

Viewpoint

Screening for Cognitive Impairment Is Important and Will Reduce Burdens on Our Healthcare System

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Screening for cognitive impairment in older patients is an important way to improve early detection and intervention, reduce risk of onset of Alzheimer's disease and dementia, manage co-occurring conditions, reduce healthcare system costs, and track prevalence. Yet, less than 16 percent of adults age 65 and over in the United States receive a regular cognitive assessment at their doctor's office [1].

This low assessment rate persists despite the fact that validated screening tools are available [2] and cognitive screening for those over 65 is a covered benefit under the U.S. Medicare program.

While some have been resistant to cognitive screening—citing no currently existing cure or disease-modifying treatment for Alzheimer's—screening has been shown to add benefits and do no harm [3].

And even without a disease-modifying treatment currently available, the latest evidence demonstrates that addressing key risk-factors may slow or even prevent the progression of cognitive decline:

- A study led by Dr. Klodian Dhana of Rush University Medical Center reported that adopting at least four healthy habits (such as exercising both mind and body, and not smoking) reduces the risk of Alzheimer's by 60 percent [4].
- The Lancet Commission posits that more than a third of dementia cases are potentially preventable by addressing nine factors across the lifespan that account for 35 percent of the population dementia risk. These include education, treatment of hypertension, exercise, social engagement, smoking, hearing loss, depression, diabetes, and obesity [5].
- The FINGER study indicated that lifestyle modifications, including dietary guidance, physical activity, cognitive training, social activities, and monitoring and management of metabolic vascular risk factors can improve or maintain cognitive functioning in older adults [6].
- The SPRINT MIND study found that closely monitoring and regulating blood pressure can reduce the risk of developing mild cognitive impairment by 19 percent [7].
- The World Health Organization found in a recent report that “adopting a healthy lifestyle helps reduce the risk of dementia”, and stated

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unequivocally that “dementia is not a natural or inevitable consequence of aging” [8].

- The American Academy of Neurology (AAN), an important healthcare provider organization, recognized that “early diagnosis can help identify forms of mild cognitive impairment that may be reversible, including those caused by sleep problems, depression or medications, and lead to treatments that can improve a person’s quality of life such as correcting hearing loss and avoiding social isolation” [9].

In addition, screening can identify cognitive impairment that is caused by something other than dementia, including treatable conditions such as nutritional deficiencies, subdural hematoma, normal pressure hydrocephalus, and medication side effects. People with dementia are also more likely to have multiple additional physical health conditions and rely on polypharmacy than their peers without dementia [10]. For this reason, the AAN stated that “knowing the cognitive health status of high-risk patients, especially older patients, has inherent clinical relevance.” Cognitive impairment can influence not only what care is recommended for that impairment, but also how care for other illnesses should be provided [11].

Screening and early intervention for cognitive decline offers opportunities for health-system cost-savings as well. Researchers have estimated that delaying the onset of Alzheimer’s disease by five years could reduce healthcare payments between 33 and 39 percent. Research has also shown that slowing the rate of functional decline by 10 percent reduced the average person’s lifetime costs by more than \$4000 in 2018 terms [12].

Even with patients who have been diagnosed with cognitive impairment, proper follow-up after screening may significantly decrease hospital admissions. Implementing collaborative dementia care models has been shown to decrease behavioral and psychological symptoms in patients living with dementia and reduced healthcare utilization, resulting in annual cost-savings ranging from \$908 to \$2856 per patient [13].

Emerging science is demonstrating that indications of treatable cognitive decline begin well before the symptoms of full-blown dementia occur, as the pathology of Alzheimer’s dementia may begin as many as 20 years before dementia symptoms surface [14]. Knowing this, brain health should be viewed more like heart health—where metrics such as blood pressure and cholesterol, monitored regularly over time, provide a clinical trajectory based in prevention and risk modification that can be compared to an established baseline [15]. The best way to establish this baseline is through the institution of cognitive screening and assessment.

The AAN practice guideline clearly recommends that clinicians assessing for cognitive impairment should use a brief, validated cognitive assessment instrument in addition to eliciting patient and informant

history regarding cognitive concerns [16]. The U.S. National Academy of Medicine recommended health and payer systems “promote cognitive health in regular medical and wellness visits among people of all ages” [17]. In addition, the American Heart Association includes administering brief screens to assess cognitive status in its recommendations for promotion and maintenance of optimal brain health [18].

Leading non-governmental organizations have updated their guidelines and practice in response to evidence of the net benefit of screening, including Alzheimer’s Disease International, the Alzheimer’s Association, the Endocrine Society, the National Academy of Neuropsychology, the Alzheimer’s Foundation of America, the Heart Failure Society of America, and the UsAgainstAlzheimer’s Brain Health Partnership. Despite this widespread support, the value and effectiveness of cognitive screening for Alzheimer’s and other dementias is still not fully accepted [19].

It is estimated that as many as half of primary care physicians are unaware of their older patients’ cognitive status. This health system failure denies millions of patients the information and support they want (82 percent believe screening is valuable) [12] and need to protect their brain health as they age. Without intervention, an estimated one out of every five women and one out of every 10 men living past the age of 55 will develop dementia ([12], p. 22), with approximately 70 percent of dementia cases due to Alzheimer’s [20].

Combined with the projected population increase in the number of people over age 65, the burden of Alzheimer’s disease and related dementias in the U.S. will nearly *double* over the next 20 years if nothing new is done [21].

Changing this trajectory for Alzheimer’s and dementia is not only possible, but essential. Screening with appropriate risk reduction counseling and care management is a critical component in a system of care that includes cognitive health.

CONFLICTS OF INTEREST

The author declares that she has no conflicts of interest.

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