

# Putting Prevention into Practice

*An Evidence-Based Approach*

## Screening for Cognitive Impairment in Older Adults

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► See related U.S. Preventive Services Task Force Recommendation Statement at <http://www.aafp.org/afp/2015/0315/od2.html>.

This PPIP quiz is based on the recommendations of the USPSTF. More information is available in the USPSTF Recommendation Statement and the supporting documents on the USPSTF website (<http://www.uspreventiveservicestaskforce.org>). The practice recommendations in this activity are available at <http://www.uspreventiveservicestaskforce.org/Page/Topic/recommendation-summary/cognitive-impairment-in-older-adults-screening>.

This series is coordinated by Sumi Sexton, MD, Associate Medical Editor.

A collection of Putting Prevention into Practice published in *AFP* is available at <http://www.aafp.org/afp/ppip>.

**CME** This clinical content conforms to AAFP criteria for continuing medical education (CME). See CME Quiz Questions on page 92.

Author disclosure: No relevant financial affiliations.

### Case Study

N.D. is a 72-year-old white man who presents for a preventive visit. He smokes, and his medical history is significant for essential hypertension, which is stable and well controlled with medication. N.D.'s close friend was recently diagnosed with dementia, and N.D. is concerned that he may receive a similar diagnosis in the future. He does not have any symptoms but asks whether he should be screened.

### Case Study Questions

1. Based on the recommendations of the U.S. Preventive Services Task Force (USPSTF), which one of the following approaches to screening for cognitive impairment is correct for this patient?

- A. He should be screened using radiography because there is convincing evidence that it provides clinically relevant benefits in asymptomatic older adults.
- B. He should be screened using the Mini-Mental State Examination because there is adequate evidence that it moderately improves all-cause mortality in older adults.
- C. He should be told that there is uncertainty about the balance of potential benefits and harms of screening in older adults.
- D. He should be screened using the Clock Drawing Test because there is high certainty that its benefits substantially outweigh the harms in older adults.

2. Which one of the following statements about risk factors for cognitive impairment or dementia in older adults is correct?

- A. Participation in physical activity programs has been associated with an increased risk of dementia.
- B. There is no evidence that smoking increases the risk of cognitive impairment.
- C. Certain cardiovascular risk factors, including hypertension, may increase the risk of cognitive impairment.
- D. Clinical depression is not a potential risk factor for cognitive impairment.

3. Which of the following statements about the epidemiology of cognitive impairment in the United States are correct?

- A. The annual rate of progression from mild cognitive impairment to dementia has been well characterized and established in clinical practice.
- B. Many primary care patients with dementia or probable dementia are undiagnosed.
- C. As many as one-half of all adults older than 65 years report subjective memory symptoms.
- D. The prevalence of dementia increases with age, up to 80 to 89 years of age, and then declines in adults older than 90 years.

Answers appear on the following page.

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### Answers

1. **The correct answer is C.** The USPSTF concluded that the current evidence is insufficient to assess the balance of benefits and harms of screening for cognitive impairment (I statement). It found insufficient evidence to recommend screening, including screening with radiography or blood tests. Although the USPSTF found adequate evidence that some screening tools have sufficiently high sensitivity and specificity to identify dementia, it found insufficient evidence on the direct benefits of screening for cognitive impairment, including screening with the Mini-Mental State Examination and the Clock Drawing Test.

2. **The correct answer is C.** Cardiovascular disease and risk factors for cardiovascular disease (such as diabetes, tobacco use, hypercholesterolemia, hypertension, and metabolic syndrome) are associated with increased risk of cognitive impairment. However, the strongest known risk factor is increasing age. Depression is an identified risk factor for cognitive impairment. Based on weaker supporting evidence, the USPSTF found that continued cognitive engagement, educational attainment, participation in physical activity, as well as certain dietary factors (adequate folic acid intake, low saturated fat intake, longer-chain omega-3 fatty acid intake, high fruit and

vegetable intake, Mediterranean diet, and moderate alcohol intake) are associated with decreased risk of dementia.

3. **The correct answers are B and C.** As many as 29% to 76% of patients with dementia or probable dementia in the primary care setting remain undiagnosed, and almost one-half of all adults older than 65 years report subjective memory symptoms. The rate of progression from mild cognitive impairment to dementia is not certain. The prevalence of dementia increases with age, and that trend does not reverse after 90 years of age. In the United States, approximately one in four adults 80 to 89 years of age has dementia, and the prevalence increases to about one in three in adults older than 90 years.

The views expressed in this work are those of the authors and do not reflect the official policy or position of the Uniformed Services University of the Health Sciences, the Department of Defense, or the U.S. government.

### SOURCES

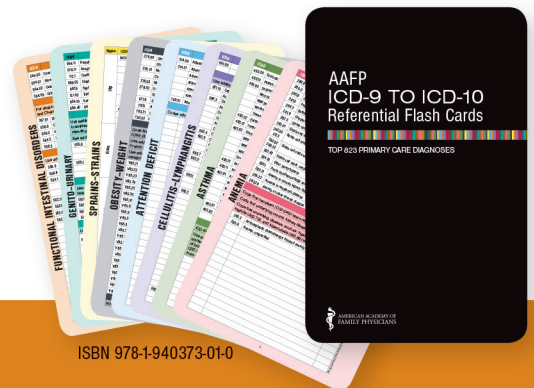
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