

Alzheimer's Advisory Committee on Research, Care, and Services

July 28, 2017

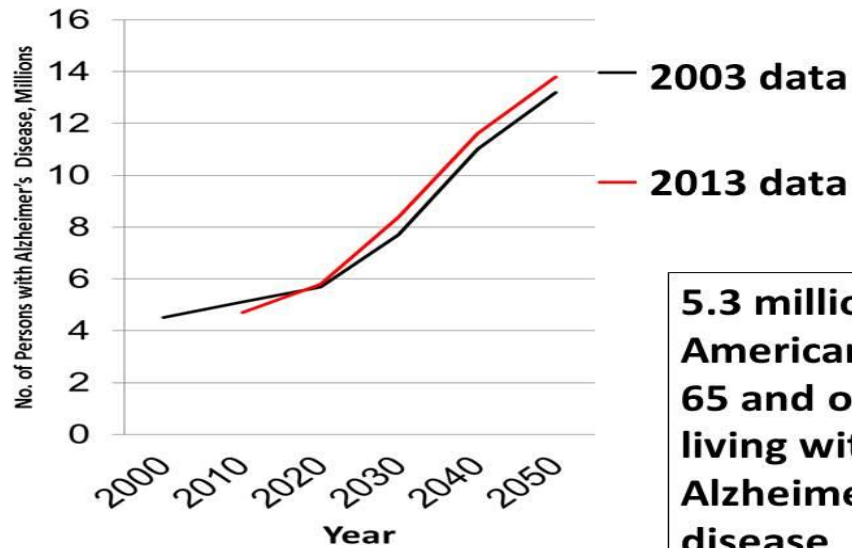
## "The Many Challenges of Alzheimer's Disease"

**Eliezer Masliah, M.D.**

Director, Division of Neuroscience,  
National Institute on Aging, NIH



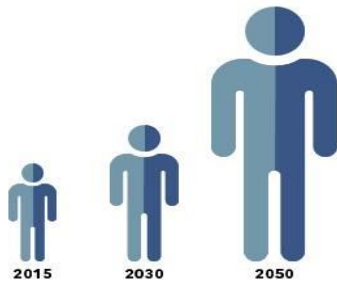
### Prevalence of Dementia in the U.S.



Hebert, LE et al. (2013) *Neurology* 80(19):1778-83  
Hebert, LE et al. (2003) *Arch Neurol* 60(8):1119-22

## Global Scale of Dementia

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The 46.8 million worldwide cases of dementia will almost double every 20 years to 131.5 million by 2050

ADI. World Alzheimer Report 2015. The Global Impact of Dementia. An Analysis of Prevalence, Incidence, Cost and Trends. London; 2015.

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

### Incidence of Dementia over Three Decades in the Framingham Heart Study

Claudia L. Satizabal, Ph.D., Alexa S. Beiser, Ph.D., Vincent Chouraki, M.D., Ph.D., Geneviève Chêne, M.D., Ph.D., Carole Dufouil, Ph.D., and Sudha Seshadri, M.D.

The 5-year age-/sex-adjusted cumulative hazard rates for dementia were:

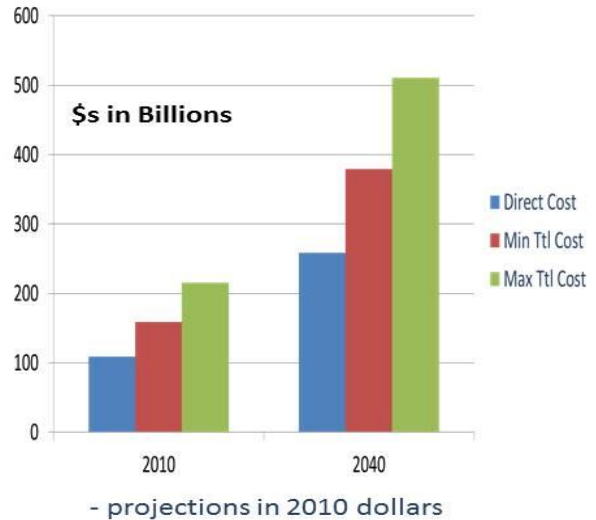
- 3.6/100 persons – 1st epoch (late 1970s - early 1980s)
- 2.8/100 persons – 2nd epoch (late 1980s - early 1990s)
- 2.2/100 persons – 3rd epoch (late 1990s - early 2000s)
- 2.0/100 persons – 4th epoch (late 2000s - early 2010s)

**Relative to the incidence during the first epoch, incidence declined by 22%, 38%, and 44% during the 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> epochs**

Satizabal, CL et al. *NEJM* (2016) 374(6):523-32

## The Growing Cost of Dementia

Dementia costs the US about \$200 billion per year. Half that amount is the value of unpaid care provided by family members.



From NIA Health and Retirement Study data

Hurd, MD et al. (2013) *NEJM* 368(14):1326-1334.

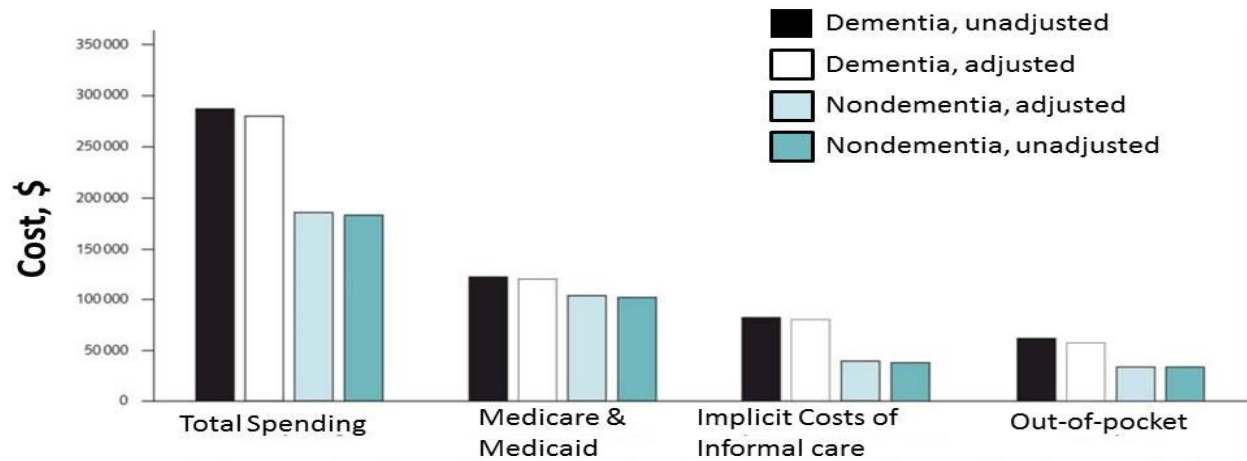
## The Burden of Health Care Costs for Patients With Dementia in the Last 5 Years of Life



Out-of-pocket expenditures were slightly lower for married decedents with dementia than for unmarried decedents, but the costs of informal care were more than double for married women in the dementia group

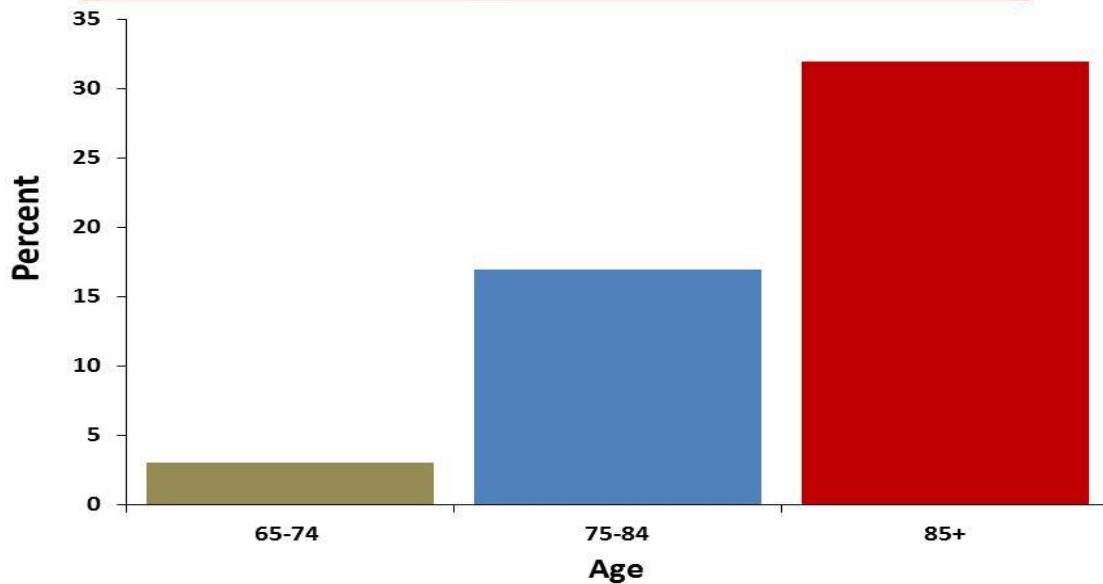
Kelley, A. S., et al. (2015). *Ann Intern Med* 163(10):729-736.

## The Burden of Health Care Costs for Patients With Dementia in the Last 5 Years of Life



Kelley, A. S., et al. (2015). *Ann Intern Med* 163(10):729-736.

## Risk of Alzheimer's Disease by Age in 2017



Adapted from Hebert, L et al. (2013) *Neurology*, 80:1778-1783.

# **ALZHEIMER'S DISEASE RISKS & PROJECTIONS USING MULTI-STATE MODELS WITH BIOMARKERS**

R21AG055361 (Brookmeyer, PI)

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## **GOALS**

- **Forecast pre-clinical and clinical Alzheimer's disease in the U.S.**
- **Evaluate potential impact of primary and secondary prevention interventions on future disease burden**
- **Determine lifetime risks of AD based on biomarker screening**

## **PUBLIC HEALTH RELEVANCE**

**The project synthesizes new biomarker evidence about preclinical AD into a unifying multi-state model for application to clinical practice and public health.**

## July 28, 2017 -- Advisory Council Meeting #25

The meeting was held on Friday, July 28, 2017, in Washington, DC. The Advisory Council spent the morning discussing information gaps across the three areas of research, clinical care, and long-term services and supports. There was also a presentation on the recently released National Academy of Sciences, Engineering, and Medicine (NASEM) report on preventing cognitive decline. Additional presentations included a presentation on planning and progress towards the October Care and Services Summit and federal workgroup updates. Material available from this meeting is listed below and is also available at <https://aspe.hhs.gov/advisory-council-alzheimers-research-care-and-services-meetings#Jul2017>.

Comments and questions, or alerts to broken links, should be sent to [napa@hhs.gov](mailto:napa@hhs.gov).

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### General Information

<b>Agenda</b>	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>
<b>Meeting Announcement</b>	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>
<b>Meeting Summary</b>	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>
<b>Public Comments</b>	<a href="#">[HTML Version]</a>

### Presentation Slides

2017 National Plan Update and Non-Federal Recommendations	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>
Clinical Services Subcommittee Federal Update	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>
CommunityRx for Community-Residing People with Dementia and Their Caregivers	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>
Dementia Caregiving in the U.S.	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>
Development of the FY 19 NIH Bypass Budget for Alzheimer's Disease and Related Dementias	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>
Implications of a Biologically Based Definition of Alzheimer's Disease	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>
Increasing Opportunities for Choice and Control for Persons with Dementia	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>
Interventions to Prevent or Slow Cognitive Decline, MCI and Dementia in Individuals without Dementia	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>
Living Alone With Dementia	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>

Long-Term Services and Supports Committee Update	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>
Managing Chronic Conditions in People Living with Dementia	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>
Preventing Cognitive Decline and Dementia	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>
Research Summit on Dementia Care	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>
The Many Challenges of Alzheimer's Disease	<a href="#">[HTML Version]</a> <a href="#">[PDF Version]</a>

## **Videos**

Welcome thru Clinical Care	<a href="#">[Video]</a>
LTSS Research	<a href="#">[Video]</a>
Public Comments thru Federal Workgroup Updates	<a href="#">[Video]</a>
Recommendations thru Adjourn	<a href="#">[Video]</a>

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Last Updated: 06/27/2018