

# **Protocol: Screening for Cognitive Impairment in the Elderly**

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## **Section I. Purpose and Background**

This report will support the Canadian Task Force on Preventive Health Care (CTFPHC) recommendation on screening for cognitive impairment. The recommendation will be specific for screening and will not include case finding in those with symptoms of cognitive impairment. We will update the recent 2013 systematic review conducted for the United States Preventive Services Task Force (USPSTF)<sup>1</sup> to determine if any additional evidence can be identified about screening for cognitive impairment in the elderly.

For the purpose of this review, cognitive impairment includes both mild cognitive impairment (MCI) and dementia. MCI includes problems with language, thinking, judgment, and memory that are noticeable but do not affect daily living, whereas dementia occurs when the problems are severe enough to affect daily living.<sup>2</sup> The Alzheimer's Society of Canada reported that 14.9% in Canadians over the age of 65 years suffered from cognitive impairment in 2011.<sup>2</sup> This number is expected to increase with the aging population as the risk of dementia doubles for every 5 year increase in age.<sup>2,3</sup>

## **Section II. Previous CTFPHC Recommendations and Recommendations from Other Guideline Developers**

The CTFPHC guideline from 2001 found insufficient evidence to recommend for or against screening for cognitive impairment.<sup>4</sup> In 2003, the USPSTF published guidelines on screening and found insufficient evidence.<sup>5</sup> This guideline is currently being updated. The NICE guideline (2006, amended in 2011) stated not to conduct general population screening for dementia.<sup>6</sup> Other guidelines on screening for cognitive impairment have been developed by the American Academy of Neurology (2001),<sup>7</sup> BC Ministry of Health (2007),<sup>8</sup> and recommend against screening or state there is insufficient evidence to recommend screening.

## **Section III. Scan of New Evidence since Previous Recommendation**

No new studies were identified in our scoping review, and the USPSTF updated systematic review did not find any additional published studies on the effectiveness of screening for cognitive impairment or dementia.<sup>1</sup>

## **Section IV. Review Approach**

This review will be an update of the USPSTF systematic review on screening for cognitive impairment in older adults.<sup>1</sup> A systematic search will be conducted to identify any studies published following the search dates of the USPSTF systematic review (December 2012). In addition, we will conduct a staged review, and will first look for evidence about benefits and harms of screening. If evidence is identified to suggest screening for cognitive impairment improves outcomes, then a search for the test performance of screening instruments will be conducted.

In addition to the update of the USPSTF review on screening, we will also conduct a search for contextual questions if evidence is identified for screening effectiveness.

## **Analytic Framework and Key Questions**

This review will use the analytical framework and key questions from the USPSTF,<sup>1</sup> with the exception of the treatment questions which will not be considered for this update.

### **Key questions from the USPSTF review on screening:<sup>1</sup>**

1. Does screening for cognitive impairment (dementia or MCI) in community-dwelling older adults in primary care relevant settings improve decision making, patient, family/caregiver, or societal outcomes?
- 2a. What is the test performance of screening instruments to detect **dementia** in community dwelling older adult primary care patients?
- 2b. What is the test performance of screening instruments to detect **MCI** in community dwelling older adult primary care patients?
3. What are the harms of screening for cognitive impairment?

### **Contextual questions:**

1. What is the cost-effectiveness of screening for cognitive impairment in older adults?
2. What are the patient or caregiver values and preferences for screening for cognitive impairment in older adults? What is the evidence for a higher burden of disease, a differential treatment response, differential performance of screening for cognitive impairment or barriers to implementation of screening for cognitive impairment in subgroups? Subgroups include: Aboriginal population, rural or remote populations, or other ethnic populations.

### **Literature Search**

The search will be based on the USPSTF search<sup>1</sup> and will cover the period from the last search date for that review. The contextual question search will search databases for the last 5 years.

### **Inclusion and Exclusion Criteria**

The inclusion and exclusion criteria will be based on the criteria used for the 2013 USPSTF review.<sup>1</sup>

## **Section V. Planned Schedule and Timeline**

Draft protocol: November 2013

Final protocol: January 2014

Draft recommendation: February 2014

Final recommendation: June 2014

## REFERENCES

1. Lin JS, O'Connor E, Rossom RC, Perdue LA, Eckstrom E. Screening for cognitive impairment in older adults: A systematic review for the U.S. preventive services task force. *Ann Intern Med.* 2013. doi: 10.7326/0003-4819-159-9-201311050-00730; 10.7326/0003-4819-159-9-201311050-00730.
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