Brain Health Partnership
convened by UsAgainstAlzheimer's

Establishing a National Goal for the Prevention of Alzheimer's Disease and other Dementias in the United States

How Did We Get Here?

70 years ago, emerging science drove us to start equating heart health with overall health.

Exercising, eating right and demanding blood pressure and cholesterol checks annually became baseline standards for healthy living

Acts of prevention and maintenance combine to generate resistance to decay and resilience in the face of decline

As our understanding of the body's interconnectivity continued to develop, we applied similar thinking to other organs, like breasts, lungs and the prostate.

New emerging science around brain health reveals proactive prevention of and maintenance for overall health concerns can yield positive effects for a resistant and resilient brain.

This disease impacts populations differently.

By focusing on brain health equity across diverse populations, we are ensuring that everyone gets a chance to be brain healthy and build resistance to potential cognitive decline.

The more we learn, the more evidence demonstrates that focus on our overall health – including brain health across the lifespan – will create a stronger foundation and better resistance to cognitive impairment as we age.

Increasing Evidence Around Prevention and Risk Reduction

263 Studies on Dementia Causation & Prevention

LOW EDUCATION

MIDLIFE HEARING LOSS

OBESITY

LATE-LIFE DEPRESSION

SMOKING

PHYSICAL INACTIVITY

HYPERTENSION

DIABETES

SOCIAL ISOLATION

"While public health interventions will not prevent, or cure all potentially modifiable dementia, intervention for cardiovascular risk factors, mental health and hearing may push back the onset of many people for years. **Even if some of this promise is realized, it could make a huge difference and we have already seen in some populations that dementia is being delayed for years.** Dementia prevalence could be halved if its onset were delayed by five years."

—Professor Gill Livingston, MD, from University College London and lead author of *The Lancet Commission.*

A CALL FOR ACTION:

Creating an Optimal System of Brain Health Care in the United States

Key Insights Challenge the Traditional Characterization of Dementia

Dementia is interconnected to other diseases.

Complex, multi-factorial condition involving multiple disease processes.

Just one but important example of this interconnectedness is with heart disease.

Evidence exists that modifying certain lifestyle and other health factors can reduce the risk of and/or delay cognitive decline.

There is general consensus that management of both population-level risk factors (e.g., diet, exercise, smoking) and individualized health risk factors (e.g., hypertension, sleep, stress, high cholesterol, diabetes, and depression) are important in minimizing risks of cognitive decline.

Dementia has a lifespan continuum, beginning in early life.

The 2015 Institute of Medicine report on cognitive aging recommends that health and payer systems, “Develop evidence-based programs and materials on cognitive health across the life span.”

The Lancet Commission has also adopted a life-course approach to dementia and identifies modifiable risk factors at different stages of life.

A CALL FOR ACTION:

Creating an Optimal System of Brain Health Care in the United States

Prioritizing Immediate Opportunities to Advance an Optimal System of Care

ACTION AREA 1:

Equip Healthcare Providers with Solutions to Support Brain Health Across the Lifespan

complex, multi-factorial condition involving multiple disease processes

- Make an Annual Brain Check Standard Practice
- Help Providers Promote Healthy Brains for Patients of all Ages
- Connect Physicians with Regional and Local Resources

ACTION AREA 2:

Create Consumer Demand for Lifelong Brain Health Care and Make an Annual Brain Check Standard Practice

- Expand Brain Health Campaigns to Increase Patient Demand for Healthy Brain Care.
- Leverage Technology Innovation to Enhance and Expand Consumer Engagement
- Develop Strategic Partnerships to Reach Consumers

ACTION AREA 3:

Build a Brain Health Business Case for Payers and Systems

- Enlist Cities and States as Partners in Promoting Prevention and Early Detection
  This would explore opportunities to advance Medicaid reforms that promote prevention and early detection in managed care and provider activities
- Develop a National Medicare Dementia Prevention and Detection Strategy
- Develop the “Business Case” For Payers and Health Systems

Why a National Goal?

- Burden on families and the healthcare system demands action
- Science points to things we can do
- Interconnectedness to other chronic conditions
- Increased focus can drive action
- Providers and people lack the information they need
- Change the narrative around aging and cognition

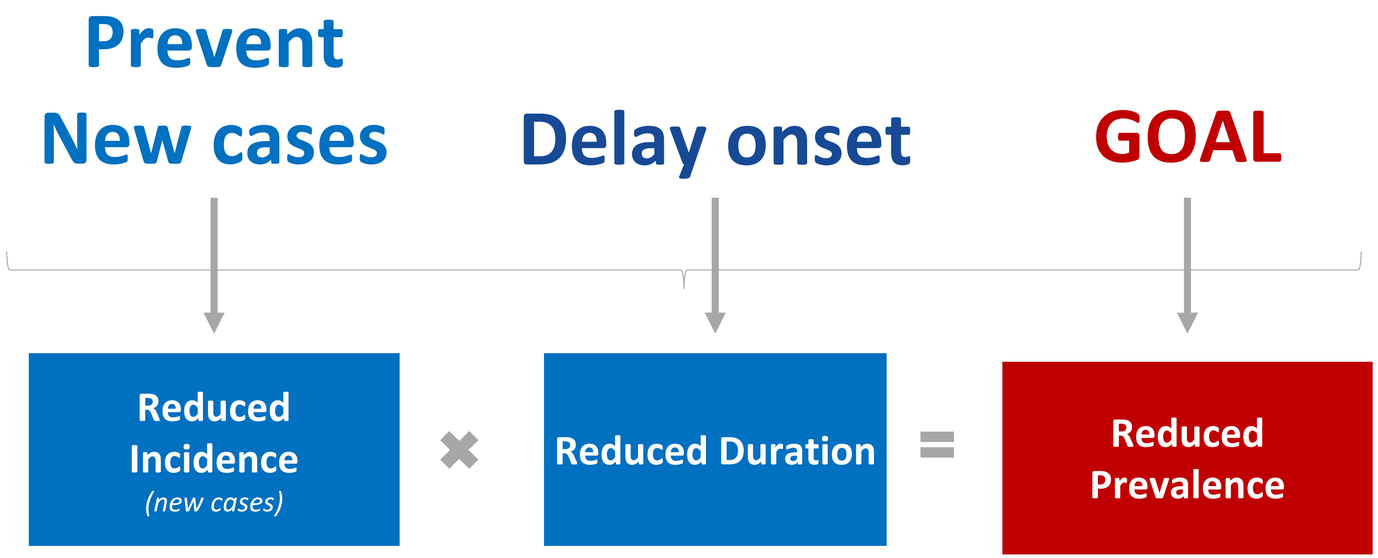
Characteristics

• Timebound	*for example*, 2030
• Measurable	*for example*, reduce prevalence by 30%
• National (v. Federal)	include private sector stakeholders
• Ambitious	a reach
• Grounded in science	but possible

Principles

- Specific milestones – also time bound – should accompany the goal along with a tactical roadmap in order to track progress and refine approaches as needed.
- Focus on optimizing health and improving health outcomes.
- Achieving health equity for communities of color and women should be overt and purposeful.
- Cost-reduction is an important consideration, but person-focused outcomes should be the foremost driver, and patient voice is a critical component of any strategy.

GOAL: Fewer people with ADRD
e.g. 30% reduction in prevalence by 2030



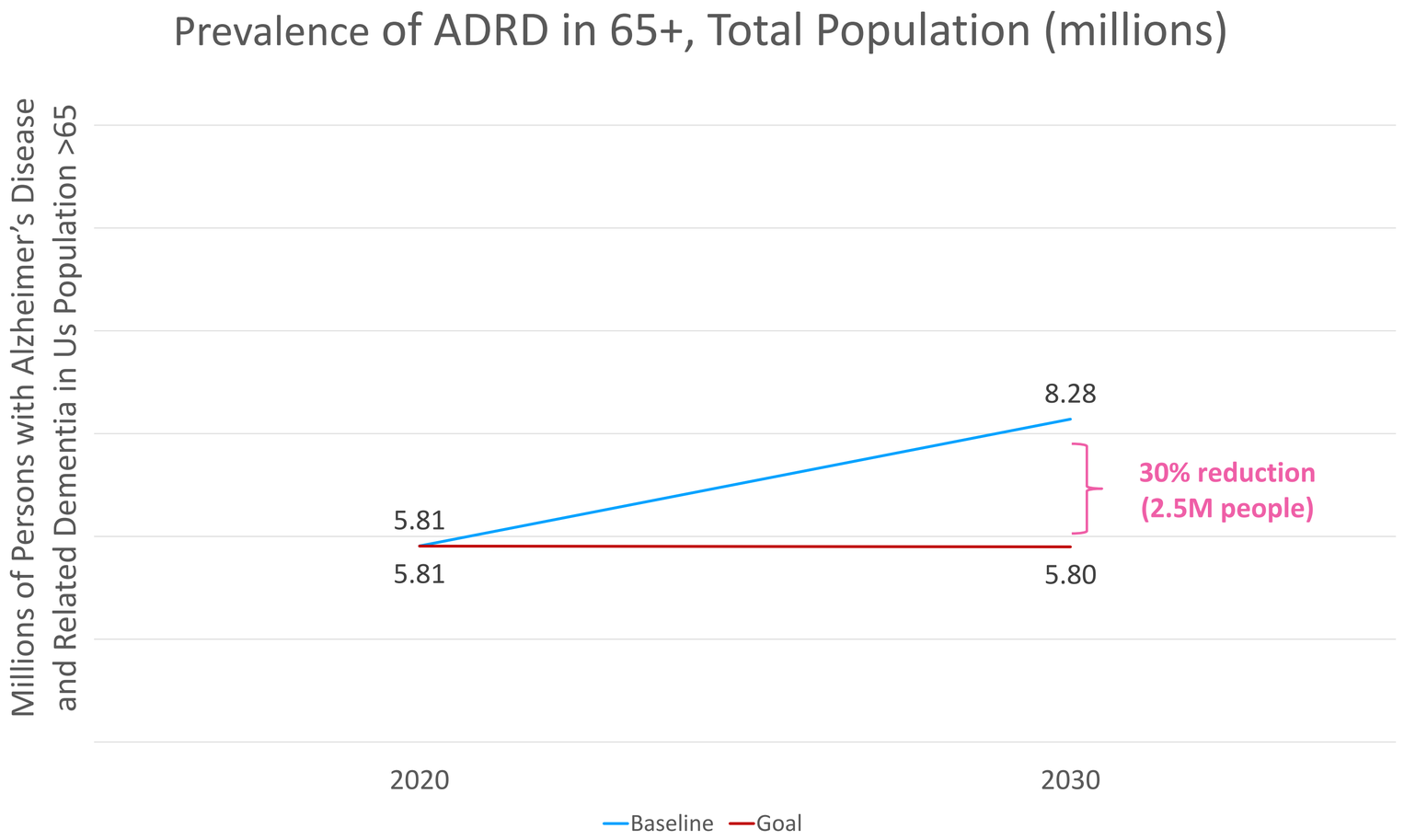
Potential Sub-goals/Alternative Goals to Measure Progress

Reduce the prevalence of dementia among communities of color and women by 40 percent by addressing health and access disparities

Delay the onset of dementia by five years

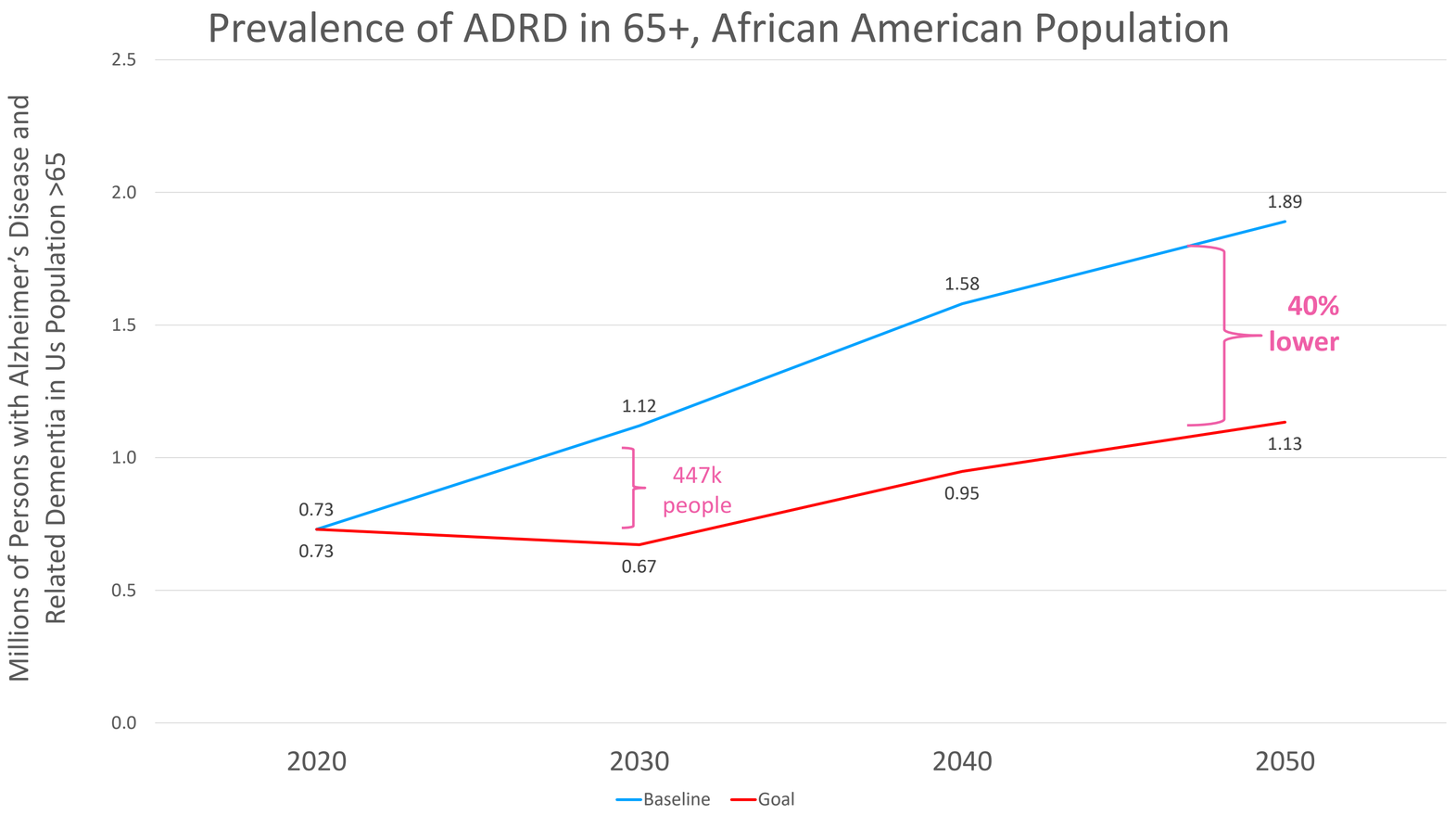
Increase Screening Rates and Implement a Risk-Reduction Intervention

Prevalence of ADRD Baseline and Goal in Total Population 65



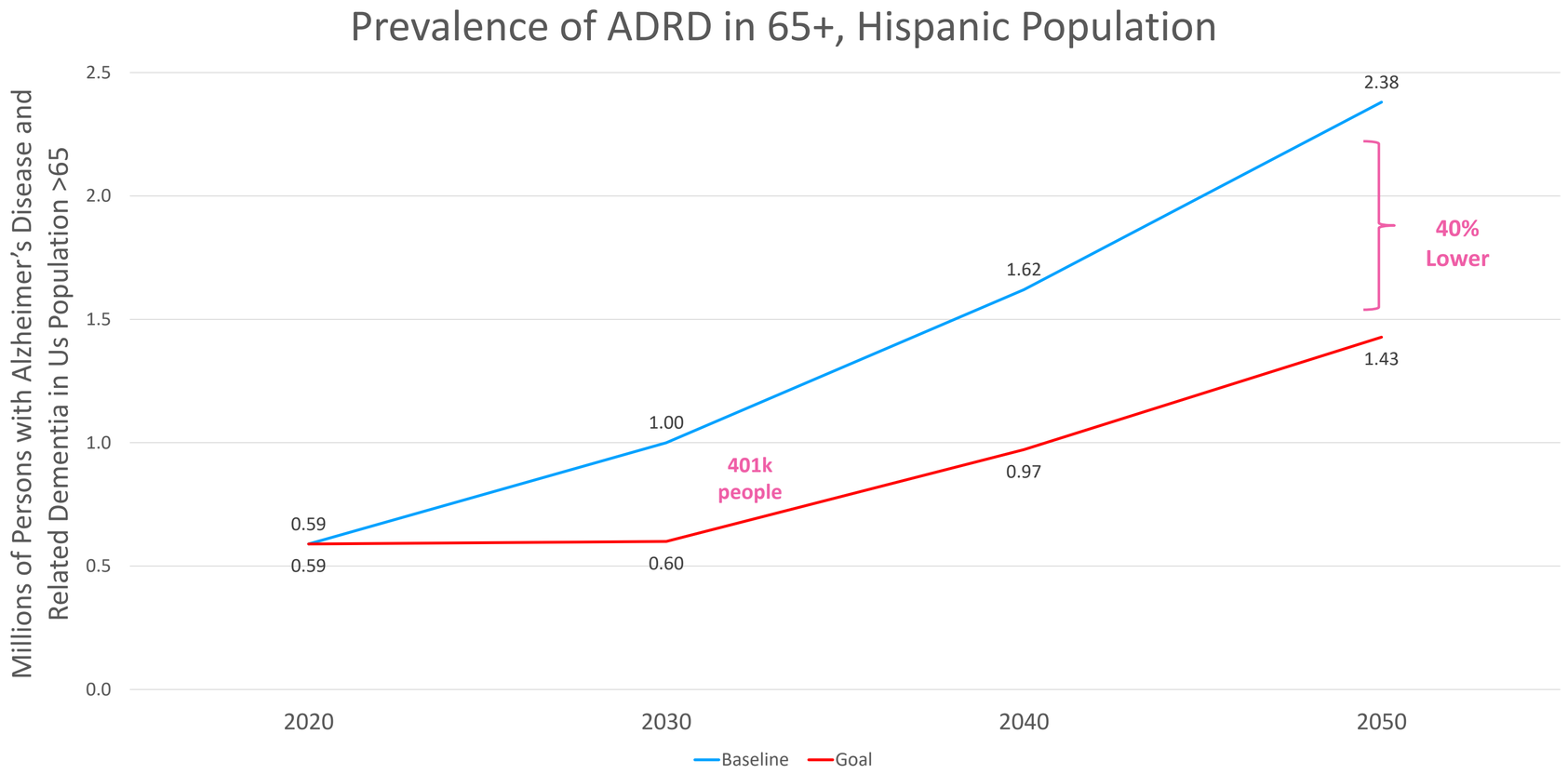
Source: Racial and ethnic estimates of Alzheimer's disease and related dementias in the United States (2015–2060) in adults aged ≥65 years Matthews, Kevin A. et al. Alzheimer's & Dementia: The Journal of the Alzheimer's Association, Volume 15, Issue 1, 17 – 24.

Prevalence of ADRD in 65+ African American Population



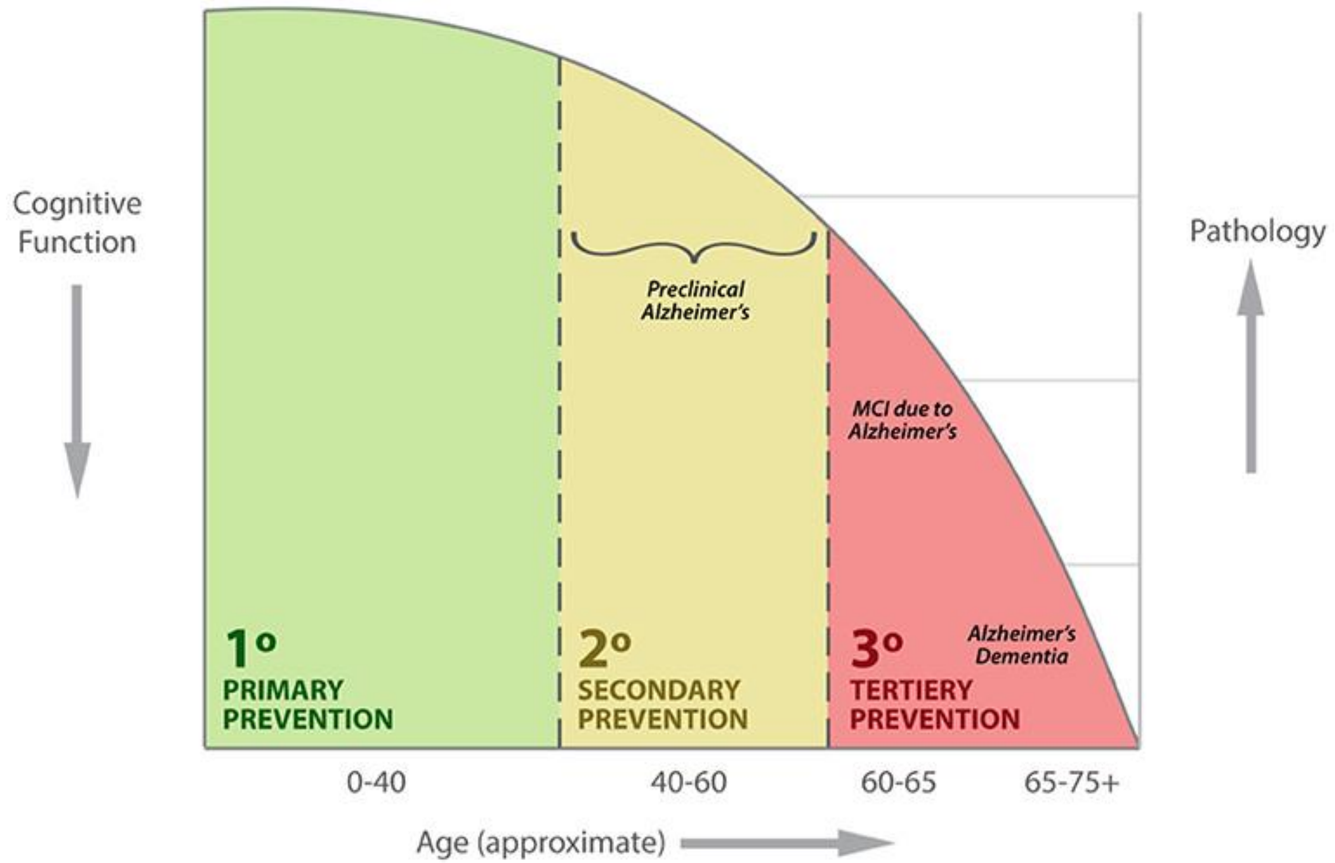
Source: Racial and ethnic estimates of Alzheimer's disease and related dementias in the United States (2015–2060) in adults aged ≥65 years Matthews, Kevin A. et al. Alzheimer's & Dementia: The Journal of the Alzheimer's Association, Volume 15, Issue 1, 17 – 24.

Prevalence of ADRD 65+ Hispanic Population



Source: Racial and ethnic estimates of Alzheimer's disease and related dementias in the United States (2015–2060) in adults aged ≥65 years Matthews, Kevin A. et al. Alzheimer's & Dementia: The Journal of the Alzheimer's Association, Volume 15, Issue 1, 17 – 24.

Prevention



Hodes JF, Oakley CI, O'Keefe JH, Lu P, Galvin JE, Saif N, Bellara S, Rahman A, Kaufman Y, Hristov H, Rajji TK, Fosnacht Morgan AM, Patel S, Merrill DA, Kaiser S, Meléndez-Cabrero J, Melendez JA, Krikorian R and Isaacson RS (2019) Alzheimer's "Prevention" vs. "Risk Reduction": Transcending Semantics for Clinical Practice. Front. Neurol. 9:1179. doi: 10.3389/fneur.2018.01179

Modifiable risk factors and potential effect in reducing risk of dementia

- A study led by Dr. Klodian Dhana of Rush University Medical Center reported that individuals who adhere to a healthy lifestyle have a 60 percent lower risk of Alzheimer's dementia compared with people who did not follow a healthy lifestyle.

- The Lancet Commission posits that more than a third of dementia cases are potentially preventable by addressing nine factors across the lifespan that account for 35 percent of the population dementia risk

- The FINGER study indicated that lifestyle modifications, including dietary guidance, physical activity, cognitive training, social activities, and monitoring and management of metabolic vascular risk factors, can improve or maintain cognitive functioning in older adults.

- SPRINT MIND clinical trial showed that tight control of blood pressure in older adults reduced the risk of developing mild cognitive impairment and dementia by 19 percent.

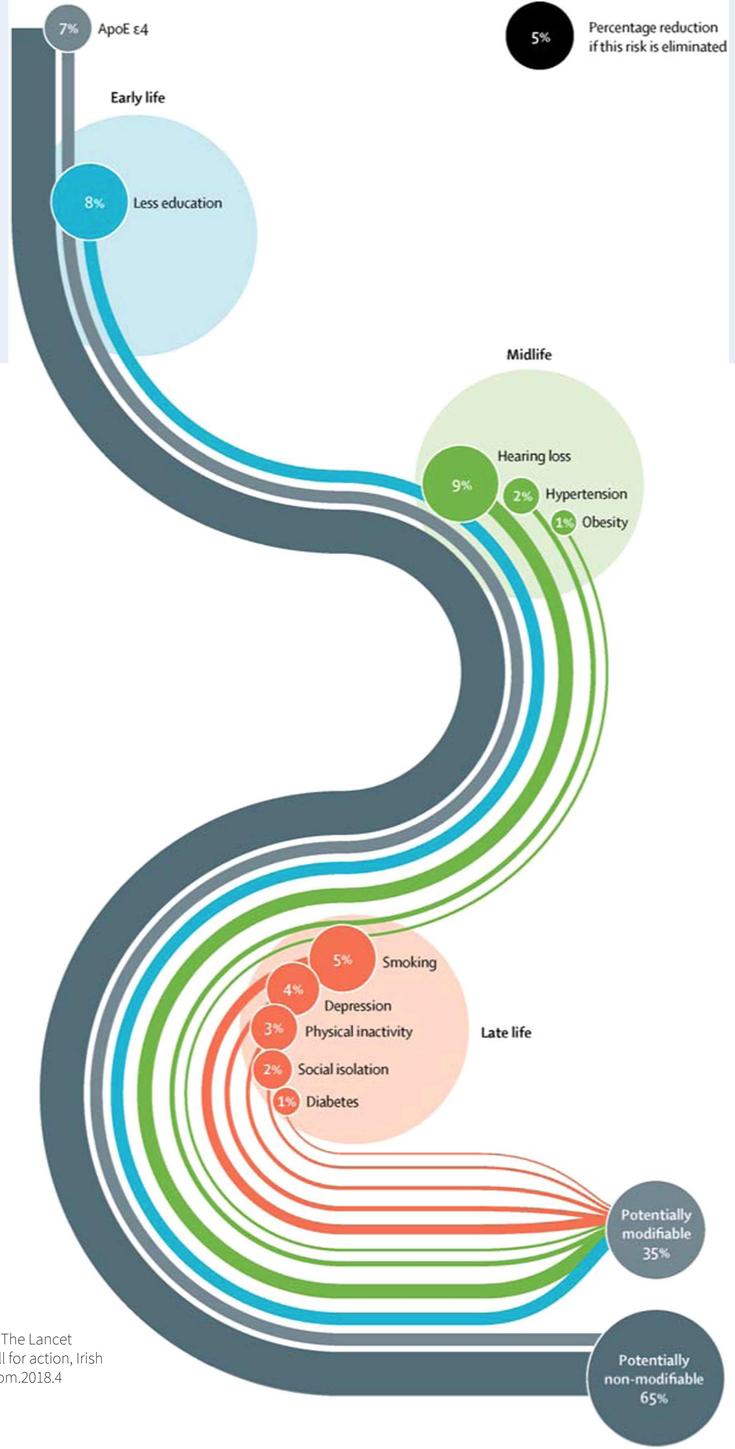


CHART: V. Orgeta*, N. Mukadam, A. Sommerlad and G. Livingston, The Lancet Commission on Dementia Prevention, Intervention, and Care: a call for action, Irish Journal of Psychological Medicine (2019), 36, 85–88. doi:10.1017/ipm.2018.4