



NOVEMBER 2004

# Issue Brief

## Trends in Mental Health Care

COLLEEN L. BARRY  
JOHN F. KENNEDY SCHOOL OF GOVERNMENT

For more information,  
please contact:

Mary Mahon  
Public Information Officer  
The Commonwealth Fund  
One East 75th Street  
New York, NY 10021-2692

Tel 212.606.3853  
Fax 212.606.3500

E-mail [mm@cmwf.org](mailto:mm@cmwf.org)

### Introduction

In the last few years, a number of major government reports have placed mental health care at the center of health policy and public health. *Mental Health: A Report of the Surgeon General*, released in December 1999, summarized the findings of a vast body of scientific literature on the prevalence and treatment of mental disorders.<sup>1</sup> Evidence amassed in this report indicated that a variety of efficacious treatments are available for most mental disorders. The Surgeon General's office also released a supplement to this report entitled *Mental Health: Culture, Race and Ethnicity*, addressing the disparities in access to mental health services and their toll on overall health and productivity, and *A Call to Action to Prevent Suicide*, providing a blueprint for reducing suicides in the U.S.<sup>2</sup> Most recently, the New Freedom Commission appointed by President Bush to study the mental health delivery system released its final report, *Achieving the Promise: Transforming Mental Health Care in America*, in July 2003.<sup>3</sup> The report recommended a fundamental transformation in mental health care delivery. Together with prior research, these four publications provide a valuable framework for assessing how public policies affect care for those with mental illnesses.

### Delivery of Mental Health Care

Striking changes have occurred in the delivery of mental health care over the past few decades. Fifty years ago, most individuals receiving care for mental disorders obtained treatment from a specialty provider in an inpatient setting. Of the 1.7 million psychiatric patient-care episodes in 1955, 77 percent were in 24-hour hospital services.<sup>4</sup> At that time, government-owned psychiatric hospitals and specialty mental health clinics accounted for 84 percent of mental health spending.<sup>5</sup> Today, most individuals receive mental health care on an outpatient basis and live in a community setting. Services delivered in public psychiatric hospitals account for less than 15 percent of total spending.<sup>6</sup> Instead, delivery of mental health care in general hospitals and nursing homes, and by primary care clinicians, psychologists, psychiatrists, and social workers provides a broader array of treatment options. Likewise, the development of insurance-based financing (including Medicaid and Medicare) has fostered the emergence of markets providing greater autonomy and choice to individuals with mental illnesses as consumers of health care. Even the most severely ill individuals are able to receive community-based care financed through public insurance.

Additional copies of this (#712) and other Commonwealth Fund publications are available online at [www.cmwf.org](http://www.cmwf.org)

To learn about new Fund publications when they appear, visit the Fund's website and [register to receive e-mail alerts](#).

---

This *Issue Brief* was prepared for The Commonwealth Fund/John F. Kennedy School of Government Bipartisan Congressional Health Policy Conference, January 15-17, 2004.

However, this transformation has also fragmented care across a patchwork of public and private insurance programs and delivery settings. New policy concerns have also emerged through enhanced civil rights to individuals with mental disorders. Advocates view the dramatic rise in homelessness and incarceration of individuals with mental disorders as unintended, troubling consequences of the evolution of the mental health system.

### **Prevalence, Service Use, and Social Costs**

The National Comorbidity Survey (NCS) constitutes the primary source of data on prevalence of mental disorders in the U.S.<sup>7</sup> The NCS reported that about 19 percent of the population have a diagnosable mental disorder.<sup>8</sup> About 15 percent of Americans use mental health services each year, yet only half of these individuals have a specific disorder. Therefore, only about 37 percent of individuals with a disorder actually receive mental health treatment. These data signal that problems of both under- and over-treatment for mental disorders exist.<sup>9</sup> Diagnosis might not always be an appropriate measure of need for services. Mental health experts suggest that treatment decisions should be made on the basis of diagnosis in conjunction with other indicators of need, such as persistent or recurring symptoms, comorbidity, and impaired functioning.

Untreated mental disorders can lead to decreased work productivity, family disruptions, significant personal distress, and disability. Mental disorders constitute a major cause of disability in the U.S. and one of the top ten leading causes of disability worldwide.<sup>10</sup> Anxiety and mood disorders are the most prevalent diagnoses.<sup>11</sup> Poor mental health is more common among the poor than among higher income individuals, though causality may run in both directions.<sup>12</sup>

The indirect costs of mental illness represented a \$112.3 billion loss to the U.S. economy in 1994.<sup>13</sup> This estimate included \$88 billion in morbidity costs reflecting loss of productivity in usual activities due to illness, as well as \$16.5 million in mortality costs from lost productivity due to premature death and \$7.8 billion in productivity losses for incarcerated individuals and caregiving family members.<sup>14</sup> Suicide also constitutes a major, preventable public health problem and is a consequence of under-diagnosed and undertreated mental illnesses. In the U.S., suicide results in 30,000 deaths each year. It ranked as the eleventh leading cause of death in 2000 and the fourth leading cause of death among those 25 to 44 years of age.<sup>15</sup>

### **Efficacy of Treatments for Mental Disorders**

*Mental Health: A Report of the Surgeon General* highlighted the extraordinary pace and productivity of scientific

research on the etiology and treatment of mental illness with particular focus on the brain and behavior. Significant gains in pharmaceutical technology have led to the development of a range of effective treatments with fewer side effects. Both the pace of medical discovery and faster approvals of new drugs in recent years by the U.S. Food and Drug Administration have contributed to the increasing use of these therapies. Various psychotherapies, such as psychodynamic, interpersonal, and cognitive-behavioral therapy also are available.

Many Americans with disorders do not benefit from the effective treatments now offered.<sup>16</sup> The Institute of Medicine report, *Crossing the Quality Chasm: A New Health System for the 21st Century*, noted that the lag between treatment discovery and incorporation into routine patient care tends to be unnecessarily long across health diagnoses.<sup>17</sup> The Surgeon General's report specifically highlighted the challenges associated with translating the best scientific knowledge about mental health treatment into everyday clinical practice. In an effort to improve quality, the mental health field has developed evidence-based practices defined as treatments and services where effectiveness is well documented. In contrast, emerging best practices are mental health treatments and services that are promising but less thoroughly documented.

Given the complexity of mental health care delivery and financing, a primary challenge involves disseminating evidence on treatment efficacy and coordinating care across a range of service settings. For example, most people suffering from depression seek care in primary care settings, so it is helpful to create linkages between primary and special mental health care providers. Furthermore, the delivery system for dispensing psychotropic drugs has expanded. Currently, psychiatrists prescribe only a third of psychotropic medications, while primary care physicians and other specialists prescribe the remaining two-thirds.<sup>18</sup> Yet, evidence has shown that primary care clinicians often lack the necessary training, time or financial incentives for appropriate detection and treatment of mental conditions.<sup>19</sup> Diffusion also appears hampered by uncertainty among private and public payers regarding how to cover evidence-based services.

### **Spending on Mental Health Care**

National expenditures for the treatment of mental health and substance abuse totaled \$82.2 billion in 1997, with 86 percent (\$70.8 billion) spent on treating mental illness and 14 percent (\$11.4 billion) spent on treating substance abuse.<sup>20</sup> Mental health and substance abuse expenditures constitute about 8 percent of the more than one trillion dollars spent on all U.S. health expenditures in 1997. Specialty mental health providers received

71 percent of mental health and substance abuse expenditures, while general health care providers received 14 percent. The remaining 15 percent covered prescription drug costs and administrative expenses of insurers.

Mental health care spending grew more slowly than overall health expenditures over the last decade. While real health care spending increased by 5 percent annually between 1987 and 1997, real mental health spending grew by only 4 percent.<sup>21</sup> Notably, these trends are reversed for prescription drug spending. The annual 9 percent inflation-adjusted increase in spending for prescription drugs to treat mental illness exceeds the annual 8 percent increase in spending on drugs for all health-related diagnoses. Outpatient psychotropic drugs now constitute the fastest growing mental health care cost. Prescription drug use grew from 22 percent of total behavioral health spending in 1992 to 48 percent in 1999 among people with employer-based health insurance.<sup>22</sup> Growth in the use of psychotropic drugs is attributable both to the increased availability of effective medications to treat mental disorders and to the comparatively generous coverage for this portion of the mental health benefit.

The primary explanation for lower relative growth in overall mental health and substance abuse spending is the reduction in hospital expenditures, which in turn resulted from widespread adoption of specialty managed behavioral health carve-outs in part due to price competition among health plans. Carve-out companies use specialized expertise to establish networks of mental health providers (including psychiatrists, psychologists, social workers, and psychiatric nurses), negotiate volume-related discount contracts, identify evidence-based treatment protocols, and develop other incentive programs to manage use of services and costs. According to an annual survey, the managed behavioral health care industry has experienced a substantial increase in enrollment over the decade, from 70 million in 1993 to 164 million in 2002.<sup>23</sup> Studies have produced relatively consistent evidence that contracting with behavioral health carve-out companies reduces mental health and substance abuse costs by around 30 to 48 percent in the private sector.<sup>24</sup> Most of these savings result from decreases in use and spending for inpatient care. Most often, the proportion of enrollees using outpatient care increased while the number of outpatient visits decreased under carve-outs. Fewer studies have examined the effects of carve-outs on quality of care. Carve-outs do not appear to increase rates of re-hospitalization,<sup>25</sup> however studies have produced mixed results on their effects on continuity of care,<sup>26</sup> adherence to treatment guidelines,<sup>27</sup> and clinical outcomes.<sup>28</sup>

## Disparities in Mental Health Services

Substantial disparities exist in access to mental health services. According to the Surgeon General's report, *Mental Health: Culture, Race and Ethnicity*, racial and ethnic minorities are less likely than whites to seek out or access services, and they receive poorer quality mental health care despite having similar community rates of mental disorders.<sup>29</sup> While use of mental health care among Asian American groups has been difficult to accurately measure, a number of studies found that they use fewer services per capita than other groups.<sup>30</sup> After controlling for sociodemographic characteristics and differences in need, another study found that African Americans receiving mental health treatment from any sources was about half that of whites.<sup>31</sup> Most studies of Latino mental health care access also reported low service use.<sup>32</sup> Also, in geographically remote areas, people with mental illness encounter more trouble accessing services due to limited availability of providers, lower family income, and possibly greater social stigma.<sup>33</sup>

## The Role of the Public Sector

Federal, state, and local governments contribute substantially to the financing and delivery of mental health care. Public payers funded 58 percent of mental health and substance abuse spending in 1997, a much larger share than the 46 percent of total health expenditures paid for through the public sector.<sup>34</sup> Historically, state and local governments have assumed a particularly large role in financing mental health services. In 1997, state and local governments provided 28 percent of all mental health and substance abuse expenditures, while funding only about 13 percent of health care services overall.<sup>35</sup>

Among all payers, Medicaid is currently the largest single payer for mental health services. In 1971, Medicaid represented only about 12 percent of national spending for mental health treatment. By 1997, this share had increased to nearly 20 percent, totaling \$14 billion.<sup>36</sup> Expenditures through the Medicaid and Medicare programs constitute 35 and 21 percent, respectively, of total public sector expenditures on mental health services.<sup>37</sup>

Medicaid pays for mental health care primarily for two distinct populations: people enrolled in Temporary Assistance to Needy Families (TANF) and in Supplemental Security Income (SSI). TANF recipients have somewhat higher rates of treatment for mental disorders than the general population<sup>38</sup> and an estimated 28 percent of enrolled adults report very poor mental health scores.<sup>39</sup> With regard to depression, Medicaid provides a vital source of access to services given that rates are particularly high among low-income women. For example, a recent study found that mothers of young children experience rates of depression ranging from 12 to 50

percent, with the highest levels among women who are poor or homeless or have a chronic health problem. Their children are at increased risk of developmental, behavioral, and emotional problems.<sup>40</sup> Adolescent girls also experience high rates of depression and report relatively high rates of suicidal ideation.<sup>41</sup>

In addition to Medicaid and Medicare, the federal government provides resources through the Community Mental Health Block Grant, community support programs, the PATH program for services to the homeless mentally ill, and Comprehensive Community Mental Health Services for Children. Income supports for individuals unable to work due to mental illness include SSI, TANF, and Social Security Disability Insurance (SSDI). Thirty-five percent of SSI beneficiaries and 27 percent of SSDI beneficiaries were disabled by mental illnesses in 2001, including a large proportion with schizophrenia.<sup>42</sup>

### **Stigma and Mental Health**

The New Freedom Commission Report and Surgeon General's Report both emphasized the importance of changing public attitudes to eliminate the stigma associated with mental illness. Advocates for the mentally ill identify stigma and discrimination as major impediments to treatment. Stigma prevents individuals from acknowledging these conditions and erodes public confidence that mental disorders are treatable. A plurality of Americans believe that mental illnesses are just like any other illness; however, 25 percent of survey respondents would not welcome into their neighborhoods facilities that treat or house people with mental illnesses, suggesting that some level of lingering stigma persists.<sup>43</sup> Sixty-one percent of Americans think that people with schizophrenia are likely to be dangerous to others<sup>44</sup> despite research suggesting that these individuals are rarely violent.<sup>45</sup>

The Surgeon General's report viewed increasingly efficacious treatments for mental disorders as the most effective long-range antidote to stigma, noting that "effective interventions help people to understand that mental disorders are not character flaws but are legitimate illnesses that respond to specific treatments, just as other health conditions respond to medical interventions."<sup>46</sup>

### **Mental Health Insurance Coverage**

Under most health insurance plans, coverage for mental disorders is more limited than coverage for general medical care. Plans commonly require higher cost sharing and more stringent limits on inpatient hospital days and outpatient visits for mental health treatment. Until recently, special lifetime and annual dollar limits were often used. A recent study reported that 74 percent of privately insured workers were subject to special annual outpatient mental health visit limits and 64 percent were

subject to special annual inpatient mental health day limits in 2002.<sup>47</sup> In the Medicare program, outpatient psychotherapy services are covered with a 50 percent beneficiary co-payment requirement, compared with 20 percent enrollee cost-sharing on other Medicare outpatient services.<sup>48</sup> A 1998 survey by the Robert Wood Johnson Foundation reported that 83 percent of uninsured and 53 percent of privately insured individuals listed cost concerns as the principal reason for not seeking mental health care.<sup>49</sup>

In the 1990s, states began to enact parity laws as a policy response to mental health coverage limitations. The objective of parity is to require insurers to provide the same level of benefits for mental health (and sometimes substance abuse) as general medical care. Thirty-four states have enacted some form of parity legislation. In 1996, Congress passed a law addressing one aspect of mental health coverage limits. The Mental Health Parity Act (P.L. 104-204) took effect in 1998 and prohibits the use of annual or lifetime dollar limits on coverage for mental illnesses. Unlike state parity laws, it extends to all self-insured companies exempt from state mandates under ERISA. The law does not apply to other kinds of benefit limits, such as special day or visit limits and higher cost sharing. Companies with fewer than 50 employees and those that offer no mental health benefit are exempt from the federal parity law. Payers experiencing more than a 1 percent increase in premiums as a result of federal parity can apply for an exemption. In 2000, the General Accounting Office reported that two-thirds of compliant employers had made at least one other aspect of their mental health benefits more restrictive, raising concerns about circumvention of this law.<sup>50</sup>

Insurers have traditionally limited coverage for mental disorders out of concern that generous benefits could lead to high costs due to long-term or intensive psychotherapy and lengthy hospital stays. In fact, there is evidence that in fee-for-services settings consumers are more sensitive to changes in the price of mental health services than other health care services. The RAND Health Insurance Experiment demonstrated that increased use of services by consumers in response to decreased out-of-pocket costs was twice as great for outpatient mental health services than for ambulatory health services as a whole under indemnity insurance.<sup>51</sup> However, contracting with carve-out companies eases these concerns since cost-control efforts no longer rely exclusively on limiting benefits. Importantly, some evidence suggests that plans may structure mental health benefits to avoid selection of unfavorable or high-risk consumers.<sup>52</sup> Mental health is an area where economic research has also identified particularly strong selection incentives. Inefficiently low levels of insurance coverage



may result if health plans narrowly limit benefits to discourage enrollment by consumers with high expected mental health use.

In the 108th Congress, Senator Pete Domenici and Representative Patrick Kennedy have introduced the Senator Paul Wellstone Mental Health Equitable Treatment Act of 2003 (S. 486/H.R. 953) to provide more comprehensive parity for mental health benefits. This legislation is patterned on an executive order issued in 1999 mandating comprehensive mental health and substance abuse benefit parity for the nine million enrollees of the Federal Employees Health Benefits Program (FEHBP).<sup>53</sup> The Office of Personnel Management and the Department of Health and Human Services are evaluating the impact of the FEHBP benefit change on cost, access, and quality. Like the FEHBP parity policy, this legislation would prohibit the use of special mental health day or visit limits and higher cost sharing. Employers remain concerned about the cost of enacting broader federal parity. The Congressional Budget Office estimated in 2001 that an identical version of the bill introduced in the prior Congress would increase premiums for group health plans by 0.4 percent after accounting for the responses of health plans, employers and workers.<sup>54</sup>

In addition, Sen. Jon Corzine and Rep. Pete Stark introduced the Medicare Mental Health Modernization Act of 2003 (S. 646/H.R. 1340). This legislation would eliminate the lifetime limit on inpatient mental health services and require parity in coverage for outpatient mental health services in the Medicare program. S. 853 introduced by Senator Olympia Snowe specifically addresses the issue of reducing the outpatient coinsurance rates for mental health services in the Medicare program from 50 percent to the 20 percent level for general outpatient medical services.

### **Other Current Mental Health Policy Issues**

Recent federal policies encourage those with mental disorders to re-enter the workforce. People disabled by mental illness have the lowest rates of employment among all disabled groups. Only one in three mentally disabled individuals has a job.<sup>55</sup> The federal Welfare-to-Work initiative created a strong financial incentive for beneficiaries to obtain training and employment by placing time limits on income support. Likewise, the Ticket to Work Incentives Improvement Act of 1999 (P.L. 106-170) sought to encourage SSI and SSDI beneficiaries to enroll in employment training and obtain jobs. However, the New Freedom Commission Report raised a concern that its rules do not create enough of an incentive for vocational rehabilitation providers to take on clients with more severe mental illnesses.<sup>56</sup>

Through the Balanced Budget Act (BBA) of 1997 (P.L. 105-33) and the Ticket to Work Act, the Congress has addressed the related issue of loss of Medicaid as a disincentive to employment. Under the BBA, states are permitted to extend Medicaid coverage to disabled individuals with incomes up to 250 percent of poverty. Under the Ticket to Work program, states can set higher income and resources levels for receiving Medicaid coverage, including for those whose health and functioning has improved enough through the use of psychotropic medications to enable a return to work. Most states have not opted to implement these Medicaid buy-in programs.

Increasing attention has focused on the troubling issue of trading custodial rights for access to children's mental services. The General Accounting Office examined the issue of parents placing children with mental health issues in welfare or juvenile justice systems solely to obtain treatment after exhausting savings and health insurance.<sup>57</sup> The GAO reported that state child welfare officials in 19 states and juvenile justice officials in 30 counties estimated that parents placed over 12,700 children in welfare or juvenile justice systems to receive mental health care treatment in 2001. Nationwide, this estimate is likely to be higher since 32 states, including the five largest states, and many counties were unable to provide data on the number of affected children. No formal federal or state tracking of these placements occurs.

In the 1999 *Olmstead v. L.C.* decision, the U.S. Supreme Court held that unnecessary institutionalization of people with disabilities is discriminatory under the Americans with Disabilities Act (ADA).<sup>58</sup> This decision requires that services to those disabled by mental illness be delivered in the most integrated setting possible. While states are required to develop comprehensive work plans for placing disabled people in appropriate treatment settings and to "maintain a waiting list that moves at a reasonable pace," some have been slow to comply.<sup>59</sup> Four years after the *Olmstead* ruling, 42 states and the District of Columbia have set up task forces, commissions or state agency working groups to develop implementation plans.<sup>60</sup>

Finally, President Bush appointed the New Freedom Commission to study the mental health delivery system citing major barriers to the provision of high quality mental health care including stigma, inadequate insurance coverage, and a fragmented service delivery system. Noting problems with the evolution of community mental health care over the intervening decades since deinstitutionalization, Commission members proposed six goals aimed at fundamentally transforming mental health care delivery:

- Americans should understand that mental health is essential to overall health. The report recommended

developing national campaigns to reduce stigma and prevent suicide. It noted that mental health should be addressed with the same urgency as physical health.

- Mental health care should be consumer and family driven. The report urged patient and family-centered care through the development of individualized treatment planning, improved care integration and accountability, and a focus on consumer rights and protections.
- Disparities in mental health services should be eliminated through improving access to culturally competent care and increasing services to geographically remote areas.
- Early mental health screening, assessment and referral to services should become common practice. The report stressed the importance of screening by primary care clinicians, expanding school mental health programs, and improving detection and treatment of co-occurring mental health and substance abuse disorders.
- Excellent mental health care should be delivered and research should be accelerated. Specific understudied areas include developing a knowledge base in mental health disparities, long-term effects of medication, and trauma and acute services for those in crisis.
- Technology should be used to better access mental health information and coordinate service delivery. Information technology can minimize mental health delivery problems in rural and other underserved areas, and electronic medical records can facilitate the adoption of and adherence to evidence-based practices.

## Conclusion

Dramatic changes have occurred in mental health over the last 50 years, including significant advances in the diagnosis and treatment of mental illness, positive shifts in public attitudes about mental disorders, and a transformation in the delivery of mental health services. Yet, fragmented systems of care, insurance and reimbursement issues, and barriers to evidence-based treatments prevent some Americans from receiving quality care for mental disorders.

## REFERENCES

- <sup>1</sup> U.S. Department of Health and Human Services. 1999. *Mental Health: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.
- <sup>2</sup> U.S. Department of Health and Human Services. 2001. *Mental Health: Culture, Race and Ethnicity*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General and U.S. Public Health Services. 1999. *Surgeon General's Call to Action to Prevent Suicide*. Washington, D.C.
- <sup>3</sup> New Freedom Commission on Mental Health. 2003. *Achieving the Promise: Transforming Mental Health Care in America. Final Report*. Rockville, MD: DHHS Pub. No. SMA-03-3832.
- <sup>4</sup> Center for Mental Health Services. 1999. *Mental Health United States, 1998*. Manderscheid, R.W. and M.J. Henderson, Eds., U.S. Department of Health and Human Services. Washington, D.C.: DHHS Pub. SMA-99-3285.
- <sup>5</sup> Fein, R. 1958. *Economics of Mental Illness*. Joint Commission on Mental Illness and Health no. 2. New York: Basic Books, Inc.
- <sup>6</sup> Coffey, R. et al. 2000. *National Estimates of Expenditures for Mental Health and Substance Abuse Treatment, 1997*. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration: SAMHSA Pub. SMA-00-3499.
- <sup>7</sup> Kessler, R.C. et al. 1994. Lifetime and 12-Month Prevalence of DSM-III-R Psychiatric Disorders in the U.S: Results from the National Comorbidity Survey. *Archives of General Psychiatry* 51 (1): 8-19.
- <sup>8</sup> In addition, 3 percent of the population have both mental and addictive disorders, and 6 percent have addictive disorders alone in a given year.
- <sup>9</sup> U.S. DHHS. 1999. *Mental Health: A Report of the Surgeon General*.
- <sup>10</sup> Murray, C.J., and A.D. Lopez. 1996. *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, MA: Harvard University Press.
- <sup>11</sup> U.S. DHHS. 1999. *Mental Health: A Report of the Surgeon General*. This report developed conservative best-estimate 1-year prevalence rates by diagnosis from two studies: the Epidemiologic Catchment Area Study (ECA) and the National Comorbidity Survey (NCS). Anxiety disorders include simple phobia, social phobia, agoraphobia, generalized anxiety disorder, panic disorder, obsessive compulsive disorder (OCD), and post traumatic stress disorder (PTSD). Mood disorders include unipolar major depressive disorder, dysthymia, bipolar I and bipolar II.
- <sup>12</sup> Muntaner, C. et al. 1998. Social Class, Assets, Organizational Control and the Prevalence of Common Groups of Psychiatric Disorders. *Social Science and Medicine* 47 (12): 2043-53; Adler, N.E. et al. 1994. Socioeconomic Status and Health: The Challenge of the Gradient. *American Psychologist* 49 (1): 15-24; Regier, D.A. et al. 1993. The De Facto U.S. Mental and Addictive Disorders Service System: Epidemiological Catchment Area Prospective One Year Prevalence Rates of Disorders and Services. *Archives of General Psychiatry* 50 (2): 85-94; Holzer, C.E. et al. 1986. The Increased Risk for Specific Psychiatric Disorders Among Persons of Low Socioeconomic Status: Evidence from the Epidemiologic Catchment Area Surveys. *American Journal of Social Psychiatry* 6 (4): 259-71.
- <sup>13</sup> Rice, D.P. 1994. *Costs of Mental Illness* (unpublished manuscript). These estimates are based on projections of socioeconomic indices applied from 1985 estimates published in Rice, D.P. et al. 1990. *The Economic Costs of Alcohol and Drug Abuse and Mental Illness, 1985*. San Francisco: Institute for Health and Aging.

- <sup>14</sup> Ibid.
- <sup>15</sup> See Institute of Medicine. 2002. *Reducing Suicide: A National Imperative*. Washington, DC: National Academies Press; and National Center for Health Statistics, *Health, United States, 2003*. DHHS Pub. No. 2003-1232, Table 32.
- <sup>16</sup> Wang, P.S. et al. 2002. Adequacy of Treatment for Serious Mental Illness in the United States. *American Journal of Public Health* 92 (1): 92–98.
- <sup>17</sup> Institute of Medicine. 2001. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington D.C.: National Academies Press.
- <sup>18</sup> Pincus, H. et al. 1998. Prescribing Trends in Psychotropic Medications: Primary Care, Psychiatry and Other Medical Specialties. *Journal of the American Medical Association* 279 (7): 526–31.
- <sup>19</sup> See, for example, Pincus, H. (note 18); Simon, G.E. 1998. Can Depression Be Managed Appropriately in Primary Care? *Journal of Clinical Psychiatry* 59 (2): 3–8; Unutzer, J. et al. 2002. Collaborative Care Management of Late-Life Depression in Primary Care Setting: A Randomized Controlled Trial. *Journal of the American Medical Association* 288 (22): 2836–45; Hunkeler, E.M. et al. 2000. Efficacy of Nurse Telehealth Care and Peer Support in Augmenting Treatment of Depression in Primary Care. *Archives of Family Medicine* 9 (8): 700–708; Katzelnick, D.J. 2000. Randomized Trial of a Depression Management Program in High Utilizers of Medical Care. *Archives of Family Medicine* 9 (4): 345–51.
- <sup>20</sup> Coffey, R. et al., 2000. *National Estimates of Expenditures for Mental Health and Substance Abuse Treatment, 1997*. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration: SAMHSA Pub. SMA-00-3499. This report produces estimates according to a methodology equivalent to the National Health Expenditures (NHE) reports produced annually by the Office of the Actuary, HCFA. This methodology specifically excludes expenditures for social services totaling about 3 million in 1997. This 1997 data constitutes the most up-to-date information available on mental health and substance abuse spending.
- <sup>21</sup> Ibid.
- <sup>22</sup> Mark, T. and R. Coffey. 2003. What Drove Private Health Insurance Spending on Mental Health and Substance Abuse Care, 1992–1999? *Health Affairs* 22 (1): 165–72.
- <sup>23</sup> Oss M., et al. 2003. *Open Minds Yearbook of Managed Behavioral Health and Employee Assistance Program Market Share in the U.S. 2002–2003*. Gettysburg, PA: Open Minds Publication.
- <sup>24</sup> See, for example, C.A. Ma and T.G. McGuire. 1998. Costs and Incentives in a Behavioral Health Care Carve Out. *Health Affairs* 17 (2): 53–69; Goldman, W.J. et al. 1998. Costs and Use of Mental Health Services Before and After Managed Care. *Health Affairs* 17 (3): 40–52; Grazier, K.L. et al. 1999. Effects of a Mental Health Carve-out on Use, Costs and Payers: A Four-year Study. *Journal of Behavioral Health Services and Research* 26 (4): 381–89. Sturm R. 1999. Tracking Changes in Behavioral Health Services: How Have Carve-outs Changed Care? *Journal of Behavioral Health Services and Research* 26 (4): 360–71; and Brisson, A.S. et al. 2000. *Changes in a MBHC Carve-out: Impact on MH/SA Spending and Utilization* (unpublished working paper).
- <sup>25</sup> For evidence on re-hospitalization rates, see Merrick E. 1998. Treatment of Major Depression Before and After Implementation of a Behavioral Health Carve-out Plan. *Psychiatric Services* 49 (11): 1563–67; Sturm R. 1999. Tracking Changes in Behavioral Health; and Dickey, B. et al. 1998. Managed Mental Health Experience in Massachusetts, in D. Mechanic (ed.), *Managed Behavioral Health Care: Current Realities and Future Potential*. San Francisco: Jossey-Bass, 115–22.
- <sup>26</sup> For evidence on continuity of care, see Merrick, E. (note 25); Dickey, B. (note 25); and Ray, W.A. et al. 2003. Effect of a Mental Health “Carve-out” Program on the Continuity of Antipsychotic Therapy. *New England Journal of Medicine* 348 (19): 1885–94.
- <sup>27</sup> For evidence on adherence to treatment guidelines, see Busch, S.H. 2002. Specialty Health Care, Treatment Patterns and Quality: A Case Study of Treatment for Depression. *Health Services Research* 37 (6): 1583–1601.
- <sup>28</sup> For evidence on clinical outcomes, see Cuffel, B.J. et al. 2002. Two-year Outcomes of Fee-for-Service and Capitated Medicaid Programs for People with Severe Mental Illness. *Health Services Research* 37 (2): 341–59; and Manning, W.G. et al. 1999. Outcomes for Medicaid Beneficiaries with Schizophrenia Under a Pre-paid Mental Health Carve-out. *Journal of Behavioral Health Services and Research* 26 (4): 442–50.
- <sup>29</sup> U.S. DHHS. 2001. *Mental Health: Culture, Race and Ethnicity*.
- <sup>30</sup> See, for example, Matsuoka, J.K. et al. 1997. National Utilization of Mental Health Services by Asian Americans/Pacific Islanders. *Journal of Community Psychology* 25 (2): 141–46; Snowden, L.R. and F.K. Cheung. 1990. Use of Inpatient Mental Health Services by Members of Ethnic Minority Groups. *American Psychologist* 45 (3): 347–55.
- <sup>31</sup> Swartz, M.S. et al. 1998. Comparing Use of Public and Private Mental Health Services: The Enduring Barriers of Race and Age. *Community Mental Health Journal* 34 (2): 133–44.
- <sup>32</sup> See, for example, Snowden, L.R. (note 30); Breaux, C. and D. Ryujin. 1999. Use of Mental Health Services by Ethnically Diverse Groups Within the U.S. *Clinical Psychologist* 52 (3): 4–15.
- <sup>33</sup> Rost, K. et al. 2002. Use, Quality, and Outcomes of Care for Mental Health: The Rural Perspective. *Medical Care Research and Review* 59 (3): 231–65.
- <sup>34</sup> Coffey, R. 2000. *National Estimates of Expenditures, 1997*.
- <sup>35</sup> Ibid.
- <sup>36</sup> Ibid; and Levine, D.S. and D.R. Levine. 1975. *The Costs of Mental Illness, 1971*. National Institute of Mental Health, Report Series B (7): Table 1.
- <sup>37</sup> Ibid.
- <sup>38</sup> Frank, R.G., H.H. Goldman, and M. Hogan. 2003. Medicaid and Mental Health: Be Careful What You Ask For. *Health Affairs* (22) 1: 101–13.
- <sup>39</sup> Loprest, P.J. and S.R. Zedlewski. 1999. *Current and Former Welfare Recipients: How Do They Differ?* Washington, D.C.: The Urban Institute.
- <sup>40</sup> 2003. Family Pediatrics: Report of the Task Force on the Family. *Pediatrics* [Family Pediatrics Suppl.] 111 (6): 1541–71.
- <sup>41</sup> Schoen, C. et al. 1997. *The Commonwealth Fund Survey of the Health of Adolescent Girls*. The Commonwealth Fund.
- <sup>42</sup> U.S. Social Security Administration. 2001. *Statistical Supplement of the Social Security Bulletin*. Washington, D.C.: U.S. Government Printing Office.
- <sup>43</sup> Borinstein, A.B. 1992. Public Attitudes Toward Persons with Mental Illness. *Health Affairs* 11 (3): 186–96.

- <sup>44</sup> Pescosolido, B. et al. 2000. Americans' Views of Mental Health and Illness at the Century's End: Continuity and Change. *Public Report on the MacArthur Mental Health Module, 1996 General Social Survey*. Bloomington, Indiana.
- <sup>45</sup> Steadman, H.J. et al. 1998. Violence by People Discharged from Acute Psychiatric Inpatient Facilities and by Others in the Same Neighborhoods. *Archives of General Psychiatry* 55 (5): 393–401.
- <sup>46</sup> U.S. DHHS. 1999. *Mental Health: A Report of the Surgeon General*.
- <sup>47</sup> Barry, C.B. et al. 2003. Design of Mental Health Benefits: Still Unequal After All These Years. *Health Affairs* 22 (5): 127–37.
- <sup>48</sup> 1998. *A Profile of Medicare: Chartbook*. Office of Strategic Planning and Health Care Financing Administration, U.S. Department of Health and Human Services.
- <sup>49</sup> Sturm, R. and C.D. Shelborne. 1999. *Are Barriers to Mental Health and Substance Abuse Still Rising?* (unpublished manuscript).
- <sup>50</sup> U.S. General Accounting Office. 2000. *Mental Health Parity Act: Despite New Federal Standards, Mental Health Benefits Remain Limited*. GAO/HEHS-00-05.
- <sup>51</sup> Newhouse, J.P. 1993. *Free for All? Lessons from the RAND Health Insurance Experiment*. Cambridge: Harvard University Press.
- <sup>52</sup> See, for example, a discussion on evidence of selection in mental health and substance abuse in Frank, R.G. and T.G. McGuire. 2000. *Economics and Mental Health. Handbook of Health Economics*. A.J. Culyer and J.P. Newhouse (eds.). Amsterdam: Elsevier.
- <sup>53</sup> U.S. Office of Personnel Management. 1999. *Executive Order: Amending the Civil Service Rules Related to Federal Employees with Psychiatric Disabilities*.
- <sup>54</sup> U.S. Congressional Budget Office. 2001. *Cost Estimate: Mental Health Equitable Treatment Act of 2001*. On. S. 543 on 107th U.S. Congress ordered by the U.S. Senate Committee on Health, Education, Labor and Pensions.
- <sup>55</sup> Social Security Administration, 2002. *Annual Statistical Supplement*.
- <sup>56</sup> New Freedom Commission. 2003. *Achieving the Promise*.
- <sup>57</sup> U.S. General Accounting Office. 2003. *Federal Agencies Could Play a Stronger Role in Helping States Reduce the Number of Children Placed Solely to Obtain Mental Health Services*. Pub. GAO-03-397.
- <sup>58</sup> *Olmstead v. L.C.*, 527 U.S. 581, 610 (1999) (Kennedy, J., concurring in judgment).
- <sup>59</sup> Health Care Financing Administration, Letter to State Medicaid Directors.
- <sup>60</sup> Fox-Grage, W. et al. 2003. *The States' Response to the Olmstead Decision: How Are States Complying?* Washington, D.C.: National Conference of State Legislatures. A major strategy for complying with the Olmstead decision is to use a task force or commission for planning and coordination purposes. To date, eight states—Kansas, Michigan, Minnesota, Nebraska, Oregon, Rhode Island, South Dakota, and Tennessee—do not have a task force or similar group.

**Other Issue Briefs produced for The Commonwealth Fund/John F. Kennedy School of Government 2004 Bipartisan Congressional Health Policy Conference**

[What's Driving Health Care Costs?](#) Patricia Seliger Keenan

[Paying for Performance](#), Patricia Seliger Keenan and Janet Kline

[Addressing Unequal Treatment: Disparities in Health Care](#), Gillian K. SteelFisher

[Continuing Policy Issues in Medicare Prescription Drug Coverage](#), Juliette Cubanski

[Is Incremental Change Working? Or Is It Time to Reconsider Universal Coverage](#), Juliette Cubanski

[The Obesity Epidemic in the United States: Causes and Extent, Risks and Solutions](#), Erin Strumpf

[The Commonwealth Fund](#) is a private foundation supporting independent research on health and social issues. The views presented here are those of the authors and should not be attributed to The Commonwealth Fund or its directors, officers, or staff.

