Detecting Alzheimer's Disease: Older Adults' Experiences with Cognitive Screening and Blood Biomarker Testing



July/August 2023

Over six million Americans have Alzheimer's disease (AD), the most common type of dementia, yet many of these individuals have not been formally diagnosed with the condition. Early detection of AD and related dementias has become an increasingly important public health priority. Cognitive screening (e.g., memory testing) is currently available to facilitate early recognition of cognitive impairment, while blood biomarker tests are an emerging option for detecting the abnormal buildup of proteins in the brain that might be an early sign of AD. In March 2023, the University of Michigan National Poll on Healthy Aging asked a national sample of adults age 65-80 about their use and awareness of cognitive screening and blood biomarker testing, as well as their perceptions of the tests' benefits, limitations, and risks.

Cognitive screening

More than seven in ten adults age 65–80 (71%) were familiar with cognitive screening (30% very, 41% somewhat) while 29% were not at all familiar. Over half (59%) said they have never undergone screening, 21% reported having been screened more than a year ago, and 20% had been screened within the past year. Compared with their non-Hispanic White and Black counterparts, Hispanic older adults were less likely to report cognitive screening within the past year (22% and 21% vs. 10%). Among those screened within the past year, 84% said the screening took place at a visit with a health care provider. Cognitive screenings conducted online or as part of research studies were less common.

Cognitive screening and blood biomarker tests for Alzheimer's disease AMONG ADULTS AGE 65–80			
10 12 12 10 7 6	Cognitive screening	Blood biomarkers	
Very familiar	30%	2%	
Somewhat familiar	41%	17%	
Somewhat familiar Not at all familiar	41 % 29 %	17% 81%	

Overall, 86% of older adults thought their health care provider would recommend cognitive screening if needed, and 80% agreed that screening can be useful to inform medical care and advance care planning. Three in five (60%) agreed screening should be offered annually for all adults age 65 and older. Meanwhile, 31% endorsed concerns about the privacy of their test results, 21% believed screening is not reliable and could give inaccurate results, and 17% agreed that testing was not worth







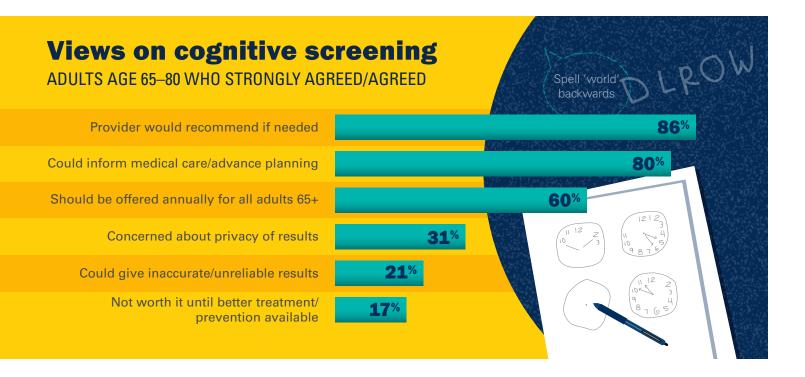
doing until better treatment and prevention options for AD are available. Older adults who reported lower annual household income (< \$60,000 compared with > \$60,000) and living alone (compared with living with others) were more likely to report concerns about cognitive screening, including its reliability, privacy, and usefulness.

Nearly all older adults (96%) reported that if cognitive screening results suggested concerns about their memory or thinking skills, they would be likely (very or somewhat) to take steps to improve brain health, (e.g., getting more exercise and staying mentally and socially engaged). Three in four (75%) said they would likely consider changes to their financial or advance care planning. About two in three (65%) said a positive screening result would make them likely to believe they were probably going to develop AD or another serious brain disorder (10% very likely, 54% somewhat likely). Three in five (60%) said that a positive screening result would make them likely to experience significant distress, with a similar proportion (58%) likely to be concerned that others would view them differently if they screened positive. Women were more likely than men to report these potential reactions (65% vs. 53% for significant distress, 62% vs. 54% for concern others would view them differently).

Blood biomarker testing

About four in five older adults (81%) reported they were not at all familiar with blood biomarker testing for AD, with 17% somewhat familiar, and 2% very familiar. Fewer than 1% reported having ever undergone blood biomarker testing, and 9% said they would be interested in having such testing as soon as possible.

More than four in five adults age 65–80 (83%) agreed that their health care provider would recommend blood biomarker testing for them if needed, and 76% agreed such testing can be useful to inform older adults' medical care and advance planning. About half (51%) agreed blood biomarker testing should be offered annually to all adults age 65 and older. About one in three adults age 65-80 (32%) said they would be concerned about the privacy of their test results, with men more likely than women to endorse this concern (38% vs. 27%). One in five (20%) agreed that blood biomarker testing is not worth doing until there are better treatment and prevention options for AD, and 14% thought that testing is not reliable and could give inaccurate results. Compared with their non-Hispanic White counterparts, non-Hispanic Black older adults were more likely to endorse concerns



about test reliability (22% vs. 13%) and privacy of test results (42% vs. 30%).

When asked about how they would react to a positive blood biomarker test result, the vast majority of older adults (97%) said they would be likely to take steps to improve their brain health (62% very likely, 35% somewhat likely), and 77% said they would consider changes to their financial or advance care planning (32% very likely, 44% somewhat likely). A majority (74%) said a positive test result would make them believe they were likely to develop AD (14% very likely, 60% somewhat likely), and nearly two in three (64%) said they would be likely to have significant distress (16% very likely, 49% somewhat likely). More than half (56%) said that a positive test result would be likely to lead to concerns that others would view them differently (14% very likely, 41% somewhat likely). In response to a positive test result, women were more likely than men to say they'd be very likely to take steps to improve their brain health (67% vs. 56%) and to experience significant distress (21% vs. 10%).

Implications

These poll results suggest that older adults are significantly more familiar and experienced with cognitive screening compared with blood biomarker testing, but they view both options as potentially useful for informing medical decisions regarding treatment and prevention of AD. Despite their familiarity with cognitive screening, only one in five adults age 65-80 reported having received screening within the past year. In particular, Hispanic older adults were less likely to report receiving cognitive screening in this timeframe, suggesting a need to address screening barriers in this population. One opportunity to reduce disparities in cognitive screening is improving access to Medicare annual wellness visits, for which detection of cognitive impairment is a required component.

Poll results suggest most older adults would rely on a health care provider to recommend cognitive screening if needed. Therefore, it is important for health care professionals caring for older adults to consider periodic cognitive screening among patients at increased risk for cognitive decline. Most older adults indicated positive views about cognitive screening and intentions to change their health behaviors if concerns were detected. This finding was encouraging given that healthy behaviors such as regular physical activity, smoking cessation, and management of hypertension have been shown to lower one's chances of developing dementia. However, potential patient concerns about screening risks (e.g., privacy and accuracy of results, potential distress responses) require consideration.

Blood biomarker tests for AD (i.e., to detect the presence of abnormal proteins such as amyloid plaques and tau tangles in the brain) have only recently become part of dementia care. Moving forward, this kind of testing is expected to play an increasing role in early detection of AD. Currently, such testing is not covered by insurance and is typically only ordered by specialty providers to assist in diagnosing cognitive impairment. It is therefore not surprising that most older adults were not familiar with this type of testing, very few had undergone it, and most were not immediately interested in pursuing it. Despite this general lack of familiarity, the vast majority of older adults perceived biomarker testing as potentially useful for informing medical care and indicated that a positive test result would prompt behavioral changes related to their brain health and financial and advance care planning.

Although not currently recommended for older adults without cognitive impairment, blood biomarker testing may become more commonplace with continued improvements in AD treatment and prevention options (e.g., two new federally approved AD-specific medications since 2021). Disclosure of blood biomarker test results for a serious condition like AD should be undertaken with care, given both the complexity of information provided and the potential psychological and social impact of results disclosure. This poll found notable gender and racial/ethnic group differences in perceptions of test risks and benefits which should be carefully considered in efforts to expand screening for AD and related dementias.

Cognitive screening rates AMONG ADULTS AGE 65–80

	% reporting having ever been screened	% reporting screening in the past year
Age		
65–69 years	31%	19%
70-74 years	47%	24%
75–80 years	47%	16%
Race / Ethnicity		
White, non-Hispanic	43%	22%
Black, non-Hispanic	39%	21%
Hispanic	33%	10%
Physical health		
Excellent / Very good / Good	38%	19%
Fair / Poor	53%	23%
Mental health		
Excellent / Very good / Good	40%	20%
Fair / Poor	54%	23%
Activities limited by health or disability		
No	37%	20%
Yes	49%	21%
Family history of dementia		
Yes	47%	22%
No / Don't know	37%	19%
All respondents	41%	20%

Data Source and Methods

This National Poll on Healthy Aging report presents findings from a nationally representative household survey conducted exclusively by NORC at the University of Chicago for the University of Michigan's Institute for Healthcare Policy and Innovation. National Poll on Healthy Aging surveys are conducted using NORC's AmeriSpeak probability-based panel. This survey module was administered online and via phone in January 2023 to a randomly selected, stratified group of U.S. adults age 50-80 (n=2,563). The sample was subsequently weighted to reflect population figures from the U.S. Census Bureau. The completion rate was 61% among panel members contacted to participate. The margin of error is ±1 to 3 percentage points for questions asked of the full sample and higher among subgroups.

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National Poll on Healthy Aging, July/August 2023, https://dx.doi.org/10.7302/7927

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