

Analysis and comment

Health policy

Should we screen for depression?

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The quality and outcomes framework will soon reward primary care doctors who screen for depression in England and Wales. This article scrutinises the rationale and evidence to support such screening

“All screening programmes do harm; some do good as well.”¹

Depression is common in primary care and hospital settings, but it is often not recognised by healthcare professionals.²⁻³ This has led to calls for screening programmes to aid detection and management.⁴ We use the criteria of the UK National Screening Committee to judge whether screening would do more good than harm.⁵ We drew on our experience in preparing a Cochrane review of the evidence for screening for depression.⁶

Depression screening as national health policy

In the United States screening for common mental health problems is thought to be effective and is a cornerstone of the agenda to improve mental health; population level screening programmes are supported by the drug industry.^{7 w1 w2} Similar national programmes have been advocated in Australia.⁸ In England and Wales, screening has been supported more cautiously by the National Institute for Health and Clinical Excellence (NICE), which recommends that it should be offered to people at high risk of depression.⁹ Screening may become health policy in England and Wales, since primary care doctors will be rewarded for “enhanced services for depression” within the quality and outcomes framework (QOF), which will include a screening programme.¹⁰

In the past screening programmes have been implemented without due consideration of their effectiveness, their ethical and clinical implications, and their impact on finite healthcare resources.^{11 w6} Consequently, the National Screening Committee has been established in the United Kingdom; this committee works to specific criteria to help ensure that screening “does more good than harm.”¹² These criteria pertain to the condition, the test, the treatment, and the screening programme.

The condition

The key National Screening Committee criteria are:

- The condition should be an important health problem
- The epidemiology and clinical course of the disease should be adequately understood.



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Depression qualifies as a major public health problem, with an annual incidence of 8-12%.¹³ Reductions in quality of life are comparable to those seen in major chronic physical diseases,¹⁴ and the economic consequences of depression are profound; £8bn (€11.5bn; \$14bn) each year in the UK and \$83bn in the United States.^{15 w10}

The epidemiology, clinical course, and consultation patterns of people with depression are well understood.¹⁶ Surveys consistently show that a substantial proportion of patients with depression are missed by clinicians.^{17 w11} However, more recent longitudinal studies have shown that many of these patients are identified later during the course of consultations.¹⁸

Cross sectional surveys of depression tend to pick up depression and transient distress, found in response to psychosocial problems and life events.¹⁹ When these populations are followed up, a substantial proportion of people identified as a “case” by screening will have symptoms that resolve within two to four weeks. Thus for mild to moderate depression, evidence based treatment guidelines recommend an initial period of watchful waiting before active intervention.^{20 w4}

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Depression is thus a potential target for screening in terms of population morbidity. However, because of the transient nature of mood changes in many people, screening might detect large numbers of false positives. Because many "missed" cases are identified during later visits, screening may not be efficient.

The test

The key National Screening Committee criteria are:

- The screening test should be safe, simple, precise, and validated; a suitable cut-off value should be defined and agreed
- The test should be acceptable to the population.

A variety of standardised questionnaires or brief consultation questions are available to detect depression, and these tests have reasonable psychometric properties (for questionnaires: median sensitivity 75%, median specificity 85%).^{13 14} However, the low prevalence of depression (<10%) means that even sensitive and specific instruments will have low positive predictive value (<50%).^{w12} Low positive predictive value will make the test less acceptable to clinicians, because patients will be followed up unnecessarily.^{w13}

The assumption is that tests are acceptable to patients and clinicians, but this has not been well researched. Indirect evidence of poor acceptability comes from two sources. With respect to acceptability to patients, the uptake of screening tests for depression is generally low when they are offered in healthcare settings: 30-60% of patients in primary care decline to participate in clinic screening interviews offered by researchers or clinic nurses during routine attendance.^{15 w14} With respect to acceptability to healthcare professionals, questionnaires are rarely used once trials of practice based screening have ended.^{w14} The degree to which additional consultation questions are adopted or implemented in practice has not been evaluated and cannot be assumed on the basis of validation studies alone.¹⁴

Thus, the criteria of the National Screening Committee regarding test performance and acceptability are not clearly met.

The treatment

The key National Screening Committee criteria are:

- An effective treatment should be identified through the screening programme, with evidence that early treatment leads to better outcome
- Clinical management of the condition and patient's outcomes should be optimised for all healthcare providers before the screening programme is offered.

The effectiveness of drugs and psychological interventions for depression is now established and forms the basis of evidence based guidelines.^{16 w4} However most guidelines focus on moderate to severe depression. In general, patients with undetected depression have milder forms of depression, which often resolve without intervention, than patients with identified depression.^{2 17 w15} Psychological intervention and drugs are not as effective when mild depression persists compared with moderate depression.^{w4} The outcomes of patients with detected and undetected depression are similar when they are followed up over 6-12 months.^{w15-w17}

The quality of care for patients with recognised depression falls short of evidence based guidelines.^{w18} Clinicians prescribe subtherapeutic doses and do not continue drugs for long enough to prevent relapse. Follow-up is poor: patients do not return for repeat prescriptions or for assessment of the response to treatment, and non-adherence with treatment is common.

Thus, the criteria of the National Screening Committee that benefit for patients as a consequence of screening and that optimised treatment should be in place before implementation of a screening programme are not met.

The screening programme

The key National Screening Committee criteria are:

- High quality randomised controlled trials should provide evidence that the screening programme effectively reduces morbidity
- The screening programme should be clinically, socially, and ethically acceptable to health professionals and the public
- The benefit from screening should outweigh the physical and psychological harm
- The cost of the screening programme should be economically balanced in relation to expenditure on medical care (value for money).

Most importantly, screening programmes should be shown to improve the detection, management, and outcomes of depression. Several randomised studies have failed to show that treatments are effective,^{18 w12} but industry sponsored observational studies have generally been more positive.^{19 w14}

Our Cochrane review (based on more than 6000 patients) concludes that routine feedback of the results of screening to clinicians results in a marginal increase in the rate of diagnosis of depression.⁶ However patients' outcomes are not improved at 6-12 months as a consequence of screening. These results need to be considered alongside the results of an earlier review conducted on behalf of the US Preventive Services Task Force, which was more supportive of screening programmes, especially within a comprehensive primary care programme for managing depression.^{7 w19} One influential study in the task force report recruited patients via a practice screening programme and offered enhanced care, consisting of face to face education of patients, telephone support, management of drugs, psychotherapy, and structured follow-up.²⁰ Clinicians were also offered guidelines, practice based education, and face to face support from specialists. Screening was only one element of this complex intervention, and positive outcomes cannot be assumed to be due to screening alone.^{w20} Thus, evidence is scant that screening alone results in improved care and outcomes; this is a key element of the National Screening Committee criteria.

UK guidelines on depression mention screening of high risk groups, such as patients with chronic physical illness, alcohol problems, or a history of depression.^{w4} Such a strategy seems appealing, but in our Cochrane review we found no studies that evaluated this strategy.⁶ Such a programme would be more complex than screening all attendees. High risk patients would have to be identified by people who deliver the screening

(practice nurses, researchers, or receptionists). In the absence of randomised data to support this strategy, it is hard to support this approach.

A favourable benefit to harm ratio is another criterion of the National Screening Committee. The benefits that might be expected are minimal. The US Preventive Services Task Force found no empirical data on the harms of screening.⁷ Potential harms include the stigma associated with depression; the risk of labelling transient distress as illness; and probable discrimination by insurance companies. Identifying a large number of patients with undetected depression could divert resources from patients with greater need, who would benefit more. Screening also increases the length of time needed for consultation in primary care (average eight minutes for patients who have positive results on screening), when follow-up interviews and further diagnostic investigations are required.^{19 w14}

Screening programmes must be cost effective if they are to take priority over competing interventions. The Cochrane review found no randomised studies on cost effectiveness, and decision modelling has been used in the absence of prospective data.²¹ Several criteria would need to be met for screening to have a cost utility below \$50 000 per quality adjusted life year. Administration, scoring, and feedback for screening instruments (printing, administrative staff time, and increased doctor time) would need to cost less than \$3.00 (£1.80) per patient. The prevalence of depression would need to be more than 13% (higher than is usually seen in primary care). Screening would need to result in intervention in more than 80% of patients, and therapeutic benefit and remission would need to be seen in more than 85% of patients who screened positive. These criteria are unlikely to be achievable.

Conclusions

Screening alone cannot improve the management and outcome of depression, and the ratio of costs to benefits is unacceptable. This does not mean that screening has no part to play. Several studies have shown that integrated management programmes for depression (some of which incorporate screening) are more effective than usual care. Thus, the systems in place to manage depression in primary care and general hospitals are inadequate.^{w18} Collaborative care, case management, and stepped care are underpinned by randomised evidence and are promising candidates for integration into usual care.²² Screening patients who have concurrent physical illness, such as diabetes (as suggested by NICE guidelines), is an effective strategy, but only when used within a collaborative care system.²³ However the individual contribution of screening as an active ingredient in individual packages of care is not clear. For many people, depression is a life-long and relapsing condition.^{w20} Population strategies aimed at reducing morbidity are more efficient when targeted at minimising the chronic effects of existing depression, rather than identifying more minor psychiatric morbidity.^{w21}

Opportunistic screening and population level screening for depression do not fulfil the criteria of the National Screening Committee. However, the assumption has been made that screening for depression should be recommended, based on the prevalence of

Summary points

Depression is common in patients in primary care and hospital settings but often is not recognised by healthcare professionals

Opportunistic screening and population level screening for depression have been supported in recent policy recommendations in the US and UK

The UK National Screening Committee has issued clear criteria, and all screening programmes should be judged against these criteria before implementation

The use of these criteria indicates that screening for depression is unlikely to be a clinically effective or cost effective way to improve the mental wellbeing of the population

the disorder; the psychometric properties of screening tools; and the availability of effective interventions in the form of drugs.¹⁷ The criteria of the National Screening Committee provide an analytical framework that helps focus discussions on how to improve the inadequate management of depression. Screening for depression is an unhelpful diversion from more fundamental questions about the most efficient and effective way of organising and delivering care.^{24 w18} Screening should only be considered as part of a package of enhanced care. Without this, moves to implement screening will be associated with increased costs and no benefit.

Contributors and sources: SG and TS have a long research interest in screening for mental health problems in primary care, and SW has an interest in the value of screening in general hospitals and in military populations. TS is interested in the evaluation of screening as health policy. This article arose from a shared interest and exchange of views regarding screening, in light of recent policy developments. SG and TS recently prepared a Cochrane review of screening for depression, which required extensive searches of a comprehensive range of databases. SG, TS, and SW formulated the ideas, and SG produced the first and subsequent drafts after contributions and comments from TS and SW. SG is guarantor.

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Health policy

The case for psychological treatment centres

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The government is committed to improved access to psychological therapy. How big an expansion is necessary to meet the NICE guidelines on depression and anxiety, and how should it be organised?

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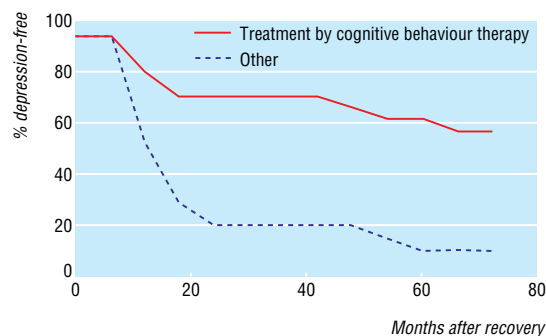
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If you have schizophrenia or bipolar depression in Britain, you will generally get specialist help from the NHS.¹ But only about 1% of the British population have these terrible conditions. Many more (some 15% of us) have unipolar depression or anxiety disorders, yet if you have one of these, often crippling, conditions you are unlikely to get any specialist help at all. You can see your general practitioner, but he or she is unlikely to prescribe any treatment other than drugs.

This pattern of prescribing is completely at variance with the guidelines from the National Institute for Health and Clinical Excellence (NICE) on treating depression and anxiety disorders.²⁻⁴ These guidelines recommend that cognitive behaviour therapy should be available as an option for all but the mildest or most recent forms of depression and anxiety. The guidelines also recommend other forms of psychological therapy for selected conditions. The guidelines are, of course, based on hundreds of randomised clinical trials. These show clearly that cognitive behaviour therapy is as effective as drugs for treating depression and anxiety in the short term, and tends to have more durable effects.²⁻⁶ Moreover, psychological help is what thousands or even millions of patients want.⁷

At present it is simply impossible for general practitioners to implement the NICE guidelines because the therapists are not available. Thus mentally ill people are denied specialist help, whereas it would automatically be supplied for equally disabling cases of physical illness. If the NICE guidelines were implemented many more people would receive help, and massive suffering would be avoided. And the cost of implementing the guidelines would be matched by savings to the government in reduced claims for incapacity benefits.

In what follows I shall discuss the scale of need, and show that the overall benefits of meeting it exceed the costs. I shall then show why the expanded provision



Risk of relapse after recovery from depression¹²

should be provided through psychological treatment centres.

The cost of depression and anxiety

According to the World Health Organization, half of all people with ill health in Western Europe have mental illness.⁸⁻¹⁰ It accounts for as much suffering as all physical illnesses put together. And the bulk of these mental illnesses are depression and anxiety.

There is also a huge economic cost, because depression and anxiety make it much more difficult, or impossible, to do a job. And those capable of working are likely to have high rates of sickness absence.¹ The resulting loss of output can be calculated as £17bn (€24bn, \$30bn), or 1.5% of UK gross domestic product.¹¹ Much of this cost falls on the Exchequer, which loses in consequence roughly £9bn in benefit payments to mentally ill people and in reduced tax receipts. There are now more than one million mentally ill people receiving incapacity benefits—more than the total number of unemployed people receiving