Case-finding instruments may help identify depression in primary care

QUESTION: How effective are case-finding instruments for identifying depression in primary care?

Design
Systematic review with meta-analysis.

Data sources
Comparative studies were identified from Medline, a specialised trials registry and bibliographies of selected papers (1994-February 2000).

Study selection
Eligible studies were published in English, located in primary care settings, included unselected patients and compared case-finding instruments with accepted diagnostic criteria for major depression (gold standard). 16 case-finding instruments were assessed in 38 studies (26 in North America, 11 in Europe and 1 in Taiwan). Case-finding instruments ranged between 1–30 questions in length, with average administration times of 2–6 minutes.

Data extraction
Data were extracted on sample size, instrument characteristics, blinding of assessors, study methodology and outcomes. Mean sensitivity and specificity, weighted by study precision and corrected for 2-stage assessment techniques, were calculated for each case-finding instrument.

Main results
For major depression, the median sensitivity of case-finding instruments was 85% (range 50% to 97%). Median specificity was 74% (range 51% to 98%). For combined diagnoses of major depression or dysthymia, overall sensitivity was 79% (95% CI 74% to 83%) and overall specificity 75% (95% CI 70% to 81%). There were no significant differences between instruments, although estimates of the specificity and sensitivity of individual instruments varied between studies.

Conclusions
There are a number of effective case-finding instruments to help clinicians identify people with major depression in primary care. There are few differences in sensitivity and specificity between instruments, so clinicians may choose an instrument based on feasibility, administration time and additional features (such as monitoring capacity).

COMMENTARY
The economic and social costs of untreated depression are well recognised. Increasing the identification of people with treatable disorders in primary care settings is a high priority. For many years, the efficiency and ethical implications of various case-finding methods have been debated. This comprehensive review resolves one aspect of that debate. Most case-finding instruments have acceptable psychometric properties. There is little evidence, however, for supporting any particular instrument. New instruments designed only to detect depressive disorders are not likely to have improved performance. This reflects the rather limiting nature of the concept of major depression, especially when it is applied in primary care.

A whole range of phenotypically-similar psychological disorders are prevalent in primary care and other general medical settings. These include a number of important depressive subtypes (dysthymia, major depression, melancholia), depressive disorders of different severity and duration, depressive disorders that are comorbid with anxiety, somatoform and substance abuse disorders and depression occurring concurrently with other medical disorders. An alternative approach, particularly favoured outside North America, is to design instruments that place less emphasis on detecting specific diagnostic categories and greater emphasis on the less diagnostically-specific but common psychological and somatic symptoms (for instance, Goldberg’s General Health Questionnaire).

Whether one adopts a narrow focus to detect depression or the wider view, the essential role of case-finding instruments is to alert the clinician to the possibility of an undetected disorder. These instruments should be followed by more detailed diagnostic assessment and, if appropriate, specific treatments. The true resistance to the routine use of such methods is no longer lack of sufficient evidence, but rather the service implications for medical systems that are not designed to deal with the magnitude of the problem.

Ian B Hickie, MD FRANZCP
Professor of Community Psychiatry
School of Psychiatry
University of NSW
Australia