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National Expenditures for Mental Health Services and Substance Abuse Treatment 1991–2001

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How to Use This Report

Previous reports of national spending estimates for mental health services and substance abuse treatment (MHSA) were produced for earlier time periods. The report released in 1998 developed spending estimates for 1986 through 1996 (McKusick et al., 1998) and the report released in 2000 developed spending estimates for 1987 through 1997 (Coffey et al., 2000). This report focuses on spending trends from 1991 through 2001.

The estimates in this report replace prior sets of estimates. Because each report is updated to take advantage of better data sources and improved methods, the estimates contained in this report are not comparable to estimates produced in earlier reports. Policy makers and analysts who want to examine trends in spending should use this report, not earlier reports, nor should they compare previous estimates with these estimates.

The National Health Accounts, produced by the Centers for Medicare and Medicaid Services (CMS), follows a similar convention of reporting revised and updated historical trends when methods or sources change significantly.

Executive Summary

Background

An estimated 28 to 30 percent of the adult U.S. population will suffer from a mental or substance use disorder during the course of a year. In any given year, about five to seven percent of adults have a serious mental illness (Kessler et al., 2001). A similar percentage of children—about five to nine percent—has a serious emotional disturbance (Friedman et al., 1996). Of the ten leading causes of disability worldwide in 2000 among individuals age 15 to 44, five were psychiatric disorders including alcohol abuse (WHO, 2004). Given the prevalence of morbidity and mortality related to mental and substance use disorders and their wider societal impacts, it is important to know how much the United States is investing in treatment of mental and substance use disorders. Moreover, because of the rapid changes occurring in treatment technologies, philosophy, organization, and financing, the extent and character of this investment should be tracked over time.

The report addresses the following key questions:

- How much was spent in the United States in 2001 to provide mental health services and substance abuse treatment (MHSA) and its component parts—mental health (MH) and substance abuse (SA)?
- How are the expenditures for each component distributed by payer and provider type?
- How has spending changed from 1991 to 2001?
- How do MHSA expenditures compare with those for all U.S. health care?

These MHSA spending estimates use data and methods that are used by the Centers for Medicare and Medicaid Services (CMS) to estimate national health expenditures, also called the National Health Accounts (NHA). This work is based primarily on nationally representative databases with multiple years of data, which generally cover the period of 1991 to 2001. The estimates are presented for mental health (MH), substance abuse (SA), and MHSA combined, and are compared with all health care expenditures.

Because the estimates focus on expenditures for treatment and not disease burden, figures include only expenditures for the direct treatment of MHSA disorders. The estimates exclude the other substantial comorbid health costs that can result from MHSA (for example, trauma and cirrhosis of the liver) and other direct costs of caring for these clients (for example, job training and subsidized housing). Other indirect costs, such as lost wages and productivity, also are excluded from these MHSA expenditure estimates.

Key Findings

Total Mental Health Services and Substance Abuse Treatment (MHSA) Spending

- Total national expenditures for the treatment of MHSA disorders were $104 billion in 2001, up from $60 billion in 1991, an average annual growth of 5.6 percent. This compared with all health care spending annual growth of 6.5 percent. As a result, MHSA spending was down to 7.6 percent of the $1,373 billion spent on all health services in 2001, compared with 8.2 percent in 1991.

Mental Health (MH) Spending

- Mental health (MH) spending totaled $85 billion in 2001, representing 6.2 percent of all health care spending.

- Public financing grew to be a more important source of financing for MH treatment over the decade. Public payers comprised 57 percent of total MH spending in 1991, increasing to 63 percent in 2001. Medicaid, in particular, grew in importance.

- One of the fastest growing components of MH spending was drugs prescribed to treat mental disorders. MH prescription drug expenditures grew by 17 percent annually between 1991 and 2001. Prescription medicines, which represented 1 of each 14 dollars spent on MH in 1991, jumped to 1 of 5 by the end of the ten-year period.

- Inpatient expenditures as a percent of total MH expenditures declined during the ten-year period, particularly within specialty hospitals. In 1991, 38 percent of MH expenditures were for inpatient care, compared with 22 percent in 2001.

Substance Abuse (SA) Spending

- In 2001, an estimated $18 billion was devoted to treatment of substance use disorders. This amount constituted 1.3 percent of all health care spending.

- Public payers support the majority of SA expenditures. They increased from 62 percent of SA expenditures in 1991 to 76 percent in 2001.

- State and local governments manage the majority of spending on SA treatment. Counting all Medicaid, other State, local, and block grant spending, States managed over 57 percent of SA spending in 2001.

- Private insurance payments on SA treatment fell by an average rate of 1.1 percent annually, compared with the private insurance payment growth rate for all health care of 6.9 percent.

- Specialty substance abuse treatment centers accounted for 51 percent of the increase in SA expenditures. These centers are the largest single provider of SA services.

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Chapter 1: Background and Methods

Organization of This Report

Chapter 1 summarizes the methods of estimation and limitations of the estimates contained in this volume. Chapter 2 summarizes the findings for total MHSA spending. In the subsequent chapters, mental health and substance use disorders are examined separately because expenditure patterns for these disorders differ in some important ways. Chapter 3 examines MH services spending for the latest year estimated, 2001, and compares this to all health care spending. Chapter 4 reviews the trends in MH and all health expenditures since 1991. Chapter 5 focuses on substance abuse (SA) treatment and explores the major providers and sources of support for substance use disorders in comparison to all health in 2001. Chapter 6 presents information on trends in SA spending from 1991 to 2001. Chapter 7 draws conclusions from the results of the spending estimates. Appendix A contains tables of estimates that serve as the foundation for the graphs displayed in this report. Appendix A displays estimates for 1991 and 2001, as well as average annual growth rates for 1991–2001, 1991–1996, and 1996–2001.

Rationale for the Estimates

The mission of the Substance Abuse and Mental Health Services Administration (SAMHSA), part of the U.S. Department of Health and Human Services, is to focus attention, programs, and funding on improving the lives of people with or at risk of mental and substance use disorders. The SAMHSA vision—"a life in the community for everyone"—focuses sharply on building resiliency and facilitating recovery for clients. The SAMHSA strategy to improve accountability, capacity, and effectiveness ensures that its resources are being used effectively and efficiently through State and community programs to serve all clients. SAMHSA's programs have been aligned with a core set of priorities—access to services, retention in treatment, social support, abstinence from drug use and alcohol abuse, employment/return to school, criminal justice involvement, and stabilized family and living conditions. To build better systems, SAMHSA tracks national trends, establishes measurement and reporting systems, and develops and promotes standards to monitor and guide efforts to improve delivery of services to its clients.

The estimates in this report track national spending on treatment for mental and substance use disorders. This information aids SAMHSA, as well as policy makers, providers, and consumers, to understand what the nation spends on mental health services and substance abuse treatment, who funds that treatment, who delivers that treatment, and how the system has changed over time.

Purpose and Scope of Estimates

The estimates provide ongoing information of national spending on health care services related to the diagnosis and treatment of mental and substance use disorders. They also provide a view of MHSA treatment spending over time and compared with spending on all health care. This report describes estimates for 1991 through 2001.

These estimates focus on expenditures for MHSA treatment, not on the *burden* of MHSA illnesses. Burden of illness studies include costs not directly related to treatment, such as the impact of mental illness on productivity, societal costs linked to drug-related crimes, or housing and other accommodation subsidies to clients with MHSA disorders. The scope of the report also does not include the physical consequences of MHSA disorders. For example, physical consequences of MHSA problems include cirrhosis, trauma, and HIV and other infectious diseases. The report also does not include expenditures for the diagnosis and treatment of related

disorders that are normally, or historically, covered by general medical insurance, such as dementias and tobacco addiction. Finally, the expenditures reported do not include those allocated to prevent substance abuse.

The reason for these exclusions is that the estimates include expenses in MHSA insurance coverage and MHSA public program funding. For example, treatment for cirrhosis of the liver would not be covered as substance abuse treatment under a third-party insurance policy (such as a managed behavioral health plan), nor would it be treated under a publicly funded substance abuse treatment program. For the most part, it would be covered under medical insurance or under general Medicaid or Medicare. HIV infection, which may result from injecting drugs, would be treated as a medical problem by a physician, not by a MHSA specialist, and expenses would be reimbursed under medical insurance.

Methods

The estimates integrate a wealth of national data sources from various government agencies and private organizations. Data are analyzed using both actuarial and statistical techniques. A number of complex issues must be addressed when combining the data to produce comprehensive estimates, such as assuring consistency across data sources, avoiding duplicate accounting, and adjusting for incomplete observations, among others.

Expert Advice. The methods for the estimation of national MHSA expenditures drew extensively upon suggestions from reviewers. The advisors included experts in mental health, substance use and abuse, expenditure estimation, actuarial science, and health economics. Experts on State programs (including the National Association of State Alcohol/Drug Abuse Directors (NASADAD) and the National Association of State Mental Health Program Directors (NASMHPD)) also reviewed the report and provided advice. Government experts on the SAMHSA specialty sector survey data shared information and insights on the imputation methods in those surveys. Appendix B lists members of the advisory panel.

Overview of Methods. The approach taken to estimate national MHSA spending was designed to be consistent with the National Health Accounts (NHA). The NHA constitutes the framework for which the estimates of spending for all health care are constructed by the Centers for Medicare and Medicaid Services (CMS). The framework can be considered as a two-dimensional matrix; along one dimension are health care providers or products that constitute the U.S. health care industry; along the other dimension are sources of funds used to purchase this health care.

The Centers for Medicare and Medicaid Services has a long history, as well as substantial expertise, in estimating national spending. The estimates of MHSA spending for non-MHSA specialty facilities were carved out of estimates of total national health services and supplies expenditures developed by CMS. Separate estimates were developed from SAMHSA data for specialty MHSA facilities. Duplicate expenditures between the two sectors were removed. Then, sector estimates were summed to obtain total national spending for mental health (MH), alcohol abuse (AA), illicit drug abuse (DA) and for total MHSA in the U.S. from 1991 through 2001. Finally, MHSA dollars were compared to all personal health care and government public health expenditures, which are referred to as national health care expenditures or all health expenditures. Table 1.1 summarizes the methods for estimating MHSA expenditures for the MHSA specialty facilities and other providers.

Strengths of Approach. The major benefit of this approach is that it levels the playing field for an analysis of and comparison between MHSA and all health care spending. When the same

Table 1.1: Overview of Methods for Estimating MHSA Expenditures

Methods	Specialty Institutions	Other Providers
Data Sources:	Facility Surveys (Facility-level reporting)	Encounter Data (administrative claims and encounter-focused surveys)
Critical Data Elements:	Total Revenue By: Facility Modality of care (inpatient, outpatient, etc.) Diagnosis Payer	Components of spending: Each by: Service use — Provider type Charges — Payer Payment rates — Diagnosis
Basic Calculations:	Eliminate diagnoses out of scope (e.g., dementias, MR/DD) Split multi-modality revenue by modality based on single modality providers' revenue Estimate total revenue by: Provider type Payer Diagnosis	Eliminate specialty providers Multiply "components of spending" together by diagnosis (mental, alcohol, illicit drug, all health disorders) and payer to estimate MHSA share of total health care expenditures by payer Multiply national health care expenditures (excluding specialty MHSA providers) by "MHSA share"
Special Calculations:	Imputations for missing revenue = f (modality, ownership, region of country, number of client days) by facility Survey non-response adjustments Extrapolations for missing years of data Projections for missing end years of data: CMS five-factor model with producer price indices Smooth expenditure estimates across all years	 Survey non-response adjustments Smooth expenditure estimates across all years
Results for 1991–2001:	MHSA specialty expenditures by provider type, payer, and type of care	MHSA other provider expenditures by provider type, payer, and type of care

methods and same underlying numbers are used for both calculations, the numbers can be made consistent for meaningful comparisons. This implies that MHSA and all health care spending can be followed over time as public programs and the health care system change. Furthermore, spending by clinical problem—mental illness, alcohol, and illicit drug abuse—can be studied to understand the patterns of public and private spending on these problems.

Basic Calculations. The specialty MHSA facility expenditure estimates were drawn from total revenues reported in the specialty surveys by facility and by payment source. Three major steps for the basic calculations were followed. First, spending on mental disorders that were beyond the scope of these estimates (dementia, tobacco addiction, mental retardation, and mental developmental delays) was subtracted from total revenues by facility. Second, revenues for

providers who delivered multiple modes of care (inpatient, outpatient, and residential treatment) were re-estimated by modality using the average revenue per client and characteristics of single modality providers. Third, total revenues were configured by types of provider (for example, multi-service mental health organizations or specialty substance abuse centers), and by payer and diagnosis.

The estimates for other providers, in contrast, were dependent on and calibrated against the NHA totals. This was done for two reasons. First, specialty sector facility data sources included a census of facilities, while other data usually were based on samples. Second, the final results needed to be consistent with and comparable to the NHA estimates.

To develop MHSA expenditures for the other providers consistent with the methods of the NHA, the 2001 release of NHA health care expenditures was used. The NHA reports health care expenditures for all diagnoses only. Because the NHA encompasses both specialty institutions and general health care services, specialty institution MHSA providers had to be eliminated from the NHA estimates. This avoided double-counting the specialty service expenditures, which were estimated separately as noted above.

To distinguish MHSA from all-disease general health care expenditures, spending rates were estimated by type of diagnosis. Only the principal or primary diagnosis was used to identify spending on mental health (MH), alcohol abuse/dependence (AA), or drug abuse/dependence (DA), and all health treatments. Spending proportions for MH, AA, and DA were calculated by multiplying utilization by average prices (accounting for discounts and cost sharing) for each diagnostic group and dividing by the sum of all groups. These proportions were applied to the appropriate national health dollars from the NHA to estimate the MH, AA, and DA national dollars. Substance abuse (SA) expenditures were summed from AA and DA estimates. These estimations were made within type of payer and provider as described next.

The public sector payer categories are: Medicare, Medicaid, State and local government sources other than Medicaid, and Federal sources other than Medicare and Medicaid (e.g., Veterans Affairs, Department of Defense, and Federal Block Grants). Medicaid expenditures are combined Federal and State and local funds. The private sources are: private insurance, out-of-pocket expenditures, and other private sources (e.g., philanthropy).

The provider categories are: specialty hospitals, general hospital specialty units, non-specialty care in general hospitals, psychiatrists, non-psychiatrist physicians, other non-physician professionals, multi-service mental health organizations, free-standing nursing homes, specialty substance abuse centers, home health, and retail prescription drugs. Although the definition has differed across SAMHSA surveys and across time, multi-service mental health organizations generally include any facility that provides a variety of MH services and that is not hospital-based. Similarly, specialty substance abuse centers are generally clinics and residential treatment centers that specialize in chemical dependency.

Expenditures by provider and payer were further divided into inpatient, outpatient, and residential care. In some cases, providers offered all three types of care. For example, hospital expenditures could comprise inpatient, outpatient, or residential services. Pharmaceutical (which includes retail pharmacy only) and home health expenditures were classified as outpatient expenditures. Nursing home expenditures were classified as residential expenditures.

Special Calculations. Several complex methodological adjustments were made to develop national spending estimates from multiple and disparate data sets. Methods were devised to allocate spending by diagnosis for facility-level data where disease classifications differed across surveys. Specifically, when co-occurring alcohol and drug abuse was adopted as a survey classification for clients, those joint diagnoses were apportioned according to spending on single-diagnosis care. Missing total revenues from MH and SA facility surveys were imputed based on numbers of clients and facility characteristics. Estimates from data sources with small samples and high variance in estimates from year-to-year were smoothed. Estimates based on incomplete survey response rates were adjusted. Missing years of survey data were extrapolated and projected to 2001 when necessary. The costs of health insurance administration for MHSA coverage were estimated based on percentages from the NHA. Finally, an NHA-equivalent estimate was computed by eliminating a small proportion of expenditures for social services in order to compare MHSA estimates to total national spending.

Data. Table 1.2 lists the data sources used to develop the estimates, how they were used, and the years of data that contributed to the estimates. For specialty institutional providers, SAMHSA generally conducts censuses of facilities that treat mental or substance use disorders, through the Survey of Mental Health Organizations (SMHO, formally called the Inventory of Mental Health Organizations (IMHO)) and the National Survey of Substance Abuse Treatment Services (NSSATS, formally called the Uniform Facilities Data Set (UFDS)), respectively. Facility administrators answer these surveys and report data at the aggregate facility level (for example, total number of Medicaid clients or total revenues for clients treated for alcohol abuse).

For other providers, various data sources were used. These included administrative claims data and surveys that collect encounter-level or patient-level data. In some cases, these surveys often sample a first stage of providers and then a second stage of encounters between providers and patients. With characteristics on each encounter or patient, expenditures for specific diagnoses such as mental health, substance abuse, or all health care can be calculated.

Table 1.2: Data Sources for the MHSA Spending Estimates

Data Source	Use in Spending Estimates	Years Used
National Health Accounts (NHA)	• National health care expenditures by provider and payer.	1986–1997, 1998, 1999, 2000, 2001
National Hospital Discharge Survey (NHDS)	• Proportion of general hospital inpatient days devoted to MHSA diagnoses.	1986–1997 , 1998, 1999, 2000, 2001
National Hospital Ambulatory Medical Care Survey (NHAMCS)	• Proportion of general hospital outpatient visits devoted to MHSA diagnoses. • Proportion of emergency room visits devoted to MHSA diagnoses. • Proportion of MHSA drug mentions during visits to general hospital outpatient departments and emergency rooms for MHSA.	1992–1997, 1998, 1999, 2000, 2001
National Ambulatory Medical Care Survey (NAMCS)	• Proportion of physician office visits devoted to MHSA. • Proportion of MHSA drug mentions during physician office visits.	1985, 1990–1997, 1998, 1999, 2000, 2001—office visits; 1985, 1992–1997, 1998, 1999, 2000. 2001—drugs
National Nursing Home Survey (NNHS)	• Proportion of nursing home residents with MHSA diagnoses.	1985, 1995, 1997, 1999

Data Source	Use in Spending Estimates	Years Used
National Home and Hospice Care Survey (NHHCS)	• Proportion of home health users with MHSA diagnoses.	1994, 1996, 1998, 2000
MarketScan®	• Payment ratios for MHSA and other disorders. • Proportion of physician bills for MHSA by inpatient, outpatient, and emergency room care. • Proportion of other provider bills (e.g., psychiatrists and home health agencies) for MHSA. • Average copayment amounts.	1995, 1996, 1997, 1998, 1999
IMS Health Inc. data	• To verify NAMCS, NHAMCS, and MEPS prescription drug estimates.	1994–1997
Medicaid drug rebate data	• To corroborate estimates from MEPS and MarketScan® for the ratio of MHSA prescriptions to non-MHSA drugs.	1994 and later
Healthcare Cost and Utilization Project, Nationwide Inpatient Sample (HCUP-NIS)	• Charge differential between MHSA services and other health care services.	1988–2001
National Medical Expenditure Survey (NMES)	• Distribution of payments among multiple payers for services.	1987
Medical Expenditure Panel Survey (MEPS)	• Distribution of payments among multiple payers for services. • Basic data on spending for psychologists and counselors. • Size, frequency, and cost of refills of prescription drugs by class of drug.	1996–2000
Economic Census, Health Care and Social Assistance Sector	• Data on number of establishments and receipts for establishments based on the North American Industrial Classification System (NAICS) that now identifies several specialty MHSA providers: offices of physicians, mental health specialists, offices of mental health practitioners (except physicians), outpatient mental health and substance abuse centers, psychiatric and substance abuse hospitals, and residential mental health and substance abuse facilities.	1997
CMS Medicare and Medicaid Statistics (in published reports and special tabulations)	• Inpatient services provided by physicians by diagnosis group for Medicare patients. • Relative Medicare payments for physician services in offices, hospital outpatient departments, and emergency rooms. • Distribution of hospital-based nursing home, home health, and personal care agency payments out of total community hospital payments.	
Alcohol and Drug Services Study (ADSS)	• Expenditures in substance abuse specialty organizations.	1996
Inventory/Survey of Mental Healthcare Organizations (IMHO/SMHO)	• Expenditures in mental health specialty organizations.	1986, 1988, 1990, 1992, 1994, 1998
National Survey of Substance Abuse Treatment Services (NSSATS) / Uniform Facility Data Set (UFDS)	• Expenditures in substance abuse specialty organizations.	1987, 1990, 1991, 1993, 1995, 1996, 1998, 2000

Changes from Prior Estimation Methodology

Current estimates reflect improvements resulting from suggestions made during the substantial review process for prior estimates and from the use of new data sources not available when prior estimates were developed. The changes result in more accurate estimates. Because the improvements are complex and involve various aspects of the estimation process, net dollar impact of a particular change was not determined.

For the current estimates, new data became available for almost all provider data sources. Two completely new data sources also were introduced. The Medical Expenditure Panel Survey (MEPS), collected by the Agency for Healthcare Research and Quality (AHRQ), was used to estimate aspects of "other providers" such as payment amounts and payer categories. MEPS is a nationally representative household survey that collects information on MHSA care by asking about the reason for medical care utilization and then assigning diagnosis codes to those reported reasons.

Another new database was the SAMHSA Alcohol and Drug Services Survey (ADSS). The ADSS was a one-time survey of the universe of substance abuse providers in the United States. It had certain advantages over the NSSATS/UFDS. In particular, it had a more complete universe than earlier UFDS. It also generated more accurate data on revenue through the use of a telephone survey. Thus, the ADSS results were used to adjust the data from NSSATS/UFDS.

Some surveys also changed their structure. The Survey of Mental Health Organization (SMHO), conducted by SAMHSA, replaced the prior census of specialty mental health facilities known as the Inventory of Mental Health Organization (IMHO). In contrast to the IMHO, revenue data from specialty MH organizations in the SMHO were not collected from all providers but rather from a representative sample.

Limitations

The estimates in this report were prepared using standard estimating techniques and the best available survey information. They represent the only MHSA estimates comparable to total health care spending in the U.S. As in any effort of this type, multiple data sources were used to piece together and cross check information that ultimately formed the basis for these estimates. Each data source comes with its own set of strengths and weaknesses.

Adjustments were made through estimation techniques to compensate for potential identified problems that weaknesses may cause. Among the data-related problems addressed were unavailability of recent information, item-specific non-response or undisclosed information on surveys (i.e., missing information in specific fields), surveys that overlap providers, and inconsistency in survey questions from year to year—each of which will influence the accuracy of the estimates. For example, SAMHSA stopped collecting revenue data for specialty substance abuse facilities after 1998. Therefore, for estimates after 1998, revenues for specialty substance abuse facilities were imputed based on actual client counts. In addition, substantial survey and item non-response occurred in the substance abuse specialty facility data prior to 2000; therefore, estimates were adjusted using the 1996 ADSS survey.

Chapter 2: Overview of Expenditures for Mental Health Services and Substance Abuse Treatment (MHSA)

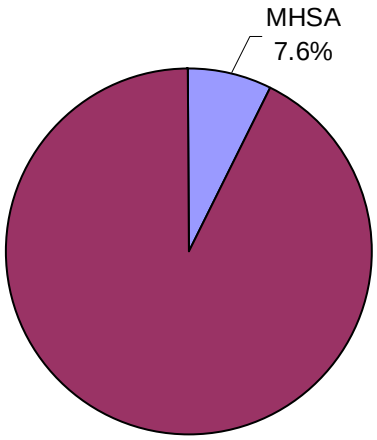
This chapter reports on expenditures combined for mental health services and substance abuse treatment (MHSA). Subsequent chapters report separately on mental health services (MH) and substance abuse treatment (SA) expenditures so that differing MH and SA trends can be discerned.

Total Expenditures for Mental Health and Substance Abuse

The U.S. spent $104 billion on MHSA treatment in 2001. To put this number in perspective, it is useful to compare it to national spending on health care for all types of conditions. Total national health services and supplies expenditures were $1,373 billion in 2001, of which MHSA spending made up 7.6 percent (Figure 2.1).

Of total MHSA spending, $85 billion (82 percent) was directed toward MH and $18 billion (18 percent) was for SA in 2001. Of total national health care spending, MH comprised 6.2 percent of such spending in 2001; while SA constituted 1.3 percent (Table A.1, Appendix A).

Figure 2.1: MHSA Expenditures as a Percent of Total Health Care Expenditures, 2001

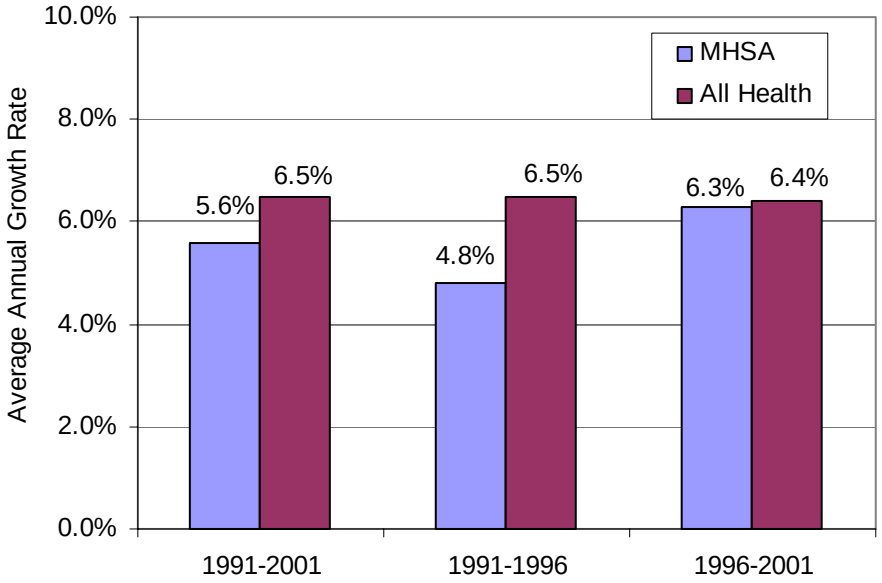


All Health = $1,372.5 billion

MHSA Growth Rate

MHSA expenditures grew from $60 billion in 1991 (Table A.5, Appendix A) to $104 billion in 2001 (Table A.1, Appendix A). The nominal MHSA growth rate from 1991 to 2001 was 5.6 percent annually, compared with the growth rate of 6.5 percent for all health care spending (Figure 2.2 and Table A.3, Appendix A). The inflation-adjusted MHSA growth was 3.5 percent, as compared to 4.4 percent for all health care spending (not shown in Figures). Inflation-adjusted growth rates are calculated using a GDP deflator that removes the effect of general price inflation.

Figure 2.2: Growth of MHSA Expenditures versus All Health Expenditures, 1991–2001 and Five-Year Increments



From 1991 to 1996, MHSA lagged behind all health care growth rates by 1.7 percentage points (4.8 percent for MHSA versus 6.5 percent for all health) (Figure 2.2). From 1996 to 2001, MHSA growth rates were close to that of all health (6.3 percent for MHSA versus 6.4 percent for all health). Because MHSA grew below all health, MHSA expenditures as a proportion of all health declined from 8.2 percent of total national health care expenditures in 1991 to 7.6 percent in 2001 (calculated from Tables A.1 and A.5, Appendix A).

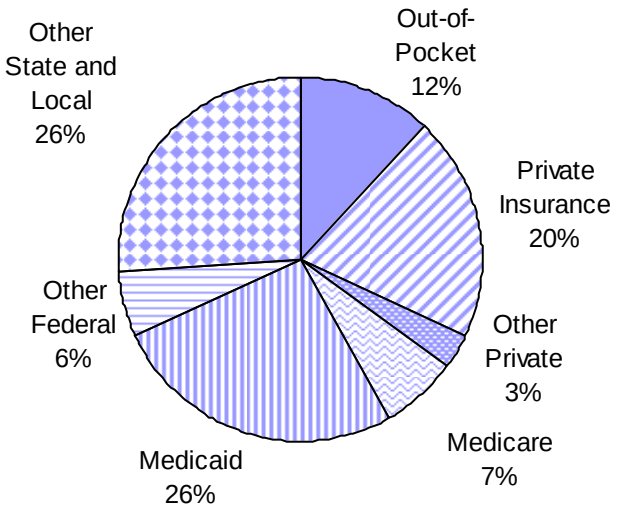
Who Covers the Expense of MHSA Treatment?

Private payers covered 35 percent and public payers covered 65 percent of total MHSA spending in 2001. For private payers, out-of-pocket payment constituted 12 percent of total MHSA expenditures, private insurance made up 20 percent, and other private payment, such as charity care, accounted for three percent. For public payers, Medicare constituted seven percent, Medicaid comprised 26 percent, other Federal government payers, such as block grants and Veterans Affairs, comprised six percent, and other State and local governments comprised 26 percent of MHSA expenditures (Figure 2.3).

All Federal spending, including the Federal portion of Medicaid, was 28 percent of total MHSA spending. All State government spending, including the State portion of Medicaid, accounted for 37 percent of total MHSA expenditures (Table A.2, Appendix A).

Public payers are a much more important source of funding for MHSA treatment than for all health. Public payers made up 65 percent of MHSA care spending but only 45 percent of all health care spending (Table A.2, Appendix A).

Figure 2.3: Distribution of MHSA Expenditures by Payer, 2001



MHSA = $103.7 billion

Who Provides MHSA Services?

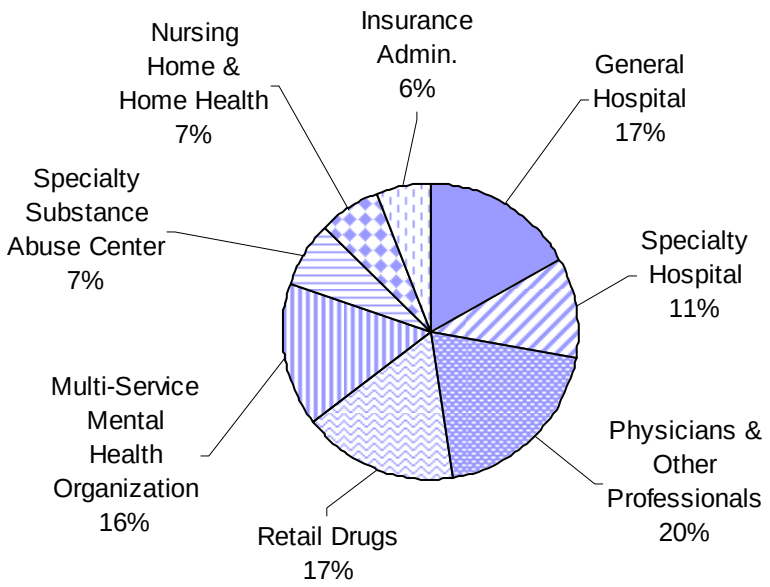
The distribution of expenditures across all providers by type of care was 24 percent in inpatient settings, 33 percent in outpatient settings excluding prescription drugs, 17 percent on retail prescription drugs, and 20 percent in residential settings. The remaining six percent for insurance administration does not relate to a health care setting (Table A.1, Appendix A).

Hospitals accounted for over one-quarter (28 percent) of expenditures on MHSA (Figure 2.4 and Table A.1, Appendix A). General hospitals accounted for more spending on MHSA care than specialty hospitals. More specifically, general non-specialty hospitals made up 17 percent, and specialty psychiatric and substance abuse hospitals made up 11 percent. Within general hospitals, about 51 percent of expenditures were in specialty units of general hospitals and the remaining 49 percent were in other types of medical care units—that is, in "scatter beds" distributed among other hospital beds in non-psychiatric or non-chemical-dependency units (calculated from Table A.1, Appendix A).

Multi-service mental health organizations, such as mental health clinics, received about 16 percent of all expenditures on MHSA treatment. Specialty substance abuse centers received about seven percent.

Retail prescription drugs accounted for 17 percent of total MHSA expenditures. Physicians made up 12 percent and other professionals billing independently, such as psychologists, counselors, and social workers, constituted eight percent. Free-standing nursing homes made up six percent, and home health expenditures were only one percent (Table A.1).

Figure 2.4: Distribution of MHSA Expenditures by Provider, 2001



MHSA = $103.7 billion

Summary

Over the ten-year period from 1991 to 2001, MHSA expenditures grew from $60 billion to $104 billion. However, the proportion of all health care spending attributable to MHSA expenses declined, from 8.2 percent of all health care spending in 1991 to 7.6 percent in 2001. Public payers made up the majority of MHSA treatment. Public payers are a greater proportion of MHSA than public payers are for all health. The largest proportion of MHSA expenditures went to hospital-based services (which includes inpatient, outpatient, and residential care provided by hospitals) (28 percent), followed by physicians and other professionals (20 percent), retail drugs (17 percent), and multi-service mental health organizations (16 percent).

Chapter 3: Mental Health Services Expenditures, 2001

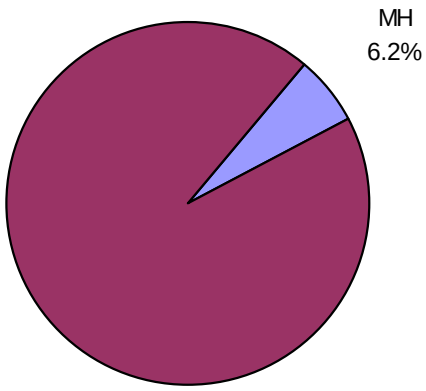
This chapter presents estimates of how much was spent on treating mental illness in the United States in 2001. Treatment for mental illness was identified if providers diagnosed individuals as having a mental disorder. This section also presents information about the types of financing of treatment for mental disorders and where the care was provided. Subsequent chapters present information on treatment of substance use disorders.

A broad array of services and treatments exist to help people with mental disorders suffer less emotional pain and disability and live healthier, longer, and more productive lives. Mental disorders are treated by a variety of caregivers who work in diverse, relatively independent, and loosely coordinated facilities. Some facilities, such as State and county mental hospitals and clinics, are owned by governments. Others are privately owned, either as nonprofit or for-profit entities. Some facilities and providers focus primarily on treating people with mental disorders, while others are general health care facilities that serve people with a range of diseases and disabilities, including mental disorders. A variety of funding streams from government grants to private insurance support facilities.

Overview of Mental Health Spending

In 2001, an estimated $85 billion was spent on the treatment of mental disorders in the United States. MH treatment accounted for 6.2 percent of all health care spending in 2001 (Figure 3.1). MH spending is the predominant component of MHSA expenditures, making up 82 percent of total MHSA spending.

Figure 3.1: MH Expenditures as a Percent of Total Health Care Expenditures, 2001

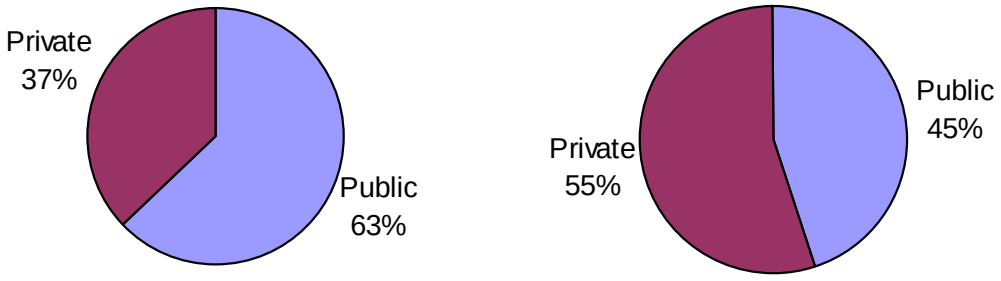


All Health = $1,372.5 billion
MH = $85.4 billion

Who Funds Mental Health Services?

People with mental disorders rely on public sources of financing to a greater extent than people with other diseases. Sixty-three percent (63 percent) of total MH spending came from public sources, while only 45 percent of all health care spending was from public sources (Figure 3.2).

Figure 3.2: Distribution of MH and All Health Care Expenditures by Public-Private Payer, 2001

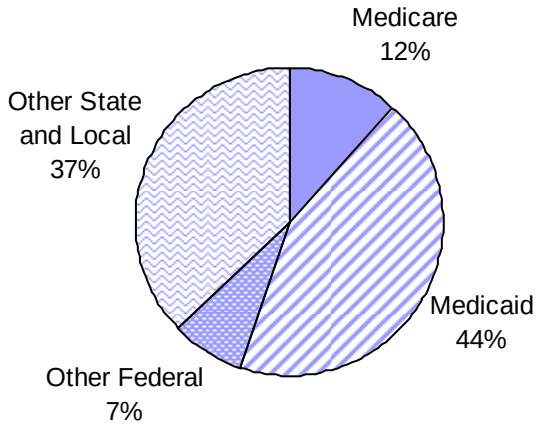


MH = $85.4 billion **All Health = $1,372.5 billion**

Among public payers, Medicaid was the largest source of funding, accounting for 27 percent of total MH and 44 percent of all public MH funding (Figure 3.3). The next largest category was other State and local government funding, which made up 23 percent of total MH and 37 percent of total MH public funding. Medicare made up 12 percent of total MH public expenditures. Other Federal government spending, which includes MH Block Grants and programs offered through the Department of Veterans Affairs, constitutes seven percent of total MH public spending.

States manage a large proportion of the funds devoted to MH services from both State and Federal budgets. States manage the 27 percent of MH spending that represents Medicaid, the 23 percent that comprises other State and local funding, and part of the five percent of other Federal spending—that part allocated through block grants to the States. Thus, over half of total MH dollars are managed by States overall. (While this is a nation-wide estimate, the estimate for individual States may vary considerably.) Other State and local funding includes dollars from

Figure 3.3: Distribution of Public MH Expenditures by Public Payer, 2001



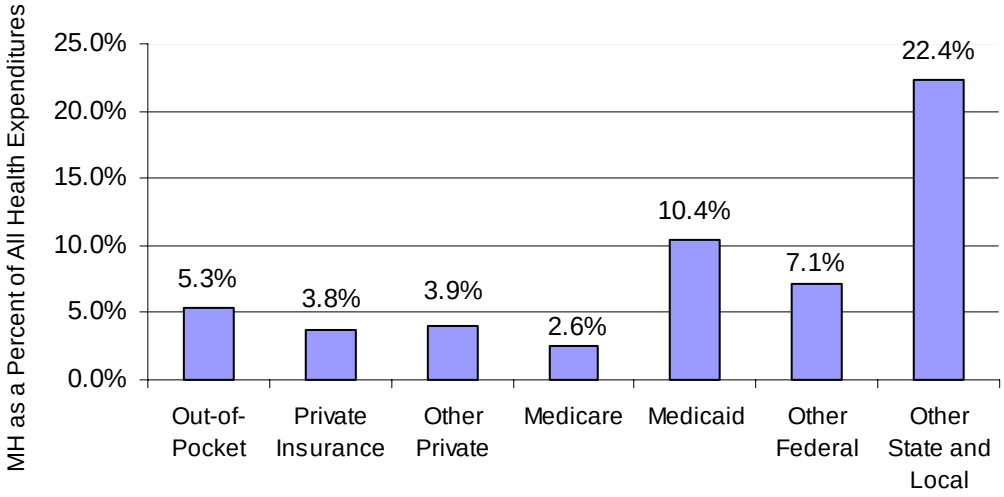
All Public = $53.6 billion

State and local government budgets allocated to community health centers, psychiatric hospitals, and other types of mental health services.

Private insurance comprised 22 percent of all MH expenditures. This compares to an all health care proportion of 36 percent. Out-of-pocket spending was 13 percent of MH expenditures, as compared with 15 percent for all health. The lower out-of-pocket percentage for MH as compared with all health is likely rooted in the greater role of public programs in financing MH treatment.

The proportion that each payer devotes to MH care is widely divergent (Figure 3.4). MH made up 22 percent of other State and local funding for all health care and 10 percent of funding for Medicaid. For Medicare the percentage was only three percent (calculations based on Table A.2, Appendix A). MH comprised four percent of all health spending covered by private insurance.

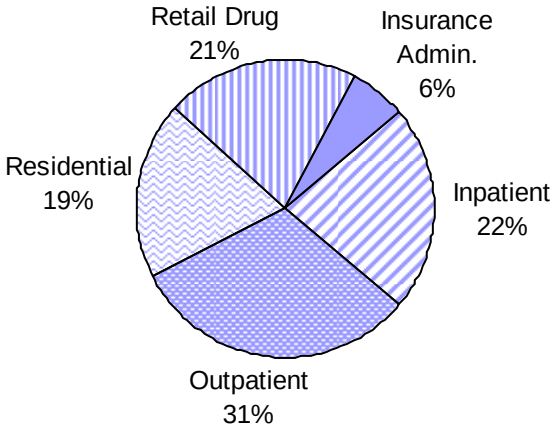
Figure 3.4: MH Expenditures as a Percent of All Health Care Expenditures by Payer, 2001



Who Provides MH Treatment?

More than half of mental health expenditures went for prescription drugs and outpatient care. Across all providers by site of care, MH expenditures were: 31 percent outpatient, 22 percent inpatient, 21 percent retail drugs, and 19 percent in residential settings (Figure 3.5). The remainder, six percent, was directed toward insurance administration.

Figure 3.5: Distribution of MH Expenditures by Setting of Care (Inpatient, Outpatient, Residential, and Retail Drug) and by Insurance Administration, 2001



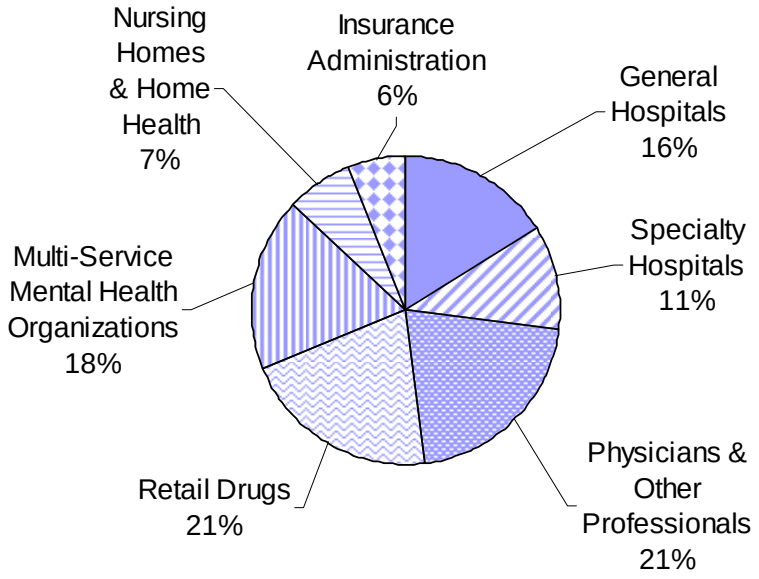
MH = $85.4 billion

Although the role of hospitals in MH care has been declining, spending on hospital care (including hospital-provided outpatient and residential care) still accounted for 27 percent of total MH expenditures in 2001 (Figure 3.6). More than half of MH hospital spending went to general hospitals (58 percent) and the remainder went to specialty psychiatric hospitals (42 percent). Within general hospitals, 44 percent of expenditures were in specialty psychiatric units and 56 percent were in non-specialty units (calculated from Table A.1, Appendix A). Hospitals can provide inpatient, outpatient, or residential care. Within general hospitals, 74 percent of expenditures were for inpatient care, 20 percent went to outpatient care, and six percent went to residential care. Within psychiatric hospitals, 92 percent were for inpatient care, five percent were for outpatient care, and three percent were for residential treatment.

A large portion of MH expenditures (18 percent) was for care in multi-service mental health organizations such as community mental health centers (Figure 3.6). In 2001, more than one out of every five dollars spent on MH services was spent on prescription medications. The role of medications in mental health care is much greater than that for all health care, in terms of the proportion of spending going to drug therapy. For all health expenditures, only one in every ten dollars spent for health care was for prescription medications.

Physicians and other professionals (psychologists, counselors, and social workers) comprised 21 percent of total MH expenditures in 2001. Physicians made up 13 percent of expenditures and other professionals made up eight percent (Table A.1, Appendix A). Among physicians, 72 percent of spending went to psychiatrists and the remainder went to other types of physicians, such as general practitioners (Table A.1).

Figure 3.6: Distribution of MH Expenditures by Provider, 2001



MH = $85.4 billion

Summary

In 2001, MH expenditures totaled $85 billion, which was 6.2 percent of all health care spending. Public sources provided most of these funds (63 percent). This is a greater percentage than for all health. Of the total $85 billion, Medicaid funding was the largest at 27 percent, while other State and local funding represented a substantial portion at 23 percent. This means that, along with Federal Block Grant funding which is allocated to MH providers by the States, States managed over half of the dollars spent on MH services. Private insurance made up slightly more than one-fifth of MH expenditures and out-of-pocket payments made up a bit more than one-tenth. MH expenditures as a proportion of all health expenditures varied by payer. For private insurance, MH was only four percent, while for Medicaid it was 10 percent.

About one-fifth of expenditures in 2001 were in inpatient settings. Specialty and general hospitals—which offer inpatient, outpatient, and residential care—made up 27 percent of total MH expenditures, retail prescription drugs comprised 21 percent, physicians and other professionals made up 21 percent, and multi-service mental health organizations accounted for 18 percent.

Chapter 4: Trends for Mental Health Services Expenditures, 1991–2001

This chapter examines changes in mental health (MH) expenditures from 1991 to 2001. It presents trends in MH spending relative to all health care, as well as trends by payer and provider.

The MH system is constantly evolving. Each decade brings improvements in MH services. During the 1990s, new medications for depression, schizophrenia, obsessive-compulsive disorder, panic disorder, bipolar disease, and other mental disorders were developed and introduced to the market. In some cases, these medications represent new indications for existing medications; in other instances, they represent completely new therapeutic agents. At the same time, a growing body of research has elucidated the benefits of different forms of psychosocial treatments.

The context in which mental health services are provided and financed has also evolved. Over the past decade, purchasers have increasingly selected managed care approaches. Managed behavioral health care has come to dominate many private insurance programs and public sector mental health programs. Utilization review, benefit design, and payment policies under managed care have influenced where and how treatments are provided. Outpatient care is emphasized over inpatient care, and pharmacotherapy over psychotherapy (Olfson, 2002). In addition, mental health care has been influenced by broader trends in financing policy, such as the growth of Medicaid enrollment.

Attitudes toward those with mental illness and toward treatment have also been shifting over time. Today, most people have a better understanding of mental illness and its etiology. However, the stigma associated with mental illness remains a major barrier to seeking, and thus receiving, care (USDHHS, 1999).

Growth in Mental Health Expenditures

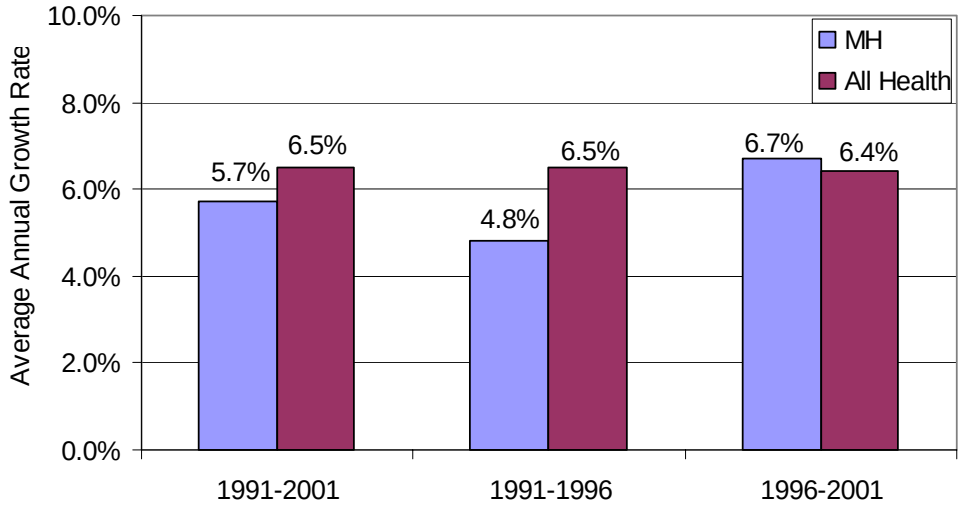
MH expenditures in 1991 totaled $49 billion (Table A.5, Appendix A). By 2001, they were $85 billion (Table A.1). This translates into an average growth rate of 5.7 percent annually for MH spending, lower than the 6.5 percent annual growth rate for all health (Figure 4.1). In inflation-adjusted terms, MH spending grew by 3.7 percent annually and all health by 4.4 percent. Over the first half of the period (1991 through 1996), MH spending grew by 4.8 percent versus 6.5 percent for all health. Over the last half (1996 through 2001), MH grew by 6.7 percent versus 6.4 percent for all health. Overall, MH expenditures as a share of total health care declined, from 6.7 percent of total health care spending in 1991 to 6.2 percent in 2001 (calculated from Tables A.5 and A.1, Appendix A).

What contributed to MH expenditure growth over this time period? Part of the answer to this question is that more people received treatment. Although this report does not track information on the volume of services received, other studies indicate that the number of people being treated for mental disorders has increased over time (Zuvekas, 2001; Olfson et al., 2002; Kessler et al., 2003). For example, from 1987 to 1996, the number of people using any mental health services increased by 26 percent (Zuvekas, 2001). In addition, medication prices have increased, in part because newly developed medications that are more expensive have replaced older, less expensive medications (Dubois et al., 2000). Moreover, more people are using psychotropic medications. Finally, the unit cost of providing mental health services has increased. For

example, hourly wages of production workers in psychiatric and substance abuse hospitals increased by an average of 3.8 percent per year between 1990 and 2001 (BLS, 2004).

The MH expenditure growth rate was 1.7 percentage points below the all health growth rate during the first half of the period and 0.3 percentage points above the all health growth rate during the second half of the period. This accelerated growth rate during the second half of the period was due to prescription medication spending. If prescription drugs are excluded, the MH growth rate was 4.0 percent annually during the first half of the period and 3.9 percent annually during the second half of the period.

Figure 4.1: Growth of MH versus All Health Expenditures, 1991–2001 and Five-Year Increments



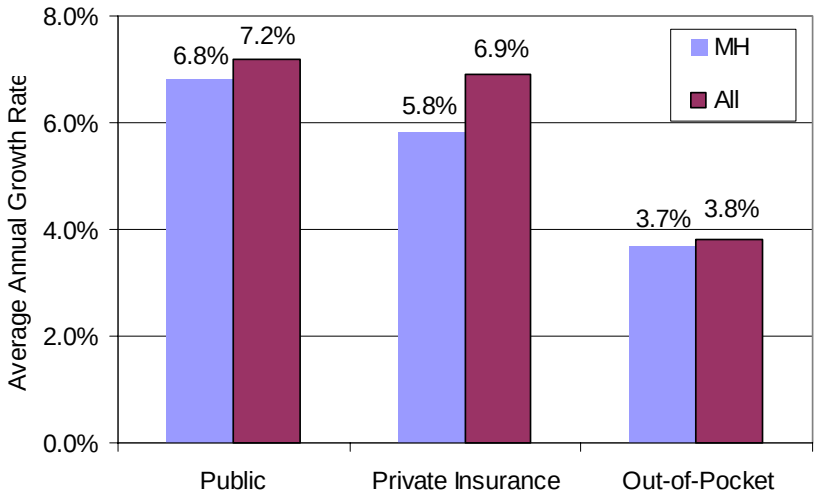
Trends by Type of Payer

For both MH and all health, public payments grew more rapidly than private payments from 1991 to 2001. The public payer growth rate for all health care expenditures was 7.2 percent annually and the private payer growth rate was 5.9 percent annually (Table A.4, Appendix A). The same was true for mental health expenditures. Public MH expenditures increased by 6.8 percent annually, while private MH expenditures increased by 4.2 percent (Table A.4).

As a result, public payers grew in importance as a source of funding for MH services, and private payers declined. In 1991, private payers made up 43 percent of total MH spending (Table A.6, Appendix A), while in 2001 they comprised 37 percent (Table A.2). For all health care spending, private payers also shrank from 59 percent of all health spending in 1991 to 55 percent in 2001.

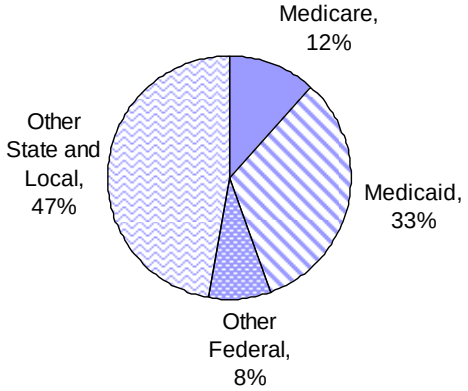
Private payments mainly are comprised of private insurance and out-of-pocket spending. Private insurance spending on MH care increased at a slower rate than all health care private insurance spending (5.8 percent versus 6.9 percent) (Figure 4.2). Out-of-pocket spending on MH care grew at almost the same rate as out-of-pocket spending on all health care (3.7 percent versus 3.8 percent, respectively). Public payer spending growth on MH services of 6.8 percent per year was slightly lower than public payer spending on all health care at 7.2 percent annually.

Figure 4.2: Growth of MH versus All Health Care Expenditures by Public, Private Insurance, and Out-of-Pocket Payer, 1991–2001

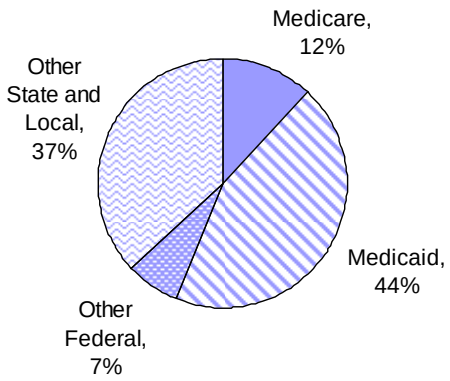


Among public payers, Medicaid (including both the State and Federal portion) grew in importance. Medicaid increased from 33 percent of total public MH expenditures in 1991 to 44 percent in 2001 (Figure 4.3). In contrast, other State and local government funding (which excludes Medicaid) dropped from 47 percent of total MH public financing to 37 percent. Medicare remained constant in 1991 and 2001, comprising 12 percent of public MH expenditures in both years. Other Federal government spending declined slightly as a proportion of public MH spending (from eight to seven percent).

Figure 4.3: Distribution of Public MH Expenditures by Public Payer, 1991 and 2001



1991 MH Public = $27.9 billion



2001 MH Public = $53.6 billion

Medicaid, followed by Medicare, had the highest MH public sector growth rates (9.7 and 6.8 percent per year, respectively, from 1991 through 2001) (Table A.4, Appendix A). Other Federal government and other State and local government grew more slowly (5.5 and 4.4 percent per

year, respectively). The lower State and local growth rate may be, in part, caused by States shifting general revenue funds for MH to Medicaid.

The growth rate for all health care spending under Medicaid and Medicare was 9.2 and 7.2 percent per year, respectively. The average annual growth in funding for all health for other Federal government and other State and local government was 5.7 and 4.4 percent, respectively. Part of the shift toward Medicare and Medicaid likely stems from growing enrollment in those programs. Medicare enrollment increased from 35 million in 1991 to 40 million in 2001 (CMS, 2004a). Medicaid enrollment grew from 25 million to 36 million over the same period (CMS, 2004b and 2001). As enrollment has increased, expenditures for all Medicaid and Medicare, as well as mental health care, have grown.

The role played by private insurance in covering MH expenses remained fairly constant during 1991–2001, equaling 22 percent of total MH expenditures (Tables A.6 and A.2, Appendix A).

Out-of-pocket spending by individuals became slightly less important as a source of financing in 2001 as compared with 1991. Out-of-pocket payments accounted for 15 percent of MH spending in 1991 (Table A.6) and declined to 13 percent in 2001 (Table A.2). This trend may have been caused by several factors. One is the growth of public financing relative to private financing. Public payers tend to have lower cost-sharing requirements than do private payers, and during this period, any Medicaid cost sharing beyond nominal amounts was prohibited. The other trend is the spread of managed care, which tends to replace proportional cost sharing with copayments per service, resulting in lower overall cost sharing. These trends were more apparent in the first half of the series (1991–1996) than in the second half (1996–2001). From 1991 to 1996, out-of-pocket MH spending fell; the average annual nominal rate of change was –0.7 percent (Table A.4, Appendix A). From 1996 to 2001, out-of-pocket MH spending grew at an average annual rate of 8.3 percent. A similar (although dampened) trend is seen in all health care, where out-of-pocket spending grew at 1.4 percent annually from 1991 to 1996 and at 6.2 percent annually from 1996 to 2001 (Table A.4).

Out-of-pocket spending trends are driven partially by spending trends on private insurance premiums because they result from cost-sharing increases. For all health, out-of-pocket spending growth rates were below all health private insurance growth rates. However, for MH, the increase of out-of-pocket spending actually exceeded that of private insurance from 1996 to 2001 by 0.3 percentage points. This may stem from increases in cost sharing for retail prescription medications.

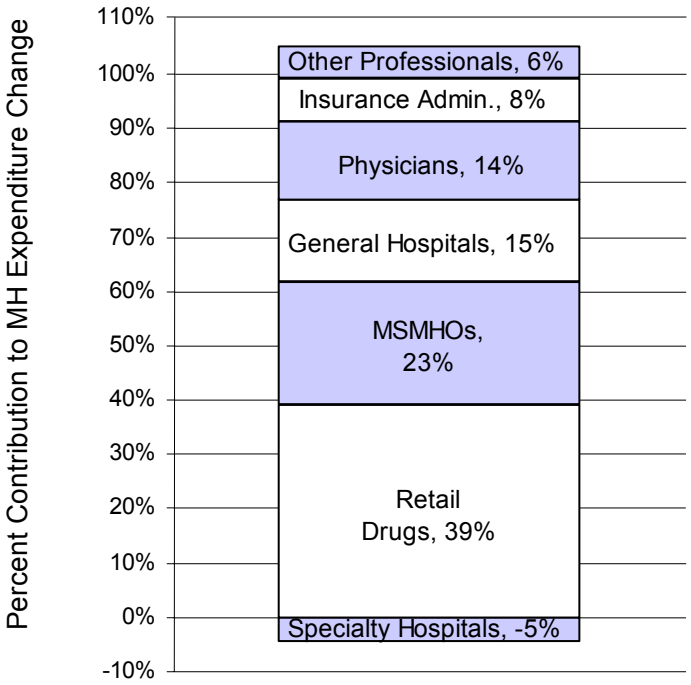
Trends by Site of Care

Inpatient expenditures declined from 38 percent of total MH to only 22 percent between 1991 and 2001 (Tables A.5 and A.1, Appendix A). The mix of services shifted to include greater expenditure on retail prescription drugs, which increased from seven percent of total MH spending to 21 percent. The outpatient share of MH expenditures, excluding prescription medications, remained constant at 31 percent. Residential expenditures remained constant at 19 percent of total MH expenditures. Examined from the perspective of growth rates, inpatient expenditures did not increase, outpatient expenditures (including prescription drugs) grew by 9.2 percent per year, and residential expenditures grew by 6.0 percent annually (Table A.3, Appendix A).

Trends by Type of Provider

Total MH expenditures grew by approximately $37 billion between 1991 and 2001 (from $49 billion to $85 billion) (Tables A.5 and A.1, Appendix A). The largest component of this change was retail prescription drugs, which contributed 39 percent to the $37 billion (Figure 4.4). The next largest component was multi-service mental health organizations (MSMHOs), which made up 23 percent of the increase. General hospitals comprised 15 percent of the growth and physicians comprised 14 percent. Other professionals made up six percent of the $37 billion. Specialty psychiatric hospital expenditures actually declined.

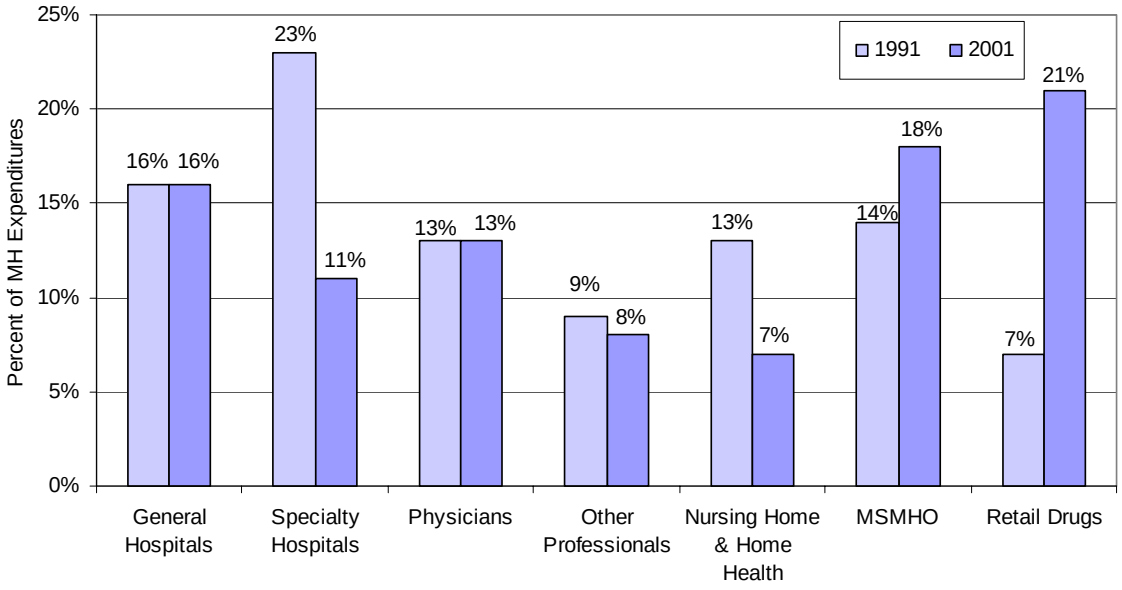
Figure 4.4: Contribution to the MH Expenditure Change between 1991 and 2001 by Provider and Insurance Administration



Hospitals continue to provide an important, but declining, setting of treatment for people with mental illness. In 1991, about 40 percent of all MH dollars was spent in hospitals; in 2001, it was 27 percent (Figure 4.5). This decrease is primarily caused by a reduction in care provided in specialty psychiatric hospitals. Their reduced role stems from several sources. First, for many years, States have been closing public psychiatric hospitals and instead placing greater reliance on community services. For example, in 1990, 735 psychiatric hospitals with 143,660 beds existed in the United States; by 1998 the census had declined to 557 psychiatric hospitals and 97,168 beds (CMHS, 2001). From 1990 to 1998, the number of hospital and residential admissions decreased by 25 percent, from approximately 276,000 to 206,000. Second, managed care has been shown to reduce the utilization of inpatient services. Managed care organizations may require "pre-approval" for inpatient admission, may apply "utilization review" to inpatient stays, and may limit payments to a fixed number of days of care. Third, pharmaceutical discoveries have led to less reliance on inpatient facilities. The increased use of psychotropic medications, for example,

has allowed clients to stabilize their illness more quickly and thus receive more treatment in less restrictive, more client-centered programs in outpatient settings.

Figure 4.5: Distribution of MH Payments by Provider, 1991 and 2001



In addition to the overall reduction in hospital-based MH care, there has been a shift in the locus of treatment away from specialty psychiatric hospitals. Specialty hospital expenditures for MH care provided in all settings fell by 1.6 percent annually. Both inpatient and outpatient specialty hospital expenditures also decreased substantially (by 3.4 and 7.1 percent annually, respectively) (Table A.3, Appendix A). There was significant increase, however, in residential care in specialty psychiatric hospitals, although this still represents a small portion of total psychiatric hospital expenses.

In contrast to specialty hospitals, general hospital expenditures for MH care grew 5.2 percent annually, which is the same as the all health care general hospital growth rate (Table A.3, Appendix A). The growth in general hospital expenditures was divided into care provided in inpatient, outpatient, and residential settings. Of these three settings, outpatient care grew at the fastest rate (9.4 percent annually).

General hospital expenditures were divided into general hospital specialty units and non-specialty units. Growth was much higher in non-specialty units (12.9 percent) than specialty psychiatric units (0.2 percent).

The role of prescription drugs in MH treatment grew enormously, increasing from seven percent to 21 percent of total MH spending over the ten years (Figure 4.5). From 1991 to 2001, MH prescription expenditures grew at a rate of 17.1 percent annually (Table A.3, Appendix A). This was higher than the 12.1 percent growth in total pharmaceutical costs for all diseases. During the 1990s, a number of new agents were introduced for treating problems of the central nervous system, including atypical antipsychotic agents for schizophrenia (e.g., risperidone (Risperidal®), olanzapine (Zyprexia®) quetiapine fumarate (Seroquel®), ziprasidone (Geodon®)) and new types of antidepressants (e.g., sertaline (Zoloft®), paroxetine (Paxil®), venlafaxine (Effexor®),

citalopram (Celexa®), bupropion (Wellbutrin®), fluvoxamine (Luvox®), escitalopram (Lexapro®)).

Existing medications also were given approval for a greater variety of disorders, such as use of medications first employed as antidepressants later approved for use to treat obsessive-compulsive disorder, generalized anxiety disorder, social anxiety disorder, panic disorder, and post traumatic stress disorder. Finally, more clients have been receiving treatment for depression and taking medications to treat the disorder. For example, the rate of outpatient treatment for depression increased from 0.73 per 100 persons in 1987 to 2.33 in 1997 (Olfson et al., 2002). The proportion of treated individuals who used antidepressant medications increased from 37.3 percent to 74.5 percent.

After prescription drugs, the fastest growing provider expense was for care at a multi-service mental health organization (MSMHO). Spending in MSMHOs grew by 8.3 percent annually (Table A.3, Appendix A). As a result, MSMHOs increased from 14 percent of total MH expenditures in 1991 to 18 percent of total MH expenditures in 2001 (Figure 4.5). MSMHOs can provide inpatient, outpatient, or residential care. The inpatient component of MSMHOs fell by 10 percent annually. The outpatient component grew by seven percent annually, and the residential component grew by 11 percent annually. Thus, there appears to be a shift away from inpatient care toward residential care within MSMHOs.

Physicians and other professional expenditures remained about the same, at 22 percent of total MH expenditures in 1991 and 21 percent in 2001 (Figure 4.5). Physician MH expenditures grew at six percent annually, which equaled the growth of all health physician spending. Psychiatrists and non-psychiatrist physicians each experienced the same six percent annual growth rate (Table A.3, Appendix A). Expenditures on other professionals grew at only four percent, as compared with an all health other professional growth rate of eight percent. The growth rate for other professionals was twice as high in the second half of the ten-year period (6 percent) as in the first half (3 percent).

The proportion of spending accounted for by nursing homes declined over the ten-year period, from 12 percent of expenditures in 1991 to six percent in 2001 (Table A.5 and A.1, Appendix A). Nursing home MH expenditures did not grow at all from 1991 to 2001, in contrast to all health nursing home expenditures, which grew at five percent annually (Table A.3). Given the aging population, this likely implies that fewer people are receiving MH care in nursing homes. The decline may also have been influenced by a Federal law implemented in 1992. The law (sometimes known as PASSAR) requires people seeking admission to Medicaid-certified nursing homes to be screened before admission to determine if they are mentally ill or mentally retarded to prevent persons who primarily need treatment for these disorders from being placed in nursing homes.

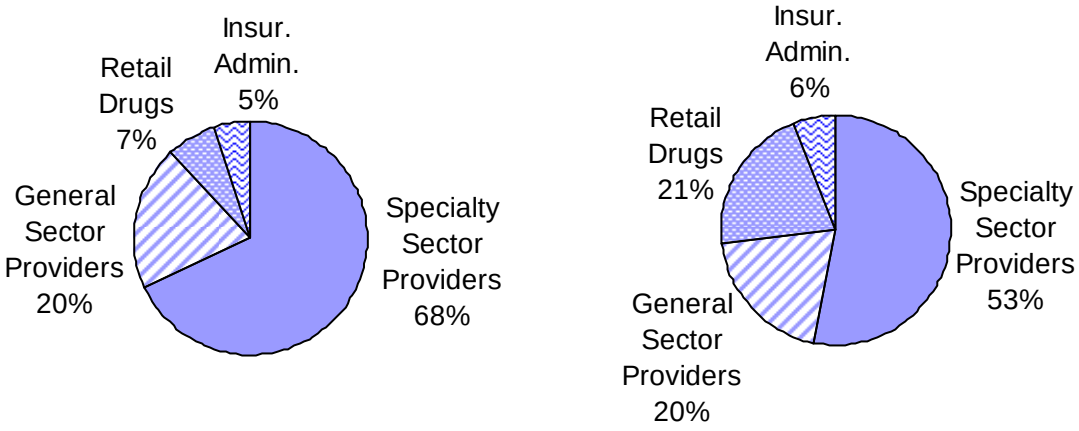
The pattern of home health care cost growth varied radically over the first and second half of the ten-year span. From 1991 to 1996, home health grew at an annual rate of 21.5 percent. From 1996 to 2001, home health expenditures fell by 0.6 percent (Table A.3, Appendix A). This same pattern was seen for all health services, and stems from several legislative changes affecting how home care is reimbursed under Medicare (Levit et al., 2003). Home health care costs made up only one percent of total MH expenditures in both 1991 and 2001 (Tables A.5 and A.1, Appendix A).

Trends by Specialty versus General Sector Providers

MH providers can be classified as specialty providers or general providers. Specialty MH providers include specialty units of general hospitals, specialty hospitals, psychiatrists, other professionals, and multi-service mental health organizations. General sector providers include general hospital non-specialty units, non-psychiatrist physicians, nursing homes, and home health agencies. In addition, retail prescription drugs and the cost of insurance administration are regarded as separate categories in this analysis.

According to these definitions, MH expenditures shifted from specialty providers toward retail prescription medications. In 1991, specialists comprised 68 percent of MH expenditures, while in 2001 they comprised only 53 percent (Figure 4.6). Retail prescription drugs grew from seven percent to 21 percent of total MH expenditures over this period. General sector providers remained relatively unchanged at 20 percent in both 1991 and 2001.

Figure 4.6: Distribution of MH Spending by Sector, 1991 and 2001



1991 MH = $48.9 billion **2001 MH = $85.4 billion**

Summary

Spending on MH services grew from $49 billion in 1991 to $85 billion in 2001, representing a rate of growth of 5.7 percent per year. This was lower than the rate of growth of spending for all health care during the ten-year time span. The largest component of the increase was spending on retail prescription drugs, contributing 39 percent to the growth in MH expenditures.

Growth rates for public payers were much higher than private payers over the ten-year period from 1991 to 2001. This trend was similar to that for all health care. The public-payer expansion of MH spending was primarily led by Medicaid, which grew at an annual rate of 9.7 percent and increased from one-third of all public MH spending to 44 percent of all public dollars spent on MH.

Finally, inpatient hospital expenditures declined as a percentage of total MH expenditures, from 38 percent of total MH to 22 percent. The decline in inpatient expenditures was greatest in specialty hospitals. General hospital inpatient expenditures grew, although only in non-specialty units.

Chapter 5: Substance Abuse Treatment Expenditures, 2001

Substance abuse and dependence are prevalent disorders. The most recent estimates for 2002 indicate that an estimated 22 million Americans aged 12 and older are classified as having a substance use disorder (9.4 percent of the population) (OAS, 2003). Of these, 3.2 million are classified with dependence on or abuse of both alcohol and illicit drugs, 3.9 million are dependent on or abused illicit drugs but not alcohol, and 14.9 million are dependent on or abused alcohol but not illicit drugs**.**

Only a small proportion of people with substance use disorders obtain treatment. An estimated 3.5 million people aged 12 or older (1.5 percent of the population) received some kind of care for a problem related to the use of alcohol or illicit drugs in the 12 months prior to being interviewed in 2002 (OAS, 2003). More than half of those in treatment (2.0 million) received care at a self-help group. Approximately 2.2 million received services for alcohol problems during their most recent treatment. An estimated 974,000 people received treatment for marijuana, 796,000 for cocaine, 360,000 for pain relievers, and 277,000 for heroin.

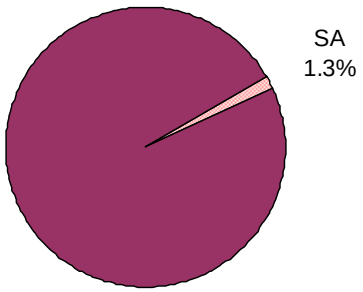
This chapter presents estimates of how much was spent on treating substance use disorders in the United States in 2001. This section also presents information about the types of financing for treatment for substance abuse and dependence and where that care was provided.

Overview of Substance Abuse Spending

In 2001, an estimated $18 billion was devoted to substance abuse treatment (about 17.6 percent of total MHSA expenditures). This amount represented 1.3 percent of all health care spending, which totaled $1,373 billion in 2001 (Figure 5.1).

To put this number in context, in 1998, the total economic costs of alcohol abuse were estimated to be $184.6 billion, and the total economic costs of drug abuse were $143.4 billion (Harwood, 2000; Harwood et al., 1998; ONDCP, 2001). These include the costs of the medical consequences of alcohol and drug abuse, lost earnings linked to premature death, lost productivity, motor vehicle crashes, crime, and other social consequences.

Figure 5.1: SA Expenditures as a Percent of All Health Care Expenditures, 2001

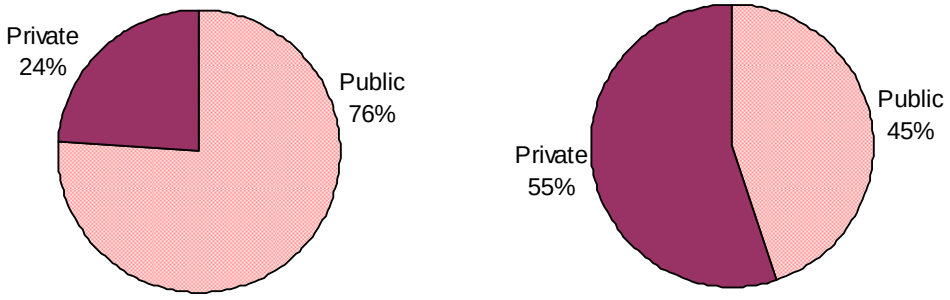


All Health = $1,372.5 billion
SA = $18.3 billion

Who Provides the Funding?

People with substance use disorders rely on public sources of financing to a much greater extent than people with other diseases. Seventy-six percent of total SA spending was by public sources, while 45 percent of all health care spending was by public sources (Figure 5.2).

Figure 5.2: Distribution of SA and All Health Expenditures by Public-Private Payer, 2001

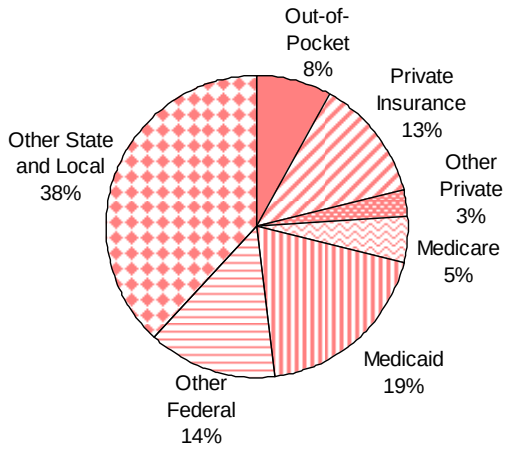


SA = $18.3 billion **All Health = $1,372.5 billion**

Among public payers, other State and local government funding (excluding Medicaid) constituted the largest source of support, making up almost half (50 percent) of all public SA funding and 38 percent of total SA funding (totaling $6.9 billion) (calculated from Table A.2, Appendix A). Medicaid comprised another 25 percent of all public dollars spent on SA treatment and 19 percent of total SA expenditures (totaling $3.3 billion). Other Federal government spending on SA treatment, which includes Departments of Defense and Veterans Affairs, and block grants to the States, accounted for 19 percent of public SA spending (totaling $2.6 billion). The Federal SA block grant dollars that go for SA treatment are estimated to be 8 percent of public SA spending (or $1.2 billion, not shown). (While this is a nation-wide estimate, the estimate for individual States may vary considerably.) Medicare was at seven percent of public spending on SA treatment (totaling $0.9 billion). (Note: Figure 5.3, discussed below, shows the payer percentages in relation to all SA spending, rather than just to *public* SA spending, which we calculated above from Table A.2, Appendix A.)

Private insurance constituted 13 percent of total SA expenditures (Figure 5.3). For all health care, private insurance made up 36 percent of total expenditures (Table A.2, Appendix A). Out-of-pocket spending was eight percent of total SA expenditures, in comparison to 15 percent for all health.

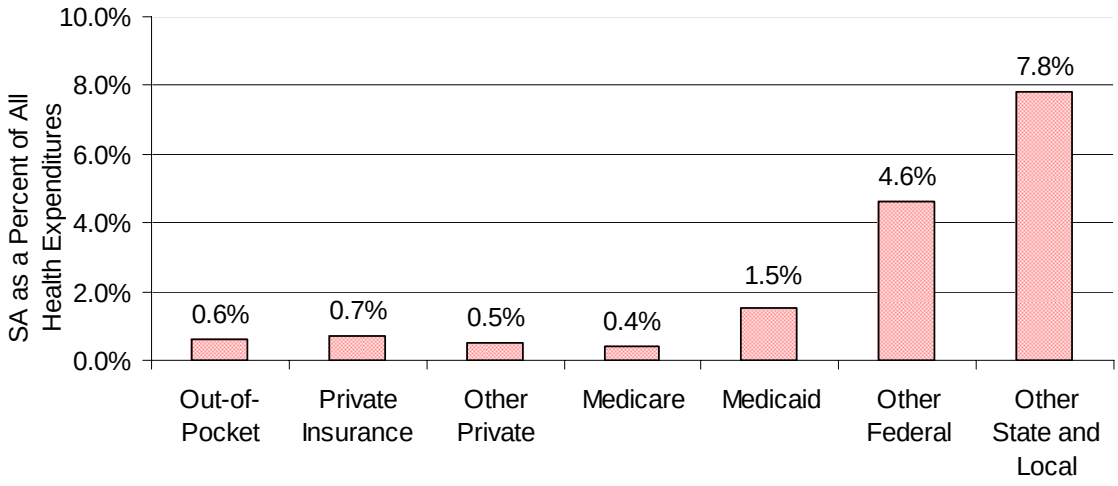
Figure 5.3: Distribution of SA Expenditures by Payer, 2001



SA = $18.3 billion

The proportion that each payer devotes to SA was low relative to MH across payers but did vary from payer to payer (Figure 5.4). MH made up 22 percent of other State and local funding for all health care and 10 percent of funding for Medicaid. For Medicare, the percentage was only three percent (calculated based on Table A.2, Appendix A). MH comprised four percent of all health spending covered by private insurance.

Figure 5.4: SA Expenditures as a Percent of All Health Care Expenditures by Payer, 2001



Who Provides Substance Abuse Treatment?

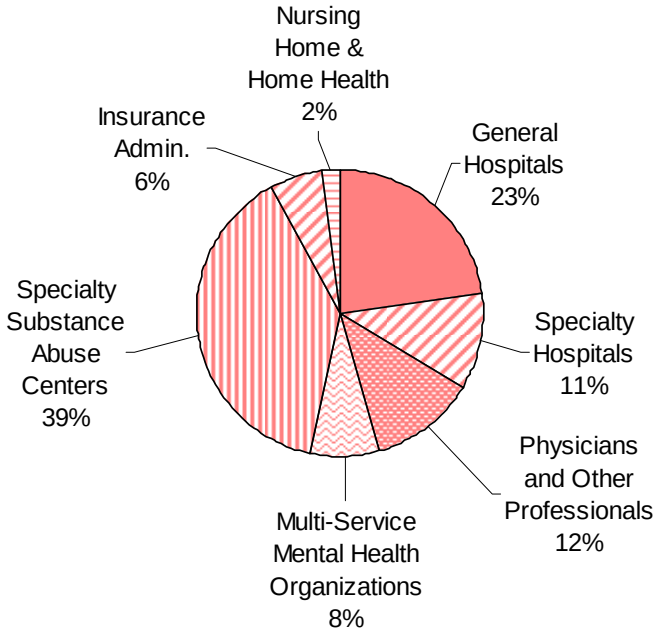
The vast majority (84 percent) of substance abuse expenditures in 2001 went to specialty providers (i.e., general hospital specialty units, specialty hospitals, psychiatrists, other MHSA professionals, multi-service mental health organizations, and specialty substance abuse centers) (calculated from Table A.1, Appendix A). Among the most significant were specialty substance

abuse centers, accounting for 39 percent of SA expenditures (Figure 5.5). The remaining specialty organizations and individuals providing substance abuse treatment were: multi-service mental health organizations (MSMHOs) (8 percent); independently billing psychologists, counselors, and social workers (7 percent); specialty hospitals (11 percent); and psychiatrists (2 percent) (Table A.1, Appendix A).

Hospitals received 34 percent of all SA expenditures in 2001 (Figure 5.5). General hospitals accounted for 68 percent of SA expenditures for hospital care and the rest went to specialty psychiatric and substance abuse hospitals (calculated from Table A.1, Appendix A). Within general hospitals, 74 percent of expenditures were in specialty units and the remainder were allocated to other areas (or "scatter beds") of the hospital.

Few retail medications existed to treat substance abuse in 2001. Therefore, it is not surprising that prescription medication expenditures were 0.4 percent of total SA expenditures. Two FDA-approved medications are for alcoholism—disulfiram (Antabuse®) and naltrexone (Revia®). Buprenorphine (Subutex® and Suboxone®) for the treatment of opiate addiction was approved in 2002 (after the period covered by this report). Methadone is not available as a retail drug.

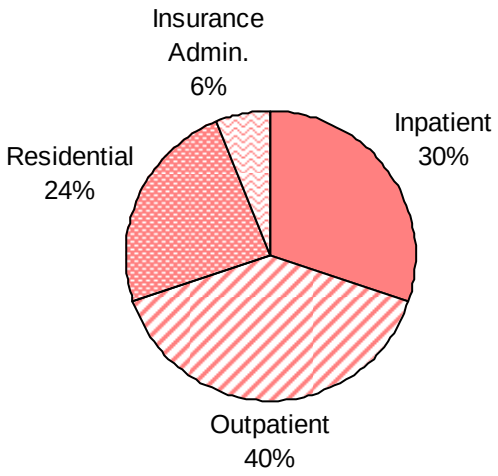
Figure 5.5: Distribution of SA Expenditures by Provider, 2001



SA = $18.3 billion

By site of care, SA expenditures were most likely to be incurred in outpatient settings (40 percent). Residential facilities accounted for 24 percent of SA expenditures. Inpatient care accounted for 30 percent of SA expenditure. The remaining six percent of SA treatment dollars went to insurance administration (Figure 5.6).

Figure 5.6: Distribution of SA Expenditures by Setting of Care (Inpatient, Outpatient, and Residential) and Insurance Administration, 2001



SA = $18.3 billion

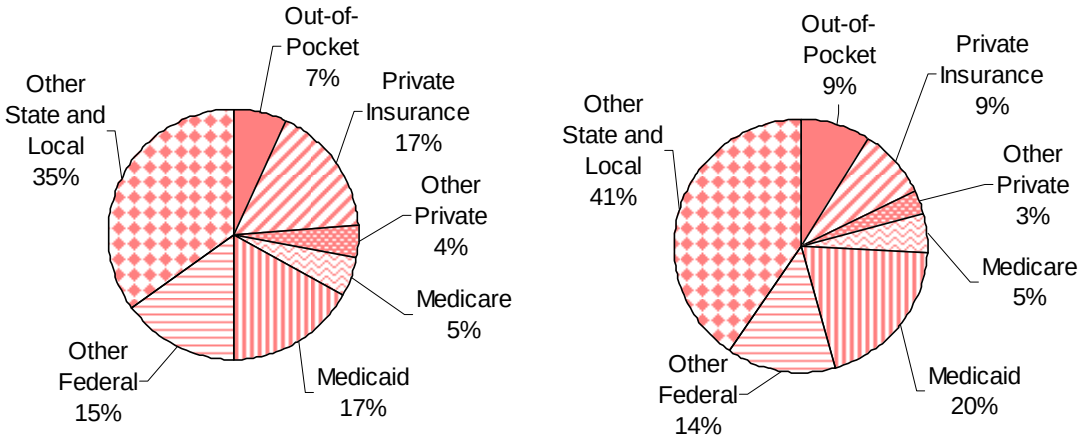
Alcohol and Drug Abuse Expenditures

Of the total $18.3 billion spent on SA in 2001, $9.7 billion was directed toward alcohol use disorder treatment and $8.5 billion was allocated for other drug use disorder treatment. For clients with alcohol and drug use disorders, treatment dollars were allocated to alcohol and drug abuse categories of expenditures, based on the split between alcohol and drug use treatment dollars for clients with single diagnoses.

The distribution of financing sources was somewhat similar between alcohol and drug use disorders (Figure 5.7). More funding originated from public sources for drug use disorders (80 percent) than for alcohol use disorders (72 percent). Private insurance contributed 17 percent for alcohol use disorders, but only nine percent for drug use disorders. The reverse was true for other State and local government funding, where it represented 35 percent of alcohol use disorder expenditures and 41 percent of drug use disorder expenditures.

The distribution of expenditures by provider in 2001 was similar between alcohol abuse and dependence and drug abuse and dependence. However, drug abuse and dependence treatment expenditures were more concentrated in specialty providers (89 percent) than were alcohol abuse and dependence expenditures (79 percent) (calculated from Table A.1, Appendix A). Specialty substance abuse facilities provided a greater proportion of illicit drug treatment than alcohol treatment (49 percent versus 31 percent, respectively). General hospitals provided less care for illicit drug abuse and dependence than alcohol abuse and dependence (21 percent versus 25 percent).

Figure 5.7: Distribution of Alcohol and Drug Use Disorders Expenditures by Payer, 2001



Alcohol = $9.7 billion **Drug Use = $8.5 billion**

Summary

Understanding the sources of funding and providers of treatment for substance use disorders is important because so few individuals with substance use disorders actually seek and receive treatment. Funding came primarily from public programs—State and local governments being the most important, as well as Medicaid, Medicare, and other Federal funding combined—to cover 76 percent of substance abuse treatment spending nationwide in 2001. Private insurance represented only 13 percent of these treatment expenditures, while it covered 36 percent of all health care expenditures.

Judging from the distribution of dollars, the treatment of substance use disorders is concentrated in specialty organizations and hospitals. Specialty substance abuse centers, MSMHOs, and hospitals account for 81 percent of the SA dollar. Independent professionals other than physicians—psychologists, counselors, and social workers—account for seven percent of spending, but they are more involved with these treatments than physicians (who account for only five percent). Compared to MH, psychiatrists, in particular, make up a small proportion of substance abuse expenditures (10 percent of expenditures for MH versus two percent for substance abuse). The reason why psychiatrist expenditures for substance abuse are relatively low clearly requires more research. It is possible that psychiatrists are treating substance abuse but using mental health diagnosis codes. Other hypotheses are that they do not believe they have the appropriate skills to treat substance abuse, that reimbursement barriers exist, or that these professionals believe that treatment should be provided in specialized substance abuse settings and support groups, such as Alcoholics Anonymous.

Chapter 6: Trends for Substance Abuse Treatment Expenditures, 1991–2001

Substance use disorders remained a significant problem in the United States during the decade of the 1990s. According to the 2001 National Household Survey on Drug Abuse (NHSDA), the estimated number of illicit drug users (based on drug use in the past month) in the United States (15.9 million) was considerably higher than the estimate from 1992 (12.0 million), a low point in the tracking of illicit drug use (OAS, 2003). The higher number in 2001 is linked to several factors—a much higher rate among youth (10.8 percent in 2001 versus 5.3 percent in 1992), a slight increase in use among adults (6.6 percent in 2001 versus 5.9 percent in 1992), and a 10 percent increase in the size of the U.S. population.

Two nationally representative surveys have recently found that between 1991–1992 and 2001–2002, the percentage of the population determined to have alcohol abuse increased, while alcohol dependence declined (Grant et al., 2004). Other data indicate that the percentage of chronic drinkers (who consumed 60 or more drinks in a month) comprised 4.6 percent of the population in 1991 and 5.6 percent in 2001 (CDC, 2004).

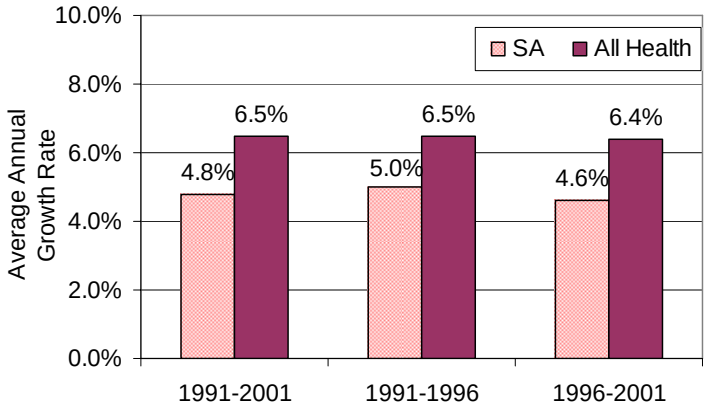
This chapter examines changes in substance abuse (SA) expenditures from 1991 to 2001.

Growth in Substance Abuse Expenditures

SA treatment expenditures in 1991 totaled $11 billion (Table A.5, Appendix A). By 2001, this figure had increased to $18 billion (Table A.1). This translates into a nominal growth rate of 4.8 percent annually (Figure 6.1). The SA expenditure growth rate of 4.8 percent is lower than the 6.5 percent annual growth rate for all health. In inflation-adjusted terms, SA spending grew by 2.7 percent and all health by 4.4 percent.

During the first five years (1991 through 1996), SA treatment expenditures grew by 5.0 percent versus 6.5 percent for all health (Figure 6.1). During the last five years (1996 through 2001), SA grew by 4.6 percent versus 6.4 percent for all health. SA expenditures, as a percentage of all health, fell from 1.6 percent in 1991 to 1.3 percent in 2001.

Figure 6.1: Growth of SA Expenditures Compared to All Health, 1991–2001 and Five-Year Increments



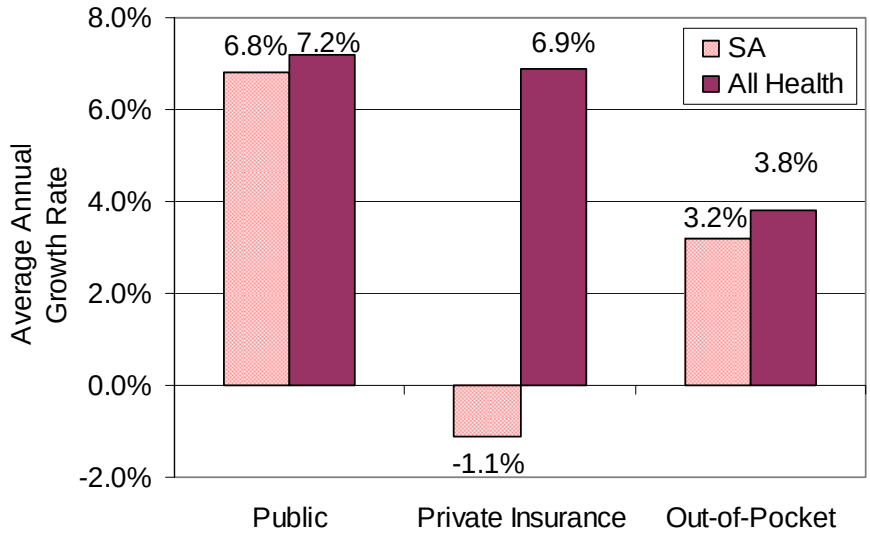
It is difficult to judge whether the growth in substance abuse expenditures has translated into an increase in persons receiving treatment. Estimates are available for the percent of the U.S. population receiving substance abuse treatment in 2001, but not for 1991.

Trends by Type of Payer

SA expenditure trends differ starkly for public payers as compared with private payers over the 1991–2001 period. SA financing by public payers grew by 6.8 percent annually (Figure 6.2). This was slightly lower than the 7.2 percent annual growth rate for all health public payers. In contrast, SA private insurance payments fell by 1.1 percent annually, as compared with an all health growth rate of 6.9 percent. Out-of-pocket spending grew by 3.2 percent annually, compared to 3.8 percent for all health.

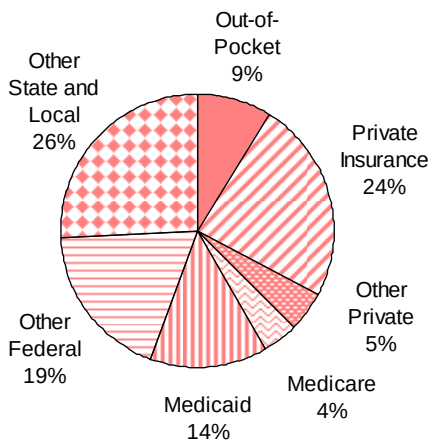
As a result of the much higher growth rate of public SA payments in relation to private payments, public payers became an increasingly dominant source of financing for SA treatment. Public payers made up 62 percent of total SA in 1991 and 76 percent in 2001 (Tables A.6 and A.2, Appendix A).

Figure 6.2: Growth of Public, Private Insurance, and Out-of-Pocket Payments for SA versus All Health, 1991–2001

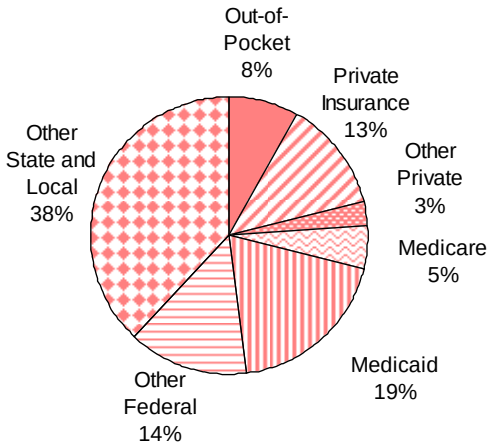


Because of the slower growth rate of private insurance relative to public payer, private insurance declined from 24 percent of total SA in 1991 to only 13 percent in 2001 (Figure 6.3). Out-of-pocket expenditures declined slightly, as well.

Figure 6.3: Distribution of SA Expenditures by Payer, 1991 and 2001



Alcohol = $9.7 billion

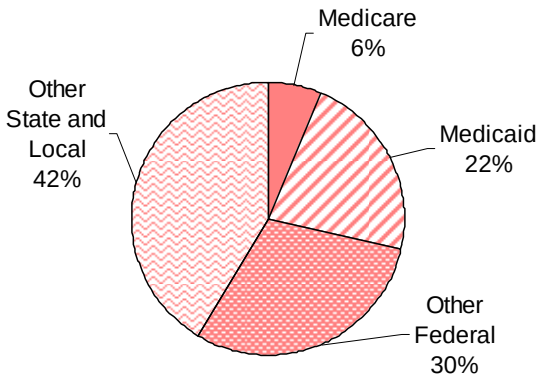


Drug Use = $8.5 billion

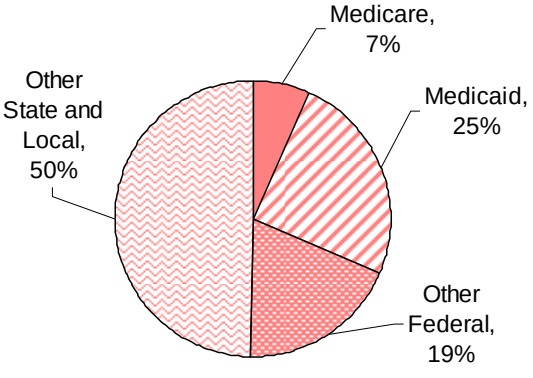
State and local governments manage the majority of spending on SA treatment. Counting all of Medicaid and State and local revenue spending, States managed 57 percent of SA spending in 2001. Furthermore, they managed a portion of the spending in the other Federal category—the block grant funds.

Among public payers, the growth rate during the ten-year period was highest for Medicaid (8.1 percent annually), Medicare (8.2 percent annually), and other State and local government (8.7 percent annually). Other Federal expenditures, which include Federal SA block grants to the States, grew 1.7 percent annually (Table A.4, Appendix A). As a result, other Federal government spending made up 30 percent of public SA expenditures in 1991 and only 19 percent in 2001 (Figure 6.4). Other State and local government spending increased from 42 percent to 50 percent of public SA spending over the same period, making it the largest financer of SA treatment. Medicaid grew from 22 percent to 25 percent of public SA expenditures nationally. Medicare increased from six to seven percent of public SA expenditures.

Figure 6.4: Distribution of Public SA Expenditures by Public Payer, 1991 and 2001



1991 SA Public = $7.1 billion

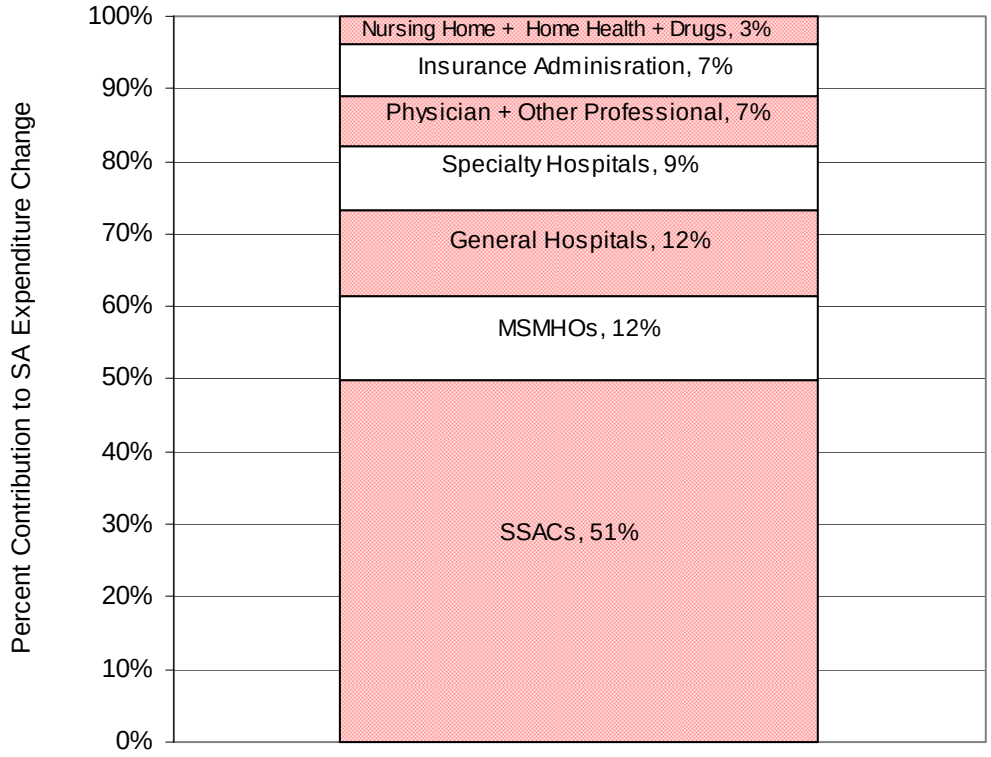


2001 SA Public = $13.8 billion

Trends by Type of Provider

Total SA expenditures grew by approximately $6.8 billion between 1991 and 2001. By far the largest components of this change were specialty substance abuse centers (SSACs), which accounted for 51 percent of the $6.8 billion increase in expenditures (Figure 6.5). The next two largest components were MSMHOs and general hospitals, which each contributed 12 percent of the increase.

Figure 6.5: Contribution to the SA Expenditure Change between 1991 and 2001 by Type of Provider and Insurance Administration

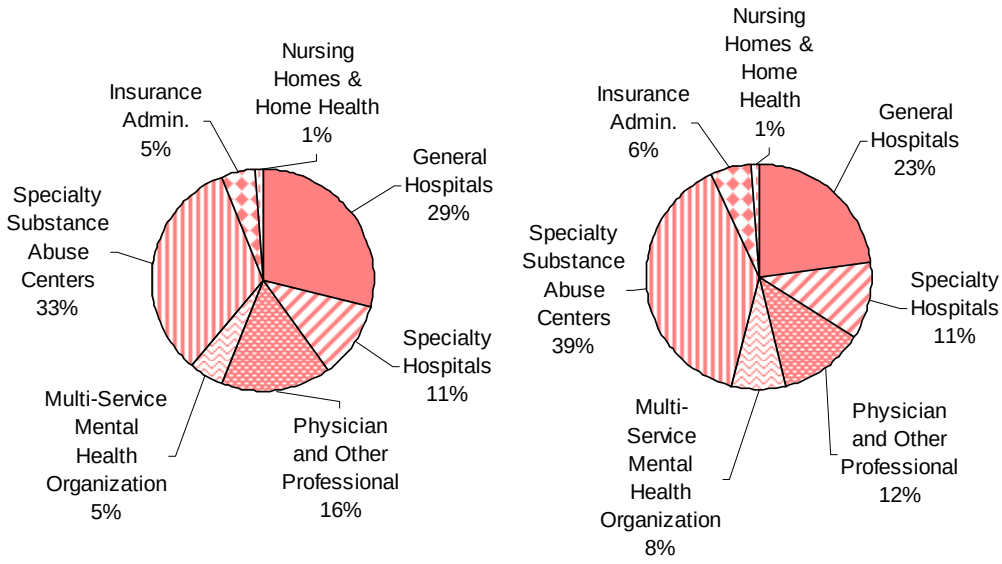


SSACs grew from 33 percent of SA expenditures in 1991 to 39 percent in 2001, making it the largest provider segment (Figure 6.6). The proportion of dollars going to MSMHOs increased from five percent in 1991 to eight percent of SA expenditures in 2001.

Expenditures for hospital care declined proportionately over the ten-year period. General hospitals comprised 29 percent of expenditures in 1991 and 23 percent in 2001. The growth rate of SA expenditures for general hospitals was below that for all health care (2.2 percent versus 5.2 percent). Specialty hospitals comprised 11 percent of expenditures in both 1991 and 2001. SA expenditures in specialty hospitals grew by 3.9 percent annually (Table A.3, Appendix A).

The role of physicians and other professionals also declined from 16 percent of SA expenditures to 12 percent. SA spending on physician services increased at a much slower rate (3.5 percent annually) compared with all health care spending on physicians (which rose 6.0 percent annually). Expenditures for SA treatment by other professionals grew by 1.8 percent annually, as compared to 8.0 percent per year for allied professionals involved in all health care treatments (Table A.3, Appendix A).

Figure 6.6: Distribution of SA Expenditures by Provider, 1991 and 2001



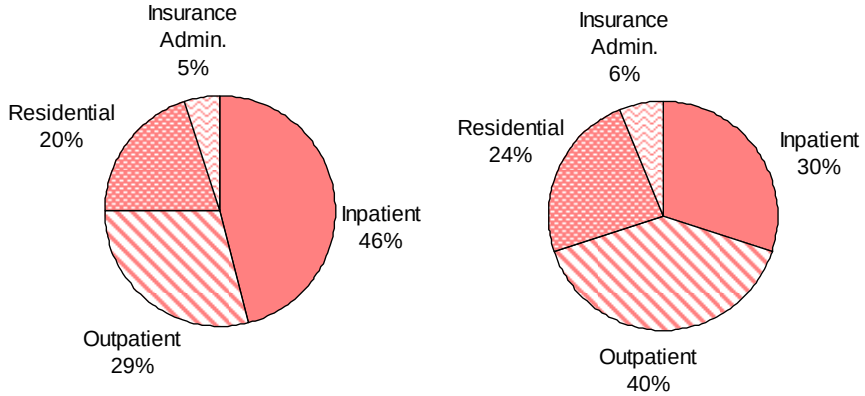
1991 SA = $11.4 billion **2001 SA = $18.3 billion**

Trends by Site of Care

Delivery of SA treatment by specialty providers (i.e., general hospital specialty units, specialty hospitals, psychiatrists, other MHSA professionals, MSMHOs, and SSACs) dominated in both 1991 and 2001 at 82 and 84 percent of expenditures, respectively (calculated from Tables A.5 and A.1).

Consistent with the decline in hospital care, inpatient expenditures declined from 46 percent of total SA to only 30 percent (Figure 6.7). Outpatient's share of SA expenditures increased from 29 percent to 40 percent. Care in residential settings grew only slightly, from 20 percent to 24 percent.

Figure 6.7: Distribution of SA Expenditures by Setting of Care (Inpatient, Outpatient, and Residential) and Insurance Administration, 1991 and 2001



1991 = $11.4 billion **2001 = $18.3 billion**

Summary

Expenditures on SA treatment grew 1.7 percentage points less than the growth rate of all health care. There were important shifts in funding of SA services over the ten-year period. Funding grew markedly for public sources but actually contracted for private insurers. On the public side, Medicaid, Medicare, and other State and local government funding of SA services expanded more rapidly than other Federal sources. State and local government financing grew and remained the largest single source of funding.

Changes in treatment patterns also emerged. As a proportion of total SA expenditures, inpatient care continued to decline, as did independent physicians and other professionals (psychologists, counselors, and social workers). The spending increases in SA treatment occurred primarily in specialty substance abuse facilities, perhaps because this is where demand increased most. Specialty substance abuse facilities remained the largest proportion of provider expenditures.

Chapter 7: Discussion

Expenditures for mental health services and substance abuse treatment comprise a significant portion of the health care economy, $104 billion out of a total of $1,372 billion in 2001. This represents a substantial investment in treatment. One analysis estimates that more than 30 million people reported receiving MHSA treatment in 2001 (Zuvekas, 2004).

This report highlights a number of important trends in overall MHSA growth rates and by payer, provider, and site of care. Among these changes, three of the most salient are the growth in spending on prescription medications, the decline in inpatient treatment, and the shift to publicly financed care.

MHSA expenditures increased by 5.6 percent annually from 1991 to 2001. From 1991 to 1996, the growth rate was 4.8 percent, while from 1996 to 2001 the growth rate was 6.3 percent. The higher growth rate in the second half of the ten-year series is almost entirely because of the higher growth rate of MHSA prescription drugs. If prescription drugs are excluded, the MHSA growth rate was 4.1 percent from 1991 to 1996 and 4.2 percent from 1996 to 2001. In comparison, the growth rate for all health care was 6.5 percent from 1991 to 1996 and 6.4 percent from 1996 to 2001.

The largest category of prescription medications are antidepressants, accounting for more than 50 percent of MHSA drug expenditures. Antipsychotics made up 22 percent of total MHSA drugs, antianxiety drugs comprised 13 percent, and other MHSA drugs (which include stimulants and other drugs) comprised 12 percent. Prescription medication expenditure growth stems from a combination of increased use of medications and higher prices for medications. During the time period, a number of new psychotropic medications entered the market. In addition, more people began taking MHSA drugs (Olfson et al., 2002).

A second major trend apparent in the data is the movement away from inpatient care. This is a long-term shift that also was noted in the previous estimates that covered the 1987 to 1997 period. Analyses of several other data sources have found that the length of stays have been declining dramatically over time. Studies are more equivocal about whether the admission rates also declined (Mark and Coffey, 2003; Zuvekas, 2001).

MHSA inpatient hospital care has also been shifting away from specialty hospitals toward general hospitals. During the 1990s, psychiatric hospitals and psychiatric hospital beds continued to close. As a result, general hospital inpatient MHSA expenditures were flat, and the MHSA specialty hospital growth rate was negative, driven mostly by MH. However, for SA spending, the growth rate of spending on specialty hospitals was positive. Within general hospitals for MHSA, there also has been a movement away from specialty units toward non-specialty unit care or “scatter beds.” One question raised by these trends is what impact the increased provision of acute inpatient services and treatment in less specialized settings might have on access and the quality of clinical care.

A third important finding is that public payers grew in importance relative to private payers. This was caused by the fact that growth in MHSA expenditures diverged for public and private payers. MHSA public expenditures grew by 6.8 percent, while private insurance increased by 4.7 percent. Looking more closely, one finds that the gap in the growth rate was only apparent during the first five-year period from 1991 to 1996. During that time period, private insurance MHSA expenditures grew by 2.5 percent, while public expenditures grew by 7.2 percent. From the 1996

to 2001 period, private insurance grew by 6.9 percent and public by 6.3 percent. To some extent, this gap in growth reflects overall health care trends. For all health during the first five years, public expenditure growth outpaced private insurance growth, while during the last five years the reverse was true. This pattern stems in part from the imposition of private cost controls through managed care during the first half of the period, which later moderated (Levit et al., 2003).

The public sector traditionally has played a greater role in supporting mental health services and substance abuse treatment than is the case for other diseases. Historically, State and local mental health providers have been providers of last resort for persons who are uninsured or underinsured. MHSA expenditures continue to represent a sizeable portion of State and local government budgets. MH comprised more than one-fifth of State and local health care expenditures in 2001. However, over time other programs have grown in importance, in particular, Medicaid. As people with MHSA disorders are increasingly served through Medicaid, questions arise about how to integrate social services, general health services, and MHSA services across diverse funding streams.

For substance abuse, the difference between public and private sector growth rates was even greater and existed during both the first and second parts of the series. During the first five years, substance abuse private insurance expenditures fell by 2.4 percent annually, and during the last five years grew only by 0.1 percent annually. The trend clearly raises questions as to why substance abuse expenditures under private insurance are not keeping pace with inflation. The large decline in private substance abuse expenditures is unlikely to be caused by a change in the number of plans offering substance abuse insurance benefits. According to the U.S. Bureau of Labor Statistics, in 1991, 96 and 97 percent of employees in medium and large establishments with medical benefits had drug abuse and alcohol abuse treatment coverage, respectively. In 1997, the percentages had grown to 97 percent and 98 percent. The change in use of substance abuse services may be attributable to the growth in managed care. Managed care can have a dramatic effect on substance abuse treatment. For example, Shepard and colleagues (2002) studied the effect of the Massachusetts Medicaid program's risk-sharing contract with a private, for-profit specialty managed behavioral health care carve-out. They found that per episode spending decreased by 76 percent and there was a 99 percent reduction in the use of hospital-based settings after the carve-out was put into place. Clearly, these trends merit additional research.

There are several other distinctions that can be drawn between the substance abuse expenditures and mental health expenditures. In terms of the payer distribution, a greater proportion of substance abuse treatment expenditures (76 percent) came from public payers as compared with MH (63 percent). Among the public payers there are also differences. For substance abuse a greater proportion of public dollars came from other State and local funding and other Federal funding (together comprising 69 percent of total public SA dollars) and less came from Medicaid and Medicare. Thus, more money for SA is coming from grants and State and local program dollars and less from insurance programs, compared to MH dollars.

The distribution of expenditures among providers between MH and SA also revealed significant differences. Physicians and other professionals played a much larger role in treating MH care (on a dollar basis) than in SA care. While 21 percent of MH dollars went to physicians and other professionals, only 12 percent of SA dollars went to physicians and other professionals. The difference was most significant for psychiatrists. Ten percent of MH expenditures were for psychiatrists, as compared with only two percent of SA expenditures. Specialty clinics played a greater role in SA treatment. Thirty-nine percent of SA expenditures occurred in specialty substance abuse centers, as compared with 18 percent of MH expenditures that occurred in multi-

service mental health organizations. Within general hospitals, a greater proportion of SA dollars occurred in specialty units as compared with MH. Finally, retail medications comprised about one-fifth of MH expenditures and totaled approximately $17 billion, while expenditures on retail medications were less than one percent of total SA expenditures and less than 100 million dollars.

National expenditure analyses provide a bird's-eye view of the mental health and substance abuse system. Their strength comes from their ability to portray broad trends in types of services provided, in providers furnishing those services, in financing, and in specialty/non-specialty concentrations. Aggregate analysis helps to identify issues and focus attention on important trends. However, aggregate analysis is not designed to address underlying causal factors which are best left to studies designed to test cause and effect. Studies of the MHSA system with more detailed data on specific types of providers and payers can complement and inform the expenditure data. With both types of studies, one can begin to develop a clearer understanding of the complex and evolving MHSA treatment system. Through this knowledge, one can begin to formulate strategies for improving the quality and access of care.

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Appendix A: Detailed Tables of MHSA Spending Estimates

Table A.1: 2001 NHA-Equivalent Estimated Expenditures of Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA), and All Health by Type of Provider and Site of Service, All Payers

	MHSA		MH		SA		AA		DA		NHA All Health	
Type of Provider and Site of Service	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent
General, Non-Specialty Hospitals	17,518	17%	13,362	16%	4,156	23%	2,394	25%	1,762	21%	435,221	32%
Inpatient (Note 1)	10,789	10%	8,543	10%	2,246	12%	1,249	13%	997	12%	Grey = not available	
Outpatient (Note 1)	5,476	5%	3,865	5%	1,611	9%	981	10%	631	7%		
Residential (Note 1)	1,253	1%	954	1%	299	2%	164	2%	134	2%		
General Hospital, Specialty Units	9,019	9%	5,928	7%	3,091	17%	1,554	16%	1,537	18%		
Inpatient	6,277	6%	4,481	5%	1,796	10%	867	9%	928	11%		
Outpatient	2,225	2%	1,201	1%	1,024	6%	539	6%	486	6%		
Residential	518	0%	246	0%	271	1%	148	2%	123	1%		
Community Hospital, Non-Specialty Care (Note 2)	8,499	8%	7,434	9%	1,065	6%	840	9%	225	3%		
Inpatient	4,512	4%	4,062	5%	450	2%	382	4%	68	1%		
Outpatient	3,251	3%	2,664	3%	587	3%	442	5%	145	2%		
Residential	735	1%	708	1%	28	0%	16	0%	11	0%		
Specialty Hospitals	11,653	11%	9,735	11%	1,918	11%	1,051	11%	866	10%	15,999	1%
Inpatient	9,062	9%	7,423	9%	1,639	9%	901	9%	738	9%		
Outpatient	345	0%	277	0%	68	0%	37	0%	31	0%		
Residential	2,246	2%	2,036	2%	210	1%	113	1%	97	1%		
All Physicians	12,144	12%	11,255	13%	889	5%	548	6%	341	4%	313,649	23%
Inpatient	2,369	2%	1,786	2%	583	3%	362	4%	221	3%		
Outpatient	9,776	9%	9,469	11%	306	2%	186	2%	120	1%		
Residential												
Psychiatrists	8,560	8%	8,128	10%	432	2%	231	2%	201	2%		
Inpatient	1,529	1%	1,223	1%	307	2%	176	2%	131	2%		
Outpatient	7,031	7%	6,905	8%	126	1%	55	1%	70	1%		
Residential												
Non-Psychiatric Physicians	3,584	3%	3,128	4%	457	3%	317	3%	140	2%		
Inpatient	840	1%	563	1%	276	2%	186	2%	90	1%		
Outpatient	2,745	3%	2,564	3%	180	1%	131	1%	50	1%		
Residential												
Other Professionals (Note 3)	8,072	8%	6,714	8%	1,358	7%	1,031	11%	327	4%	42,333	3%
Inpatient	1,862	2%	976	1%	886	5%	681	7%	205	2%		
Outpatient	6,210	6%	5,738	7%	472	3%	350	4%	122	1%		
Residential												

Free-Standing Nursing Homes	5,806	6%	5,538	6%	268	1%	222	2%	46	1%	98,911	7%
Inpatient												
Outpatient												
Residential	5,806	6%	5,538	6%	268	1%	222	2%	46	1%		
Free-Standing Home Health	668	1%	657	1%	10	0%	6	0%	5	0%	33,168	2%
Inpatient												
Outpatient	668	1%	657	1%	10	0%	6	0%	5	0%		
Residential												
Retail Prescription Drug	17,909	17%	17,830	21%	78	0%	78	1%			140,574	10%
Inpatient												
Outpatient	17,909	17%	17,830	21%	78	0%	78	1%				
Residential												
Other Personal and Public Health	23,515	23%	14,963	18%	8,552	47%	3,846	39%	4,706	55%	202,958	15%
Inpatient	295	0%	128	0%	167	1%	70	1%	97	1%		
Outpatient	11,499	11%	6,719	8%	4,780	26%	2,270	23%	2,510	29%		
Residential	11,720	11%	8,115	9%	3,605	20%	1,506	15%	2,099	25%		
Multi-Service Mental Health Organizations (Note 4)	16,337	16%	14,963	18%	1,374	8%	826	8%	548	6%		
Inpatient	150	0%	128	0%	22	0%	14	0%	9	0%		
Outpatient	7,439	7%	6,719	8%	720	4%	445	5%	275	3%		
Residential	8,748	8%	8,115	9%	633	3%	368	4%	265	3%		
Specialty Substance Abuse Centers (Note 5)	7,178	7%			7,178	39%	3,019	31%	4,158	49%		
Inpatient	145	0%			145	1%	56	1%	89	1%		
Outpatient	4,060	4%			4,060	22%	1,826	19%	2,235	26%		
Residential	2,972	3%			2,972	16%	1,138	12%	1,835	22%		
Total All Service Providers	97,285	94%	80,055	94%	17,229	94%	9,176	94%	8,053	95%	1,282,813	93%
Total Inpatient	24,377	24%	18,856	22%	5,521	30%	3,263	33%	2,258	27%		
Total Outpatient	51,882	50%	44,556	52%	7,327	40%	3,908	40%	3,419	40%		
Total Residential	21,025	20%	16,644	19%	4,382	24%	2,005	21%	2,377	28%		
Insurance Administration	6,421	6%	5,386	6%	1,035	6%	571	6%	464	5%	89,740	7%
Total Expenditures	103,705	100%	85,441	100%	18,264	100%	9,747	100%	8,517	100%	1,372,553	100%

Source: Substance Abuse and Mental Health Services Administration, 2004.

Notes:

1. Not all service providers will have all three sites of service. Administrative insurance expenses are not attributable to site of service.
2. General hospitals include VA hospitals; community hospitals exclude VA hospitals. Spending on MHSA-related non-specialty care in VA hospitals cannot be distinguished.
3. Includes psychologists and counselors/social workers.
4. Includes Residential Treatment Centers for Children.
5. Includes other facilities for treating substance abuse.

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Table A.2: 2001 NHA-Equivalent Estimated Expenditures of Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA), and All Health Care by Type of Payer (Including Administrative Expenses), All Providers

	MHSA		MH		SA		AA		DA		NHA All Health	
Type of Payer	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent
Private -- Total	36,276	35%	31,806	37%	4,470	24%	2,728	28%	1,742	20%	759,431	55%
Out-of-Pocket	12,266	12%	10,867	13%	1,399	8%	655	7%	744	9%	205,497	15%
Private Insurance	21,105	20%	18,658	22%	2,446	13%	1,663	17%	784	9%	496,103	36%
Other Private	2,905	3%	2,281	3%	625	3%	411	4%	214	3%	57,831	4%
Public -- Total (Note 1)	67,429	65%	53,636	63%	13,794	76%	7,019	72%	6,775	80%	613,123	45%
Medicare	7,178	7%	6,272	7%	906	5%	505	5%	401	5%	241,884	18%
Medicaid	26,738	26%	23,357	27%	3,381	19%	1,643	17%	1,737	20%	225,511	16%
Other Federal (Note 2)	6,557	6%	3,984	5%	2,574	14%	1,420	15%	1,153	14%	56,308	4%
Other State and Local (Note 2)	26,957	26%	20,023	23%	6,934	38%	3,450	35%	3,483	41%	89,420	7%
All Federal (Note 3)	29,244	28%	23,804	28%	5,440	30%	2,879	30%	2,562	30%	429,002	31%
All State (Note 4)	38,185	37%	29,832	35%	8,353	46%	4,140	42%	4,213	49%	184,121	13%
Total	103,705	100%	85,441	100%	18,264	100%	9,747	100%	8,517	100%	1,372,554	100%

Source: Substance Abuse and Mental Health Services Administration, 2004.

Notes:

1 The State Children's Health Insurance Program (SCHIP) total NHA spending was $3.8 billion in 2001. MHSA SCHIP spending was estimated at $800 million or about 1% of total MHSA. In this table, SCHIP is distributed across Medicaid, Other Federal, and Other State and Local categories.

2 SAMHSA block grants to "State and Local" agencies are part of "Other Federal" government spending.

3 Includes Federal Share of Medicaid.

4 Includes State and Local Share of Medicaid.

Table A.3: Average Annual Growth Rates for NHA-Equivalent Estimated Expenditures of Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA), and All Health Care by Type of Provider, All Payers, 1991–2001 and Five-Year Increments

	MHSA			MH			SA			AA			DA			NHA All Health		
Type of Provider and Site of Service	1991 to 2001	1991 to 1996	1996 to 2001	1991 to 2001	1991 to 1996	1996 to 2001	1991 to 2001	1991 to 1996	1996 to 2001	1991 to 2001	1991 to 1996	1996 to 2001	1991 to 2001	1991 to 1996	1996 to 2001	1991 to 2001	1991 to 1996	1996 to 2001
General, Non-Specialty Hospitals	4.4%	5.1%	3.7%	5.2%	6.3%	4.1%	2.2%	2.2%	2.3%	0.6%	0.6%	0.6%	5.0%	5.1%	4.9%	5.2%	5.3%	5.0%
Inpatient (Note 1)	2.4%	2.8%	2.0%	3.6%	4.4%	2.8%	-1.0%	-1.5%	-0.6%	-2.7%	-1.8%	-3.6%	1.6%	-0.8%	4.0%	Grey = not available		
Outpatient (Note 1)	9.4%	11.8%	7.0%	9.4%	11.4%	7.3%	9.4%	12.6%	6.4%	7.4%	8.9%	5.9%	13.8%	20.9%	7.1%			
Residential (Note 1)	6.6%	8.0%	5.2%	7.2%	9.8%	4.6%	5.0%	2.5%	7.6%	2.6%	-7.7%	14.1%	9.0%	16.6%	1.9%			
General Hospital, Specialty Units	1.0%	5.0%	-3.0%	0.2%	5.5%	-4.9%	2.7%	3.8%	1.7%	-0.5%	0.4%	-1.4%	7.8%	10.2%	5.4%			
Inpatient	-0.2%	4.8%	-4.9%	-0.3%	5.7%	-6.0%	0.1%	2.2%	-1.9%	-3.4%	1.2%	-7.8%	5.5%	4.4%	6.5%			
Outpatient	3.4%	4.2%	2.6%	0.3%	1.7%	-1.0%	9.1%	10.0%	8.2%	6.1%	-0.1%	12.8%	13.9%	24.5%	4.2%			
Residential	9.5%	16.2%	3.2%	17.8%	40.5%	-1.2%	5.4%	2.2%	8.6%	2.9%	-8.5%	15.8%	9.5%	17.0%	2.6%			
Community Hospital, Non-Specialty Care (Note 2)	10.3%	5.4%	15.5%	12.9%	8.2%	17.8%	0.9%	-2.3%	4.3%	3.1%	1.3%	5.1%	-4.4%	-10.1%	1.6%			
Inpatient	8.0%	-4.4%	22.0%	11.5%	-0.6%	25.1%	-4.6%	-13.9%	5.7%	-0.9%	-13.7%	13.8%	-13.9%	-14.2%	-13.6%			
Outpatient	17.6%	24.8%	10.8%	20.4%	28.3%	12.9%	10.1%	17.1%	3.5%	9.2%	19.2%	0.0%	13.5%	4.8%	23.0%			
Residential	5.0%	3.2%	6.8%	5.1%	3.1%	7.2%	1.9%	3.9%	-0.1%	0.5%	-2.5%	3.6%	4.4%	14.0%	-4.3%			
Specialty Hospitals	-0.9%	-0.7%	-1.0%	-1.6%	-1.2%	-1.9%	3.9%	3.1%	4.6%	1.7%	1.1%	2.4%	7.2%	6.7%	7.8%	-0.6%	-2.5%	1.4%
Inpatient	-2.4%	-2.5%	-2.4%	-3.4%	-3.1%	-3.7%	4.1%	2.6%	5.6%	2.1%	0.9%	3.3%	7.4%	5.8%	9.0%			
Outpatient	-6.4%	-3.8%	-9.0%	-7.1%	-4.5%	-9.7%	-2.7%	0.7%	-5.9%	-4.8%	-5.9%	-3.8%	0.9%	10.7%	-8.1%			
Residential	17.8%	28.0%	8.5%	20.9%	33.7%	9.3%	5.0%	8.3%	1.8%	2.3%	6.6%	-1.9%	9.7%	11.9%	7.5%			
All Physicians	5.7%	5.2%	6.3%	6.0%	5.5%	6.4%	3.5%	1.4%	5.6%	2.6%	0.4%	4.7%	5.2%	3.4%	7.0%	6.0%	5.6%	6.5%
Inpatient	4.0%	3.0%	5.0%	4.9%	4.3%	5.5%	1.7%	-0.1%	3.6%	1.1%	-0.4%	2.5%	2.8%	0.3%	5.4%			
Outpatient	6.2%	5.8%	6.6%	6.2%	5.8%	6.5%	8.3%	6.4%	10.2%	6.4%	3.0%	10.0%	12.1%	13.8%	10.5%			
Residential																		
Psychiatrists	5.8%	5.0%	6.5%	5.8%	5.1%	6.5%	5.2%	2.3%	8.2%	2.4%	5.9%	-1.0%	9.9%	-9.2%	33.1%			
Inpatient	4.8%	3.1%	6.6%	5.1%	3.8%	6.5%	3.8%	0.4%	7.4%	1.7%	4.4%	-1.0%	7.7%	-13.3%	33.9%			
Outpatient	6.0%	5.4%	6.5%	5.9%	5.4%	6.5%	9.7%	9.0%	10.4%	5.1%	11.8%	-1.2%	15.9%	2.0%	31.7%			
Residential																		
Non-Psychiatric Physicians	5.7%	5.7%	5.8%	6.4%	6.7%	6.1%	2.1%	0.9%	3.4%	2.7%	-4.6%	10.5%	1.0%	8.9%	-6.4%			
Inpatient	2.7%	3.0%	2.4%	4.5%	5.4%	3.6%	-0.2%	-0.5%	0.1%	0.5%	-5.2%	6.7%	-1.5%	5.8%	-8.4%			
Outpatient	6.9%	6.9%	6.9%	6.9%	7.0%	6.7%	7.4%	4.8%	10.0%	7.0%	-3.0%	18.1%	8.5%	20.1%	-2.0%			
Residential																		
Other Professionals (Note 3)	3.7%	1.8%	5.6%	4.1%	2.5%	5.7%	1.8%	-1.5%	5.2%	0.2%	-2.4%	2.8%	10.1%	4.6%	15.9%	8.0%	9.4%	6.5%
Inpatient	0.9%	-1.3%	3.2%	1.7%	-0.1%	3.4%	0.1%	-2.6%	3.0%	-1.3%	-3.2%	0.7%	7.5%	1.3%	14.0%			
Outpatient	4.7%	3.0%	6.4%	4.6%	3.1%	6.1%	6.0%	1.9%	10.3%	3.9%	0.1%	7.9%	16.9%	14.5%	19.5%			
Residential																		

Free-Standing Nursing Homes	0.0%	-2.6%	2.6%	-0.3%	-2.9%	2.4%	6.7%	7.9%	5.5%	5.3%	6.7%	3.9%	20.1%	23.7%	16.6%	5.4%	6.5%	4.4%
Inpatient																		
Outpatient																		
Residential	0.0%	-2.6%	2.6%	-0.3%	-2.9%	2.4%	6.7%	7.9%	5.5%	5.3%	6.7%	3.9%	20.1%	23.7%	16.6%			
Free-Standing Home Health	9.9%	21.7%	-0.8%	9.9%	21.5%	-0.6%	9.8%	35.5%	-11.0%	8.2%	29.0%	-9.3%	12.2%	44.3%	-12.8%	8.3%	17.7%	-0.3%
Inpatient																		
Outpatient	9.9%	21.7%	-0.8%	9.9%	21.5%	-0.6%	9.8%	35.5%	-11.0%	8.2%	29.0%	-9.3%	12.2%	44.3%	-12.8%			
Residential																		
Retail Prescription Drug	17.1%	11.9%	22.6%	17.1%	11.9%	22.6%	12.6%	9.9%	15.5%	12.6%	9.9%	15.5%				12.1%	8.4%	15.9%
Inpatient																		
Outpatient	17.1%	11.9%	22.6%	17.1%	11.9%	22.6%	12.6%	9.9%	15.5%	12.6%	9.9%	15.5%						
Residential																		
Other Personal and Public Health	7.9%	9.7%	6.1%	8.3%	10.4%	6.3%	7.1%	8.5%	5.7%	5.3%	3.0%	7.7%	8.8%	13.7%	4.2%	7.1%	7.7%	6.5%
Inpatient	-7.5%	8.8%	-21.3%	-9.9%	0.3%	-19.2%	-5.0%	16.9%	-22.8%	-7.9%	18.6%	-28.5%	-2.0%	14.5%	-16.2%			
Outpatient	7.3%	8.6%	5.9%	6.5%	9.4%	3.8%	8.4%	7.2%	9.6%	7.2%	0.3%	14.5%	9.6%	13.3%	6.0%			
Residential	9.6%	11.1%	8.2%	11.3%	12.7%	9.9%	6.7%	8.6%	4.8%	4.2%	2.5%	5.9%	8.9%	14.0%	4.0%			
Multi-Service Mental Health Organizations (Note 4)	8.4%	10.5%	6.3%	8.3%	10.4%	6.3%	8.9%	11.5%	6.3%	8.3%	10.3%	6.4%	9.9%	13.6%	6.2%			
Inpatient	-10.0%	-1.7%	-17.6%	-9.9%	0.3%	-19.2%	-10.2%	-17.6%	-2.2%	-10.6%	-17.9%	-2.6%	-9.7%	-17.1%	-1.6%			
Outpatient	6.7%	9.7%	3.8%	6.5%	9.4%	3.8%	8.4%	12.9%	4.0%	8.0%	11.6%	4.6%	8.9%	15.0%	3.2%			
Residential	11.3%	12.8%	9.9%	11.3%	12.7%	9.9%	12.2%	14.8%	9.8%	11.3%	13.4%	9.3%	13.7%	17.0%	10.4%			
Specialty Substance Abuse Centers (Note 5)	6.8%	8.0%	5.5%				6.8%	8.0%	5.5%	4.6%	1.3%	8.1%	8.7%	13.7%	3.9%			
Inpatient	-3.8%	22.3%	-24.3%				-3.8%	22.3%	-24.3%	-7.1%	24.9%	-30.9%	-0.8%	18.7%	-17.0%			
Outpatient	8.4%	6.0%	10.7%				8.4%	6.0%	10.7%	7.0%	-3.1%	18.1%	9.7%	13.1%	6.4%			
Residential	5.8%	7.8%	3.9%				5.8%	7.8%	3.9%	2.7%	0.5%	5.0%	8.4%	13.8%	3.2%			
Total All Service Providers	5.4%	4.5%	6.3%	5.6%	4.5%	6.6%	4.7%	4.7%	4.7%	2.7%	1.3%	4.2%	7.6%	10.1%	5.2%	6.3%	6.3%	6.3%
Total Inpatient	0.1%	0.3%	0.0%	0.0%	0.2%	-0.1%	0.5%	0.7%	0.3%	-1.1%	-0.1%	-2.0%	3.5%	2.5%	4.5%			
Total Outpatient	9.0%	7.9%	10.2%	9.2%	7.9%	10.5%	8.3%	7.9%	8.6%	6.7%	2.7%	10.8%	10.4%	14.5%	6.4%			
Total Residential	6.1%	6.0%	6.3%	6.0%	5.4%	6.7%	6.5%	8.1%	4.9%	4.1%	2.5%	5.7%	9.1%	14.2%	4.2%			
Insurance Administration	8.4%	9.8%	7.1%	8.8%	9.9%	7.7%	6.6%	9.3%	4.1%	4.6%	5.9%	3.4%	9.9%	15.1%	4.9%	8.4%	8.8%	8.0%
Total Expenditures	5.6%	4.8%	6.3%	5.7%	4.8%	6.7%	4.8%	5.0%	4.6%	2.8%	1.5%	4.1%	7.7%	10.3%	5.2%	6.5%	6.5%	6.4%

Source: Substance Abuse and Mental Health Services Administration, 2004.

Notes:

1. Not all service providers will have all three sites of service. Administrative insurance expenses are not attributable to site of service.
2. General hospitals include VA hospitals; community hospitals exclude VA hospitals. Spending on MHSA-related non-specialty care in VA hospitals cannot be distinguished.
3. Includes psychologists and counselors/social workers.
4. Includes Residential Treatment Centers for Children.
5. Includes other facilities for treating substance abuse.

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Table A.4: Average Annual Growth Rates for NHA-Equivalent Estimated Expenditures of Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA), and All Health Care by Type of Payer, All Providers, 1991–2001 and Five-Year Increments

	MHSA			MH			SA			AA			DA			NHA All Health		
Type of Payer	1991 to 2001	1991 to 1996	1996 to 2001	1991 to 2001	1991 to 1996	1996 to 2001	1991 to 2001	1991 to 1996	1996 to 2001	1991 to 2001	1991 to 1996	1996 to 2001	1991 to 2001	1991 to 1996	1996 to 2001	1991 to 2001	1991 to 1996	1996 to 2001
Private -- Total	3.7%	1.1%	6.3%	4.2%	1.6%	6.9%	0.4%	-1.7%	2.5%	-1.0%	-4.0%	2.1%	3.1%	3.1%	3.2%	5.9%	4.8%	6.9%
Out-of-Pocket	3.7%	-0.6%	8.2%	3.7%	-0.7%	8.3%	3.2%	-0.5%	7.2%	-0.5%	-4.8%	3.8%	8.7%	6.6%	10.7%	3.8%	1.4%	6.2%
Private Insurance	4.7%	2.5%	6.9%	5.8%	3.6%	8.0%	-1.1%	-2.4%	0.1%	-1.5%	-4.1%	1.3%	-0.5%	1.4%	-2.3%	6.9%	6.3%	7.6%
Other Private	-1.5%	-0.7%	-2.4%	-2.2%	-0.7%	-3.7%	1.6%	-0.6%	3.9%	0.3%	-2.3%	2.9%	4.8%	3.9%	5.8%	5.5%	7.3%	3.8%
Public -- Total (Note 1)	6.8%	7.2%	6.3%	6.8%	7.0%	6.6%	6.8%	8.3%	5.4%	4.9%	4.7%	5.0%	9.3%	13.1%	5.7%	7.2%	8.6%	5.9%
Medicare	7.0%	12.5%	1.7%	6.8%	11.9%	1.9%	8.2%	16.8%	0.3%	5.5%	14.4%	-2.7%	13.2%	22.0%	5.0%	7.2%	10.3%	4.1%
Medicaid	9.5%	9.3%	9.6%	9.7%	8.6%	10.8%	8.1%	13.2%	3.2%	5.2%	10.6%	0.1%	11.8%	17.1%	6.7%	9.2%	10.3%	8.2%
Other Federal (Note 2)	3.8%	3.0%	4.6%	5.5%	5.2%	5.8%	1.7%	0.5%	2.9%	0.8%	-7.0%	9.2%	3.0%	8.8%	-2.5%	5.7%	4.1%	7.3%
Other State and Local (Note 2)	5.3%	5.5%	5.2%	4.4%	4.6%	4.2%	8.7%	9.0%	8.5%	6.9%	6.0%	7.8%	11.0%	12.9%	9.2%	4.4%	4.2%	4.6%
All Federal (Note 3)	7.1%	8.4%	5.8%	7.8%	8.9%	6.8%	4.4%	6.6%	2.2%	2.7%	2.4%	3.0%	6.8%	12.5%	1.4%	7.4%	9.4%	5.4%
All State (Note 4)	6.5%	6.4%	6.7%	6.0%	5.6%	6.4%	8.8%	9.8%	7.7%	6.7%	6.9%	6.5%	11.3%	13.6%	9.0%	6.9%	6.8%	7.0%
Total	5.6%	4.8%	6.3%	5.7%	4.8%	6.7%	4.8%	5.0%	4.6%	2.8%	1.5%	4.1%	7.7%	10.3%	5.2%	6.5%	6.5%	6.4%

Source: Substance Abuse and Mental Health Services Administration, 2004.

Notes:

1 Includes SCHIP programs for years 1997 and forward; SCHIP estimates for 2001 are shown in Table A.2.

2 SAMHSA block grants to "State and Local" agencies are part of "Other Federal" government spending.

3 Includes Federal Share of Medicaid.

4 Includes State and Local Share of Medicaid.

Table A.5: 1991 NHA-Equivalent Estimated Expenditures of Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA), and All Health by Type of Provider and Site of Service, All Payers

	MHSA		MH		SA		AA		DA		NHA All Health	
Type of Provider and Site of Service	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent
General, Non-Specialty Hospitals	11,382	19%	8,050	16%	3,332	29%	2,251	30%	1,080	27%	262,515	36%
Inpatient (Note 1)	8,488	14%	5,993	12%	2,494	22%	1,644	22%	851	21%	Grey = not available	
Outpatient (Note 1)	2,233	4%	1,580	3%	654	6%	481	7%	173	4%		
Residential (Note 1)	661	1%	477	1%	184	2%	127	2%	57	1%		
General Hospital, Specialty Units	8,200	14%	5,837	12%	2,362	21%	1,635	22%	728	18%		
Inpatient	6,400	11%	4,627	9%	1,773	15%	1,227	17%	546	13%		
Outpatient	1,591	3%	1,163	2%	429	4%	297	4%	132	3%		
Residential	209	0%	48	0%	161	1%	111	2%	50	1%		
Community Hospital, Non-Specialty Care (Note 2)	3,182	5%	2,213	5%	969	8%	617	8%	353	9%		
Inpatient	2,088	3%	1,366	3%	722	6%	417	6%	305	8%		
Outpatient	642	1%	417	1%	225	2%	184	2%	41	1%		
Residential	452	1%	429	1%	23	0%	16	0%	7	0%		
Specialty Hospitals	12,715	21%	11,401	23%	1,314	11%	884	12%	430	11%	16,970	2%
Inpatient	11,611	19%	10,515	22%	1,096	10%	733	10%	363	9%		
Outpatient	669	1%	580	1%	90	1%	61	1%	29	1%		
Residential	435	1%	306	1%	129	1%	91	1%	39	1%		
All Physicians	6,943	12%	6,313	13%	631	6%	426	6%	205	5%	175,003	24%
Inpatient	1,598	3%	1,105	2%	493	4%	326	4%	167	4%		
Outpatient	5,345	9%	5,207	11%	138	1%	100	1%	38	1%		
Residential												
Psychiatrists	4,893	8%	4,633	9%	261	2%	182	2%	78	2%		
Inpatient	954	2%	743	2%	211	2%	149	2%	62	2%		
Outpatient	3,939	7%	3,889	8%	50	0%	34	0%	16	0%		
Residential												
Non-Psychiatric Physicians	2,050	3%	1,680	3%	370	3%	243	3%	127	3%		
Inpatient	644	1%	362	1%	282	2%	177	2%	105	3%		
Outpatient	1,406	2%	1,318	3%	88	1%	66	1%	22	1%		
Residential												
Other Professionals (Note 3)	5,625	9%	4,488	9%	1,137	10%	1,012	14%	125	3%	19,694	3%
Inpatient	1,700	3%	826	2%	874	8%	774	10%	99	2%		
Outpatient	3,925	7%	3,662	7%	264	2%	238	3%	25	1%		
Residential												

Free-Standing Nursing Homes	5,823	10%	5,683	12%	140	1%	132	2%	7	0%	58,314	8%
Inpatient												
Outpatient												
Residential	5,823	10%	5,683	12%	140	1%	132	2%	7	0%		
Free-Standing Home Health	260	0%	256	1%	4	0%	3	0%	2	0%	14,879	2%
Inpatient												
Outpatient	260	0%	256	1%	4	0%	3	0%	2	0%		
Residential												
Retail Prescription Drug	3,690	6%	3,666	7%	24	0%	24	0%			44,892	6%
Inpatient												
Outpatient	3,690	6%	3,666	7%	24	0%	24	0%				
Residential												
Other Personal and Public Health	11,030	18%	6,719	14%	4,311	38%	2,291	31%	2,020	50%	102,208	14%
Inpatient	644	1%	365	1%	279	2%	159	2%	120	3%		
Outpatient	5,708	9%	3,566	7%	2,142	19%	1,136	15%	1,006	25%		
Residential	4,678	8%	2,788	6%	1,890	17%	996	13%	895	22%		
Multi-Service Mental Health Organizations (Note 4)	7,306	12%	6,719	14%	587	5%	373	5%	214	5%		
Inpatient	430	1%	365	1%	65	1%	41	1%	24	1%		
Outpatient	3,888	6%	3,566	7%	322	3%	206	3%	117	3%		
Residential	2,988	5%	2,788	6%	199	2%	126	2%	73	2%		
Specialty Substance Abuse Centers (Note 5)	3,724	6%			3,724	33%	1,918	26%	1,806	45%		
Inpatient	214	0%			214	2%	118	2%	96	2%		
Outpatient	1,820	3%			1,820	16%	931	13%	889	22%		
Residential	1,691	3%			1,691	15%	870	12%	821	20%		
Total All Service Providers	57,467	95%	46,575	95%	10,892	95%	7,023	95%	3,869	96%	694,475	95%
Total Inpatient	24,040	40%	18,805	38%	5,235	46%	3,635	49%	1,600	39%		
Total Outpatient	21,831	36%	18,516	38%	3,315	29%	2,043	28%	1,272	31%		
Total Residential	11,597	19%	9,254	19%	2,343	20%	1,345	18%	997	25%		
Insurance Administration	2,860	5%	2,316	5%	544	5%	363	5%	181	4%	40,083	5%
Total Expenditures	60,327	100%	48,891	100%	11,436	100%	7,386	100%	4,051	100%	734,558	100%

Source: Substance Abuse and Mental Health Services Administration, 2004.

Notes:

1. Not all service providers will have all three sites of service. Administrative insurance expenses are not attributable to site of service.
2. General hospitals include VA hospitals; community hospitals exclude VA hospitals. Spending on MHSA-related non-specialty care in VA hospitals cannot be distinguished.
3. Includes psychologists and counselors/social workers.
4. Includes Residential Treatment Centers for Children.
5. Includes other facilities for treating substance abuse.

Table A.6: 1991 NHA-Equivalent Estimated Expenditures of Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA), and All Health Care by Type of Payer (Including Administrative Expenses), All Providers

	MHSA		MH		SA		AA		DA		NHA All Health	
Type of Payer	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent
Private -- Total	25,316	42%	21,022	43%	4,295	38%	3,016	41%	1,278	32%	429,786	59%
Out-of-Pocket	8,554	14%	7,537	15%	1,017	9%	692	9%	324	8%	142,133	19%
Private Insurance	13,371	22%	10,625	22%	2,746	24%	1,926	26%	821	20%	253,899	35%
Other Private	3,391	6%	2,859	6%	532	5%	399	5%	133	3%	33,754	5%
Public -- Total (Note 1)	35,011	58%	27,869	57%	7,142	62%	4,369	59%	2,772	68%	304,773	41%
Medicare	3,657	6%	3,247	7%	411	4%	295	4%	116	3%	120,913	16%
Medicaid	10,795	18%	9,238	19%	1,557	14%	987	13%	570	14%	93,241	13%
Other Federal (Note 2)	4,515	7%	2,339	5%	2,176	19%	1,315	18%	861	21%	32,454	4%
Other State and Local (Note 2)	16,043	27%	13,045	27%	2,998	26%	1,773	24%	1,225	30%	58,165	8%
All Federal (Note 3)	14,736	24%	11,203	23%	3,533	31%	2,210	30%	1,324	33%	210,062	29%
All State (Note 4)	20,274	34%	16,666	34%	3,608	32%	2,160	29%	1,448	36%	94,711	13%
Total	60,327	100%	48,891	100%	11,436	100%	7,386	100%	4,051	100%	734,559	100%

Source: Substance Abuse and Mental Health Services Administration, 2004.

Notes:

1 The State Children's Health Insurance Program (SCHIP) spending for 2001 is included in Table A.2; SCHIP did not exist in 1991.

2 SAMHSA block grants to "State and Local" agencies are part of "Other Federal" government spending.

3 Includes Federal Share of Medicaid.

4 Includes State and Local Share of Medicaid.

Appendix B: Expert Advisory Panel

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