SPECIAL REPORT

American Perspectives on Early Detection of Alzheimer's Disease in the Era of Treatment

In 2017, the *Alzheimer's Disease Facts and Figures* Special Report highlighted the promise of biomarkers, stating, "… we envision a future in which Alzheimer's disease is placed in the same category as other chronic diseases, such as cardiovascular disease or diabetes, which can be readily identified with biomarkers and treated before irrevocable disability occurs."[1062] Less than a decade later, we are close to realizing that promise. Highly accurate blood-based biomarker tests for detecting Alzheimer's disease may soon be available in physicians' offices.

There have also been great strides in treatment of Alzheimer's disease. The U.S. Food and Drug Administration (FDA) has approved new treatment options that address the underlying biology and slow the decline of memory, thinking and function in a meaningful way for some people diagnosed with Alzheimer's disease in the early stages. By slowing the progression of Alzheimer's, individuals could have more time to participate in daily life and live independently — underscoring the importance of early detection and diagnosis.

Implications of Early Detection and Diagnosis for Treatment to Slow Alzheimer's Progression

People diagnosed in the earlier stages — mild cognitive impairment (MCI) or mild dementia due to Alzheimer's disease — are the only ones for whom the new anti-amyloid medications donanemab (Kisunla™) and lecanemab (Leqembi®) are approved.[1063] Both medications remove beta-amyloid to reduce cognitive and functional decline, thereby slowing the typical progression of the disease (see Treatments to Slow Alzheimer's Disease section, page 14).

Throughout this Special Report, "anti-amyloid medication" is used interchangeably with "treatments to slow progression." To be eligible for treatment to slow disease progression, an Alzheimer's diagnosis must be confirmed with tests showing elevated levels of beta-amyloid in the brain. Establishing this with diagnostic testing can be a lengthy process, often involving multiple steps and various clinicians.

People considering anti-amyloid treatments should discuss the risks and benefits of all approved therapies and other health care considerations with their physicians to develop a tailored treatment plan.[1063]

Considerations include:

- Current anti-amyloid medications are administered as infusions at specialty outpatient clinics.
- Possible side effects of anti-amyloid medications include amyloid-related imaging abnormalities (ARIA), infusion-related reactions, headaches or falls; some of these can be serious.
- Appropriate use recommendations that require magnetic resonance imaging (MRI) scans before select infusions to identify and manage ARIA.
- Incorporation of other approaches, such as medications that manage symptoms or non-drug treatments.
- Insurance coverage of the desired treatment.
- Personal preferences for interventions and care.

Early Detection and Diagnosis Could Ease Other Concerns

In addition to determining eligibility for and facilitating access to treatment, early detection and diagnosis of Alzheimer's disease could have emotional and practical benefits, such as:[526,1059,1064-1067]

- Reducing anxiety and promoting peace of mind associated with knowing one's status, even in light of a diagnosis, and the improved clarity, education and understanding that follow.
- Empowering individuals through knowledge to promote a sense of self-control and agency over decisions.
- Improving personal and financial planning in conversation with family and caregivers to allow for informed decision-making.
- Promoting healthy behaviors, such as physical activity and a nutritious diet.
- Prompting proactive safety measures, such as managing driving ability, medication adherence and home modifications.
- Creating the potential for better outcomes as a result of earlier intervention and improved quality of life.

Current State of Early Detection and Diagnosis

While not everyone experiencing cognitive decline has or will develop Alzheimer's disease, early detection and diagnosis can offer deeper insight to help navigate potential next steps, including treatment options. Today, early detection and diagnosis of Alzheimer's are closely linked. Unlike screening tests for other diseases that may pick up biological signals before outward physical symptoms appear, detecting and diagnosing Alzheimer's depends on physician assessment, often prompted by the individual's or a family member's observations of memory and thinking problems.

Clinically, early diagnosis is recognized as when an individual meets the requirements for cognitive impairment with early functional impact or mild dementia with functional impairment (Stages 3 and 4; see the Alzheimer's Disease Continuum, page 10, for more information).[53] "Functional impact" means self-reported or observed increases in the amount of time it takes to independently complete complex activities of daily living, whereas "functional impairment" describes more noticeable difficulties with everyday tasks.[53] Accurate diagnosis currently hinges on combining evidence from medical history, neurological exams, cognitive assessments and brain imaging. No one test can definitively establish that the cause of cognitive symptoms is Alzheimer's or another dementia. This diagnostic complexity currently limits early diagnosis.

Barriers to accessing health care — including logistical issues, e.g., work schedules and access to transportation, staff workforce shortages and financial constraints — present additional challenges to early detection and timely diagnosis. Although primary care physicians (PCPs) can perform standardized cognitive assessments, they may not feel equipped to administer the screening or interpret and discuss the results. Furthermore, PCPs often refer patients to specialists for additional confirmatory testing to evaluate the cause of memory issues before an official diagnosis. Patients may encounter long wait times for comprehensive testing, in part due to the scarcity of dementia specialists. Additionally, brain imaging equipment or specialized expertise to perform other diagnostic tests may not be locally available, further delaying confirmatory diagnosis.

Early Detection With Blood-Based Biomarker Tests Could Lead to More Timely Diagnosis

The limitations of current detection methods, including their complexity and accessibility challenges, highlight the need for more efficient and readily available tools. The latest promising advancement in Alzheimer's detection is blood-based biomarker tests (see the Looking to the Future: Importance of Biomarkers section, page 26). Blood tests are relatively simple to administer in a clinical setting and are commonly used to monitor health status, detect medical conditions and, in some cases, definitively diagnose a disease. Alzheimer's blood-based biomarker tests signal a shift to a more accessible method of early detection, potentially prevailing over currently expensive and/or invasive methods that are not always within reach for patients.

Blood tests for Alzheimer's disease offer potential advantages. Experts believe blood-based biomarker tests could improve the accuracy and speed of diagnosis when used as a complement to other testing, offering a viable path to earlier Alzheimer's detection and diagnosis. As of the writing of this Special Report, such tests are limited to use in

At a Glance: Alzheimer's Disease Biomarkers and Biomarker Testing

What are biomarkers?
Biomarkers are measurable biological changes that can:

- Indicate the presence or absence of disease.
- Assess the risk of developing symptoms of a disease.

What are biomarkers for Alzheimer's disease?
Biomarkers for Alzheimer's disease include the proteins beta-amyloid and phosphorylated tau (p-tau). Researchers are studying other possible biomarkers.

What biomarker tests are used to detect Alzheimer's disease?
When Alzheimer's disease is suspected, a physician can order medical tests to measure biomarkers, specifically brain imaging scans or samples of cerebrospinal fluid (CSF).

What do Alzheimer's biomarker tests look for?
Current biomarker tests primarily measure accumulation of beta-amyloid or p-tau as evidence of the hallmark brain changes of Alzheimer's disease.

What's the state of biomarker testing?
Current research is investigating novel, simple medical tests to detect biomarkers of Alzheimer's disease. Blood-based biomarker tests that detect p-tau or beta-amyloid are the furthest along and the closest to being widely available. A number of researchers are also exploring retinal biomarkers (e.g., proteins associated with retinal neurodegeneration and changes in the thickness and cell structure of the retina), cerebrovascular changes or even changes in sleep quality. Other emerging biomarker research includes examining components in saliva and the skin for signals that may indicate early biological changes in the brain.

Can biomarker tests diagnose Alzheimer's disease?
No, the presence of these biomarkers alone is not sufficient to determine an Alzheimer's diagnosis at this time.

specialty care clinics to aid in the diagnostic workup of symptomatic individuals and are still being validated in clinical trials. The Alzheimer's Association® does not recommend their use in asymptomatic individuals at this time.

Much remains to be learned about Americans' willingness to pursue testing, diagnosis and treatment to slow Alzheimer's disease progression, which was the impetus for the *2025 Alzheimer's Disease Facts and Figures* Special Report survey.

Attitudes About Early Detection and Treatment of Alzheimer's Disease

This year's Special Report offers new insights into the public's knowledge, interest and views regarding detection and treatment of Alzheimer's disease.

To better understand these topics, the Alzheimer's Association commissioned Versta Research to survey U.S. adults age 45 and older. The survey aimed to identify key knowledge gaps, measure public awareness, and uncover attitudes and beliefs about Alzheimer's across different demographic groups.

Key Findings

Attitudes about early detection and diagnosis

The vast majority of Americans believe diagnosis at the early stages of Alzheimer's disease is important.

- Nearly all (99%) Americans said it is important to diagnose Alzheimer's in the early stages of the disease.
- Most (59%) also viewed cognitive screening for Alzheimer's or other dementia as a very important aspect of preventive health care.

Most Americans would want to know if they have Alzheimer's disease when they have no symptoms or minor symptoms of cognitive decline.

- Nearly 4 in 5 Americans (79%) would want to know if they had Alzheimer's disease before experiencing symptoms or before symptoms interfere with daily activities.

Consistent with interest in early diagnosis, nearly all Americans would want to undergo a simple test, e.g., a blood-based biomarker test, to detect Alzheimer's disease if it were available.

- More than 9 in 10 Americans would definitely or probably want a simple medical test if it were available.
  - 91% would want testing before symptoms appear (presymptomatic).
  - 95% would want testing when experiencing early symptoms (postsymptomatic).
- Four in 5 Americans (80%) said they would ask for a simple medical test rather than wait for their doctor to suggest it; this was consistent across all populations surveyed.

The top reason to seek a simple medical test is the potential for earlier health care intervention.

- More than 4 in 5 Americans (83%) would want to undergo simple medical testing for Alzheimer's because it would allow for earlier treatment and care.
- Other leading reasons included that detection allows time for planning (76%), encourages action to preserve existing cognitive function (68%) and helps with understanding what is happening (67%).

Implications for future insurance coverage are the major concern related to testing that detects Alzheimer's.

- More than 2 in 5 Americans (44%) had concerns about insurance companies not covering subsequent care after testing.
- Other leading concerns about being given a simple medical test included test accuracy (41%), losing confidence in one's ability to carry out daily activities (40%) and the cost of testing (39%).

Attitudes about anti-amyloid medications

The option for treatment to slow progression elevates the importance of an early Alzheimer's diagnosis.

- Nearly 3 in 4 survey respondents (73%) said being able to take medication to slow the progression of Alzheimer's during its early stages would influence their feelings about an early diagnosis.

If diagnosed with Alzheimer's, most Americans would want medication to slow the progression of the disease and highly value information about it.

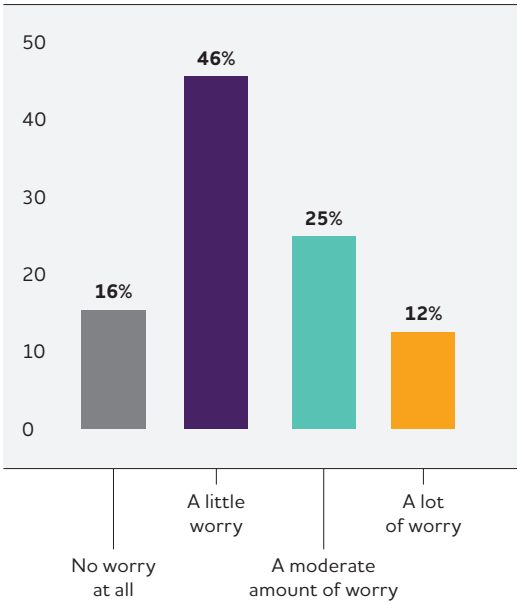
- More than 9 in 10 Americans (92%) would probably or definitely want a medication that could slow the progression of Alzheimer's disease following a diagnosis.
  - Nearly 2 in 3 Americans (64%) knew that anti-amyloid medications targeting underlying causes to slow disease progression exist.
- Information about treatments that slow the progression of the disease (72%) and information about Alzheimer's disease (69%) top the list of most valued information people want to receive following a diagnosis.
- Survey participants expressed equally strong interest in other options to manage and treat Alzheimer's disease — 94% would want medications that lessen symptoms, and 90% would want education and support for lifestyle changes.

Treatment risks and logistics do not diminish interest in anti-amyloid medication.

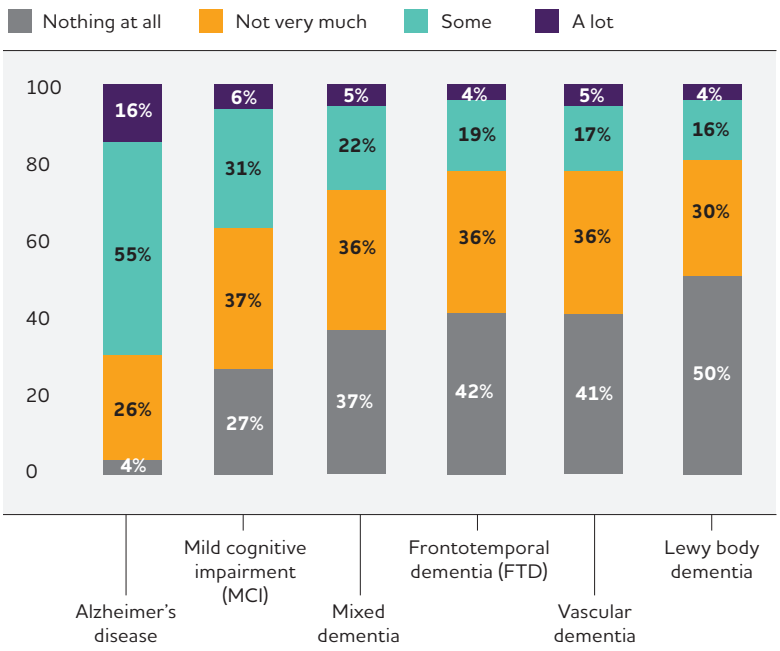
- Nearly 3 in 5 Americans (58%) would accept moderate or high levels of medication risk to slow the progression of Alzheimer's disease.
- Three in 4 Americans (74%) said visiting an outpatient clinic at least once a month for treatment would not affect their interest in an anti-amyloid medication.

FIGURE **19**

Worry About Developing Alzheimer's Disease



Knowledge of Alzheimer's Disease and Related Conditions



Attitudes about the future of Alzheimer's treatment

Americans expressed high expectations and optimism for the next 10 years, as well as a desire to contribute to progress in Alzheimer's disease treatment.

- Up to 4 in 5 Americans feel optimistic about new Alzheimer's treatments in the next decade.
  - 81% expect new treatments to ***stop*** progression.
  - 66% expect new treatments to ***prevent*** Alzheimer's disease.
  - 49% expect new treatments to ***cure*** Alzheimer's disease.
- If diagnosed with Alzheimer's disease, more than 4 in 5 Americans (83%) said they would be interested in participating in a clinical trial to evaluate a medication that would slow or cure Alzheimer's.

Survey design and research methods

A survey of 1,702 U.S. adults age 45 and older was conducted from Nov. 7-18, 2024. The sample was sourced via NORC's AmeriSpeak Panel at the University of Chicago. AmeriSpeak is a probability-based panel of all U.S. households. The full sample included oversampling of Hispanic (n=296), Black (n=309), Asian (n=282) and Native (n=166) Americans for robust analysis of subgroups. The final data was weighted by select criteria to match population totals from the U.S. Census Bureau. The survey was offered in both English and Spanish as an online or phone survey.

Survey results

Americans Are Worried About Alzheimer's Disease Despite Knowing Little About It

Worry about developing Alzheimer's disease is common. In the survey, more than 4 in 5 U.S. adults (83%) expressed some level of worry, with more than 1 in 10 (12%) expressing a lot of worry (Figure 19). Hispanic Americans and those with a family history worried most about Alzheimer's disease (see box, Perspectives of Individuals with a Family History of Alzheimer's, page 112). Hispanic Americans reported significantly higher levels of worry than all other groups surveyed, with nearly 1 in 3 (29%) saying they had a lot of worry compared with 14% of Native Americans, 12% of Asian Americans, 13% of Black Americans and 9% of White Americans.

Although worry is prevalent, understanding of both Alzheimer's and other diseases that cause dementia remains considerably limited. Fewer than 1 in 5 Americans (16%) said they knew a lot about Alzheimer's disease, and even fewer said they knew much about MCI or other diseases that cause dementia (Figure 19). MCI due to Alzheimer's disease is the symptomatic precursor to Alzheimer's dementia.

These findings echo those of the *2022 Alzheimer's Disease Facts and Figures Special Report, More Than Normal Aging: Understanding Mild Cognitive Impairment*, which surveyed American adults ages 18 and older about their awareness

of MCI.[1064] That survey found that 42% of Americans had some level of worry about developing MCI due to Alzheimer's disease, with 14% worrying "a lot."[1064] The 2022 Special Report also found that knowledge of MCI was limited.[1064]

Most U.S. Adults Want to Know Early If They Have Alzheimer's Disease

Americans overwhelmingly viewed early diagnosis of Alzheimer's disease as important (99%), with 4 in 5 (79%) indicating that early diagnosis of Alzheimer's disease is very important (Figure 20).

White Americans were less likely to say early diagnosis was very important (76%) versus Black Americans (91%), Native Americans (87%), Hispanic Americans (86%) and Asian Americans (80%).

Strong Preference for Diagnosis Before Noticeable Symptoms or When Symptoms Are Minor

Americans indicated a strong preference for diagnosis as early as possible. Half of Americans (50%) would want to know if they had Alzheimer's disease even before experiencing symptoms, and 1 in 3 (29%) would want to know at the point where they are experiencing minor symptoms (Figure 21). Fewer survey participants said that they wanted to know their diagnosis as symptoms worsened — 11% when experiencing mild symptoms, 3% when experiencing moderate symptoms and 2% when symptoms were severe. Only 5% said they would never want to know if they had Alzheimer's disease (Figure 21).

This preference for the timing of diagnosis varied among different population groups. Black Americans most wanted to know about Alzheimer's disease at the earliest stage before symptoms arise, especially when compared with White Americans (58% versus 48%, respectively). Greater percentages of Native and Hispanic Americans said they would never want to know compared with other groups (11% and 13%, respectively, versus 1% of Asian Americans, 7% of Black Americans and 4% of White Americans).

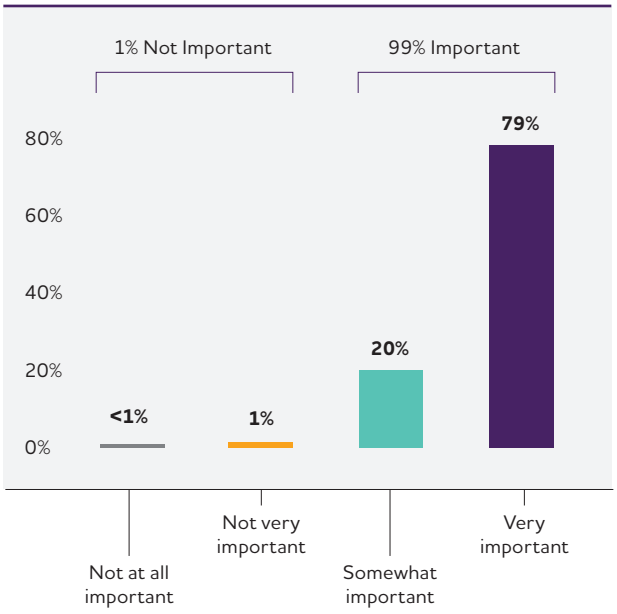
Again, these responses are consistent with the 2022 Special Report, which found that 54% of Americans ages 18 and older would want to know they had Alzheimer's disease at the MCI stage, and only 5% would never want to know their diagnosis.[1064] As with this year's findings, very few people were interested in waiting until the severe stages of the disease to be diagnosed.[1064] Taken together with current findings, the public sentiment appears to be "earlier is better" when it comes to an Alzheimer's diagnosis.

The Public Values Cognitive Assessments and Is Aware of Diagnostic Tests but Lacks Biomarker Test Knowledge

Preventive health care screenings and services — such as cholesterol or cancer screening — become a more frequent part of recommended care as one ages and are

FIGURE **20**

Perceived Importance of Early Alzheimer's Disease Diagnosis



essential tools for risk assessment and identifying diseases in their early stages. Most Americans (59%) believed cognitive screening for Alzheimer's or other dementia is very important, albeit less so than other preventive services and screenings (Figure 22). (*Note: While routine screening for Alzheimer's and other dementias is not recommended without recognizable cognitive signs and symptoms, assessment for any potential cognitive impairment is part of the Medicare Annual Wellness Visit.*[792])

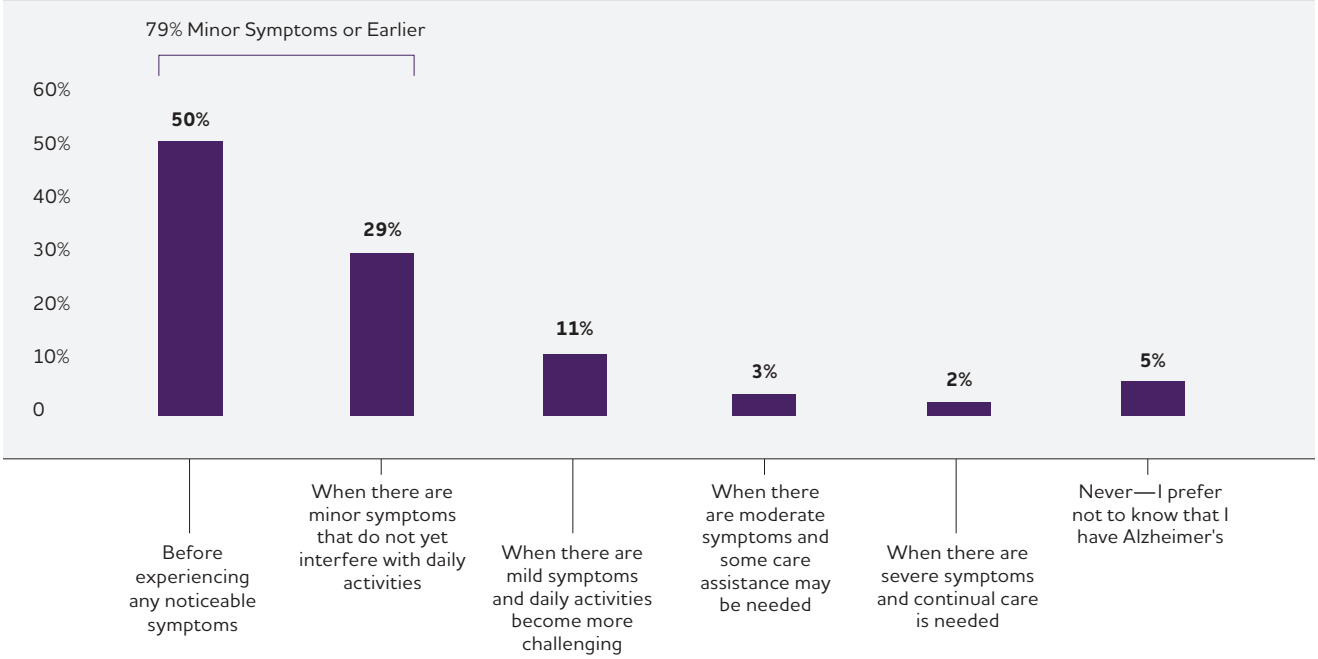
Americans reported high awareness of medical tests to aid in diagnosing Alzheimer's disease, including cognitive testing, brain imaging and neurological exams.

However, only 1 in 3 (31%) were aware of blood tests being evaluated in clinical trials and available primarily in specialty care settings to aid in the diagnostic workup of symptomatic individuals. The percentage aware of various testing methods is:

- Tests to measure memory, activities and emotional/psychological changes (70%).
- Brain imaging (67%).
- Neurological exams (65%).
- Medical history interviews (55%).
- Computerized cognitive tests (49%).
- Genetic testing (46%).
- Physical exams (43%).
- Blood tests (31%).
- Autopsy (29%).
- Cerebrospinal fluid (CSF) tests (14%).

FIGURE **21**

Stage at Which U.S. Adults Age 45+ Would Want to Know If They Had Alzheimer's Disease



Overall, survey participants reported very limited knowledge about biomarker tests to support Alzheimer's disease diagnoses, with fewer than 1 in 10 Americans (9%) feeling they knew much about them.

Nearly All Americans Would Want a Simple Medical Test for Alzheimer's if Available, and Many Would Proactively Request It

Although Americans reported little knowledge of biomarker tests, there was strong interest in them when framed as a hypothetical simple medical test. More than 9 in 10 Americans reported that they would want a simple medical test for Alzheimer's (Figure 23, left and middle panels). Ninety-one percent expressed interest in being tested before experiencing symptoms (presymptomatic; Figure 23, left panel). The appearance of symptoms did not seem to influence interest level, with only slightly more (95%) wanting a test if they noticed problems with their ability to think, understand or remember things (postsymptomatic; Figure 23, middle panel). Four in 5 Americans (80%) indicated they would ask for a simple medical test to detect Alzheimer's rather than waiting for a doctor to suggest it (Figure 23, right panel). Overall, interest in a simple medical test to detect Alzheimer's disease remained strong across all populations surveyed.

Preparedness Tops Benefits, While Loss of Insurance Coverage Is Noted as a Risk of Testing

Americans cited feeling prepared as a reason to want a simple Alzheimer's test. Preparedness encompasses allowing for earlier treatment and care, general planning for the future, encouraging action to preserve cognitive function for as long as possible, addressing safety issues in advance, and assembling medical and caregiving teams.

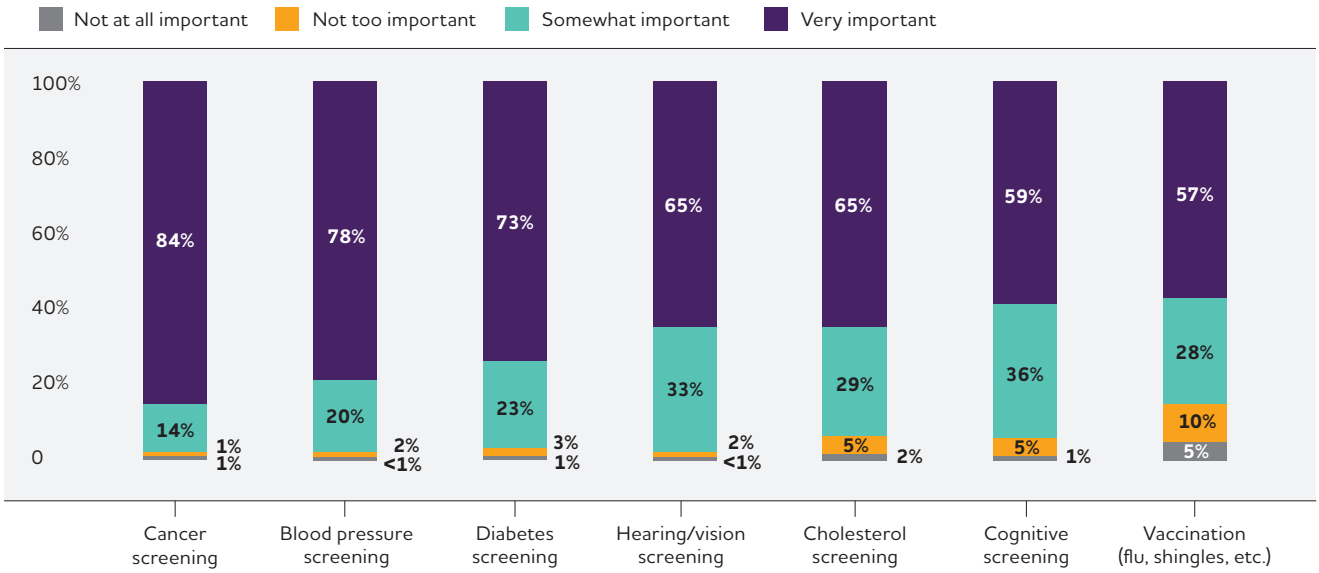
The top reason for wanting a test to detect Alzheimer's disease was that it would allow for earlier treatment and care (4 in 5 respondents, 83%). Three in 4 (76%) respondents said another reason is it would allow them to better plan for the future with their family, and 2 in 3 (68%) said it would encourage them to take actions that could help preserve their cognitive function (Figure 24, top panel).

Wanting education is also a reason for seeking testing. Americans said they would want a test because it could help them understand what is happening (67%) and encourage them to seek support and education (58%; Figure 24, top panel).

Regarding the medical benefits of simple tests for Alzheimer's disease, there was stronger than anticipated interest in testing to inform clinical trial participation, with nearly 1 in 2 respondents (48%) saying this would be a reason for them to undergo testing. More than half (55%) also indicated interest if the test could rule out other causes of memory problems (Figure 24, top panel).

FIGURE 22

Perceived Importance of Preventive Health Care Services or Screenings



Insurance was the most prominent concern about being tested. More than 2 in 5 Americans (44%) reported apprehension about how this would affect coverage of future care (Figure 24, bottom panel). Other common concerns included test accuracy (41%), losing confidence in abilities to carry out daily tasks (40%), cost of testing (39%) and being prohibited from activities such as driving (38%). Concerns related to worry, access and stigma were less common but still meaningful to some survey participants (Figure 24, bottom panel). Nearly 1 in 5 respondents (17%) had no concerns about testing. Only a few respondents believed that testing would not matter because treatment options are limited (14%) or there is no cure (13%).

In the 2022 Special Report survey, Americans age 18 and older indicated their top reasons for wanting to know early if they had Alzheimer's disease were to plan for the future, allow for earlier treatment of symptoms, take steps to preserve cognitive function and understand what was happening.[1064] Participation in clinical trials was another, but less prominent, reason for wanting an early diagnosis of Alzheimer's disease. Reasons for wanting early detection overlap with those for seeking early diagnosis. In this year's Special Report, Americans 45 and older cited these same reasons for wanting a simple medical test to detect Alzheimer's disease, supporting the trend toward early Alzheimer's diagnosis first identified in the 2022 Special Report.[1064]

Americans Are More Inclined to Want an Early Alzheimer's Diagnosis When They Have the Option of Treatment to Slow Cognitive Decline

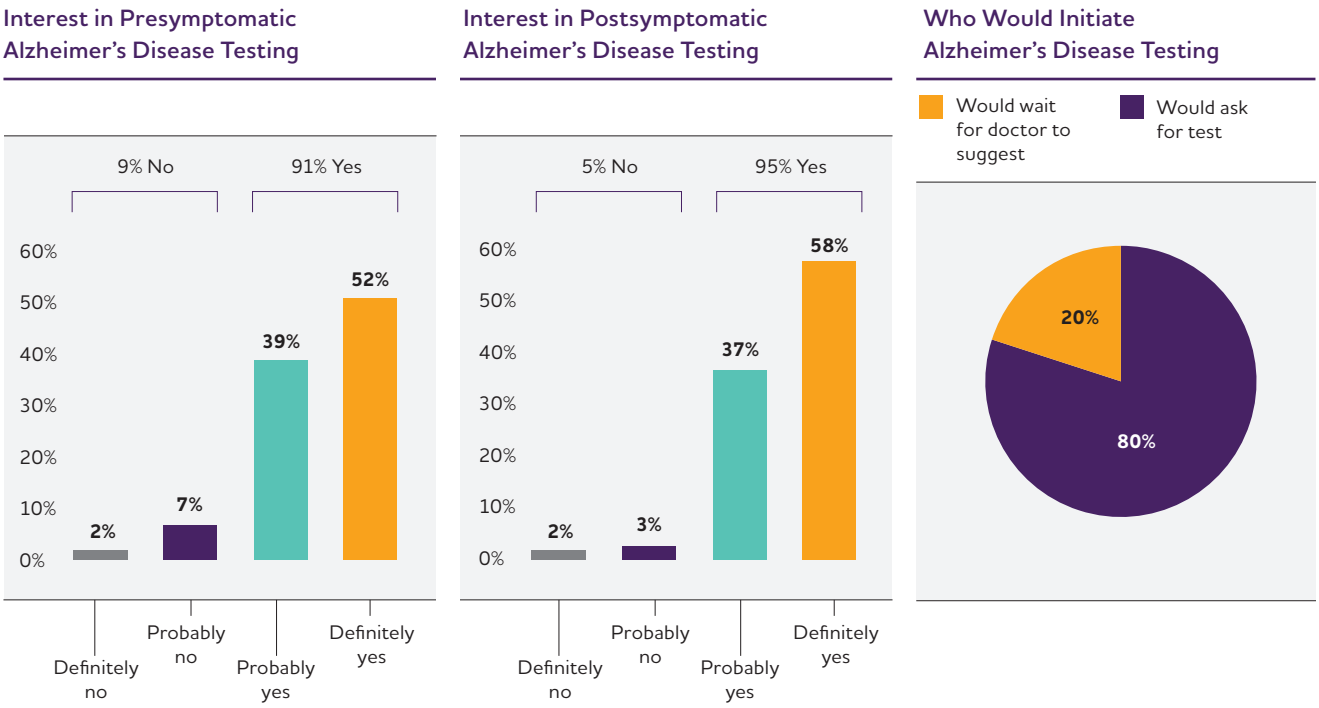
There was high awareness of current treatment options for Alzheimer's disease. Many Americans (73%) were aware of medications to lessen symptoms. Nearly 2 in 3 Americans (64%) said they knew of medications that can now slow the progression of Alzheimer's disease (anti-amyloid medications). However, aside from general awareness, familiarity with treatments that can slow the disease progression was low (15% familiar versus 85% not familiar).

A higher percentage of Hispanic Americans were not sure of options for treatment and management of Alzheimer's disease. They also reported lower awareness than other populations of all current options; for example, 1 in 2 (52%) indicated they had heard of medications that could slow Alzheimer's disease progression, and 57% were aware of medications to lessen symptoms.

Many people were also aware of alternatives to medication that could help manage Alzheimer's disease, such as community resources (56%), lifestyle changes (55%), and counseling and psychotherapy (43%).

When asked, "If you could take a medication that would slow the progression of Alzheimer's disease during the early stages of the disease, would that change your feelings about when you would want to know if you had Alzheimer's?", nearly 3 in 4 survey respondents (73%) said it would change their preference (Figure 25, left panel).

FIGURE 23



Americans Expressed Strong Interest in Anti-Amyloid Medications if Diagnosed with Alzheimer's Disease

Nine in 10 Americans (92%) surveyed said they would want to take medication to slow progression if they were diagnosed with Alzheimer's at a stage when experiencing only mild symptoms (Figure 25, right panel). Assuming they were diagnosed early, participants also expressed similarly strong interest in taking medications to lessen symptoms (94%), as well as receiving education and support for lifestyle changes (90%) (Figure 25, right panel).

Apart from expressing interest in being treated with anti-amyloid medication, Americans reported that if they were diagnosed with Alzheimer's disease, information about such treatments would be the most valuable. More broadly, they said they wanted education on the health impacts of the disease and health care planning. If diagnosed with Alzheimer's, survey respondents would most value:

- Information about treatments that slow progression (72%).
- Information about the disease (69%).
- Information about the treatments to address disease-related symptoms (62%).
- A point of contact on the care team to answer questions and connect to resources (otherwise known as a care navigator, 59%).
- Information about financial and legal resources and protections (59%).
- Information about non-medication management of symptoms (57%).
- Information about Alzheimer's clinical trials (50%).
- Information about caregiver support (49%).
- Information about local support resources (44%).

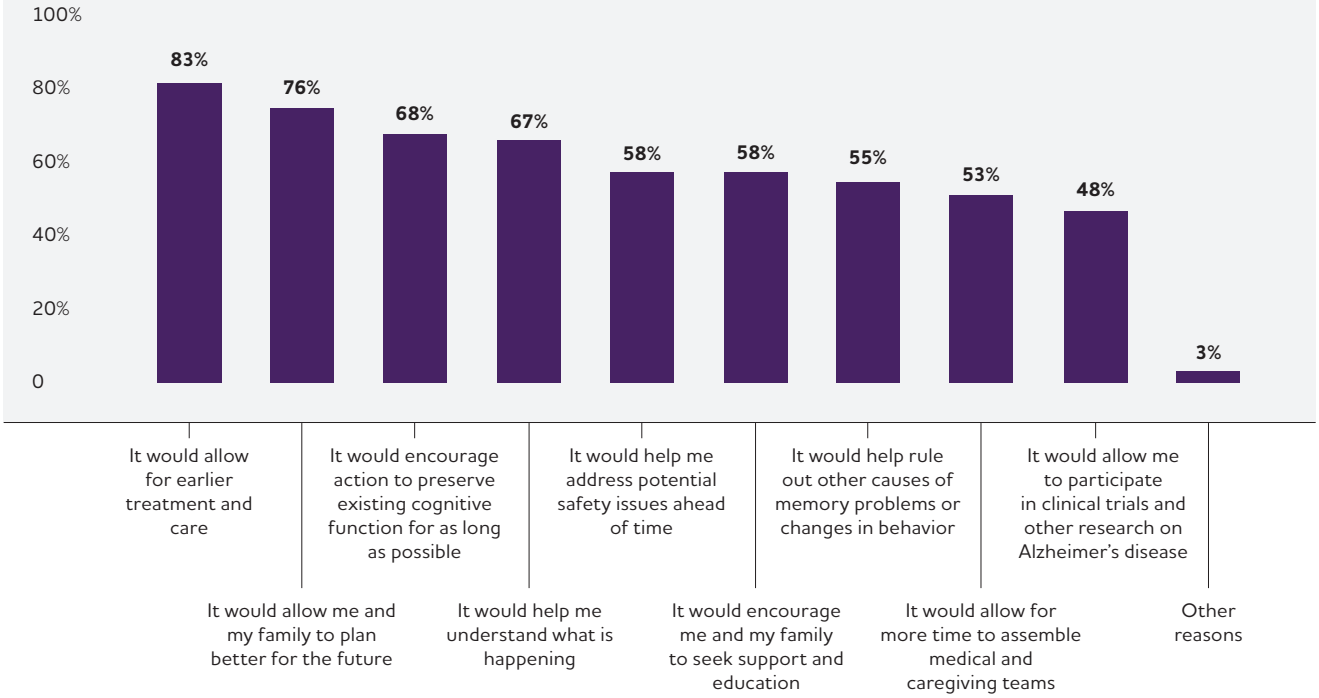
Interest in Treatment to Slow Alzheimer's Progression Is Not Diminished by Barriers to Access or Potential Risks Associated with Medication

Today's anti-amyloid treatments are administered as infusions at least once per month in a clinical setting, such as a hospital or specialty outpatient clinic. This schedule may create barriers to access for some individuals due to clinic location or distance, scheduling and transportation. These barriers had little impact on attitudes, with 3 in 4 Americans (74%) saying it would not change their interest in receiving treatment (Figure 26, top left panel). Of those who were less likely to want outpatient treatment, insurance coverage was their top concern (60%), followed by experiencing side effects at home (52%; Figure 26, top right panel).

Additionally, nearly 3 in 5 Americans (58%) would accept moderate to very high levels of medication risk to slow the progression of Alzheimer's disease in the early stages. More than 1 in 3 (36%) expressed willingness to accept moderate risk, 8% were willing to accept a high amount of risk, and 14% responded that they would be willing to do everything possible to slow progression (Figure 26, lower panel).

FIGURE 24

Reasons for Wanting a Simple Test for Alzheimer's



Concerns about Alzheimer's Testing

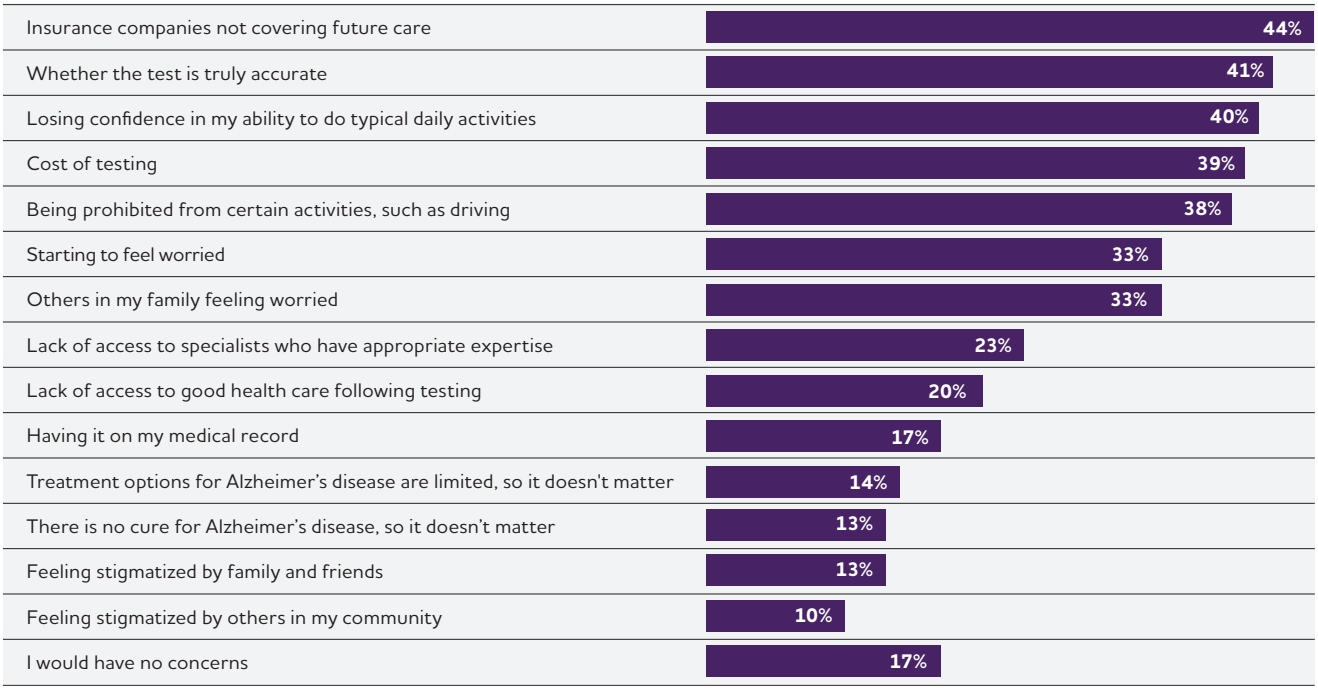
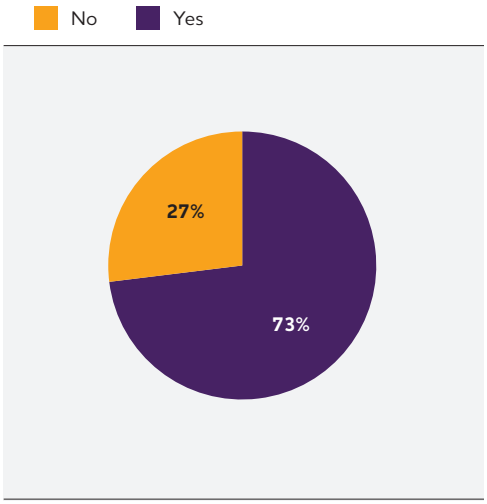
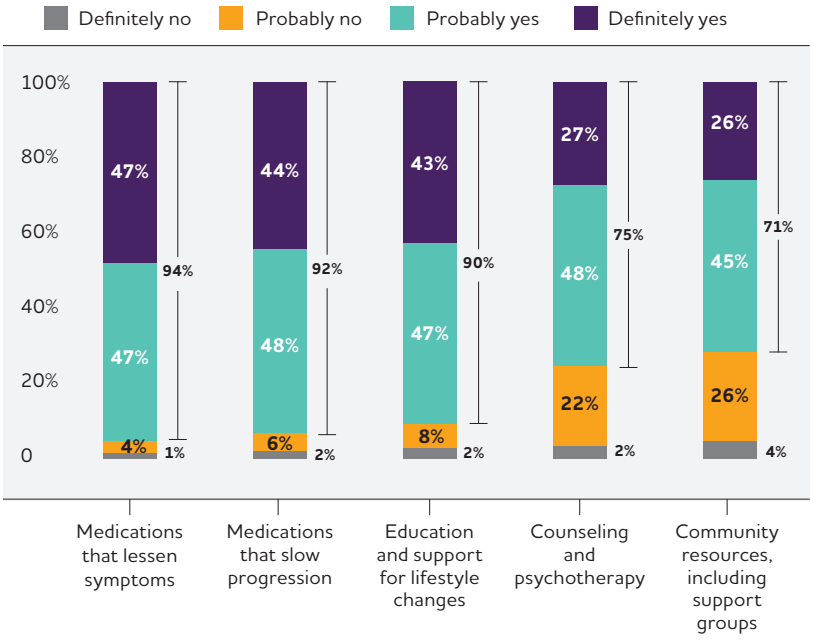


FIGURE 25

Whether Anti-Amyloid Treatment Potential Changes Preference for Earlier Diagnosis



Interest in Options for Managing and Treating Alzheimer's Disease



White Americans had somewhat higher risk tolerance, with 61% saying they would accept moderate to very high levels of risk with anti-amyloid treatment versus 48% of Asian Americans and 45% of Black Americans. Many Native and Hispanic Americans also said they would accept moderate to very high levels of risk (58% and 53%, respectively).

Americans Envision a Bright Future for Alzheimer's Treatment

Although Alzheimer's disease continues to affect the lives of many across the nation, Americans remain hopeful about the potential for new treatments and signaled strong support for research that aims to advance medical breakthroughs. More than 4 in 5 Americans (83%) expressed interest in participating in clinical trials that could help slow or cure Alzheimer's disease. Additionally, survey respondents were optimistic about treatment advances in the next 10 years:

- Four in 5 (81%) believe treatments to ***stop*** the progression of Alzheimer's disease are within reach.
- Two in 3 (66%) say treatments to ***prevent*** Alzheimer's disease are likely.
- Half (49%) think there might be a treatment to ***cure*** Alzheimer's disease.

These responses mostly align with public views on future Alzheimer's treatment reported in 2022, with a shift toward greater optimism about a future treatment to stop disease progression (60% of Americans 18 and over in 2022 versus 81% of Americans 45 and older in 2025).[1064]

White respondents were generally less optimistic about future progress in preventing and treating Alzheimer's disease. Among those surveyed, a majority of Hispanic (80%), Black (77%), Native (74%), and Asian Americans (73%) believed it likely that a treatment will be developed in the next decade to prevent Alzheimer's disease. A smaller majority of White Americans (62%) shared this belief. Many Black (65%), Asian (63%), Native (61%) and Hispanic Americans (60%) also thought that a cure was likely on the horizon. White Americans were the least hopeful, with 43% believing a cure for Alzheimer's disease was plausible in this timeframe.

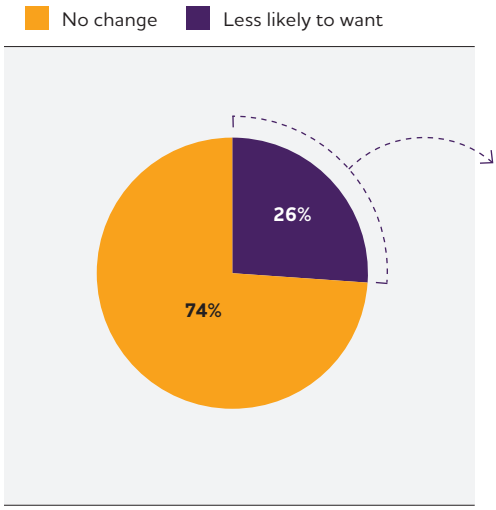
A Path Forward: Facilitating the Future of Alzheimer's Detection, Diagnosis and Treatment

The *2025 Alzheimer's Disease Facts and Figures* Special Report underscores the need to strengthen early detection and diagnosis of Alzheimer's disease for more Americans. Possible steps include:

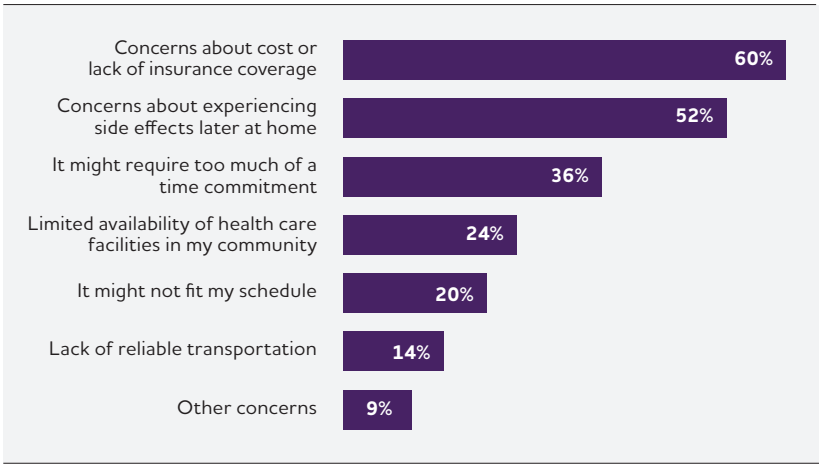
- Continuing research to discover, validate and advance biomarker testing modalities.
- Establishing clinical practice guidelines to assist with detection and diagnosis and to ensure that evaluation and treatment are grounded in actionable evidence.

FIGURE 26

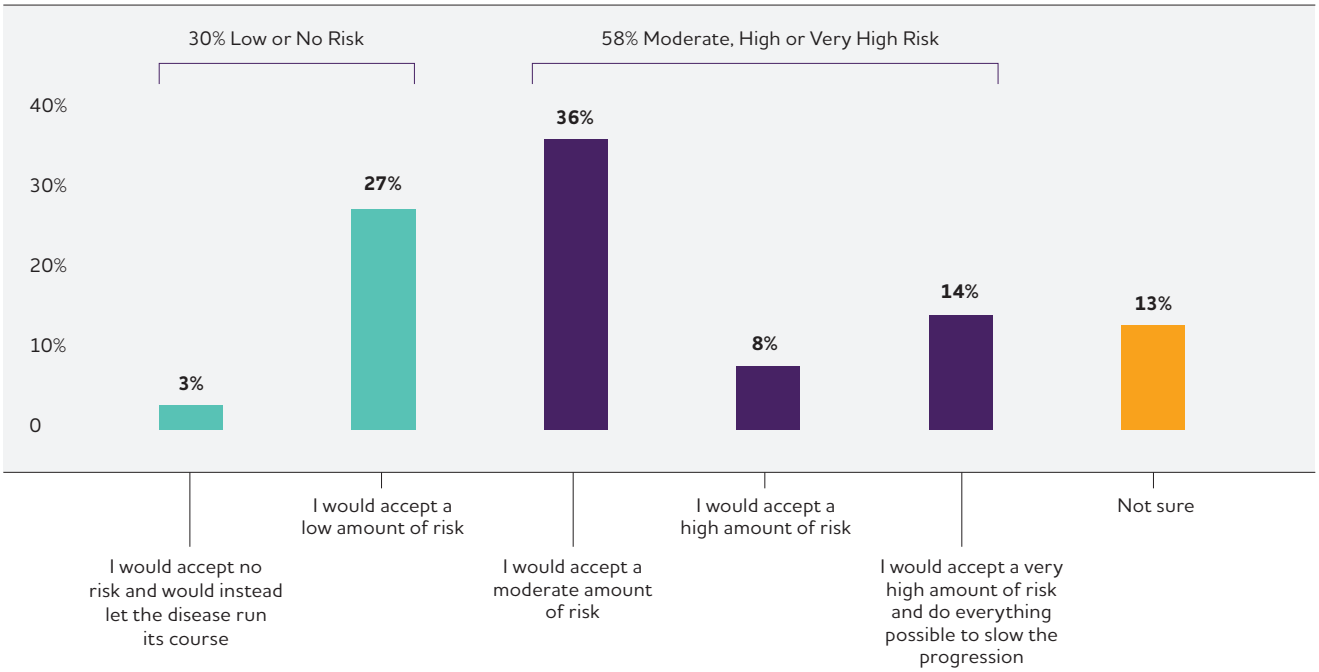
Impact of Monthly Outpatient Care on Interest in Anti-Amyloid Treatment



Reasons for Less Interest in Anti-Amyloid Treatment Requiring Monthly Outpatient Care



Acceptable Levels of Risk for Treatments that Slow the Progression of Alzheimer's Disease



- Improving conversations among patients, caregivers and clinicians about testing, diagnosis and treatment.
- Recognizing potential ethical concerns with early detection.
- Securing future access to biomarker testing through legislation and policy initiatives that aim to guarantee insurance coverage.
- Leveraging public health efforts to promote the importance of early detection and diagnosis through awareness campaigns and provider education.

Ensuring Support for Research, Development and Validation of Novel Biomarker Tests

Research advancements on clinical assessments, psychometric testing, and emerging blood-based and established biomarker tests are increasing the likelihood of being able to detect hallmarks of neurodegenerative diseases at their earliest stages.[1068]

The Alzheimer's Association has been at the forefront of these cutting-edge research efforts, investing millions annually to propel a variety of aspects of dementia research.[1069] In 2024, 15% of funded projects focused on developing tools and methods for earlier diagnosis, timelier interventions and more effective monitoring of disease progression.[1069] These efforts encompass studies that develop and expand the use of brain scans, fluid biomarkers such as blood tests, and clinical tools, as well as studies that integrate these measures to further their development, standardization and validation.

In addition, more than 10 years ago, the Alzheimer's Association established the Global Biomarker Standardization Consortium (GBSC) to convene key researchers, clinicians, industry members and regulatory and government leaders.[1068] The GBSC's objective is to achieve consensus on the best ways to standardize and validate biomarker tests — a critical part of ensuring consistent test results — for Alzheimer's and other dementia for use in global clinical practices.

In 2018, the Alzheimer's Association launched a working group under the GBSC umbrella to focus on consensus procedures for standardizing collection and processing of blood samples. This working group, the Standardization of Alzheimer's Blood Biomarkers (SABB) Program, brings together those with expertise in fluid biomarkers from academia, government and industry. The SABB published standardized procedures for handling blood samples and continues to research new and emerging biomarkers to inform the scientific and clinical communities.[1070] Furthermore, in 2024, the GBSC launched a new workgroup, the Alzheimer's Association Certified Reference Material for Plasma p-tau217, to facilitate global standardization measurements and improve diagnostic accuracy of this key biomarker for Alzheimer's disease.

Perspectives of Individuals With a Family History of Alzheimer's

In this year's survey, 1 in 4 U.S. adults reported having a biological grandparent, parent or sibling with Alzheimer's disease. This personal experience was a significant differentiator of attitudes, awareness and interest in early detection, diagnosis and treatment.

Compared with survey participants who did not report having a relative with Alzheimer's disease, those with a family history:

- Worried more about developing Alzheimer's disease themselves (38% worried a moderate amount and 21% worried a lot versus 20% and 9% for those without a family history, respectively).
- Saw cognitive screening as being more important (66% perceived it as very important versus 56% of those without a family history).
- Expressed stronger interest in blood-based biomarker testing (62% were definitely interested in presymptomatic and 67% were definitely interested in postsymptomatic testing versus 48% and 54% without a family history, respectively).
- Were somewhat more familiar with anti-amyloid treatments (20% versus 13%) and expressed the strongest interest in this treatment option (50% would definitely want treatment versus 42%).
- Expressed somewhat greater interest in participating in future clinical trials studying treatments to slow or possibly cure Alzheimer's disease (46% were very interested in future clinical trials versus 37%).

Focus Groups Mirror Survey Findings

As part of its Healthy Brain Initiative Cooperative Agreement with the Centers for Disease Control and Prevention, the Alzheimer's Association initiated focus groups to gather perceptions and attitudes about the early detection and treatment of Alzheimer's disease beyond what could be gleaned from the survey. Focus groups reiterated several of the Special Report survey findings, and views overlapped in many areas.

Most participants understood early detection to be regular health screenings and preventive care, and personal experiences through family members significantly shaped views of early detection of Alzheimer's disease.

Thoughts on Early Detection

"**When you have knowledge, you are that much more powerful.**" — American Indian participant who indicated they would want to know if they had Alzheimer's disease before noticeable symptoms.

The preference for early-stage detection (before noticeable or with only minor symptoms) was clear in the focus groups. Attitudes and opinions on the advantages were consistent with the survey responses. However, the focus groups were able to probe deeper into the disadvantages of early detection, particularly the potential emotional drawbacks.

The focus groups also explored whether knowing about medication to treat the early stages of Alzheimer's influenced the timing of diagnosis. Knowledge about new medication to slow disease progression reinforced preferences to know their diagnosis in the early stages of the disease. However, this information raised questions for many participants about medication access and affordability, including access to insurance coverage, efficacy and side effects.

Advantages

"**Even if it's not in your family, you should still be doing things to protect your brain or your health. I'm not going to do anything that's going to jeopardize my brain because I don't want to get Alzheimer's. I'm going to prevent it [in] any way possible.**" — Asian American and Pacific Islander participant

Cross-cutting findings and themes:

Planning and preparation
- Ability to get affairs in order while cognitively capable.
- Ability to express care preferences.
- Time for family to prepare and plan for care.
- Opportunity to make financial and legal arrangements.

Medical benefits
- Potential access to treatment.
- Opportunity to participate in research or clinical trials.
- Better chance to participate in care decisions.

Safety and support
- Time to build a support network.
- Ability to make living arrangements.
- Prevention of crisis situations.

Disadvantages

"**I would not want to know too early. I wouldn't want to deal with the anxiety.**" — White participant

Cross-cutting findings and themes:

Psychological impact
- Anxiety about the future.
- Stress of knowing that there is no cure.
- Potential depression or hopelessness.
- Fear about the loss of independence.

Emotional burden
- Living with diagnosis while still functioning well.
- Uncertainty about progression timeline and treatment options.
- Challenge of timing disclosure to others.

Practical challenges
- Insurance coverage.
- Limited treatment options or access to care.

Family and social concerns
- Family stress and worry.
- Changes in relationships.
- Stigma and social implications.
- Potential isolation.

Focus group methodology

L&M Policy Research was engaged to conduct 11 focus groups with 69 participants (14 White, 14 African American, 18 American Indian/Alaska Native [AI/AN], nine Asian American and Pacific Islander [AAPI], and 14 Hispanic, Spanish-speaking [HIS-SPA]).

In 2022, the Association published *Appropriate Use Recommendations for Blood Biomarkers in Alzheimer's Disease*, which provides guidance for clinicians and researchers using these tests in clinical trials, as well as priorities for future research in this area.[277]

Establishing Clinical Practice Guidelines to Bridge Scientific Advances and Clinical Care

The Alzheimer's Association is building an updated library of clinical guidance that distills the latest scientific evidence and translates it into clear and actionable recommendations for clinical practices. This process involves close collaboration with clinical and subject-matter experts, methodologists, peer organizations, early-career researchers and patient representatives. Expert panels will move from evidence to recommendations using a transparent methodology called the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach to vet the quality of evidence used to inform recommendations. Numerous reputable organizations, including the World Health Organization, the American College of Physicians and the Cochrane Collection follow the GRADE principles and format for systematic reviews and clinical guidelines.[1071]

Recognizing that specialists need more detailed and comprehensive recommendations to provide high-quality care and promote early detection and diagnosis, the Association is currently preparing guidelines on:

- Blood-based biomarker tests: Specialized health care settings (anticipated in 2025).
- Cognitive assessment tools: Primary health care settings (anticipated in 2025).
- Clinical implementation of Alzheimer's disease staging criteria and treatment (anticipated in 2026).

These guidelines are expected to be updated annually to reflect the rapidly evolving science, new evidence and practical experiences of health care professionals.

Fostering Better Conversations About Testing, Diagnosis and Treatment

Clinical practice guidelines provide the framework for high-quality dementia care, but the foundation of trust is built on communication among patients, caregivers and clinicians.

Effective communication is absolutely necessary for improving testing, diagnosis and treatment for Alzheimer's and other dementias. Primary Care Physicians (PCPs) are often on the frontlines of dementia diagnosis and care. However, the *2020 Alzheimer's Disease Facts and Figures* Special Report found that PCPs feel inadequately prepared to care for patients with Alzheimer's and other dementias, citing difficulty answering questions, making diagnoses and staying current with the latest developments in management, treatment and screening/testing.[1072] Beyond these challenges faced by PCPs, communication barriers exist between patients and clinicians. Both groups are often uncomfortable raising concerns or discussing cognitive symptoms, which can hinder crucial next steps for detection, diagnosis and treatment.

Enhancing patient-clinician dialogue is paramount not only for improving communication about next steps but for engaging patients and caregivers in the dementia care journey. To achieve this, it is essential to develop and invest in training that increases comfort with difficult conversations and prioritizes listening to patient concerns, responding with empathy and providing clear, jargon-free explanations of complex medical information.[1073] Furthermore, training should teach techniques for collaborative decision-making that integrate patient preferences and values into the discussion.[918]

Future clinical guidelines will offer recommendations on how to broach the topic of blood-based biomarkers with patients. In the meantime, there is a growing body of language to help clinicians, including PCPs and dementia specialists, convey information about diagnosis and treatment in a balanced and realistic way. In 2024, The Alzheimer's Association Clinical Meaningfulness Workgroup presented recommendations and suggested language to help health care providers communicate clearly, accurately and empathetically about newly approved anti-amyloid medications to patients diagnosed with early Alzheimer's disease and their caregivers.[58]

The workgroup's recommendations for discussing and personalizing care plans encapsulated the following core themes:

- Balanced, accurate communication.
- Eligibility and personalization.
- Informed consent and risks.
- *APOE* genetic testing.
- Ongoing monitoring and safety.
- Financial and logistical considerations.
- Support for caregivers.
- A holistic care approach.

Many of these themes are directly applicable to eventual discussions about early detection. For example, patients and caregivers will need accurate information about how tests work, the meaning of test results, and the risks and benefits associated with receiving positive test results, which may lead to early diagnosis.

The Alzheimer's Association provides a range of resources to support health systems and clinicians in these critical areas, including materials on early detection and diagnosis, management of Alzheimer's and other dementias, care planning and support services. Prioritizing communication

efforts and using available resources creates a dementia care environment where patients and caregivers feel heard, respected and empowered — ultimately resulting in higher quality of care and strengthening the patient-clinician relationship. For a complete listing of available Association resources to support health systems and clinicians, visit alz.org/professionals/health-systems-clinicians.

Examining Potential Ethical Considerations Associated with Advances in Biomarker Testing

The evolving ability to detect protein signals of Alzheimer's disease in presymptomatic individuals, particularly through blood-based biomarker tests, raises important ethical considerations.[281,1066,1074] As stated earlier in the Special Report, no guidance today recommends biomarker testing for individuals who are not experiencing cognitive symptoms. Experts must establish a clear delineation between detection, which measures indicators of potential risk, and formal diagnosis of Alzheimer's disease, which is a multifaceted process involving cognitive screening, other assessments and, ultimately, clinical judgment.

Possible ethical considerations are heightened by the anticipated FDA approval of these tests for use in primary care settings, where health care professionals may not be as familiar with the critical distinction between detection and diagnosis as specialists are, nor as equipped to accurately convey this to patients as they weigh the benefits and risks of such tests. The health care community can learn from approaches used in clinical research settings, where presymptomatic biomarker information is carefully disclosed to study participants and care partners.[281,1074] A pattern has been observed of participants in research studies sharing biomarker test results with their care partners, a practice that may well continue when test results are available in the clinic.[1066,1074]

Pre-counseling patients is an additional proactive approach to respond to possible concerns related to biomarker test results. This approach can set realistic expectations about what these tests can and cannot do, explain the possible implications of results both now and in the future, and educate patients on the distinctions between detection and diagnosis of Alzheimer's disease. Laying this groundwork for patients is vital given the increasing availability of medical test results, including blood tests and imaging, through patient portals — often without sufficient context or clinical interpretation. Premature release of results to patients before physicians are able to provide context and interpretation can lead to misinterpretation and emotional distress.

Furthermore, the potential for discrimination based on the results of biomarker testing, whether in medical settings, the workplace or the community, must be carefully considered to determine how and with whom to share results. In the clinical research setting, concerns about stigma and discrimination are cited as reasons not to share biomarker test results.[1066,1074]

This year's Special Report found that individuals are pragmatic about the use of simple medical tests, such as blood-based biomarker tests, for Alzheimer's detection. They stated that they would use the results to plan ahead, be more aware of potential symptoms and seek treatment earlier if symptoms appear.

Advancing Legislative and Policy Initiatives to Secure Insurance Coverage for Current and Future Biomarker Tests

Currently, insurance coverage for biomarker testing, which includes imaging and blood tests, has not kept pace with scientific discoveries and progress in treatment. The majority of states do not require insurance carriers to cover biomarker testing, which gives private insurance plans significant latitude in what they cover. As a result, individuals in these states may not have access to necessary biomarker testing. State Medicaid programs may elect to not cover biomarker testing for a wide variety of reasons, further challenging access. Existing health care disparities and challenges to obtaining a dementia diagnosis may be exacerbated if new biomarker testing opportunities cannot be accessed.

> **"By ensuring access to necessary biomarker testing, states can reduce the time it takes to receive a diagnosis and enable access to new disease-modifying treatments and care planning."**

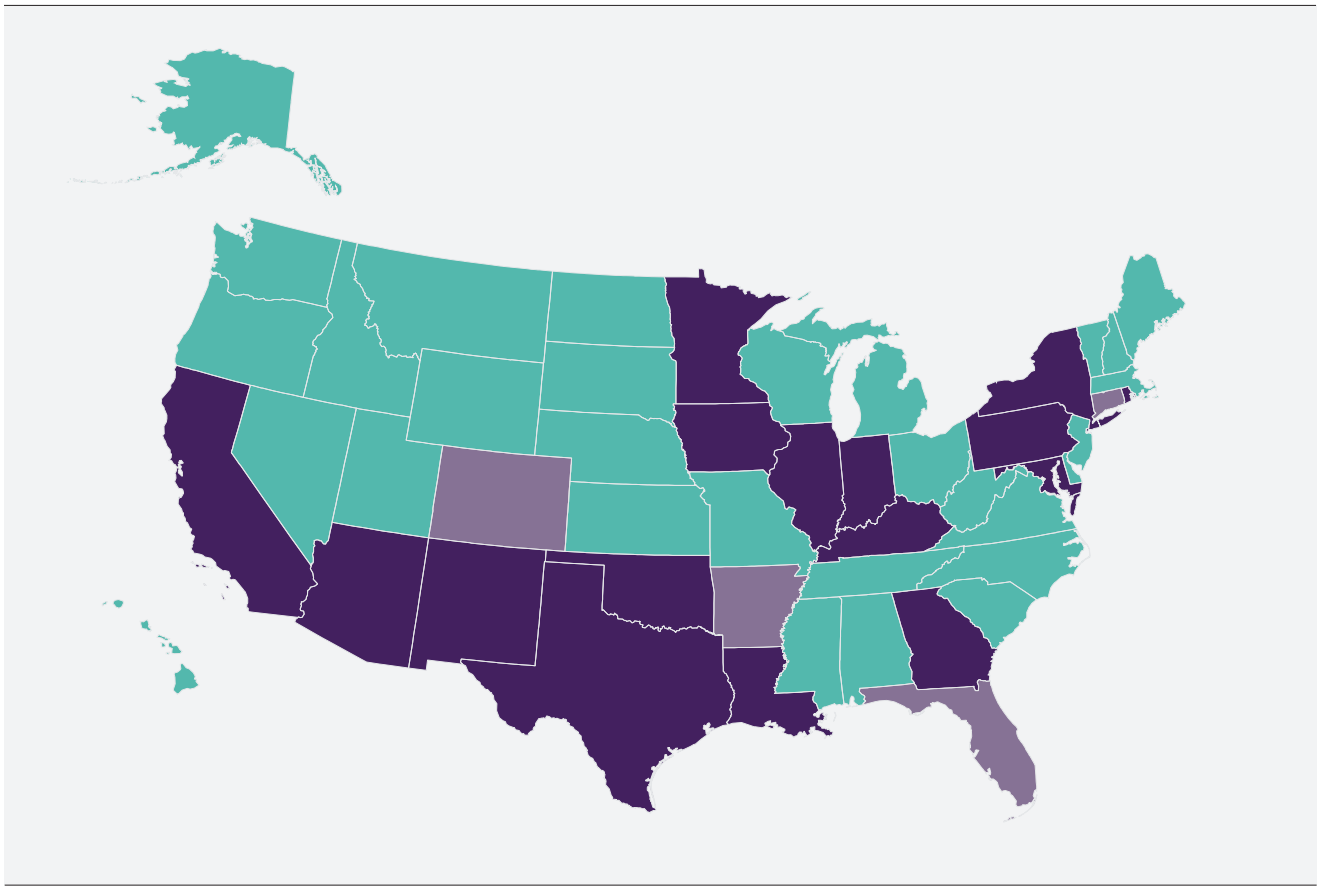
With new evidence in the field of biomarker testing and FDA consideration of blood-based amyloid biomarker testing tools expected in the near future, the Association is engaging state governments to ensure adequate coverage of biomarker tests and future access to diagnosis and treatment — reflecting the Association's commitment to these priorities.

The Alzheimer's Association and the Alzheimer's Impact Movement (AIM) are part of a national coalition of patient advocates committed to ensuring insurance coverage for comprehensive biomarker testing. National coalition members include the American Cancer Society Cancer Action Network (ACS CAN), the ALS Association and the Arthritis Foundation. AIM is working with policymakers to advance and pass state legislation requiring insurers to cover biomarker testing (Figure 27). As of January 2025:

- 16 states require coverage in both public and private insurance plans (AZ, CA, GA, IA, IL, IN, LA, KY, MD, MN, NM, NY, RI, OK, PA, TX).
- Two states require private pay only (AR, CO).
- Two states require public pay only (CT, FL).

FIGURE **27**

Successful AIM Insurance Coverage Legislation Efforts (As of January 2025)*



* AIM = Alzheimer's Impact Movement

Implementing Public Health Efforts to Promote Early Detection and Diagnosis

As more treatments become available, early detection and diagnosis of Alzheimer's disease become essential to improving the health of communities. Public health agencies play a critical role in educating the public and health care providers about the latest research, best practices and importance of early detection and diagnosis.

Alzheimer's Association initiatives with public health agencies to increase understanding emphasize education about warning signs of dementia and improve access to diagnostic services and supports. Efforts also include working to lessen stigma around discussing memory and thinking problems in communities and normalizing these conversations in health care settings to help make early detection and diagnosis more commonplace. The resulting materials and campaigns to promote early detection and diagnosis must be leveraged in every community and developed in culturally sensitive and relevant ways. The survey and focus group results from this and previous Special Reports can provide valuable insights to guide these efforts.

Beyond education, the Alzheimer's Association also collaborates with state and local public health departments, tribal health organizations, health systems and other stakeholders to establish population-based strategies covering risk reduction, early detection and diagnosis, and quality of care. These collaborative efforts are vital for creating a comprehensive and coordinated approach to addressing Alzheimer's and dementia across the life course.

Through broad, ongoing initiatives and collaborations, public health has the power to significantly lessen the burden of Alzheimer's disease on individuals, families and the nation as a whole.

Appendices

End Notes

A1. Racial and ethnic identifiers: *Facts and Figures* keeps the racial and ethnic terms used in source documents when describing study findings. When not referring to data from specific studies, adjectives such as "Black," "Hispanic" and "White" may be used (for example, Black populations and Hispanic communities).

A2. Estimated prevalence (number and proportion) of Americans age 65 and older with Alzheimer's dementia for 2025: The estimated 7.2 million individuals ages 65 years and older with Alzheimer's dementia and the estimated numbers of individuals with Alzheimer's in each age group were reported from a study that used data from the Chicago Health and Aging Project (CHAP) in combination with population projections from the U.S. Census.[293] The number, 7.2 million, is higher than estimated from previous study that also combined CHAP and U.S. Census data. This is because the more recent study used updated Census projections and incorporated information from Hispanic/Latino American individuals. The proportion of the population with Alzheimer's dementia (among people age 65 and older and by age group) is calculated using as the numerators the numbers of people with Alzheimer's dementia, as reported by the recent study in CHAP.[293] The denominators were the U.S. Census population projections for the specific age groups of interest.

A3. Differences between CHAP and HRS-HCAP estimates for Alzheimer's dementia prevalence: The number of people estimated to have any form of dementia in the U.S. in 2016 from the Health and Retirement Study's (HRS) Harmonized Cognitive Assessment Protocol (HCAP; 4.92 million) is lower than the CHAP estimate of how many people were living with Alzheimer's dementia only (6.07 million).[173] This is because of differences in dementia ascertainment between the two studies: both studies used scores on batteries of cognitive tests, but the HRS-HCAP study additionally required an informant report of functional impairment (i.e. disability). Because the more stringent threshold for dementia in HRS-HCAP may miss people with mild Alzheimer's dementia, the Association believes that the larger CHAP estimates may be a more relevant estimate of the burden of Alzheimer's dementia in the United States.

A4. Criteria for identifying people with Alzheimer's or other dementias in the Framingham Heart Study: From 1975 to 2009, 7,901 people from the Framingham Study who had survived free of dementia to at least age 45, and 5,937 who had survived free of dementia until at least age 65 were followed for incidence of dementia.340 Diagnosis of dementia was made according to the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) criteria and required that the participant survive for at least 6 months after onset of symptoms. Standard diagnostic criteria (the NINCDS-ADRDA criteria from 1984) were used to diagnose Alzheimer's dementia. The definition of Alzheimer's and other dementias used in the Framingham Study was very strict; if a definition that included milder disease and disease of less than six months' duration were used, lifetime risks of Alzheimer's and other dementias would be higher than those estimated by this study.

A5. Projected number of people with Alzheimer's dementia, 2020-2060: This figure comes from the CHAP study.[293] Other projections are somewhat lower (see, for example, Brookmeyer et al.[1075]) because they relied on more conservative methods for counting people who currently have Alzheimer's dementia.[A3] Nonetheless, these estimates are statistically consistent with each other, and all projections suggest substantial growth in the number of people with Alzheimer's dementia over the coming decades.

A6. Annual mortality rate due to Alzheimer's disease by state: Unadjusted death rates are presented rather than age-adjusted death rates in order to provide a clearer depiction of the burden of mortality for each state. States such as Florida with larger populations of older people will have a larger burden of mortality due to Alzheimer's — a burden that appears smaller relative to other states when the rates are adjusted for age.

A7. Number of family and other unpaid caregivers of people with Alzheimer's or other dementias: To calculate this number, the Alzheimer's Association started with data from the Behavioral Risk Factor Surveillance System (BRFSS) survey. Since 2016, all states and the District of Columbia utilized the BRFSS caregiver module. This module identified respondents age 18 and over who had provided any regular care or assistance during the past month to a family member or friend who had a health problem, long-term illness or disability. The module asks a series of follow-up questions, including asking the caregiver to identify what the main health problem, long-term illness, or disability that the person they care for has. One of the reported condition categories is "Alzheimer's disease, dementia, or other cognitive impairment." In the BRFSS surveys conducted in 2019 and after, an additional follow-up question was included, asking if the caregiving recipient also had dementia in addition to their main condition. Prior to 2019, the survey did not include caregivers of recipients for whom dementia was not their main condition, so these numbers were imputed using data collected in 2019 by the National Alliance for Caregiving (NAC)/AARP survey. The NAC/AARP survey asked respondents age 18 and over whether they were providing unpaid care for a relative or friend age 18 or older or had provided such care during the past 12 months. Respondents who answered affirmatively were then asked about the health problems of the person for whom they provided care: 11% of respondents reported dementia as the main condition of their care recipient, while 26% of all respondents reported the presence of dementia. Using this ratio in combination with BRFSS data, the Alzheimer's Association was able to determine the percentage of adults in all states and the District of Columbia who are caregivers for individuals living with Alzheimer's or another dementia. These percentages were applied to the estimated number of people age 18 and older in each state in July 2024, using U.S. Census Bureau data available at: https://www.census. gov/programs-surveys/popest/data/tables.html. This resulted in a total of 11,926 million Alzheimer's and dementia caregivers across all 50 states and the District of Columbia.

A8. Number of hours of unpaid care: The BRFSS survey asks caregivers to identify, within five time frames, the number of hours they provide care in an average week. Using the method developed by Rabarison and colleagues,[517] the Alzheimer's Association assumed the midpoint of each time frame was the average number of hours for each caregiver within that time frame and then calculated the overall average number of hours of weekly care provided by dementia caregivers in each state. This number was then converted to a yearly average and multiplied by the number of caregivers in each state[A7] to determine the total number of hours of care provided. When added together, across all 50 states and the District of Columbia, the total number of hours provided by Alzheimer's and dementia caregivers is 19.161 billion hours.

A9. Value of unpaid caregiving: For each state, the hourly value of care was determined as the average of the state minimum hourly wage[1076] and the most recently available state median hourly cost of a home health aide. (For Nevada, the minimum wage used was the average of the minimum wage for those who are not provided health insurance and the minimum wage for those who are provided health insurance.)[992] The average for each state was then multiplied by the total number of hours of unpaid care in that state[A8] to derive the total value of unpaid care. Adding the totals from all states and the District of Columbia resulted in an economic value of $413.452 billion for dementia caregiving in the United States in 2024.

A10. The 2014 Alzheimer's Association Women and Alzheimer's Poll: This poll questioned a nationally representative sample of 3,102 American adults about their attitudes, knowledge and experiences related to Alzheimer's and dementia from Jan. 9, 2014, to Jan. 29, 2014. An additional 512 respondents who provided unpaid help to a relative or friend with Alzheimer's or a related dementia were asked questions about their care provision. Random selections of telephone numbers from landline and cell phone exchanges throughout the United States were conducted. One individual per household was selected from the landline sample, and cell phone respondents were selected if they were 18 years old or older. Interviews were administered in English and Spanish. The poll "oversampled" Hispanics/Latinos, selected from U.S. Census tracts with higher than an 8% concentration of this group. A list sample of Asian Americans was also utilized to oversample this group. A general population weight was used to adjust for number of adults in the household and telephone usage; the second stage of this weight balanced the sample to estimated U.S. population characteristics. A weight for the caregiver sample accounted for the increased likelihood of female and White respondents in the caregiver sample. Sampling weights were also created to account for the use of two supplemental list samples. The resulting interviews comprise a probability-based, nationally representative sample of U.S. adults. A caregiver was defined as an adult over age 18 who, in the past 12 months, provided unpaid care to a relative or friend age 50 or older with Alzheimer's or another dementia. Questionnaire design and interviewing were conducted by Abt SRBI of New York.

A11. Lewin Model on Alzheimer's and dementia costs: These numbers come from a model created for the Alzheimer's Association by the Lewin Group. The model estimates total payments for health care, long-term care and hospice — as well as state-by-state Medicaid spending — for people with Alzheimer's and other dementias. The model was updated by the Lewin Group in January 2015 (updating previous model) and June 2015 (addition of state-by-state Medicaid estimates). The Lewin Model's state-specific Medicaid costs for 2025 are based on an earlier estimate of state prevalence than reported here (Weuve J, Hebert LE, Scherr PA, Evans DA. Prevalence of Alzheimer disease in U.S. states. Epidemiology 2015;26(1):E4-6) and are inflated to 2024 dollars.

A12. All cost estimates were inflated to year 2024 dollars using the Consumer Price Index (CPI): All cost estimates were inflated using the seasonally adjusted average prices for medical care services from all urban consumers. The relevant item within medical care services was used for each cost element. For example, the medical care item within the CPI was used to inflate total health care payments; the hospital services item within the CPI was used to inflate hospital payments; and the nursing home and adult day services item within the CPI was used to inflate nursing home payments.

A13. Average annual per-person payments for health care and long-term care services for Medicare beneficiaries age 65 and older with and without Alzheimer's or other dementias: Payments are unadjusted, and therefore, do not account for differences in patient characteristics, such as age or sex. Additionally, payments are based on health care utilization and payments in 2018 for the Medicare Current Beneficiary Survey and 2019 for Medicare claims data, prior to the COVID-19 pandemic, and do not reflect any post-pandemic-related changes in utilization.

A14. Enrollment in fee-for-service Medicare versus Medicare Part C: Individuals eligible for Medicare can enroll in traditional Medicare, also referred to as fee-for-service Medicare and original Medicare, or Medicare Advantage, also referred to as Medicare Part C.[1077] With traditional Medicare, beneficiaries can receive care from any doctor or hospital in the United States that accepts Medicare. Generally, beneficiaries can seek care from a specialist without a referral. Traditional Medicare has fixed cost sharing, which includes coinsurance of 20% of the Medicare-approved amount for services covered by Part B after the deductible is met. Individuals enrolled in traditional Medicare can also enroll in Medicare Supplemental Insurance (also referred to as Medigap) to help cover the out-of-pocket costs. Traditional Medicare does not have an annual limit on the amount beneficiaries pay out-of-pocket. Benefits are the same for all individuals enrolled in traditional Medicare. Individuals enrolled in traditional Medicare can also enroll in a Medicare Part D plan to cover some of the costs of prescription drugs. Medicare Part D enrollment has a separate premium. With Medicare Advantage, individuals must enroll in a specific private plan. Premiums, benefits and out-of-pocket costs may vary across plans. Medicare Advantage plans have an annual limit on the amount individuals pay out-of-pocket. Individuals enrolled in a Medicare Advantage plan are not allowed to enroll in Medigap. Medicare Advantage plans are also allowed to offer additional benefits not included in traditional Medicare, such as vision, hearing and dental services as well as some non-health care benefits, such as transportation costs and gym memberships. Many Medicare Advantage plans include prescription drug coverage (Medicare Part D). Individuals enrolled in a Medicare Advantage plan have a specific network of doctors and hospitals that enrollees need to use for services to be paid by the Medicare Advantage plan. Additionally, individuals enrolled in a Medicare Advantage plan may need a referral to see a specialist. Enrollment in Medicare Advantage has increased dramatically over the past decade, with 51% of all Medicare beneficiaries enrolled in a Medicare Advantage plan in 2023 compared with 29% in 2013.[1000]

A15. Medicare Current Beneficiary Survey Report: These data come from an analysis of findings from the 2018 Medicare Current Beneficiary Survey (MCBS). The analysis was conducted for the Alzheimer's Association by Health Care Cost Institute.[941] The MCBS, a continuous survey of a nationally representative sample of about 15,000 Medicare beneficiaries, is linked to Medicare claims. The survey is supported by the U.S. Centers for Medicare & Medicaid Services (CMS). For community-dwelling survey participants, MCBS interviews are conducted in person three times a year with the Medicare beneficiary or a proxy respondent if the beneficiary is not able to respond. For survey participants who are living in a nursing home or another residential care setting, such as an assisted living residence, retirement home or a long-term care unit in a hospital or mental health facility, MCBS interviews are conducted with a staff member designated by the facility administrator as the most appropriate to answer the questions. Data from the MCBS analysis that are included in *2025 Alzheimer's Disease Facts and Figures* pertain only to Medicare beneficiaries age 65 and older.

For this MCBS analysis, people with dementia are defined as:

- Community-dwelling survey participants who answered yes to the MCBS question, "Has a doctor ever told you that you had Alzheimer's disease or dementia?" Proxy responses to this question were accepted.
- Survey participants who were living in a nursing home or other residential care setting and had a diagnosis of Alzheimer's disease or dementia in their medical record.
- Survey participants who had at least one Medicare claim with a diagnostic code for Alzheimer's or other dementias in 2018. The claim could be for any Medicare service, including hospital, skilled nursing facility, outpatient medical care, home health care, hospice or physician, or other health care provider visit. The diagnostic codes used to identify survey participants with Alzheimer's or other dementias are G30.0, G30.1, G30.8, G30.9, G31.01, G31.09, G31.83, F.01.50, F01.51, F02.80, F02.81, F03.90, F03.91 and F10.27.

Costs from the MCBS analysis are based on responses from 2018 and reported in 2024 dollars.

A16. Differences in estimated costs reported by Hurd and colleagues: Hurd and colleagues[940] estimated per-person costs using data from participants in ADAMS, a cohort in which all individuals underwent diagnostic assessments for dementia. One reason that the per-person costs estimated by Hurd and colleagues are lower than those reported in *Facts and Figures* is that ADAMS, with its diagnostic evaluations of everyone in the study, is more likely than MCBS to have identified individuals with less severe or undiagnosed Alzheimer's. By contrast, the individuals with Alzheimer's registered by MCBS are likely to be those with more severe, and therefore more costly, illness. A second reason is that the Hurd et al. estimated costs reflect an effort to isolate the incremental costs associated with Alzheimer's and other dementias (those costs attributed only to dementia),while the per-person costs in *2025 Alzheimer's Disease Facts and Figures* incorporate all costs of caring for people with the disease (regardless of whether the expenditure was related to dementia or a coexisting condition).

Appendices

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Alzheimer's Association
225 N. Michigan Ave., Fl. 17
Chicago, IL 60601-7633
800.272.3900
alz.org®

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