

Quick Test Could Help Reduce Dementia Care Disparities

A five-minute, culturally neutral test for cognitive problems improved dementia detection and management in older adults.

July 12, 2024 By National Institutes of Health

More than 6 million older adults in the U.S. are living with dementia. But despite how common dementia is, studies suggest that signs of cognitive impairment are often missed by health care providers in busy primary care settings. This is especially true among older Black and Hispanic Americans.

Early diagnosis of dementia or its precursor, mild cognitive impairment, is important to enable treatments and planning to help keep older adults safe in their living situations. Several standard tests for dementia can measure aspects of cognition—the ability to think, learn, and remember. But these tests can be lengthy, expensive, and require trained clinicians to administer. Many were also developed in White populations, so they may contain cultural biases that make them less effective among more diverse populations.

To improve the diagnosis of dementia in busy, diverse primary care clinics, a research team led by Dr. Joe Verghese from Albert Einstein College of Medicine developed a culturally unbiased cognitive assessment tool called 5-Cog. The team designed 5-Cog to be used in older adults who have concerns about their cognitive health.

The tool consists of three brief tests: of memory recall, the connection between cognition and gait, and the ability to match symbols to pictures. If the results suggest cognitive problems, 5-Cog automatically puts a notification in the patient's electronic health record. This causes a set of recommendations to be sent to their health care provider. The whole 5-Cog process takes about five minutes and can be administered by people without health care expertise.

In an NIH-funded study, the team tested 5-Cog in about 1,200 older adults recruited from a primary care clinic in Bronx County of New York City. All study participants lived in disadvantaged neighborhoods. Almost three-quarters were women, and 94% listed their race as Black, Hispanic, or Latino. About 40% had not graduated from high school.

The researchers randomly assigned the participants to receive either 5-Cog or an unrelated physical test (the control group) immediately before a primary care visit. The results were

published on June 4, 2024, in [Nature Medicine](#).

Almost 20% of older adults who took the 5-Cog test received improved overall dementia care, compared to just under 7% of patients in the control group. Those who took the 5-Cog test also had significant improvements in several individual components of dementia care. These included a new diagnosis of dementia or mild cognitive impairment, further assessments, and specialist referrals within 90 days of assessment.

There was no significant difference between groups in hospitalizations or emergency department visits over the next year.

“We’re hopeful that the findings from this study could promote changes in primary care practice so that more older people with mild cognitive impairment or dementia will benefit from getting diagnosed and treated for their conditions,” Verghese says.

Further work is underway, including a clinical trial to test whether 5-Cog is effective in identifying early cognitive changes in older adults who don’t report any cognitive concerns. It also needs to be tested in different populations.

This [research summary](#) was published by the National Institutes of Health on June 25, 2024.