

Screening for depression in primary care: recommendation statement from the Canadian Task Force on Preventive Health Care

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In 1994 the Canadian Task Force on Preventive Health Care addressed screening for depression in asymptomatic individuals during periodic health assessments.¹ On the basis of a review of the literature published to May 1993, the task force concluded that there was fair evidence to exclude screening for depression in the primary care setting (grade D recommendation), because screening instruments did not improve the detection rate or management of depression, particularly among people at high risk, such as those with a family history of depression. The task force recently revisited the topic to determine whether studies published in the past 10 years provided new evidence to recommend that primary care practitioners routinely screen their patients for depression.

In 2002 a systematic review was conducted at the request of the US Preventive Services Task Force to determine whether routine screening improves the detection, treatment and outcome of depression.^{2,3} This rigorous overview provided the basis for our review to update the Canadian task force's recommendation (Table 1). (A summary of the methods and results of the Canadian task force's review of the US task force's work, the subsequent literature update and the process of arriving at the practice recommendations are available at www.ctfphc.org.)

Depression is frequently encountered in patients in the primary care setting. The 1994/95 National Population Health

Survey, a Canadian longitudinal study that included household residents in all provinces, gave a 1-year prevalence rate for major depressive disorder of about 6% among Canadians 18 years of age and older.⁸ Rates were higher among females than among males and declined in both sexes in the elderly population. Data from a province-wide Canadian community-based survey revealed a 6-month prevalence of depression of 5.9% among children 6–16 years of age.⁹ Certain subgroups of the Canadian population may be at increased risk for depression. The 2000/01 Canadian Community Health Survey showed that, after controlling for socioeconomic factors, Aboriginal people living off-reserve were 1.5 times more likely than non-Aboriginal people to have experienced an episode of depression in the previous year.¹⁰

The prevalence of major depression in Canadian primary care settings is unknown; however, in the United States point prevalence estimates of between 4.8% and 8.6% have been reported.^{2,11}

When making its recommendations (Table 1), the Canadian task force not only considered the effectiveness of screening tools in identifying patients with depression in primary care settings, but it also evaluated the treatment options and outcomes arising from the initial screening process, weighing at each point the potential benefits of intervention against the potential harms (including false-positive results

leading to further, unnecessary diagnostic investigation). The systematic review for the US task force³ found good evidence that screening for depression in the primary care setting improves detection rates. Furthermore, when screening is linked to appropriate follow-up and treatment, the overall result, based on a meta-analysis of findings from key studies, was a reduced risk of depression. However, when identification of depressed patients was not linked to follow-up and treatment, there was generally much less improvement in depressive symptoms. Evidence regarding screening adolescents and children is lacking. The available evidence led the US task force to recommend that adults be screened for depression “in clinical practices that have systems in place to assure accurate diagnosis, effective treatment, and follow-up” (grade B recommendation).¹² The Canadian task force, after reviewing this body of evidence in the Canadian context, and having ascertained that no new evidence was available, reached the same conclusion (Table 1).

In the studies reviewed, “effective follow-up and treatment” referred to screening programs that were integrated with both feedback to the clinician regarding depression status and a system for managing treatment (antidepressants and psychotherapeutic interventions). Trials that included access to case management or mental health care as part of the system of care were particularly effective in reducing depressive symptoms.

Clinical implications: What should primary health care providers do?

A number of screening tools exist for use in primary care settings. Asking 2 simple questions regarding mood and anhedonia — “Over the past 2 weeks, have you felt down, depressed, or hopeless?” and “Over the past 2 weeks, have you felt little interest or pleasure in doing things?” — may be as effective as longer instruments.^{12,13} The authors of the systematic review for the US task force calculated that 11 patients with depression would need to be identified through screening to produce 1 additional remission at 6 months. Assuming a 10% prevalence of treatment-responsive depression in primary care, 110 patients would need to be screened to produce this additional clinical remission.² Although the optimal interval for screening is unknown, the US task force recently stated that “recurrent screening may be most productive in patients with past history of depression, unexplained somatic symptoms, comorbid psychological conditions (such as panic disorder or generalized anxiety), substance abuse, or chronic pain.”¹² A positive screen must be followed by accurate diagnosis, effective treat-

ment and follow-up to ensure that the benefits of screening are realized.

“Integrated programs” as defined in the US and Canadian task force reviews went beyond feedback and included interventions such as education of patients or health care providers or both, access to case management or mental health care and telephone follow-up.¹² In deciding whether an integrated program of care for screening and treating depression exists in a community, clinicians need to examine the step-by-step process by which patients go from screening to receiving effective treatment. Given the heterogeneity of the models used in the studies reviewed, it is not possible to recommend a specific primary care-based screening and treatment program for depression. However, the following questions, with examples, may assist clinicians in determining whether integrated care exists in their community:

- *Is there a mechanism to ensure that the screening results are reported to the clinician, who can then provide appropriate treatment for depression? What is the process by which the patient proceeds from screening positive to having the diagnosis confirmed to receiving treatment for depression?* In the study

by Katzelnick and colleagues,⁵ results of telephone screening were provided to physicians, who saw the patients at an evaluation visit and then for pre-scheduled follow-up sessions. Providers in the study by Wells and colleagues⁷ were asked to schedule a visit with patients 2 weeks after the initial screening.

- *Is there a clinician trained in the use of antidepressants who will follow up with patients who screen positive? Is there access to psychotherapists trained in approaches effective for the treatment of depression?* Evidence-based training in the management and treatment of depression was implemented in the integrated programs reviewed. For example, the study by Wells and colleagues⁷ provided a 2-day training workshop to clinical leaders (local primary care experts and nurse specialists) as well as educational materials for clinicians and patients. Furthermore, the clinical leaders provided educational sessions, including lectures and ongoing feedback, to clinicians based on medical record audits. Those in the psychotherapy intervention group of this trial had access to therapists who received specific training in cognitive behavioural therapy. In the study by Rost and colleagues,⁶ both primary care physicians and nurses received

Table 1: Summary of recommendations by the Canadian Task Force on Preventive Health Care for screening for depression

Manoeuvre	Effectiveness	Level of evidence	Recommendation ⁴
Screening adults in the general population for depression in settings with integrated feedback and treatment systems*	There is evidence that screening improves the accuracy of identifying depressed patients. In studies where an integrated system of screening and follow-up was available, there was improvement in patient outcomes ²	Level I, good to fair ^{2,5-7}	There is fair evidence to recommend screening adults in the general population for depression in primary care settings that have integrated programs for feedback to patients and access to case management or mental health care (grade B recommendation)
Screening adults in the general population for depression in settings without integrated feedback and treatment systems*	There is evidence that screening improves the accuracy of identifying depressed patients. In studies without integrated feedback and treatment systems, there were fewer improvements in patient outcomes ²	Level I, good (systematic review of RCTs) ²	There is insufficient evidence to recommend for or against screening adults in the general population for depression in primary care settings where effective follow-up and treatment are not available (grade I recommendation)
Screening children and adolescents in the general population for depression	No studies were identified that examined treatment outcomes for children or adolescents screened for depression in primary care settings ²	Level I, good (systematic review of RCTs) ²	There is insufficient evidence to recommend for or against routine screening for depression among children or adolescents in primary settings (grade I recommendation)

*Screening programs integrated with both feedback to the clinician regarding depression status and a system for managing treatment (antidepressant medications and psychotherapeutic interventions). Trials that included access to case management or mental health care as part of the system of care were particularly effective in reducing depressive symptoms. Since integrated screening and feedback/treatment systems are not the norm in Canadian primary care practices, clinicians are encouraged to advocate for these to be implemented.

brief training in the management of depression that was aimed at enhancing the proportion of patients who completed a course of psychopharmacotherapy or psychotherapy. In each of these studies, there was strong coordination in place and a systematic process that integrated screening with treatment of depression.

Authors of the US task force review suggested that, for increased rates of screening to be translated into improved outcomes, special focus on the course of therapy may be required, "perhaps in the form of a quality improvement effort or other programs systematically designed to provide appropriate care" (page 66).³

The Canadian task force recognizes that such services may not yet be available in all settings. However, on the basis of the evidence, and the burden of this disease, physicians are encouraged to advocate for the implementation of systems to provide linked screening for depression and treatment services in primary care settings.

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References

1. Feightner JW. Early detection of depression. In: Canadian Task Force on the Periodic Health Examination. *Canadian guide to clinical preventive health care*. Ottawa: Health Canada; 1994. p. 450-4.
2. Pignone MP, Gaynes BN, Rushton JL, Burchell CM, Orleans CT, Mulrow CD, et al. Screening for depression in adults: a summary of the evidence for the U.S. Preventive Services Task Force. *Ann Intern Med* 2002;136:765-76.
3. Pignone M, Gaynes BN, Rushton JL, Mulrow CD, Orleans CT, Whitener BL, et al. *Screening for depression* [systematic evidence review no 6]. Rockville (MD): Agency for Healthcare Research and Quality; 2002.
4. Canadian Task Force on Preventive Health Care. New grades for recommendations from the Canadian Task Force on Preventive Health Care. *CMAJ* 2003;169(3):207-8.
5. Katzelnick DJ, Simon GE, Pearson SD, Manning WG, Helstad CP, Henk HJ, et al. Randomized trial of a depression management program in high utilizers of medical care. *Arch Fam Med* 2000;9:345-51.
6. Rost K, Nutting P, Smith J, Werner J, Duan N. Improving depression
7. Wells KB, Sherbourne C, Schoenbaum M, Duan N, Meredith L, Unützer J, et al. Impact of disseminating quality improvement programs for depression in managed primary care: a randomized controlled trial. *JAMA* 2000;283:212-20.
8. Beaudet MP. Depression. *Health Rep* 1996;7:11-24.
9. Fleming JE, Offord DR. Epidemiology of childhood depressive disorders: a critical review. *J Am Acad Child Adolesc Psychiatry* 1990;29(4):571-80.
10. Statistics Canada. Health of the off-reserve Aboriginal population, 2000/01. *The Daily* [Statistics Canada, Ottawa] 2002;Aug 27:2-3. Cat no 11-001E. Available: www.statcan.ca/Daily/English/020827/d020827.pdf
11. Depression Guideline Panel. *Depression in primary care: Volume 1. Detection and diagnosis* [clinical guideline no 5, AHCPR publ no 93-0550]. Rockville (MD): Agency for Healthcare Research and Quality; 1993. Available: www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat6.chapter.14485 (accessed 2004 Nov 17).
12. US Preventive Services Task Force. Screening for depression: recommendations and rationale. *Ann Intern Med* 2002;136:760-4.
13. Whooley MA, Avins AL, Miranda J, Browner WS. Case-finding instruments for depression. Two questions are as good as many. *J Gen Intern Med* 1997;12:439-45.

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