

SPEAKER 1: Many older people as they age, develop mild cognitive impairment and dementia. This is a major concern for primary care physicians these days. But to do the elaborate testing-- the expensive MRI scans, PET scans, or invasive studies like spinal taps, lumbar punctures-- we need to know who's at the greatest risk for developing cognitive impairment in the future.

So this study, from the Mayo Clinic's study of aging, was designed to look at individuals who are aging normally in the community and try to develop a technique for stratifying them into high-risk, medium-risk or low-risk of developing cognitive impairment in the future. So the study showed that in fact, many of the pieces of data that are available to primary care physicians like age, sex, education, family history of dementia can be useful in stratifying people at the first level.

At the second level then, when the patient comes into the doctor's office, the doctor can do a very minimal examination-- like a mental status exam. Who's the president? Remember these words. What's the date? Also a psychiatric inventory of signs for depression, anxiety.

And then thirdly, even asking the person to walk across the floor and time how long it takes them to perform that task. You put that information together with the other history information. And now you can get a fairly-sophisticated risk formula indicating who's at high, medium, and low risk.

The final level of sophistication then, if the physician wants to draw blood, he or she can get some information from the patient on genetic risk of developing Alzheimer's disease. Putting all that information together then, a primary care physician will know who to refer on to a specialist-- a neurologist, psychiatrist, for further testing and maybe this more-elaborate biomarker testing involving scans and lumbar punctures.

One implication of this research is from a public-health perspective. That is, we as a country cannot afford to do this expensive testing, scanning, lumbar punctures on the whole population. So we need to know who's at the highest risk, who's at the lowest risk, so we can allocate these expensive resources. So this study will give us an idea of those individuals on whom we would get the biggest bang for our buck in doing these more expensive tests by just stratifying, based on information from the primary care physician's office.