CHAPTER 6

ORGANIZING AND FINANCING MENTAL HEALTH SERVICES

Contents

Contents, continued

Toward Parity in Coverage of Mental Health Care	426
Benefit Restrictions and Parity	426
Legislative Trends Affecting Parity in Mental Health Insurance Coverage	427
Conclusions	428
Appendix 6-A: Quality and Consumers' Rights	430
References	430

ORGANIZING AND FINANCING MENTAL HEALTH SERVICES

This chapter examines what recent research has I revealed about the organization and financing of mental health services as well as the cost and quality of those services. The discussion places emphasis on the tremendous growth of managed care and the attempts to gain parity in insurance. Understanding these issues can inform the decisions made by people with mental health problems and disorders, as well as their family members and advocates, and health care administrators and policymakers. Earlier chapters reviewed data on the occurrence of mental disorders in the population at large and described the treatment system. In each stage of the life cycle, issues related to mental health services have been discussed, including, for example, the breadth of mental health and human services involved in caring for children with mental health problems and disorders; deinstitutionalization and its role in shaping contemporary mental health services for children and adults; the problems associated with discontinuity of care in a fragmented service system; and the impor tance of primary care medical providers in meeting the mental health needs of older persons. Special mental health services concerns such as homelessness, criminalization of persons with mental illness, and disparities in access to and utilization of mental health services due to racial, cultural, and ethnic identities as well as other demographic characteristics have been discussed throughout the report.

There are four main sections in this chapter. The first section provides an overview of the current system of mental health services. It describes where people get care and how they use services. The next section presents information on the costs of care and trends in spending. The third section discusses the dynamics of

insurance financing and managed care. It also addresses both positive and adverse effects of managed care on access and quality and describes efforts to guard against untoward consequences of aggressive cost-containment policies. The final section documents some of the inequities between general medical and mental health care and describes efforts to correct them through legislation, regulation, and financing changes.

Overview of the Current Service System

The Structure of the U.S. Mental Health Service System

A broad array of services and treatments exists to help people with mental illnesses—as well as those at particular risk of developing them—to suffer less emotional pain and disability and live healthier, longer, and more productive lives. Mental disorders and mental health problems are treated by a variety of caregivers who work in diverse, relatively independent, and loosely coordinated facilities and services—both public and private—that researchers refer to, collectively, as the *de facto mental health service system* (Regier et al., 1978; Regier et al., 1993).

About 15 percent of all adults and 21 percent of U.S. children and adolescents use services in the de facto system each year. The system is usually described as having four major components or sectors:

 The specialty mental health sector consists of mental health professionals such as psychiatrists, psychologists, psychiatric nurses, and psychiatric social workers who are trained specifically to treat

people with mental disorders. The great bulk of specialty treatment is now provided in outpatient settings such as private office-based practices or in private or public clinics. Most acute hospital care is now provided in special psychiatric units of general hospitals or beds scattered throughout general hospitals. Private psychiatric hospitals and residential treatment centers for children and adolescents provide additional intensive care in the private sector. Public sector facilities include state/county mental hospitals and multiservice mental health facilities, which often coordinate a wide range of outpatient, intensive case management, partial hospitalization, and inpatient services. Altogether, slightly less than 6 percent of the adult population and about 8 percent of children and adolescents (ages 9 to 17) use specialty mental health services in a year.

The general medical/primary care sector consists of health care professionals such as general internists, pediatricians, and nurse practitioners in office-based practice, clinics, acute medical/ surgical hospitals, and nursing homes. More than 6 percent of the adult U.S. population use the general medical sector for mental health care, with an average of about 4 visits per year—far lower than the average of 14 visits per year found in the specialty mental health sector. The general medical sector has long been identified as the initial point of contact for many adults with mental disorders; for some, these providers may be their only source of mental health services. However, only about 3 percent of children and adolescents contact general medical physicians for mental

- health services; the human services sector (see below) plays a much larger role in their care.
- The *human services* sector consists of social services, school-based counseling services, residential rehabilitation services, vocational rehabilitation, criminal justice/prison-based services, and religious professional counselors. In the early 1980s, about 3 percent of U.S. adults used mental health services from this sector. But by the early 1990s, the National Comorbidity Survey (NCS) revealed that 5 percent of adults used such services. For children, school mental health services are a major source of care (used by 16 percent), as are services in the child welfare and juvenile justice systems, which serve about 3 percent.
- The *voluntary support network* sector, which consists of self-help groups, such as 12-step programs and peer counselors, is a rapidly growing component of the mental and addictive disorder treatment system. The Epidemiologic Catchment Area (ECA) study demonstrated that about 1 percent of the adult population used self-help groups in the early 1980s; the NCS showed a rise to about 3 percent in the early 1990s.

Table 6-1 summarizes the percentage of U.S. adults who use different sectors of the de facto mental health treatment system. (There is overlap across these sectors because some people use services in multiple sectors.) Table 6-2 summarizes the percentage of U.S. children and adolescents using various sectors of this system.

Table 6-1. Proportion of adult population using mental/ addictive disorder services in one year

Total Health Sector	11%*
Specialty Mental Health	6%
General Medical	6%
Human Services Professionals	5%
Voluntary Support Network	3%
Voluntary Support Notwork	370
Any of Above Services	15%

^{*}Subtotals do not add to total due to overlap. Source: Regier et al., 1993; Kessler et al., 1996

¹ The National Comorbidity Survey, using a single interview requiring a 12-month recall period, determined that 4 percent of adults sought mental or addictive treatment services from primary care physicians. With a more intensive examination of primary health care use involving three interviews about service use during a 1-year period in the Epidemiologic Catchment Area study, more than 6 percent of adults indicated that they specifically spoke with their general medical physicians about their "emotions, nerves, drugs or alcohol."

Table 6-2. Proportion of child/adolescent populations (ages 9-17) using mental/addictive disorder services in one year

•	
Total Health Sector	9%*
Specialty Mental Health	8%
General Medical	3%
Human Services Professionals	17%*
School Services	16%
Other Human Services	3%
Any of Above Services	21%

*Subtotals do not add to total due to overlap.

Source: Shaffer et al., 1996

The Public and Private Sectors

The de facto mental health service system is divided into public and private sectors. The term "public sector" refers both to services directly operated by government agencies (e.g., state and county mental hospitals) and to services financed with government resources (e.g., Medicaid, a Federal-state program for financing health care services for people who are poor and disabled, and Medicare, a Federal health insurance program primarily for older Americans and people who retire early due to disability). Publicly financed services may be provided by private organizations. The term "private sector" refers both to services directly operated by private agencies and to services financed with private resources (e.g., employer-provided insurance). Funding for the de facto mental health service system is discussed later in the report.

State and local government has been the major payer for public mental health services historically and remains so today. Since the mid-1960s, however, the role of the Federal government has increased. In addition to Medicare and Medicaid, the Federal government funds special programs for adults with serious mental illness and children with serious emotional disability. Although small in relation to state and local funding, these Federal programs provide additional resources. They include the Community Mental Health Block Grant, Community Support

Organizing and Financing Mental Health Services

programs, the PATH program for people with mental illness who are homeless, the Knowledge Development and Application Program, and the Comprehensive Community Mental Health Services for Children and Their Families Program.

The fact that 16 percent of the U.S. adult population—largely the working poor—have no health insurance at all is the focus of considerable policy activity. Many others are inadequately insured. Initiatives designed to increase enrollment for selected populations include the newly created Child Health Insurance Program, which provides block grants to states for coverage of children not eligible for Medicaid.

These federally funded public sector programs buttress the traditional responsibility of state and local mental health systems and serve as the mental health service "safety net" and "catastrophic insurer" for those citizens with the most severe problems and the fewest resources in the United States. The public sector serves particularly those individuals with no health insurance, those who have insurance but no mental health coverage, and those who exhaust limited mental health benefits in their health insurance.

Each sector of the de facto mental health service system has different patterns and types of care and different patterns of funding. Within the specialty mental health sector, state- and county-funded mental health services have long served as a safety net for people unable to obtain or retain access to privately funded mental health services. The general medical sector receives a relatively greater proportion of Federal Medicaid funds, while the voluntary support network sector, staffed principally by people with mental illness and their families, is largely funded by private donations of time and money to emotionally supportive and educational groups. The relative quality of care in these various sectors is a matter of intense interest and discussion, although there is little definitive research to date.

Effective functioning of the mental health service system requires connections and coordination among many sectors (public-private, specialty-general health, health-social welfare, housing, criminal justice, and

education). Without coordination, it can readily become organizationally fragmented, creating barriers to access. Adding to the system's complexity is its dependence on many streams of funding, with their sometimes competing incentives. For example, if as part of a Medicaid program reform, financial incentives lead to a reduction in admissions to psychiatric inpatient units in general hospitals and patients are sent to state mental hospitals instead, this cost containment policy conceivably could conflict with a policy directive to reduce the census of state mental hospitals.

The public and private parts of the de facto mental health system treat distinct populations with some overlap. As shown in Table 6-1, 11 percent of the U.S. population use specialty or general medical mental health services each year. Nearly 10 percent of the population—almost all users—received some care in private facilities, while 2 percent of the population received care in public facilities. About 1 percent of the population used inpatient care; of these, one-third received care in the public sector, suggesting that those requiring more intensive services rely more heavily on the public safety net (Regier et al., 1993; Kessler et al., 1994). Nonetheless, many people with severe and persistent illness now receive at least some of their care in the private sector. This makes it important to ensure that the private sector can meet the full treatment needs of this population.

Patterns of Use

Adults

Americans use the mental health service system in complex ways, or patterns. A total of about 15 percent of the U.S. adult population use mental health services in any given year. These data come from two epidemiologic surveys: the Epidemiologic Catchment Area (ECA) study of the early 1980s and the National Comorbidity Survey (NCS) of the early 1990s. Those surveys defined mental illness according to the prevailing editions of the *Diagnostic and Statistical Manual of Mental Disorders* (i.e., DSM-III and DSM-IIIR) and defined mental health services in accordance with the "de facto" system described above. Figure 6-1

presents a hierarchy of sectors in the treatment system (i.e., specialty mental health, general medical, and other human services).² About 6 percent of the adult population use specialty mental health care; 5 percent of the population receive their mental health services from general medical and/or human services providers, and 3 to 4 percent of the population receive their mental health services from other human service professionals or self-help groups. (The overlap across these latter two sectors accounts for these figures totaling more than 15 percent) (Figure 6-1).

Also, slightly more than *half* of the 15 percent of the population that use mental health services have a specific mental or addictive disorder (8 percent), while the remaining portion has a mental health problem or a disorder not included in the ECA or NCS (7 percent). The surveys estimate that during a 1-year period, about one in five American adults—or 44 million people—have diagnosable mental disorders, according to reliable, established criteria. To be more specific, 19 percent of the adult U.S. population have a mental disorder alone (in 1 year); 3 percent have both mental and addictive disorders; and 6 percent have addictive disorders alone. Consequently, about 28 percent of the population have either a mental *or* addictive disorder (Regier et al., 1993; Kessler et al., 1994).

Given that 28 percent of the population have a diagnosable mental or substance abuse disorder and only 8 percent of adults both have a diagnosable disorder and use mental health services, one can conclude that less than one-third of adults with a diagnosable mental disorder receives treatment in one year. In short, a substantial *majority* of those with specific mental disorders do not receive treatment. Figure 6-1 depicts the 28 percent of the U.S. adult population who meet full criteria for a mental or addictive disorder, and illustrates that 8 percent receive mental health services while 20 percent do *not* receive such services in a given year.

Among the service users with specific disorders, between 30 and 40 percent perceived some need for

² For those who use more than one sector of the service system, preferential assignment is to the most specialized level of mental health treatment in the system.

care. However, most of those with disorders who did not seek care believed their problems would go away by themselves or that they could handle them on their own (Kessler et al., 1997). In a recent 1998 Robert Wood Johnson national household telephone survey, 11 percent of the population perceived a need for mental or addictive services, with about 25 percent of these reporting difficulties in obtaining needed care (Sturm & Sherbourne, 1999). Worry about costs was listed as the highest reason for not receiving care, with 83 percent of the uninsured and 55 percent of the privately insured listing this reason. The inability to obtain an appointment soon enough because of an insufficient supply of services was listed by 59 percent of those with Medicaid but by far fewer of those with private insurance.

Children and Adolescents

Comparable data on service use by children and adolescents with diagnoses of mental disorder and at least minimal impairment only recently have been obtained from a National Institute of Mental Health (NIMH) multisite survey of children and adolescents ages 9 to 17 years (Shaffer et al., 1996). Results from this survey are summarized in Table 6-2 and in Figure 6-2.

Although 9 percent of the entire child/adolescent sample received some mental health services in the health sector (that is, the general medical sector and specialty mental health sector), the largest provider of mental health services to this population was the school system. As shown in Figure 6-2, nearly 11 percent of the child/adolescent sample received their mental health services exclusively from the schools or the human services sector (with no services from the health sector); another 5 percent (not shown in Figure 6-2) received school services in addition to health sector services. Many children served by schools do not have diagnosable mental health conditions covered in available surveys—some may have other diagnoses such as adjustment reactions or acute stress reactions. In addition, 1 percent of children and adolescents received their mental health services from human service professionals, such as those in child welfare and

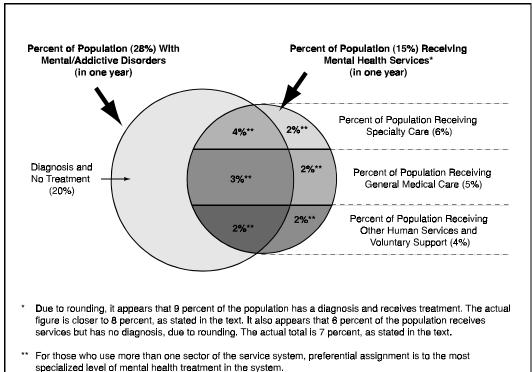
Organizing and Financing Mental Health Services

juvenile justice. The latter is a setting under increasing scrutiny as the result of pending Federal legislation. At present, child data are unavailable that would exactly match the adult data on service use (analyzed by diagnostic severity and by public versus private sectors).

Almost 21 percent of children and adolescents (ages 9 to 17) had some evidence of distress or impairment associated with a specific diagnosis and also had at least a minimal level of impairment on a global assessment measure. Almost half of this group (almost 10 percent of the child/adolescent population) had some treatment in one or more sectors of the de facto mental health service system, and the remainder (more than 11 percent of the population) received no treatment in any sector of the health care system. This translates to a majority with mental disorders not receiving any care. Of the 21 percent of the young population receiving any mental health services, slightly less than half (about 10 percent) met full criteria for a mental disorder diagnosis; the remainder (more than 11 percent of the population) received diagnostic or treatment services for mental health problems, conditions that do not fully meet diagnostic criteria (Shaffer et al., 1996).

In summary, the mental health treatment system is a dynamic array of services accessed by patients with different levels of disorder and severity, as well as different social and medical service needs and levels and types of insurance financing. Disparities in access due to sociocultural factors have been described in earlier sections of this report. In a system in which substantial numbers of those with even the most severe mental illness do not receive any mental health care in a year, the match between service use and service need is clearly far from perfect. Neither the number nor the proportion of people with mental health problems who need or want treatment is yet established, and many factors influence perceived need for treatment, including severity of symptoms and functional disability as well as cultural factors. But obviously not everyone with a diagnosable mental disorder perceives a need for treatment, and not all who desire treatment have a currently diagnosable disorder. Providing access

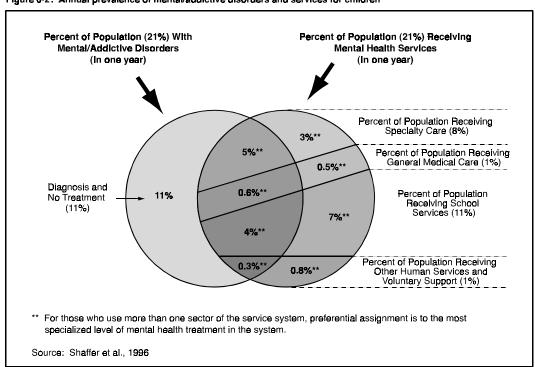
Figure 6-1. Annual prevalence of mental/addictive disorders and services for adults



specialized level of mental health treatment in the system.

Sources: Regier et al., 1993; Kessler et al., 1996

Figure 6-2. Annual prevalence of mental/addictive disorders and services for children



to appropriate mental health services is a fundamental concern for mental health policymakers in both the public and private arenas.

The Costs of Mental Illness

As many of the preceding chapters have indicated, mental disorders impose an enormous emotional and financial burden on ill individuals and their families. They are also costly for our Nation in reduced or lost productivity (indirect costs) and in medical resources used for care, treatment, and rehabilitation (direct costs).

Indirect Costs

The *indirect costs* of all mental illness imposed a nearly \$79 billion loss on the U.S. economy in 1990 (the most recent year for which estimates are available) (Rice & Miller, 1996). Most of that amount (\$63 billion) reflects morbidity costs—the loss of productivity in usual activities because of illness. But indirect costs also include almost \$12 billion in mortality costs (lost productivity due to premature death), and almost \$4 billion in productivity losses for incarcerated individuals and for the time of individuals providing family

Organizing and Financing Mental Health Services

care. For schizophrenia alone, the total indirect cost was almost \$15 billion in 1990. These indirect cost estimates are conservative because they do not capture some measure of the pain, suffering, disruption, and reduced productivity that are not reflected in earnings.

The fact that morbidity costs comprise about 80 percent of the indirect costs of all mental illness indicates an important characteristic of mental disorders: Mortality is relatively low, onset is often at a younger age, and most of the indirect costs are derived from lost or reduced productivity at the workplace, school, and home (Rupp et al., 1998).

The Global Burden of Disease, a recent publication of the World Bank and the World Health Organization, reported on a study of the indirect costs of mental disorders associated with years lived with a disability, with and without years of life lost due to premature death. Disability Adjusted Life Years (DALYs) are now being used as a common metric for describing the burden of disability and premature death resulting from the full range of mental and physical disorders throughout the world (Figure 6-3). A striking finding from the study has been that mental disorders account for more than 15 percent of the burden of disease in

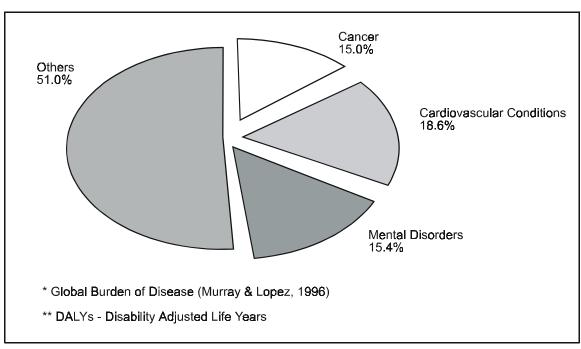


Figure 6-3. Global burden of disease*—DALYs** worldwide—1990

established market economies; unipolar major depression, bipolar disorder, schizophrenia, and obsessive-compulsive disorder are identified as among the top 10 leading causes of disability worldwide (Murray & Lopez, 1996).

Direct Costs

Mental health expenditures for treatment and rehabilitation are an important part of overall health care spending but differ in important ways from other types of health care spending. Many mental health services are provided by separate specialty providers—such as psychiatrists, psychologists, social workers, and nurses in office practice—or by facilities such as hospitals, multiservice mental health organizations, or residential treatment centers for children. Insurance coverage of

mental health services is typically less generous than that for general health, and government plays a larger role in financing mental health services compared to overall health care.

In 1996, the United States spent more than \$99 billion for the direct treatment of mental disorders, as well as substance abuse, and Alzheimer's disease and other dementias (Figure 6-4).

More than two-thirds of this amount (\$69 billion or more than 7 percent of total health spending) was for mental health services. Spending for direct treatment of substance abuse was almost \$13 billion (more than 1 percent of total health spending), and that for Alzheimer's disease and other dementias was almost \$18 billion (almost 2 percent of total health spending) (Figure 6-4).³

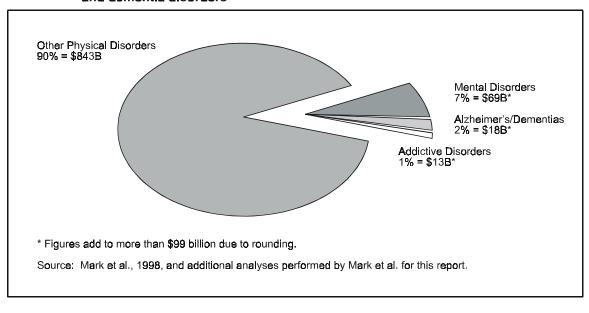


Figure 6-4. 1996 National health accounts, \$943 billion total—\$99 billion* mental, addictive, and dementia disorders

Although Alzheimer's disease and other dementias are not discussed further in this chapter, the reader should note that the definition of serious mental illness promulgated by the Center for Mental Health Services includes these disorders. Further, care of these patients is a major role of the public mental health system.

³ Figure 6-4 comes from the spending estimates project conducted by the Center for Mental Health Services and the Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration. It is limited to spending for formal treatment of disorders and excludes spending for most services not ordinarily classified as health care. Some of these data come directly from the most recent report published by this project (Mark et al., 1998), while others are based on unpublished data. Further, minor modifications in estimation methodology have been made since the Mark et al. (1998) report to meet the special requirements of the Surgeon General's report. The estimates presented here differ from those published previously by Rice and her colleagues (Rice et al., 1990) in several important respects. First, they are limited to a definition of mental illness that more closely reflects what most payers regard as mental disorders. Diagnostic codes such as mental retardation and non-mental health comorbid conditions, which were included in the Rice study, have not been used. Second, they are based on data sources that were not available at the time of the Rice study. Finally, they result from a different approach to estimation, which emphasizes linkage to the National Health Accounts published by the Health Care Financing Administration.

Despite the historical precedent for linking all these disorder groups together for diagnostic and cost accounting purposes, they are handled differently by payers and providers. A majority of private health insurance plans have a benefit that combines coverage of mental illness and substance abuse. However, most of the treatment services for mental illness and for substance abuse are separate (and use different types of providers), as are virtually all of the public funds for these services. This separation causes problems for treating the substantial proportion of individuals with comorbid mental illness and substance abuse disorders, who benefit from treating both disorders together (Drake et al., 1998).

Alzheimer's disease and other dementias historically have been considered as both mental and somatic disorders. However, recent efforts to destignatize dementias and improve care have removed some insurance coverage limitations. Once mostly the province of the public sector, Alzheimer's disease now enjoys more comprehensive coverage, and care is better integrated into the private health care system. Inequities in coverage are diminishing (U.S. Department of Health and Human Services Task Force on Alzheimer's Disease, 1984; Goldman et al., 1985).

As indicated, coverage differs for treatment of substance abuse and Alzheimer's disease. With respect to financing policy, both conditions are outside the scope of this report (although some services aspects of Alzheimer's disease are discussed in Chapter 5); thus,

Organizing and Financing Mental Health Services

they will not be included in the spending estimates that follow.

Mental Health Spending

Of the \$69 billion spent in 1996 for diagnosis and treatment of mental illness (see Figure 6-5), more than 70 percent was for the services of specialty providers, with most of the remainder for general medical services providers. The distribution for all types of providers is shown in the figure.

Spending by the Public and Private Sectors

Funding for the mental health service system comes from both public and private sources [Table 6-3 and Figure 6-6 (percent distribution) and Table 6-4 (dollar distribution and per capita mental health costs)]. In 1996, approximately 53 percent (\$37 billion) of the funding for mental health treatment came from public payers. Of the 47 percent (\$32 billion) of expenditures from private sources, more than half (\$18 billion) were from private insurance. Most of the remainder was outof-pocket payments. These out-of-pocket payments include copayments from individuals with private insurance, copayments and prescription costs not covered by Medicare or Medigap (i.e., supplementary) insurance, and payment for direct treatment from the uninsured or insured who choose not to use their insurance coverage for mental health care.

For purpose of these analyses, general medical service providers include community hospitals, nursing homes, non-psychiatrist physicians, and home health agencies. An intermediate funding category is that of prescription medications, which are prescribed in both general medical and specialty mental health settings. Other than prescription medications, 18 percent of total mental health funds are allocated in this analysis to the general medical sector, which provides some mental health services to slightly more than half of all persons (about 6 percent of the population) using any services in the health system during 1 year.

Specialty providers include psychiatric hospitals, psychiatrists, office-practice psychologists and counselors (including social workers and psychiatric nurses), residential treatment centers for children, and multiservice mental health organizations. These mental health specialists provided some mental health services to nearly 6 percent of the population—also about half of all people requesting such services from health and mental health services in the health system.

⁴ In estimating mental health expenditures, spending can be categorized by provider type, which includes both general medical service providers and specialty mental health providers. Since spending for mental health services in the human services sector is not covered by health insurance or included in the national health accounts, neither total costs nor total spending estimates for mental health services are covered under these direct cost figures. Indirect costs generally include estimates of lost productivity as well as disability insurance and the costs of treating those with mental illness in the criminal justice system. Hence, it is not possible to provide completely parallel analyses of the prevalence of mental disorders in the population, the prevalence of treatment in different service sectors, and expenditures in the treatment system. However, the estimate given here is the best approximation of that intent.

Figure 6-5. 1996 National health accounts, \$69 billion total mental health expenditures by provider type

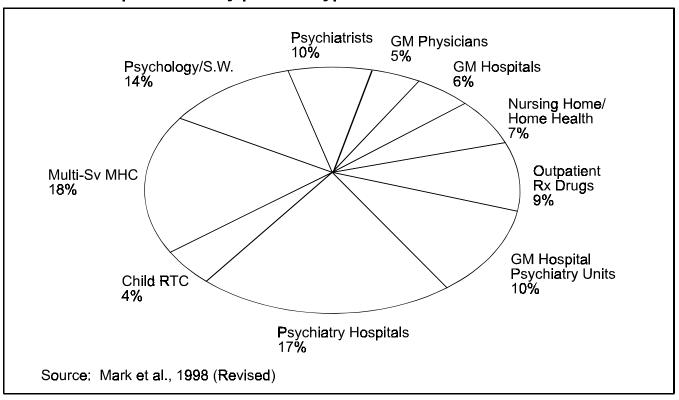


Figure 6-6. Mental health expenditures by payer—1996 (total = \$69 billion)

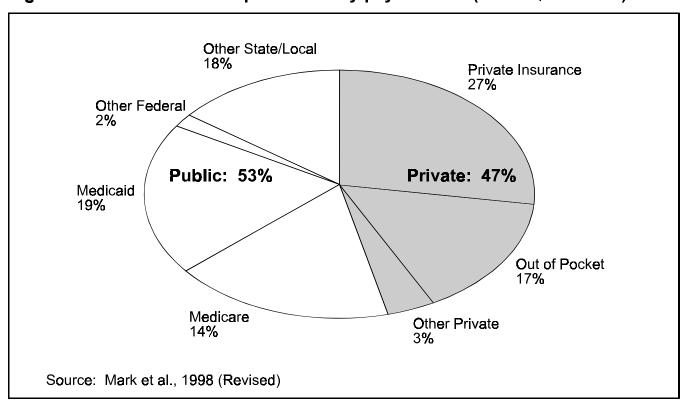


Table 6-3. Distribution of 1996 U.S. population and mental disorder direct costs by insurance status

Insurance	Status	Population	Direct Costs
Private		63%*	47%
Public		***	53%
Medic	are	13%**	14%
Medic	aid	12%**	19%
Unins	ured	***	_
S	tate/Local	16%	18%
_	Other ederal	***	2%
Total		100%	100%

^{*} About 70 percent of the population has some private insurance—reflecting the fact that 7 percent of the population has both Medicare and Medigap or other dual private insurance coverage. Although 61 percent of the population has employment-based private insurance, this percentage also includes some military insurance coverage.

Source: Mark et al., 1998 (Revised)

nonulation and Tal

Table 6-4. Population, spending, and per capita mental health costs by insurance status (1996)

Organizing and Financing Mental Health Services

Insurance Status		Spending (\$ billions)	Per Capita (\$ per year)
Private	167.5	32.3	193
Insurance Payment		18.4	
Out-of-Pocket Payment		11.7	
Other Private		2.2	
Medicare	30.6	9.8	320
Medicaid	27.0	13.0	481
Other and Uninsured	41.7	13.9	333
SPMI*	5.1	12.4	2,431
Other	36.6	1.5	41
Total	266.8	69.0	259

^{*} Severe and persistent mental illness

Source: Mark et al., 1998, and calculations by D. Regier, personal communication, 1999

Trends in Spending

Between 1986 and 1996, mental health expenditures grew at an average annual growth rate of more than 7 percent (Table 6-5). Because of changes in population, reimbursement policies, and legislative and regulatory requirements during this decade, the share of mental health funding from public sources grew from 49 percent to 53 percent. Overall, the rate of growth in the public sector was slightly more than 8 percent per year (Medicare and Medicaid, both about 9 percent; state/local government, nearly 8 percent).

In the private sector, out-of-pocket costs increased only 3 percent, which, together with the private insurance increases of almost 9 percent, resulted in a net private cost increase of little more than 6 percent—significantly lower than the increase found in the public sector.

^{**} Since 2 percent of the population has both Medicare and Medicaid insurance coverage, adding this duplicated count to each insurance category results in the first column adding to a duplicated total of 104 percent.

^{***} Although some state/local/and other Federal government support goes to those who are underinsured in the private and public insured groups, these funds are primarily allocated to the uninsured population.

Table 6-5. Mental health expenditures in relation to national health expenditures, by source of payer, annual growth rate (1986-1996)

	Average Annual Growth Rate (1986-1996)	
	Mental Health Care	All Health Care
Private		
Out-of-Pocket Payment	3%	5%
Private Insurance	9%	9%
Other Private	7%	7%
Total Private	6%	7%
Public		
Medicare	9%	10%
Medicaid	9%	13%
Other Federal Government	4%	6%
State/Local Government	8%	10%
Total Public	8%	10%
Total Expenditures	7%	8%
Source: Mark et al., 1998 (Revise	d)	

Among the fastest-rising expenses for mental health services were outpatient prescription drugs, which account for about 9 percent of total mental health direct costs (Figure 6-5). Although these medications are prescribed in both specialty and general medical sectors, they are increasingly being covered under general medical rather than mental health private insurance benefits.

The higher than average growth rate (almost 10 percent) of spending for prescription drugs reflects, in part, the increasing availability and application of medications of demonstrable efficacy in treating mental disorders. Estimates from the National Ambulatory Medical Care Survey show that the number of visits during which such medication was prescribed increased from almost 33 million in 1985 to almost 46 million in 1994. Only one-third of psychotropic medications are now prescribed by psychiatrists, with two-thirds prescribed by primary care physicians and other medical specialists (Pincus et al., 1998). Although Medicaid covers 21 percent of drug costs (and

state/local/other Federal government covers 4 percent), Medicare does not cover prescription drugs. Although many older adults have supplemental insurance that does cover prescription drugs, the failure to cover any prescription drugs under Medicare is a barrier to effective treatment among the elderly who cannot afford supplemental insurance.

Mental Health Compared With Total Health

Mental health spending figures acquire more meaning when they are compared with those for all health care. Annually, the Health Care Financing Administration produces estimates of this spending. These estimates include nearly all of the expenditures presented for mental health services. However, some specialty providers who work in social service industries are excluded from the national health care spending estimates. Accordingly, mental health estimates require adjustment to allow direct comparison with these national figures, reducing the total from \$69 billion cited earlier to \$66 billion (Table 6-6).

Table 6-6. Mental health expenditures in relation to national health expenditures, by source of payer, 1996

	Expenditures in Billions (1996)		
	Mental Health Care	All Health Care	Percentage
Private			
Client Out-of-Pocket	\$11	\$171	6%
Private Insurance	\$17	\$292	6%
Other Private	\$2	\$32	5%
Total Private	\$30	\$495	6%
Public			
Medicare	\$10	\$198	5%
Medicaid	\$13	\$140	9%
Other Federal Government	\$1	\$41	3%
State/Local Government	\$12	\$69	18%
Total Public	\$36	\$447	8%
Total Expenditures	\$66	\$943	7%
Source: Mark et al., 1998 (Revised)			

Estimated total health care expenditures were \$943 billion in 1996. Of this amount, 7 percent was for mental health services. Table 6-6 describes expenditures on mental health services as a percentage of national health spending by source of payment. The significance of mental health spending for various payers varies from a low of only 3 percent of "other" Federal government spending to a high of 18 percent of health care expenditures by state and local governments.

Between 1986 and 1996, spending for mental health treatment grew more slowly than health care spending in general, increasing by more than 7 percent annually, compared with health care's overall rate of more than 8 percent (see Table 6-5). This difference may stem from the greater reliance of mental health services on managed care cost-containment methods during this period. Increased efficiency could account for a slower rate of growth in mental health care expenditures. Slowing of the growth rate in the public sector may also be due to other Federal and state government policies, such as limitations in states' ability to use certain Medicaid funds to support state mental hospitals and states' greater emphasis on community-based outpatient care as opposed to inpatient care. Finally, it may also reflect the greater contribution of institutional care, particularly in nursing homes, to total health care figures. Changes in these components affect overall growth rates more in general health care than in mental health care.

For most provider categories, the rise in mental health spending was not much different than spending growth rates for personal health care, with the exception of home health (higher) and nursing home (lower) expenditures. For various types of payers, spending growth in mental health care has been about the same or less than that in general health care. Mental health spending in Medicare, Medicaid, and other Federal programs has grown more slowly than overall program spending. For private sources, the growth rate of mental health out-of-pocket expenditures has been below that of total out-of-pocket spending (see Table 6-5).

Organizing and Financing Mental Health Services

During the past two decades there have been important shifts in what parties have final responsibility for paying for mental health care. The role of direct state funding of mental health care has been reduced, whereas Medicaid funding of mental health care has grown in relative importance. This is in part due to substantial funding offered to the states by the Federal government. One consequence of this shift is that Medicaid program design has become very influential in shaping the delivery of mental health care. State mental health authorities, however, continue to be an important force in making public mental health services policy, working together with state Medicaid programs. Considerable administrative responsibility for mental health services has devolved to local mental health authorities in recent years (Shore & Cohen, 1994).

Private insurance coverage has played a somewhat more limited role in mental health financing in the past decade. Various cost containment efforts have been pursued aggressively in the private sector through the introduction of managed care. There is also some emerging evidence on the imposition of new benefit limits on coverage for mental health services (HayGroup, 1998). At the same time private insurance coverage for prescription drugs has expanded dramatically over the past 15 years. In this area, insurance coverage for mental health treatments is on par with coverage for other illnesses. Accompanying this pattern of private insurance coverage are the availability of innovative new prescription drugs aimed at treating major mental illnesses and a shift in mental health spending in private insurance toward pharmaceutical agents.

In summary, spending for mental health care has declined as a percentage of overall health spending over the past decade. Further, public payers have increased their share of total mental health spending. Some of the decline in resources for mental health relative to total health care may be due to reductions in inappropriate and wasteful hospitalizations and other improvements in efficiency. However, it also may reflect increasing reliance on other (non-mental health) public human services and increased barriers to service access.

Financing and Managing Mental Health Care

History of Financing and the Roots of Inequality

Private health insurance is generally more restrictive in coverage of mental illness than in coverage for somatic illness. This was motivated by several concerns. Insurers feared that coverage of mental health services would result in high costs associated with long-term and intensive psychotherapy and extended hospital stays. They also were reluctant to pay for long-term, often custodial, hospital stays that were guaranteed by the public mental health system, the provider of "catastrophic care." These factors encouraged private insurers to limit coverage for mental health services (Frank et al., 1996).

Some private insurers refused to cover mental illness treatment; others simply limited payment to acute care services. Those who did offer coverage chose to impose various financial restrictions, such as separate and lower annual and lifetime limits on care (per person and per episode of care), as well as separate (and higher) deductibles and copayments. As a result, individuals paid out-of-pocket for a higher proportion of mental health services than general health services and faced catastrophic financial losses (and/or transfer to the public sector) when the costs of their care exceeded the limits.

Federal public financing mechanisms, such as Medicare and Medicaid, also imposed limitations on coverage, particularly for long-term care, of "nervous and mental disease" to avoid a complete shift in financial responsibility from state and local governments to the Federal government. Existence of the public sector as a guarantor of "catastrophic care" for the uninsured and underinsured allowed the private sector to avoid financial risk and focus on acute care of less impaired individuals, most of whom received health insurance benefits through their employer (Goldman et al., 1994).

Goals for Mental Health Insurance Coverage

The purpose of health insurance is to protect individuals from catastrophic financial loss. While the majority of individuals who use mental health services incur comparatively small expenses, some who have severe illness face financial ruin without the protection afforded by insurance. For people with health insurance, the range of covered benefits and the limits imposed on them ultimately determine where they will get service, which, in turn, affects their ability to access necessary and effective treatment services. Adequate mental health treatment resources for large population groups require a wide range of services in a variety of settings, with sufficient flexibility to permit movement to the appropriate level of care. A 1996 review of the evidence for the efficacy of well-documented treatments (Frank et al., 1996) suggested that covered services should include the following:

- Hospital and other 24-hour services (e.g., crisis residential services);
- Intensive community services (e.g., partial hospitalization);
- Ambulatory or outpatient services (e.g., focused forms of psychotherapy);
- Medical management (e.g., monitoring psychotropic medications);
- Case management;
- Intensive psychosocial rehabilitation services; and
- Other intensive outreach approaches to the care of individuals with severe disorders.

Since resources to provide such services are finite, insurance plans are responsible for allocating resources to support treatment. Each type of insurance plan has a different model for matching treatment need with insurance support for receiving services.

Patterns of Insurance Coverage for Mental Health Care

Health insurance, whether funded through private or public sources, is one of the most important factors influencing access to health and mental health services. In 1996, approximately 63 percent of the U.S. population had private insurance, 13 percent had Medicare as a primary insurer (with about 7 percent

also having supplemental private insurance), 12 percent had Medicaid (2 percent had dual Medicaid/Medicare), and 16 percent were uninsured (Bureau of the Census, 1996) (Table 6-3.)

Most Americans (84 percent) have some sort of insurance coverage—primarily private insurance obtained through the workplace. However, its adequacy for mental health care is extremely variable across types of plans and sponsors. Of the more than \$32 billion spent for mental health services for people with private insurance, more than \$18 billion came from that insurance, almost \$12 billion came from client out-of-pocket payments, and more than \$2 billion came from other private sources. For these more than 167 million people, the per capita expenditure was \$193 per person per year (Table 6-4).

Slightly more than 13 percent of the U.S. population are entitled to Medicare, which includes mental health coverage. The nearly \$10 billion spent for mental health coverage under Medicare for nearly 31 million people reflects an average per capita expenditure of \$320 per year.

Nearly 12 percent of U.S. adults (27 million low-income individuals on public support) receive Medicaid coverage (with more than 2 percent having dual Medicare/Medicaid coverage). With per capita expenditures of \$481 a year for mental health services, the average cost of this coverage is 2.5 times higher than that in the private sector. An explanation for this higher average cost is the severity of illness of this population and greater intensity of services needed to meet their needs.

Finally, more than \$12 billion (other than Medicaid funds) from state/local government and more than \$1 billion from other Federal government block grant and Veterans Affairs funds contribute a total of almost \$14 billion to cover mental health services for the uninsured. Most (75 percent) of the uninsured are members of employed families who cannot afford to purchase insurance coverage. Individuals with severe and persistent mental illness who are uninsured have the highest annual costs, leaving few resources for treatment for those with less severe disorders (see Table 6-4). By applying the technique of Frank and

Organizing and Financing Mental Health Services

colleagues (1994) to 1996 funding patterns, it is estimated that public sector costs for seriously mentally ill patients receiving care in the public sector (about 5.1 million people or 1.9 percent of the population) are about \$2,430 per year. As a result, although it is only a rough estimate, only about \$40 per year per capita is available for those uninsured with less severe mental illness.

State mental health policymakers have begun to blend funding streams from Medicaid and the state public mental health expenditures under Medicaid "waivers," which offer the potential of purchasing private insurance for certain public beneficiaries who have not been eligible for Medicaid. This new option has recently been raised as a means of concentrating public mental health services on forensic and other long-term intensive care programs not covered by private insurance (Hogan, 1998). Given the extremely low level of funding for the uninsured with less severe mental illness, the recently implemented Federal legislation to fund a State Child Health Insurance Program (CHIP) could result in considerably increased coverage for previously uninsured children. It is noteworthy that CHIP benefits vary from state-to-state particularly for mental health coverage.

Traditional Insurance and the Dynamics of Cost Containment

From the time they were introduced in 1929 until the 1990s, fee-for-service (indemnity) plans, such as Blue Cross/Blue Shield, were the most common form of health insurance. Insurance plans would identify the range of services they considered effective for the treatment of all health conditions and then reimburse physicians, hospitals, and other health care providers for the usual and customary fees charged by independent practitioners. To prevent the overuse of services, insurance companies would often require patients to pay for some portion of the costs out-of-pocket (i.e., co-insurance) and would use annual deductibles, much as auto insurance companies do, to minimize the administrative costs of processing small claims.

For most health insurance plans covering somatic illness, to protect the *insured*, costs above a certain "catastrophic limit" would be borne entirely by the insurance company. To protect the *insurer* against potentially unlimited claims, however, "annual" or "lifetime limits"—often as high as \$1 million—would be imposed for most medical or surgical conditions. It was expected that any expenses beyond that limit would become the responsibility of the patient's family.

In contrast, in the case of coverage for mental health services, insurance companies often set lower annual or lifetime limits, for reasons discussed in the following paragraphs, to protect themselves against costly claims, leaving patients and their families exposed to much greater personal financial risks. The legacy of the public mental health system safety net as the provider of catastrophic coverage encouraged such practices. Further, when federal financing mechanisms such as Medicare and Medicaid were introduced, they also limited coverage of long-term care of "nervous and mental disease" to avoid shifting financial responsibility from state and local government to the Federal government.

Economists have observed that for potential insurers of mental health care or general health care, two financial concerns are key: moral hazard and adverse selection. The terms are technical, but the concepts are basic. Moral hazard reflects a concern that if people with insurance no longer have to pay the full costs of their own care, they will use more services services that they do not value at their full cost. To control moral hazard, insurers incorporate cost-sharing and care management into their policies. Adverse selection reflects a concern that, in a market with voluntary insurance or multiple insurers, plans that provide the most generous coverage will attract individuals with the greatest need for care, leading to elevated service use and costs for those insurers independent of their efficiency in services provision. To control adverse selection, insurers try to restrict mental health coverage to avoid enrolling people with higher mental health service needs.

Both forces are at work in the insurance market, and they tend to be stronger for coverage of some mental health services than for some general health services. There is evidence of moral hazard, for example, from the RAND Health Insurance Experiment, which showed that increased use of insured services in response to decreased out-of-pocket costs for consumers (known as "demand response") is twice as great for outpatient mental health services (mostly psychotherapy) as for all ambulatory health services taken together (Manning et al., 1989). The RAND study did not include a sufficient number of individuals who used inpatient care or who were severely disabled to make a determination of the effect of changes in price on hospital care or on outpatient use by individuals with severe mental disorders.

While these economic forces are important, insurer responses to them may have been exaggerated. In the fee-for-service insurance system, for example, some insurers have addressed their concerns about moral hazard by assigning higher cost-sharing to mental health services. Coverage limitations, imposed to control costs, have been applied unevenly, however, and without full consideration of their consequences. In particular, higher cost-sharing, such as placing a 50 percent copayment on outpatient psychotherapy, may reduce moral hazard and inappropriate use, but it may also reduce appropriate use. Limits on coverage may reduce adverse selection but leave people to bear catastrophic costs themselves.

In addition, such measures do not address the issue of fairness in coverage policy. In particular, although similar levels of price response and presumed moral hazard occur in other areas of health care, mental health coverage is singled out for special cost-sharing arrangements. There may be a rationale for some level of differential cost-sharing, but such policies are fair only if the benefit design policies are applied to all services in which demand is highly responsive to price.

Managed Care

Managed care represents a confluence of several forces shaping the organization and financing of health care. These include the drive to deliver more highly individualized, cost-effective care; a more health-promoting and preventive orientation (often found in

health maintenance organizations, or HMOs); and a concern with cost containment to address the problem of moral hazard. Managed care implies a range of financing and payment strategies that depart in important ways from traditional fee-for-service indemnity insurance. Managed care strategies have resulted in dramatic savings in a wide range of settings over the past decade (Bloom et al., 1998; Callahan et al., 1995; Christianson et al., 1995; Coulam & Smith, 1990; Goldman et al., 1998; Ma & McGuire, 1998).

Major Types of Managed Care Plans

Health maintenance organizations were the first form of managed care. Originally developed by the Kaiser Foundation to provide health services to company employees, these large group practices initiated contracts to provide all medical services on a prepaid, per capita basis. Medical staff members were originally salaried and not paid on a fee-for-service basis, as is the case in most other financing arrangements. However, in recent years, some HMOs have developed networks of physicians—so-called Independent Practice Associations, or IPAs—who are paid on a fee-for-service basis and function under common management guidelines.

Health maintenance organizations initially treated only those mental disorders that were responsive to short-term treatment, but they reduced copayments and deductibles for any brief therapy. There was an implicit reliance on the public mental health system for treatment of any chronic or severe mental disorder—especially those for whom catastrophic coverage was needed.

Preferred Provider Organizations (PPOs) are managed care plans that contract with networks of providers to supply services. Providers are typically paid on a discounted fee-for-service basis. Enrollees are offered lower cost-sharing to use providers on the "preferred" list but can use non-network providers at a higher out-of-pocket cost.

Point-of-Service (POS) plans are managed care plans that combine features of prepaid (or capitated) and fee-for-service insurance. Enrollees can choose to use a network provider at the time of service. A significant copayment typically accompanies use of

Organizing and Financing Mental Health Services

non-network providers. Although few plans are purely of one type, an important difference between a PPO and a POS is that in a PPO plan, the patient may select any type of covered care from any in-network provider, while in a POS, use of in-network services must be approved by a primary care physician.

In Carve-out Managed Behavioral Health Care, segments of insurance risk—defined by service or disease—are isolated from overall insurance risk and covered in a separate contract between the payer (insurer or employer) and the carve-out vendor. Even with highly restrictive admission criteria, many HMOs have recently found it cost effective to carve out mental health care for administration by a managed behavioral health company, rather than relying on in-house staff. This arrangement permits a larger range of services than can be provided by existing staff without increasing salaried staff and management overhead costs. Carve-outs generally have separate budgets, provider networks, and financial incentive arrangements. Covered services, utilization management techniques, financial risk, and other features vary depending on the particular carve-out contract. The employee as a plan member may be unaware of any such arrangement. These separate contracts delegate management of mental health care to specialized vendors known as managed behavioral health care organizations (MBHOs).

There are two general forms of carve-outs: payer carve-outs and health plan subcontracts. In payer carve-outs, an enrollee chooses a health plan for coverage of health care with the exception of mental health and must enroll with a separate carve-out vendor for mental health care. Examples of payer carve-outs include the state employee health plans of Ohio and Massachusetts. In health plan subcontracts, administrators of the general medical plan arrange to have mental health care managed by a carve-out vendor or MBHO; the plan member does not have to take steps to select mental health coverage. Examples of payer carve-outs include health plans associated with Prudential and Humana.

The Ascent of Managed Care

Over the past decade, the pace of change in U.S. health insurance has been striking. In 1988, insurance based on fee-for-service was the predominant method of financing health care. But in the ensuing decade, various management techniques were added such that insurance that used "unmanaged fee-for-service" as its payment mechanism plummeted from 71 percent to 15 percent (HayGroup, 1998). Managed care arrangements (HMO, PPO, or POS plans), which fundamentally alter the way in which health care resources are allocated, now cover the majority (56 percent) of Americans (Levit & Lundy, 1998). During the 1988–1998 decade, PPO plans rose from being 13 percent to 34 percent of primary medical plans, with a similar rapid rise in HMO plans from 9 percent to 24 percent. Point-ofservice (POS) plans rose more slowly as the principal medical plan, from 12 percent in 1990 to 20 percent in 1998 (HayGroup, 1998).

Managed care has also made significant inroads into publicly funded health care. Between 1988 and 1997, Medicaid enrollees in managed care rose from 9 percent to 48 percent, while Medicare enrollees in managed care increased from 5 percent to 14 percent. Most Medicaid and Medicare managed care growth has occurred since 1994. In Medicaid, growth is primarily focused on the population receiving Temporary Aid to Needy Families support (as opposed to the population with severe and chronic mental illness, eligible for Medicaid because of Supplemental Security Incomeeligible disability) (HayGroup, 1998).

In 1999, almost 177 million Americans with health insurance (72 percent) were enrolled in managed behavioral health organizations. This represents a 9 percent increase over enrollment in 1998 (OPEN MINDS, 1999). This administrative mechanism has changed the incentive structure for mental health professionals, with "supply-side" controls (e.g., provider incentives) replacing "demand-side" controls (e.g., benefit limits) on service use and cost. In addition, the privatization of service delivery is increasing in the public sector. As a result of these changes, access to specific types of mental health

services is increasingly under the purview of managed behavioral care companies and employers.

It is difficult to know precisely how many people are enrolled in various forms of carve-out plans. Recent reports estimate that 35 percent of employers with more than 5,000 employees have created payer carve-outs, while only 5 percent of firms with fewer than 500 employees have adopted them (Mercer/Foster-Higgins, 1997). A survey of 50 large HMOs revealed that roughly half of HMO enrollees were enrolled in carveout plans (OPEN MINDS, 1999). The carve-out concept has also been adopted by a number of state Medicaid programs. At most recent count, 15 states are using payer carve-out arrangements to manage mental health care (Substance Abuse and Mental Health Services Administration [SAMHSA], 1998). More than 20 states use carve-out arrangements to manage non-Medicaid public sector services.

As the states have adopted Medicaid managed care for mental health, at least two distinct models have emerged. States that entered managed care early have tended to issue contracts to private sector organizations to perform both administrative (payments, network development) and management (utilization review) functions. States that entered managed care more recently have tended to contract administrative functions with Administrative Services Organizations (ASOs), while retaining control of management functions. Under any of these arrangements, financial risk for the provision of care to a particular population can be distributed in a variety of ways (Essock & Goldman, 1995).

As the foregoing discussion indicates, mental health services associated with private insurance, public insurance, and public direct-service programs often have managed mental health care arrangements that are organized differently than are overall health services. These arrangements have emerged mostly within the past decade. The next section describes how the ascent of managed care has shifted patterns of resource allocation toward financial incentives aimed at providers, organizational structure, and administrative mechanisms and away from the use of benefit design (e.g., using copayments and annual deductibles)

meant to encourage consumer cost-sharing. As a result, cost control and care management are accomplished through a more complicated set of policies than at any time in the recent past, and benefit design is no longer the only factor in determining service allocation or predicting costs to a health insurer.

Dynamics of Cost Controls in Managed Care

In a managed care system, the moral hazard of unnecessary utilization need not be addressed through benefit design. Utilization typically is controlled at the level of the provider of care, through a series of financial incentives and through direct management of the care. For example, managed care reduces cost in part by shifting treatment from inpatient to outpatient settings, negotiating discounted hospital and professional fees, and using utilization management techniques to limit unnecessary services. In this fashion, at least theoretically, unnecessary utilization, the moral hazard, is eliminated at the source, on a case-by-case basis.

Adverse selection may be addressed through regulations, such as mandates in coverage that require all insurers in a market to offer the same level of services. In this way, no one insurer runs the risk that offering superior coverage will necessarily attract people who are higher utilizers of care. Efforts to regulate adverse selection may not produce the intended effect, however, when insurers who offer the same services use management techniques to control costs by restricting care to those who use services most intensely—effectively denying care to those who most need it. In such instances, patients with the greatest needs might become concentrated in plans with the most generous management of care. This may lead to financial losses for such plans or encourage them to cut back on services for those who need care most or to divert resources from other beneficiaries.

As managed care grows, the structure of the industry changes, with companies merging and disappearing. Managed behavioral health care organizations now cover approximately 177 million Americans, with only three companies controlling 57 percent of all insured persons (or 91 million covered

Organizing and Financing Mental Health Services

lives) (OPEN MINDS, 1999). However, the range of management controls currently applied to enrollees in covered plans extends from simple utilization review of hospitalizations on an administrative services only (ASO) contract to prepaid, at-risk contracts with extensive employee assistance plan (EAP) screening and networks of eligible mental health specialists and hospitals providing services for discounted fees. If and when mental health service benefits expand, it is possible for managed behavioral health plans to tighten the level of supply-side controls to maintain costs at a desired level.

Some consumers and consumer advocates have expressed concern that the management measures used to cut the costs of health care may also lower its quality and/or accessibility. Although this issue was addressed by the President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry and by current Patient Bill of Rights legislation, more research is needed to understand the effects of industry competition on costs, access, and quality. (See Appendix 6-A for Patient Bill of Rights.)

Managed Care Effects on Mental Health Services Access and Quality

Managed care demonstrably reduces the cost of mental health services (Ma & McGuire, 1998; Goldman et al., 1998; Callahan et al., 1995; Bloom et al., 1998; Christianson et al., 1995; Coulam & Smith, 1990). That was one of its goals—to remove the excesses of overutilization, such as unnecessary hospitalization, and to increase the number of individuals treated by using more cost-effective care. This was to be accomplished through case-by-case "management" of care. The risk of cost-containment, however, is that it can lead to undertreatment. Research is just beginning on how managed care cost-reduction techniques affect access and quality. Excessively restrictive costcontainment strategies and financial incentives to providers and facilities to reduce specialty referrals, hospital admissions, or length or amount of treatment may ultimately contribute to lowered access and quality of care. These restrictions pose particular risk to people on either end of the severity spectrum: individuals with

mental health problems may be denied services entirely, while the most severely and persistently ill patients may be undertreated. These risks must be seen, however, in the context of similar problems inherent in fee-for-service practice. Access and quality problems and the failure to treat those most in need predate managed care.

Impact on Access to Services

Despite considerable concern that managed care cost reductions may inappropriately restrict access to mental health services, the actual impact of these reductions has received relatively little systematic study. In addition, there are currently no benchmark standards for access to specialty mental health services.⁵ A system to measure access and track it over time is clearly needed. Establishing targets for treated prevalence⁶ is also problematic because the appropriate level and type of service utilization for specific population groups is only beginning to be documented (McFarland et al., 1998).

The term "access to mental health services" refers generally to the ability to obtain treatment with appropriate professionals for mental disorders. Having health insurance—and the nature of its coverage and administration—are critical determinants of such access. But so are factors such as the person's clinical status and personal and sociocultural factors affecting

desire for care; knowledge about mental health services and the effectiveness of current treatments; the level of insurance copayments, deductibles, and limits; ability to obtain adequate time off from work and other responsibilities to obtain treatment; and the availability of providers in close proximity, as well as the availability of transportation and child care. In addition, because the stigma associated with mental disorders is still a barrier to seeking care, the availability of services organized in ways that reduce stigma—such as employee assistance programs—can provide important gateways to further treatment when necessary.

A small number of studies provide a limited picture of access to managed behavioral health care. It has been found that the proportion of individuals receiving mental health treatment varies considerably across managed behavioral health plans (National Advisory Mental Health Council, 1998). Some long-term case studies of managed care's impact on access find that the probability of using mental health care—especially outpatient care—increases after managed behavioral health care is implemented in private insurance plans (Goldman et al., 1998).

Impact on Quality of Care

The quality of care within health systems has been assessed traditionally on three dimensions: (1) the structure of the health care organization or system; (2) the *process* of the delivery of health services; and (3) the *outcomes* of service for consumers (Donabedian, 1966). Many of these dimensions are being tapped in current efforts to assess—and, it is hoped, ultimately improve—the overall quality of mental health care in the United States. These include the use of accreditation practices, clinical- and systems-level practice guidelines, outcome measures and "report cards," and systems-level performance indicators. For example, to maximize the potential mental health benefit of patients' contact with the primary health care sector, which 70 to 80 percent of all Americans visit at least once a year, guidelines and treatment algorithms have been developed. The Agency for Health Care Policy and Research has developed comprehensive guidelines for the treatment of depression in primary

⁵ Between the early 1980s and 1990s—prior to the dominance of managed care—about 5.8 percent of U.S. adults used some type of specialty mental health outpatient services in any year. This rate now can be used as one reference point for assessing subsequent changes in access to mental health services, although there is no evidence on the appropriateness of this care.

⁶ Researchers and administrators often report access in terms of *treated prevalence* or *penetration rates*. These rates reflect the proportion of individuals in a given population (e.g., members of a particular managed behavioral health care plan) that use specialty mental health and/or substance abuse services in 1 year.

⁷ This phrase has many additional dimensions and meanings to consumers, health care providers, and health services researchers. These include (a) waiting time for emergency, urgent, and routine initial and followup appointments; (b) telephone access, including call pick-up times and call abandonment rates; (c) access to a continuum of services, including treatment in the least restrictive setting; (d) access to providers from a full range of mental health disciplines; (e) choice of individual provider; (f) geographic access; and (g) access to culturally competent treatment.

care settings (1993) as well as recommendations for the treatment of schizophrenia (Patient Outcome Research Team, Lehman & Steinwachs, 1998). Also funded by the Agency is the Depression PORT that will soon release findings on the quality and cost of the treatment of depression in managed, primary care practice (Wells et al., in press). In addition, multiple studies are now under way to develop better coordination between primary care physicians and mental health specialists

for management of both chronic and acute mental

disorders (Katon et al., 1997; Wells, 1999). These

studies are described in more detail in Chapters 4

and 5.

Current incentives both within and outside managed care generally do not encourage an emphasis on quality of care. Nonetheless, some managed mental health systems recognize the potential uses of quality assessment of their services. These include monitoring and assuring quality of care to public and private oversight organizations; developing programs to improve services or outcomes from systematic empirical evaluation; and permitting reward on the basis of quality and performance, not simply cost (Kane et al., 1994, 1995; Institute of Medicine, 1997; President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry, 1997). In the public sector, the Center for Mental Health Services (CMHS), in conjunction with the Mental Health Statistics Improvement Program, has developed a Consumer-Oriented Report Card. Designed to obtain a consumer perspective on access, appropriateness, prevention, and outcome, it is being tested in 40 states under CMHS grant support.

Efforts are ongoing within managed behavioral health systems to develop quality-reporting systems based on existing administrative claims data, which measure aspects of the process of care as well as some clinical outcome data (American Managed Behavioral Healthcare Association, 1995; American College of Mental Health Administrators, 1997; National Committee for Quality Assurance, 1997).

The first comparative study of quality indicators within the managed behavioral health care industry (Frank & Shore, 1996) has revealed very diverse

Organizing and Financing Mental Health Services

practices. For example, across the responding companies, expected outpatient followup visits within 30 days after hospital discharge for depression occurred among 92 percent of patients in one plan, but only 39 percent in another. One indicator of inadequate hospital treatment or discharge planning is rapid hospital readmission after discharge—an event that occurred in 2 percent to 41 percent of discharges. Another indicator of quality is the proportion of patients with schizophrenia who received a minimum of four medication visits per year; this figure ranged from 15 percent to 97 percent. Measures of access (treated prevalence rates) also varied widely. Although methodological problems probably contribute to the variation among companies, these data raise concerns about real differences in quality among managed behavioral health care companies. They also underscore the need to improve quality measurement.

In a more positive vein, investigators recently found that rates of readmission after hospital discharge were not adversely affected by the 1993 transition to a managed behavioral health carve-out for Massachusetts state employees. In fact, the proportion of cases receiving outpatient followup (within 15 or 30 days) actually increased for patients with major depressive disorder, despite substantial reductions in inpatient utilization and costs. However, because the study was based on the plan's administrative claims data, only limited conclusions could be made about the quality of care provided (Merrick, 1997).

Clinical outcome data systems, although more expensive and complicated than administrative data systems, have much greater potential for evaluating how programs and practices actually affect patient outcomes. Several managed care companies are currently testing the feasibility of implementing systemwide collection of clinical outcome data, to be managed through newly developed comprehensive clinical quality information systems (Goldman, 1997; Goldman et al., 1998).

Another way to measure quality takes into account outcomes outside the mental health specialty sector. Two recent studies suggest that when management and financial incentives limit access to mental health care

or encourage a shift to general health care services for mental health care, disability may increase and work performance decline (Rosenheck et al., 1999; Salkever, 1998). These losses to employers may well offset management-based savings in mental health specialty costs. Findings such as these raise concern about the use of shortsighted cost-cutting measures that may contribute to less appropriate and less effective treatment, reduced work function, and no net economic benefits.

Many of the administrative techniques used in managed care (such as case management, utilization review, and implementation of standardized criteria) have the potential to improve the quality of care by enhancing adherence to professional consensus treatment guidelines (Berndt et al., 1998) and possibly improving patient outcomes (Katon et al., 1997). However, little is known about what happens when management is introduced into service systems in combination with high cost-sharing (often the case with non-parity mental health benefits) (Burnam & Escarce, 1999). These combined limitations on services may seriously inhibit the provision of full and necessary treatment and lower the quality of care. The differential impact on service use on the basis of gender or other sociocultural factors is unknown.

In summary, managed behavioral health plans differ considerably in their access and other aspects of quality in mental health care. Current practices often provide little incentive to improve quality. There is, however, some evidence that access and quality can be maintained or improved after managed care is introduced (Merrick, 1997). This is particularly important because some evidence suggests that limitations in mental health access affect people's wellbeing and result in decreases in work performance, increased absenteeism, and increased use of medical services (Rosenheck et al., 1999). Outcome assessments which focus on functional improvements are particularly important in the mental health area because of the ease with which management practices have been able to reduce treatment intensity and cost of mental health services.

Toward Parity in Coverage of Mental Health Care

"Parity" refers to the effort to treat mental health financing on the same basis as financing for general health services. In recent years advocates have repeatedly tried to expand mental health coverage—in the face of cost-containment policies that have been widespread since the 1980s. Parity legislation is an effort to address at once both the adverse selection problem and the fairness problem associated with moral hazard. The fundamental motivation behind parity legislation is the desire to cover mental illness on the same basis as somatic illness, that is, to cover mental illness fairly. A parity mandate requires all insurers in a market to offer the same coverage, equivalent to the coverage for all other disorders. The potential ability of managed care to control costs (through utilization management of moral hazard) without limiting benefits makes a parity mandate more affordable than under a fee-for-service system.

Managed care coupled with parity laws offers opportunities for focused cost control by eliminating moral hazard without unfairly restricting coverage through arbitrary limits or cost-sharing and by controlling adverse selection. However, continued use of unnecessary limits or overly aggressive management may lead to undertreatment or to restricted access to services and plans.

Benefit Restrictions and Parity

As noted above, mental health benefits are often restricted through greater limits on their use or by imposing greater cost-sharing than for other health services. Despite both the cost-controlling impact of managed care and advocacy to expand benefits, inequitable limits continue to be applied to mental health services. Parity legislation in the states and Federal government has attempted to redress this inequity.

In 1997, the most common insurance restriction was an annual limit on inpatient days; annual or lifetime limits were used somewhat less. Higher cost-sharing was used by the smallest percentage, with the use of separate deductibles almost nonexistent on

inpatient mental health benefits. For outpatient mental health services, a quarter of the most prevalent plans had no special limitations (Buck et al., 1999). Unlike the situation for inpatient services, there was no marked preference for the use of any particular type of limitation for outpatient services.

Mental health benefits are significantly restricted when special limitations are employed. Maximum lifetime limits for both inpatient and outpatient services were typically only \$25,000. In some extreme cases, annual limits were only \$5,000 for inpatient care and \$2,000 for outpatient care. Day limits remained at the traditional limit of 30 inpatient days. However, the median limit on outpatient visits, traditionally 20, reached 25 in 1997 (Buck et al., 1999)

Studies show that the gap in insurance coverage between mental health and other health services has been getting wider. One study found that the proportion of employees with coverage for mental health care increased from 1991 to 1994 (Jensen et al., 1998). However, more have multiple limits on their benefits, partly due to the increased use of managed care. Another study found that while health care costs per employee grew from 1989 to 1995, behavioral health care costs decreased, both absolutely and as a share of employers' total medical plan costs (Buck & Umland, 1997).

A report by the HayGroup (1998) on changes in the health plans of medium and large employers provides more recent evidence for these trends. Between 1988 and 1997, the proportion of such plans with day limits on inpatient psychiatric care increased from 38 percent to 57 percent, whereas the proportion of plans with outpatient visit limits rose from 26 percent to 48 percent. On the basis of this and other information, the HayGroup estimated that the value of behavioral health care benefits within the surveyed plans decreased from 6.1 percent to 3.1 percent from 1988 to 1997 as a proportion of the value of the total health benefit (HayGroup, 1998).

Extensive limits on mental health benefits can create major financial burdens for patients and their families. One economic study modeled the out-ofpocket burden that families face under existing mental

Organizing and Financing Mental Health Services

health coverage using different mental health expense scenarios (Zuvekas et al., 1998). For a family with mental health treatment expenses of \$35,000 a year, the average out-of-pocket burden is \$12,000; for those with \$60,000 in mental health expenses a year, the burden averages \$27,000. This is in stark contrast to the out-of-pocket expense of only \$1,500 and \$1,800, respectively, that a family would pay for medical/surgical treatment.

Legislative Trends Affecting Parity in Mental Health Insurance Coverage

Federal legislative efforts to achieve parity in mental health insurance coverage date from the 1970s and have continued through to present times. However, a major parity initiative was included in the failed 1994 Health Security Act (the Clinton Administration's health care reform proposal). Although national health care reform stalled, the drive for mental health parity continued, culminating in passage of the Mental Health Parity Act in 1996. Implemented in 1998, this legislation focused on only one aspect of the inequities in mental health insurance coverage: "catastrophic" benefits. It prohibited the use of lifetime and annual limits on coverage that were different for mental and somatic illnesses. As Federal legislation, it included within its mandate some of the Nation's largest companies that are self-insured and otherwise exempted from state parity laws because of the Employment Retirement Income Security Act. Although it was seen as an important first substantive step and rhetorical victory for mental health advocacy, the Parity Act was limited in a number of important ways. Companies with fewer than 50 employees or which offered no mental health benefit were exempt from provisions of the law. The parity provisions did not apply to other forms of benefit limits, such as per episode limits on length of stay or visit limits, or copayments or deductibles, and they did not include substance abuse treatment. In addition, insurers who experienced more than a 1 percent rise in premium as a result of implementing parity could apply for an exemption. Despite these limitations, Federal parity legislation put mental health coverage concerns "on the

map" for policymakers and demonstrated an unprecedented concern to redress inequities in coverage (Goldman, 1997).

State efforts at parity legislation paralleled those at the Federal level. During the past decade, a growing number of states have implemented parity (Hennessy & Stephens, 1997; National Advisory Mental Health Council, 1998; SAMHSA, 1999). Some (e.g., Texas) target their parity legislation narrowly to include only people with severe mental disorders; others use a broader definition of mental illness for parity coverage (e.g., Maryland) and include, in some cases, substance abuse. Some states (e.g., Maryland) focus on a broad range of insured populations; others focus only on a single population (e.g., Texas state employees) (National Alliance for the Mentally III, 1999).

Until recently, efforts to achieve parity in insurance coverage for the treatment of mental disorders were hampered by limited information on the effects of such mandates. This led to wide variations in estimates of the costs of implementing such laws. For example, past estimates of the increase in premium costs of full parity in proposed federal legislation have ranged from 3 percent to more than 10 percent (Sing et al., 1998).

Recent analyses of the experience with state and Federal parity laws have begun to provide a firmer basis for such estimates. These studies indicate that implementing parity laws is not as expensive as some have suggested.

Case studies of five states that had a parity law for at least a year revealed a small effect on premiums—at most a change of a few percent, plus or minus. Further, employers did not attempt to avoid the laws by becoming self-insured or by passing on costs to employees (Sing et al., 1998). Separate studies of laws in Texas, Maryland, and North Carolina have shown that costs actually declined after parity was introduced where legislation coincided with the introduction of managed care. In general, the number of users increased, with lower average expenditures per user. There is no evidence on the appropriateness of treatment delivered following the introduction of parity laws (National Advisory Mental Health Council, 1998). Similar findings come from case studies of private

insurance plans that have provided generous mental health benefits (Goldman et al., 1998) and of plans that have switched to carve-out managed care (Ma & McGuire, 1998; Sturm et al., 1999).

Some evidence also exists of the effects of the Federal Mental Health Parity Act, which went into effect in 1998. Under that law, group health plans providing mental health benefits may not impose a lower lifetime or annual dollar limit on mental health benefits than exists for medical/surgical benefits. A national survey of employers conducted after the Act went into effect found that while mid- to large-size companies made some reductions in benefits and added cost-sharing, small companies (the majority of companies in the country) did not make compensatory changes to their benefits. This was because they judged that the projected costs were minimal or nonexistent (SAMHSA, 1999). Additional evidence that the law has resulted in minimal added expense comes from exemptions that may be granted if a plan experiences a cost increase of at least 1 percent because of the law. In the first year of the law's implementation, only a few plans nationwide had requested such an exemption (SAMHSA, 1999).

In summary, evidence of the effects of parity laws shows that their costs are minimal. Introducing or increasing the level of managed care can significantly limit or even reduce the costs of implementing such laws. Within carve-out forms of managed care, research generally shows that parity results in less than a 1 percent increase in total health care costs. In plans that have not previously used managed care, introducing parity simultaneously with managed care can result in an actual reduction in such costs.

Conclusions

In the United States in the late 20th century, researchbased capabilities to identify, treat, and, in some instances, prevent mental disorders are outpacing the capacities of the service system the Nation has in place to deliver mental health care to all who would benefit from it. Approximately 10 percent of children and adults receive mental health services from mental health specialists or general medical providers in a given year. Approximately one in six adults, and one in five children, obtain mental health services either from health care providers, the clergy, social service agencies, or schools in a given year.

Chapter 6 discusses the organization and financing of mental health services. The chapter provides an overview of the current system of mental health services, describing where people get care and how they use services. The chapter then presents information on the costs of care and trends in spending. Only within recent decades, in the face of concerns about discriminatory policies in mental health financing, have the dynamics of insurance financing become a significant issue in the mental health field. In particular, policies that have emphasized cost containment have ushered in managed care. Intensive research currently is addressing both positive and adverse effects of managed care on access and quality, generating information that will guard against untoward consequences of aggressive cost-containment policies. Inequities in insurance coverage for mental health and general medical care—the product of decades of stigma and discrimination—have prompted efforts to correct them through legislation designed to produce financing changes and create parity. Parity calls for equality between mental health and other health coverage.

- 1. Epidemiologic surveys indicate that one in five Americans has a mental disorder in any one year.
- 2. Fifteen percent of the adult population use some form of mental health service during the year. Eight percent have a mental disorder; 7 percent have a mental health problem.
- 3. Twenty-one percent of children ages 9 to 17 receive mental health services in a year.
- 4. The U.S. mental health service system is complex and connects many sectors (public-private, specialty-general health, health-social welfare, housing, criminal justice, and education). As a result, care may become organizationally fragmented, creating barriers to access. The system is also financed from many funding streams, adding to the complexity, given sometimes competing incentives between funding sources.

Organizing and Financing Mental Health Services

- In 1996, the direct treatment of mental disorders, substance abuse, and Alzheimer's disease cost the Nation \$99 billion; direct costs for mental disorders alone totaled \$69 billion. In 1990, indirect costs for mental disorders alone totaled \$79 billion.
- 6. Historically, financial barriers to mental health services have been attributable to a variety of economic forces and concerns (e.g., market failure, adverse selection, moral hazard, and public provision). This has accounted for differential resource allocation rules for financing mental health services.
 - a. "Parity" legislation has been a partial solution to this set of problems.
 - Implementing parity has resulted in negligible cost increases where the care has been managed.
- In recent years, managed care has begun to introduce dramatic changes into the organization and financing of health and mental health services.
- 8. Trends indicate that in some segments of the private sector per capita mental health expenditures have declined much faster than they have for other conditions.
- 9. There is little direct evidence of problems with quality in well-implemented managed care programs. The risk for more impaired populations and children remains a serious concern.
- 10. An array of quality monitoring and quality improvement mechanisms has been developed, although incentives for their full implementation have yet to emerge. In addition, competition on the basis of quality is only beginning in the managed care industry.
- 11. There is increasing concern about consumer satisfaction and consumers' rights. A Consumers Bill of Rights has been developed and implemented in Federal Employee Health Benefit Plans, with broader legislation currently pending in the Congress.

Appendix 6-A: Quality and Consumers' Rights

The Federal government's concern with quality in the Nation's health care system was expressed in President Clinton's charge to the Advisory Commission on Consumer Protection and Quality in the Health Care Industry (March 26, 1997) "to recommend such measures as may be necessary to promote and assure health care quality and value and protect consumers and workers in the health care system." In November 1997 the Commission recommended a Consumer Bill of Rights and Responsibilities (President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry, 1997).

The Consumer Bill of Rights and Responsibilities (Bill of Rights) is intended to meet three major goals:

- Strengthen consumer confidence by assuring that
 the health care system is fair and responsive to
 consumers' needs; it gives consumers credible and
 effective mechanisms for addressing their
 concerns and encourages them to take an active
 role in improving and assuring their health.
- Reaffirm the importance of a strong relationship between consumers and their health care professionals.
- Underscore the critical role of consumers in safeguarding their own health by establishing both rights and responsibilities for all participants in improving health status.

The Bill of Rights addresses a number of issues that are particularly relevant to mental health care:

- Information disclosure of comparable measures of quality and consumer satisfaction from health plans, professionals, and facilities;
- Direct access to specialists of choice for consumers with complex or serious medical conditions who require frequent specialty care;
- Authorization, when required, for an adequate number of visits under an approved treatment plan;
- Vulnerable groups, including individuals with mental disabilities, require special attention by decisionmakers to protect their health coverage and quality of care;

- Confidentiality protections for sensitive services, such as mental health and substance abuse services, provided by health plans, providers, employers, and purchasers to safeguard against improper use or release of individually identifiable information.
- To move the mental health care system from a focus on providers to a focus on consumers, future care systems and quality tools will need to reflect person-centered values. This nascent trend is driven both by the consumer movement in American society and by a strong focus on consumer rights in a managed care environment. First steps include the voluntary adoption of the principles of the Consumer Bill of Rights by Federal agencies and passage of legislation requiring their national implementation.

References

- Agency for Health Care Policy and Research. (1993). Depression in primary care. Vol. 2: Treatment of major depression (Clinical Practice Guideline No. 5; AHCPR Publication No. 93-0551). Washington, DC: Author.
- American College of Mental Health Administrators. (1997). Final report of Santa Fe Summit '97. Preserving quality and value in the managed care equation. Pittsburgh, PA: Author.
- American Managed Behavioral Healthcare Association. (1995). Performance measures for managed behavioral healthcare programs (PERMS 1). Washington, DC: AMBHA Quality Improvement and Clinical Services Committee.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author
- Berndt, G. B., Busch, S. H., & Frank, R. G. (1998). *Price indexes for acute phase treatment of depression* (NBER Working Paper No. W6799) [On-line]. Cambridge, MA: National Bureau of Economic Research. Available: http://www.nber.org
- Bloom, J., Hu, T., Wallace, N., Cuffel, B., Hausman, J., & Schaffer, R. (1998). Mental health costs and outcomes under alternative capitation in systems in Colorado: Early results. *Journal of Mental Health Policy and Economics*, *1*, 3–13.

Organizing and Financing Mental Health Services

- Buck, J. A., Teich, J. L., Umland, B., & Stein, M. (1999). Behavioral health benefits in employer-sponsored health plans, 1997. *Health Affairs (Millwood)*, 18, 67–78.
- Buck, J. A., & Umland, B. (1997). Covering mental health and substance abuse. *Health Affairs (Millwood)*, 16, 120–126.
- Bureau of the Census. (1996). *Health insurance coverage:* 1996. *Table A: Health insurance coverage status and type of coverage:* 1996 [Online]. Washington, DC: Author. Available: http://www.census.org/hhrs/hlthins/cover96//c96taba.html
- Burnam, M. A., & Escarce, J. J. (1999). Equity in managed care for mental disorders. *Health Affairs (Millwood)*, 18, 22–31
- Callahan, J. J., Shepard, D. S., Beinecke, R. H., Larson, M. J., & Cavanaugh, D. (1995). Mental health/substance abuse treatment in managed care: The Massachusetts Medicaid experience. *Health Affairs (Millwood)*, 14, 173–184.
- Christianson, J. B., Manning, W., Lurie, N., Stoner, T. J., Gray, D. Z., Popkin, M., & Marriott, S. (1995). Utah's prepaid mental health plan: The first year. *Health Affairs (Millwood)*, *14*, 160–172.
- Coulam, G., & Smith, J. (1990). Evaluation of the CPA-Norfolk Demonstration: Final Report. Cambridge, MA: ABT Associates.
- Donabedian, A. (1966). Evaluating the quality of managed care. *Milbank Memorial Fund Quarterly*, 3(Suppl.), 166–206.
- Drake, R. E., Mercer-McFaddin, C., Mueser, K. T., McHugo, G. J., & Bond, G. R. (1998). Review of integrated mental health and substance abuse treatment for patients with dual disorders. *Schizophrenia Bulletin*, 24, 589–608.
- DSM-IV. See American Psychiatric Association. (1994).
- Essock, S. M., & Goldman, H. H. (1995). States' embrace of managed mental health care. *Health Affairs (Millwood)*, 14, 34–44.
- Frank, R. G., McGuire, T. G., & Goldman, H. (1996). Buying in the public interest. Washington, DC: Bazelon Center.
- Frank, R. G., McGuire, T. G., Regier, D. A., Manderscheid, R., & Woodward, A. (1994). Paying for mental health and substance abuse care. *Health Affairs (Millwood)*, 13, 337–342.

- Frank, R. G., & Shore, M. F. (1996). *Performance measures* for managed behavioral healthcare programs: *PERMS* 1.0. Washington, DC: American Behavioral Healthcare Association.
- Goldman, H. H., Cohen, G., & Davis, M. (1985). Expanded Medicare outpatient coverage for Alzheimer's disease and related disorders. *Hospital and Community Psychiatry*, *36*, 939–942.
- Goldman, H., Frank, R., & McGuire, T. (1994). Mental health care. In E. Ginzberg (Ed.), *Critical issues in U.S.* health reform (pp. 73–92). Boulder, CO: Westview.
- Goldman, W. (1997). Goal focused treatment planning and outcomes. Minneapolis, MN: United Behavioral Health.
- Goldman, W., McCulloch, J., & Sturm, R. (1998). Costs and use of mental health services before and after managed care. *Health Affairs (Millwood)*, *17*, 40–52.
- HayGroup. (1998). Health care plan design and cost trends—1988 through 1997. Arlington, VA: Author.
- Hennessy, K. D., & Stephens, S. (1997). Mental health parity: Clarifying our objectives. *Psychiatric Services*, 48, 161–164.
- Hogan, M. (1998). The public sector and mental health parity: Time for inclusion. *Journal of Mental Health Policy and Economics*, 1, 189–198.
- Institute of Medicine. (1997). *Managing managed care: Quality improvement in behavioral health* (Vols. 1 and 2). Washington, DC: National Academy Press.
- Jensen, G. A., Rost, K., Burton, R. P., & Bulycheva, M. (1998). Mental health insurance trends in the 1990s: Are employers offering less to more? *Health Affairs (Millwood)*, 17, 201–208.
- Kane, R., Bartlett, J., & Potthoff, S. (1994). Integrating an outcomes information system into managed care for substance abuse. *Behavioral Healthcare Tomorrow*, *May/June*, 57–61.
- Kane, R., Bartlett, J., & Potthoff, S. (1995). Building an empirically based outcomes information system for managed mental health care. *Psychiatric Services*, 46, 459–461.
- Katon, W., VonKorff, M., Lin, E., Unutzer, J., Simon, G.,
 Walker, E., Ludman, E., & Bush, T. (1997).
 Population-based care of depression: Effective disease management strategies to decrease prevalence. *General Hospital Psychiatry*, 19, 169–178.

- Kessler, R. C., Frank, R. G., Edlund, M., Katz, S. J., Lin, E., & Leaf, P. (1997). Differences in the use of psychiatric outpatient services between the United States and Ontario. New England Journal of Medicine, 336, 551–557.
- Kessler, R. C., McGonagle, K. A., Zhao, S., Nelson, C. B.,
 Hughes, M., Eshleman, S., Wittchen, H. U., & Kendler,
 K. S. (1994). Lifetime and 12-month prevalence of
 DSM-III-R psychiatric disorders in the United States.
 Results from the National Comorbidity Survey.
 Archives of General Psychiatry, 51, 8–19.
- Kessler, R. C., Berglund, P. A., Zhao, S., Leaf, P. J., Kouzis, A. C., Bruce, M. L., Friedman, R. M., Grosser, R. C., Kennedy, C., Narrow, W. E., Kuehnel, T. G., Laska, E. M., Manderscheid, R. W., Rosenheck, R. A., Santoni, T. W., & Schneier, M. (1996). The 12-month prevalence and correlates of serious mental illness (SMI). In R. W. Manderscheid & M.A. Sonnenschein (Eds.), Center for Mental Health Services, Mental health United States, 1996, (DHHS Pub. No. SMA 96–3098) (pp. 59–70). Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
- Lehman, A. F., Steinwachs, D. M., & Co-Investigators of the PORT Project. (1998). Translating research into practice: The Schizophrenia Patient Outcomes Research Team (PORT) treatment recommendations. *Schizophrenia Bulletin*, 24, 1–10.
- Levit, L., & Lundy, J. (1998). *Trends and indicators in the changing health care market place: Chartbook.* Menlo Park, CA: The Henry J. Kaiser Family Foundation.
- McFarland, B. H., George, R. A., Goldman, W., Pollack, D. A., McCullough, J., Penner, S., Angell, R. H. (1998). Population-based guidelines for performance measurement: A preliminary report. *Harvard Review of Psychiatry*, 6(1), 23–27.
- Ma, C. A., & McGuire, T. G. (1998). Costs and incentives in a behavioral health carve-out. *Health Affairs* (Millwood), 17, 53–69.
- Manning, W. G., Wells, K. B., Buchanan, J. L., Keeler, E. B., Valdez, E. B., & Newhouse, J. P. (1989). Effects of mental health insurance: Evidence from the Health Insurance Experiment. Santa Monica, CA: The RAND Corporation.

- Mark, T., McKusick, D., King, E., Harwood, H., & Genuardi, J. (1998). *National expenditures for mental health, alcohol, and other drug abuse treatment, 1996*. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Mercer/Foster Higgins. (1997). *National Survey of Employer-Sponsored Health Plans*. New York: Mercer.
- Merrick, E. (1997). *Impact of a behavioral health carve-out* on treatment of major depression. Unpublished doctoral dissertation, Brandeis University, New York.
- Murray, C. J., & Lopez, A. D. (Eds.). (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.
- National Advisory Mental Health Council. (1998). Parity in financing mental health services: Managed care effects on cost, access and quality: An interim report to Congress by the National Advisory Mental Health Council. Bethesda, MD: Department of Health and Human Services, National Institutes of Health, National Institute of Mental Health.
- National Alliance for the Mentally Ill. (1999). *State mental illness parity laws*. Arlington, VA: Author.
- National Committee for Quality Assurance. (1997). *Health Plan Employer Data and Information Set 3.0 (HEDIS 3.0)*. Washington, DC: Author.
- OPEN MINDS. (1999). Over 72% of insured Americans are enrolled in MBHOs: Magellan Behavioral Health continues to dominate the market. *OPEN MINDS Behavioral Health and Social Service Industry Analyst*, 11, 9.
- Pincus, H. A., Tanelian, T. L., Marcus, S. C., Olfson, M., Zarin, D. A., Thompson, J., & Zito, J. M. (1998). Prescribing trends in psychotropic medications: Primary care, psychiatry, and other medical specialties. *Journal of the American Medical Association*, 279, 526–531.
- President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry. (1997). *Final report to the President: Quality first: Better health care for all Americans*. Washington, DC: Author.
- Regier, D., Goldberg, I., & Taube, C. (1978). The de facto U.S. mental health services system: A public health perspective. *Archives of General Psychiatry*, *35*, 685–693.

- Regier, D. A., Narrow, W., Rae, D. S., Manderscheid, R. W., Locke, B. Z., & Goodwin, F. K. (1993). The de facto US mental and addictive disorders service system. Epidemiologic Catchment Area prospective 1-year prevalence rates of disorders and services. *Archives of General Psychiatry*, 50, 85–94.
- Rice, D. P., Kelman, S., Miller, L. S., & Dunmeyer, S. (1990). The economic costs of alcohol and drug abuse and mental illness, 1985. San Francisco: Institute for Health and Aging.
- Rice, D. P., & Miller, L. S. (1996). The economic burden of schizophrenia: Conceptual and methodological issues, and cost estimates. In M. Moscarelli, A. Rupp, & N. Sartorious (Eds.), *Handbook of mental health economics and health policy. Vol. 1: Schizophrenia* (pp. 321–324). New York: John Wiley and Sons.
- Rosenheck, R. A., Druss, B., Stolar, M., Leslie, D., & Sledge, W. (1999). Effect of declining mental health service use on employees of a large private corporation. *Health Affairs (Millwood)*, 18, 193–203.
- Rupp, A., Gause, E., & Regier, D. A. (1998). Research policy implications of cost-of-illness studies for mental disorders. *British Journal of Psychiatry*. *Supplement*, 173(36), 19–25.
- Salkever, D. (1998). Psychiatric disability in the workplace. *Insight*, 5.
- Shaffer, D., Fisher, P., Dulcan, M. K., Davies, M., Piacentini, J., Schwab-Stone, M. E., Lahey, B. B., Bourdon, K., Jensen, P. S., Bird, H. R., Canino, G., & Regier, D. A. (1996). The NIMH Diagnostic Interview Schedule for Children, version 2.3 (DISC 2.3): Description, acceptability, prevalence rates and performance in the MECA study. Methods for the Epidemiology of Child and Adolescent Mental Disorders Study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 865–877.
- Shore, M., & Cohen, M. (1994). Introduction. *Milbank Quarterly*, 72, 31–35.

Organizing and Financing Mental Health Services

- Sing, M., Hill, S., Smolkin, S., & Heiser, N. (1998). The costs and effects of parity for mental health and substance abuse insurance benefits (DHHS Publication No. (SMA) 98-3205). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Sturm, R., McCulloch, J., & Goldman, W. (1999). *Mental health and substance abuse parity: A case study of Ohio's state employee program* (Working Paper No. 128). Los Angeles: UCLA/RAND Center on Managed Care for Psychiatric Disorders.
- Sturm, R., & Sherbourne, C. D. (1999). Are barriers to mental health and substance abuse care still rising? Manuscript submitted for publication.
- Substance Abuse and Mental Health Services Administration. (1998). State profiles on public sector managed behavioral health care and other reforms. Rockville, MD: Author.
- Substance Abuse and Mental Health Services Administration. (1999). Background report: Effects of the mental health parity act of 1996. Rockville, MD:
- U.S. Department of Health and Human Services Task Force on Alzheimer's Disease. (1984). *Report of the Secretary's Task Force on Alzheimer's Disease* (DHHS Publication No. (ADM) 84-1323). Washington, DC: Government Printing Office.
- Wells, K. B. (1999). The design of partners in care: Evaluating the cost-effectiveness of improving care for depression in primary care. *Social Psychiatry and Psychiatric Epidemiology*, *34*, 20–29.
- Wells, K. B., Sherbourne, C., Schoenbaum, M., Duan, N., Meredith, L., Unutzer, J., Miranda, J., Carney, M., & Rubenstein, L. (in press). Can managed, primary care practices improve quality and outcomes of care and employment status of depressed patients? Results from a randomized trial. *Journal of the American Medical Association*.
- Zuvekas, S. H., Banthin, J. S., & Selden, T. M. (1998). Mental health parity: What are the gaps in coverage? *Journal of Mental Health Policy and Economics*, 1, 135–146.