

CADTH Reference List

Screening for Cognitive Impairment in Asymptomatic Community-Dwelling Older Adults: A 2022 Update

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Key Messages

- No evidence was identified regarding the clinical utility of screening for cognitive impairment in asymptomatic community-dwelling older adults.
- Two evidence-based guidelines were identified regarding the use of screening for cognitive impairment in asymptomatic community-dwelling older adults.

Research Questions

1. What is the clinical utility of screening for cognitive impairment in asymptomatic community-dwelling older adults?
2. What are the evidence-based guidelines regarding the use of screening for cognitive impairment in asymptomatic community-dwelling older adults?

Methods

Literature Search Methods

The literature search strategy used in this report is a modified, updated version of one developed for a previous CADTH report. A limited literature search was conducted by an information specialist on key resources including MEDLINE, PsycINFO, the Cochrane Database of Systematic Reviews, the International HTA Database, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search strategy was comprised of both controlled vocabulary, such as the National Library of Medicine’s MeSH (Medical Subject Headings), and keywords. The main search concepts were screening, cognitive impairment, and community-dwelling older adults or primary care settings. CADTH-developed search filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, or network meta-analyses, randomized controlled trials or controlled clinical trials, and guidelines. Where possible, retrieval was limited to the human population. The initial search was limited documents published between January 1, 2015 and September 29-30, 2020. For the current report, database searches were rerun on January 12, 2022 to capture any new or modified records since the initial search date. The search was also limited to English language documents. Internet links were provided, where available.

Selection Criteria

One reviewer screened literature search results (titles and abstracts) and selected publications according to the inclusion criteria presented in Table 1. Full texts of study publications were not reviewed. Open access full-text versions of evidence-based guidelines were reviewed when available.

Table 1: Selection Criteria

| Criteria | Description |
|----------------------|--|
| Population | Community-dwelling adults (age 65 years or older) without symptoms of cognitive impairment |
| Intervention | Screening for dementia or mild cognitive impairment using a clinician- or self-administered instrument |
| Comparators | Q1: No screening Q2: Not applicable |
| Outcomes | Q1: Clinical utility (e.g., health care utilization, health effects of false positive or negative test result, cognitive function, quality of life, depression, anxiety, mortality, harms) Q2: Recommendations regarding the appropriate use of screening for dementia or mild cognitive impairment (e.g., whether to screen, and at what time intervals) |
| Study designs | Health technology assessments, systematic reviews, randomized controlled trials, evidence-based guidelines |

Q = question.

Results

Two evidence-based guidelines were identified regarding the use of screening for cognitive impairment in asymptomatic community-dwelling older adults.^{1,2} No relevant health technology assessments, systematic reviews, or randomized controlled trials were identified regarding the clinical utility of screening for cognitive impairment in asymptomatic community-dwelling older adults.

Additional references of potential interest that did not meet the inclusion criteria are provided in Appendix 1.

References

Health Technology Assessments

No literature identified.

Systematic Reviews

No literature identified.

Randomized Controlled Trials

No literature identified.

Guidelines and Recommendations

1. Ismail Z, Black SE, Camicioli R, et al. Recommendations of the 5th Canadian Consensus Conference on the diagnosis and treatment of dementia. *Alzheimers Dement*. 2020 Aug;16(8):1182-1195. [PubMed](#)

Since 1989, four Canadian Consensus Conferences on the Diagnosis and Treatment of Dementia (CCCDTD) have provided evidence-based dementia guidelines for Canadian clinicians and researchers. We present the results of the 5th CCCDTD, which convened in October 2019, to address topics chosen by the steering committee to reflect advances in the field, and build on previous guidelines. **Topics included: (1) utility of the National Institute on Aging research framework for clinical Alzheimer’s disease (AD) diagnosis; (2) updating diagnostic criteria for vascular cognitive impairment, and its management; (3) dementia case finding and detection; (4) neuroimaging and fluid biomarkers in diagnosis; (5) use of non-cognitive markers of dementia for better dementia detection; (6) risk reduction/prevention; (7) psychosocial and non-pharmacological interventions; and (8) deprescription of medications used to treat dementia.** We hope the guidelines are useful for clinicians, researchers, policy makers, and the lay public, to inform a current and evidence-based approach to dementia.

See: *Table 3 Dementia case finding and detection, recommendations for asymptomatic screening, p. 1184*

2. Tang-Wai DF, Smith EE, Bruneau M-A, et al. CCCDTD5 recommendations on early and timely assessment of neurocognitive disorders using cognitive, behavioral, and functional scales. *Alzheimers Dement (N Y)*. 2020 Nov 11;6(1):e12057. [PubMed](#)

Introduction: Earlier diagnosis of neurocognitive disorders and neurodegenerative disease is needed to implement preventative interventions, minimize harm, and reduce risk of exploitation in the context of undetected disease. Along the spectrum from subjective cognitive decline (SCD) to dementia, evidence continues to emerge with respect to detection, staging, and monitoring. Updates to previous guidelines are required for clinical practice. Methods: **A subcommittee of the 5th Canadian Consensus Conference on Diagnosis and Treatment of Dementia (CCCDTD) reviewed emerging evidence to address the following: (1) Is there a role for screening at-risk patients without clinical concerns? In what context is assessment for dementia appropriate? (2) What tools can be used to evaluate patients in whom cognitive decline is suspected? (3) What important information can be gained from an informant, using which measures? (4) What instruments can be used to get more in-depth information to diagnose mild cognitive impairment (MCI) or dementia? (5) What is the approach to those with cognitive concerns but without objective changes (ie, SCD)? (6) How do we track response to treatment and change over time? The Grading of Recommendations Assessment, Development, and Evaluation system was used to rate quality of the evidence and strength of the recommendations.** Results: We recommend instruments to assess and monitor cognition, behavior, and function across the cognitive spectrum, including reports from patient and informant. **We recommend against screening asymptomatic older adults but recommend investigation for self- or informant reports of changes in cognition, emergence of behavioral or psychiatric symptoms, or decline in function or self-care.** Standardized assessments should be used for cognitive and behavioral change that have sufficient

validity for use in clinical practice. Discussion: **The CCCDTD5 provides evidence-based recommendations for detection, assessment, and monitoring of neurocognitive disorders. Although these guidelines were developed for use in Canada, they may also be useful in other jurisdictions.**

Appendix 1: References of Potential Interest

Previous CADTH Reports

3. Screening for cognitive impairment in asymptomatic community-dwelling older adults: clinical utility and guidelines. (*CADTH rapid response report: reference list*). Ottawa (ON): CADTH; 2020 Oct: <https://www.cadth.ca/sites/default/files/pdf/htis/2020/RA1143%20Cognitive%20Impairment%20Final.pdf>. Accessed 2022 Jan 14.