

Behavioral Health is Essential To Health • Prevention Works • Treatment is Effective • People Recover



National Expenditures for Mental Health Services & Substance Abuse Treatment

1986 – 2009

National Expenditures for Mental Health Services and Substance Abuse Treatment 1986–2009

U.S. Department of Health and Human Services
Substance Abuse and Mental Health Services Administration
Center for Mental Health Services
Center for Substance Abuse Treatment

ACKNOWLEDGMENTS

This report was prepared for the Substance Abuse and Mental Health Services Administration (SAMHSA) by Truven Health Analytics Inc, formerly the Healthcare business of Thomson Reuters, under SAMHSA IDIQ Prime Contract #HHSS283200700029I, Task Order #HHSS283200700029I/HHSS28342002T with SAMHSA, U.S. Department of Health and Human Services (HHS). Juli Harkins and Rasheda Parks served as the Contracting Officer Representatives.

DISCLAIMER

The views, opinions, and content of this publication are those of the authors and do not necessarily reflect the views, opinions, or policies of SAMHSA or HHS.

PUBLIC DOMAIN NOTICE

All material appearing in this report is in the public domain and may be reproduced or copied without permission from SAMHSA. Citation of the source is appreciated. However, this publication may not be reproduced or distributed for a fee without the specific, written authorization of the Office of Communications, SAMHSA, HHS.

ELECTRONIC ACCESS AND COPIES OF PUBLICATION

This publication may be downloaded at <http://store.samhsa.gov>. Or, call SAMHSA at 1-877-SAMHSA-7 (1-877-726-4727) (English and Español).

RECOMMENDED CITATION

Substance Abuse and Mental Health Services Administration. National Expenditures for Mental Health Services and Substance Abuse Treatment, 1986–2009. HHS Publication No. SMA-13-4740. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2013.

ORIGINATING OFFICES

Survey, Analysis, and Financing Branch, Division of State and Community Systems Development, Center for Mental Health Services, and Quality Improvement Branch, Division of Services Improvement, Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration, 1 Choke Cherry Road, Rockville, MD 20857.

HHS Publication No. SMA-13-4740.

Printed in 2013

Executive Summary

The Substance Abuse and Mental Health Services Administration (SAMHSA) Spending Estimates (SSE) initiative was created to provide policymakers with essential information on expenditures for mental health (MH) and substance abuse (SA) treatment services, sources of financing, and trends over time.¹ The SSE has helped to document past inequities through its ability to compare spending and financing sources for MH and SA treatment with those for all-health spending. Such comparisons can be performed because the SSE was designed to closely mirror the National Health Expenditure Accounts (NHEA), which are produced annually by the Centers for Medicare & Medicaid Services (CMS). The current report presents estimates and analyses from 1986 through 2009. The results serve as a baseline for understanding the impact of coverage and eligibility expansions anticipated beyond 2009 and how the structure of financing will be affected. They will also allow policymakers to gauge the effectiveness of parity and coverage expansion from the financing perspective and point out unanticipated consequences, if any.

The six policy questions are addressed in this report for a baseline period of 1986–2009, before the implementation of the new laws that are changing behavioral health care in the United States:

- How much was spent in the United States for MH and SA treatment?
- Who paid for MH and SA services and how much did they spend?
- How much was spent by type of provider—hospitals, physicians, specialty MH and SA centers, etc.?
- How much was spent on MH and SA services by type of setting—inpatient, outpatient, residential?
- How has spending changed over time?
- How did MH and SA expenditures compare with those for all health care spending?

MHSA spending estimates in this report focus on expenditures for treatment and not disease burden; they include only spending for the direct treatment of mental and/or substance use disorders (M/SUDs) and exclude other substantial comorbid health costs that can result from M/SUDs (e.g., trauma and liver cirrhosis). Other costs of patient care such as job training and subsidized housing are also excluded, as are indirect costs such as lost wages and productivity.

General findings:

Total MHSA Treatment Spending

- MHSA treatment spending from all public and private sources totaled \$172 billion in 2009.
- MHSA treatment spending as a share of all-health spending declined from 9.4 percent in 1986 to 7.4 percent in 2004, where it remained through 2009.

¹Throughout the report, we use the traditional labels of mental health (MH), substance abuse (SA), or combined mental health and substance abuse (MHSA) for programs, providers, services, treatments, or spending. Also in these contexts, we may use the term behavioral health to refer to MH, SA, or MHSA. We use the more recent nomenclature of the Institute of Medicine (2006)-mental and/or substance use (M/SU) conditions-for individuals when we refer to their problems, illnesses, or disorders. Our estimates encompass all levels of severity (Institute of Medicine, 2006).

- MHSA treatment spending lagged behind growth in all-health spending between 1986 and 1998. However, from 1998 to 2009, growth in MHSA spending and all-health spending was similar, largely due to the growth in MH prescription drug spending that surged during this period.
- During the recession from 2007 to 2009, all-health spending and MHSA spending grew at record-setting slow rates—4.5 percent and 4.3 percent average annual increases, respectively.
- Slow growth in *private* spending was responsible for slow MHSA spending growth during the recession. From 2007 to 2009, MHSA private spending averaged increases of only 2.7 percent.
- In contrast, growth in *public* spending for MHSA remained strong and relatively constant during the recession, increasing at an average annual rate of 7.4 percent. Accelerating growth in federal funding sustained public MHSA spending during the recession, while state and local funding languished. Federal MHSA spending growth increased from an average of 7.2 percent annually in 2004–2007 to 11.1 percent in 2007–2009. In contrast, other state and local MHSA spending rose at an average annual rate of 3.7 percent from 2004–2007 and declined at an annual rate of –1.2 percent from 2007–2009.

MH Spending

- At \$147 billion, MH spending accounted for 6.3 percent of all-health spending in 2009.
- MH treatment spending depended more on public payers than spending for all-health care in 2009; public payers accounted for 60 percent of MH spending but just 49 percent of all-health spending.
- Medicaid (27 percent of MH spending) and private insurance (26 percent of MH spending) accounted for more than half of MH spending in 2009.
- The state share of Medicaid financing combined with other state and local funding (referred to as *all state* spending in Appendix A tables) creates a total for all state contributions to MH spending. During the 2007-2009 recession, these combined state contributions fell (down by –0.3 percent), compared to 3.3 percent average annual increases in the pre-recession period of 2004–2007.
- MH spending for all payers combined on treating mental disorders amounted to 6.3 percent of all-health spending in 2009 but varied considerably by payer. MH other state and local spending accounted for 14.8 percent of all-health other state and local spending and MH Medicaid spending accounted for 10.4 percent of all-health Medicaid spending. In contrast, MH private insurance spending accounted for only 4.8 percent of all-health private insurance spending.
- Prescription drugs accounted for the largest share of MH spending in 2009—28 percent. At the height of the expansion of spending on psychotropic medications from 1992 to 2004, spending rose at an average annual rate of 17.7 percent and was responsible for about half of the increase in MH spending. From 2004 to 2007, spending slowed dramatically,

averaging increases of 6.5 percent annually and by 2007, spending on prescription medications was no longer growing as a share of all MH spending.

- With the creation of Medicare Part D in 2006, financial responsibility for prescription drugs for dually eligible Medicare and Medicaid enrollees was shifted from Medicaid to Medicare. In 2005, about 1 percent of all MH medications were paid by Medicare and 36 percent by Medicaid. In 2006, the shares shifted to 13 percent paid by Medicare and 19 percent by Medicaid.
- About one-quarter of MH spending went for treatment in hospitals in 2009. Treatment in general hospitals accounted for 15 percent of MH spending; spending in specialty psychiatric and chemical dependency hospitals accounted for 11 percent.

SA Treatment Spending

- At \$24 billion, SA spending accounted for 1.0 percent of all-health spending in 2009.
- Public payers were responsible for 69 percent of SA treatment spending in 2009—an even higher share than for MH (60 percent).
- SAMHSA SA block grants, included as part of other federal spending, accounted for 5 percent of all SA spending.
- State and local payers (excluding the state share of Medicaid) accounted for the largest share of SA treatment spending (31 percent) in 2009. Other major payers were Medicaid (21 percent of SA spending) and private insurance (16 percent).
- Between 1986 and 2009, the share of SA spending increased for Medicaid (from 9 percent to 21 percent) and for other state and local governments (from 27 percent to 31 percent) and decreased for private insurance (from 32 percent to 16 percent).
- Spending on treating SUDs amounted to 1.0 percent of all-health spending in 2009 but varied considerably by payer: SA spending accounted for 5.1 percent of other state and local spending, 2.4 percent of other federal spending, and 1.4 percent of Medicaid spending for all-health, but only 0.5 percent of private insurance spending on all-health.
- Specialty SA centers received the largest portion (35 percent) of SA treatment spending in 2009, down from a high of 45 percent in 2002 to 35 percent in 2009.
- Spending on SA prescription drugs increased significantly in recent years, from \$6 million in 1986 to \$887 million in 2009; 93 percent of this spending was for the purchase of buprenorphine—a medication used to treat opioid addiction. Despite the rapid spending growth, prescription medications for treatment of substance use disorders made up only 4 percent of SA treatment spending in 2009.
- The share of SA treatment spending in inpatient settings decreased dramatically from 50 percent in 1986 to 21 percent in 2009.

Contents

| | |
|---|------------|
| Executive Summary | iii |
| Contents..... | vii |
| Introduction | 1 |
| Mental Health and Substance Abuse Spending Overview | 7 |
| MH and SA Treatment Spending Totaled \$172 Billion in 2009 | 8 |
| MHSA Spending Growth Slowed in Recent Years and Aligned Closely with All-Health Spending Growth | 9 |
| MH Treatment Spending Has Stabilized as a Share of All-Health Spending; SA Treatment Spending Share Continued to Fall Through 2009 | 10 |
| Slowest Growth in MHSA Spending in 10 Years Took Place During the Recent Recession (2007–2009) | 11 |
| Growth in Private MHSA Spending Slumped During the Recent Recession | 12 |
| Growth in Public MHSA Spending Remained Strong During the Recent Recession | 13 |
| Federal MHSA Spending Remained Strong While State and Local Spending Languished During the Recession..... | 14 |
| Mental Health: Spending by Payer..... | 15 |
| After Lagging Behind All-Health Spending Growth Through 1998, Recent Growth in MH Spending Aligns With All-Health Spending..... | 16 |
| MH Treatment Depended More on Public Spending than Did All-Health Treatment in 2009 | 17 |
| Medicaid and Private Insurance Were the Largest Payers for MH Treatment in 2009 | 18 |
| Shares of Other State and Local MH Spending Decreased; Shares of Medicaid and Private Insurance Increased, Between 1986 and 2009 | 19 |
| Medicaid and Private Insurance Contributed Most to the MH Spending Increases Between 1986 and 2009 | 20 |
| MH Spending Accounted for 6.3 Percent of All-Health Spending in 2009;by Payer, MH Share Varied Considerably | 21 |
| MH Share of All-Health Spending Rose Slightly for Many Payers from 1998 to 2009, After Declining as a Share from 1986 to 1998..... | 22 |
| Mental Health: Spending by Provider, Setting, and Specialty Type | 23 |
| Prescription Drugs and Hospital Treatment Each Accounted for More than One-Quarter of MH Spending in 2009 | 24 |
| Although Still the Largest Driver of MH Spending Increases, Prescription Medications Accounted for Less of Spending Increase from 2007 to 2009..... | 25 |
| MH Medication Spending Growth Slowed Dramatically, Increasing Only 5.6 Percent Each Year on Average from 2004 to 2009 | 26 |
| Share of MH Medication Spending for Antidepressants Dropped; Share for Antipsychotics and ADHD Medications Rose, from 2002 to 2009 | 27 |

| | |
|---|-----------|
| The Implementation of Medicare Part D in 2006 Shifted MH Prescription Drug Spending from Medicaid to Medicare | 28 |
| Share of MH Spending on Specialty MH and SA Hospitals Fell Sharply from 1986 to 2002, then Stabilized in Recent Years | 29 |
| Specialty Providers Accounted for Three-Quarters of MH Spending Throughout Most of the Period from 1986 to 2009 | 30 |
| Shares of Spending for Inpatient and Residential Settings Fell, Shares for Outpatient and Prescription Drugs Rose, from 1986 to 2009 | 31 |
| Substance Abuse: Spending by Payer | 33 |
| Growth in SA Treatment Spending Lagged Behind Growth in All-Health Spending for All Periods from 1986 Through 2009 | 34 |
| Public Payers Financed \$7 Out of Every \$10 Spent on SA Treatment in 2009..... | 36 |
| Other State and Local Payers Accounted for the Largest Share of Spending on SA Treatment in 2009 | 37 |
| Share of SA Spending from Private Insurance Decreased; Shares of Medicaid and Other State and Local Government Spending Grew, Between 1986 and 2009 | 38 |
| Other State and Local Payers and Medicaid Contributed Most to Increases in SA Spending | 39 |
| SA Spending Accounted for Only One Percent of All-Health Spending in 2009 and a Substantially Smaller Share of All Private Health Insurance | 40 |
| SA Share of All-Health Spending Fell Consistently for Nearly All Payers Between 1986 and 2009 | 41 |
| Substance Abuse: Spending by Provider, Setting, and Specialty Type | 43 |
| Specialty MH and SA Centers Accounted for the Largest Portion of SA Spending in 2009..... | 44 |
| Specialty MH and SA Centers Accounted for Almost Half of the Increase in SA Spending from 1986 Through 2009 | 45 |
| Hospital Share of SA Spending Declined Between 1986 and 2005 and Rose Between 2005 and 2009 | 46 |
| Share of SA Spending Going to Specialty SA and MH Centers Expanded Between 1986 and 2009 | 47 |
| SA Treatment Spending on Prescription Drugs Increased Significantly in Recent Years | 48 |
| Spending on Drugs to Treat Opioid and Heroin Addiction Comprised the Vast Majority of Spending for SA Prescription Drugs in 2009..... | 49 |
| Specialty Providers Received the Vast Majority of SA Spending Paid to Providers in 2009..... | 50 |
| Share of SA Spending for Inpatient Treatment Decreased Between 1986 and 2005, Before Rising Slightly in Recent Years | 51 |
| References | 53 |

Appendices

| | |
|---|-----------|
| Appendix A: Tables | 55 |
| Table A.1. Spending by Provider and Setting: Levels and Percent Distribution for Mental Health and Substance Abuse (MHSA), Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA), and All Health, 2009..... | 56 |
| Table A.2. Spending by Payer: Levels and Percent Distribution for Mental Health and Substance Abuse (MHSA), Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA), and All Health, 2009 | 58 |
| Table A.3. Spending by Specialty and Nonspecialty Providers: Levels, Percentage of Total Expenditures, and Percentage Within Sector for Mental Health and Substance Abuse (MHSA), Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), and Drug Abuse (DA), 2009 | 59 |
| Table A.4. Mental Health and Substance Abuse Spending by Provider and Setting: Levels, Percent Distribution, and Share of All-Health Spending, Selected Years..... | 61 |
| Table A.5. Mental Health Spending by Provider and Setting: Levels, Percent Distribution, and Share of All-Health Spending, Selected Years | 63 |
| Table A.6. Substance Abuse Spending by Provider and Setting: Levels, Percent Distribution, and Share of All-Health Spending, Selected Years | 65 |
| Table A.7. Average Annual Growth by Provider and Setting for Mental Health and Substance Abuse (MHSA), Mental Health (MH), Substance Abuse (SA), and All-Health Spending and for GDP Price Index, Selected Periods..... | 67 |
| Table A.8. Mental Health and Substance Abuse (MHSA), Mental Health (MH), and Substance Abuse (SA) Spending by Payer: Levels, Percent Distribution, and Share of All-Health Spending, Selected Years..... | 69 |
| Table A.9. Average Annual Growth by Payer for Mental Health and Substance Abuse (MHSA), Mental Health (MH), and Substance Abuse (SA) and for Gross Domestic Product Price Index, Selected Periods..... | 70 |
| Appendix B: Definitions | 71 |
| SAMHSA Spending Estimates Structure | 71 |
| Classification System | 72 |
| Definitions | 74 |
| Appendix C: Methods | 81 |
| Overview of Estimating Methods and Algorithms | 81 |
| Data Source Descriptions..... | 85 |
| Appendix D: Abbreviations | 91 |
| Appendix E: Authors and Reviewers | 93 |
| Authors | 93 |
| Reviewers | 93 |

Introduction

The Substance Abuse and Mental Health Services Administration (SAMHSA) Spending Estimates (SSE) initiative was created to provide policymakers with benchmark information on expenditures for treatment of people with mental and/or substance use disorders (M/SUDs). The SSE was designed to be comparable to the National Health Expenditure Accounts (NHEA) produced annually by the Centers for Medicare & Medicaid Services (CMS). To strengthen their ties to these all-health accounts, the SSE relies heavily upon the definitions and concepts used in the NHEA.

THIS REPORT AND ITS ORGANIZATION

This report presents the latest estimates of expenditures on mental health and substance abuse (MHSA) treatment services. It improves upon and replaces the prior reports and related journal articles of national MHSA estimates produced by SAMHSA since the inception of this project in 1996 (McKusick, et al., 1998; Mark, et al., 1998; Coffey, et al., 2000; Mark, et al., 2000; Mark and Coffey, 2004; Mark, Coffey, McKusick, et al., 2005; Mark, Coffey, Vandivort-Warren, et al., 2005; Mark, et al., 2007; SAMHSA, 2010; Mark, et al., 2011).

The spending estimates are presented first for MHSA combined, followed by MH, and then by SA disorders. This organization is used because expenditure patterns differ in some important ways by condition. The organization of the report is:

- Overview of mental health and substance abuse spending
- Mental health spending by payer
- Mental health spending by provider, setting, and specialty type
- Substance abuse spending by payer
- Substance abuse spending by provider, setting, and specialty type
- Appendix A—Tables
- Appendix B—Definitions
- Appendix C—Methods
- Appendix D—Abbreviations
- Appendix E—Authors and Reviewers

RATIONALE FOR THE ESTIMATES

SAMHSA, an agency of the U.S. Department of Health and Human Services, strives to reduce the impact of substance use disorders and mental illness on America's communities. SAMHSA's mission is "to help people with mental and substance use disorders and their families, build and support strong and supportive communities, prevent costly and painful behavioral health problems, and promote better health and functioning for all Americans."² SAMHSA's initiatives focus on:

² www.samhsa.gov/About/strategy.aspx; accessed July 9, 2012.

- Promotion of emotional health and prevention and reduction of mental illness and substance use disorders through the early recognition and treatment of behavioral health disorders and through the integration of behavioral health services into primary care settings
- Assistance for special populations affected by M/SUDs—victims of personal trauma, people involved in or at risk of involvement with the criminal justice system, the homeless, and military families and veterans
- Expansion of the capacity of behavioral health service through health care reform, the adoption of health information technology, data system integration, and the improved measurement of quality and outcomes.

These efforts increase public understanding of behavioral health disorders and of prevention and treatment services so as to achieve the full potential of prevention and to enable people to recognize and seek treatment for these conditions with the same urgency as for other conditions.

To support and guide policy initiatives, SAMHSA tracks national trends, establishes measurement and reporting systems, and develops and promotes standards to improve delivery of services to people with M/SUDs. As one piece of that effort, the estimates in this report track national spending on MHSA treatment. This information aids SAMHSA—as well as policymakers, providers, consumers, and researchers—by increasing their understanding of what the nation spends on MH services and SA treatment, which payers fund that treatment, who delivers treatment, and how these expenditures have changed over time.

PURPOSE AND SCOPE OF ESTIMATES

The SSE provides ongoing information about national spending on health care services related to the diagnosis and treatment of M/SUDs. They also provide a view of MHSA treatment spending over time and compared with spending on all health care. Estimates for 1986 through 2009 are described in this report and replace prior sets of MHSA treatment spending estimates. The present report includes some estimates from earlier reports that are now revised to take advantage of better data sources and improved analysis methods. These estimates serve as a basis for assessing the impact of the recession (2008–2009) on MHSA spending and as a baseline from which the future impacts of the Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act of 2008 (MHPAEA) and the Patient Protection and Affordable Care Act of 2010 (generally referred to as the Affordable Care Act) (PL 111-148) can be evaluated.

These estimates focus on expenditures for MHSA treatment but do not include the number of individuals treated or per-patient treatment costs. The burden of MHSA illnesses is not incorporated into the estimates. Burden-of-illness studies include costs not directly related to treatment, such as the impact of mental illness on productivity, societal costs linked to drug-related crimes, or housing and other subsidies to assist people with MHSA disorders. The scope of the report does not include the physical consequences of M/SUDs or their related costs. Physical consequences of M/SUDs can include cirrhosis of the liver, trauma, HIV and other infectious diseases, and common conditions (such as diabetes and respiratory disease). In addition, expenditures for the diagnosis and treatment of development impairment or disorders that are usually or historically covered by general medical insurance, such as dementias and tobacco addiction, are not included here. Services through self-help groups such as Alcoholics Anonymous are also not included in these estimates because these

programs are free to people with substance use disorders. These estimates do not include MHSA services paid by federal, state, or local corrections and justice departments or agencies, unless these funds are subcontracted to community providers. Finally, the SSE does not include spending to prevent SUDs or mental illnesses.

LIMITATIONS

The estimates in this report were prepared using standard estimation techniques and the best available survey information. They represent the only MHSA estimates comparable to total health care spending for the United States. As in any effort of this type, multiple data sources were used to piece together and cross-check information that ultimately formed the basis for the estimates. Each data source has its own strengths and weaknesses, which were assessed before determining the best data sources to use in producing the MHSA estimates.

DEFINITIONS

As in the NHEA, the physical location of services provided (referred to as an “establishment” by the Bureau of the Census) determines the provider category for health care spending. In other words, the MHSA expenditures by specific providers are categorized not by the spending for a specific service, but by spending for services of a particular establishment. For example, home health care may be provided by freestanding home health agencies, but also may be provided by home health agencies that are part of a hospital. In the former case, home health care spending would be classified as home health care; in the latter case, it would be classified as part of hospital care.

The following is a list of abbreviated definitions of provider, payer, and setting categories used in the SSE. They borrow extensively from those used in the NHEA.³ More comprehensive descriptions can be found in Appendix B.

PAYERS

Private payments: Any payments made through private health insurance, out-of-pocket, or from other private sources.

Private health insurance: benefits paid by private health insurers (including behavioral health plans) for provision of service, prescription drugs, or the administrative costs and profits of health plans. Private health insurance benefits paid through managed care plans on behalf of Medicare and Medicaid are excluded.

Out-of-pocket payments: direct spending by consumers for health care goods and services including coinsurance, deductibles, and any amounts not covered by public or private insurance.

Other private: spending from philanthropic and other nonpatient revenue sources.

Public payments: Any payments made on behalf of enrollees in Medicare or Medicaid or through other programs run by the federal or individual state government agencies.

³ CMS National Health Expenditure Account websites: www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/index.html?redirect=/NationalHealthExpendData/

Medicare: the federal government program that provides health insurance coverage to eligible aged and disabled persons. It includes payments made through fee-for-service and managed care plans.

Medicaid: a program jointly funded by the federal and state governments that provides health care coverage to certain classes of people with limited income and resources. Medicaid includes funding by both federal and state governments. It includes payments made through fee-for-service and managed care plans.

Other federal: programs other than Medicaid and Medicare provided through federal payers, including the Department of Veterans Affairs, Department of Defense, block grants administered by SAMHSA, and the Indian Health Service, among others.

Other state and local: programs other than Medicaid that are funded primarily through state and local MH and SA agencies.

PROVIDERS

Hospital care: all billed services provided to patients by public and private hospitals, including general medical or surgical hospitals and psychiatric and SA specialty hospitals.

General hospitals: community medical or surgical and specialty hospitals other than MH and SA specialty hospitals providing diagnostic and medical treatment, including psychiatric care in specialized treatment units of general hospitals, detoxification, and other MHS treatment services in inpatient, outpatient, emergency department, and residential settings.

General hospital specialty unit: designated unit of a general medical or surgical hospital (other than a MH and SA specialty hospital) that provides care for diagnosed mental illness, SUDs, or detoxification.

General hospital nonspecialty unit: medical or surgical units of general hospitals (other than in MH and SA specialty hospitals) that provide treatment for a diagnosed mental illness, SUD, or detoxification.

Specialty hospitals: hospitals primarily engaged in providing diagnostic, medical treatment, and monitoring services for patients with mental illness or substance use diagnoses.

Physician services: independently billed services provided by Doctors of Medicine (M.D.) and Doctors of Osteopathy (D.O.), plus the independently-billed portion of medical laboratory services.

Psychiatrists: independently billed services of private or group practices of health practitioners having the degree of M.D. or D.O. who are primarily engaged in the practice of psychiatry or psychoanalysis, plus the independently-billed portion of medical laboratory services.

Other professional services: care provided in locations operated by independent health practitioners other than physicians and dentists, such as psychologists, social workers, and counselors. (Spending for services provided in doctors' offices by nurses, nurse practitioners, and physician assistants would be classified with the spending by their supervising physician.)

Home health care: medical care provided in the home by private and public freestanding home health agencies.

Nursing home care: services provided in private and public freestanding nursing home facilities.

Specialty MH centers: organizations providing outpatient and/or residential mental health services and/or co-occurring mental health and substance abuse treatment services to individuals with mental illness or with co-occurring mental illness and substance use diagnoses.

Specialty SA centers: organizations providing residential and/or outpatient substance abuse services to individuals with substance use diagnoses.

Prescription drugs: psychotherapeutic medications sold through retail outlets and mail order pharmacies. Excluded are sales through hospitals, exclusive-to-patient health maintenance organizations (HMOs), and nursing home pharmacies. See Appendix B for specific medication classes. Spending on methadone dispensed for the treatment of drug abuse is captured as part of spending for specialty SA centers where methadone is dispensed, rather than with SA prescription drug spending. (Methadone prescribed for pain management by physicians and other practitioners and sold through retail pharmacies is not included in the MHSA spending estimates.)

Insurance administration: spending for the cost of running various government health care insurance programs, as well as the administrative costs and profit of private health insurance companies.

SETTINGS OF CARE

Inpatient services: care provided in an acute medical care unit or setting of a general hospital or in specialty MH or SA hospitals.

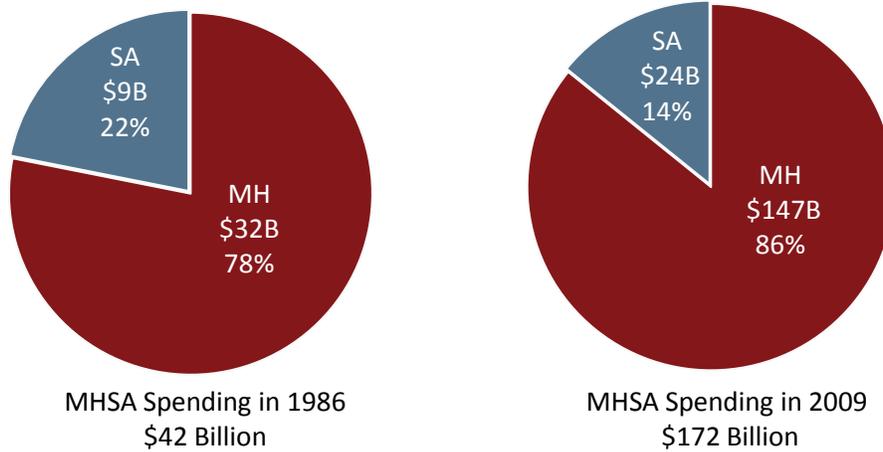
Outpatient services: care provided in settings such as hospital outpatient departments, emergency departments, or offices and clinics of physicians and other medical professionals; includes partial hospitalization and intensive outpatient services offered by hospital outpatient departments as well as case management and intensive outpatient services offered by health clinics and specialty MH and SA centers. Care provided by home health providers is counted as an outpatient service.

Residential services: therapeutic care provided by licensed health professionals in a 24-hour-care setting, including residential care in specialty MH and SA centers and all nursing home care.

Mental Health and Substance Abuse Spending Overview

MH and SA Treatment Spending Totaled \$172 Billion in 2009

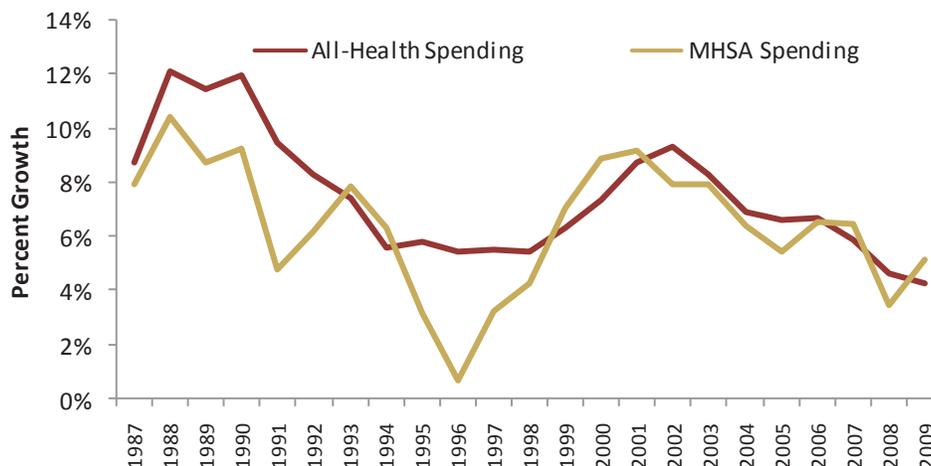
MH and SA Treatment Spending, 1986 and 2009



- MHSA spending totaled \$172 billion in 2009. MH spending amounted to \$147 billion, or 86 percent of all MHSA spending; SA spending accounted for the balance—\$24 billion, or 14 percent.
- The share of MHSA spending going to SA treatment has been declining over time—from 22 percent in 1986 to 14 percent in 2009. Although the SA share of MHSA treatment spending fell, SA spending rose during this period from \$9 billion to \$24 billion, but at a slower rate of increase than for MH treatment spending.

MHSA Spending Growth Slowed in Recent Years and Aligned Closely with All-Health Spending Growth

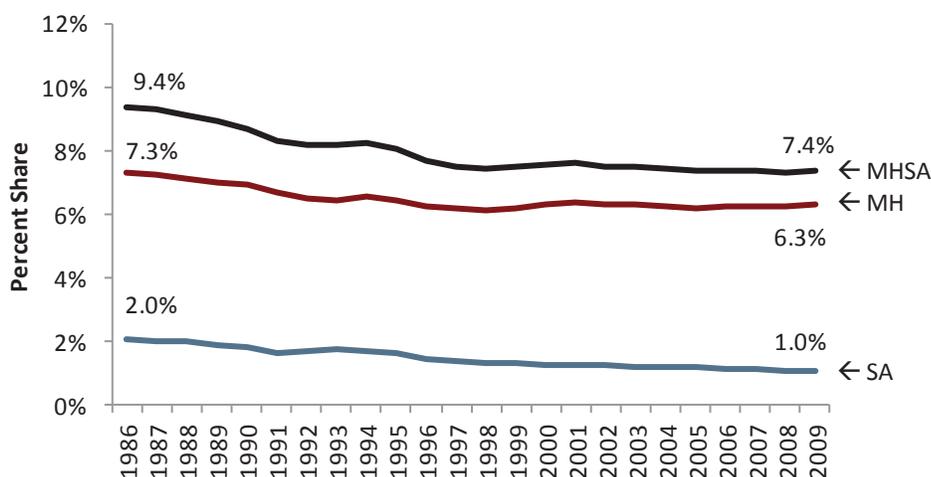
Annual Growth in All-Health and MHSA Spending, 1986-2009



- Over the entire time span covered by these estimates (1986–2009), growth in spending on MHSA has lagged behind the growth in all-health spending by about 1 percentage point. MHSA spending averaged annual increases of 6.4 percent; all-health spending increased at a 7.5 percent pace. However, this average masks distinct differences between the first half and second half of the period.
- From 1986 through 1998, growth in MHSA spending generally lagged behind the growth in all-health spending. All-health spending increased at an 8.1 percent average annual rate, whereas MHSA spending rose at a 6.0 percent annual rate. The notable slowdown in MHSA spending growth in the early to mid 1990s was because of the closure of MHSA specialty hospitals and large declines in length of stay for MHSA-related hospitalization, related in part to intense behavioral health managed care expansion.
- From 1998–2009, growth in MHSA spending mirrored that of all-health spending. All-health spending increased at a 6.8 percent average annual rate; MHSA spending rose at a similar 6.7 percent annual rate.
- In inflation-adjusted terms, MHSA spending grew at a 3.8 percent average annual rate compared to all-health spending that increased at a 4.9 percent average annual rate from 1986–2009.

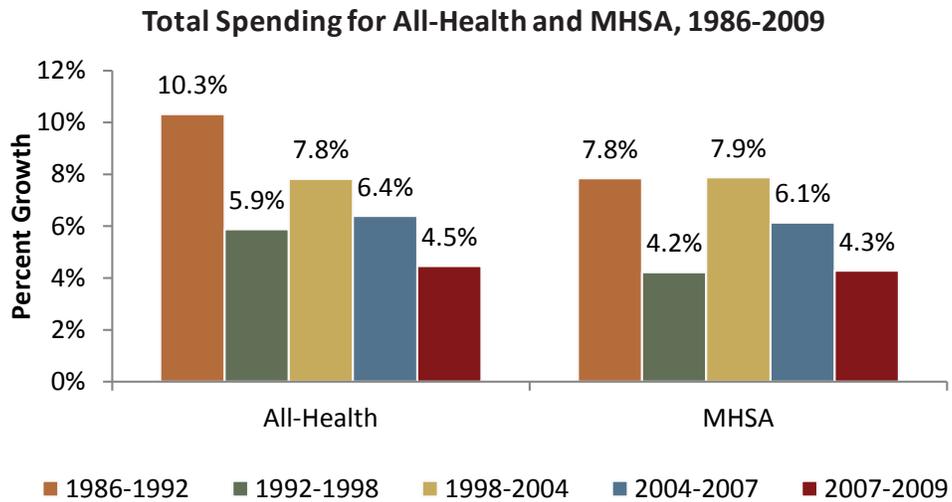
MH Treatment Spending Has Stabilized as a Share of All-Health Spending; SA Treatment Spending Share Continued to Fall Through 2009

MH and SA Shares of All-Health Spending, 1986-2009



- In 2009, MHSA spending accounted for 7.4 percent of the \$2,330 billion in all-health expenditures.
- The share of all-health spending devoted to MHSA treatment fell between 1986 and 1998—from 9.4 percent to 7.4 percent. The MHSA share of all-health spending has changed little between 1998 and 2009.
 - In 2009, MH spending was 6.3 percent of all-health spending—approximately the same share since 1996, but lower than its 7.3-percent share in 1986.
 - In 2009, SA spending was 1.0 percent of all-health spending—a share that was only about half of what it was in 1986 (2.0 percent). Unlike MH spending, which remained a stable share of all-health spending between 1996 and 2009, the SA share of all-health spending continued to decline steadily throughout this period. The falling share of all-health spending is the result of growth in SA spending that has lagged behind that of all-health spending throughout the entire period.

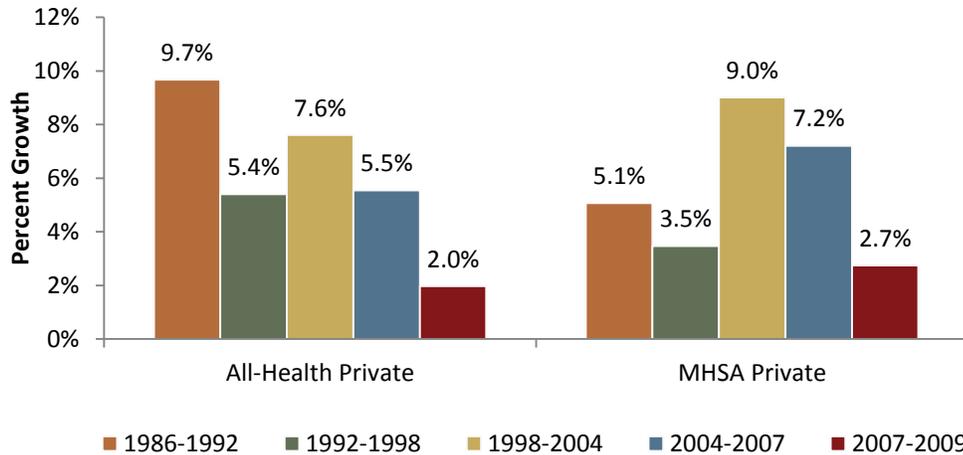
Slowest Growth in MHSA Spending in 10 Years Took Place During the Recent Recession (2007–2009)



- Growth in MHSA spending slowed between 2007 and 2009 to its slowest rate in the past 10 years. This mirrored the record-setting slow growth in all-health spending over the same period (Martin et al., 2011).
- The rapid increase in spending for MH prescription drugs between 1998 and 2004, which averaged 18.3 percent per year, was responsible in large part for the surge in MHSA spending during that period.

Growth in Private MHSA Spending Slumped During the Recent Recession

Private Spending for All-Health and MHSA, 1986-2009



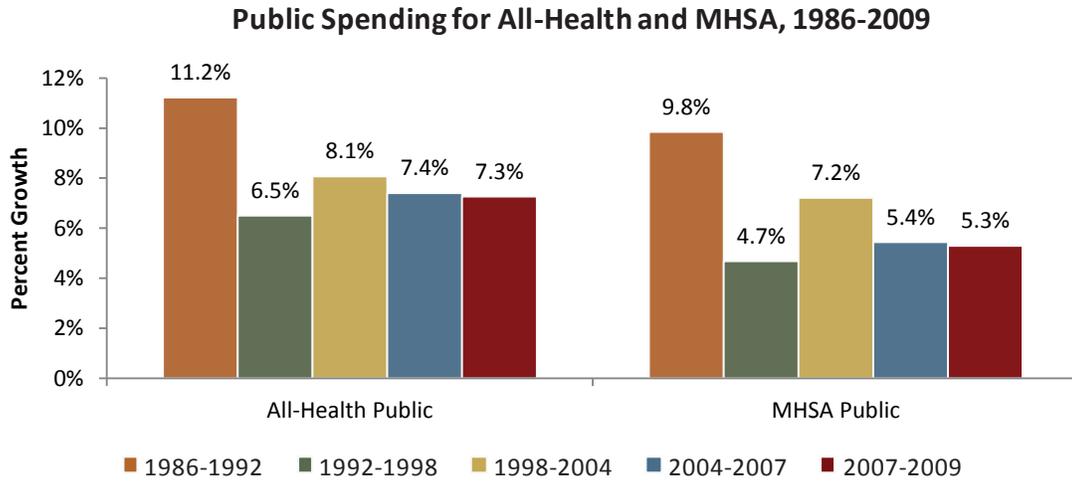
- Private payers experienced the recent recession differently from public payers.
 - Growth in private spending (including private health insurance and out-of-pocket spending) slowed substantially during the recession (2007–2009)⁴ for both all-health and MHSA treatment.
 - Between 2007 and 2009, growth in private spending slowed to an average of 2.7 percent annually for MHSA. Private insurance expenditures rose 3.3 percent and out-of-pocket spending increased just 1.2 percent for MHSA.
 - Loss of jobs between 2007 and 2009 produced a drop of 4.6 percent in the number of persons with employer-sponsored private insurance coverage.^{4, 5} Job loss also slowed income growth to an average annual rate of 0.2 percent during the recession.⁶ Slow income growth combined with uneasiness about future job security caused consumers to restrict spending on many consumer goods, including health care. This reduced the pace of out-of-pocket spending increases for both all-health and MHSA treatment spending.

⁴ Although the recession ended officially in 2009, the effects of the recession, including low state government revenues and high unemployment rates, extended beyond 2009.

⁵ U.S. Bureau of the Census. Table HIB-1. Health insurance coverage status and type of coverage by sex, race and Hispanic origin: 1999 to 2010. Accessed on July 26, 2012 at www.census.gov/hhes/www/hlthins/data/historical/HIB_tables.html.

⁶ U.S. Bureau of Economic Analysis. Table 2.1. Personal income and its disposition. Accessed on July 26, 2012 at www.bea.gov/iTable/index_nipa.cfm.

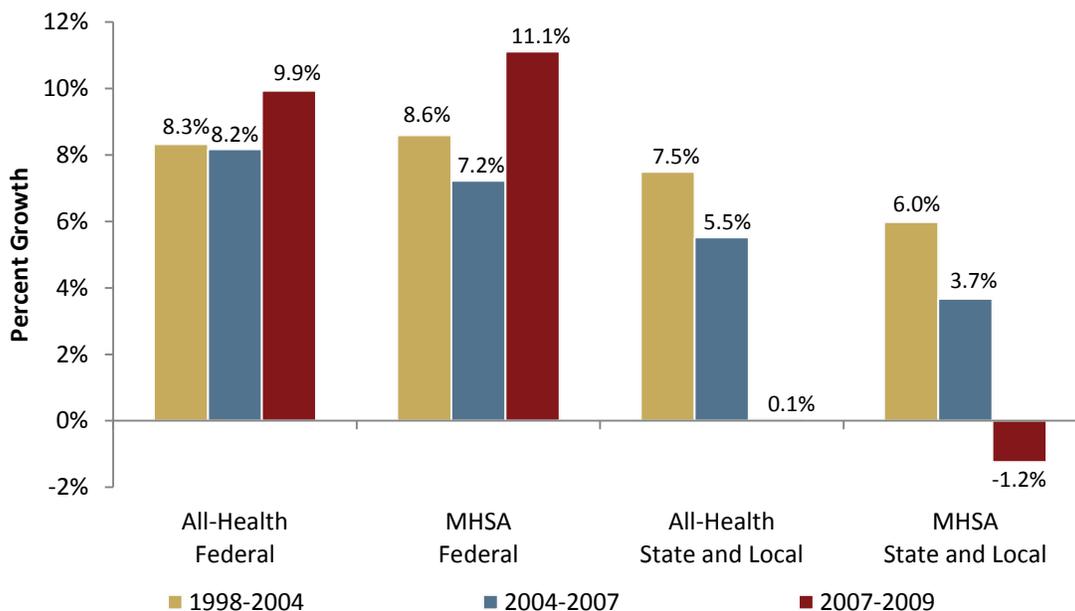
Growth in Public MHSA Spending Remained Strong During the Recent Recession



- Unlike private spending, public spending showed almost no slowdown in growth in MHSA and all-health spending between the period leading up to the recession (2004–2007) and during the recession (2007–2009).
- Between 2004–2007 and 2007–2009, public spending increased at average annual rates of 5.4 percent and 5.3 percent, respectively, for MHSA and 7.4 percent and 7.3 percent, respectively, for all-health spending.
- One reason for the strong public spending growth during the recession was the increase in Medicaid spending. Medicaid spending increased at a 7.0 percent average annual rate for all-health and a 6.4 percent average annual rate for MHSA. The number of Medicaid recipients rose—a consequence of the recession and the prohibition under the American Recovery and Reinvestment Act of 2009 of reducing Medicaid eligibility in return for enhanced federal matching—as did the average spending per Medicaid recipient for all-health spending (Martin et al., 2011).
- In each period shown, the rate of growth for public spending for MHSA treatment was slower than public spending for all health.

Federal MHA Spending Remained Strong While State and Local Spending Languished During the Recession

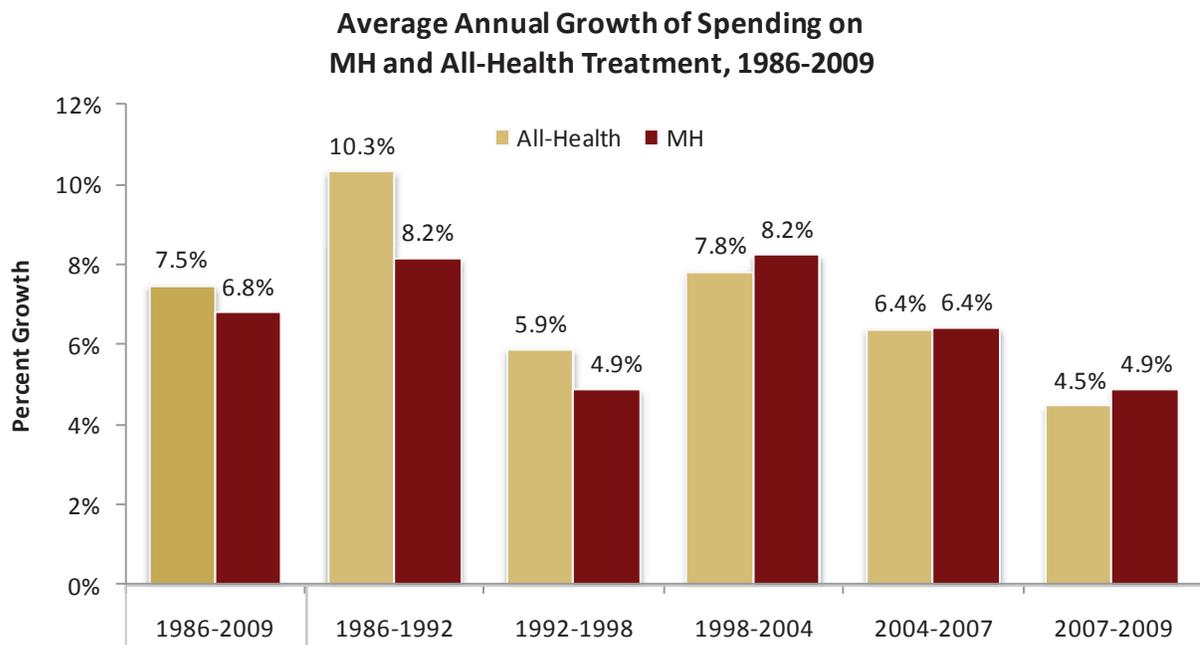
Federal and State and Local Government Spending Growth, 1998-2009



- Growth in state and local funding (including the state portion of Medicaid and other state and local funding) was negligible for all-health treatment and declined in absolute terms for MHA treatment during the recession. State and local funding declined at a –1.2 percent average annual rate for MHA treatment in 2007–2009, down from a 3.7 percent average annual rate for 2004–2007. This was a loss of \$1.1 billion in all state and local MHA funding between 2007 and 2009.
- Public spending was sustained by federal funds during the recession (2007–2009) for all-health and MHA treatment.
 - The American Recovery and Reinvestment Act of 2009 increased the federal Medicaid match rate (and lowered state financial responsibilities) under Medicaid beginning in October 2008 and continuing through 2009.
 - Federal spending for MHA treatment (including funding from Medicare, the federal share of Medicaid, and other federal programs) rose 11.1 percent from 2007 to 2009, up from 7.2 percent from 2004 to 2007. This amounted to an increase of \$11.4 billion from 2007 to 2009.

Mental Health: Spending by Payer

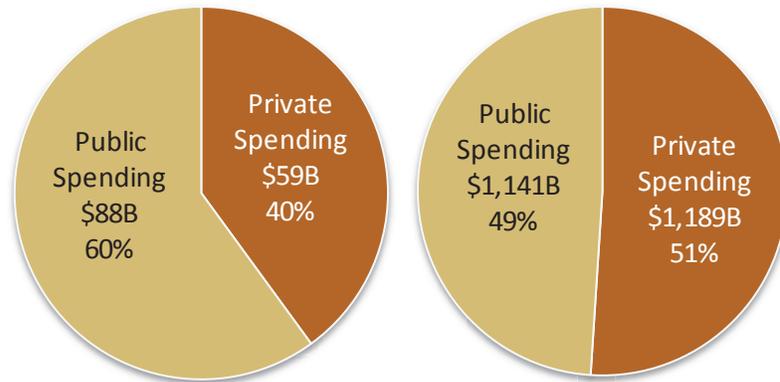
After Lagging Behind All-Health Spending Growth Through 1998, Recent Growth in MH Spending Aligns With All-Health Spending



- Across all periods, nominal MH spending growth (6.8 percent annually, on average) was slower than the all-health growth (7.5 percent). After adjusting for inflation, MH spending annual growth averaged 4.3 percent and all-health annual growth averaged 4.9 percent.
- Characteristics of distinct periods provide a context for understanding growth in MH and all-health expenditures:
 - 1986–1992, a period of higher inflation compared to other periods shown; Medicaid expansion, including the extension of community-based MH services through the Medicaid rehabilitation and targeted case management options; and rapid growth in hospital spending for all-health spending and MH spending.
 - 1992–1998, a period of intensive behavioral health managed care expansion and relatively low MH and all-health spending growth.
 - 1998–2004, a period when MH and all-health spending increased at similar rates. The rapid increase in spending for MH prescription drugs, which averaged 18.3 percent growth per year, was responsible in large part for the surge in MH spending.
 - 2004–2007, a period of slowing growth in MH spending because of moderating prescription drug spending and the prelude to the recession.
 - 2007–2009, a period of recession marked by further slowing in MH spending growth.

MH Treatment Depended More on Public Spending than Did All-Health Treatment in 2009

Public and Private Spending on MH and All-Health Treatment, 2009

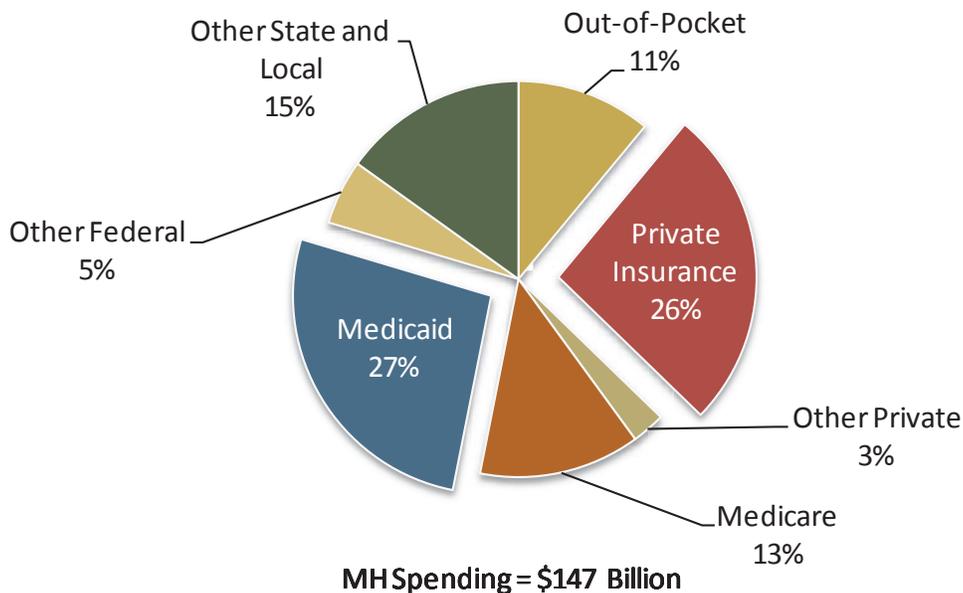


MH Spending = \$147 Billion All-Health Spending = \$2,330 Billion

- Public payers—including Medicare, Medicaid, other federal, and other state and local government sources—accounted for the majority (60 percent, or \$88 billion) of the \$147 billion spent on MH treatment in 2009. This compares to 49 percent of all-health spending coming from public sources.
- Private payers—including private insurance, out-of-pocket spending, and other private sources—accounted for 40 percent of MH spending (\$59 billion of \$147 billion) in 2009, compared to 51 percent for all-health spending.

Medicaid and Private Insurance Were the Largest Payers for MH Treatment in 2009

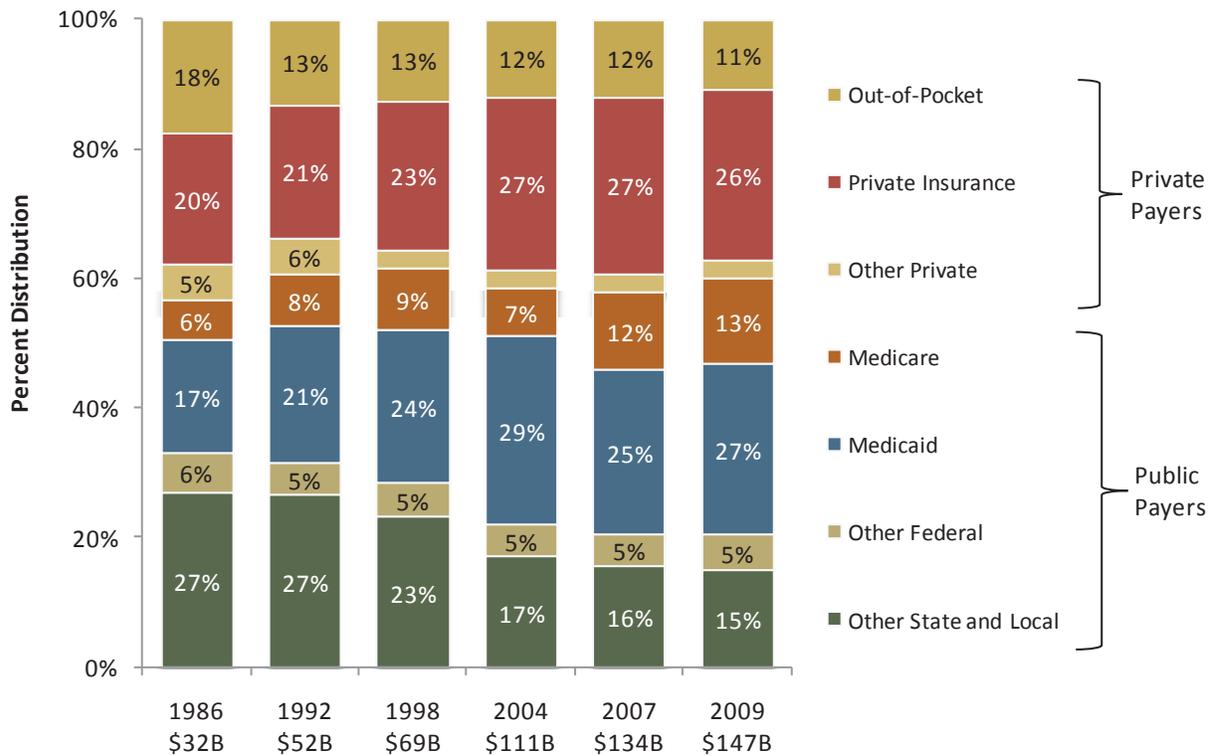
Distribution of Spending on MH Treatment by Payer, 2009



- Private insurance and Medicaid (including the federal and state components) together accounted for the majority of MH treatment spending in 2009. Each was responsible for over one-quarter of MH treatment spending.
- Other state and local government spending (other than state Medicaid) was the third largest payer at 15 percent.
- Medicare spending was the fourth largest source of payments for MH treatment at 13 percent.
- Other federal spending (other than Medicare and Medicaid), which amounted to 5 percent of all MH spending, included MH block grants from SAMHSA that accounted for 0.3 percent (not shown on the graph) for MH spending.

Shares of Other State and Local MH Spending Decreased; Shares of Medicaid and Private Insurance Increased, Between 1986 and 2009

Distribution of MH Spending by Payer, 1986-2009

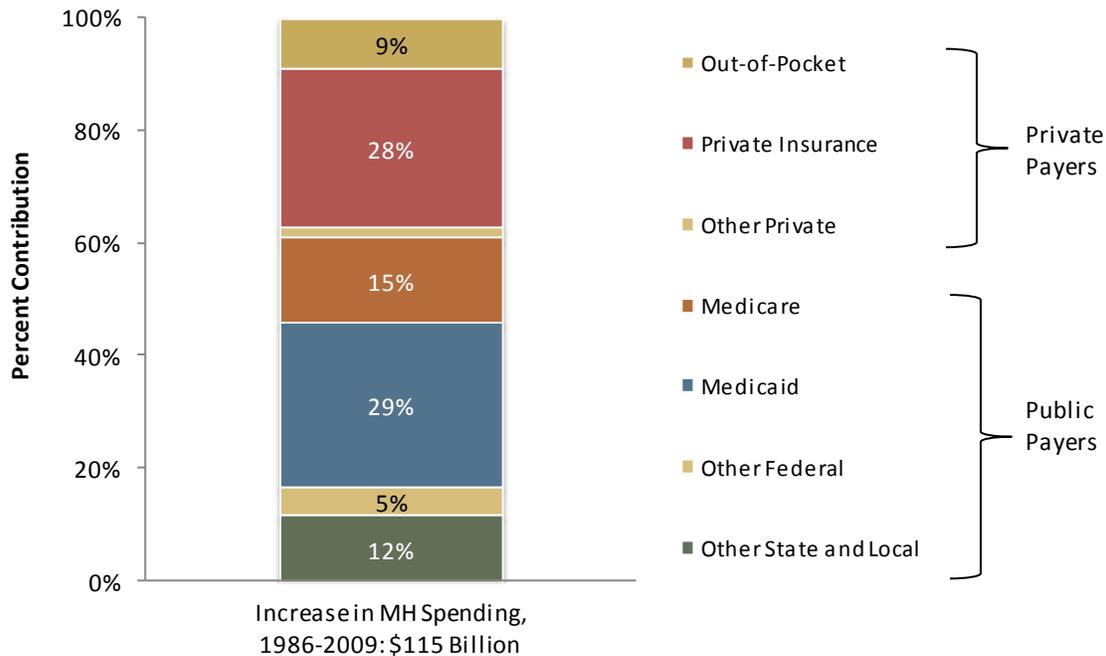


Note: Bar segments less than 5 percent are not labeled.

- Other state and local government spending (other than the state Medicaid) accounted for 27 percent of MH treatment spending in 1986, but just 15 percent in 2009.
- Medicaid made up 17 percent of MH treatment spending in 1986; in 2009, it made up 27 percent of the total.
- The share of MH spending from private insurance also grew over time—from 20 percent in 1986 to 26 percent in 2009.
- From 1986 to 2009, the out-of-pocket share of MH treatment spending decreased from 18 percent to 11 percent.
- The state share of Medicaid financing combined with other state and local funding represents the total state contributions to MH spending (not shown). During the 2007–2009 recession, the total state contributions fell by –0.3 percent, compared to 3.3 percent average annual increases in the pre-recession period of 2004–2007.

Medicaid and Private Insurance Contributed Most to the MH Spending Increases Between 1986 and 2009

Contribution to Increase in MH Spending by Payer, 1986-2009

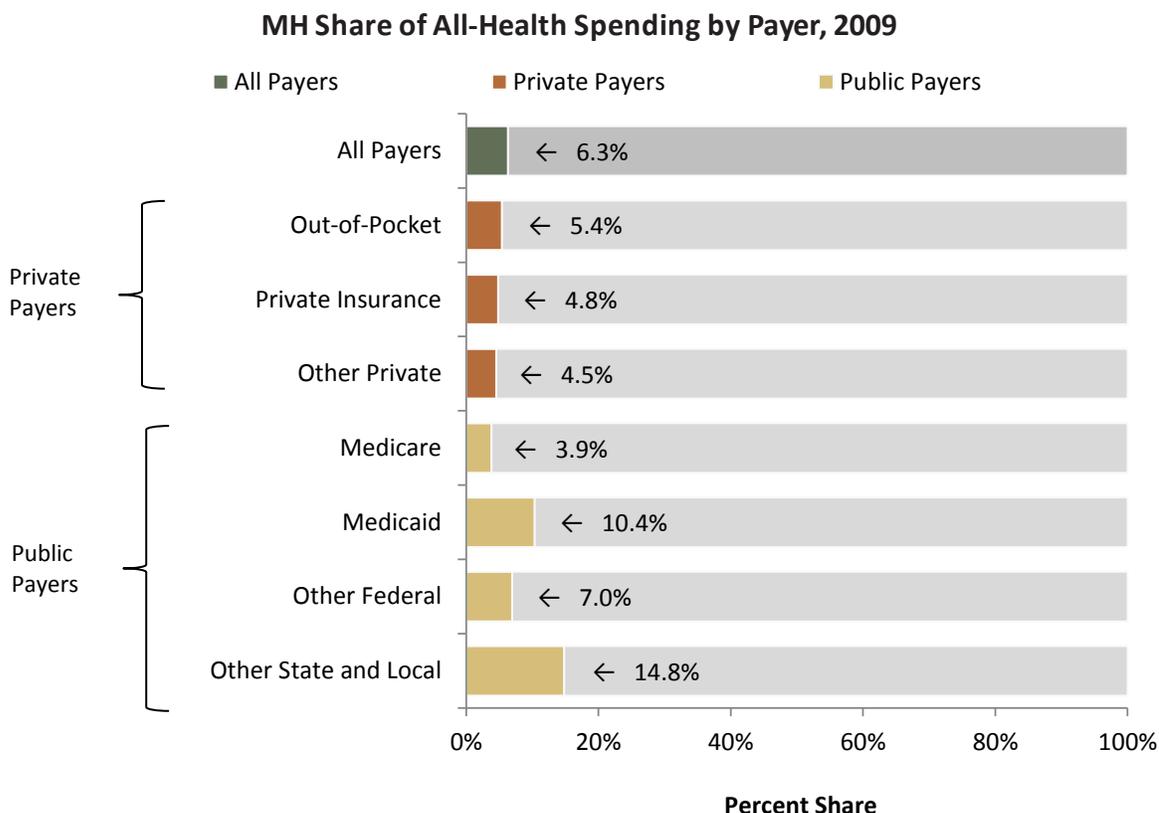


Note: Bar segments less than 5 percent are not labeled.

This graph depicts the portion each payer contributed to the \$115 billion increase in MH spending between 1986 and 2009.

- Medicaid accounted for the largest share of the increase (29 percent, \$33 billion) between 1986 and 2009. In 1986, Medicaid made up less than one-fifth of total MH spending, but because of rapid Medicaid MH spending growth, it became one of the most important drivers of overall MH spending increase between 1986 and 2009.
- Private insurance was also an important contributor, responsible for 28 percent (\$32 billion) of the increase in MH spending between 1986 and 2009.
- In contrast, other state and local government spending made up only 12 percent (\$13 billion) of the increase in MH spending between 1986 and 2009. Although funding from other state and local governments accounted for the largest share of MH spending in 1986 (27 percent), spending growth was slow, resulting in a relatively small contribution to the overall increase in MH spending.

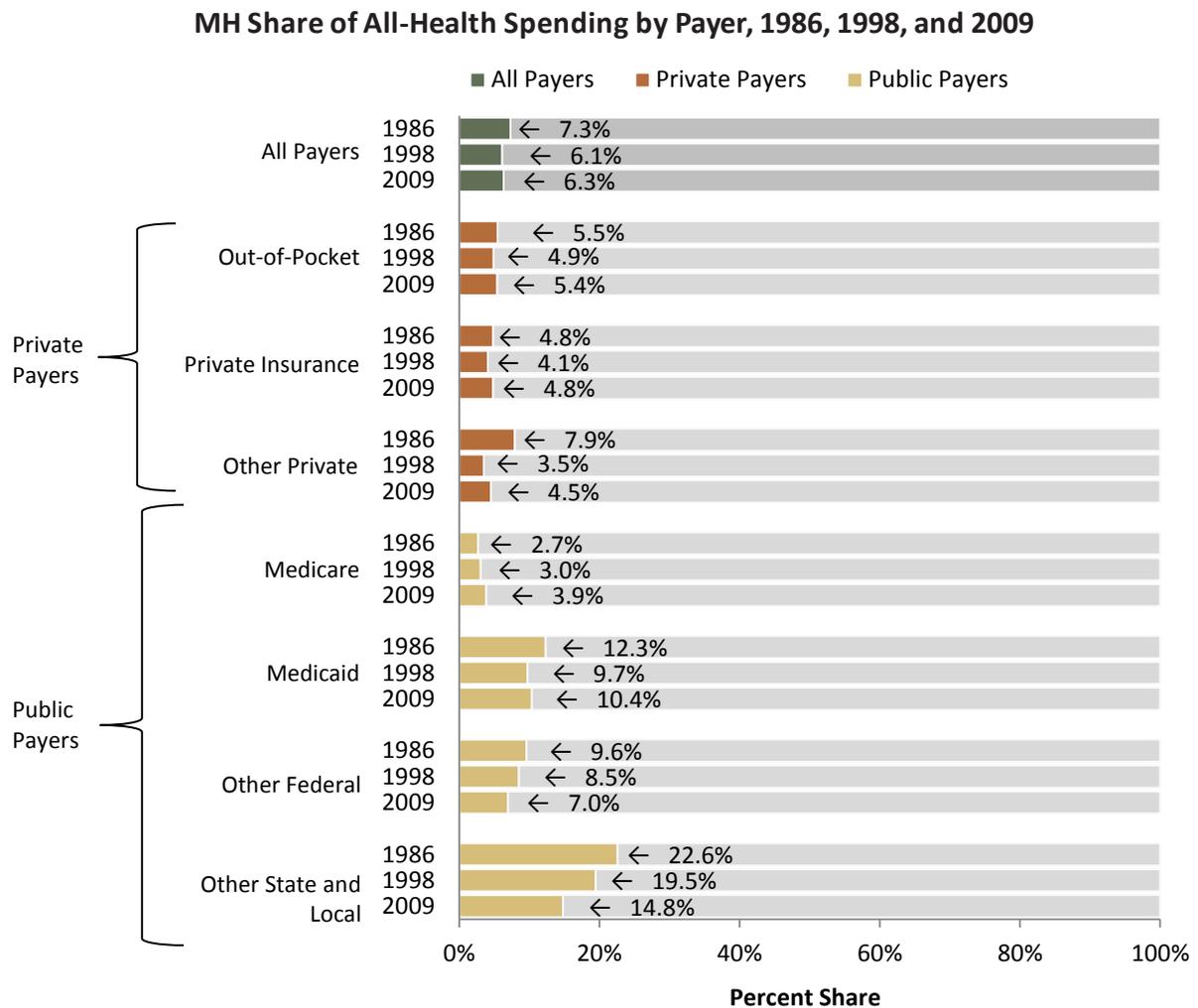
MH Spending Accounted for 6.3 Percent of All-Health Spending in 2009; by Payer, MH Share Varied Considerably



This graph depicts spending on MH treatment as a share of all-health spending, over all payers combined and for each payer separately, in 2009.

- MH accounted for 6.3 percent of all-health spending in 2009. However, the MH share varied considerably by payer, with generally a higher share of public payers and a lower share of private payers.
 - In 2009, MH shares of all-health spending for other state and local (14.8 percent), Medicaid (10.4 percent) and other federal payers (7.0 percent) were higher than the all-payer average (6.3 percent).
 - The MH shares for out-of-pocket (5.4 percent), private insurance (4.8 percent), other private (4.5 percent), and Medicare (3.9 percent) were lower than for all payers.
 - If the prescription drug spending is excluded from MH and all-health spending, MH private insurance spending accounted for just 3.1 percent of all private health insurance payments in 2009.

MH Share of All-Health Spending Rose Slightly for Many Payers from 1998 to 2009, After Declining as a Share from 1986 to 1998



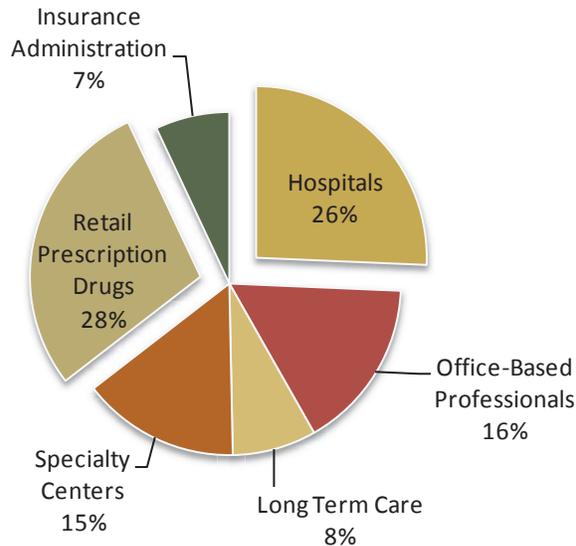
This graph depicts spending on MH treatment as a share of all-health spending, over all payers combined and for each payer, in 1986, 1998, and 2009.

- Between 1998 and 2009, the shares of all-health spending that went for MH treatment increased slightly for most payers. For other federal and other state and local, however, the MH share of all-health spending continued to fall. This was especially noticeable for other state and local funding where the MH treatment share fell from 19.5 percent in 1998 to 14.8 percent in 2009.
- The MH share of all other payers fell between 1986 and 1998, with the exception of Medicare where the MH share of all-health Medicare spending going to fund MH treatment rose slightly from 2.7 percent to 3.0 percent.

Mental Health: Spending by Provider, Setting, and Specialty Type

Prescription Drugs and Hospital Treatment Each Accounted for More than One-Quarter of MH Spending in 2009

Distribution of MH Spending by Provider Type, 2009

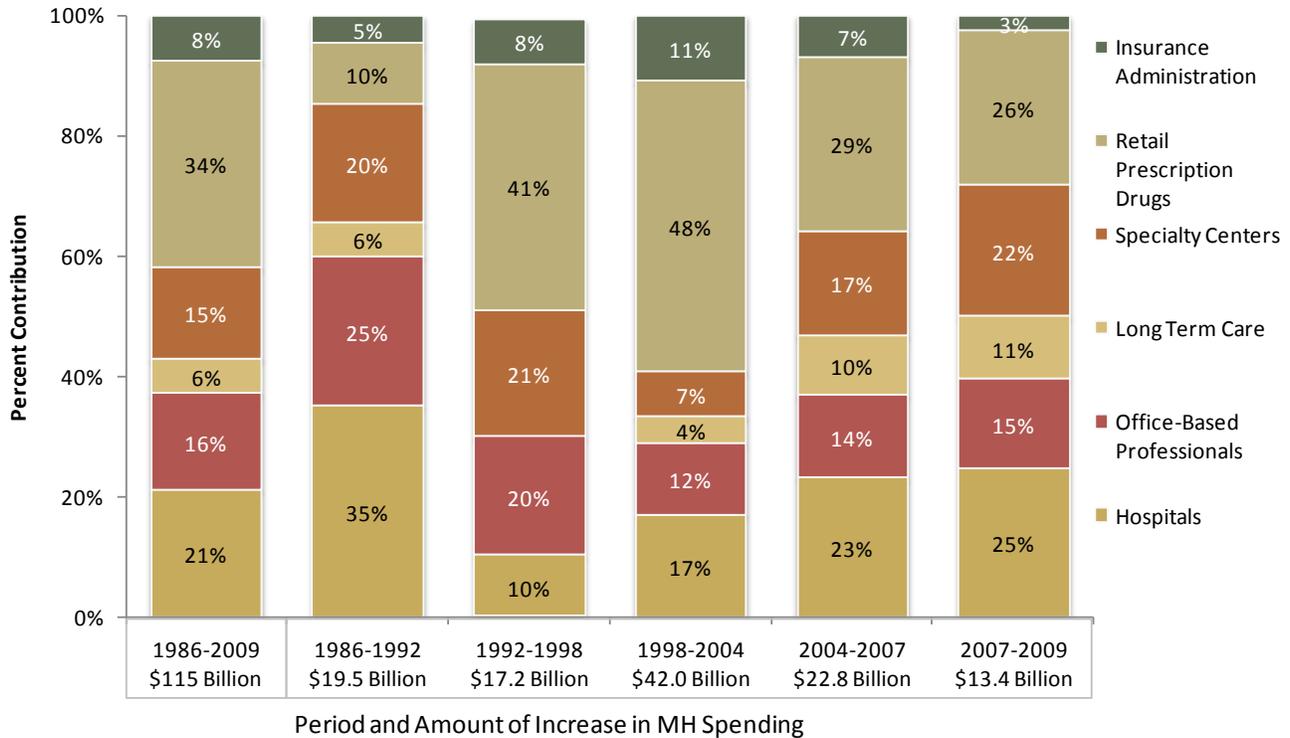


MH Spending = \$147 Billion

- Prescription drugs accounted for 28 percent of MH spending, or \$42 billion, in 2009.
- Another 26 percent (\$38 billion) in MH spending went for care in hospitals, including specialty MHSAs and general hospitals.
- About one-fifth of MH spending (\$24 billion) was for treatment by office-based professionals—psychiatrists, nonpsychiatric physicians, and other professionals such as psychologists and social workers.
- Spending for care from specialty MH and SA centers amounted to \$22 billion in 2009, or 15 percent of all MH spending. These facilities provide mainly outpatient and residential treatment options.
- Insurance administration and long term care—including nursing homes and home health—accounted for 7 percent and 8 percent of MH spending, respectively.

Although Still the Largest Driver of MH Spending Increases, Prescription Medications Accounted for Less of Spending Increase from 2007 to 2009

**Contribution to Increase in MH Spending
by Provider Type, 1986-2009**

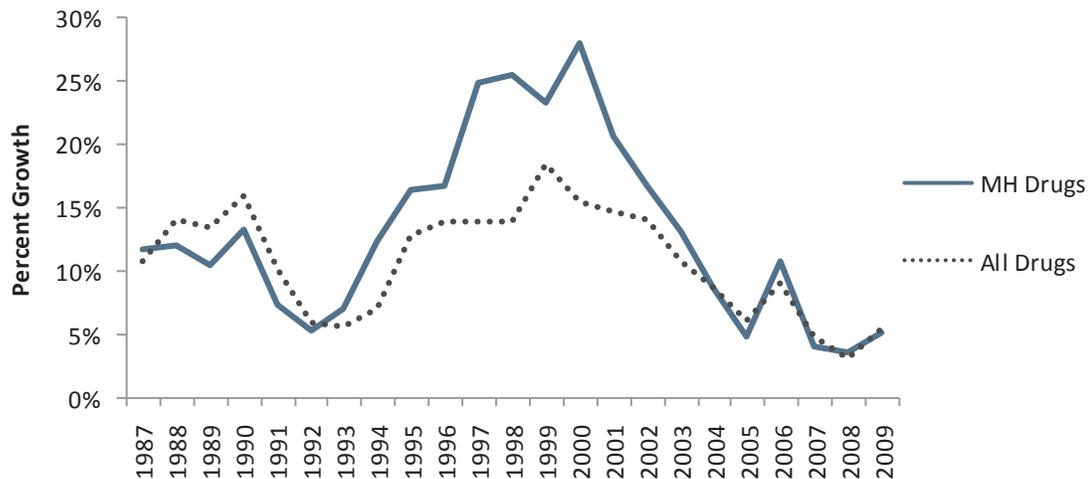


This graph identifies important drivers of MH spending for key periods between 1986 and 2009 by showing the percent contribution of each provider type to the \$115 billion increase in MH spending.

- Of the \$13.4 billion increase in MH spending between 2007 and 2009, \$3.4 billion (26 percent) came from the growth in spending on prescription medications. Although the largest contributor to the increase in MH spending, its contribution is substantially less than it was in the 1992–1998, 1998–2004, and 2004–2007 periods. This contribution reduction is attributable to the slowdown in growth rates for prescription drug spending.

MH Medication Spending Growth Slowed Dramatically, Increasing Only 5.6 Percent Each Year on Average from 2004 to 2009

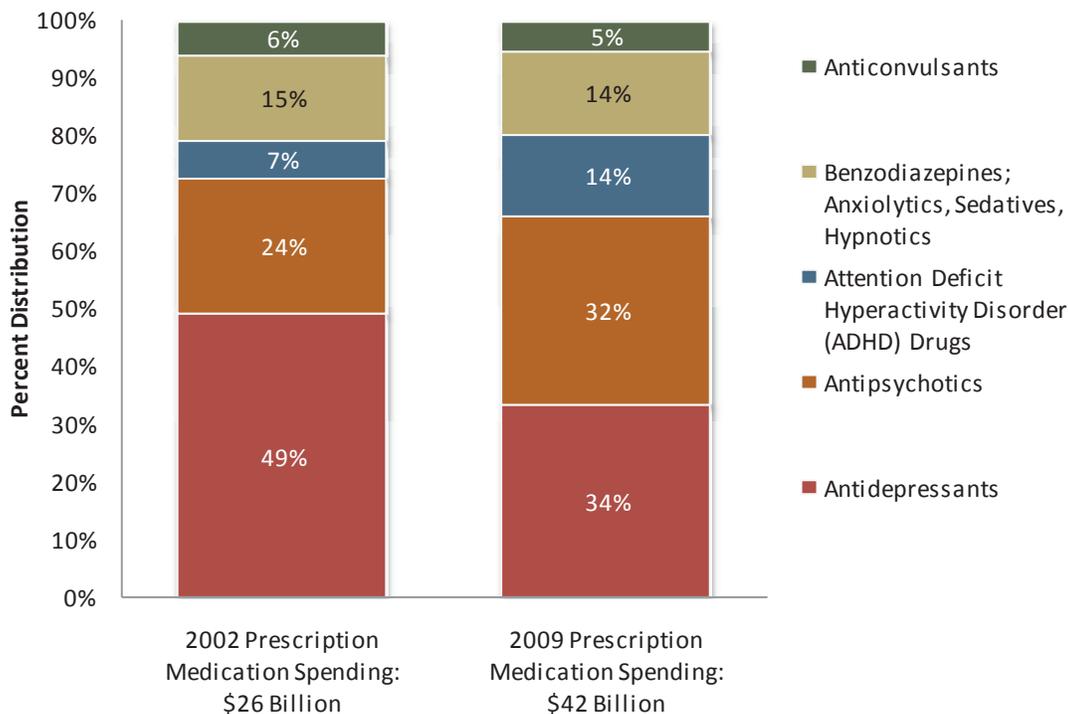
**Growth in Prescription Drug Spending
for MH and All-Health, 1986-2009**



- From 1992 through 2004, growth in spending on psychotropic medications exceeded that of all prescription medications. The availability of many new and expensive psychiatric medications with fewer side effects, including new atypical antipsychotics and new therapeutic classes of antidepressants, resulted in more widespread use. Spending on MH prescription medications rose at an average annual rate of 17.7 percent, compared to an increase of 12.4 percent for all prescription medications.
- From 2004 to 2009, there was a dramatic slowdown in this spending growth, stemming from patent expirations and widespread availability of generic alternatives to many psychiatric medications (Mark, et al., 2012). Spending for both psychotropic medications and all medications slowed to an average annual increase of 5.6 percent. Spending growth on MH prescription drugs closely aligned with that for all prescription drugs—for the first time since 1993.
- The upward bump in 2006 all-drug spending growth marks the implementation of Medicare Part D. Medicare Part D allowed enrolled persons who previously paid for prescription drugs entirely out of pocket or through Medigap policies to pay a premium that would allow them to purchase prescription medications at a substantially lower out-of-pocket cost. It also transferred the cost of prescription drugs for dually eligible Medicare and Medicaid persons from Medicaid to Medicare.

Share of MH Medication Spending for Antidepressants Dropped; Share for Antipsychotics and ADHD Medications Rose, from 2002 to 2009

MH Prescription Medication Spending Share by Therapeutic Class, 2002 and 2009

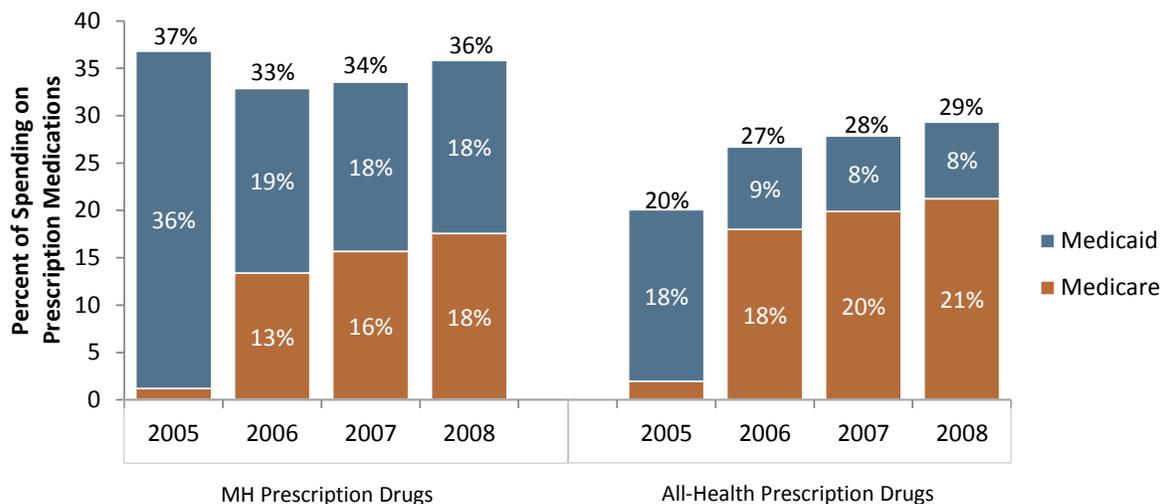


Note: Manufacturers' rebates returned to insurers reduce actual spending on medications and have been accounted for in these estimates.

- In 2009, one-third of all spending for MH prescription medications went for purchases of antidepressants. Another third went to purchase antipsychotics used to treat schizophrenia and other severe mental disorders, including bipolar disorder. Stimulants used to treat attention deficit hyperactivity disorder (ADHD) accounted for 14 percent of all spending on MH medications, as did benzodiazepines and anxiolytics, sedatives, and hypnotics used to treat anxiety and sleep disorders. Anticonvulsants made up the remaining 5 percent of all spending on MH prescription medications.
- Beginning in 2002, growth in spending for MH medications dropped below 20 percent for the first time since 1996 and marked the beginning of a shift in the distribution of spending for MH prescription medications among therapeutic categories. The share of spending on antidepressants dropped from one-half to one-third as many products became available in lower cost generic form (Mark, et al., 2012).
- For antipsychotics, the share of spending has increased from about one-quarter to one-third of all spending on MH medications between 2002 and 2009. Similarly, the share of spending on ADHD medications has risen from 7 percent in 2002 to 14 percent in 2009, with the fastest growth between 1996 and 2008 in prescriptions for teenagers (National Institute of Mental Health, 2011).

The Implementation of Medicare Part D in 2006 Shifted MH Prescription Drug Spending from Medicaid to Medicare

Distribution of Medicare and Medicaid Spending for MH and All-Health Prescription Drugs, 2005-2008

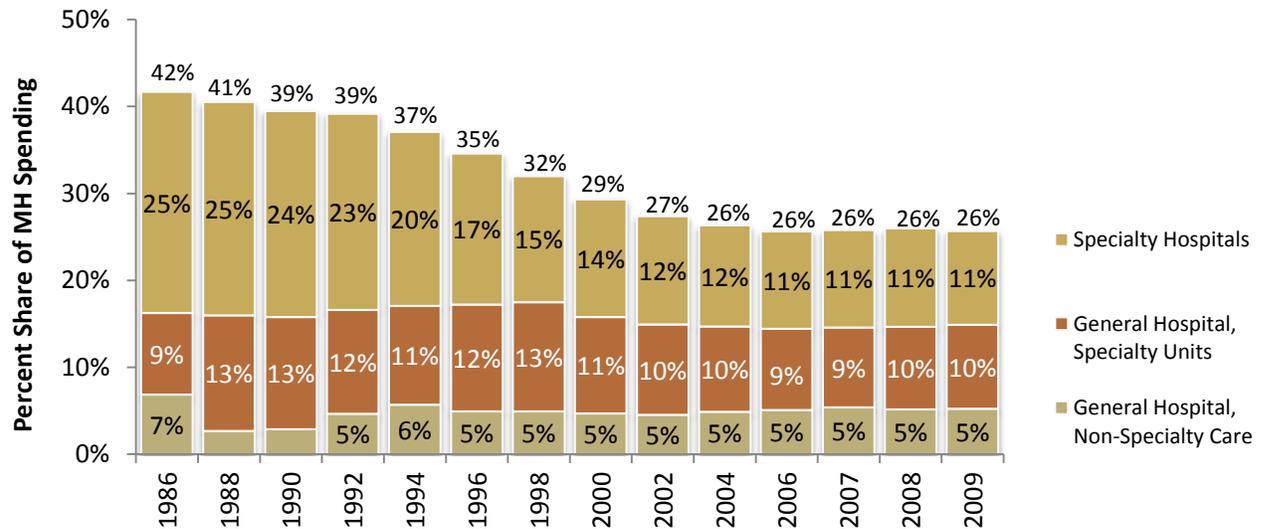


Note: Bar segments less than 5 percent are not labeled.

- With the creation of Medicare Part D in 2006, financial responsibility for prescription drugs for dually eligible Medicare and Medicaid enrollees was shifted from Medicaid to Medicare. Because many people on Medicaid are also eligible for Medicare because of a mental disability or age, Medicare Part D pays for a large share of psychotropic medications beginning in 2006.
- About 1 percent of all MH medications were paid by Medicare and 36 percent by Medicaid in 2005. In 2006, the shares shifted to 13 percent paid by Medicare and 19 percent by Medicaid. Altogether, about one-third of all MH medications, or \$12.2 billion, were paid by Medicare and Medicaid in 2006. Small shifts in spending continued to occur over the next few years as the transition was completed for all dual Medicare and Medicaid enrollees.
- In 2005, about 2 percent of all-health spending on prescription medications was paid by Medicare and 18 percent by Medicaid. In 2006, the shares shifted to 18 percent paid by Medicare and 9 percent by Medicaid.

Share of MH Spending on Specialty MH and SA Hospitals Fell Sharply from 1986 to 2002, then Stabilized in Recent Years

Share of MH Spending for Hospital Care by Hospital Type, 1986-2009

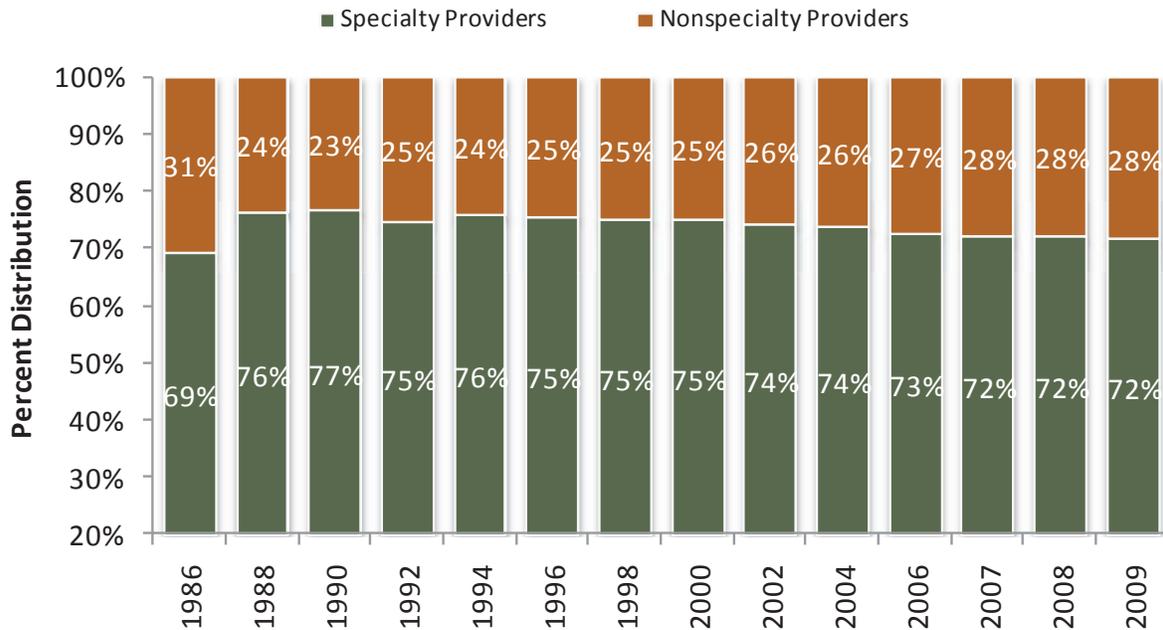


Note: Bar segments less than 5 percent are not labeled.

- Between 1986 and 2009, the hospital share of MH spending fell from 42 percent to 26 percent. This decline was driven by a significant drop in the share of spending on MH treatment in specialty MHA hospitals (from 25 percent to 11 percent of all MH treatment spending between 1986 and 2009). *Specialty hospitals* are psychiatric and chemical dependency hospitals that provide specialized treatment for M/SUDs.
- From 1986 to 2009, the share of MH spending in general hospitals (including specialty units and in general medical and surgical units) remained relatively constant between 14 and 17 percent.
- In 2009, almost 60 percent of MH spending in hospitals was in general hospitals, up from 39 percent in 1986.
 - In 2009, \$14 billion (10 percent of all MH spending) was spent on care in specialty psychiatric units of general hospitals; \$8 billion (5 percent of MH spending) was spent on nonspecialty care in general hospitals that took place in outpatient settings (including the emergency department), scatter beds located in inpatient medical units, and residential nursing home units.

Specialty Providers Accounted for Three-Quarters of MH Spending Throughout Most of the Period from 1986 to 2009

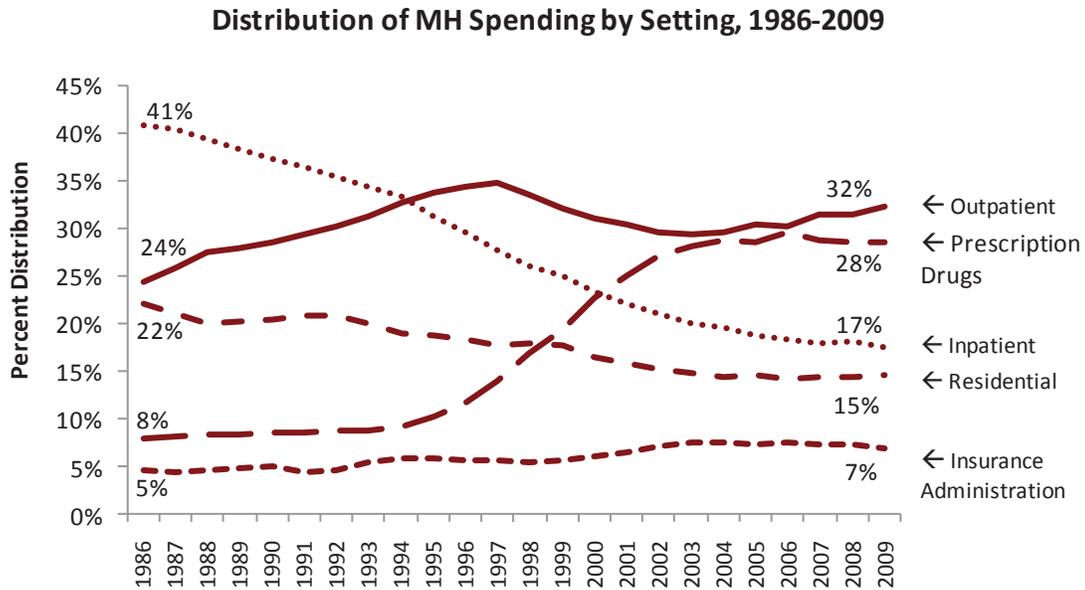
Distribution of MH Treatment Spending by Specialty and Nonspecialty Providers, 1986-2009*



*Spending on prescription drugs and insurance administration excluded from the total MH spending represented by the distribution shown here.

- The share of MH treatment spending devoted to specialty providers remained relatively flat throughout the 1986–2009 period, with MH specialty providers receiving about three-quarters of all MH spending. Specialty providers include psychiatric units of general hospitals, specialty psychiatric hospitals, psychiatrists, other MH professionals such as psychologists and MH social workers, and specialty MH and SA centers providing mostly outpatient and residential treatment services. All other providers are considered to be nonspecialty, including nonpsychiatric physicians, medical or surgical units and outpatient departments of general hospitals, home health, and nursing homes.
- Most visits to nonpsychiatric physicians during which a psychotherapeutic medication is prescribed are not coded with MH diagnoses in billing records, despite the fact that the vast majority of psychotherapeutic medications are prescribed for MH conditions (Kautz, et al., 2008; Mark, 2010). Spending on visits to nonpsychiatric physicians without a recorded MH diagnosis code is not captured in these estimates.

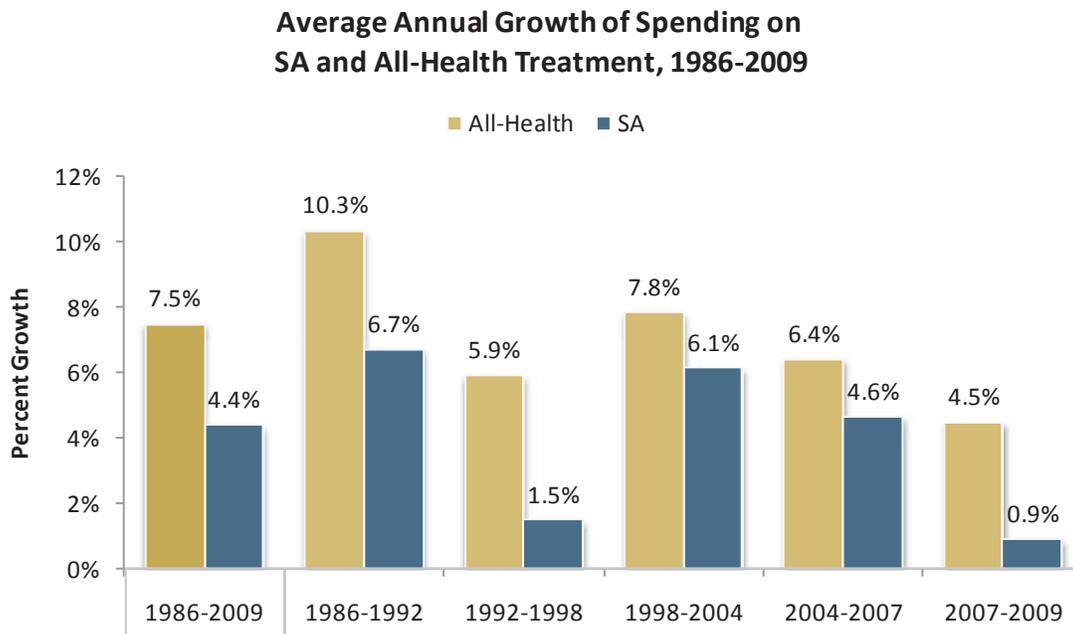
Shares of Spending for Inpatient and Residential Settings Fell, Shares for Outpatient and Prescription Drugs Rose, from 1986 to 2009



- The share of spending on inpatient MH treatment fell from 41 percent of MH spending in 1986 to 17 percent in 2009.
- Residential treatment fell from 22 percent to 15 percent of MH spending between 1986 and 2009.
- Spending on outpatient treatment rose from 24 percent of all MH treatment spending in 1986 to 32 percent in 2009.
- Spending on prescription drugs made up a rapidly increasing share of MH spending—expanding from 8 percent of MH spending in 1986 to 28 percent in 2009.
- Insurance administration (costs for running public programs and private insurance plans) accounted for 5–7 percent of all MH spending from 1986 to 2009.

Substance Abuse: Spending by Payer

Growth in SA Treatment Spending Lagged Behind Growth in All-Health Spending for All Periods from 1986 Through 2009



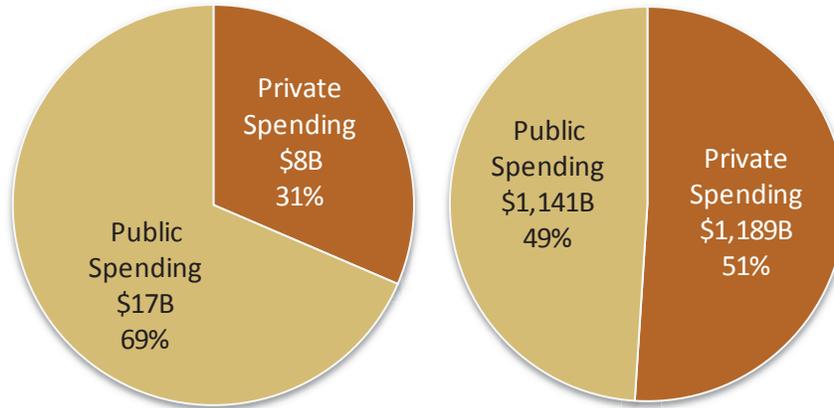
- Across all periods, nominal SA spending growth (4.4 percent annually, on average) was slower than the growth for all-health (7.5 percent) and MH (6.8 percent, not shown).
- Characteristics of distinct periods provide a context for understanding nominal changes in SA and all-health expenditures:
 - 1986–1992: a high inflation period and the end of a period of insurance benefit and treatment provider expansions.
 - 1992–1998: a period of significant managed care restrictions on reimbursement for SA inpatient treatment.
 - 1998–2004: a period when faster growth in SA treatment spending was spurred by rapid growth in spending on specialty SA centers that provided outpatient and residential treatment.
 - 2004–2007: a period of slowing growth again in SA and all-health spending. Slow growth in SA spending stemmed primarily from slow growth in spending for treatment in specialty SA centers (2.3 percent) during this period.
 - 2007–2009: a period of recession characterized by even slower growth in SA and all-health spending. Slow growth in SA spending continued, primarily due to spending for treatment in specialty SA centers that fell by 8 percent. Growth in state and local funding (including the state portion of Medicaid and other state and local funding) may also be a factor in the slowdown in SA spending. In 2007–2009, growth for state and

local funding fell at a 4.6-percent average annual rate compared with growth averaging 5.0 percent annually in 2004–2007.

- In inflation-adjusted terms for 1986–2009, SA spending grew at a 1.9 percent average annual rate compared to all-health spending that increased at a 4.9 percent average annual rate. During the recession (2007–2009), SA spending fell at an inflation-adjusted rate of –0.7 percent, compared to an increase of 2.8 percent for all-health spending and 3.2 percent for MH spending.

Public Payers Financed \$7 Out of Every \$10 Spent on SA Treatment in 2009

Public and Private Spending on SA and All-Health Treatment, 2009



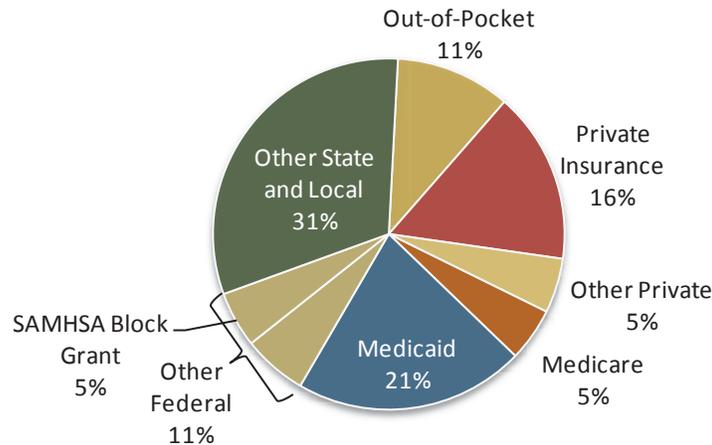
SA Spending = \$24 Billion

All-Health Spending = \$2,330 Billion

- In 2009, public payers accounted for the vast majority (69 percent) of spending on SA treatment. In contrast, public payers accounted for less than half (49 percent) of all-health spending in 2009.
- Private payers—composed of private insurance, out-of-pocket, and other private spending—accounted for \$8 billion (31 percent) of spending on SA treatment but 51 percent of all-health spending in 2009.

Other State and Local Payers Accounted for the Largest Share of Spending on SA Treatment in 2009

Distribution of Spending on SA Treatment by Payer, 2009

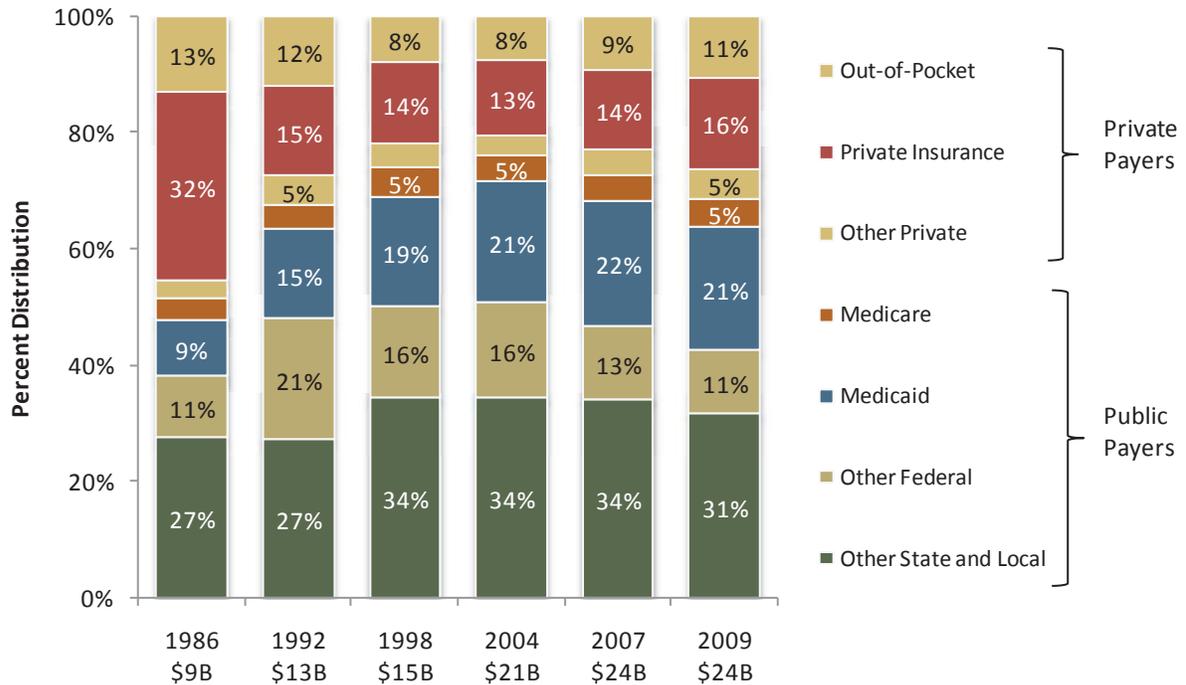


SA Spending = \$24 Billion

- Other state and local government spending (other than the state share of Medicaid) was responsible for 31 percent of SA treatment spending in 2009.
- One out of every five dollars spent on SA treatment was paid by Medicaid in 2009.
- Other federal government payers accounted for 11 percent of SA spending in 2009. Other federal payers included the Department of Veterans Affairs, Indian Health Service, and SAMHSA, among others.
- In 2009, about 47 percent of other federal government spending came from the SAMHSA SA Block Grant, or about 5 percent of all SA spending.
- Sixteen cents of each dollar spent on SA treatment in 2009 came from private insurance.
- Direct spending by patients and their families for insurance cost sharing or for treatment not covered by another third party amounted to 11 percent in 2009.

Share of SA Spending from Private Insurance Decreased; Shares of Medicaid and Other State and Local Government Spending Grew, Between 1986 and 2009

**Distribution of SA Spending by Payer,
1986-2009**

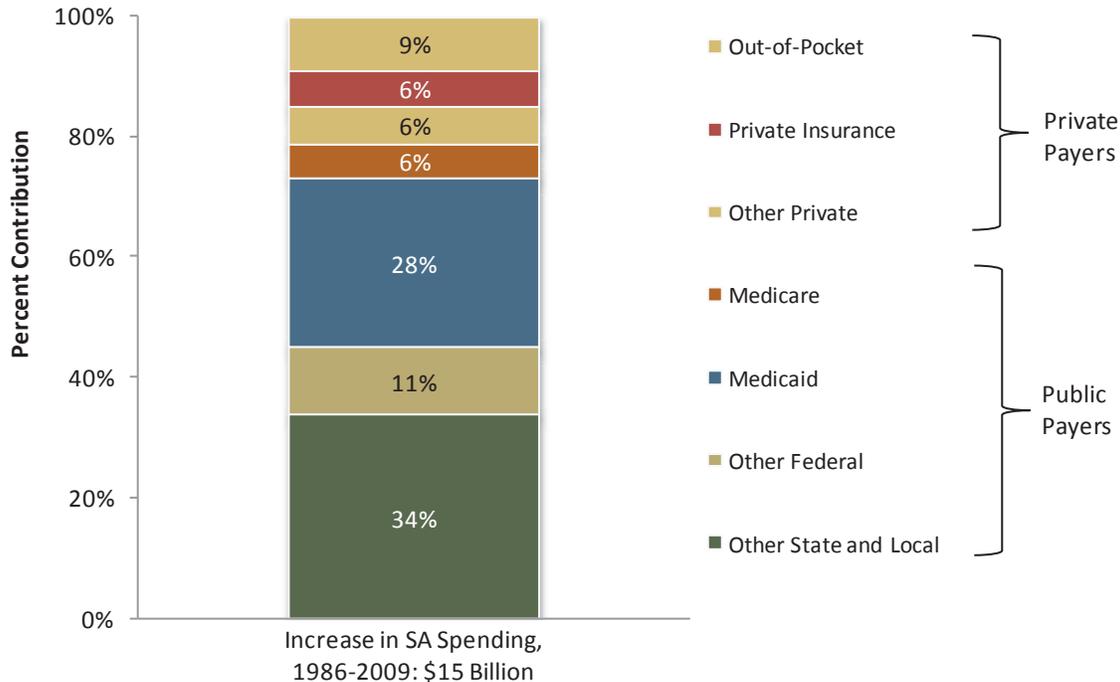


Note: Bar segments less than 5 percent are not labeled.

- Private insurance funding of SA treatment accounted for one of every three dollars (32 percent) in 1986, but just half of that share (16 percent) in 2009.
- In contrast, the proportion of spending funded by Medicaid rose from 9 to 21 percent between 1986 and 2009.
- The share of other federal spending was the same in 2009 (11 percent) as it was in 1986. Between 1986 and 1992, however, the share of other federal spending doubled (because of expansions in the SAMHSA SA Block Grant and other federal funding) before falling back to 11 percent by 2009.
- The share of other state and local government spending also increased from 27 percent in 1986 to 31 percent in 2009.

Other State and Local Payers and Medicaid Contributed Most to Increases in SA Spending

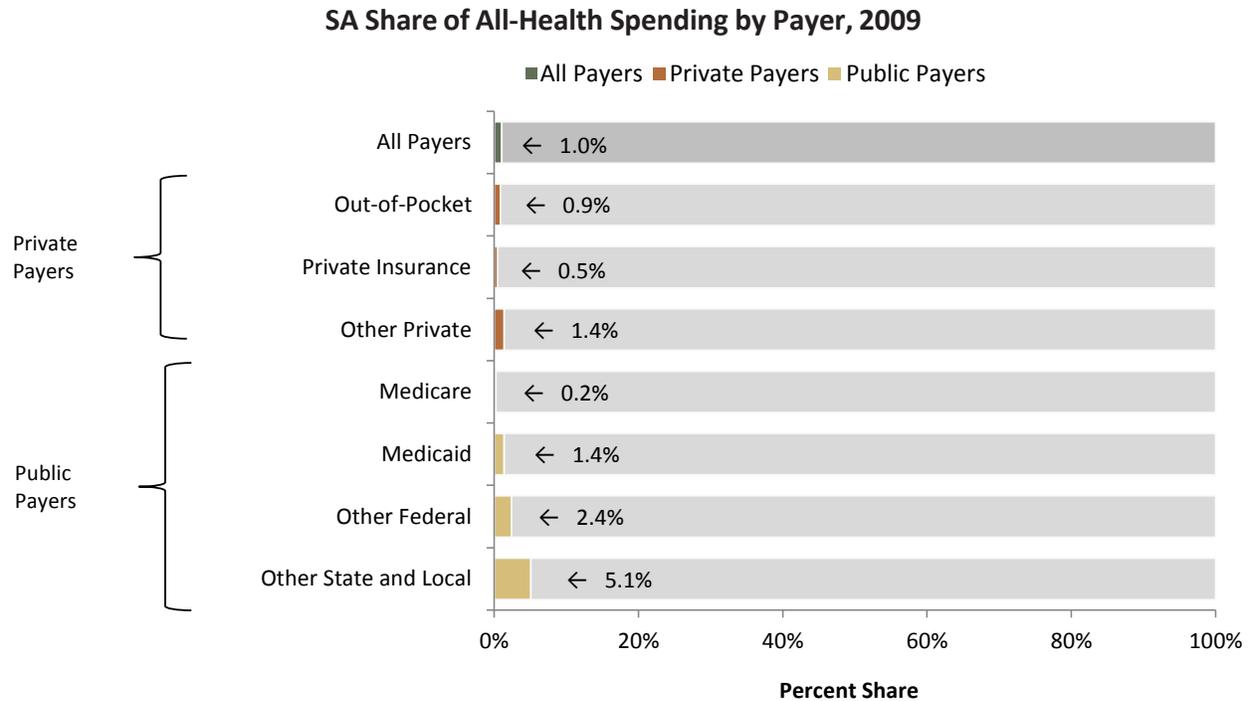
Contribution to Increase in SA Spending by Payer, 1986-2009



This graph depicts the portion each payer contributed to the \$15 billion increase in SA spending between 1986 and 2009.

- Other state and local government spending was responsible for 34 percent (\$5.2 billion) of the growth in SA treatment spending; this payer accounted for the largest share of SA spending in 1986 and grew at a slightly faster pace than overall SA spending.
- Medicaid contributed 28 percent (\$4.3 billion) to the increase in SA treatment spending. Medicaid made up only nine percent of SA spending in 1986, but grew at almost twice the rate (averaging 8.2 percent annually) as all SA spending between 1986 and 2009 to become an important driver of the increase in total SA spending.
- Private insurance spending on SA treatment contributed only 6 percent (\$0.9 billion) to the increase in SA spending. Growth in private insurance spending averaged just 1.2 percent annually, compared to 4.4 percent for all payers for SA treatment.
- Between 1986 and 2009, 11 percent of the increase in SA treatment spending was attributable to other federal government payers other than Medicaid and Medicare. SAMHSA SA block grants (a subset of other federal spending) accounted for 7 percent of the SA spending increase.

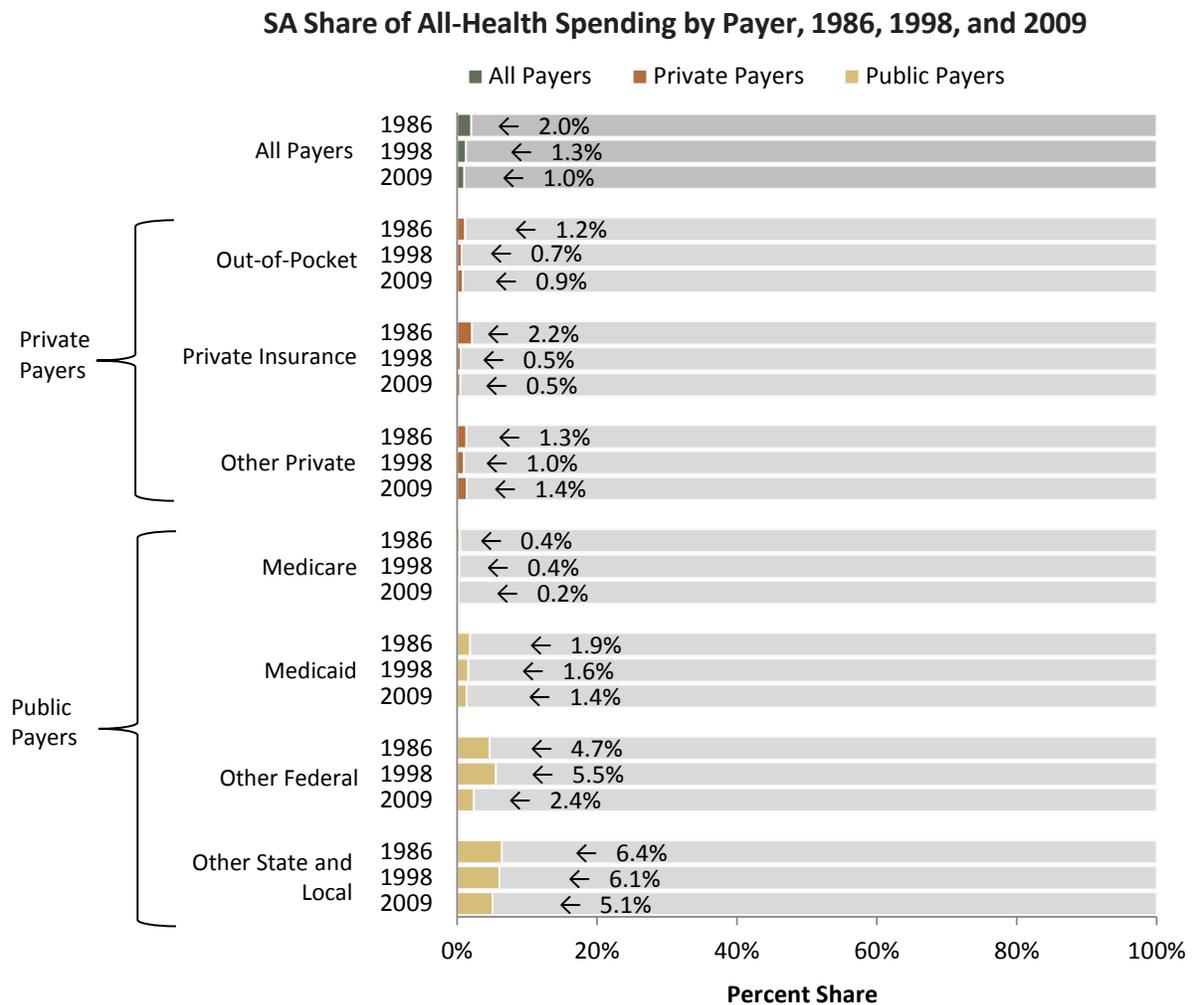
SA Spending Accounted for Only One Percent of All-Health Spending in 2009 and a Substantially Smaller Share of All Private Health Insurance



This graph depicts spending on SA treatment as a share of all-health spending, over all payers combined and for each payer, in 2009.

- Across payers, just 1.0 percent of all-health spending went to SA treatment in 2009.
- In 2009, the shares of all-health spending dedicated to SA treatment by other federal and other state and local governments were much higher (2.4 percent and 5.1 percent, respectively) than the SA all-payer share (1.0 percent), an indication of the importance of these funding sources for SA treatment.
- For out-of-pocket, private insurance, and Medicare, the shares of all-health spending that went to SA treatment were lower than the all-payer share (0.9 percent, 0.5 percent, and 0.2 percent, respectively), an indication that these funding sources are less involved in treatment funding for SA than for all health.
- SA spending amounted to a 1.4 percent share of Medicaid all-health spending.

SA Share of All-Health Spending Fell Consistently for Nearly All Payers Between 1986 and 2009

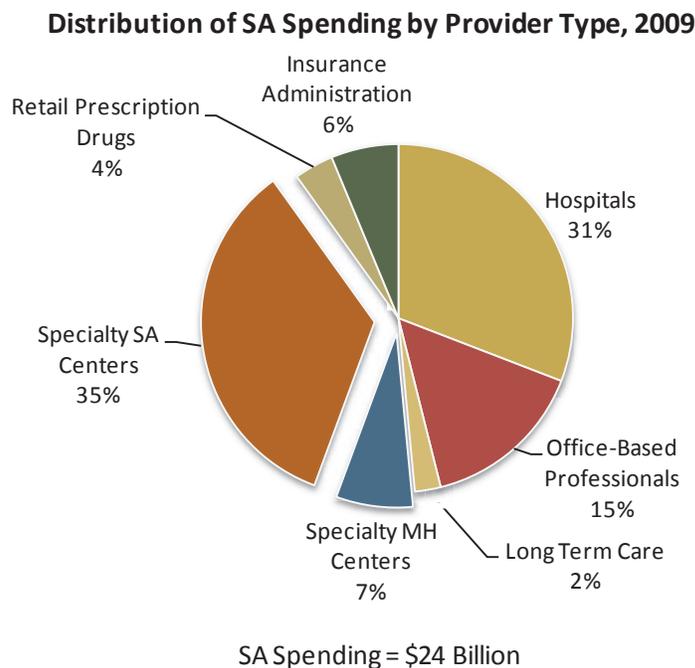


This graph depicts spending on SA treatment as a share of all-health spending, over all payers combined and for each payer in 1986, 1998, and 2009.

- For all payers combined, the SA share of all-health spending fell by half, from 2.0 percent to 1.0 percent
- SA treatment accounted for smaller shares of all-health spending in 2009 than it did in 1986. From 1986 to 2009, the SA share of payer spending declined from 2.2 percent to 0.5 percent of all-health private insurance spending; from 1.9 percent to 1.4 percent of all-health Medicaid spending; from 4.7 percent to 2.4 percent all-health other federal spending; and from 6.4 percent to 5.1 percent of the all-health other state and local spending.

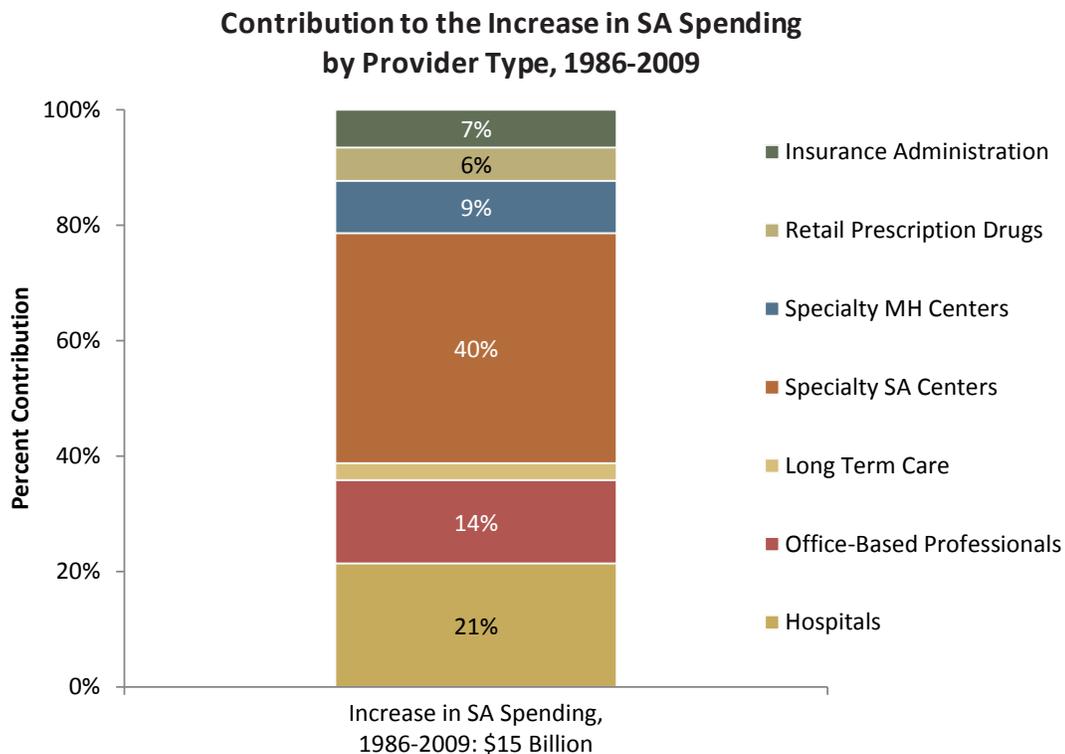
Substance Abuse: Spending by Provider, Setting, and Specialty Type

Specialty MH and SA Centers Accounted for the Largest Portion of SA Spending in 2009



- Specialty SA and MH centers—organizations providing residential or outpatient services to individuals with SA and MH diagnoses—accounted for nearly half (42 percent) of all SA spending in 2009. Specialty SA centers were responsible for 35 percent of SA treatment spending in 2009; specialty MH centers were responsible for 7 percent.
- Almost one-third of SA treatment spending went for hospital care (31 percent).
- Office-based professionals received 15 percent of all SA treatment spending.
 - Psychiatrists and other nonpsychiatric physicians accounted for 4 percent of all SA treatment spending. SA treatment depends more on care from nonpsychiatric physicians (3 percent of SA spending) than it does from psychiatrists (1 percent of SA spending) (not shown separately; see Table A.1).
 - Spending on other professionals such as psychologists, social workers, and counselors amounted to 11 percent of SA spending (not shown separately; see Table A.1).
- Spending on retail prescription drugs has increased in recent years, amounting to 4 percent of all SA spending in 2009, but remained a substantially smaller share than the 28 percent of all MH spending spent for prescription medications. Although a number of medications for the treatment of alcohol problems has been available for many years, new medications to treat opioid addiction have recently become available and their use has grown dramatically since 2004.

Specialty MH and SA Centers Accounted for Almost Half of the Increase in SA Spending from 1986 Through 2009



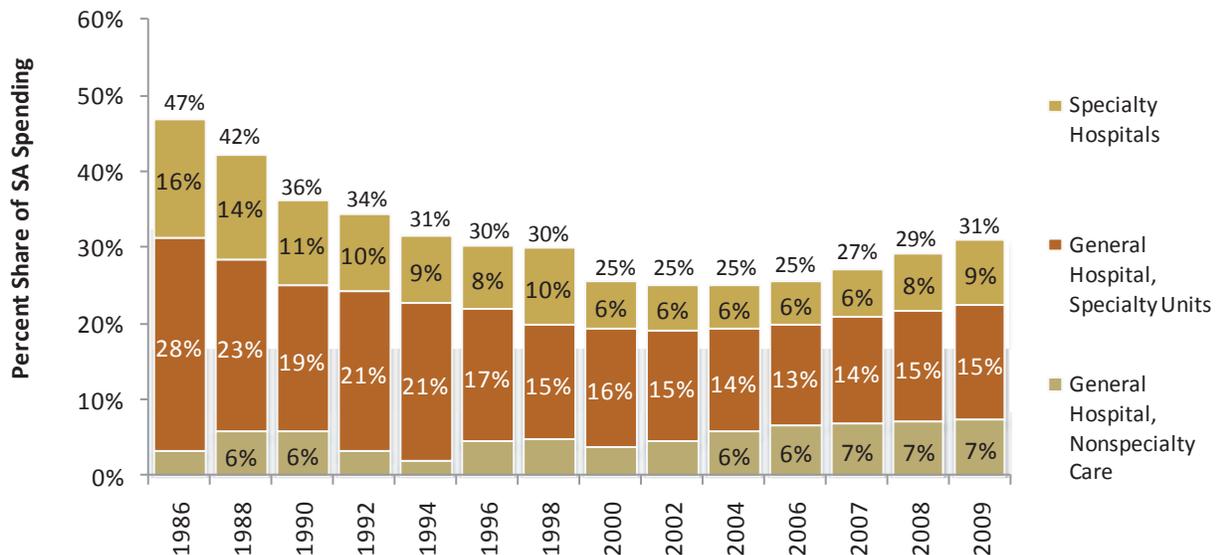
Note: Bar segments less than 5 percent are not labeled.

This graph identifies important drivers of SA spending between 1986 and 2009 by showing the percent contribution of each provider type to the \$15 billion increase in SA spending.

- Between 1986 and 2009, spending on specialty SA centers increased by \$6.1 billion (40 percent of total SA expenditures increase), and spending on specialty MH centers increased by \$1.4 billion (9 percent of the increase in total SA expenditures).
- Office-based professionals (physicians and other SA professionals) accounted for 14 percent (\$2.2 billion) of the increase in SA spending. Spending for other professionals grew more rapidly than did SA spending on physician services and was alone responsible for \$2.0 billion, or 13 percent, of the SA spending increase.
- Spending on care in hospitals accounted for 21 percent (\$3.3 billion) of the increase in SA spending. Spending on prescription drugs contributed 6 percent to the 1986–2009 increase in SA spending. This is larger than the 4 percent share of SA spending that went for the purchase of prescription drugs in 2009 and is an indication of the rapid growth in spending in recent years, although from a very small base.

Hospital Share of SA Spending Declined Between 1986 and 2005 and Rose Between 2005 and 2009

Share of SA Spending for Hospital Care by Hospital Type, 1986-2009



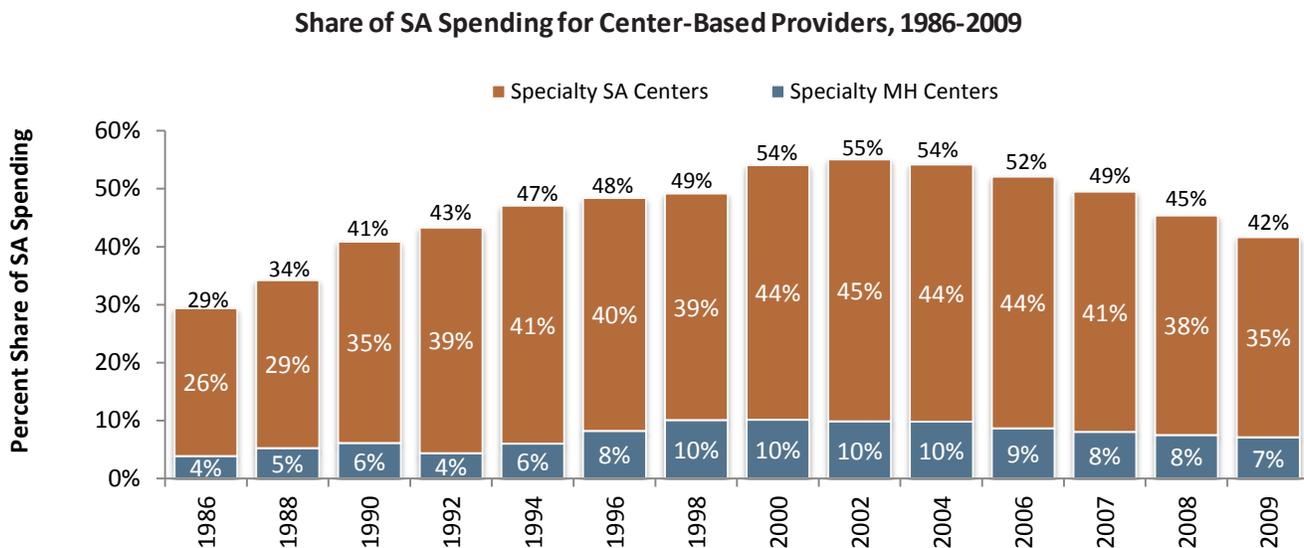
Note: Bar segments less than 5 percent are not labeled.

- Between 1986 and 2005, the hospital share of SA spending decreased from 47 percent to 24 percent (not shown in graph). This decline was primarily caused by large reductions in the share of spending for SA treatment in specialty hospitals and specialty units in general hospitals. This trend is likely related to the movement of SA rehabilitation to nonhospital settings and the resulting use of specialty inpatient treatment primarily for detoxification.
- Between 2005 and 2009, however, the hospital share of SA spending began to rise.
 - The Healthcare Cost and Utilization Project (HCUP)⁷ Nationwide Inpatient Sample shows a slight increase (0.7 percent average annual increase) in inpatient days for patients with a principal substance use disorder (SUD) diagnosis from 2005 to 2009. The HCUP Nationwide Emergency Department Sample⁸ shows a strong uptick in the growth of community hospital emergency department visits for SUDs in 2008 and 2009; most of this increase was for alcohol-related disorders.

⁷ Data downloadable from <http://hcupnet.ahrq.gov/>.

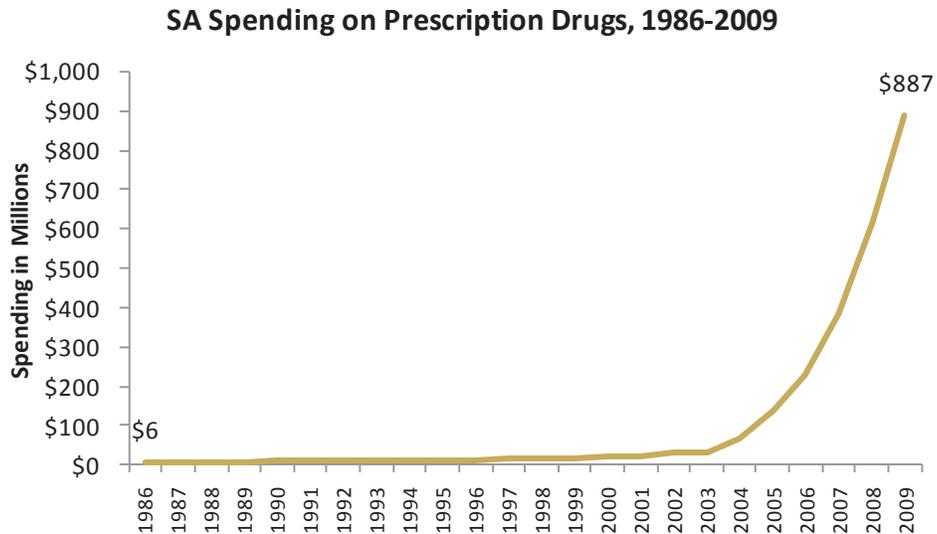
⁸ Data downloadable from <http://hcupnet.ahrq.gov/>.

Share of SA Spending Going to Specialty SA and MH Centers Expanded Between 1986 and 2009



- Overall, the share of SA treatment spending for specialty center services (mostly outpatient and residential) surged from 29 percent in 1986 to 55 percent in 2002, after which it declined to 42 percent in 2009.
- Between 1986 and 2009, the specialty SA centers' share of SA spending increased by almost half from 26 percent to 35 percent.
- Similarly, the share of SA spending on treatment services in specialty MH centers almost doubled from 4 to 7 percent.
- Several factors may be influencing the recent reduction in the share (and level) of spending in specialty SA centers.
 - The recession limited the amount of increase in state and local funding available to specialty SA centers to cover treatment costs for a growing number of uninsured patients. Other state and local funding accounted for 39 percent of specialty SA center funding and was a major source of funding for these safety net providers.
 - The expanding Medicaid population forced states to redirect health care funds from state MH and SA authorities to Medicaid, slowing increases in the amount of grants that states could direct to specialty SA centers.

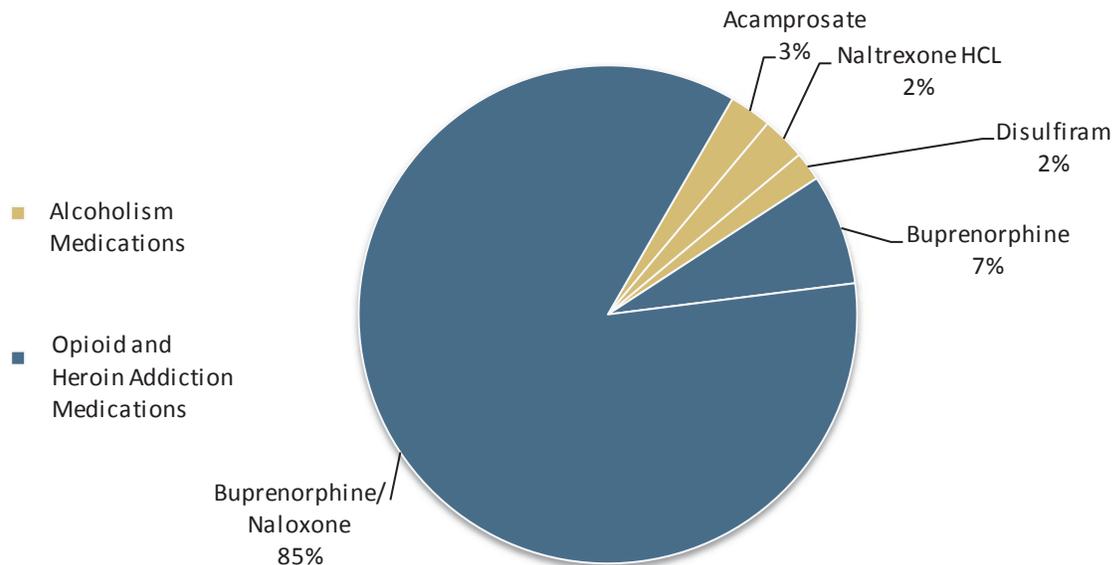
SA Treatment Spending on Prescription Drugs Increased Significantly in Recent Years



- In 1986, just \$6 million was spent on drugs for SA treatment, but by 2009 spending reached \$887 million.
- In 2002, all spending on SA prescription medications (\$31 million) was for treatment of alcohol addiction. By 2009, a large part of spending on SA prescription medications (92 percent) went for the purchase of buprenorphine (used to treat drug addiction); only 8 percent was for the purchase of medications used to treat alcohol addiction.
- Spending on methadone for drug addiction is captured as part of spending for specialty SA centers where methadone is dispensed, rather than with SA prescription drug spending.

Spending on Drugs to Treat Opioid and Heroin Addiction Comprised the Vast Majority of Spending for SA Prescription Drugs in 2009

SA Spending on Prescription Drugs by Drug Type, 2009

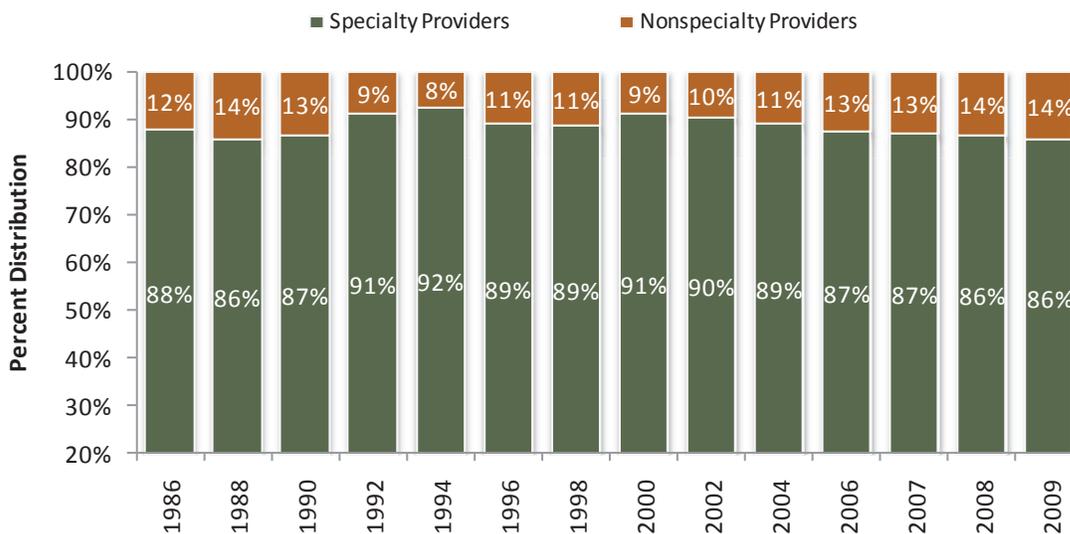


SA Spending on SA Prescription Drugs = \$887 Million

- In 2009, a large part of spending on SA prescription medications went for products used to treat drug addiction.
 - About 7 percent of SA drug spending went for the purchase of prescription drugs to treat alcohol abuse and addiction. These products included acamprosate, naltrexone, and disulfiram (3 percent, 2 percent, and 2 percent, respectively, of all spending on SA medications).
 - The remaining 93 percent of spending on SA prescription medications was for treatment of opioid abuse and addiction. These products included buprenorphine (7 percent of all spending on SA medications) and buprenorphine/naloxone (85 percent of all spending on SA medications).

Specialty Providers Received the Vast Majority of SA Spending Paid to Providers in 2009

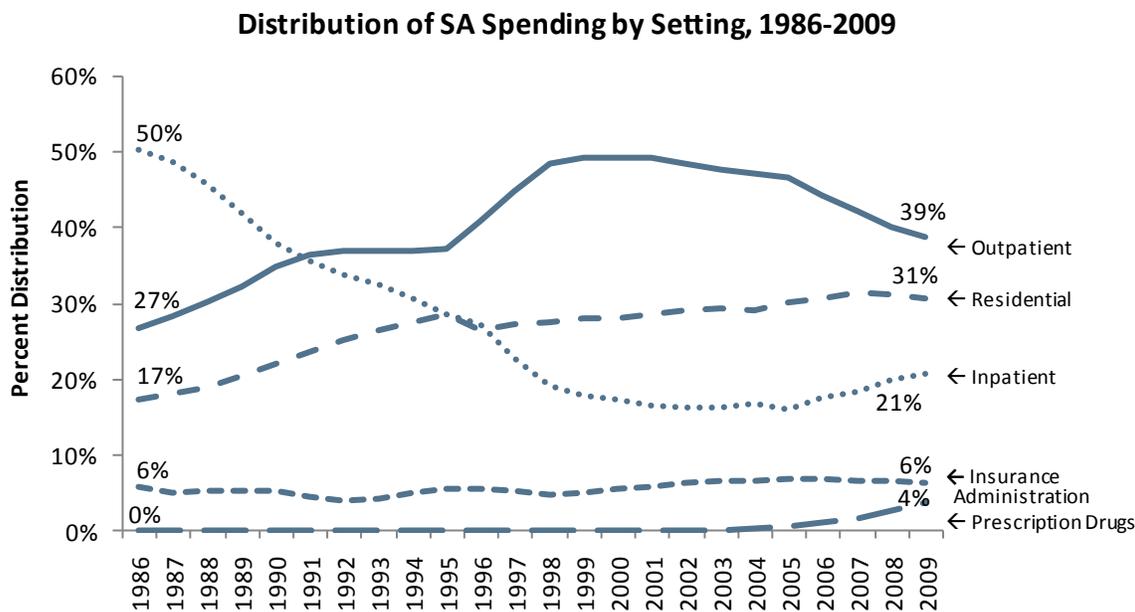
Distribution of SA Treatment Spending by Specialty and Nonspecialty Providers, 1986-2009*



*Spending on prescription drugs and insurance administration excluded from the total SA spending represented by the distribution shown here.

- In 1986, 88 percent of SA provider spending was dedicated to specialty providers. By 1993, this share rose to 93 percent (data not shown), before falling gradually to 86 percent by 2009.
- Substance use disorders are more likely than mental disorders to be treated by a specialty provider. Seventy-two percent of MH spending was dedicated to specialty providers in 2009 compared to 86 percent of SA spending.

Share of SA Spending for Inpatient Treatment Decreased Between 1986 and 2005, Before Rising Slightly in Recent Years



- As shares of spending for outpatient and residential treatment grew between 1986 and 2009, the share of spending on inpatient SA treatment dropped from 50 percent to 21 percent.
- In 2009, almost two-fifths (39 percent) of SA spending was dedicated to treatment in the outpatient setting. In 1986, only 27 percent of SA spending went for outpatient SA treatment.
- Residential treatment accounted for the next largest portion of SA spending (31 percent) in 2009, increasing substantially from a low of 17 percent in 1986.
- Prescription drugs and insurance administration each accounted for a small share of SA spending in 2009 (4 percent and 6 percent, respectively). The share of spending for insurance administration remained relatively stable over the 24-year period, whereas the share for prescription drugs rose from very little spending in 1986 (0 percent) to 4 percent by 2009.

References

- Coffey RM, Mark TL, King E, Harwood H, McKusick D, Genuardi J, et al. National Expenditures for Mental Health and Substance Abuse Treatment, 1997. SAMHSA Pub. No. SMA 00-3499. Rockville, MD: Department of Health and Human Services, Center for Substance Abuse Treatment and Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, July 2000.
- Institute of Medicine. *Improving the Quality of Health Care for Mental and Substance-Use Conditions*. Washington, DC: The National Academies Press, 2006.
- Kautz C, Mauch D, Smith SA. Reimbursement of Mental Health Services in Primary Care Settings. HHS Pub. No. SMA-08-4324. Rockville, MD: Department of Health and Human Services, Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, 2008.
- Mark TL. For what diagnoses are psychotropic medications being prescribed? A nationally representative survey of physicians. *CNS Drugs*. 24(4):319–326, 2010.
- Mark TL, Coffey RM. The decline in receipt of substance abuse treatment by the privately insured, 1992–2001. *Health Affairs (Millwood)*. 23(6):157–162, 2004.
- Mark T, Coffey R, King E, Harwood H, McKusick D, Genuardi J, et al. Spending on mental health and substance abuse treatment, 1987–1997. *Health Affairs*. 19(4):108–120, 2000.
- Mark T, Coffey RM, McKusick D, Harwood H, King E, Bouchery E, et al. National Expenditures for Mental Health Service and Substance Abuse Treatment 1991–2001. HHS Pub. No. SMA 05-3999. Rockville, MD: Department of Health and Human Services, Center for Substance Abuse Treatment and Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, 2005.
- Mark TL, Coffey RM, Vandivort-Warren R, Harwood HJ, King EC, MHSAs Spending Estimates Team. U.S. spending for mental health and substance abuse treatment, 1991–2001. *Health Affairs (Millwood)*. Web Exclusives:W5-133–W5-142, 2005.
- Mark TL, Kassed C, Levit K, Vandivort-Warren R. An analysis of the slowdown in growth of spending for psychiatric drugs, 1986–2008. *Psychiatric Services*. 63(1): 13–18, 2012.
- Mark TL, Levit KR, Coffey RM, McKusick DR, Harwood HJ, King EC, et al. National Expenditures for Mental Health Services and Substance Abuse Treatment, 1993–2003. SAMHSA Publication No. SMA 07-4227. Rockville, MD: Department of Health and Human Services, Center for Substance Abuse Treatment and Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, 2007.
- Mark TL, Levit KR, Vandivort-Warren R, Buck JA, Coffey RM. Changes in US spending on mental health and substance abuse treatment, 1986–2005, and implications for policy. *Health Affairs*. 30:2284–292, 2011.
- Mark TL, McKusick D, King E, Harwood R, Genuardi J. National Expenditures for Mental Health, Alcohol and Other Drug Abuse Treatment, 1996. Rockville, MD: Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, 1998.

Martin A, Lassman D, Whittle L, Catlin A, and the National Health Expenditure Accounts Team. Recession contributes to slowest annual rate of increase in health spending in five decades. *Health Affairs*. 30(1): 11–22, 2011.

McKusick D, Mark TL, King E, Harwood R, Buck JA, Dilonardo J, et al. Spending for mental health and substance abuse treatment, 1996. *Health Affairs*. 17(5):147–157, 1998.

National Institute of Mental Health. 2011. Prescribed stimulant use for ADHD continues to rise steadily. Available at www.nimh.nih.gov/science-news/2011/prescribed-stimulant-use-for-adhd-continues-to-rise-steadily.shtml. Accessed July 24, 2012.

Substance Abuse and Mental Health Services Administration. National Expenditures for Mental Health Services and Substance Abuse Treatment, 1986–2005. HHS Publication No. (SMA) 10-4612. Rockville, MD: Department of Health and Human Services, Center for Mental Health Services and Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration, 2010.

Appendix A: Tables

Table A.1. Spending by Provider and Setting: Levels and Percent Distribution for Mental Health and Substance Abuse (MHSA), Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA), and All Health, 2009

| Type of Provider and Site of Service (note 1) | MHSA | | MH | | SA | | AA | | DA | | All-Health | |
|---|------------------|-------------|------------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|--------------------|-------------|
| | Millions | Percent | Millions | Percent | Millions | Percent | Millions | Percent | Millions | Percent | Millions | Percent |
| TOTAL[†] | \$171,720 | 100% | \$147,381 | 100% | \$24,339 | 100% | \$11,157 | 100% | \$13,182 | 100% | \$2,330,064 | 100% |
| Total all service providers and products [†] | 159,912 | 93 | 137,093 | 93 | 22,819 | 94 | 10,452 | 94 | 12,367 | 94 | 2,167,075 | 93 |
| Total all service providers [†] | 117,041 | 68 | 95,110 | 65 | 21,932 | 90 | 10,385 | 93 | 11,547 | 88 | 1,839,034 | 79 |
| Total inpatient | 30,831 | 18 | 25,773 | 17 | 5,058 | 21 | 2,475 | 22 | 2,583 | 20 | - | - |
| Total outpatient | 57,052 | 33 | 47,637 | 32 | 9,416 | 39 | 4,412 | 40 | 5,004 | 38 | - | - |
| Total residential | 29,158 | 17 | 21,700 | 15 | 7,458 | 31 | 3,498 | 31 | 3,959 | 30 | - | - |
| All hospitals | 45,349 | 26 | 37,835 | 26 | 7,513 | 31 | 3,921 | 35 | 3,592 | 27 | 759,074 | 33 |
| Inpatient | 27,992 | 16 | 24,360 | 17 | 3,632 | 15 | 1,747 | 16 | 1,886 | 14 | - | - |
| Outpatient | 14,465 | 8 | 11,271 | 8 | 3,195 | 13 | 1,860 | 17 | 1,334 | 10 | - | - |
| Residential (note 2) | 2,891 | 2 | 2,205 | 1 | 686 | 3 | 314 | 3 | 372 | 3 | - | - |
| General hospitals | 27,392 | 16 | 21,967 | 15 | 5,425 | 22 | 3,052 | 27 | 2,373 | 18 | - | - |
| Inpatient | 12,768 | 7 | 10,454 | 7 | 2,314 | 10 | 1,249 | 11 | 1,065 | 8 | - | - |
| Outpatient | 12,637 | 7 | 9,890 | 7 | 2,747 | 11 | 1,665 | 15 | 1,082 | 8 | - | - |
| Residential (note 2) | 1,988 | 1 | 1,624 | 1 | 364 | 1 | 137 | 1 | 227 | 2 | - | - |
| General hospitals, specialty units (note 3) | 17,917 | 10 | 14,266 | 10 | 3,651 | 15 | 1,644 | 15 | 2,006 | 15 | - | - |
| Inpatient | 11,159 | 6 | 9,444 | 6 | 1,715 | 7 | 820 | 7 | 895 | 7 | - | - |
| Outpatient | 5,737 | 3 | 4,140 | 3 | 1,597 | 7 | 713 | 6 | 884 | 7 | - | - |
| Residential (note 2) | 1,021 | 1 | 683 | 0 | 338 | 1 | 111 | 1 | 227 | 2 | - | - |
| General hospitals, nonspecialty units (note 3) | 9,475 | 6 | 7,701 | 5 | 1,774 | 7 | 1,407 | 13 | 367 | 3 | - | - |
| Inpatient | 1,609 | 1 | 1,010 | 1 | 598 | 2 | 429 | 4 | 170 | 1 | - | - |
| Outpatient | 6,900 | 4 | 5,750 | 4 | 1,150 | 5 | 952 | 9 | 197 | 1 | - | - |
| Residential (note 2) | 967 | 1 | 941 | 1 | 26 | 0 | 26 | 0 | - | - | - | - |
| Specialty hospitals | 17,956 | 10 | 15,868 | 11 | 2,089 | 9 | 870 | 8 | 1,219 | 9 | - | - |
| Inpatient | 15,225 | 9 | 13,906 | 9 | 1,319 | 5 | 498 | 4 | 821 | 6 | - | - |
| Outpatient | 1,828 | 1 | 1,380 | 1 | 448 | 2 | 195 | 2 | 253 | 2 | - | - |
| Residential (note 2) | 904 | 1 | 581 | 0 | 322 | 1 | 177 | 2 | 145 | 1 | - | - |
| All physicians | 16,991 | 10 | 15,911 | 11 | 1,079 | 4 | 513 | 5 | 566 | 4 | 505,887 | 22 |
| Inpatient | 1,586 | 1 | 1,192 | 1 | 393 | 2 | 220 | 2 | 174 | 1 | - | - |
| Outpatient | 15,405 | 9 | 14,719 | 10 | 686 | 3 | 293 | 3 | 392 | 3 | - | - |
| Psychiatrists | 8,587 | 5 | 8,332 | 6 | 256 | 1 | 102 | 1 | 154 | 1 | - | - |
| Inpatient | 725 | 0 | 636 | 0 | 89 | 0 | 46 | 0 | 43 | 0 | - | - |
| Outpatient | 7,863 | 5 | 7,696 | 5 | 167 | 1 | 56 | 1 | 111 | 1 | - | - |
| Nonpsychiatric physicians | 8,403 | 5 | 7,580 | 5 | 823 | 3 | 411 | 4 | 412 | 3 | - | - |
| Inpatient | 861 | 1 | 556 | 0 | 305 | 1 | 174 | 2 | 131 | 1 | - | - |
| Outpatient | 7,542 | 4 | 7,023 | 5 | 519 | 2 | 237 | 2 | 282 | 2 | - | - |

Table A.1. Spending by Provider and Setting: Levels and Percent Distribution for Mental Health and Substance Abuse (MHSA), Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA), and All Health, 2009—Continued

| Type of Provider and Site of Service (note 1) | MHSA | | MH | | SA | | AA | | DA | | All-Health | |
|---|----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|------------|---------|
| | Millions | Percent | Millions | Percent |
| Other professionals (note 4) | 10,461 | 6 | 7,832 | 5 | 2,629 | 11 | 1,460 | 13 | 1,170 | 9 | 66,781 | 3 |
| Inpatient | 546 | 0 | 220 | 0 | 326 | 1 | 177 | 2 | 149 | 1 | - | - |
| Outpatient | 8,713 | 5 | 7,490 | 5 | 1,224 | 5 | 609 | 5 | 614 | 5 | - | - |
| Residential | 1,202 | 1 | 122 | 0 | 1,080 | 4 | 674 | 6 | 406 | 3 | - | - |
| Free-standing nursing homes | 9,415 | 5 | 8,976 | 6 | 439 | 2 | 422 | 4 | 17 | 0 | 136,971 | 6 |
| Residential | 9,415 | 5 | 8,976 | 6 | 439 | 2 | 422 | 4 | 17 | 0 | - | - |
| Free-standing home health | 2,802 | 2 | 2,660 | 2 | 142 | 1 | 134 | 1 | 8 | 0 | 68,264 | 3 |
| Outpatient | 2,802 | 2 | 2,660 | 2 | 142 | 1 | 134 | 1 | 8 | 0 | - | - |
| Other personal and public health | 32,024 | 19 | 21,896 | 15 | 10,129 | 42 | 3,934 | 35 | 6,194 | 47 | 199,836 | 9 |
| Inpatient | 707 | 0 | - | - | 707 | 3 | 332 | 3 | 375 | 3 | - | - |
| Outpatient | 15,667 | 9 | 11,497 | 8 | 4,170 | 17 | 1,514 | 14 | 2,656 | 20 | - | - |
| Residential | 15,651 | 9 | 10,398 | 7 | 5,252 | 22 | 2,088 | 19 | 3,164 | 24 | - | - |
| Specialty mental health centers (note 5) | 22,819 | 13 | 21,088 | 14 | 1,732 | 7 | 761 | 7 | 971 | 7 | - | - |
| Inpatient | - | - | - | - | - | - | - | - | - | - | - | - |
| Outpatient | 12,121 | 7 | 11,279 | 8 | 843 | 3 | 401 | 4 | 442 | 3 | - | - |
| Residential | 10,698 | 6 | 9,809 | 7 | 889 | 4 | 360 | 3 | 529 | 4 | - | - |
| Specialty substance abuse centers (note6) | 9,205 | 5 | 808 | 1 | 8,397 | 35 | 3,174 | 28 | 5,223 | 40 | - | - |
| Inpatient | 707 | 0 | - | - | 707 | 3 | 332 | 3 | 375 | 3 | - | - |
| Outpatient | 3,546 | 2 | 219 | 0 | 3,327 | 14 | 1,113 | 10 | 2,214 | 17 | - | - |
| Residential | 4,953 | 3 | 589 | 0 | 4,363 | 18 | 1,728 | 15 | 2,635 | 20 | - | - |
| Retail prescription drugs | 42,871 | 25 | 41,983 | 28 | 887 | 4 | 67 | 1 | 820 | 6 | 249,904 | 11 |
| Insurance administration | 11,808 | 7 | 10,288 | 7 | 1,520 | 6 | 705 | 6 | 815 | 6 | 162,988 | 7 |

Sources: SAMHSA Spending Estimates, 2013; Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Expenditure Accounts.

[†] For all-health, includes spending not shown separately for dentists, other non-durable products and durable medical products.

Notes:

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

Table A.2. Spending by Payer: Levels and Percent Distribution for Mental Health and Substance Abuse (MHSA), Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), Drug Abuse (DA), and All Health, 2009

| Type of Payer | MHSA | | MH | | SA | | AA | | DA | | All-Health | |
|--------------------------------|------------------|-------------|------------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|--------------------|-------------|
| | Millions (\$) | Percent | Millions (\$) | Percent | Millions (\$) | Percent | Millions (\$) | Percent | Millions (\$) | Percent | Millions (\$) | Percent |
| Total | \$171,720 | 100% | \$147,381 | 100% | \$24,339 | 100% | \$11,157 | 100% | \$13,182 | 100% | \$2,330,064 | 100% |
| Private—Total | 66,584 | 39 | 58,928 | 40 | 7,656 | 31 | 3,676 | 33 | 3,981 | 30 | 1,188,794 | 51 |
| Out-of-pocket | 18,791 | 11 | 16,212 | 11 | 2,579 | 11 | 1,101 | 10 | 1,478 | 11 | 299,345 | 13 |
| Private insurance | 42,562 | 25 | 38,710 | 26 | 3,852 | 16 | 1,924 | 17 | 1,928 | 15 | 801,190 | 34 |
| Other private | 5,231 | 3 | 4,006 | 3 | 1,225 | 5 | 651 | 6 | 574 | 4 | 88,259 | 4 |
| Public—Total | 105,136 | 61 | 88,454 | 60 | 16,682 | 69 | 7,481 | 67 | 9,201 | 70 | 1,141,269 | 49 |
| Medicare | 20,544 | 12 | 19,347 | 13 | 1,197 | 5 | 708 | 6 | 489 | 4 | 502,289 | 22 |
| Medicaid (note 1) | 44,227 | 26 | 39,069 | 27 | 5,158 | 21 | 2,302 | 21 | 2,855 | 22 | 376,850 | 16 |
| Other Federal (note 2) | 10,492 | 6 | 7,803 | 5 | 2,689 | 11 | 1,118 | 10 | 1,571 | 12 | 111,994 | 5 |
| Other State and local (note 2) | 29,873 | 17 | 22,234 | 15 | 7,639 | 31 | 3,353 | 30 | 4,286 | 33 | 150,137 | 6 |
| All Federal (note 3) | 60,207 | 35 | 52,914 | 36 | 7,292 | 30 | 3,346 | 30 | 3,947 | 30 | 863,325 | 37 |
| All State (note 4) | 44,929 | 26 | 35,539 | 24 | 9,390 | 39 | 4,136 | 37 | 5,254 | 40 | 277,944 | 12 |

Sources: SAMHSA Spending Estimates, 2013; Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Expenditure Accounts.

Notes:

1. The State Children's Health Insurance Program (SCHIP) all-health spending was \$11.1 billion in 2009. MHSA SCHIP spending was estimated at \$0.8 billion or about 0.5 percent of total MHSA. In this table, SCHIP is distributed across Medicaid, other Federal, and other State and local categories, depending on whether the SCHIP was run through Medicaid or as a separate State SCHIP program.
2. SAMHSA block grants to "State and local" agencies are part of "other Federal" government spending. In 2009, block grants amounted to \$393 million for MH and \$1,251 million for SA.
3. Includes Federal share of Medicaid.
4. Includes State and local share of Medicaid.

Table A.3. Spending by Specialty and Nonspecialty Providers: Levels, Percentage of Total Expenditures, and Percentage Within Sector for Mental Health and Substance Abuse (MHSA), Mental Health (MH), Substance Abuse (SA), Alcohol Abuse (AA), and Drug Abuse (DA), 2009

| Type of Provider and Site of Service | MHSA | | | MH | | | SA | | | AA | | | DA | | |
|--|------------------|-------------------------------|------------------------|------------------|-------------------------------|------------------------|-----------------|-------------------------------|------------------------|-----------------|-------------------------------|------------------------|-----------------|-------------------------------|------------------------|
| | Millions (\$) | Percent of total expenditures | Percent within sectors | Millions (\$) | Percent of total expenditures | Percent within sectors | Millions (\$) | Percent of total expenditures | Percent within sectors | Millions (\$) | Percent of total expenditures | Percent within sectors | Millions (\$) | Percent of total expenditures | Percent within sectors |
| Total | \$171,720 | 100% | - | \$147,381 | 100% | - | \$24,339 | 100% | - | \$11,157 | 100% | - | \$13,182 | 100% | - |
| Specialty sector providers | 86,946 | 51 | 100 | 68,193 | 46 | 100 | 18,753 | 77 | 100 | 8,011 | 72 | 100 | 10,743 | 81 | 100 |
| General hospitals, specialty units (note 1) | 17,917 | 10 | 21 | 14,266 | 10 | 21 | 3,651 | 15 | 19 | 1,644 | 15 | 21 | 2,006 | 15 | 19 |
| Specialty hospitals | 17,956 | 10 | 21 | 15,868 | 11 | 23 | 2,089 | 9 | 11 | 870 | 8 | 11 | 1,219 | 9 | 11 |
| Psychiatrists | 8,587 | 5 | 10 | 8,332 | 6 | 12 | 256 | 1 | 1 | 102 | 1 | 1 | 154 | 1 | 1 |
| Other professionals (note 2) | 10,461 | 6 | 12 | 7,832 | 5 | 11 | 2,629 | 11 | 14 | 1,460 | 13 | 18 | 1,170 | 9 | 11 |
| Specialty mental health centers (note 3) | 22,819 | 13 | 26 | 21,088 | 14 | 31 | 1,732 | 7 | 9 | 761 | 7 | 9 | 971 | 7 | 9 |
| Specialty substance abuse centers (note 4) | 9,205 | 5 | 11 | 808 | 1 | 1 | 8,397 | 35 | 45 | 3,174 | 28 | 40 | 5,223 | 40 | 49 |
| General sector providers | 30,095 | 18 | 100 | 26,917 | 18 | 100 | 3,178 | 13 | 100 | 2,375 | 21 | 100 | 804 | 6 | 100 |
| General hospitals, nonspecialty units (note 5) | 9,475 | 6 | 31 | 7,701 | 5 | 29 | 1,774 | 7 | 56 | 1,407 | 13 | 59 | 367 | 3 | 46 |
| Nonpsychiatric physicians | 8,403 | 5 | 28 | 7,580 | 5 | 28 | 823 | 3 | 26 | 411 | 4 | 17 | 412 | 3 | 51 |
| Free-standing nursinghomes | 9,415 | 5 | 31 | 8,976 | 6 | 33 | 439 | 2 | 14 | 422 | 4 | 18 | 17 | 0 | 2 |
| Free-standing home health | 2,802 | 2 | 9 | 2,660 | 2 | 10 | 142 | 1 | 4 | 134 | 1 | 6 | 8 | 0 | 1 |
| Retail prescription drugs | 42,871 | 25 | - | 41,983 | 28 | - | 887 | 4 | - | 67 | 1 | - | 820 | 6 | - |
| Insurance administration | 11,808 | 7 | - | 10,288 | 7 | - | 1,520 | 6 | - | 705 | 6 | - | 815 | 6 | - |

Source: SAMHSA Spending Estimates, 2013.

Notes:

1. Includes specialty units of general hospitals and all MH and SA expenditures at VA hospitals.
2. Includes psychologists and counselors/social workers.
3. Includes residential treatment centers for children.
4. Includes other facilities for treating substance abuse.
5. Includes general hospital nonspecialty units but excludes nonspecialty units of VA hospitals.

Table A.4. Mental Health and Substance Abuse Spending by Provider and Setting: Levels, Percent Distribution, and Share of All-Health Spending, Selected Years

| Type of Provider and Site of Service (note 1) | Spending in Millions | | | | | Percent Distribution | | | | | Share of All-Health Spending | | | | |
|--|----------------------|-----------------|-----------------|------------------|------------------|----------------------|-------------|-------------|-------------|-------------|------------------------------|-------------|-------------|-------------|-------------|
| | 1986 | 1992 | 1998 | 2004 | 2009 | 1986 | 1992 | 1998 | 2004 | 2009 | 1986 | 1992 | 1998 | 2004 | 2009 |
| TOTAL | \$41,538 | \$65,360 | \$83,783 | \$132,076 | \$171,720 | 100% | 100% | 100% | 100% | 100% | 9.4% | 8.2% | 7.4% | 7.4% | 7.4% |
| Total all service providers and products | 39,500 | 62,381 | 79,354 | 122,362 | 159,912 | 95 | 95 | 95 | 93 | 93 | 9.4 | 8.2 | 7.4 | 7.5 | 7.4 |
| Total all service providers | 36,930 | 57,832 | 67,671 | 90,331 | 117,041 | 89 | 88 | 81 | 68 | 68 | 9.9 | 8.6 | 7.3 | 6.5 | 6.4 |
| Total inpatient | 17,812 | 22,876 | 20,854 | 25,376 | 30,831 | 43 | 35 | 25 | 19 | 18 | - | - | - | - | - |
| Total outpatient | 10,324 | 20,696 | 30,318 | 42,714 | 57,052 | 25 | 32 | 36 | 32 | 33 | - | - | - | - | - |
| Total residential | 8,794 | 14,260 | 16,498 | 22,241 | 29,158 | 21 | 22 | 20 | 17 | 17 | - | - | - | - | - |
| All hospitals | 17,772 | 24,942 | 26,498 | 34,465 | 45,349 | 43 | 38 | 32 | 26 | 26 | 10.1 | 8.4 | 7.1 | 6.1 | 6.0 |
| Inpatient | 15,211 | 20,096 | 18,636 | 23,006 | 27,992 | 37 | 31 | 22 | 17 | 16 | - | - | - | - | - |
| Outpatient | 1,521 | 3,337 | 5,360 | 8,517 | 14,465 | 4 | 5 | 6 | 6 | 8 | - | - | - | - | - |
| Residential (note 2) | 1,041 | 1,508 | 2,501 | 2,942 | 2,891 | 3 | 2 | 3 | 2 | 2 | - | - | - | - | - |
| General hospitals | 8,112 | 11,872 | 14,977 | 20,345 | 27,392 | 20 | 18 | 18 | 15 | 16 | - | - | - | - | - |
| Inpatient | 6,104 | 8,587 | 8,460 | 10,995 | 12,768 | 15 | 13 | 10 | 8 | 7 | - | - | - | - | - |
| Outpatient | 1,124 | 2,374 | 4,766 | 7,599 | 12,637 | 3 | 4 | 6 | 6 | 7 | - | - | - | - | - |
| Residential (note 2) | 884 | 912 | 1,751 | 1,751 | 1,988 | 2 | 1 | 2 | 1 | 1 | - | - | - | - | - |
| General hospitals, specialty units (note 3) | 5,612 | 9,048 | 10,922 | 13,751 | 17,917 | 14 | 14 | 13 | 10 | 10 | - | - | - | - | - |
| Inpatient | 4,371 | 7,232 | 7,796 | 9,217 | 11,159 | 11 | 11 | 9 | 7 | 6 | - | - | - | - | - |
| Outpatient | 871 | 1,574 | 2,785 | 3,669 | 5,737 | 2 | 2 | 3 | 3 | 3 | - | - | - | - | - |
| Residential (note 2) | 370 | 242 | 341 | 865 | 1,021 | 1 | 0 | 0 | 1 | 1 | - | - | - | - | - |
| General hospitals, nonspecialty units (note 3) | 2,500 | 2,824 | 4,055 | 6,594 | 9,475 | 6 | 4 | 5 | 5 | 6 | - | - | - | - | - |
| Inpatient | 1,733 | 1,355 | 664 | 1,778 | 1,609 | 4 | 2 | 1 | 1 | 1 | - | - | - | - | - |
| Outpatient | 254 | 800 | 1,981 | 3,930 | 6,900 | 1 | 1 | 2 | 3 | 4 | - | - | - | - | - |
| Residential (note 2) | 514 | 670 | 1,410 | 885 | 967 | 1 | 1 | 2 | 1 | 1 | - | - | - | - | - |
| Specialty hospitals | 9,660 | 13,070 | 11,521 | 14,120 | 17,956 | 23 | 20 | 14 | 11 | 10 | - | - | - | - | - |
| Inpatient | 9,107 | 11,510 | 10,176 | 12,011 | 15,225 | 22 | 18 | 12 | 9 | 9 | - | - | - | - | - |
| Outpatient | 396 | 964 | 594 | 918 | 1,828 | 1 | 1 | 1 | 1 | 1 | - | - | - | - | - |
| Residential (note 2) | 157 | 596 | 750 | 1,191 | 904 | 0 | 1 | 1 | 1 | 1 | - | - | - | - | - |
| All physicians | 4,682 | 7,901 | 10,314 | 13,821 | 16,991 | 11 | 12 | 12 | 10 | 10 | 4.6 | 4.1 | 4.0 | 3.5 | 3.4 |
| Inpatient | 1,783 | 1,856 | 1,669 | 1,722 | 1,586 | 4 | 3 | 2 | 1 | 1 | - | - | - | - | - |
| Outpatient | 2,899 | 6,045 | 8,645 | 12,099 | 15,405 | 7 | 9 | 10 | 9 | 9 | - | - | - | - | - |
| Psychiatrists | 2,655 | 4,632 | 5,655 | 8,073 | 8,587 | 6 | 7 | 7 | 6 | 5 | - | - | - | - | - |
| Inpatient | 869 | 990 | 835 | 951 | 725 | 2 | 2 | 1 | 1 | 0 | - | - | - | - | - |
| Outpatient | 1,786 | 3,642 | 4,820 | 7,122 | 7,863 | 4 | 6 | 6 | 5 | 5 | - | - | - | - | - |
| Nonpsychiatric physicians | 2,027 | 3,269 | 4,660 | 5,748 | 8,403 | 5 | 5 | 6 | 4 | 5 | - | - | - | - | - |
| Inpatient | 914 | 866 | 834 | 771 | 861 | 2 | 1 | 1 | 1 | 1 | - | - | - | - | - |
| Outpatient | 1,113 | 2,403 | 3,826 | 4,977 | 7,542 | 3 | 4 | 5 | 4 | 4 | - | - | - | - | - |

Table A.4. Mental Health and Substance Abuse Spending by Provider and Setting: Levels, Percent Distribution, and Share of All-Health Spending, Selected Years—Continued

| Type of Provider and Site of Service (note 1) | Spending in Millions | | | | | Percent Distribution | | | | | Share of All-Health Spending | | | | |
|---|----------------------|--------|--------|--------|--------|----------------------|------|------|------|------|------------------------------|------|------|------|------|
| | 1986 | 1992 | 1998 | 2004 | 2009 | 1986 | 1992 | 1998 | 2004 | 2009 | 1986 | 1992 | 1998 | 2004 | 2009 |
| Other professionals (note 4) | 2,169 | 4,540 | 5,391 | 7,372 | 10,461 | 5 | 7 | 6 | 6 | 6 | 23.3 | 21.6 | 16.0 | 14.7 | 15.7 |
| Inpatient | 33 | 74 | 120 | 278 | 546 | 0 | 0 | 0 | 0 | 0 | - | - | - | - | - |
| Outpatient | 2,131 | 4,454 | 5,248 | 6,843 | 8,713 | 5 | 7 | 6 | 5 | 5 | - | - | - | - | - |
| Residential | 5 | 11 | 23 | 251 | 1,202 | 0 | 0 | 0 | 0 | 1 | - | - | - | - | - |
| Free-standing nursing homes | 5,119 | 6,132 | 5,578 | 7,076 | 9,415 | 12 | 9 | 7 | 5 | 5 | 17.8 | 11.6 | 7.0 | 6.7 | 6.9 |
| Residential | 5,119 | 6,132 | 5,578 | 7,076 | 9,415 | 12 | 9 | 7 | 5 | 5 | - | - | - | - | - |
| Free-standing home health | 106 | 290 | 795 | 1,237 | 2,802 | 0 | 0 | 1 | 1 | 2 | 1.7 | 1.5 | 2.3 | 2.8 | 4.1 |
| Outpatient | 106 | 290 | 795 | 1,237 | 2,802 | 0 | 0 | 1 | 1 | 2 | - | - | - | - | - |
| Other personal and public health | 7,082 | 14,028 | 19,095 | 26,360 | 32,024 | 17 | 21 | 23 | 20 | 19 | 24.9 | 25.7 | 20.4 | 18.2 | 16.0 |
| Inpatient | 786 | 849 | 429 | 371 | 707 | 2 | 1 | 1 | 0 | 0 | - | - | - | - | - |
| Outpatient | 3,666 | 6,569 | 10,270 | 14,018 | 15,667 | 9 | 10 | 12 | 11 | 9 | - | - | - | - | - |
| Residential | 2,630 | 6,609 | 8,396 | 11,971 | 15,651 | 6 | 10 | 10 | 9 | 9 | - | - | - | - | - |
| Specialty mental health centers (note 5) | 4,763 | 8,806 | 13,376 | 17,090 | 22,819 | 11 | 13 | 16 | 13 | 13 | - | - | - | - | - |
| Inpatient | 395 | 425 | 366 | 52 | - | 1 | 1 | 0 | 0 | - | - | - | - | - | - |
| Outpatient | 2,672 | 4,377 | 7,295 | 9,143 | 12,121 | 6 | 7 | 9 | 7 | 7 | - | - | - | - | - |
| Residential | 1,696 | 4,004 | 5,715 | 7,894 | 10,698 | 4 | 6 | 7 | 6 | 6 | - | - | - | - | - |
| Specialty substance abuse centers (note 6) | 2,319 | 5,221 | 5,718 | 9,270 | 9,205 | 6 | 8 | 7 | 7 | 5 | - | - | - | - | - |
| Inpatient | 391 | 424 | 63 | 319 | 707 | 1 | 1 | 0 | 0 | 0 | - | - | - | - | - |
| Outpatient | 994 | 2,192 | 2,975 | 4,875 | 3,546 | 2 | 3 | 4 | 4 | 2 | - | - | - | - | - |
| Residential | 933 | 2,605 | 2,681 | 4,077 | 4,953 | 2 | 4 | 3 | 3 | 3 | - | - | - | - | - |
| Retail prescription drugs | 2,570 | 4,548 | 11,683 | 32,031 | 42,871 | 6 | 7 | 14 | 24 | 25 | 10.6 | 9.7 | 13.2 | 16.8 | 17.2 |
| Insurance administration | 2,038 | 2,980 | 4,429 | 9,714 | 11,808 | 5 | 5 | 5 | 7 | 7 | 9.1 | 6.9 | 7.1 | 7.3 | 7.2 |
| ADDENDUM | | | | | | | | | | | | | | | |
| Specialty providers (note 7) | 27,178 | 45,317 | 52,583 | 69,676 | 86,946 | 65 | 69 | 63 | 53 | 51 | - | - | - | - | - |
| Nonspecialty providers (note 8) | 9,752 | 12,516 | 15,088 | 20,655 | 30,095 | 23 | 19 | 18 | 16 | 18 | - | - | - | - | - |

Sources: SAMHSA Spending Estimates, 2013; Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Expenditure Accounts.

Notes:

1. Not all service providers will have all three sites of service. Retail prescription drugs and insurance administration are not attributable to a site of service.
2. Includes spending in nursing home units of hospitals or in nursing homes affiliated with hospitals.
3. All spending for psychiatric services in Department of Veterans Affairs hospitals is included in general hospital specialty unit providers.
4. Includes psychologists, counselors, and social workers.
5. Includes residential treatment centers for children.
6. Includes other facilities for treating substance abuse.
7. Includes specialty units of general hospitals, specialty hospitals, psychiatrists, other professionals, specialty mental health centers, and specialty substance abuse centers.
8. Includes nonspecialty units in general hospitals, nonpsychiatric physicians, home health, and nursing homes.

Table A.5. Mental Health Spending by Provider and Setting: Levels, Percent Distribution, and Share of All-Health Spending, Selected Years

| Type of Provider and Site of Service (note 1) | Spending in Millions | | | | | Percent Distribution | | | | | Share of All-Health Spending | | | | |
|--|----------------------|-----------------|-----------------|------------------|------------------|----------------------|-------------|-------------|-------------|-------------|------------------------------|-------------|-------------|-------------|-------------|
| | 1986 | 1992 | 1998 | 2004 | 2009 | 1986 | 1992 | 1998 | 2004 | 2009 | 1986 | 1992 | 1998 | 2004 | 2009 |
| TOTAL | \$32,453 | \$51,957 | \$69,160 | \$111,200 | \$147,381 | 100% | 100% | 100% | 100% | 100% | 7.3% | 6.5% | 6.1% | 6.3% | 6.3% |
| Total all service providers and products | 30,932 | 49,511 | 65,419 | 102,862 | 137,093 | 95 | 95 | 95 | 93 | 93 | 7.3 | 6.5 | 6.1 | 6.3 | 6.3 |
| Total all service providers | 28,368 | 44,973 | 53,752 | 70,897 | 95,110 | 87 | 87 | 78 | 64 | 65 | 7.6 | 6.7 | 5.8 | 5.1 | 5.2 |
| Total inpatient | 13,260 | 18,372 | 18,064 | 21,870 | 25,773 | 41 | 35 | 26 | 20 | 17 | - | - | - | - | - |
| Total outpatient | 7,892 | 15,731 | 23,232 | 32,882 | 47,637 | 24 | 30 | 34 | 30 | 32 | - | - | - | - | - |
| Total residential | 7,216 | 10,870 | 12,456 | 16,145 | 21,700 | 22 | 21 | 18 | 15 | 15 | - | - | - | - | - |
| All hospitals | 13,524 | 20,353 | 22,129 | 29,263 | 37,835 | 42 | 39 | 32 | 26 | 26 | 7.7 | 6.8 | 5.9 | 5.2 | 5.0 |
| Inpatient | 11,841 | 16,701 | 16,335 | 20,285 | 24,360 | 36 | 32 | 24 | 18 | 17 | - | - | - | - | - |
| Outpatient | 1,079 | 2,449 | 3,857 | 6,498 | 11,271 | 3 | 5 | 6 | 6 | 8 | - | - | - | - | - |
| Residential (note 2) | 604 | 1,203 | 1,937 | 2,480 | 2,205 | 2 | 2 | 3 | 2 | 1 | - | - | - | - | - |
| General hospitals | 5,274 | 8,620 | 12,097 | 16,331 | 21,967 | 16 | 17 | 17 | 15 | 15 | - | - | - | - | - |
| Inpatient | 4,011 | 6,295 | 7,082 | 9,245 | 10,454 | 12 | 12 | 10 | 8 | 7 | - | - | - | - | - |
| Outpatient | 741 | 1,586 | 3,470 | 5,710 | 9,890 | 2 | 3 | 5 | 5 | 7 | - | - | - | - | - |
| Residential (note 2) | 522 | 739 | 1,545 | 1,376 | 1,624 | 2 | 1 | 2 | 1 | 1 | - | - | - | - | - |
| General hospitals, specialty units (note 3) | 3,053 | 6,196 | 8,696 | 10,919 | 14,266 | 9 | 12 | 13 | 10 | 10 | - | - | - | - | - |
| Inpatient | 2,420 | 5,082 | 6,538 | 7,877 | 9,444 | 7 | 10 | 9 | 7 | 6 | - | - | - | - | - |
| Outpatient | 625 | 1,044 | 1,960 | 2,526 | 4,140 | 2 | 2 | 3 | 2 | 3 | - | - | - | - | - |
| Residential (note 2) | 8 | 71 | 198 | 516 | 683 | 0 | 0 | 0 | 0 | 0 | - | - | - | - | - |
| General hospitals, nonspecialty units (note 3) | 2,220 | 2,424 | 3,401 | 5,411 | 7,701 | 7 | 5 | 5 | 5 | 5 | - | - | - | - | - |
| Inpatient | 1,590 | 1,214 | 544 | 1,367 | 1,010 | 5 | 2 | 1 | 1 | 1 | - | - | - | - | - |
| Outpatient | 116 | 542 | 1,509 | 3,184 | 5,750 | 0 | 1 | 2 | 3 | 4 | - | - | - | - | - |
| Residential (note 2) | 514 | 668 | 1,347 | 860 | 941 | 2 | 1 | 2 | 1 | 1 | - | - | - | - | - |
| Specialty hospitals | 8,251 | 11,733 | 10,032 | 12,932 | 15,868 | 25 | 23 | 15 | 12 | 11 | - | - | - | - | - |
| Inpatient | 7,830 | 10,406 | 9,254 | 11,040 | 13,906 | 24 | 20 | 13 | 10 | 9 | - | - | - | - | - |
| Outpatient | 338 | 863 | 387 | 789 | 1,380 | 1 | 2 | 1 | 1 | 1 | - | - | - | - | - |
| Residential (note 2) | 83 | 464 | 392 | 1,104 | 581 | 0 | 1 | 1 | 1 | 0 | - | - | - | - | - |
| All physicians | 3,821 | 6,943 | 9,436 | 12,960 | 15,911 | 12 | 13 | 14 | 12 | 11 | 3.8 | 3.6 | 3.7 | 3.3 | 3.1 |
| Inpatient | 1,103 | 1,244 | 1,363 | 1,414 | 1,192 | 3 | 2 | 2 | 1 | 1 | - | - | - | - | - |
| Outpatient | 2,718 | 5,698 | 8,073 | 11,546 | 14,719 | 8 | 11 | 12 | 10 | 10 | - | - | - | - | - |
| Psychiatrists | 2,447 | 4,186 | 5,410 | 7,777 | 8,332 | 8 | 8 | 8 | 7 | 6 | - | - | - | - | - |
| Inpatient | 698 | 699 | 725 | 846 | 636 | 2 | 1 | 1 | 1 | 0 | - | - | - | - | - |
| Outpatient | 1,749 | 3,487 | 4,685 | 6,931 | 7,696 | 5 | 7 | 7 | 6 | 5 | - | - | - | - | - |
| Nonpsychiatric physicians | 1,374 | 2,756 | 4,026 | 5,183 | 7,580 | 4 | 5 | 6 | 5 | 5 | - | - | - | - | - |
| Inpatient | 405 | 545 | 637 | 568 | 556 | 1 | 1 | 1 | 1 | 0 | - | - | - | - | - |
| Outpatient | 969 | 2,211 | 3,389 | 4,615 | 7,023 | 3 | 4 | 5 | 4 | 5 | - | - | - | - | - |

Table A.5. Mental Health Spending by Provider and Setting: Levels, Percent Distribution, and Share of All-Health Spending, Selected Years—Continued

| Type of Provider and Site of Service (note 1) | Spending in Millions | | | | | Percent Distribution | | | | | Share of All-Health Spending | | | | |
|---|----------------------|--------|--------|--------|--------|----------------------|------|------|------|------|------------------------------|------|------|------|------|
| | 1986 | 1992 | 1998 | 2004 | 2009 | 1986 | 1992 | 1998 | 2004 | 2009 | 1986 | 1992 | 1998 | 2004 | 2009 |
| Other professionals (note 4) | 1,519 | 3,255 | 4,198 | 5,685 | 7,832 | 5 | 6 | 6 | 5 | 5 | 16.3 | 15.5 | 12.4 | 11.3 | 11.7 |
| Inpatient | 6 | 17 | 47 | 126 | 220 | 0 | 0 | 0 | 0 | 0 | - | - | - | - | - |
| Outpatient | 1,512 | 3,236 | 4,140 | 5,498 | 7,490 | 5 | 6 | 6 | 5 | 5 | - | - | - | - | - |
| Residential | 1 | 2 | 11 | 62 | 122 | 0 | 0 | 0 | 0 | 0 | - | - | - | - | - |
| Free-standing nursing homes | 4,989 | 5,917 | 5,309 | 6,775 | 8,976 | 15 | 11 | 8 | 6 | 6 | 17.4 | 11.2 | 6.7 | 6.4 | 6.6 |
| Residential | 4,989 | 5,917 | 5,309 | 6,775 | 8,976 | 15 | 11 | 8 | 6 | 6 | - | - | - | - | - |
| Free-standing home health | 103 | 281 | 772 | 1,169 | 2,660 | 0 | 1 | 1 | 1 | 2 | 1.6 | 1.5 | 2.3 | 2.7 | 3.9 |
| Outpatient | 103 | 281 | 772 | 1,169 | 2,660 | 0 | 1 | 1 | 1 | 2 | - | - | - | - | - |
| Other personal and public health | 4,412 | 8,224 | 11,908 | 15,045 | 21,896 | 14 | 16 | 17 | 14 | 15 | 15.5 | 15.1 | 12.7 | 10.4 | 11.0 |
| Inpatient | 311 | 409 | 319 | 46 | - | 1 | 1 | 0 | 0 | - | - | - | - | - | - |
| Outpatient | 2,479 | 4,067 | 6,389 | 8,171 | 11,497 | 8 | 8 | 9 | 7 | 8 | - | - | - | - | - |
| Residential | 1,622 | 3,748 | 5,200 | 6,828 | 10,398 | 5 | 7 | 8 | 6 | 7 | - | - | - | - | - |
| Specialty mental health centers (note 5) | 4,412 | 8,224 | 11,908 | 15,045 | 21,088 | 14 | 16 | 17 | 14 | 14 | - | - | - | - | - |
| Inpatient | 311 | 409 | 319 | 46 | - | 1 | 1 | 0 | 0 | - | - | - | - | - | - |
| Outpatient | 2,479 | 4,067 | 6,389 | 8,171 | 11,279 | 8 | 8 | 9 | 7 | 8 | - | - | - | - | - |
| Residential | 1,622 | 3,748 | 5,200 | 6,828 | 9,809 | 5 | 7 | 8 | 6 | 7 | - | - | - | - | - |
| Specialty substance abuse centers (note 6) | - | - | - | - | 808 | - | - | - | - | 1 | - | - | - | - | - |
| Inpatient | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Outpatient | - | - | - | - | 219 | - | - | - | - | 0 | - | - | - | - | - |
| Residential | - | - | - | - | 589 | - | - | - | - | 0 | - | - | - | - | - |
| Retail prescription drugs | 2,564 | 4,539 | 11,667 | 31,965 | 41,983 | 8 | 9 | 17 | 29 | 28 | 10.6 | 9.7 | 13.2 | 16.8 | 16.8 |
| Insurance administration | 1,521 | 2,446 | 3,740 | 8,338 | 10,288 | 5 | 5 | 5 | 7 | 7 | 6.8 | 5.7 | 6.0 | 6.2 | 6.3 |
| ADDENDUM | | | | | | | | | | | | | | | |
| Specialty providers (note 7) | 19,682 | 33,595 | 40,245 | 52,359 | 68,193 | 61 | 65 | 58 | 47 | 46 | - | - | - | - | - |
| Nonspecialty providers (note 8) | 8,687 | 11,378 | 13,507 | 18,538 | 26,917 | 27 | 22 | 20 | 17 | 18 | - | - | - | - | - |

Sources: SAMHSA Spending Estimates, 2013; Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Expenditure Accounts.

Notes:

1. Not all service providers will have all three sites of service. Retail prescription drugs and insurance administration are not attributable to a site of service.
2. Includes spending in nursing home units of hospitals or in nursing homes affiliated with hospitals.
3. All spending for psychiatric services in Department of Veterans Affairs hospitals is included in general hospital specialty unit providers.
4. Includes psychologists, counselors, and social workers.
5. Includes residential treatment centers for children.
6. Includes other facilities for treating substance abuse.
7. Includes specialty units of general hospitals, specialty hospitals, psychiatrists, other professionals, specialty mental health centers, and specialty substance abuse centers.
8. Includes non-specialty units in general hospitals, non-psychiatric physicians, home health, and nursing homes.

Table A.6. Substance Abuse Spending by Provider and Setting: Levels, Percent Distribution, and Share of All-Health Spending, Selected Years

| Type of Provider and Site of Service (note 1) | Spending in Millions | | | | | Percent Distribution | | | | | Share of All-Health Spending | | | | |
|--|----------------------|-----------------|-----------------|-----------------|-----------------|----------------------|-------------|-------------|-------------|-------------|------------------------------|-------------|-------------|-------------|-------------|
| | 1986 | 1992 | 1998 | 2004 | 2009 | 1986 | 1992 | 1998 | 2004 | 2009 | 1986 | 1992 | 1998 | 2004 | 2009 |
| TOTAL | \$9,085 | \$13,403 | \$14,623 | \$20,876 | \$24,339 | 100% | 100% | 100% | 100% | 100% | 2.0% | 1.7% | 1.3% | 1.2% | 1.0% |
| Total all service providers and products | 8,568 | 12,870 | 13,935 | 19,500 | 22,819 | 94 | 96 | 95 | 93 | 94 | 2.0 | 1.7 | 1.3 | 1.2 | 1.1 |
| Total all service providers | 8,562 | 12,860 | 13,919 | 19,434 | 21,932 | 94 | 96 | 95 | 93 | 90 | 2.3 | 1.9 | 1.5 | 1.4 | 1.2 |
| Total inpatient | 4,552 | 4,504 | 2,790 | 3,506 | 5,058 | 50 | 34 | 19 | 17 | 21 | - | - | - | - | - |
| Total outpatient | 2,432 | 4,966 | 7,086 | 9,832 | 9,416 | 27 | 37 | 48 | 47 | 39 | - | - | - | - | - |
| Total residential | 1,578 | 3,390 | 4,042 | 6,096 | 7,458 | 17 | 25 | 28 | 29 | 31 | - | - | - | - | - |
| All hospitals | 4,248 | 4,589 | 4,369 | 5,201 | 7,513 | 47 | 34 | 30 | 25 | 31 | 2.4 | 1.5 | 1.2 | 0.9 | 1.0 |
| Inpatient | 3,370 | 3,395 | 2,301 | 2,721 | 3,632 | 37 | 25 | 16 | 13 | 15 | - | - | - | - | - |
| Outpatient | 441 | 888 | 1,503 | 2,019 | 3,195 | 5 | 7 | 10 | 10 | 13 | - | - | - | - | - |
| Residential (note 2) | 436 | 305 | 565 | 462 | 686 | 5 | 2 | 4 | 2 | 3 | - | - | - | - | - |
| General hospitals | 2,838 | 3,252 | 2,880 | 4,014 | 5,425 | 31 | 24 | 20 | 19 | 22 | - | - | - | - | - |
| Inpatient | 2,093 | 2,291 | 1,378 | 1,750 | 2,314 | 23 | 17 | 9 | 8 | 10 | - | - | - | - | - |
| Outpatient | 383 | 787 | 1,296 | 1,890 | 2,747 | 4 | 6 | 9 | 9 | 11 | - | - | - | - | - |
| Residential (note 2) | 362 | 173 | 206 | 374 | 364 | 4 | 1 | 1 | 2 | 1 | - | - | - | - | - |
| General hospitals, specialty units (note 3) | 2,559 | 2,851 | 2,226 | 2,831 | 3,651 | 28 | 21 | 15 | 14 | 15 | - | - | - | - | - |
| Inpatient | 1,951 | 2,150 | 1,258 | 1,339 | 1,715 | 21 | 16 | 9 | 6 | 7 | - | - | - | - | - |
| Outpatient | 246 | 530 | 824 | 1,143 | 1,597 | 3 | 4 | 6 | 5 | 7 | - | - | - | - | - |
| Residential (note 2) | 362 | 172 | 143 | 349 | 338 | 4 | 1 | 1 | 2 | 1 | - | - | - | - | - |
| General hospitals, nonspecialty units (note 3) | 280 | 400 | 655 | 1,182 | 1,774 | 3 | 3 | 4 | 6 | 7 | - | - | - | - | - |
| Inpatient | 142 | 141 | 120 | 411 | 598 | 2 | 1 | 1 | 2 | 2 | - | - | - | - | - |
| Outpatient | 138 | 258 | 472 | 747 | 1,150 | 2 | 2 | 3 | 4 | 5 | - | - | - | - | - |
| Residential (note 2) | - | 1 | 63 | 25 | 26 | - | 0 | 0 | 0 | 0 | - | - | - | - | - |
| Specialty hospitals | 1,409 | 1,337 | 1,488 | 1,187 | 2,089 | 16 | 10 | 10 | 6 | 9 | - | - | - | - | - |
| Inpatient | 1,277 | 1,104 | 923 | 971 | 1,319 | 14 | 8 | 6 | 5 | 5 | - | - | - | - | - |
| Outpatient | 58 | 101 | 207 | 129 | 448 | 1 | 1 | 1 | 1 | 2 | - | - | - | - | - |
| Residential (note 2) | 74 | 132 | 359 | 88 | 322 | 1 | 1 | 2 | 0 | 1 | - | - | - | - | - |
| All physicians | 861 | 958 | 878 | 861 | 1,079 | 9 | 7 | 6 | 4 | 4 | 0.9 | 0.5 | 0.3 | 0.2 | 0.2 |
| Inpatient | 680 | 612 | 307 | 308 | 393 | 7 | 5 | 2 | 1 | 2 | - | - | - | - | - |
| Outpatient | 181 | 347 | 572 | 553 | 686 | 2 | 3 | 4 | 3 | 3 | - | - | - | - | - |
| Psychiatrists | 208 | 445 | 245 | 296 | 256 | 2 | 3 | 2 | 1 | 1 | - | - | - | - | - |
| Inpatient | 171 | 290 | 110 | 105 | 89 | 2 | 2 | 1 | 1 | 0 | - | - | - | - | - |
| Outpatient | 37 | 155 | 135 | 191 | 167 | 0 | 1 | 1 | 1 | 1 | - | - | - | - | - |
| Nonpsychiatric physicians | 653 | 513 | 634 | 565 | 823 | 7 | 4 | 4 | 3 | 3 | - | - | - | - | - |
| Inpatient | 509 | 321 | 197 | 202 | 305 | 6 | 2 | 1 | 1 | 1 | - | - | - | - | - |
| Outpatient | 144 | 192 | 437 | 363 | 519 | 2 | 1 | 3 | 2 | 2 | - | - | - | - | - |

Table A.6. Substance Abuse Spending by Provider and Setting: Levels, Percent Distribution, and Share of All-Health Spending, Selected Years—Continued

| Type of Provider and Site of Service (note 1) | Spending in Millions | | | | | Percent Distribution | | | | | Share of All-Health Spending | | | | |
|---|----------------------|--------|--------|--------|--------|----------------------|------|------|------|------|------------------------------|------|------|------|------|
| | 1986 | 1992 | 1998 | 2004 | 2009 | 1986 | 1992 | 1998 | 2004 | 2009 | 1986 | 1992 | 1998 | 2004 | 2009 |
| Other professionals (note 4) | 651 | 1,285 | 1,192 | 1,687 | 2,629 | 7 | 10 | 8 | 8 | 11 | 7.0 | 6.1 | 3.5 | 3.4 | 3.9 |
| Inpatient | 27 | 57 | 72 | 152 | 326 | 0 | 0 | 0 | 1 | 1 | - | - | - | - | - |
| Outpatient | 620 | 1,218 | 1,107 | 1,346 | 1,224 | 7 | 9 | 8 | 6 | 5 | - | - | - | - | - |
| Residential | 4 | 10 | 13 | 189 | 1,080 | 0 | 0 | 0 | 1 | 4 | - | - | - | - | - |
| Free-standing nursing homes | 130 | 215 | 269 | 301 | 439 | 1 | 2 | 2 | 1 | 2 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 |
| Residential | 130 | 215 | 269 | 301 | 439 | 1 | 2 | 2 | 1 | 2 | - | - | - | - | - |
| Free-standing home health | 3 | 9 | 23 | 69 | 142 | 0 | 0 | 0 | 0 | 1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 |
| Outpatient | 3 | 9 | 23 | 69 | 142 | 0 | 0 | 0 | 0 | 1 | - | - | - | - | - |
| Other personal and public health | 2,670 | 5,804 | 7,187 | 11,315 | 10,129 | 29 | 43 | 49 | 54 | 42 | 9.4 | 10.6 | 7.7 | 7.8 | 5.1 |
| Inpatient | 475 | 440 | 110 | 325 | 707 | 5 | 3 | 1 | 2 | 3 | - | - | - | - | - |
| Outpatient | 1,187 | 2,502 | 3,881 | 5,846 | 4,170 | 13 | 19 | 27 | 28 | 17 | - | - | - | - | - |
| Residential | 1,007 | 2,861 | 3,196 | 5,143 | 5,252 | 11 | 21 | 22 | 25 | 22 | - | - | - | - | - |
| Specialty mental health centers (note 5) | 351 | 582 | 1,469 | 2,045 | 1,732 | 4 | 4 | 10 | 10 | 7 | - | - | - | - | - |
| Inpatient | 84 | 16 | 47 | 7 | - | 1 | 0 | 0 | 0 | - | - | - | - | - | - |
| Outpatient | 193 | 310 | 906 | 972 | 843 | 2 | 2 | 6 | 5 | 3 | - | - | - | - | - |
| Residential | 74 | 256 | 515 | 1,066 | 889 | 1 | 2 | 4 | 5 | 4 | - | - | - | - | - |
| Specialty substance abuse centers (note 6) | 2,319 | 5,221 | 5,718 | 9,270 | 8,397 | 26 | 39 | 39 | 44 | 35 | - | - | - | - | - |
| Inpatient | 391 | 424 | 63 | 319 | 707 | 4 | 3 | 0 | 2 | 3 | - | - | - | - | - |
| Outpatient | 994 | 2,192 | 2,975 | 4,875 | 3,327 | 11 | 16 | 20 | 23 | 14 | - | - | - | - | - |
| Residential | 933 | 2,605 | 2,681 | 4,077 | 4,363 | 10 | 19 | 18 | 20 | 18 | - | - | - | - | - |
| Retail prescription drugs | 6 | 10 | 16 | 66 | 887 | 0 | 0 | 0 | 0 | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| Insurance administration | 517 | 533 | 689 | 1,376 | 1,520 | 6 | 4 | 5 | 7 | 6 | 2.3 | 1.2 | 1.1 | 1.0 | 0.9 |
| ADDENDUM | | | | | | | | | | | | | | | |
| Specialty providers (note 7) | 7,496 | 11,722 | 12,338 | 17,317 | 18,753 | 83 | 87 | 84 | 83 | 77 | - | - | - | - | - |
| Non-specialty providers (note 8) | 1,065 | 1,138 | 1,581 | 2,117 | 3,178 | 12 | 8 | 11 | 10 | 13 | - | - | - | - | - |

Sources: SAMHSA Spending Estimates, 2013; Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Expenditure Accounts. Notes:

1. Not all service providers will have all three sites of service. Retail prescription drugs and insurance administration are not attributable to a site of service.
2. Includes spending in nursing home units of hospitals or in nursing homes affiliated with hospitals.
3. All spending for psychiatric services in Department of Veterans Affairs hospitals is included in general hospital specialty unit providers.
4. Includes psychologists, counselors, and social workers.
5. Includes residential treatment centers for children.
6. Includes other facilities for treating substance abuse.
7. Includes specialty units of general hospitals, specialty hospitals, psychiatrists, other professionals, specialty mental health centers, and specialty substance abuse centers.
8. Includes non-specialty units in general hospitals, non-psychiatric physicians, home health, and nursing homes.

Table A.7. Average Annual Growth by Provider and Setting for Mental Health and Substance Abuse (MHSA), Mental Health (MH), Substance Abuse (SA), and All-Health Spending and for GDP Price Index, Selected Periods

| Type of Provider and Site of Service (note 1) | Average Annual Growth | | | | | | | | | | | | | | | |
|--|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|-------------|
| | MHSA | | | | MH | | | | SA | | | | All-Health | | | |
| | 1986-1992 | 1992-1998 | 1998-2004 | 2004-2009 | 1986-1992 | 1992-1998 | 1998-2004 | 2004-2009 | 1986-1992 | 1992-1998 | 1998-2004 | 2004-2009 | 1986-1992 | 1992-1998 | 1998-2004 | 2004-2009 |
| TOTAL | 7.8% | 4.2% | 7.9% | 5.4% | 8.2% | 4.9% | 8.2% | 5.8% | 6.7% | 1.5% | 6.1% | 3.1% | 10.3% | 5.9% | 7.8% | 5.6% |
| Total all service providers and products | 7.9 | 4.1 | 7.5 | 5.5 | 8.2 | 4.8 | 7.8 | 5.9 | 7.0 | 1.3 | 5.8 | 3.2 | 10.3 | 5.8 | 7.4 | 5.7 |
| Total all service providers | 7.8 | 2.7 | 4.9 | 5.3 | 8.0 | 3.0 | 4.7 | 6.1 | 7.0 | 1.3 | 5.7 | 2.4 | 10.4 | 5.5 | 6.9 | 5.9 |
| Total inpatient | 4.3 | (1.5) | 3.3 | 4.0 | 5.6 | (0.3) | 3.2 | 3.3 | (0.2) | (7.7) | 3.9 | 7.6 | - | - | - | - |
| Total outpatient | 12.3 | 6.6 | 5.9 | 6.0 | 12.2 | 6.7 | 6.0 | 7.7 | 12.6 | 6.1 | 5.6 | (0.9) | - | - | - | - |
| Total residential | 8.4 | 2.5 | 5.1 | 5.6 | 7.1 | 2.3 | 4.4 | 6.1 | 13.6 | 3.0 | 7.1 | 4.1 | - | - | - | - |
| All hospitals | 5.8 | 1.0 | 4.5 | 5.6 | 7.0 | 1.4 | 4.8 | 5.3 | 1.3 | (0.8) | 2.9 | 7.6 | 9.2 | 3.9 | 7.1 | 6.1 |
| Inpatient | 4.8 | (1.2) | 3.6 | 4.0 | 5.9 | (0.4) | 3.7 | 3.7 | 0.1 | (6.3) | 2.8 | 5.9 | - | - | - | - |
| Outpatient | 14.0 | 8.2 | 8.0 | 11.2 | 14.6 | 7.9 | 9.1 | 11.6 | 12.4 | 9.2 | 5.0 | 9.6 | - | - | - | - |
| Residential (note 2) | 6.4 | 8.8 | 2.7 | (0.3) | 12.2 | 8.3 | 4.2 | (2.3) | (5.8) | 10.8 | (3.3) | 8.2 | - | - | - | - |
| General hospitals | 6.6 | 3.9 | 5.2 | 6.1 | 8.5 | 5.8 | 5.1 | 6.1 | 2.3 | (2.0) | 5.7 | 6.2 | - | - | - | - |
| Inpatient | 5.9 | (0.2) | 4.5 | 3.0 | 7.8 | 2.0 | 4.5 | 2.5 | 1.5 | (8.1) | 4.1 | 5.7 | - | - | - | - |
| Outpatient | 13.3 | 12.3 | 8.1 | 10.7 | 13.5 | 13.9 | 8.7 | 11.6 | 12.7 | 8.7 | 6.5 | 7.8 | - | - | - | - |
| Residential (note 2) | 0.5 | 11.5 | (0.0) | 2.6 | 6.0 | 13.1 | (1.9) | 3.4 | (11.6) | 2.9 | 10.5 | (0.5) | - | - | - | - |
| General hospitals, specialty units (note 3) | 8.3 | 3.2 | 3.9 | 5.4 | 12.5 | 5.8 | 3.9 | 5.5 | 1.8 | (4.0) | 4.1 | 5.2 | - | - | - | - |
| Inpatient | 8.8 | 1.3 | 2.8 | 3.9 | 13.2 | 4.3 | 3.2 | 3.7 | 1.6 | (8.5) | 1.0 | 5.1 | - | - | - | - |
| Outpatient | 10.4 | 10.0 | 4.7 | 9.4 | 8.9 | 11.1 | 4.3 | 10.4 | 13.7 | 7.6 | 5.6 | 6.9 | - | - | - | - |
| Residential (note 2) | (6.8) | 5.9 | 16.8 | 3.4 | 44.6 | 18.8 | 17.3 | 5.8 | (11.7) | (3.0) | 16.1 | (0.6) | - | - | - | - |
| General hospitals, nonspecialty units (note 3) | 2.1 | 6.2 | 8.4 | 7.5 | 1.5 | 5.8 | 8.1 | 7.3 | 6.2 | 8.5 | 10.3 | 8.4 | - | - | - | - |
| Inpatient | (4.0) | (11.2) | 17.8 | (2.0) | (4.4) | (12.5) | 16.6 | (5.9) | (0.1) | (2.7) | 22.8 | 7.8 | - | - | - | - |
| Outpatient | 21.1 | 16.3 | 12.1 | 11.9 | 29.3 | 18.6 | 13.2 | 12.6 | 11.0 | 10.6 | 7.9 | 9.0 | - | - | - | - |
| Residential (note 2) | 4.5 | 13.2 | (7.5) | 1.8 | 4.5 | 12.4 | (7.2) | 1.8 | - | 87.1 | (14.3) | 0.6 | - | - | - | - |
| Specialty hospitals | 5.2 | (2.1) | 3.4 | 4.9 | 6.0 | (2.6) | 4.3 | 4.2 | (0.9) | 1.8 | (3.7) | 12.0 | - | - | - | - |
| Inpatient | 4.0 | (2.0) | 2.8 | 4.9 | 4.9 | (1.9) | 3.0 | 4.7 | (2.4) | (2.9) | 0.8 | 6.3 | - | - | - | - |
| Outpatient | 16.0 | (7.7) | 7.5 | 14.8 | 16.9 | (12.5) | 12.6 | 11.8 | 9.7 | 12.7 | (7.6) | 28.2 | - | - | - | - |
| Residential (note 2) | 24.9 | 3.9 | 8.0 | (5.4) | 33.4 | (2.8) | 18.9 | (12.0) | 10.0 | 18.1 | (20.9) | 29.7 | - | - | - | - |
| All physicians | 9.1 | 4.5 | 5.0 | 4.2 | 10.5 | 5.2 | 5.4 | 4.2 | 1.8 | (1.4) | (0.3) | 4.6 | 11.3 | 5.1 | 7.3 | 5.1 |
| Inpatient | 0.7 | (1.8) | 0.5 | (1.6) | 2.0 | 1.5 | 0.6 | (3.4) | (1.8) | (10.9) | 0.1 | 5.0 | - | - | - | - |
| Outpatient | 13.0 | 6.1 | 5.8 | 4.9 | 13.1 | 6.0 | 6.1 | 5.0 | 11.5 | 8.7 | (0.5) | 4.4 | - | - | - | - |
| Psychiatrists | 9.7 | 3.4 | 6.1 | 1.2 | 9.4 | 4.4 | 6.2 | 1.4 | 13.5 | (9.5) | 3.2 | (2.9) | - | - | - | - |
| Inpatient | 2.2 | (2.8) | 2.2 | (5.3) | 0.0 | 0.6 | 2.6 | (5.5) | 9.2 | (15.0) | (0.7) | (3.4) | - | - | - | - |
| Outpatient | 12.6 | 4.8 | 6.7 | 2.0 | 12.2 | 5.0 | 6.7 | 2.1 | 27.0 | (2.3) | 5.9 | (2.6) | - | - | - | - |
| Nonpsychiatric physicians | 8.3 | 6.1 | 3.6 | 7.9 | 12.3 | 6.5 | 4.3 | 7.9 | (3.9) | 3.6 | (1.9) | 7.8 | - | - | - | - |
| Inpatient | (0.9) | (0.6) | (1.3) | 2.2 | 5.1 | 2.6 | (1.9) | (0.4) | (7.4) | (7.8) | 0.5 | 8.5 | - | - | - | - |
| Outpatient | 13.7 | 8.1 | 4.5 | 8.7 | 14.7 | 7.4 | 5.3 | 8.8 | 5.0 | 14.7 | (3.1) | 7.4 | - | - | - | - |

Table A.7. Average Annual Growth by Provider and Setting for Mental Health and Substance Abuse (MHSA), Mental Health (MH), Substance Abuse (SA), and All-Health Spending, Selected Periods and for GDP Price Index—Continued

| Type of Provider and Site of Service (note 1) | Average Annual Growth | | | | | | | | | | | | | | | |
|--|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|-----------|-----------|
| | MHSA | | | | MH | | | | SA | | | | All-Health | | | |
| | 1986-1992 | 1992-1998 | 1998-2004 | 2004-2009 | 1986-1992 | 1992-1998 | 1998-2004 | 2004-2009 | 1986-1992 | 1992-1998 | 1998-2004 | 2004-2009 | 1986-1992 | 1992-1998 | 1998-2004 | 2004-2009 |
| Other professionals (note 4) | 13.1 | 2.9 | 5.4 | 7.2 | 13.5 | 4.3 | 5.2 | 6.6 | 12.0 | (1.2) | 6.0 | 9.3 | 14.5 | 8.2 | 6.8 | 5.9 |
| Inpatient | 14.7 | 8.3 | 15.1 | 14.4 | 19.5 | 18.0 | 17.7 | 11.9 | 13.5 | 4.2 | 13.2 | 16.4 | - | - | - | - |
| Outpatient | 13.1 | 2.8 | 4.5 | 5.0 | 13.5 | 4.2 | 4.8 | 6.4 | 11.9 | (1.6) | 3.3 | (1.9) | - | - | - | - |
| Residential | 13.5 | 13.0 | 48.7 | 36.8 | 13.5 | 36.7 | 34.2 | 14.4 | 13.5 | 4.8 | 56.9 | 41.7 | - | - | - | - |
| Free-standing nursing homes | 3.1 | (1.6) | 4.0 | 5.9 | 2.9 | (1.8) | 4.1 | 5.8 | 8.8 | 3.8 | 1.9 | 7.8 | 10.8 | 7.0 | 4.8 | 5.4 |
| Residential | 3.1 | (1.6) | 4.0 | 5.9 | 2.9 | (1.8) | 4.1 | 5.8 | 8.8 | 3.8 | 1.9 | 7.8 | - | - | - | - |
| Free-standing home health | 18.2 | 18.3 | 7.6 | 17.8 | 18.2 | 18.4 | 7.2 | 17.9 | 20.0 | 16.2 | 19.7 | 15.7 | 19.6 | 10.5 | 4.2 | 9.3 |
| Outpatient | 18.2 | 18.3 | 7.6 | 17.8 | 18.2 | 18.4 | 7.2 | 17.9 | 20.0 | 16.2 | 19.7 | 15.7 | - | - | - | - |
| Other personal and public health | 12.1 | 5.3 | 5.5 | 4.0 | 10.9 | 6.4 | 4.0 | 7.8 | 13.8 | 3.6 | 7.9 | (2.2) | 11.5 | 9.4 | 7.5 | 6.7 |
| Inpatient | 1.3 | (10.8) | (2.4) | 13.8 | 4.7 | (4.1) | (27.7) | (100.0) | (1.3) | (20.6) | 19.8 | 16.8 | - | - | - | - |
| Outpatient | 10.2 | 7.7 | 5.3 | 2.2 | 8.6 | 7.8 | 4.2 | 7.1 | 13.2 | 7.6 | 7.1 | (6.5) | - | - | - | - |
| Residential | 16.6 | 4.1 | 6.1 | 5.5 | 15.0 | 5.6 | 4.6 | 8.8 | 19.0 | 1.9 | 8.3 | 0.4 | - | - | - | - |
| Specialty mental health centers (note 5) | 10.8 | 7.2 | 4.2 | 6.0 | 10.9 | 6.4 | 4.0 | 7.0 | 8.8 | 16.7 | 5.7 | (3.3) | - | - | - | - |
| Inpatient | 1.2 | (2.5) | (27.7) | (100.0) | 4.7 | (4.1) | (27.7) | (100.0) | (24.0) | 19.5 | (27.7) | (100.0) | - | - | - | - |
| Outpatient | 8.6 | 8.9 | 3.8 | 5.8 | 8.6 | 7.8 | 4.2 | 6.7 | 8.2 | 19.6 | 1.2 | (2.8) | - | - | - | - |
| Residential | 15.4 | 6.1 | 5.5 | 6.3 | 15.0 | 5.6 | 4.6 | 7.5 | 22.9 | 12.4 | 12.9 | (3.6) | - | - | - | - |
| Specialty substance abuse centers (note 6) | 14.5 | 1.5 | 8.4 | (0.1) | - | - | - | - | 14.5 | 1.5 | 8.4 | (2.0) | - | - | - | - |
| Inpatient | 1.3 | (27.2) | 30.9 | 17.3 | - | - | - | - | 1.3 | (27.2) | 30.9 | 17.3 | - | - | - | - |
| Outpatient | 14.1 | 5.2 | 8.6 | (6.2) | - | - | - | - | 14.1 | 5.2 | 8.6 | (7.4) | - | - | - | - |
| Residential | 18.7 | 0.5 | 7.2 | 4.0 | - | - | - | - | 18.7 | 0.5 | 7.2 | 1.4 | - | - | - | - |
| Retail prescription drugs | 10.0 | 17.0 | 18.3 | 6.0 | 10.0 | 17.0 | 18.3 | 5.6 | 8.5 | 8.0 | 27.1 | 68.2 | 11.6 | 11.1 | 13.6 | 5.6 |
| Insurance administration | 6.5 | 6.8 | 14.0 | 4.0 | 8.2 | 7.3 | 14.3 | 4.3 | 0.5 | 4.4 | 12.2 | 2.0 | 11.4 | 6.5 | 13.5 | 4.0 |
| ADDENDUM | | | | | | | | | | | | | | | | |
| Specialty providers (note 7) | 8.9 | 2.5 | 4.8 | 4.5 | 9.3 | 3.1 | 4.5 | 5.4 | 7.7 | 0.9 | 5.8 | 1.6 | | | | |
| Nonspecialty providers (note 8) | 4.2 | 3.2 | 5.4 | 7.8 | 4.6 | 2.9 | 5.4 | 7.7 | 1.1 | 5.6 | 5.0 | 8.5 | | | | |
| GDP price index (note 9) | 3.3 | 1.9 | 2.1 | 2.5 | 3.3 | 1.9 | 2.1 | 2.5 | 3.3 | 1.9 | 2.1 | 2.5 | 3.3 | 1.9 | 2.1 | 2.5 |

Sources: SAMHSA Spending Estimates, 2013; Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Expenditure Accounts; Bureau of Economic Analysis, Gross Domestic Product (GDP) price index.

Notes:

1. Not all service providers will have all three sites of service. Retail prescription drugs and insurance administration are not attributable to a site of service.
2. Includes spending in nursing home units of hospitals or in nursing homes affiliated with hospitals.
3. All spending for psychiatric services in Department of Veterans Affairs hospitals is included in general hospital specialty unit providers.
4. Includes psychologists, counselors, and social workers.
5. Includes residential treatment centers for children.
6. Includes other facilities for treating substance abuse.
7. Includes specialty units of general hospitals, specialty hospitals, psychiatrists, other professionals, specialty mental health centers, and specialty substance abuse centers.
8. Includes nonspecialty units in general hospitals, non-psychiatric physicians, home health, and nursing homes.
9. Measure of economy-wide price inflation.

Table A.8. Mental Health and Substance Abuse (MHSA), Mental Health (MH), and Substance Abuse (SA) Spending by Payer: Levels, Percent Distribution, and Share of All-Health Spending, Selected Years

| Type of Payer | Spending in Millions | | | | | Percent Distribution | | | | | Share of All-Health Spending | | | | |
|--------------------------------|----------------------|-----------------|-----------------|------------------|------------------|----------------------|-------------|-------------|-------------|-------------|------------------------------|-------------|-------------|-------------|-------------|
| | 1986 | 1992 | 1998 | 2004 | 2009 | 1986 | 1992 | 1998 | 2004 | 2009 | 1986 | 1992 | 1998 | 2004 | 2009 |
| Total MHSA | \$41,538 | \$65,360 | \$83,783 | \$132,076 | \$171,720 | 100% | 100% | 100% | 100% | 100% | 9.4% | 8.2% | 7.4% | 7.4% | 7.4% |
| Private–Total | 18,481 | 24,860 | 30,501 | 51,187 | 66,584 | 44 | 38 | 36 | 39 | 39 | 7.0 | 5.4 | 4.9 | 5.3 | 5.6 |
| Out-of-pocket | 6,908 | 8,534 | 10,003 | 14,920 | 18,791 | 17 | 13 | 12 | 11 | 11 | 6.6 | 5.9 | 5.6 | 6.0 | 6.3 |
| Private insurance | 9,506 | 12,728 | 17,834 | 32,475 | 42,562 | 23 | 19 | 21 | 25 | 25 | 7.0 | 4.6 | 4.6 | 5.0 | 5.3 |
| Other private | 2,067 | 3,598 | 2,664 | 3,793 | 5,231 | 5 | 6 | 3 | 3 | 3 | 9.3 | 9.8 | 4.5 | 5.4 | 5.9 |
| Public–Total | 23,057 | 40,500 | 53,282 | 80,888 | 105,136 | 56 | 62 | 64 | 61 | 61 | 12.7 | 11.8 | 10.6 | 10.1 | 9.2 |
| Medicare | 2,389 | 4,628 | 7,131 | 9,006 | 20,544 | 6 | 7 | 9 | 7 | 12 | 3.1 | 3.4 | 3.4 | 2.9 | 4.1 |
| Medicaid (Note 1) | 6,440 | 13,072 | 19,233 | 36,879 | 44,227 | 16 | 20 | 23 | 28 | 26 | 14.2 | 12.1 | 11.4 | 12.6 | 11.7 |
| Other Federal (Note 2) | 2,989 | 5,335 | 5,804 | 8,791 | 10,492 | 7 | 8 | 7 | 7 | 6 | 14.2 | 15.8 | 14.0 | 11.1 | 9.4 |
| Other State and local (Note 2) | 11,238 | 17,465 | 21,114 | 26,213 | 29,873 | 27 | 27 | 25 | 20 | 17 | 29.0 | 26.3 | 25.5 | 22.4 | 19.9 |
| All Federal (Note 3) | 8,948 | 18,346 | 24,117 | 39,556 | 60,207 | 22 | 28 | 29 | 30 | 35 | 7.3 | 7.7 | 6.9 | 7.0 | 7.0 |
| All State (Note 4) | 14,109 | 22,154 | 29,165 | 41,333 | 44,929 | 34 | 34 | 35 | 31 | 26 | 24.0 | 20.9 | 19.0 | 17.5 | 16.2 |
| Total MH | 32,453 | 51,957 | 69,160 | 111,200 | 147,381 | 100% | 100% | 100% | 100% | 100% | 7.3% | 6.5% | 6.1% | 6.3% | 6.3% |
| Private–Total | 14,043 | 20,481 | 26,679 | 46,181 | 58,928 | 43 | 39 | 39 | 42 | 40 | 5.4 | 4.5 | 4.3 | 4.7 | 5.0 |
| Out-of-pocket | 5,699 | 6,896 | 8,817 | 13,294 | 16,212 | 18 | 13 | 13 | 12 | 11 | 5.5 | 4.8 | 4.9 | 5.3 | 5.4 |
| Private insurance | 6,577 | 10,662 | 15,787 | 29,800 | 38,710 | 20 | 21 | 23 | 27 | 26 | 4.8 | 3.9 | 4.1 | 4.6 | 4.8 |
| Other private | 1,767 | 2,923 | 2,075 | 3,088 | 4,006 | 5 | 6 | 3 | 3 | 3 | 7.9 | 8.0 | 3.5 | 4.4 | 4.5 |
| Public–Total | 18,410 | 31,477 | 42,481 | 65,019 | 88,454 | 57 | 61 | 61 | 58 | 60 | 10.1 | 9.1 | 8.5 | 8.1 | 7.8 |
| Medicare | 2,058 | 4,072 | 6,380 | 8,061 | 19,347 | 6 | 8 | 9 | 7 | 13 | 2.7 | 3.0 | 3.0 | 2.6 | 3.9 |
| Medicaid (Note 1) | 5,590 | 11,015 | 16,492 | 32,516 | 39,069 | 17 | 21 | 24 | 29 | 27 | 12.3 | 10.2 | 9.7 | 11.1 | 10.4 |
| Other Federal (Note 2) | 2,012 | 2,572 | 3,513 | 5,374 | 7,803 | 6 | 5 | 5 | 5 | 5 | 9.6 | 7.6 | 8.5 | 6.8 | 7.0 |
| Other State and local (Note 2) | 8,751 | 13,817 | 16,096 | 19,069 | 22,234 | 27 | 27 | 23 | 17 | 15 | 22.6 | 20.8 | 19.5 | 16.3 | 14.8 |
| All Federal (Note 3) | 7,168 | 13,695 | 19,474 | 32,613 | 52,914 | 22 | 26 | 28 | 29 | 36 | 5.8 | 5.7 | 5.6 | 5.8 | 6.1 |
| All State (Note 4) | 11,242 | 17,782 | 23,007 | 32,406 | 35,539 | 35 | 34 | 33 | 29 | 24 | 19.1 | 16.8 | 15.0 | 13.7 | 12.8 |

Table A.8. Mental Health and Substance Abuse (MHSA), Mental Health (MH), and Substance Abuse (SA) Spending by Payer: Levels, Percent Distribution, and Share of All-Health Spending, Selected Years—Continued

| Type of Payer | Spending in Millions | | | | | Percent Distribution | | | | | Share of All-Health Spending | | | | |
|--------------------------------|----------------------|----------------|------------------|------------------|------------------|----------------------|-------------|-------------|-------------|-------------|------------------------------|-------------|-------------|-------------|-------------|
| | 1986 | 1992 | 1998 | 2004 | 2009 | 1986 | 1992 | 1998 | 2004 | 2009 | 1986 | 1992 | 1998 | 2004 | 2009 |
| Total SA | 9,085 | 13,403 | 14,623 | 20,876 | 24,339 | 100% | 100% | 100% | 100% | 100% | 2.0% | 1.7% | 1.3% | 1.2% | 1.0% |
| Private—Total | 4,438 | 4,379 | 3,822 | 5,006 | 7,656 | 49 | 33 | 26 | 24 | 31 | 1.7 | 1.0 | 0.6 | 0.5 | 0.6 |
| Out-of-pocket | 1,209 | 1,638 | 1,186 | 1,626 | 2,579 | 13 | 12 | 8 | 8 | 11 | 1.2 | 1.1 | 0.7 | 0.7 | 0.9 |
| Private insurance | 2,929 | 2,066 | 2,047 | 2,675 | 3,852 | 32 | 15 | 14 | 13 | 16 | 2.2 | 0.8 | 0.5 | 0.4 | 0.5 |
| Other private | 301 | 676 | 590 | 706 | 1,225 | 3 | 5 | 4 | 3 | 5 | 1.3 | 1.8 | 1.0 | 1.0 | 1.4 |
| Public—Total | 4,647 | 9,024 | 10,801 | 15,870 | 16,682 | 51 | 67 | 74 | 76 | 69 | 2.6 | 2.6 | 2.1 | 2.0 | 1.5 |
| Medicare | 332 | 556 | 751 | 945 | 1,197 | 4 | 4 | 5 | 5 | 5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 |
| Medicaid (Note 1) | 851 | 2,057 | 2,740 | 4,363 | 5,158 | 9 | 15 | 19 | 21 | 21 | 1.9 | 1.9 | 1.6 | 1.5 | 1.4 |
| Other Federal (Note 2) | 977 | 2,763 | 2,291 | 3,417 | 2,689 | 11 | 21 | 16 | 16 | 11 | 4.7 | 8.2 | 5.5 | 4.3 | 2.4 |
| Other State and local (Note 2) | 2,487 | 3,647 | 5,019 | 7,145 | 7,639 | 27 | 27 | 34 | 34 | 31 | 6.4 | 5.5 | 6.1 | 6.1 | 5.1 |
| All Federal (Note 3) | 1,780 | 4,652 | 4,643 | 6,943 | 7,292 | 20 | 35 | 32 | 33 | 30 | 1.4 | 2.0 | 1.3 | 1.2 | 0.8 |
| All State (Note 4) | 2,867 | 4,372 | 6,158 | 8,927 | 9,390 | 32 | 33 | 42 | 43 | 39 | 4.9 | 4.1 | 4.0 | 3.8 | 3.4 |
| Total all-health | 444,198 | 800,787 | 1,128,493 | 1,772,924 | 2,330,064 | 100% | 100% | 100% | 100% | 100% | - | - | - | - | - |
| Private—Total | 262,294 | 456,443 | 625,976 | 972,281 | 1,188,794 | 59 | 57 | 55 | 55 | 51 | - | - | - | - | - |
| Out-of-pocket | 104,129 | 144,323 | 179,959 | 248,819 | 299,345 | 23 | 18 | 16 | 14 | 13 | - | - | - | - | - |
| Private insurance | 135,844 | 275,374 | 386,775 | 653,700 | 801,190 | 31 | 34 | 34 | 37 | 34 | - | - | - | - | - |
| Other private | 22,321 | 36,746 | 59,241 | 69,762 | 88,259 | 5 | 5 | 5 | 4 | 4 | - | - | - | - | - |
| Public—Total | 181,905 | 344,344 | 502,517 | 800,642 | 1,141,269 | 41 | 43 | 45 | 45 | 49 | - | - | - | - | - |
| Medicare | 76,829 | 135,996 | 209,212 | 311,272 | 502,289 | 17 | 17 | 19 | 18 | 22 | - | - | - | - | - |
| Medicaid (Note 1) | 45,383 | 108,187 | 169,235 | 293,044 | 376,850 | 10 | 14 | 15 | 17 | 16 | - | - | - | - | - |
| Other Federal (Note 2) | 20,983 | 33,689 | 41,337 | 79,193 | 111,994 | 5 | 4 | 4 | 4 | 5 | - | - | - | - | - |
| Other State and local (Note 2) | 38,709 | 66,472 | 82,734 | 117,134 | 150,137 | 9 | 8 | 7 | 7 | 6 | - | - | - | - | - |
| All Federal (Note 3) | 123,000 | 238,287 | 349,361 | 564,347 | 863,325 | 28 | 30 | 31 | 32 | 37 | - | - | - | - | - |
| All State (Note 4) | 58,905 | 106,057 | 153,156 | 236,295 | 277,944 | 13 | 13 | 14 | 13 | 12 | - | - | - | - | - |

Sources: SAMHSA Spending Estimates, 2013; Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Expenditure Accounts.

Notes:

1. The State Children's Health Insurance Program (SCHIP) all-health spending was \$11.1 billion in 2009. MHSA SCHIP spending was estimated at \$0.8 billion or about 0.5 percent of total MHSA. In this table, SCHIP is distributed across Medicaid, other Federal, and other State and local categories, depending on whether the SCHIP was run through Medicaid or as a separate State SCHIP program.
2. SAMHSA block grants to "State and local" agencies are part of "other Federal" government spending. In 2009, block grants amounted to \$393 million for MH and \$1,251 million for SA.
3. Includes Federal share of Medicaid.
4. Includes State and local share of Medicaid.

Table A.9. Average Annual Growth by Payer for Mental Health and Substance Abuse (MHSA), Mental Health (MH), and Substance Abuse (SA) and for Gross Domestic Product Price Index, Selected Periods

| Type of Payer | Average Annual Growth | | | | | | | | | | | | | | | |
|--------------------------------|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|-------------|
| | MHSA | | | | MH | | | | SA | | | | All-Health | | | |
| | 1986-1992 | 1992-1998 | 1998-2004 | 2004-2009 | 1986-1992 | 1992-1998 | 1998-2004 | 2004-2009 | 1986-1992 | 1992-1998 | 1998-2004 | 2004-2009 | 1986-1992 | 1992-1998 | 1998-2004 | 2004-2009 |
| Total | 7.8% | 4.2% | 7.9% | 5.4% | 8.2% | 4.9% | 8.2% | 5.8% | 6.7% | 1.5% | 6.1% | 3.1% | 10.3% | 5.9% | 7.8% | 5.6% |
| Private–Total | 5.1 | 3.5 | 9.0 | 5.4 | 6.5 | 4.5 | 9.6 | 5.0 | (0.2) | (2.2) | 4.6 | 8.9 | 9.7 | 5.4 | 7.6 | 4.1 |
| Out-of-pocket | 3.6 | 2.7 | 6.9 | 4.7 | 3.2 | 4.2 | 7.1 | 4.0 | 5.2 | (5.2) | 5.4 | 9.7 | 5.6 | 3.7 | 5.5 | 3.8 |
| Private insurance | 5.0 | 5.8 | 10.5 | 5.6 | 8.4 | 6.8 | 11.2 | 5.4 | (5.7) | (0.2) | 4.6 | 7.6 | 12.5 | 5.8 | 9.1 | 4.2 |
| Other private | 9.7 | (4.9) | 6.1 | 6.6 | 8.8 | (5.6) | 6.9 | 5.3 | 14.5 | (2.2) | 3.0 | 11.7 | 8.7 | 8.3 | 2.8 | 4.8 |
| Public–Total | 9.8 | 4.7 | 7.2 | 5.4 | 9.4 | 5.1 | 7.4 | 6.3 | 11.7 | 3.0 | 6.6 | 1.0 | 11.2 | 6.5 | 8.1 | 7.3 |
| Medicare | 11.6 | 7.5 | 4.0 | 17.9 | 12.0 | 7.8 | 4.0 | 19.1 | 9.0 | 5.1 | 3.9 | 4.8 | 10.0 | 7.4 | 6.8 | 10.0 |
| Medicaid (note 1) | 12.5 | 6.6 | 11.5 | 3.7 | 12.0 | 7.0 | 12.0 | 3.7 | 15.9 | 4.9 | 8.1 | 3.4 | 15.6 | 7.7 | 9.6 | 5.2 |
| Other Federal (note 2) | 10.1 | 1.4 | 7.2 | 3.6 | 4.2 | 5.3 | 7.3 | 7.7 | 18.9 | (3.1) | 6.9 | (4.7) | 8.2 | 3.5 | 11.4 | 7.2 |
| Other State and local (note 2) | 7.6 | 3.2 | 3.7 | 2.6 | 7.9 | 2.6 | 2.9 | 3.1 | 6.6 | 5.5 | 6.1 | 1.3 | 9.4 | 3.7 | 6.0 | 5.1 |
| All Federal (note 3) | 12.7 | 4.7 | 8.6 | 8.8 | 11.4 | 6.0 | 9.0 | 10.2 | 17.4 | (0.0) | 6.9 | 1.0 | 11.7 | 6.6 | 8.3 | 8.9 |
| All State (note 4) | 7.8 | 4.7 | 6.0 | 1.7 | 7.9 | 4.4 | 5.9 | 1.9 | 7.3 | 5.9 | 6.4 | 1.0 | 10.3 | 6.3 | 7.5 | 3.3 |
| GDP price index (note 5) | 3.3 | 1.9 | 2.1 | 2.5 | 3.3 | 1.9 | 2.1 | 2.5 | 3.3 | 1.9 | 2.1 | 2.5 | 3.3 | 1.9 | 2.1 | 2.5 |

Sources: SAMHSA Spending Estimates, 2013; Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Expenditure Accounts; Bureau of Economic Analysis, Gross Domestic Product (GDP) price index.

Notes:

1. The State Children's Health Insurance Program (SCHIP) all-health spending was \$11.1 billion in 2009. MHSA SCHIP spending was estimated at \$0.8 billion or about 0.5 percent of total MHSA. In this table, SCHIP is distributed across Medicaid, other Federal, and other State and local categories, depending on whether the SCHIP was run through Medicaid or as a separate State SCHIP program.
2. SAMHSA block grants to "State and local" agencies are part of "other Federal" government spending. In 2009, block grants amounted to \$393 million for MH and \$1,251 million for SA.
3. Includes Federal share of Medicaid.
4. Includes State and local share of Medicaid.
5. Measure of economy-wide price inflation.

Appendix B: Definitions

This appendix presents the structure used in the Substance Abuse and Mental Health Services Administration (SAMHSA) Spending Estimates (SSE) to estimate treatment spending for mental health (MH) and substance abuse (SA). It also describes the classification system used as a basis for that structure and defines many of the concepts used in the SSE. It draws heavily on the definitions used for the National Health Expenditure Accounts (NHEA) that are posted on the Centers for Medicare & Medicaid Services (CMS) NHEA website.⁹

SAMHSA Spending Estimates Structure

The SSE measures aggregate spending on the treatment of mental and/or substance use disorders (M/SUDs). Historical estimates are constructed in four dimensions:

- Diagnosis:
 - Mental illness/disorders
 - SUDs¹⁰
- Providers and products:
 - Hospital care: general and specialty hospitals¹¹
 - Physician services: psychiatrists and other physicians¹²
 - Other professional services: psychologists, clinical social workers, and others
 - Nursing home care
 - Home health care
 - Center-based providers
 - Specialty MH centers
 - Specialty SA centers
 - Prescription drugs
 - Insurance administration
- Setting:
 - Inpatient
 - Outpatient
 - Residential
- Payer:
 - Private insurance
 - Out-of-pocket
 - Other private: foundation and other charity
 - Medicare
 - Medicaid, both state and federal share; includes State Children's Health Insurance Program (SCHIP) that is run through Medicaid programs
 - Other federal: Department of Defense (DoD), Department of Veterans Affairs (DVA),

⁹ www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/dsm-10.pdf

¹⁰ Estimates are also prepared separately for drug abuse and alcohol abuse.

¹¹ Hospital care is estimated separately for "specialty" psychiatric and chemical dependency hospitals and, within general hospitals, separately for "specialty unit" and nonspecialty care.

¹² Physician services are estimated separately for psychiatric physicians and for nonpsychiatric physicians.

- and SAMHSA MH and SA Block Grants
- Other state and local: state and local general revenue; includes SCHIP operated as a program separate from Medicaid.

Expenditures in the SSE measure the amounts spent to: (1) provide services to specific individuals who have MH- and SA-related diagnoses; (2) pay for prescription medications with indications for treatments related to those diagnoses; (3) cover the costs of insurers to administer various public and private insurance programs, and (4) cover the costs of philanthropic organizations to administer their programs. There is currently no measure of MHSAs research or investment in structures or equipment that is used in providing treatment, which is unlike the CMS NHEA.

Classification System

The classification system for private establishments (i.e., generally single locations of production of services) is laid out in the North American Industrial Classification System (NAICS) by the federal government. Sector 62 defines establishments in the Health Care and Social Assistance area. For public entities, classification of government operations parallels the NAICS system, such as the operation of public MH and SA/chemical dependency clinics. The NAICS groups private sector establishments according to similar production processes. Each establishment is assigned a code that identifies the main nature of its operation within the broader industrial classification scheme. For the health care and social assistance industry, the NAICS is also structured to capture the continuum of medical and social care. The NAICS structure for health care and social assistance ranges from medical care facilities providing acute care (offices and clinics of physicians and hospitals) to less acute medical care facilities (residential treatment centers, nursing homes, and continuing care facilities) to social assistance facilities providing little or no medical care.

Historically in the NHEA, only those facilities providing medical care were included in the estimates; establishments providing social assistance were excluded. This meant that services provided by residential treatment centers were not included in the all-health accounts. In the 2009 comprehensive revisions to the NHEA, spending was broadened to encompass residential treatment facilities that included residential SA and MH facilities. This change means that some residential treatment centers that previously were not included in the SSE are now included, raising the overall level of MHSAs spending. Residential facilities provide therapeutic services, including assessments, counseling, medication management, group and individual counseling services, and a structured, therapeutic environment that is removed from people, places, or situations that contribute to the patient's dysfunction.

Table B.1: North American Industry Classification System for Health Care Services Crosswalk to the MHA Expenditure Accounts and the National Health Expenditure Accounts

| NAICS Code | NAICS Industry Title | MHA Expenditure Account Category | NHEA Category |
|---------------|--|--|--|
| 6211 | Offices of Physicians | Physician Services | Physician and Clinical Services |
| 621111 | Offices of Physicians (except Mental Health Specialists) | Nonpsychiatric Physician Services | |
| 621112 | Offices of Physicians, Mental Health Specialists | Psychiatrists | |
| 6213 | Offices of Other Health Practitioners | Other Professional Services | Other Professional Services |
| 62133 | Offices of Mental Health Practitioners | Other Professional Services | Part of Other Professional services |
| 6214 | Outpatient Care Centers | Physician Services, except Outpatient MH and SA Centers | Physician and Clinical Services |
| 62142 | Outpatient Mental Health and Substance Abuse Centers | Specialty Mental Health Centers-part; Specialty Substance Abuse Centers-part | |
| 6216 | Home Health Care Agencies | Home Health Care | Home Health Care |
| 6221; 6223 | General Medical/Surgical Hospitals; Specialty Hospitals (except Psychiatric and Substance Abuse Hospitals) | General Hospitals | Hospital Care |
| 6222 | Psychiatric and Substance Abuse Hospitals | Specialty (Psychiatric and Substance Abuse) Hospitals | |
| 6231 | Nursing Care facilities | Nursing Home Care | Nursing Home Care |
| 623311 | Continuing Care Retirement Communities (with onsite nursing home facilities) | | |
| 62322 | Residential Mental Health and Substance Abuse Facilities | Specialty Mental Health Centers-part; Specialty Substance Abuse Centers-part | Other Health, Residential, and Personal Care |

Source: National Health Expenditures Accounts: Methodology Paper, 2010 available at: www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/dsm-10.pdf

In addition, two categories of spending are not defined by NAICS. Unlike other spending categories where the establishment’s primary function is medical care, this spending is for services or products delivered by nonmedical establishments. The first category is spending on the purchase of prescription drugs. This category represents products sold in retail establishments such as community pharmacies, mass merchandise retailers, grocery stores, or through mail order pharmacies. The second category is insurance administration, which covers the cost of running various government health care programs,

the net cost¹³ of private health insurance, and the administrative costs associated with operating philanthropic organizations that provide donations for health care.

Definitions

The following list provides definitions of provider, payer, and setting categories used with the MH and SA spending accounts. The NAICS codes referenced in these definitions can be found on Table B.1.

Diagnoses

Spending for MH and SA services measured in these accounts are defined by diagnostic codes found in the International Classification of Diseases 9th Revision (ICD-9-CM) as “mental disorders” (i.e., codes in sections 290 through 319; see Table B.2). A subset of these mental disorders is excluded as being outside the scope of this project: dementias (290), transient mental disorders caused by conditions classified elsewhere (293), persistent mental disorders caused by conditions classified elsewhere (294), nondependent use of drugs-tobacco abuse disorder (305.1), specific delays in development (315), and mental retardation (317–319). Also excluded are cerebral degenerations (e.g., Alzheimer’s disease, 331.0), tobacco abuse, and psychic factors associated with disease classified elsewhere (316). Two pregnancy-related complications are included: complications mainly related to pregnancy—drug dependence (648.3) and mental disorders (648.4).

The allocation of MHSA spending for services is based on principal or primary diagnosis and does not include spending associated with secondary diagnoses. The diagnostic categories selected generally reflect what payers (insurers) consider as M/SUDs. They exclude costs not directly related to treatment, such as those stemming from lower productivity, missed workdays, and/or drug-related crimes. They also exclude expenditures on non-MHSA conditions that are caused by M/SUDs, such as liver cirrhosis.

¹³ *Net cost* is the difference between the insurance premium cost and the benefits incurred. It includes all costs associated with administering health insurance (e.g., commissions, bill processing, reserves), dividends paid to stockholders, and other taxes and costs.

Table B.2: ICD-9 Codes Included in Mental Health (MH) and Substance Abuse (SA) Diagnosis

| ICD-9 Code | ICD-9 Disease Category | Included in MH/SA |
|-------------|--|-------------------|
| 290-319 | MENTAL DISORDERS | |
| 290-299 | Psychoses | |
| 291 | Alcohol-induced mental disorders | SA (Alcohol) |
| 292 | Drug-induced disorders | SA (Drug) |
| 295 | Schizophrenic disorders | MH |
| 296 | Episodic mood disorders | MH |
| 297 | Delusional disorders | MH |
| 298 | Other nonorganic psychoses | MH |
| 299 | Pervasive developmental disorders | MH |
| 300-316 | Neurotic disorders, personality disorders, and other nonpsychotic mental disorders | |
| 300 | Anxiety, dissociative and somatoform disorders | MH |
| 301 | Personality disorders | MH |
| 302 | Sexual and gender identity disorders | MH |
| 303 | Alcohol dependence syndrome | SA (Alcohol) |
| 304 | Drug dependence | SA (Drug) |
| 305.2-305.9 | Nondependent abuse of drugs-except tobacco abuse disorder | SA (Drug) |
| 306 | Physiological malfunction arising from mental factors | MH |
| 307 | Special symptoms and syndromes, not elsewhere classified | MH |
| 308 | Acute reaction to stress | MH |
| 309 | Adjustment reaction | MH |
| 310 | Specific nonpsychotic mental disorders due to brain damage | MH |
| 311 | Depressive disorder, not elsewhere classified | MH |
| 312 | Disturbance of conduct, not elsewhere classified | MH |
| 313 | Disturbance of emotions to childhood and adolescence | MH |
| 314 | Hyperkinetic syndrome of childhood | MH |
| 648.3 | Complications mainly related to pregnancy-drug dependence | SA (Drug) |
| 648.4 | Complications mainly related to pregnancy-mental disorders | MH |

Source: International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)

Drugs administered for the treatment of M/SUDs are generally identified differently—that is, not based on diagnosis. Rather, an indication for use of the drug for treatment of an M/SUD is required, regardless of the associated diagnosis.

The following classifications of psychotherapeutic drugs are used in this study:

- Antianxiety agents
- Sedatives and hypnotics
- Antipsychotics and antimanics
- Antidepressants

This classification of MH and SA drugs includes spending for drugs whose main indication for use is M/SUDs, but these drugs may also be used to treat other conditions.

Two other classes of drugs—central nervous system (CNS) stimulants and anorexiant/miscellaneous CNS drugs—plus specific anticonvulsant medications are included if they have an associated mental or substance use diagnosis.

Two medications used to treat opioid addiction are also incorporated:

- Buprenorphine
- Buprenorphine/naloxone

Medications used in treating alcoholism are also captured:

- Acamprosate
- Disulfiram
- Naltrexone

Drugs whose main indication for use is not M/SUDs may be used to treat these conditions, but spending on these drugs is not included in the SSE. Spending on methadone is captured as part of spending for the provider where methadone is dispensed, rather than with SA prescription drug spending.

Providers¹⁴

Providers of service are classified according to the major types of services they furnish. These services are listed in Table B.1. In addition to the major types of services they deliver, providers often perform other functions. For example, a hospital primarily provides inpatient health care services, but also may operate a home health agency or nursing home wing and provide physician services through staff physicians in clinics and outpatient departments. The classification of spending is made based on the primary services provided, even though the provider may also fill other functions. The reason for this classification scheme is that providers often furnish the data used to estimate spending. These providers seldom break apart spending by function, which would be necessary information to produce a “functional” display of spending.

Hospital care includes all billed services provided to patients by public and private general medical/surgical and psychiatric and SA specialty hospitals.

General hospitals are community medical/surgical and specialty hospitals (other than MH and SA specialty hospitals) providing diagnostic and medical treatment to inpatients, including inpatient psychiatric care in specialized treatment units of general hospitals, detoxification, and other MHSA treatment services.

General hospital specialty units are any general medical/surgical hospital or nonpsychiatric and nonsubstance abuse specialty hospital that provides MH or SA treatment

¹⁴ The definitions below borrow liberally from two CMS National Health Expenditure Account websites: www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/dsm-10.pdf and <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/quickref.pdf> and from the U.S. Bureau of the Census NAICS website: www.census.gov/epcd/naics02/naicod02.htm#N62.

or detoxification in a “specialty unit” specifically designated for the treatment of patients with M/SUD diagnoses. For purposes of these estimates, only spending for patients with M/SUD primary diagnoses is counted in this category. Inpatient care in DVA hospitals is included in this category.

General hospital nonspecialty care is any general medical or surgical hospital, or nonpsychiatric and nonsubstance abuse specialty hospital, that provides MH or SA treatment or detoxification in general units (i.e., other than “specialty units” specifically designated for the treatment of patients with M/SUDs). For purposes of these estimates, only spending for patients with mental illness or substance use primary diagnoses is counted in this category.

Specialty hospitals are establishments primarily engaged in providing diagnostic, medical treatment, and monitoring services for patients who have M/SUDs. Psychiatric, psychological, and social work services predominate at the facilities.

Office-based professional care as a summary category includes physician services and other professional services.

Physician services include independently billed services provided in establishments operated by Doctors of Medicine (M.D.) and Doctors of Osteopathy (D.O.), and outpatient care centers (except specialty MH and SA clinics). This category also includes services rendered by a physician in hospitals, if the physician bills independently for those services.

Psychiatrists include independently billing private or group practices of health practitioners with the degree of M.D. or D.O. who are primarily engaged in the practice of psychiatry or psychoanalysis, plus the independently-billed portion of medical laboratory services.

Other professional services cover services provided in establishments operated by health practitioners other than physicians and dentists. These professional services include those provided by private-duty nurses, chiropractors, podiatrists, optometrists, and physical, occupational, and speech therapists; for the MH and SA field, these include services of psychologists, psychoanalysts, psychotherapists, clinical social workers, professional counselors and SA counselors, and marriage and family therapists. For the SSE, these are establishments primarily engaged in the diagnosis and treatment of mental, emotional, and behavioral disorders and/or the diagnosis and treatment of individual or group social dysfunction brought about by such causes as mental illness, alcohol and SA, physical and emotional trauma, or stress.

Long-term care as a summary category includes home health and nursing home care.

Home health care covers medical care provided in the home by private and public freestanding home health agencies (HHAs). The *freestanding* designation means that the agency is not facility-based—that is, based out of a hospital, nursing home, or other type of provider whose primary mission is something other than home health services. Medical equipment sales or rentals billed through HHAs are included. Nonmedical types of home care (e.g., Meals on Wheels, chore-worker services, friendly visits, or other custodial services) are excluded.

Nursing home care covers services provided in private and public freestanding nursing home facilities. The *freestanding* designation means that the nursing home is not based out of a hospital or other type of provider whose primary mission is something other than nursing home care. These facilities include nursing and rehabilitative services generally for an extended period of time by staffs of registered or licensed practical nurses with physician consultation or oversight. Services provided in nursing facilities operated by the DVA are also included.

Center-based providers include specialty MH centers and specialty SA centers.

Specialty MH centers are facilities providing outpatient and/or residential mental health services and/or co-occurring mental health and substance abuse treatment to individuals with mental illness or with dual mental health and substance use disorder diagnoses. In most of these facilities, a physician provides medical assessments and prescribes and manages medications, usually with the assistance of a registered nurse. Most of the services provided by these facilities, however, are counseling, rehabilitation, and case management services delivered by psychologists, counselors, and social workers. **Specialty SA centers** are facilities providing substance abuse residential or outpatient services, or both, to individuals with substance use disorder diagnoses. Residential facilities include residential SA facilities providing residential care, detoxification, and treatment for patients with SUDs. These establishments provide rehabilitation, social and counseling services, supervision, room, and board, but only incidental medical services. Outpatient treatment centers and clinics, which generally do not provide residential care, include establishments with medical and/or nonmedical staff primarily engaged in providing outpatient diagnostic, detoxification, and treatment services related to SUDs. They may provide counseling staff, information on a wide range of SUD issues, and referral services for more intensive treatment programs, if necessary.

Prescription drugs include the sales of psychotherapeutic medications sold through retail outlets such as community pharmacies; pharmacies in mass merchandise stores, grocery stores, and department stores; and mail order pharmacies. Excluded are sales through hospital, exclusive-to-patient health maintenance organizations (HMOs), and nursing home pharmacies, which are instead counted with the establishment (hospital, physicians' offices, or nursing home) where the pharmacy is located.

The classifications of psychotherapeutic drugs used in this study are: antianxiety agents, sedatives and hypnotics, antipsychotics and antimanics, and antidepressants. In addition, two other classes of drugs are used if they have an associated M/SUD diagnosis: CNS stimulants and anorexians, and miscellaneous CNS drugs. Specific anticonvulsant medications have been captured if they have an associated M/SUD diagnosis. The study also incorporated buprenorphine as well as buprenorphine/naloxone (used to treat opioid addiction), and acamprosate, disulfiram, and naltrexone (used to treat alcoholism).

Adjustments are made to prescription drug spending for rebates. This adjustment measures rebates that are returned to the insurer directly from the manufacturer after the pharmacy transaction takes place, thereby reducing the true cost. These rebates serve as incentives for insurers to include particular drugs on an insurer's formulary, thus helping the manufacturer increase its volume of sales.

Insurance administration covers spending for the cost of running various government health care insurance programs. It also covers the net cost of private health insurance (the difference between premiums earned by insurers and the claims or losses incurred for which insurers become liable). The

net cost of private insurance includes claims processing costs, reserves to cover future liabilities, advertising costs, premium taxes, investor dividends, and profits of insurance companies, among other things.

Payers

Private Payments. Any payments made through private health insurance, out-of-pocket, or other private sources.

Private health insurance is represented in two pieces in the MHSA spending estimates: (1) benefits paid by private insurance to providers of service or for prescription drugs, and (2) the net cost of private insurance—the difference between health premiums earned and benefits incurred—that is included in the category of *insurance administration*. The net cost of private insurance includes costs associated with bill processing, advertising, sales commissions, other administrative costs, net additions to reserves, rate credits and dividends, premium taxes, and profits or losses, among other items. Private health insurance benefits paid through managed care plans on behalf of Medicare or Medicaid are excluded.

Out-of-pocket payments include direct spending by consumers for health care goods and services, including coinsurance, deductibles, and any amounts paid for health care services that are not covered by public or private insurance. Health insurance premiums paid by individuals are not covered here, but are counted as part of private health insurance.

Other private includes spending from philanthropic and foundation sources and from nonpatient revenues. Nonpatient revenues are monies received for nonhealth purposes, such as from the operation of gift shops, parking lots, cafeterias, and educational programs, or from returns on investments.

Public Payments. Any payments made on behalf of enrollees in Medicare or Medicaid or through other programs run by the federal or individual state government agencies.

Medicare is a federal government program that provides health insurance coverage to eligible elderly and disabled persons. It is composed of four parts: Part A—coverage of institutional services, including inpatient hospital services, nursing home care, initial home health visits, and hospice care; Part B—coverage for physicians and other professional services, outpatient clinic or hospital services, laboratory services, rehabilitation therapy, and home health visits not covered by Part A, among other services; Part C—Medicare Advantage program providing coverage through private plans; and Part D—coverage for prescription drugs, starting in 2006.¹⁵ Medicare payments include payments made through fee-for-service (Part A and Part B) and managed care (Part C and Part D) plans.

Medicaid is a program jointly funded by the federal and state governments that provides health care coverage to certain classes of persons with limited income and resources. Within federal guidelines, state governments set eligibility standards, determine services provided, set reimbursement rates, and administer the program. Income and resources are only two factors in determining eligibility, so not all poor people in a state are necessarily covered by this

¹⁵ For more information, see Medicare & You 2013 at www.medicare.gov/Library/PDFNavigation/PDFInterim.asp?Language=English&Type=Pub&PubID=10050.

program.¹⁶ Spending represents both federal and state portions unless otherwise specified. Medicaid payments also include payments made through fee-for-service and managed care plans. This line also includes State Children’s Insurance Program (SCHIP) spending that is administered as part of the Medicaid program.

Other federal includes spending provided through the DVA and DoD, treatment spending through MH and SA block grants administered by SAMHSA, and treatment under the Indian Health Service, among other federal payers. It also includes any federal SCHIP spending that is administered separately from the Medicaid program.

Other state and local includes programs funded primarily through state and local offices of MH and SA, but may also including funding from other state and local sources such as general assistance or state and local hospital subsidies. It also includes any state and local SCHIP spending that is administered separately from the Medicaid program.

Settings

Inpatient services cover inpatient care provided in an acute medical care unit or setting, which is usually a hospital.

Outpatient services include care provided in an ambulatory setting, such as in a hospital outpatient department or emergency room, and in physicians’ and other medical professionals’ offices and clinics, including specialty MH and SA centers.

Residential services include those from a 24-hour-care setting that provides therapeutic care to patients using licensed mental or behavioral health professionals. All nursing home care, whether provided in a freestanding or hospital-based nursing home, is counted as residential care.

Note: Neither insurance administration nor prescription drugs are classified by setting.

¹⁶ For more information, see www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareProgramRatesStats/Downloads/MedicareMedicaidSummaries2011.pdf.

Appendix C: Methods

This appendix describes the methods and data sources used to produce the Substance Abuse and Mental Health Services Administration (SAMHSA) Spending Estimates (SSE) for 1986–2009. The SSE measures spending for mental health (MH) and substance abuse (SA) treatment by provider type, payer, and treatment setting. The initial report, issued in 1998, was the first effort to measure disease-specific spending in a comprehensive way using concepts similar to those used in the National Health Expenditure Accounts (NHEA). Subsequent reports in 2000, 2005, 2007, and 2010 provided updates to these estimates. Current efforts have produced updates through 2009.

Overview of Estimating Methods and Algorithms

The estimates integrate national data sources from various government agencies and private organizations. Data were analyzed using both actuarial and statistical techniques. Complex issues must be addressed when combining the data to produce comprehensive estimates, such as assuring consistency across data sources, avoiding duplicate accounting, and adjusting for incomplete observations in sample surveys.

Expert Advice. Over many years, the methods for the estimation of national MHA expenditures drew extensively upon suggestions from reviewers and a technical panel of experts. The advisors included experts in mental illness, substance use disorders (SUDs), expenditure estimation, actuarial methods, health services research, and health economics. Experts on state programs (including the National Association of State Alcohol/Drug Abuse Directors and the National Association of State Mental Health Program Directors) also reviewed the methods and provided advice. Government experts on the SAMHSA specialty sector survey data shared information and insights on the imputation methods in those surveys.

Overview of Methods. The approach taken to estimate national MHA spending was designed to be consistent with the NHEA. The NHEA constitutes the framework for which the estimates of spending for all-health care are constructed by the Centers for Medicare & Medicaid Services (CMS). The framework is a two-dimensional matrix. Along one dimension are health care providers or products that constitute the U.S. health care industry; the other dimension is comprised of sources of funds used to purchase this health care.

We constructed MHA spending estimates for two major treatment categories of spending: MH and SA, with SA estimated in two separate subcategories—alcohol abuse (AA) and drug abuse (DA). Although we prepared estimates of SA at this more detailed level, in most instances we present findings in this report as a sum of AA and DA spending.

CMS has a long history and substantial expertise in estimating national spending. The estimates of MHA spending for nonspecialty providers were carved out of estimates of total national health consumption expenditures developed by CMS. We developed separate estimates from SAMHSA data for specialty MHA facilities. We removed duplicate expenditures between the two sectors (specialty and nonspecialty providers). Then, we summed sector estimates to obtain total national spending for MH, SA (AA plus DA) and for total MHA in the United States from 1986 through 2009. Finally, we compared MHA expenditures to all personal health care spending, government public health

expenditures, and spending on administration, which are referred to as “health consumption expenditures” in the national health expenditure accounts or as “all-health expenditures” in this report.

Strengths of Approach. The major benefit of developing estimates to be consistent with the NHEA is that it allows for an analysis of and comparison between MHSA and all-health spending. When the same methods, underlying data sources, and estimates are used for both calculations, the results are consistent and can be used to produce meaningful comparisons. In addition, both MHSA and all-health spending can be followed over time as public programs and the health care system change. Furthermore, spending by clinical problem—mental illness and/or substance use disorders (M/SUDs)—can be studied to understand the patterns of public and private spending on these problems, and the participation by types of providers can be monitored as treatment patterns change.

Basic Calculations. Table C.1 summarizes the methods for estimating MHSA expenditures for the MHSA specialty facilities and other providers. The specialty MHSA facility expenditure estimates were predominantly drawn from specialty surveys by facility type and by payment source. We followed three major steps for the basic calculations. First, we subtracted spending on mental disorders that were beyond the scope of these estimates (dementia, tobacco addiction, mental impairment, and mental developmental delays) from total revenues by facility. Second, we re-estimated revenues for providers who delivered multiple modes of care (inpatient, outpatient, and residential treatment) by modality, using patient counts by modality and the average revenue per patient for single modality providers specified by ownership type and region. Third, we summarized total revenues by type of provider (for example, specialty MH centers or specialty SA centers) and by payer and diagnosis.

Table C.1: Overview of Methods for Estimating MHA Expenditures

| Method Component | Specialty Institutions¹ | All Other Providers² |
|-------------------------------|--|--|
| Data sources | Facility/organization surveys (facility-level reporting) | Encounter data (administrative claims and encounter-focused surveys) |
| Critical data elements | Total revenue ³ by facility, modality of care (inpatient, outpatient, residential), diagnosis, payer | Components of spending (service use and price) by provider type, payer and diagnosis |
| Basic calculations | Eliminate diagnoses out of scope (e.g., dementias, mental impairment and mental developmental delays, tobacco addiction) | Eliminate duplications with specialty providers |
| | Split multimodality revenue by modality based on the product of the cost per patient for single modality providers and patient counts by modality for multimodality facilities | Multiply “components of spending” together for each diagnosis (mental, alcohol, drug abuse, all other health disorders) and payer to estimate diagnosis share of total health care expenditures by payer |
| | Estimate total revenue by provider type, payer, diagnosis | Multiply national health care expenditures (excluding specialty MHA specialty providers) by “diagnosis share” |
| Special calculations | Imputations for missing revenue = $f(\text{modality, ownership, region of the country, number of patient days})$ by facility | |
| | Survey nonresponse adjustments | Survey nonresponse adjustments |
| | Extrapolations and interpolations for missing years of data | Extrapolations and interpolations for missing years of data |
| | Projections for missing years of data | Projections for missing years of data |
| | Smooth expenditure estimates across all years | Smooth expenditure estimates across all years |
| Results for 1986–2009 | MHA specialty expenditures by provider type, payer, and setting (modality) | MHA nonspecialty provider expenditures by provider type, payer, and setting |

¹ Includes methods for estimating spending in specialty hospitals, specialty mental health centers, and specialty substance abuse centers whose underlying data come from specialty provider surveys sponsored by SAMHA.

² For inpatient psychiatric units in general hospitals, estimates are based on specialty unit data reported in Medicare Cost Reports submitted by hospitals to CMS; for psychiatric hospitals, we used revenues of psychiatric hospitals from the Census of Service Industry. For spending on retail prescription drugs for treatment of substance use disorders and mental illness, estimates came directly from data supplied by IMS. In both cases, the method is more direct than the two methods described in this table.

³ For SA, imputed from patient counts using revenue from 1998 N-SSATS indexed for price inflation through 2005.

We used the 2011 release of 2009 NHEA health care expenditures¹⁷ to develop MHSAs expenditures for the other providers, consistent with the methods of the NHEA. The NHEA reports health care expenditures for all diagnoses only. Because the NHEA encompasses both specialty institutions and general health care services, we had to eliminate from the NHEA estimates most specialty institution MHSAs providers (specialty MHSAs hospitals, specialty MH centers, and specialty SA centers). This elimination avoided double-counting the specialty service expenditures, which we estimated separately using specialty facility surveys as noted above.

To distinguish MHSAs from all-disease general health care expenditures, we estimated spending rates by type of diagnosis.¹⁸ We used only the principal diagnosis to identify spending on MH, AA, or DA. We calculated spending proportions for MH, AA, and DA by multiplying utilization by average prices (accounting for discounts and cost sharing) for each diagnostic group and dividing by the sum of all diagnoses. We applied these proportions to the estimates from the NHEA to estimate the MH, AA, and DA national spending. We summed SA expenditures from AA and DA estimates. We made these estimations within type of payer and provider, as described next.

The public sector payer categories are: Medicare, Medicaid, state and local government sources excluding contributions to Medicaid, and federal sources other than Medicare and Medicaid (e.g., Department of Veterans Affairs (DVA), Department of Defense, and federal Block Grants from SAMHSA). Medicaid expenditures are combined federal, state, and local funds. The private sources are: private insurance, out-of-pocket expenditures, and other private sources (e.g., philanthropy and other nonpatient revenues received by providers).

The provider categories are: specialty MHSAs hospitals, general hospitals with specialty units, general hospitals with services outside of specialty units, psychiatrists, nonpsychiatrist physicians, other nonphysician MHSAs professionals (e.g., psychologists, psychotherapists, social workers, SA counselors), freestanding home health agencies (HHAs), freestanding nursing homes, specialty MH centers, specialty SA centers, and retail purchases of prescription drugs. Although the definition has differed across SAMHSA surveys and across time, *specialty MH centers* generally include any facility that is not hospital-based and provides a variety of MH services. Similarly, *specialty SA centers* are generally clinics and residential treatment centers that specialize in treating SA and dependence.

We also presented MHSAs estimates by grouping providers into specialty or nonspecialty categories. Specialty providers include specialty MHSAs hospitals, general hospital specialty units, psychiatrists, other MHSAs professionals, specialty MH centers, and specialty SA centers. Nonspecialty providers include general hospitals with services outside of specialty units, nonpsychiatric physicians, HHAs, and nursing homes. The remaining two categories of spending, retail purchases of prescription drugs and insurance administration, are not given a specialty/nonspecialty designation.

We further divided expenditures by provider and payer into inpatient, outpatient, and residential care. In some cases, providers offered all three types of care. For example, hospital expenditures could comprise inpatient, outpatient, or residential services. We classified home health expenditures as outpatient expenditures only, and we classified nursing home expenditures as residential expenditures

¹⁷ In 2011, NHEA released estimates through calendar year 2009 (Martin et al., 2011).

¹⁸ As a result, spending is not captured for nonpsychiatric physician visits in which a psychotherapeutic medication was prescribed but no MH diagnosis was included on the billing record.

only. Expenditures on retail purchases of prescription drugs (a medical product rather than a provider) and insurance administration are not subdivided into these settings of service.

Data Source Descriptions

Table C.2 lists the data sources used to develop the SSE, how they were used, and the years of data that contributed to the estimates. For specialty institutional providers, SAMHSA conducts censuses and surveys of facilities that treat M/SUDs through the Survey/Inventory of Mental Health Organizations (SMHO/IMHO) and through the National Survey of Substance Abuse Treatment Services (N-SSATS, formerly called the Uniform Facilities Data Set [UFDS]). Facility and organization administrators answered these surveys and reported data at the aggregate facility level or organization level (for example, total number of Medicaid clients or total revenues for clients treated for SA). For 2009, SAMHSA added a new survey—the SAMHSA Survey of Revenue and Expenses (SSRE)—to collect spending and payer information by diagnosis and setting that was no longer collected by N-SSATS or by the successor survey to SMHO/IMHO (the 2008 National Survey of Mental Health Treatment Facilities).

The 1998, 2000, and 2002 SMHOs were conducted in two-parts. In the first part, all organizations were asked a small number of questions about types of organizations, ownership, number of patients, and number of beds staffed during the reporting year. The second part included only a sample of facilities but obtained more detailed information, including total revenue and source of payment. However, the response rate to these revenue questions was poor, resulting in some erratic trends in total revenue and by payer. In 2004, the format for this survey was revised so that total and payer revenue was collected from a census of facilities. A substantially higher response rate in 2004 than in 2000 and 2002 led to the decision to use only the data for 1998 and 2005 (projected from 2004 data), disregarding the 2000 and 2002 data points. For estimating expenditures in psychiatric hospitals and specialty MH centers, we used total revenue and payer information from the 1998 and 2004 (projected to 2005) SMHO and the 2009 SSRE. For estimating overall expenditures in psychiatric units of general hospitals, we used Medicare Cost Report data on psychiatric units to establish the total expenditures for 1996–2005, relying on the distribution of spending by payer from the SMHO for 1994, 1998, and 2005. We used data from earlier IMHO surveys to extend the psychiatric unit estimates to earlier years and to estimate payers.

For other providers, we used various data sources. These included administrative claims, cost data, and surveys that collect encounter-level or patient-level data. In some cases, these surveys sampled a first stage of providers and then a second stage of encounters between providers and patients. We could calculate expenditures for specific treatments such as MH, SA, or all-health care because diagnosis on each encounter or patient is included in these sources.

Table C.2: Data Sources for the MHSA Spending Estimates

| DATA SOURCE | USE IN SPENDING ESTIMATES | YEARS USED |
|---|--|--|
| Alcohol and Drug Services Study (ADSS) | • Expenditures in SA specialty organizations | 1996 |
| Inventory/Survey of Mental Healthcare Organizations (IMHO/SMHO) | • Expenditures in MH specialty organizations | 1986, 1988, 1990, 1992, 1994, 1998, 2004 |
| National Survey of Substance Abuse Treatment Services (NSSATS)/Uniform Facility Data Set (UFDS) | • Expenditures in SA specialty organizations | 1987, 1990, 1991, 1993, 1995, 1996, 1998, 2000, 2002, 2003, 2004, 2005 |
| SAMHSA Survey of Revenue and Expenses (SSRE) | • Expenditures in specialty MH and SA organizations | 2009 |
| National Health Expenditure Accounts (NHEA) | • National health care expenditures by provider and payer • Distribution of hospital-based nursing home, home health, and personal care agency payment shares of total community hospital payments | 1986–2009 (from NHEA 2009 released in January 2011) 1986–2009 |
| National Hospital Discharge Survey (NHDS) | • Proportion of general hospital inpatient visits devoted to MHSA diagnoses | 1986–1992 (for remaining years see HCUP below) |
| National Hospital Ambulatory Medical Care Survey (NHAMCS) | • Proportion of general hospital outpatient visits devoted to MHSA diagnoses • Proportion of emergency department visits devoted to MHSA diagnoses • Proportion of MHSA drug mentions during visits to general hospital outpatient and emergency departments devoted to MHSA | 1992–2009 1992–2009 1986–2005 |

| DATA SOURCE | USE IN SPENDING ESTIMATES | YEARS USED |
|---|---|--|
| National Ambulatory Medical Care Survey (NAMCS) | <ul style="list-style-type: none"> • Proportion of physician office visits devoted to MHSA • Proportion of office visits attributable to visits to psychiatrists. • Proportion of MHSA drug mentions during physician office visits | <p>1985–2009</p> <p>1985–2009</p> <p>1985, 1992–2005</p> |
| National Nursing Home Survey (NNHS) | <ul style="list-style-type: none"> • Proportion of nursing home residents with MHSA diagnoses | 1985, 1995, 1997, 1999, 2004 |
| Bureau of Labor Statistics Quarterly Census of Employment and Wages | <ul style="list-style-type: none"> • Growth in the product of the number of nursing home employees and their average weekly hours | 2004–2009 |
| National Home and Hospice Care Survey (NHHCS) | <ul style="list-style-type: none"> • Proportion of home health users with M/SUD diagnoses | 1994, 1996, 1998, 2000, 2007 |
| Truven Health Analytics MarketScan® Research Databases | <ul style="list-style-type: none"> • Payment for MHSA nonpsychiatric physician visits and psychiatrist visits relative to all physician visits • Proportion of other provider bills (e.g., home health agencies) for MHSA • Distribution of other professional services by setting | <p>1996, 2000, 2003, 2006–2009</p> <p>1996, 2000, 2003, 2006, 2009</p> <p>1998, 2007</p> |
| IMS Health Inc. data | <ul style="list-style-type: none"> • Spending on prescription drugs for MH and SA treatment | 2002–2009 |
| CMS-64s (financial reporting forms) | <ul style="list-style-type: none"> • To estimate drug rebates • Medicaid spending growth for psychiatric hospitals | <p>2002–2009</p> <p>2006–2009</p> |
| Healthcare Cost and Utilization Project (HCUP), Nationwide Inpatient Sample | <ul style="list-style-type: none"> • Proportion of general hospital inpatient days for M/SUD diagnoses • MHSA charges for inpatient hospitalizations by primary payer • Charge differential between MHSA services and other health care services | <p>1993–2009</p> <p>1993–2009</p> <p>1993–2009</p> |

| DATA SOURCE | USE IN SPENDING ESTIMATES | YEARS USED |
|---|---|---|
| National Medical Expenditure Survey (NMES) | <ul style="list-style-type: none"> • Distribution of payments among multiple payers for services | 1987 |
| Medical Expenditure Panel Survey (MEPS) | <ul style="list-style-type: none"> • Distribution of payments among multiple payers for services • Spending for psychologists and counselors • Distribution of spending by payer on drugs to treat mental illness | 1996–2009 |
| Economic Census, Health Care and Social Assistance Sector | <ul style="list-style-type: none"> • Data on number of establishments and receipts for offices of MH professionals (except physicians) • Estimates of specialty psychiatric hospital revenue total | 1997, 2002, 2007 2007 |
| Services Annual Survey | <ul style="list-style-type: none"> • Revenue from offices of other professionals (other than physicians) • Revenue by payer for specialty psychiatric hospitals • Growth in revenue for outpatient specialty MH and SA centers | 1997–2009 2006–2009 2005–2009 |
| Department of Veterans Affairs | <ul style="list-style-type: none"> • Spending on inpatient, outpatient and residential MH and SA treatment | Selected years 1993–2009 |
| Medicare Cost Reports | <ul style="list-style-type: none"> • Costs of psychiatric units in nonpsychiatric hospitals for MH | 1996–2009 |
| CMS Medicare and Medicaid Statistics (in published reports and special tabulations) | <ul style="list-style-type: none"> • Inpatient services provided by physicians by diagnostic group for Medicare patients • Relative Medicare payments for physician services in offices, hospital outpatient, and emergency departments • Medicare payments for home health by diagnosis | 1992–2009 1992–2009 1992–2009 |

| DATA SOURCE | USE IN SPENDING ESTIMATES | YEARS USED |
|--|---|------------|
| National Association of State Mental Health Program Directors National Research Institute | • Medicaid funding of state and local specialty hospitals | 2005–2009 |

Special Calculations. We made several complex methodological adjustments to develop national spending estimates from multiple and disparate data sets. We devised methods to allocate spending by diagnosis for facility-level data where disease classifications differed across surveys. Specifically, when co-occurring alcohol and drug abuse was adopted as a survey classification for clients in SAMHSA surveys, we divided those co-existing SA diagnoses expenditures between single-diagnosis care types. We imputed missing total revenues from MH and SA facility surveys based on numbers of clients and facility characteristics (ownership and region). Estimates from data sources with small samples and high variance in estimates from year-to-year were smoothed. Estimates based on incomplete survey response rates were adjusted. Missing years of survey data were interpolated and projected to 2009 when necessary. We estimated the costs of health insurance administration for MHPA coverage using the administrative cost share of total expenditures for each payer from the NHEA.

Appendix D: Abbreviations

| Abbreviation | Meaning |
|---------------------|--|
| AA | Alcohol Abuse |
| ACA | Patient Protection and Affordable Care Act of 2010 |
| ADHD | Attention Deficit Hyperactivity Disorder |
| ADSS | Alcohol and Drug Services Study |
| AHRQ | Agency for Healthcare Research and Quality |
| CMS | Centers for Medicare & Medicaid Services |
| CNS | Central Nervous System |
| DA | Drug Abuse |
| HHS | U.S. Department of Health and Human Services |
| D.O. | Doctor of Osteopathy |
| DoD | Department of Defense |
| DVA | Department of Veterans Affairs |
| HCUP | Healthcare Cost and Utilization Project (AHRQ) |
| HHAs | Home Health Agencies |
| HMO | Health Maintenance Organization |
| ICD-9-CM | International Classification of Diseases 9th Revision, Clinical Modification |
| IMHO | Inventory of Mental Health Organizations (SAMHSA) |
| M/SUD | Mental and/or Substance Use Disorder |
| M.D. | Medical Doctor |
| MEPS | Medical Expenditure Panel Survey (AHRQ) |
| MH | Mental Health |
| MHSA | Mental Health and Substance Abuse |
| NAICS | North American Industrial Classification System |
| NCHS | National Center for Health Statistics |
| NAMCS | National Ambulatory Medical Care Survey (NCHS) |
| NHAMCS | National Hospital Ambulatory Medical Care Survey (NCHS) |
| NHEA | National Health Expenditure Accounts (CMS) |
| NHDS | National Hospital Discharge Survey (NCHS) |
| NHHCS | National Home and Hospice Survey (NCHS) |
| NIMH | National Institute of Mental Health |
| NMES | National Medical Expenditure Survey (AHRQ) |
| NNHS | National Nursing Home Survey (NCHS) |
| N-SSATS | National Survey of Substance Abuse Treatment Services (SAMHSA) |
| SA | Substance Abuse |
| SAMHSA | Substance Abuse and Mental Health Services Administration |
| SCHIP | State Children's Health Insurance Program |
| SSE | SAMHSA Spending Estimates |
| SSRE | SAMHSA Survey of Revenue and Expenses |

| <i>Abbreviation</i> | <i>Meaning</i> |
|----------------------------|--|
| SMHO | Survey of Mental Health Organizations (SAMHSA) |
| UFDS | Uniform Facility Data Set (SAMHSA) |

Appendix E: Authors and Reviewers

Authors

Truven Health Analytics

Katharine Levit

Sasha Frankel

Tami Mark, Ph.D.

Rosanna Coffey, Ph.D.

Ekaterina Ivanova

Anne Pfuntner

Actuarial Research Corporation

Edward King, M.A.

Holen Chang, M.A., M.S., M.Ph., A.S.A.

Substance Abuse and Mental Health Services Administration

Patricia Santora, Ph.D.

Health Resources and Services Administration

Rita Vandivort-Warren, M.S.W. (formerly of SAMHSA)

Reviewers

Agency for Healthcare Research and Quality

Samuel Zuvekas, Ph.D.

National Association of State Mental Health Program Directors Research Institute, Inc.

Ted Lutterman

Centers for Medicare & Medicaid Services

Jeffrey Buck, Ph.D.

Office of the Actuary



SAMHSA's mission is to reduce the impact of substance abuse and mental illness on America's communities

HHS Publication No. (SMA) 13-4740
Printed 2013