# Age-Friendly Health Systems: "The What, Why, and a bit of How of the 4Ms"
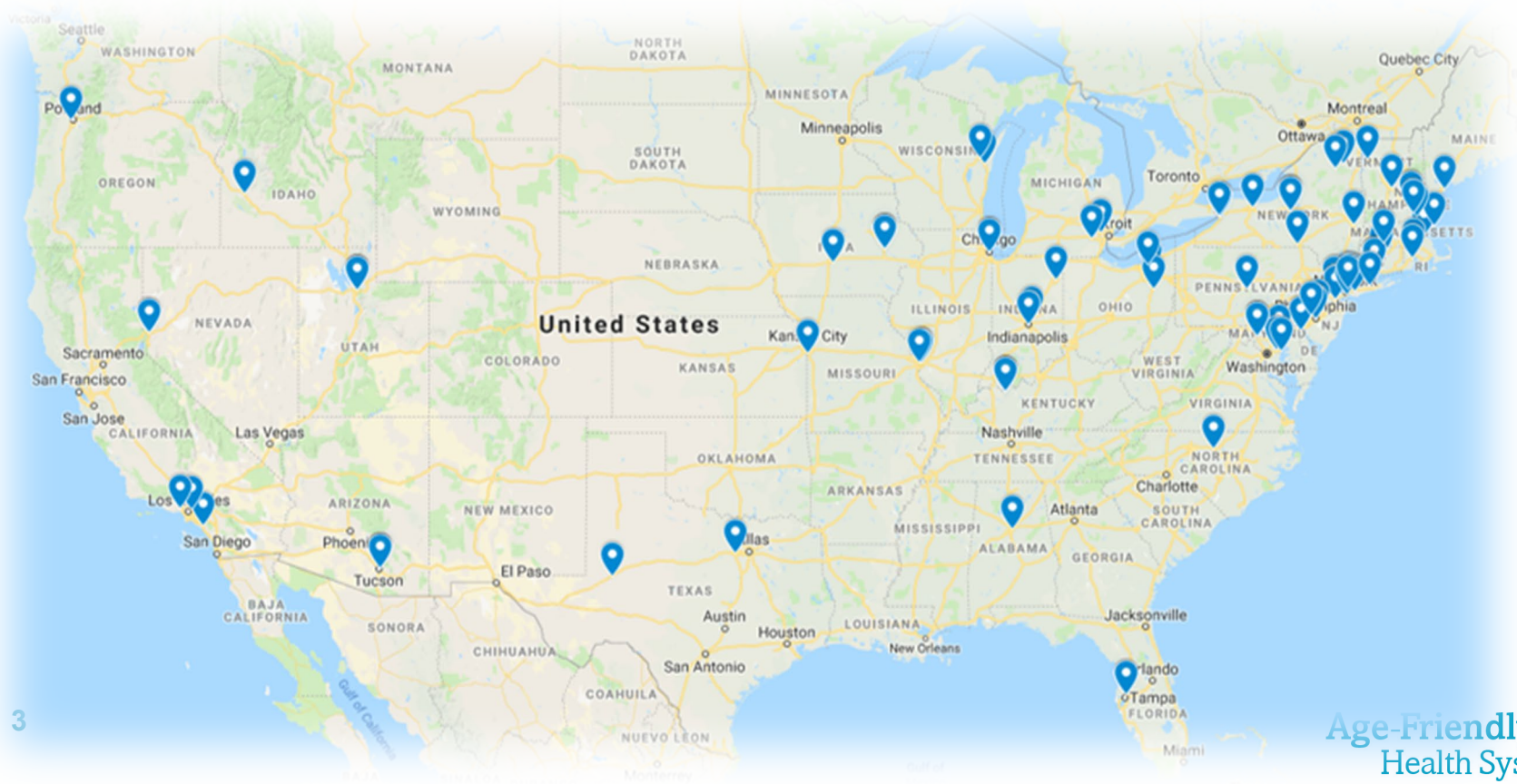# U Center on Aging Retreat
## Mary Tinetti, MD

Age-Friendly Health Systems

# **Aim of the AFHS initiative:**

Establish Age-Friendly Care in 20% of US hospitals and health systems by 2020

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# Current Age Friendly Health Systems
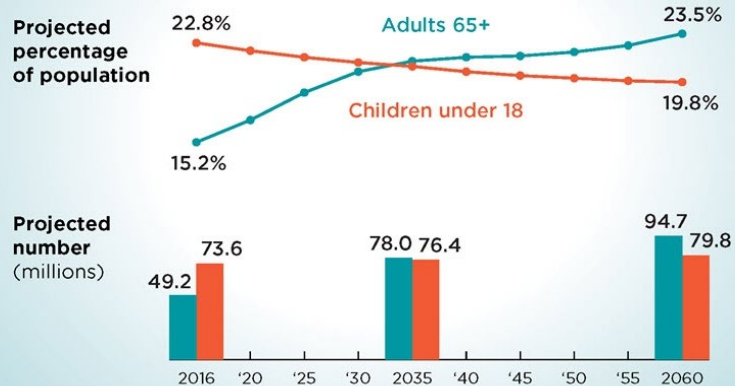
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# Why Age-Friendly Health Systems?



*The numbers speak for themselves*

# Why Age-Friendly Health Systems?: The complexity

## Percent of Patients with > 6 Diagnoses

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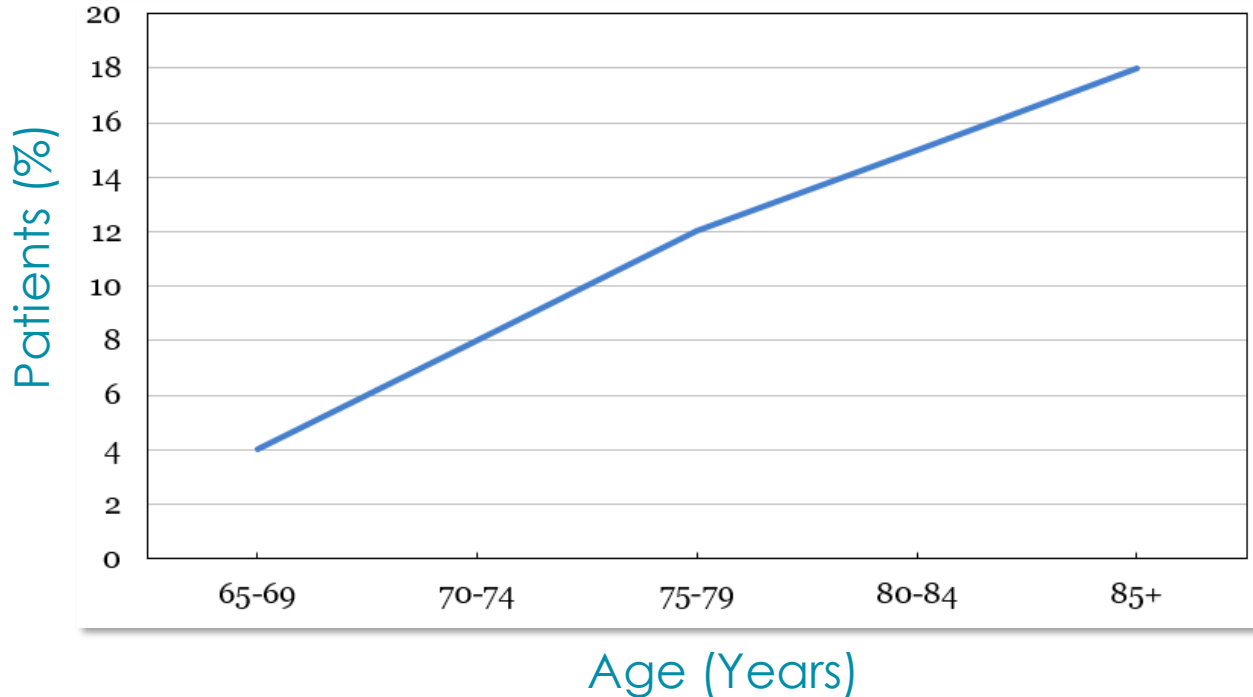
# Why Age-Friendly Health Systems?: The healthcare

| Site | Ages 65-74 (per 100 persons) | Ages >75 (per 100 persons) |
|---|---|---|
| Office Visits | 647 | 768 ⬆ |
| ED Visits | 37 | 60 ⬆ |
| Hospital Days | 139 | 259 ⬆ |

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# What is an AFHS: The 4Ms Framework

## Evidence-based interventions across 4 core elements

| The 4Ms | Description |
| --- | --- |
| **Matters Most** | Know & align care with each older adult's specific health outcome goals and care preferences across settings of care |
| **Medications** | Use only medications that do not interfere with What Matters most, Mobility, or Mentation across settings of care |
| **Mentation** | Prevent, identify, treat, & manage dementia, depression, and delirium across settings of care |
| **Mobility** | Ensure that older adults move safely every day to maintain function and do What Matters |

Fulmer T, Mate KS, Berman A. *J Am Geriatr Soc*. 2018 Jan;66(1):22-24.

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# Why these 4 Ms?

- Outcome areas affected by "all" diseases (or by their treatment)

- Unifying focus for all care in all settings for all clinicians (↓ fragmentation, conflicting recommendations)

- What people want help with from their healthcare

- Provides a simplified framework

  – for managing the complexity of caring for older adults

  – for getting everyone on the same page

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# How we got to the 4Ms

Reviewed 17 evidence-based programs serving older adults

↓

Identified >90 components

↓

Recognized 4 core elements

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# The 4 Ms: Evidence Base

**What Matters** — Older adults vary in what matters most; Increases satisfaction

**Medication** — Adverse drug events (ADE)↑ 10% per drug; many medications harmful & of little benefit; ADEs lead to ↑ morbidity, hospitalizations, ↑ costs

**Mobility** — Fall-related injury cost ave. $13,316; ↑ LOS 6.3 days; Mobility programs ↓ hospital costs 30%

**Mentation** — Dementia, delirium, depression often unrecognized; ↑ morbidity, mortality, and costs; 16:1 ROI on delirium programs

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# Reciprocal/synergistic relationships



4Ms Framework of an
Age-Friendly Health System

What Matters

Mobility

4Ms

Medication

Mentation

- **Feasible framework for implementation and measurement**

- **Synergistic relationships → simplify and reduce burden on care team while increasing effect**

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# Why should health systems want to be Age Friendly?



## What's in it for them?

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"The only Big Data letters I care about are the four Ms —

*Make Me More Money*

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# Case for AFHS



Make a sustainable business case for age-friendly care

- **Reduce costs associated with poor quality care**
  - Reduce harm → penalties or higher level of care settings, longer inpatient LOS, ED visits, readmissions
  - Improve care transitions, care coordination
  - Reduce risk of malpractice claims

- **Increase utilization of cost-effective services**
  - Increase use of underused, evidence-based services and practices
  - Reduce over-utilization of unwanted care
  - Optimize site of care (often lower cost care settings)

- **Enhance revenue and market share**
  - Increase staff productivity and decrease turnover
  - Increase bed capacity
  - Improve reputation to attract patients

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# AFHS: The how of implementing the 4Ms

Where are the 4Ms already in practice?

Who are the champions to spread the 4Ms?

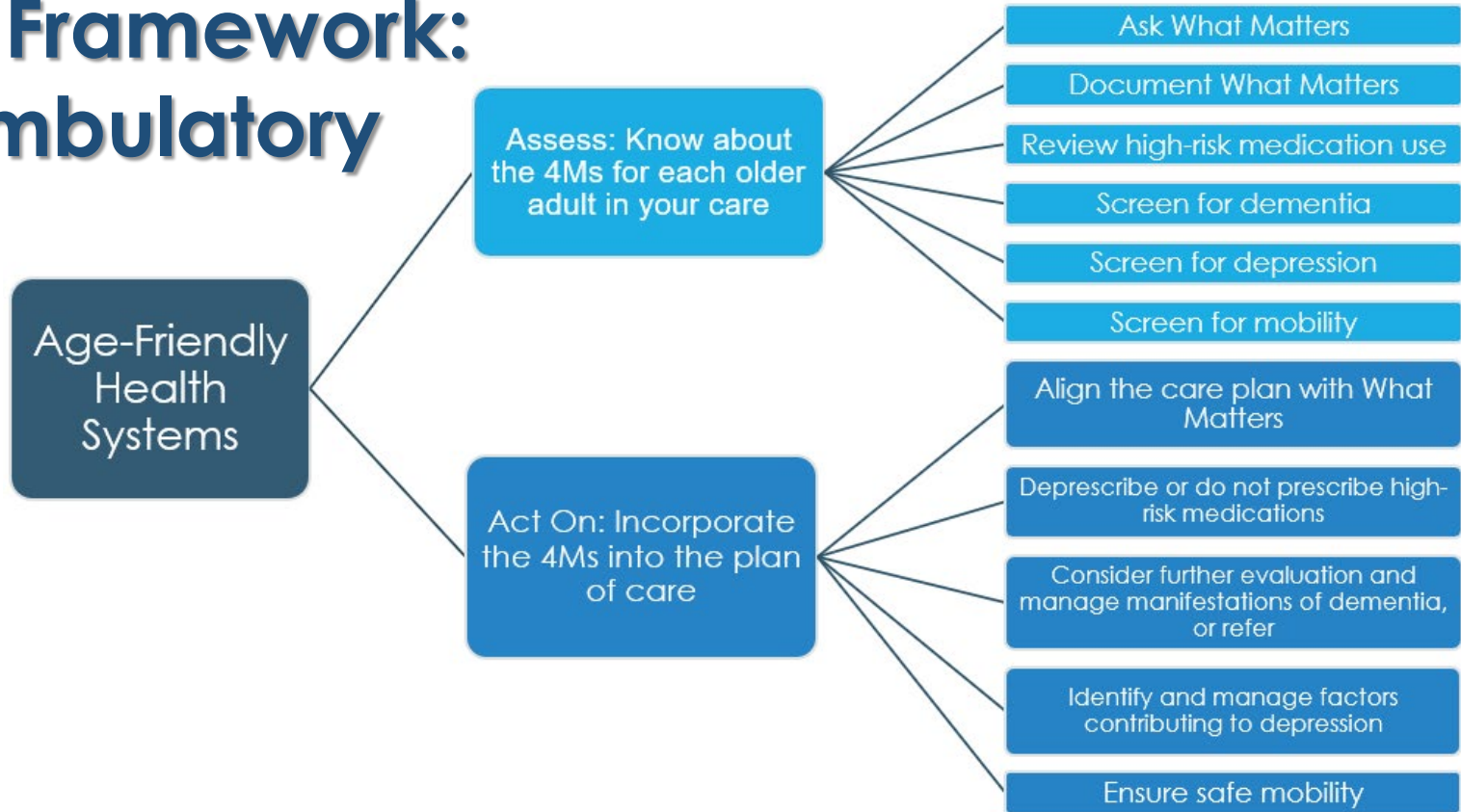What can you stop doing when the 4Ms are reliably in practice?

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# 4Ms Framework: Hospital

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**Assess the 4Ms for each older adult**
- Ask What Matters
- Document What Matters
- Review high-risk medication use
- Screen for delirium every 12 hours
- Screen for mobility

**Act On: Incorporate the 4Ms into care**
- Align care with What Matters
- Avoid high-risk medications
- Ensure oral hydration
- Orient to time, place, situation
- Ensure glasses & hearing devices
- Avoid sleep interruptions; non-pharmacological
- Early and safe mobility

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# 4Ms Framework: Ambulatory

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**Assess: Know about the 4Ms for each older adult in your care**
- Ask What Matters
- Document What Matters
- Review high-risk medication use
- Screen for dementia
- Screen for depression
- Screen for mobility

**Act On: Incorporate the 4Ms into the plan of care**
- Align the care plan with What Matters
- Deprescribe or do not prescribe high-risk medications
- Consider further evaluation and manage manifestations of dementia, or refer
- Identify and manage factors contributing to depression
- Ensure safe mobility

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# Hospital: Assess the 4Ms

| The 4 Ms | How to assess |
|---|---|
| **Ask What Matters** | • "What do you most want to focus on while you are in the hospital/ED_____ (fill in health problem) so that you can do_____ (fill in desired activity) more often or more easily?"<br>• For older adults with advanced or serious illness, "What are your most important goals if your health situation worsens?" |
| **Document What Matters** | Documentation on paper, whiteboard, or EHR where it is accessible across settings |
| **High-risk medication use** | Suggested list: Benzodiazepines; Opioids; Anticholinergics (e.g. diphenhydramine); over-the-counter sedatives and sleep medications; Muscle relaxants; Tricyclic antidepressants; Antipsychotics |
| **Delirium** | Suggested tool: 2-Item Ultra-Brief (UB-2) Delirium Screen |
| **Mobility** | Suggested tool: Timed Up & Go (TUG) |

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# Hospital: Act on the 4Ms

| 4M interventions | Getting started |
| --- | --- |
| **Align the care plan with What Matters** | Align care with the older adult's goals and preferences (i.e., What Matters) |
| **Do not prescribe (deprescribe) high-risk medications** | Avoid or deprescribe medications that may interfere with What Matters, Mentation and Mobility of older adults. |
| **Ensure sufficient oral hydration** | (e.g. Anna Arundel's solution) |
| **Orient older adults to time, place, and situation** | For older adults with dementia, gentle re-orientation cues; avoid repeated testing about orientation. |
| **Sensory adaptive equipment** | Glasses, hearing aids, and dentures |
| **Support adequate sleep** | Avoid disruptions (vital sign, blood draws;) Nonpharmacological (music, massage) |
| **Ensure early and safe mobility** | Manage impairments (e.g., pain; strength, balance; remove catheters, IV, telemetry, other tethers); Set & meet a daily mobility goal |

*Health outcome goals are the activities that matter most to an individual, such as babysitting a grandchild, walking with friends in the morning, or continuing to work as a teacher. Health care preferences include the medications, health care visits, testing, and self-management tasks that an individual is able and willing to do.

**These activities are also key to preventing delirium and falls

⁺McDowell JA, Mion LC, Lydon TJ, Inouye SK. A nonpharmacologic sleep protocol for hospitalized older patients. J Am Geriatr Soc 1998;46:700-70.5.

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# Ambulatory: Assess the 4Ms

| The 4 Ms | How to assess |
|---|---|
| **Ask What Matters** | • "What do you most want to us focus on _____ (fill in health problem) so that you can do_____ (fill in desired activity) more often or more easily?" <br> • For older adults with advanced or serious illness, "What are your most important goals if your health situation worsens?" |
| **Document What Matters** | Documentation in EHR where it is accessible across settings |
| **High-risk medications** | Suggested list: Benzodiazepines; Opioids; Sedatives; Muscle relaxants; Tricyclic antidepressants; Antipsychotics |
| **Dementia; Depression** | Suggested tools: Mini-Cog; MoCA <br> Suggested tool: PHQ-2 |
| **Mobility** | Suggested tool: Timed Up & Go (TUG) |

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# Ambulatory: Act on the 4Ms

| Key Changes | Getting Started |
|---|---|
| **Align care with What Matters** | Align care with older adult's goals and preferences* |
| **Deprescribe high-risk medications** | Avoid or deprescribe medications that may interfere with What Matters, mentation , or safe mobility |
| **Impact of dementia** | Consider impact of dementia on other conditions, adherence to treatments & self-management, and on caregiver stress. Refer the older adult & caregivers to resources such as the Alzheimer's Association |
| **Manage depression** | Consider initiating treatment for depression or referring to mental health professional |
| **Ensure safe mobility** | • Manage impairments that reduce mobility (e.g. pain; balance, strength)<br>• Ensure home environment that is safe for mobility<br>• Support older adults to implement a daily mobility goal that supports What Matters |

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# AFHS What Matters

# Why What Matters Most matters most

- For older adults
  - Vary in what matters most
  - Feel more engaged, listened to
  - Avoid unwanted care & receive wanted care
- For health systems
  - Better patient experiences scores & retention
  - Avoid unnecessary utilization
- For everyone
  - Everyone on same page
  - Improved relationships
  - It is the basis of everything else

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# Reliably ask What Matters Most

- Purpose:
  - General getting to know person & what's important
  - Inform care decisions
- Feasible (time, training, format, method for sharing information)
  - Reliable, specific, actionable
  - Depends on setting & patient population
    - <u>Setting</u>: Immediate decision (e.g. hospital, ED) or ongoing care (e.g. 1° care, ambulatory)
    - <u>Population</u>: Advanced serious illness or remaining older adults
- AFHS What Matters toolkit

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# Patient priorities identification: Value-based Health outcome goals

➢ Desired activities that reflect values

➢ To inform clinical decisions: Specific, actionable, reliable, & realistic

➢ Patientprioritiescare.org

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# Tips on acting on What Matters Most

- Link care to goals & preferences, "*There are things we could do, but knowing what matters most to you, I suggest we…*"
- Use patient's priorities (not just diseases) in communicating, decision-making, assessing benefit
- Collaborative negotiations when differ (agree there is no best answer & brainstorm alternatives)
  - *"I know you don't like the CPAP, but are you willing to try it for 2 weeks to see if it helps you be less tired so you can get back to volunteering which you said was most important to you"*
- Care options involve many disciplines (PT, SW, community, etc.)

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# The 4Ms in Action

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# Age-Friendly Care: St. Vincent's, Indiana

| Initial change | Created 4M-focused EHR templates for assessments and documentation; data accessible to patients' other clinicians. |
|---|---|
| Scale up | 18 Medicare Wellness Nurses integrated 4Ms into annual Medicare Wellness Visits at 38 primary care practices:<br>• Created 4M-focused template for AWVs<br>• All sites used same 4M-related questions and assessments in<br>• Developed 4M-focused guide to facilitate referrals based on 4M assessments |

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# Anne Arundel Team



**4Ms:**

**Medication:** Pharmacist identifies high risk medications.

**Mobility**: Mobility tech a new position

**Mentation: N**ew drinking cups to maintain hydration

**What matters:** Each patient identity specific goal for hospital-posthospital (see his cat)

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# Trinity Glacier Hills



Number of patients with care conference note regarding their goals
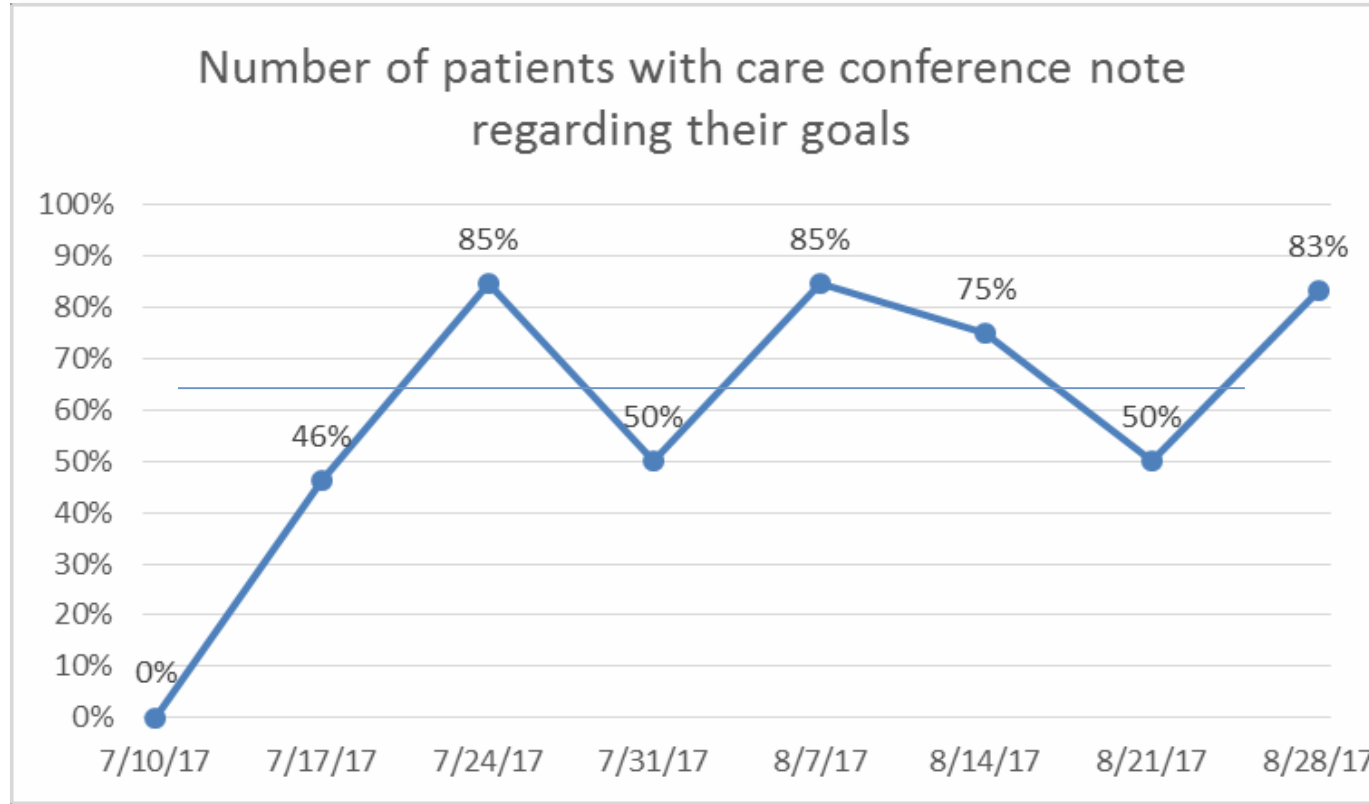
Median = 63

# Trinity Glacier Hills



Resident answered that they met their goals during their stay

Median = 81

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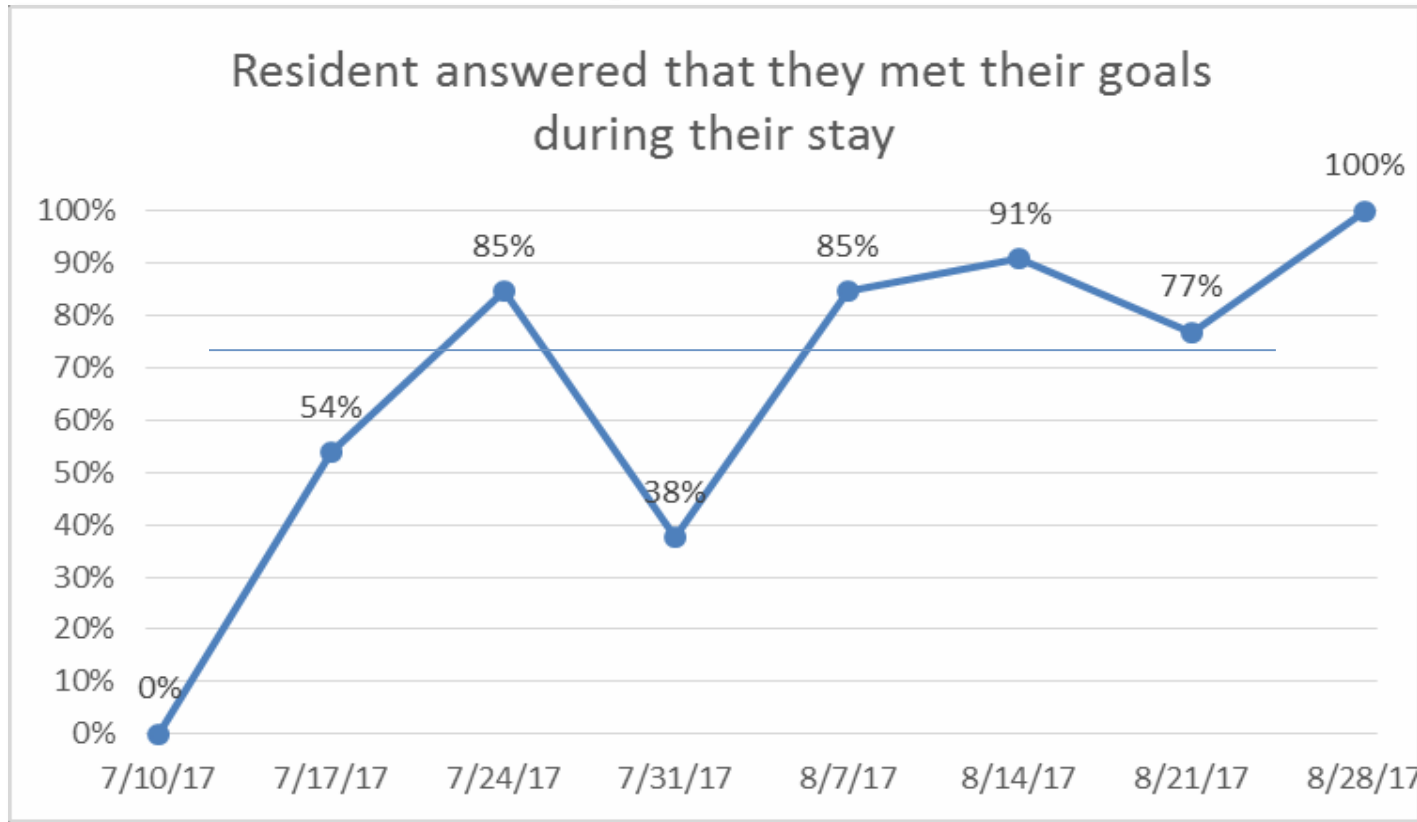
# Let's meet Mr. Smith



- 77 years old; 3 children, 5 grandkids, 1 wife

- 6 chronic diseases (hip arthritis, diabetes, hypertension, …)

- 9 Medications

- 5 Clinicians (primary, cardiologist, orthopedist,..)

- 2 health visits (doctor, lab test, etc.) per week (each ½ day)

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# What Matters to Mr. Smith

**Not sure, but…**

- Always tired

- Too much time on his healthcare

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# What matters to Mr. Smith's clinicians before AFHS

**Blood pressure & glucose too high**

- Increase medications & check more often

**Hip replacement?**

- Orthopedist & Primary doctor differ

# Mr. Smith's health system becomes Age Friendly



**Annual wellness visit:**

- Identified his health priorities (patientprioritiescare.org)
- MoCA score 24/30
- PhQ 2 score 4
- POMA score 22/28→ CDC STEADI

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# What Matters Most to Mr. Smith

*" I want to be less tired so I can get to the club a few days a week. My medications make me too tired."*

*" I can live with the hip pain. I don't want surgery."*

- **Health outcome goal:**
  - Get to club 3 times/week
- **Healthcare preferences:**
  - decrease medications
  - avoid surgery

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# What Matters Most to Mr. Smith's clinicians after AFHS

**Primary doctor & cardiologist:**

→ decrease meds over few months

→ less tired → gets to club



**Primary & orthopedist:**

→ will use his goals to determine when and if to suggest surgery

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# Mr. Smith fell at club while exercising …heads to the hospital….

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# Mr. Smith Arrives on the Unit

Nurse evaluates him with 2-Item Screen for delirium:

1. What are the months of the year backwards?
2. What is the day of the week?

If POSITIVE, then
Delirium Treatment

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# Delirium Treatment Protocol

| 7AM-3:30 PM | 3:00-11:30 PM | 11:00PM- 7:30AM |
|---|---|---|
| **Maintain Cognition and Orientation:** | **Maintain Cognition and Orientation:** | **Maintain Cognition and Orientation:** |
| ☐     Reorient as indicated | ☐     Reorient as indicated | ☐     Reorient as indicated |
| ☐     Encourage family to remain at bedside as much & As possible/ family pictures | ☐     Encourage family to remain at bedside as much As possible/ family pictures | ☐     Encourage family to remain at bedside as much As possible/ family pictures |
| **Sleep Promotion:** | **Sleep Promotion:** | **Sleep Promotion:** |
| ☐     *Cluster care during sleep; quiet hours; avoid sedatives* | ☐     Cluster care during (and around) sleep & Quiet hours | ☐     Cluster care during (and around) sleep & Quiet hours |
| **Eva… Confusion:** | **Evaluate Medications/Identify Contributors to Confusion:** | **Evaluate Medications/Identify Contributors to Confusion:** |
| ☐     Assess pain, hypoxia, dehydration, constipation, infection, hypoglycemia, and vital signs | ☐     *Assess dehydration, fill water; remove IV* | ☐     Assess pain, hypoxia, dehydration, constipation, infection, hypoglycemia, and vital signs |
| **Early, Aggressive, Progressive Mobility:** | **Early, Aggressive, Progressive Mobility:** | **Early, Aggressive, Progressive Mobility:** |
| ☐     OOB to chair for meals | ☐     OOB to chair for meals | ☐     OOB to chair for meals |
| ☐     Ambulate at minimum 3 times a day, as appropriate (and document) | ☐     Ambulate at minimum 3 times a day, as appropriate (and document) | ☐     *Walk ≥3 times per day* |
| **Adequate Nutrition/Hydration:** | **Adequate Nutrition/Hydration:** | **Adequate Nutrition/Hydration:** |
| ☐     Encourage/ Assist with meals and fluids | ☐     Encourage/ Assist with meals and fluids | ☐     Encourage/ Assist with meals and fluids |
| **Prevent Nosocomial Infections:** | **Prevent Nosocomial Infections:** | **Prevent Nosocomial Infections:** |
| ☐     Remove all tubes and drains as soon as possible | ☐     Remove all tubes and drains as soon as possible | ☐     Remove all tubes and drains as soon as possible |
| ☐     Perform **oral care at minium** twice daily | ☐     Perform **oral care at minium** twice daily | ☐     Perform **oral care at minium** twice daily |

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# Mr. Smith in the hospital: What Matters?

Nursing staff asks: What would you most like to focus on while you are in the hospital?  Every morning and on the white board



WHAT DO YOU WANT TO FOCUS ON WHILE YOU ARE IN THE HOSPITAL

- mobilty
- feeling better/ pain control
- safe d/c home
- other

43%
7%
33%
17%
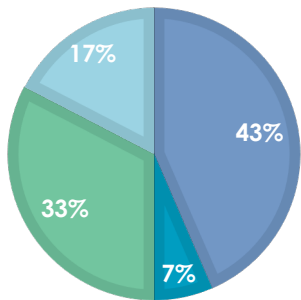


Mon    Tue    Wed
Thur    Fri    Sat    Sun

YALE-NEW HAVEN HOSPITAL

Today's Date:

Room #:  762??A        Telephone #:  203-688-22?B

Doctor:

Nurse:              Phone #:

Clin. Tech:              Phone #:

Patient Service Manager:    Other Team Members:    Diet:

Activity:
☐ Independent      ☐ Assistance
☐ Chair X
☐ Ambulate X

Pain Rating Scale:
Mild      Moderate      Severe
0  1  2  3  4  5  6  7  8  9  10
Next Pain Medication Time:              Goal: ☐

Assistive Device:

Patient's Goal for the Day:

Family / Patient Questions / Other Communication:

CALL. DON'T FALL.

Family Contacts:

☐ FALL RISK
☐ BED/ CHAIR ALARM

* Use only non-abrasive cleaners. CaviWipes, Expo, isopropyl alcohol, soap & water and disinfectants OK with 6-year warranty from www.ahutton.com *

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# Pharmacist screens Mr. Smith for high risk Medications

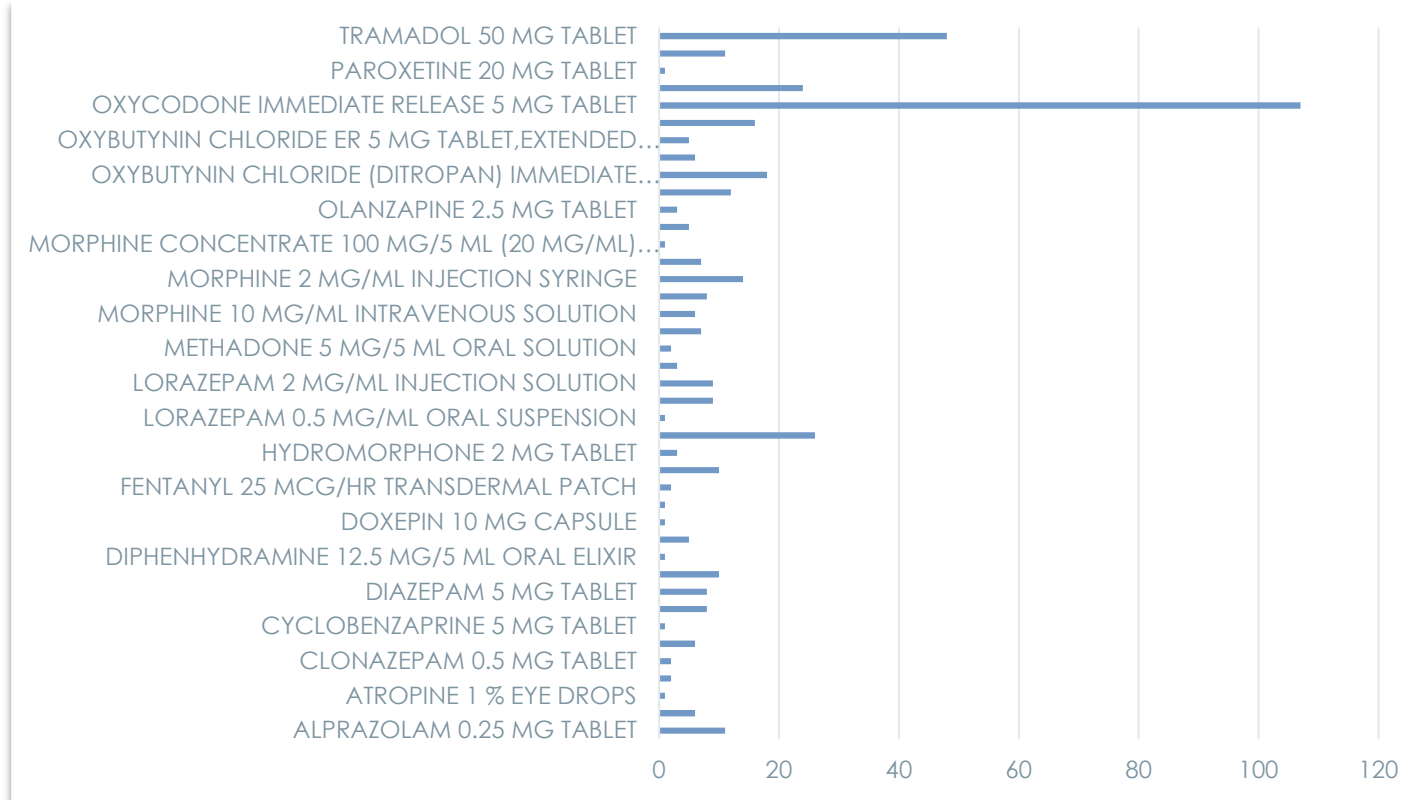Benadryl -> Anticholinergic; confusion and falls

Losartan -> Low BP, orthostatic hypotension

## Tools to Track and Monitor

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# High Risk Medications - January 2019 - V4W

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# Mr. Smith screened by PT for Balance and Gait





**The Johns Hopkins Highest Level of Mobility Scale (JH-HLM)**

| MOBILITY LEVEL | | | Score |
|---|---|---|---|
| WALK | 250+ FEET | | 8 |
| | 25+ FEET | | 7 |
| | 10+ STEPS | | 6 |
| STAND | 1 MINUTE | | 5 |
| CHAIR | TRANSFER | | 4 |
| BED | SIT AT EDGE | | 3 |
| | TURN SELF / BED ACTIVITY | | 2 |
| | LYING | | 1 |

Report of what the patient **ACTUALLY DID** (Observation)

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# YNHH ACE Unit Jan./ Feb. 2018 vs Jan./ Feb. 2019 Mobility

|                      | January '18 | Febuary '18 | January '19 | Febuary '19 |
|----------------------|-------------|-------------|-------------|-------------|
| oob for meals        | 48%         | 46%         | 46%         | 58%         |
| ambulated in hall    | 26%         | 24%         | 34%         | 40%         |
| ambulated in room    | 64%         | 59%         | 73%         | 78%         |

— oob for meals   — ambulated in hall   — ambulated in room

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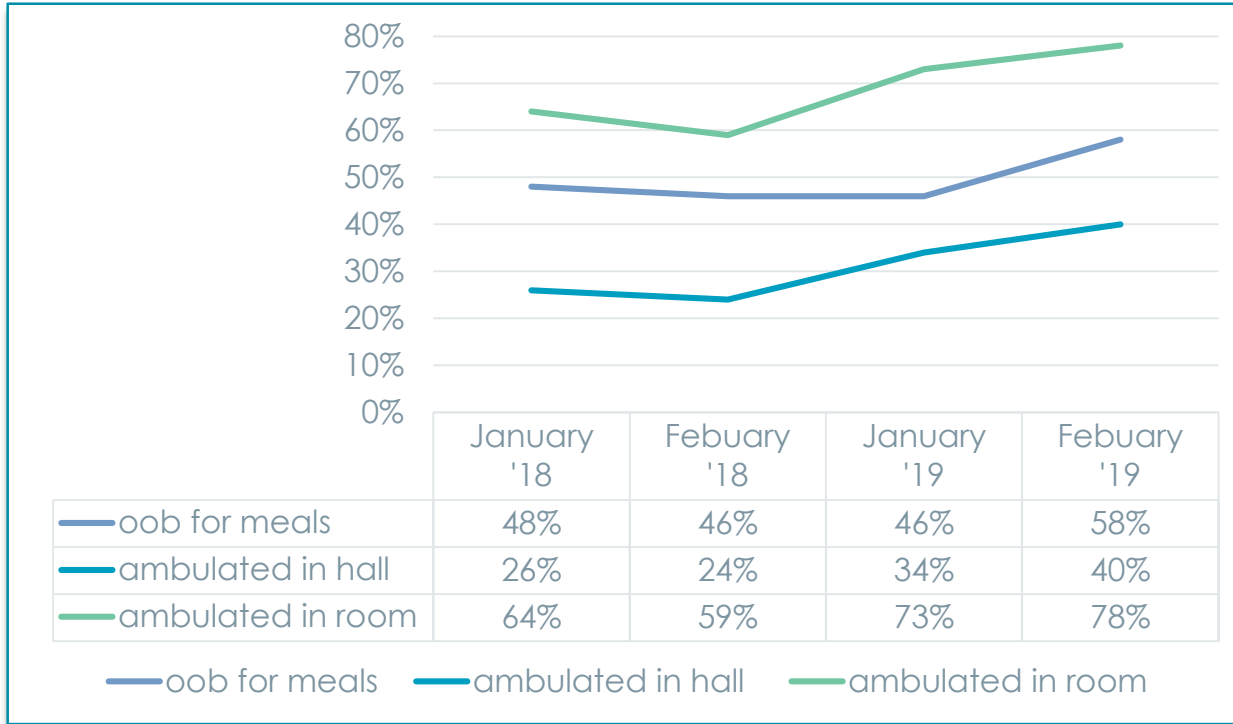
# Mr. Smith goes home



## Home care
- Home safety evaluation
- Checks postural BP
- Alert MD that patent takes OTC sleep medications
- What Matters mobility goal (walk in house & yard 5 times)

## Outpatient rehabilitation
- Progressive balance, gait and strength program
- What Matters based mobility goal (walk to club 3 times/week)

## PCP
- Avoid sleep medications; Sleep hygiene patient sheet
- Check postural BP→ ↓ Flomax; BP medications
- Reinforce What Matters based mobility goal

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# AFHS: Successes & Challenges

## Successes

- Clinical champions
- Build on existing excellence
- Involve patients in design
- Heightens visibility

## Challenges

- Inertia (even good change is hard; "already doing it)
- Changes too small to see effect
- Cross site & discipline integration



Achievements and Challenges Triangles Business Action Pl

Achievements | Challenges

Achievement 1 → Challenge
Achievement 2 → Challenge 3
Achievement 3 → Challenge 2
Achievement 4 → Challenge 1

This slide is 100% editable. Adapt it to your needs and capture your audience's attention.

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