To Subscribe: https://fulfillment.healthaffairs.org

Health Affairs is published monthly by Project HOPE at 7500 Old Georgetown Road, Suite 600, Bethesda, MD 20814-6133. Copyright © by Project HOPE - The People-to-People Health Foundation. As provided by United States copyright law (Title 17, U.S. Code), no part of may be reproduced, displayed, or transmitted in any form or by any means, electronic or mechanical, including photocopying or by information storage or retrieval systems, without prior written permission from the Publisher. All rights reserved.

Not for commercial use or unauthorized distribution
TREATING MENTAL ILLNESS: GENERALIST VERSUS SPECIALIST

by David Mechanic

Prologue: In an era of cost containment and escalating health spending, reduced access to specialty health services is evident across the health sectors. On the mental health front, alternatives to specialty mental health services are the focus of recent debate as policy analysts question the merits of generalist versus specialist care. Sociologist David Mechanic suggests that the public should not be misguided by recent research findings that general medicine can fill the gap for providing specialty mental health services. “Much of the [mental health] care provided by general medical providers is superficial,” he said, warning of the danger in relying on general practice physicians to provide specialty mental health services. In this article, Mechanic analyzes findings from major health services research studies, which may have contributed unintentionally to the wide perception that general practice physicians are “a suitable alternative or substitute for more specialized services for the mentally ill.” Mechanic declares that these beliefs may reinforce efforts to limit mental health specialty benefits. He examines policy measures that encourage strategies to link medical care and specialty mental health services more closely. Mechanic is the director of the Institute for Health, Health Care Policy, and Aging Research and Rene Dubos Professor of behavioral sciences at Rutgers University, where he formerly served as dean of the Faculty of Arts and Sciences. He holds a doctorate in sociology from Stanford University and is a member of the Commission on Behavioral and Social Sciences and Education of the National Research Council, Institute of Medicine. Mechanic is the author of numerous books and articles on health policy and health services research, many of which have appeared in Health Affairs.
The majority of persons assessed to have a mental illness in community epidemiological studies, if they receive any treatment at all, appear to obtain such care from the general medical sector. The intent of research efforts in this field has been to assess how to achieve a better integration between the general medical sector and the mental health specialty sector and to improve the ability of general physicians to recognize and respond appropriately to persons with mental illness.

It is clearly desirable that general physicians have the capability to recognize mental illness and provide responsive treatment and referral. There is evidence that appropriate psychotherapy and drug treatment can shorten the duration of disorders seen in general medical practice, but efforts to interest general physicians in giving attention to mental disorders within the pace of busy general practice are not easily accomplished. Despite efforts for several decades, only modest progress is evident.

In this article, I argue that researchers, in highlighting the large proportion of all persons with mental illness who receive their care exclusively in the general medical sector, have probably inadvertently encouraged a picture that seriously overestimates the amount of mental health care provided. This view also may reinforce a belief that general physicians, while providing a very different style of care, are a suitable alternative to or substitute for more specialized services for the mentally ill. The risks are exacerbated by the fact that standards and criteria for ambulatory mental health care are uncertain.

The lack of firm knowledge in this area calls for focused research on how effectively comparable problems are treated in the two sectors. In our present context of seeking to restrain medical care costs, efforts are being made to cut back on mental health specialty insurance coverage. The impression that the general health sector has a large capacity to provide such care helps justify such efforts to limit specialty benefits. This article, by reviewing existing data, seeks to show that much less mental health care is being provided in the general medical sector than we think, and that it is probably not realistic to expect general medical clinicians to carry more than modest psychiatric care responsibilities. There is little doubt that physicians need continuing encouragement and help in improving their skills in recognizing and managing psychiatric conditions, particularly depression, which is common in general medical practice. In many geographic areas, specialized services will not be available, or access problems may be formidable because of financial or other reasons. Sound social policy should also seek, wherever possible, to increase coordination between the general medical and mental health specialty sectors.

In 1966, publication of Psychiatric Illness in General Practice by Michael Shepherd and his colleagues in London shaped this field and alerted the
research community to the significant role of primary medical care in the management of mental illness. These studies focused on the extent of psychiatric morbidity among primary care patients and the degree to which such conditions were properly identified and managed by doctors. Numerous studies documented that psychiatric illness and distress, as measured by independent assessments, were often neither recognized nor treated. Referral to specialized mental health settings depended as much on the attitudes of doctors and their interests in psychiatry as on any other factor.

In subsequent years, it was widely noted that most persons in the community who appeared to have mental illnesses or high levels of disabling distress received no specific treatment for these conditions, and, if they did, they were more likely to be treated through general medical services than through the specialty mental health sector. The Epidemiological Catchment Area (ECA) Study, for example, found that 6 to 7 percent of the population studied visited a health or mental health provider for a mental health problem during the prior six months. A majority of these visits were attributed to care by general health providers, although the distribution varied by geographic site. This is in contrast to the 17 to 24 percent of patients in St. Louis, New Haven, and Baltimore who were reported to have had a recent disorder as assessed by the Diagnostic Interview Schedule (DIS) based on the criteria specified by the Diagnostic and Statistical Manual of Mental Disorders, edition III (DSM-III). Among persons who met criteria for a recent DIS-DSM-III disorder, only from 16 to 20 percent reported any kind of mental health visit in the prior six months.

When one examines the relative distribution of reported visits by type of DIS disorder, the patterns suggest some division of responsibility between the general medical sector and specialty mental health services. A majority of mental health visits occur in the specialty sector for schizophrenia/schizophreniform disorders (67 to 90 percent, depending on site), substance abuse and dependence (71 to 84 percent), and antisocial personality (62 to 74 percent). In contrast, lower proportions of visits for affective disorders (52 to 61 percent) and anxiety and somatoform disorders (47 to 67 percent) are reported to take place in the specialty sector. This is consistent with the relevant general practice literature, which focuses on depression and anxiety as the major concerns for primary care.

The relationship between data from epidemiological or clinical studies on the occurrence of disorder and distress and need for treatment remains uncertain. The fact of a discernible disorder is not the same as need or desire for care. Much depends on what treatment has to offer, its benefits,
and possible adverse effects. Moreover, in many instances, successful treatment is likely to depend on the patient’s perceived needs and motivations for care, and prevalence data tell us little about these issues. In addition to the costs of treatment, patients may incur costs in accepting a diagnosis that may influence their self-conceptions and may involve risks of stigma and discrimination as well. Thus, positive perceived benefits of treatment must at least balance potential costs. In many instances, such as in the treatment of cognitive impairment and substance abuse, there is little evidence of efficacious care, although careful assessment and social support may be helpful. In other instances, where individuals have a long history of psychiatric illness, they may have learned through their own experiences that it is more helpful to depend on their own resources and those of their support systems than on formal mental health services. A significant proportion of patients with a serious psychiatric episode after the initial episode receive no further follow-up treatment over many years, although they are not free of symptoms. Thus, the absence of a mental health visit in the prior six months may convey either an unawareness of the need for treatment, a rejection of treatment, or a particular stage in the illness and care trajectory.

Problems In Defining Sources Of Care

The manner in which studies such as the ECA project measure the care-seeking process has limitations that may substantially affect the resulting estimates of utilization. While the decision to seek care typically is linked to a specific visit often triggered by events in close proximity to the visit, estimates from such studies as the ECA project are derived from a global retrospective response. Respondents are first asked about their use of health services in the prior six months and then asked: “During these visits, did you and the health professional talk about any problems you had with your emotions or nerves that might have been connected to or in addition to the reason for your visit? (Pause) How about problems with alcohol or drugs?” A follow-up question asks: “Were these problems the main reason for making (any of these/this) visit(s)?”

This format is likely to overestimate the role of general medical care in dealing with mental health problems. The question addresses any visit in which there is discussion of emotions or nerves, and no link is made between specific disorders and such discussion. Also, such discussion may relate to a wide variety of problems such as cardiovascular disease or pain, or to symptomatic care for insomnia, fatigue, or a host of other concerns.

In four of the sites for which data on this question are available (Baltimore, St. Louis, Durham, and Los Angeles), only 381 respondents
of the 1,131 who talked about emotions or nerves with a provider reported this as a main reason for any visit (varying from 25 percent to 39 percent among the sites). These data suggest that the aggregate estimates of the proportion of the mentally ill receiving care from the general health sector are inflated. Most of the mental health care was incidental to the major reason for the consultation.

Although the New Haven site provided a broader range of utilization questions, it poses similar estimation difficulties. Respondents in New Haven were asked if they had ever gone to a variety of places and people “where someone might get help for problems with emotions, nerves, drugs, alcohol, or their mental health.” In the item on general medical care, however, the language shifts in a way that significantly changes the question: “Have you ever talked to a medical doctor in private practice (except for a psychiatrist) or to any medical person at a health plan or at a primary care clinic about problems like that?” A follow-up question asks: “How many times in the past six months did you go to (that person) for any of these problems?” Having talked to is quite different from going to for a problem.

In sum, the ECA data are less helpful in estimating the role of the general medical sector in the treatment of mental illness than generally is appreciated. One readily gets the impression that more care is being provided for persons with mental illness in the general medical sector than may be the case. Other data sets, however, can be examined to see to what degree they can illuminate the situation.

Examining The Evidence

The RAND Health Insurance Experiment. The RAND study was an effort to experimentally examine the effects of coinsurance on the use of health services involving random samples of eligible respondents in six geographic sites. Families were enrolled in the experiment for either three or five years and represent 12,435 person-years of data. The sample is not representative of the United States or any region, and extrapolations are constrained by the experimental manipulations. However, the RAND study provides an extremely rich data set that combines interviews and extensive financial data from claims files. The data provide no specific information on DIS disorders but include a mental health inventory measuring anxiety, depression, and well-being. The claims files allow reconstruction of mental health care provided through the general medical sector as well as from specialty mental health providers covered by the insurance plans. Benefits covered within the RAND experiment included up to fifty-two visits per person per year for psychotherapy
provided by psychiatrists, psychologists, psychiatric social workers, psychiatric nurses, and other mental health professionals.

Kenneth Wells and his colleagues have reported on use of mental health services in the RAND study. The experimental insurance effects for use of outpatient mental health services are large, with the proportion of mental health services users of outpatient care doubling between the zero and 95 percent coinsurance plans. In contrast, insurance plan is not significant in predicting the choice of provider for mental health services.

In the Health Insurance Experiment, respondents were not specifically asked if they sought help for mental health problems. Claims forms were the source of data, with use of psychiatrists, psychologists, psychiatric social workers, and other mental health professionals designated as mental health providers. All other mental health care as indicated by a coded mental health procedure or diagnosis was attributed to general medical providers. An algorithm was also developed that includes as mental health visits those instances where psychotropic drugs were prescribed but no physical basis was provided for the prescription. The use of this algorithm increases the proportion of users in year two from 7.1 percent to 9.2 percent. Depending on whether these cases are included, 46 to 58 percent of users of mental health services were defined as receiving their care exclusively from the general medical sector.

How are we to assess the content of mental health care provided by the general medical sector? As with the ECA data, a majority of the visits are not primarily for mental health purposes. Among users who receive mental health care exclusively from the general medical sector, 58 percent “have one or more ‘mental’ health visits where the primary diagnosis is not a mental disorder.” Moreover, the low intensity of care is impressive. Median annual expenditures for outpatient mental health services for this group who received such care are only fourteen dollars, one-twentieth of median expenditures for patients who use mental health specialty services. The major reason is the low number of visits per year, two visits in comparison to eleven among those using specialty services. Even more revealing is the fact that while the intensity of services provided by mental health specialists is related to the patients’ mental health status at enrollment, such care provided through the general medical sector is unrelated to mental health status at enrollment.

The overall impression that emerges from the RAND data set is that mental health services provided by the general medical sector are relatively shallow and not well matched with indicators of possible need. It should be noted, however, that the RAND researchers could find no changes in mental health status over time in relation to variations in cost.
In the absence of outcome differences, data on the lower intensity of mental health care in general medical practice may be appealing to those seeking economic constraints. The RAND data, however, do not provide a good test of the relative advantages of low intensity versus more concentrated care for persons with specific psychiatric problems. In particular, their analysis could not address the effects of limiting economic access for those who were disadvantaged.

**National Ambulatory Medical Care Survey (NAMCS).** NAMCS is a sample survey of visits to nonfederal office-based practitioners. The multistage probability sample design allows estimates of ambulatory visits in the United States for settings covered by the survey. In the ambulatory care survey, office practitioners provide information on sixteen data items for a sample of their patients during a specified week. Information that may be useful for our purposes includes the patients' complaints or symptoms, the physicians' diagnoses, and all new or continued medications ordered or provided at the visit. Data are collected from both primary care physicians and specialists.

In 1985, 2.5 percent of all visits to office-based doctors were for symptoms that were referable to psychological and mental disorder as abstracted from the principal reasons given by patients for their visits. Mental disorder was the principal diagnosis made by the doctor in 4.1 percent of visits. Neurotic disorder was the eighth most common diagnosis in office-based practice, representing 1.5 percent of all visits. Many studies indicate that other than psychiatrists, general and family practitioners and internists are the primary mental health providers in the general medical sector. In the RAND study, for example, these physicians provided 67 percent of all mental health care within the nonspecialty sector. Published data from NAMCS for 1980-1981 indicate that these primary care physicians are the highest prescribers of psychotropic drugs, apart from psychiatrists. General and family practitioners and internists note psychotropic drugs in 84 and 115 visits per 1,000 visits, in contrast to psychiatrists, who have a rate of 441.

The drug listings have been classified into three categories: (1) anti-anxiety agents, sedatives, and hypnotics; (2) antidepressants; and (3) antipsychotic and antimanic agents. It is instructive to contrast the types of drugs prescribed by psychiatrists as compared with primary care physicians. Almost three-quarters of the drugs listed by psychiatrists in the survey are in classes two and three, while among primary care physicians, two-thirds are in class one. The allegations that primary care physicians prescribe psychotropic drugs inappropriately may be correct in part, but it is also likely that these physicians are treating very different patients than those seen by office-based psychiatrists. More than one-third of the
prescriptions noted by psychiatrists are for antipsychotic and antimanic drugs, in contrast to one-tenth in the case of primary care physicians. In further analysis of the 1980 data, Stephen Jencks found that an unduplicated count of ambulatory visits in which psychotropic drugs were listed or “psychotherapy/therapeutic listening” provided or a mental health reason given for the visit accounted for 11.6 percent of all visits. No diagnosis was given in most visits in which either psychotropic drugs or psychotherapy were provided. These analyses suggest again that this is not a comparable population of patients to those typically seen in the specialty sector. The ambulatory care data are provocative, but they do not take us far enough in understanding how care varies in the two sectors of concern.

The National Medical Care Utilization and Expenditure Survey (NMCUES). In this study, completed in 1979, randomly selected respondents in about 14,000 households were interviewed six times during 1977 and 1978, focusing on their use and expenditures for medical care. A more recent expenditures survey has recently been completed, but data on mental health utilization are not yet available.

In NMCUES, 4.3 percent of the population reported a mental health visit for 1980. These include visits to any provider that the respondent indicated was for mental health, as well as all visits to psychiatrists, psychologists, or psychiatric clinics, regardless of the reasons given. Such visits were fairly equally divided between psychiatrists (30 percent), psychologists (35 percent), and physicians and other providers (30 percent). Half of all expenditures for such visits were incurred by 10 percent of respondents who made twenty-five or more visits a year. Of this group, 82 percent were for persons primarily seeing office-based psychiatrists and psychologists. Two important facts should be noticed about these data. First, the rate of users per annum is considerably lower than the 6 to 7 percent reported by the ECA study for a six-month period. Second, those with high rates of utilization (presumably those with a greater need for care) are concentrated in the specialty mental health sector. While interviewing for the ECA study was carried out in 1980-1982, it is highly unlikely that the differences noted could be simply a result of the different times of data collection. It is more likely that they reflect the sampling at selective sites in the ECA study. The most probable explanation of differences, however, is the lenient definition of what constitutes a mental health visit to the general medical sector in the analysis from the ECA study. As Carl Taube and his colleagues noted, inclusion of “nerves, not elsewhere classified” would increase estimated numbers of mental disorder by 50 percent. Although direct comparisons cannot be made between NAMCS and NMCUES because the ambulatory care survey is
not population-based, the results of these two national surveys appear much more consistent with each other than with the ECA results.

The NMCUES data also suggest that the inclusion of the prescription of psychotropics as one criterion for defining a mental health visit is too lenient. It should be noted that the RAND investigators excluded neuroleptic drug visits where the record showed a physical reason—a more justifiable procedure—although their definition of mental health visits remains relatively lenient. The proportion of respondents in NMCUES who received a psychotropic (9.1 percent) was more than double the proportion reporting a mental health visit. About half of all prescribed drugs were for mental conditions, most commonly reported nervousness and depression. But such drugs were reported also to be used commonly for a range of other medical problems, including conditions of the circulatory system (14 percent of such prescriptions) and conditions of the musculoskeletal system (5 percent). Fifty-four percent of prescriptions were for antianxiety agents, 19 percent for sedatives, 17 percent for antidepressants, and 10 percent for antipsychotics. Antianxiety drugs were prescribed in a majority of the mental conditions (54 percent).

Discussion

Depressive symptoms are extremely common in the general population and particularly in the context of general medical practice. Some patients seek assistance for depression directly. More commonly, depression is associated with the presentation of a variety of physical symptoms—some the patient’s primary concern, others representing an acceptable way to request assistance for depression and distress. Symptoms of depression, however expressed, are substantially disabling. The RAND Medical Outcomes Study, examining how chronic disease is managed in contrasting practice settings, reports that patients with both depressive disorders and depressive symptoms below the disorder threshold suffer from poorer functioning across a range of dimensions than persons with no chronic condition.

In the Medical Outcomes Study, patients with depressive conditions and with depressive symptoms were compared with other patients with a variety of serious medical conditions. Patients with both a depressive disorder and depressive symptoms had the poorest health appraisals and were equally or more disabled in their daily lives than patients with most of the other disorders studied, with the exception of advanced coronary artery disease. The picture that emerges is that depressive symptoms cause pervasive disability and suffering, far more than is appreciated by the
general public and even physicians.

The literature indicates that at least half of the patients with significant depressive symptoms do not have their symptoms detected and receive no psychosocial care. Further, it is believed that many whose symptoms are recognized receive inadequate or inappropriate care. The concept of “nonsystem” fits the picture of management of psychiatric illness in general medical care better than descriptions of it as an alternative source of care. The notion that general medical care can fill gaps resulting from barriers to access to specialty mental health services may be a harmful illusion.

It is no accident that the study of psychiatric illness in general practice developed within the British National Health Service. Psychiatry in Britain is a hospital-based specialty, and the system is highly dependent on general practitioners for much of the continuing care of chronic patients and for most of those with lesser disorders. Far fewer alternatives exist for mental health services than in the United States. Research in Britain focused on improving the capacity of general practitioners to detect and manage depression, and on practice schemes, such as social work attachments, that enabled them to take significant responsibility for the maintenance of psychiatric patients. While general practitioners vary in their interest and sense of responsibility in these matters, both administrators and practitioners define this as an appropriate role. The system of care in the United States is more fragmented, and the reimbursement system provides strong disincentives for psychosocial services. Also, many physicians feel poorly prepared and uncomfortable in dealing with mentally ill persons.

It is unrealistic to refer all patients with psychiatric problems to specialty services, nor is this desirable. Many patients with depression and anxiety, as well as other disorders, can be managed well by primary care physicians who are motivated to provide their care. But it is also highly optimistic, given the real constraints of general medical practice, to anticipate that most general physicians will be motivated or well prepared to provide appropriate care to patients with substantial mental disorder. The so-called de facto mental health system speaks more to the deficiencies of mental health care than to the value of substituting general physician services for specialty mental health services. It is essential that there be collaboration and cooperation between primary medical care and specialty care because of the close interconnections between psychiatric and medical morbidity. However, we must develop improved models of collaboration that define responsibilities more realistically. Such models, if they are to be successful, must be consistent with the financial and organizational structures of medical care that will prevail.
Data from health maintenance organizations (HMOs) that maintain specialty mental health services suggest that their presence allows a better demarcation of care between general and specialty services. While general care contexts have much responsibility for managing psychosocial problems, the more seriously ill appear to be referred to specialty services if the patient does not resist referral and if the physician is not unduly prejudiced toward specialty care. In the RAND Health Insurance Experiment, the researchers compared outcomes of patients randomized to the Group Health Cooperative of Puget Sound, a prepaid group practice with varying fee-for-service insurance plans. Although the style of care in the prepaid practice was quite different than in fee-for-service, there were no significant differences in general mental health outcomes. Mental health specialty services in HMOs, however, strictly control volume of use and may be a poor context for care for the most seriously mentally ill. Also, anecdotal information suggests that HMOs discourage enrollment among persons with mental illness.

The selective processes that bring patients into varying types of care are a product of two intersecting systems. One, defined by the illness behavior of patients and their families, shapes how symptoms are defined and what are seen as appropriate pathways into care and relevant services. The other reflects the training, orientations, judgments, and needs of physicians when they encounter patients with psychiatric symptoms, the financial and organizational incentives that affect their behavior, and the decisions they make about treatment and referral. Neither system is autonomous, although patients and their families can completely bypass the general medical sector and seek services directly from specialty providers.

The Need For A New Strategy

In the past twenty years, a great deal of effort has been devoted to understanding differences in the abilities of general physicians to detect and appropriately manage psychiatric illness and how to prepare primary care physicians better for this role. Any efforts along these lines are useful, but the preponderance of evidence indicates that much, if not most of, such illness is undetected and, when detected, is often poorly managed. Given the magnitude of psychiatric distress, the lack of interest of many physicians, and the reluctance of patients to view themselves as having an emotional or psychiatric condition, most such care will occur as an incidental aspect of general medical care. It is probably unrealistic, however, for primary care physicians to take major responsibility for patients who have a serious mental disorder.
A more effective strategy would be to develop incentives that make specialty mental health care more available and that link general medical care and specialty care more closely. This goal could be facilitated through attaching mental health specialty services to group practices and using liaison arrangements to assist primary care physicians in managing those patients for whom they take responsibility. Whatever the case, the definition of which services are covered and the intensity of services are likely to be central issues. In the future, it is clear that such arrangements are unlikely to be financially viable outside of a system of controlled referral and careful monitoring of the intensity of services used.

There is need to define more clearly the respective domains and responsibilities of general medical care and specialty mental health care in the treatment of the mentally ill. They are not interchangeable systems, and thinking about them in this way should be discouraged.

The ability to make good assessments about who should take responsibility for which subsets of patients is very much limited by the inadequate research base. We know too little about who is currently providing care to varying types of patients or the intensity, appropriateness, and outcomes of such care. We often think of referral practices as efforts to achieve a rational fit between medical need and appropriateness and intensity of service. But referral may also reflect the needs of busy practicing physicians as they deal with the flow of their workload, their interest and confidence in treating varying types of patients, and their perceptions of risk and uncertainty. There is some fragmentary evidence that referral of psychiatric patients to specialty services is more likely to reflect the disruptiveness of the patient, uncertainties concerning suicide threat and violence, and other behavior features that threaten the physician, rather than the objective severity of the conditions.

Sound policy must be based on a clear conception of the relative responsibilities of general medical practice and specialty mental health services. It would not be cost-effective to open the gates to specialty care too widely. But we need better mechanisms to support general physicians who take on more than usual mental health responsibility and to facilitate consultation. Liaison psychiatry is a growing activity in the inpatient arena and in some multispecialty group settings, but it is more difficult to implement in typical primary care settings. The introduction of social workers, behavioral psychologists, and nurse practitioners to work with general physicians is increasingly common but difficult to accomplish in smaller practice groups.

Clearly, a great deal of research remains necessary, but the practice arena is changing rapidly and not likely to wait. As cost pressures mount, health insurance plans and self-insured employers who seek to restrain
expenditures often focus on mental health benefits. It is not uncommon for the mental health benefit package to be carved out and to be capitated separately from other medical services. Proprietary firms now market capitated mental health services to employers, insurance plans, and managed care programs. We know remarkably little about the experience and consequences of these new ventures or how they affect access and integration between general medical care and mental health care.

We clearly need to think more carefully about the heterogeneity of patients with psychiatric problems and the types of arrangements that best serve their needs. As with other areas of medical care, effectiveness research is of high priority. Research over the past twenty years has provided some good models for collaboration between generalists and the specialty sector. They exist in fragmentary and fragile forms, and we require incentives to help reinforce and expand them and to engage in further evaluation. Without effort and vigilance, they may be swept away in the ferment that now characterizes the health care arena.

This research was supported, in part, by a grant from the National Institute of Mental Health.

NOTES

1. Over the past twenty years, a large literature has developed on this topic, and several general summaries and annotated bibliographies have been published. These include: J. Hankin and J.S. Oktay, Mental Disorder and Primary Medical Care: Analytic Review of the Literature, Series D, no. 5, DHEW Pub. no. (ADM) 78-4661 (Washington, D.C.: National Institute of Mental Health, 1979); Institute of Medicine, Mental Health Services in General Health Care (Washington, DC.: National Academy Press, 1979); G. Wilkinson, Mental Health Practices in Primary Care Settings: An Annotated Bibliography, 1977-85 (London: Tavistock, 1985); and N. Sartorius et al., eds., Psychological Disorders in General Medical Settings (Toronto: Hogrefe and Huber, 1990).


3. J.V. Coleman and D. Patrick, “Integrating Mental Health Services into Primary Medical Care,” Medical Care 14 (1976): 654-661.


13. Ibid., 8.


18. Ibid.


21. See, for example, K.B. Wells, *Depression as a Tracer Condition for the National Study of Medical Care Outcomes: Background Review*, 3293-RWJHJK (Santa Monica, Calif.: The RAND Corporation, 1985); and D. Goldberg, “Reasons for Misdiagnosis,” in *Psychological Disorders in Medical Settings*, ed. Sartorius et al.

22. P. Williams and M. Shepherd, “Psychological Disorder in Primary Medical Care,” in
23. Coleman and Patrick, “Integrating Mental Health Services into Primary Medical Care.”