

Addressing the Unique Needs of a Diverse Aging Population

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Disclosures

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Objectives

- Explain the unique context and challenges of caring for older adults
- Describe a framework with evidence-based approaches to improve care of older adults across the continuum of care settings
- Apply the 4Ms of an Age Friendly Health System to improve the care of all older adults across care settings

Figure 1.
**Population 65 Years and Over by Size and Percentage of Total Population:
1920 to 2020**

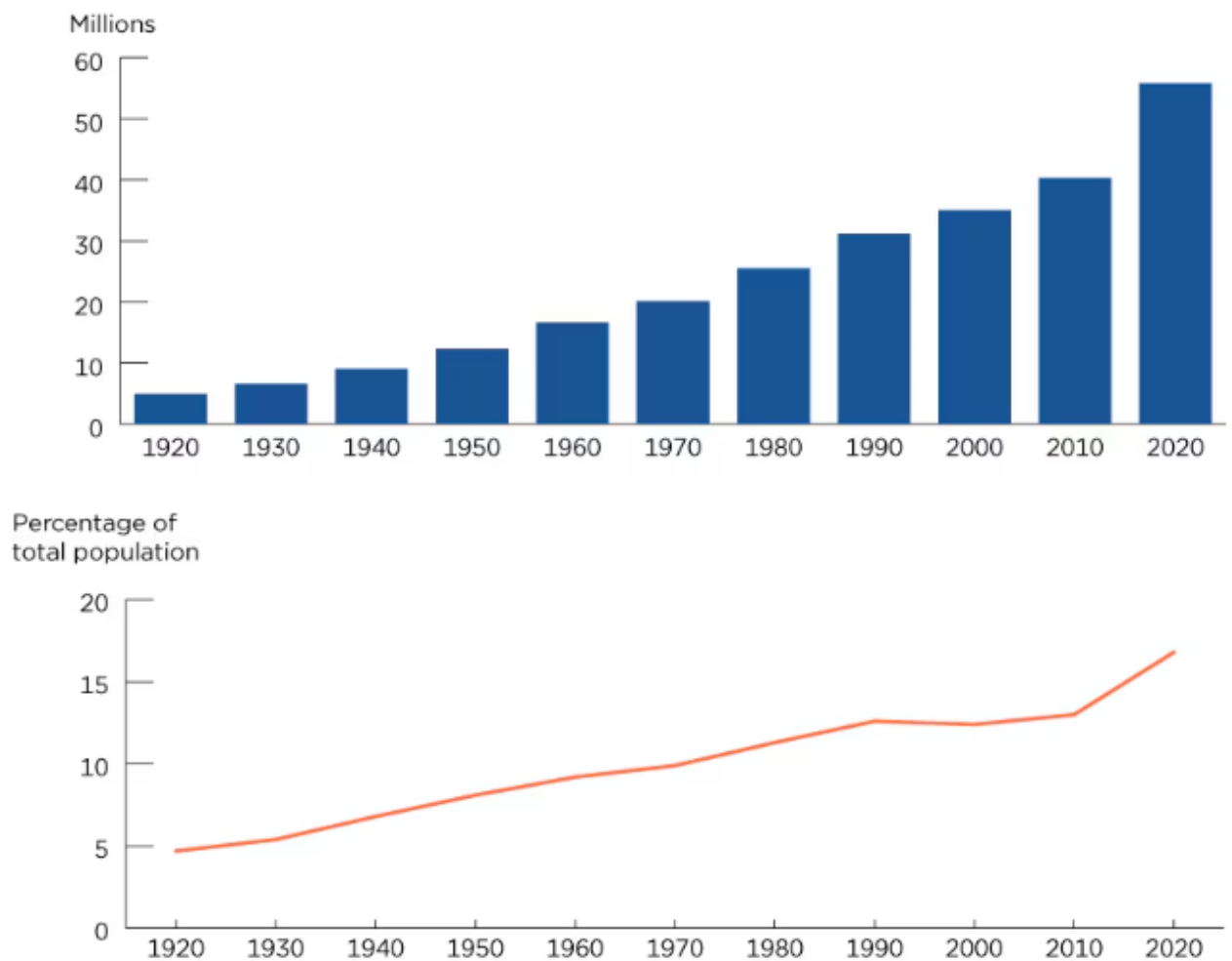


Figure 8.

Percentage of Population 65 Years and Over and 85 Years and Over by State: 2020

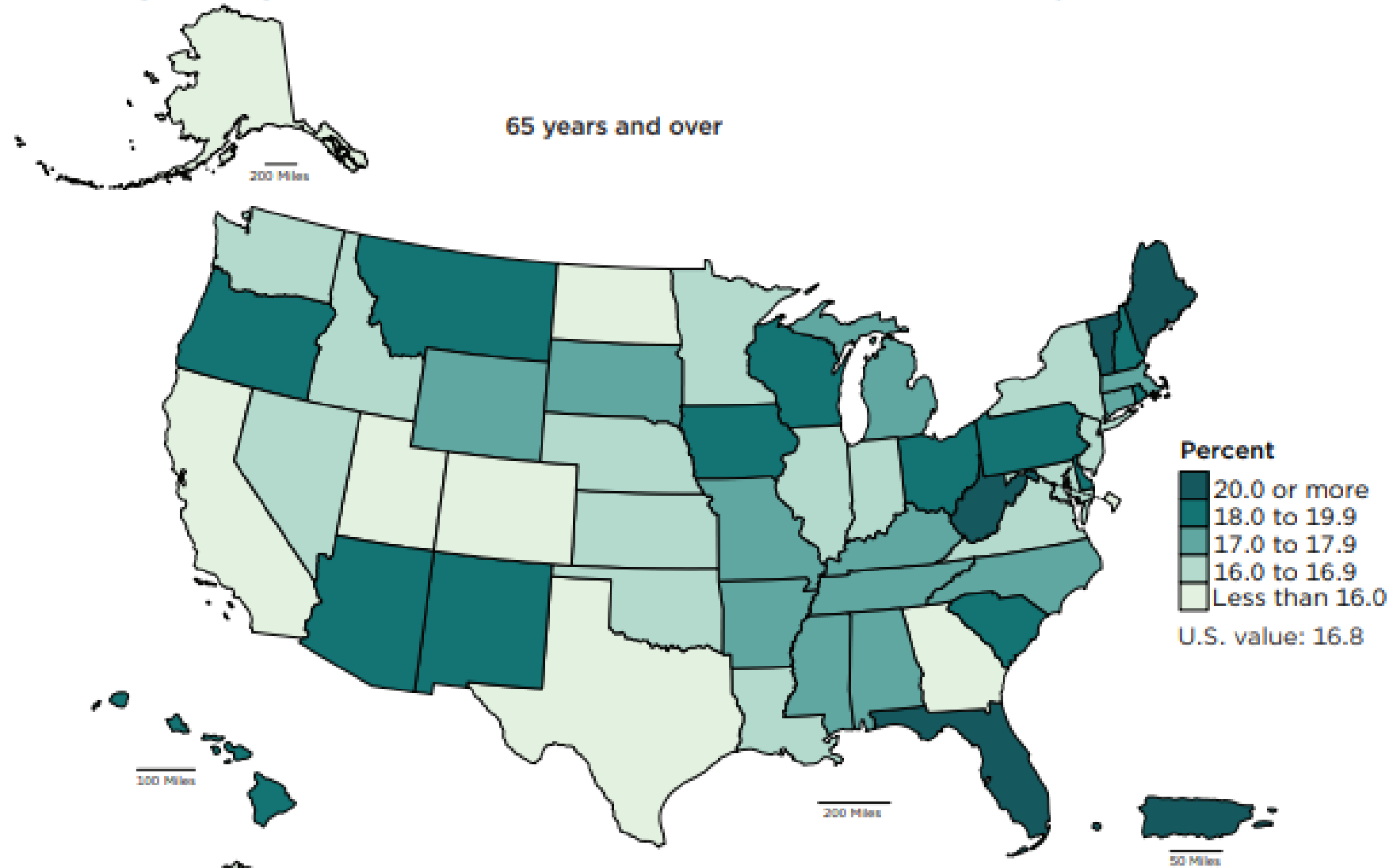


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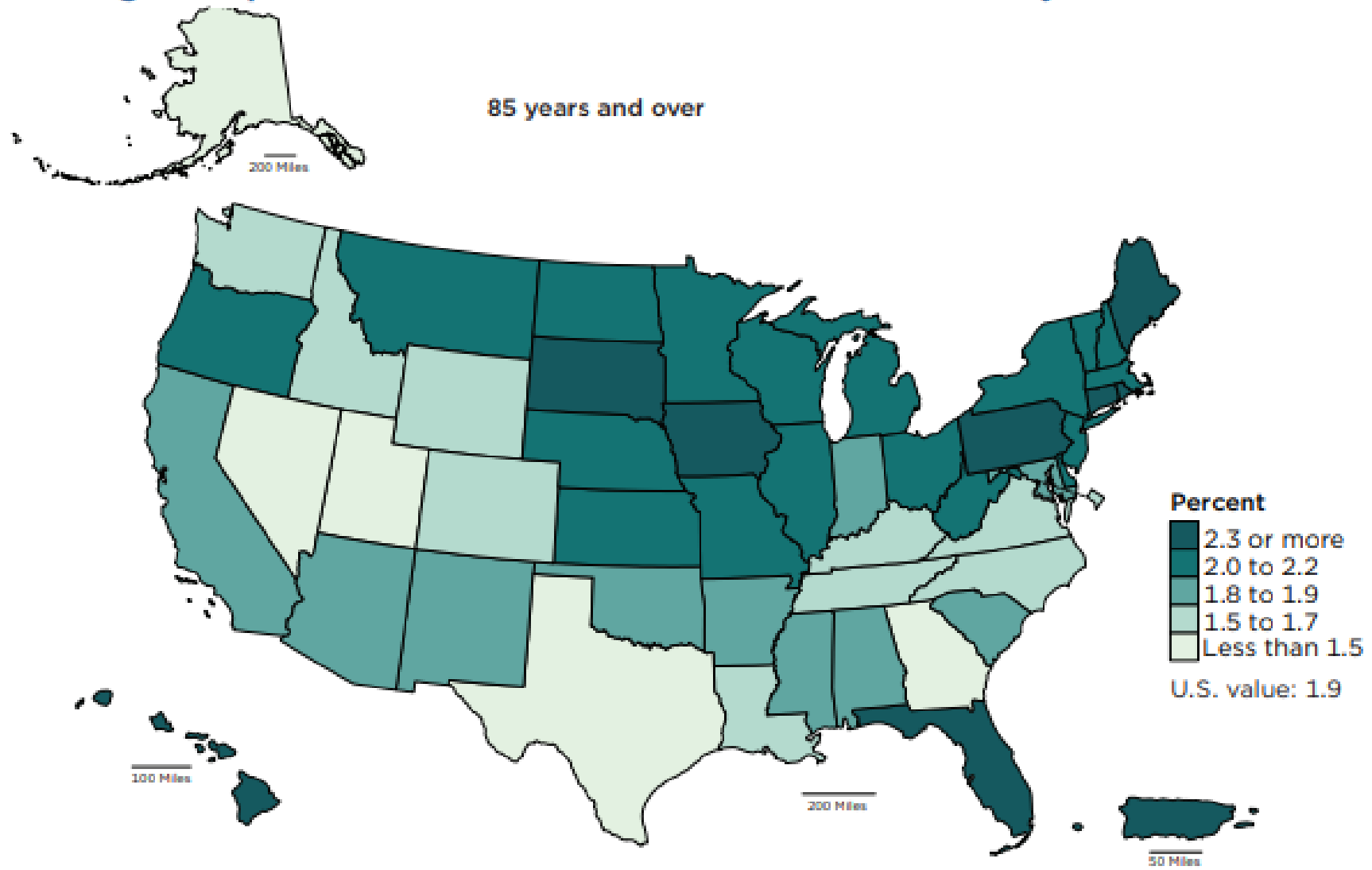
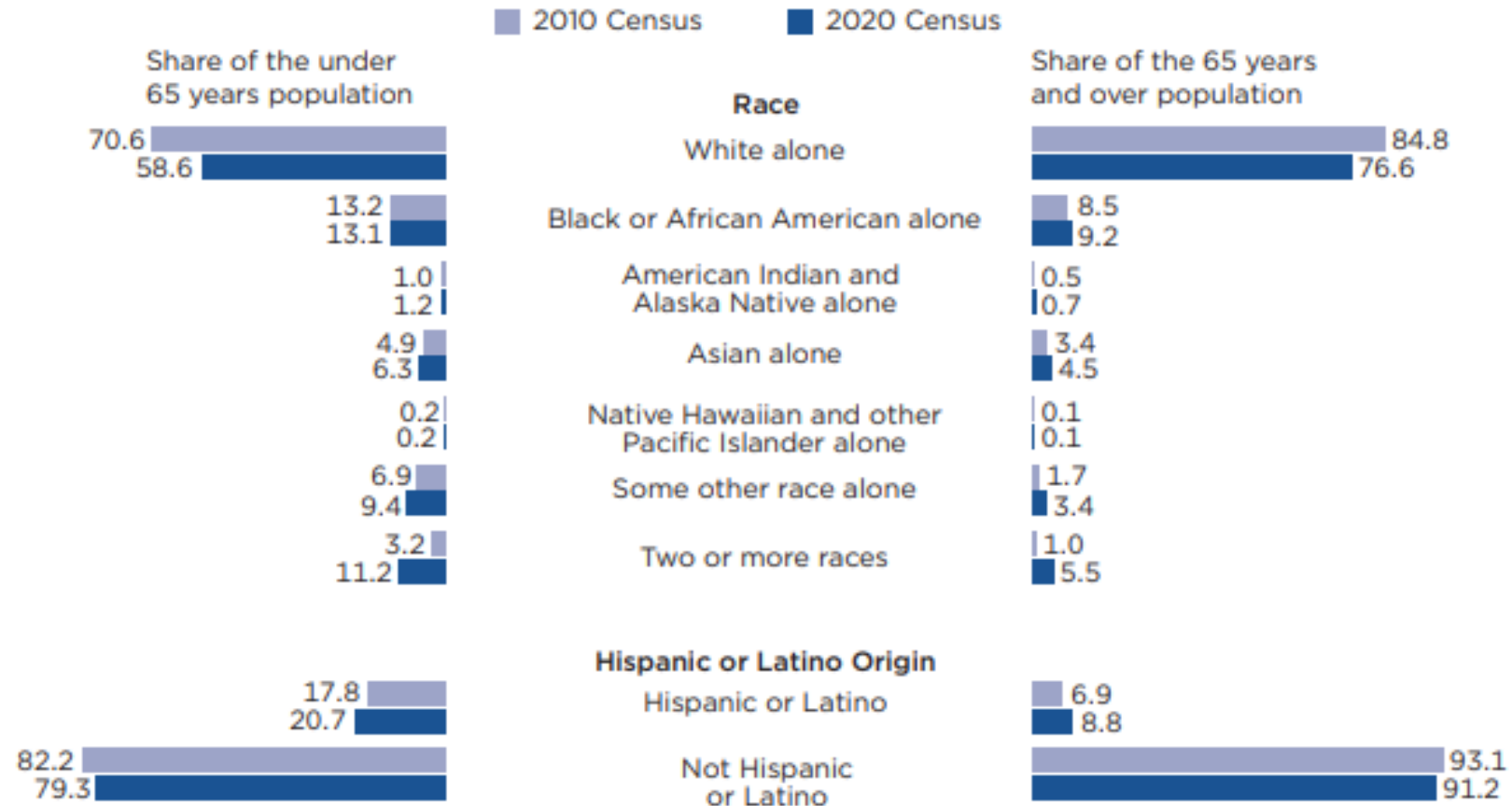
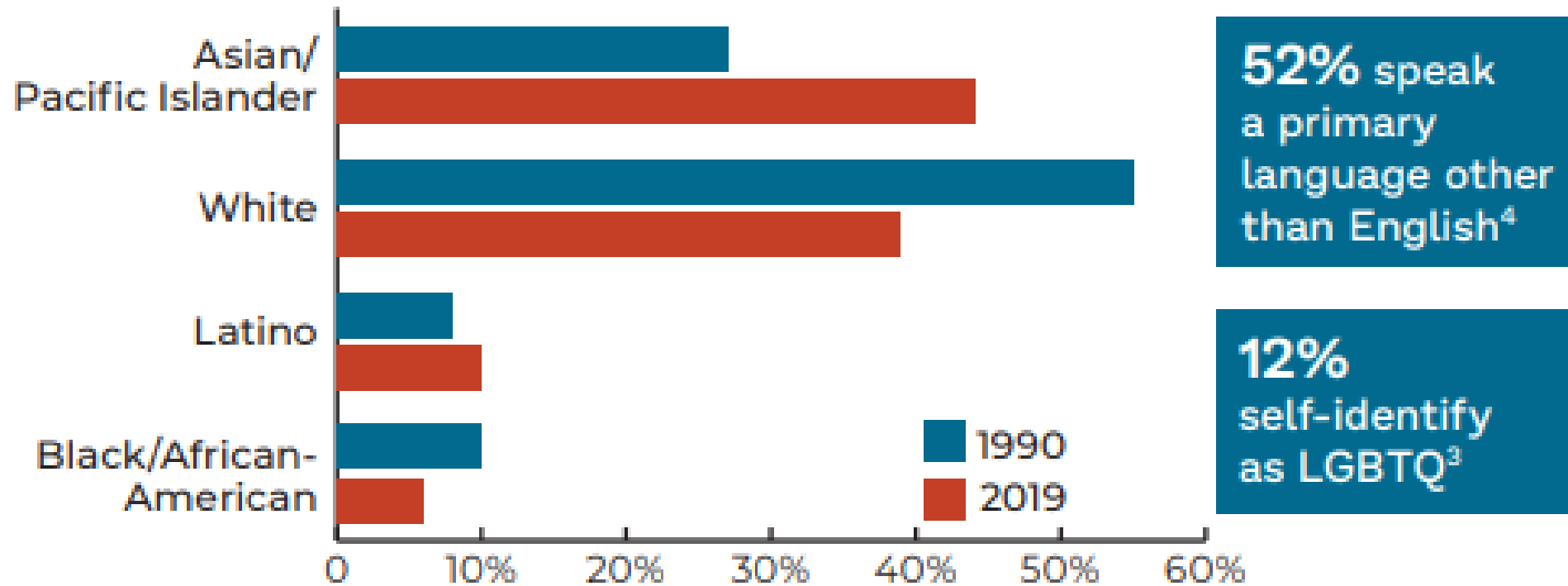


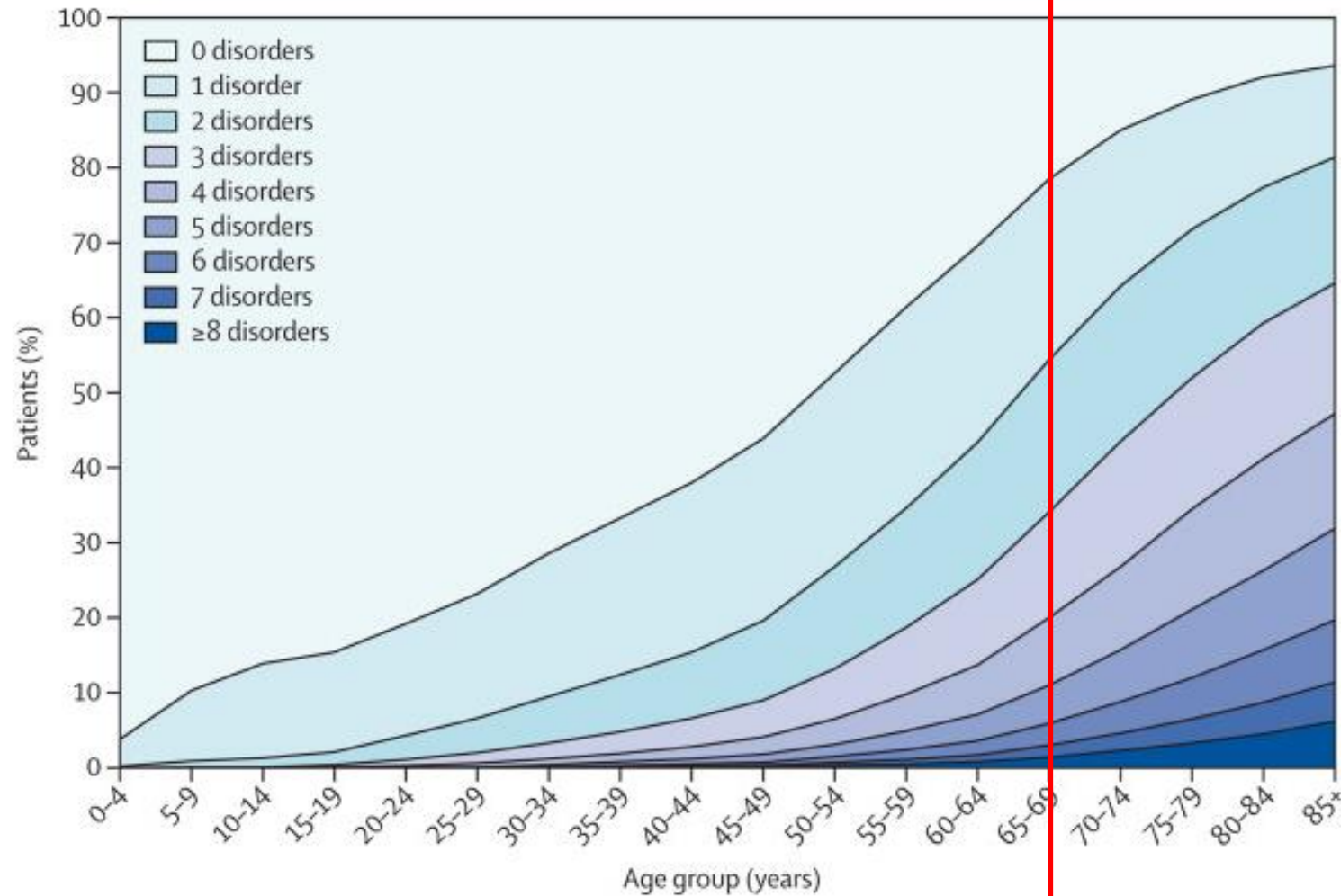
Figure 6.
Percent Distribution of Race and Hispanic Origin for the Under 65 Years and 65 Years and Over Populations: 2010 and 2020



San Francisco



Correlation: Multimorbidity and Age



Barnett, K, Mercer, SW, Norbury, M, et al. (2012). Epidemiology of Multimorbidity and Implications for healthcare, research, and medical education: a cross-sectional study. *The Lancet*. 380(9836): 37-43.

Diversity among Older Adults

- Age range: 65 to 100+ (spans 4 decades!)
- Racially and ethnically diverse
- Education attainment: 33% completed 4-yrs colleges or more compared with around 10% in 1965
- Functional status
 - Fully functional and working \leftrightarrow Fully dependent on others for care
- Health status
 - Those with 0 disorder \leftrightarrow Those with multimorbidities

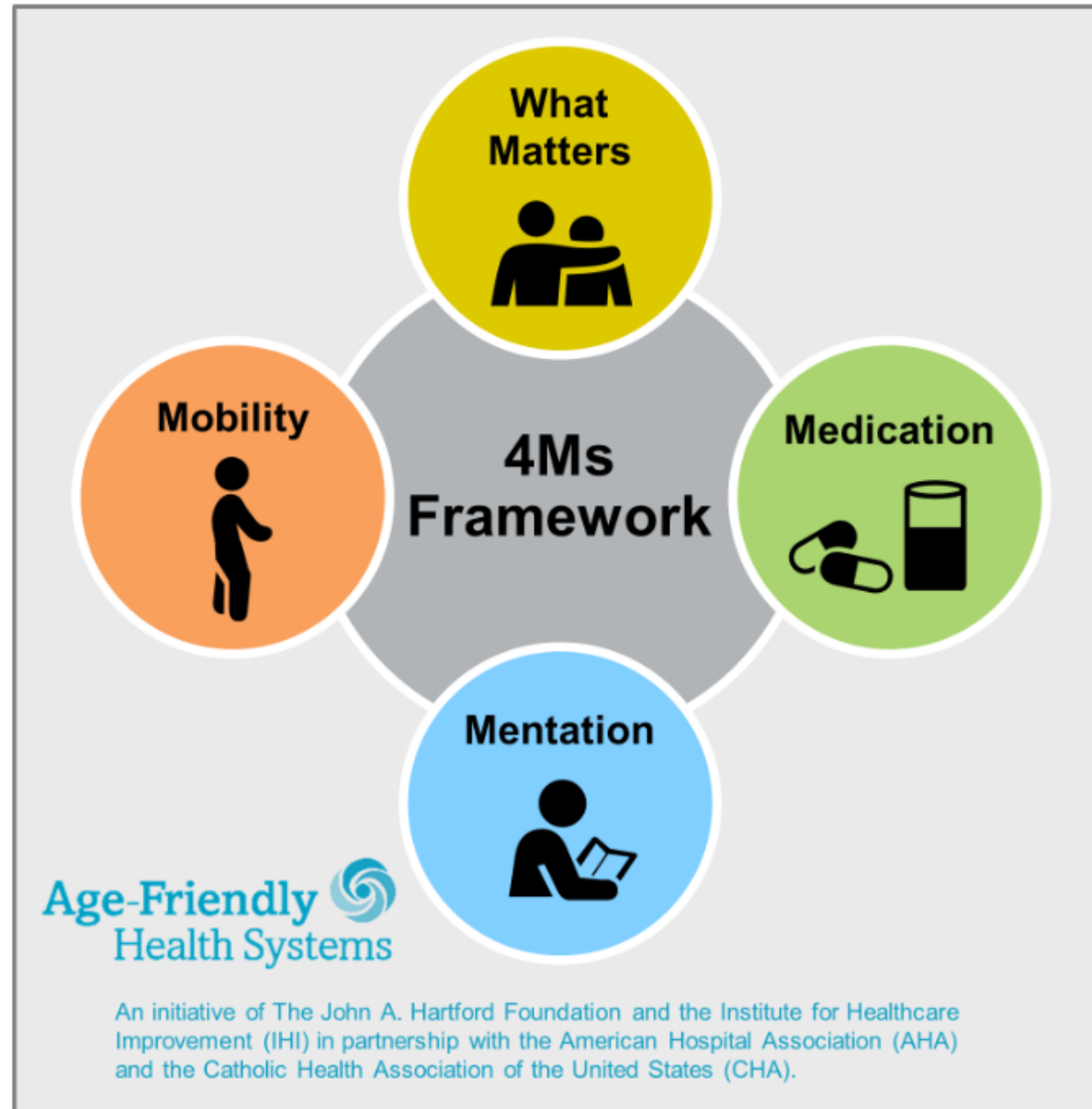
Challenges within Existing Evidence and Guidelines

- Evidence for the care of older adults are sometimes limited
 - Exclusion of age
 - Exclusion of conditions that may disproportionately affect older adults (e.g. physical disability, functional limitation, decreased life expectancy, inability to give informed consent, age-related cognitive impairment)
 - Exclusion of multimorbidity
- Most existing guidelines have single disease focus

Zulman DM, Sussman JB, Chen X, et al. Examining the evidence: a systematic review of the inclusion and analysis of older adults in randomized controlled trials. *J Gen Intern Med.* 2011 Jul;26(7):783-90.

Jadad, A., To, MJ, Emara M, et al. Consideration of multiple chronic diseases in randomized controlled trials. *JAMA.* 2011 Dec; 306(24): 2670-2.

The 4Ms Framework





Medication

- When medication is necessary, choose those that aligns with what matters and avoid those that interfere with mobility and mentation
- Avoid high-risk medications (e.g. benzodiazepine, anticholinergics, sedatives and hypnotics, muscle relaxants, antipsychotics, etc.)
 - Resource: AGS Beer's Criteria®
- Address polypharmacy
 - Understand the indications for the medications, e.g. is it still appropriate?
 - Be aware of prescribing cascade, e.g. is this medication treating a potential of a side effect of another existing medication?
- Consider deprescribing
 - Resources: STOPP-START, [deprescribing.org](https://www.deprescribing.org)



Mobility

- Ensure that older adults move safely every day to maintain function and do what matters
- Assess gait and balance (e.g. fall risk assessment)
 - Screening tools: Timed up and go (TUG), 5 times sit-to-stand (FTSS), 4-stage balance test, gait speed, functional reach, short physical performance battery assessment (SPPB), etc.
- Address gait and balance abnormalities, fall risks, environmental hazards, & other contributing factors (e.g. medications, vision, neurodegenerative conditions, deconditioning, etc.)
- Resources: CDC STEADI (<https://www.cdc.gov/steady/index.html>)



Mentation

- Prevent, identify, treat, and manage depression, dementia, and delirium across the continuum of care
- Screening for depression, dementia, and delirium
 - Prioritization may be dependent on the setting
- Screening tools:
 - Depression: PHQ2/PHQ9, Geriatrics Depression Scale (GDS)
 - Cognition: Mini-Cog, Montreal Cognitive Assessment (MoCA), Mini-Mental State Exam (MMSE), Rowland Universal Dementia Assessment Scale (RUDAS), St. Louis University Mental Status Examination (SLUMS), AD8 Dementia Screening Interview for Informant
 - Delirium: Confusion Assessment Method (CAM), Nursing Delirium Symptom Checklist (NuDESC)
- Management depends on findings



What Matters

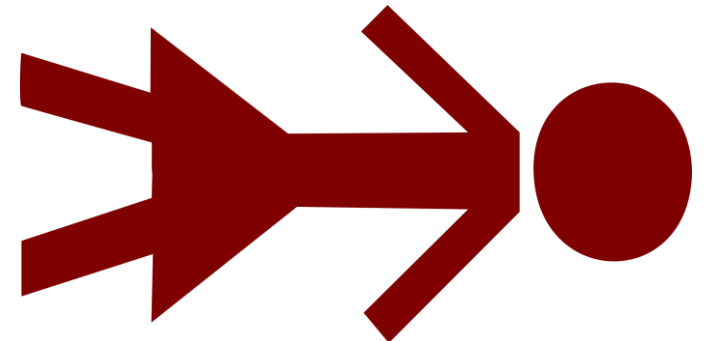
- Know and align care with each older adult's specific health outcome goals and care preferences, including, but not limited to, end of life care, and across the continuum of care
- Recognize our own biases
- Acknowledge that everyone is different, and therefore, no one person's goals, values, and preferences are the same
- Recognize that what matters to an individual may change over time
- Understanding the values and preferences can promote individualization of the care plan

Case: Ms. S



Ms. S

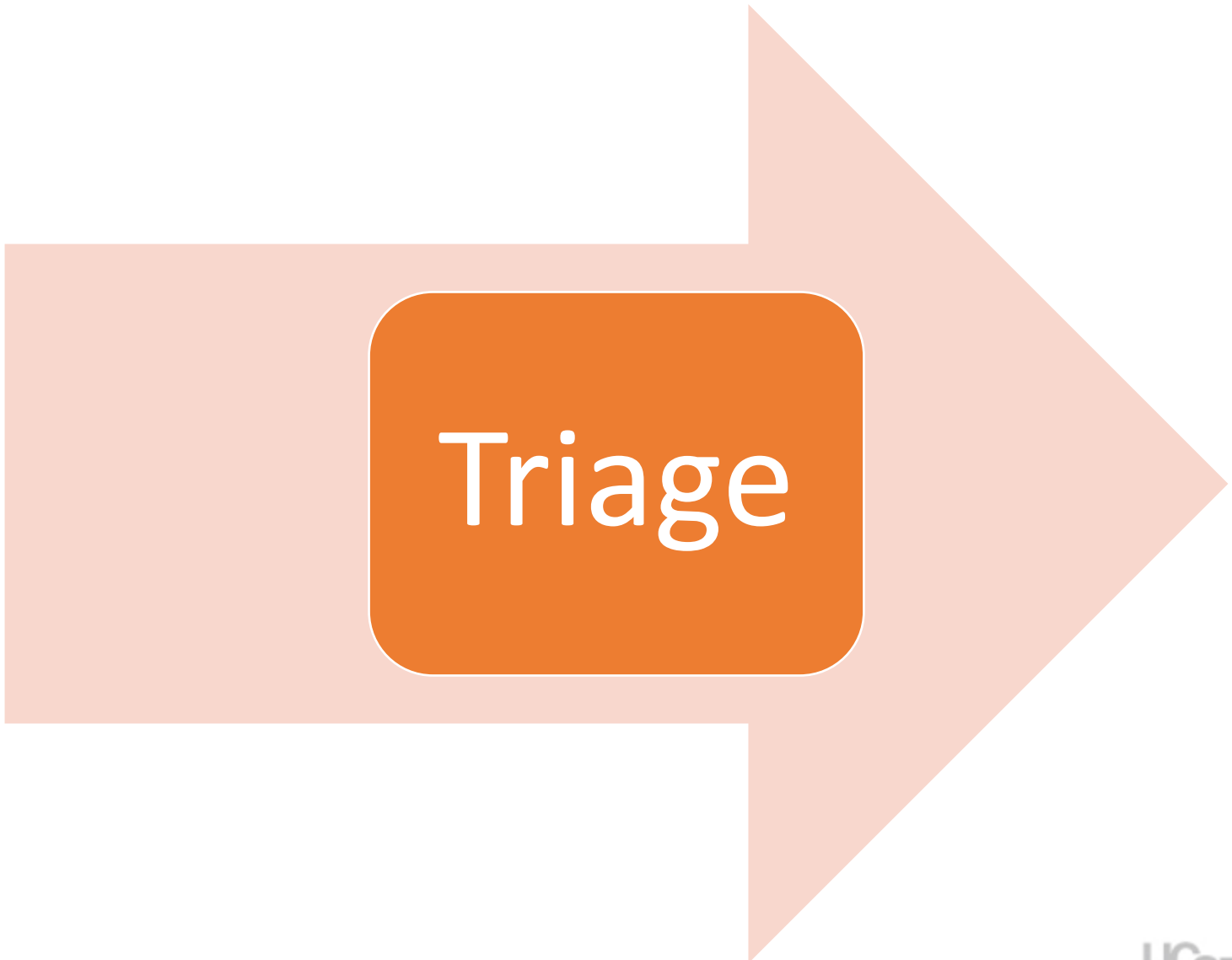
- 78 year-old woman with insulin dependent type 2 diabetes complicated by diabetic retinopathy and nephropathy, chronic kidney disease stage G3bA2, hypertension, osteoporosis, cataracts, and hearing impairment BIBA to the Emergency Department after a fall in her single-family home and inability to get up on her own.
- Daughter is the primary caregiver and is at the bedside.



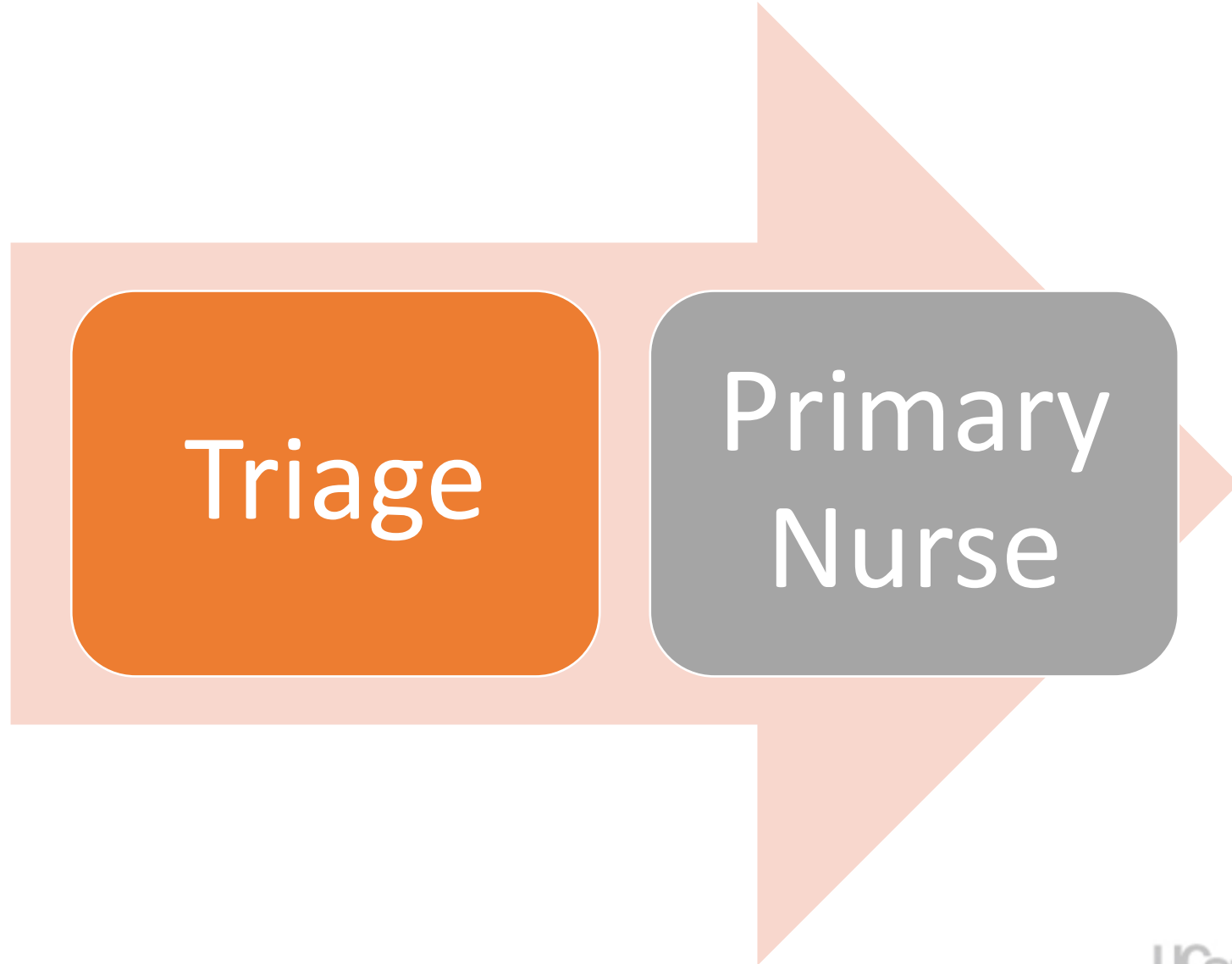
Age-Friendly Emergency Department (AFED)

- Interprofessional collaborative effort
 - Physician/nurse practitioner/physician assistant, nursing, physical therapy/occupational therapy, social work, pharmacy, caregivers, volunteers, community partners
- Ensure geriatrics-focused education
- Standardize approach to the care of older adults
- Optimize transition of care from the ED
- Focus on measurable outcome for quality improvement
 - Reduced ED return, hospital admission, hospital length of stay, delirium
 - Improve patient satisfaction, identification of cognitive dysfunction

AFED Process Flow



AFED Process Flow

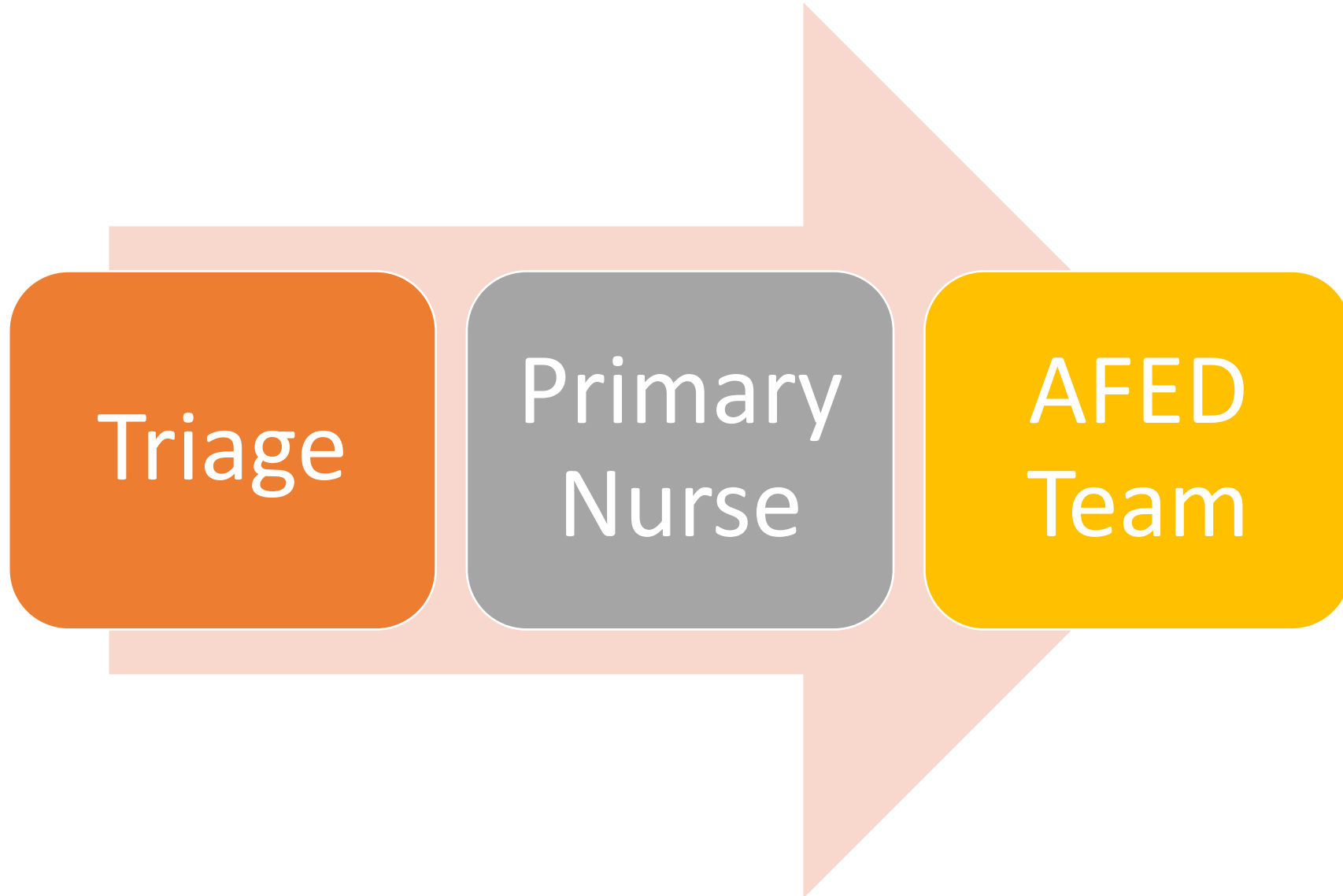


Identification of Seniors at Risk (ISAR)

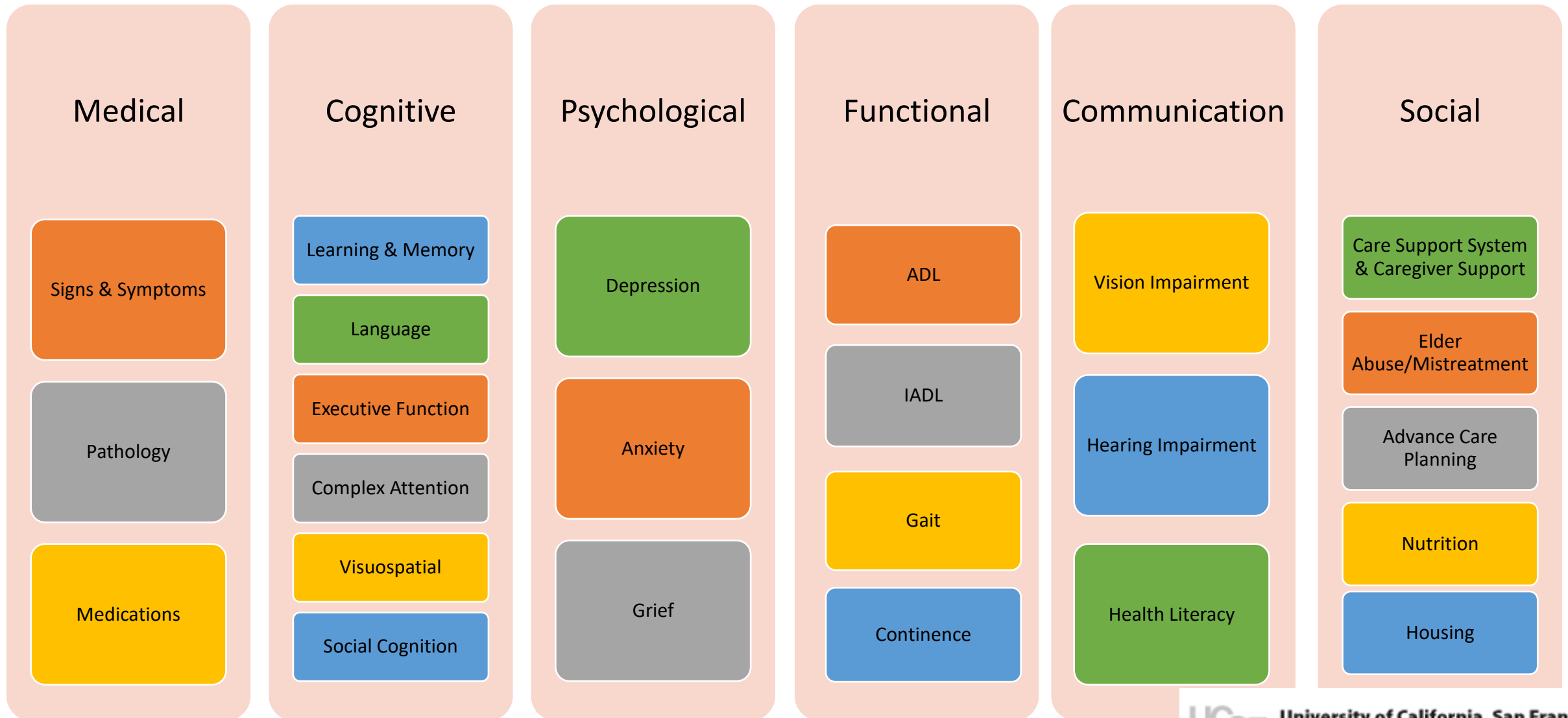
ISAR	Yes	No
1) Before the illness or injury that brought you to the Emergency, did you need someone to help you on a regular basis?	1	0
2) Since the illness or injury that brought you to the Emergency, have you needed more help than usual to take care of yourself?	1	0
3) Have you been hospitalized for one or more nights during the past six months (excluding a stay in the Emergency Department)?	1	0
4) In general, is your sight good?	0	1
5) In general, do you have serious problems with your memory?	1	0
6) Do you take more than three different medications every day?	1	0

Positive is ≥ 2

AFED Process Flow



Geriatrics Assessment (Example)



Example of AFED Screening Tools

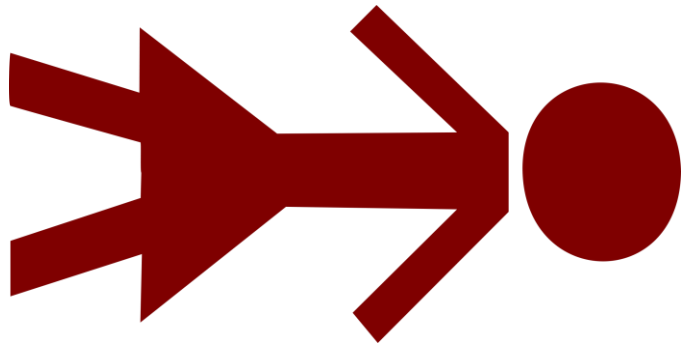
- Confusion Assessment Method (CAM)
- Mini-Cog
- AD8 (a dementia screening tool when using informant)
- Patient Health Questionnaire 2 (PHQ2)
- Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs)
- Stopping Elderly Accidents, Deaths, & Injuries (STEADI) by CDC
- Elder Abuse Suspicion Index (EASI)
- Kingston Caregiver Stress Scale (KCSS)

Interprofessional Team Meeting

- Obtain inputs from members of the interprofessional team, including the caregivers
- Communicate recommendations with the team
 - Admission for inpatient care
 - Discharge with primary care +/- community resources

Back to Ms. S

- 78 yo F with insulin dependent T2DM complicated by diabetic retinopathy and nephropathy, CKD stage G3bA2, HTN, osteoporosis, cataracts, and hearing impairment BIBA to the ED s/p fall in her single-family home and inability to get up on her own.
- Daughter is the primary caregiver and is at the bedside



Geriatrics Assessment: Ms. S

Medical

BP 91/50
Finger stick 70

Imagings:
No fractures

Accidentally took
oral meds x2

Cognitive

CAM: Negative

MiniCog:
Abnormal CDT and
recalled 2/3 words

AD8: 5 (Abnormal)

Psychological

PHQ2 = 0

Functional

ADL Indep

IADL: Dep on
shopping, cooking,
housekeeping,
transportation,
finance

STEADI: + prior falls

Communication

Limited Vision

Hearing
Impairment

English speaking
with 5th grade
literacy

Social

KCSS: 28
(Moderate stress)

EASI: Negative

Advance Care
Planning: Most
important to stay
at home

Next Steps for Ms. S

- Seen by interprofessional team members
- Address pain, hypoglycemia, and borderline hypotension
- Recommendation: Home with primary care follow up and community resources



Application of 4Ms in Ms. S



- Medications
 - Medication management supervision
 - Simplify regimen: reduce frequency or dosage of medications that contribute to hypoglycemia and orthostatic hypotension
- Mobility
 - Referral to Home Health PT and OT for fall prevent, strength and balance training and assess DME needs
- Mentation
 - Referral to Memory Care for diagnostic evaluation
- What Matters Most
 - Referral to Social work to continue addressing caregiver support options, adult day program, etc.

Conclusion

- The older population is heterogenous, including but not limited to, age, race, ethnicity, language, functional and health status, etc.
- The 4Ms (Medication, Mobility, Mentation, and what Matters most) is a framework that can be used across care settings (e.g. inpatient, emergency room, outpatient, short-stay rehab, long-term care, etc.) to provide age-friendly care to diverse older adults.
- Geriatrics assessment can be incorporated in different care settings, including the emergency room, and completed within a limited amount of time to achieve the 4Ms age-friendly care.



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