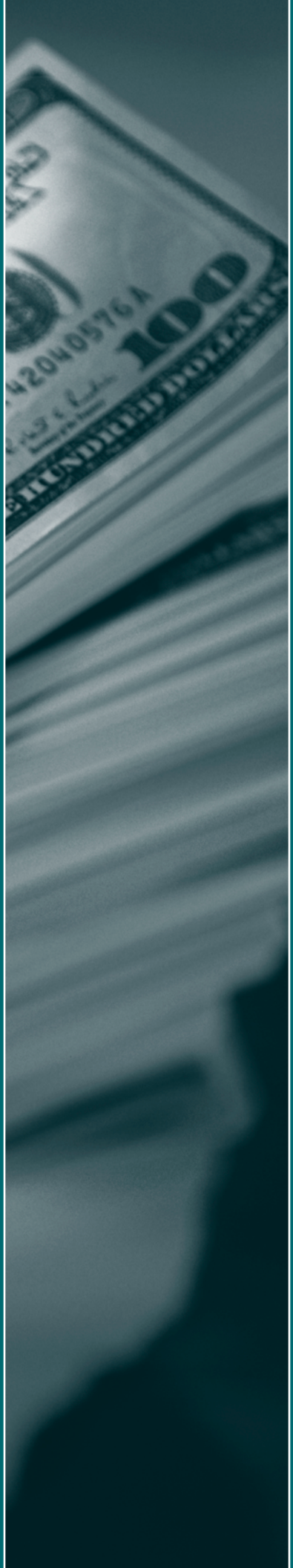
National Expenditures *for* Mental Health Services *and* Substance Abuse Treatment 1993–2003



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National Expenditures for Mental Health Services and Substance Abuse Treatment

1993–2003

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Executive Summary

BACKGROUND

In any given year, about six percent of adults have a serious mental disorder (Kessler et al., 2005b). A similar percentage of children—about five to nine percent—has a serious emotional disturbance (Friedman et al., 1996). More than nine percent of the population suffers from substance abuse or dependence (SAMHSA, 2005). Mental disorders are the leading cause of disability in the U.S. for individuals ages 15 to 44 (World Health Organization, 2004). Although a range of efficacious treatments is available to ameliorate symptoms of mental illnesses and substance use disorders (U.S. Department of Health and Human Services, 1999), financial barriers often stand in the way of receipt of effective treatment. For example, a recent SAMHSA survey finds that among the 11 million adults who reported having unmet need for treatment for mental health problems in the past year, nearly half reported cost or insurance issues as a barrier to treatment receipt (Office of Applied Studies, In Press). Given the immense burden of disability associated with mental illnesses and substance abuse disorders, it is important to know how much the United States is investing in treatment of these conditions. 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:

- What do the latest data for 2003 tell us about how much was spent in the United States to provide mental health and substance abuse (MHSA) treatment and its component parts—mental health (MH) and substance abuse (SA)?
- Which health care providers supply treatment for MH and SA and how much is spent by provider type?
- How much is spent by type of setting on MH and SA services?
- Who pays for MH and SA services and how much do they spend?
- How has spending changed from 1993 to 2003?
- How do MHSA expenditures compare with those for all U.S. health care?

These MHSA spending estimates use many of the same definitions, data, sources, and methods to construct treatment spending estimates as do the national health expenditures (also called the national health accounts (NHA)) produced by the Centers for Medicare & Medicaid Services (CMS). The MHSA spending estimates are based primarily on nationally representative databases with multiple years of data, which generally cover the period of 1993 to 2003. The estimates are presented in this report for MH, SA, and MHSA combined, and are compared with all health care expenditures from the NHA.

Because they focus on expenditures for treatment and not disease burden, these estimates 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 Spending

- National expenditures for the treatment of MHSA disorders amounted to $121 billion in 2003, up from $70 billion in 1993. Spending grew at an average annual rate of 5.6 percent, somewhat slower than spending growth for all health that increased at a 6.5 percent annually on average over the same period. As a result, MHSA spending as a share of all health spending fell to 7.5 percent of the $1.6 trillion spent on all health services in 2003, from 8.2 percent in 1993.

- From 1993 to 1998, a period of rapid expansion of managed care, the growth rate for MHSA expenditures was only 3.4 percent as compared to 5.4 percent for all health. From 1998 to 2003 MHSA spending grew by 7.9 percent similar to the 7.7 percent for all health.

Mental Health (MH) Treatment Spending

- MH spending totaled $100 billion in 2003, representing 6.2 percent of all health care spending.

- One of the fastest growing components of MH spending was drugs prescribed to treat mental disorders. MH prescription drug expenditures grew by 18.8 percent annually between 1993 and 2003 and were responsible for 42 percent of the increase in MH spending between 1993 and 2003.

- Public sources financed more than half of all spending for MH treatment. Public payers accounted for 61 percent of total MH spending in 1993, peaked at 63 percent in 1996, and then decreased to 58 percent in 2003. Half of this drop in share occurred from 2001 to 2003. This trend stems from spending for prescription drugs, which is more heavily funded by private payers than are most MH providers, as well as from the decline in state spending growth. However, some public payers—Medicaid, in particular—increased their financing share (from 21 percent to 26 percent of MH spending between 1993 and 2003).

- Out-of-pocket spending for MH grew annually by 7.2 percent from 1993 to 2003, compared to a 4.6 percent growth rate of all health care. Much of the difference in growth between MH and all health is related to spending for prescription drugs, which is a higher share of MH spending (23 percent) than for all health care (11 percent).

- The growth rate of out-of-pocket spending for MH accelerated in the second half of the ten year period from 4.3 percent from 1993 to 1998 to 10.1 percent from 1998 to 2003. Out-of-pocket spending on prescription drugs, psychiatrist services, and other professional services were the largest contributors to this acceleration in spending.

- Spending for services from specialty providers grew by 2.9 percent between 1993 and 2003 while spending on non-specialty providers grew by 6.8 percent. Slow spending growth for specialty providers resulted in a decline in the share of MH expenditures that were paid to specialty provider between 1993 and 2003. Most of this decline is attributable to declines in spending for specialty hospitals and psychiatric units of general hospitals.

Substance Abuse (SA) Treatment Spending

- In 2003, an estimated $21 billion was devoted to treatment of substance use disorders. This amount constituted 1.3 percent of all health care spending.

- Public payments supported the majority of SA expenditures. Throughout the 1993–2003 period, public expenditures continued to increase as a share of SA expenditures, rising from 68 percent of SA expenditures in 1993 to 77 percent in 2003.

- Private insurance payments on SA treatment grew at an average rate of 0.1 percent annually between 1993 and 2003, compared with the private payment annual growth rate for all health care of 7.3 percent.

- Other Federal government spending made up 17 percent of SA expenditures in 1993 and only 15 percent in 2003. Other State and local government spending increased from 31 percent to 40 percent of SA spending over the same period, making it the largest financer of SA treatment. Medicaid share increased from 16 percent to 18 percent of SA expenditures nationally, while Medicare spending share (4 percent in 1993 and 4 percent in 2003) remained relatively constant.

- Specialty substance abuse centers (SSACs) for the treatment of substance use disorders accounted for 57 percent of the increase in SA expenditures. These centers are the largest single provider of SA services.

- Inpatient SA expenditures declined from 41 percent of SA spending in 1993 to only 21 percent in 2003. Outpatient share of SA expenditures increased from 34 percent to 49 percent. Spending on care in residential settings rose only slightly in share, from 20 percent to 23 percent. Spending on prescription drugs was negligible in both 1993 and 2003 and accounted for only 0.2 percent and 0.5 percent of SA spending respectively.

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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 described estimates for 1986 through 1996 (McKusick et al., 1998), the report released in 2000 presented spending estimates for 1987 through 1997 (Coffey et al., 2000) and the report released in 2005 presented spending estimates for 1991–2001 (Mark et al., 2005). This report focuses on spending trends from 1993 through 2003.

The estimates in this report replace prior sets of estimates. These estimates include data for years that are revised from earlier reports to take advantage of better data sources and improved methods. Estimates shown in earlier reports should not be combined with these estimates because they may be inconsistent with the new sources and methods in some cases. Policy makers and analysts who want to examine trends in spending should use this report and should not attach earlier years of estimates from previous reports to the estimates presented here.

The National Health Accounts, produced by the Centers for Medicare & Medicaid Services (CMS), follows a similar convention of reporting revised and updated historical trends when implementing method or source changes that cover the entire time period.

Chapter 1 | Background and Methods

THIS REPORT AND ITS ORGANIZATION

This report presents the latest estimates of expenditures on mental health and substance abuse (MHSA) treatment services. It improves upon and replaces the three prior reports and related journal articles of MHSA estimates produced by the Substance Abuse and Mental Health Administration (SAMHSA) since the inception of this project in 1996 (McKusick et al., 1998, Mark et al., 1998; Coffey et al., 2000, Mark et al., 2000, Mark et al., 2005a, Mark et al., 2005b) .

This report presents the spending for MHSA combined, followed by spending for mental illness and substance use disorders separately, because the expenditure patterns for these disorders differ in some important ways. The organization of the report is as follows.

- **Chapter 1** describes the methods of estimation and their limitations.
- **Chapter 2** summarizes the findings for total mental health and substance abuse (MHSA) spending.
- C**hapter 3** examines mental health (MH) services spending by provider and payer for the latest year estimated, 2003 and compares this to all health care spending.
- **Chapter 4** reviews the trends in MH relative to all health expenditures between 1993 and 2003.
- **Chapter 5** focuses on substance abuse (SA) treatment expenditures and explores the major providers and sources of financing treatment for substance use disorders in comparison to all health in 2003.
- **Chapter 6** presents information on trends in SA spending from 1993 to 2003.
- **Chapter 7** draws conclusions from the results of the spending estimates
- **Appendix A** contains tables of estimates that serve as the foundation for the discussion and graphs displayed in this report. Tables display estimates for 1993 and 2003, as well as average annual growth rates for 1993–2003, 1993–1998, and 1998–2003 and distributions of spending by provider, setting, specialty/non-specialty group, and payer.
- **Appendix B** lists the members of the Technical Expert Panel for this report.
- **Appendix C** provides a catalog of abbreviations used in this report along with their meanings.

RATIONALE FOR THE ESTIMATES

SAMHSA is part of the U.S. Department of Health and Human Services (DHHS). The SAMHSA vision is to promote a life in the community for everyone. SAMHSA aims to achieve that vision through a mission that is both action-oriented and measurable—a mission to build resilience and facilitate recovery for people with, or at risk of, substance abuse and/or mental illness. The SAMHSA goals are to improve accountability, capacity, and effectiveness in order to ensure that its resources are being used effectively and efficiently throughout State and community programs that serve clients. To promote accountability, 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, by increasing understanding of what the nation spends on MH services and SA treatment, which payers fund that treatment, who delivers that treatment, and how expenditures have changed over time.

PURPOSE AND SCOPE OF ESTIMATES

The estimates provide ongoing information about national spending on health care services related to the diagnosis and treatment of mental and substance use disorders. The estimates also provide a view of MHSA treatment spending over time and compared with spending on all health care. This report describes estimates for 1993 through 2003.

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 subsidies to assist clients with MHSA disorders. The scope of the report 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 does not include expenditures for mental retardation services or for the diagnosis and treatment of related disorders that are normally, or historically, covered by general medical insurance, such as dementias and tobacco addiction. Services through self-help groups such as Alcoholics Anonymous are not included in these estimates because these programs are free to the clients. Finally, the expenditures reported do not include spending to prevent substance use disorders or mental illnesses.

Expenditure estimates are presented overall for the whole MHSA system as well as for particular providers. However, estimates are not available by the number of persons served, neither overall or by provider type.

METHODS

The estimates integrate national data sources from various government agencies and private organizations. Data were analyzed using both actuarial and statistical techniques. 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.

Expert Advice. The methods for the estimation of national MHSA expenditures drew extensively upon suggestions from reviewers. The advisors included experts in MH, substance use disorders, expenditure estimation, actuarial methods, health services research, and health economics. Experts on State programs (including the National Association of State Alcohol/Drug Abuse Directors and the National Association of State Mental Health Program Directors) 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 current 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 & Medicaid Services (CMS). The framework is a two-dimensional matrix. Along one dimension are health care providers or products that constitute the U.S. health care industry while the other dimension is comprised of sources of funds used to purchase this health care.

MHSA spending estimates were constructed for two major treatment categories of spending: MH and SA, with SA estimated in two separate subcategories—alcohol abuse (AA) and drug abuse (DA). While estimates of SA were prepared at this more detailed level, in most instances findings are presented in this report as a sum of AA and DA spending, although they are available separately in the Appendix A Tables at the end of this report.

CMS has a long history, as well as substantial expertise, in estimating national spending. The estimates of MHSA spending for non-specialty providers 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 MH, AA, DA and for total MHSA in the U.S. from 1993 through 2003. 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.

Strengths of Approach. The major benefit of developing estimates to be consistent with the NHA is that it allows for an analysis of and comparison between MHSA and all health care spending. When the same methods, underlying data sources, and estimates are used for both calculations, the results are consistent and can be used to produce meaningful comparisons. In addition, both 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 and substance use disorders—can be studied to understand the patterns of public and private spending on these problems, and the participation by types of providers can be monitored as treatment patterns change.

Basic Calculations. Table 1.1 summarizes the methods for estimating MHSA expenditures for the MHSA specialty facilities and other providers. 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 (ownership type and region) of single modality providers. Third, total revenues were summarized by types of provider (for example, multi-service mental health organizations or specialty substance abuse centers) and by payer and diagnosis.

Table 1.1: Overview of Methods for Estimating MHSA Expenditures

METHODS	SPECIALTY INSTITUTIONS[1]	ALL 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: Service use Charges Payment rates	Each by: Provider type Payer 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 duplicate specialty providers Multiply "components of spending" together for each 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 1993–2003	MHSA specialty expenditures by provider type, payer, and type of care	MHSA other provider expenditures by provider type, payer, and type of care	

[1]Includes methods for estimating spending in specialty hospitals, specialty units of general hospitals, multi-service mental health organizations (MSMHOs), and specialty substance abuse centers (SSACs) whose underlying data come from specialty provider surveys sponsored by SAMHSA.

To develop MHSA expenditures for the other providers consistent with the methods of the NHA, the 2003 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 (specialty units of general hospitals, specialty hospitals, multi-service mental health organizations (MSMHOs), and specialty substance abuse centers (SSACs)) had to be eliminated from the NHA estimates. This elimination avoided double-counting the specialty service expenditures, which were estimated separately from specialty facility surveys as noted above.

To distinguish MHSA from all-disease general health care expenditures, spending rates were estimated by type of diagnosis. Only the primary diagnosis was used to identify spending on MH, AA, or 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 expenditure estimates from the NHA to estimate the MH, AA, and DA national spending. 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 excluding contributions to Medicaid, and Federal sources other than Medicare and Medicaid (e.g., Department of Veterans Affairs, Department of Defense, and Federal Block Grants). Medicaid expenditures are combined Federal, State, and local funds. The private sources are: private insurance, out-of-pocket expenditures, and other private sources (e.g., philanthropy and other non-patient revenues received by providers).

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

MHSA estimates are also presented by grouping providers as specialty or non-specialty providers. Specialty providers include specialty hospitals, general hospitals with specialty units, psychiatrists, other MHSA professionals (including psychologists, psychotherapists and social workers), MSMHOs, and SSACs. Non-specialty providers include general hospital services outside of specialty units, non-psychiatric physicians, home health agencies and nursing homes. The remaining two categories of spending, retail purchases of prescription drugs and insurance administration, are not given a specialty/non-specialty designation.

Expenditures by provider and payer are 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, while home health expenditures were classified as outpatient expenditures, and nursing home expenditures were classified as residential expenditures. Expenditures on retail purchases of prescription drugs (a medical product rather than a provider) and insurance administration are not subdivided into these settings of service.

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 co-existing diagnoses expenditures were divided between single-diagnosis care. Missing total revenues from MH and SA facility surveys were imputed based on numbers of clients and facility characteristics (ownership and region). 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 2003 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 health 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 conducts censuses and surveys of facilities that treat mental or substance use disorders, through the Survey of Mental Health Organizations (SMHO, formerly called the Inventory of Mental Health Organizations (IMHO)) and the National Survey of Substance Abuse Treatment Services (NSSATS, formerly called the Uniform Facilities Data Set (UFDS)), respectively. Facility administrators answered these surveys and reported data at the aggregate facility level (for example, total number of Medicaid clients or total revenues for clients treated for AA).

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 sampled 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 MH, SA, or all health care were calculated.

Table 1.2: Data Sources for the MHSA Spending Estimates

DATA SOURCE	USE IN SPENDING ESTIMATES	YEARS USED
Alcohol and Drug Services Study (ADSS)	• Expenditures in substance abuse specialty organizations.	1996
Inventory/Survey of Mental Healthcare Organizations (IMHO/SMHO)	• Expenditures in MH specialty organizations.	1986, 1988, 1990, 1992, 1994, 1998, 2000, 2002
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, 2002, 2003
National Health Accounts (NHA)	• National health care expenditures by provider and payer.	1986–2003, 2003 edition of NHA
National Hospital Discharge Survey (NHDS)	• Proportion of general hospital inpatient visits devoted to MHSA diagnoses.	1986–2002
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.	1992–2002
National Ambulatory Medical Care Survey (NAMCS)	• Proportion of physician office visits devoted to MHSA. • Proportion of office visits attributable to visits to psychiatrists. • Proportion of MHSA drug mentions during physician office visits.	1985, 1990–2002 for office visits; 1985, 1992–2002 for drugs
National Nursing Home Survey (NNHS)	• Proportion of nursing home residents with MHSA diagnoses.	1985, 1995, 1997, 1999
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

DATA SOURCE	USE IN SPENDING ESTIMATES	YEARS USED
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.	1988–2002
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.	1996–2002
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, MH specialists; offices of MH practitioners (except physicians); outpatient MH and substance abuse centers; psychiatric and substance abuse hospitals; and residential MH and substance abuse facilities.	1997, 2002
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.	

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 involve changes in the data sources as well as in the estimation process and because both types of changes can interact to affect a single estimate, the impact of any one change in isolation from other changes was not determined.

The basic methodological framework for the general sector estimates remained the same, but some details were updated, corrected, or reconsidered. Supporting data sets for the general sector estimates were updated: the National Health Accounts for 2003 was available; other data sets such as the Medical Expenditure Panel Survey and the provider surveys from the National Center for Health Statistics (NHDS, NHAMCS and NAMCS) were available for 2002. In addition, some changes were made in the smoothing methodology applied to the various diagnostic distributions.

The basic methodological framework for the specialty sector estimates also remained the same, but methods were updated to account for changes in the survey data available to the study. Supporting datasets for the specialty facility estimates were updated: Survey of Mental Health Organizations (SMHO) was available for 2000 and 2002; National Survey of Substance Abuse Treatment Services (NSSATS) for 2002 and 2003 were available.

Beginning in 1998, the structure of the SMHO, conducted by SAMHSA, was changed. In contrast to its predecessor, revenue data from specialty MH organizations in the SMHO were not collected from all providers but rather from a representative sample. Prior to selection of the sample, a screening survey known as the "inventory" was conducted collecting information from all specialty MH providers. Beginning in 2000, this screening survey included a question on total facility expenditures. Methods were changed for this round of estimates to take advantage of these expenditure data from the universe of facilities to impute revenue, allowing for more precise estimates in smaller cells.

Methods for imputing the payer source distribution for specialty substance abuse facilities were also improved. The payer source distribution was imputed based on recent and historic trends in substance abuse estimates produced for this project, NHA estimates by payer, and federal budget data on SA treatment spending.

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.

Where possible, adjustments were made through estimation techniques to compensate for identified weaknesses in each data source used in the estimates. 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, substantial survey and item non-response occurred in the substance abuse specialty facility data in 1998 and prior years; therefore, estimates were adjusted using the 1996 ADSS survey which represented a more comprehensive universe of facilities and which adjusted for facility non-response. In addition, 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 using a regression-based method with client counts and facility characteristics (ownership and region) as predictors of revenue.

Similarly, because of substantial item non-response in the inventory and sample surveys of MH organizations, imputation methods were used to fill missing data. For 1998 and subsequent years of the survey, the first step of the imputation procedure was to fill fields that are missing information with reported information for that field or a related field (e.g., a reported expenditure value might be used to impute a missing revenue value) in the inventory or sample survey for a recent year. If no reported value was available for the facility, the data would be imputed, depending on the field, using either a regression-based method or mean values for like facilities that did report information.

Another limitation of the study is the exclusion of some expenditures for MHSA treatment that occurred in correctional facilities. In general, the survey data that was used for the study excludes MHSA services that occurred in correctional facilities.

Chapter 2 | Overview of Expenditures for Mental Health Services and Substance Abuse Treatment

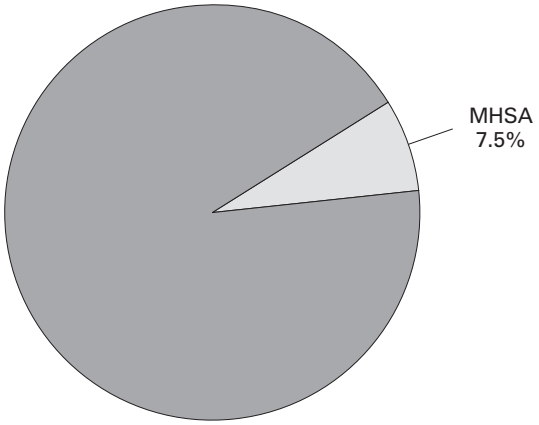
This chapter reports on expenditures combined for mental health and substance abuse (MHSA) treatment. Subsequent chapters report separately on mental health services (MH) and substance abuse treatment (SA) expenditures so that differing MH and SA trends can be discerned.

TOTAL EXPENDITURES FOR MENTAL HEALTH AND SUBSTANCE ABUSE

The U.S. spent $121 billion on MHSA treatment in 2003. 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 $1.6 trillion in 2003, of which MHSA spending comprised 7.5 percent (Figure 2.1).

Of total MHSA spending, $100 billion (83 percent) was directed toward MH and $21 billion (17 percent) was for SA in 2003. Of total national health care spending, MH comprised 6.2 percent of such spending in 2003, while SA constituted 1.3 percent (calculated from Table A.1, Appendix A).

Figure 2.1: MHSA Expenditures as a Percent of Total Health Care Expenditures, 2003

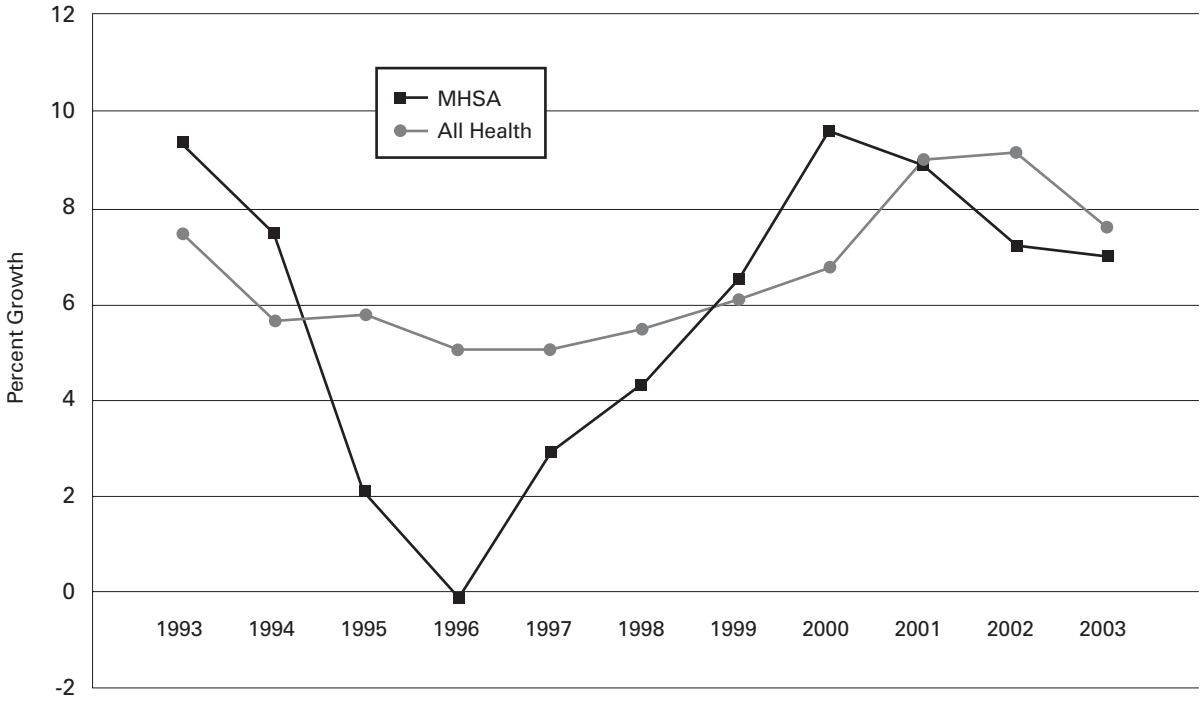


All Health = $1,614 billion in 2003
MHSA = $121 billion in 2003

MHSA GROWTH RATE

MHSA expenditures grew from $70 billion in 1993 (Table A.6, Appendix A) to $121 billion in 2003 (Table A.1, Appendix A). The nominal MHSA growth rate from 1993 to 2003 averaged 5.6 percent annually, compared with the growth rate of 6.5 percent for all health care spending (Figure 2.2 and Table A.4, Appendix A). The inflation-adjusted MHSA growth was 3.7 percent, as compared to 4.6 percent for all health care spending (not shown in Figures). Inflation-adjusted growth rates are calculated using a gross domestic product (GDP) implicit price deflator that removes the effect of general price inflation.[2]

Figure 2.2: Growth of MHSA Expenditures and All Health Expenditures, 1993–2003



Because MHSA spending grew at an average rate below spending for all health care over the entire time period (1993–2003), MHSA expenditures as a proportion of all health care declined from 8.2 percent of total national health care expenditures in 1993 to 7.5 percent in 2003 (calculated from Tables A.1 and A.6, Appendix A). However, this overall growth trend masked distinct differences within the period. From 1993 to 1998 when growth of managed care plans was strong, especially for behavioral mental health services, spending for MHSA growth lagged behind all health care spending growth rates by 2 percentage points (3.4 percent average annual rate for MHSA versus 5.4 percent for all health) (Figure 2.2 and Table A.5, Appendix A). From 1998 to 2003, MHSA spending growth rate doubled and was also slightly higher than that for all health care (7.9 percent average annual rate for MHSA versus 7.7 percent for all health).

[2]Implicit price deflators are available from the U.S. Department of Commerce, Bureau of Economic Analysis, Table 1.1.9 at **www.bea.doc.gov/bea/dn/nipaweb/TableView.asp** (accessed on January 26, 2005).

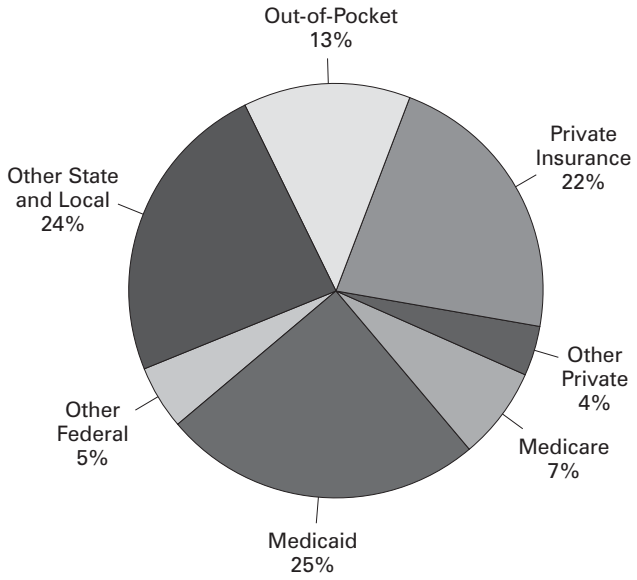
WHO FUNDS MHSA TREATMENT?

In 2003, private payers made up 39 percent of total MHSA spending and public payers constituted 61 percent. For private payers, out-of-pocket payment made up 13 percent of total MHSA expenditures, private insurance made up 22 percent, and other private payment accounted for 4 percent of MHSA spending. For public payers, Medicare constituted 7 percent of total MHSA expenditures, Medicaid accounted for 25 percent (including Federal, state and local contributions), other Federal government payers (e.g., block grants and Veterans Affairs) accounted for 5 percent, and other State and local government funding accounted for 24 percent of MHSA expenditures (Figure 2.3).

All Federal spending, including the Federal portion of Medicaid, was 27 percent of total MHSA spending. All State government spending, including the State portion of Medicaid, accounted for 35 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 care. Public payers made up 61 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, 2003



MHSA = $121 billion in 2003

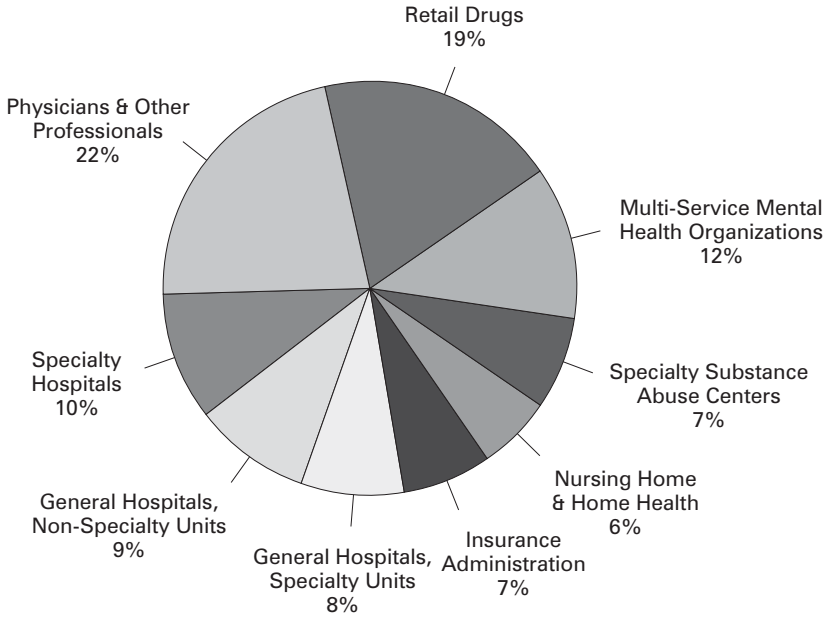
WHAT MHSA SERVICES ARE FUNDED?

Expenditures across all providers by site of service were distributed as follows: 24 percent in inpatient settings, 34 percent in outpatient settings, 19 percent on retail purchases of prescription drugs, and 16 percent in residential settings. The remaining 7 percent for insurance administration is not attributable to a health care setting (Table A.1, Appendix A).

Hospitals providing a mix of inpatient, outpatient and residential services accounted for over one-quarter (27 percent) of expenditures on MHSA (Figure 2.4 and Table A.1, Appendix A). More specifically, specialty psychiatric and chemical dependency programs in hospitals made up 10 percent of total MHSA expenditures, specialty units of general hospitals made up 8 percent, and other types of non-specialty units in general hospitals providing MHSA treatment—"scatter beds" distributed among other hospital beds in non-psychiatric or non-chemical-dependency units—made up 9 percent (Table A.1, Appendix A).

Multi-service mental health organizations (MSMHOs), such as MH clinics, received about 12 percent of all expenditures on MHSA treatment. Specialty substance abuse centers (SSACs) received 7 percent. Retail purchases of prescription drugs accounted for 19 percent of total MHSA expenditures. Physicians made up 13 percent and other professionals billing independently—such as psychologists, psychotherapists, and social workers—constituted 9 percent. Free-standing nursing homes made up 5 percent and home health expenditures comprised only one percent of all MHSA expenditures (Table A.1).

Figure 2.4: Distribution of MHSA Expenditures by Provider, 2003



MHSA = $121 billion in 2003

SUMMARY

In 2003–2005, 13.0 percent of persons aged 18 or older (27.9 million adults) received treatment for mental health problems in the past 12 months (Office of Applied Studies, In Press). Over the ten-year period from 1993 to 2003, MHSA expenditures grew from $70 billion to $121 billion. However, the proportion of all health care spending attributable to MHSA expenses declined, from 8.2 percent of all health care spending in 1993 to 7.5 percent in 2003. Public sources paid for the majority of MHSA treatment. Public payers accounted for a greater proportion of MHSA expenditures than public payers did for all health. The largest proportion of MHSA expenditures went to hospital-based services, which includes inpatient, outpatient, and residential care provided by hospitals (27 percent), followed by physicians and other professionals (22 percent), retail purchases of prescription drugs (19 percent), and MSMHOs (12 percent). Spending in all outpatient settings (34 percent) was larger than for inpatient (24 percent) or residential (16 percent) settings.

Chapter 3 | Mental Health Services Expenditures, 2003

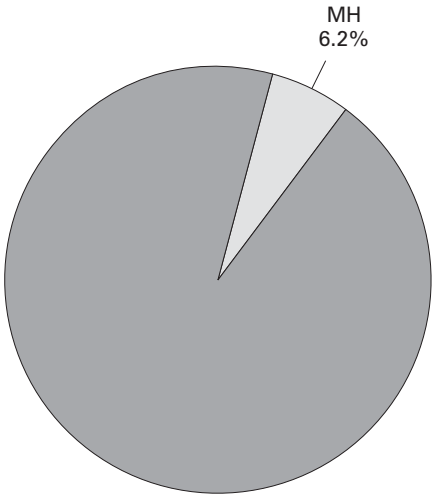
This chapter presents estimates of how much was spent on treating mental illness in the United States in 2003. Treatment for mental illness was identified if providers diagnosed individuals as having a mental disorder. This section also presents information about the sources of financing for the treatment of mental disorders and where the care was provided. Subsequent chapters present information on treatment for substance use disorders.

A broad array of services and treatments exists to help people with mental disorders 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 settings. Some facilities, such as State and county mental hospitals and clinics, are owned by government agencies. 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 the care supplied by these facilities and providers.

OVERVIEW OF MENTAL HEALTH SPENDING

In 2003, an estimated $100 billion was spent on the treatment of mental disorders in the United States. Mental Health (MH) treatment accounted for 6.2 percent of all health care spending in 2003 (Figure 3.1). MH spending is the predominant component of mental health and substance abuse (MHSA) expenditures, making up 83 percent of total MHSA spending.

Figure 3.1: MH Expenditures as a Percent of All Health Care Expenditures, 2003

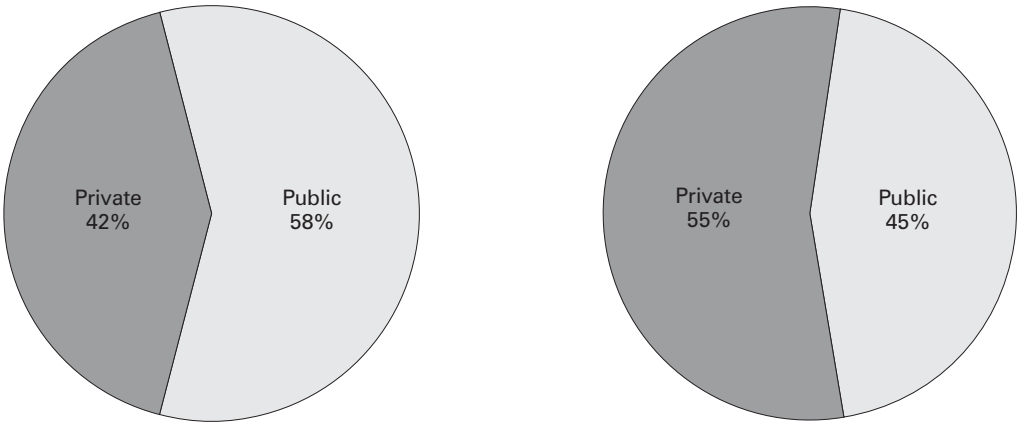


All Health = $1,614 billion in 2003
MH = $100 billion in 2003

WHO FUNDS MENTAL HEALTH SERVICES?

People with mental disorders rely on public sources of financing to a greater extent than people with other diseases. Fifty-eight (58) percent of total MH spending came from public sources, while only 45 percent of all health care spending for all conditions was from public sources (Figure 3.2).

Figure 3.2: Distribution of MH and All Health Care Expenditures by Public-Private Payer, 2003



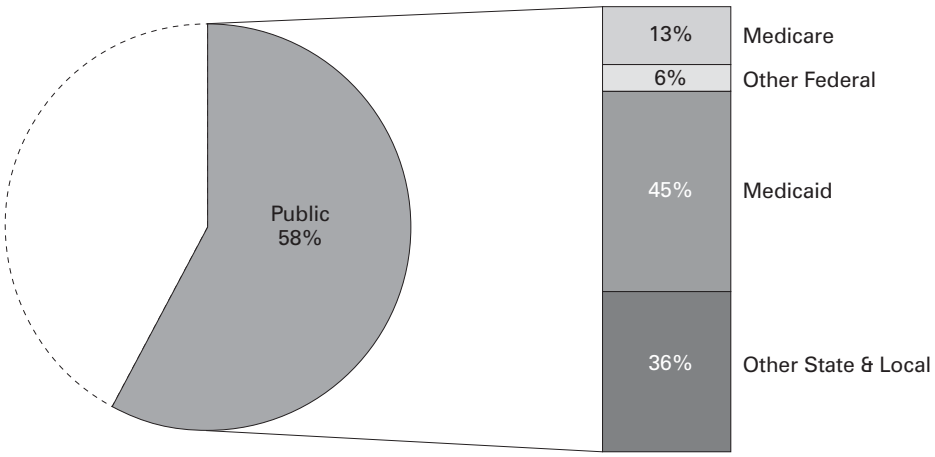
MH = $100 billion in 2003

All Health = $1,614 billion in 2003

Among public payers, Medicaid was the largest source of funding, accounting for 45 percent of public MH funding (Figure 3.3). The next largest category was other State and local government funding, which made up 36 percent of public MH funding. Medicare made up 13 percent of public MH expenditures. Other Federal government spending, including MH Block Grants and programs offered through the Department of Veterans Affairs and Department of Defense, constituted 6 percent of public MH spending.

For MH services, States administratively manage a large proportion of the funds from both State and Federal budgets. This proportion includes 26 percent of MH spending from Medicaid, 21 percent from other State and local funding, and part of the 4 percent of other Federal spending, which is allocated through block grants to the States (Table A.2, Appendix A). Thus, about half of total MH dollars are managed by States. (While this is a nation-wide estimate, the estimate for individual States may vary considerably). Other State and local funding includes dollars from State and local government budgets allocated to community health centers, psychiatric hospitals, and other types of MH services.

Figure 3.3: Distribution of Public MH Expenditures by Public Payer, 2003

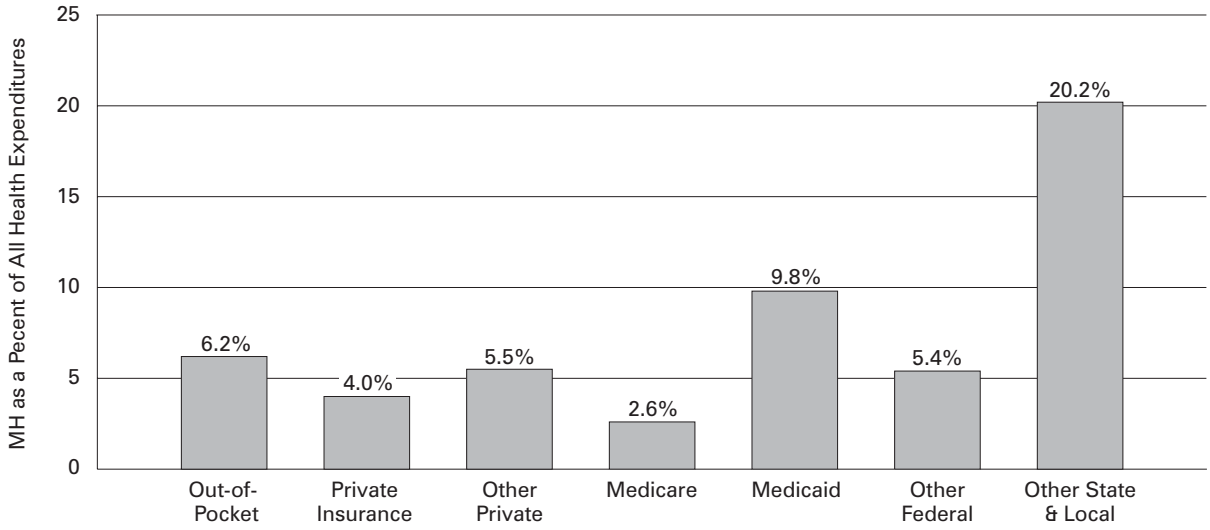


All Public = $58 billion in 2003

Private insurance comprised 24 percent of all MH expenditures. This compares to an all health care private insurance proportion of 37 percent (Table A.2, Appendix A). Out-of-pocket spending was 14 percent of MH expenditures, which is the same as out-of-pocket spending for all health.

The fraction of total health expenditures that each payer devotes to MH care is widely divergent (Figure 3.4; calculation based on Table A.2, Appendix A). MH made up 20 percent of other State and local funding for all health care and 10 percent of Medicaid funding. For Medicare, the percentage was only 3 percent. MH comprised 4 percent of all health spending covered by private insurance.

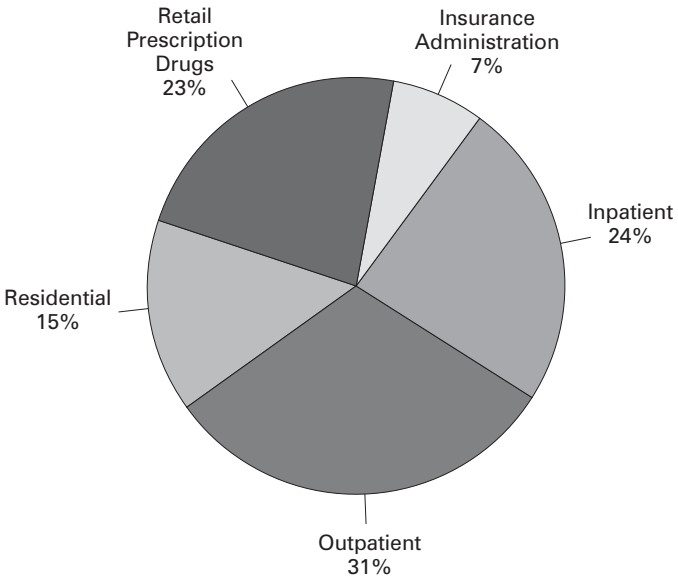
Figure 3.4: MH Expenditures as a Percent of All Health Care Expenditures by Payer, 2003



WHAT MENTAL HEALTH SERVICES ARE FUNDED?

More than half of MH expenditures went for retail purchases of prescription drugs and outpatient care. Across all providers by site of service, MH expenditures were: 31 percent outpatient, 24 percent inpatient, and 15 percent in residential settings (Figure 3.5). The remaining 23 percent was directed toward retail purchases of prescription drugs and another 7 percent toward insurance administration.

Figure 3.5: Distribution of MH Expenditures by Setting of Care (Inpatient, Outpatient and Residential) and Type of Product, 2003



MH = $100 billion in 2003

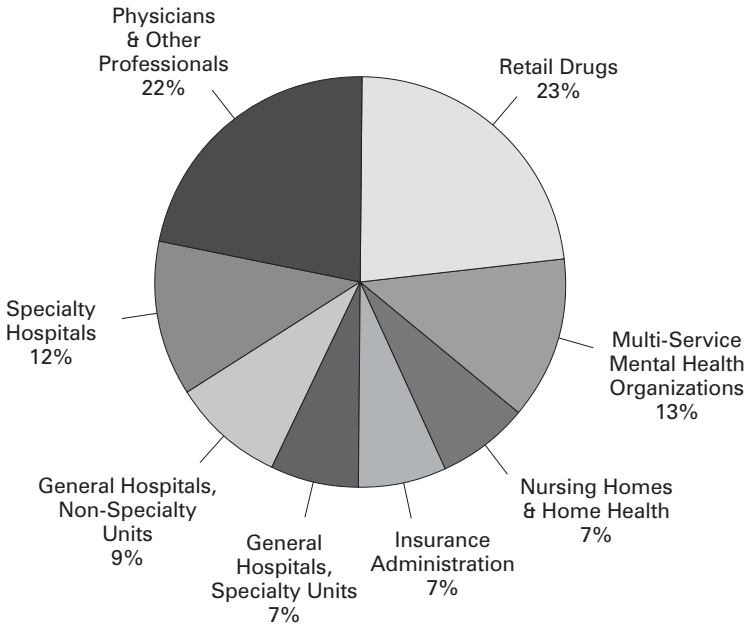
Although the role of hospitals in MH care has been declining, spending on hospital care (including hospital-provided outpatient and residential care) still accounted for 28 percent of total MH expenditures in 2003 (Figure 3.6). The majority of MH hospital spending went to general hospitals (58 percent) and the remainder (42 percent) went to specialty psychiatric hospitals. Within general hospitals, 41 percent of expenditures occurred in specialty psychiatric units and 59 percent were in non-specialty units (calculated from Table A.1, Appendix A). Within general hospitals, 65 percent of expenditures went for inpatient care, 28 percent for outpatient care, and 7 percent for residential care. Within psychiatric hospitals, 83 percent was for inpatient care, 6 percent for outpatient care, and 10 percent for residential treatment.

A large portion of MH expenditures (13 percent) was for care in multi-service mental health organizations (MSMHOs) such as community MH centers (Figure 3.6).

In 2003, nearly one out of every four dollars spent on MH services went for retail purchases of prescription medications. The role of medications in MH care was much greater than that for all health care, in terms of the proportion of spending going to drug therapy. For all health expenditures, slightly more than one in every nine dollars spent for health care was for prescription medications.

Spending on care delivered by physicians and other independently practicing professionals (psychologists, psychotherapists, and social workers) constituted 22 percent of total MH expenditures in 2003. Spending on physicians' services made up 14 percent of expenditures and other professionals made up 8 percent (Table A.1, Appendix A). Among physicians, 71 percent of spending went to psychiatrists and the remainder went to other types of physicians, such as general practitioners.

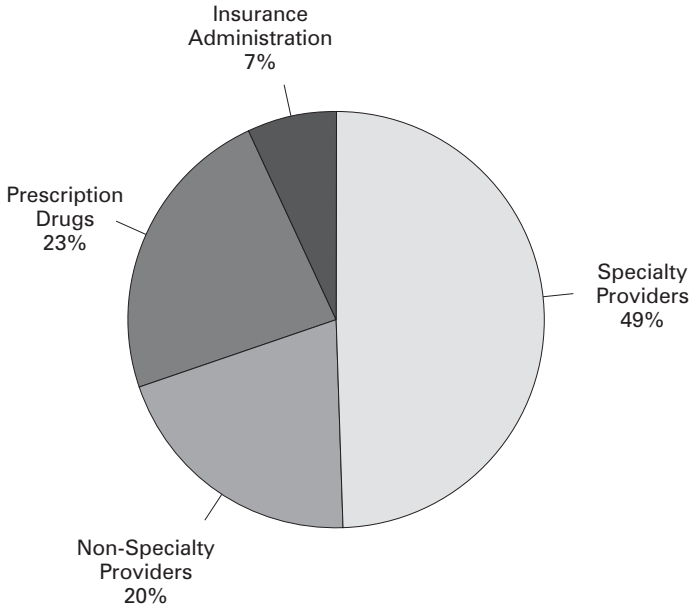
Figure 3.6: Distribution of MH Expenditures by Service, 2003



MH = $100 billion in 2003

The distribution of MH spending is heavily weighted towards specialty MH providers, defined as specialty units of general hospitals, specialty hospitals, psychiatrists, other professionals, and MSMHOs. In 2003, half of spending for mental health treatment went for services furnished by specialty providers (Figure 3.7 and Table A.3, Appendix A). Another 20 percent of spending went to non-specialty providers. The remaining spending was divided between spending for retail sales of prescription drugs (23 percent) and insurance administration (7 percent).

Figure 3.7: Distribution of MH Expenditures by Specialty Sector Providers versus Other Services, 2003



MH = $100 billion in 2003

Specialty providers furnish 72 percent of inpatient services, 79 percent of all outpatient services, and 51 percent of all residential care for the treatment of mental illness (calculated from Table A.1, Appendix A). A significant portion of residential services for MH is supplied in nursing homes, which is a non-specialty provider in this classification scheme.

SUMMARY

In 2003, MH expenditures totaled $100 billion, which was 6.2 percent of all health care spending. Public sources provided most (58 percent) of these funds. This expenditure is a greater percentage than for all health. Of the total $100 billion, Medicaid funding was the largest payer category at 26 percent, while other State and local funding represented a substantial portion at 21 percent, Looked at another way, 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.

MH as a proportion of all health spending varied by payer; MH made up only 4 percent of all private insurance expenditures and 6 percent of total out-of-pocket payments. However, MH made up 20 percent of other State and federal expenditures, and 10 percent of Medicaid expenditures.

Nearly one-fourth of MH expenditures in 2003 were for retail purchases of prescription drugs. Specialty and general hospitals made up 28 percent of total MH expenditures, physicians and other professionals made up 22 percent, and MSMHOs accounted for 13 percent.

Chapter 4 | Trends in Mental Health Services Expenditures, 1993–2003

This chapter examines changes in mental health (MH) expenditures from 1993 to 2003. 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 represented new indications for existing medications; in other instances, they represented completely new therapeutic agents. At the same time, a growing body of research has elucidated the benefits of psychosocial treatments.

The context in which MH 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 MH programs. Utilization review, benefit design, provider networks, and reimbursement 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, MH 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, many 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 (SAMHSA, 2005).

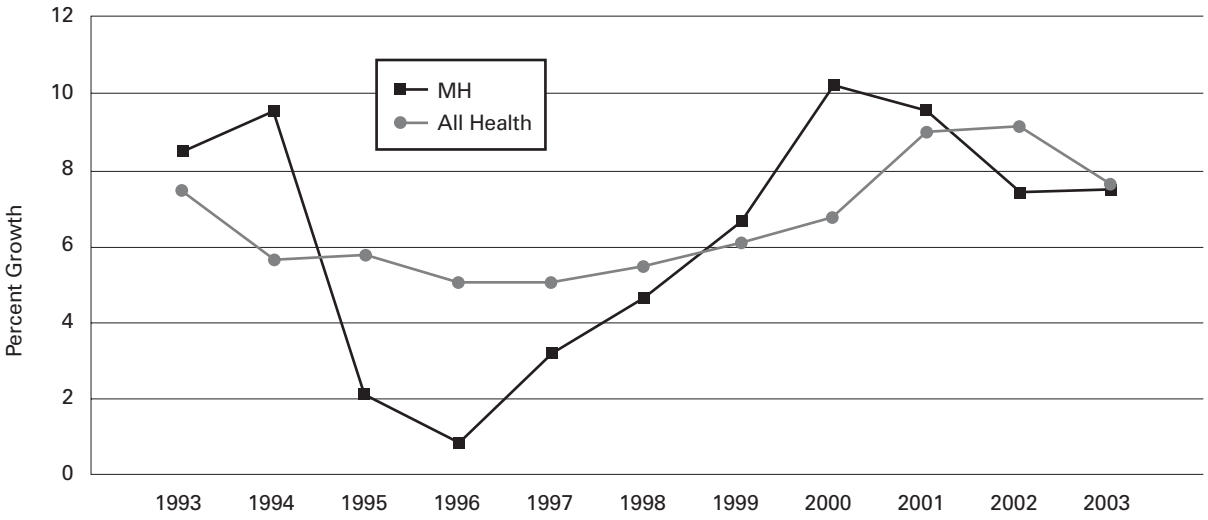
GROWTH IN MENTAL HEALTH EXPENDITURES

MH expenditures in 1993 totaled $55 billion (Table A.6, Appendix A). By 2003, spending had grown to $100 billion (Table A.1). This translates into an average growth rate of 6.2 percent annually for MH spending, lower than the 6.5 percent annual growth rate for all health (Table A.5, Appendix A). In inflation-adjusted terms, MH spending grew by 4.3 percent annually and all health by 4.6 percent (calculated from Table A.4[3]).

Figure 4.1 shows the growth of MH and all health expenditures by year. Over the first half of the period (1993 through 1998), MH spending (in nominal dollars) generally grew more slowly than growth in all health expenditures (4.1 percent average annual growth for MH and 5.4 percent for all health care). Slowdown in spending growth during this period is usually attributed to the growing influence of managed care on the health care sector and to managed behavioral health care on the MH sector. Over the last half (1998 through 2003) of the period, growth in MH spending (averaging 8.3 percent annually) exceeded growth in all health care expenditures (averaging 7.7 percent annually). Faster growth in MH expenditures than for all health care spending is related to the rapid rise in spending for retail purchases of prescription drugs that constitutes a larger share of MH spending than it does of all health care spending.

[3]Calculated using the implicit price deflators available from the U.S. Department of Commerce, Bureau of Economic Analysis, Table 1.1.9 at **www.bea.doc.gov/bea/dn/nipaweb/TableView.asp** (accessed on January 26, 2005).

Figure 4.1: Growth of MH and All Health Expenditures, 1993–2003



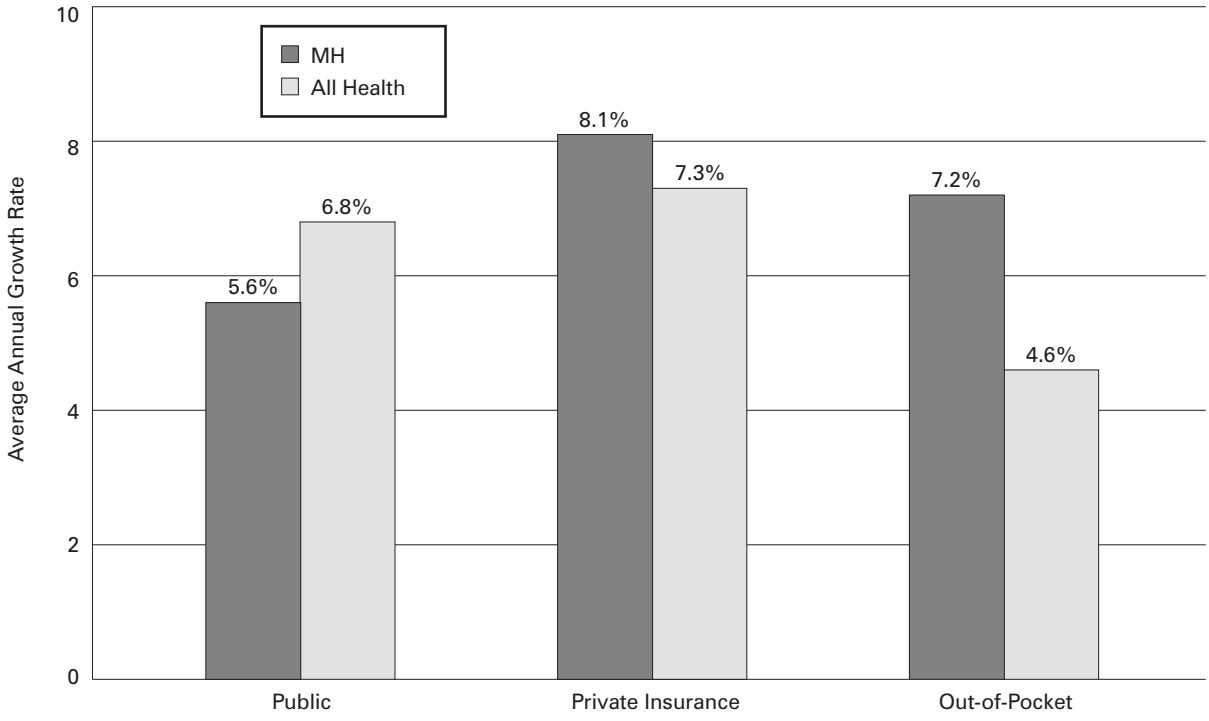
Over the 10 year period, MH expenditures as a share of total health care remained relatively constant, at 6.4 percent of total health care spending in 1993 and 6.2 percent in 2003 (calculated from Tables A.6 and A.1, Appendix A).

TRENDS BY TYPE OF PAYER

Average annual growth of private MH spending (7.0 percent) was faster than that of public spending (5.6 percent) between 1993 and 2003. This trend was the opposite of the trend for all health care expenditures. Spending for all health care expenditures grew at a 6.3 percent average annual rate for private payers and at a 6.8 average annual rate for public payers (Table A.5, Appendix A).

Private payments mainly include private insurance and out-of-pocket spending. Private insurance spending on MH care increased at a faster rate than all health care private insurance spending (8.1 percent versus 7.3 percent) (Figure 4.2). Out-of-pocket spending on MH care grew much faster than out-of-pocket spending on all health care (7.2 percent versus 4.6 percent, respectively).

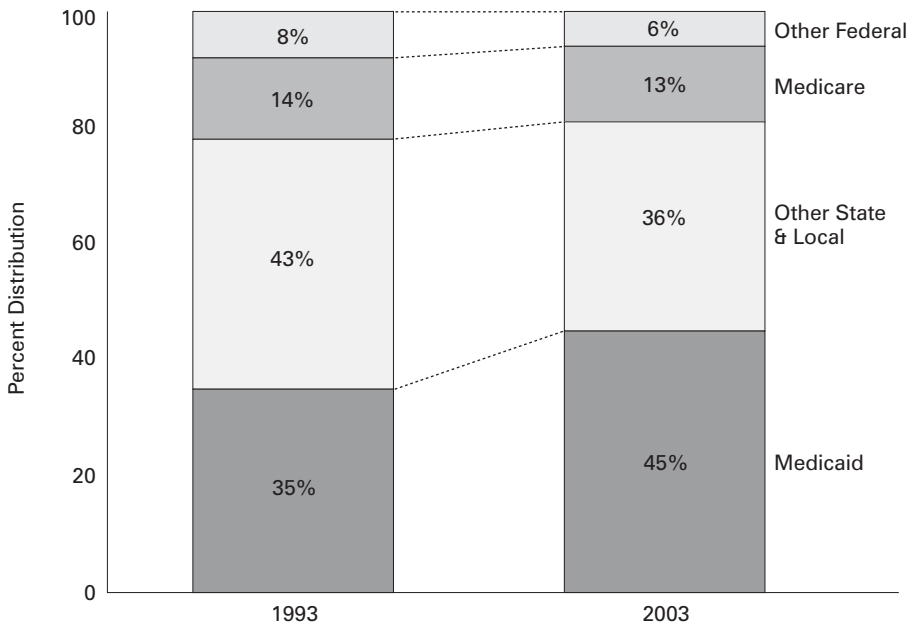
Figure 4.2: Growth of MH and All Health Care Expenditures by Public, Private Insurance, and Out-of-Pocket Payers, 1993–2003



In contrast, public payer spending growth on MH services of 5.6 percent per year was slower than public payer spending on all health care (6.8 percent annually) (Figure 4.2). From 1993 to 2003, Medicaid increased at similar rates for both MH and all health spending (8.5 and 8.2 percent, respectively). For other public payers over the same period, however, growth in MH spending was slower. Other State and local government MH spending grew at 3.7 percent annually compared to all health spending growth of 4.7 percent. Medicare spending on MH grew at 4.5 percent annually compared to all health Medicare growth of 6.7 percent. Other Federal MH spending grew at a 2.6 percent average annual rate compared to a 6.1 percent rate for all health.

Despite public spending growth that was slower than private growth, public payers remained an important source of funding for MH services in 2003 (financing 58 percent of MH spending). Among public payers, Medicaid (including both the State and Federal portion) grew in importance, increasing from 35 percent of public MH expenditures in 1993 to 45 percent in 2003 (Figure 4.3). In contrast, other State and local government funding (which excludes Medicaid) dropped from 43 percent of public MH financing to 36 percent. Medicare decreased slightly between 1993 and 2003, comprising 13 percent of public MH in 2003, down from 14 percent in 1993. Other Federal government spending declined slightly as a proportion of public MH spending (from 8 to 6 percent).

Figure 4.3: Distribution of Public MH Expenditures by Public Payer, 1993 and 2003



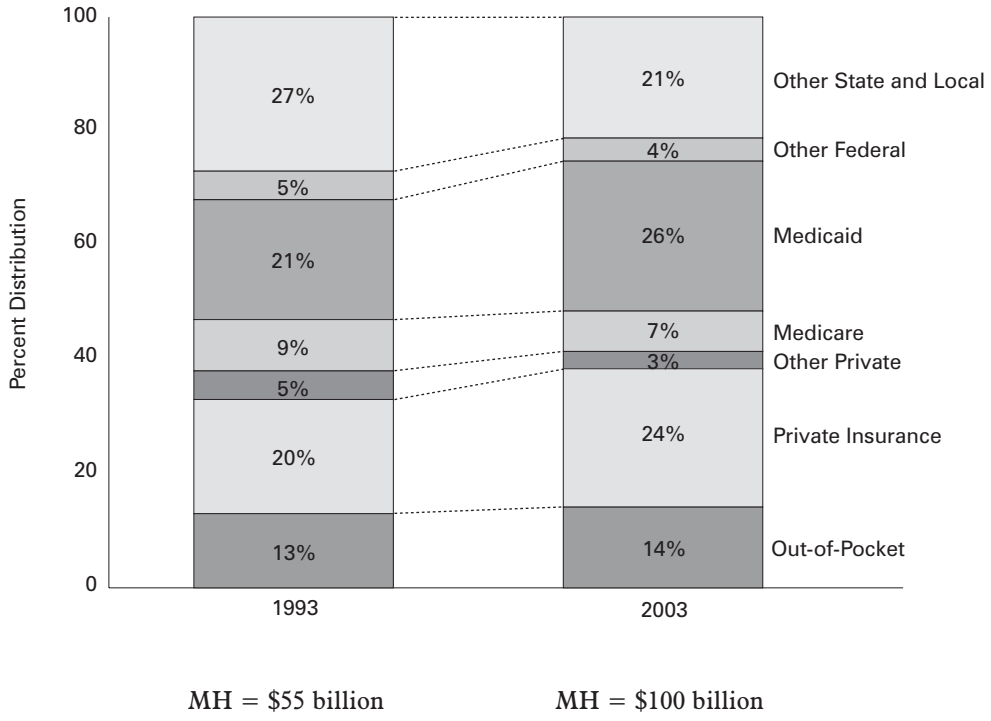
Faster growth in private payer spending caused the private share of MH spending to rise. In 1993, private payers made up 39 percent of total MH spending (Table A.7, Appendix A) while in 2003 they comprised 42 percent (Table A.2). This trend contrasts with trends for all health care spending, where private payers shrank from 57 percent of all health spending in 1993 to 55 percent in 2003.

Within private payers, expenditures for private insurance increased from 20 percent of total MH expenditures in 1993 to 24 percent in 2003 (Tables A.7 and A.2, Appendix A and Figure 4.4). Out-of-pocket spending by individuals also became slightly more important as a source of financing in 2003 as compared with 1993. Out-of-pocket payments accounted for 13 percent of MH spending in 1993 (Table A.7) and grew to 14 percent in 2003 (Table A.2).

In 2003, the largest component of MH out-of-pocket spending was for retail drugs (36 percent) and the next largest portion was for physicians (psychiatrists and other physicians) (25 percent). Out-of-pocket spending for MH prescription drugs grew at a 10.2-percent average annual rate between 1993 and 2003. This was slower than growth in the all payer retail sales of MH prescription drugs over the 10 year period (increasing at an 18.8-percent average annual rate), resulting in an out-of-pocket share of spending for MH prescription drugs that dropped from 47 percent in 1993 to 22 percent in 2003. In contrast, for psychiatrists, out-of-pocket spending rose as a percentage of total spending for psychiatrist services from 24 percent to 33 percent (not shown on tables).

From 1993 to 1998, out-of-pocket MH spending increased; the average annual growth rate was 4.3 percent (Table A.5, Appendix A). From 1998 to 2003, out-of-pocket MH spending grew an average of 10.1 percent per year. A similar (although dampened) trend is seen in all health care, where out-of-pocket spending grew at 3.6 percent annually from 1993 to 1998 and at 5.6 percent annually from 1998 to 2003 (Table A.5).

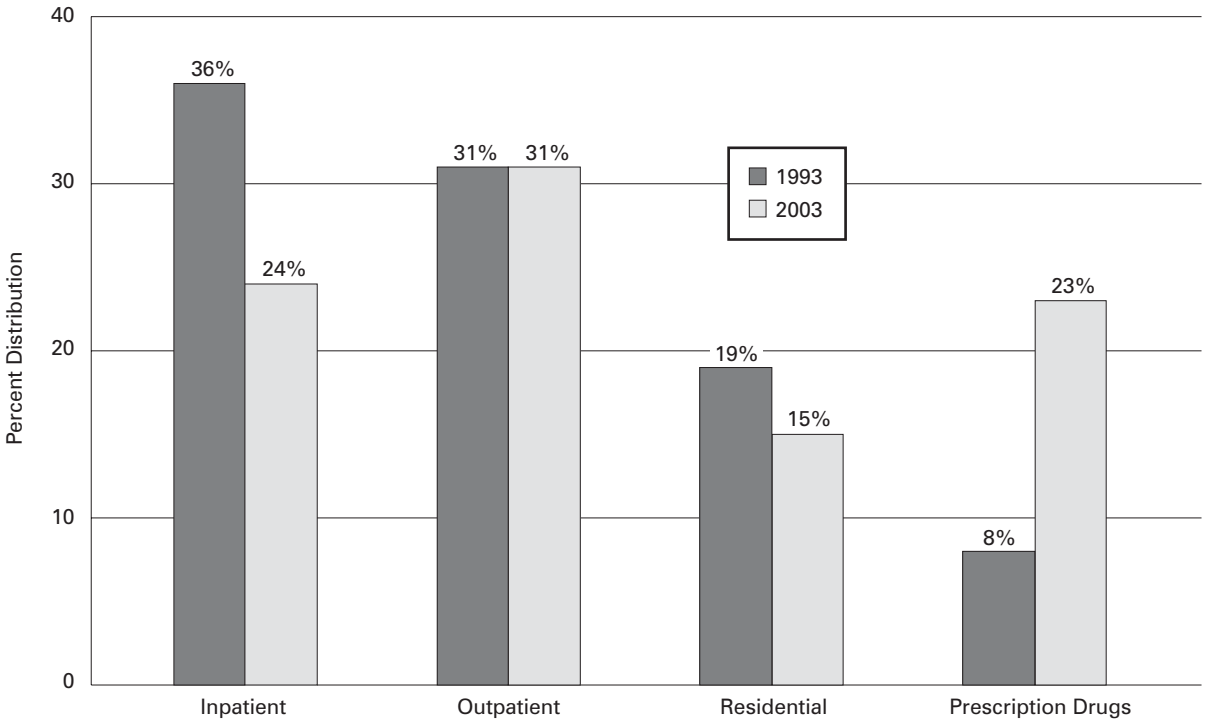
Figure 4.4: Distribution of MH Expenditures by Payer, 1993 and 2003



TRENDS BY SITE OF CARE

Inpatient expenditures declined from 36 percent of total MH to only 24 percent between 1993 and 2003 (Figure 4.5, Tables A.1 and A.6, Appendix A). The mix of services shifted to include greater expenditure on retail purchases of prescription drugs, which increased from 8 percent of total MH spending to 23 percent. The outpatient share of MH expenditures, excluding prescription medications, remained constant at 31 percent. Residential expenditures decreased from 19 percent of total MH expenditures to 15 percent. Examined from the perspective of average annual growth rates, prescription drug expenditures increased 18.8 percent, inpatient expenditures increased 1.8 percent, outpatient expenditures grew by 6.1 percent, and residential expenditures grew by 3.4 percent annually (Table A.4, Appendix A).

Figure 4.5: Distribution of MH Expenditures by Setting for 1993 and 2003

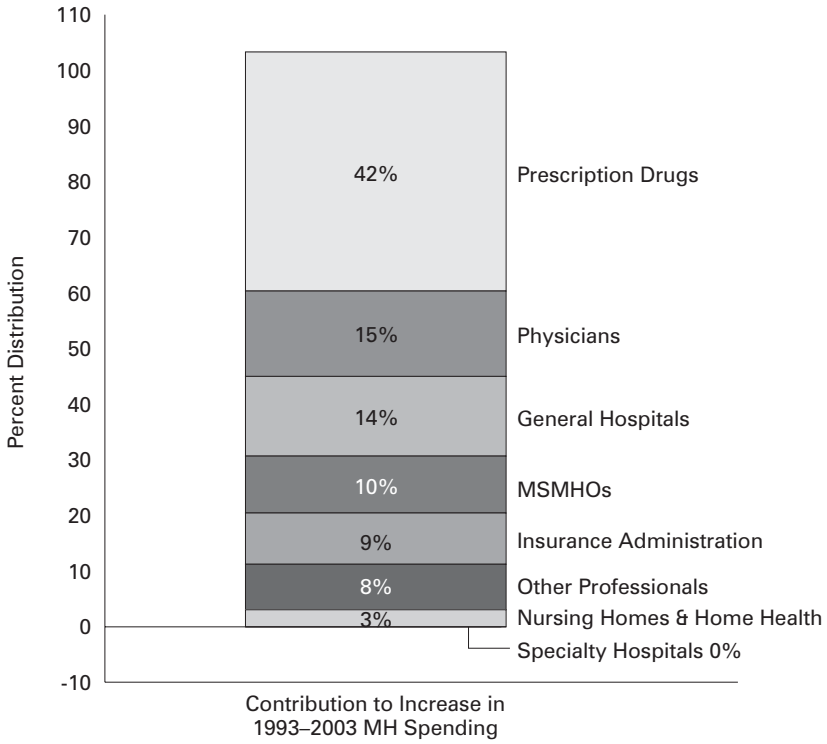


Note: Expenditures on Administration are not shown separately

TRENDS BY TYPE OF PROVIDER

Total MH expenditures grew by $45 billion between 1993 and 2003 (from $55 billion to $100 billion) (Tables A.1 and A.6, Appendix A). The largest component of this change was retail purchases of prescription drugs, which contributed 42 percent to the $45 billion increase (Figure 4.6). The next largest contributors to the increase were physician spending at 15 percent, general hospitals at 14 percent (i.e., combined specialty and non-specialty unit care), multi-service mental health organizations (MSMHOs) at 10 percent, insurance administration at 9 percent, other professionals at 8 percent, and nursing homes and home health at 3 percent of the increase. There were no increases in spending for specialty hospitals during this period, resulting in its 0 percent contribution to growth in MH spending.

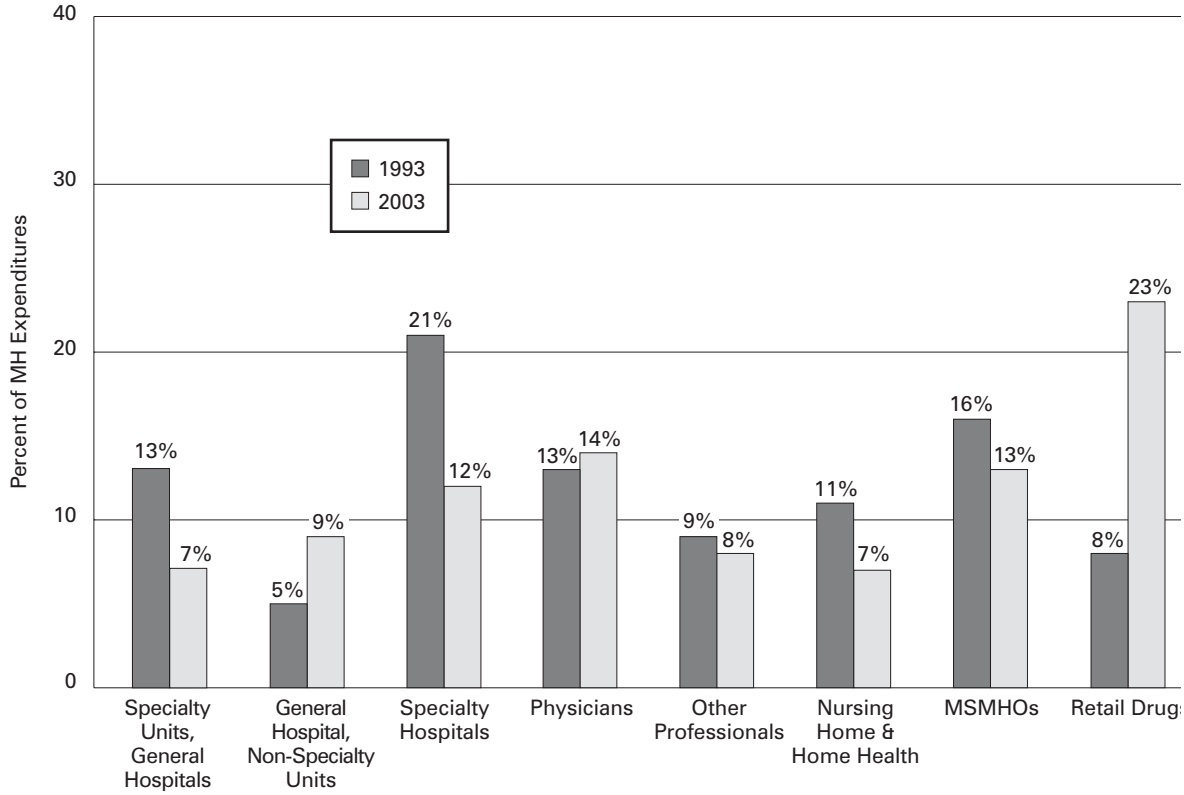
Figure 4.6: Distribution of the Contribution to the MH Expenditure Increase between 1993 and 2003 by Provider and Insurance Administration



Despite its declining share of MH spending, hospitals continue to be important providers of treatment for people with mental illness. In 1993, about 39 percent of all MH dollars was spent in hospitals; in 2003, this figure dropped to 28 percent. The decline in the proportion of care coming from specialty hospitals and from specialty units of general hospitals was even more precipitous (from 34 percent to 18 percent of expenditures) (Figure 4.7). Similarly, the slow growth in hospital spending was concentrated in these same facilities: Specialty hospital expenditures for MH care fell by 0.1 percent annually and spending for care in specialty units of general hospitals declined at an average annual rate of 0.9 percent. In contrast, MH care in non-specialty units of general hospitals grew robustly (14.2 percent on average per year) between 1993 and 2003 (Table A-4, Appendix A).

The role of prescription drugs in MH treatment grew, increasing from 8 percent to 23 percent of total MH spending over the ten years (Figure 4.7). From 1993 to 2003, MH prescription expenditures grew at a rate of 18.8 percent annually (Table A.4, Appendix A). This rate was higher than the 13.3 percent average annual 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®)). Also, new antidepressants were introduced (e.g., sertaline (Zoloft®), paroxetine (Paxil®), venlafaxine (Effexor®), citalopram (Celexa®), bupropion (Wellbutrin®), fluvoxamine (Luvox®), escitalopram (Lexapro®)).

Figure 4.7: Distribution of MH Payments by Provider, 1993 and 2003



Existing medications also were given approval for a greater variety of disorders, such as use of medications first employed as antidepressants that were later approved for use to treat obsessive-compulsive disorder, generalized anxiety disorder, social anxiety disorder, panic disorder, and post traumatic stress disorder.

According to two national surveys, the percent of the population taking a psychotropic medication increased from 3.4 percent in 1987 to 8.1 percent in 2001 (Zuvekas, 2005). Moreover, an increasing number of people took prescription medication without accompanying MH visits (40 percent in 1996 and 45 percent in 2001) (Zuvekas, 2005).

Although spending in MSMHOs grew by 4.3 percent annually (Table A.4, Appendix A), as a portion of MH expenditures, this spending decreased from 16 percent in 1993 to 13 percent in 2003 (Figure 4.7). MSMHOs provide mostly outpatient and residential care. Both the outpatient and the residential components grew by 5 percent annually.

The combined physicians' and other professionals' share of MH spending remained constant at 22 percent in 1993 and 2003. Physician MH expenditures grew at 6.8 percent annually, which slightly exceeded the growth of spending on physician services for all health care. Psychiatrist expenditures related to MH treatment grew faster than those of non-psychiatrist physicians (7.0 percent vs. 6.2 percent, respectively) (Table A.4, Appendix A). Expenditures for other MH professionals grew at 5.8 percent, compared with the growth of other professional services related to all health care, which was 7.1 percent. The growth rate for other MH professionals was three times as high in the second half of the ten-year period (9.0 percent annually) as in the first half (2.8 percent annually).

The proportion of spending accounted for by nursing homes declined over the ten-year period, from 10 percent of expenditures in 1993 to 6 percent in 2003 (Tables A.1 and A.6, Appendix A). Nursing home MH expenditures (increasing at a 1.2-percent average annual rate) did not grow significantly from 1993 to 2003, in contrast to all health nursing home expenditures, which grew at 5.4 percent annually (Table A.4). For purposes of these estimates, MH nursing home expenditures are allocated based on the diagnosis at some time during a nursing home stay. It should be noted that the MH diagnoses examined exclude Alzheimer's disease and other dementias. Further, there may be expenditures on MH treatment that occur within nursing homes for persons that this analysis cannot capture. In particular, there has been an increase in the use of psychotropic medication such as antipsychotic medication in nursing homes (Briesacher et al., 2005).

The pattern of home health care cost growth varied radically over the first and second half of the ten-year span. From 1993 to 1998, home health grew at an annual rate of 12 percent. From 1998 to 2003, home health expenditures grew by only 4 percent (Table A.4, 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 1993 and 2003 (Tables A.1 and A.6, Appendix A).

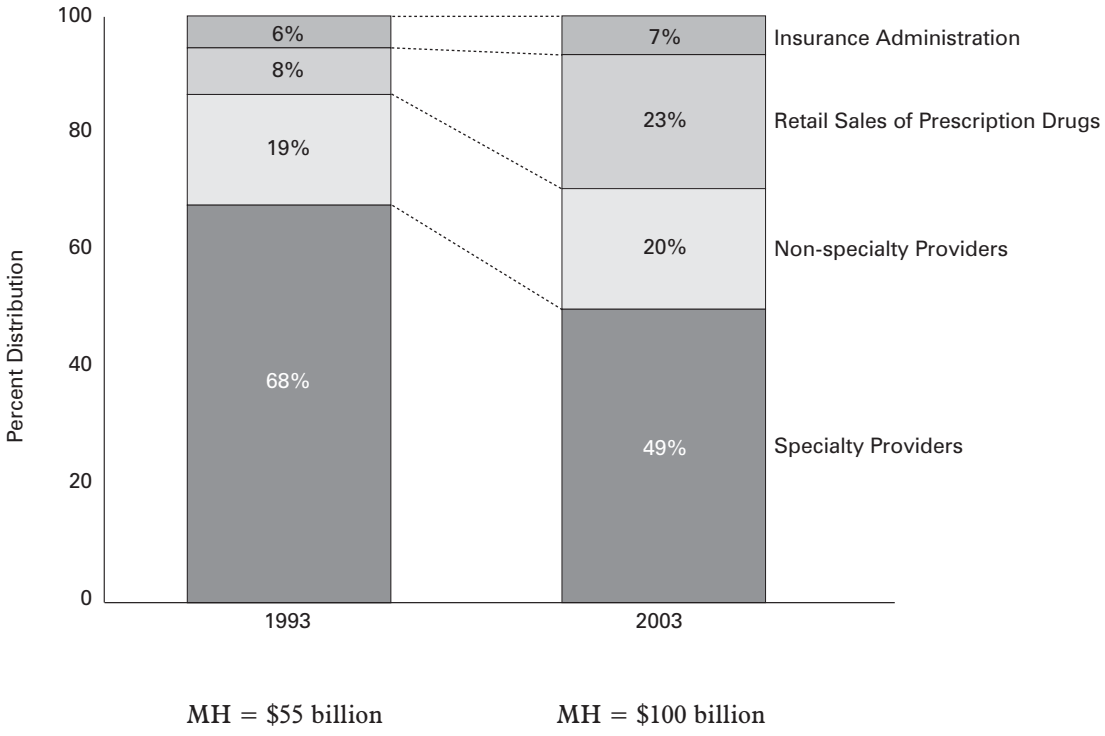
TRENDS BY PROVIDER: SPECIALTY VERSUS GENERAL SECTOR

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

According to these definitions, MH expenditures shifted from specialty providers toward retail prescription medications. In 1993, specialty providers comprised 68 percent of MH expenditures, while in 2003 they comprised only 49 percent (Figure 4.8 and Tables A.3 and A.8, Appendix A). This decline in share is largely attributable to a decline in hospital services provided by specialty providers. Spending on retail prescription MH drugs offset the decline in MH specialty hospital spending shares, increasing from 8 percent to 23 percent of total MH expenditures over this period. General sector providers' share of spending remained relatively unchanged (19 and 20 percent, respectively) between 1993 and 2003.

Spending for specialty services grew at about half the rate of spending for services at non-specialty providers. Over the 10 year period, spending for specialty providers grew at a 2.9 percent annually compared to 6.8 percent for non-specialty providers. Within specialty providers, spending in general hospital specialty units and in specialty hospitals declined in absolute terms, falling at average annual rates of 0.9 percent and 0.1 percent respectively. Growth in spending for specialty provider services was stronger in the last half of the 10 year period (4.6 percent on average each year) than in the first half (1.2 percent annually). Spending on non-specialty provider services exhibited the same accelerating growth trends between 1993–1998 and 1998–2003 as was exhibited for specialty providers, although at a faster rate. Non-specialty provider expenditures grew 8.8 percent annually from 1998 to 2003 compared with 4.9 percent average annual growth between 1993 and 1998.

Figure 4.8: Distribution of MH Spending by Sector, 1993 and 2003



SUMMARY

Spending on MH services grew from $55 billion in 1993 to $100 billion in 2003, representing a 6.2 percent average annual rate of growth. This rate was slightly 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 purchases of prescription drugs, comprising 23 percent of MH expenditures.

Growth rates for private payers were higher than for public payers over the ten-year period from 1993 to 2003, contrary to the trend for all health care. The private-payer expansion of MH spending was primarily led by private insurance, which grew at an annual rate of 8.1 percent and increased from 20 percent of all MH spending in 1993 to 24 percent in 2003.

Out-of-pocket spending on MH grew rapidly and at a much higher rate than for all health, particularly during the second half of the ten year period. This rapid increase may be due to the greater use of new, more expensive psychotropic drugs in MH and the increase in psychotropic drug co-payments (KFF/HRET, 2005).

Finally, inpatient expenditures declined as a percentage of MH expenditures, from 36 percent of MH spending in 1993 to 24 percent in 2003.

Chapter 5 | Substance Abuse Treatment Expenditures, 2003

An estimated 22.5 million people ages 12 and older have a substance abuse or dependence disorder (9.4 percent of the population) (SAMHSA, 2005). Of those with drug abuse or dependence in 2004, 15 percent were classified with a substance use disorder of both alcohol and illicit drugs, 17 percent were dependent on or abused illicit drugs but not alcohol, and 68 percent were soley dependent on or abuse alcohol (SAMHSA, 2005).

Of those with a substance use disorder, only 17 percent received treatment. According to the National Survey on Drug Use and Health, 3.8 million people (1.6 percent of the population) received some kind of treatment for a problem related to the use of alcohol or illicit drugs in 2004 (SAMHSA, 2005). Of these, more than half (2.1 million) received treatment at a self-help group. Other types of care included treatment in one or more other settings: at a rehabilitation facility as an outpatient (1.7 million persons), at a mental health center as an outpatient (982,000), at a rehabilitation facility as an inpatient (947,000), at a hospital as an inpatient (775,000), at a private doctor's office (490,000), at an emergency room (453,000), and at a prison or jail (310,000) (SAMHSA, 2005).

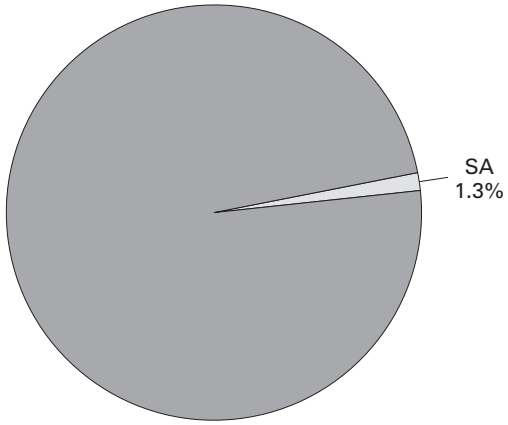
Most of the individuals in 2004 with symptoms of a substance use disorder who did not receive treatment reported that they did not feel that they needed treatment (94.2 percent). Among those who felt they needed and made an effort to get treatment but did not receive SA treatment, the main reasons for not receiving treatment were "cost/insurance barriers" (42.5 percent), not ready to stop using (25.3 percent), access barriers other than cost (21.5 percent), and stigma (17.8 percent).

This chapter presents estimates of spending on treatment for substance abuse in the United States in 2003 by provider type. This section also presents information about the financing for treatment for substance abuse and setting where that care was provided.

OVERVIEW OF SUBSTANCE ABUSE SPENDING

In 2003, an estimated $21 billion was devoted to substance abuse (SA) treatment (about 17 percent of total mental health and substance abuse (MHSA) expenditures). This amount represented 1.3 percent of all health care spending, which totaled $1.6 trillion in 2003 (Figure 5.1).

Figure 5.1: SA Expenditures as a Percent of All Health Care Expenditures, 2003



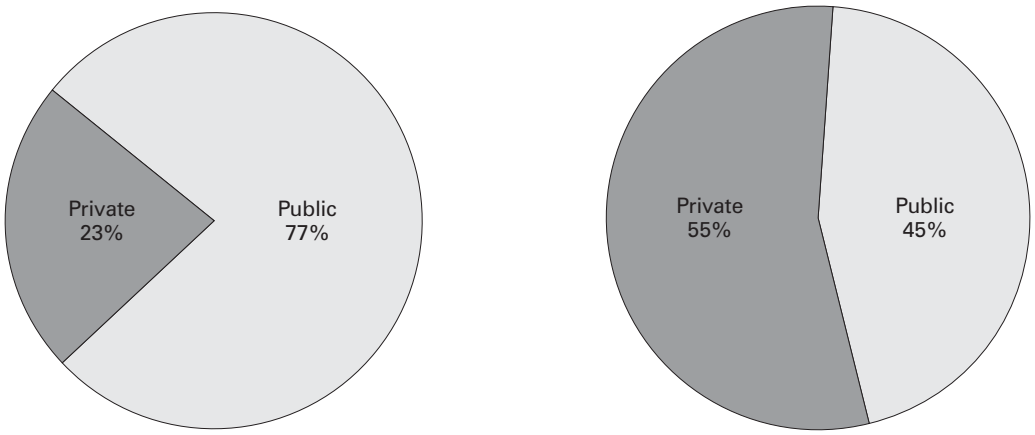
All Health = $1,614 billion
SA = $21 billion

To put this number in context, in 1998 when treatment spending for SA totaled $15.5 billion, the total economic costs of alcohol abuse (AA) were estimated at $184.6 billion, and the total economic costs of drug abuse (DA) were $143.4 billion (Harwood, 2000; Office of National Drug Control Policy, 2001). These estimates included 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.

WHO FUNDS SUBSTANCE ABUSE SERVICES?

People with substance use disorders rely on public sources of financing far more than do people with other diseases. Public sources provided 77 percent of total SA spending, 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, 2003

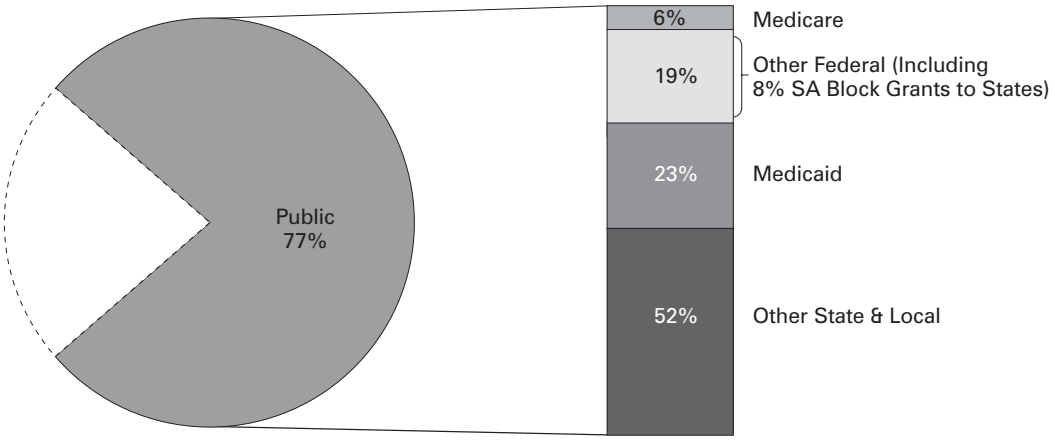


SA = $21 billion in 2003

All Health = $1,614 billion in 2003

Among public payers, other State and local government funding (excluding Medicaid) constituted the largest source of support, making up more than half (52 percent) of all public SA treatment spending (Figure 5.3; calculated from Table A.2, Appendix A). Medicaid, totaling $3.7 billion, comprised another 23 percent of all public dollars spent on SA treatment. 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. The Federal SA block grant dollars that go for SA treatment (a component of the Other Federal category) 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 represented 6 percent of all public SA spending on SA treatment.

Figure 5.3: Distribution of Public SA Expenditures by Payer, 2003

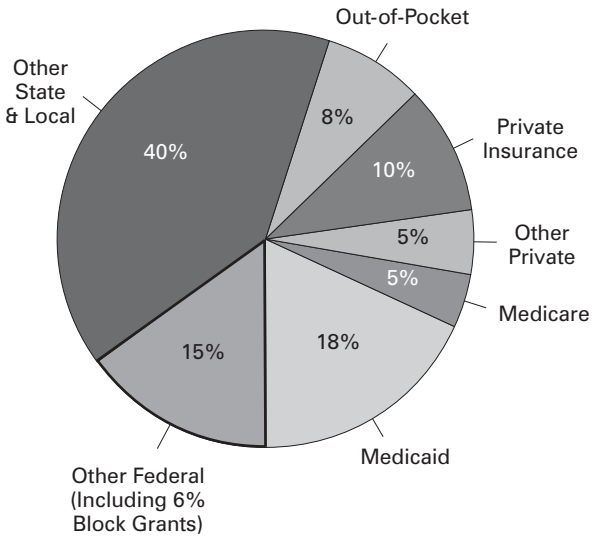


SA Public = $16.1 billion in 2003

Among all payers, other State and local government funding (excluding state and local spending for Medicaid) constituted 40 percent of total SA funding (calculated from Table A.2, Appendix A and Figure 5.4). Medicaid comprised another 18 percent, other Federal government spending 15 percent, and Medicare 4 percent of total spending on SA treatment. Considering that substance abuse benefits under Medicaid are largely at the state's option, and that State and local funding is approximately half of Medicaid, states in total administer 58% of substance abuse funding.

On the private side, private insurance constituted 10 percent of total SA expenditures (Figure 5.4). For all health care, private insurance made up 37 percent of total expenditures. Out-of-pocket spending was 8 percent of total SA expenditures, in comparison to 14 percent for all health. About half of the difference between SA and all health in out-of-pocket share of total spending is because of the lower use of prescription medicines in treating substance use disorders compared to all health treatments.

Figure 5.4: Distribution of SA Expenditures by Payer, 2003

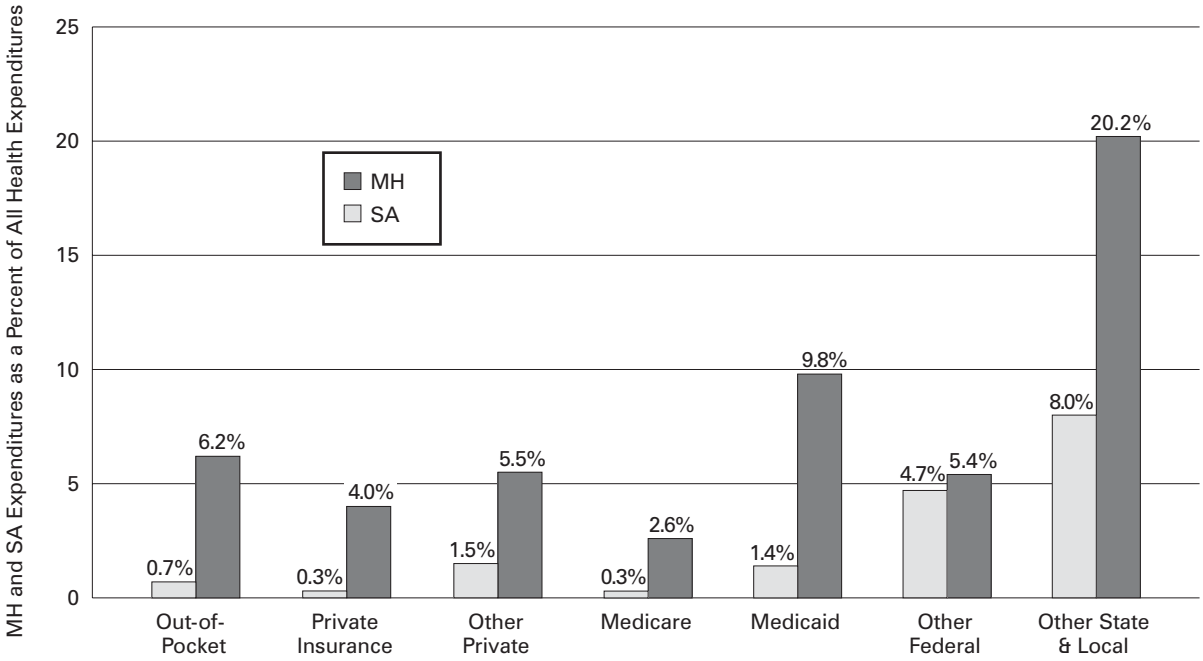


SA = $21 billion in 2003

The proportion that each payer devotes to SA treatment spending varied from payer to payer in 2003 (Figure 5.5; calculated from Table A.2, Appendix A). SA made up 8 percent of other State and local funding for all health care and 1.4 percent of all Medicaid payments. For Medicare, the percentage was only 0.3 percent. SA comprised 0.3 percent of private insurance spending on all health care as well.

The proportion that each payer devotes to SA was much lower than for MH across payers. Only Other Federal spending was approximately equivalent for both SA and MH, at 4.7 percent and 5.4 percent, respectively (see Figure 3.4 for MH proportions).

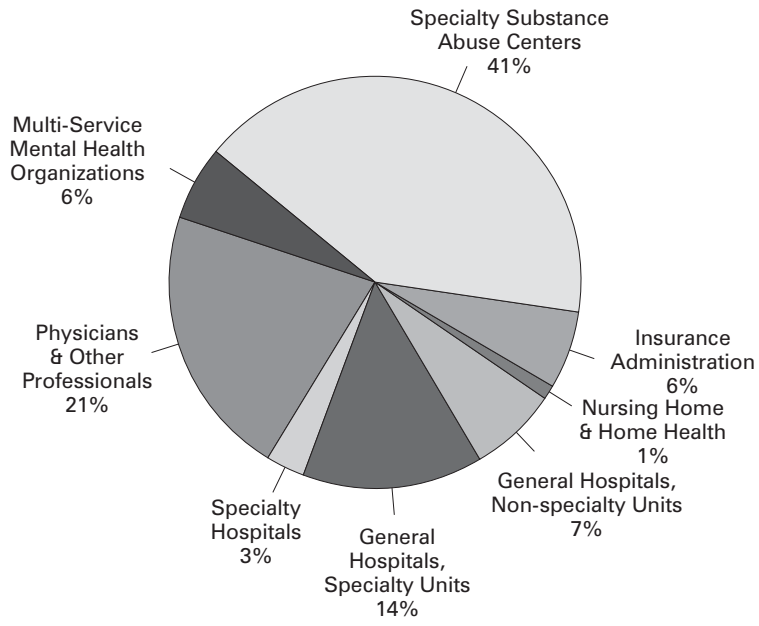
Figure 5.5: SA and MH Expenditures as a Percent of All Health Care Expenditures by Payer, 2003



WHAT SUBSTANCE ABUSE SERVICES ARE FUNDED?

The vast majority—79 percent—of substance abuse expenditures in 2003 went to specialty providers (i.e., general hospital specialty units, specialty hospitals, psychiatrists, other MHSA professionals, multi-service mental health organizations (MSMHOs), and specialty substance abuse centers (SSACs)) (Table A.3, Appendix A). Among the most significant were SSACs, accounting for 41 percent of SA expenditures (Figure 5.6). The remaining specialty organizations and individuals providing substance abuse treatment were: specialty units of general hospitals (14 percent); independently practicing psychologists, counselors, and social workers (13 percent); MSMHOs (6 percent); specialty hospitals (3 percent); and psychiatrists (3 percent).

Figure 5.6: Distribution of SA Expenditures by Provider, 2003



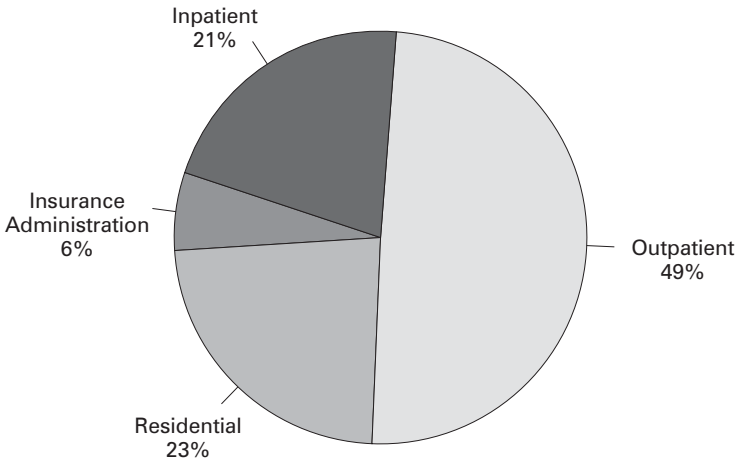
SA = $21 billion in 2003

Hospitals, both general and specialty, received 24 percent of all SA expenditures in 2003 (Figure 5.6). Specialty hospitals (13 percent of SA hospital spending) and general hospitals with specialty units (57 percent of all hospital spending) accounted for 71 percent of all hospital spending for SA treatment (calculated from Table A.3, Appendix A). Within general hospitals, 66 percent of expenditures were in specialty units and the remainder were allocated to other areas (or "scatter beds") of the hospital. Of all spending on hospitals, care in inpatient settings accounted for 53 percent, outpatient services accounted for 37 percent and residential settings accounted for 10 percent of spending (calculated from Table A.1, Appendix A).

Compared to mental health, far fewer retail medications existed to treat substance abuse in 2003. Therefore, it is not surprising that prescription medication expenditures were only 0.5 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. Methadone is not available as a retail prescription drug. Spending for methadone is included with expenditures for providers, such as SSACs, who administer this medication.

Spending for SA services in outpatient settings (49 percent of SA spending in 2003) was the most prevalent site of services. Residential facilities accounted for 23 percent of SA expenditures. Inpatient care accounted for 21 percent of SA expenditures. The remaining 6 percent of SA treatment dollars went to insurance administration (Figure 5.7 and Table A.1, Appendix A).

Figure 5.7: Distribution of SA Expenditures by Setting of Care (Inpatient,Outpatient,and Residential) and by Insurance Administration, 2003



SA = $21 billion in 2003

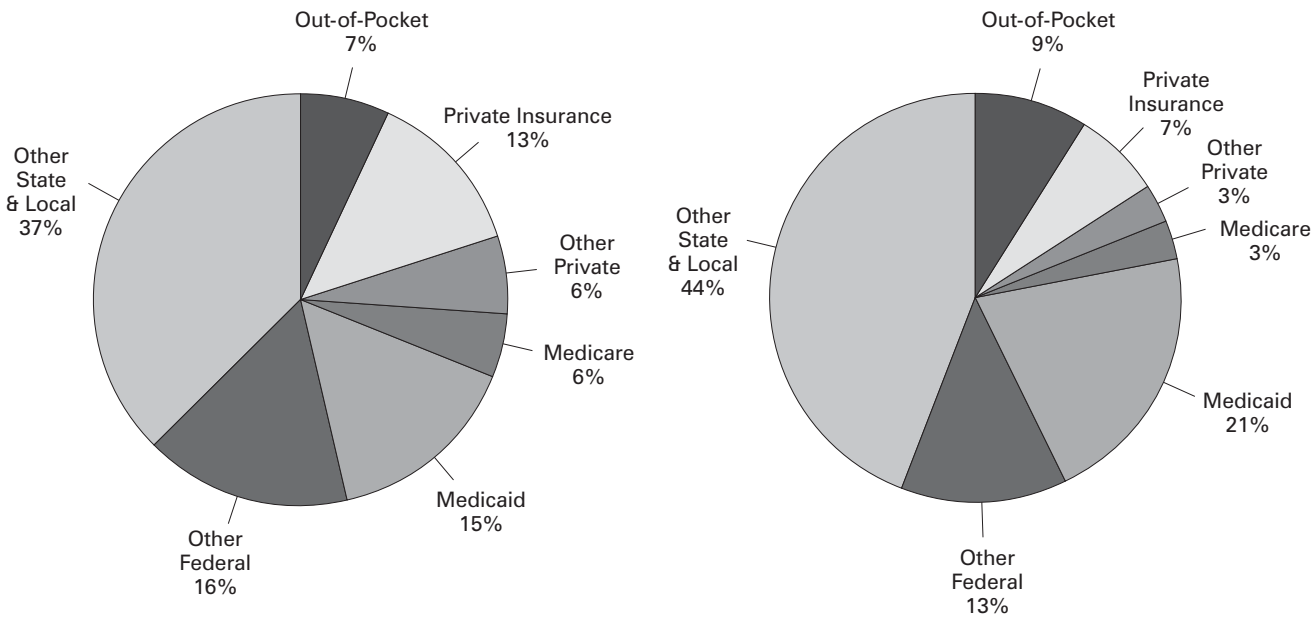
NOTE: Spending on retail purchases of prescription drugs (0.5 percent of total SA spending) is not shown on this figure.

ALCOHOL AND DRUG ABUSE EXPENDITURES

Of the total $20.7 billion spent on SA in 2003, $10.5 billion was directed toward alcohol use disorder treatment and $10.2 billion was allocated for other drug use disorder treatment (Table A-1, Appendix A).

The distribution of financing sources was somewhat similar between alcohol and drug use disorders (Figure 5.8). More funding originated from public sources for drug use disorders (81 percent) than for alcohol use disorders (74 percent). Private insurance contributed 13 percent for alcohol use disorders, but only 7 percent for drug use disorders. The reverse was true for other state and local government funding, where it represented 37 percent of alcohol use disorder expenditures and 44 percent of drug use disorder expenditures.

Figure 5.8: Alcohol and Drug Use Disorders Expenditures by Payer, 2003

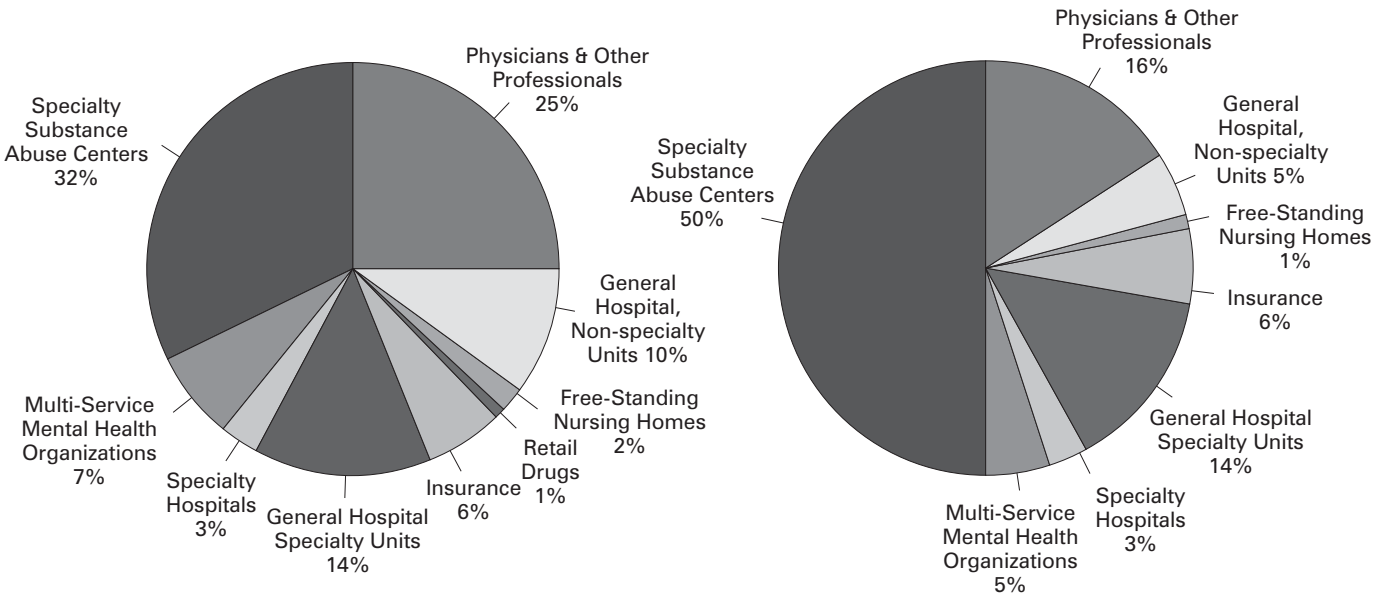


Alcohol Abuse = $10.5 billion

Drug Abuse = $10.2 billion

The distribution of expenditures by provider in 2003 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 (84 percent) than were alcohol abuse and dependence expenditures (74 percent) (Table A.3, Appendix A). Specialty substance abuse facilities provided a greater proportion of illicit drug treatment than alcohol treatment (50 percent versus 32 percent, respectively). General hospitals provided less care for illicit drug abuse and dependence than alcohol abuse and dependence (18 percent versus 24 percent) (Figure 5.9).

Figure 5.9: Alcohol and Drug Expenditures by Provider, 2003



Alcohol Abuse = $10.5 billion

Drug Abuse = $10.2 billion

SUMMARY

Understanding the sources of funding and providers of treatment for SA is important for policymakers. Few individuals with substance use disorders actually seek and receive treatment. As they seek to expand SA treatment, policy makers will require an understanding of where the resources are currently spent. This will promote better decision-making on the most effective payer channels for increasing funding and on the critical provider sectors where capacity is most concentrated.

Funding came primarily from public programs—State and local governments being the most important, but also from Medicaid, Medicare, and other Federal funding combined—to cover 77 percent of SA treatment spending nationwide in 2003. Private insurance represented only 10 percent of these treatment expenditures, while it covered 37 percent of all health care expenditures. This significantly lessened role of private insurance in funding for SA compared to all health care may be rooted in a number of possible explanations. Some employed persons may be afraid of losing their jobs if they acknowledge their addictions. Alternatively, a combination of less generous coverage and more tightly controlled utilization for SA than for general health care may be part of the reason for a lower share of SA treatment spending coming from private insurance.

Based on the distribution of spending, treatment of SA is concentrated in specialty organizations and hospital-based care. SSACs, MSMHOs, and hospitals account for 71 percent of the SA dollar. Independent professionals other than physicians—psychologists, counselors, and social workers—account for 13 percent of spending, but they are more involved with these treatments than physicians (who account for only 8 percent). Psychiatrists in particular account for a much smaller share (3 percent) of SA expenditures than they do for MH (10 percent).

Further, the spending estimates for substance abuse support reports from the field that outpatient services are the most likely setting for substance abuse treatment. Given the generally lower per unit cost of treatment in outpatient versus inpatient settings, the 49-percent share of outpatient spending probably represents far more persons receiving treatment than the 21 percent of spending on inpatient care. As treatment data systems become more sophisticated over time, researchers studying outpatient SA treatment can measure more adequately the different detoxification and treatment options to better understand which clients require what types of services to obtain the best outcomes.

Chapter 6 | Trends in Substance Abuse Treatment Expenditures, 1993–2003

Comprehensive information on trends in substance abuse prevalence or treatment for 1993 through 2003 is scarce due to recent changes in a major survey that collected prevalence information.[4] Selected information is available for earlier and later years, although the consistency in this information cannot be determined.

The estimated number of people (15.9 million) in 2001 who used illicit drugs during the previous month was substantially higher than the estimate from 1992 (12.0 million) (SAMHSA, 2002). 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 per month among adults (6.6 percent in 2001 versus 5.3 percent in 1992), and a 10 percent increase in the size of the population (SAMHSA, 2002).

By piecing together information from several surveys, SAMHSA reports on trends for specific types of substance abuse. For example, the prevalence of marijuana use among young adults rose throughout the 1990s and has declined early in this decade (SAMHSA, 2005). The prevalence of alcohol abuse and dependence is much greater than that of illicit drug abuse and dependence. Two nationally representative surveys found that between 1991–1992 and 2001–2002, the percentage of the population involved in 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 for men and 30 or more drinks in a month for women) comprised 3.4 percent of the population in 1991 and 5.7 percent in 2003 (CDC, downloaded July, 2006).

The number of substance abuse treatment admissions to specialty substance abuse centers (SSACs) also increased from 1993 to 2003, from 1.62 to 1.84 million admissions, an increase of almost 14 percent (SAMHSA, 2006).

This chapter examines changes from 1993 to 2003 in expenditures used to treat substance abuse and dependence.

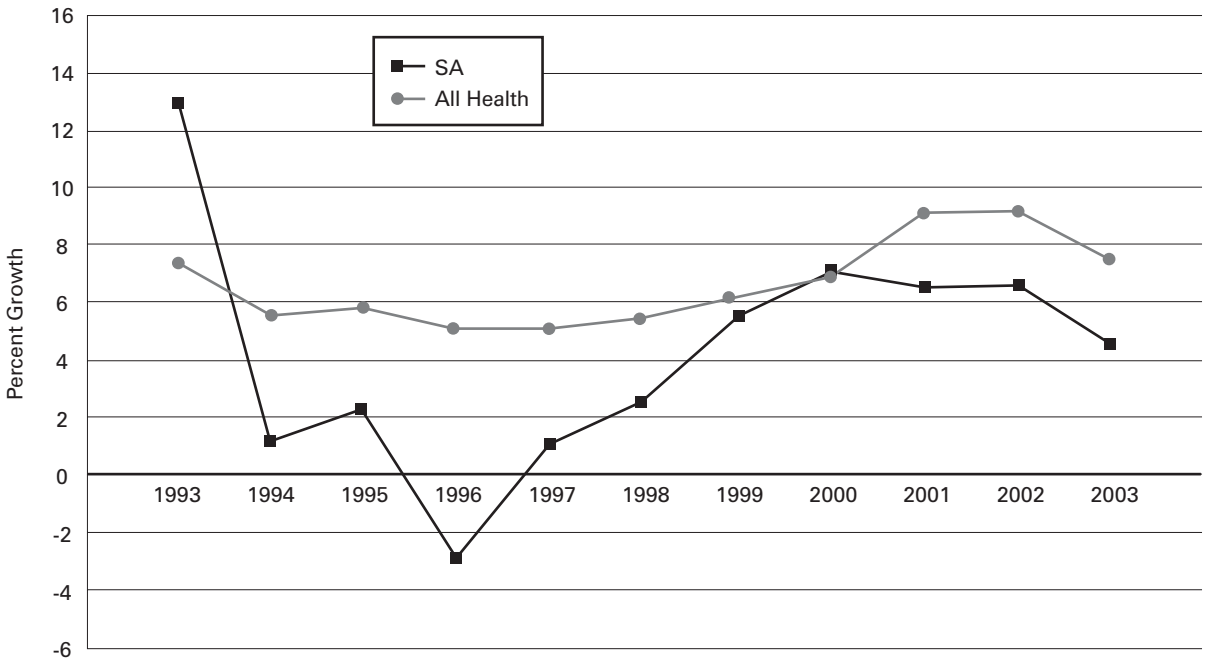
GROWTH IN SUBSTANCE ABUSE EXPENDITURES

Substance abuse (SA) treatment expenditures in 1993 totaled $15 billion (Table A.6, Appendix A). By 2003, this figure had increased to $21 billion (Table A.1, Appendix A). This was a nominal growth rate of 3.3 percent annually. The growth rate for all health was 6.5 percent annually. In inflation-adjusted terms, SA spending grew by 1.4 percent and all health by 4.6 percent.

[4]Historically, prevalence estimates of substance abuse and dependence came from the National Household Survey on Drug Abuse (NHSDA). In 2002, this survey was redesigned and renamed the National Survey on Drug Use and Health (NSDUH). This change introduced new methods that affected the comparability between the 2002–2004 prevalence estimates and those from earlier NHSDA.

During the five year period from 1993 to 1998, SA treatment expenditure growth was essentially flat, averaging 0.6 percent per year, much slower than the 5.4 percent growth for all health (Figure 6.1). This pattern is consistent with that experienced by MH expenditures. Unlike the patterns exhibited by MH during the 1998 to 2003 period that were heavily influenced by skyrocketing growth in retail purchases of prescription drugs, SA expenditure growth (averaging 6.0 percent per year) continued to grow more slowly than all health spending (increasing at a 7.7 percent average annual rate). As previously noted, from 1993 to 2003, expenditure growth was generally slower for SA (3.3 percent average annual growth) than for all health (6.5 percent average annual growth), which caused SA expenditures as a percentage of all health expenditures to fall from 1.8 percent in 1993 to 1.3 percent in 2003 (Table A.4, Appendix A).

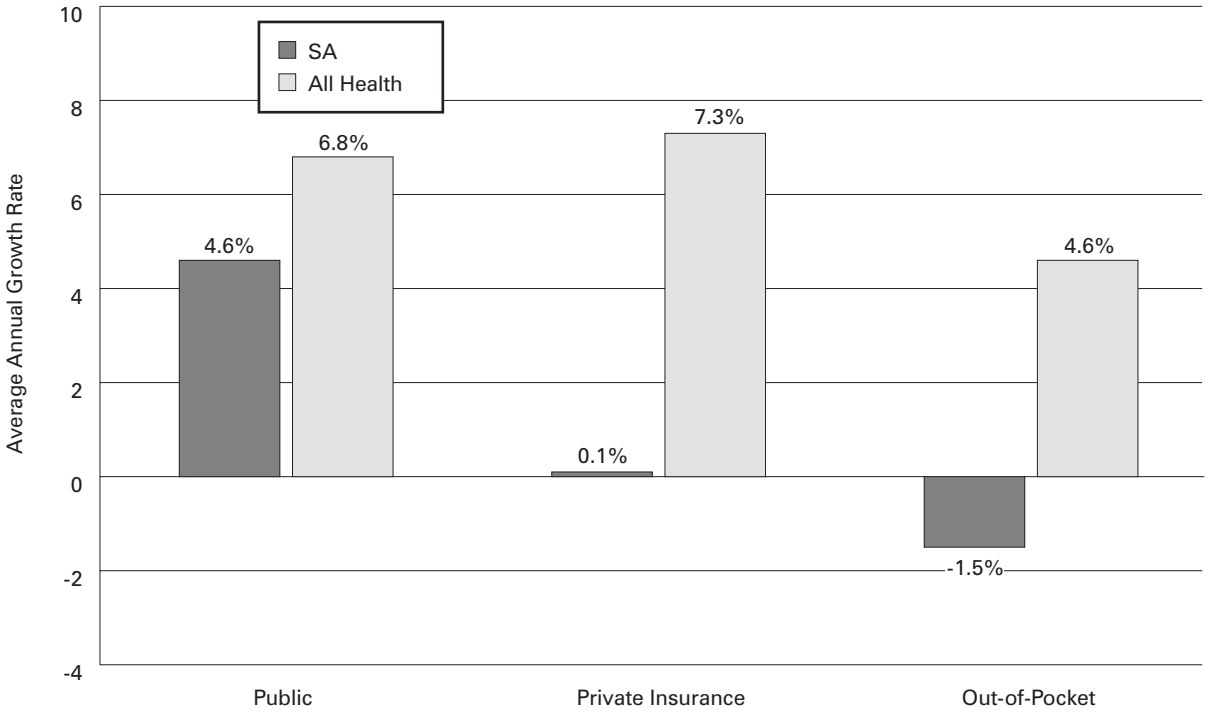
Figure 6.1: Growth of SA and All Health Expenditures, 1993–2003



TRENDS BY TYPE OF PAYER

SA expenditure trends for public payers diverged from those for private payers between 1993 and 2003. Public payments grew at a 4.6 percent average annual rate while private payments fell at a 0.1 percent rate (Table A.5, Appendix A). Trends also differed between SA and all health by payer. The 4.6 percent annual growth in SA was significantly lower than the 6.8 percent annual growth rate for all health public payers (Figure 6.2). In contrast, SA private insurance payments remained stagnant, increasing 0.1 percent annually, as compared with an all-health average annual growth rate of 7.3 percent. Out-of-pocket SA spending decreased by 1.5 percent annually, a substantial difference when compared to 4.6 percent growth for all health. The decreases in out-of-pocket may be in part attributable to increased dependence on public funds that generally have little or no client co-payments.

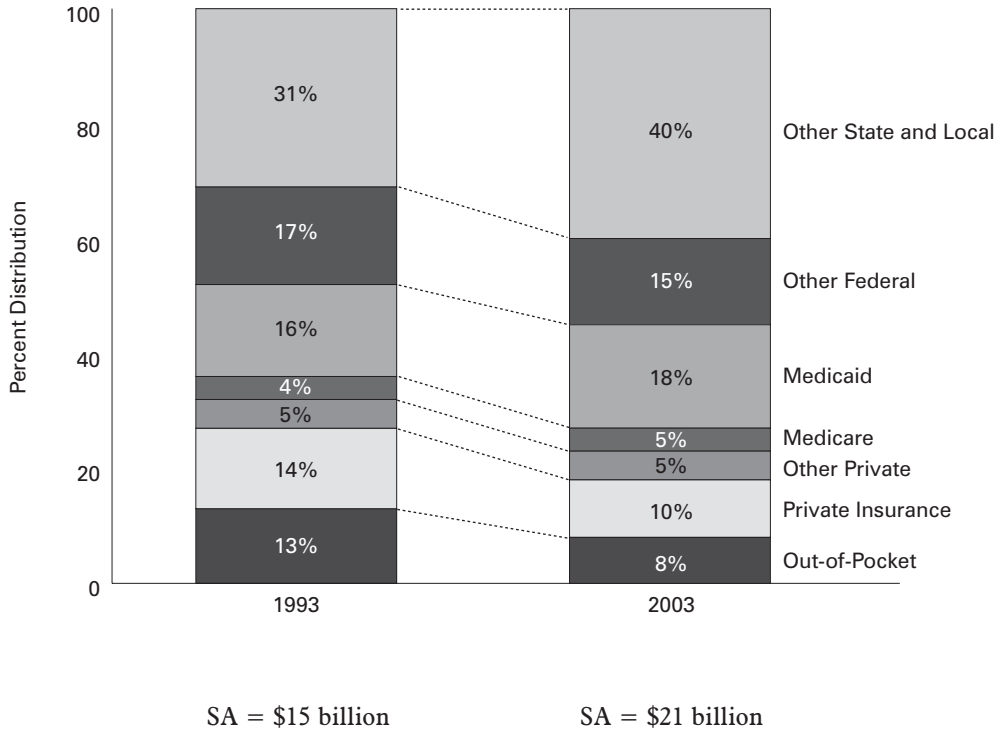
Figure 6.2: Growth of Public, Private Insurance, and Out-of-Pocket Payments for SA and All Health, 1993–2003



As a result of the higher growth rate of public SA payments compared with private and out-of-pocket payments, public payers became an increasingly prominent source of financing for SA treatment. Public payers made up 68 percent of total SA in 1993, jumping to 77 percent in 2003 (Tables A.2 and A.7, Appendix A).

The growth rate of private insurance expenditures relative to all payers in SA spending was negligible between 1993 and 2003. (This stabilization of spending by private insurers followed three years of declining spending (between 1990 and 1993) as managed behavioral care began to dominate SA service provision and private insurance share of SA spending dropped from 26 percent in 1990 to 14 percent in 1993.) Negligible growth in private insurance spending produced a decline in its share of total spending from 14 percent of total SA in 1993 to 10 percent in 2003 (Figure 6.3). Similarly, out-of-pocket expenditures declined from 13 percent to 8 percent during the same time period.

Figure 6.3: Distribution of SA Expenditures by Payer, 1993 and 2003

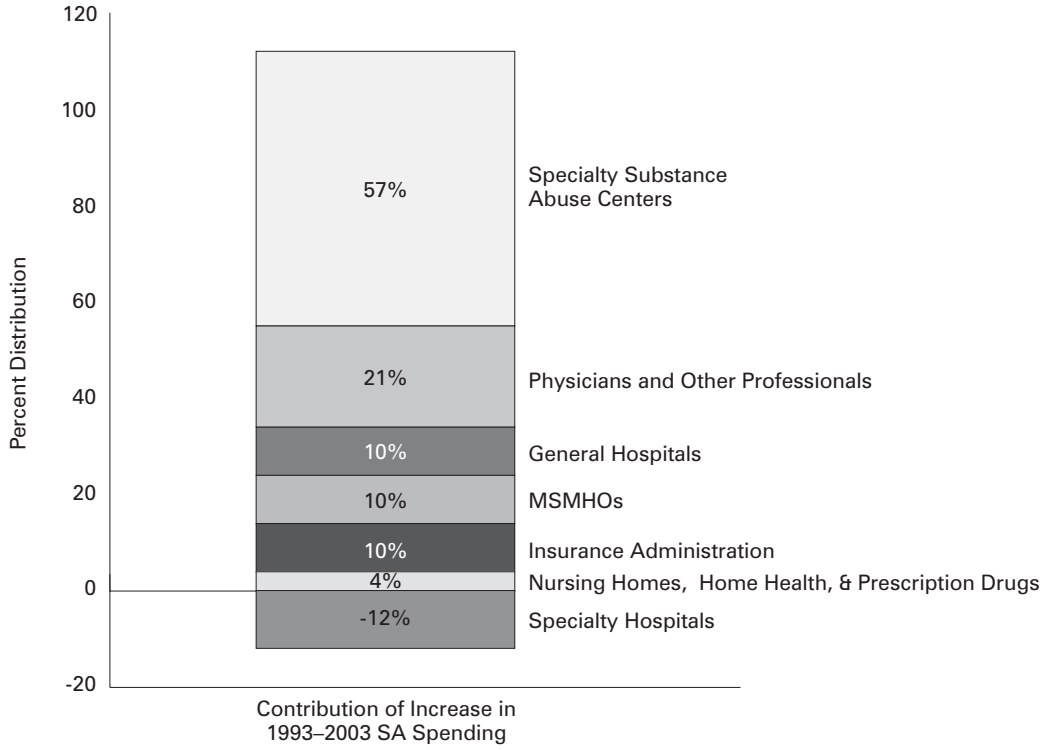


Among public payers, increases in other State and local financing accounted for two-thirds of the overall increase in SA spending between 1993 and 2003. This resulted from the relatively high growth in spending by other State and local government financers of SA treatment compared with other public and with all private payers. The growth rate during the ten-year period was 6.1 percent annually for State and local governments, 4.4 percent annually for Medicaid, and 3.4 percent annually for Medicare. Other Federal expenditures, which include Federal SA block grants to the States, grew 1.7 percent annually (Table A.5, Appendix A). As a result, other Federal government spending made up 17 percent of SA expenditures in 1993 and only 15 percent in 2003. Other State and local government spending increased from 31 percent to 40 percent of SA spending over the same period, making it the largest financer of SA treatment. Medicaid share increased from 16 percent to 18 percent of SA expenditures nationally, while Medicare spending share (4 percent in 1993 and 2003) remained relatively constant.

TRENDS BY TYPE OF PROVIDER

Total SA expenditures grew by $5.7 billion between 1993 and 2003. By far the largest component of this change was due to increased spending for services of the SSACs which includes outpatient, residential and inpatient services. They accounted for 57 percent of the $5.7 billion increase in expenditures between 1993 and 2003 (Figure 6.4). The next largest contributors of provider growth were physicians and other professionals (21 percent), followed by multi-service mental health organizations (MSMHOs) and general hospitals, each of which contributed 10 percent of the increase. In line with field reports of the decline in 28 day residential programs at specialty treatment centers, the decline in spending for SA treatment in specialty hospitals between 1993 and 2003 was responsible for reducing SA spending by 12 percent.

Figure 6.4: Contribution to the SA Expenditure Increase between 1993 and 2003 by Provider and Insurance Administration

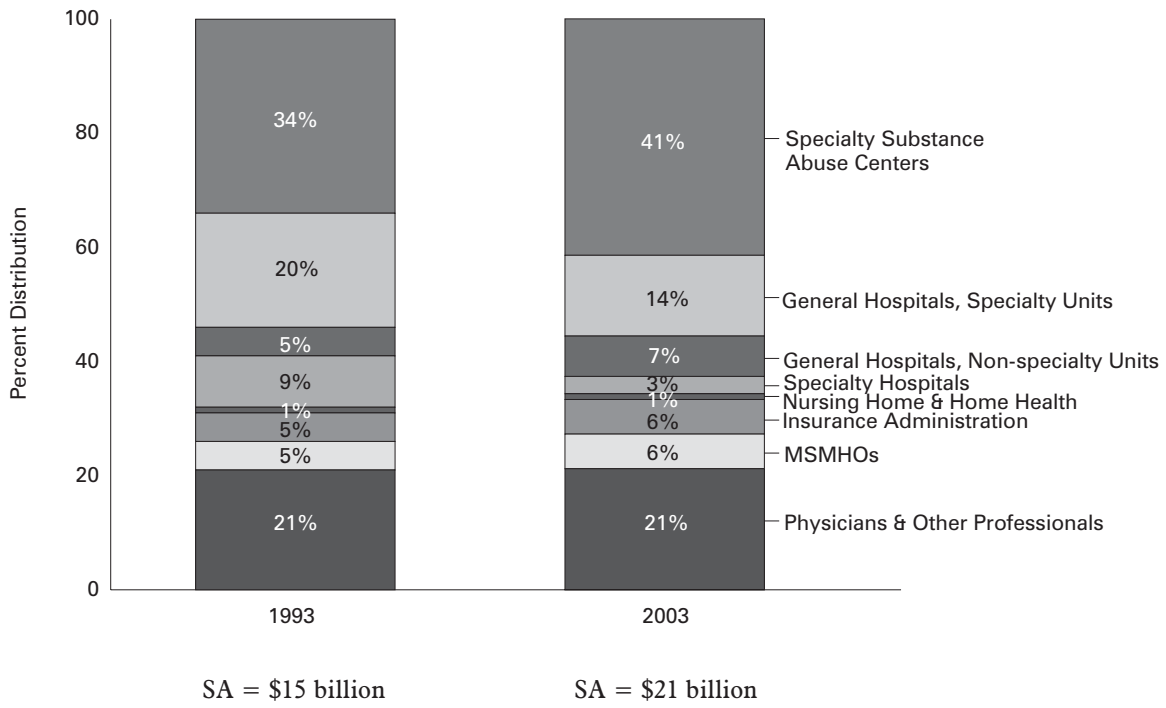


SA spending increase = $5.7 billion

Comparing provider shares across the decade, SSACs grew from 34 percent of SA expenditures in 1993 to 41 percent in 2003, making them the largest provider segment (Figure 6.5). The proportion of dollars going to MSMHOs increased slightly from 5 percent in 1993 to 6 percent of SA expenditures in 2003.

Expenditures for SA hospital care declined in absolute dollars over the ten-year period. Specialty hospitals comprised 9 percent of expenditures in 1993, but only 3 percent in 2003; SA expenditures in specialty hospitals fell by 6.6 percent annually (Table A.4, Appendix A). In addition, expenditures for general hospitals with specialty units were essentially flat, declining only 0.5% annually. On the other hand, general hospitals with non-specialty units demonstrated double the growth rate of SA spending overall, with a 7.0 percent annual growth rate over the 10 year period compared to a 3.3 percent average annual growth for all SA spending. Further research is required to determine if much of this growth could be largely for detoxification services that are typically provided on medical floors.

Figure 6.5: Distribution of SA Expenditures by Provider, 1993 and 2003



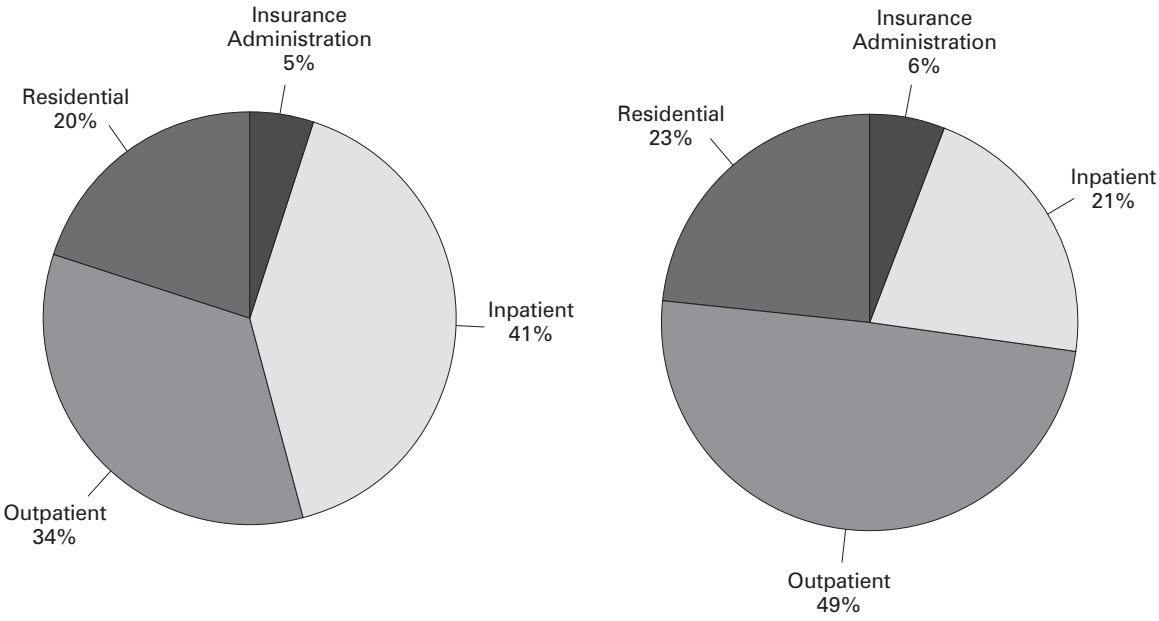
The role of physicians and other professionals remained steady at 21 percent of SA expenditures in 1993 and 2003. Spending for non-psychiatric physicians, although a small overall part of the SA (5.5 percent in 2003), had a robust 8.0 percent annual growth rate from 1993 to 2003. SA spending on physician (including psychiatrists') services increased at a slower rate (3.9 percent annually) compared with all health care spending on physicians (which rose 6.3 percent annually). Expenditures for SA treatment by other professionals grew by 3.0 percent annually, as compared to 7.1 percent per year for allied professionals involved in all health care treatments (Table A.4, Appendix A).

TRENDS FOR SPECIALTY PROVIDERS AND BY SITE OF SERVICE

The majority of SA treatment was delivered by specialty providers (i.e., general hospital specialty units, specialty hospitals, psychiatrists, other MHSA professionals, MSMHOs, and SSACs) in both 1993 and 2003, at 85 and 79 percent of expenditures, respectively (Tables A.8 and A.3, Appendix A).

Consistent with the decline in hospital care, inpatient expenditures declined from 41 percent of SA spending in 1993 to only 21 percent in 2003 (Figure 6.6). Outpatient share of SA expenditures increased from 34 percent to 49 percent. Spending on care in residential settings rose only slightly in share, from 20 percent to 23 percent. Spending on prescription drugs was negligible in both 1993 and 2003 and accounted for only 0.2 percent and 0.5 percent of SA spending respectively.

Figure 6.6: Distribution of SA Expenditures by Setting of Care (Inpatient, Outpatient, and Residential) and Insurance Administration, 1993 and 2003



SA = $15 billion, 1993

SA = $21 billion, 2003

NOTE: Retail spending on prescription drugs was 0.2 percent in 1993 and 0.5 percent in 2003 and is not shown in this figure.

SUMMARY

Between 1993 and 2003, expenditures on SA treatment grew at an average annual rate of 3.3 percent in nominal terms and 1.4 percent in inflation-adjusted terms.

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 payers. 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 remained the largest single source of funding and accounted for a majority of the increase in SA funding between 1993 and 2003.

Changes in treatment patterns also emerged. As a proportion of total SA expenditures, spending for inpatient care declined through 2001 and then stabilized. The spending increases in SA treatment occurred primarily in specialty substance abuse facilities. Spending for specialty substance abuse facilities remained the largest proportion of provider expenditures.

Chapter 7 | Conclusion

Expenditures for mental health services and substance abuse treatment constitute a significant portion of all health care costs. Amounting to $121 billion, mental health and substance abuse (MHSA) expenditures accounted for 7.5 percent of the $1.6 trillion spent on all health care in 2003. These most recent estimates reflect the continuing long-term trends in spending for MHSA treatment that increased at a slower rate than all health care costs—5.6 percent annually in nominal dollars for MHSA treatment between 1993 and 2003 compared with 6.5 percent annually for all health care. This produced a continuing decline in the share of all health care costs going for mental health and substance abuse treatment—from 8.2 percent in 1993 to 7.5 percent in 2003.

FACTORS ACCOUNTING FOR SPENDING INCREASES

Unlike most sectors of the health care industry, increasing spending for MHSA services is not driven by cost-increasing technology, except in the area of prescription drugs (Chernew et al., 1997 and 2004, Peden and Freeland, 1997). This may provide part of the explanation of why spending for the MHSA sector has historically grown at rates that are slower than for all health.

A significant portion of the increase in MHSA expenditures stemmed from more people receiving MHSA treatment. Thorpe and colleagues (2004) documented this finding by estimating the factors associated with the total change in inflation-adjusted spending by the noninstitutionalized population from 1987 to 2000. Their results for spending associated with the treatment of mental illness (including SA treatment) show that one-fifth of the spending growth came from increases in the inflation-adjusted cost per case, another fifth from increases in the U.S. population and the remaining three-fifths from the increased rate of treatment within the U.S. population.

The increased rate at which individuals in the U.S. population sought treatment came despite little change in the prevalence of MHSA disorders throughout the 1993–2003 period covered by this report. Evidence from household surveys[5] covering the population ages 18 to 54 indicates that the prevalence of serious MHSA disorders within the general population was approximately the same in 1990-1992 (5.3 percent) as it was in 2001–2003 (6.3 percent). However, the percent of the population that sought MH and SA treatment rose dramatically. In the 1990–1992 survey, 12.2 percent of population ages 18 to 54 received treatments for an anxiety, mood or substance use disorder at some point during the year, while 20.1 percent of the population in the 2001–2003 survey did so. Despite the treatment increase, only a minority of individuals with a serious mental disorder actually received care (24.3 percent in 1990–1992 and 40.5 percent in 2001–2003) (Kessler, 2005b).

SPENDING FOR MHSA SERVICES

Distinct trends in spending by provider emerge from the MHSA expenditure estimates. The estimates document the trends of increased reliance on prescription medications in the treatment of mental illness and the decline in inpatient hospitalizations in the treatment of mental illness and substance abuse disorders.

[5]National Comorbidity Survey and National Comorbidity Survey—Replication conducted by the National Institute of Mental Health.

Prescription Drugs. The influence of prescription drugs on spending patterns for treatment of MH and all health conditions grew during the 1993–2003 period. In 2003, retail purchases of prescription drugs used to treat mental illness and substance use disorders reached $23 billion, growing at an average rate of 19 percent annually over the previous 10 years. Between 1993 and 2003, retail purchases of prescription drugs went from 6 percent to 19 percent of MHSA expenditures and were responsible for 38 percent of the increase in MHSA spending overall. In addition, MHSA expenditures on retail purchases of prescription drugs accounted for 13 percent of drug spending for all health conditions in 2003, up from 8 percent in 1993.

The growth in retail purchases of prescription drugs for MHSA treatment comes from both more spending per user and from the increased number of users. In a study of the community-based population between 1996 and 2001, Zuvekas (2005) found that the percent of the population using psychotropic drugs increased from 5.9 percent in 1996 to 8.1 percent in 2001 and that spending per user rose on average by 11.3 percent per year—from $374 in 1996 to $639 in 2001. In contrast, the percent of the community-based population with any ambulatory visits remained fairly stable (6.9 percent in 1996 and 7.1 percent in 2001) while the number of visits per user each year declined (from 8.4 visits in 1996 to 6.6 visits in 2001) (Zuvekas, 2005).

Inpatient Services. Another important trend documented in the MHSA spending is the movement away from inpatient care, especially through specialty hospitals and by specialty units in general hospitals. Inpatient expenditures for MHSA treatment increased at a 0.8 percent average annual rate in nominal terms, but fell by an average of 1.0 percent annually in inflation-adjusted terms. The number of inpatient and residential treatment admissions to specialty facilities[6] (2,092,000 in 1992 and 2,193,000 in 2002[7]) increased 5 percent between 1992 and 2002, a rate that did not keep pace with the 12-percent growth in the U.S. population over the same period (National Center for Health Statistics, 2005). As a result, inpatient and residential treatment admissions fell from 8.2 admissions per 1,000 population in 1992 to 7.8 admissions per 1,000 population in 2002. In addition, the length of stay declined over the same period. For example, an analysis of data from the Healthcare Cost and Utilization Project showed that discharges for mental illness and substance abuse disorders from community hospitals had an average length of stay of 11.0 days in 1993, falling to 7.2 days in 2003 (Table 7.1). Finally, the number of facilities providing inpatient MH care declined from 1992 to 2000. The number of private psychiatric hospitals declined from 475 to 269, non-Federal general hospital specialty units from 1,616 to 1,373, and state and county mental hospitals from 273 to 220 (Substance Abuse and Mental Health Services Administration, 2004).

[6]Also includes readmissions, a return from a long-term leave or a transfer from another service of the same or different facility. The estimates are based on inventories of mental health organizations and excludes admissions to general hospital non-specialty units. See next footnote for types of facilities covered by the inventory.

[7]Admissions and readmissions between 1992 and 2002 to state and county mental hospitals declined from 275,000 to 239,000; to private psychiatric hospitals, rose from 469,000 to 477,000; to non-Federal general hospitals with separate psychiatric services, increased from 951,000 to 1,095,000; to VA medical centers, grew from 180,000 to 182,000; and to all other facilities, fell from 215,000 to 201,000.

Table 7.1: Community Hospitals: Discharges, Days of Care, and Average Length of Stay for Mental Health and Substance Abuse Discharges: 1993, 1998, and 2003

	MENTAL DISEASES AND DISORDERS AND ALCOHOL/DRUG USE & ALCOHOL/DRUG INDUCED ORGANIC MENTAL DISORDERS			MENTAL DISEASES AND DISORDERS			ALCOHOL/DRUG USE & ALCOHOL/DRUG INDUCED ORGANIC MENTAL DISORDERS		
	1993	1998	2003	1993	1998	2003	1993	1998	2003
DISCHARGES IN THOUSANDS	1,571	1,731	1,748	1,082	1,273	1,363	490	458	385
DAYS OF CARE IN MILLIONS	17.3	13.2	12.5	13.8	10.8	10.8	3.5	2.3	1.7
AVERAGE LENGTH OF STAY IN DAYS	11.0	7.6	7.2	12.8	8.5	7.9	7.1	5.1	4.5

Source: HCUPnet accessible at **http://hcup.ahrq.gov/HCUPnet.asp.**
Note: Tabulations of Major Diagnosis Codes 19 and 20.

SPECIALTY AND NON-SPECIALTY MHSA SERVICES

The distribution of MH spending is heavily weighted towards specialty MH providers, defined as specialty units of general hospitals, specialty hospitals, psychiatrists, other professionals, and multi-service mental health organizations (MSMHOs). In 2003, half of spending for mental health treatment went for services furnished by specialty providers. Another 20 percent of spending went to non-specialty providers (i.e., scatter beds in general hospitals, non-psychiatric physicians). The remaining spending was divided between spending for retail sales of prescription drugs (23 percent) and insurance administration (7 percent).

The distribution for SA is even more skewed toward specialty providers. In 2003, 79 percent of SA spending was for specialty providers, with only 14 percent for non-specialty providers.

Specialty MH providers grew at half the average annual rate of non-specialty providers from 1993 to 2003 (2.9 percent versus 6.8 percent). This growth rate was primarily because psychiatric hospitals and general hospital specialty units (down 0.4 percent) grew more slowly than spending in hospital scatter beds (up 14.2 percent on average). Spending growth rates for psychiatrists exceeded that of non-psychiatrist physicians (7.0 percent versus 6.2 percent), although other specialty professionals grew at a slightly lower rate (5.8 percent).

Specialty providers for SA treatment followed a similar pattern to that exhibited by MH specialty providers. Spending for specialty SA providers grew at a 2.5 percent average annual rate between 1993 and 2003, compared to growth of 7.3 percent for non-specialty SA providers. As with MH, this was primarily because spending in specialty hospitals (decreasing at a 6.6 percent average annual rate) and general hospital specialty units (decreasing at a 0.5 percent rate) declined, as did spending on psychiatrist services (decreasing at a 1.4 percent rate).

FINANCING OF MHSA SERVICES

MHSA spending estimates also depict changes within the financing structure for MHSA services. The type of insurance paying for MHSA services and its benefit design can determine access to specific services and providers as well as the amount paid out-of-pocket by the patient. The significant conversion to managed care arrangements for MHSA services during 1993 to 1998 period in both public and private purchasers likely

accounted for much of the low growth rates in spending. In addition, the MHSA spending estimates document a rising share of public payments during the first five years of the 1993–2003 that gave way to a falling share of public spending in the last half of the period, a trend in MH that is associated with rapidly rising private spending on prescription drugs and the state budget crises of the early 1990s. They also document MH out-of-pocket spending that was growing more rapidly than for all health, once again a trend associated with the more rapid growth in spending attributable to prescription drugs compared with all health spending. For substance abuse treatment, private insurance funding represented a falling share of SA treatment expenditures throughout the ten year period, and state and local funding gained increased prominence in financing SA treatment.

Out-of-pocket. The growth rate in MH out-of-pocket spending (7.2 percent average annual rate) was much faster than the growth rate in out-of-pocket for all diseases (4.6 percent average annual rate) (Table A.5, Appendix A). One explanation for the faster growth is that more MH care (compared to all health care) came in the form of prescription drugs, for which cost sharing tends to be higher (compared to other forms of medical care). About half (45 percent) of the increase in out-of-pocket spending came from prescription drug insurance copayments and out-of-pocket spending for drugs that were not covered by a third party. Most of the remaining increases in out-of-pocket expenditures (47 percent) came from increases in out-of-pocket spending for psychiatrist and other professional (psychologists, social workers and counselors) services. These specialty services rely more on private payments than do similar ambulatory care services provided in MSMHO or in specialty substance abuse centers (SSACs).

The growth in out-of-pocket payments is not necessarily related to increases in the share of a service that is paid for out-of-pocket. For example, in efforts to control spiraling costs of prescription medications, insurers increased prescription drug consumer cost-sharing over the 1993–2003 period (Kaiser Family Foundation and Health Research and Educational Trust, 2005). However, even though copayments increased, the share of prescription MHSA expenditures paid out-of-pocket declined. This is because the increase in copayments did not keep pace with the very rapid rise in overall prescription drug spending

Private Insurance. One finding that is specific to substance abuse treatment expenditures is the negligible increase in private insurance expenditures (averaging 0.1 percent per year). This trend has also been found in employer claims databases (Mark and Coffey, 2004). Analysis of the Medstat MarketScan® database indicates that the percent of beneficiaries with any outpatient or inpatient SA treatment use declined from 1992 to 2001.[8] In addition, unlike in MH care, SA treatment patterns made little use of pharmaceuticals, which was the source of 67 percent of the increase in MH private insurance expenditures between 1993 and 2003.

The trend 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 data from the U.S. Bureau of Labor Statistics, in 1997, from 80–84 percent of employees with medical coverage had coverage for inpatient or outpatient alcohol or drug rehabilitation (Morton and Aleman, 2005). In 2002, 83–87 percent of employees with medical coverage had similar benefits. Moreover, from 1997 to 2002 there was a slight decrease in the percent of employees with coverage who had separate limits for substance abuse rehabilitation compared to other care.

[8]Because of the small number of claims in the MarketScan® database, spending for residential care was excluded from this study.

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 the spending for 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. A study of Vermont's implementation of MHSA parity laws shows a similar decline in substance abuse treatment spending. The switch to managed care as a result of these parity laws was an important factor in controlling costs, but it also reduced substance abuse treatment service use for persons covered by private health plans (Rosenbach et al., 2003). Clearly, these trends merit additional research.

State and Local. The MHSA spending estimates also document the increasing prominence of state and local expenditures as a SA funding source. Between 1993 and 2003, other state and local funding (other than Medicaid) grew from 31 percent to 40 percent of all SA funding and accounted for two-thirds of the $5.7 billion increase in SA funding between 1993 and 2003. Two-thirds of all other state and local funding for SA services went to specialty substance abuse centers in 2003.

MH AND SA EXPENDITURE DIFFERENCES

Combining spending estimates of MH and SA often masks important differences in financing and provision of services to the populations using MHSA services.

Payers. There are several distinctions that can be drawn between the substance abuse expenditures and mental health expenditures in 2003. In terms of the payer distribution, a greater proportion of substance abuse treatment expenditures (77 percent) came from public payers as compared with MH (58 percent). Among the public payers there are also differences. A greater proportion of dollars in SA expenditures than in MH expenditures came from other State and local funding and other Federal funding (together comprising 55 percent of SA spending but only 24 percent of MH spending) and less came from Medicaid (18 percent of SA spending and 26 percent of MH spending) and Medicare (4 percent of public SA spending and 7 percent of public MH spending). Thus, more money for SA is coming from grants and State and local programs and less from insurance programs, compared to MH spending.

On the other hand, private insurance in MH plays a much larger role than in SA. In 2003, almost one-quarter of all spending for MH treatment was by private insurance, which represented only 10 percent of SA treatment expenditures. Between 1993 and 1998, both private and public spending slowed substantially for both MH and SA (more significantly for SA), probably related to the entrance of managed care techniques. But in the later period of 1998 to 2003, private insurance spending for MH rebounded dramatically, averaging 11.1 percent annually, whereas growth in spending on SA continued to languish (averaging increases of 1.8 percent annually).

Providers. The distribution of expenditures among providers between MH and SA also revealed significant differences. By provider type, physicians played a larger role in treating mental illness than in treating substance use disorders, perhaps related to the higher utilization of retail drugs as well as payment policy. Among physicians, the difference was most apparent for psychiatrists. Ten percent of MH expenditures went to psychiatrists, compared with only 3 percent of SA expenditures.

Expenditures on other independent professional services, however, were more significant for SA—13 percent of SA expenditures, as compared to 8 percent for MH. Specialty clinics played a much larger role than physicians and other independent professionals in SA treatment. Forty-seven percent of SA expenditures occurred in SSACs and MSMHOs, compared with 13 percent for MH expenditures. Forty-one percent of SA expenditures occurred in SSACs, as compared with the 13 percent of MH expenditures that occurred in MSMHOs.

Within general hospitals, twice the proportion of SA dollars (14 percent) was spent in specialty units as compared with MH (7 percent). On the other hand, specialty hospitals represented a four times larger share of spending for MH than for SA (12 percent versus 3 percent). Finally, retail purchases of prescription drugs comprised nearly a quarter (23 percent) of MH expenditures and totaled $23 billion, while expenditures on retail purchases of prescription drugs were less than one percent of total SA expenditures and totaled $0.1 billion.

By provider specialty classification, specialty providers (which included psychiatrists, other professionals, specialty hospitals, general hospitals with specialty units, MSMHOs, and SSACs) captured a larger share of spending for treatment of SA than for treatment of MH. In 2003, specialty providers accounted for 8 out of every 10 dollars spent on SA treatment, but less than 5 out of every 10 dollars spent on MH treatment.

POLICY IMPLICATIONS

National expenditure analyses provide an overview of the mental health and substance abuse systems. The strength of these aggregate expenditures 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. Because of the very large social and economic costs associated with mental illness and substance use, this type of aggregate analysis helps to identify issues, focus attention on important trends, and highlight important policy questions.

Payer Questions: The growing emphasis on cost containment in medical care has led to important changes in the funding of MHSA services that affect payers. Many trends evident in the spending estimates suggest questions for further research:

- What are the underlying causes of falling contribution of private insurance to the funding of SA treatment?
- What effect does managed behavioral care have on the access and settings of MHSA treatment?
- How will SA treatment programs that depend heavily on State and local funding fare during economic recessions that put pressure on State and local governments?
- In an era when the out-of-pocket share of total expenditures is falling for general medical care, how will the recent increases in the out-of-pocket share of MH spending affect access to treatment?
- With the shift over time in the management of State mental health funds from mental health agencies to Medicaid, how should coordination and cooperation among these agencies change? What role should the Federal government play in this change?
- With increasing demands for public accountability, how can states build nimble MHSA data systems to address client outcomes and service costs across public programs?

Provider Questions: With the demand for use of evidenced-based practices and greater documentation of treatment effectiveness, providers face enormous challenges. The development of newer medications with fewer side effects for treating mental illness and the spread of managed behavioral care has led to a change in the distribution of MH spending among providers. These trends suggest additional policy inquiries:

- How have changes in treatment patterns such as the decline in inpatient care and increase in use of pharmaceuticals altered the quality of outcomes and the cost of care?
- Are newer psychotropic medications being used optimally?
  - Should policies be developed that encourage their use in conjunction with psychotherapy?
  - Do the purported benefits that come from newer psychotropic medications outweigh the higher costs?
  - How will insurers' formularies and increased cost sharing of non-formulary medications affect the balance between cost-containment, access, and treatment effectiveness?
- What is the appropriate role of inpatient treatment in psychiatric and chemical dependency care?
  - With hospital inpatient stays increasingly used only for crisis intervention or detoxification, how can appropriate outpatient treatment be ensured for patients?
  - If more patients are treated outside of specialty units in general hospitals, how has this affected the quality of treatment?
  - Is the supply of and access to inpatient psychiatric and chemical dependency beds and insurance financing adequate to the needs of those who could optimally benefit from inpatient specialty treatment?

Aggregate analysis, however, is not designed to address underlying causal factors posed by many of these questions. These factors 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, we can begin to develop a clearer understanding of the complex and evolving MHSA treatment and financing systems. This knowledge can assist in uncovering issues from which formulation of strategies and policies for improving the quality and access of care for mental illness and substance use disorders may evolve.

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Appendix A | Detailed Tables of MHSA Spending Estimates

Table A.1: 2003 Estimated Expenditures and Percent Distribution of Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA) and All Health Care (NHA) 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 (Note 1)	Millions ($)	Percent	Millions ($)	Percent	Millions ($)	Percent	Millions ($)	Percent	Millions ($)	Percent	Millions ($)	Percent
General Hospitals	20,286	16.8	15,927	15.9	4,359	21.0	2,509	23.9	1,850	18.1	496,623	30.8
Inpatient	12,442	10.3	10,286	10.3	2,156	10.4	1,214	11.6	941	9.2	–	–
Outpatient	6,257	5.2	4,455	4.4	1,802	8.7	1,058	10.1	744	7.3	–	–
Residential (Note 2)	1,587	1.3	1,185	1.2	402	1.9	237	2.3	165	1.6	–	–
General Hospitals, Specialty Units (Note 3)	9,458	7.8	6,568	6.5	2,890	13.9	1,504	14.3	1,386	13.5	–	–
Inpatient	5,886	4.9	4,483	4.5	1,403	6.8	712	6.8	691	6.8	–	–
Outpatient	3,035	2.5	1,889	1.9	1,146	5.5	602	5.7	544	5.3	–	–
Residential (Note 2)	537	0.4	196	0.2	341	1.6	190	1.8	151	1.5	–	–
General Hospitals, Non-Specialty Units (Note 3)	10,828	8.9	9,359	9.3	1,470	7.1	1,005	9.6	464	4.5	–	–
Inpatient	6,556	5.4	5,804	5.8	752	3.6	502	4.8	250	2.4	–	–
Outpatient	3,222	2.7	2,566	2.6	656	3.2	456	4.3	201	2.0	–	–
Residential (Note 2)	1,050	0.9	989	1.0	61	0.3	47	0.4	14	0.1	–	–
Specialty Hospitals	12,348	10.2	11,673	11.6	676	3.3	324	3.1	352	3.4	19,243	1.2
Inpatient	10,242	8.5	9,721	9.7	521	2.5	250	2.4	271	2.6	–	–
Outpatient	819	0.7	748	0.7	71	0.3	34	0.3	37	0.4	–	–
Residential (Note 2)	1,287	1.1	1,204	1.2	83	0.4	40	0.4	43	0.4	–	–
All Physicians	15,420	12.7	13,748	13.7	1,672	8.1	933	8.9	738	7.2	369,746	22.9
Inpatient	3,201	2.6	2,620	2.6	581	2.8	337	3.2	243	2.4	–	–
Outpatient	12,219	10.1	11,128	11.1	1,091	5.3	596	5.7	495	4.8	–	–
Residential	–	–	–	–	–	–	–	–	–	–	–	–
Psychiatrists	10,342	8.5	9,802	9.8	540	2.6	248	2.4	292	2.9	–	–
Inpatient	2,019	1.7	1,756	1.8	263	1.3	132	1.3	131	1.3	–	–
Outpatient	8,323	6.9	8,046	8.0	277	1.3	116	1.1	161	1.6	–	–
Residential	–	–	–	–	–	–	–	–	–	–	–	–
Non-Psychiatric Physicians	5,077	4.2	3,946	3.9	1,131	5.5	685	6.5	446	4.4	–	–
Inpatient	1,182	1.0	864	0.9	318	1.5	206	2.0	112	1.1	–	–
Outpatient	3,895	3.2	3,082	3.1	813	3.9	480	4.6	334	3.3	–	–
Residential	–	–	–	–	–	–	–	–	–	–	–	–
Other Professionals (Note 4)	11,006	9.1	8,370	8.3	2,636	12.7	1,715	16.3	922	9.0	48,507	3.0
Inpatient	2,362	2.0	1,453	1.4	909	4.4	620	5.9	289	2.8	–	–
Outpatient	8,644	7.1	6,917	6.9	1,728	8.3	1,094	10.4	633	6.2	–	–
Residential	–	–	–	–	–	–	–	–	–	–	–	–
Free-Standing Nursing Homes	6,535	5.4	6,234	6.2	301	1.5	249	2.4	52	0.5	110,797	6.9
Inpatient	–	–	–	–	–	–	–	–	–	–	–	–
Outpatient	–	–	–	–	–	–	–	–	–	–	–	–
Residential	6,535	5.4	6,234	6.2	301	1.5	249	2.4	52	0.5	–	–
Free-Standing Home Health	827	0.7	823	0.8	4	0.0	3	0.0	1	0.0	40,009	2.5
Inpatient	–	–	–	–	–	–	–	–	–	–	–	–
Outpatient	827	0.7	823	0.8	4	0.0	3	0.0	1	0.0	–	–
Residential	–	–	–	–	–	–	–	–	–	–	–	–

Other Personal and Public Health	22,830	18.9	13,143	13.1	9,687	46.7	3,999	38.1	5,688	55.6	230,382	14.3
Inpatient	208	0.0	–	–	208	1.0	86	0.8	123	1.2	–	–
Outpatient	12,446	10.3	7,011	7.0	5,435	26.2	2,310	22.0	3,125	30.5	–	–
Residential	10,176	8.4	6,132	6.1	4,044	19.5	1,604	15.3	2,440	23.8	–	–
Multi-Service Mental Health Organizations (Note 5)	14,390	11.9	13,143	13.1	1,246	6.0	689	6.6	557	5.4	–	–
Inpatient	–	–	–	–	–	–	–	–	–	–	–	–
Outpatient	7,845	6.5	7,011	7.0	834	4.0	473	4.5	361	3.5	–	–
Residential	6,544	5.4	6,132	6.1	412	2.0	216	2.1	196	1.9	–	–
Specialty Substance Abuse Centers (Note 6)	8,441	7.0	–	–	8,441	40.7	3,310	31.5	5,131	50.1	–	–
Inpatient	208	0.0	–	–	208	1.0	86	0.8	123	1.2	–	–
Outpatient	4,601	3.8	–	–	4,601	22.2	1,836	17.5	2,764	27.0	–	–
Residential	3,632	3.0	–	–	3,632	17.5	1,388	13.2	2,244	21.9	–	–
Total All Service Providers	89,252	73.7	69,918	69.7	19,335	93.2	9,732	92.7	9,602	93.8	1,315,307	81.5
Total Inpatient	28,455	23.5	24,080	24.0	4,375	21.1	2,508	23.9	1,867	18.2	–	–
Total Outpatient	41,212	34.0	31,082	31.0	10,129	48.8	5,193	49.4	5,035	49.2	–	–
Total Residential	19,586	16.2	14,755	14.7	4,831	23.3	2,130	20.3	2,701	26.4	–	–
Retail Prescription Drugs	23,357	19.3	23,259	23.2	98	0.5	98	0.9	–	–	179,204	11.0
Total All Service Providers and Products	112,610	93.0	93,177	93.0	19,433	94.0	9,831	93.6	9,602	93.8	1,494,511	92.6
Insurance Administration	8,452	7.0	7,145	7.1	1,307	6.3	673	6.4	634	6.2	119,712	7.4
TOTAL	121,062	100.0	100,321	100.0	20,740	100.0	10,503	100.0	10,237	100.0	1,614,223	100.0

Source: SAMHSA Spending Estimates, 2006.

Notes:

1. Not all service providers will have all three sites of service. Retail prescription drugs and insurance administration are not attributable to a site of service.
2. Includes spending in nursing home units of hospitals or in nursing homes affiliated with hospitals.
3. All spending for psychiatric services in Department of Veterans Affairs hospitals is included in general hospital specialty unit providers.
4. Includes psychologists and counselors/social workers.
5. Includes Residential Treatment Centers for Children.
6. Includes other facilities for treating substance abuse.

Table A.2: 2003 Estimated Expenditures and Percent Distributions of Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA), and All Health Care (NHA) 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	46,702	38.6	42,013	41.9	4,688	22.6	2,751	26.2	1,938	18.9	892,564	55.3
Out-of-Pocket	15,977	13.2	14,311	14.3	1,665	8.0	739	7.0	926	9.0	230,483	14.3
Private Insurance	26,400	21.8	24,311	24.2	2,089	10.1	1,404	13.4	685	6.7	600,594	37.2
Other Private	4,325	3.6	3,390	3.4	935	4.5	608	5.8	327	3.2	61,487	3.8
Public -- Total	74,360	61.4	58,308	58.1	16,052	77.4	7,753	73.8	8,299	81.1	721,658	44.7
Medicare	8,270	6.8	7,343	7.3	927	4.5	573	5.5	354	3.5	283,104	17.5
Medicaid (Note 1)	30,101	24.9	26,391	26.3	3,710	17.9	1,608	15.3	2,102	20.5	268,629	16.6
Other Federal (Note 2)	6,591	5.4	3,525	3.5	3,066	14.8	1,692	16.1	1,374	13.4	65,672	4.1
Other State and Local (Note 2)	29,398	24.3	21,049	21.0	8,349	40.3	3,879	36.9	4,470	43.7	104,253	6.5
All Federal (Note 3)	32,598	26.9	26,419	26.3	6,179	29.8	3,213	30.6	2,966	29.0	507,480	31.4
All State (Note 4)	41,762	34.5	31,889	31.8	9,873	47.6	4,540	43.2	5,333	52.1	214,178	13.3
Total	121,062	100.0	100,321	100.0	20,740	100.0	10,503	100.0	10,237	100.0	1,614,222	100.0

Source: SAMHSA Spending Estimates, 2006.
Notes:

1. The State Children's Health Insurance Program (SCHIP) total NHA spending was $6.6 billion in 2003. MHSA SCHIP spending was estimated at $1.1 billion or about 1 percent of total MHSA. In this table, SCHIP is distributed across Medicaid, Other Federal, and Other State and Local categories, depending on whether the SCHIP was run through Medicaid or as a separate state SCHIP program.
2. SAMHSA block grants to "State and Local" agencies are part of "Other Federal" government spending. In 2003, block grants amounted to $385 million for MH and $1,227 for SA.
3. Includes Federal share of Medicaid.
4. Includes State and Local share of Medicaid.

Table A.3: 2003 Estimated Expenditures and Percent Distributions of Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA) by Type of Specialty and General Sector Provider, All Payers

Type of Provider and Site of Service	Millions ($)	Percent of total expen-ditures	Percent within sectors	Millions ($)	Percent of total expen-ditures	Percent within sectors	Millions ($)	Percent of total expen-ditures	Percent within sectors	Millions ($)	Percent of total expen-ditures	Percent within sectors	Millions ($)	Percent of total expen-ditures	Percent within sectors
Specialty Sector Providers	65,986	54.5	100.0	49,557	49.4	100.0	16,429	79.2	100.0	7,790	74.2	100.0	8,639	84.4	100.0
General Hospitals, Specialty Units (Note 1)	9,458	7.8	14.3	6,568	6.5	13.3	2,890	13.9	17.6	1,504	14.3	19.3	1,386	13.5	16.0
Specialty Hospitals	12,348	10.2	18.7	11,673	11.6	23.6	676	3.3	4.1	324	3.1	4.2	352	3.4	4.1
Psychiatrists	10,342	8.5	15.7	9,802	9.8	19.8	540	2.6	3.3	248	2.4	3.2	292	2.9	3.4
Other Professionals (Note 2)	11,006	9.1	16.7	8,370	8.3	16.9	2,636	12.7	16.0	1,715	16.3	22.0	922	9.0	10.7
Multi-Service Mental Health Organizations (Note 3)	14,390	11.9	21.8	13,143	13.1	26.5	1,246	6.0	7.6	689	6.6	8.8	557	5.4	6.4
Specialty Substance Abuse Centers (Note 4)	8,441	7.0	12.8	–	–	–	8,441	40.7	51.4	3,310	31.5	42.5	5,131	50.1	59.4
General Sector Providers	23,267	19.2	100.0	20,361	20.3	100.0	2,906	14.0	100.0	1,942	18.5	100.0	963	9.4	100.0
General Hospitals, Non-Specialty Units (Note 5)	10,828	8.9	46.5	9,359	9.3	46.0	1,470	7.1	50.6	1,005	9.6	51.8	464	4.5	48.2
Non-Psychiatric Physicians	5,077	4.2	21.8	3,946	3.9	19.4	1,131	5.5	38.9	685	6.5	35.3	446	4.4	46.3
Free-Standing Nursing Homes	6,535	5.4	28.1	6,234	6.2	30.6	301	1.5	10.4	249	2.4	12.8	52	0.5	5.4
Free-Standing Home Health	827	0.7	3.6	823	0.8	4.0	4	0.0	0.1	3	0.0	0.1	1	0.0	0.1
Retail Prescription Drug	23,357	19.3	–	23,259	23.2	–	98	0.5	–	98	0.9	–	–	–	–
Insurance Administration	8,452	7.0	–	7,145	7.1	–	1,307	6.3	–	673	6.4	–	634	6.2	–
Total	121,062	100.0	–	100,321	100.0	–	20,740	100.0	–	10,503	100.0	–	10,237	100.0	–

Source: SAMHSA Spending Estimates, 2006.

Notes:

1. Includes specialty units of general hospitals and all MH and SA expenditures at VA hospitals.
2. Includes psychologists and counselors/social workers.
3. Includes Residential Treatment Centers for Children.
4. Includes other facilities for treating substance abuse.
5. Includes general hospital non-specialty units but excludes non-specialty units of VA hospitals.

Table A.4: Average Annual Growth Rates for Estimated Expenditures of Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA), and All Health Care (NHA) by Type of Provider, All Payers, 1993–2003 and Five-Year Increments

Type of Provider and Site of Service	MHSA			MH			SA			AA			DA			NHA All Health		
	1993 to 2003	1993 to 1998	1998 to 2003	1993 to 2003	1993 to 1998	1998 to 2003	1993 to 2003	1993 to 1998	1998 to 2003	1993 to 2003	1993 to 1998	1998 to 2003	1993 to 2003	1993 to 1998	1998 to 2003	1993 to 2003	1993 to 1998	1998 to 2003
	Average Annual Growth Rate (Percent)																	
General Hospitals	4.2	2.0	6.4	5.1	3.7	6.6	1.4	-2.7	5.6	0.1	-3.3	3.6	3.5	-1.5	8.7	5.0	3.7	6.4
Inpatient	2.6	-2.1	7.5	4.2	0.6	7.9	-2.6	-10.3	5.6	-3.9	-10.9	3.8	-0.8	-9.1	8.3	–	–	–
Outpatient	8.5	11.2	5.9	8.6	11.0	6.3	8.3	11.8	4.9	6.3	9.4	3.3	12.2	17.0	7.6	–	–	–
Residential (Note 2)	3.9	7.0	0.9	2.7	6.7	-1.2	9.0	8.6	9.3	8.0	11.3	4.8	10.5	3.1	18.5	–	–	–
General Hospitals, Specialty Units (Note 3)	-0.8	-2.6	1.1	-0.9	-1.7	-0.1	-0.5	-5.0	4.1	-2.5	-6.2	1.4	2.2	-3.2	7.7	–	–	–
Inpatient	-3.1	-6.0	-0.1	-2.5	-4.2	-0.8	-4.8	-11.4	2.3	-6.9	-11.3	-2.2	-1.9	-11.6	8.7	–	–	–
Outpatient	5.2	6.2	4.2	4.5	5.2	3.8	6.5	8.1	5.0	4.6	3.8	5.4	9.3	14.2	4.5	–	–	–
Residential (Note 2)	5.4	12.1	-0.9	1.6	15.9	-10.9	8.6	7.1	10.1	7.2	9.1	5.3	10.7	3.2	18.9	–	–	–
General Hospitals, Non-Specialty Units (Note 3)	12.8	12.8	12.8	14.2	14.8	13.5	7.0	5.0	9.0	6.1	4.5	7.7	9.0	6.2	12.0	–	–	–
Inpatient	15.5	12.1	19.0	19.0	18.2	19.8	3.6	-5.8	14.0	3.7	-9.3	18.5	3.5	-0.2	7.3	–	–	–
Outpatient	13.2	19.1	7.7	13.4	18.6	8.5	12.5	20.7	4.8	9.1	18.1	0.8	32.6	46.7	19.8	–	–	–
Residential (Note 2)	3.3	4.6	1.9	2.9	4.2	1.7	11.3	17.7	5.1	12.3	22.5	3.0	8.3	1.8	15.2	–	–	–
Specialty Hospitals	-0.7	-2.7	1.4	-0.1	-3.3	3.1	-6.6	2.2	-14.6	-9.6	-1.9	-16.6	-2.5	8.7	-12.5	1.7	-1.6	5.2
Inpatient	-1.3	-2.8	0.1	-0.9	-2.7	1.0	-7.3	-3.7	-10.8	-10.3	-7.7	-12.9	-3.1	2.7	-8.6	–	–	–
Outpatient	0.4	-5.5	6.6	0.6	-11.2	14.1	-1.9	19.1	-19.2	-5.0	11.7	-19.2	2.3	29.6	-19.2	–	–	–
Residential (Note 2)	6.8	2.4	11.4	8.5	-5.9	25.2	-4.7	21.6	-25.3	-7.3	19.6	-28.1	-1.4	24.6	-22.0	–	–	–
All Physicians	6.4	4.3	8.6	6.8	4.9	8.7	3.9	0.3	7.5	1.9	-2.3	6.2	7.2	5.1	9.4	6.3	5.0	7.6
Inpatient	5.2	-0.6	11.4	7.4	2.8	12.1	-1.0	-9.5	8.3	-2.2	-10.9	7.4	0.9	-7.1	9.6	–	–	–
Outpatient	6.8	5.7	7.9	6.7	5.4	8.0	8.1	9.0	7.2	5.3	5.0	5.6	13.1	17.0	9.3	–	–	–
Residential	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Psychiatrists	6.3	3.2	9.6	7.0	4.4	9.7	-1.4	-8.8	6.7	-5.4	-12.6	2.5	4.5	-1.9	11.2	–	–	–
Inpatient	5.3	-1.5	12.6	7.4	1.8	13.3	-2.6	-12.6	8.6	-5.3	-14.5	4.9	1.4	-9.2	13.3	–	–	–
Outpatient	6.6	4.3	8.9	6.9	4.9	9.1	0.0	-4.8	5.0	-5.5	-10.7	0.1	8.0	6.3	9.7	–	–	–
Residential	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Non-Psychiatric Physicians	6.6	6.6	6.7	6.2	6.2	6.3	8.0	8.0	8.0	7.1	6.4	7.8	9.6	10.9	8.2	–	–	–
Inpatient	5.0	0.7	9.4	7.4	4.8	10.0	0.5	-6.5	8.0	0.6	-7.3	9.3	0.3	-5.0	6.0	–	–	–
Outpatient	7.2	8.5	5.9	6.0	6.5	5.4	13.8	20.0	8.0	12.2	17.4	7.2	16.8	25.1	9.0	–	–	–
Residential	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other Professionals (Note 4)	5.1	1.3	9.0	5.8	2.8	9.0	3.0	-2.6	9.0	-0.1	-4.7	4.7	15.3	9.5	21.5	7.1	7.7	6.4
Inpatient	2.1	-5.7	10.6	5.5	0.0	11.4	-1.6	-11.5	9.3	0.0	0.0	0.0	0.0	0.0	0.0	–	–	–
Outpatient	6.1	3.7	8.6	5.9	3.4	8.5	6.9	5.0	8.9	3.3	2.5	4.1	21.6	21.0	22.2	–	–	–
Residential	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Free-Standing Nursing Homes	1.4	-2.2	5.2	1.2	-2.6	5.2	6.9	8.9	4.9	5.7	7.4	4.0	16.4	23.5	9.8	5.4	6.4	4.4
Inpatient	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Outpatient	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Residential	1.4	-2.2	5.2	1.2	-2.6	5.2	6.9	8.9	4.9	5.7	7.4	4.0	16.4	23.5	9.8	–	–	–
Free-Standing Home Health	8.0	12.2	3.9	8.1	12.2	4.2	-7.0	13.5	-23.9	-3.7	12.2	-17.4	-13.7	15.1	-35.3	6.2	8.9	3.6
Inpatient	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Outpatient	8.0	12.2	3.9	8.1	12.2	4.2	-7.0	13.5	-23.9	-3.7	12.2	-17.4	-13.7	15.1	-35.3	–	–	–
Residential	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Other Personal and Public Health	4.7	4.6	4.8	4.3	5.8	2.9	5.1	2.7	7.6	2.6	-0.4	5.8	7.4	5.8	9.0	6.9	7.0	6.7
Inpatient (Note 5)	-15.0	-16.9	-13.1	-100.0	-8.9	-100.0	-9.4	-28.3	14.6	-12.9	-28.5	6.1	-5.5	-28.1	24.1	–	–	–
Outpatient	5.6	6.7	4.5	4.6	6.8	2.4	6.9	6.4	7.5	4.9	3.0	6.8	8.8	9.7	7.9	–	–	–
Residential	5.2	4.5	5.8	5.4	6.1	4.8	4.8	2.1	7.5	2.0	-0.2	4.3	7.2	4.4	10.0	–	–	–
Multi-Service Mental Health Organizations (Note 6)	4.5	6.6	2.4	4.3	5.8	2.9	6.0	15.3	-2.5	4.6	13.7	-3.7	8.0	17.7	-1.0	–	–	–
Inpatient (Note 5)	-100.0	-7.2	-100.0	-100.0	-8.9	-100.0	-100.0	16.8	-100.0	-100.0	17.2	-100.0	-100.0	16.1	-100.0	–	–	–
Outpatient	4.9	7.8	2.0	4.6	6.8	2.4	7.5	17.1	-1.3	6.4	15.4	-1.8	9.2	19.8	-0.5	–	–	–
Residential	5.3	6.5	4.2	5.4	6.1	4.8	4.3	12.2	-3.1	2.4	10.8	-5.4	6.9	14.4	-0.1	–	–	–
Specialty Substance Abuse Centers (Note 7)	–	–	–	–	–	–	5.0	0.5	9.8	2.3	-3.7	8.6	7.4	4.3	10.5	–	–	–
Inpatient	–	–	–	–	–	–	-9.0	-35.7	28.8	-12.5	-36.5	20.5	-5.2	-34.6	37.5	–	–	–
Outpatient	–	–	–	–	–	–	6.8	4.1	9.6	4.5	-0.7	10.0	8.8	8.1	9.4	–	–	–
Residential	–	–	–	–	–	–	4.9	0.6	9.2	2.0	-2.3	6.5	7.2	3.3	11.2	–	–	–
Total All Service Providers	3.7	1.7	5.7	3.9	2.1	5.7	3.1	0.5	5.7	0.7	-2.1	3.5	6.4	4.6	8.3	5.8	5.0	6.5
Total Inpatient	0.8	-3.0	4.7	1.8	-1.2	4.9	-3.4	-10.1	3.7	-5.1	-11.7	2.0	-0.5	-7.0	6.4	–	–	–
Total Outpatient	6.3	6.2	6.5	6.1	5.7	6.4	7.2	7.7	6.7	4.7	4.5	4.9	10.6	12.4	8.7	–	–	–
Total Residential	3.7	2.0	5.5	3.4	1.4	5.4	4.9	4.2	5.6	2.6	2.9	2.3	7.2	5.7	8.8	–	–	–
Retail Prescription Drugs	18.7	20.2	17.3	18.8	20.3	17.3	14.1	12.8	15.4	14.1	12.8	15.4	–	–	–	13.3	11.2	15.5
Total All Service Providers and Products	5.4	3.3	7.6	6.0	4.1	8.0	3.1	0.5	5.7	0.7	-2.1	3.6	6.4	4.6	8.3	6.4	5.5	7.4
Insurance Administration	8.1	3.9	12.5	8.6	4.4	12.9	6.0	1.8	10.3	3.6	-0.7	8.0	9.4	5.8	13.0	8.4	4.0	13.0
TOTAL	5.6	3.4	7.9	6.2	4.1	8.3	3.3	0.6	6.0	0.9	-2.0	3.8	6.6	4.7	8.5	6.5	5.4	7.7

Source: SAMHSA Spending Estimates, 2006.

Notes:

1. Not all service providers will have all three sites of service. Retail prescription drugs and insurance administration are not attributable to a site of service.
2. Includes spending in nursing home units of hospitals or in nursing homes affiliated with hospitals.
3. All spending for psychiatric services in Department of Veterans Affairs hospitals is included in general hospital specialty unit providers.
4. Includes psychologists and counselors/social workers.
5. Expenditures for inpatient care in multi-service mental health organizations existed through 2001.
   Growth rates showing -100 percent mean that all spending has disappeared between the beginning and ending period covered by this rate.
6. Includes ResidentialTreatment Centers for Children.
7. Includes other facilities for treating substance abuse.

Table A.5: Average Annual Growth Rates for Estimated Expenditures of Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA), and All Health Care (NHA) by Type of Payer, All Providers, 1993–2003 and Five-Year Increments

	MHSA			MH			SA			AA			DA			NHA All Health		
Type of Payer	1993 to 2003	1993 to 1998	1998 to 2003	1993 to 2003	1993 to 1998	1998 to 2003	1993 to 2003	1993 to 1998	1998 to 2003	1993 to 2003	1993 to 1998	1998 to 2003	1993 to 2003	1993 to 1998	1998 to 2003	1993 to 2003	1993 to 1998	1998 to 2003
	Average Annual Growth Rate (Percent)																	
Private -- Total	6.0	2.3	9.9	7.0	3.6	10.6	-0.1	-4.7	4.6	-1.9	-7.2	3.7	3.1	0.3	5.9	6.3	4.9	7.7
Out-of-Pocket	5.8	2.1	9.6	7.2	4.3	10.1	-1.5	-8.3	5.9	-5.7	-15.2	4.9	4.4	2.2	6.7	4.6	3.6	5.6
Private Insurance	7.1	4.2	10.1	8.1	5.2	11.1	0.1	-1.5	1.8	-0.2	-1.8	1.3	0.9	-0.9	2.7	7.3	5.2	9.3
Other Private	1.4	-5.9	9.2	1.2	-6.0	8.9	2.2	-5.3	10.2	0.9	-6.7	9.1	5.1	-1.8	12.5	4.7	7.2	2.2
Public -- Total	5.4	4.0	6.7	5.6	4.4	6.8	4.6	2.7	6.4	2.1	0.4	3.9	7.6	6.1	9.2	6.8	6.0	7.7
Medicare	4.4	7.3	1.5	4.5	7.2	1.9	3.4	8.5	-1.5	2.2	7.7	-3.0	5.7	10.3	1.2	6.7	7.1	6.3
Medicaid (Note 1)	7.8	6.9	8.8	8.5	7.6	9.3	4.4	3.3	5.4	1.2	0.2	2.3	7.8	7.2	8.3	8.2	7.1	9.4
Other Federal (Note 2)	2.2	-0.9	5.3	2.6	0.0	5.3	1.7	-1.8	5.4	1.0	-1.9	4.1	2.6	-1.6	7.1	6.1	2.9	9.4
Other State and Local (Note 2)	4.3	1.9	6.8	3.7	1.3	6.2	6.1	3.8	8.5	3.0	0.3	5.9	10.0	8.8	11.2	4.7	2.6	6.8
All Federal (Note 3)	5.2	4.3	6.1	5.9	5.3	6.5	2.6	1.0	4.3	1.1	0.0	2.1	4.6	2.4	6.9	6.9	6.0	7.7
All State (Note 4)	5.5	3.8	7.3	5.3	3.7	7.0	6.0	4.2	8.0	2.9	0.7	5.2	9.8	9.0	10.6	6.8	5.8	7.9
Total	5.6	3.4	7.9	6.2	4.1	8.3	3.3	0.6	6.0	0.9	-2.0	3.8	6.6	4.7	8.5	6.5	5.4	7.7

Source: SAMHSA Spending Estimates, 2006.

Notes:

1. The State Children's Health Insurance Program (SCHIP) total NHA spending was $6.6 billion in 2003. MHSA SCHIP spending was estimated at $1.1 billion or about 1 percent of total MHSA. In this table, SCHIP is distributed across Medicaid, Other Federal, and Other State and Local categories, depending on whether the SCHIP was run through Medicaid or as a separate state SCHIP program.
2. SAMHSA block grants to State and local agencies are part of "Other Federal" government spending. Block grants for MH amounted to $249 million in 1993, $245 million in 1998, and $385 million in 2003. For SA, block grants amounted to $768 million in 1993, $969 million in 1998, and $1,227 million in 2003.
3. Includes Federal share of Medicaid.
4. Includes State and Local share of Medicaid.

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Table A.6: 1993 Estimated Expenditures and Percent Distributions of Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA), and All Health Care (NHA) 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 (Note 1)	Millions ($)	Percent	Millions ($)	Percent	Millions ($)	Percent	Millions ($)	Percent	Millions ($)	Percent	Millions ($)	Percent
General Hospitals	13,467	19.2	9,665	17.5	3,802	25.3	2,486	25.9	1,315	24.3	303,754	35.5
Inpatient	9,631	13.7	6,812	12.3	2,819	18.8	1,800	18.7	1,019	18.8	–	–
Outpatient	2,758	3.9	1,946	3.5	812	5.4	576	6.0	236	4.4	–	–
Residential (Note 2)	1,078	1.5	908	1.6	170	1.1	110	1.1	61	1.1	–	–
General Hospitals, Specialty Units (Note 3)	10,226	14.6	7,175	13.0	3,051	20.3	1,931	20.1	1,120	20.7	–	–
Inpatient	8,083	11.5	5,790	10.5	2,293	15.3	1,451	15.1	842	15.6	–	–
Outpatient	1,827	2.6	1,217	2.2	609	4.1	386	4.0	224	4.1	–	–
Residential (Note 2)	317	0.5	168	0.3	149	1.0	95	1.0	54	1.0	–	–
General Hospitals, Non-Specialty Units (Note 3)	3,240	4.6	2,490	4.5	750	5.0	555	5.8	196	3.6	–	–
Inpatient	1,548	2.2	1,022	1.9	527	3.5	350	3.6	177	3.3	–	–
Outpatient	931	1.3	729	1.3	202	1.3	191	2.0	12	0.2	–	–
Residential (Note 2)	761	1.1	740	1.3	21	0.1	15	0.2	6	0.1	–	–
Specialty Hospitals	13,181	18.8	11,843	21.5	1,337	8.9	886	9.2	451	8.3	16,209	1.9
Inpatient	11,725	16.7	10,610	19.2	1,116	7.4	744	7.7	371	6.9	–	–
Outpatient	788	1.1	702	1.3	86	0.6	57	0.6	30	0.5	–	–
Residential (Note 2)	667	1.0	532	1.0	135	0.9	85	0.9	50	0.9	–	–
All Physicians	8,269	11.8	7,126	12.9	1,143	7.6	776	8.1	368	6.8	201,239	23.5
Inpatient	1,927	2.7	1,284	2.3	643	4.3	420	4.4	223	4.1	–	–
Outpatient	6,343	9.0	5,842	10.6	501	3.3	355	3.7	145	2.7	–	–
Residential	–	–	–	–	–	–	–	–	–	–	–	–
Psychiatrists	5,592	8.0	4,973	9.0	619	4.1	431	4.5	189	3.5	–	–
Inpatient	1,200	1.7	859	1.6	341	2.3	227	2.4	114	2.1	–	–
Outpatient	4,392	6.3	4,114	7.5	278	1.9	204	2.1	75	1.4	–	–
Residential	–	–	–	–	–	–	–	–	–	–	–	–
Non-Psychiatric Physicians	2,677	3.8	2,153	3.9	524	3.5	345	3.6	179	3.3	–	–
Inpatient	726	1.0	425	0.8	301	2.0	193	2.0	108	2.0	–	–
Outpatient	1,950	2.8	1,728	3.1	223	1.5	152	1.6	71	1.3	–	–
Residential	–	–	–	–	–	–	–	–	–	–	–	–
Other Professionals (Note 4)	6,703	9.5	4,749	8.6	1,953	13.0	1,732	18.0	221	4.1	24,478	2.9
Inpatient	1,918	2.7	848	1.5	1,070	7.1	938	9.8	132	2.4	–	–
Outpatient	4,785	6.8	3,902	7.1	883	5.9	794	8.3	89	1.6	–	–
Residential	–	–	–	–	–	–	–	–	–	–	–	–
Free-Standing Nursing Homes	5,667	8.1	5,512	10.0	155	1.0	144	1.5	11	0.2	65,713	7.7
Inpatient	–	–	–	–	–	–	–	–	–	–	–	–
Outpatient	–	–	–	–	–	–	–	–	–	–	–	–
Residential	5,667	8.1	5,512	10.0	155	1.0	144	1.5	11	0.2	–	–

Free-Standing Home Health	384	0.5	377	0.7	7	0.0	4	0.0	3	0.1	21,879	2.6
Inpatient	–	–	–	–	–	–	0	0.0	0	0.0	–	–
Outpatient	384	0.5	377	0.7	7	0.0	4	0.0	3	0.1	–	–
Residential	–	–	–	–	–	–	–	–	–	–	–	–
Other Personal and Public Health	14,453	20.6	8,588	15.6	5,866	39.0	3,084	32.1	2,781	51.4	118,448	13.8
Inpatient	1,059	1.5	503	0.9	556	3.7	339	3.5	217	4.0	–	–
Outpatient	7,245	10.3	4,467	8.1	2,777	18.5	1,433	14.9	1,344	24.8	–	–
Residential	6,150	8.8	3,617	6.6	2,533	16.9	1,312	13.6	1,221	22.6	–	–
Multi-Service Mental Health Organizations (Note 5)	9,284	13.2	8,588	15.6	696	4.6	438	4.6	259	4.8	–	–
Inpatient	525	0.7	503	0.9	21	0.1	14	0.1	8	0.1	–	–
Outpatient	4,871	6.9	4,467	8.1	403	2.7	254	2.6	150	2.8	–	–
Residential	3,888	5.5	3,617	6.6	271	1.8	171	1.8	101	1.9	–	–
Specialty Substance Abuse Centers (Note 6)	5,169	7.4	–	–	5,169	34.4	2,647	27.5	2,523	46.6	–	–
Inpatient	534	0.8	–	–	534	3.6	325	3.4	209	3.9	–	–
Outpatient	2,374	3.4	–	–	2,374	15.8	1,180	12.3	1,194	22.1	–	–
Residential	2,261	3.2	–	–	2,261	15.1	1,141	11.9	1,120	20.7	–	–
Total All Service Providers	62,123	88.5	47,860	86.8	14,263	94.9	9,112	94.8	5,152	95.2	751,720	87.8
Total Inpatient	26,260	37.4	20,056	36.4	6,204	41.3	4,242	44.1	1,962	36.3	–	–
Total Outpatient	22,302	31.8	17,236	31.2	5,066	33.7	3,219	33.5	1,847	34.1	–	–
Total Residential	13,561	19.3	10,568	19.2	2,993	19.9	1,650	17.2	1,343	24.8	–	–
Retail Prescription Drugs	4,191	6.0	4,165	7.5	26	0.2	26	0.3	0	0.0	51,250	6.0
Total All Service Providers and Products	66,315	94.5	52,025	94.3	14,290	95.1	9,138	95.1	5,152	95.2	802,970	93.8
Insurance Administration	3,874	5.5	3,141	5.7	733	4.9	474	4.9	259	4.8	53,304	6.2
TOTAL	70,189	100.0	55,166	100.0	15,023	100.0	9,612	100.0	5,410	100.0	856,274	100.0

Source: SAMHSA Spending Estimates, 2006.

Notes:

1. Not all service providers will have all three sites of service. Retail prescription drugs and insurance administration are not attributable to a site of service.
2. Includes spending in nursing home units of hospitals or in nursing homes affiliated with hospitals.
3. All spending for psychiatric services in Department of Veterans Affairs hospitals is included in general hospital specialty unit providers.
4. Includes psychologists and counselors/social workers.
5. Includes Residential Treatment Centers for Children.
6. Includes other facilities for treating substance abuse.

Table A.7: 1993 Estimated Expenditures and Percent Distributions 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	26,103	37.2	21,351	38.7	4,753	31.6	3,324	34.6	1,428	26.4	484,049	56.5
Out-of-Pocket	9,090	13.0	7,158	13.0	1,933	12.9	1,331	13.8	602	11.1	146,948	17.2
Private Insurance	13,239	18.9	11,174	20.3	2,065	13.7	1,437	15.0	628	11.6	298,078	34.8
Other Private	3,774	5.4	3,019	5.5	755	5.0	556	5.8	199	3.7	39,023	4.6
Public -- Total	44,085	62.8	33,815	61.3	10,270	68.4	6,288	65.4	3,982	73.6	372,225	43.5
Medicare	5,397	7.7	4,732	8.6	664	4.4	461	4.8	204	3.8	148,336	17.3
Medicaid (Note 1)	14,143	20.1	11,723	21.3	2,420	16.1	1,425	14.8	994	18.4	121,612	14.2
Other Federal (Note 2)	5,318	7.6	2,732	5.0	2,586	17.2	1,528	15.9	1,058	19.6	36,247	4.2
Other State and Local (Note 2)	19,228	27.4	14,628	26.5	4,600	30.6	2,874	29.9	1,726	31.9	66,030	7.7
All Federal (Note 3)	19,641	28.0	14,864	26.9	4,778	31.8	2,888	30.0	1,889	34.9	261,345	30.5
All State (Note 4)	24,444	34.8	18,951	34.4	5,493	36.6	3,400	35.4	2,093	38.7	110,880	12.9
Total	70,189	100.0	55,166	100.0	15,023	100.0	9,612	100.0	5,410	100.0	856,274	100.0

Source: SAMHSA Spending Estimates, 2006.

Notes:

1. The State Children's Health Insurance Program (SCHIP) in 2003 is included in Table A.2; SCHIP did not exist in 1993.
2. SAMHSA block grants to "State and Local" agencies are part of "Other Federal" government spending. In 1993, block grants amounted to $249 million for MH and $768 million for SA.
3. Includes Federal share of Medicaid.
4. Includes State and Local share of Medicaid.

Table A.8: 1993 Estimated Expenditures and Percent Distributions of Mental Health (MH), Substance Abuse (SA) Alcohol (AA), and Drug Abuse (DA) by Type of Specialty and General Sector Provider, All Payers

Type of Provider and Site of Service	MHSA			MH			SA			AA			DA		
	Millions ($)	Percent of total expen-ditures	Percent within sectors	Millions ($)	Percent of total expen-ditures	Percent within sectors	Millions ($)	Percent of total expen-ditures	Percent within sectors	Millions ($)	Percent of total expen-ditures	Percent within sectors	Millions ($)	Percent of total expen-ditures	Percent within sectors
Specialty Sector Providers	50,156	71.5	100.0	37,329	67.7	100.0	12,827	85.4	100.0	8,064	83.9	100.0	4,762	88.0	100
General Hospitals, Specialty Units (Note 1)	10,226	14.6	20.4	7,175	13.0	19.2	3,051	20.3	23.8	1,931	20.1	23.9	1,120	20.7	23.5
Specialty Hospitals	13,181	18.8	26.3	11,843	21.5	31.7	1,337	8.9	10.4	886	9.2	11.0	451	8.3	9.5
Psychiatrists	5,592	8.0	11.2	4,973	9.0	13.3	619	4.1	4.8	431	4.5	5.3	189	3.5	4.0
Other Professionals (Note 2)	6,703	9.5	13.4	4,749	8.6	12.7	1,953	13.0	15.2	1,732	18.0	21.5	221	4.1	4.6
Multi-Service Mental Health Organizations (Note 3)	9,284	13.2	18.5	8,588	15.6	23.0	696	4.6	5.4	438	4.6	5.4	259	4.8	5.4
Specialty Substance Abuse Centers (Note 4)	5,169	7.4	10.3	–	–	–	5,169	34.4	40.3	2,647	27.5	32.8	2,523	46.6	53.0
General Sector Providers	11,968	17.1	100.0	10,531	19.1	100.0	1,437	9.6	100.0	1,048	10.9	100.0	389	7.2	100.0
General Hospitals, Non-Specialty Units (Note 5)	3,240	4.6	27.1	2,490	4.5	23.6	750	5.0	52.2	555	5.8	53.0	196	3.6	50.3
Non-Psychiatric Physicians	2,677	3.8	22.4	2,153	3.9	20.4	524	3.5	36.5	345	3.6	32.9	179	3.3	46.0
Free-Standing Nursing Homes	5,667	8.1	47.4	5,512	10.0	52.3	155	1.0	10.8	144	1.5	13.7	11	0.2	2.9
Free-Standing Home Health	384	0.5	3.2	377	0.7	3.6	7	0.0	0.5	4	0.0	0.4	3	0.1	0.8
Retail Prescription Drugs	4,191	6.0	–	4,165	7.5	–	26	0.2	–	26	0.3	–	–	–	–
Insurance Administration	3,874	5.5	–	3,141	5.7	–	733	4.9	–	474	4.9	–	259	4.8	–
Total	70,189	100.0	–	55,166	100.0	–	15,023	100.0	–	9,612	100.0	–	5,410	100.0	–

Source: SAMHSA Spending Estimates, 2006.

Notes:

1. Includes specialty units of general hospitals and all MH and SA expenditures at VA hospitals.
2. Includes psychologists and counselors/social workers.
3. Includes Residential Treatment Centers for Children.
4. Includes other facilities for treating substance abuse.
5. Includes general hospital non-specialty units but excludes non-specialty units of VA hospitals.

Appendix B | Expert Advisory Panel

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Appendix C | Abbreviated Terms

ABBREVIATION	MEANING
AA	Alcohol Abuse
ADSS	Alcohol and Drug Services Study
CMS	Centers for Medicare & Medicaid Services
DA	Drug Abuse
DHHS	U.S. Department of Health and Human Services
GDP	Gross Domestic Product
HCUP-NIS	Healthcare Cost and Utilization Project, Nationwide Inpatient Sample
IMHO	Inventory of Mental Health Organizations
IMHO/SMHO	Inventory/Survey of Mental Healthcare Organizations
MEPS	Medical Expenditure Panel Survey
MH	Mental Health
MHSA	Mental Health and Substance Abuse
MSMHOs	Multi-service Mental Health Organizations
NAICS	North American Industrial Classification System
NAMCS	National Ambulatory Medical Care Survey
NASADAD	National Association of State Alcohol/Drug Abuse Directors
NASMHPD	National Association of State Mental Health Program Directors
NHA	National Health Accounts
NHE	National Health Expenditures
NHAMCS	National Hospital Ambulatory Medical Care Survey
NHDS	National Hospital Discharge Survey
NHHCS	National Home and Hospice Care Survey
NMES	National Medical Expenditure Survey
NNHS	National Nursing Home Survey
NSSATS	National Survey of Substance Abuse Treatment Services
SA	Substance Abuse
SAMHSA	Substance Abuse and Mental Health Services Administration
SMHO	Survey of Mental Health Organizations
SSACs	Specialty Substance Abuse Centers
UFDS	Uniform Facilities Data Set
VA	Veterans Affairs

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