Recommendations and Rationale

Screening for Depression

U.S. Preventive Services Task Force (USPSTF)

This statement summarizes the current U.S. Preventive Services Task Force (USPSTF) recommendation on screening for depression, and updates the 1996 recommendation contained in the *Guide to Clinical Preventive Services*, Second Edition[1].

Summary of Recommendation

- **The U.S. Preventive Services Task Force (USPSTF) recommends screening adults for depression in clinical practices that have systems in place to assure accurate diagnosis, effective treatment, and followup.**

  Rating: B Recommendation.

  Rationale: The USPSTF found good evidence that screening improves the accurate identification of depressed patients in primary care settings and that treatment of depressed adults identified in primary care settings decreases clinical morbidity. Trials that have directly evaluated the effect of screening on clinical outcomes have shown mixed results. Small benefits have been observed in studies that simply feed back screening results to clinicians. Larger benefits have been observed in studies in which the communication of screening results is coordinated with effective followup and treatment. The USPSTF concluded the benefits of screening are likely to outweigh any potential harms.

- **The USPSTF concludes the evidence is insufficient to recommend for or against routine screening of children or adolescents for depression.**

  Rating: I Recommendation.

  Rationale: The USPSTF found limited evidence on the accuracy and reliability of screening tests in children and adolescents and limited evidence on the effectiveness of therapy in children and adolescents identified in primary care settings.

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Clinical Considerations

- Many formal screening tools are available (e.g., the Zung Self-Assessment Depression Scale, Beck Depression Inventory, General Health Questionnaire [GHQ], Center for Epidemiologic Study Depression Scale [CES-D]).[2] Asking two simple questions about 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 using longer instruments.[3] There is little evidence to recommend one screening method over another, so clinicians can choose the method that best fits their personal preference, the patient population served, and the practice setting.
- All positive screening tests should trigger full diagnostic interviews that use standard diagnostic criteria (i.e., those from the fourth edition of *Diagnostic and Statistical Manual of Mental Disorders* [DSM-IV]) to determine the presence or absence of specific depressive disorders, such as major depression and/or dysthymia.[4] The severity of depression and comorbid psychological problems (e.g., anxiety, panic attacks, or substance abuse) should be addressed.
- Many risk factors for depression (e.g., female sex, family history of depression, unemployment, and chronic disease) are common, but the presence of risk factors alone cannot distinguish depressed from nondepressed patients.
- The optimal interval for screening is unknown. Recurrent screening may be most productive in patients with a history of depression, unexplained somatic symptoms, comorbid psychological conditions (e.g., panic disorder or generalized anxiety), substance abuse, or chronic pain.

- Clinical practices that screen for depression should have systems in place to ensure that positive screening results are followed by accurate diagnosis, effective treatment, and careful followup. Benefits from screening are unlikely to be realized unless such systems are functioning well.
- Treatment may include antidepressants or specific psychotherapeutic approaches (e.g., cognitive behavioral therapy or brief psychosocial counseling), alone or in combination).
- The benefits of routinely screening children and adolescents for depression are not known. The existing literature suggests that screening tests perform reasonably well in adolescents and that treatments are effective, but the clinical impact of routine depression screening has not been studied in pediatric populations in primary care settings. Clinicians should remain alert for possible signs of depression in younger patients. The predictive value of positive screening tests is lower in children and adolescents than in adults, and research on the effectiveness of primary care-based interventions for depression in this age group is limited.

Scientific Evidence

Epidemiology and Clinical Consequences

Depressive disorders are common, chronic and costly. The World Health Organization identified major depression as the fourth leading cause of worldwide disease in 1990, causing more disability than either ischemic heart disease or cerebrovascular disease.[5] In primary care settings, the point prevalence of major depression ranges from 5 to 9 percent among adults, and up to 50 percent of depressed patients are not recognized.[6,7] Other disabling depressive illnesses include dysthymia (a chronic low-grade depression) and minor depression (an episodic, less severe illness). These two illnesses are as common as major depression in primary care settings. Depressive disorders are also relatively common in younger persons, with estimated prevalence of 0.8 to 2.0 percent in children and 4.5 percent in adolescents.

Accuracy and Reliability of Screening Tests

Several depression screening instruments are available; most instruments have relatively good sensitivity (80 percent to 90 percent) but only fair specificity (70 to 85 percent).[2] Most instruments are easy to use and can be administered in less than 5 minutes. Shorter screening tests, including simply asking questions about depressed mood and anhedonia, appear to detect a majority of depressed patients and, in some cases, perform better than the original instrument from which they were derived.[3]

Assuming optimal test performance and a prevalence of major depression of 5 to 10 percent in primary care settings, about 24 to 40 percent of patients who screen positive will have major depression. Some patients with "false positive" results on screening may have dysthymia or subsyndromal depressive disorders that might benefit from treatment or closer monitoring; others may have comorbid disorders such as anxiety disorder, substance abuse, panic disorder, post-traumatic stress disorder, or grief reactions; still others may have no disorder at all. The finding of a positive screen therefore requires further diagnostic questioning by the clinician to establish an appropriate diagnosis and initiate a plan for treatment and followup.

Screening instruments have been tested in children and adolescents, with sensitivity ranging from 40 to 100 percent and specificity from 49 to 100 percent. Because the underlying prevalence is much lower than in adults, the positive predictive value is low.

Effectiveness of Early Treatment

Effective treatments are available for patients with depressive illnesses detected in primary care settings.[1,8] Antidepressant medications for major depression, including tricyclic antidepressants (TCAs) and selective serotonin reuptake inhibitors (SSRIs), are clearly more effective than placebo. Most of the data supporting effectiveness come from structured trials with selected populations, although more recent studies using "usual care" comparison groups and real-world settings have produced similar effects. Newer agents perform similarly to older agents.

Psychosocial and psychotherapeutic interventions are probably as effective as antidepressant medications for major depression, but they are clearly more time-intensive.[7] The benefits of psychotherapy for other depressive illnesses are less well studied. Few studies have examined the effect of combining medications and psychotherapy.

No studies have examined treatment outcomes for children or adolescents identified by primary care clinicians through screening. Evidence for treating adolescents comes from school and community settings where SSRIs and cognitive-behavioral therapy, but not tricyclic antidepressants, appear to be effective. Whether these results can be generalized to primary care settings or to children is unclear.

Effectiveness of Screening

The review for the USPSTF identified 14 randomized, controlled trials that have examined the effectiveness of screening for depression in primary care settings.[9] In eight studies, the only intervention was feedback of screening results to clinicians; remaining studies combined feedback with other interventions for patients or clinicians. The trials reported various outcomes, including recognition of depression, rates of treatment, and clinical improvement among patients with depression. In seven trials, routine depression screening with feedback of screening results to providers generally increased recognition of depression, especially major depression, by a factor of 2 to 3 compared with usual care. Trials that examined the effect of feedback of screening results on the proportion of depressed patients who received treatment showed mixed results: in four fair-to-good quality trials that used feedback alone, there was no significant effect on treatment rates, but four of the five trials that combined feedback with treatment advice or other system supports reported increased treatment rates in the intervention group compared with usual care. Ten trials measured the effect of screening and feedback on depression outcomes from 1 month to 2 years after the intervention. Five of these 10 studies reported significant improvements in the clinical outcomes of depressed patients, and three others reported improvements that did not reach statistical significance.

All three trials that compared the effects of integrated recognition and management programs with usual care in community primary care practices showed significantly improved patient outcomes. Integrated programs included feedback, provider and/or patient education, access to case management and/or mental health care, telephone followup, and institutional commitment to quality improvement. One trial, which included both newly detected cases of depression and patients already under treatment, showed improvement in patient symptoms at 6 months only among patients beginning a new treatment episode. No improvement was noted among patients who had recently been treated (that is, those who would have been identified without specific screening). Two trials showed improved symptoms at 12 months; one of these also showed more employment retention in intervention compared with usual care patients. All three trials required allocation of clinic resources to detection and management programs.

On the basis of estimates from the above-mentioned trials, approximately 11 patients identified as depressed as a result of screening would need to be treated to produce one additional remission.[9] If depression (including major depression, dysthymia, and minor depression) is present in 10 percent of primary care patients, then 110 patients would need to be screened to produce one additional remission after 6 to 12 months of treatment. The number needed to treat for benefit would be smaller for patients with major depression only, but a larger group would need to be screened to identify them.

Potential Harms of Screening and Treatment

The potential harms of screening include false-positive screening results, the inconvenience of further diagnostic work-up, the adverse effects and costs of treatment for patients who are incorrectly identified as being depressed, and potential adverse effects of labeling. None of the research reviewed provided useful empirical data regarding these potential adverse effects.

Recommendations of Others

The Canadian Task Force on Preventive Health Care (CTFPHC) found fair evidence to exclude routine screening of asymptomatic individuals for depression in 1994 but suggested that clinicians maintain a high degree of clinical suspicion for depression among their patients.[10] The CTFPHC is currently revisiting this recommendation. The American College of Obstetricians and Gynecologists recommends that clinicians should be alert to symptoms of depression and question patients about psychosocial stressors and family history of depression when taking their history.[11] The American Academy of Pediatrics recommends that pediatricians ask questions about depression in routine history-taking throughout adolescence.[12] The American Medical Association recommends screening for depression among adolescents who may be at risk owing to family problems, drug or alcohol use, or other indicators of risk.[13]

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