

National Estimates of Expenditures for Substance Abuse Treatment, 1997

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Disclaimer

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Executive Summary

Background

About 11 percent of the adult population of the United States will suffer from a substance abuse (SA) problem, including alcohol and/or drug abuse, during the course of a year. Of the 10 leading causes of disability worldwide in 1990, alcohol use was fourth. The social cost of substance abuse in the United States in 1995 has been estimated at \$276 billion. Given the magnitude of SA-related morbidity and mortality and this enormous cost, society should know how much is being invested in SA treatment. Moreover, major changes over the last 10 years in the organization and financing of health care make the tracking over time of our investment in substance abuse treatment paramount.

This report is based on a larger study of mental health and substance abuse (MH/SA) treatment expenditures designed to provide periodic expenditure estimates. Because SA alone is an important social problem and a difficult health care challenge, this report examines questions specifically for substance abuse:

- How much is spent in the United States to treat alcohol and/or drug abuse disorders?
- How are the expenditures distributed by payer and provider type?
- How has spending changed from 1987 to 1997?
- How do SA expenditures compare to those for mental health and all U.S. health care?

This report shows more detail on SA than the earlier study on MH/SA, although the dollar estimates are identical in both reports. SA is sometimes compared to MH in this report to view SA spending in the context of other behavioral health care.

The project estimated expenditures using data and methods that the Health Care Financing Administration uses for estimates of national health expenditures from the National Health Accounts (NHA). Like the NHA, this work primarily used nationally representative databases with multiple years of data, which generally cover the study period of 1987 to 1997.

Two sets of estimates are reported. First, “NHA-equivalent SA expenditures” are used to compare to all health care spending because they focus exclusively on health-services-related SA treatment. Second, “total SA expenditures” include some social services (such as custodianship of group homes) that are excluded from the NHA estimates but delivered by SA providers. At a detailed level, the estimates include alcohol problems, drug abuse, combined substance abuse, mental health and all health care expenditures.

Because the study focuses on expenditures for treatment and not on disease burden, estimates include expenditures only for the direct treatment of SA disorders. They exclude the substantial health costs that can result from SA (for example, trauma, HIV infection, and cirrhosis of the liver) and other non-health costs of caring for SA clients (for example, vocational training and housing subsidies). Other indirect costs, such as lost wages and productivity, and costs of criminal behavior, are also excluded from these SA expenditure estimates.

Key Findings

- ◆ The total expenditure for treatment of SA in the United States was \$11.9 billion in 1997. That figure was small compared to the total social costs of \$294 billion that can be attributed to substance abuse in that year.
- ◆ SA treatment expenditures, when defined comparably to the National Health Accounts, grew at half the rate of all health care, 2.5 percent compared to 5.0 percent, annually between 1987 and 1997, after adjusting for general price inflation.
- ◆ The slower growth of SA expenditures relative to all health care was due primarily to less spending on hospital care (primarily for alcohol treatment). SA spending for hospital services *declined* 0.6 percent per year on average between 1987 and 1997; such spending for all health conditions *grew* 3.6 percent annually, inflation adjusted.
- ◆ The decline in hospital-based spending on SA was offset by faster spending on other services. Spending on outpatient and residential treatment for SA rose 5.8 percent annually over the 10 years, slightly faster than the 5.1 percent for mental health (MH) and 5.5 percent for all health care.
- ◆ Spending on SA between 1987 and 1997 shifted from private to public support. Private expenditures for SA *declined* 0.2 percent each year on average, compared to an annual 3.6-percent *increase* for MH and a 4.1-percent *increase* for all health care. The public sector's share of SA expenditures increased from 53 percent in 1987 to 64 percent in 1997, greatly exceeding public spending on all health, which increased from 41 to 46 percent, and on MH, which went from 56 to 57 percent over the period.
- ◆ Private insurance spending and "other private" (mostly philanthropic) spending on SA treatment each declined 0.6 percent annually over the 10 years, while out-of-pocket spending on SA increased by 1.1 percent each year. (Out-of-pocket spending for MH and all health care also increased comparably during the 10 years, but private insurance payments for those conditions increased rapidly.)
- ◆ Examining "total expenditures" separately for alcohol and drug abuse treatment, a little more than half of total SA treatment expenditures was spent for treatment of alcohol problems (\$6.4 billion in 1997), and \$5.5 billion was for treatment of drug abuse. Total spending for drug abuse treatment rose at four times the rate for alcohol treatment, 4.3 percent versus 0.9 percent annually between 1987 and 1997.
- ◆ Federal funding increased rapidly for drug abuse treatment, 9.6 percent per year on average from 1987-1997 (in NHA-equivalent dollars). This compared to 6.7 percent per year for alcohol treatment, 6.3 percent for MH, and 6.9 percent for all health.
- ◆ Private out-of-pocket payments for drug abuse treatment over the 10-year period grew faster than for any other condition, at 4.9 percent per year for drug abuse, but only 2.6 percent for MH and 1.8 percent for all health. Out-of-pocket payments for alcohol treatment declined 1.9 percent.

Table of Contents

EXECUTIVE SUMMARY	I
BACKGROUND	I
KEY FINDINGS	II
CHAPTER 1. BACKGROUND AND APPROACH	1
BACKGROUND	1
OBJECTIVE.....	3
SCOPE OF THE STUDY	3
METHODS	5
<i>Consultation and Improvements for the Second Set of Estimates</i>	<i>5</i>
<i>Overview of Methods</i>	<i>5</i>
LIMITATIONS OF APPROACH	6
BENEFITS OF APPROACH.....	8
ORGANIZATION OF THE REPORT	8
CHAPTER 2. EXPENDITURES FOR SUBSTANCE ABUSE (SA) TREATMENT AND ALL HEALTH CARE, 1997.....	9
TWO ESTIMATES OF SA EXPENDITURES	9
SA EXPENDITURES IN CONTEXT.....	9
SA TREATMENT PROVIDERS.....	10
<i>A Specialty Network of Providers</i>	<i>10</i>
<i>Some Specialized Professionals Do Not Treat SA.....</i>	<i>11</i>
<i>Most of SA Specialized Care Is Facility-Based.....</i>	<i>12</i>
<i>Most of SA Treatment Is in Outpatient and Residential Settings</i>	<i>13</i>
SA FINANCING	14
<i>SA Treatment Funding Predominantly Public</i>	<i>14</i>
<i>Individuals Who Pay for SA Treatment Face High Out-of-Pocket Spending.....</i>	<i>15</i>
<i>Federal Contribution Foremost for SA Treatment.....</i>	<i>16</i>
<i>State and Local Government Manages the Majority of All Spending on SA.....</i>	<i>18</i>
<i>Medicaid Has an Important Role in SA Treatment</i>	<i>18</i>
SUMMARY	19
CHAPTER 3. TRENDS IN SUBSTANCE ABUSE (SA), MENTAL HEALTH (MH), AND ALL HEALTH CARE, 1987-1997.....	21
INFLATION-ADJUSTED GROWTH AND NATIONAL-HEALTH-ACCOUNTS-EQUIVALENT EXPENDITURES.....	21
SA SPENDING GREW MUCH MORE SLOWLY THAN MH AND ALL HEALTH CARE	21
REASONS FOR SLOWER SA SPENDING	22
<i>Hospital-Based Services Declined</i>	<i>23</i>
<i>Outpatient/Residential Spending Rose.....</i>	<i>24</i>
<i>Independent Allied Professional Services Rose</i>	<i>25</i>
<i>Community SA Facility Services Rose</i>	<i>26</i>
<i>Pharmacological Therapy for SA Increased -- An Uncertain Harbinger.....</i>	<i>27</i>
<i>Public Funding Slowdown and Private Funding Erosion.....</i>	<i>29</i>
<i>Federal Funding Grew Rapidly for SA</i>	<i>31</i>
<i>Federal Block Grants Grew Dramatically.....</i>	<i>32</i>
<i>Medicaid Growth – Reduced in Last Five Years.....</i>	<i>33</i>
<i>Medicare Spending Accelerated Over the Period.....</i>	<i>35</i>
FINDINGS IN CONTEXT.....	36
CHAPTER 4. ALCOHOL AND DRUG ABUSE TREATMENT EXPENDITURES, 1997	37
ALCOHOL AND DRUG ABUSE TREATMENT EXPENDITURES VERY SMALL RELATIVE TO TOTAL COST TO SOCIETY	37
OTHER SIMILARITIES BETWEEN ALCOHOL AND DRUG ABUSE TREATMENT EXPENDITURES	38

DIFFERENCES BETWEEN ALCOHOL AND DRUG ABUSE TREATMENT EXPENDITURES	38
<i>Specialty Sector Larger for Drug Abuse</i>	38
<i>Hospital-Based Spending Higher for Alcohol Abuse</i>	39
<i>Drug Abuse Treatment More Likely at SSACs; Alcohol Treatment More Likely at MSMHOs</i>	40
<i>Independent Practitioners More Relevant for Drug Abuse</i>	41
<i>The Importance of Funding Sources Differed Little by Type of Substance Abuse</i>	42
CHAPTER 5. TRENDS IN ALCOHOL AND DRUG ABUSE TREATMENT EXPENDITURES, 1987-1997	43
INFLATION-ADJUSTED GROWTH AND “TOTAL” AND “NHA-EQUIVALENT” EXPENDITURES	43
DRUG ABUSE GREW MUCH MORE RAPIDLY THAN ALCOHOL TREATMENT AND ALMOST AS FAST AS ALL HEALTH CARE SPENDING	43
REASONS FOR FASTER GROWTH IN DRUG ABUSE SPENDING	44
<i>More Treatment</i>	44
<i>Federal Expenditures Increased Significantly for Drug Abuse Treatment</i>	45
<i>Slow Increase in Private Funding of Drug Abuse Treatment; Decline for Alcohol</i>	46
EVIDENCE OF MORE EFFICIENT TREATMENT	46
<i>Alcohol and Drug Abuse Spending Shifted from Hospital-Based to Other Services</i>	47
<i>Spending on Specialty Hospital Services Declined Dramatically</i>	48
<i>Meaning of Trends in Alcohol and Drug Abuse Spending</i>	49
CHAPTER 6. CONCLUSIONS	50
STUDY METHODS	50
NATIONAL TRENDS IN HEALTH CARE IN RELATION TO SA TREATMENT	51
<i>Enrollment Trends in the Private Sector</i>	51
<i>Enrollment Trends in the Public Sector</i>	51
<i>Effects of Managed Care</i>	51
<i>Changes in Treatment Philosophy</i>	52
WHAT DOES SLOWER SA GROWTH MEAN?	53
MEANING OF TRENDS IN ALCOHOL AND DRUG ABUSE SPENDING	54
<i>What Does the Growth in Drug Abuse Treatment Spending Mean?</i>	55
<i>What Does the Slow Growth in Alcohol Treatment Spending Mean?</i>	55
CONCLUSION	56
REFERENCES	58
GLOSSARY OF ACRONYMS AND TERMS	66
APPENDIX A. ADVISORY PANEL	
APPENDIX B. METHODS	
APPENDIX C. EXPLANATION OF CHANGES IN SA EXPENDITURES BETWEEN THE 1996 AND 1997 ESTIMATION PROCESS	
APPENDIX D. DETAILED TABLES OF MH/SA, MH, SA AND ALL HEALTH CARE EXPENDITURES	
APPENDIX E. DETAILED TABLES OF ALCOHOL ABUSE, DRUG ABUSE, MENTAL HEALTH, AND ALL HEALTH CARE EXPENDITURES	

Table of Figures

Figure 2.1	SA Treatment Expenditures Were Very Small Relative to the Total Social Cost of Substance Abuse in 1997	9
Figure 2.2	Specialty Providers Received a Very Large Share of SA Expenditures in 1997	10
Figure 2.3	Retail Drug Spending for SA Treatment Was Very Small Compared to MH Services in 1997	11
Figure 2.4	Few SA Treatment Dollars Went to Independent Psychiatrists, Psychologists, Counselors, and Social Workers Compared to MH Dollars in 1997.	12
Figure 2.5	SA and MH Dollars Supported a Spectrum of Treatment Facilities in 1997	13
Figure 2.6	Outpatient and Residential Treatment Dominated SA Spending as with All Health Care in 1997	14
Figure 2.7	Public Funding Was A Larger Share of SA Treatment than of MH in 1997	15
Figure 2.8	Out-of-Pocket SA Treatment Spending High Relative to MH in 1997	16
Figure 2.9	Federal Funding A Larger Share of SA than of MH in 1997	17
Figure 2.10	Federal Block Grants Provided Substantial SA Funding in 1997	17
Figure 2.11	State and Local Governments Managed Nearly Half of SA Dollars in 1997	18
Figure 2.12	Medicaid Supported a Larger Share of SA (and MH) Expenditures than of All Health Spending in 1997	19
Figure 3.1	SA Expenditures Grew Much More Slowly than MH and All Health between 1987 and 1997	22
Figure 3.2	SA Spending Declined in Hospital Settings and Grew More Rapidly in Outpatient Settings than MH and All Health between 1987 and 1997.....	23
Figure 3.3	Non-Community Hospital Spending Declined Earlier for SA than for MH and All Health Care between 1987 and 1997.	24
Figure 3.4	SA Spending on “Other Professionals” Was Most Rapid between 1992 and 1997.....	26
Figure 3.5	Community SA Facility Spending Rose Rapidly between 1987 and 1992 ...	27
Figure 3.6	Private Funding for SA Was Outpaced by Inflation and Was Much Slower than for MH and All Health between 1987 and 1997	29
Figure 3.7	Out-of-Pocket Spending a Much Higher Proportion of SA Spending on Non-Physician Professionals in 1997 Compared to 1987	30
Figure 3.8	Public Funding Grew Differentially for SA and MH Treatments between 1987 and 1997.....	32
Figure 3.9	Federal Block Grants for SA Grew Rapidly between 1987 and 1992.....	33
Figure 3.10	Medicaid Spending on SA Slowed in the Second Five Years, as for All Health.....	34
Figure 3.11	Medicare Spending on SA Accelerated during the Second Five Years	35
Figure 4.1	Both Alcohol and Drug Abuse Treatment Expenditures Were Very Small Relative to their Total Social Cost in 1997.....	38

Figure 4.2	Drug Abuse Treatment Expenditures Reflected a Larger Specialty Sector than Alcohol Expenditures in 1997	39
Figure 4.3	Hospital-Based Spending Higher for Alcohol than Drug Abuse in 1997	40
Figure 4.4	Drug Abuse Spending Higher on SSACs1; Alcohol Abuse Spending Higher on MSMHOs1 in 1997	41
Figure 4.5	Spending on “Professionals Other than Physicians” Was Greater for Drug Abuse Treatment than Alcohol Treatment in 1997	41
Figure 4.6	Similar Funding Sources by Type of SA Disorder in 1997.....	42
Figure 5.1	Drug Abuse Spending Increased More Rapidly than Other MH/SA Spending between 1987 and 1997	43
Figure 5.2	Treatment Admissions for Alcohol Abuse Declined and for Drug Abuse Increased between 1992 and 1997.....	44
Figure 5.3	Federal Funding of Drug Abuse Treatment Increased Faster than Federal Funding of All Health Care between 1987 and 1997	45
Figure 5.4	Private Out-of-Pocket Payments for Drug Abuse Treatment Increased Faster than for All Other Health Problems between 1987 and 1997.....	46
Figure 5.5	Outpatient/Residential Services Grew Notably Faster than Hospital-Based Services for Alcohol and Drug Abuse Treatment between 1987 and 1997.....	47
Figure 5.6	Specialty Hospital Spending Declined for Alcohol and Drug Abuse Treatment between 1987 and 1997.....	48

Chapter 1. Background and Approach

Background

An estimated 11 percent of the adult U.S. population suffers from substance abuse or dependence during the course of a year (Kessler et al., 1994). About 13.7 million adults each year (based on 1992 data) abuse or are dependent on alcohol (NIAAA, 1997), and about 5.3 million (based on 1996 estimates) abuse or are dependent on illicit drugs (Epstein and Gfroerer, 1998). The 1999 National Household Survey on Drug Abuse reveals that of the population 12 years of age and older, 6.7 percent used illicit drugs (at least once during the 30 days prior to the interview), 20.2 percent engaged in binge drinking (drinking five or more drinks on one occasion during the 30-day period), and 5.6 percent were heavy drinkers (drinking five or more drinks at a time during five or more occasions during the past 30 days) (OAS, 2000). Of the 10 leading causes of disability worldwide in 1990, the fourth was alcohol use and five (including alcohol) were psychiatric conditions (Murray and Lopez, 1996).

Furthermore, the total cost to society of substance abuse in 1995 was estimated to be a very large \$276 billion (Harwood et al., 1998), a much larger figure than the spending on substance abuse treatment reported below. In addition, national estimates of the need for drug abuse treatment alone suggest that only two in five illicit drug abusers who need treatment for severe problems actually receive care. In 1996, about 5.3 million people with serious drug abuse problems needed treatment, while only about 2.0 million received it (Epstein and Gfroerer, 1998).

Given the prevalence of substance-abuse-related morbidity and mortality and the broad social consequences, the Nation should know how much is being invested in treating these disorders, especially in relation to other health problems. Moreover, due to changes in treatment philosophy, and in the organization and financing of the health care system, consistent estimates of substance abuse spending over time are crucial for understanding the impact of major health policy changes.

Over the past two decades, six studies have attempted to estimate the level of U.S. spending on substance abuse disorders, often in conjunction with estimates on mental disorders (Berry et al., 1977; Cruze et al., 1981; Harwood et al., 1984; Rice et al., 1990; Frank et al., 1994; Harwood et al., 1998). These studies made major contributions to our understanding of the total cost to society of substance abuse. However, they could not satisfy the need for a longitudinal perspective, where estimates from year to year can be readily compared to each other and to spending for all health care.

Society's approach to substance abuse has changed markedly over the decades. Substance abuse has shifted from being viewed as an individual problem for which society has no responsibility to a major social problem that must be addressed both by the medical care system and the criminal justice system (IOM, 1990a).

A person in treatment for an alcohol or drug abuse disorder in the year 2000 has an experience vastly different from a person seeking care 50 years ago. Fifty years ago, a person seeking help for a serious drug or alcohol problem would have been treated for months in a psychiatric hospital. A person who experienced a trauma related to alcohol or drug intoxication and who visited an emergency room would be “patched up,” but might not be referred for substance abuse treatment. The characteristics that would identify that patient as having a drug or alcohol dependency varied across medical observers, and thus, the observer affected the likelihood of being referred for treatment of the substance problem. The patient’s diagnosis would be determined using the American Psychiatric Association’s Greybook (APA, 1942), in which alcohol and drug abuse problems were defined as character disorders along with stuttering and bed wetting. If the patient needed detoxification, he or she might be hospitalized for a month or more. Once “dried out,” the individual most likely would leave the medical care system to finish recovery alone, and relapse to use was a frequent occurrence.

Today, people with a substance abuse disorder have a better chance of being identified and finding support, or of being required by the criminal justice system to undergo treatment. In an emergency room for trauma care, they usually are evaluated through psychiatric consultation. They are diagnosed with the standard, clinically explicit criteria of the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) (APA 1994), in which alcohol and drug abuse are classified as distinct disorders. If they have the personal finances or health insurance that covers SA treatment, they can obtain care from a private outpatient or residential setting (such as the Betty Ford Clinic). If they cannot afford to pay for care, they can obtain it through a public facility that specializes in treating substance abuse. If they seek care, they are more likely to be treated in an outpatient than inpatient setting. Even if hospitalization is necessary, it occurs in a chemical dependency unit of a general hospital rather than in a State or county mental or other specialty hospital. Detoxification in a hospital occurs in a matter of days, not weeks, due to better detoxification agents and protocols, or occurs in a social setting or outpatient setting if the risk of serious complications are not high. A person dependent on alcohol likely receives counseling or psychotherapy and is linked to a support network. A person dependent on drugs may be enrolled in an intensive, residential therapeutic community or in an outpatient program under individual, group, or family therapy, and afterward is provided with a network to support their recovery. If they use opiates, they can be placed on methadone maintenance or LAAM (long-acting methadone) to reduce the craving for the drug and, thus, decrease their resistance to working through serious psychological problems. If the drug abuser is identified through the legal system, the court may order treatment as a condition of diversion or sentencing. If the addict is incarcerated, a drug abuse recovery program more likely is available within the prison or jail.

None of this is to suggest that recovery from substance abuse is any easier today than 50 years ago. There are no miracle drugs to cure substance abuse. Newer pharmaceuticals that exist to reduce craving of a substance (for example, naltrexone for alcohol) are rarely used in most treatment programs. Effective programs tend to require personal confrontation, acceptance, long-term commitment to treatment, and provide emotional and physical support. The difference today is that more support networks and different settings for care are available for those who seek treatment.

Objective

To understand the impact of these changes on substance abuse treatment, the Center for Substance Abuse Treatment and the Center for Mental Health Services (CSAT/CMHS) embarked on the development of a comprehensive set of expenditure estimates on substance abuse treatment – the CSAT/CMHS Spending Estimates Project. A prime objective of this project was to devise substance abuse estimates over a 10-year span that could be compared with spending on all health care services within the United States.

Scope of the Study

This study developed national spending estimates for substance abuse consistent with the methods and estimates of the National Health Accounts (NHA). The NHA is produced by the Health Care Financing Administration (HCFA) for all health care services. HCFA produces estimates by type of service and by payer, but not by diagnosis. This study produced a 10-year retrospective of spending on alcohol abuse, drug abuse, substance abuse, and mental illness, compared to all health care treatments, from 1997 back to 1987.

The work is part of a larger study of national spending on mental health and substance abuse (MH/SA) services reported in Coffey et al. (2000) and Mark et al. (2000a, b). The results reported here are based on the second set of 10-year estimates from that work. The second set of estimates supercedes, and reflects improvements over, the first set of estimates. This report shows more detail on SA than the earlier study on MH/SA, although the dollar estimates are identical in both reports. SA is sometimes compared to MH in this report to view SA spending in the context of other behavioral health care.

This study differs from many other studies of SA costs in that it focuses on the cost of treatment, not the burden of the illness. Burden of illness studies include costs not directly related to treatment, such as the impact of substance abuse on productivity, ability to hold a job and earn income, costs due to drug-related crimes, or housing and other accommodation subsidies to SA clients.

To define SA disorders, we relied on relevant diagnoses classified in the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM): alcoholic psychoses (291), drug psychoses (292), alcohol dependence syndrome (303), drug dependence (304), nondependent drug abuse (305, which includes alcohol), and drug dependence in pregnancy (648.3). “Tobacco abuse” was excluded for reasons noted below. (The ICD-9-CM system incorporates classifications of the DSM-IV system.)

These diagnostic categories generally reflect what most payers identify as SA conditions that would be considered behavioral health benefits or excluded from coverage altogether. This definition of SA excludes expenditures on treatment that would be covered under medical benefits – for example, counseling and pharmacotherapy for nicotine addiction, or treatment for cirrhosis of the liver from alcoholism.

Expenditure estimates were made for persons who had one of the included diagnoses as a primary diagnosis. Thus, additional expenditures for SA treatment provided during visits or encounters for other medical problems are not counted in the expenditures presented here.

This is because data and methods for allocating payments for co-occurring diagnoses or co-occurring treatments are not available and development of such methods is beyond the scope of this study.

The results of this study differ from other studies where substance abuse spending is based on all types of care provided in particular facilities. This study identifies relevant SA diagnoses on the basis of diagnostic information, not on the basis of where the care was given. For example, when we excluded diagnoses (such as tobacco addiction), we also excluded their expenditures from specialty mental health or substance abuse facilities.

This study includes all providers delivering any services related to substance abuse. These include all hospital-based services (inpatient, residential, and outpatient services operated by any type of hospital); physician services (delivered by psychiatrists and other physicians); other professionals (psychologists, counselors, and social workers); freestanding nursing homes and home health agencies; and specialty SA facilities (multi-service mental health organizations, residential treatment centers for emotionally disturbed children, specialty substance abuse centers, and other facilities providing substance abuse services such as schools, jails, churches, and military field stations when enumerated by SAMHSA surveys).

In counting substance abuse treatment services, this study includes encounters for detoxification. Many specialty SA professionals do not consider detoxification alone as a treatment for substance abuse. Even though isolated detoxification may be inadequate treatment, it does represent one type of spending that is part of the substance abuse treatment regimen. Furthermore, we have no way of separating detoxification alone from that associated with a more complete regimen of treatment, given the data available for this study.

The study includes all types of payers. At the most detailed level, for public payers these include: Medicaid, Medicare, “other State/local” (State/local government sources other than Medicaid), and “other Federal” (Federal sources other than Medicaid and Medicare – for example, Veterans Affairs, Department of Defense, and Federal block grants). For one analysis, we split Medicaid funds into their tax dollar source – State/local or Federal – to develop total spending by these two government sources. For another analysis, we split public dollars into who manages the funds – State/local or Federal management. In this case, Medicaid funds and Federal block grants all are classified with “other State and local” funds, as State and local managed dollars. The private sources include private insurance, out-of-pocket expenditures, and other private sources. Out-of-pocket spending includes payments by both those with and without insurance. For the insured, out-of-pocket payments can include copayment and deductible amounts, services that are uninsured or are beyond insurance limits, as well as SA encounters paid totally by the client or family to avoid the stigma of SA treatment in insurance records. For the uninsured, their spending is included in out-of-pocket spending but cannot be distinguished. “Other private” includes philanthropic payments, either directly through private grants or indirectly through the proceeds of gift shops and cafeterias.

Methods

The methods used to devise the estimates are described briefly below and in more detail in Appendix B. Readers who want more detail on methods should consult the Technical Report on the 1997 estimates (Mark et al., 2000a).

Consultation and Improvements for the Second Set of Estimates

The methods used to estimate the 1997 national SA expenditures took advantage of extensive suggestions from substance abuse and mental health experts – researchers, clinicians, and policymakers. This accomplished panel of experts is listed in Appendix A. With guidance from three methodology experts in the field (also identified in Appendix A), the project team implemented a number of improvements in this second set of estimates over the first set. The changes affecting substance abuse estimates were 1) using more conservative trim points for specialty data and 2) allocating expenditures on co-occurring alcohol and drug abuse by separating them into the “alcohol” and “drug” abuse categories proportionate to the expenditures reported for only alcohol and only drug abuse. (In a prior set of estimates, all co-occurring alcohol/drug abuse spending was allocated to drug abuse for the purpose of assessing drug control policies. Estimates under that alternative method are available in Mark et al., 2000a).

Overview of Methods

The estimation approach differed according to the type of provider: 1) specialty facility service providers such as substance abuse clinics and 2) other providers and services, including providers who may treat any type of health care problem, independent substance abuse practitioners (e.g., alcohol counselors), and prescription drugs. Because the nature of the data differed between the two groups, the methods for estimating expenditures for these two groups of services also differed.

Specialty facility providers were identified through the SAMHSA census of facilities that treat substance abuse disorders (the Uniform Facilities Data Set (UFDS)). Aggregate facility level statistics (for example, total number of Medicaid clients or total alcohol abuse clients) are available, but no encounter-level or patient-level records are available from these surveys.

For other services, various administrative data and surveys that collect encounter-level or patient-level data were used. With characteristics of each encounter or patient, we could calculate expenditures for specific diagnoses, such as alcohol or drug abuse, or all health care for various combinations of facility and patient characteristics.

Given the different types of data sources, methods used to develop estimates for each of the two types of services also differed. Specialty facility estimates were drawn from total revenues reported in the SAMHSA surveys by facility and by payment source. Estimates for the other providers were derived from and calibrated against the NHA totals. This was done to take advantage of the substantial work that had been done for the NHA for all health care providers and to make the final SA expenditures comparable to the NHA estimates. The processes for deriving estimates for both types of services are described in Appendix B.

For accurate comparisons between SA and all health, we computed an NHA-equivalent estimate of SA expenditures, which eliminated some social services (relevant only to SA treatment) from the SA estimate. For example, expenditures related to job placement services provided by social workers billing independently to private payers and provided to those recovering from addiction were included in total SA spending, but were excluded from the NHA estimates and from our NHA-equivalent SA estimates. Nevertheless, some such social services funded under public health budgets were included in the NHA because they cannot be separated in those budgets; for the latter public health facilities, we kept their social service expenditures in our NHA-equivalent SA estimates. For another example, substance abuse services provided by employees of the jail and prison systems and, thus, not included in State or Federal public health budgets, would not be captured by the NHA estimates. They were included in the total SA expenditures to the extent that they report as a substance abuse facility on SAMHSA surveys; they were excluded from the NHA-equivalent SA estimates.

We used the NHA-equivalent SA figures in this report whenever we compared SA estimates to all health care spending. Whenever social services were particularly relevant to a comparison within SA (i.e., between alcohol and drug abuse), we used the total SA estimates. Both types of estimate are presented in the detailed tables of spending estimates in Appendices D and E.

In addition, we use “all health care” as the comparison group, rather than “all other health care” so that estimates are easy to compare to the NHA “all health care” estimates.

Finally, we examined spending trends that were adjusted for economy-wide price inflation. This provides a perspective on the real growth in treatment expenditures, as opposed to expenditure increases that also result from general inflationary pressures in the United States economy. The same inflation adjustment used in the National Health Accounts (NHA) – the “Gross Domestic Product deflator” – is used here and is explained in Appendix B.

Limitations of Approach

Generally, two limitations affect the spending estimates – underlying data sets and methods of estimation. Two specific methodologic problems affect the SA estimates in particular, and both represent an improvement in the estimate, albeit, one creates problems for comparisons.

First, the trend for SA specialty facility expenditures is more reliable than that for MH estimates. This occurs because specialty SA expenditures are based on UFDS data, available through 1996, while MH expenditures are based on the Inventory of Mental Health Organizations (IMHO) data, available only through 1994 for this study. The more recent data for SA without the same for MH creates a problem when attempting to compare the two. The MH trends are based on estimated data from a period of faster growth, while the more recent actual SA data show a slowdown for SA. If the missing MH data also show a slowdown in spending, then we have overestimated the MH component and overstated the differential between the two.

A second issue is lower SA expenditures from this second set of expenditures than from the first set of estimates reported earlier (Mark et al., 1999). (Appendix C compares estimates

from the two rounds of estimation for a common year, 1996.) The lower estimate in this study is due to two factors. First, the addition of a year of data (UFDS for 1996) revealed an earlier flattening of SA expenditures and a decrease in 1996. This accounted generally for over half of the difference in SA expenditures between the two studies and, for some years, for nearly two-thirds of the difference. Second, the method of estimation for the time series used more conservative and symmetrical trim points than were used in the first set of estimates. We made this change after extensive consultation with outside MH/SA and quantitative-methods experts.

In addition, the data and methods of the study are limited in several other ways. SA diagnoses in claims for reimbursement may be under-reported as a result of limits on substance abuse benefits and concern about the stigma of SA on health care records. These reporting biases would lead to an underestimate of SA spending, although such reporting bias should be present across the entire time period.

Furthermore, the use of claims to track out-of-pocket spending on care in general hospitals (on other than specialty units) can underestimate personal spending, particularly when limits on inpatient services cause the cost of a hospitalization to be borne entirely or partially by the client. This is not a problem for out-of-pocket spending on care outside the hospital, because data sources for those estimates (the National Ambulatory Medical Care Survey (NAMCS) and the National Hospital Ambulatory Medical Care Survey (NHAMCS), described in Appendix B Table 1.2) capture such self-payments correctly. This is also not a problem for out-of-pocket spending in specialty units of general hospitals because they report such spending through the SAMHSA (UFDS and IMHO) surveys. Thus, such an underestimate is likely to be small because the use of “scatter beds” – those in general hospitals but outside of specialty SA units – is likely to be rare.

There may be errors in allocations of expenditures among payers due to provider confusion about insurance type. For example, the use of Medicaid managed care cards indistinguishable from private insurance cards can lead to incorrect payment-source coding in facility databases that feed into the surveys. Finally, we strove to eliminate duplicate expenditures across data sources. For example, the National Hospital Discharge Survey (NHDS), described in Appendix B Table 1.2, as well as the IMHO and UFDS data sets include specialty hospitals which we must not count more than once in the expenditure estimates. This problem can be eliminated only if survey coverage is documented accurately and types of facilities are delineated in the data sets.

In addition to underlying data issues, methods also create limitations in our findings. For example, tying the estimation process to the NHA imposes limits on SA estimates. The NHA includes expenditures only for health services. However, social services (such as custodial residential care or group homes or job counseling outside the health system) can be essential complements to treatment of persons recovering from alcoholism or drug addiction. Likewise, substance abuse services beyond the health system (such as that provided entirely within the penal system) are important substance abuse services that generally are not captured in the NHA. For this reason, we developed two sets of estimates – one of total SA spending and one of NHA-equivalent spending. Nevertheless, any of these services (such as

penal-system-based treatment) may be underestimated to the extent that they are underreported in SAMHSA substance abuse surveys.

Benefits of Approach

The foremost benefit of this project's approach to estimating national SA spending is that it levels the playing field for an analysis of SA (alcohol and drug abuse), mental health, and total health care spending. When the same methods and underlying numbers are used for all disorders, the data can be made consistent for meaningful comparisons. Thus, SA and total health care spending can be tracked over time as public programs and the health care system change. Furthermore, spending by disorder – alcohol versus drug abuse, substance abuse versus mental illness – can be studied to understand patterns of public and private spending on these health problems.

Organization of the Report

This report highlights major findings from the CSAT/CMHS Spending Estimates Project. Chapter 1 and Appendix B summarize the methods. Chapter 2 examines SA spending for 1997, the most recent year estimated, and compares that to mental health (MH) and all health care spending by type of service and payer. Chapter 3 reviews trends in expenditures since 1987 for SA, MH, and all health care. Chapter 4 looks, in detail, at spending on alcohol and drug abuse services in 1997, while Chapter 5 examines the 10-year trend in those services. Each chapter attempts to assess changes in the expenditures in relation to major Federal and State policy changes related to SA services. Chapter 6 summarizes the study conclusions and discusses major shifts in patterns of treatment evident in the SA services literature over the 1987 to 1997 time period.

While the chapters display the general findings graphically, the appendices provide more detailed results in tables. Appendix D reports expenditure estimates for SA treatment, MH services, and all health care. Appendix E reports expenditures for alcohol abuse, drug abuse, MH and all health. In Appendix D and E, both NHA-equivalent SA expenditures and total SA expenditures are shown by service and payer. For each of the tables, three types of calculation related to the expenditures are displayed: (a) nominal dollar expenditures, (b) percent distributions of expenditures across providers or payers, and (c) average annual inflation-adjusted growth rates of expenditures for 10- and five-year increments. Footnotes below the graphs in the chapters reference the table sources in the appendices.

Chapter 2. Expenditures for Substance Abuse (SA) Treatment and All Health Care, 1997

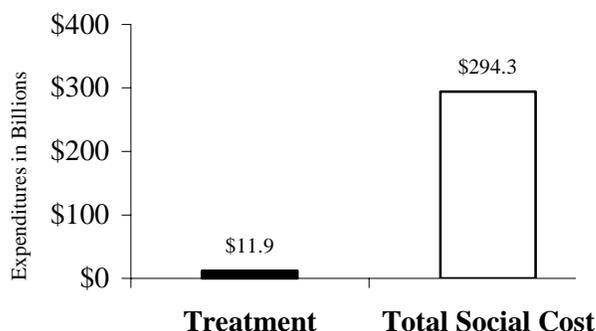
Two Estimates of SA Expenditures

As Chapter 1 explains, two estimates of substance abuse (SA) expenditures were developed for this study – “National-Health-Account-equivalent (NHA-equivalent) SA expenditures” (excluding some social services) and “total SA expenditures” (including those social services). In this report, we use the NHA-equivalent numbers for accurate comparisons to all health care expenditures. In some instances for which social service is an important component and where we are not comparing to all health care, we use “total SA spending.”

SA Expenditures in Context

National expenditures for total SA treatment were \$11.9 billion in 1997, a very small expenditure relative to the total social costs associated with the consequences of substance abuse. Social costs include direct SA treatment costs, indirect treatment costs of medical problems that result from SA (for example, HIV infection, trauma, cirrhosis of the liver), plus other indirect costs related to premature death, lost wages, impaired productivity, crime-related losses, property destruction, and social welfare costs. Harwood et al. (1998) estimated the social cost of alcohol and drug abuse to be \$276.3 billion in 1995, which, inflated by price and population growth, totaled about \$294 billion in 1997 (Figure 2.1). *Thus, the total cost to society of substance abuse is nearly 25 times what the Nation spends on treatment of substance abuse.*

Figure 2.1 SA Treatment Expenditures Were Very Small Relative to the Total Social Cost of Substance Abuse in 1997



Source: CSAT/CMHS Spending Estimates (Table D.1(a) and Harwood et al., 1998).

¹ The 1995 social-cost estimate was inflated to 1997 dollars using the GDP deflator (2.2 percent per year) and a population adjustment (1.0 percent per year).

To understand these SA expenditures and social costs, they should be viewed relative to figures for other behavioral disorders – mental illnesses. In contrast, spending on treatment of mental disorders is more in line with the total social cost of mental illnesses. The total social cost of mental illness imposed a \$184.7 billion burden on the U.S. economy in 1995

(Harwood et al., 2000), which translates to about \$197 billion in 1997 dollars, while mental health services dollars were \$73 billion in 1997.

SA Treatment Providers

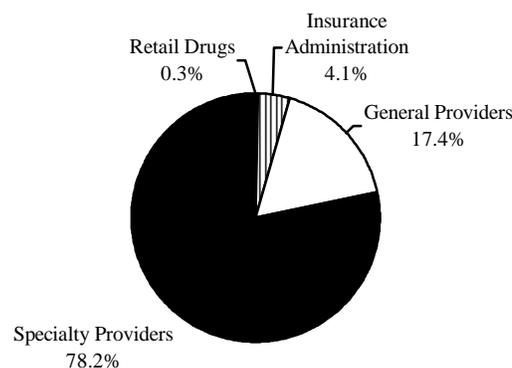
A Specialty Network of Providers

Substance abuse disorders can be diagnosed by many types of health care provider and treated by different types of provider. A network of “specialty” providers focuses exclusively on SA treatment. That group includes specialty hospitals, specialty dependency units of general hospitals, psychiatrists, other SA professionals (such as alcohol and drug abuse counselors, psychologists, and social workers), and specialty substance abuse centers (SSACs), including other programs that treat substance abuse (such as churches or jails and prisons). In addition, some mental health facilities also treat substance abuse (such as multi-service mental health organizations (MSMHOs) and residential treatment centers for emotionally disturbed children (RTCCs)).

Some providers who treat physical health problems also may treat mild or moderately severe SA disorders. We call them “general providers” in this study. That group includes non-specialty units of general hospitals, nursing homes and home health agencies, and non-psychiatric physicians.

Specialty providers are a much larger force in SA treatment than are general health care providers (Figure 2.2). Specialty providers received 78.2 percent (\$9.3 billion) of the \$11.9 billion of total SA expenditures in 1997. General providers received 17.4 percent (\$2.1 billion). Insurance administration accounted for about 4.1 percent of spending, although data limitations preclude the estimate from reflecting the full cost of managed behavioral health plans. The remaining, almost imperceptible proportion was spent on prescription drugs.

Figure 2.2 Specialty Providers Received a Very Large Share of SA Expenditures in 1997

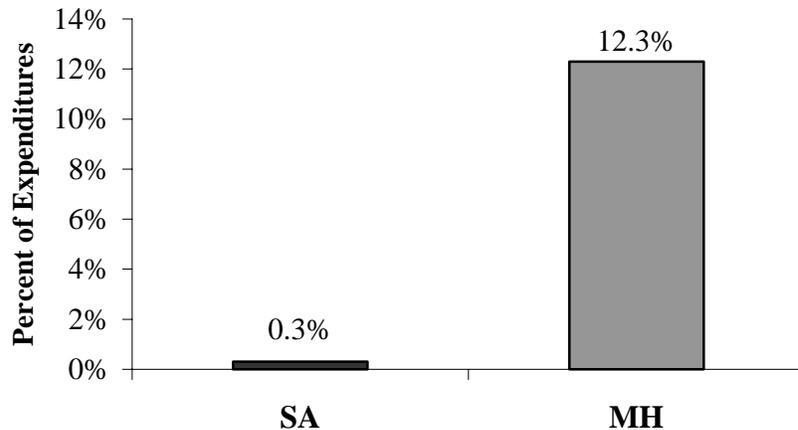


**SA
(\$11.9 Billion)**

Source: CSAT/CMHS Spending Estimates (Total SA expenditures calculated from Table D.3(a)).

Retail drug spending differs greatly between substance abuse and mental health (Figure 2.3). *While spending on drugs to treat mental illness is quite large, 12.3 percent of MH spending, pharmacotherapy for SA is very small, only 0.3 percent of SA spending.* Some of this large disparity is due to the lack of drug therapy to treat drug abuse; some may reflect the kinds of providers who typically treat substance abuse rather than mental illness, as noted below.

Figure 2.3 Retail Drug Spending for SA Treatment Was Very Small Compared to MH Services in 1997



Source: CSAT/CMHS Spending Estimates (NHA-equivalent expenditures, Table D.3(b)).

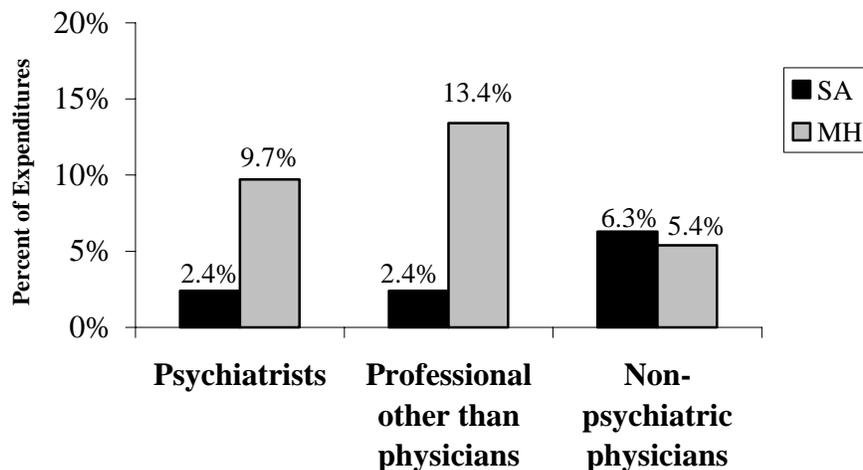
Some Specialized Professionals Do Not Treat SA

One of the striking distinctions between SA and MH treatment relates to both the treating professional and the treatment setting. Few SA treatment dollars went to independent practitioners, including psychiatrists and, as a group, other non-physician, independent professionals – psychologists, counselors, and social workers. Only 2.4 percent of SA dollars went to independent psychiatrists in 1997 compared with 9.7 percent of MH dollars (Figure 2.4). Likewise, only 2.4 percent of SA spending went to independent professionals other than physicians compared with 13.4 percent of MH spending.

These differences suggest that independent specialty practitioners treat primarily MH disorders and that most SA professionals work for and are counted in spending for facilities. This finding raises the question of whether SA services, which currently do not meet the need for treatment (OAS, 1998a), could be expanded through the network of independent practitioners, if insurance and other programs expanded. To answer this question the source of the large differences in treatment patterns by type of professional must be understood. Do these professionals avoid treatment of drug abusing clients? Are these services poorly covered by health insurance? Do these providers tend to diagnose SA patients with MH diagnoses? We know that Medicare only has covered psychologists and social workers since 1991. In contrast to the finding for MH/SA professionals, non-psychiatric general physicians received much more similar portions of SA and MH dollars. Non-psychiatric physicians received 6.3 percent of SA dollars and 5.4 percent of MH dollars. A substantial amount of

the SA spending on independent non-psychiatric practitioners is on primary care physicians (Table D.3(b)). However, it is not known how much of SA spending on general physician services is related to detoxification rather than SA treatment.

Figure 2.4 Few SA Treatment Dollars Went to Independent Psychiatrists, Psychologists, Counselors, and Social Workers Compared to MH Dollars in 1997.



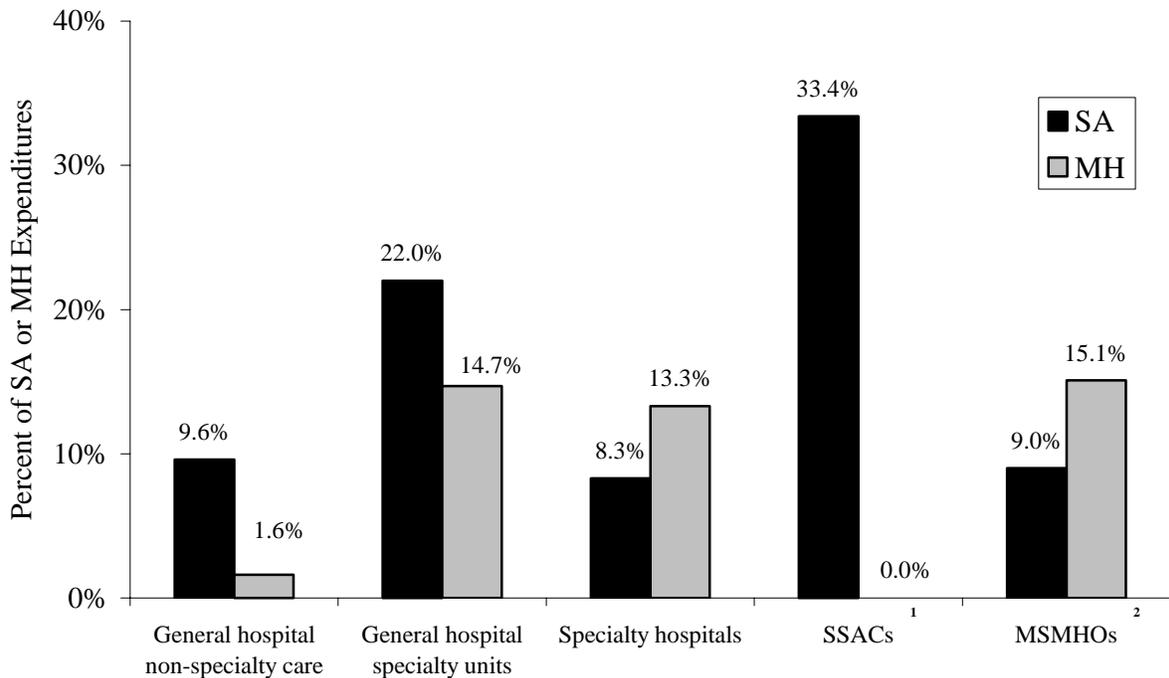
Source: CSAT/CMHS Spending Estimates (Total SA expenditures, Table D.3(b)).

The low proportion of SA expenditures on retail prescription drugs, noted above in Figure 2.3, may be related to the lesser involvement of MH/SA professional in SA treatment. As Chapter 4 will show, use of pharmaceuticals for treating alcohol disorders is rare and for drug abuse is almost non-existent (outside of methadone and LAAM). Psychiatrists, the primary specialized SA professionals who prescribe drug therapy, rarely treat substance abuse. Although the FDA approved naltrexone in 1994, its sales have grown little compared to other psychotropic drugs (Goodman et al., 1997). Another possible explanation is resistance to the prescribing of medications by alcohol treatment specialists who view alcoholism as a personal choice or weakness that must be overcome with will power and commitment to abstinence (Schaler, 2000), rather than with drug therapy.

Most of SA Specialized Care Is Facility-Based

Many types of facilities have evolved to serve the needs of substance abuse clients (Figure 2.5). Hospitals received 40 percent of SA expenditures in 1997 (Table D.3(b)). Outside of hospitals, most SA spending is for services provided in specialty substance abuse centers (SSACs) (33.4 percent in 1997). SSACs in this study include freestanding substance abuse centers and units of other facilities that specialize in substance abuse treatment, such as substance abuse units of public health clinics, ambulatory treatment clinics, health maintenance organizations (HMOs), charitable organizations, correctional facilities, and other facilities. Multi-service mental health organizations (MSMHOs) also received 9.0 percent of SA dollars in 1997. Thus, in total in 1997, 82 percent of SA spending went to facilities, rather than to independent practitioners, retail drugs, or administrative expenses.

Figure 2.5 SA and MH Dollars Supported a Spectrum of Treatment Facilities in 1997



Source: CSAT/CMHS Spending Estimates (Total SA and MH expenditures Table D.3(b)).

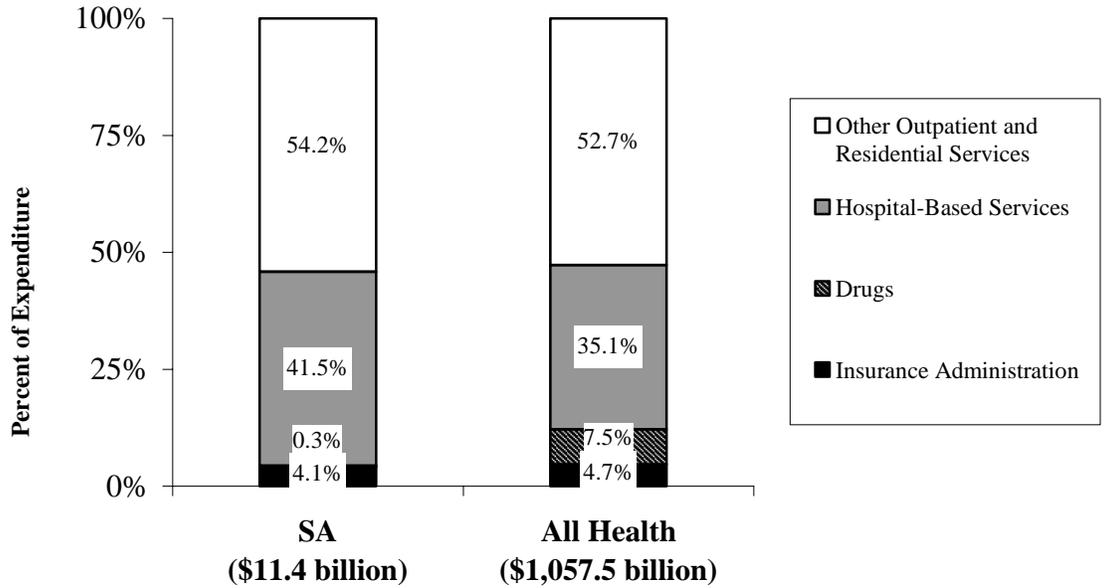
¹Specialty substance abuse centers. ²Multi-service mental health organizations

Other than hospitals, only MSMHOs received both MH and SA service dollars between 1987 and 1997. SSACs are assumed to provide only substance abuse treatments (by the nature of the UFDS Survey). In a general population survey, about half of SA and MH patients each are diagnosed with the other comorbidity (MH or SA) (Kessler et al., 1996). Patients with co-occurring MH and SA disorders may be treated simultaneously by different providers. How this separation of providers influences the continuity and quality of care for persons with dual diagnosis is unknown.

Most of SA Treatment Is in Outpatient and Residential Settings

In 1997, as for all health care, non-hospital-based outpatient and residential treatment were the most likely settings for spending on SA treatment (Figure 2.6). Fifty-four percent of the \$11.4 billion in NHA-equivalent SA spending in 1997 was for care in settings not affiliated with hospitals (non-hospital-based care). Likewise, 53 percent of the total health care dollar was spent in non-hospital-run outpatient or residential settings. However, hospital-based services were more likely to be used for SA care (41 percent of dollars) than for all health care (35 percent of dollars) in 1997. For MH dollars, 53 percent was spent on non-hospital-based outpatient and residential care, and only 31 percent was on hospital-based treatment. (Table D.1(b)).

Figure 2.6 Outpatient and Residential Treatment Dominated SA Spending as with All Health Care in 1997



Source: CSAT/CMHS Spending Estimates (NHA equivalent expenditures calculated from Table D.1(b)).

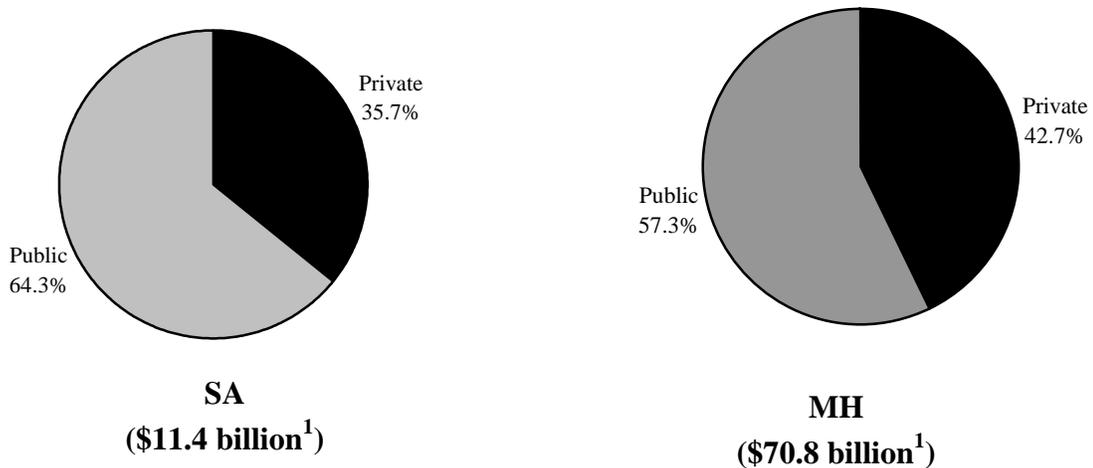
These percents underestimate the full extent of outpatient and residential treatment because some outpatient care is provided by hospitals. In future studies, we will attempt to allocate hospital-based expenditures to inpatient and outpatient settings to give a clearer picture of the extent to which SA patients are treated outside of institutional settings.

SA Financing

SA Treatment Funding Predominantly Public

Public sources of funding covered a much larger share of SA treatment dollars than of MH in 1997. For SA, 64 percent of spending came from public sources; for MH, 57 percent was from the public sector (Figure 2.7). Only 36 percent of SA expenditures are covered by private insurers, philanthropy, or out of the pockets of clients or their families.

Figure 2.7 Public Funding Was A Larger Share of SA Treatment than of MH in 1997



Source: CSAT/CMHS Spending Estimates (Table D.2(b)).

¹ NHA-equivalent expenditures.

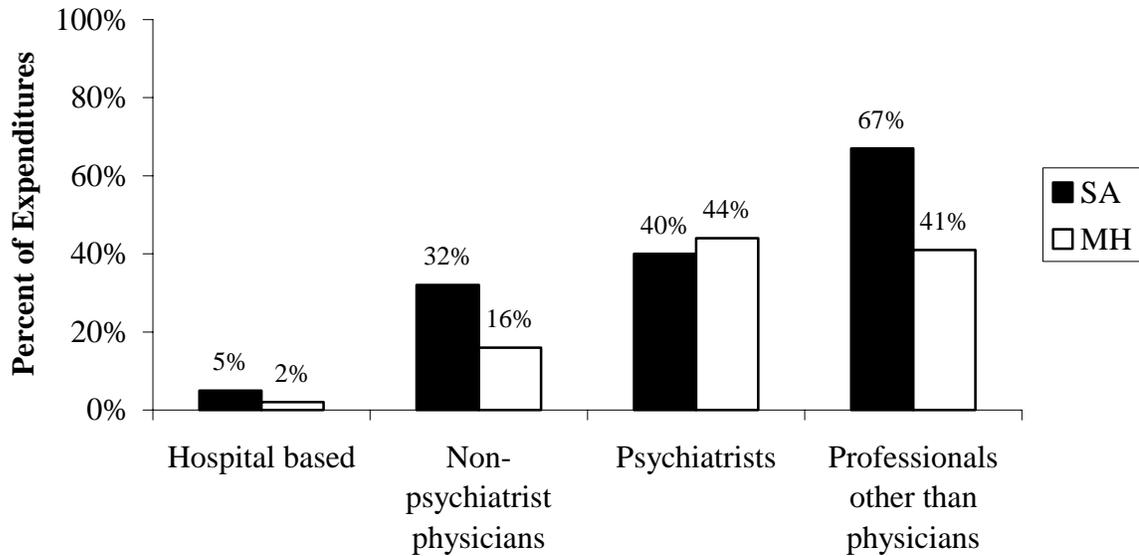
Individuals Who Pay for SA Treatment Face High Out-of-Pocket Spending

With public funding such a dominant source of support for SA treatment, out-of-pocket SA expenditures look inconsequential in the aggregate. That is, relative to all payers and all services, out-of-pocket spending was only 10.5 percent of total SA spending in 1997 (Table D.4(b)). However, when the out-of-pocket costs are examined in relation to the specific services sought and paid for, the story is quite different.

For most services, individuals with SA disorders paying for their own treatment faced much higher out-of-pocket expenses than individuals with MH disorders. Likewise individuals with MH disorders paid increasingly higher out-of-pocket costs compared to persons with physical conditions over the 10-year period (Coffey et al., 2000). Nevertheless, the SA-MH out-of-pocket differential is particularly wide for allied MH/SA professionals and for non-psychiatric physicians (Figure 2.8). For allied professionals (psychologists, counselors, and social workers), 67 percent of spending on their services for SA treatment comes from personal out-of-pocket payments. By comparison only 41 percent of spending on allied professionals treating MH disorders comes from the pockets of patients or their families. Likewise, for non-psychiatric physicians treating SA, 32 percent of their funds come from individual payments, while for the MH patients only 16 percent is paid by the individual.

Given the wide gap between the need for and treatment of SA disorders (OAS, 1998a), the above findings raise the concern that high out-of-pocket costs for SA treatment may discourage many from seeking care who need it. Further study is needed to determine how much personal costs inhibit care-seeking behavior and how much resistance to treatment plays a role, among other factors.

Figure 2.8 Out-of Pocket SA Treatment Spending High Relative to MH in 1997



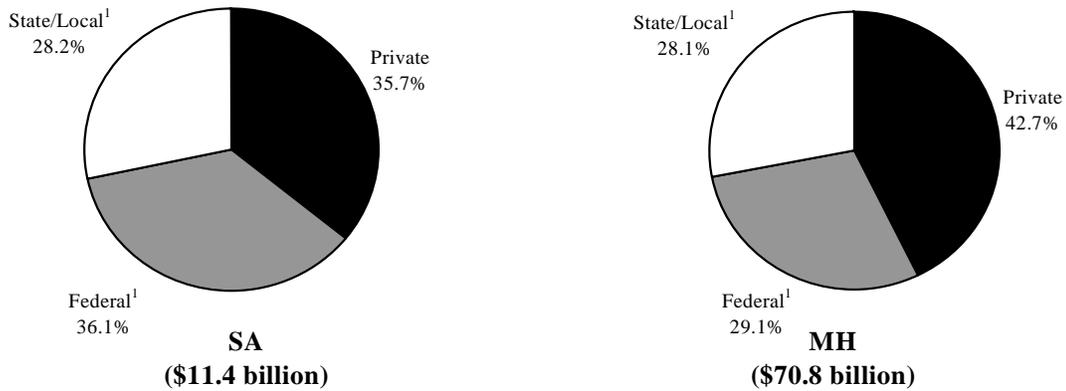
Source: CSAT/CMHS Spending Estimates

The reasons for the substantial differences in the extent of public versus private financing are complex. Historically, State governments have organized and funded the bulk of services to care for persons with chronic and severe SA disorders. Private insurers, on the other hand, typically have viewed their role as paying for medical treatment of acute problems – detoxification, physical or medical emergencies associated with substance abuse, medical sequelae, but generally little ongoing treatment for substance abuse. This mirrors the view of employers who aim, first, to keep substance abusers out of their workplaces through applicant drug screening, and, second, to keep the costs of employee benefits, such as behavioral health benefits, as low as possible (IOM, 1990a). Private insurers constrain the use of SA services by exclusion of such benefits, by use of annual and lifetime limits on those benefits, and through other controls on service utilization. Recent legislative activity attempts to make private insurance for MH, and sometimes SA, more on par with that for other health problems. The results here suggest considerable room for improvement in SA parity.

Federal Contribution Foremost for SA Treatment

Federal contributions for SA treatment constituted a larger share of all SA spending than Federal support for MH or all health. Federal funding accounted for 36.1 percent of SA treatment spending, but only 29.1 percent of MH spending in 1997 (Figure 2.9). The Federal share of SA spending in that year even surpassed the Federal share of all health expenditures (33.3 percent), which includes the massive Medicare program (Table D.2(b)). These Federal figures encompass total Federal funding – Medicare, the Federal share of Medicaid, and all other Federal programs (such as SAMHSA block grants and Federal veterans and military programs).

Figure 2.9 Federal Funding A Larger Share of SA than of MH in 1997

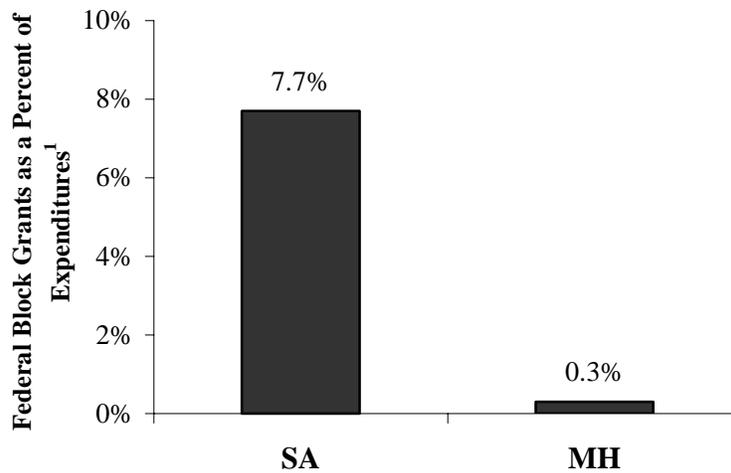


Source: CSAT/CMHS Spending Estimates (NHA-equivalent expenditures, Table D.2(b)).

¹ Medicaid dollars here were apportioned to Federal and State/local Spending.

The Federal government makes substantial contributions to SA treatment through Federal block grants to the States. These grant dollars provided 7.7 percent of the funds for all SA treatment (public and private), while they were the support for only 0.3 percent for MH care (Figure 2.10). These block grant funds represented 12.0 percent of all *public* funds (Federal, State and local) for SA and 21.3 percent of *Federal* funds for SA services; the comparable block grant dollars for MH services were only 0.6 percent of MH *public* funds and only 1.2 percent of MH Federal funds. The SA block grants support services provided by substance abuse treatment facilities (Huber et al., 1994). By 1997, the Federal block grant program for SA treatment services was nearly \$900 million, compared to \$245 million for MH services.

Figure 2.10 Federal Block Grants Provided Substantial SA Funding in 1997



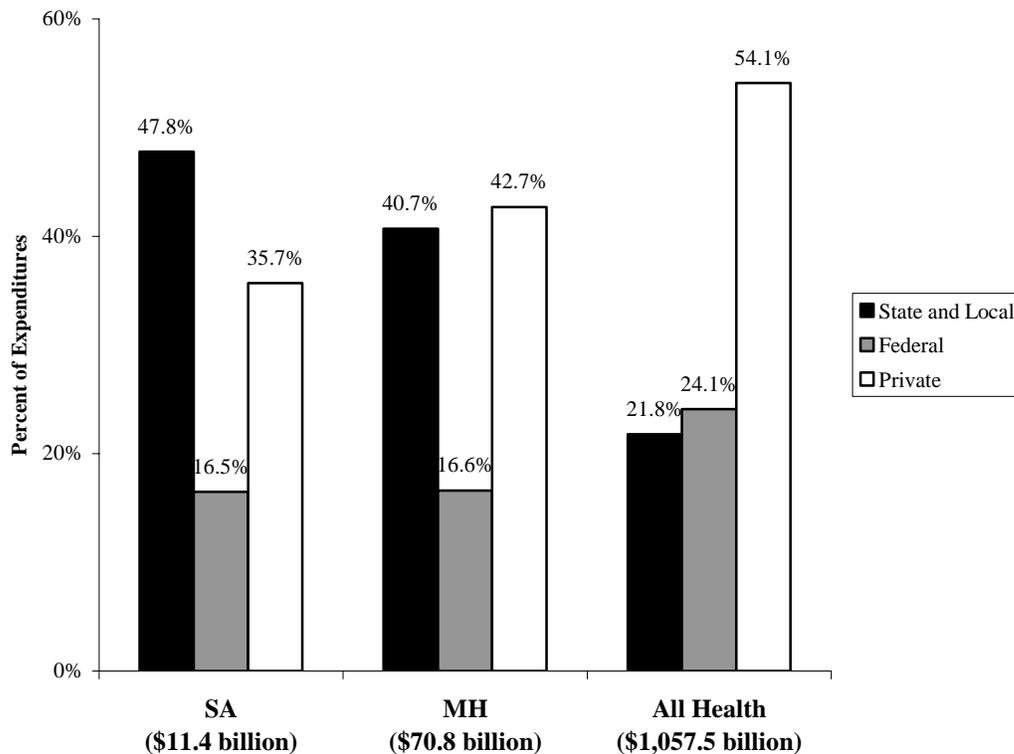
Source: CSAT/CMHS Spending Estimates. (Special calculations not shown in appendix tables.)

¹ NHA-equivalent expenditures.

State and Local Government *Manages* the Majority of All Spending on SA

State and local governments have the dominant role in managing SA treatment dollars even though the dollars do not all come from State/local sources of revenue. In addition to State tax-support for SA treatment, the States manage both the substantial Federal match to State Medicaid funding and the large Federal block grants for SA programs. In 1997, State and local agencies managed 47.8 percent of all SA dollars (Figure 2.11). This is enormous compared to their role in managing general health dollars (21.8 percent), and larger than their role in managing MH service dollars (40.7 percent).

Figure 2.11 State and Local Governments Managed Nearly Half of SA Dollars in 1997



Source: CSAT/CMHS Spending Estimates (NHA-equivalent expenditures; based on Table D.2(b) and other estimates not shown).

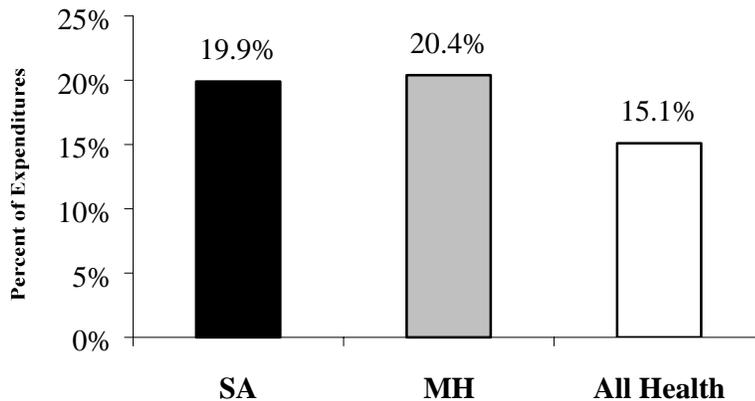
¹ State/local management dollars include all Medicaid dollars, Federal block grants, and other State and local programs.

Medicaid Has an Important Role in SA Treatment

Medicaid is a larger funder of SA services than of general health services. Medicaid supported about 20 percent of SA treatment expenditures in 1997, about the same as MH service expenditures, but a lower portion of all health care expenditures (15.1 percent) (Figure 2.12). The substantial role of Medicaid in SA treatment is consistent with characteristics of Medicaid recipients and of people who are more likely to use illicit drugs. People with drug abuse disorders are more likely to be younger, with less than a high school education, and to be unemployed (OAS, 1998). Medicaid recipients are likely to be younger,

less educated, and unemployed, although Medicaid predominantly covers low-income women and children and, less often, low-income men. One study shows that Medicaid recipients are more likely to suffer from substance abuse disorders (Larson et al., 1998).

Figure 2.12 Medicaid Supported a Larger Share of SA (and MH) Expenditures than of All Health Spending in 1997



Source: CSAT/CMHS Spending Estimates (NHA-equivalent expenditures, Table D.2(b)).

In addition to Medicaid, other State and local government programs provided a comparable 20-percent share of SA spending as a treatment safety net. These aggregate, national Medicaid and other State-local spending shares mask likely variation among States in their support of substance abuse services (Buck et al., forthcoming).

Summary

National spending on substance abuse services in 1997 was a small \$11.9 billion compared to the total costs to society of substance abuse (\$294 billion), as others have estimated.

A primarily publicly supported, specialty provider network received the majority of SA dollars to deliver treatment to persons with substance abuse problems. In fact, compared with MH, a very small proportion of SA dollars went to private practitioners (psychiatrists, psychologists, counselors, and social workers). In addition, a very small amount of SA spending paid for pharmacotherapy compared to MH spending. As with all health care expenditures, over 50 percent of SA spending went for care in freestanding outpatient and residential settings, as opposed to hospital-based services.

The financing of SA services was predominantly from public sources (64 percent). Federal support of SA spending was foremost at 36 percent, while Federal funds supported only 33 percent of all health care, despite Medicare funding for all health services for elderly and disabled populations. Furthermore, Federal block grants for SA were crucial funding sources, with nearly eight percent of SA spending coming from those grants, compared with

less than one percent of MH spending. Medicaid was another important contributor to SA treatment (20 percent of SA spending), compared to its funding for all health (15 percent).

However, by counting funds based who pays the bill, the role of State and local governments in SA treatment is masked. State and local governments manage nearly half of all expenditures for SA treatment. They managed only 22 percent of all health care service dollars.

Chapter 3. Trends in Substance Abuse (SA), Mental Health (MH), and All Health Care, 1987-1997

Inflation-Adjusted Growth and National-Health-Accounts-Equivalent Expenditures

Expenditure trends discussed in this chapter are based on inflation-adjusted growth rates. The adjustment uses the general price inflation in the Gross Domestic Product (GDP), the deflator HCFA uses to report real growth in national health expenditures. This adjustment is made to examine real increases in spending for substance abuse treatment, in contrast to increases that may be confounded by price inflation.

Because this chapter also compares trends for SA to all health care, we use NHA-equivalent SA estimates throughout. The concepts of inflation adjustment and NHA-equivalence are explained in Chapter 1. To understand SA spending in the context of behavioral health care, SA is also compared to MH spending in this chapter.

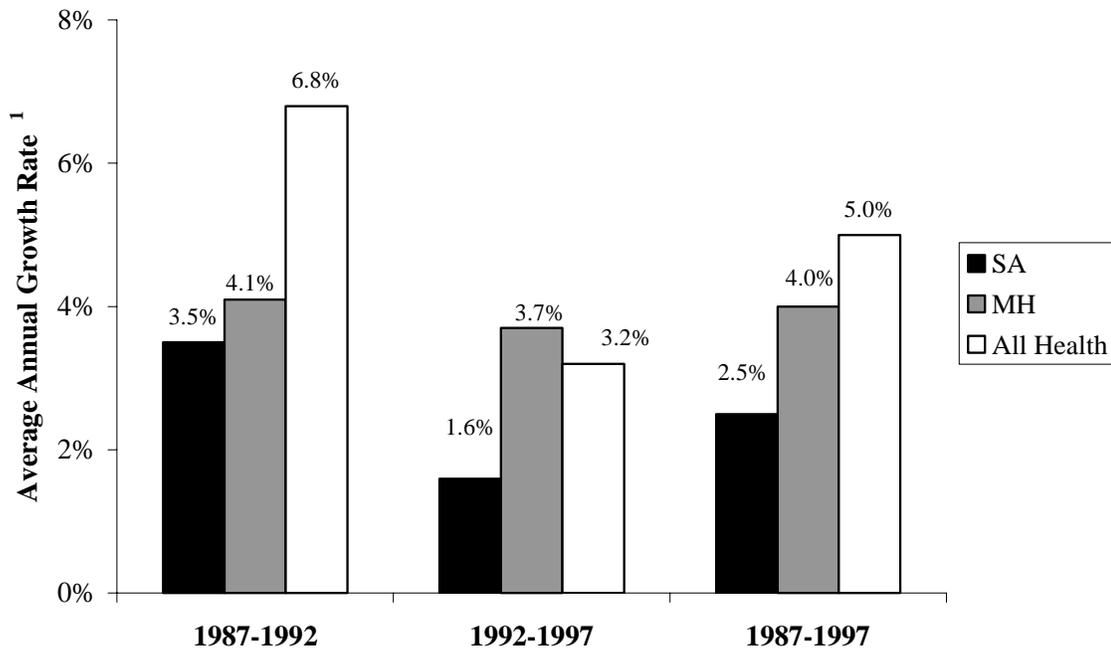
SA Spending Grew Much More Slowly than MH and All Health Care

Inflation-adjusted SA spending grew much more slowly than MH and all health care spending in the decade between 1987 and 1997. SA spending grew at half the rate per year (2.5 percent) at which all health care expenditures grew (5.0 percent) over the 10 years and less than two-thirds the rate of MH spending growth (4.0 percent) (Figure 3.1).

The rate of growth shifted during the 10-year period (Figure 3.1). During the first five years (1987-1992), SA expenditures grew at 3.5 percent per year (about half the rate of all health (6.8 percent per year)). However, during the second five-year period, SA spending slowed significantly to 1.6 percent, again at half the rate of all health spending at 3.2 percent.

Compared to MH, the SA slowdown was significantly greater. While SA spending shifted from 3.5 to 1.6 percent per year between the two five-year periods, MH spending declined from 4.1 to only 3.7 percent. Whatever was responsible for the slowdown in expenditures between the two five-year periods, it had a larger effect on SA, cutting the average annual rate of SA spending by more than 50 percent, but cutting the average annual rate of MH spending by 10 percent. We examine below some of the reasons for the differential slowdown.

Figure 3.1 SA Expenditures Grew Much More Slowly than MH and All Health between 1987 and 1997



Source: CSAT/CMHS Spending Estimates (Table D.1(c)).

¹Inflation-adjusted, NHA-equivalent expenditures.

Reasons for Slower SA Spending

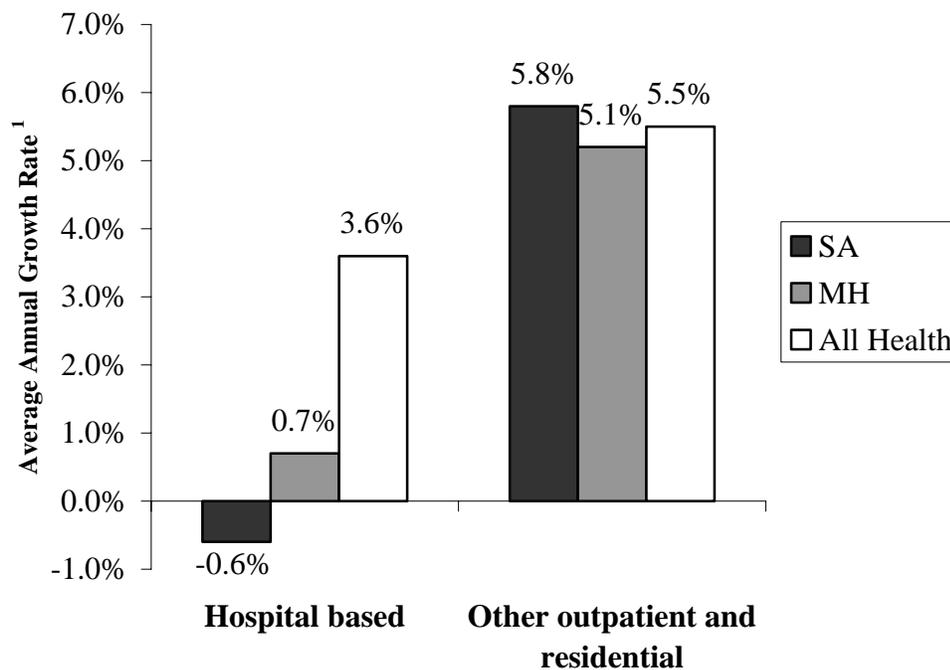
The reasons for the relatively slow growth of SA expenditures can be deduced, in part, from spending trends by type of service and by payer that are measured in this study. Some of the explanation must be deduced from the literature on SA services over this period and on general health care trends.

The long, quarter-century trend of the NHA highlights in relief the dramatic slowdown in all health care spending in the last five years of 1992-1997 (Braden et al., 1998). By viewing only 10 years of SA spending, we cannot see the full context. There is some evidence that SA spending grew relatively rapidly prior to 1987. Some employers added SA health insurance or employee assistance benefits in the early 1980s. Federal block grants for SA that started in the early 1980s, grew rapidly, stimulating expansion of SA treatment facilities (Huber, et al., 1994). Thus, the slowdown may be a natural response to relatively rapid growth in the early and mid-1980s. SA spending since 1987 also may represent a substantial slowdown in SA services because of efforts by employers and private insurers to introduce managed behavioral health care carve-out arrangements. Alternatively, SA treatment spending may have grown more slowly relative to all health care expenditures because SA expenditures may not be driven as relentlessly by medical and surgical advances and increases in treatment intensity. We explore some of these issues below.

Hospital-Based Services Declined

Real SA expenditures for hospital-based services declined noticeably between 1987 and 1997 on average by 0.6 percent per year, while such spending on other conditions accelerated (Figure 3.2). Spending on hospital care for MH and all diseases grew – less for MH at 0.7 percent than for all health care at 3.6 percent annually. This clearly influenced the slower growth of SA spending overall compared to MH and all health care, because hospital care is the most expensive mode of treatment for disease.

Figure 3.2 SA Spending Declined in Hospital Settings and Grew More Rapidly in Outpatient Settings than MH and All Health between 1987 and 1997

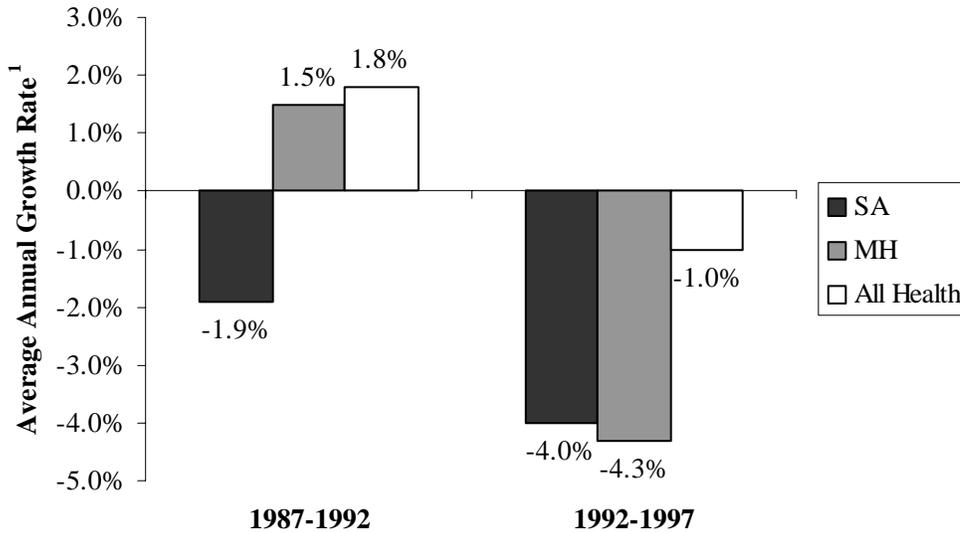


Source: CSAT/CMHS Spending Estimates (Table D.1(c)).

¹Inflation-adjusted, NHA-equivalent expenditures.

The slower pace of hospital-based spending occurred earlier in the study decade for SA than for MH, and it occurred in non-community hospitals (specialty and VA hospitals) (Figure 3.3). In the first five years of the period, SA specialty and VA hospital spending declined almost two percent per year, while such spending *grew* at 1.5 percent for MH and 1.8 percent for all health care. In the second period, 1992-1997, SA spending on these hospital services had a precipitous drop of 4.0 percent per year. MH spending in these non-community hospitals also had a dramatic decline in the second five years, down 4.3 percent per year. The drop in all health spending on specialty and VA hospitals was much less, down 1.0 percent per year.

Figure 3.3 Non-Community Hospital Spending Declined Earlier for SA than for MH and All Health Care between 1987 and 1997.



Source: CSAT/CMHS Spending Estimates (Table D.1(c)).

¹Inflation-adjusted, NHA-equivalent expenditures.

Outpatient/Residential Spending Rose

As Figure 3.2 also shows, while hospital spending declined, spending on care in outpatient and residential settings increased for SA slightly faster than for MH and all health care. SA spending in these settings increased 5.8 percent per year between 1987 and 1997, and MH and all health spending in these settings increased by 5.1 and 5.5 percent, respectively. Small differences in annual growth rates can mean substantial differences over a decade because small differences every year accumulate over the 10 years.

The increase in outpatient services cuts across provider type. For example, Residential Treatment Centers for Emotionally Disturbed Children (RTCCs) historically have specialized in residential treatment. However, between 1986 and 1994, RTCCs expanded their outpatient services at a greater rate (18.4 percent per year) than their residential services (which increased only 4.4 percent per year) (Mark et al., 2000a). To some extent, even general hospitals have increased their outpatient services faster than their inpatient care. Although we did not separate outpatient from inpatient spending for all hospital services, we did a special analysis for general hospitals. Between 1987 and 1997, general hospitals expanded psychiatric and substance abuse outpatient services by 9.9 percent per year and such specialty inpatient services by 8.5 percent per year (Mark et al., 2000a).

Thus, SA clients may be receiving more outpatient treatment than the numbers in the first paragraph of this section imply. Hospital-based services as configured in these classifications include some outpatient and residential treatment. If hospital-based SA outpatient services have increased relative to SA inpatient care, more so than for MH or all health, then the differences in expenditures found here could be greater. We plan to redefine categories as inpatient, outpatient, and residential for future studies to address this.

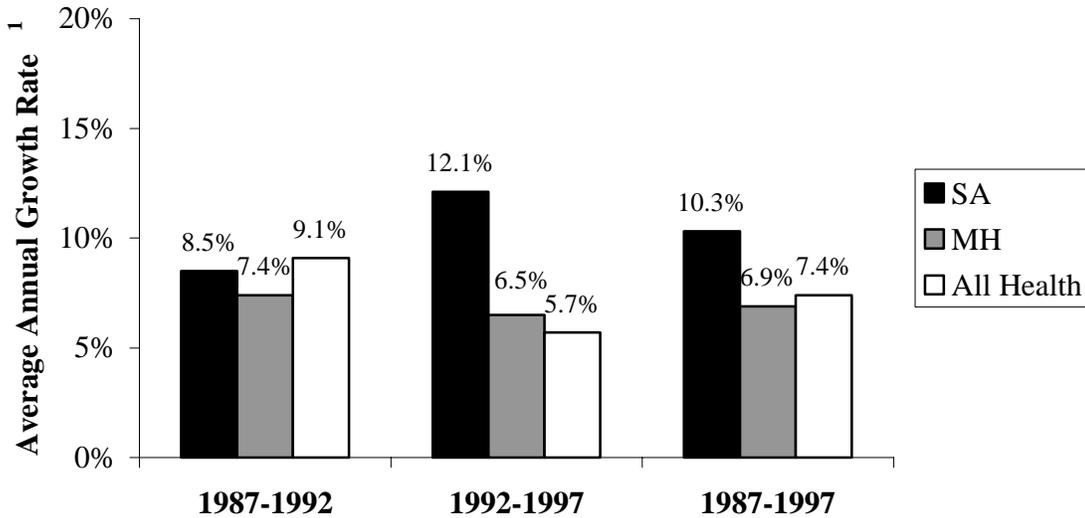
Declining hospital-based SA expenditures, combined with slightly faster growth in other outpatient and residential treatment, may reflect a faster movement of clients from hospital-based to community-based treatment for SA than for MH and all health care. For example, improved detoxification agents enable providers to detoxify patients in outpatient settings. Alternatively, the differential in expenditures may reflect less treatment for SA patients simply because they are kept out of hospitals. How spending is distributed among chronic severe, moderate, and occasional substance users cannot be ascertained from this study.

Independent Allied Professional Services Rose

Although less than 2.5 percent of SA spending in 1997 went to non-physician, independent professionals (Table D.1(b) and D.3(b)), the rate of growth of spending for their services for SA increased rapidly. This “other professionals” group includes independently billing psychologists and some independently billing counselors and social workers in the NHA-equivalent comparisons in Table D.1(b) and Figure 3.4. The group does not include counselors and social workers providing non-health services (such as job placement counselors who independently bill those services to private payers), because those are excluded from the NHA. “Other professionals” in the *total* SA expenditures in Table D.3(b) include these non-health services of independent SA counselors and social workers.

Spending on SA services provided by “other professionals” grew much more rapidly (10.3 percent yearly) than for MH services (6.9 percent) and for all types of other professional services for all health care (7.4 percent over the entire period) (Figure 3.4). This overall relatively rapid growth was likely influenced by Medicare changes that provided payment for psychologists and social workers in 1990 (Rosenbach and Ammering, 1997; Frank, 2000). There was a spurt in SA spending between 1992 and 1997 for independently billing “other professionals” (12.1 percent increase per year). Spending for services of allied health professionals in MH and in all health care (chiropractors, podiatrists, optometrists and others) grew at about half that rate (Figure 3.4).

Figure 3.4 SA Spending on “Other Professionals” Was Most Rapid between 1992 and 1997



Source: CSAT/CMHS Spending Estimates (Table D.1(c)).

¹Inflation-adjusted, NHA-equivalent expenditures.

While comparisons based on NHA-equivalent expenditures omit some independent counselors and social workers, the patterns are similar when we include them in total spending estimates for SA and MH presented in Tables D.3(a) and (c). In the second five-year period, SA spending rose 13.1 percent for SA treatment professionals other than physicians, with MH spending on these professionals increasing 6.4 percent per year during the same period.

While expenditures on care by professionals other than physicians were accelerating for SA treatment, spending on physician services were not. Physicians’ receipt of SA treatment dollars rose at a 2.5-percent-per-year rate over the 10 years, a rate much slower than the annual increase of physician services for MH treatment (5.9 percent) or for all health care (4.5 percent) (Table D.1(c)). This juxtaposition of two substitute service provider groups suggests that the slower growth in overall SA spending may have been caused, in part, by the substitution of less expensive providers compared to patterns of spending for providers who diagnose and treat other diseases.

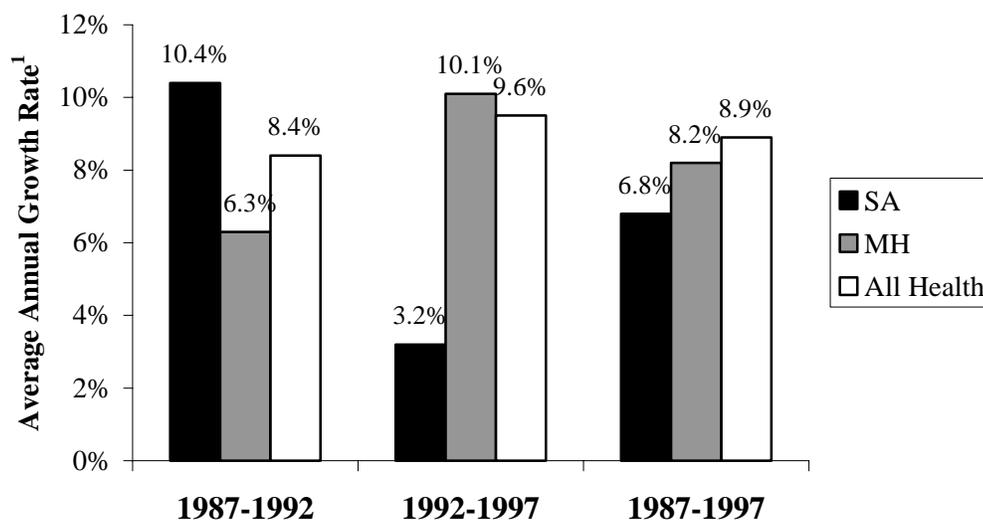
Community SA Facility Services Rose

Increased spending for outpatient care of SA relative to MH and all health is apparent for another much larger category – “other personal health care and government public health activities (PHC&GPH),” an aggregation specific to the NHA-equivalent estimates only, which we refer to here as “community services.” This PHC&GPH category includes community public health services, as well as other direct health care services provided by employers for their employees and provided in non-health facilities for school children, jail inmates, etc. For all health spending, this class is dominated by community health centers.

For SA and MH, this category represents over 40 percent of SA spending and about 19 percent of MH spending (Table D.1(b)). For those services, the category is dominated by spending in substance abuse and other public health facilities (such as specialty substance abuse centers, multi-service mental health centers, residential treatment facilities, and special programs in schools, jails, churches, and military field stations, reported through SAMHSA surveys of specialty health care facilities). The category includes both residential and outpatient services.

SA spending at specialty substance abuse centers and other facilities rose more slowly over the 10-year period (at 6.8 percent yearly) compared to MH or all health spending at similar facilities (8.2 and 8.9 percent per year, respectively) (Figure 3.5). However, in the first five years, SA facility spending outpaced both MH and all health spending. During that period, SA spending in these facilities grew 10.4 percent annually; MH grew 6.3 percent; and all health grew 8.4 percent per year. When we explore financing (below), we will see that the early SA-spending increases at these facilities correspond with large increases in Federal block grant funding for SA between 1987 and 1992. These facilities were and remain the primary recipients of such funds.

Figure 3.5 Community SA Facility Spending Rose Rapidly between 1987 and 1992



Source: CSAT/CMHS Spending Estimates (Table D.1(c)).

¹Inflation-adjusted, NHA-equivalent expenditures of “other personal health care and government public health expenditures.”

Pharmacological Therapy for SA Increased -- An Uncertain Harbinger

Prescription drugs for SA treatment were an insignificant part of SA spending both in 1987 and a decade later in 1997 – less than one percent of total SA spending (Table D.1(b)). However, in the second five years of this study, SA spending on drug therapy grew tremendously (35.8 percent per year compared to less than one percent per year in the first five years (Table D.1(c)). Part of the large growth rate is an artifact, due to the small base of

retail drug spending on which subsequent growth was calculated. Thus, the growth rate should not be compared between SA and MH. Although the increase coincides with the introduction of naltrexone as new drug treatment for alcoholism, little of the increase may be attributed to it. Most of the increase results from the use of antabuse, an alcohol-sensitizing agent. (The use of drug therapy for opiate addiction – methadone and LAAM – can only be prescribed by licensed methadone and detoxification programs and hospital pharmacies and are not dispensed as retail drugs. They are counted in facility expenditures, here. Generally, the counts for prescription drugs for SA treatment reported are based on weak estimates because the national survey of physician office visits (NAMCS) is based on so few cases relative to the universe of visits and because SA diagnosis and treatment is a relatively rare occurrence for physician office visits.)

Is drug prescribing the start of a new trend in therapy for substance abuse disorders? At least one new type of medication for the treatment of narcotic addiction, buprenorphine products, is pending approval of the FDA. If approved, it may eventually increase expenditures for retail prescriptions for the treatment of substance abuse. Beyond that, we can only speculate that new understanding of brain functions and biochemical reactions (McLellan et al., 2000) might revolutionize substance abuse treatment as it has MH treatment since the late 1980s (USDHHS, 1999). However, new medications introduced to treat heroin addiction (LAAM) and alcoholism (naltrexone) have been used only minimally in clinical practice.

For example, naltrexone was introduced in January of 1995 after FDA approved it as the first new drug for alcohol treatment in 50 years. Despite evidence of its efficacy shown in double-blind clinical trials, it is being used with perhaps fewer than two percent of persons receiving alcohol treatment. Total naltrexone retail prescriptions (including prescriptions for narcotic treatment but excluding those dispensed directly by SA facilities) were 12,000 prescriptions per month in 1997 (Gordon, 1999). The one-day census of specialty substance abuse facilities indicates that in 1997, 624,000 clients were in treatment for alcoholism, a figure which undercounts clients in treatment because it excludes persons receiving alcohol treatment in private primary care settings, in programs such as Alcoholics Anonymous, and in MH institutions (OAS, 1999). Furthermore, the 1997 National Household Survey on Drug Abuse estimated that 11 million adults were heavy drinkers in 1997 (OAS, 1999c). The use of naltrexone is substantially below levels predicted by the drug manufacturer (Goodman et al., 1997).

For two reasons, the path of adoption of new drug treatments may not be taken readily when new SA pharmacotherapies are discovered. First, a strong philosophy of personal-choice, will-power, and self-help through support groups dominate SA treatment (IOM, 1990a). Such a philosophy may not be accepting of the use of medication. Second, in the MH/SA field, there are twice as many psychologists as psychiatrists and four times as many social workers/counselors as psychiatrists (Ivey et al., 1998). Among them, usually only psychiatrists (MDs) are licensed to prescribe drugs. An unwillingness by non-physician practitioners to refer clients to physicians for such treatment may dampen the diffusion of new drug therapies in the SA field. The extent to which resistance to the use of naltrexone is a consequence of perceived effectiveness, philosophical aversions to treating alcoholism with dependence on another substance, or the results of regulated prescribing patterns is unclear.

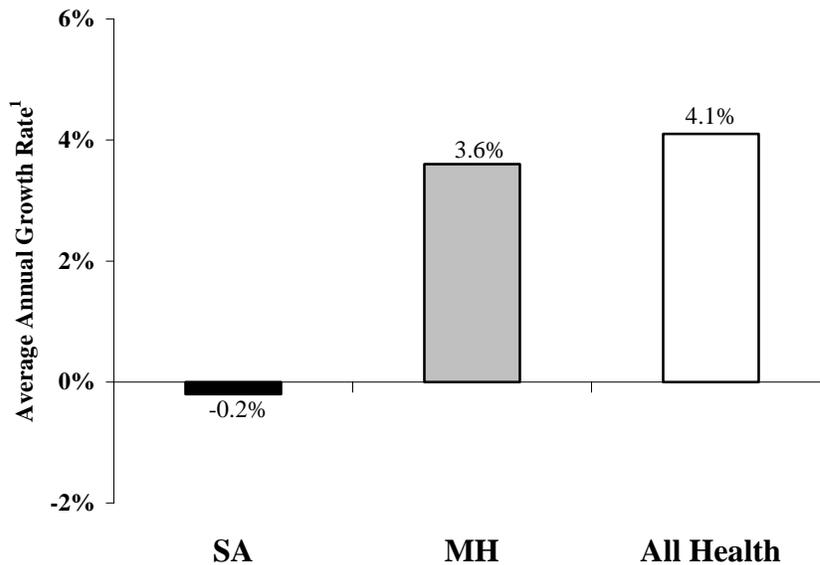
Research underway to answer these questions will elucidate the potential clinical significant of future advances in pharmacotherapy for substance abuse.

Public Funding Slowdown and Private Funding Erosion

As described in Chapter 2, public sources of funding supported a much larger share of SA treatment dollars than of MH in 1997. During the 10-year study period, public funding for SA treatment grew at about the same rate as did MH (4.5 and 4.3 percent per year, respectively) (Table D.2(c)). However, the rate of increase in SA spending declined over the period, from a 6.6-percent increase per year for the period 1987-1992 to a 2.3-percent increase per year for the period 1992-1997. The rate of increase in spending for MH had the same pattern.

Private support for SA treatment expenditures did not keep pace with inflation, falling 0.2 percent per year on average over the 10-year period; private funding for MH grew 3.6 percent per year during the same decade (Figure 3.6). Private spending for all health care services grew 4.1 percent annually, faster than either SA or MH.

Figure 3.6 Private Funding for SA Was Outpaced by Inflation and Was Much Slower than for MH and All Health between 1987 and 1997



Source: CSAT/CMHS Spending Estimates (Table D.2(c)).

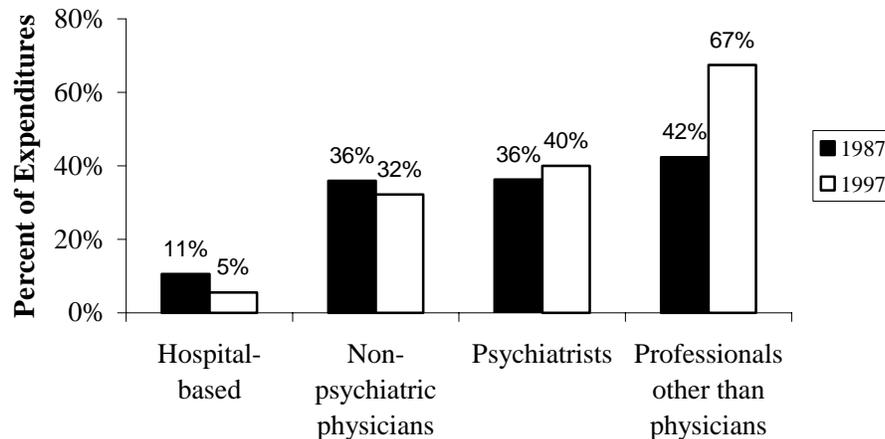
¹Inflation-adjusted, NHA-equivalent expenditures.

Furthermore, between 1987 and 1997, private insurance (one component of the private spending shown in Figure 3.6) declined at a faster inflation-adjusted rate, 0.6 percent per year. Between 1987 and 1992, inflation-adjusted private insurance payments declined, on average, 1.0 percent per year; these payments fell 0.2 percent per year between 1992 and 1997 (Table D.2(c)).

Pressure from employers to reduce insurance expenses and the exclusion of SA from most MH parity laws during the 1990s prompted researchers to ask: How much would coverage of SA cost relative to MH? Coverage of SA treatment under private insurance has very small total cost implications for those insurers relative to MH treatment (Sing et al., 1998), primarily because a very low proportion of the privately insured population needs SA treatment. Two other studies of private insurance parity for SA and MH also found little effect on SA costs, again because few enrollees use those services, even though SA treatment episodes typically were twice as expensive, on average, as MH episodes (Schoenbaum et al., 1998; Sturm et al., 1999). These latter SA and MH comparisons are relevant for privately insured persons only; private insurance generally excludes people with the most severe and persistent mental illnesses, who usually are treated in the public mental health sector. Furthermore, insurers and employers have used managed care to restrain the use of MH/SA services (Callahan et al., 1995; Larson et al., 1997).

At the same time that private insurance was declining, out-of-pocket payments for specific types of SA treatment service were increasing. For example, the amount spent out of pocket for psychiatrist services increased from 36 percent of SA expenditures on psychiatrists in 1987 to 40 percent in 1997. More disconcerting is the significant rise in out-of-pocket spending related to psychologists, counselors, and social workers providing SA treatment. Out-of-pocket spending on these allied professionals grew from 42 percent of their total receipts in 1987 to 67 percent in 1997. We do not know whether this increase relates to increasing restrictions by private insurers on reimbursements to these allied professionals, resulting in more of the expense being borne directly by clients. Nor do we know whether the increase might be due to increasing numbers of clients without insurance who make some financial contribution to the cost of their treatment.

Figure 3.7 Out-of-Pocket Spending a Much Higher Proportion of SA Spending on Non-Physician Professionals in 1997 Compared to 1987



Source: CSAT/CMHS Spending Estimates (not in Tables, total SA Spending, unadjusted).

The overall decline in private insurance spending and the rise in out-of-pocket spending on some types of SA services raise important questions for future research. Are the declines in

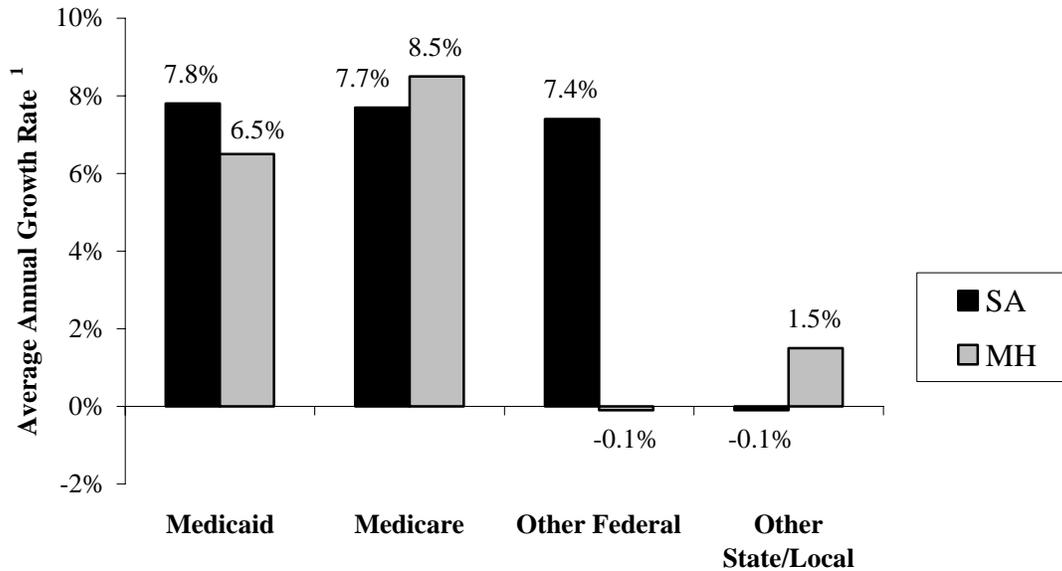
private insurance payments related to increasing efficiencies in treating SA patients that are associated with managed behavioral health care? Are the declines due to employer and private insurer coverage limits on SA-related services? Are employers becoming more vigilant and effective in excluding or removing employees with substance abuse problems from their workforce? Do SA benefit limits result in private patients being shifted to public programs or out of treatment altogether? Is the criminal justice system stimulating the treatment of persons with substance abuse disorders? We explore the penetration of managed care and managed behavioral health care in Chapter 6, but cannot address these questions definitively.

Federal Funding Grew Rapidly for SA

In 1987, Medicaid and “other Federal program” shares of SA treatment expenditures were a moderate-sized 12 and 10 percent, respectively, compared to other sources of funding (Table D.2(b)). Medicare contributed a small five-percent share in 1987. However, all three sources of payment grew rapidly, about seven percent per year each, between 1987 and 1997 (Figure 3.8). For MH services, only Medicare and Medicaid grew rapidly; other Federal support declined slightly.

Other State and local funding of SA services, despite representing 26 percent of SA funding in 1987, did not keep pace with general inflation, declining 0.1 percent per year. The slower “other State and local” spending on SA treatment, along with faster spending by other contributors to SA treatment, moved “other State and local” spending down to a share of 20 percent in 1997. This shift is part of a long-term trend away from direct State funding of MH and SA care. During this period, States closed many public hospitals and moved patients into community settings (Mechanic et al., 1998). Also, to the extent possible, States moved funding of health-related programs into the Medicaid program to obtain Federal Medicaid matching funds (Holahan et al., 1998).

Figure 3.8 Public Funding Grew Differentially for SA and MH Treatments between 1987 and 1997



Source: CSAT/CMHS Spending Estimates (Table D.2(c)).

¹ Inflation-adjusted, NHA-equivalent expenditures.

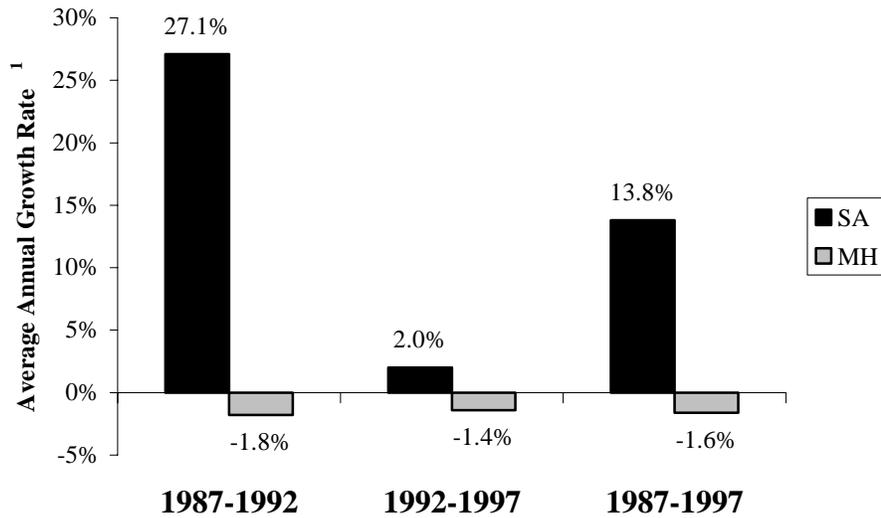
Federal Block Grants Grew Dramatically

The large increases for “other Federal” funds for SA reflected an active SAMHSA block grant program (Huber et al., 1994). In 1982, 10 categorical grant programs for mental health and substance abuse were combined into the Alcohol, Drug Abuse and Mental Health (ADAMH) Services block grant program, and total funds were reduced by about 20 percent (Jacobson et al., 1996). In 1992, a new Substance Abuse Prevention and Treatment block grant program was instituted (under the ADAMHA Reorganization Act, P.L. 102-321), replacing the ADAMH block grant program.

Inflation-adjusted block grants for SA treatment services¹ increased by 27.1 percent per year, on average, between 1987 and 1992 (Figure 3.9). This growth rate subsided to 2.0 percent per year between 1992 and 1997. Both trends dwarfed block grant funding for MH, which declined during both periods. By 1997, the Federal block grant program for SA services was almost \$900 million, while funding for the MH block grant was about \$250 million.

¹ The SA block grant dollar estimates exclude set-asides of 20 percent for preventive services, 5 percent for evaluation research, and 5 percent for State administration.

Figure 3.9 Federal Block Grants for SA Grew Rapidly between 1987 and 1992



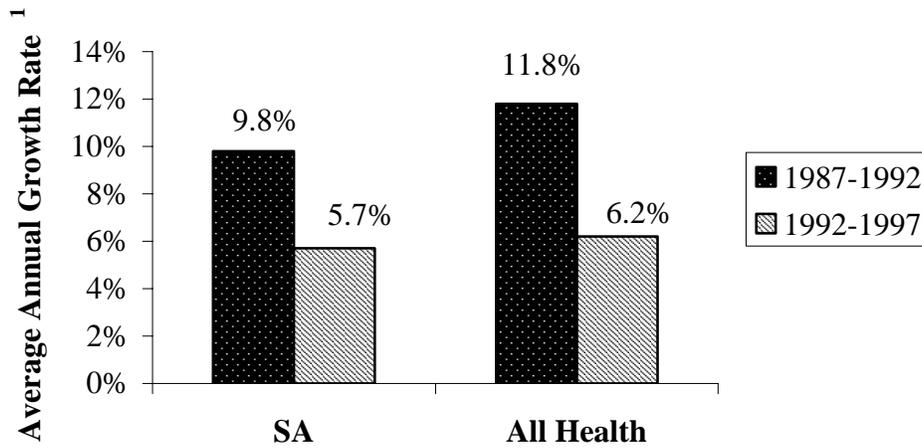
Source: CSAT/CMHS Spending Estimates (not shown in Appendix Tables).

¹Inflation-adjusted block grant funds.

Medicaid Growth – Reduced in Last Five Years

While Medicaid spending on SA services was only \$800 million by 1997, social and health policy changes appear to have had strong effects on Medicaid trends in SA (and MH) expenditures over the 10-year period. Medicaid spending on SA rose rapidly at an inflation-adjusted rate of 9.8 percent yearly between 1987 and 1992, still slower than the 11.8 percent annual increase in Medicaid spending on all health care during that period. In the second five-year period, Medicaid programs slowed the rate of increase of spending on SA treatment to an annual 5.7-percent increase between 1992 and 1997 (Figure 3.10). Federal and State policies designed to expand Medicaid eligibility in the early 1990s, particularly for pregnant women and children, fueled dramatic growth in Medicaid enrollment (from 23.1 million recipients in 1987 to 32.1 million recipients in 1997). In addition, an economic downturn in the early 1990s increased the number of people in need (Ku and Bruen, 1999). However, the increasing general enrollment in Medicaid reversed in 1996-1997, in part due to welfare reform implemented by the States, and also due to better economic conditions (Holahan et al., 1998).

Figure 3.10 Medicaid Spending on SA Slowed in the Second Five Years, as for All Health



Source: CSAT/CMHS Spending Estimates (Table D.2(c)).

¹ Inflation-adjusted, NHA-equivalent expenditures.

While Medicaid enrollment was growing rapidly, States were restructuring their health services financing. The Federal match for disproportionate share hospital (DSH) payments for low-income recipients of hospital services caused States to expand greatly their financing of DSH services through provider taxes and donations. From 1988 to 1992, DSH payments rose at 263 percent per year on average, and States aggressively shifted health programs to Medicaid to reap the Federal matching funds (Holahan et al., 1998). In 1991 and 1993, Congress passed legislation limiting State access to Federal DSH payments (Coughlin and Liska, undated). However, since SA has been covered poorly under State Medicaid programs (Johnson, 1999), these DSH payment changes probably had greater impact on Medicaid expenditures for MH and other health care than on SA.

The Medicaid program also shifted from large hospital spending increases before 1992 to lower increases afterward. At the same time, Medicaid stepped up funding for outpatient services, particularly at comprehensive mental health organizations (Witken et al., 1999).

The slowdown in Medicaid SA expenditures also corresponds with accelerated enrollment of Medicaid recipients in managed care programs (Braden et al., 1998). This policy change should have affected all health care spending as well. Medicaid spending on all health care grew 11.8 percent per year (inflation-adjusted) for the first five years, but fell to about half of that rate, 6.2 percent growth annually, for the second five years (Figure 3.10). Thus, the general Medicaid change affected SA and all health care spending. (MH was affected similarly – see Table D.2(c).)

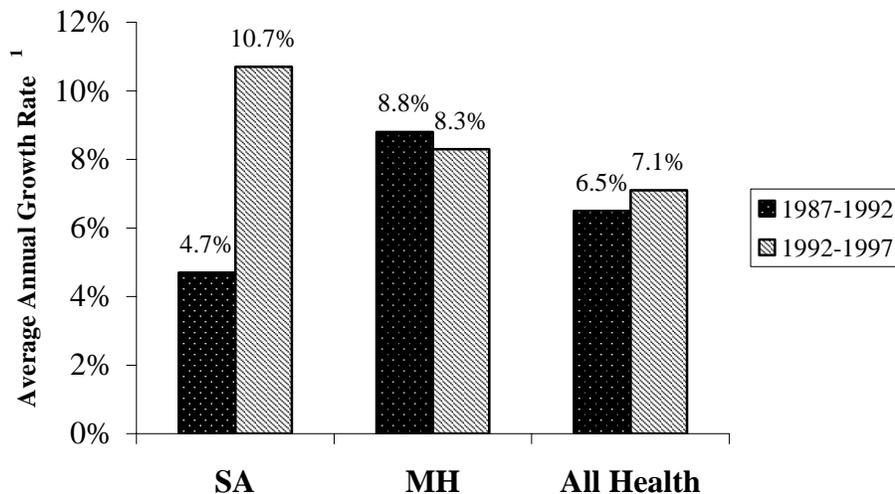
The slowdown in Medicaid SA spending measured here was not yet influenced by a law passed in 1996 (P. L. 104-121) that removed people disabled due to drug addiction or alcoholism from eligibility for Medicare and Medicaid coverage because they would be ineligible for disability benefits under the Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI) programs. The law denied benefits to individuals who applied for such benefits on or after July 1, 1996. Individuals already collecting benefits on

July 1, 1996, continued to receive them until January 1, 1997 (SSA, 1996). Our estimates for SA are based on actual UFDS data that end in 1996, too soon to see the effect of this law. Simply counting SSDI and SSI beneficiaries who qualified on the basis of substance abuse would not reveal the impact of this policy change, because some of those SA-SSI beneficiaries who lost their benefits may have reapplied and obtained SSI benefits on the basis of other disabilities.

Medicare Spending Accelerated Over the Period

While Medicaid was slowing SA treatment expenditures, Medicare was expanding them rapidly, even though Medicare accounted for only eight percent of all SA expenditures in 1997. The growth of Medicare SA expenditures more than doubled over the two five-year intervals, from a growth rate of 4.7 percent per year to a rate of 10.7 percent per year, on average (Figure 3.11), a rapid increase relative to increases for MH and all health care. Medicare spending on MH slowed slightly from an 8.8-percent-per-year increase in the first five years to 8.3 percent in the second five years. Medicare spending on all health care problems accelerated slightly from 6.5 percent to 7.1 percent per year across the decade.

Figure 3.11 Medicare Spending on SA Accelerated during the Second Five Years



Source: CSAT/CMHS Spending Estimates (Table D.2(c)).

¹Inflation-adjusted, NHA-equivalent expenditures.

The Medicare expansion for SA spending may be related to coverage policy shifts. Medicare expanded benefits to reimburse psychologists and social workers, starting in 1990 (Rosenbach and Ammering, 1997; Frank, 2000). In addition, Medicare expanded home health and nursing home benefits, although these are rarely used for SA treatment. (In fact, the Omnibus Budget Reconciliation Act of 1987 disallowed admissions to nursing homes for people with primary SA or MH disorders). Nevertheless, reimbursement for treatment by independent psychologists and social workers under Medicare may have increased the treatment of SA in the eligible disabled and elderly populations.

Findings in Context

These results occurred in the context of a changing health care system and changing patterns of treatment for MH/SA. In Chapter 6, we explore those changes and their effects on MH/SA services and expenditures. We also explore the meaning of slower MH/SA expenditure growth compared to all health care spending.

Chapter 4. Alcohol and Drug Abuse Treatment Expenditures, 1997

Chapters 2 and 3 examined substance abuse – the combined category of alcohol abuse and drug abuse – in relation to mental health and all health care expenditures. This chapter reveals the differences in alcohol and drug abuse treatment expenditures.

Recall from Chapter 1 that the assignment of spending to alcohol and drug abuse categories required methodological choices. First, we based the assignment of spending solely on the first-listed diagnostic code from encounter-level data. We made allocations of expenditures for co-occurring drug and alcohol treatment in specialty facilities. For this report, those allocations were made proportionate to the “alcohol only” and “drug abuse only” categories of revenues reported by facilities in the UFDS surveys. (For those policy analyst who want any drug-abuse-related spending allocated completely to the drug abuse category, we provide such estimates in the Technical Report from this study (Mark et al., 2000a).)

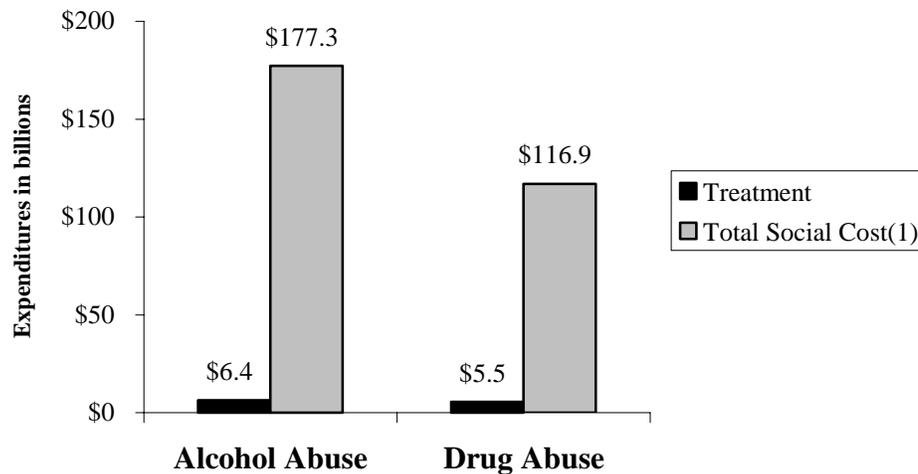
Furthermore, because the comparisons in this chapter are between alcohol abuse and drug abuse spending (rather than comparisons to all health care), we use the total expenditures that include health-related social services. These are shown in Appendix E Tables E.3(a-c) and E.4(a-c). (The NHA-equivalent estimates used in earlier chapters are also reported in Appendix E, Tables E.1(a-c) and E.2(a-c).)

Alcohol and Drug Abuse Treatment Expenditures Very Small Relative to Total Cost to Society

National expenditures for alcohol abuse and drug abuse in 1997 were split fairly evenly on a dollar basis. Alcohol abuse expenditures were \$6.4 million (54 percent) and drug abuse expenditures were \$5.5 million (46 percent), including the costs of health-related social services.

For both alcohol and drug abuse, spending on treatment is only about five percent of the total cost to society of these disorders. Harwood et al. (1998) estimated the indirect cost of alcohol and drug abuse in 1995 at \$166.5 billion and \$109.8 billion, respectively. These translate to \$177.3 and \$116.9 billion, respectively, in 1997 U.S. dollars (Figure 4.1). Thus, the total cost to society of these two substances is on the order of 20 to 30 times what the Nation spends on their treatment.

Figure 4.1 Both Alcohol and Drug Abuse Treatment Expenditures Were Very Small Relative to their Total Social Cost in 1997



Source: CSAT/CMHS Spending Estimates (Table E.3(a) and Harwood et al., 1998).

¹ The 1995 social-cost estimate was inflated to 1997 dollars using the GDP deflator (2.2 percent per year) and a population adjustment (1.0 percent per year).

Other Similarities between Alcohol and Drug Abuse Treatment Expenditures

Similar to overall spending on substance abuse, spending on alcohol and drug abuse separately is predominantly for specialized provider services and is more likely to pay for treatment in outpatient and residential settings than in hospital-based settings. Most spending for specialty care is through facilities, especially specialty substance abuse centers, rather than through independent practitioners.

Expenditures for both alcohol and drug abuse problems are more likely to be made by public rather than private sources. While the Federal government played a substantial role, once again State and local government administered the majority of all funds for both alcohol and drug abuse treatment.

Beneath these aggregate categories, some differences arise related to relative spending for the range of providers and to levels of support from different payers.

Differences between Alcohol and Drug Abuse Treatment Expenditures

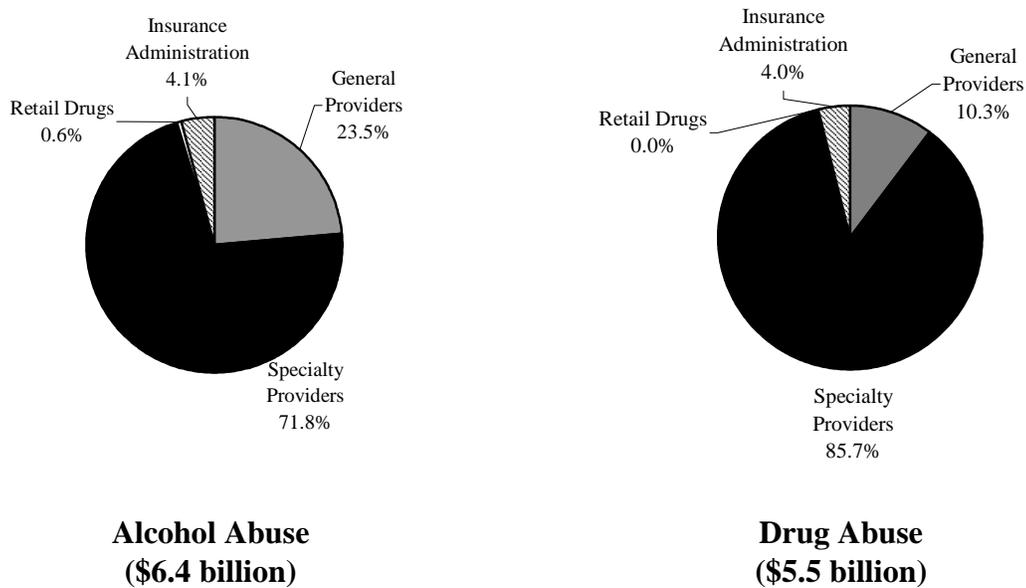
Specialty Sector Larger for Drug Abuse

Providers of specialty services are a larger force in drug abuse treatment than in alcohol treatment (Figure 4.2). Specialty providers received 85.7 percent of total drug abuse expenditures in 1997, while they received 71.8 percent of dollars spent on alcohol treatment in that year. General providers, thus, received a larger part of alcohol spending than of drug abuse spending. This probably reflects the greater spending on general hospital-based services for alcohol treatment, shown in the next section. It also may reflect a medical profession that deals more with alcohol problems than drug abuse problems and that views

alcohol problems within the domain of general health care. The Institute of Medicine may have stimulated that view by arguing that the treatment of alcohol problems should *not* be considered the sole responsibility of specialized providers (IOM, 1990b).

Differential spending on retail drugs is not a meaningful comparison between alcohol and drug abuse. Prescription drugs for treatment of drug abuse (methadone and LAAM) are dispensed only by licensed facilities and such data are not broken out on those drugs. Thus, they are counted in total facility spending in this study.

Figure 4.2 Drug Abuse Treatment Expenditures Reflected a Larger Specialty Sector than Alcohol Expenditures in 1997



Source: CSAT/CMHS Spending Estimates (Total expenditures, calculated from Table E.3(a)).

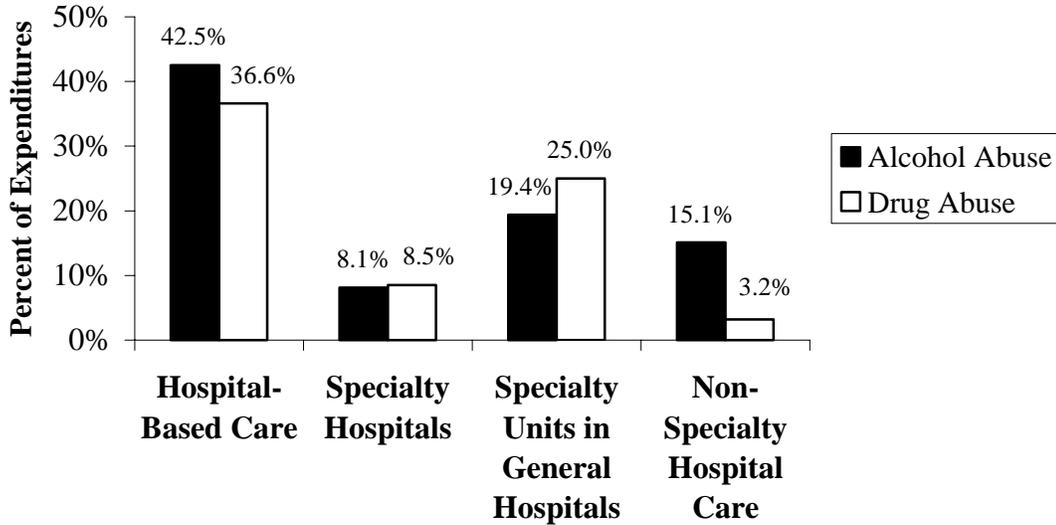
Hospital-Based Spending Higher for Alcohol Abuse

More money was spent on alcohol treatment in hospital facilities than was spent on drug abuse treatment in the same facilities. Of the \$6.4 billion spent on alcohol treatment in 1997, 42.5 percent of that amount paid for hospital-based care (inpatient or outpatient care affiliated with hospitals) (Figure 4.3). Of the \$5.5 billion spent on drug abuse treatment, only 36.6 percent of that went to hospital-based care in 1997.

The spending differences in Figure 4.3 also reflect that both alcohol and drug abuse treatment at hospitals are more likely to occur in specialty units of general hospitals. However, alcohol treatment is more likely than drug abuse treatment to be provided in general services units and general clinics at these hospitals than in their specialty units. This is consistent with the older average age of persons admitted to hospitals with alcohol rather than drug abuse problems (OAS, 1999b). Older patients are more likely to have more comorbidities and more serious complications of alcohol disorders that frequently would be treated on general rather than specialty services. We do not know the extent to which greater use of general (non-

specialty unit) hospital services is related to detoxification rather than treatment of alcohol problems.

Figure 4.3 Hospital-Based Spending Higher for Alcohol than Drug Abuse in 1997



Source: CSAT/CMHS Spending Estimates (Total expenditures, Table E.3(b)).

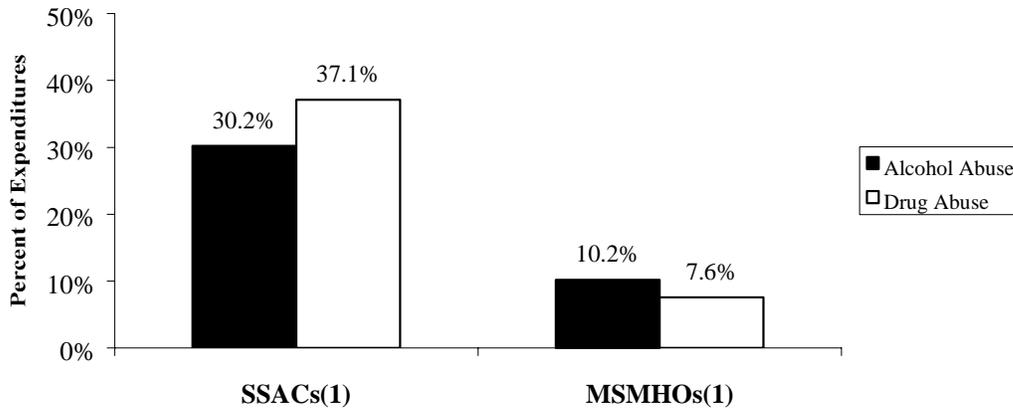
Drug Abuse Treatment More Likely at SSACs; Alcohol Treatment More Likely at MSMHOs

As Chapter 2 showed, the overwhelming majority of substance abuse dollars spent outside hospital services went to specialty substance abuse centers (SSACs), whether freestanding or part of an HMO, a general ambulatory clinic, a jail, a prison, or a school.

Drug abuse treatment dollars were more likely to be spent at these facilities than were alcohol treatment funds. Of the total \$5.5 billion in expenditures on drug treatment in 1997, 37.1 percent went to SSACs (Figure 4.4). Of the \$6.4 billion in alcohol treatment spending in the same year, 30.2 percent went to SSACs.

The next largest recipient following SSACs was multi-service mental health organizations (MSMHOs). These facilities attracted slightly more of the alcohol than the drug abuse treatment dollar (10.2 percent versus 7.6 percent, respectively).

Figure 4.4 Drug Abuse Spending Higher on SSACs¹; Alcohol Abuse Spending Higher on MSMHOs¹ in 1997



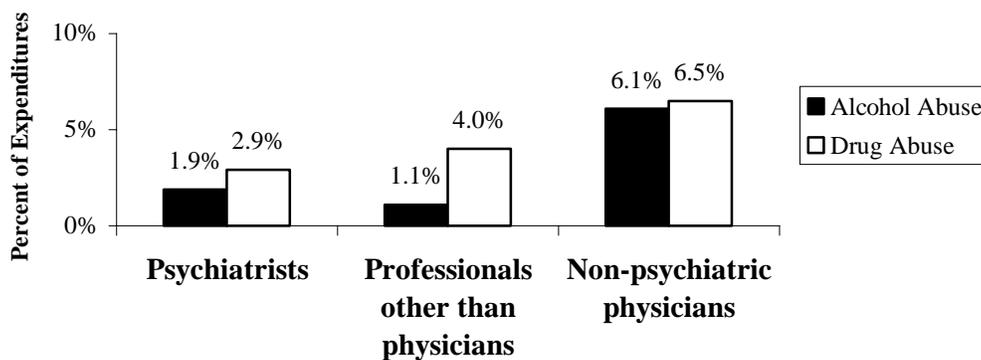
Source: CSAT/CMHS Spending Estimates (Total expenditures, Table E.3(b)).

¹SSACs are specialty substance abuse centers; MSMHOs are multi-service mental health organizations.

Independent Practitioners More Relevant for Drug Abuse

Although the shares of substance abuse spending paid to independent practitioners were small compared to MH (as we learned in Chapter 2), the proportions across practitioners varied by disorder. SA professionals other than physicians are more likely to treat drug abuse than alcohol abuse based on expenditure estimates for 1997. They received four percent of the drug abuse dollars but only 1.1 percent of alcohol abuse dollars (Figure 4.5). Psychiatrists received 2.9 percent of the drug abuse treatment dollars, but only 1.9 percent of alcohol treatment dollars in 1997.

Figure 4.5 Spending on “Professionals Other than Physicians” Was Greater for Drug Abuse Treatment than Alcohol Treatment in 1997

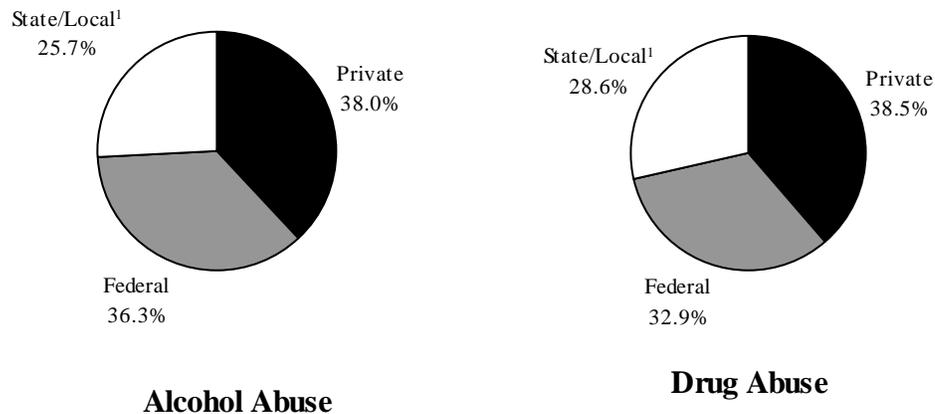


Source: CSAT/CMHS Spending Estimates (Total expenditures, Table E.3(b)).

The Importance of Funding Sources Differed Little by Type of Substance Abuse

Federal funding was somewhat higher for alcohol than for drug abuse treatment. In 1997, Federal funds supported 36.3 percent of the spending on alcohol abuse treatment and 32.9 percent of drug abuse treatment.

Figure 4.6 Similar Funding Sources by Type of SA Disorder in 1997



Source: CSAT/CMHS Spending Estimates (Total expenditures; Table E.4(b)).

¹ Medicaid dollars here were apportioned to Federal and State/Local Spending.

Otherwise, sources of funding were more closely divided for both alcohol and drug abuse treatment. State and local governments funded 25.7 percent of alcohol and 28.6 percent of drug abuse treatment in 1997 (Figure 4.6). Private funding was comparable for alcohol and drug abuse treatment at about 38 percent of dollars spent on each type of treatment (Figure 4.6). However, neither disorder received private support to the degree that mental health care was supported by private sources. Mental health care was 45 percent privately funded in 1997 (Table E.4(b)).

For a comparison to all health care services, we must return to NHA-equivalent estimates in Table E.2(b), which presents the disparity between alcohol/drug abuse treatment dollars and all health care dollars from private sources. For alcohol and drug abuse each, about 36 percent of NHA-equivalent dollars are from private payers. For all health care, 54 percent of dollars are from private payments.

These results support the contention of others that discrimination in coverage of substance abuse exists (IOM, 1990a). The U.S. health care system has not reached the public policy goal of providing non-discriminatory coverage for alcohol and drug abuse treatment equivalent to that for other health problems.

Chapter 5. Trends in Alcohol and Drug Abuse Treatment Expenditures, 1987-1997

Inflation-Adjusted Growth and “Total” and “NHA-Equivalent” Expenditures

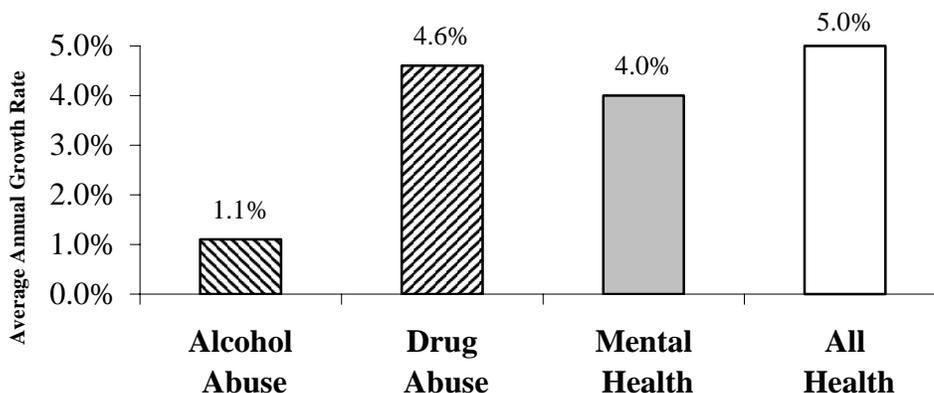
As in Chapter 3, growth rates for alcohol and drug abuse treatment expenditures are inflation-adjusted to reveal spending changes that are beyond general price inflation. See Chapter 1 for how the adjustment was made.

In this chapter, comparisons between alcohol and drug abuse sometimes are made on the basis of total expenditures for these disorders. Total (as opposed to NHA-equivalent) expenditures capture the full range of services, including health-related social services. Whenever alcohol and/or drug abuse spending is compared to all health care spending, the NHA-equivalent estimates are used. (Both “total” and “NHA-Equivalent” estimates are in tables in Appendix E -- “total” in Tables E.3 and E.4; “NHA-equivalent” in Tables E.1 and E.2.)

Drug Abuse Grew Much More Rapidly than Alcohol Treatment and Almost as Fast as All Health Care Spending

In NHA-equivalent inflation-adjusted terms, drug abuse treatment expenditures grew at a rate of 4.6 percent per year between 1987 and 1997 (Figure 5.1). In contrast, alcohol abuse treatment dollars barely exceeded inflation with a growth rate of 1.1 percent per year. In fact, drug abuse treatment spending grew slightly faster than the 4.0-percent increase annually for mental health. And, drug abuse spending grew almost as fast as spending for all health care, which increased 5.0 percent yearly, on average.

Figure 5.1 Drug Abuse Spending Increased More Rapidly than Other MH/SA Spending between 1987 and 1997



Source: CSAT/CMHS Spending Estimates (NHA-equivalent expenditures, Table E.1(c)).

This finding suggests that treatment for drug abuse was expanding during the 10-year period, an observation confirmed from other sources in the next section. The increase in drug abuse spending was fairly uniform over both five-year periods, with a 4.8 percent increase between

1987 and 1992 and a 4.3 percent increase between 1992 and 1997 (Table E.1(c)). Thus, drug abuse expenditures were not affected as significantly by the slowdown in spending that occurred for other conditions in the second half of the study period (discussed in Chapter 3).

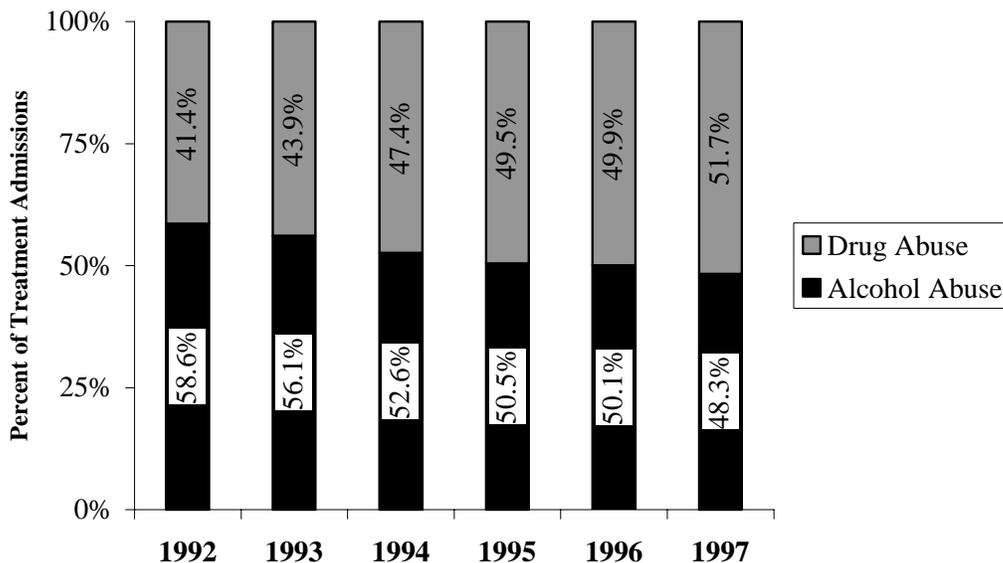
The foregoing finding about drug abuse spending makes it clear that the slower substance abuse spending overall was due to significantly slower growth in spending on the treatment of alcohol problems than on the treatment of drug abuse.

Reasons for Faster Growth in Drug Abuse Spending

More Treatment

With respect to substance abuse treatment expenditures, slower growth for alcohol and faster growth for drug abuse treatment are consistent with trends in the types of substance abuse reported by clients in U.S. treatment centers. The SAMHSA Treatment Episodes Data Set (TEDS) showed that State-agency-funded admissions for treatment of primary alcohol abuse declined from 59 percent of admissions in 1992 to 48 percent in 1997 (Figure 5.2; OAS, 1999b). These alcohol abuse admissions declined both in relative percentage and in absolute numbers of admissions. Primary drug abuse treatment increased from 41 percent of admissions in 1992 to 52 percent in 1997, in both relative and absolute terms. Individual abuse of both substances increased from 40 percent to 44 percent over the same period. Abuse of both substances when drug abuse was the primary diagnosis grew faster than when alcohol was the primary diagnosis (OAS, 1999b).

Figure 5.2 Treatment Admissions for Alcohol Abuse Declined and for Drug Abuse Increased between 1992 and 1997

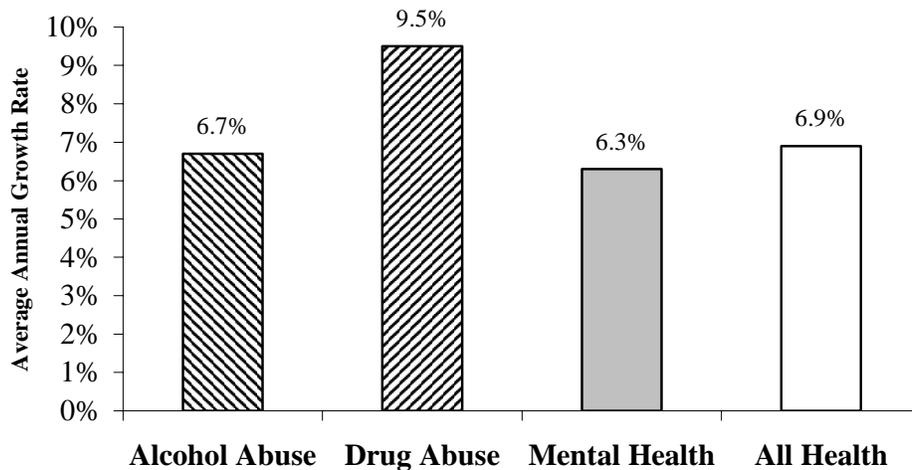


Source: Office of Applied Studies, 1999b, p.47.

Federal Expenditures Increased Significantly for Drug Abuse Treatment

Federal expenditures (that is, Medicare, the Federal share of Medicaid, and other Federal expenditures) for drug abuse treatment grew faster at 9.5 percent per year than they did for all other health conditions between 1987 and 1997. Federal spending during the same period for alcohol treatment grew 6.7 percent per year, in line with the growth of Federal spending on all health care, 6.9 percent per year.

Figure 5.3 Federal Funding of Drug Abuse Treatment Increased Faster than Federal Funding of All Health Care between 1987 and 1997



Source: CSAT/CMHS Spending Estimates (NHA-equivalent expenditures, Table E.2(c)).

Federal block grants played an important role in this expansion, as we saw in Chapter 3. The Federal SA block grant program gives considerable discretion to States. In the past, the SAPT grants required only that not less than 35 percent be spent for alcohol and not less than 35 percent be spent for drugs. (That requirement was stricken in the Youth Drug and Mental Health Act of 2000, P. L. 106-310.) During 1987-1997, the 14-percent-per-year increase in Federal block grant funds (Figure 3.9) outstripped the relative percentage increases in SA spending (either for alcohol or for drug abuse services) from all other sources of funding (Tables D.4(c) and E.4(c)).

Spending of Federal Medicaid funds on SA varies considerably. Many States cover substance abuse only within stringent limits on treatment services or only for detoxification rather than treatment (Johnson, 1999). In addition to block grants, Medicaid and Medicare funding for drug abuse treatment expanded greatly over the period. Medicaid funding increased 7.9 percent per year (Table E.4(c)) on a relatively large base, accounting for 14 percent of all drug abuse treatment spending in 1987 and resulting in a 20-percent share by 1997 (Table E.4(b)). During this period, other State and local funding of drug abuse services grew (at 2.1 percent per year), despite State action to move many of their health programs under Medicaid to reap the benefit of matching Federal Medicaid funds (Holahan et al., 1998). Again, some States even by 1998 did not cover substance abuse services under Medicaid (Johnson, 1999).

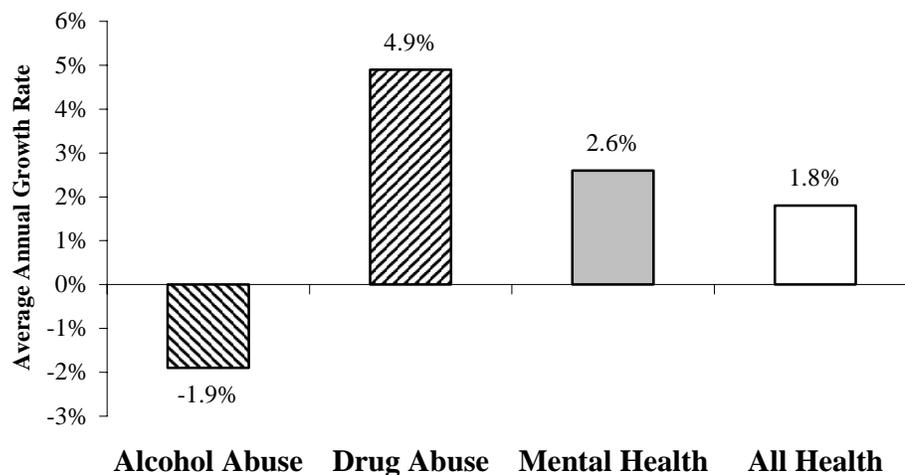
Medicare spending also increased dramatically for drug abuse treatment, although the Medicare base in 1987 was small (3.5 percent of all drug abuse treatment spending (Table E.2(b))). The most notable Medicare spending occurred after 1992: a rate of 15.9 percent per year (Table E.2(c)). That fast pace was likely related to the effects of a 1990 law expanding mental health benefits and supporting drug abuse treatment – reimbursement of psychologists, counselors, and social workers, coverage of medical management visits at parity with ambulatory visits, and inclusion of partial hospitalization (Frank, 2000).

Slow Increase in Private Funding of Drug Abuse Treatment; Decline for Alcohol

Private support for drug abuse treatment grew at a 2.3-percent-per-year rate, while the rate for alcohol abuse declined (-1.8 percent per year) (Table E.2(c)). The increasing private support for drug abuse services was considerably less rapid than for mental health services (3.6 percent annually) and all health care (4.1 percent yearly) over the period.

While private insurance led the increases for mental health and all health care, out-of-pocket dollars led the increase for drug abuse (Figure 5.4). Private out-of-pocket payments rose about twice as fast for drug abuse (4.9 percent annually) as they did for MH (2.6 percent per year) and faster yet than all health (1.8 percent yearly). Out-of-pocket spending on alcohol abuse services declined 1.9 percent per year, suggesting different dynamics for personal spending on treatment of alcohol abuse than for drug abuse, discussed in Chapter 6.

Figure 5.4 Private Out-of-Pocket Payments for Drug Abuse Treatment Increased Faster than for All Other Health Problems between 1987 and 1997



Source: CSAT/CMHS Spending Estimates (NHA-equivalent expenditures, Table E.2(c)).

Evidence of More Efficient Treatment

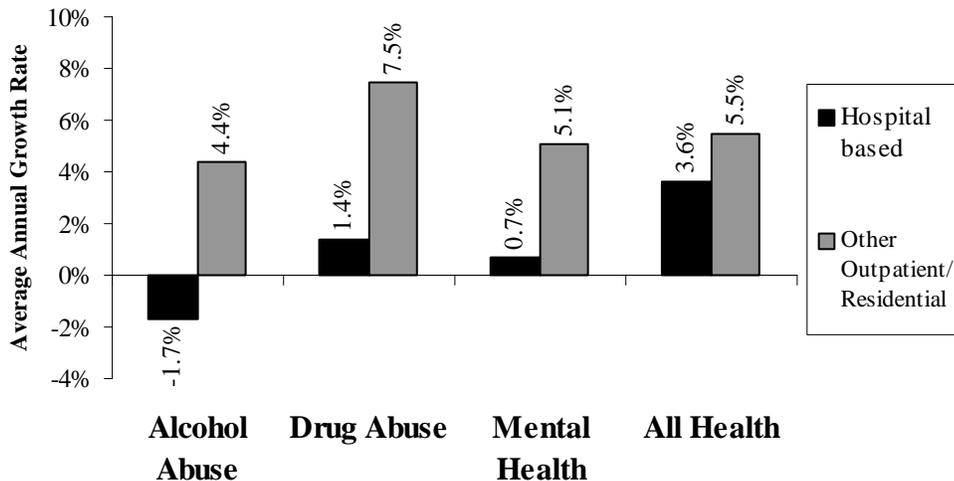
Despite a disparity in spending for alcohol and drug abuse treatment, changes in patterns of treatment did affect both fields during the period of 1987 to 1997.

Alcohol and Drug Abuse Spending Shifted from Hospital-Based to Other Services

Between 1987-1997, judging from spending patterns, hospital-based services for alcohol and drug abuse treatment were constrained relative to other treatments (Figure 5.5). This shift in treatment dollars was more prominent for SA than for other types of care. Spending on hospital-based alcohol services actually declined over the 10 years by an average 1.7 percent per year, while alcohol spending on other outpatient and residential treatments rose 4.4 percent per year. The decline in spending on hospital-based alcohol treatment may have been driven by the elimination of inpatient alcohol treatment programs, such as the “28-day program.”

While hospital-based drug abuse service spending rose by 1.4 percent per year, drug abuse spending in other outpatient and residential settings rose much faster by an average of 7.5 percent annually over the 10 years. This growth for drug abuse was actually greater than for MH (5.1 percent yearly) and all health (5.5 percent yearly). Many would view these trends toward greater outpatient treatments as positive results caused by changes in technology and pressures from managed care.

Figure 5.5 Outpatient/Residential Services Grew Notably Faster than Hospital-Based Services for Alcohol and Drug Abuse Treatment between 1987 and 1997



Source: CSAT/CMHS Spending Estimates (Inflation-adjusted, NHA-equivalent, Table E.1(c)).

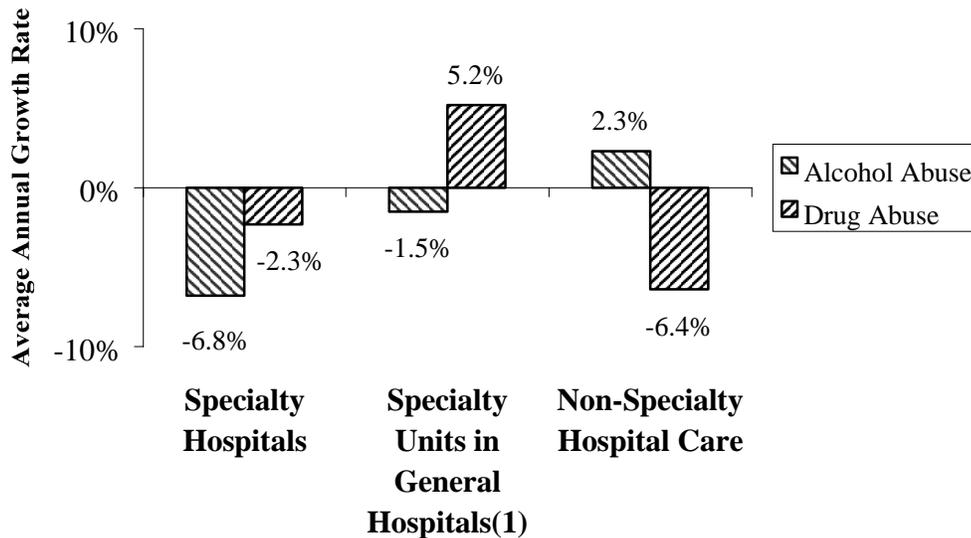
These important shifts in the locus of treatment for alcohol and drug abuse echo the literature, which has described the effectiveness of treatment outside the hospital. Furthermore, shorter hospital lengths of stay became possible for both detoxification and rehabilitation programs over this period (NIAAA, 1997). Detoxification now can be accomplished in outpatient settings for many patients with less serious withdrawal symptoms, given the improved drugs used for detoxification (IOM, 1990a).

Spending on Specialty Hospital Services Declined Dramatically

Spending for treatment in specialty hospitals declined dramatically for both drug abuse and alcohol treatment. *Drug abuse treatment spending in specialty hospitals declined by 2.3 percent per year after inflation. Alcohol treatment spending in specialty hospitals declined by three times as much, almost a seven-percent-per-year reduction across the 10-year period* (Figure 5.6).

The substantial declines for drug abuse treatment in specialty hospitals were not evident in specialty units of general hospitals (including in VA hospitals) (Figure 5.6). For alcohol, spending on those units declined, but by only 1.5 percent per year. For drug abuse, however, spending on those units took up some of the dollars that previously had gone to specialty hospitals. Drug abuse spending for treatment in specialty units of general hospitals rose 5.2 percent annually over the 10-year period. At the same time, expenditures on drug-abuse treatment in general service units of general hospitals declined markedly by 6.4 percent per year. The majority of hospital-based drug abuse treatment occurred in specialty units of general hospitals, and the net effect on drug abuse treatment spending for all hospital-based services was an increase of 1.4 percent per year (Figure 5.5).

Figure 5.6 Specialty Hospital Spending Declined for Alcohol and Drug Abuse Treatment between 1987 and 1997



Source: CSAT/CMHS Spending Estimates (Total expenditures, Table E.3(c)).

¹“Specialty units in general hospitals” includes community and VA hospitals.

As noted in earlier chapters, this view of hospital-based treatment does not show how much of the treatment dollars were for inpatient treatment as opposed to outpatient clinic or other facility based treatment modalities. It also does not distinguish between detoxification services and treatment for SA. Separation of detoxification and treatment services might have resulted in different conclusions.

Meaning of Trends in Alcohol and Drug Abuse Spending

These trends occurred in the context of a changing health care system and changing patterns of treatment for both alcohol and drug abuse disorders. In Chapter 6, we explore those changes and their effects on SA services and expenditures.

Chapter 6. Conclusions

Substance abuse (SA) disorders are associated with a substantial degree of morbidity and mortality, draining resources of individuals. The behavioral problems associated with substance abuse too frequently are lead to substantial losses in productivity and property and impose a high cost on society.

Over the past 10 years, major strides in the neurological and behavioral sciences have led to better understanding of the diversity of genetic and behavioral factors that influence the propensity of individuals to abuse substances (McLellan, et al, 2000). The health care system has struggled to treat SA disorders by finding financial resources to pay for treatment regimens and by searching for more effective treatments. A diverse network of professionals provides treatment that is rarely standardized or evaluated in terms of outcomes for patients. Changes in treatment philosophy and more recently managed care have moved care out of hospitals and into community settings. These forces may have reduced SA expenditures (e.g., less reliance on expensive hospital care, shorter hospital stays, and detoxification in outpatient settings) or they simply may have shifted the locus of care from private insurance to public programs, without reducing the cost of treatment.

Given the dramatic changes in the health care landscape it is important to follow how SA treatment dollars are changing and to evaluate that pattern relative to overall spending in the health care industry. On a national scale, who is paying for SA treatment? Are government roles increasing? Are private insurers cutting SA benefits? Who is providing treatment and receiving SA dollars? How is the locus of care changing?

Study Methods

This document is derived from a larger study of mental health and substance abuse (MH/SA) treatment expenditures in the United States (Coffey et al., 2000; Mark et al., 2000(a and b)). Those reports discuss a second set of estimates that are part of a series of planned, periodic updates of national expenditures for MH/SA treatment. The estimates can be compared with all health care spending nationally, as contained in the National Health Accounts of the United States (see for example, Braden et al., 1998).

This study also provides an historical perspective developed with a single consistent method so trends in, for example, SA treatment expenditures can be identified. In addition to all health care expenditures, this work also distinguishes spending for mental health (MH), substance abuse (SA), alcohol abuse, and drug abuse, separately. These separate estimates permit policymakers to discern whether and where their program policy initiatives have had an impact. And they provide a way to assess how public policy changes may interact with the dynamics of the private health care system.

National Trends in Health Care in Relation to SA Treatment

Nationally, the trend toward slowing the rise in health care costs began in 1991, propelled by industry changes such as the shift to managed care plans, price competition among health plans, and low general and medical inflation (Braden et al., 1998). The same forces likely restrained SA spending growth, although it is possible those forces took hold sooner and had a greater impact on SA than on MH or all health, judging from the rate of growth of spending. It is also possible that the slower growth of SA spending reflects an erosion of health insurance benefits for SA.

Enrollment Trends in the Private Sector

Enrollment in managed care plans and in plans that specialize in managing behavioral health benefits has grown rapidly since the early 1990s. In 1987, traditional insurance based on fee-for-service was the dominant method of financing health care; by 1998, fewer than 15 percent of active employees covered in employer-sponsored health plans were enrolled in indemnity insurance (Collective Bargaining Reporter, 1998). While in 1987, behavioral health care plans were essentially unknown, they enrolled 48 percent of the insured population by the end of 1992 and 57 percent by the end of 1997 (Open Minds, 1993 and 1998). These facts likely have had significant effects on SA- and MH-related utilization and expenditures by private insurers.

Enrollment Trends in the Public Sector

Public payers followed private payers in adopting managed care. Managed care grew from 9.5 percent of total Medicaid enrollment in 1991 to nearly one-half (47.8 percent) in 1997 (Braden et al., 1998). Likewise, enrollment of Medicare beneficiaries in HMOs increased, although at a much more conservative pace, from about three percent of Medicare enrollees to 13.5 percent over the same period (Braden et al., 1998).

Information is limited on Medicaid adoption of behavioral health care plans (BHCPs) for their recipients. One qualitative study of Medicaid BHCPs indicates that they have grown in use and complexity among 54 Medicaid contracts (GWU, 1998). Understanding the penetration and effects of BHCPs is essential to understanding the slower growth of SA in relation to all health care and for understanding a slowdown in Medicaid funding for SA in the second half of the study period.

Effects of Managed Care

Research has shown that managed care organizations (MCOs) constrain utilization and expenditures. BHCPs apparently control spending for SA treatment more effectively than they do for MH services. The introduction of a capitated behavioral health care carve-out plan for Massachusetts Medicaid had a substantial impact on SA treatment and expenditures. While the number of users of inpatient services per 1000 Medicaid enrollees declined 2.4 percent for MH, it declined 61.2 percent for SA. Other SA services (detoxification and methadone maintenance) increased substantially (Callahan et al., 1995).

Savings come from shifting use from inpatient services to outpatient services and decreasing the volume of services, typically number of admissions, average length of stay, and to a lesser extent, mean number of outpatient visits (Callahan et al., 1995; Frank and McGuire, 1997; Ma and McGuire, 1998; Larson et al., 1997; Huskamp, 1998; Brisson and Frank, 1999; Leslie and Rosenheck, 1999; Stein et al., 1999; Weisner et al., 1999; Wickizer and Lessler, 1998; see Grazier and Eselius, 1999 and Weisner et al., 1999 for reviews of the issue). Furthermore, utilization review of hospital admissions and length of stay may have a greater impact on SA and MH care than on care for other conditions (Callahan et al., 1995; Wickizer and Lessler, 1998).

BHCPs argue that they substantially lessen the costs of SA and MH treatment by utilizing case management. The management may involve many activities: access to case managers, use of community care instead of inpatient treatment, follow-up after hospitalization and after treatment in an emergency room, and/or family involvement in treatment. SA program directors concur that while services are unduly restricted, marketing, outreach, and follow-up are enhanced; outcomes are an increasing focus under managed care (McNeese-Smith, 1998; Alexander, Lemark, 1997). These sources also question the effects of managed care on treatment quality. Findings such as increased detoxification services under BHCPs raise warning flags (Callahan et al., 1995). Detoxification alone is not considered treatment for substance abuse (IOM, 1990a). Does the increased use of detoxification come at the expense of counseling and continuing care? Few quantitative findings on quality of care are available. One study found that recidivism rates for SA in one institution were the same under managed care and traditional payment methods (Renz, 1995).

Variation in the cost of treating SA is consistent with the apparent ability of BHCPs to reduce the cost of SA. Therapeutic community treatment programs for drug abuse compared across three sites in three States (Arizona, New Jersey, and New York) ranged from \$10,893 to \$29,117 per treatment episode (French, 1996). This variation across programs with apparently similar goals suggests that large price variation may be one reason why BHCPs have been able to reduce the cost of SA treatment.

Based on this literature, we speculate that the slower growth of SA spending in the first five years of the 10-year trend might have been due to managed care influences. In particular, enrollment under managed care contracts was greater in the first half than the second half of the study period (Open Minds, 1993 and 1998). The strong evidence on the effectiveness of BHCPs suggests that managed care may have made substantial contributions to the greater decline in hospital expenditures for SA than for all health care services over the study period and likely also constrained the use of residential and outpatient services.

Changes in Treatment Philosophy

The shift away from hospital care also reflects a long-term shift in thinking about the most cost-effective and beneficial modes for treating behavioral health disorders (IOM, 1990a; NIDA, 1999). Since the 1950s, State governments have been downsizing and closing public mental hospitals and other specialty hospitals; long-term patients have been returned to community residence and care in general hospitals (Mechanic et al., 1998; Bachrach, 1996). Because the Medicaid program prohibits payments to Institutions for Mental Disease for

those between the ages of 21 and 65, Medicaid has held down funding for care of many persons who formerly would have received care in public mental hospitals or in residential centers with more than 16 beds (Frank, 2000).

Private SA and MH facilities responded to this trend by enhancing their services. Partial hospitalization became one approach for treating people with serious substance abuse problems (IOM, 1990a). Residential treatment in therapeutic communities expanded (Callahan et al., 1995 and 1998). 2000a). Since detoxification on an outpatient basis is more often recommended today than in the 1980s, only persons with severe withdrawal and other medical complications now require hospitalization (IOM, 1990a).

What Does Slower SA Growth Mean?

The slower growth rate of SA spending relative to mental health and all health care may reflect two important policy shifts or perhaps simply a different technology of care. One policy change, discussed above, is the greater influence of managed behavioral health on SA disorders. The other policy shift may be new restrictions on SA coverage under private insurance or public programs. Understanding these potential causes helps delineate whether remedies are warranted or not.

A number of questions are raised if restraints on SA spending are due to greater efficiency of managed behavioral health care. Does management of services create greater access barriers to SA treatment resulting in fewer people being treated? Or do these changes indicate that SA treatment has become relatively more cost-effective with the same number of (or more) people being served with fewer dollars? While reduction of treatment costs is desirable, the consequences of those reductions should be monitored closely. The continued long waiting lists, particularly in urban SA programs (IOM, 1990a; ONDCP, 2000), attest to the fact that managed care in Medicaid and private insurance has not alleviated those problems.

If slower SA spending is the result of growing SA coverage restrictions by private and public programs, the policy prescription is more straightforward. Laws to promote substance abuse treatment parity with all health care will be necessary.

An alternative viewpoint is that slower SA spending growth may have occurred because SA is fundamentally different from the rest of the health care system and, increasingly, different from MH. SA services have faced less of the rapid, continuous change in underlying technologies that can dramatically increase the cost of health care once new treatments become widespread. For example, new, expensive surgical procedures (such as organ transplants (Andrews et al., 1994)) save lives but sizably increase the cost of health care, especially as they become disseminated widely. New, expensive drug therapies widely disseminated for mental illness may have accelerated MH expenditures, while they clearly have not been used for SA treatment to the same extent, perhaps contributing to the differential growth of SA and MH expenditures.

This study shows several trends consistent with slower growth of SA spending than of all health care services over the period from 1987 to 1997:

- faster reduction in inpatient care;
- similar growth in outpatient and residential spending;
- stronger cost containment pressures from third-party management of SA (fairly convincing in the literature) and;
- a treatment regimen that is less pressured by new technological imperatives.

However, these conclusions are more circumstantial than definitive explanations of why SA spending has risen more slowly than MH and all health care. More detailed work is needed and is underway on these issues (e.g., Frank et al., 1998).

Our study of SA expenditures raises another other important question about the capacity of substance abuse providers. *Why do independent specialists in MH/SA treatment (psychiatrists, psychologists, counselors, and social workers) receive a lower proportion of SA dollars than MH dollars? Are these specialists less likely to accept addiction clients than mental health clients? Are these professionals less well trained to treat SA than mental illness? Are their SA services less likely to be covered by third-party payments than their MH services? What is the impact of the high degree of separation of SA and MH services on persons who suffer from dual diagnoses of substance abuse and mental disorders? Research is needed for definitive conclusions about the capacity of the substance abuse network of treatment providers, insurance coverage of their services, and about the continuity of care available to clients with dual disorders.*

Another area for concern is the substantial lag in private financing for SA treatment behind that for mental health and all health care problems. Private insurers' inflation-adjusted payments for SA treatment declined 0.6 percent each year on average over this period, while private insurance expenditures grew 4.7 percent annually for MH and 5.4 percent yearly for all health. If the declines in private reimbursement for SA services were the result of increased efficiencies in treatment of SA, we would look to find the same trend (a decrease) in out-of-pocket costs to those being treated. But this is not the case. Out-of-pocket costs to SA clients and/or their families increased over the period, albeit at a rate below out-of-pocket increases for MH and all health care.

Meaning of Trends in Alcohol and Drug Abuse Spending

Literature over the last 10 years reports major changes in the treatment settings and regimens for alcohol and drug abuse (IOM, 1990a; NIAAA, 1997; Weisner et al., 1999). These changes encompass:

- restrained use of inpatient services reserved for the most severe drug problems;
- use of partial hospitalization rather than long stays whenever possible;
- use of outpatient and social (residential, non-hospital treatment) settings for detoxification (except for complicated withdrawal cases);
- earlier community-based rehabilitation;
- better integration of services to coordinate care across settings; and
- focus on continuity and outcomes (as yet unsubstantiated) of treatment.

These changes are generally acknowledged to have been stimulated by the financial imperative of managed care and credited to the specialized knowledge of managed behavioral health care plans.

What Does the Growth in Drug Abuse Treatment Spending Mean?

The faster spending on treatment for drug abuse did not mirror exactly the rates of drug abuse by the U.S. population (OAS, 1999b). The National Household Survey on Drug Abuse (NHSDA) shows that illicit drug use was at its zenith in the late 1970s and mid-1980s for those residents in households (including those in shelters and group homes). Use of any illicit drug reported in “the past month” has been fairly steady since 1988 – declining slightly from 7.7 percent of the population in 1988 to 6.4 percent in 1997. Thus, while expenditures and treatment for drug abuse have been growing, the prevalence of abuse in the general population has remained fairly steady.

As a result, estimates of the “treatment gap” for drug abuse suggest that the gap has narrowed (Epstein and Gfroerer, 1998). This gap is the difference between the number of people in drug abuse treatment (based on the UFDS data) and the number of people who need treatment based on severe abuse of drugs (from the NHSDA). This treatment gap declined for most of the period during which it has been measured, from 3.5 million people without treatment in 1991 to 3.3 million untreated in 1996.

Despite improvements in the treatment gap brought about by more spending on drug abuse treatment, the majority of people with serious drug abuse problems (63 percent) still go untreated. An estimated 3.3 million of the 5.3 million people with severe drug abuse problems in 1996 were not treated for those problems (Epstein and Gfroerer, 1998). This high percentage, coupled with the existence of waiting lists for drug treatment especially in urban areas (IOM, 1990a; ONDCP, 2000), suggests that drug abuse treatment capacity is still inadequately financed to significantly reduce the drug abuse problem and its associated social costs in the United States.

What Does the Slow Growth in Alcohol Treatment Spending Mean?

The proportion of the United States population treated for alcohol-related problems has declined over the period of this study. The number of people treated on a single day in 1988 in facilities licensed or tracked by States was 875.7 thousand; the number in 1997 was 713.7 thousand (OAS, 1999b). At the same time, heavy use of alcohol (defined as “five or more drinks on the same occasion on each of five or more days in the past thirty days” reported in the NHSDA household surveys) remained fairly steady in the United States. In 1988, an estimated 11.5 million people indulged in heavy alcohol consumption, in 1997, 11.2 million did (OAS, 1998).

While the OAS statistics do not capture all treatment for alcohol problems, those figures coupled with alcohol treatment expenditure estimates from this study (which are comprehensive) suggest a wide, and perhaps widening, gap in the treatment of people with serious alcohol problems. Total spending on alcohol treatment remains nearly unchanged over the decade compared to spending on all health care problems.

This might raise little concern for alarm, except that one vision for alcohol treatment is to reach all of those with alcohol dependence and also many of those with less serious alcohol problems. The Institute of Medicine assembled a panel of experts in the late 1980s who recommended broadening the base of treatment of alcohol problems – not only providing better, more integrated treatment for those with the most serious problems, but also providing treatment for those with less serious conditions (for example, teenage binge alcohol consumption) and providing early intervention to reach teenagers before they are caught in a chronic health problem. If those recommendations had been acted upon, we would have expected substantially increased numbers of people in treatment and greater expenditures on alcohol treatment.

At the same time managed care has been pressuring providers of alcohol and drug abuse treatment services to reduce the use of services. Because of frequent medical complications which plague those with alcohol dependence, managed care has likely had a dual impact on alcohol treatment. We cannot assess in this study whether these effects of managed care and slower spending on alcohol problems compared to other diseases represent less treatment or more efficient care. Even if the result is more efficient care, the question that remains in evaluating these aggregate spending trends is what effect the constraints have on outcomes for people with alcohol problems.

Conclusion

What can be concluded from the fact that during the period 1987 to 1997 SA spending grew, but at a rate significantly below mental health and all health care expenditures? First, given the significant gap between prevalence and treatment of substance abuse disorders reported in SAMHSA surveys (OAS, 1998a), growth in expenditures is a welcome finding. We know that, overall, more people are seeking treatment at SA facilities. For example, the UFDS survey of substance abuse facilities shows that 929 thousand clients on a single day in 1997 sought help in coping with substance abuse problems, up from 768 thousand on the same day in 1990 (OAS, 1999a). Unfortunately, we do not know whether the number of people in the privately financed treatment system has risen, stayed the same, or declined. And, we do not know whether there is a trend forcing private clients to move to public programs.

Second, without further work that dissects the rate of expenditure growth into changes in utilization and changes in prices, it is impossible to say whether access and use of needed services did indeed improve over the time period. The relatively low growth rate of SA spending relative to MH and all health care spending is particularly troubling in this regard. This is particularly disconcerting in light of the fact that about five million people are in need of drug abuse treatment while only about two million are receiving treatment (OAS, 1998b; ONDCP, 2000).

Evidence from this report and other research also demonstrates that SA expenditures can be contained. Over the study period, there was a greater recognition that alcohol and drug treatments can be accomplished for many cases in less expensive outpatient and residential settings. This was especially apparent from the estimates for alcohol treatment, where private insurance has historically played a larger role and where the cutbacks were large.

If we can resolve the questions about the quality of treatments received by persons suffering from addictions under managed care, we can be more certain about the best directions for substance abuse treatment programs in the future. Assuming no adverse effects on the quality and outcomes of treatment, the trend in slower spending on substance abuse treatment (evident from this study) could create a financial opportunity to treat more people with SA problems by reinvesting the savings in substance abuse treatment. Reinvestment is more likely to play out under public programs (which are substantial in this field) than under private insurance. Under private insurance, savings are normally translated into lower premiums for employers and employees or larger profits for insurers. The challenge remains for public payers – primarily the State and local governments that manage the majority of public substance abuse dollars – to realize potential for savings in both alcohol and drug abuse services and translate them into treatments for additional people who suffer from substance abuse problems. Only with greater efforts to ensure access to treatments, monitor quality of services provided, and, at the same time, contain treatment costs can we increase the number of people reached by substance abuse treatment. This is one way we can strive to lessen the tremendous costs to society of substance abuse and create a more satisfied life for those who are plagued by substance abuse disorders.

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Glossary of Acronyms and Terms

Acronyms:

GDP = Gross Domestic Product
HCFA = Health Care Financing Administration
HCUP-NIS = Healthcare Cost and Utilization Project, Nationwide Inpatient Sample
IMHO = Inventory of Mental Health Organizations
MH/SA = Mental Health and Substance Abuse, including alcohol and drug abuse
MSMHO = Multi-Service Mental Health Organizations
NAMCS = National Ambulatory Medical Care Survey
NDATUS = National Drug and Alcoholism Treatment Unit Survey
NHA = National Health Accounts
NHAMCS = National Hospital Ambulatory Medical Care Survey
NHDS = National Hospital Discharge Survey
NHHCS = National Home and Hospice Care Survey
NMES = National Medical Expenditure Survey
SAMHSA = Substance Abuse and Mental Health Services Administration
SIC = Standard Industrial Classification
UFDS = Uniform Facility Data Set

Terms:

General Hospital Specialty Units: Specialty psychiatric or substance abuse units of community hospitals and Veterans Affairs hospitals.

Hospital-based Services: All services owned and operated by hospitals – inpatient, outpatient (including clinics and home health), and residential facilities (including nursing homes).

Insurance Administration: Administrative expenses of all third-party payers and profit and reserve adjustments for private insurers.

MarketScan®: A private database of The MEDSTAT Group, Inc. The database includes paid insurance claims for seven million privately insured persons from large employers across the Nation.

Medicaid: A State-administered and State-and-Federally-funded program which provides health care services for certain low-income persons.

Medicare: A Federal government health insurance program for persons 65 years of age and over, for people entitled to social security disability payments for two years or more, and for people with end-stage renal disease, regardless of income.

Multi-Service Mental Health Organizations (MSMHOs): A variety of providers such as community mental health centers, residential treatment facilities for the mentally ill, and partial care facilities. Some MSMHO providers treat people with substance abuse disorders.

National Health Accounts: A system of accounting for expenditures on health care in the United States developed and maintained by the Health Care Financing Administration.

Non-Community Hospitals (for NHA comparisons): Psychiatric hospitals, Veterans Affairs hospitals, and other specialty hospitals and all of their hospital-based services.

Non-Specialty Care in Community Hospitals: That portion of care provided in community hospitals outside of specialty psychiatric or substance abuse treatment units.

This category excludes VA hospitals.

Other Federal Government: Health care covered or provided by Federal government agencies and programs other than Medicaid or Medicare (e.g., Veterans Affairs, Department of Defense, and Federal block grants to the States).

Other Non-Durable Medical Products: Non-prescription drugs and medical sundries.

Other Outpatient and Residential Care: All providers except for hospital-based services, retail prescription drugs, and insurance administration. Note hospital-based services include some outpatient services, which are thus excluded from the “other outpatient and residential care” category. This latter category captures most (albeit imperfectly) outpatient and non-hospital-based services to MH/SA clients.

Other Personal Health Care and Government Public Health Activities: Direct services provided by community health centers (SA or MH). Also, it includes direct services provided by employers for the health care needs of their employees, offered either on-site or off-site. Government expenditures for care not specified in kind, or health care spending that is not elsewhere classified. This tends to include services offered at non-health facilities such as at schools, military field stations, prisons, and community centers. Health care spending at prisons is excluded when it is paid for by the correctional system and funded internally [or outside government health agencies]. If the services are obtained through contract with other health facilities or independent practitioners, they are included in the respective provider category.

Other Private: A residual category of nonpublic funds which include philanthropy, foundation grants, gift shops, and cafeterias, as well as health care provider investment income.

Other Professionals: This category includes non-physician professionals including psychologists, counselors, and social workers. For the NHA-equivalent estimates, this category 1) includes only health-related services of non-physician health professionals such as psychologists, chiropractors, optometrists, podiatrists, and other licensed medical practitioners, as well as miscellaneous health and allied services, and 2) excludes independently billing, social service providers who provide services outside of what is considered typically to be health services (such as job placement). The latter group includes counselors and social workers.

Other State/Local Government: Health care expenditures by State and local governments other than that for Medicaid.

Out-of-Pocket Spending: Expenditures that are made by individuals or their families for health care services that are not reimbursed by health insurers or publicly subsidized programs. This includes payments by those without and with insurance. For the insured, out-of-pocket payments can include: copayment and deductible amounts, services uninsured or beyond insurance limits, as well as MH/SA encounters paid entirely by the client or family to avoid the stigma of MH/SA treatment on insurance records. Health insurance premiums are excluded from this category.

Residential Treatment Centers for Children: These residential facilities primarily treat emotionally disturbed children and may include a small amount of inpatient treatment, as well as outpatient care. They also treat adolescents for substance abuse problems.

Retail Prescription Drugs: Prescriptions obtained through retail (pharmacy or mail order) distribution. Inpatient drug treatment and facilities which dispense drugs through public programs, such as methadone clinics, are not included in this category, but rather are part of

the specific facility expenditure.

Specialty Hospitals: Psychiatric hospitals, which specialize in mental health or substance abuse treatment, and all of their hospital-based services.

Specialty Substance Abuse Centers (SSACs): Freestanding substance abuse centers and units of other facilities. Thus, for example, it includes methadone maintenance clinics, other facilities that primarily serve persons with substance abuse problems, and units of public health clinics, charitable organizations, correctional facilities, and other entities. Some of these organizations have substance abuse as their primary mission and others treat substance abuse as a secondary function. We assume that all services provided at these facilities are primarily for treatment of substance abuse rather than mental health disorders.

Standard Industrial Codes: A classification system used by the Bureau of the Census to classify businesses.