

Rapid screening tools for dementia and depression

Dementia (or major neurocognitive disorder) and depression are conditions that have a significant impact on the lives of older adults. They also pose challenges in primary care, especially in diagnosis. Thorough assessment of cognitive and mental health conditions consumes time and resources. Screening tools commonly used in the specialist setting are too long for practical use during a standard family physician clinic visit. This clinical snippet outlines two tools that can serve as a first step in identifying patients requiring additional assessment, in a rapid and effective manner.

Mini-Cog

As the prevalence of dementia dramatically increases in Canada over the next several decades, family physicians can expect to see more older adults presenting with cognitive changes.¹ Although there is no curative treatment for dementia, early diagnosis is essential for managing the disease, which allows for education, monitoring, and future planning, and timely access of supports and services.² However, there are challenges to identifying dementia in a primary care setting, such as overcoming time constraints. Not surprisingly, studies have found that up to two-thirds of all dementias go unrecognized in primary care.³ There are various screening tools available to identify patients with possible dementia. Many, such as the Mini Mental Status Examination (MMSE) or Montreal Cognitive Assessment (MoCA), are time-consuming for a busy family practice.

The Mini-Cognitive Assessment Instrument (Mini-Cog) is a rapid cognitive screening test that includes asking the person to recall three words from an earlier exercise and draw a clock with the hands set at “10 past 11.” Scoring is based on the following three rules:

- Recall zero of three words = screen positive
- Recall three of three words = screen negative
- Recall one or two of three words is classified based on the clock task; if the clock task is scored correctly (includes a circle, approximately correct number placement, and hands pointing to the 11 and 2) the screen is negative

The Mini-Cog compares well with the MMSE, with similar sensitivity and specificity,^{4,5} and it has the advantage of taking less than half the time of the MMSE.⁵ When the Mini-Cog is given in a family physician’s office, a negative score can provide reassurance and limit the need for further assessment. Although a positive score is not a definitive diagnosis of dementia, it can identify those patients needing additional cognitive assessment that includes additional history (including from collateral sources), functional assessment, examination, and investigations.

PHQ-2

The role of primary care is important in managing depression in older adults. Depressive symptoms are present in 15 to 20 per cent of older adults in the community, leading to negative effects on their life, daily function, and comorbid conditions.⁶ Depression in older populations is also not as easily recognized, compared to younger populations, and studies have shown that primary care providers detect only 40 to 50 per cent of these cases.⁷ Challenges for recognizing depression include atypical presentation with more somatic complaints, and there may be a greater resistance to diagnosis.⁸ Instead of depressed or low mood, presenting complaints may focus more on anhedonia, avolition, unexplained physical symptoms, and low energy or fatigue. Because of these challenges, using a reliable and efficient tool to screen for depression in older adults is important. Tools such as

the Geriatric Depression Scale (GDS) or Personal Health Questionnaire-9 (PHQ-9) are useful for monitoring disease progression, though they may not be as useful as a brief screening tool for detection purposes in the primary care setting.⁸

The Personal Health Questionnaire-2 (PHQ-2) is a rapid, two-question screening tool:

- During the past weeks have you often been bothered by feeling down, depressed, or hopeless?
- During the past month have you often been bothered by little interest or pleasure in doing things?

The PHQ-2 has been found to be an effective screening tool to identify possible depression in older adults, in the primary care setting, with sensitivity of 100 per cent and specificity of 77 per cent.⁹ This simple two-question tool can help health care professionals recognize which patients require a more detailed assessment of depressive symptoms and mental health concerns.

Your committee

The HCOE Program Committee consists of representatives from the CFPC's five regions.

If you have any ideas or questions related to your region, please contact us at hcoe@cfpc.ca.

Dr. Chris Frank, Chair

Dr. Huy Nguyen, Atlantic representative

Dr. Matthieu Lafontaine-Godbout, Québec representative

Dr. Sidney Feldman, Ontario representative

Dr. Pravinsagar Mehta, Manitoba/Saskatchewan representative

Dr. Jed Shimizu, British Columbia/Alberta representative

Dr. Fred Mather, Long Term Care representative

Dr. Robert Lam, Observer from the Canadian Geriatrics Society

Sincerely

Dr. Jed Shimizu, British Columbia/Alberta representative



References

1. Smetanin P, Kobak P, Briante C, Stiff D, Sherman G, Ahmad S. *Rising tide: the impact of dementia on Canadian society 2008 to 2038*. Toronto, ON: Alzheimer Society of Canada; 2009.
2. Prorok JC, Horgon S, Seitz DP. Health care experiences of people with dementia and their caregivers: a meta-ethnographic analysis of qualitative studies. *CMAJ* 2013;185(14):669-80.
3. Valcour VG, Masaki KH, Curb D, Blanchette PL. The detection of dementia in the primary care setting. *Arch Intern Med* 2000;160(19):2964-8.
4. Borson S, Scanlan J, Brush M, Vitaliano P, Dokmak A. The mini-cog: a cognitive 'vital signs' measure for dementia screening in multi-lingual elderly. *Int J Geriatr Psychiatry* 2000;15(11):1021-7.
5. Yang L, Yan J, Jin X, Jin Y, Yu W, Xu S, et al. Screening for dementia in older adults: comparison of mini-mental state examination, mini-cog, clock drawing test and ad8. *PLoS One* 2016;11(12):e0168949.
6. Canadian Coalition for Seniors' Mental Health. *National guidelines for seniors' mental health*. Toronto, ON: Canadian Coalition for Seniors' Mental Health; 2006.
7. Mitchell AJ, Rao S, Vaze A. Do primary care physicians have particular difficulty identifying late-life depression? A meta-analysis stratified by age. *Psychother Psychosom* 2010;79(5):285-94.
8. Park M, Unutzer J. Geriatric depression in primary care. *Psychiatr Clin North Am* 2011;34(2):469-87.
9. Li C, Friedman B, Conwell Y, Fiscella K. Validity of the Patient Health Questionnaire 2 (PHQ-2) in identifying major depression in older people. *J Am Geriatr Soc* 2007;55(4):596-602.