

From the USPSTF Draft Recommendations

1) Screening for Mild Cognitive Impairment

According to the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*, dementia (also known as major neurocognitive disorder) is defined by a significant decline in one or more cognitive domains that interferes with a person's independence in daily activities. The six cognitive domains identified in the *DSM-5* are complex attention, executive function, learning and memory, language, perceptual motor function, and social cognition. Dementia affects an estimated 2.4 to 5.5 million persons in the US, and its prevalence increases with age. Dementia affects an estimated 3% of persons ages 65 to 74 years, 10% of those ages 75 to 84 years, and 29% of those age 85 years or older.

Mild cognitive impairment (MCI) differs from dementia in that the impairment is not severe enough to interfere with independent daily functioning. Some persons with MCI may progress to dementia, but some do not. One systematic review found that 32% of persons with MCI develop dementia over 5 years. However, studies have also shown that between 10% and 40% of persons with MCI may return to normal cognition over approximately 4 to 5 years. The prevalence of MCI is difficult to estimate, in part due to differing diagnostic criteria, leading to a wide range of prevalence estimates from 3% to 42% in adults age 65 years or older.

The USPSTF recently released a draft recommendation regarding screening for mild cognitive impairment updating their 2014 recommendation. Both concluded:

- the current evidence is insufficient to assess the balance of benefits and harms of screening for cognitive impairment in older adults. (I recommendation)

In this statement, "cognitive impairment" refers to both dementia and MCI.

My Comment:

See the comment for Pointer 2 for more on this. Remember this is a draft statement, though there is high likelihood it will be the final statement as well.

Reference:

USPSTF September 2019: Cognitive Impairment in Older Adults – Screening: [draft](#)

Reprise From the Guidelines and the AAN

2) Mild Cognitive Impairment (MCI) Diagnosis and Treatment

Mild cognitive impairment (MCI) is a condition in which individuals demonstrate cognitive impairment with minimal impairment of instrumental activities of daily living (IADL). Although MCI can be the first cognitive expression of Alzheimer disease (AD), it can also be secondary to other disease processes (i.e., other neurologic,

neurodegenerative, systemic, or psychiatric disorders). The term *amnestic MCI* (aMCI) describes a syndrome in which memory dysfunction predominates; in nonamnestic MCI, impairment of other cognitive features (e.g., language, visuospatial, executive) is more prominent. Cumulative dementia incidence is 15% in those with MCI \geq 65 followed for 2 years.

In 2018, the American Academy of Neurology (AAN) updated their 2001 guideline on the diagnosis and treatment of MCI. Among their recommendations:

- assess for MCI using validated tools in appropriate scenarios (B);
- evaluate patients with MCI for modifiable risk factors, assess for functional impairment, and assess for and treat behavioral/neuropsychiatric symptoms (B);
- monitor cognitive status of patients with MCI over time (B);
- stop cognitively impairing medications where possible, and treat behavioral symptoms (B);
- consider not offering cholinesterase inhibitors (B), and if offering, first discuss lack of evidence (A);
- recommend regular exercise (B) (at least twice weekly);
- consider recommending cognitive training (C);
- discuss diagnosis, prognosis, long-term planning, and the lack of effective drug options (B); and
- consider discussing biomarker research with patients with MCI and families (C).

There is no consensus on the efficacy of cognitive training in persons with MCI because of the paucity of well-designed randomized controlled trials. Another recently published study was designed to assess the effect of memory training on the cognitive functioning of persons with amnestic MCI using a process called MEMO+, to evaluate whether this effect generalizes to daily life, and whether positive effects could be obtained from psychosocial intervention. Participants were randomized to cognitive training, a psychosocial intervention, or a no-contact control condition. Interventions were provided in small groups in eight 2-hour sessions.

The authors found that participants in the cognitive training group improved on the delayed composite memory score and on strategy use in everyday life. Improvement was maintained at the 3- and 6-month follow-up assessments. Participants in the psychosocial and no-contact conditions did not show any significant improvement. They concluded that cognitive training is a valid way to promote cognition in MCI.

My Comment:

The lack of recommendations in this guideline for specific screening tools and interventions makes it less helpful (see Pointer 3 for more specifics). However, there are a few notable items for the prevention/management of MCI that should be applicable to all of our elderly patients as part of a comprehensive cognitive health maintenance and intervention strategy. They include blood pressure control, weight control, healthy nutrition, stopping/minimizing cognitively impairing medications, and regular physical activity. Stimulating the mind through regular “cognitive training” (or playing “mind games”) will likely not make up for neglect of these other interventions, but may be an important part of an overall strategy.

When comparing the AAN recommendation to that from the USPSTF, remember that the USPSTF will not make a recommendation for an intervention unless the evidence to do so is compelling. An “I” recommendation does not necessarily mean the intervention

is ineffective or harmful, only that there is not good enough evidence to make that determination. Note in Pointer 3 that the AAN has recently published some quality measures regarding MCI.

References:

- Petersen RC et al. Practice guideline update summary: MCI: Report of the Guideline Development, Dissemination, and Implementation Subcommittee of the American Academy of Neurology. *Neurology*. 2018 Jan 16;90(3):126-135. [Article](#)
 - Belleville S et al. MEMO+: Efficacy, Durability and Effect of Cognitive Training and Psychosocial Intervention in MCI. *J Am Geriatr Soc*. 2018 Jan 4. [Article](#)
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From the Guidelines and the American Academy of Neurology (AAN)

3) Cognitive Testing in Adults \geq 65

As a follow-up to their 2018 Guideline on the diagnosis and treatment of mild cognitive impairment (MCI), the American Academy of Neurology (AAN) recently published an MCI Quality Measurement Set. The order set includes the following:

MCI Quality Measurement Set

- 1 Perform annual cognitive assessment for patients 65 and older
- 2 Perform cognitive/functional assessment for patients with MCI or memory loss
- 3 Disclose MCI diagnosis and provide counseling on treatment options
- 4 Assess and treat factors contributing to MCI
- 5 Avoid anticholinergic medications in patients with MCI
- 6 Educate care partners of patients with MCI

The paper notes that although there is conflicting evidence on the benefits of screening for dementia in older adults, there is growing support for the benefits of assessment of cognitive health in patients over the age of 65. The authors also note that rather than trying to implement all of these together, the AAN encourages pilot projects focusing on 1-2 of them to determine baseline performance and to design, implement, and measure improvement efforts.

My Comment:

For those of us performing Medicare Annual Wellness visits (of which I am “a fan”) will note that you are already doing the annual screening assessment. In the case of the MAW visit, the instrument used is the Mini-Cog (see references below). If MCI is diagnosed, it seems to me that the remainder of the measurement set should be interventions that should be occurring with every patient. Whether that is happening or not is the exact reason why measurement is so important.

References:

- Foster N, et al. Quality improvement in neurology: Mild cognitive impairment quality measurement set. *Neurology* October 15, 2019. Published ahead of Print September 2019. [Article](#)
- Mini-Cog Assessment Tool: [PDF Link](#)

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Mark

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