

# Can Depression Be Managed Appropriately in Primary Care?

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This review considers the necessary conditions for appropriate management of depression in primary care. While discussion of primary care management has often focused on the recognition of depression, recognition alone is not sufficient. Recent research demonstrates that primary care management of depression frequently fails to meet recommended standards for intensity of treatment and follow-up. Several recent randomized trials show that effective treatment of depression in primary care is possible but will require significant changes in current practice. Prerequisites for more effective management of depression in primary care include appropriate patient education, systematic monitoring of care processes and outcomes, and easy access to the full range of psychiatric consultation services. *(J Clin Psychiatry 1998;59[suppl 2]:3-8)*

Long before the rise of managed mental health care, primary care physicians were the most common source of treatment for depression. Community surveys such as the Epidemiologic Catchment Area project<sup>1</sup> have demonstrated that people suffering from depressive disorders receive treatment from general medical physicians more often than from mental health specialists. Surveys of outpatient medical and mental health providers<sup>2</sup> confirm that primary care physicians are the “de facto” providers of treatment for depression. Primary care physicians and other medical specialists also account for the bulk of antidepressant prescriptions.<sup>3,4</sup>

Recent attempts to control health care costs may tip the balance even further toward primary care management of depression. Managed care organizations frequently require a referral from the primary care physician (gatekeeper) before granting access to a mental health specialty service. Some organizations incorporate financial incentives that place primary care physicians “at risk” for costs of mental health referrals. When a referral for mental health specialty care is made, requirements for prior authorization and utilization review are intended to restrict the duration and intensity of mental health specialty treat-

ment. Higher levels of cost-sharing (copayments or coinsurance) for mental health services than for general medical services also shift care from specialty providers back to primary care.<sup>5</sup> All these administrative restrictions and financial incentives for patients and providers are intended to reduce the proportion of depressed patients seen by mental health specialists and to speed the patient’s transfer back to primary care.

A shift toward primary care management of depression—and away from specialty treatment—raises concerns about quality of care and patient outcomes. Recent reviews<sup>6,7</sup> point out significant deficiencies in current primary care management, such as frequent nonrecognition of major depression by primary care physicians and inadequate dosage and/or duration of antidepressant treatment. Sturm and Wells<sup>8</sup> point out that current primary care management may be less expensive than specialty treatment, but it may also lead to poorer patient outcomes. The least expensive care is not always the most cost effective.

This review will examine the appropriate roles of primary care providers and psychiatrists in the management of depression. Data from recent primary care studies will be used to address the following questions: (1) What are the shortcomings of current primary care practice with respect to recognition of depression and quality of acute-phase treatment? (2) How can the shortcomings of current primary care practice be remedied? (3) What will improved treatment of depressed patients by primary care physicians mean for psychiatrists?

## RECOGNITION OF DEPRESSION IN PRIMARY CARE

Previous discussions of primary care treatment of depression have focused on the failure of primary care physi-

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cians to recognize depressive illness. Some reviews cite nonrecognition rates as high as 90%.<sup>6</sup> Studies that report the highest nonrecognition rates (60%–90%) have typically classified patients as depressed by the use of scores on such screening scales as the General Health Questionnaire,<sup>9</sup> Zung Self-Rating Depression Scale,<sup>10</sup> and Beck Depression Inventory.<sup>11</sup>

Recent studies have identified depression by the use of structured interviews and formal diagnostic criteria. These newer methods have identified patients with more severe illness, and studies have typically reported higher recognition rates than previously described. Coyne and colleagues<sup>12</sup> surveyed patients of Michigan family practitioners and found that 35% of those patients who had current major depression were recognized by their treating physician. By the use of data from the Seattle site of the World Health Organization (WHO) collaborative primary care study, a colleague and I<sup>13</sup> found a physician recognition rate of at least 55% for current major depression. Tiemens and colleagues<sup>14</sup> reported a recognition rate of 60% among Dutch primary care patients in the WHO study. Higher recognition rates reported in more recent studies probably reflect both a difference in research methods, by the use of more stringent criteria for identifying depressed patients, and a true improvement in physicians' knowledge and diagnostic skill. The recent data suggest that primary care physicians recognize 40% to 50% of patients who have current major depression, but the likelihood of recognition appears to vary across treatment settings.<sup>15,16</sup> It is also likely that recognition varies among individual physicians, but studies have not examined this issue in detail.

More importantly, primary care surveys typically find that unrecognized depressed patients are less severely ill than those recognized. In three studies described above,<sup>12–14</sup> depressed primary care patients who were recognized by the primary care physician were more severely ill and/or more disabled than those who remained unrecognized. For example, in the Seattle site of the WHO collaborative study,<sup>13</sup> recognition rates were 29% for patients who had minor depression and 64% for those who had major depression.

The limited available evidence does not clearly demonstrate that increased recognition by primary care physicians will improve patient outcomes. At both the Seattle<sup>13</sup> and Dutch<sup>14</sup> sites of the WHO study, depressed patients who were not recognized by primary care physicians showed rates of improvement similar to recognized patients. In a follow-up study of urban family practice patients, Schulberg and colleagues<sup>15</sup> found that recognition by the primary care physician was not associated with a more favorable patient outcome. Two smaller randomized trials conducted 15 to 20 years ago<sup>10,17</sup> did find a modest benefit from "forced recognition," i.e., depression screening with feedback of results to primary care physicians. However, a recent large randomized trial<sup>18</sup> of depression

screening and feedback found no significant impact on clinical outcomes.

The cumulative evidence in regard to recognition of depression suggests that low recognition rates may not be the most important barrier to effective primary care treatment of depression. Observational and experimental studies do not clearly demonstrate an association between recognition and improved outcome. These studies, however, should not be interpreted as evidence that recognition is unnecessary or that treatment is ineffective. Instead, the findings probably imply that recognition alone is insufficient. Viewed in this light, the data reviewed above seem neither surprising nor disturbing. Major depression is a serious and often chronic condition, and clinicians should not expect recognition or diagnosis alone to have a major therapeutic effect.

## ACUTE-PHASE TREATMENT

### Quality

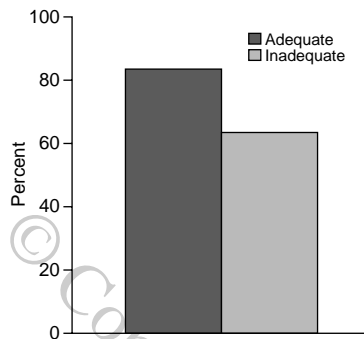
Over the last 2 decades, studies conducted in mental health specialty clinics have clearly demonstrated the effectiveness of both antidepressant pharmacotherapy and specific psychotherapies in the treatment of major depression. Recent studies have examined the frequency with which depressed primary care patients actually receive treatments of proven effectiveness.

Studies of antidepressant treatment in primary care patients typically find early discontinuation and frequent use of apparently inadequate medication dosage. Reports from the 1970s and 1980s characteristically describe low-intensity treatment.<sup>19–21</sup> Data from the Medical Outcomes Study<sup>22</sup> suggest that only half the primary care patients who are treated with antidepressants receive adequate dosages (100 mg/day imipramine or the equivalent). In a sample of primary care patients from Group Health Cooperative, Seattle, Washington, who received an initial antidepressant prescription during 1989 and 1990, only 39% received an adequate dose of medication for at least 30 days.<sup>4</sup> In a follow-up sample from the same HMO in 1992 to 1994, 56% received adequate treatment for 30 days or more.<sup>23</sup>

The few data available suggest that an even smaller proportion of depressed primary care patients receive appropriate levels of psychotherapeutic treatment. At the Seattle site of the WHO study, over 60% of primary care patients who had current major depression were recognized, but only 35% were subsequently seen by mental health specialty providers,<sup>13</sup> and this group averaged fewer than three visits over the following 3 months.<sup>24</sup> These findings are consistent with older data from referral samples,<sup>25</sup> which demonstrate that few depressed patients who are referred for psychotherapeutic treatment receive levels of care proven effective in the treatment of major depression.

In contrast to the findings on recognition of depression as described above, the quality of acute-phase pharmacotherapy is not clearly related to severity of illness or clini-

**Figure 1. Likelihood of Treatment Response (50% Reduction in Symptoms) According to Quality of Acute-Phase Pharmacotherapy\***



\*Data from reference 23. "Adequate" treatment is defined as at least 30 days of treatment at a dose of 100 mg of imipramine per day or the equivalent.

cal need. In a cohort of 88 HMO primary care patients who initiated antidepressant treatment for depression, patients who received inadequate treatment<sup>23</sup> (less than 30 days duration or inadequate dosage) were no less ill or disabled than those treated more intensively. However, those patients who received adequate treatment did have somewhat better outcomes after 4 months (Figure 1). Rost and colleagues<sup>26</sup> observed a similar pattern among a sample of rural primary care patients.

Appropriateness of pharmacotherapy is, however, related to quality of clinical management. Using data from several primary care samples at Group Health Cooperative, we have examined factors associated with quality of acute-phase pharmacotherapy (adequate dosage and appropriate duration). Adequate pharmacotherapy was more likely among patients who took newer antidepressants that had a lower burden of side effects.<sup>4</sup> Early discontinuation of medication was less likely among those patients who made early follow-up visits.<sup>4</sup> Duration of treatment was also related to physicians' communication of specific patient educational messages.<sup>27</sup> Overall quality of pharmacotherapy was higher among patients treated by psychiatrists than among primary care patients, but most of the difference appeared due to psychiatrists' more frequent use of newer medications.<sup>4</sup>

The findings reviewed above suggest that improvement of the quality of acute-phase treatment of depression in primary care patients is a high priority. Only a minority of these patients receive treatments of proven effectiveness. In contrast to the pattern seen in studies of depression recognition, adequate treatment is not related to clinical need. Adequacy of acute-phase treatment appears instead to be dependent on quality of clinical care, which includes medication selection, follow-up care, and patient education. A more organized approach to acute phase treatment of depression in primary care has the potential to significantly improve patient outcomes.

### Strategies to Improve Acute-Phase Treatment

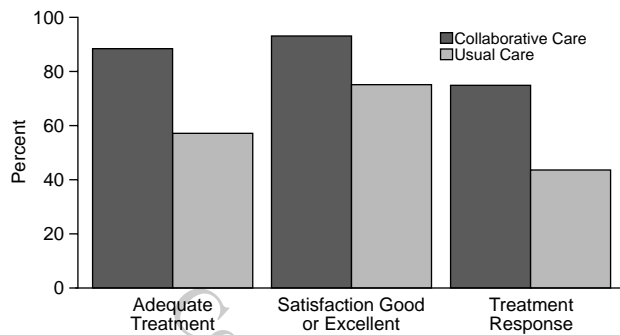
Several recent studies have evaluated strategies for improving acute-phase treatment of depression in primary care. Each study has compared "care as usual" in primary care to more organized treatment. While the treatment programs evaluated have varied in intensity and level of specialist involvement, all have attempted to deliver treatment that is more concordant with specialty standards and practice guidelines.<sup>28</sup>

Mynors-Wallis and colleagues<sup>29</sup> studied two primary-care-based depression treatment programs: (1) pharmacotherapy with amitriptyline and (2) brief, structured psychotherapy (problem-solving). Both programs were compared with a pill placebo group. Both active treatments were provided by a psychiatrist and two trained general practitioners. Problem-solving treatment yielded outcomes significantly better than placebo on the Hamilton Rating Scale for Depression. The amitriptyline group also had outcomes superior to placebo, but the difference did not reach statistical significance.

Katon and colleagues<sup>30</sup> evaluated the benefits of a "collaborative care" program among primary care patients who initiated antidepressant treatment for depression. This program included physician training in regard to appropriate administration of antidepressants and patient education materials designed to address barriers to medication adherence. The program also significantly reorganized patient care during acute-phase pharmacotherapy. All patients were seen for an initial consultation visit by an on-site psychiatrist after which the psychiatrist and primary care physician shared responsibility for management over the next 4 to 8 weeks. During this period of stabilization, the psychiatrist and primary care physician generally alternated visits; the intensity and frequency of this "comanagement" phase was adjusted according to patient need. After the comanagement period, consulting psychiatrists monitored treatment adherence and intensity of follow-up care throughout acute-phase treatment. Among patients who had major depression, this collaborative care model yielded higher patient satisfaction, greater treatment adherence, and more favorable clinical outcomes compared with usual primary care management (Figure 2).

Schulberg and colleagues<sup>31</sup> compared the effectiveness of two organized treatment programs (interpersonal psychotherapy and antidepressant pharmacotherapy) to usual primary care. In general, the patients were more severely ill and the treatments were more intensive than those described by Mynors-Wallis<sup>29</sup> or Katon.<sup>30</sup> Both treatment programs attempted to replicate the intensity of specialty treatment in the primary care clinic, e.g., 8 to 12 psychotherapy sessions, frequent medication management visits, and monitoring of antidepressant blood levels. Both programs yielded significant improvements in clinical outcomes when compared with usual primary care. However, the investigators encountered considerable difficulty in

**Figure 2. Outcomes of Collaborative Care Depression Treatment Program Compared to Usual Primary Care\***



\*Data from reference 30. Adequate treatment is defined as 30 days or more of antidepressant treatment at a dose of 100 mg per day of imipramine or the equivalent. Treatment response is defined as 50% or greater reduction in Symptom Checklist-90 depression subscale score.

delivering specialty-level treatment in the primary care environment.<sup>32</sup>

Callahan and colleagues<sup>33</sup> evaluated a multifaceted program to improve management of depression among elderly primary care patients. The intervention program included physician education, screening for depressive symptoms, and feedback of management suggestions to treating physicians. The program did not include face-to-face psychiatric consultation services or systematic follow-up care. Follow-up assessments found no significant advantage in clinical outcomes for the intervention group compared with the usual primary care group.

This series of studies suggests a number of conclusions in regard to strategies to improve primary care management of depression. First, provision of organized treatment programs for depression in primary care clinics can significantly improve patient outcomes. Second, treatments proven effective in psychiatric patients (both structured psychotherapy and antidepressant pharmacotherapy) are also clearly effective in primary care patients. Third, physician training and feedback alone may be insufficient to improve outcomes. A structured program of treatment, including psychiatric consultation, is probably necessary.

### TOWARD POPULATION-BASED DEPRESSION TREATMENT

The research described above suggests the outline of a population-based approach to depression treatment. Such an approach attempts to reduce the burden of depression across an entire population. Key elements of such a population-based treatment program include:

(1) *Integration of mental health services (and mental health specialists) with primary medical care.* Effective integration requires availability of mental health consultation in primary care clinics, but co-location alone is not

sufficient. Primary care and mental health providers must communicate frequently and effectively and must have a sense of shared responsibility for the same patient population. The logistical conditions for integrated care (co-location, shared medical records, and financial arrangements) can be established rapidly. Integration of the primary care and mental health cultures—mutual respect, shared responsibility, and common treatment orientation—can develop only over time.

(2) *Systematic monitoring of follow-up care and treatment adherence.* As discussed above, early discontinuation of medication and inadequate follow-up care are major barriers to effective treatment. Because primary care practice is typically structured to respond to acute complaints, regular follow-up care may be overlooked. Few practices are structured to notify physicians when patients fail to refill prescriptions or fail to return for follow-up care at the expected time. Assurance of adequate follow-up requires clear standards of care (e.g., frequency of follow-up visits), information systems capable of monitoring follow-up care, and resources for outreach efforts when standards of care are not met (e.g., telephone calls to patients who fail to refill prescriptions).

(3) *Routine assessment of clinical outcomes.* A significant minority of depressed patients in primary and specialty care fail to respond to initial treatment. Many of these nonresponders may also fail to return for follow-up care. A population-based treatment approach focuses as much (or more) on those patients who drop out of treatment as on those who continue. Effective care for nonresponders requires monitoring of patient outcomes. Identifying nonresponse among those who drop out of treatment requires outreach efforts (e.g., telephone assessments).

(4) *A “proactive” approach toward specialty consultation.* In traditional medical practice, a referral for psychiatric consultation is “reactive.” Referral for specialty consultation has been dependent both on return of patients for follow-up care and on recognition by primary care physicians of the need for psychiatric or other mental health services. As discussed above, such a system allows many patients in need to “slip through the cracks.” A more organized approach systematically identifies indications for consultation and/or referral. Such indications may become apparent at the initiation of treatment or they may develop over subsequent weeks. Table 1 lists potential indications for psychiatric consultation during acute-phase antidepressant pharmacotherapy. An organized system of patient care should assure specialty involvement in the management of all patients who have one or more of these indications.

### IMPLICATIONS FOR PSYCHIATRIC PRACTICE

In a population-based system of treatment of depression, psychiatrists will have some “umbrella” level of re-

**Table 1. Potential Indications for Psychiatric Consultation or Referral During Acute-Phase Treatment of Depression in Primary Care**

Indications at initiation of treatment
Significant suicide risk
Symptoms of psychosis
Substance abuse/dependence
History of mania or hypomania
History of psychiatric hospitalization
Indications during follow-up
Failure to respond after 8 weeks
Intolerance of two antidepressants
Relapse during active treatment

sponsibility for a broader range of patients. The psychiatrist must consider the clinical needs of the entire patient population, including those who have left or never entered treatment. Compared with the traditional clinical view, a population-based view is both broader and more longitudinal in scope. A focus on the overall impact of depression across a population may lead to different clinical priorities. For example, reducing the burden of depressive illness may depend as much on relapse prevention as on acute-phase treatment.

A psychiatrist's level of involvement with individual patients will vary widely, depending on the patient's needs. For many patients, the psychiatrist's participation is limited to training of and liaison with the primary care physician. In many cases, the consulting psychiatrist may offer general or specific advice without face-to-face patient contact. For example, a primary care physician may telephone the psychiatrist for advice in regard to medication dosage or management of side effects. A substantial minority of patients may require brief psychiatric consultation that can often be accomplished in one or two in-person visits. After this brief direct consultation, the psychiatrist returns to a liaison/educator role. Patients who have more complicated depression often require a period of comanagement. In such an arrangement, the primary care physician and consulting psychiatrist share responsibility and may alternate visits over 1 or 2 months. When (or if) the patient responds to treatment, the primary care physician may reassume primary responsibility.

Patients who have more complex or treatment-resistant illness are usually managed best in specialty care. An important goal of a population-based treatment approach is to rapidly and accurately identify those patients who need specialty treatment. In such a system, psychiatrists' clinical time will probably focus more on patients who have severe, complicated, or treatment-resistant depression. The innovations described above (systematic assessment and monitoring, "proactive" referral, education and liaison programs) will tend to shift management of more severely ill patients toward psychiatrists while reducing the proportion of mildly ill patients who receive specialty care. Patients who require routine follow-up will often be trans-

ferred back to primary care, and psychiatrists' clinical work will grow more complex and challenging.

Integration of psychiatry with primary medical care will require increased attention to communication and collaboration. Shared responsibility for patient care depends on effective sharing of clinical information. Increased collaboration often conflicts with mental health clinicians' traditional emphasis on confidentiality. The stigma attached to mental disorders and treatment has sensitized mental health providers to all of the possible adverse consequences of disclosing clinical information. If primary care and mental health clinicians collaborate effectively, increased sharing of information can also have a significant positive effect. Psychiatrists who work in collaborative practice must learn to balance the competing needs of privacy and coordinated care. The need for improved communication does not, of course, preclude the requirement for patient consent. Both primary care and mental health clinicians must openly discuss with patients the need for communication and coordination of care.

## SUMMARY

Our original question, "Can primary care deliver appropriate treatment of depression?" can probably be answered with a qualified "Yes." Current primary care practice often fails to deliver appropriate treatment. Follow-up is erratic, and treatment often falls below recommended standards for duration or intensity. Providing appropriate treatment of depression in primary care will require more resources and improved practice organization. In such a reorganized system, specialists will have a prominent role in liaison, consultation, and collaborative management of patients. Delivery of appropriate treatment of depression in primary care will not mean less work for psychiatrists but will require a different kind of work. Psychiatrists' clinical activities will concentrate on patients who have more severe or complex illness, and a significant portion of their energy will shift toward collaboration and communication with primary care colleagues. While this picture represents a significant change from current practice, it is the type of change that most psychiatrists will welcome.

*Drug names:* imipramine (Tofranil and others), amitriptyline (Elavil and others).

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