

Latest in Alzheimer's and Dementia: Research, New Treatments, and Care

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Friday, April 26, 2024





Our Time Today

- **Landscape of Alzheimer's and Dementia**
- **The Mission of the Alzheimer's Association**
- **Latest Advances in Clinical Trials, Treatments, Care, Understanding Risk and Lifestyle Interventions**

1 IN 3

SENIORS DIES WITH ALZHEIMER'S OR ANOTHER DEMENTIA

IT KILLS MORE THAN BREAST CANCER AND PROSTATE CANCER

COMBINED

OVER 11 MILLION AMERICANS PROVIDE UNPAID CARE

FOR PEOPLE WITH ALZHEIMER'S OR OTHER DEMENTIAS

BETWEEN 2000 AND 2021, DEATHS FROM HEART DISEASE HAVE

DECREASED 2.1%



WHILE DEATHS FROM ALZHEIMER'S DISEASE HAVE

INCREASED 141%

IN 2024, ALZHEIMER'S AND OTHER DEMENTIAS WILL

COST THE NATION \$360 BILLION

BY 2050, THESE COSTS COULD RISE TO NEARLY

\$1 TRILLION



THESE CAREGIVERS PROVIDED MORE THAN 18 BILLION HOURS

VALUED AT NEARLY \$347 BILLION

THE LIFETIME RISK FOR ALZHEIMER'S AT AGE 45 IS

1 in 5 FOR WOMEN

1 in 10 FOR MEN

70% OF DEMENTIA CAREGIVERS

FEEL STRESSED WHEN COORDINATING CARE

AND MORE THAN HALF OF CAREGIVERS SAID NAVIGATING HEALTH CARE IS DIFFICULT



3 in 5 DEMENTIA CAREGIVERS

SAY LESS STRESS AND MORE PEACE OF MIND ARE POTENTIAL BENEFITS OF HAVING A CARE NAVIGATOR

56% SAY IT COULD HELP THEM BE

BETTER CAREGIVERS





2024 ILLINOIS ALZHEIMER'S STATISTICS



PREVALENCE

Number of People Aged 65 and Older with Alzheimer's (2020)

250,600

% of Adults Over 65 with Alzheimer's

12%



CAREGIVING

of Caregivers

311,000

Caregivers with Chronic Health Conditions

64.2%

Total Hours of Unpaid Care

480,000,000

Caregivers with Depression

29.0%

Total Value of Unpaid Care

\$9,840,000,000



WORKFORCE

of Geriatricians in 2021

212

of Home Health and Personal Care Aides in 2020

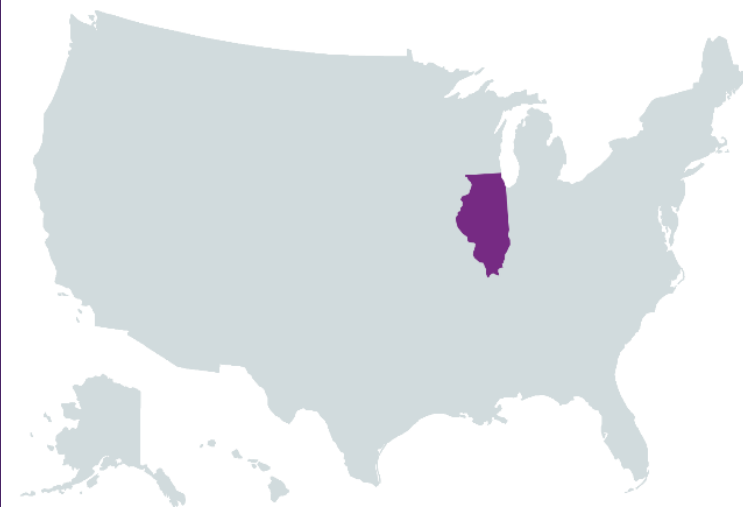
99,460

Increase Needed to Meet 2050 Demand

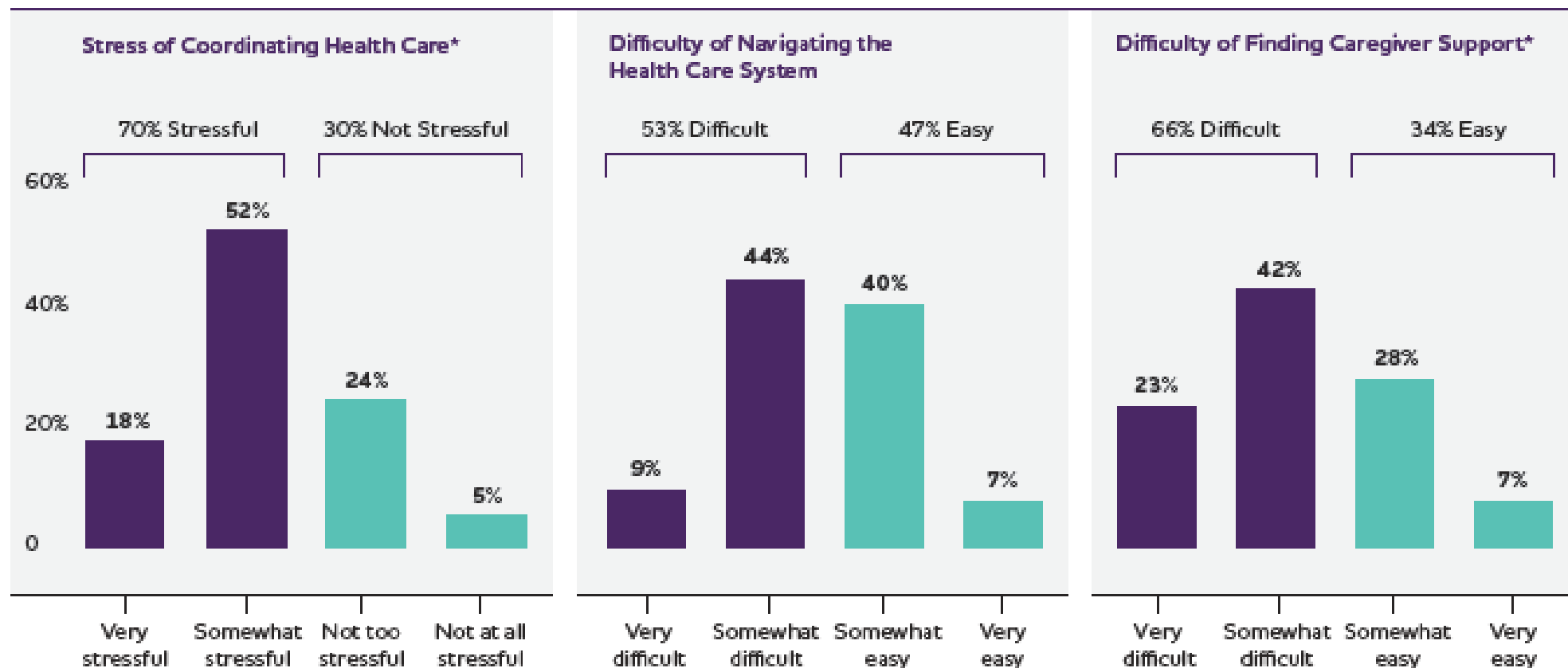
143.9%

Increase Needed to Meet 2030 Demand

19.2%



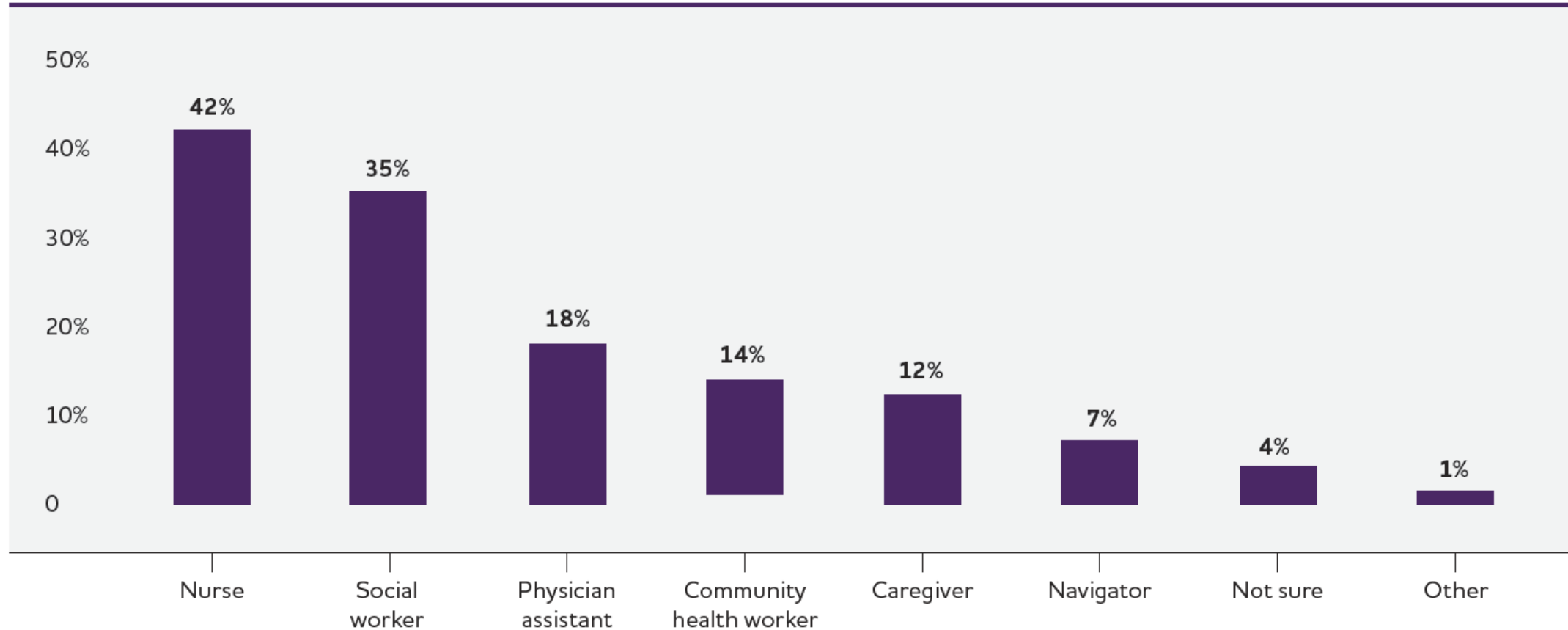
Difficulties and Stressors Dementia Caregivers Experience



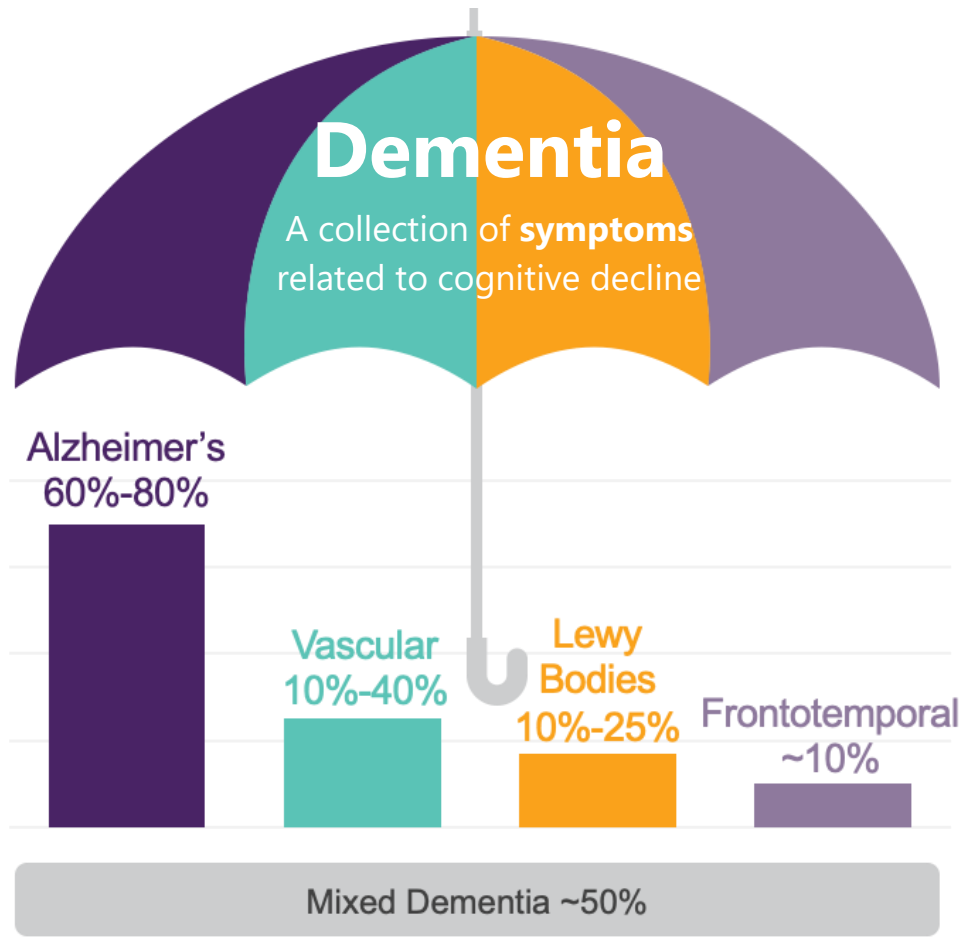
*Percentages of bars may not total the percentages above due to rounding.

Health care workers most likely to provide navigator-type support and services

Navigator's Professional Role



What is the difference between **Alzheimer's** and **dementia**?



Dementia is an *umbrella term* used to describe a range of symptoms, including changes in memory, thinking and behavior.

In order for a diagnosis of dementia to be made, symptoms must be severe enough to interfere with daily life.

There are many causes or types of dementia, including Alzheimer's, Vascular, Lewy body, and Frontotemporal dementia.



Gender and Racial Differences in Alzheimer's Prevalence



- Almost two-thirds of Americans with Alzheimer's are women.
- Older Blacks/African Americans and Hispanics/Latinos are disproportionately more likely than older non-Hispanic whites to have Alzheimer's or other dementias.
- Population-based studies for other racial/ethnic groups are needed.

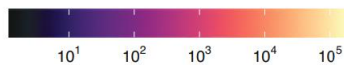
US County Level Prevalence

Estimated number of people living with
Alzheimer's

First ever county-level estimates
of the prevalence of Alzheimer's

Take home message:

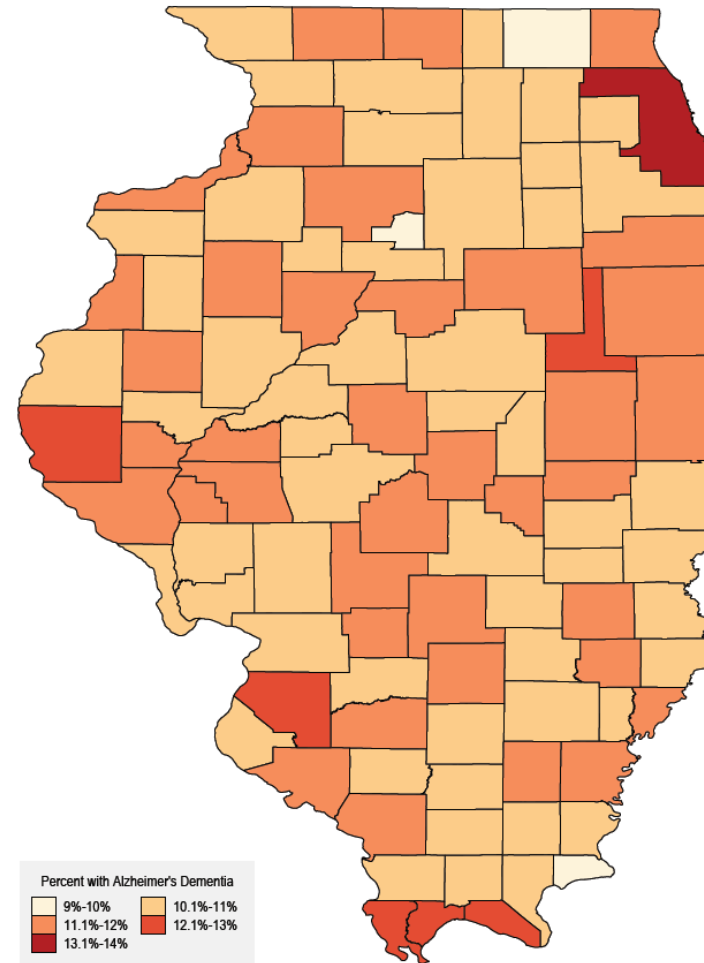
This first ever **county level prevalence** for Alzheimer's will help public health programs better understand and pinpoint **areas** of **high risk** and resource/ service/ support **need**



average and **higher percentages**
of **Black** and **Hispanic** residents

Prevalence in Illinois in older adults 65 and older

Alzheimer's Dementia in Illinois (Age 65+)



Based on data from: Dhana et al., Alzheimer's & Dementia, 2023



The Progression of Alzheimer's is Slow and Burdensome

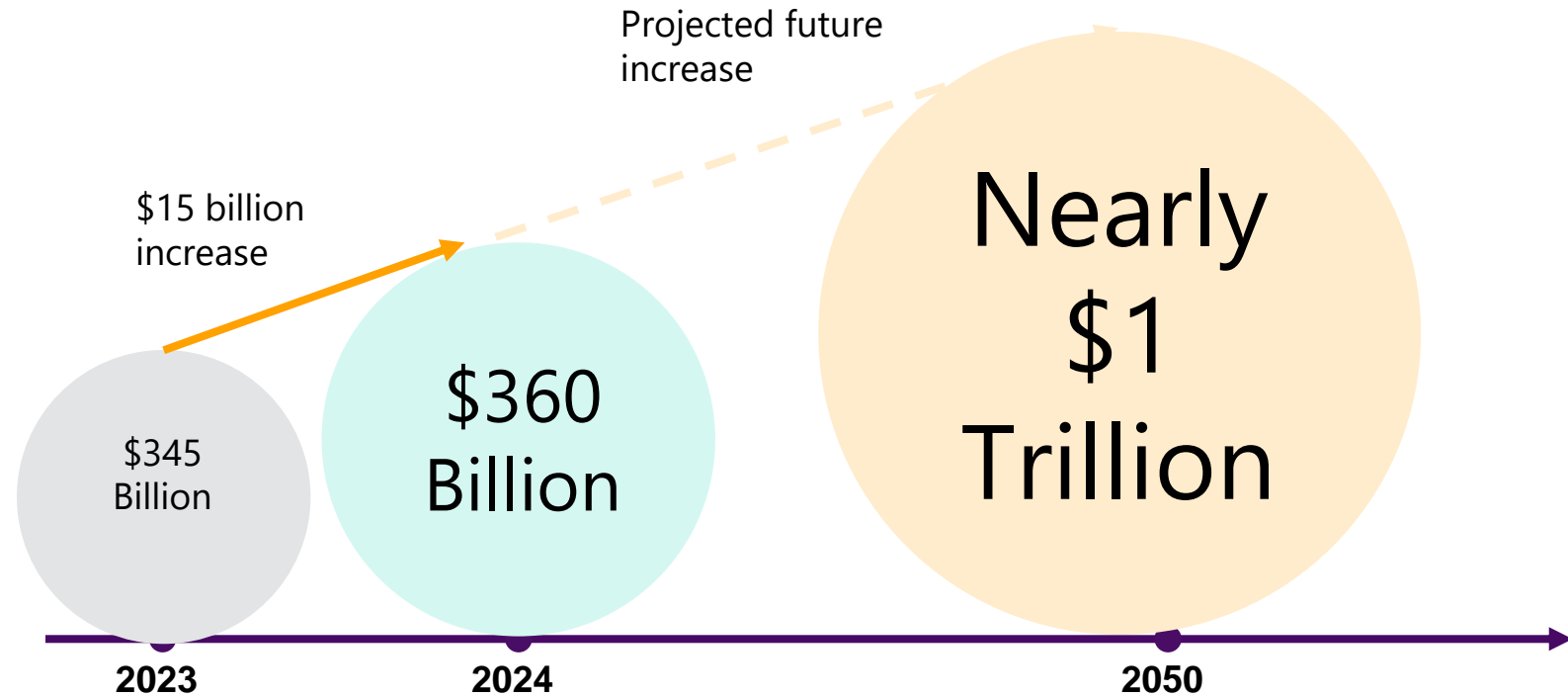
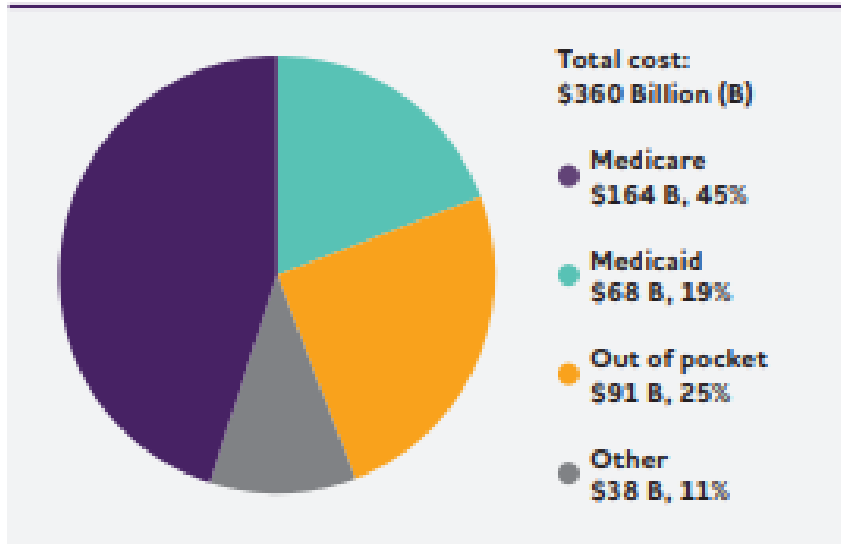


- Alzheimer's disease begins 20 years or more before the onset of symptoms.
- People age 65+ survive an average of **four to eight years** after a diagnosis, yet some live as long as **20 years**.
- At age 80, approximately 75% of people with Alzheimer's dementia **live in a nursing home** compared with only 4% of the general population age 80.
- The long duration of the disease **contributes significantly to the public health impact** of Alzheimer's.



Dementia is One of the Costliest Conditions to Society and the U.S. Economy

Distribution of Aggregate Costs of Care by Payment
Source for Americans Age 65 and Older with Alzheimer's or Other Dementias, 2024*



Workforce

More than 1 million additional direct care workers will be needed between 2021 and 2031 - more new workers than in any other single occupation in the United States.





Direct Care Workforce Shortages Remain Significant

- Direct care workers **play a vital role** in caring for people living with dementia in institutional and community settings.
- Between 2012 and 2022, direct care workers **increased from 3.2 million to 4.8 million**.
- Twenty-one states expect to see a **30% to 40% increase** in this workforce, while two states (Arizona and Nevada) are expected to increase **more than 50%**.
 - Job growth reflects preference for “aging in place” and public policies expanding access to home and community-based services.
- **Turnover rates remain high** — estimated at **77%** annually for direct care workers and **99%** for nursing assistants in nursing homes.



Lack of Dementia Care Specialists

- **55% of PCPs** caring for people living with Alzheimer's report **there are not enough dementia care specialists** in their communities.
 - Greater shortage in smaller cities and rural communities
- **20 states** have been termed "**dementia neurology deserts.**"
- **12 states** will need to increase the number of practicing geriatricians at least **five-fold** to care for those projected to have Alzheimer's dementia in 2050.

What We Learned...

- There are currently **6.9 MILLION** Americans 65+ living with Alzheimer's — a number expected to reach nearly 13 million by 2050.
- Total cost of care continues to be unsustainable, reaching **\$360 billion** — \$15 billion higher than a year ago.
- Deaths from Alzheimer's have **increased significantly** during the past two decades.
- The dementia care workforce, including dementia care specialists and direct care workers, **is not keeping pace** to meet future demands.

The Alzheimer's Association's Charge

Mission:

The Alzheimer's Association leads the way to **end Alzheimer's and all other dementia** — by accelerating global research, driving risk reduction and early detection, and maximizing quality care and support.

Strategic goals



Providing and enhancing
care and support.



Accelerating
research.



Increasing concern
and awareness.



Strengthening diversity,
equity and inclusion.



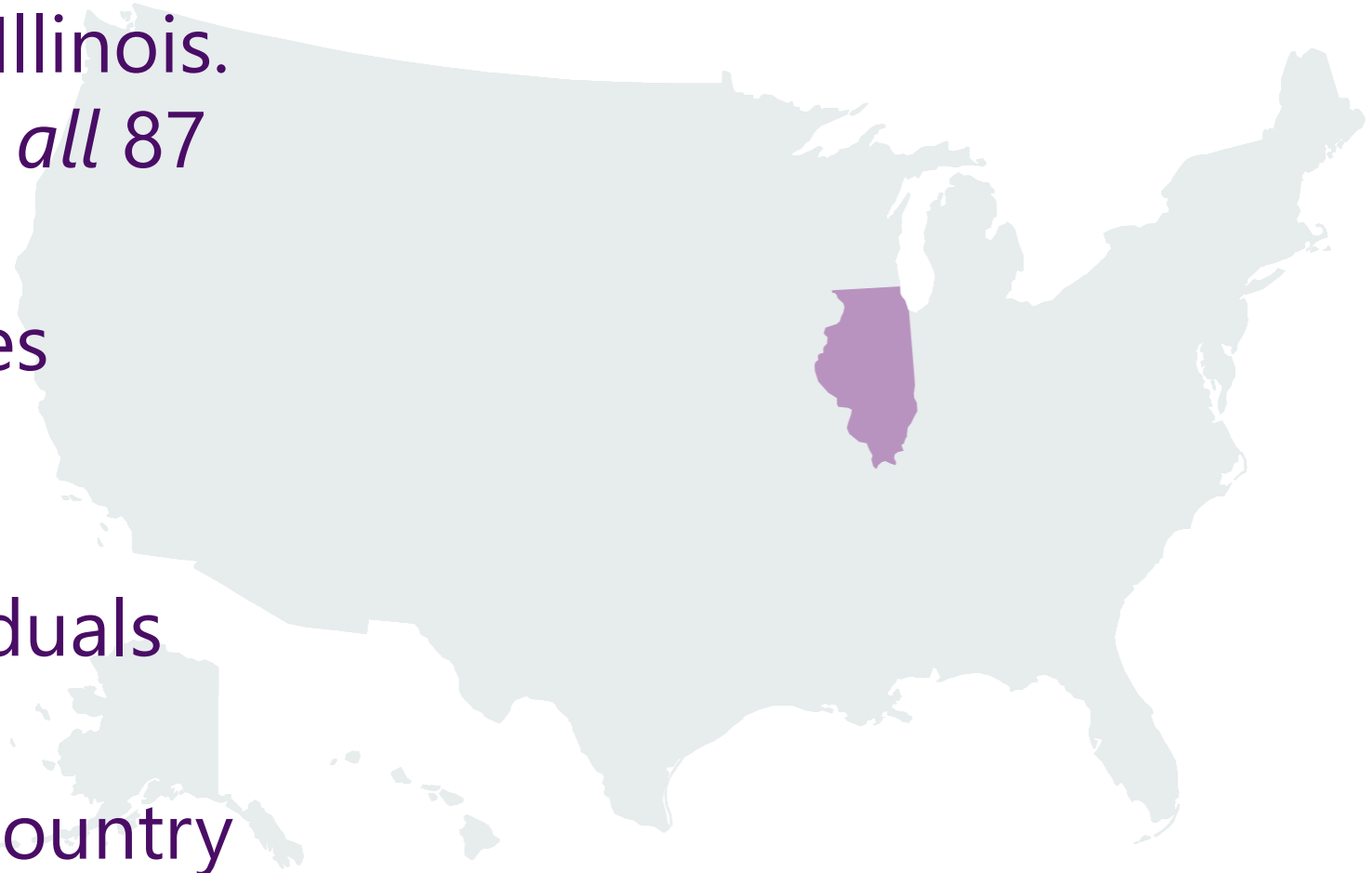
Advancing public
policy.



Increasing
revenue.

About the Illinois Chapter

- There are 8 points of service throughout the state of Illinois.
- Our teams are mobile in *all* 87 counties.
- The Illinois chapter serves nearly 1 million people affected by Alzheimer's, including 250,600 individuals living with the disease.
- 70 Chapters across the country

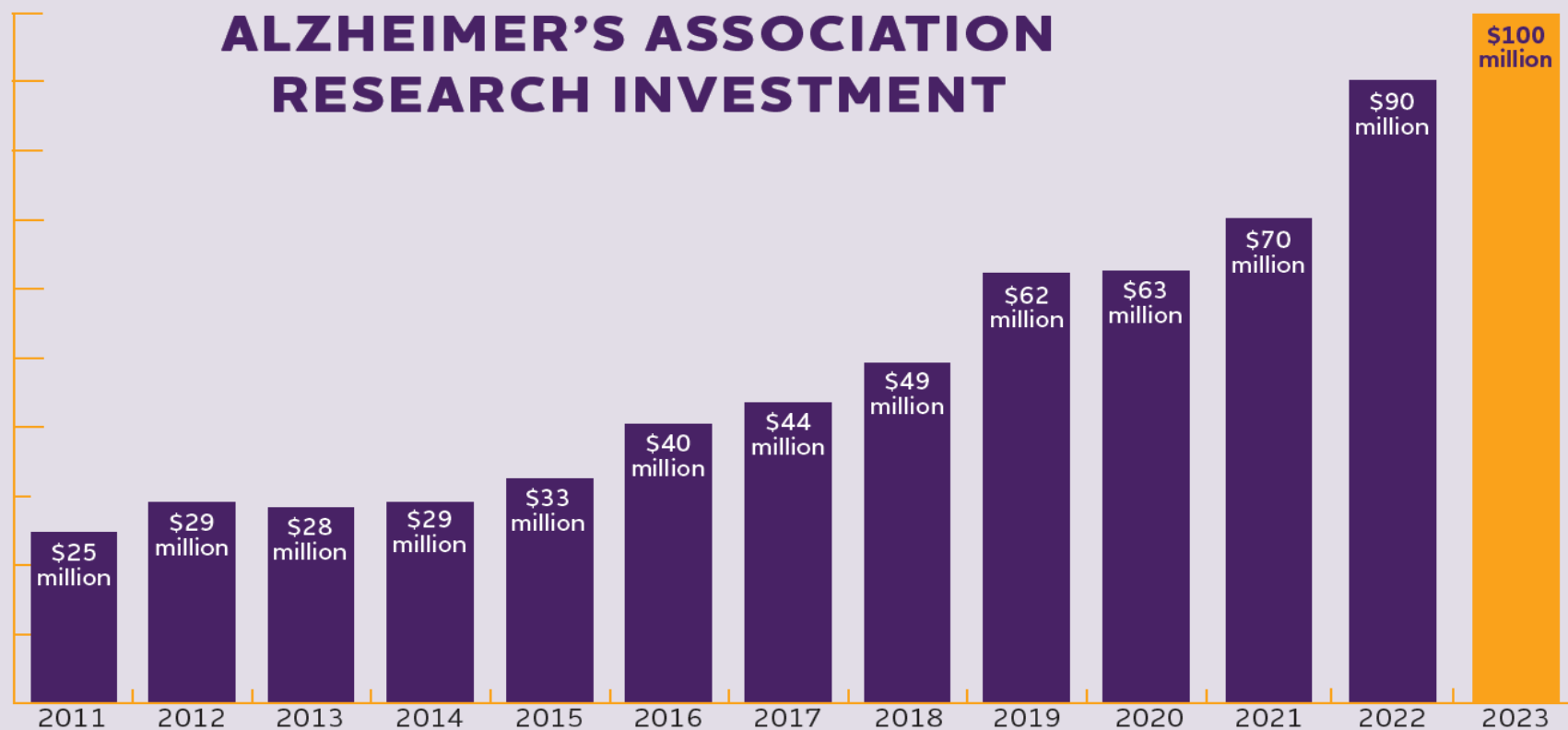


Latest in Alzheimer's and Dementia Research

The Alzheimer's Association is the largest non-profit funder of Alzheimer's research in the world.

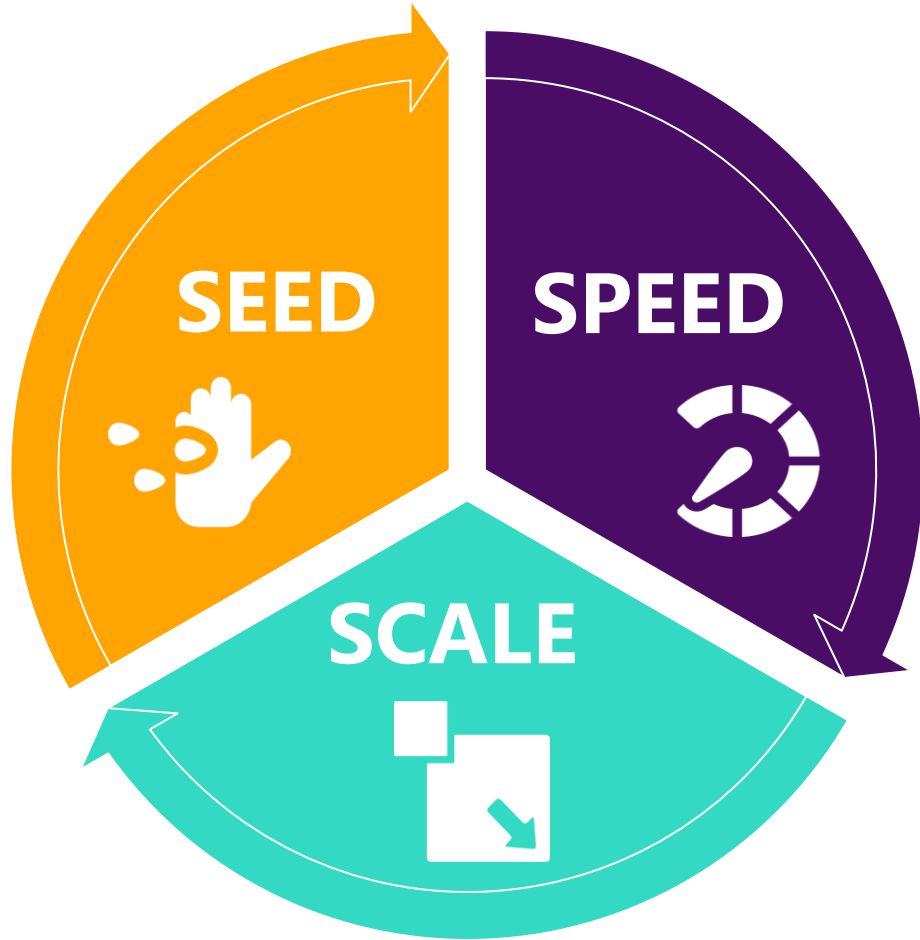


In 2023, the Alzheimer's Association® reached a milestone of \$100 million in Alzheimer's and dementia research spending. This is the largest annual investment in research-related activities in the Association's history.



Our Research Strategy

Dynamic, Durable, Multi-dimensional, Multi-faceted



**World's Largest
Nonprofit Funder of
Alzheimer's & All
Dementia Research**

\$360M
currently
active

1000+
research
projects

53
countries



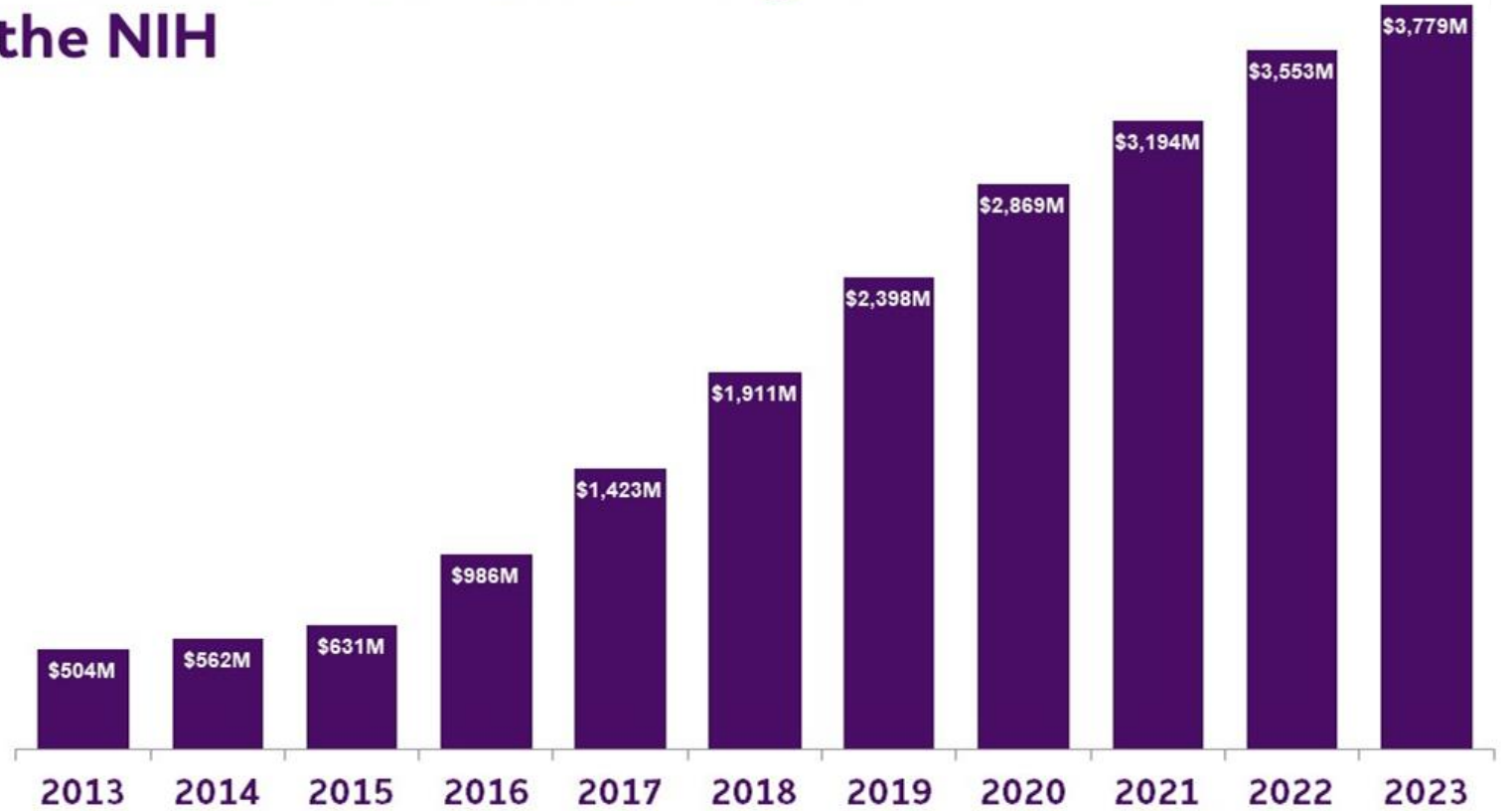
We Advocate



Alzheimer's and Related Dementia Research Funding at the NIH



Today, Alzheimer's and dementia research funding is more than \$3.7 billion annually. Since the passage of the Alzheimer's Accountability Act, Congress has increased Alzheimer's and dementia research funding more than seven-fold.



Source: NIH (<https://report.nih.gov/funding/categorical-spending>) with the 2023 figure reflecting NIH's estimated 2022 funding plus the additional increase of \$226M appropriated through the FY2023 omnibus.

In Illinois, \$6,700,000 of active funding supports 23 projects

Illinois Institute of Technology, Loyola University, Midwestern University, Northwestern University, Rush University, University of Chicago, University of Illinois at Chicago, University of Illinois at Urbana-Champaign



Hemraj B Dodiya, University of Chicago
Microbiome influences microglia and amyloidosis
in a sex-specific manner

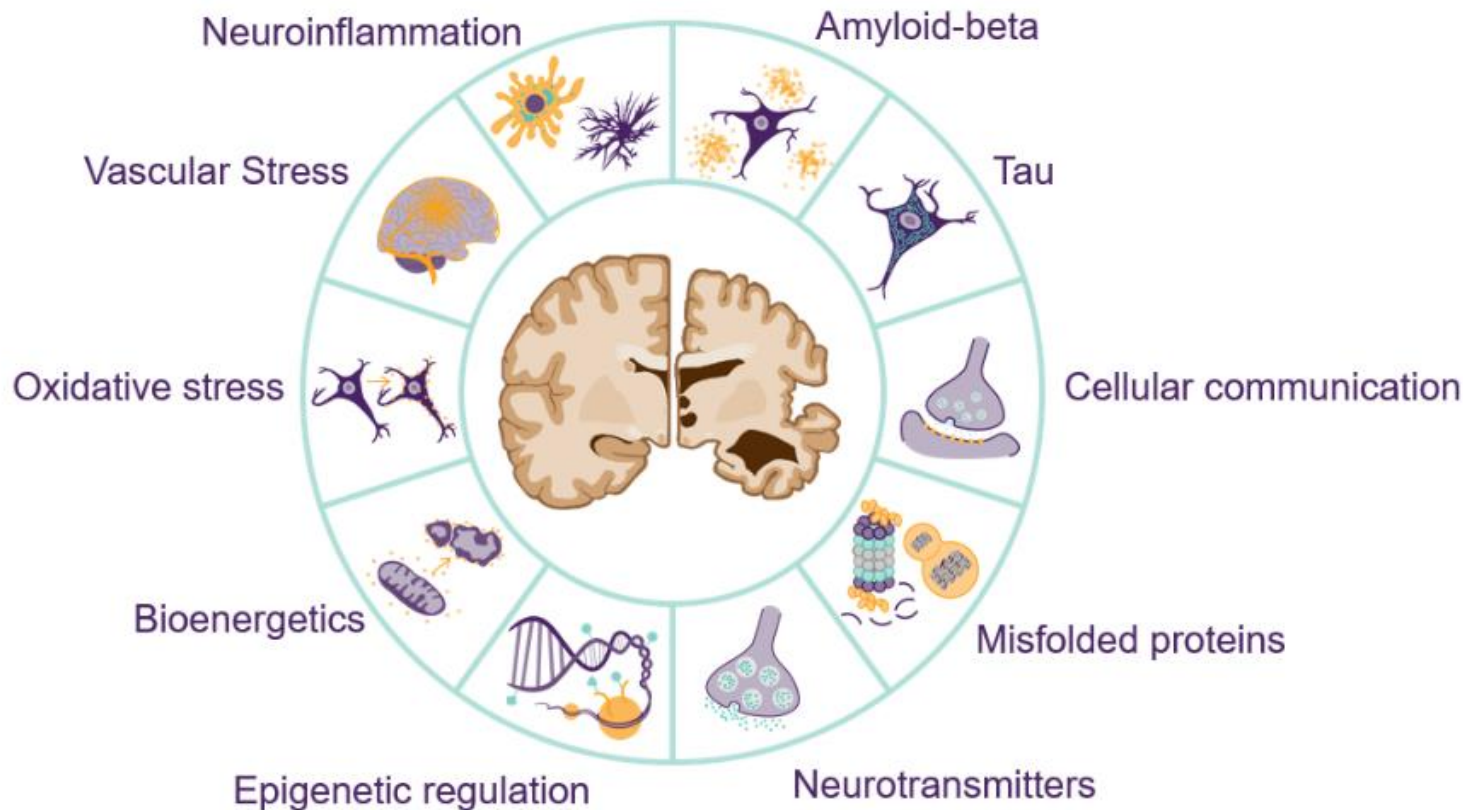


Susan Aguinaga, University of Illinois at
Urbana-Champaign
STAND UP: Sitting Time, Activity, aNd Dementia in
Underserved Populations



Alesia Prakapenka, Midwestern University
Alzheimer's disease pathogenesis in mothers: a
role for age and menopause

Alzheimer's Disease Drug Development Pipeline



“There are currently **187 trials** assessing **141 drugs** for the treatment of Alzheimer's disease

Transmitter receptors, amyloid, synaptic function, and inflammation are the most common targets of drugs”

Cummings et al 2023

A LANDMARK STUDY

**Completed
Recruitment**
March 2023



5
sites

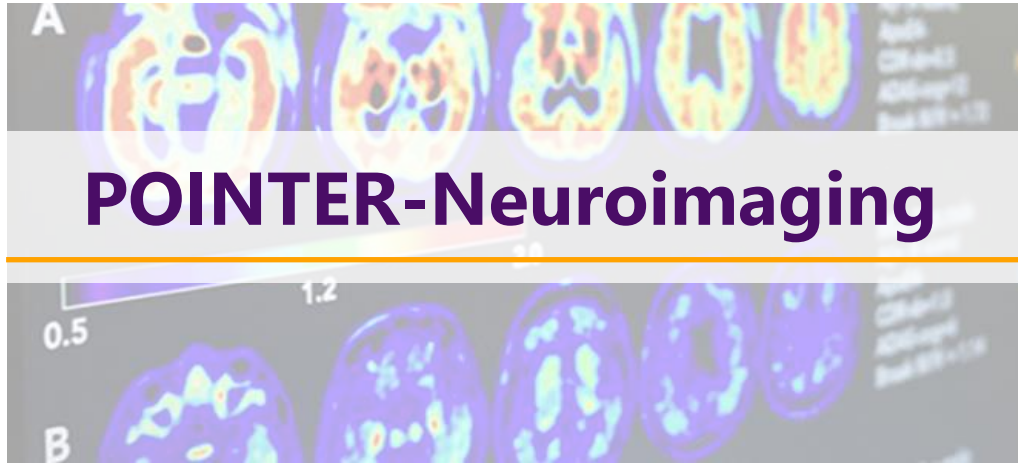
2000
participants

2
Self-Guided
or
Structured

2
Year
Intervention

U.S. POINTER is a **two-year clinical trial** to evaluate whether **lifestyle interventions** that target many risk factors that can **protect cognitive function** in older adults who are at increased risk for cognitive decline.

NIA Supported Ancillary Studies



Find opportunities to **participate** in research
through **TrialMatch**.



TrialMatch is a free, easy-to-use platform that
provides **customized lists of clinical studies**.

HEALTHY HABITS FOR YOUR BRAIN

TAKE CHARGE OF YOUR BRAIN HEALTH! THESE HEALTHY HABITS CAN LOWER THE RISK OF DEVELOPING COGNITIVE DECLINE AND POSSIBLY DEMENTIA. THIS IS TRUE EVEN FOR PEOPLE WITH A HISTORY OF DEMENTIA IN THEIR FAMILIES.



Protect your head



Challenge your mind



Stay in school



Eat right



Manage diabetes



Be smoke-free



Maintain a healthy weight



Control your blood pressure



Sleep well



Get moving



It is never too early or too late to start these healthy habits for your brain. Visit alz.org/healthyhabits to learn more!

New Alzheimer's Treatments

FDA-Approved Therapies for Alzheimer's



1906

First
Description
of Disease

Treat
cognitive symptoms



1996 - 2014

Aricept[®] (Donepezil)
Exelon[®] (Rivastigmine)
Razadyne[®] (Galantamine)

Namenda[®] (Memantine)
Namzaric[®] (Donepezil
and Memantine)

Targets
amyloid



2021

Aduhelm[®]
(Aducanumab)

2023

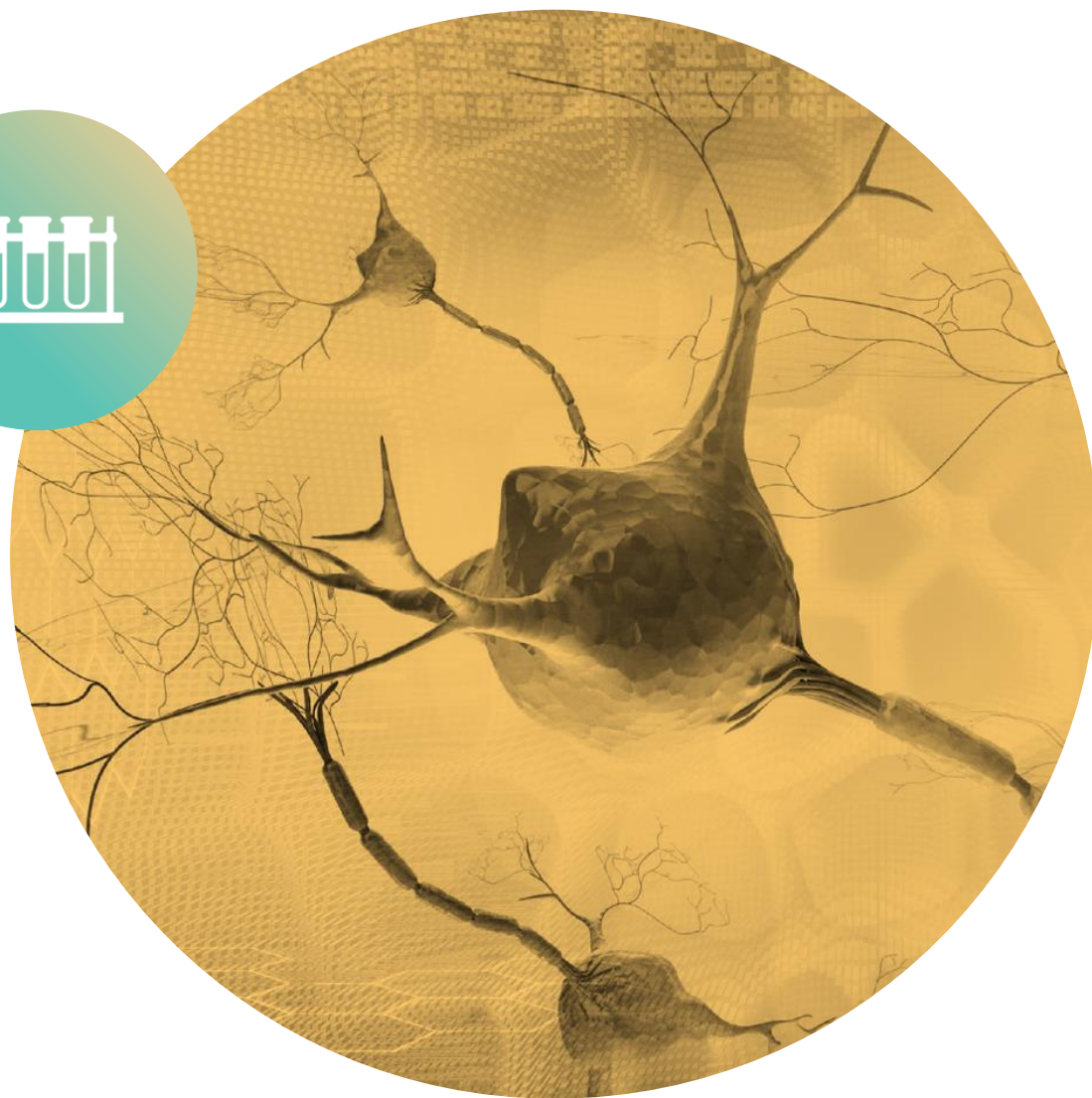
Leqembi[®]
(Lecanemab)

Alzheimer's Is a Complex Disease

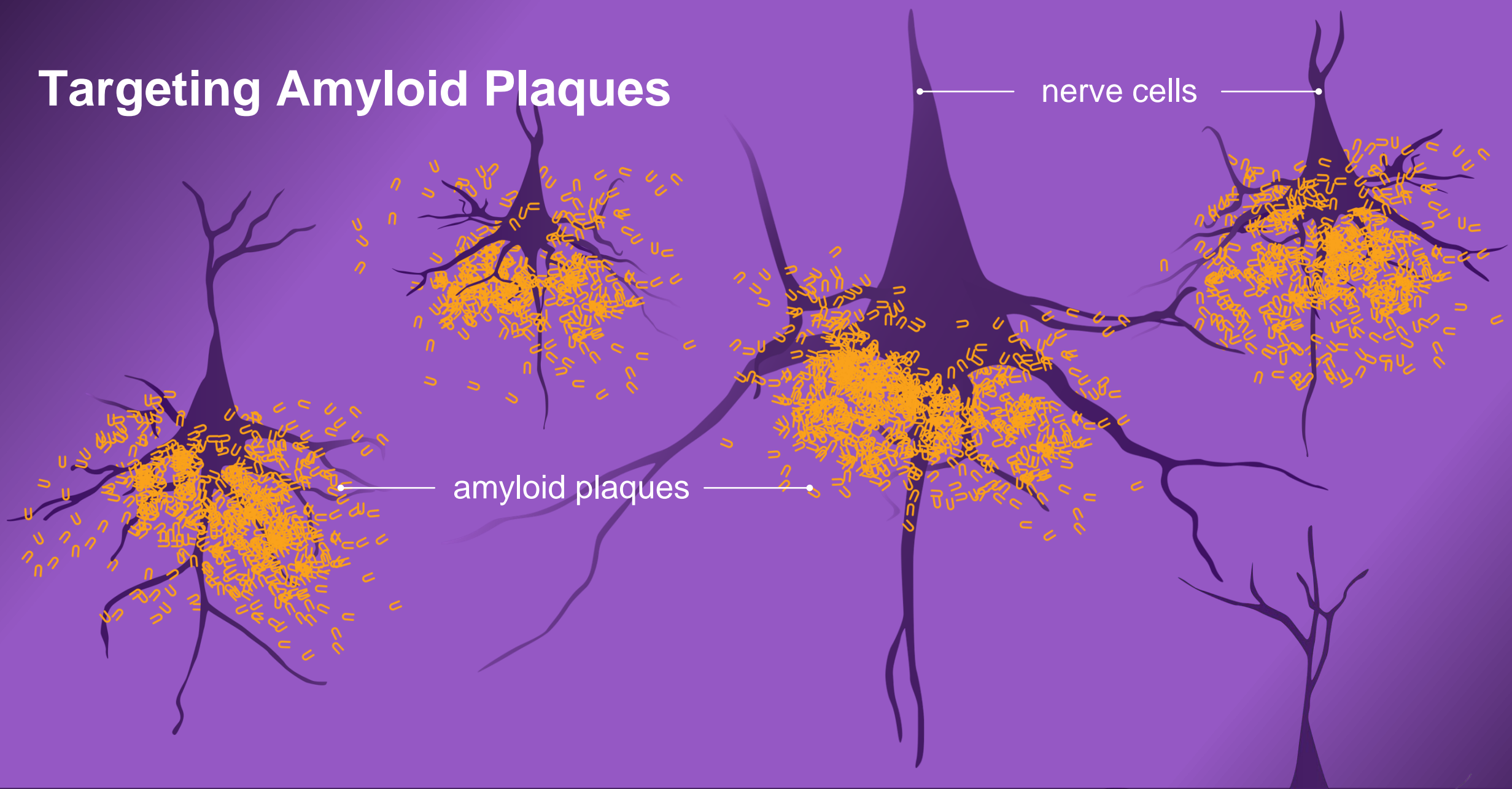
Research is targeting many potential causes of Alzheimer's disease, including the two hallmarks of the disease:

Tau neurofibrillary tangles

Beta-amyloid protein plaques



Targeting Amyloid Plaques



Anti-Amyloid Monoclonal Antibodies



First treatments to address the underlying biology of Alzheimer's disease
(Not a cure)



Targets and reduces amyloid plaques in the brains of individuals living with Alzheimer's disease

Treatment May be Appropriate for People With Both



Mild cognitive impairment (MCI) due to Alzheimer's disease or mild dementia due to Alzheimer's disease



Evidence of a buildup of amyloid plaques in the brain

Outcomes Could Include:



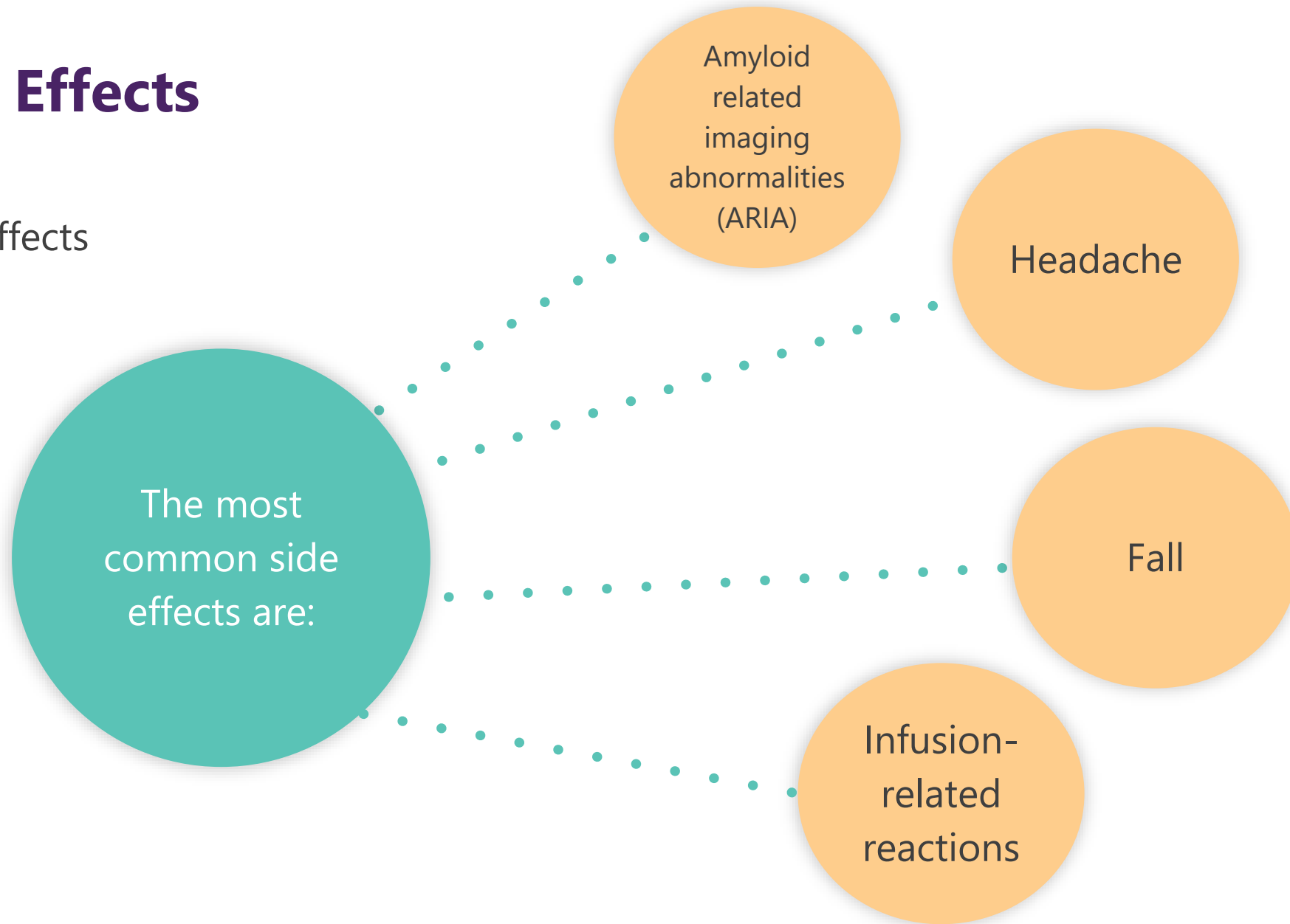
Reduction in cognitive decline
(memory and thinking)

Reduction in functional decline
(activities of daily life, sustained independence)

Individual response to treatments may vary.

Possible Side Effects

All drugs have side effects



How the Treatment is Administered



By IV infusion
(by vein into the
bloodstream)



Leqembi
every two weeks



In general, infusion
can be done at:
- Hospitals
- Infusion therapy centers

Who Is a Potential Candidate for Treatment?

Treatment may be appropriate for people with both:

1. Mild cognitive impairment (MCI) due to Alzheimer's OR mild dementia due to Alzheimer's
2. Evidence of a buildup of amyloid plaques in the brain
 - *While the FDA does not directly state which type of diagnostic tests should be used to identify buildup of amyloid plaques in the brain, tests like cerebrospinal fluid (CSF) analysis or amyloid PET imaging will be a part of the process to determine eligibility for the treatment.*

The FDA recommends genetic testing for APOE-e4 status prior to initiation of treatment to inform the risk of developing ARIA.

These treatments are not approved for other causes of dementia. There is no safety or effectiveness data on initiating treatment at earlier or later stages of Alzheimer's than were studied in the clinical trials.

How to Access Treatment

- Talk to your doctor to determine if you are a candidate for the treatment. You may be eligible if you have both:

A diagnosis of MCI due to Alzheimer's or mild dementia due to Alzheimer's

Confirmation of amyloid plaques in the brain

- You may be referred to a specialist to determine if it is an appropriate treatment for you



If You Do Not Have a Diagnosis



Learn about the 10 warning signs of Alzheimer's disease



Visit your doctor



Share your concerns



Get a diagnosis



You may be referred to a specialist to determine appropriate treatment

Coverage for Cost of Treatments

- Treatment is covered in different ways.
- The Centers for Medicare & Medicaid Services (CMS) has said they will cover Leqembi as long as an individual's physician enrolls them in a CMS-approved registry.
- Those eligible for both Medicare and Medicaid can receive coverage. There may be additional state requirements.
- The U.S. Veterans Health Administration (VHA) will also cover Leqembi for some veterans.
- Other insurance coverage will likely depend on the individual's plan.

The Alzheimer's Association will work closely with CMS, other payers, the physician community, our health systems and other community partners to work toward a smooth rollout for patients who can benefit.

Alzheimer's Association Resources



24/7 HELPLINE

1.800.272.3900

- Information and referral
- Care consultation
- Language line allows translation services to support 200+ languages



ALZ.ORG

- Information/resources for every stage, in several languages
- Free online education programs, several available in Spanish
- ALZConnected®, online community
- ALZNavigator™, create an action plan
- Alzheimer's Association & AARP Community Resource Finder, find local resources
- [alz.org/treatments](https://www.alz.org/treatments)



IN THE COMMUNITY

- Education programs, support groups and early-stage programs, available in person and virtually.
- Resources available in several languages and for LGBTQ+ communities

How You Can Help



As an Individual

- Share your personal story as an advocate.
- Help your neighbors by providing education or a support group.
- Get involved in clinical trials or a research study.
- Sign up for one of our fundraising programs.



As an Organization / Group / Business

- Start a team for Walk to End Alzheimer's or another of our fundraising programs.
- Host an educational program or community listening session.
- Share resources with your business associates, neighbors and friends.



For You and Your Community

- Share our 24/7 Helpline at 800.272.3900
- Get more information and resources at www.alz.org
- Find education, support, and caregiving resources at communityresourcefinder.org



In Summary...

- **Alzheimer's Association is the global leader for Alzheimer's and dementia science**
- **Exciting time in research**
 - **New tools for detection and diagnosis**
 - **Growing diversity of therapies under investigation**
 - **New resources and strategies to promote diverse participation**
- **There is HOPE in research**





**Our Vision: A world without
Alzheimer's and all
other dementia®.**

Questions?

800.272.3900 | [alz.org](https://www.alz.org)