Screening for depression in adults: Recommendations 2013

Canadian Task Force on Preventive Health Care

Putting Prevention into Practice

Canadian Task Force on Preventive Health Care
Groupe d'étude canadien sur les soins de santé préventifs

Overview

- CTFPHC Background
- Screening for Depression: Overview
- Scientific Methods
- Depression Screening Recommendations
- Details of Recommendations
- Questions & Answers

CTFPHC Background

Who is the CTFPHC?

- The Canadian Task Force on Preventive Health Care (CTFPHC)
  - Established to develop clinical practice guidelines that support primary care providers in delivering preventive health care
  - Identify evidence gaps that need to be filled and develop guidance documents for each topic
  - Comprised of 14 primary care experts

SCREENING FOR DEPRESSION: OVERVIEW

Background

- This guideline (2013) updates previous CTFPHC depression screening guidelines (2005).

CTFPHC 2005 Guideline:

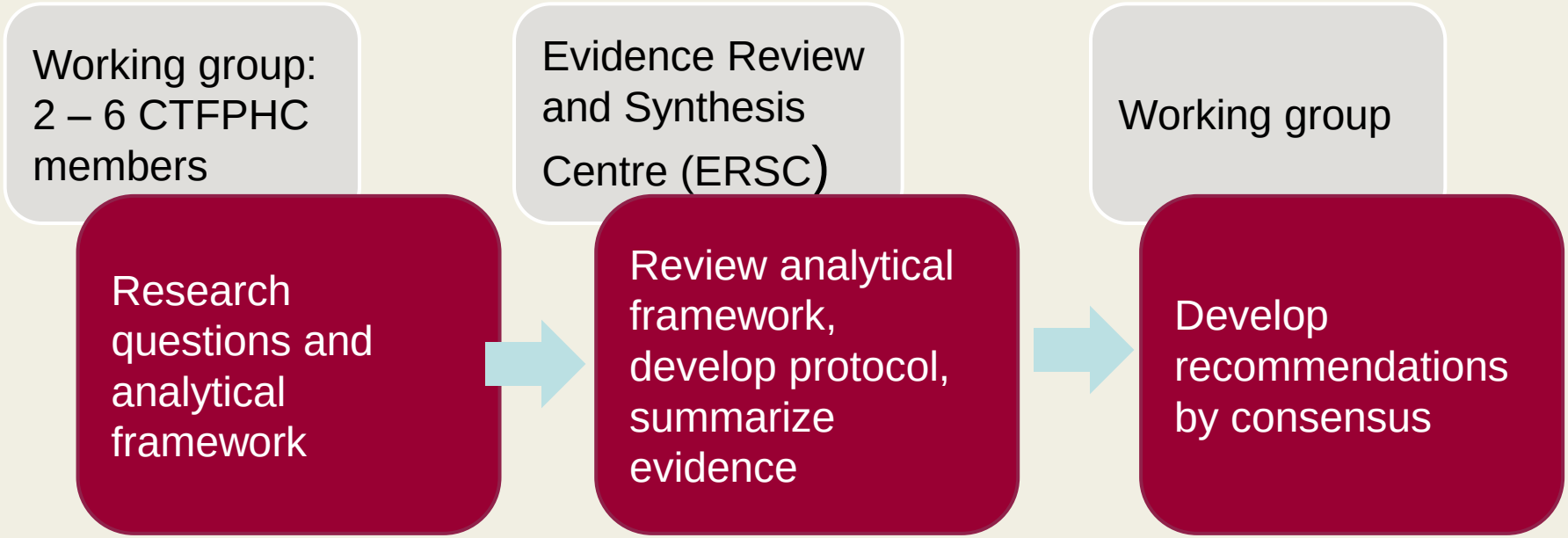
Recommendation	Evidence
Recommend screening adults in the general population for depression in primary care settings that have integrated programs for feedback to patients and access to case management or mental health care.	-Screening improves the accuracy of diagnosing depression. - Benefit was more likely in settings where screening is linked to effective follow-up and treatment.

The Goal of the 2013 Guideline

- To address a disease with high prevalence amongst the Canadian population.
- To address questions raised from differing recommendations among industrialized countries (e.g. USPSTF and NICE).
- To form the recommendations on an *updated* systematic review of the literature.

SCIENTIFIC METHODS

Methods of the CTFPHC



Eligible Studies for Clinical Practice Guidelines

Population: Asymptomatic adults over the age of 18 years from the general population who are not at high risk for depression, or who are at high risk for depression.

- Effectiveness of screening on preselected outcomes
  - systematic reviews
  - randomized controlled trials
  - observational studies with comparison groups
- Harms of screening
  - studies of any design
  - Psychological stress (labelling, anxiety, stigma), false positives, false negatives, decreased day-to-day functioning, increased symptoms
- Contextual questions (n=7)
  - studies of any design
  - For example: effect of depression screening in subgroups; resource implications; values and preferences; and outcome performance measurement.

GRADE: How is evidence graded?

Quality of Evidence	Explanation
High	There is high confidence that the true effect lies close to the estimate of the effect
Moderate	The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different
Low	The true effect may be substantially different from the estimate of the effect
Very Low	Any estimate of effect is very uncertain

GRADE: How is the strength of recommendations graded?

- Recommendations graded as **strong** or **weak**
- Strength of recommendations is based on 4 factors:
  - Balance between desirable and undesirable effects
  - Certainty of effects
  - Values and preferences
  - Feasibility and resource implications

Equally important

Interpretations of the recommendations

Implications	Strong Recommendation	Weak Recommendations
For patients	• Most individuals would want the recommended course of action; • only a small proportion would not.	• The majority of individuals in this situation would want the suggested course of action • but many would not.
For clinicians	• Most individuals should receive the intervention.	• Recognize that different choices will be appropriate for individual patients; clinicians must help patients make management decisions consistent with values and preferences.
For policy makers	• The recommendation can be adapted as policy in most situations.	• Policy making will require substantial debate and involvement of various stakeholders.

Screening for Depression

RECOMMENDATIONS

Definition of Screening

- By definition screening is used to identify only new cases of depression.

- Screening is performed in individuals with no apparent symptoms, to detect those individuals with a high probability of having a disease – before the disease manifests itself (i.e. early identification).

- Those identified through screening undergo further testing to confirm the presence of the disease (i.e. diagnostic testing). If confirmed, they may be offered disease treatment.

The net benefit of screening depends on early identification and successful treatment, and requires that the benefits of such treatment outweigh any harm, such as side effects of medication.

Considerations

These recommendations apply to adults who:

- are 18+ years of age
- with no apparent symptoms of depression
- are at average risk or increased risk for depression

These recommendations ***do not*** apply to people:

- with known depression
- with past history of depression
- or people in treatment for depression

Average and Increased risk populations

Average risk

- includes all individuals 18 years of age and older with no apparent symptoms of depression who are not considered to be at high risk

Increased risk

- People with family history of depression, traumatic experiences as a child, recent traumatic life events, chronic health problems, substance misuse, perinatal and post-partum status and people of Aboriginal origin

CTFPHC Recommendation:
Average risk population

For adults at average risk for depression we recommend <u>not routinely screening</u> for depression

(Weak recommendation, very low quality evidence)

Recommendation: average risk population

- This recommendation is based on:
  - Lack of direct evidence on the benefits of screening the average risk population
  - Lack of evidence on harms of screening
  - Concerns about the potential harms of screening

- This recommendation places a relatively
  - *high value* on the importance of demonstrating a clear net benefit before recommending routine screening for an entire population and on the potential harms that may result from screening,
  - *low value* on the unproven likelihood that early identification and subsequent treatment of people with depression may lead to better health outcomes.

CTFPHC Recommendation:
High risk population

For adults in subgroups of the population who may be at increased risk of depression we recommend <u>not routinely screening</u> for depression

(Weak recommendation, very low quality evidence)

Recommendation: high risk population

- This recommendation is based on:
  - the lack of direct evidence on the benefits of screening the high risk population
  - the lack of evidence on harms
  - concerns about the potential harms of screening

- The incidence of depression (and prevalence of undetected depression) may be higher in high-risk populations, which in theory would be expected to favourably influence the potential benefit of screening.
- The efficacy and side effects of treatment, the performance of screening tools, and the possibility of harms also plausibly vary in high risk populations (as compared to the general population).
- It cannot be assumed that screening will be beneficial in the latter simply because the incidence and prevalence are higher.

Findings: Average and high risk population (1)

Evidence of screening effectiveness

- No direct evidence was found evaluating depression screening in average or high risk adults (i.e. no studies compared screening to not screening).
- 5 quasi-experimental studies examined community-based depression screening in Japanese elderly adults in rural communities
- Studies showed a reduction in the number of completed suicides (RRR=0.51, 95% CI, 0.34 to 0.75; p=0.0008)
- Very low quality of evidence due to methodological and generalizability concerns:
  - prevalence of depression in Japanese rural elders is 5 times higher than the elderly Canadian population as a whole (10.4% versus 2% respectively)
  - suicide rate for elderly Japanese women 7 times higher than in Canadian women 75 - 84 years of age (23.4 versus 3.3 per 100,000 respectively)

Findings: Average and high risk population (2)

Evidence of harms of screening:

- We did not identify any eligible studies measuring the harms of screening for depression.

Evidence on patient preferences and values:

- High variability in patient preferences and values
- Generally screening is important and the tools acceptable
- Treatment should be culturally sensitive
- Matching treatment to patient preferences improves outcomes

Evidence on resource implications:

- Time used to screen reduces availability to deliver other services known to be beneficial.
- Canadian modeling study: identifying new cases may not reduce the burden of depression. Instead, focus on effective long-term treatment of patients with identified depression.

Rationale for limiting review to direct evidence (screen vs. no- screen control group)

- Studies in which both treatment and control groups are screened *(with the former receiving treatment if depression is found while the latter remains untreated)* do NOT study the impact of screening per se; such studies actually compare the addition of treatment to screening alone.

- Since screening all patients may increase awareness of depression symptoms these studies may overestimate or underestimate any benefits.

- Studies that include people with known depression, with past history of depression, or people on treatment for depression, may bias the effect of screening. Screening does not apply to people who already have known disease.

Differences with the CTFPHC 2005 Guidelines

- The 2005 CTFPHC guideline recommended in primary care settings where integrated staff-assisted systems were available to manage treatment.

- CTFPHC 2005 Guideline based on evidence for US Preventive Services Task Force 2002 Guidelines, which showed screening improved accuracy of diagnosis and benefit was more likely in settings where screening was linked to effective follow-up and treatment.

- 2002 USPSTF lit review included trials that did not exclude people with prior or know depression – may have overestimated the benefits of screening.

2009 USPSTF review

- Differing research questions, study selection criteria and standards of admissible evidence.

- 1 RCT on the effectiveness of screening: not eligible because all participants underwent a diagnostic interview.

- 8 studies on the effectiveness of integrated systems not eligible because:
  - All 8 screened all patients in intervention and control groups.

- Additional considerations on these 8 studies:
  - 4 out of the 8 studies included patients who were currently being treated for depression or had been recently treated; 1 study included patients that had a history of depression, and 2 studies did not report the percentage currently or recently treated.
  - Substantial variability in the interventions delivered among all 8 studies – makes it difficult to determine what portion is attributed to screening.

Gilbody review

The review found no evidence that screening instruments have an effect on depression clinical outcomes.

- 19 papers were published on the 16 randomized controlled trials included in the Gilbody review. 16 of 19 were not considered further:
    - Published before 1994
    - Population included people with known depression, with past history of depression, or people in treatment for depression
    - The outcome or setting was outside of the scope of the guideline.
    - The interventions delivered included management and treatment of depression, not only screening
- 3 RCTs merited further analysis: all suggest routine screening does not lead to improved clinical outcomes in the average risk population.

- **Conclusion:**

It is unlikely that the inclusion of these 3 studies would have changed our recommendation for the average risk population

Reassessing studies missing a no-screen comparator

- 1 RCT evaluated the effectiveness of a postnatal screening programme using the EPDS.
- At 6 months, fewer participants in the intervention group had EPDS scores >10 (13% vs 22%; risk ratio: 0.59; 95% CI: 0.39–0.89).
- At 18 months there were no significant differences in EPDS scores >10 (RR = 1.10, 95% CI: 0.70–1.73).

- **Conclusion:**

It is unlikely that the inclusion of this study would have changed our recommendation for the high risk population

Considerations for implementation of recommendations

Patients with clinical clues to depression

The CTFPHC does not recommend routinely screening adults with no apparent symptoms of depression, but suggests that:

- clinicians remain vigilant in detecting any potential signs and symptoms of depression, especially in patients at increased risk

- clinicians actively search for depression in patients presenting with signs or symptoms that may indicate depression, but that do not identify themselves as depressed.

Detecting depression based on clinical symptoms tends to identify patients with more severe depression who may be more likely to benefit from treatment.

Considerations for implementation of recommendations

Implementing a weak recommendation

- Undesirable effects probably outweigh desirable effects but appreciable uncertainty exists.
- Must recognize different choices appropriate for each individual.
- Clinicians who believe their patients, or a subset of their patients, place a high value on the potential benefits and are less concerned with potential harms would likely implement screening for these patients

Considerations for implementation of recommendations

Integrated staff-assisted systems

- Integrated systems engage specialists who play a central role in providing depression management and follow-up.
- May be more effective in increasing response and remission over usual care.
- It is unclear whether screening is a necessary component of these programs (conclusion from 2009 USPSTF review).
- Physicians practicing in a setting where there are integrated, staff-assisted systems may be more inclined to choose screening given that treatment is more likely to be effective.

Recommendations from other industrialized countries

Org	Risk Assessment	Recommendation	Screening Test
NICE 2004/2009 UK Adults (CPG 23)	-Past history of depression -People with a chronic physical health problem with associated functional impairment	Recommend being alert to possible depression	Whooley questions
NICE 2007 UK Perinatal women (CPG 45)	- Past or present severe mental illness including schizophrenia, bipolar disorder, psychosis in the postnatal period and severe depression - Previous treatment by a psychiatrist/specialist mental health team including inpatient care - A family history of perinatal mental illness	Recommend identifying possible depression at a woman's first contact with primary care, at her booking visit and postnatally (usually at 4 to 6 weeks and 3 to 4 months)	Whooley questions + help question
USPSTF 2009 US	No guidance	Recommend screening adults for depression in clinical practices with systems in place to assure accurate diagnosis, effective treatment and follow-up	No guidance

Screening for Depression

CONCLUSIONS

Key Points

1) The evidence review did not identify high quality evidence on the effectiveness of screening for depression.

2) The evidence review did not identify direct evidence on the harms of screening but we remain concerned about false positives, unnecessary or inappropriate treatment, labeling and stigma, and appropriate use of limited resources.

3) For adults with no apparent symptoms of depression, who are at average or high risk for depression, we recommend not routinely screening for depression in primary care settings.

Key Points: continuation

4) Clinicians should be alert to the possibility of depression, especially in individuals with characteristics that may increase the risk for depression. Clinicians should look for depression when there are clinical clues, such as insomnia, low mood, anhedonia, lack of motivation, and suicidal thoughts.

5) Randomized controlled trials with unscreened controls, evaluating the effect of screening for depression on clinically relevant outcomes should be a high research priority, especially in populations at higher risk of depression.

Knowledge Translation Tools

SCREENING FOR DEPRESSION IN PRIMARY CARE

For adults at average [a] or high [b] risk for depression we recommend not routinely screening (weak recommendations, very low quality evidence)

This guideline applies to adults (18 years of age or older) who present with no apparent symptoms of depression. **It does not apply to individuals with known, past history of, or being treated for depression**.

[a] The average risk group includes all individuals 18 years of age or older with no apparent symptoms of depression.
[b] High risk groups include: family history of depression, traumatic childhood/ recent life events, chronic health problems, substance misuse, perinatal and post-partum status, Aboriginal origin.

What do these recommendations mean?

Individuals with **no apparent symptoms** of depression are those who:

- do not verbalize their potential depression;
- do not present any apparent signs of depression (disposition, facial affect, body language, behaviour); and
- do not present clinical clues (**Box 1**) of depression.

Screening is not recommended, but may be appropriate in some cases - see scenarios below for examples.

Box 1. Clinical Clues of Depression (from DSM IV - R)

1. Depressed mood
2. Diminished interest or pleasure
3. Significant change in weight or appetite
4. Insomnia or hypersomnia
5. Psychomotor agitation or retardation
6. Fatigue or loss of energy
7. Feeling of worthlessness or excessive/ inappropriate guilt
8. Inability to think or concentrate, or indecisiveness
9. Recurrent thoughts of death; or suicide plan, attempt, or ideation.

How do I implement these recommendations into my practice?

SCENARIO	POSSIBLE ACTION(S)
1 Individual has no apparent symptoms; depression is not suspected and the individual does not inquire about depression screening.	• Do not screen.
2 Individual has no apparent symptoms, but is at higher risk for depression (e.g. stroke, postpartum).	• Remain sensitive to changes in disposition, facial affect, body language or behaviour between clinical encounters. • Remain aware of and alert to clinical clues (Box 1) of depression that the individual may be exhibiting. • Use your knowledge about the individual's preferences/values and your clinical judgment to determine at what point screening for depression may be appropriate.
3 Individual has no apparent symptoms, but he/ she or his/her loved ones inquire about the possibility of depression.	
4 Individual has symptoms of depression.	• Symptomatic individuals should be appropriately assessed for depression.
5 Individual has known depression, a past history of depression or is being treated for depression.	• This guideline does not apply to this individual.

Canadian Task Force on Preventive Health Care
3050 RTF, University of Alberta
Edmonton, AB, T6G 2V2
Canada

FREQUENTLY ASKED QUESTIONS ABOUT DEPRESSION SCREENING

Why is the Canadian Task Force on Preventive Health Care (CTFPHC) recommending not screening adults from average and high risk groups?

The CTFPHC's decision to recommend against screening was based on the lack of evidence on the benefits and harms of routinely screening adults with no apparent symptoms of depression. Despite the lack of evidence, the CTFPHC had concerns about the potential harms of screening, (e.g. false positives and unnecessary treatment) and appropriate use of limited resources.

In the absence of a demonstrated benefit of screening, and considering the potential harms, the CTFPHC recommends not routinely screening adults from average and high risk groups with no apparent symptoms of depression.*

How is "screening" defined?

Screening refers to posing targeted questions or administering a survey/questionnaire to all adults with no apparent symptoms of depression to identify those who may have depression. Screening can range from systematically asking one or two questions about depression to using a comprehensive screening tool.

How can I remain alert to potential depression without asking an individual questions about his/her psychological well-being?

Individuals may present with signs and/or clinical clues of depression, some of which are apparent without asking the individual. Additionally, some individuals presenting with other medical issues may have undiagnosed depression. Clinicians should be aware of depression symptoms, both verbal and non-verbal, for example:

- Remain open and sensitive to changes in disposition, facial affect, body language or behaviour during a clinical encounter; these signs can help identify potential depression.
- Remain alert to clues disclosed by an individual that he/she may not relate to depression but may indicate that depression is present (**Box 1,** previous page).

Pay attention to the clinical clues of depression and assess symptomatic adults when appropriate.

My clinic asks standard questions about mood and signs of depression on our individual intake forms, during primary care visits, and in other forms/services. Is this considered screening for depression?

If a validated screening instrument is being applied, then yes, this is considered a form of screening. As stated previously, it is important to remember that screening instruments can range from one or two questions to a series of questions.

The CTFPHC does not recommend screening individuals with no apparent symptoms of depression, but individual practitioners or clinics may consider their practice settings to decide when screening is appropriate. For example, integrated staff-assisted systems (i.e. primary care settings engaging nonmedical specialists in providing depression management and follow-up) may be more effective in increasing response to treatment. Clinicians practicing in a setting where there are integrated, staff-assisted systems may be more inclined to offer screening through standard forms or in primary care visits given that treatment is more likely to be effective when these systems are available.

Guidelines from other organizations for specific conditions or populations (e.g. postpartum women) indicate that I should screen for depression. Which guideline should I follow?

The CTFPHC offers a weak recommendation for depression screening; this means that although this course of action is appropriate for most people, it may not be appropriate for others. Clinicians should consider the CTFPHC guideline and use their knowledge of an individual's history, physical health condition, preferences and values to determine a suitable course of action.

* Detailed descriptions of methods used by the CTFPHC, which include the application of the Grades of Recommendation, Assessment, Development and Evaluation (GRADE) system to determine the strength of the recommendations, are available on the CTFPHC website (www.canadiantaskforce.ca).

Canadian Task Force on Preventive Health Care
3050 RTF, University of Alberta
Edmonton, AB, T6G 2V2
Canada

Questions & Answers