Depression and Primary Care: Drowning in the Mainstream or Left on the Banks?

HAROLD ALAN PINCUS, MD

ABSTRACT

OBJECTIVE: To discuss the treatment, barriers, and successful strategies to treat depression in a primary care setting.

SUMMARY: Historical, conceptual, and individual barriers hinder the treatment of depression. Additionally, a lack of clarity about whether the responsibility for care lies with primary care or behavioral health providers further leads to fragmented and uncoordinated systems. Depression is a chronic illness, not unlike diabetes, heart failure, and asthma. Therefore, disease models used to treat these chronic illnesses can also be applied to successfully treat depression.

CONCLUSION: Appropriately managing patients with depression and other behavioral health conditions will require changing the entire health care system. Future strategies should include developing a continual quality improvement process, developing bridges between behavioral health and primary care, eliminating clinical and financial barriers between systems, and viewing the mind and body as a whole.

KEYWORDS: Depression, Disease management, Primary care, Health care delivery, Practice management

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Depression is a prevalent illness directly affecting 10% to 20% of the population.^{1,2} But depression not only affects the patient. It is also devastating to the family and friends of the afflicted individual. The disease has significant personal, family, social, and economic impact and, despite the scientific advancements in diagnosis and treatment, there still remains a large gap between scientific evidence and the effective implementation of programs to reduce the disease burden of patients with depression.

Depression is a chronic illness not unlike other chronic diseases such as diabetes, asthma, and congestive heart failure. Chronic disease models for treating these other diseases can also be applied to treating depression. According to a study by the World Health Organization (WHO), the leading source of disease burden, unipolar major depression, was ranked as the second most disabling disease in developed economies (Table 1).³ The WHO Global Burden of Disease study ranked diseases according to disability-adjusted life-years (DALY), which combines the measures of mortality and morbidity, including disability, into a single measure for the purposes of comparing various illnesses and their impact on the population. But when only disability was considered, unipolar depression was the leading cause of years lived with disability for all sexes and all ages (Table 2).⁴ In this analysis, 4 of the top 10 illnesses contributing to disability were behavioral health conditions. Among the productive workforce between the ages of 15 and 44, 4 of the top 5 illnesses that contribute to disability were also behavioral health conditions (Table 3).⁴

In terms of disability, behavioral health conditions appear to be significant sources of disability across the population. Despite the

TABLE 1 Leading Sources of Disease Burden—Established Market Economies, 1990

	Total DALYs (Millions)	% of Total
All Causes	98.7	100.0
Ischemic heart disease	8.9	9.0
Unipolar major depression	6.7	6.8
Cardiovascular disease	5.0	5.0
Alcohol use	4.7	4.7
Road-traffic accidents	4.3	4.4

From: Murray CJL, Lopez AD, eds. *A Comprehensive Assessment of Mortality and Disability From Diseases, Injuries, and Risk Factors in 1990 and Projected to 2020. The Global Burden of Disease and Injury Series. Vol. 1.* Cambridge, MA: Harvard University Press; 1996. [Harvard School of Public Health, on behalf of the World Health Organization and the World Bank.] DALY=disability-adjusted life-year.

Author

HAROLD ALAN PINCUS, MD, is a professor and executive vice chairman, Department of Psychiatry, University of Pittsburgh School of Medicine; a senior scientist, RAND Corporation; director, RAND-University of Pittsburgh Health Institute; and director, Robert Wood Johnson Foundation's national program Depression in Primary Care: Linking Clinical and Systems Strategies.

AUTHOR CORRESPONDENCE: Harold Alan Pincus, MD, Western Psychiatric Institute and Clinic, 3811 O'Hara St., Suite 230; Pittsburgh, PA 15213.

Tel: (412) 246-5942; Fax: (412) 586-9049; E-mail: pincusha@upmc.edu

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TABLE 2 Leading Causes of Years of Life Lived With Disability in All Ages

Both Sexes, All Ages	% of Total
Unipolar depressive disorders	11.9
Hearing loss, adult onset	4.6
Iron-deficiency anemia	4.5
Chronic obstructive pulmonary disease	3.3
Alcohol-use disorders	3.1
Osteoarthritis	3.0
Schizophrenia	2.8
Falls	2.8
Bipolar affective disorder	2.5
Asthma	2.1

From: World Health Organization. *The World Health Report, 2001. Mental Health: New Understanding, New Hope*. Geneva: World Health Organization; 2001.

TABLE 3 Leading Causes of Years of Life Lived With Disability in 15-44 Year-Olds

Both Sexes, All Ages	% of Total
Unipolar depressive disorders	16.4
Alcohol-use disorders	5.5
Schizophrenia	4.9
Iron-deficiency anemia	4.9
Bipolar affective disorder	4.7

From: World Health Organization. *The World Health Report, 2001. Mental Health: New Understanding, New Hope*. Geneva: World Health Organization; 2001.

FIGURE 1 Prevalence of Major Depression in Patients With Physical Illnesses

From: Kessler RC, Barber C, Beck A, et al. *The World Health Organization Health and Work Performance Questionnaire (HPQ)*. *J Occup Environ Med*. 2003;45:156-74. HIV/AIDS=human immunodeficiency virus/acquired immune deficiency syndrome.

prevalence and disease burden, often these behavioral health conditions may not be the focus of effort for most health care organizations or systems. Not recognizing the importance of these conditions can result in poor patient outcomes as well as significant cost burden for the organization.

Disease Burden of Depression

The disease burden of depression is high because of several factors. We know that the prevalence of depression is high, but this prevalence appears to be rising in studies with recent cohorts.^{5,6} In addition, the disease is usually chronic in nature with frequent episodes of relapse. Depression is also prevalent during the most productive time in a person's life, and this has significant long-term impact on educational and professional development. In addition to the societal impact of suicide, the increased utilization of health services in people afflicted with depression is also a concern. As both the number of people being treated for depression and the cost of treatment modalities increase, the disease burden of the illness will rise accordingly. One third to one half of all individuals with diseases such as hypertension, epilepsy, diabetes, and HIV/AIDS also suffer from depression (Figure 1).⁷

Although we have focused primarily on patients in primary care, we should not lose sight of those with severe mental illnesses who are often treated in mental health specialty settings. Among patients with severe mental illnesses like schizophrenia and bipolar disorder, medical and preventive health care needs are particular issues of concern. Most of these patients already have complications such as cardiovascular disease, diabetes, and hepatitis; in fact, approximately 40% to 56% of individuals with mental illness have a clinically significant medical condition.⁸ Whether it is the mental illness, the medical condition, or a combination of both factors, these patients have reduced life spans and 2-to-4-times higher death rates compared with patients without mental illnesses.⁹ In addition, according to recent evidence, the association between atypical antipsychotics and increased risk of metabolic syndromes places these patients at even higher risk of morbidity and mortality.¹⁰ Continual efforts to ensure appropriate utilization of these medications and preventive strategies to manage metabolic consequences in these patients should be priorities.

Depression is often identified and managed within the setting of primary care since a high percentage of patients seek treatment with primary care physicians for somatic symptoms that, in fact, may actually be depressive symptoms. People often feel less stigmatized in seeking general medical care than behavioral health care for treatment of their symptoms. Unfortunately, however, one third to one half of these patients who have depression may not be appropriately diagnosed or receive proper treatment. Among patients with depression, 50% of them still remain depressed after 1 year.¹¹ This may be the result of inadequate dosing, inadequate follow-up, or lack of education about the nature of the disease or treatment being provided. In fact, as many as 50% of depressed

patients fail to refill their antidepressant prescriptions.¹¹ These issues are not exclusive to primary care but exist in mental health specialty settings as well. The good news is that there are effective models to address some of these issues and hopefully to produce better clinical outcomes.

Barriers to Treatment

So what are the barriers to identifying and effectively treating patients with depression? First, the players involved in the process need to be identified (Figure 2). Although there are many people who have depression, not all of them are effectively identified and treated. Therefore, we would like the proportion of patients who are appropriately recognized and treated to expand as much as possible. Ideally, our goal is to have these latter and former groups overlap completely. In addition, a minority of patients may be identified as having depression who actually do not have depression or may have subthreshold levels of depression. These patients may warrant other types of intervention than simply an antidepressant medication, (e.g., watchful waiting that is truly watchful).

Barriers to treatment of depression exist on many levels—ranging from historical to conceptual to individual barriers (Table 4). There are 6 levels, or what are termed the 6 Ps: patient, provider, practice, plans, purchasers, and population. As for historical barriers, behavioral health is different from general medical conditions. Dating back to René Descartes, who theorized about the division between the mind and body, there has been stigma about mental illnesses. Although great strides have been made in educating the public about depression and other mental illnesses, stigma is still a very prevalent problem that often hinders people from seeking treatment. Also, there are legal and regulatory issues that are specific to the care of the mentally ill (e.g., privacy, competency). Further, there are separate treatment systems, such as state mental hospitals. The mental health care system is complex, often involving social services, criminal justice, and educational systems, which together make the care of those with mental health issues more complicated than the care of those with other health conditions. In addition, there is a division of diagnostic systems as well as delivery and financing systems (e.g., separate “carve-out” managed mental health plans and lack of parity between behavioral health and general medical care). While most of us may have medical care insurance benefits, we rarely know what to expect from our plan when it comes to behavioral health benefits. It is clear that there are many silos within the behavioral health care system that hinder us from receiving adequate care.

In addition to historical barriers, there are individual patient barriers, such as stigma. In 1999, a survey of primary care providers found that more than a third of patients with depression resisted the diagnosis, and half of the patients were hesitant to seek specialty care.¹² Even when they accept the diagnosis, patients are often unwilling to be referred outside of the primary care setting and are concerned about confidentiality issues,

FIGURE 2 Scope of the Problem: Recognition and Treatment of Depression in Primary Care Settings

Adapted from: Goldberg D, Huxley P. *Mental Illness in the Community*. London: Tavistock Publications; 1980.

TABLE 4 Barriers to Treatment

- Historical
- Conceptual
- Patients/consumers
- Providers
- Practices/delivery systems
- Plans—managed care organizations/managed behavioral health organizations
- Purchasers—public/private
- Population—community

especially when they participate in an employer-based health plan. It should be noted that the symptoms of depression themselves may be obstacles to the treatment of the disease. Patients with depression often have low energy, feelings of hopelessness, and decreased concentration; these symptoms reduce the likelihood that patients will follow up with care or adhere to treatment and follow-up. These patients are less able to manage diseases that often coexist with depression, resulting in poor self-care management that may contribute to their decreased functioning and quality of life.¹²

Responsibility for Care

In addition to the barriers that may prevent patients from receiving appropriate care, there is also the issue of responsibility for care. Providers are faced with conflicts such as “Who is responsible for care?” and “Where and how should care be provided?” The level of responsibility of the primary care provider and the behavioral health specialist is often unclear, and the lack of coordination

FIGURE 3 Mapping Training to Roles

Interventions	Longitudinal Follow-up & Monitoring											
	Extended B/P/S Interventions											
	2nd Level or Higher Medications											
	Brief B/P/S Interventions											
	Initial Medications											
	Diagnosis/Comprehensive P/S Assessment											
	Counseling/Psychoeducation											
	Recognition/Limited P/S Assessment											
	Primary Care for GMC											
		Depressive Disorders	Substance Use Problems	Panic Disorder	Somatization	Other—Anxiety Disorders, e.g., Social Specific Phobias	Substance Abuse	Bipolar Disorder	Substance Dependence	Severe Personality Disorder	Schizophrenia	
Conditions/Populations												

Note: Did not include child (e.g. ADHD) geriatric (e.g. dementia).

ADHD=attention-deficit/hyperactivity disorder; B/P/S=bio/psycho/social;

GMC=general medicine clinic; P/S=psycho/social.

between them can lead to gaps in continuity of care. Certainly, these roles can be delineated by looking at the various conditions and potential interventions for particular disease states (Figure 3). In principle, a matrix such as the one shown in Figure 3 can link the responsibility for the intervention with the types of providers for specific disorders. For an educational strategy, a curriculum can be developed to train individuals to accomplish these tasks—unfortunately, current accreditation policies and programs have not been developed to facilitate such a process.

What is the current state of the relationship between mental health and primary care? In large part, there is little integration of services or collaboration between these types of care settings. Usually, the primary care providers work independently of the mental health specialists, resulting in disconnected care for the patient. In addition, the providers are primarily focused on the identification and short-term management of depression when, in fact, more attention should be dedicated longitudinally to prevention and ongoing maintenance treatment for this chronic disease.

At the health plan level, there are several obstacles that may hinder appropriate management of these patients. Traditional indemnity models are rare in mental health; often, the behavioral health benefit is “carved out” to a separate company. It is estimated that approximately 78% of Americans with public or private insurance, which represents a \$4.4 billion industry,¹³ have some form of managed behavioral health care benefit. This separation of benefits has a significant impact in terms of care and the incentive structure that allows for the coordination and communication between primary care and behavioral health care specialists. The increasing fragmentation of care in the rapidly growing sector of the disease management industry is an

important issue that needs to be addressed in the near future.

The traditional indemnity model of insurance, in which both primary care providers and psychiatrists/psychologists are involved in the ultimate care of the patient, is rare today. Current health plans are primarily employed to pay the bills and are not often involved in any type of relationship between the providers. In an integrated model such as the health maintenance organization, there remains a close connection between providers, and the risk is shared among all providers. In a carve-out model, there is little relationship between the mental health and primary care providers; instead, the communication is primarily between the health plans and their respective provider networks. When a referral is made, there is no discussion between the primary care provider and the mental health specialist to whom the patient is referred. Furthermore, there is little financial incentive for either the primary care provider or the managed behavioral health organization to coordinate care among all of the different providers.

Unfortunately, the complexity and fragmentation of the system is increasing. The potential players in this system can range from the managed care organization and the pharmacy benefit managers to the disease management organizations and the corporate medical staff. Within each of these entities lie additional silos. The responsibility for this state of affairs falls for the most part to the purchasers, both employer purchasers and public purchasers who contract with vendors to implement this system. Purchasers are generally not concerned with behavioral health conditions because of the stigma of mental illness and the lack of awareness of the association between depression and their bottom line (i.e., absenteeism, presenteeism, disability, productivity, indirect costs). As mentioned previously, depression has a significant impact on the treatment of other chronic disease such as diabetes and congestive heart failure. Although behavioral health care may only account for 5% to 7% of the health care dollar, the cumulative cost of behavioral health conditions and the diseases that are affected by behavioral health disorders can be astounding. The purchasers must use appropriate behavioral health quality measures when making purchasing decisions and not contribute to the increasing fragmentation in the delivery of care.

Potential Strategies

Wagner and colleagues^{14,15} have designed chronic care models to provide the best possible functional and clinical outcomes by optimizing the interaction between an effective and prepared practice team and the active patient (Figure 4). For these interactions to take place, an infrastructure needs to support this dyad. The model is effective across a wide range of chronic diseases, including depression, as evidenced by results from studies of multiple programs such as the PROSPECT,¹⁶ IMPACT,¹⁷ and Partners in Care¹⁸ programs.

In our depression program funded by the Robert Wood

Johnson Foundation, we designed programs to combat barriers at each level of the 6 P's conceptual framework, from patients to policies and populations (Figure 5). In the incentives demonstration component, a partnership was formed between the health plan and provider groups to implement the chronic care model. This partnership also incorporated an economic model that challenged the traditional organization and financing structure. There were 8 sites, some of which were commercial and others of which were Medicaid, and both clinical and economic models were implemented. The intent was to realign some of the financial and nonfinancial incentives, reward performance, and alter the contractual arrangements between and among the managed behavioral health organizations, managed care organizations, and the primary care and mental health specialty provider groups. The process was designed to be a collaborative and learning process that could be adapted to different situations. Additional approaches have been developed to integrate preventive and general medical care for severely mentally ill populations. A 4-quadrant model can aid in understanding the process of determining the types of care patients need in a specialty care setting (Figure 6).

Depending on the nature of the general medical condition or the behavioral health condition, people may have different intensities of need. There are different models of integrating care, whether you imbed a primary care provider within a behavioral health system or you co-locate a behavioral health system in a primary care office. Furthermore, there can be a unified team or a very intensive coordination/collaboration between the providers; different models may work in either way.

Crossing the Quality Chasm

In recent reports by the Institute of Medicine (IOM), there is much evidence of a gap between ideal health care and the quality of care that our health care system provides. There is a "quality chasm" that we must cross, and this divide is evident across all health care settings and all age groups and geographic areas. According to a report by RAND, there is a 50% chance of receiving the right care, overall, if a patient walks into any health care provider's office.¹⁹ In the IOM report, *To Err Is Human*, it was reported that the number of people dying in this country from medical errors represents the "equivalent of a B747 plane crashing every day."²⁰ In addition, the second report by the IOM, *Crossing the Quality Chasm*, concluded that the American health care delivery system is in need of fundamental change. The current care systems cannot do the job; therefore, simply trying harder will not work.²¹ The report provided a roadmap for improving the system in 6 basic ways: to make it safe, effective, patient-centered, timely, efficient, and equitable. It also outlined 10 rules for what people should expect from the health care system (Table 5). The IOM strongly supported the chronic care model that focuses on the diseases that contribute to significant disease burden.

The National Committee for Quality Assurance's Health Plan Employer Data and Information Set (HEDIS) statistics, which eval-

FIGURE 4 Evidence-Based Chronic (Planned) Care Approaches for Treating Depression

From: Wagner EH. Chronic disease management: what will it take to improve care for chronic illness? *Eff Clin Pract.* 1998;1:2-4.

FIGURE 5 "6 P" Conceptual Framework

uate the performance of health plans, have shown improvement in general practice measures; however, behavioral health measures are markedly lower than general practice measures and remain stagnant.²² There is less scientific evidence on safety, but there is less acceptance of an evidence-based framework in mental health. In addition, there is a greater diversity of backgrounds and disciplines in the mental health care system, and the infrastructure of the system is less well developed. There is also less quality improvement research being performed in this area. The IOM committee concluded that (1) all of the aims/rules from the original *Quality Chasm* report apply to mental health and substance abuse and (2) overall health care will not improve unless overall mental health/substance abuse care improves (and

FIGURE 6 The 4-Quadrant Clinical Integration Model

From: NCCBH state assessment of BH/PCP integration environment: August 28, 2003, ©2003, National Council for Community Behavioral Healthcare. In: *Behavioral Health/Primary Care Integration. Environmental Assessment Tool State Level Policy and Financing* (Spring 2004). Rockville, MD: National Council for Community Behavioral Healthcare; 2004:3. Available at: <http://www.nccbh.org/WHO/INDUSTRY/Primary%20Care%20Integration/PCI-Enviro-Assess.pdf>. Accessed January 31, 2006.

* PCP-based BH provider might work for the PCP organization, a specialty BH provider, or as an individual practitioner, is competent in both MH and SA assessment and treatment.

BH=behavioral health; ER=emergency room; IP=inpatient; PCP=primary care provider; PH=physical health; SNF=skilled nursing facility; SPMI=severe and persistent mental illness.

TABLE 5 What People Should Expect From the Health Care System—10 Rules

1. Continuous healing relationships
2. Safety
3. Cooperation
4. Science
5. Individualization
6. Control
7. Information
8. Anticipation
9. Transparency
10. Value

Potential Scenarios

There are 3 potential scenarios that may describe the future relationship between behavioral health and primary care. The first is an evidence-based, rational, but somewhat optimistic scenario in which we would have more effective and targeted medications with fewer side effects and risks. In this scenario, we would also have more effective and targeted psychosocial behavioral interventions, which could be provided in different ways, utilizing different technological advancements. There would be clinical information systems that would provide tracking capabilities and decision support as well as integrated financing and practice arrangements that would incentivize high-quality care. The structure of care for a patient would be coordinated, in that the less severely ill patients would be treated primarily by the primary care provider while those with more severe conditions would be treated in the specialty mental health settings. The second is a pessimistic scenario in which behavioral health care would be more segregated from the mainstream practice of medicine. Primary care and behavioral health specialty providers would not receive any

vice versa). The committee also provided recommendations for creating an infrastructure for quality improvement in behavioral health so that the methodologies for improving care are infused into every aspect of care for mental and substance use disorders.

incentives for providing or coordinating behavioral health care, and there would be even less parity on the financing side. But a third scenario, which is a more realistic one, is a marketplace scenario in which the demands of the consumers and the purchasers would provide the incentive to discover ways to provide quality care efficiently. Purchasers would consider behavioral health performance measures and establish mechanisms to reward the performance of the appropriate players on the health care team.

Proper management of patients with depression and other behavioral health conditions will require changing the system as a whole. Not only will this reduce the stigma and other barriers that prevent patients with mental illness from receiving appropriate treatment, but it will also allow for better coordination of care among primary care and specialty mental health providers. There needs to be a continual quality improvement process to solve problems and build bridges between behavioral health and primary care. Eliminating barriers between systems and looking at the mind and the body as a whole is crucial to strategizing for the future.

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