

Depression Screening Is Not Enough

Not enough” does not mean “not at all.” The individual and societal burden of depression is enormous in terms of economic costs (over \$40 billion annually in the United States alone); disability days; and pervasive effects on physical, mental, and social well-being (1–3). This burden, coupled with the eminent treatability of depression, compels us to action (4, 5). The first action must be recognition of the depressed patient, without which amelioration is impossible. The second action is treating the patient in whom depression has been identified. Although screening can enhance both recognition and initiation of treatment (6), improvement in depression outcomes requires a third step: careful follow-up and monitoring of treatment effectiveness.

These steps are no different from those taken in any other chronic disease. Imagine a system in which providers screened for hypertension and started medical treatment, only to neglect follow-up blood pressure checks and adjustment of therapy. Is the patient taking his or her antihypertensive medication? Is it working? Are there side effects? Does the dose of medication need to be increased, or should an alternative agent be used? The same principles apply to diabetes, high cholesterol, asthma, congestive heart failure, and many other conditions requiring patient education, ongoing treatment, outcome monitoring, and vigilance for episodic exacerbations.

A systematic review of depression case-finding instruments illustrates why routine screening may be inefficient (7). Synthesizing data from 18 studies of nine different instruments, Mulrow and colleagues found an overall sensitivity of 84% and specificity of 72%, and no instrument was superior to another. Given a 5% prevalence of major depression in primary care, screening 100 patients would yield 4 true-positive cases and 27 false-positive ones. Further diagnostic inquiry could separate the false from the true positives, but the time burden on the busy clinician would be onerous.

Case finding may be preferable to routine screening for depression. In this scenario, the clinician would focus diagnostic efforts on patients in whom the suspicion of depression is higher. Most depressed patients initially present with somatic rather than emotional symptoms,

and multiple, unexplained or persistent physical symptoms are one of the strongest correlates of depression (8, 9). Difficult encounters would be another red flag. Clinicians consider about one of six patient encounters to be difficult, and such patients have a much higher prevalence of mental disorders (10). Depression is also more common in patients who are high utilizers of health care; have a history of depression or current nondepressive mental disorders; or have chronic medical disorders, especially the three Cs—cardiac disease, cancer, and central nervous system disorders.

When depression is suspected, a single question about depressed mood can detect 85% to 90% of patients with major depression, and adding a second question about anhedonia increases the sensitivity to 95% (11, 12). Patients appear not to “hide” their depression when asked about it. In addition, the extent to which physicians fail to recognize clinical depression may be exaggerated. First, studies concluding that half of the cases of depression in primary care go undetected often base their findings on depression screening instruments that produce many false positives. Second, “missed” cases are more likely to have less severe depression or be more reluctant to embrace diagnosis or treatment of their depression (13). Third, many patients may be recognized as depressed, but their diagnosis may be coded as something else (such as fatigue or insomnia) because of reimbursement issues, fear of stigmatization, or other reasons (14).

The cost–utility approach used by Valenstein and colleagues (15) to evaluate depression screening is preferable to the outdated and discriminatory cost–offset approach that insisted that treatment of mental disorders save health care dollars before it could be considered warranted. Saving money is not the first priority in treating heart disease or cancer; rather, saving, extending, or improving the quality of patient’s lives is. Still, it is unrealistic to expect that unlimited resources can be expended for a single year of life, for either medical or mental disorders. Therefore, the use of cost per quality-adjusted life-year in Valenstein and colleagues’ study is appropriate.

Do patients feel that the cost of depression care is worth it? The willingness-to-pay method has been used

by health economists to compare the value of different treatments and may be a useful alternative to other methods of valuing health care technologies, such as cost–utility analysis. The mean willingness to pay for depression treatment in a study of 615 primary care patients with depression was \$270 per month (Unutzer J. Personal communication). This is almost three times as much as the willingness to pay for antihypertensive therapy and is roughly comparable to that reported for treatments to eliminate symptoms of asthma or psoriasis. This finding is not surprising, given that depression has a greater and more pervasive effect on multiple domains of health-related quality of life than do many chronic medical disorders (1, 16, 17).

Although Valenstein and colleagues conclude that screening either once or at intervals as infrequent as every 3 to 5 years would improve its cost-effectiveness, this may not be an optimal approach for a disorder like depression. Long intervals between screening make more sense with targeting of asymptomatic conditions that have long latency before clinical manifestations, in which case early detection can prevent disease progression and morbidity (for example, screening for early cancer or cardiovascular risk factors). Implementing such an approach for depression may miss many episodes in between screening and would overselect for chronic depressive disorders, such as dysthymia.

The latest generation of intervention studies aimed at improving depression outcomes in primary care have typically involved three components: provider education, introduction of a care manager, and improved access to and communication with a mental health specialist (4, 5, 18). The care manager is often a nurse who can assist in patient education and, in particular, provide follow-up contacts to monitor treatment adherence and effectiveness. Although measures based on the Health Plan Employer Data Information Set mandate three office visits within the first 12 weeks of initiating treatment for depression, five recent studies have shown that telephone contacts may also be an effective mechanism for monitoring outcomes, adjusting medication, and even delivering limited counseling (19). The team approach to depression is not unlike the care management needed to achieve guideline-concordant care for diabetes, heart failure, asthma, and other chronic medical disorders.

Improving the primary care–mental health interface is important to achieve optimal care for patients who require or prefer psychotherapy, have complex psychiatric comorbidity, or need more specialized pharmacotherapeutic regimens (18, 20). Again, this is no different from providing access to medical and surgical subspecialists for primary care patients who need consultation or referral. Mental health referrals, however, have encountered greater obstacles, including reimbursement issues (limited coverage or higher patient copayments), behavioral health carve-outs, communication barriers between mental health specialists and primary care providers (for example, confidentiality), and reluctance on the part of some patients to visit a mental health specialist. As the treatment of mental disorders becomes a core competency for the generalist, it is important that the pendulum not swing too far, removing the safety net of mental health specialty care for complex, refractory, or chronic disorders.

The findings of Valenstein and colleagues do not imply that detecting depression is unimportant. Instead, their cost–utility analysis raises questions about universal screening (as opposed to selective case finding) and about merely improving detection without simultaneously enhancing treatment and follow-up. Depression care should embrace diagnosis and initial prescription as the starting leg of the relay race rather than the finish line. Abundant evidence now demonstrates that attention to the entire race will result in effective outcomes for the majority of depressed patients in primary care.

Kurt Kroenke, MD
Regenstrief Institute for Health Care
Indianapolis, IN 46202

Requests for Single Reprints: Kurt Kroenke, MD, Regenstrief Institute for Health Care, RG-6, 1050 Wishard Boulevard, Indianapolis, IN 46202; e-mail, kkroenke@regenstrief.org.

Ann Intern Med. 2001;134:418-420.

References

- Spitzer RL, Kroenke K, Linzer M, Hahn SR, Williams JB, deGruy FV 3rd, et al. Health-related quality of life in primary care patients with mental disorders. Results from the PRIME-MD 1000 Study. *JAMA*. 1995;274:1511-7. [PMID: 0007474219]
- Ormel J, VonKorff M, Ustun TB, Pini S, Korten A, Oldehinkel T. Common mental disorders and disability across cultures. Results from the WHO

Collaborative Study on Psychological Problems in General Health Care. *JAMA*. 1994;272:1741-8. [PMID: 0007966922]

3. Greenberg PE, Stiglin LE, Finkelstein SN, Berndt ER. The economic burden of depression in 1990. *J Clin Psychiatry*. 1993;54:405-18. [PMID: 0008270583]

4. Simon GE. Can depression be managed appropriately in primary care? *J Clin Psychiatry*. 1998;59 Suppl 2:3-8. [PMID: 0009559753]

5. Rubenstein LV, Jackson-Triche M, Unutzer J, Miranda J, Minnium K, Pearson ML, et al. Evidence-based care for depression in managed primary care practices. *Health Aff (Millwood)*. 1999;18:89-105. [PMID: 0010495595]

6. Kroenke K, Taylor-Vaisey A, Dietrich AJ, Oxman TE. Interventions to improve provider diagnosis and treatment of mental disorders in primary care. A critical review of the literature. *Psychosomatics*. 2000;41:39-52. [PMID: 0010665267]

7. Mulrow CD, Williams JW Jr, Gerety MB, Ramirez G, Montiel OM, Kerber C. Case-finding instruments for depression in primary care settings. *Ann Intern Med*. 1995;122:913-21. [PMID: 0007755226]

8. Kroenke K, Spitzer RL, Williams JB, Linzer M, Hahn SR, deGruy FV 3rd, et al. Physical symptoms in primary care. Predictors of psychiatric disorders and functional impairment. *Arch Fam Med*. 1994;3:774-9. [PMID: 0007987511]

9. Simon GE, VonKorff M, Piccinelli M, Fullerton C, Ormel J. An international study of the relation between somatic symptoms and depression. *N Engl J Med*. 1999;341:1329-35. [PMID: 0010536124]

10. Hahn SR, Kroenke K, Spitzer RL, Brody D, Williams JB, Linzer M, et al. The difficult patient: prevalence, psychopathology, and functional impairment. *J Gen Intern Med*. 1996;11:1-8. [PMID: 0008691281]

11. Williams JW Jr, Mulrow CD, Kroenke K, Dhanda R, Badgett RG, Omori D, et al. Case-finding for depression in primary care: a randomized trial. *Am J Med*. 1999;106:36-43. [PMID: 0010320115]

12. Whooley MA, Avins AL, Miranda J, Browner WS. Case-finding instruments for depression. Two questions are as good as many. *J Gen Intern Med*. 1997;12:439-45. [PMID: 0009229283]

13. Simon GE, Goldberg D, Tiemens BG, Ustun TB. Outcomes of recognized and unrecognized depression in an international primary care study. *Gen Hosp Psychiatry*. 1999;21:97-105. [PMID: 0010228889]

14. Rost K, Smith R, Matthews DB, Guise B. The deliberate misdiagnosis of major depression in primary care. *Arch Fam Med*. 1994;3:333-7. [PMID: 0008012621]

15. Valenstein M, Vijan S, Zeber JE, Boehm K, Buttar A. The cost-utility of screening for depression in primary care. *Ann Intern Med*. 2001;134:345-60.

16. Wells KB, Stewart A, Hays RD, Burnam MA, Rogers W, Daniels M, et al. The functioning and well-being of depressed patients. Results from the Medical Outcomes Study. *JAMA*. 1989;262:914-9. [PMID: 0002754791]

17. Unutzer J, Patrick DL, Diehr P, Simon G, Grembowski D, Katon W. Quality adjusted life years in older adults with depressive symptoms and chronic medical disorders. *Int Psychogeriatr*. 2000;12:15-33. [PMID: 0010798451]

18. Wells KB, Sturm R, Sherbourne CD, Meredith LS. *Caring for Depression*. Cambridge, MA: Harvard Univ Pr; 1996:

19. Dietrich AJ. The telephone as a new weapon in the battle against depression. *Eff Clin Pract*. 2000;4:191-3.

20. Keller MB, McCullough JP, Klein DN, Arnow B, Dunner DL, Gelenberg AJ, et al. A comparison of nefazodone, the cognitive behavioral-analysis system of psychotherapy, and their combination for the treatment of chronic depression. *N Engl J Med*. 2000;342:1462-70. [PMID: 0010816183]

© 2001 American College of Physicians–American Society of Internal Medicine

Notice for *Annals* Subscribers

We are planning to initiate password-controlled access to the *Annals* Web site, annals.org, starting with the 6 March 2001 issue. Access to full-text, searchable content will be available only to members of the American College of Physicians–American Society of Internal Medicine and to *Annals* subscribers.

It's easy to register.

If you're a member or individual subscriber, you will need your ID number (it's on the top line of your address label). You'll be asked to sign in with a user name and a password, both of your choice. Members will also be asked to provide their date of birth.

Institutional subscribers will have access via their IP address. These subscribers should refer to the access-information letter mailed to them, or they can call 800-523-1546, extension 2630, for another copy of the letter.

Register once, visit often.