Is Questionnaire-Based Screening for Depression Worthwhile in Primary Care?

No: Current Evidence Does Not Demonstrate Improved Patient Outcomes

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Depression is increasingly prevalent in the United States and globally and is a leading contributor to health care use and disability.[1-3] Despite the significance of this condition, routine questionnaire-based screening in asymptomatic adults in primary care is not supported by evidence demonstrating improved patient-oriented outcomes. Although screening instruments such as the Patient Health Questionnaire-9 are widely promoted as tools to improve detection, evidence from randomized trials demonstrating that screening itself improves outcomes is limited and uncertain.

The appeal of screening is understandable. Depressive symptoms may be occult and are frequently not disclosed in routine care, and earlier identification might lead to timelier treatment and better outcomes. For this reason, systematic approaches to improving detection in the general population, including questionnaire-based screening, have been proposed. Questionnaire-based screening involves administering a standardized instrument to adults who have not raised concerns about mood and are not otherwise suspected of having depression. Screening instruments are designed to identify individuals who may require further diagnostic evaluation; they are not diagnostic tests for major depressive disorder. Patients who screen positive by scoring higher than a prespecified cutoff score are referred for further diagnostic evaluation or are prescribed antidepressant therapy. The premise is that earlier or broader detection will translate into better outcomes.

Despite its intuitive appeal, the case for routine depression screening remains weak. The Canadian Task Force on Preventive Health Care recently issued a strong recommendation against using questionnaires to screen adults, concluding that the effect of screening on patient-important health outcomes is trivial or very uncertain.[4] In contrast, the US Preventive Services Task Force continues to endorse routine screening across the adult population.[5] The disagreement is less about national contexts or patient values than about how evidence is interpreted—and what counts as a benefit.

There is remarkably little direct evidence that screening for depression itself improves patient-important outcomes. Only three randomized trials have evaluated the effect of screening.[6-8] These trials were conducted in narrowly defined populations—Chinese postpartum mothers, adults with osteoarthritis (98% of whom identified as White European), and those recently diagnosed with acute coronary syndromes (predominantly White males)—which substantially limits their generalizability to routine primary care. The studies found little or no evidence that screening improves outcomes. Certainty in the available evidence was very low, owing to all three studies having major methodological limitations that posed a high risk of bias, as well as concerns regarding indirectness (given the narrow populations assessed), imprecision in outcome estimates, and heterogeneity among trials in participants, interventions, and time points. Taken together, low- or very low-certainty evidence suggested that routine questionnaire use may have little to no benefit beyond attentive clinical care, and effects are generally very uncertain.[4]

Much of the evidence cited in support of screening comes from trials that combined screening with additional care components (such as clinician training, facilitated referral, counseling, symptom monitoring, or structured follow-up), rather than from trials that evaluated adding screening alone to usual clinical care.[5,9] These studies demonstrate that improved treatment systems can improve depression outcomes. However, when screening is implemented alongside enhanced management strategies, it becomes difficult to determine whether improved outcomes are attributable to screening itself or to the additional care provided after screening. Also, the incremental

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This is one in a series of pro/con editorials discussing controversial issues in family medicine.

See related editorial on page 16.

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benefit of screening beyond attentive clinical care cannot be clearly established.

Even if screening does have modest benefits, they need to be weighed against predictable harms. Screening instruments with fixed cutoff scores inevitably generate false-positive results, particularly when applied at scale in populations with low prevalence of depression. Assuming a prevalence of approximately 11%, screening 100 adults with the Patient Health Questionnaire-9 would yield 9 true-positives, 13 false-positives, 76 true-negatives, and 2 false-negatives. This means that more patients would falsely screen positive than would be correctly identified as having major depression.[4,10]

False-positive results initiate cascades of additional visits, diagnostic evaluations, referrals, and antidepressant prescriptions. Overdiagnosis and overtreatment are foreseeable consequences, even if only a small percentage of patients with false-positive results ultimately receive medication.[11,12]

Beyond the potential harms and burdens of overdiagnosis and treatment, these cascades matter at the system level. Time is a finite clinical resource,[13] and time spent evaluating false-positive results takes time away from patients with established mental illness, complex multimorbidity, or urgent concerns. Even brief screening instruments require explanation, scoring, documentation, and follow-up. In a 15-minute visit, spending several minutes on a tool without proven benefit displaces other necessary care. Multiple studies have demonstrated that delivering all recommended preventive and chronic care already exceeds the time available to primary care clinicians.[14,15]

Declining to implement routine screening does not mean ignoring depression. On the contrary, it reflects respect for clinical judgment and patient-centered care. Clinicians should remain vigilant for depression, particularly when patients present with overt symptoms, functional decline, psychosocial stressors, or high-risk contexts. Diagnostic assessment, including selective use of questionnaires, remains appropriate when depression is suspected or for individuals at particularly high risk. What is not supported by evidence is the blanket application of screening instruments to all asymptomatic patients in the general population.

Current evidence suggests that routine questionnaire-based screening does not improve outcomes enough to justify the costs, harms, and burdens at the individual and system levels. Focusing on attentive listening, contextual assessment, and timely access to effective treatment for those who need it is more likely to benefit patients—and preserve primary care's limited capacity—than implementing low-yield screening programs.

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