# 5M'S OF GERIATRICS

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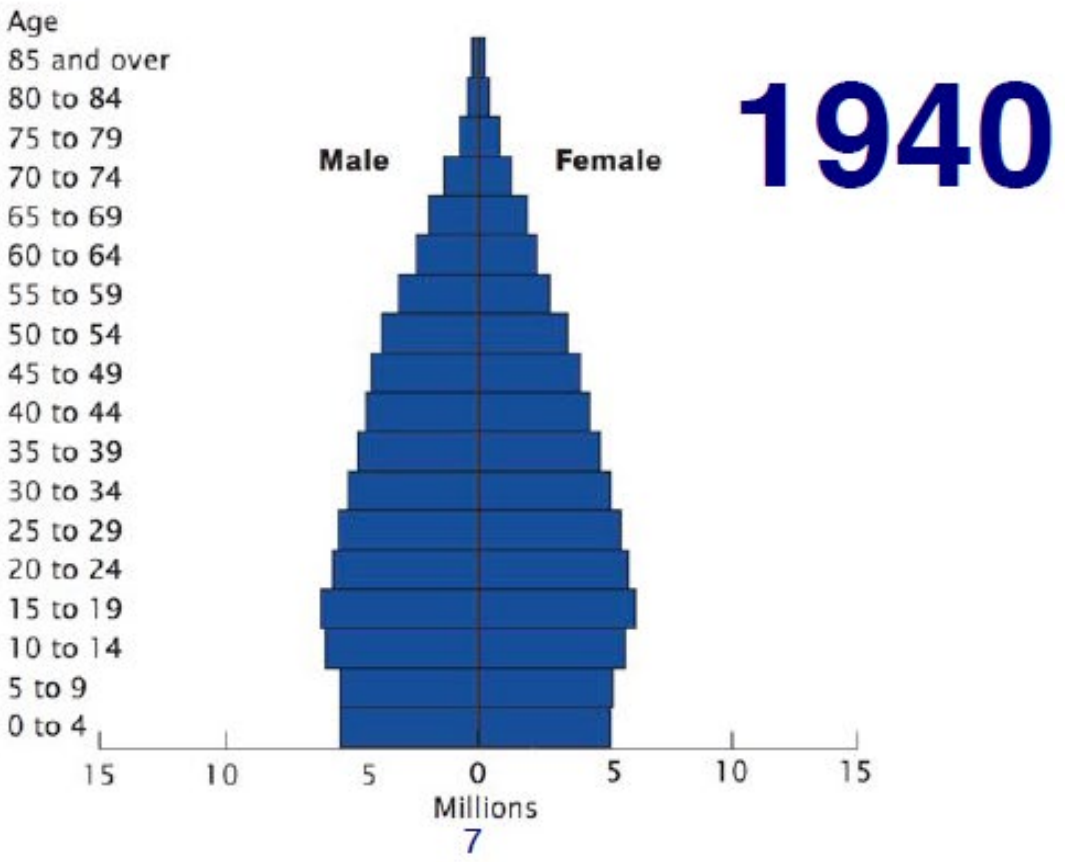
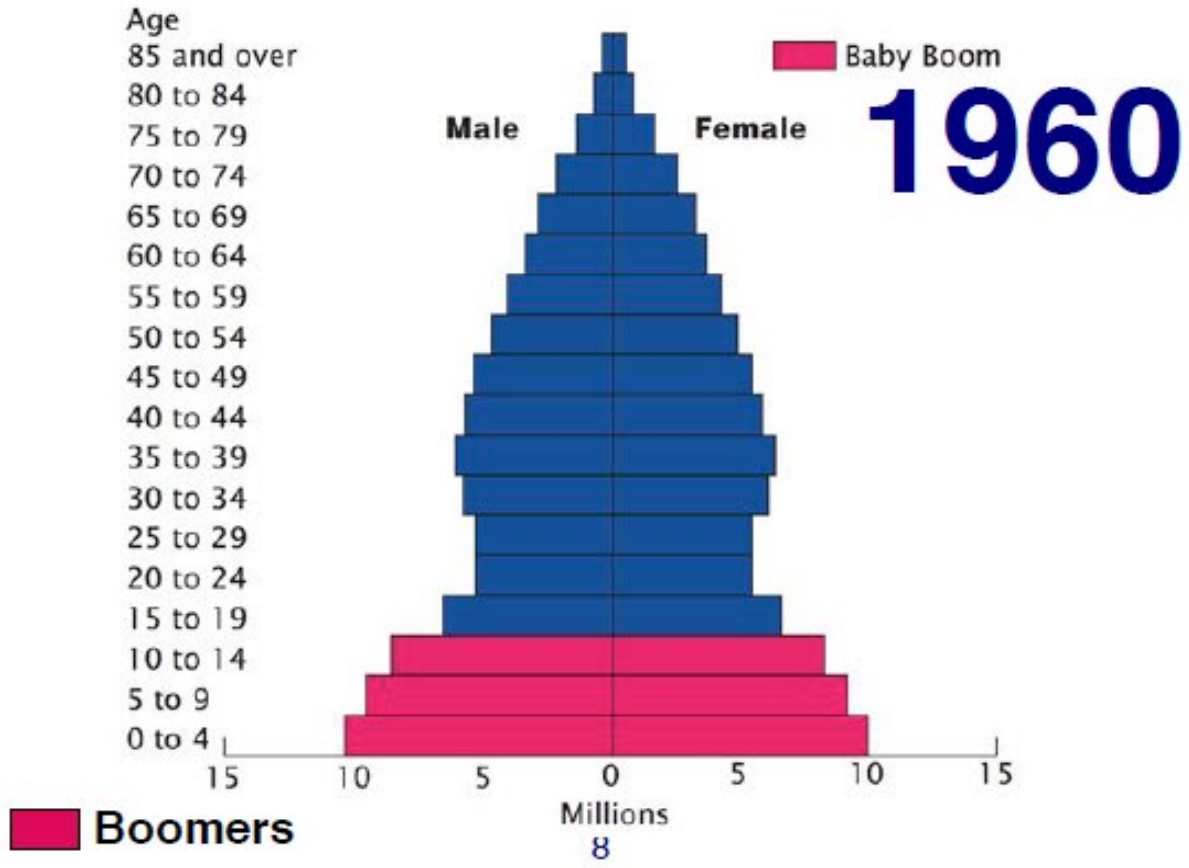
# Objectives

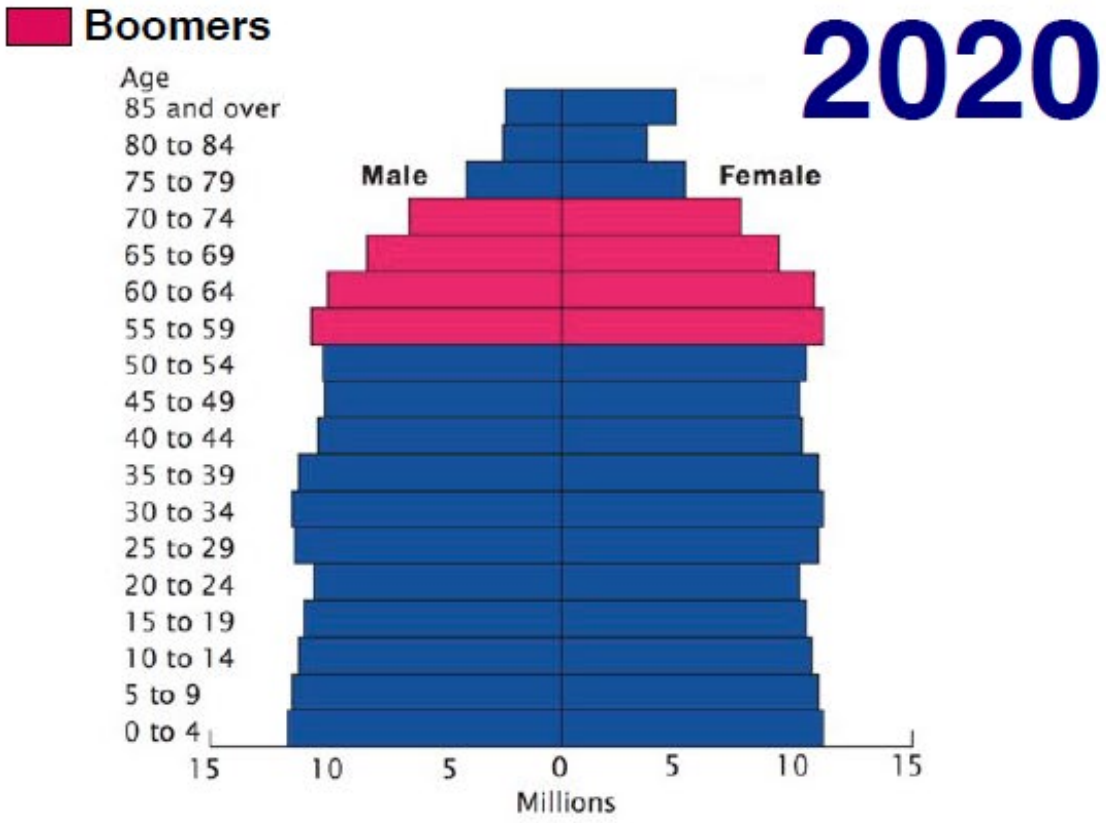
- **Review the approach to a Geriatric patient**
- **Introduce 5Ms of Geriatrics to assess older adults**
  - Mind/Mentation
  - Mobility
  - Medications
  - Multi-morbidity
  - Matters Most

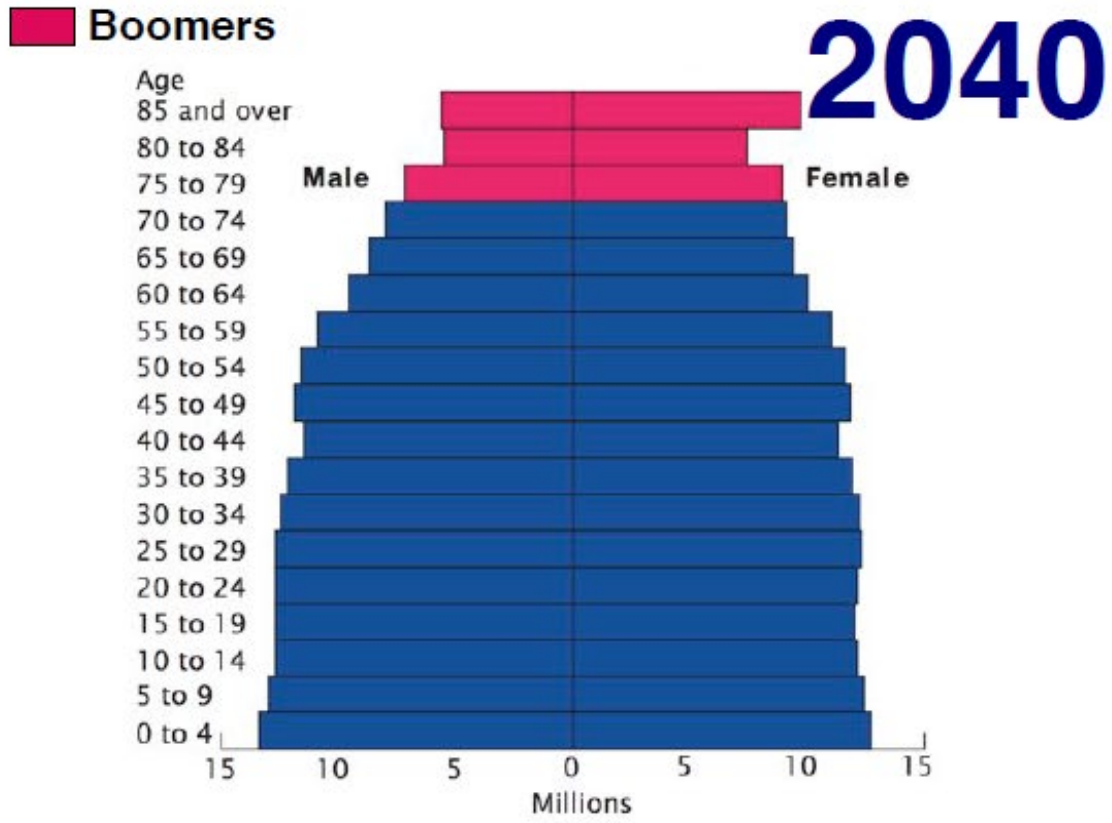
# Aging population has been growing…



# And will continue to grow… !



# Aging population will transform our society and health care systems

- **18%** are ≥ 65 in Erie County
- **40%** ≥ 65 in the hospital
- **50%** ≥ 85 ↓ cognition ± frailty
- **75%** ≥ who require rehab or LTC post-hospitalization
- **100%** who are aging and want to live a long and healthy life !

# New York State Trends Demographics

| FAMILY STRUCTURE in the United States | |
|---|---|
| Married couple families | ↓ |
| Married couple families with children | ↓ |
| Single parent households | ↑ |
| Single person households | ↑ |
| Non-traditional households | ↑ |

**New York State**
**62 Counties**
**Change in Population Aged 60 and Over**
**2020 to 2030**

| Proportion of County Population Aged 60 and Over | Number of Counties with Specified Percent of Older Adults | |
|---|---|---|
| | 2020 | 2030 |
| Less than 20% | 3 | 2 |
| 20% to 24% | 18 | 8 |
| 25% to 29% | 32 | 17 |
| 30% and over | 9 | 33 |

Source: Woods & Poole Economics, Inc., 2019 State Profile

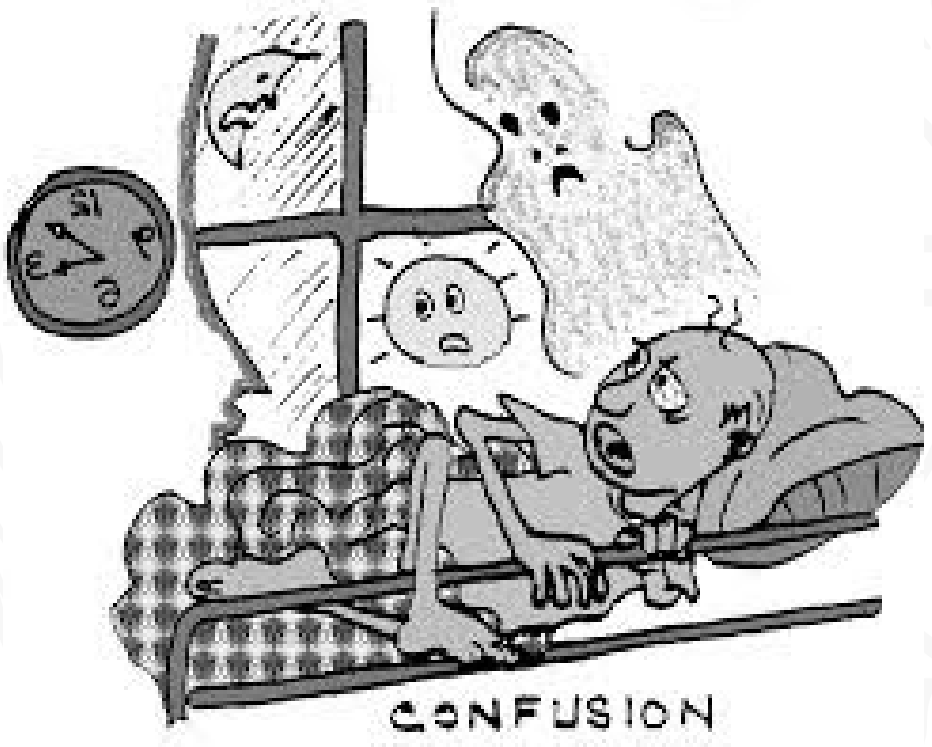
# Health and Impairment of Older Adults

- Chronic conditions *the* major cause of illness, disability and death in US
- Estimated that the **cost of chronic conditions** will reach **$864 billion by 2040**
- Chronic conditions among older adults being **more costly, disabling, and difficult to treat** – many **preventable**

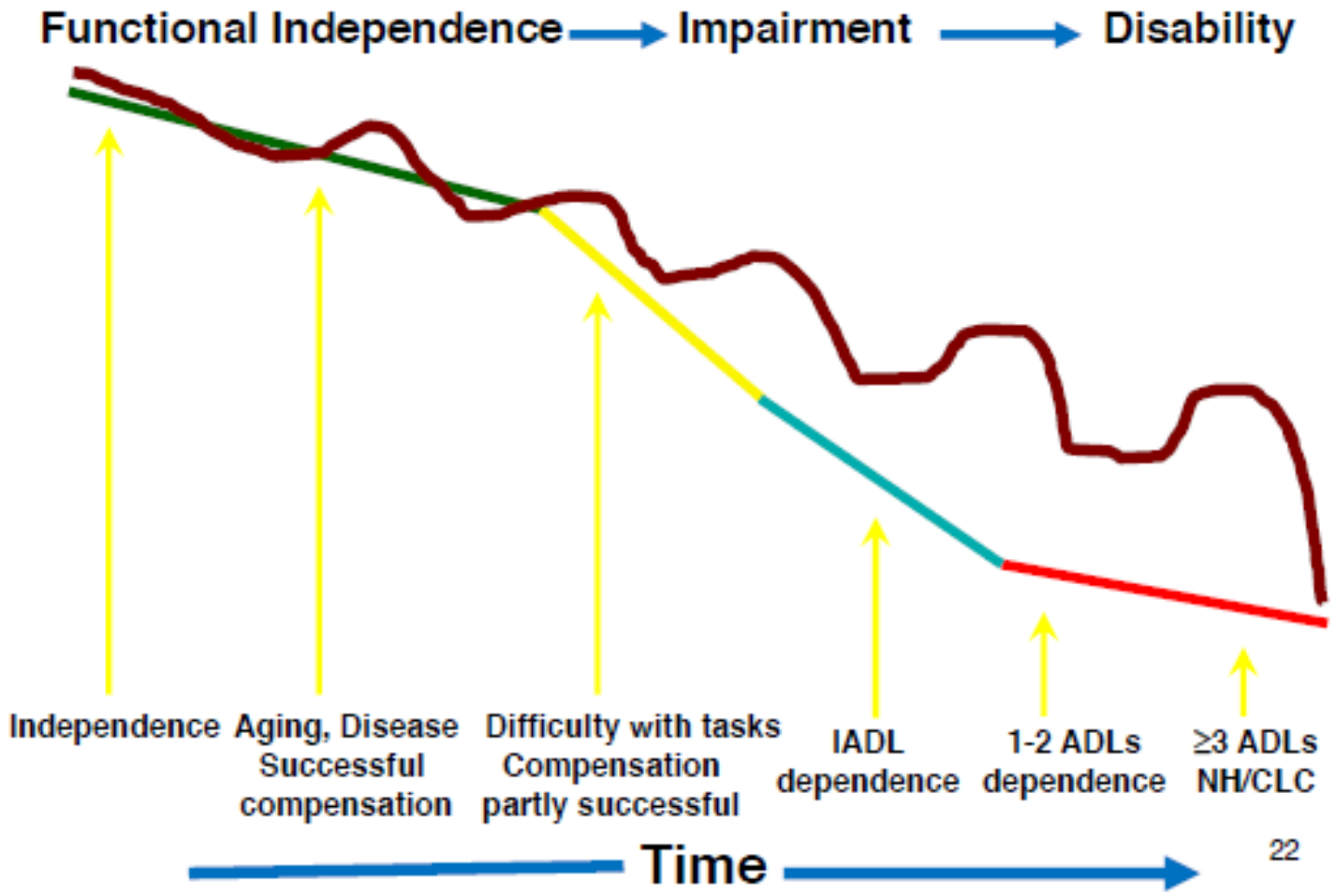
| New York State Population: Disability | |
|---|---|
| **Age Group** | % of Group with All Types of Disabilities |
| **5-20** | 4% |
| **21-64** | 9% |
| **65 and over** | 35% |

# Case of hospitalized older adult

- 75 M PMH of **dementia**, HTN, DJD, found **"wandering"** in his neighborhood
- **"non-reimbursable admission"**
- Confused and "agitated"; given **Haloperidol and restrained**. For hours, **kept in bed** due to "high fall risk". Given **olanzapine** for further sedation.
- Restricted to the bed most of hospitalization due to delirium, hence leads to **progressive debility despite physical therapy** (PT)
- PT recommends **Subacute Rehab (SAR)**



# Trajectory of functional ability



# Frail elderly are at risk for multiple adverse outcomes

- Acute illness / Medical instability
- Disability, dependency
- Hospitalizations/ Institutionalization
- Injuries / Falls
- Health care resource utilization
- Iatrogenesis and side effects
- **Mortality**

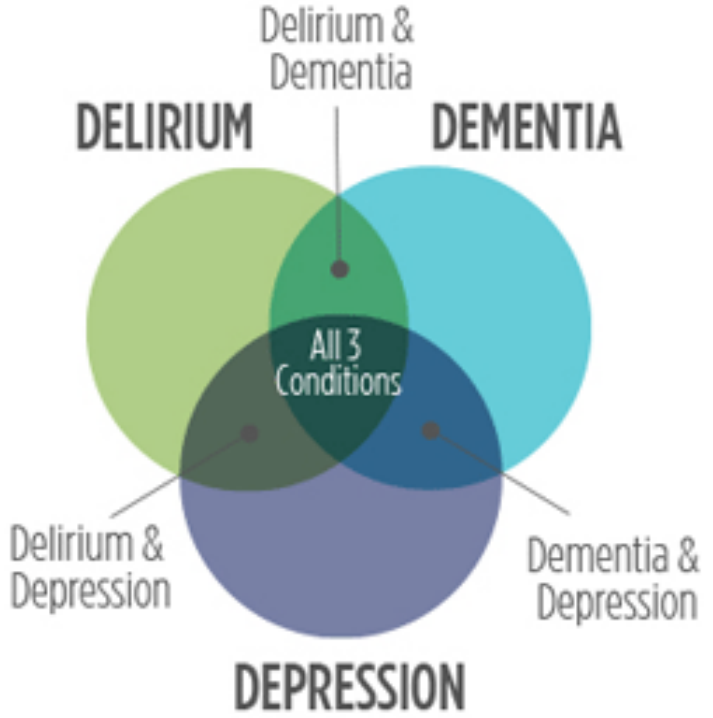
# Frailty is at the Core of Geriatric Medicine (and Palliative Medicine)

# Approach to the Geriatric 5 Ms


Geriatric 5M's © framework adapted from Molnar, Huang & Tinetti (2017)

# Mind/Mentation


- Dementia
- Delirium
- Depression



# Mind/Mentation – **Dementia**

## Mini-Cog©

## Instructions for Administration & Scoring

ID: _____ Date: _____

### Step 1: Three Word Registration

Look directly at person and say, "Please listen carefully. I am going to say three words that I want you to repeat back to me now and try to remember. The words are [select a list of words from the versions below]. Please say them for me now." If the person is unable to repeat the words after three attempts, move on to Step 2 (clock drawing).

The following and other word lists have been used in one or more clinical studies.[1-3] For repeated administrations, use of an alternative word list is recommended.

| Version 1 | Version 2 | Version 3 | Version 4 | Version 5 | Version 6 |
|---|---|---|---|---|---|
| Banana | Leader | Village | River | Captain | Daughter |
| Sunrise | Season | Kitchen | Nation | Garden | Heaven |
| Chair | Table | Baby | Finger | Picture | Mountain |

### Step 2: Clock Drawing

Say: "Next, I want you to draw a clock for me. First, put in all of the numbers where they go." When that is completed, say: "Now, set the hands to 10 past 11."

Use preprinted circle (see next page) for this exercise. Repeat instructions as needed as this is not a memory test. Move to Step 3 if the clock is not complete within three minutes.

### Step 3: Three Word Recall

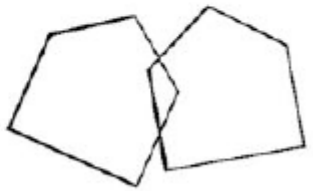
Ask the person to recall the three words you stated in Step 1. Say: "What were the three words I asked you to remember?" Record the word list version number and the person's answers below.

Word List Version: _____ Person's Answers: _____ _____ _____

# Mind/Mentation – Dementia

## Minimental Status Exam

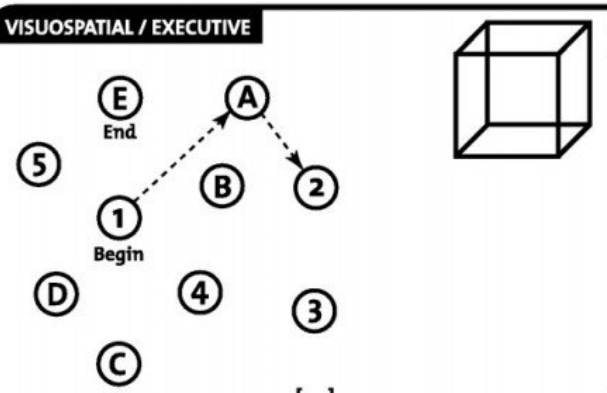
| | | Value | Score |
|---|---|---|---|
| Orientation | Year, season, date, day, month | 5 | ___ |
| | State, county, town, hospital, floor | 5 | ___ |
| Registration | Repeat and remember 3 words | 3 | ___ |
| Attn & Calc. | Serial 7's (5 times) or DLROW | 5 | ___ |
| Recall | Recall three above items | 3 | ___ |
| Language | Name two common objects when shown | 2 | ___ |
| | Repeat "no ifs and or buts" | 1 | ___ |
| 3-stage command | Take this paper, fold it, place it on table | 3 | ___ |
| Read and Do | Close your eyes | 1 | ___ |
| Write Sentence | Write sentence with proper grammar | 1 | ___ |
| Copy | Copy below overlapping pentagons | 1 | ___ |
| | Total: | | ___/30 |



**MONTREAL COGNITIVE ASSESSMENT (MOCA)**

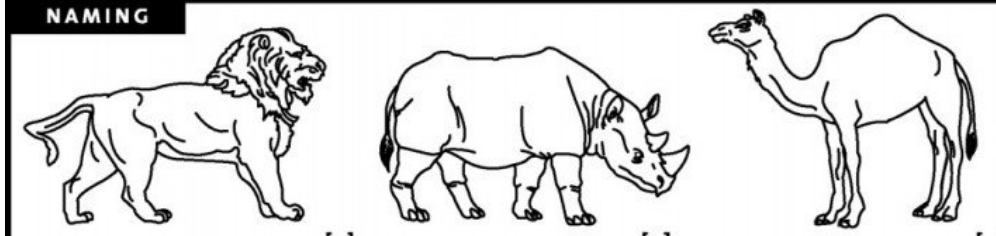
NAME :
Education :
Sex :
Date of birth :
DATE :

**VISUOSPATIAL / EXECUTIVE** — Copy cube — Draw CLOCK (Ten past eleven) (3 points) — POINTS




[ ] [ ] [ ] Contour [ ] Numbers [ ] Hands ___/5

**NAMING** ___/3



[ ] [ ] [ ]

**MEMORY** — Read list of words, subject must repeat them. Do 2 trials. Do a recall after 5 minutes. — No points

| | FACE | VELVET | CHURCH | DAISY | RED |
|---|---|---|---|---|---|
| 1st trial | | | | | |
| 2nd trial | | | | | |

**ATTENTION** — Read list of digits (1 digit/ sec.). Subject has to repeat them in the forward order [ ] 2 1 8 5 4 ___/2
Subject has to repeat them in the backward order [ ] 7 4 2

Read list of letters. The subject must tap with his hand at each letter A. No points if ≥ 2 errors ___/1
[ ] F B A C M N A A J K L B A F A K D E A A A J A M O F A A B

Serial 7 subtraction starting at 100 [ ] 93 [ ] 86 [ ] 79 [ ] 72 [ ] 65 ___/3
4 or 5 correct subtractions: **3 pts**, 2 or 3 correct: **2 pts**, 1 correct: **1 pt**, 0 correct: **0 pt**

**LANGUAGE** — Repeat : I only know that John is the one to help today. [ ] ___/2
The cat always hid under the couch when dogs were in the room. [ ]

Fluency / Name maximum number of words in one minute that begin with the letter F [ ] ____ (N ≥ 11 words) ___/1

**ABSTRACTION** — Similarity between e.g. banana - orange = fruit [ ] train – bicycle [ ] watch - ruler ___/2

**DELAYED RECALL** — Points for UNCUED recall only ___/5

| | Has to recall words WITH NO CUE | FACE | VELVET | CHURCH | DAISY | RED |
|---|---|---|---|---|---|---|
| | | [ ] | [ ] | [ ] | [ ] | [ ] |
| Optional | Category cue | | | | | |
| | Multiple choice cue | | | | | |

**ORIENTATION** [ ] Date [ ] Month [ ] Year [ ] Day [ ] Place [ ] City ___/6

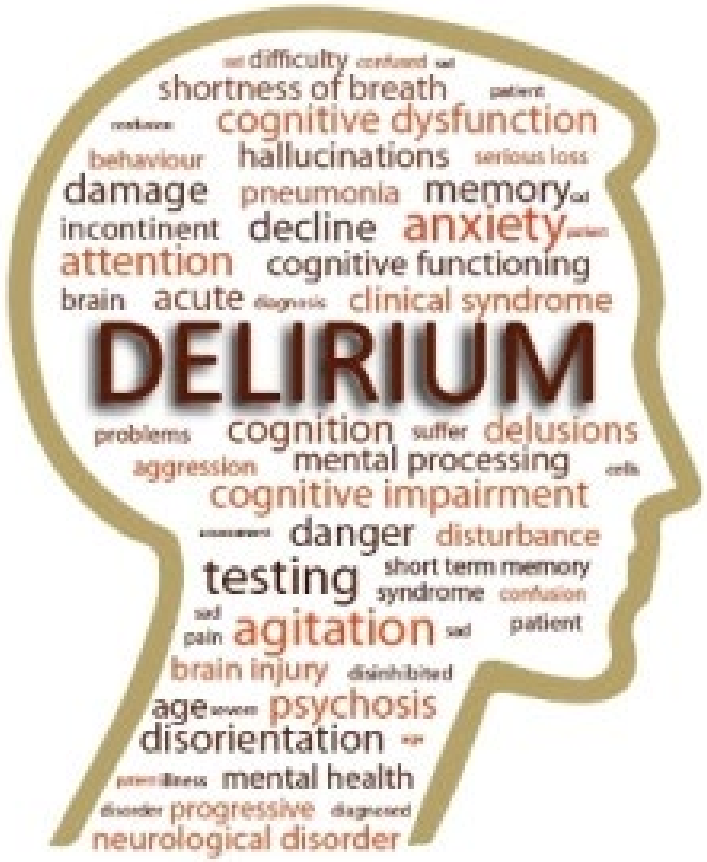
© Z.Nasreddine MD Version 7.0 www.mocatest.org Normal ≥ 26 / 30

Administered by: _____

**TOTAL** ___/30
Add 1 point if ≤ 12 yr edu

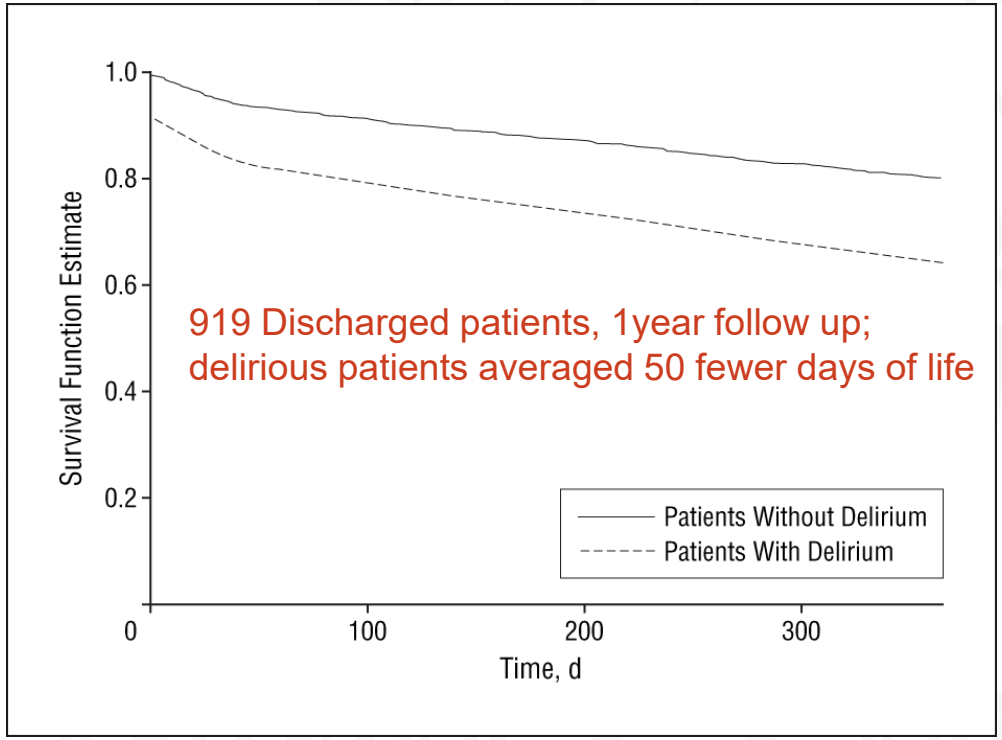
# Mind/Mentation – Morbidity of **Delirium**

- 10-fold risk of death in hospital
- A 3-5 fold ↑ risk of nosocomial complications, post-acute NH placement
- ↑ length of stay, morbidity, mortality = ↑ costs
- Poor functional recovery, decreased physical function
- Institutionalization, prolonged rehabilitation
- Persistence of cognitive impairment for > 2 years



# Epidemiology and Detection of Delirium

- **1/3 of older patients presenting to the ED**
- 1/3 of inpatients aged 70+ on general medical units, half of whom are delirious on admission
- **Under-recognition** - nurses recognize, document < 50%; MDs recognize, document only 20%
- *DSM-IV* criteria precise, difficult to apply
- **Confusion Assessment Method (CAM) – performs better clinically: >95% sensitivity, specificity**




Delirium is associated with poorer survival

Leslie DL, Arch Int Med 2005;165:1657

# Mind/Mentation – **Delirium screening tool Confusion Assessment Score (CAM)**

1a. **Acute onset**: Is there evidence of an acute change in mental status from the patient's baseline?

**OR**

1b. **Fluctuating course**: Did the (abnormal) behavior fluctuate during the day, that is tend to come and go or increase and decrease in severity?

**AND**

2. **Inattention**: Did the patient have difficulty focusing attention, for example being easily distractible, or having difficulty keeping track of what was being said?

**AND**

3. **Disorganised thinking**: Was the patient's thinking disorganized or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?

**OR**

4. **Altered level of consciousness**: Overall, how would you rate this patient's level of consciousness? Any answer other than 'alert' indicates an abnormal level of consciousness.

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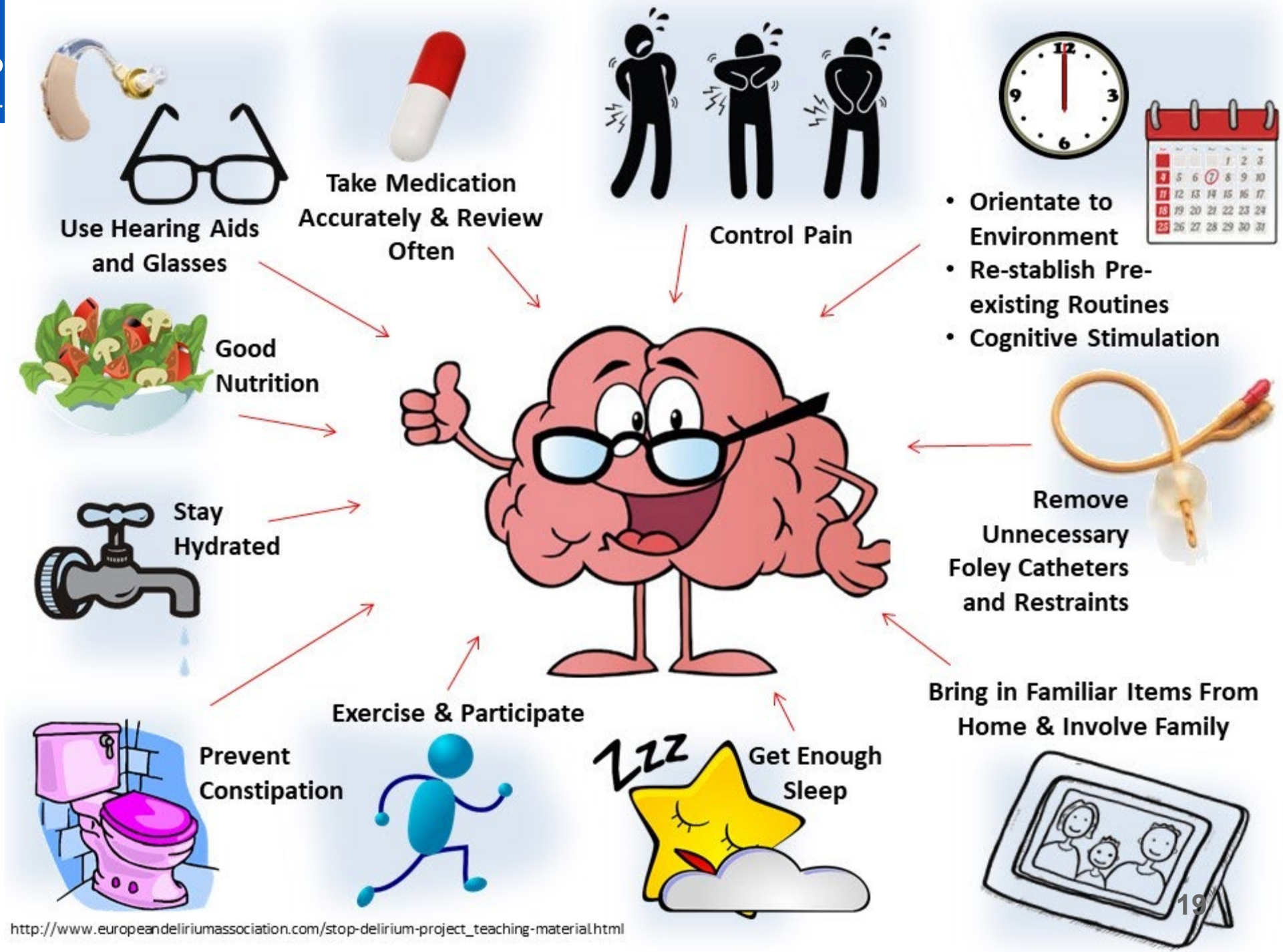
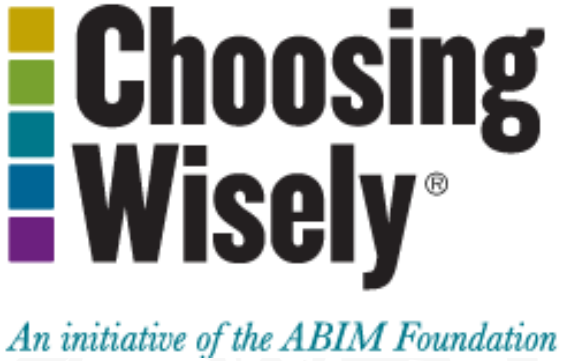
# Delirium prevention is key!

**No evidence that drugs reduce severity or duration of delirium – in fact, most worsen**




Marcantonio ER. Delirium in Hospitalized Older Adults. NEJM. 2017; 377:1456-66.

# Delirium Guidelines




***Choosing Wisely Recommendations:***

- **Avoid** physical restraints to manage behavioral symptoms of hospitalized older adults
- Do **not** use benzodiazepines or other sedative-hypnotics in older adults **as first choice** for insomnia, agitation, or delirium

# Mind/Mentation – **Depression – PHQ2 screen**

| | Not at all | Several days | More than half the days | Nearly every day |
|---|---|---|---|---|
| Lost interest or had little pleasure in doing things | 0 | 1 | 2 | 3 |
| Felt down, depressed, or hopeless | 0 | 1 | 2 | 3 |

Total score = sum of two items.
PHQ-2 score ≥ 3 is suggestive of elevated symptoms of depression.
*The PHQ-2 was developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke, and colleagues, with an educational grant from Pfizer Inc.

# GERIATRIC DEPRESSION SCALE

Choose the best answer for how you have felt over the past week:

1. Are you basically satisfied with your life? YES / **NO**
2. Have you dropped many of your activities and interests? **YES** / NO
3. Do you feel that your life is empty? **YES** / NO
4. Do you often get bored? **YES** / NO
5. Are you in good spirits most of the time? YES / **NO**
6. Are you afraid that something bad is going to happen to you? **YES** / NO
7. Do you feel happy most of the time? YES / **NO**
8. Do you often feel helpless? **YES** / NO
9. Do you prefer to stay at home, rather than going out and doing new things? **YES** / NO
10. Do you feel you have more problems with memory than most? **YES** / NO
11. Do you think it is wonderful to be alive now? YES / **NO**
12. Do you feel pretty worthless the way you are now? **YES** / NO
13. Do you feel full of energy? YES / **NO**
14. Do you feel that your situation is hopeless? **YES** / NO
15. Do you think that most people are better off than you are? **YES** / NO

Answers in **bold** indicate depression. Although differing sensitivities and specificities have been obtained across studies, for clinical purposes a score > 5 points is suggestive of depression and should warrant a follow-up interview. Scores > 10 are almost always depression.

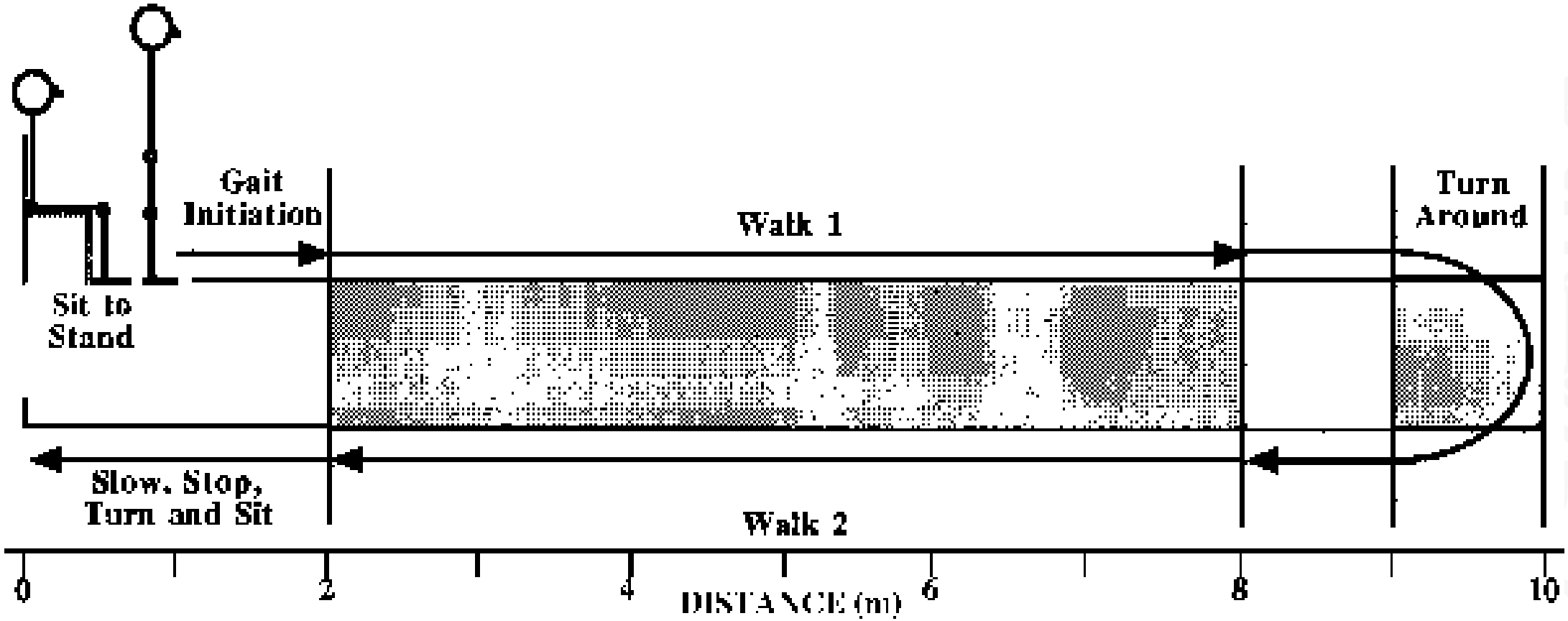
# Mobility


- **History**
  - any recent falls or fear of falling
  - Baseline mobility
  - Living situation (community vs. facility)
- **Functional Status**
  - Activities of Daily Living/Instrumental Activities of Daily Living
  - Get up and Go test
- Fall injury prevention –
  - Intrinsic factors - Orthostatic hypotension, vision impairment
  - Extrinsic factors – Medications, environment

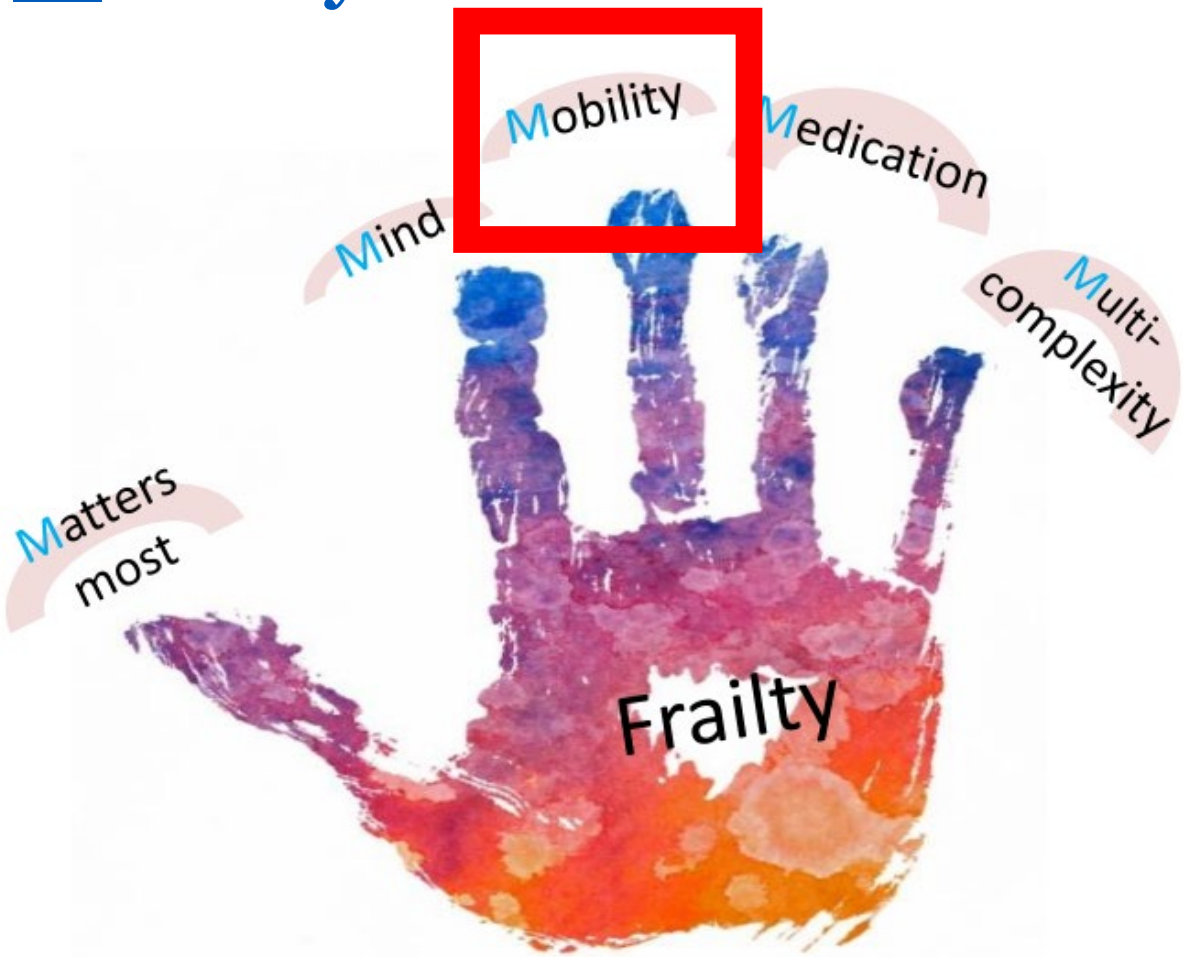
# Mobility

| Activities of Daily Living (ADLs) | Instrumental Activities of Daily Living (IADLs) |
|---|---|
| Feeding | Using the telephone |
| Continence | Shopping |
| Transferring | Preparing food |
| Toileting | Housekeeping |
| Dressing | Doing laundry |
| Bathing | Using transportation |
| | Handling medications |
| | Handling finances |

# Mobility – Get up and Go Test



# Mobility

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- **Fall injury prevention –**
  - Intrinsic factors - Orthostatic hypotension, vision impairment
  - Extrinsic factors – Medications, environment

# Medications


- **Polypharmacy !!!!**
- Deprescribing and Optimal prescribing
- Adverse medication effects and medication burden
- **Tools**
  - AGS Beer's criteria
  - Deprescribing.org
  - Medstopper.org
  - Anticholinergic Burden Calculator

# Multicomplexity


- Caregiver burden
- Finances
- Social isolation
- Transitions of Care
- Prognostication
  - Functional Assessment Staging Tool (FAST) for dementia
  - Palliative Performance Scale (PPS)
  - Eprognosis.com
  - Surprise question ?

# Functional Assessment Staging Tool (FAST Scale)

**1.** No difficulty either subjectively or objectively.

**2.** Complains of forgetting location of objects. Subjective work difficulties.

**3.** Decreased job functioning evident to co-workers. Difficulty in traveling to new locations. Decreased organizational capacity. *

**4.** Decreased ability to perform complex tasks, e.g., planning dinner for guests, handling. personal finances (such as forgetting to pay bills), difficulty marketing, etc.

**5.** Requires assistance in choosing proper clothing to wear for the day, season, or occasion, e.g., patient may wear the same clothing repeatedly, unless supervised. *

**6.**

A. Improperly putting on clothes without assistance or prompting (e.g., may put street clothes on over night clothes, or put shoes on wrong feet, or have difficulty buttoning clothing) occasionally or more frequently over the past weeks. *
B. Unable to bathe properly (e.g., difficulty adjusting bathwater temp.) occasionally or more frequently over the past weeks. *
C. Inability to handle mechanics of toileting (e.g., forgets to flush the toilet, does not wipe properly or properly dispose of toilet tissue) occasionally or more frequently over the past weeks. *
D. Urinary incontinence occasionally or more frequently over the past weeks. *
E. Fecal incontinence occasionally or more frequently over the past weeks. *

**7.**

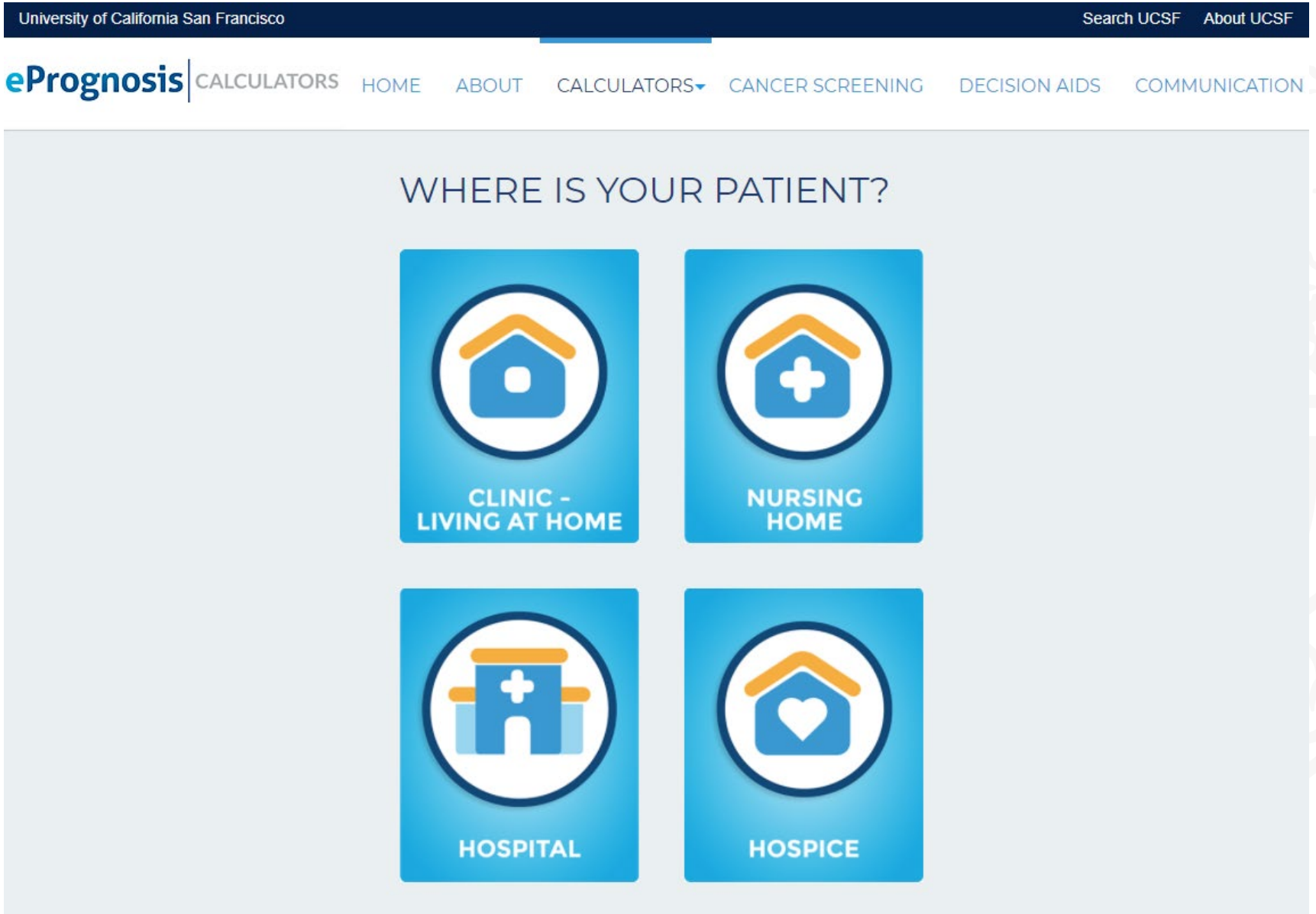
A. Ability to speak limited to approximately a half-dozen intelligible different words or fewer in the course of an average day or in the course of an intensive interview.
B. Speech ability is limited to the use of a single intelligible word in an average day or in the course of an intensive interview (the person may repeat the word over and over).
C. Ambulatory ability is lost (cannot walk without personal assistance).
D. Cannot sit up without assistance.
E. Loss of ability to smile.
F. Loss of ability to hold head up independently.

** Scored primarily on the basis of information obtained from knowledgeable informant.*

Reisberg, B. Functional Assessment Staging (FAST). Psychopharmacology Bulletin, 1988; 24:653-659.

## PALLIATIVE PERFORMANCE SCALE (PPS)

| % | Ambulation | Activity level<br>Evidence of disease | Self-care | Intake | Level of consciousness | Estimated median survival in days (a) | (b) | (c) |
|---|---|---|---|---|---|---|---|---|
| 100 | Full | Normal<br>*No disease* | Full | Normal | Full | NA | NA | 108 |
| 90 | Full | Normal<br>*Some disease* | Full | Normal | Full | | | |
| 80 | Full | Normal with effort<br>*Some disease* | Full | Normal or reduced | Full | | | |
| 70 | Reduced | Can't do normal job or work<br>*Some disease* | Full | As above | Full | 145 | | |
| 60 | Reduced | Can't do hobbies or housework<br>*Significant disease* | Occasional assistance needed | As above | Full or confusion | 29 | 4 | |
| 50 | Mainly sit/lie | Can't do any work<br>*Extensive disease* | Considerable assistance needed | As above | Full or confusion | 30 | 11 | 41 |
| 40 | Mainly in bed | As above | Mainly assistance | As above | Full or drowsy or confusion | 18 | 8 | |
| 30 | Bed bound | As above | Total care | Reduced | As above | 8 | 5 | |
| 20 | Bed bound | As above | As above | Minimal | As above | 4 | 2 | 6 |
| 10 | Bed bound | As above | As above | Mouth care only | Drowsy or coma | 1 | 1 | |
| 0 | Death | | | | | | | |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DECISION AIDS
COMMUNICATION
WHERE IS YOUR PATIENT?
CLINIC - LIVING AT HOME
NURSING HOME
HOSPITAL
HOSPICE

**Surprise Question:**
Would you be surprised if this patient dies in 6 months?

# Matters Most


- Advanced Care Planning
  - Health Care Proxy (HCP)
  - Medical Orders of Life Sustaining Treatment (MOLST) form
- Communicating Tools
  - Prepareforyourcare.org
  - **Theconversationproject.org**
  - Serious Illness Conversation guide
  - **Vitaltalk.org – REMAP**

the **conversation** project

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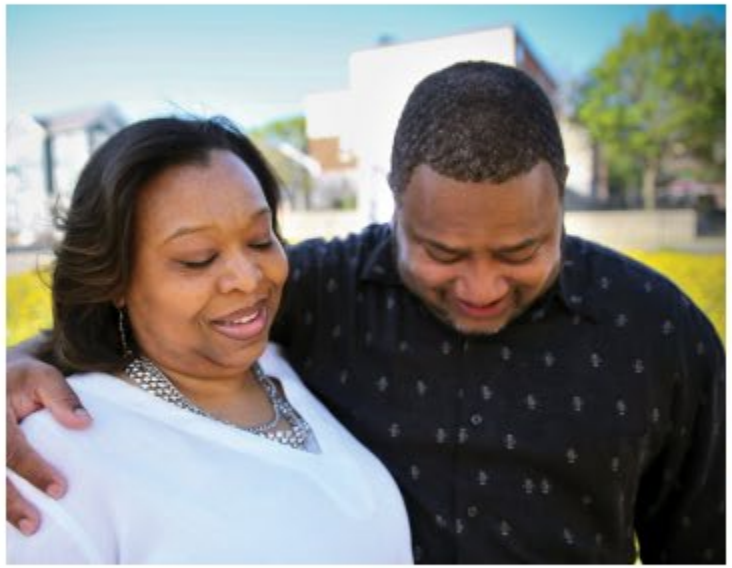

# Helping people share their wishes for care through the end of life.

**Theconversationproject.org**

All the Guides are available to download and print at home for free. Click on the title or image of the Guide to download.

## I want to...

- Start a conversation with those who matter most to me
- Choose a health care proxy for myself
- Be a good health care proxy for someone else
- Talk to my health care team about my wishes for care through the end of life
- Think and get ready to talk about the care I want for my serious illness
- Help the person I care for with Alzheimer's or Dementia have a say in their health care
- Talk with my child living with serious illness about the health care that's right for them
- Take action and be prepared in the time of COVID

Frequently Asked Questions

Note: Before filling in a Conversation Guide, save it to your desktop. Otherwise, anything you type will not be saved.

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## Your Conversation Starter Guide


English


Spanish

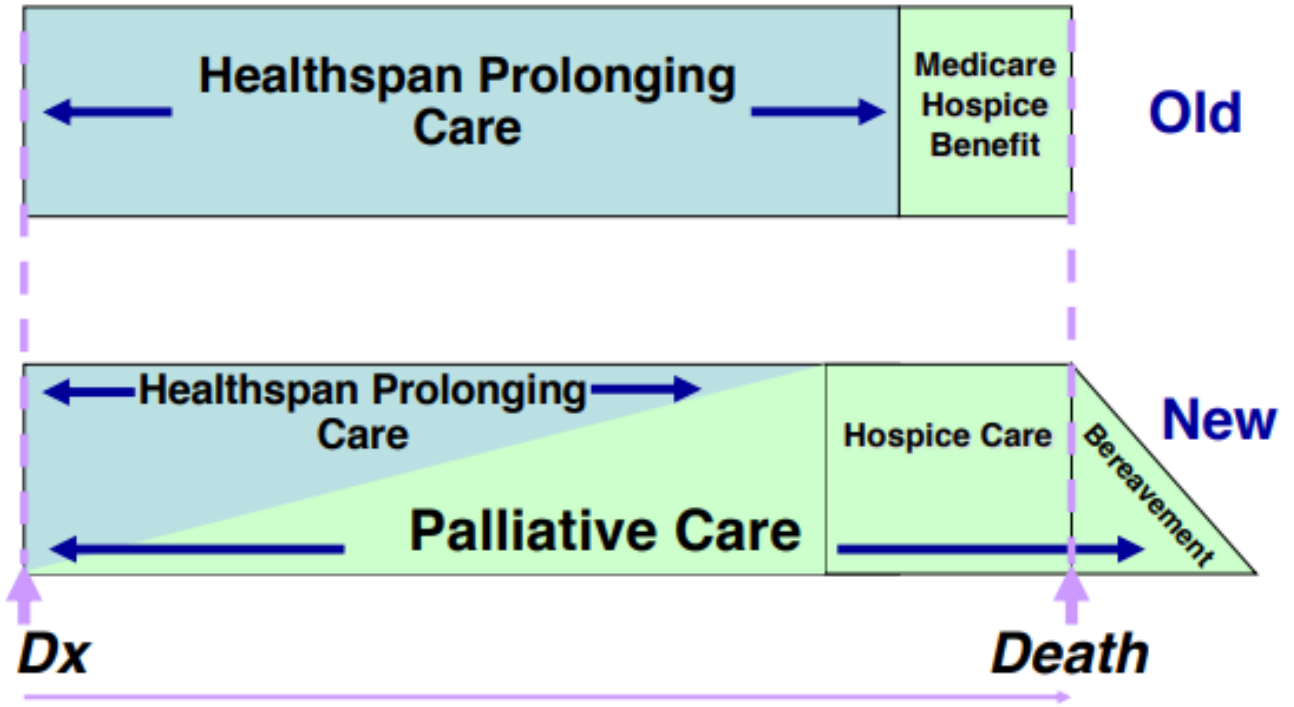

Chinese

**Theconversationproject.org**

# Matters Most –
# Various ways to ask "What matters to you?"

- *What is important to you at the moment?*
- *For your care,* ***what's your ideal scenario?***
- ***What are your hopes/worries?***
- ***Is there anything you want to avoid in your care?***
- *What are your goals and how can I help you achieve them?*
- *What can I do to best support you in your care today?*

# Conceptual Shift for Geriatric and Palliative Care Goals




Adapted from D. Meier – AGS Henderson Lecture 2013

## Is Palliative Care the "New" Geriatrics? Wrong Question—We're Better Together

*James T. Pacala, MD, MS*

Is palliative care the "new" geriatrics? I submit that this is the wrong question because it connotes a mutually exclusive or even adversarial relationship between the two disciplines. We should not be asking whether one usurps the other. Nor should we be attempting to draw distinct boundaries around ourselves to exclude the other discipline. Rather, geriatrics and palliative care should be looking to identify mutual strengths, while openly and

Herein lies the difficulty in ourselves one from the other: more commonalities than differ care of older adults. Because we for scarce resources and recogni are blown out of proportion. In organizations will often retreat i tality, attempting to strengthen t

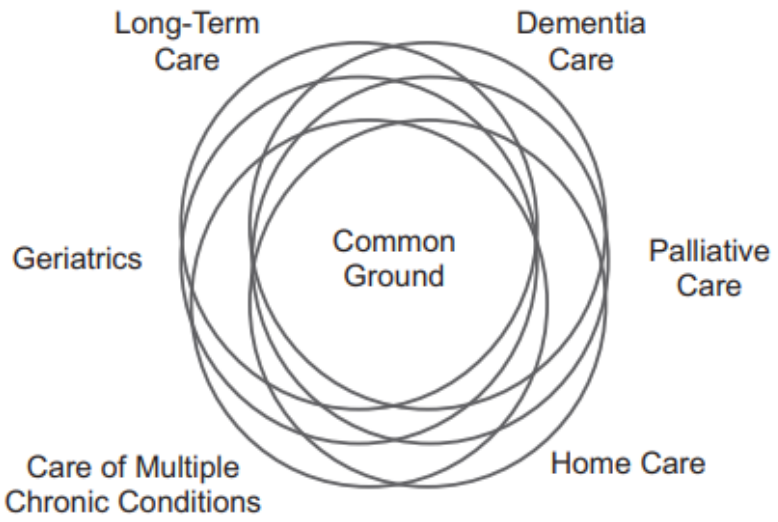
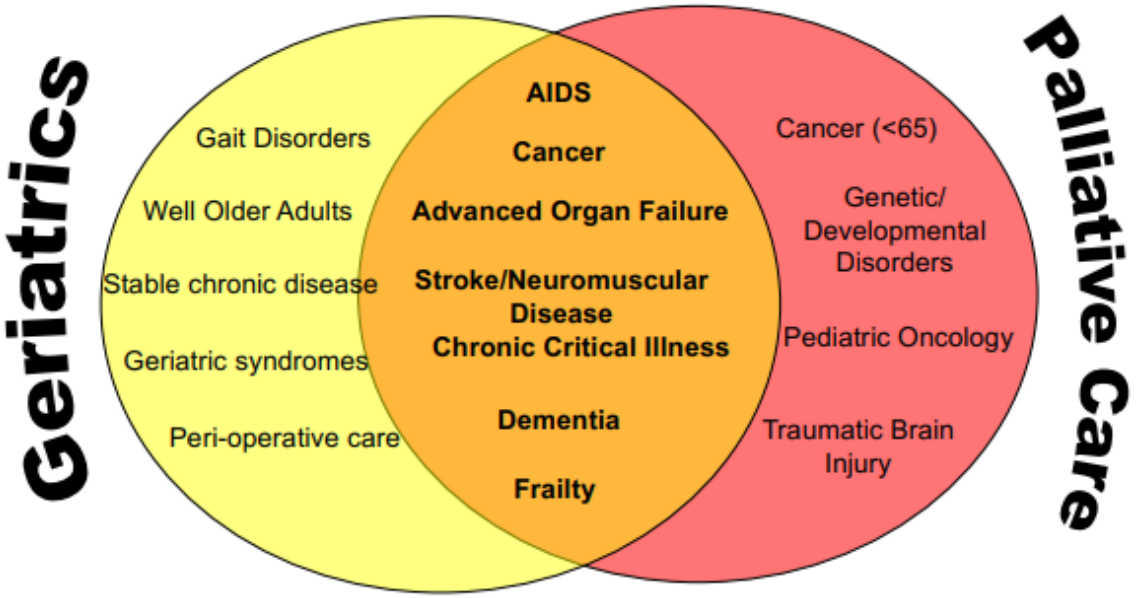



**Figure 2.** Building effective partnerships around common ground.

# Geriatrics and Palliative Care: Leaning In

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# 5Ms – "high five" of Geriatrics !

# Age-Friendly Health Systems

National initiative started by 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) in 2017.

The John A. Hartford Foundation

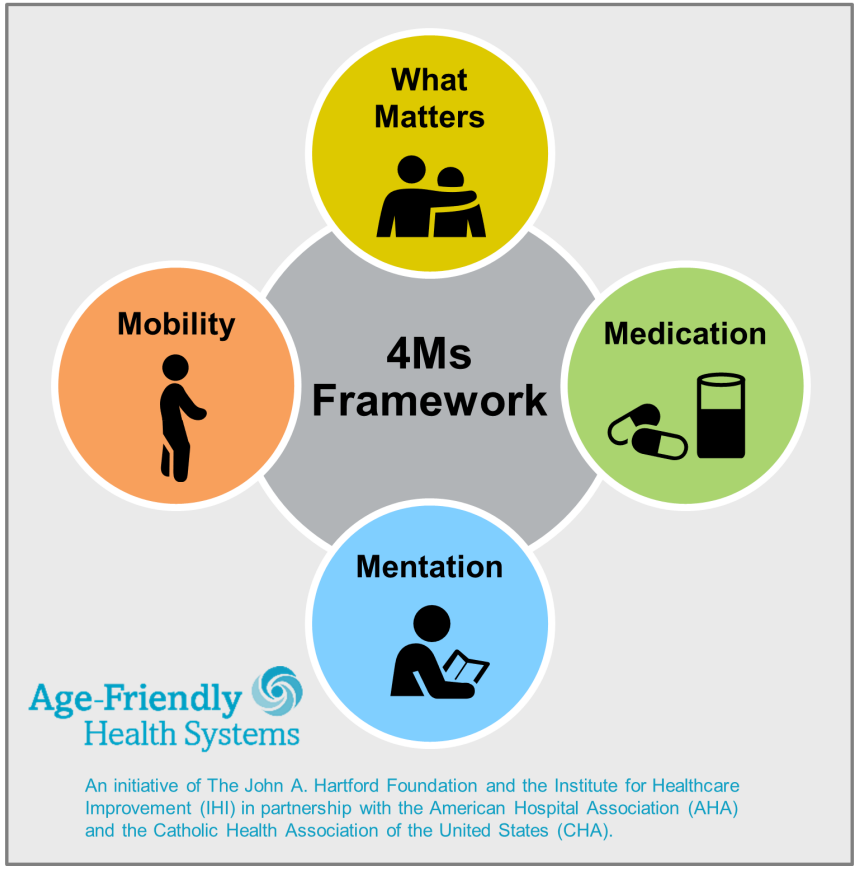
Institute for Healthcare Improvement

HANYS
Always There for Healthcare

# Age Friendly Health Initiative

- Commitment to building a **social movement** so **all care** with older adults is **age-friendly care:**
  - Guided by an essential set of evidence-based practices (4Ms of Geriatrics outlined below);
  - Causes no harms; and
  - Is consistent with What Matters to the older adult and their family

**Visit [www.ihi.org/agefriendly](www.ihi.org/agefriendly) for more information**




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

**What Matters**

Know and align care with each olde specific health outcome goals and c preferences including, but not limite end-of-life care, and across settings

**Medication**

If medication is necessary, use Age medication that does not interfere w Matters to the older adult, Mobility, Mentation across settings of care.

**Mentation**

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

**Mobility**

Ensure that older adults move safel day in order to maintain function an What Matters.

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# Questions?

# Thank you