
NHPF Issue Brief

No.786 / November 22 2002

**NATIONAL
HEALTH
POLICY
FORUM**

Depression: A Decade of Progress, More to Do

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OVERVIEW — *This issue brief discusses the most recent findings on depression prevalence and cost; examines trends in outpatient treatment, including the dramatic growth in antidepressant use; discusses efforts to improve treatment in primary care; and explores possible public policy avenues for improving treatment access and quality.*

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Depression: A Decade of Progress, More to Do

The economic and social costs of untreated depression have been documented worldwide. One in six persons have an episode of depression during their lifetime, many during their most productive work years. A landmark 1996 study found major depression was a leading cause of disability throughout the world.¹ Data from U.S. employers show it is also a major source of lost productivity at the workplace and accounts for billions of dollars in health care expenditures.

In the decade between 1987 and 1997, the number of Americans treated for depression increased three-fold.² Reduced stigma, increased recognition and diagnosis, and effective treatments are primary reasons behind the trend. Still, research suggests that fewer than half of those with depression are treated. And many who are receive suboptimal care.

Although the economic case for improving the recognition and treatment of depression is compelling, mental health has not been a public health priority. When it has been addressed, policymakers have struggled to find the levers that improve access to high-quality treatment.

NATURE OF DEPRESSION

Depression is a serious and common medical condition affecting physical health, mood, and thoughts. Almost 19 million American adults experience an episode of depression each year.³ It recurs in about half of patients and can be severely disabling. Up to 35 percent of all deaths by suicide are associated with depression.

At some point in their lives, most people experience depression's symptoms, including deep sadness, grief, and sleep disturbances, due to life events such as loss of a loved one. But clinical depression is different in some important ways. The 1999 surgeon general's report on mental health notes:

Some of the symptoms of severe depression, such as anhedonia (the inability to experience pleasure), hopelessness, and loss of mood reactivity (the ability to feel a mood uplift in response to something positive) only rarely accompany "normal" sadness. Suicidal thoughts and psychotic symptoms such as delusions or hallucinations virtually always signify a pathological state.⁴

Among the most common types of depression are major depression, dysthymia, and bipolar disorder.⁵ Women are at higher risk for depression than men; contributing to this elevated risk, it is hypothesized, are

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NHPF is a nonpartisan education and information exchange for federal health policymakers.

a number of social, economic, and biological reasons, including hormonal factors related to the menstrual cycle, pregnancy, the postpartum period, premenopause, and menopause. Depression in men may be more difficult to recognize, frequently showing itself as irritability and anger or being hidden by substance abuse. Untreated, an episode of depression lasts for an average of nine months. When it recurs, the length of time between episodes decreases over time.

People with depression often have other mental and physical illnesses. About half of people with depression also have an anxiety disorder.⁶ Some form of substance abuse or dependence is common in about a third of those with depression. And people with depression also experience chronic conditions, such as arthritis and musculoskeletal disorders, at higher rates.

Two decades of research show a strong relationship between depression and heart disease, the leading cause of death in the United States. People with depression are at greater risk for developing heart disease than healthy individuals, and people with heart disease and depression have an increased risk of death after a heart attack.⁷ A recent study illustrates depression's serious effect on men's health. Researchers found depression is associated with increased risk of heart disease for both men and women. However, men with depression and heart disease have a higher death rate than women with the two conditions.⁸

Although, the exact causes of depression are unknown,⁹ years of research point to a combination of biological and psychosocial factors and have yielded a growing body of knowledge on risk factors, early intervention, and prevention.

COST OF DEPRESSION

On average, people with depression use two to four times more health care than people without a mental illness.¹⁰ As noted above, depression increases risk for common chronic conditions, such as heart disease. Often, people with unrecognized depression undergo diagnostic procedures and treatments for physical symptoms, such as headaches, chronic pain, and digestive problems, without relief.

One study at a large U.S. corporation found that total medical expenditures for people with common mental disorders, including depression, were four-and-a-half times greater than expenditures for people without mental illness. When individuals had more than one mental disorder, expenditures increased tenfold.¹¹

Recent studies on the cost of treatment for depression show that utilization of mental health services accounts for only a small portion of total health care spending for people with the illness. Analysis of health care utilization and expenditures over a four-year period for a group of people with depression found "treating an uncomplicated episode of depressive illness in this primary care population averaged a little more than \$2,000,

Symptoms of Depression

- Persistent sad, anxious or empty mood.
- Loss of interest or pleasure in hobbies or activities that were once enjoyed, including sex.
- Decreased energy, fatigue, being "slowed down."
- Insomnia, particularly early morning awakening, or oversleeping.
- Appetite and/or weight changes.
- Difficulty concentrating, remembering, making decisions.
- Feelings of hopelessness, pessimism.
- Feelings of guilt, worthlessness, helplessness.
- Thoughts of death or suicide, or suicide attempts.
- Restlessness, irritability.

If five or more of these symptoms are present every day for at least two weeks and interfere with routine daily activities such as work, self-care, and child care or social life, a thorough evaluation is recommended.

Source: National Institute of Mental Health.

and treating the most common form was significantly less."¹² In contrast, total medical costs for those individuals averaged almost \$8,000 a year.

Still, depression's greatest costs are not for health care services. Rather, they are indirect costs associated with disability and lost productivity at work when depression is unrecognized or poorly treated. A 1993 study, the most recent research of its kind, found \$12 billion was spent on treatment of depression in 1990. However, employers spent another \$24 billion associated with lost work time and productivity. The authors concluded that poor recognition and treatment of depression exposes employers to avoidable disability and productivity-related costs.

Employer experiences underscore the costly impact of untreated depression and support the value of early intervention. Depression is a common disability claim, as both a primary and a co-occurring condition. It accounts for about half of all psychiatric disability claims and often has the longest average length of disability and the highest probability of recidivism.¹³ Research on employer-sponsored health benefits found that plans with good access to outpatient mental health services had lower psychiatric disability claims costs than plans with more restrictive arrangements.¹⁴

TREATMENT OF DEPRESSION

Treatments and treatment effectiveness vary with the type of depression and its severity. There is also a growing body of knowledge about how cultural and language differences affect mental health perceptions, depression diagnosis, and treatment approaches. However, most depression can be effectively treated with medication, some specific types of psychotherapy, or a combination of both. Research on depression treatment suggests that a combination of medication and psychotherapy may be more efficacious than either treatment alone. In addition, more severe depression may require medication, while psychotherapy alone may be as effective as medication for milder depression.

Results of a long-running study on medication and psychotherapy treatments presented at the annual meeting of the American Psychiatric Association in 2002 challenged conventional thinking about depression treatment. The study concluded that cognitive behavioral therapy is just as effective as medication for severe depression. However, researchers determined that psychotherapy worked more slowly than medication and was not as effective in chronic cases. They also noted that it must be administered appropriately, raising some concern about availability of skilled providers. However, investigators found the effects of cognitive therapy may be long-lasting and therefore able to protect against relapse.

Regardless of the ongoing debate and research into determining which treatment will be most effective for which patients, the surgeon general's report on mental health notes, "so much is known about the assortment

Depression accounts for about half of all psychiatric disability claims.

of pharmacological and psychosocial treatments for mood disorders that the most salient problem is not with treatment, but rather getting people into treatment."¹⁵

Appropriate treatment typically includes three phases: acute, continuation, and maintenance.¹⁶ Within that framework, individual preferences and circumstances, including age, gender, culture, race, and other personal characteristics, can be accommodated with a range of effective treatments. Medication usually requires six to eight weeks of treatment in the acute phase. Patients are seen once or twice a week to monitor symptoms and medication side effects, adjust medication dosage when necessary, and provide support. The acute phase for psychotherapies typically involves 6 to 20 weekly visits.

Continuation therapy provides for continual treatment over a minimum of six months, although patients usually see their providers less often than during the acute phase. The primary purpose of continuation therapy is to prevent a relapse. Maintenance therapy consists of ongoing treatment to prevent a recurrence of the illness and is usually recommended for people who have had three or more episodes of depression or have persistent depression or bipolar disorder.¹⁷

Over the last decade, use of medications in depression treatment grew dramatically. At least eight new antidepressants have been approved for use in the United States since 1987, beginning with fluoxetine, a selective serotonin reuptake inhibitor (SSRI). SSRIs and other newer antidepressants tend to have fewer side effects and easier dosing regimens than older medications. Before the advent of SSRIs, psychiatrists prescribed most antidepressants. Now, nonpsychiatrists prescribe most antidepressants, writing almost 90 million prescriptions in 1998, up from 32 million in 1988.¹⁸

A significant barrier to successful treatment is poor patient compliance during the acute phase. Medication side effects, uninformed expectations about treatment, and inadequate oversight by providers may result in high attrition rates, measured at up to 40 percent in clinical trials.¹⁹ Prescription drug data show that fewer than half of patients refill their initial antidepressant prescription.²⁰ However, tracking is not sophisticated enough to determine whether patients are switching to another medication or just stopping treatment before the drug has a chance to provide a therapeutic effect.

TRENDS IN OUTPATIENT CARE

Before 1990, most mental health dollars were spent in the specialty mental health system on inpatient care. Typically, people accessed mental health services through indemnity plans that used benefit limits and patient cost sharing to control service use and spending. By the late 1990s, managed care was the norm in health service delivery. Managed behavioral health

“[T]he most salient problem is not with treatment, but rather getting people into treatment.”

had grown into a \$4.5 billion industry with almost 200 million enrollees. Managed care was successful at controlling spending growth for mental health services while providing access to a wider scope of services than those offered under the traditional unmanaged indemnity plan.

Mental health benefit design changed dramatically during the 1990s, in large part due to managed care. Before 1990, most plans provided 80 percent coverage for inpatient care and 50 percent coverage for outpatient care with annual limits. By the end of the decade, typical plans covered 80 percent of outpatient costs, within annual limits, and more intermediate services, such as partial hospitalization, intensive day/evening treatment programs, and in-home care. Combined with managed care techniques, such as utilization review, discounted fee arrangements, and preferred provider networks, employer experiences show that coverage changes resulted in greater access to outpatient services and cost-effective alternatives to hospitalization.

The number of people treated for depression increased dramatically over that same decade, particularly in primary care settings. A study published in 2002 showed that 6.3 million Americans were treated for depression in 1997, up from 1.7 million in 1987.²¹ The researchers, using surveys of more than 30,000 people nationwide, found patients treated for depression were almost five times more likely to receive an antidepressant in 1997 than they would have been a decade earlier. In contrast, fewer patients received psychotherapy—60 percent in 1997, down from 71 percent in 1987. However, by 1997 more patients received a combination of medication and psychotherapy.

Researchers Mark Olfson and colleagues cited several factors contributing to the increase in people receiving depression treatment: the introduction and marketing of new antidepressants with fewer adverse effects, aggressive public health efforts to increase depression awareness, and more accepting public attitudes about pharmacological treatments. In addition, they noted that increased penetration of managed care and managed behavioral health care may have resulted in incentives for briefer treatments and more care delivered in primary care settings.

The authors concluded, “treatment became characterized by greater involvement of physicians, greater use of psychotropic medications, and expanding availability of third-party payment, but fewer outpatient visits and less use of psychotherapy.” They noted study limitations inherent to survey research and cited the need to better understand the effects that treating a greater number of people for depression would have on population health and patient outcomes.

Health plan and prescription drug benefit manager (PBM) data on antidepressant use also reflected increases in the number of people treated for depression. Antidepressants are among the most highly utilized prescription medications in employer-sponsored plans. The top five drug

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classes in total dollar growth over the last several years typically included cholesterol reducers, anti-ulcerants, antihistamines, antihypertensives, and antidepressants.²²

The rapid rise in antidepressant expenditures has caught the attention of large employers sponsoring health benefits. Comparing the patterns of antidepressant use to depression treatment guidelines leaves many plan sponsors wondering whether beneficiaries are receiving appropriate care. Typical PBM and health plan data show that most SSRI drug cost is for single prescriptions, 60 percent of antidepressants are prescribed by primary care physicians, the average number of days of use is 45, and there is little evidence of follow-up or continuing care.²³

Antidepressant-type medications have other uses, such as treatment of anxiety disorders and bulimia. But it is nearly impossible to know if antidepressants are prescribed appropriately because diagnosis codes are not included with prescriptions. Experts contend it is altogether possible that overuse of antidepressants coexists with undertreatment of depression.²⁴

DEPRESSION AND PRIMARY CARE

More people receiving treatment for depression can be seen as positive news. However, there are many unanswered questions about treatment quality. Numerous studies over many years document poor recognition and treatment of depression in primary care. Even though it is a common condition with clear diagnostic criteria, research suggests that depression is missed in somewhere between one-third and one-half of patients in primary care.²⁵ Even when depression is recognized, research shows it is often treated inappropriately.

In 1986, the National Institute of Mental Health launched the Depression Awareness, Recognition, and Treatment (D/ART) Program, the first federally funded public and professional education campaign to address a specific mental illness. The purpose of the professional education portion of the program was to educate medical and mental health providers about depression and train them in diagnosis and treatment.²⁶

A major contribution of the D/ART Program was to spotlight several obstacles to improving depression recognition and treatment in primary care. Provider knowledge about diagnostic criteria and guidelines for treatment were certainly problems. But it became clear there were more complex factors. Stigma associated with mental illness, patient confidentiality, lack of insurance coverage for ongoing treatments, low physician reimbursement, poor integration between primary and specialty care, and physician time pressures in the managed care environment all contributed to patients' receiving less than optimal treatment, even when physicians were knowledgeable about depression.

Suggesting that quality of care for depression in primary care is an ongoing concern, the 2002 National Committee for Quality Assurance

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(NCQA) *State of Health Care Quality* report found that average scores for antidepressant medication management measures have declined since 1999. The three measures, tracked annually, are based on the federal Agency for Healthcare Research and Quality guidelines for depression treatment in primary care.²⁷ Results indicated that even top-performing plans were having difficulty documenting treatment consistent with the guidelines in more than half of patients diagnosed with depression.²⁸

Blue Cross Blue Shield of Michigan (BCBSM) has embarked on a major campaign to educate patients and primary care physicians on recognition and treatment of depression in primary care as a result of a study they did to determine "how often depression is treated in a population with access to a relatively rich benefit, where and how these patients receive treatment, and how closely this treatment meets nationally recognized treatment guidelines."²⁹ Professional, pharmacy, and facility claims for the year beginning October 1998 were used to analyze treatment of new episodes of depression.

The analysis showed a primary care physician was the first provider seen in 35 percent of cases. Thirty-two percent of treatment episodes began with a visit to an outpatient clinic staffed by nonphysician mental health specialists and psychiatrists, 28 percent began with a visit to a psychiatrist, and 7 percent started with a visit to a nonphysician mental health provider.

Of more than 2,000 episodes of care studied, 56 percent were treated with antidepressant medication. However, only 18 percent of medication episodes met duration and dosage criteria and only 20 percent of patients had three or more visits within the initiation period. BCBSM found that three or more follow-up visits after a depression diagnosis was a key factor in treatment adequacy.

New Primary Care Treatment Models

Several initiatives around the country, many sponsored by major foundations, are testing the effectiveness of new models for depression treatment in primary care. Many of the efforts address the need for structural changes in both health service delivery and financial incentives for physicians to provide high-quality care.

For example, the MacArthur Foundation is sponsoring a variety of projects to examine "how—and how well—primary care physicians diagnose and treat depression in their patients, and how they can improve their effectiveness in both areas."³⁰ Established in 1997, the program reports insights from the initiative about how physicians manage depression:

Most physicians agree that recognizing depression is part of their responsibility. However, they differ across specialties in their view of their responsibility for treatment and in their confidence in their ability to treat depression effectively. Physicians are pragmatic. They choose

how to manage patients with depression according to the severity of dysfunction, rather than traditional diagnostic criteria.³¹

In another prominent effort, the Robert Wood Johnson Foundation in 2002 launched a five-year program, "Depression in Primary Care: Linking Clinical and System Strategies," to increase the use of effective treatment models for depression in primary care. A major theme of the program is recognition that "multilevel clinical and economic/system strategies are needed to overcome barriers among target groups and implement chronic illness care models for depression in primary care."³²

A collaborative care model or team approach to depression treatment, pioneered by clinicians at the University of Washington in Seattle, is featured in several demonstrations throughout the country. For example, Project IMPACT, a multicenter initiative coordinated at UCLA and funded by the John A. Hartford Foundation and the California HealthCare Foundation, uses a disease management model and team approach to managing late life depression.³³ The IMPACT model addresses a number of barriers to effective treatment in primary care, such as the limited ability of primary care providers to follow-up with patients prescribed antidepressants and/or referred for psychotherapy.

Project IMPACT features a depression clinical specialist (DCS), who provides patient follow-up to "assess side effects and symptom relief for patients taking antidepressants, and is trained to offer a brief (6-8 session) form of psychotherapy called Problem-Solving Treatment for patients who prefer counseling."³⁴ A psychiatrist and primary care physician within a collaborative care team support the DCS. Almost 2,000 older adults in 18 participating clinics were enrolled in the program over the last two years. Researchers will track patients for two years, assessing health and economic outcomes, including effects of the treatment model on diabetes and other conditions commonly coexisting with depression.

A number of health plan initiatives highlighting a variety of models and tools for depression recognition and treatment in primary care were documented in a 2001 *Healthplan* article published by the American Association of Health Plans.³⁵ Among the initiatives are consultation and case management models, along with co-location of primary and behavioral health providers, and telephonic and Internet tools for physicians and patients.

One example is "Taking Charge of Depression," a program of PacifiCare Behavioral Health, a subsidiary of PacifiCare Health Systems. The program uses specially trained health educators to coach patients in managing their depression. In addition, primary care physicians are provided algorithms for depression treatment and easy access to behavioral health specialists for consultations. A state-of-the-art outcomes tracking and monitoring system called ALERT (Algorithms for Effective Reporting and Treatment), notifies physicians about patient progress and alerts them to problems with treatment.

Other efforts to provide primary care providers with tools for depression diagnosis and treatment evolve from the theory that generalists may have difficulty incorporating disease-specific solutions into their practice. Tools and strategies are being developed to help primary care providers use a general line of questioning to uncover potential mental health problems and then move quickly to more specific diagnostic strategies, if warranted.

DEPRESSION AS A PUBLIC POLICY CONCERN

The costly consequences of unrecognized and poorly treated depression are clear. From avoidable health care spending and productivity losses to death by suicide and devastation for families, there are good reasons to make improved depression recognition and treatment a public health policy priority. In the 1996 book, *Caring for Depression*, Kenneth Wells and colleagues link public policy to depression care, saying “quality improvement for the care of depression is necessary to improve the *value* of care.”³⁶

Acknowledging the serious and costly consequences of unrecognized and poorly managed depression, the U.S. Preventive Services Task Force, an independent and influential panel of experts sponsored by the U.S. Department of Health and Human Services, recommended in May 2002 that doctors routinely screen all adult patients for depression and have systems in place to ensure effective treatment and follow-up. The panel recommended that physicians ask their patients at least two questions, “Over the past two weeks, have you ever felt down, depressed, or hopeless?” and “Have you felt little interest or pleasure in doing things?” If a patient answers yes to either question, a more thorough screening is recommended.

Although mental health typically takes a back seat to other health care policy issues, coverage for mental health services, specifically parity coverage with medical care, has been a visible issue since debate over the health plan proposed by the Clinton administration and enactment of the Mental Health Parity Act in 1996. The parity law’s scope was more limited than desired by mental health advocates, requiring parity in annual and lifetime dollar limits but not prohibiting other controls such as day and visit limits. Despite the continued limits, the debate highlighted the relatively low cost of mental health care and the indirect benefits of better access to services, leading some experts to believe the law’s enactment signaled the beginning of an end to discrimination in mental health coverage.

With the 1996 law scheduled to sunset September 30, 2001, Congress was engaged in negotiating a new, expanded law when the September 11 terrorist attacks abruptly stopped action on legislation. President Bush renewed the push for new parity legislation in early 2002, perhaps in response to heightened public awareness about the mental health effects of terrorism. Any action, however, will not occur until next year.

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In January 2001, the Federal Employee Health Benefit Plan, the largest employer-sponsored health benefits plan of its kind, began implementing parity for mental health and substance abuse benefits. President Clinton directed the Office of Personnel Management to incorporate the benefit in 1999 after several studies demonstrated parity could be achieved at a manageable cost when provided in a managed care setting.³⁷ A thorough evaluation of the program is underway and results will be available in late 2003.

With the focus on parity, there has been less attention to other policies that could improve access to mental health care and create incentives for quality treatment. One obvious target is the growing number of uninsured and their lack of access to care. Another is the need for culturally and linguistically competent primary care and mental health professionals.

One area receiving strong attention is Medicare coverage for outpatient prescription drugs. Currently, almost three-quarters of Medicare beneficiaries have some outpatient drug benefits. But coverage from the two leading sources, employer retiree plans and Medicare+Choice plans, is eroding as a result of cost pressures.

Having prescription drug coverage influences whether Medicare beneficiaries fill their prescriptions and take their medications as directed. As prescription drugs are an integral part of depression treatment, it makes sense to expect that Medicare drug coverage would enhance access to treatment for many seniors. In addition, it is possible that quality of life and health outcomes would improve for older adults if recognition and management of depression were improved. Although there is strong bipartisan support for the addition of a prescription drug benefit to modernize Medicare, affordability of new coverage and partisan differences over how to structure the benefit have hampered the legislation's progress.

Policy areas that have received little attention are physician reimbursement and incentives for quality treatment. Wells and colleagues discuss two possible policy avenues for improving depression treatment. The first is the establishment of standard quality-of-care measures in order to identify high-quality providers; the second is a reimbursement scheme that rewards those providers.³⁸ New reimbursement schemes could also be used to encourage collaborative care models and other team approaches to depression treatment. The new treatment models may require increased spending. However, some current spending can be redistributed to reward quality, and improved treatment efficiency and cost avoidance might result in savings.

A scenario along the lines of that described by Wells is evolving in the area of diabetes care. The American Diabetes Association (ADA)/NCQA Diabetes Provider Recognition Program is a voluntary program for physicians and physician groups who provide care for people with diabetes. Under the program, developed by the ADA, NCQA, Centers for Medicare and Medicaid Services, Academy of Family Physicians, American

Having prescription drug coverage influences whether Medicare beneficiaries fill their prescriptions and take their medications as directed.

College of Physicians, FACCT (Foundation for Accountability), and the Veterans Administration, physicians can receive recognition for providing quality diabetes care based on a set of key measures.³⁹ Several large health care purchasers are developing reimbursement schedules that link provider payment to this care quality designation.

In an environment of rising health care costs, it may be difficult to advocate for policies that would increase direct health care spending on depression treatment. On the other hand, there is a strong case for making a modest spending increase to avoid the significant health care expenditures related to untreated depression, not to mention the huge productivity and social costs. Approaches that address the complex nature of the problem, including improving provider knowledge about depression, increasing mental health coverage, encouraging treatment within a chronic illness model, and reducing inefficient and poorly managed care, may stand the best chance of improving access to treatment at an affordable cost.

ENDNOTES

1. Christopher J. L. Murray and Alan D. Lopez, eds. *The Global Burden of Disease: A Comprehensive Assessment of Mortality and Disability from Diseases, Injuries, and Risk Factors in 1990 and Projected to 2020* (Cambridge, Mass.: Harvard University Press, 1996).
2. Mark Olsson, Steven C. Marcus, Benjamin Druss, Lynn Elinson, Terri Tanielian, and Harold Alan Pincus, "National Trends in the Outpatient Treatment of Depression," *Journal of the American Medical Association*, 287, no.2 (January 9, 2002): 203-209.
3. Margaret Strock, "Depression," NIH Publication No. 00-3561, National Institute of Mental Health, Bethesda, Md., 2000, 1; accessed October 4, 2002, at <http://www.nimh.nih.gov/publicat/depression.cfm>.
4. U.S. Department of Health and Human Services (DHHS), *Mental Health: A Report of the Surgeon General* (Rockville, Md.: U.S. Department of Health and Human Services, 1999), 245.
5. "Major depression is manifested by a combination of symptoms that interfere with the ability to work, study, sleep, eat, and enjoy once pleasurable activities." "A less severe type of depression, dysthymia involves long-term, chronic symptoms that do not disable, but keep one from functioning well or from feeling good." Bipolar disorder, also called manic-depressive illness, is "not nearly as prevalent as the other forms of depressive disorders and is characterized by cycling mood changes: severe highs (mania) and lows (depression)." See National Institute of Mental Health, "Depression"; accessed August 25, 2002, at <http://www.nimh.nih.gov/publicat/depression.cfm>.
6. DHHS, *Mental Health*, 244.
7. National Institute of Mental Health, "Depression and Heart Disease"; accessed September 4, 2002, at <http://www.mentalhealth.gov/publicat/depheart.cfm>.
8. Amy K. Ferketich, Judith A. Schwartzbaum, David J. Frid, and Melvin L. Moeschberger, "Depression as an Antecedent to Heart Disease among Women and Men in the NHANES I Study," National Health and Nutrition Examination Survey, *Archives of Internal Medicine* 160, no. 9 (May 8, 2000): 1261-1268.
9. DHHS, *Mental Health*, 153.

10. Jim Johnson, Myra Weissman, and Gerald Klerman, "Service Utilization and Social Morbidity Associated with Depressive Symptoms in the Community," *Journal of the American Medical Association*, 267 (1992), no.11: 1478-1483; Michael Von Korff and Gregory E. Simon, "Disability and Depression among High Utilizers of Health Care," *Archives of General Psychiatry*, 49 (1992), no. 2: 91-100.
11. Ernst R. Berndt, Howard L. Bailit, Martin B. Keller, Jason C. Verner, and Stan Finkelstein, "Health Care Use and At-Work Productivity among Employees with Mental Disorders," *Health Affairs*, 19, no. 4 (July-August 2000): 244-256.
12. Thomas Croghan, Robert L. Obenchain, and William E. Crown, "What Does Treatment of Depression Really Cost?" *Health Affairs*, 17, no. 4 (July-August 1998): 198-208.
13. Washington Business Group on Health, "Depression Awareness, Recognition, and Treatment (D/ART) National Worksite Program," Washington Business Group on Health, Washington, D.C., 1995.
14. David Slakever, "Disability Management, Employee Health and Fringe Benefits, and Long Term Disability Claims for Mental Disorders: An Empirical Exploration," *Milbank Quarterly*, 78 (2000), no. 1: 78.
15. DHHS, *Mental Health*, 257.
16. DHHS, *Mental Health*, 257.
17. DHHS, *Mental Health*, 261.
18. Sandra M. Foote and Lynn Etheredge, "Increasing Use of New Prescription Drugs: A Case Study," *Health Affairs*, 19, no. 41 (July / August 2000): 165-170.
19. DHHS, *Mental Health*, 258.
20. R. A. Lawrenson, F. Tyrer, R. B. Newson, and R. D. T. Farmer, "The Treatment of Depression in UK General Practice: Selective Serotonin Reuptake Inhibitors and Tricyclic Antidepressants Compared," *Journal of Affective Disorders*, 59 (2000): 156.
21. Olsson et al., "National Trends."
22. Barents Group, LLC, "Factors Affecting the Growth of Prescription Drug Expenditures," National Institute for Health Care Management Research and Educational Foundation, Washington, D.C., July 9, 1999, 6.
23. Discussed during November 29, 2001, meeting of employers, pharmacy benefit managers, and behavioral health plans on linking pharmacy and mental health benefits, Washington Business Group on Health, Washington, D.C.
24. Thomas Croghan, "The Controversy of Increased Spending for Antidepressants," *Health Affairs*, 20, no. 2 (March/April 2001): 129-135.
25. Kenneth Wells Ronald Hays, Audrey Burnam, William Rogers, Sheldon Greenfield, John Ware Jr., "Detection of Depressive Disorder for Patients Receiving Prepaid or Fee-For-Service Care: Results from the Medical Outcomes Study," *Journal of the American Medical Association*, 262 (1989), no. 23: 3298-3302; DHHS, *Mental Health*, 245, 269.
26. D. A. Regier, R. M. A. Hirschfeld, and F. K. Goodwin, "The NIMH Depression Awareness, Recognition, and Treatment Program: Structure, Aims, and Scientific Basis," *Archives of General Psychiatry*, 46 (November 1989): 971-982.
27. The National Committee for Quality Assurance's Antidepressant Medication Management measure has three components: (a) Optimum Practitioner Contact—The percentage of eligible members who received at least three follow-up office visits with a PCP or mental health provider in the 12-week acute treatment phase after a diagnosis of depression and prescription of antidepressant medication. (b) Effective Acute Phase Treatment—The percentage of eligible members who received effective acute phase treatment after a new episode of depression. (c) Effective Continuation Phase Treatment—The percentage of members who received effective continuation phase treatment by remaining on antidepressant medication continuously in the six months after the initial diagnosis and treatment.

28. National Committee for Quality Assurance, "The State of Health Care Quality: 2002"; accessed November 22, 2002, at <http://www.ncqa.org>.
29. Beth Goldman, "Beyond HEDIS: Quality of Depression Care in an Insured Population with Fee for Service Coverage," unpublished, Blue Cross Blue Shield of Michigan (paper shared with author by Joel Slackman, Blue Cross Blue Shield Association, October 8, 2002).
30. MacArthur Foundation, "Initiative on Depression in Primary Care"; accessed on May 4, 2002, at http://www.macfound.org/research/hcd/hcd_17.htm.
31. MacArthur, "Initiative on Depression."
32. Robert Wood Johnson Foundation, "Depression in Primary Care: Linking Clinical and System Strategies," call for proposals, Robert Wood Johnson Foundation, Princeton, New Jersey, March 2002.
33. UCLA, "IMPACT—Improving Mood: Promoting Access to Collaborative Treatment for Late Life Depression," project summary; accessed October 20, 2002, at <http://www.impact.ucla.edu>.
34. UCLA, "IMPACT."
35. Genevieve Belfiglio, "Approaches to Depression Care," *Healthplan*, 42 (2001), no. 2: 12-17.
36. Kenneth B. Wells, Roland Sturm, Cathy D. Sherbourne, and Lisa S. Meredith, *Caring for Depression: A RAND Study* (Cambridge, Mass.: Harvard University Press, 1996), 149.
37. National Advisory Mental Health Council, "Parity in Financing Mental Health Services: Managed Care Effects on Cost, Access, and Quality," interim report to Congress, U.S. Department of Health and Human Services, National Institute of Mental Health, April 1998.
38. Wells, Sturm, Sherbourne, and Meredith, *Caring*, 150.
39. For more information on the Diabetes Provider Recognition Program, see <http://www.ncqa.org/dprp/>.