiafriendly practices.





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# Need Further Help?

### UW ECHO IN GERIATRICS

### CASE CONSULTATION, NETWORKING, AND CE/CMES!

Providing support to providers who care for older adults by creating a network of colleagues in the Rocky Mountain region with ease of access to a geriatric specialist care team.

### PROFESSIONAL CONTINUING EDUCATION CREDITS ARE AVAILABLE

### Participation is free, students are welcome!

Through the UW ECHO in Geriatrics, sponsored by the Wyoming Center on Aging healthcare professionals throughout the region have the opportunity to receive best-practice recommendations for consideration in management of older adults. You are invited to present challenging cases for discussion and feedback to a network of colleagues as well as a specialist care team. Each ECHO network will also feature a brief community discussion on a variety of important topics related to geriatrics.

Project ECHO is a virtual model for lifelong medical learning and collaborative practice that links frontline healthcare providers with specialist care teams to manage patients who have chronic conditions requiring complex care.

Learning Objectives: Develop a network of geriatric care practitioners. Create hubs of geriatric expertise in the Rocky Mountain Region. Implement best practices for geriatric patients. Identify strategies to assess and address the 4Ms (What Matters, Mentation, Mobility, Medication) of geriatric healthcare.

To join this community of practice contact: <a href="wycoa@uwyo.edu">wycoa@uwyo.edu</a> | (307) 766-2829



# References

Alzheimer's Association: <a href="https://www.alz.org/">https://www.alz.org/</a>
Alzheimer's Society UK: <a href="https://www.alzheimers.org.uk/">https://www.alzheimers.org.uk/</a>
Institute for Healthcare Improvement (IHI) - Age-Friendly Health Systems initiative: <a href="https://www.ihi.org/networks/initiatives/age-friendly-health-systems">https://www.ihi.org/networks/initiatives/age-friendly-health-systems</a>
American Geriatrics Society: <a href="https://www.americangeriatrics.org/">https://www.americangeriatrics.org/</a>
Alzheimer's Society Canada: <a href="https://alzheimer.ca/en">https://alzheimer.ca/en</a>
CDC: <a href="https://www.de.gov/nchs/data/nhsr/nhsr/203.pdf">https://alzheimer.ca/en</a>
CDC: <a href="https://www.de.gov/nchs/data/nhsr/nhsr/203.pdf">https://www.nia.nih.gov/toolkits/exercise</a>
Healthy Aging: <a href="https://www.healthinaging.org/age-friendly-healthcare-you">https://www.healthinaging.org/age-friendly-healthcare-you</a>

### Matters Most:

Patient Priorities: https://patientprioritiescare.org/

### Medications:

https://deprescribing.org/

https://www.cgakit.com/m-2-stopp-start

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 $\begin{tabular}{ll} VA Gerofit: $$\underline{$https://www.youtube.com/playlist?list=PL3AQ\_JVoBEywSLDVtTw5lExCYHxjfp\_Py}$ \end{tabular}$ 

https://www.nia.nih.gov/toolkits/exercise