Appendix 1. Characteristics of studies included for the search update on benefits and harms of screening versus no screening among asymptomatic adults ≥65 years in primary care.

Study; design; country; funding	Population characteristics	Intervention and comparator	Outcomes; follow-up
Fowler, et al, 2020 (1) RCT United States National Institutes of Health, National Institute on Aging	Community dwelling, adults ≥65 years with at least one office visit to their PCP in the last year, no previous diagnosis of ADRD or cognitive impairment, no prescription for cholinesterase inhibitors or memantine, not diagnosed with schizophrenia, bipolar or major depression **N=4005 randomized** Baseline assessments for participants included age (74.1 +/- 6.9), sex (66% female), race, comorbidity status, Charlson comorbidity score, education, study site, the Health Utilities Index (HUI) (2), the Patient Health Questionnaire-9 (PHQ-9) (3,4), the Generalized Anxiety Disorder seven-item scale (GAD-7) (5,6), the Medical Outcomes Study Social Support Survey Instrument (7), and seven questions	**Screening (n=1997 randomized):** − ADRD screen with Memory Impairment Screen (MIS) assessment (8) and Mini-Cog (9). − Patients who scored positive on either the MIS or Mini-Cog were given a follow-up diagnostic assessment at a local collaborative memory care program, the Aging Brain Care Medical Home (ABC MedHome) − Primary care provider (PCP) was notified of screening result − **n=992** completed 12-month assessment **Usual care (n=1008 randomized):** − Usual primary care, including a referral to a local memory care practice if their PCP suspected the presence of a cognitive impairment at any time during the study − Cognitive impairment in the non-screened group was defined by having a diagnosis of mild cognitive impairment or ADRD or starting a new prescription for a cholinesterase inhibitor or memantine at any point	**Primary outcomes** **Health-related quality of life (HRQoL):** Assessed at baseline, 1, 6 and 12 months using the HUI (2) **Depression and anxiety:** Assessed at 1, 6 and 12 months with PHQ-9 (3,4) and GAD-7 (5,6). **Secondary outcomes** **Healthcare utilization:** Number of patients with ≥1 emergency department visits or ≥1 hospital admissions at 12 months **ADRD incidence:** Incident diagnosis of mild cognitive impairment or ADRD or starting a new prescription for a cholinesterase inhibitor or memantine within 12 months from the screening event **Advance care planning**: Seven questions inquiring about the presence of an Advance Directive and Power of Attorney for healthcare and financial affairs at baseline and 12 months. **Follow-up:** 1 year

Study; design; country; funding	Population characteristics	Intervention and comparator	Outcomes; follow-up
	inquiring about the presence of an Advance Directive and Power of Attorney for healthcare and financial affairs.	in the 12 months post study enrollment. – **n=1008** completed 12-month assessment	

ADRD= Alzheimer disease and related dementias; PCP = primary care provider;

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Appendix 2. Disposition table.

Clinical expert: Dr. Zahinoor Ismail, University of Calgary (received on March 30, 2021)

Disclosure(s): I have received honoraria from Lundbeck/Otsuka, unrelated to this work. My institution has received funds from Acadia, Biogen, and Roche. My research has been funded by Alzhemer's Drug Development Foundation, Brain Canada, CCNA, CIHR, CABHI, NIH, and Weston Foundation - all funds paid to institution.

Comments	CTFPHC response
1. Conceptually, the field has moved forward since 2014. Specifically, it is becoming better appreciated that there are many scales that can measure cognition, and all have their strengths and weaknesses. Almost all are subject to bias by language, education, and culture.	We have added to the "Implementation" section *The USPSTF notes that instruments such as MMSE, MoCA, MiniCog can adequately detect cognitive impairment (34) and these instruments could be a resource for diagnostic assessment of these patients. As noted by the clinical expert, sensitivity, specificity, length of administration, cost and cultural, language or educational biases of validated screening tools as well as inclusion of information from family or caregivers are important considerations for diagnostic investigations.* The rationale for our strong recommendation against screening was based on a lack of direct evidence (i.e. no trials on screening vs no screening for cognitive impairment in asymptomatic adults). New evidence would need to also directly compare screening vs no screening to prompt an update to a strong recommendation. The advancement in indirect evidence of diagnostic test accuracy is important and we will monitor this and note it in our reaffirmation analysis.
2. Later life changes in behaviour or personality can be manifestations of early neurodegenerative disease, often misdiagnosed as a psychiatric illness. Additionally, even with normal cognition (but more common in MCI), older adults can develop anosognosia or a lack of awareness of their cognitive, functional or behavioural deficits. Asking a family	This is an important reminder to emphasize the caveats when reaffirming recommendations. The full 2016 guideline states that "Practitioners should consider cognitive assessment for patients with signs and symptoms of impairment or when family members or patients express concerns about potential cognitive decline." It also mentions other non-cognitive symptoms to be aware of (e.g. behavioural or psychological symptoms that may mildly or substantially affect a patient's day-to-day life or usual activities). Practitioners should consider cognitive assessment for patients with signs and symptoms of impairment or when family members or patients express concerns about potential cognitive decline."

member, caregiver, or reliable informant is essential for a proper dementia assessment.	We will also note that when deciding to test a patient, screening tools should allow for inclusion of information from family or caregivers.
3. We need good recommendations on when to screen	The previous guideline and reaffirmation are specific to asymptomatic individuals. However, we have added the following to the reaffirmation *"This recommendation is about screening and does not apply to symptomatic individuals such as those who are concerned about their own cognitive performance (i.e. the patient has raised complaints about cognitive changes with their clinician or others) or who are suspected of having mild cognitive impairment or dementia by clinicians or non-clinicians (caregivers, family, or friends) and/or have symptoms suggestive of mild cognitive impairment or dementia (such as loss of memory, language, attention, visuospatial, or executive functioning, or behavioural or psychological symptoms that may either mildly or significantly impact a patient's day-to-day life or usual activities)."*

Previous WG member: Dr. Brett Thombs, McGill University (received on May 10, 2021)

Disclosure(s): None

Comments	CTFPHC response
1. To the best of my knowledge, there are no new developments that would influence the Task Force recommendation.	Thank you