

[MUSIC PLAYING]

DR. DOUGLAS SCHARRE: Dementia is increasing worldwide. We were desperate to identify individuals at an early stage. And because they would come in too late, and a lot of people don't have knowledge about giving cognitive tests, people weren't identified early enough to help them.

So we devised the SAGE test, which is Self-Administered Gerocognitive Examination to be self-administered so that it would not require an administer. You could do a cognitive test even if you didn't have training on it. Get a good cognitive assessment, find out if they were having cognitive issues and in what domain, and be able to use that as a physician to determine do I need to do other tests?

SAGE is not a diagnostic test. It tells you if the cognitive issues are impaired. The doctor has to look at the past medical history and take in the context of the individual's health and determine, OK, this is most likely related to strokes, or vascular disease, or their thyroid, or to Alzheimer's disease. So they have to work that out.

But it allows the individual, even at the primary care doctor level, or the neurologist, or the geriatrician to help them get a cognitive assessment tool so that they can use that in their assessment of the patient.

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When you follow someone longitudinally and compare it to, for example, the mini-mental state, as we have done, SAGE tests, which is a self-administered tool, is picking up individuals at least six months earlier than the mini-mental states can do it. And this is when we take these tests every six months. The statistics of it show that with the SAGE test, the pen and paper test, we have 95% specificity, 79% sensitivity. That's in our validity studies.

The electronic test has very similar statistics, 90% specific and 71% sensitive. So they both work very well in our validity studies. None of these tests are perfect. But they measure what we are hoping that they measure, cognitive decline, and hopefully, many, many years, maybe two, three years before they usually would be identified in the typical process that we have right now with the primary care doctors offices.

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