

# Realizing the National Plan to Address Alzheimer's Disease

Leadership Toward Treatment and Prevention

ALZHEIMER'S R ASSOCIATION®

#### Table of Contents



Public Policy's Role in Advancing Research



Understanding Molecular and Biological Factors and Causes of Alzheimer's and Other Dementia



Enabling Accurate and Timely Diagnosis



Progress Toward Effective Means of Prevention



Researcher Spotlight



Realizing Progress for Everyone



Working Towards Effective Treatments



Improving the Delivery of Care and Support

The 2011 enactment of the landmark National Alzheimer's Project Act (NAPA) (P.L. 111-375) ushered in a new phase of progress, changing the way our nation addresses Alzheimer's and all other dementia — and resulting in unprecedented progress in Alzheimer's and dementia research, care and support. In 2024, Congress renewed the nation's commitment with the unanimous passage of the NAPA Reauthorization Act (P.L. 118-92) and the Alzheimer's Accountability and Investment Act (P.L. 118-93).

Since the passage of NAPA, the Alzheimer's Association<sup>®</sup> and the Alzheimer's Impact Movement (AIM) have worked with bipartisan congressional champions to increase federal research funding more than sevenfold. In fiscal year 2025 the National Institutes of Health (NIH) investment in Alzheimer's and dementia research will be more than \$3.8 billion. During the same time, the Alzheimer's Association, academia, the pharmaceutical industry, the corporate sector and private philanthropists have stepped up. The Alzheimer's Association has expanded its international research grants program to fuel scientific progress at every stage — from identifying bold ideas to raising and investing dollars in high impact projects with the potential to change the field. In 2024 alone, the Association invested \$109 million to advance Alzheimer's and dementia research. These contributions to the most promising research have generated more than \$2 billion in additional funding during the last five years.

As a result of this increased investment, scientists have been able to work at a more rapid pace to advance basic disease knowledge, explore ways to reduce risk, uncover new biomarkers for early diagnosis and drug targeting, and develop potential treatments.

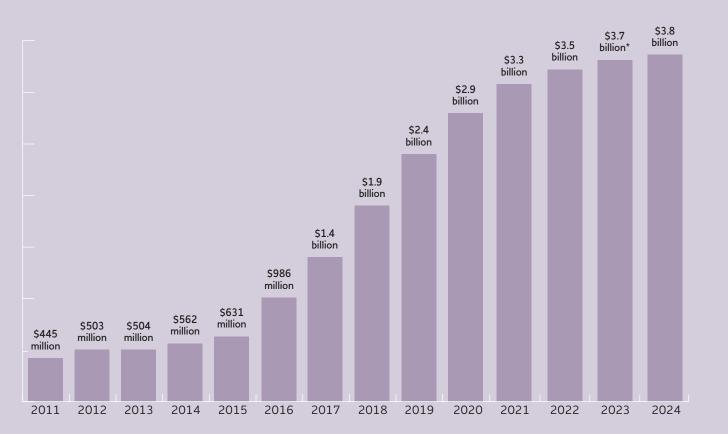
Today, several treatments which address the underlying biology of Alzheimer's disease have received approval by the Food and Drug Administration (FDA). These treatments change the course of the disease in a meaningful way for some people in the early stages. By slowing progression of the disease in the early stages of Alzheimer's, individuals will have more time to participate in daily life and live independently. Treatment discovery continues to advance for Alzheimer's disease and all other diseases that cause dementia. Future treatments will need to address the underlying biology that drives all stages and symptoms of each neurodegenerative disease, so that all individuals who are affected by Alzheimer's or another dementia have effective treatment options.

We're at the moment when our knowledge and discoveries are changing the way we fight Alzheimer's and all other dementia. Our progress must continue.



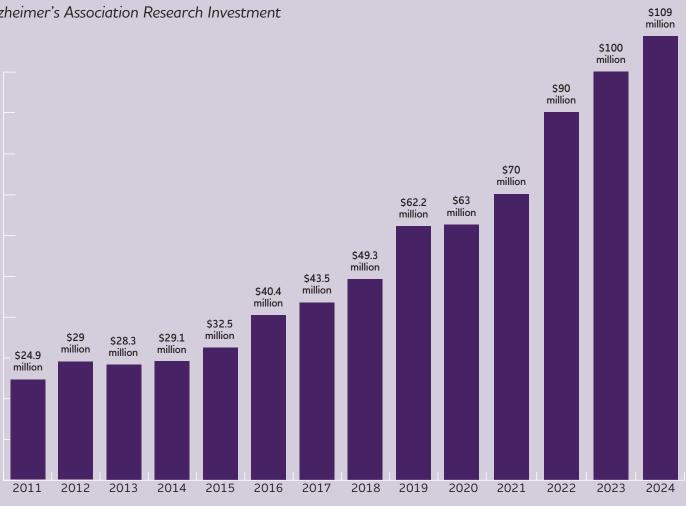
## Public Policy's Role in Advancing Research

National Institutes of Health Alzheimer's & Dementia Research Funding



Beginning in FY15, the NIH combined Alzheimer's and other dementia funding into one category. Source: https://report.nih.gov/funding/categorical-spending \*Estimated below source

Alzheimer's Association Research Investment



#### Public Policy Victories Led by the Alzheimer's Association and AIM

#### 2011

The Alzheimer's Association and AIM worked with bipartisan leaders in Congress to develop the National Alzheimer's Project Act (NAPA). This landmark legislation required the creation of a national plan to help change the trajectory of this devastating disease.

#### 2012

The Alzheimer's Association hosted more than 130 community events to secure and provide input to the federal government for the development of the National Plan to Address Alzheimer's Disease

#### 2014

To ensure swift movement toward the first goal of the national plan, the Alzheimer's Association and AIM secured support for the passage and enactment of the **Alzheimer's** Accountability Act (AAA). This legislation ensures Congress hears directly from NIH scientists — through an annual professional judgment budget - on the resources needed to meet the nation's goal.

#### 2015

Following the passage of AAA, the NIH released its first **Professional Judgment Budget** (PJB) in 2015. In its first PJB, the NIH asked Congress for a \$323 million increase in Alzheimer's and dementia research funding for the fiscal year.

#### 2022

Key provisions of the ENACT Act were included in the Fiscal Year 2023 budget, which will help increase the participation of underrepresented populations in Alzheimer's and other dementia clinical trials by expanding education and outreach to these populations, encouraging the diversity of clinical trial staff and reducing participation burden, among other priorities.

#### 2024

Working closely with bipartisan congressional champions, the Alzheimer's Association and AIM secured unanimous support and reauthorized NAPA and AAA, renewing our nation's commitment to the fight against Alzheimer's and other dementia.

## Understanding Biological and Molecular Factors and Causes of Alzheimer's and Other Dementia

Since Alzheimer's disease was first described more than 100 years ago, researchers have made progress understanding the many aspects of the disease, but major gaps in knowledge still exist. Research into the underlying biology that may cause and contribute to Alzheimer's and other diseases that cause dementia is essential to preventing and effectively treating these diseases.



Since the passage of NAPA, the Alzheimer's Association has continued its leadership commitment to Alzheimer's research, currently investing more than \$430 million in over 1,110 active projects in 56 countries spanning six continents **through its International Research Grant Program**. These projects investigate the biological underpinnings of the disease in order to accelerate pathways toward early detection, diagnosis, treatments, and quality and equitable care.



The NIH-funded Alzheimer's Disease Sequencing Project (ADSP) supports genetic research to discover long-term treatments for Alzheimer's disease and other dementia, seeking to identify genes that increase risk for Alzheimer's and those that provide protection to identify possible avenues to prevent and treat the disease. As of 2022, ADSP includes more than 535 investigators and 52 institutions from across the globe. For more than a decade, the Alzheimer's Association has worked with government agencies such as the NIH, as well as industry and other nonprofit organizations, on the **Accelerating Medicines Partnership Alzheimer's Disease (AMP-AD)**. By finding promising biological targets for therapeutics, AMP-AD is revolutionizing the model for discovering new diagnostics and treatments for Alzheimer's. Through this cross-sector partnership, AMP-AD has profoundly influenced the approach to target discovery, selection and prioritization in the Alzheimer's field, contributing to a deeper understanding of the complex biology of the disease.

Researchers have discovered that **accumulation** of a dysfunctional protein, TDP43, is common in Alzheimer's and is linked with greater disease severity. It also associated with the development of certain neurodegenerative conditions, such as amyotrophic lateral sclerosis (ALS), frontotemporal dementia and a newly characterized form of dementia ---limbic-predominant age-related TDP-43 encephalopathy neuropathological change (LATE-NC). In a small study in mice, scientists used injections of a new therapy to counteract some of the impact of TDP-43 aggregation. Recently published proposed clinical criteria will serve as an initial framework for further validation of LATE-NC diagnosis.

## **Enabling Accurate and Timely Diagnosis**



An early diagnosis provides a range of benefits for individuals living with Alzheimer's or another dementia and their families, including better treatment. However, there is no single diagnostic test that can determine if a person has one of the diseases that cause dementia; instead, health care professionals use a variety of approaches and tools to make a diagnosis. Scientists are developing simple, inexpensive diagnostic tools that can be incorporated into the diagnostic process in a variety of clinical practice settings. With the newest approved treatments being limited to individuals in the early stages of Alzheimer's disease, early and accurate detection is even more critical. Blood tests that can detect the hallmark changes of Alzheimer's disease and other diseases that cause dementia have been advancing in research settings for many years. Research shows that some blood tests are able to detect biological markers of Alzheimer's with a great degree of accuracy, and when incorporated into a thorough clinical evaluation as part of a diagnostic workup, may even increase accuracy and clinician confidence in a diagnosis. There are a variety of laboratory developed tests on the market that can be used to detect blood-based biomarkers associated with Alzheimer's, but they are not yet FDA approved. Diagnostic company Fujirebio filed its blood assay Lumipulse<sup>®</sup> G pTau 217/B-Amyloid 1-42 Plasma Ratio in-vitro **diagnostic (IVD) test** with the FDA in 2024, with an expected decision in 2025.

While the science of blood biomarkers is advancing rapidly, broad implementation in the clinic requires additional research, and guidance is needed to support clinicians so they are using the right test on the right patient at the right time as part of the diagnostic process. In collaboration with a panel of clinical and subject matter experts, the Alzheimer's Association will publish a **clinical practice guideline** in summer 2025 on the use of blood tests for Alzheimer's disease diagnosis in patients with cognitive impairment being seen in specialty care settings.

As biomarkers advance, it's critical that the clinical community stay abreast of changing best practices for diagnosis and detection of Alzheimer's. Building off of the 2011 National Institute on Aging and Alzheimer's Association (NIA-AA) clinical guidance and 2018 NIA-AA research framework, the "Revised Criteria for Diagnosis and Staging of Alzheimer's **Disease**" was published June 2024 in Alzheimer's & Dementia<sup>®</sup>: The Journal of the Alzheimer's Association, with corresponding commentaries published in Nature Medicine and Nature Aging. The revised criteria aim to improve current diagnosis, including accuracy; provide context for a biological definition that will inform the next generation of clinical trials; and lay a foundation that moves us toward personalized approaches for Alzheimer's treatment that are rooted in biology.

The Association has been a collaborator and funder of the **Alzheimer's Disease Neuroimaging Initiative (ADNI)** since its advent in 2004 but took on a new role as convener of the **Private Partner Scientific Board (PPSB)** in 2022. The current iteration of the study, ADNI4, is a five-year extension of the original study, fully funded by the NIA. ADNI's goal is to validate biomarkers for Alzheimer's disease clinical trials, and it has had a major impact on Alzheimer's research and clinical trials, yielding more than 6,200 scientific publications.

The Association continued to provide leadership and support for New IDEAS: Imaging Dementia — Evidence for Amyloid Scanning Study, alongside the American College of Radiology (ACR), the Centers for Medicare & Medicaid Services (CMS) and recruitment experts from Vanderbilt University and the University of North Carolina at Chapel Hill. The New IDEAS Study leadership team announced the decision to end new recruitment in March 2024, after considering the feasibility of the study against new structural barriers presented by CMS' retirement of the National Coverage with Evidence Development (CED) of amyloid PET scans. Black/African Americans are 2 times more likely, and Hispanic/Latinos are 1.5 times more likely to develop Alzheimer's, therefore New IDEAS focused on recruiting people from these historically underrepresented and disproportionately impacted communities.

### 26 Phase I 19 Phase II 8 Phase III DIAGNOSTIC IMAGING AGING AGENTS

REGISTERED ON CLINICALTRIALS.GOV AS OF APRIL 2025

## **Progress Toward Effective Means of Prevention**

Researchers around the globe are working to uncover ways to prevent Alzheimer's and other dementia. Identifying methods of prevention could save millions of lives and greatly reduce health care costs for families, Medicare, and Medicaid. While we have no definitive answer for prevention of dementia, research has shown us that we can take action to reduce risk of cognitive decline. In a report presented at the Alzheimer's Association International Conference<sup>®</sup> (AAIC) 2024, the Lancet Commission on Dementia

**Prevention, Intervention and Care** shared 14 lifestyle factors that play a role in dementia risk. The report says that, taken together, these factors account for around 50% of worldwide cases of dementia, which may be prevented or delayed by eliminating these risk factors. Identifying dementia risk factors can empower people to adopt healthy habits, help health care professionals and systems identify individuals at risk, and provide better health education and risk management used by policymakers to prioritize funding/support at the local and national levels.

The Alzheimer's Association **Public Health Center of Excellence on Dementia Risk Reduction** coordinates risk reduction efforts and helps public health agencies share best practices. Headed by the Alzheimer's Association, the Center launched in 2020 with funding from the Centers for Disease Control and Prevention (CDC). The Center translates the latest science on dementia risk reduction into actionable tools, materials and messaging for use by public health agencies.

As a response to a growing body of evidence showing that people can take positive steps now to protect their memory and thinking, the Association launched **10 Healthy Habits For Your Brain**. This public health campaign provides easy-to-understand brain health strategies to encourage Americans of all ages to protect themselves from Alzheimer's and dementia. In order to identify a more precise "recipe" to reduce a person's risk of cognitive decline and dementia, the Alzheimer's Association, along with partners, is leading the U.S. POINTER study. With recruitment complete, more than 2,100 people were enrolled via study sites in Illinois (Advocate Health Care, Rush University Medical Center), Texas (Baylor College of Medicine in collaboration with Kelsey Seybold Foundation), Rhode Island (Butler Hospital in collaboration with LifeSpan), California (UC Davis School of Medicine), and North Carolina (Wake Forest School of Medicine). Over 30% of participants are from historically underrepresented populations. The Association has invested over \$60 million in U.S. POINTER, and the National Institute on Aging (NIA) has made four awards expected to total up to nearly \$65 million for add-on studies. In FY24, the Association committed additional funding to engage and monitor participants for four years following their exit from the study.

In March 2024, the Alzheimer's Association. with GHR Foundation, announced a \$4 million additional commitment to support Washington University's Dominantly Inherited Alzheimer's Network Trials Unit (DIAN-TU) to launch the DIAN-TU-003 Amyloid Removal Trial (ART). One of the world's leading Alzheimer's prevention studies, the international DIAN-TU has been advancing the evaluation of experimental drugs in people living with dominantly inherited Alzheimer's disease (DIAD), a rare genetically determined form of Alzheimer's, since 2012. DIAN-ART will explore the effects of Eisai's Legembi<sup>®</sup> (lecanemab) in this unique patient population, offering key insights on Alzheimer's prevention.

Lecanemab is also being tested in an ongoing prevention trial called **AHEAD 3-45**, which comprises two concurrent phase 3 trials to test the drug in individuals as young as 55 who have evidence of brain amyloid buildup but do not yet show symptoms. The Alzheimer's Association, in collaboration with GHR Foundation, provided \$4 million in funding to support recruitment of underrepresented individuals in this trial. "Additional NIH funding has been critical in allowing me to pursue my research passions. As an early career researcher interested in Alzheimer's disease biomarkers among diverse populations, I have been able to leverage NIH funding opportunities that might not have been available without funding increases. I have been able to further investigate ethnocultural differences in biomarkers and how differences are driven by social determinants of health, seeking to ultimately use this research to further health equity."

CHARLES WINDON, MD Assistant Professor of Clinical Neurology, UCSF Memory and Aging Center

"The increase in funding for Alzheimer's disease research enabled us to establish a new Alzheimer Disease Research Center in South Texas in 2021 to bring state of the art, compassionate, comprehensive prevention, diagnosis, care and cutting-edge research to populations across South Texas. Combining NIH, foundation and philanthropic funding, we have recruited over 1,500 people into longitudinal cohorts, investigator-initiated clinical trials of promising drugs and studies on the impact of new risk factors like COVID on the risk of dementia."

SUDHA SESHADRI, MD Director, Glenn Biggs Institute for Alzheimer's and Neurodegenerative Diseases



"Increases in NIH funding for Alzheimer's disease research have made it possible to carry out large, nationwide brain imaging studies such as the Alzheimer's Disease Neuroimaging Initiative (ADNI), which is designed to help us understand how Alzheimer's disease develops, and U.S. **POINTER Imaging, a partnership with** the Alzheimer's Association, which is investigating how lifestyle changes may improve brain health. These studies have made cognitive, health and biomarker assessments available to the scientific community so that many different research questions can be examined."

SUSAN M LANDAU, PHD Neuroscience Department University of California, Berkeley

"Increased NIH funding for Alzheimer's and related dementias (AD/ADRD) research has helped me scale up my local, community-engaged research with heterogeneous, more generalizable samples to national, multi-site studies, including the BEYONDD Project. For this project, we have built a robust research infrastructure for understanding the etiology, severity, and biomarker (e.g., plasma, digital) profiles of young-onset dementia, in more generalizable samples, to better inform clinical trials and create hope for new treatments and ultimately a cure for AD/ADRD."

MONICA RIVERA MINDT, PHD, ABPP Professor of Psychology, Fordham University Professor of Neurology, Icahn School of Medicine at Mount Sinai Executive Director, The Rivera Mindt Lab

## **Realizing Progress for Everyone**

Each person's experience with Alzheimer's or another dementia is different, including what may contribute to the underlying disease, the progression, and their symptoms that would benefit from treatment or intervention. In addition, multiple treatments are needed to address different diseases that cause dementia. It is also critical that future treatments and means of prevention are effective in all populations. As science advances and evolves, it's critical to understand and address how disparities play a role in inequities in diagnosis of Alzheimer's and other dementias. In November 2024, the Alzheimer's Association brought together experts in biomarkers, epidemiology, health equity, community participatory research practices, clinical care, and more to advance discussion of the science and collaboration around identifying, understanding and addressing equity in Alzheimer's and other dementia diagnosis. Funding for this conference, titled **AAIC**<sup>®</sup> **Advancements: Exploring Equity in Diagnosis**, was made possible in part by an NIA grant.

Bringing researchers together from all corners of the world is essential for collaboration and advancing dementia research. That's why the Alzheimer's Association provides opportunities for researchers to apply for **travel fellowships** to support their registration, travel and housing to Association-led scientific conferences.

In 2024, the Alzheimer's Association launched a new open access, peer-reviewed journal, **Alzheimer's & Dementia: Behavior & Socioeconomics of Aging (A&D: BSEA)**, which examines how economic, social, and behavioral factors impact and inform health policy, interventions, and strategies of dementia care and health outcomes in aging.

The International Society to Advance Alzheimer's Research and Treatment (ISTAART) is the Alzheimer's Association's professional society. ISTAART is a diverse, global network of scientists, clinicians, and professionals who share common goals: the pursuit of knowledge, collaborations, and breakthroughs in order to find more effective ways to detect, treat, and prevent Alzheimer's and other dementias. ISTAART hosts a Diversity and Disparities Professional Interest Area (PIA) which focuses on identifying potential differences in risk reduction strategies, diagnosis and treatment effectiveness in individuals of all backgrounds. Major emphasis is placed on underlying cultural and cognitive differences and brain mechanisms. The PIA also explores culturally responsible strategies for dementia risk reduction in these populations. The PIA hosts Special Interest Groups focused on bilingualism,

literacy and language, LGBTQ+ communities and dementia research in low- and middle-income countries (LMIC). PIA participation is open to all ISTAART members.

The **ISTAART Ambassador Program** provides early career researchers with year-round professional development and networking opportunities.Through this program, Ambassadors gain exclusive access to the Association's suite of scientific conferences and receive personalized mentoring and career-development training to ensure they are equipped with the skills and knowledge to advance in this field. In 2024, 39 Ambassadors were selected representing 24 countries, 13 of whom represented low- and middle-income countries.

The Alzheimer's Association recognizes the importance of supporting research through grant funding to understand and address diversity, equity, and inclusion in Alzheimer's disease related dementias. The Supporting Research in Health Disparities, Policy and Ethics in Alzheimer's Disease and Dementia **Research** (HPE-ADRD) program aims to provide seed or synergistic funding for research with the potential to increase knowledge about Alzheimer's disease and related dementias in populations that are underrepresented in research studies. The Capacity Building in International Dementia Research (CBIDR) grant, a collaborative initiative between the Alzheimer's Association and the Global Brain Health Institute (GBHI), funds projects that showcase innovative strategies for enhancing research capacity and promise to advance dementia research. The CBIDR grant targets capacity building for scientific investigation in low- and middleincome countries where significant barriers to sustainability persist, including limited funding, infrastructure and personnel.

## Working Toward Effective Treatments



For decades, millions of Americans and their families have waited for improved and effective therapies for Alzheimer's and other dementias. Around the globe, researchers are working to find solutions for those facing the crushing realities of these relentless conditions. Unprecedented levels of funding mean scientists are exploring a wide variety of pathways that could yield potential therapies. Today, we're seeing results as new therapies addressing the underlying biology of Alzheimer's disease are now available to patients.



#### The Alzheimer's Network (ALZ-NET) is a

voluntary health care provider-enrolled patient network that collects clinical and safety data for patients treated with new FDA-approved Alzheimer's disease therapies, and tracks the long-term health outcomes associated with their use in real-world settings. ALZ-NET is currently enrolling clinical sites across the country. In October 2023, the Alzheimer's Association announced a \$5 million funding program to support the development, expansion and alignment of real-world data globally. As of November 2024, funding has been issued to sites in Australia and The Netherlands.

Through the NIH-funded **Alzheimer's Drug-Development Program (ADDP)**, researchers are developing new potential

treatments that address many different biological processes impacted in Alzheimer's and other dementias. This program has led to 20 new drug candidates that have entered phase 1 and phase 2 trials. In addition, more than 30 additional drug candidates are in preclinical development.

#### PART THE CLOUD

Part the Cloud, a movement founded by philanthropist Michaela Hoag, works in partnership with the Alzheimer's Association to fund research that accelerates findings from the laboratory through clinical trials and into possible therapies. **Part the Cloud** has provided funding to 68 projects, including some of the most promising phase 1 and phase 2 clinical trials in the field.

# 132 Phase I182 Phase II52 Phase III

#### AGENT AND DEVICE CLINICAL TRIALS

Across all trials, including diagnostic:

36.29% were industry sponsored

#### 63.71%

were collaboratively funded (academia, industry, NIH, Alzheimer's Association and others)

REGISTERED ON CLINICALTRIALS.GOV AS OF APRIL 2025

## Improving the Delivery of Care and Support



The delivery of high quality care and support for families facing Alzheimer's is critically important. Needs change swiftly based on the stage of the disease, and each situation is unique. Research and education around new measures of care and support — as well as improved outcomes — benefit individuals, families and care providers.



#### The Association's Alzheimer's and Dementia Care Project ECHO<sup>®</sup> (Extension for Community

**Healthcare Outcomes) Program** connects multidisciplinary dementia care experts with health care teams in a free continuing education series of interactive, case-based video conferencing sessions. The program, which has influenced over 500,000 lives, enables primary care providers to better understand Alzheimer's and other forms of dementia and emphasizes high-quality, person-centered care in community-based settings. Expanding the program, the Alzheimer's Association became the first ECHO Superhub for dementia, equipped to train new and existing ECHO hubs to establish their own dementia-focused programs.

The Center for Medicare & Medicaid Services (CMS) launched an initiative to improve the way dementia care is delivered for people living with Alzheimer's or other dementia. This test initiative, the Guiding an Improved Dementia Experience (GUIDE) Model, is being run through the Center for Medicare & Medicaid Innovation (CMMI). The GUIDE Model, consistent with the bipartisan Comprehensive Care for Alzheimer's Act championed by the Alzheimer's Association and AIM, works to provide access to dementia care management. The Alzheimer's Association has partnered with Rippl to power the Dementia Care Navigation System (DCNS) leveraging Rippl's proven model of on-demand dementia care and the extensive resources of the Alzheimer's Association, including its 24/7 Helpline and community education programs.



#### **201**NIH-SUPPORTED

Alzheimer's and related dementia care and caregiver intervention trials as of June 2024.

## NALZHEIMER'S° | LINC-AD

With support from the Alzheimer's Association and NIH funding, the Leveraging an Interdisciplinary Consortium to Improve Care and Outcomes for Persons Living with Alzheimer's and Dementia (LINC-AD) is working to usher in the next phase of psychosocial research that examines care for people living with dementia and their care partners. As part of LINC-AD, the Alzheimer's Association collaborated with Brain Canada Foundation to launch the Advancing Research on Care and Outcome Measurement (ARCOM) funding program, which has advanced 18 projects over two cycles to address significant gaps in care and outcome measurement. ARCOM also advances research so care providers can ensure that they are implementing evidence-based practices and achieving desired outcomes.

The Alzheimer's Association is partnering with the American Association for Men in Nursing (AAMN) to pilot a **caregiver education program focused on reaching male caregivers**. The partnership aims to raise concern and awareness of Alzheimer's and all other dementia particularly among men, and provide care and support for people impacted by dementia.

The NIH-funded **National Dementia Workforce Study** is conducting large-scale surveys that will produce new perspectives on the professional dementia care workforce. The study will create a new resource for researchers on the state of the workforce and its impact on care delivered to people living with dementia.

## ALZHEIMER'S R ASSOCIATION

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.

Our vision is a world without Alzheimer's and all other dementia<sup>®</sup>.

### 800.272.3900 | alz.org<sup>®</sup>



The Alzheimer's Impact Movement (AIM) is a separately incorporated advocacy affiliate of the Alzheimer's Association. AIM develops and advances policies to overcome Alzheimer's disease through increased investment in research, enhanced care and improved support.

## alzimpact.org