TRENDS

Future Funding For Mental Health And Substance Abuse: Increasing Burdens For The Public Sector

Medicaid and state and local governments are expected to pay an increasing share of the bill for these conditions through 2014.

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ABSTRACT: Spending on mental health (MH) and substance abuse (SA) treatment is expected to double between 2003 and 2014, to $239 billion, and is anticipated to continue falling as a share of all health spending. By 2014, our projections of SA spending show increasing responsibility for state and local governments (45 percent); deteriorating shares financed by private insurance (7 percent); and 42 percent of SA spending going to specialty SA centers. For MH, Medicaid is forecasted to fund an increasingly larger share of treatment costs (27 percent), and prescription medications are expected to capture 30 percent of MH spending by 2014. [*Health Affairs* 27, no. 6 (2007): w513–w522 (published online 7 October 2008; 10.1377/hlthaff.27.6.w513)]

TREATMENT FOR mental illness and substance use disorders are important components of overall health care. However, 89 percent of the twenty-four million people age twelve and older with a substance use or dependence disorder in 2006 received no specialty treatment for their condition.[1] Of the thirty-three million adults age eighteen and older needing mental health (MH) treatment, 31 percent received inadequate care or none at all.[2] At the same time, the United States is experiencing the largest increase in adolescent suicide rates in fifteen years—one indication of the severe consequences of unmet treatment needs.[3]

Presented here for the first time are forecasts through 2014 of spending on behavioral health care, prepared in the context of the historical spending estimates for mental health and substance abuse (MHSA) treatment for the Substance Abuse and Mental Health Services Administration (SAMHSA).[4] Although our forecasts cannot specifically address the reasons for unmet MHSA treatment needs,

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they can uncover broad trends in spending that provide clues to these deeper issues. Baseline views of future MHSA spending provide a framework for understanding what might influence spending over the next decade: how much the nation is likely to spend on MHSA treatment, how much spending is predicted to be directed to each provider type, who is expected to pay for care, and how spending is forecasted to change over time. Our forecasts are intended to present decisionmakers with a realistic picture of probable future MHSA spending if historical trends as well as advances in treatment and technology (including prescription drugs) continue as they have in the past.

Despite continuing MHSA treatment shortfalls, one in five nonelderly adults received treatment for emotional disorders during 2001–2003, a sizable increase over treatment rates a decade earlier.[5] Effective planning to continue MHSA treatment expansion depends on rational and cost-effective resource coordination. Our objective is to provide one tool that can help policymakers envision future funding requirements and the potential implications of policy inaction.

"The imminent and serious mental health needs of returning combat veterans, changes in the U.S. political landscape, and natural disasters can alter spending trends."

Projection Methods

These projections of MH and SA spending were forecasted from historical estimates produced as part of the SAMHSA spending estimates. These forecasts are modeled after the general format of the National Health Expenditure Accounts (NHEA) produced by the Centers for Medicare and Medicaid Services (CMS).[6] In both the historical estimates and the projections, MHSA treatment spending was identified by a first-listed MH or SA diagnosis. *International Classification of Diseases*, Ninth Revision, Clinical Modification (ICD-9-CM) codes defined these conditions: "mental disorders" (291, 292, 295–304, 305.2–305.9, and 306–314) and MH and SA complications related to pregnancy (648.3 and 648.4). We excluded dementias (290), transient and persistent mental disorders due to conditions classified elsewhere (293 and 294), tobacco abuse disorders (305.1), specific delays in development (315), mental retardation (317–319), cerebral degenerations (331.0), and psychic factors associated with disease classified elsewhere (316).

Historical estimates for key years are presented; the methods used to produce them have been described in an earlier report.[7] To project MHSA spending, we predominantly used a five-factor growth model, a technique used in the past by the CMS in producing projections of all health spending. This model allocated historical spending growth to changes in population, use per person, general inflation, service-specific net price increases, and a residual (intensity of service use). Projections of growth in population and general inflation were taken from the Old-Age, Survivors, and Disability Insurance (OASDI) Trustees Report; projections of increases in all other factors were developed as extensions of historical trends, modified by other near-term (2004–2005) inflation, economic, and employment indicators when available.[8]

These forecasts reflect laws in place at the time they were prepared, including Medicare prescription drug coverage. Other factors, however, that are likely to occur and may influence future spending trends are not included in these forecasts, because their effects are currently unknown. In particular, the imminent and serious mental health needs of returning combat veterans, changes in the U.S. political landscape, economic downturns, shifts in Medicaid policies, and natural disasters can alter spending trends. More speculative factors, such as enactment of the long-debated federal MHSA benefit parity, once again under consideration by Congress, could

bring most private insurance coverage for behavioral health (including SA treatment) closer to coverage provided for general medical care and could increase demand for treatment.

Factors such as these suggest that future spending will likely differ from the forecasts shown here. Nevertheless, these results provide insight into unfolding trends and provide a reasonable baseline forecast upon which evolving changes could be incorporated as better information becomes available.

Study Results

■ **Mental health and substance abuse spending.** Spending for MHSA treatment is expected to reach $239 billion by 2014, almost double the amount spent in 2003. Yet this spending represents a small and declining share of all health spending (7.5 percent in 2003 and a projected 6.9 percent in 2014) (Exhibit 1). Unlike most of the health care sector, MHSA treatment does not rely extensively on high-price, rapidly evolving technology (other than prescription medications), which drives overall health cost increases. Thus, MHSA spending has increased at slower average annual rates than spending for all health (by 1.6 percentage points between 1986 and 2003), but it is anticipated to narrow the gap in growth to only 0.8 percentage points over the projection period. This is because prescription

EXHIBIT 1
Mental Health And Substance Abuse (MHSA) Spending: Amount, Distribution, Average Annual Growth, And Share Of All-Health Spending, Billions Of Dollars, Selected Years 1986–2014

	Historical		Projections	
Item and diagnostic category	**1986**	**2003**	**2006**	**2014**
All health[a]	$439.2	$1,614.2	$1,997.8	$3,451.3
MHSA	42.4	121.1	145.3	238.7
Mental health	33.1	100.3	121.7	203.3
Substance abuse	9.3	20.7	23.6	35.4
Average annual growth from previous year shown				
All health[a]	–[b]	8.0%	7.4%	7.1%
MHSA	–[b]	6.4	6.3	6.4
Mental health	–[b]	6.7	6.7	6.6
Substance abuse	–[b]	4.8	4.4	5.2
Distribution of MHSA spending				
MHSA	100%	100%	100%	100%
Mental health	78	83	84	85
Substance abuse	22	17	16	15
Share of all health[a] spending				
MHSA	9.7%	7.5%	7.3%	6.9%
Mental health	7.5	6.2	6.1	5.9
Substance abuse	2.1	1.3	1.2	1.0

SOURCES: Substance Abuse and Mental Health Services Administration (SAMHSA) spending estimates: T.L. Mark et al., *National Expenditures for Mental Health Services and Substance Abuse Treatment, 1993–2003* (Rockville, Md.: SAMHSA, 2007); K.R. Levit et al., *Projections of National Expenditures for Mental Health Services and Substance Abuse Treatment, 2004–2014* (Rockville, Md.: SAMHSA, forthcoming); and Centers for Medicare and Medicaid Services (CMS), Office of the Actuary.

[a] "Health Services and Supplies" from the National Health Expenditures produced by the CMS Office of the Actuary. Excludes spending for noncommercial research and capital investment in medical structures that is included in the National Health Expenditures data.

[b] First year of available data.

drugs account for a higher proportion of spending in MH than in all health, and their use is anticipated to grow rapidly over the next decade, adding more to the overall growth rate of MH spending than to all-health spending.

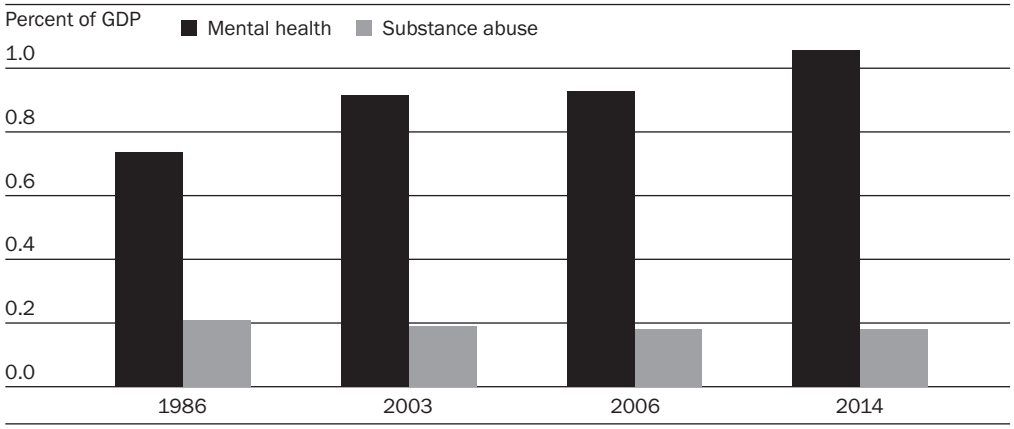
Despite falling as a share of all-health spending, MHSA spending is rising as a share of the economy—from 0.95 percent of U.S. gross domestic product (GDP) in 1986 to an expected 1.24 percent in 2014. Spending on MH alone is forecasted to outpace economic growth, but SA spending growth is not; as a result, SA spending is likely to fall slightly as a share of GDP by 2014 (Exhibit 2).

■ **Mental health spending.** The majority of U.S. spending on MHSA continues to go toward treatment for people with mental illnesses. MH spending is expected to reach $203 billion in 2014—85 percent of projected total MHSA spending, and a slightly larger share than in 2003 (Exhibit 1). Growth in MH spending is forecasted to average 6.6 percent between 2003 and 2014—about the same rate as in the 1986–2003 historical period and a slower rate than growth in all-health spending.

MH payer spending. MH spending has historically been more dependent upon public funding than all-health spending, and we expect that trend to continue over the next decade. By 2014, we anticipate that 58 percent of MH spending will come from public sources—about the same as in 2003 (Exhibit 3)—compared to 49 percent for all health (data not shown). The likely stability in private and public MH spending shares results from growth in public MH spending that is forecasted to slow from historical average increases of 7.3 percent to 6.6 percent between 2003 and 2014, while private spending is expected to accelerate slightly—from 6.1 percent average annual growth in 1986–2003 to 6.6 percent in 2003–2014. These changes in growth patterns reflect changes in the mix of service providers with very different funding structures: growth in MH spending is projected to be relatively faster for prescription drugs and physician services (which are predominantly funded by private insurance) and relatively slower for multiservice MH organizations (MSMHOs), which are almost entirely funded by public sources.

The single largest payer of MH treatment is projected to be Medicaid, accounting for more

EXHIBIT 2
Spending For Mental Health And Substance Abuse Treatment As A Share Of U.S. Gross Domestic Product (GDP), Selected Years 1986–2014



SOURCE: Substance Abuse and Mental Health Services Administration (SAMHSA) spending estimates: T.L. Mark et al., *National Expenditures for Mental Health Services and Substance Abuse Treatment, 1993–2003* (Rockville, Md.: SAMHSA, 2007); K.R. Levit et al., *Projections of National Expenditures for Mental Health Services and Substance Abuse Treatment, 2004–2014* (Rockville, Md.: SAMHSA, forthcoming); and U.S. Department of Commerce, Bureau of Economic Analysis.

EXHIBIT 3
Spending For Mental Health (MH) Treatment: Amount, Distribution, And Average Annual Growth, By Payer And Provider, Selected Years 1986–2014

	Spending and percent distribution				Average annual growth			
	Historical		Projection		Historical	Projection		
	1986	2003	2006	2014	1986–2003	2003–2006	2006–2014	2003–2014
Total MH spending (billions)	$33.1	$100.3	$121.7	$203.3	6.7%	6.7%	6.6%	6.6%
Spending distribution by payer	100%	100%	100%	100%	–	–	–	–
Private—total	46	42	42	42	6.1	6.8	6.6	6.6
Out of pocket	18	14	14	12	5.2	6.1	4.8	5.1
Private insurance	21	24	24	26	7.5	6.9	7.7	7.4
Other private	7	3	4	3	2.3	8.6	5.5	6.3
Public—total	54	58	58	58	7.3	6.6	6.7	6.6
Medicare	6	7	11	12	8.2	23.2	6.9	11.1
Medicaid[a]	16	26	24	27	9.9	3.3	8.3	6.9
Other federal[b]	6	4	3	3	3.3	4.2	6.4	5.8
Other state and local[b]	26	21	20	16	5.5	4.2	4.3	4.3
Spending distribution by provider	100%	100%	100%	100%	–	–	–	–
Total, all service providers and products	95	93	93	94	6.6	6.8	6.7	6.7
Hospitals: general hospitals[c]	17	16	16	15	6.5	6.4	6.1	6.2
Hospitals: specialty MHSA hospitals	25	12	10	7	2.1	1.8	2.3	2.1
Physicians: psychiatrists	8	10	10	11	7.9	8.5	7.5	7.8
Physicians: nonpsychiatric	3	4	4	5	8.0	8.6	8.5	8.5
Other professionals[d]	9	8	9	8	6.0	8.6	5.9	6.6
Nursing homes (freestanding)	14	6	6	6	1.6	5.9	6.0	5.9
Home health (freestanding)	0	1	1	1	12.4	13.1	8.3	9.6
Retail Rx drugs	7	23	25	30	14.9	9.7	9.0	9.2
MSMHOs[e]	12	13	12	10	7.4	3.2	4.9	4.4
Insurance administration	5	7	7	6	9.3	4.6	5.7	5.4

SOURCES: Substance Abuse and Mental Health Services Administration (SAMHSA) spending estimates: T.L. Mark et al., *National Expenditures for Mental Health Services and Substance Abuse Treatment, 1993–2003* (Rockville, Md.: SAMHSA, 2007); and K.R. Levit et al., *Projections of National Expenditures for Mental Health Services and Substance Abuse Treatment, 2004–2014* (Rockville, Md.: SAMHSA, forthcoming).

NOTES: MHSA is mental health and substance abuse. MSMHOs are multiservice mental health organizations.

[a] Spending under the State Children's Health Insurance Program (SCHIP) is distributed to Medicaid, other federal, and other state and local, depending on whether the SCHIP program was run through Medicaid or as a separate state program.

[b] Federal government SAMHSA block grants to state and local agencies are included as part of "other federal" spending. In 2003, block grants amounted to $385 million for MH treatment.

[c] All spending for psychiatric services in Department of Veterans Affairs hospitals is included in general hospital providers.

[d] Includes psychologists and counselors/social workers.

[e] Includes residential treatment centers for children.

than one-quarter of all MH spending. However, Medicaid spending is anticipated to fall from 26 percent of all MH funding in 2003 to 24 percent in 2006, as a result of the implementation of Medicare drug coverage that shifted costs for people eligible for both Medicare and Medicaid to Medicare (Exhibit 3). Medicaid's share of MH spending is projected to then rise to 27 percent of MH spending by 2014. Medicare's share of MH spending is expected to rise as well (from 7 percent in 2003 to 11 percent in 2014), as benefits expand to include drug coverage. MH spending from other state and local governments and from other federal government sources is anticipated to grow more slowly than Medicare and Medic-

aid and, as a result, account for a smaller share of spending by 2014. Falling shares of other state and local financing are driven to some extent by state policies to maximize Medicaid revenue ("Medicaid maximization") that stretch limited state funds by shifting costs to Medicaid wherever possible to take advantage of the federal Medicaid match. This trend complicates the provision of MH (and SA) services in some states by removing control of state funds from the specialized MH (or SA, or both) state agency and placing it in the Medicaid agency.[9]

Over the projection period, private health insurance spending is expected to increase as a share of MH spending (from 24 percent to 26 percent), while out-of-pocket spending shares are anticipated to fall (from 14 percent to 12 percent) (Exhibit 3). These changes reflect a predicted shift in MH prescription drug spending for the Medicare elderly and disabled population in 2006 from out of pocket to Medicare; to a more limited degree, Medicare drug coverage also dampens some of the growth in private insurance spending for drugs. After this one-time adjustment, private insurance shares are expected to rise slightly, driven primarily by subsequent increases in private insurance drug spending for the non-Medicare population.

MH provider spending. Spending on prescription drugs drives MH spending and is expected to be responsible for 37 percent of the increase in overall MH spending between 2003 and 2014.[10] The meteoric rise in the use of prescription MH medications over the past decade has had many positive effects on the treatment of mental illnesses. Drug therapies with increased efficacy, fewer safety issues, and improved side-effect profiles have emerged since the early 1990s and have led to greatly expanded use, especially when prescribed by primary care physicians, who have become more comfortable with some types of MH medications.[11] The easier access and reduced stigma of receiving MH medications from primary care physicians rather than psychiatrists has contributed to use and spending increases.

"The meteoric rise in the use of prescription MH medications over the past decade has had many positive effects on the treatment of mental illnesses."

The slowdown in drug spending growth since 1999 has tempered expectations for rapid all-health prescription drug spending growth in the future.[12] The switch to generic medications; the use of tiered formularies that require higher copayments for newer, more expensive drugs; step therapy (prescribing older, less costly medications before newer, more costly drugs will be covered); the slump in new drug development that is expected to abate only later in the projection period; increased availability of generic alternatives; and a rise in black-box warnings about drug side effects together have dampened spending growth expectations on prescription MH drugs over the next decade.[13] However, spending on prescription drugs is still expected to outpace all other MH and all-health spending growth through the coming decade.[14] We forecast growth in prescription MH drug spending (averaging 9.2 percent for 2003–2014) that will be more than one-third faster than growth in MH spending for all treatment and this will raise the drug share of MH spending to 30 percent by 2014 from 23 percent in 2003 (Exhibit 3). Nevertheless, MH drug spending increases are projected to be more modest than the historical rate, which averaged 14.9 percent from 1986 to 2003.

Growth in MH spending for physician services is expected to exceed the growth for all MH spending as well; physicians' share of all MH spending is forecasted to rise from 14 percent in 2003 to 16 percent in 2014. Psychiatrists alone account for about 70 percent of MH physician spending in both 2003 and 2014. The remainder goes for treatment delivered by nonpsychiatric physicians, including primary care physicians. However, spending on treatment by primary care physicians may be underestimated because prescriptions for

psychotropic medications are often written by these nonspecialty physicians without specifically listing an accompanying principal MH diagnosis used to identify MH spending.

Based on historical trends, we project slightly slower growth for general hospitals (averaging 6.2 percent annually) and continued slow growth in spending for specialty psychiatric hospitals (averaging 2.1 percent annually) during the projection period (Exhibit 3). Low rates of MH hospital admissions and shorter lengths-of-stay are hallmarks of behavioral health plans' utilization management, which has helped to reduce costs of MH health treatment by closely monitoring inpatient services. Utilization management dominated service delivery during the mid-1990s and was particularly evident in freestanding psychiatric hospitals. Although these trends are expected to continue through the next decade, decline in shares of spending for specialty hospitals will be more moderate (from 12 percent in 2003 to 7 percent in 2014) than they were historically (from 25 percent in 1986 to 12 percent in 2003). The ultimate effect on hospitals of the Medicare inpatient prospective payment system (PPS) for psychiatric stays after the 2005–2007 transition period is currently unknown, but it holds the potential to alter incentives for providers of psychiatric inpatient care as the new payment rates are implemented.[15]

In addition to hospitals, growth in spending for MSMHOs that deliver a wide range of outpatient and residential MH services is also forecasted to increase more slowly than all MH spending over the coming decade. This slow projected growth (4.4 percent average annual increase) is slightly faster than the trends in recent historical spending (3.2 percent between 1994 and 2003; data not shown).

■ **Substance abuse spending.** Spending on SA treatment is expected to total $35 billion in 2014—an anticipated 15 percent of MHSA spending. However, this forecast may underestimate actual spending on SA treatment. MH and SA conditions often occur in combination, but spending in this report is classified only by the principal diagnosis.[16] Providers typically classify a mental health condition as principal when it co-occurs with SA because MH benefits are often more generous and likely to be paid by an insurer.[17]

Growth in SA spending is forecasted to average 5.0 percent between 2003 and 2014, slightly faster than the rate of 4.8 percent in the 1986–2003 historical period (Exhibit 4). Over the next decade, SA spending growth is expected to continue to increase at slower rates than MH health spending, mainly because pharmacotherapy, which has driven increases in MH spending, currently plays only a small role in SA treatment. This is expected to result in an SA share that falls from 1.3 to 1.0 percent of all-health spending (Exhibit 1). Moreover, growth in SA spending increases at a slower pace than growth in the economy, with the SA share of GDP falling slightly between 2003 and 2014 (Exhibit 2).

SA payer spending. Public SA spending, which accounted for more than three-quarters of all SA spending in 2003, is anticipated to swell to 83 percent by 2014, as public programs assume increasing responsibility for treatment (Exhibit 4). While private financing of SA treatment is forecasted to increase at faster-than-historical rates (2.5 percent annually), growth is expected to still remain at less than half the rate of public SA spending increases.

Each category of public SA spending other than other federal (whose share is expected to remain stable) is likely to increase its spending share over the projection period. SA spending by other state and local governments is projected to reach 45 percent of all SA spending by 2014, making this source the dominant payer for SA services. This is a much larger share of SA spending than the 6 percent that is anticipated for all-health spending in 2014, indicating the disproportionate reliance of this industry on state and local government funding. Medicaid is the second-largest payer for SA treatment, accounting for a projected 20 percent of SA treatment spending in 2014. By 2014, Medicaid and other state and local programs together are forecasted to finance 65 percent of SA treatment.

Historically, a dominating characteristic of

EXHIBIT 4
Spending For Substance Abuse (SA) Treatment: Amount, Distribution, And Average Annual Growth, By Payer And Provider, Selected Years 1986–2014

	Spending and percent distribution				Average annual growth			
	Historical		Projection		Historical	Projection		
	1986	2003	2006	2014	1986–2003	2003–2006	2006–2014	2003–2014
Total SA spending (billions)	$9.3	$20.7	$23.6	$35.4	4.8%	4.4%	5.2%	5.0%
Spending distribution by payer	100%	100%	100%	100%	–	–	–	–
Private—total	50	23	22	17	0.1	2.7	2.4	2.5
Out of pocket	14	8	8	6	1.5	4.1	2.0	2.6
Private insurance	30	10	9	7	−1.6	0.5	1.6	1.3
Other private	6	5	5	4	2.9	5.0	4.4	4.6
Public—total	50	77	78	83	7.5	4.8	5.9	5.6
Medicare	4	4	4	5	5.1	4.2	5.5	5.1
Medicaid[a]	10	18	18	20	8.5	4.9	6.2	5.8
Other federal[b]	7	15	14	14	9.5	2.9	4.8	4.2
Other state and local[b]	29	40	42	45	6.9	5.6	6.2	6.0
Spending distribution by provider	100%	100%	100%	100%	–	–	–	–
Total, all service providers and products	95	94	94	95	4.8	4.5	5.3	5.1
Hospitals: general hospitals[c]	32	21	21	22	2.2	4.3	5.8	5.4
Hospitals: specialty MHSA hospitals	16	3	2	2	−4.4	−6.7	1.3	−1.0
Physicians: psychiatrists	3	3	3	3	5.0	6.7	4.3	5.0
Physicians: nonpsychiatric	5	6	6	6	5.6	6.0	4.8	5.2
Other professionals[d]	16	13	14	14	3.6	8.7	4.6	5.7
Nursing homes (freestanding)	1	1	2	2	6.3	5.9	6.5	6.4
Home health (freestanding)	0	0	0	0	3.9	11.0	7.6	8.5
Retail Rx drugs	0	1	1	1	12.3	8.2	6.1	6.6
MSMHOs[e]	4	6	5	5	8.2	0.8	4.7	3.6
SSACs[f]	19	41	40	42	9.7	4.1	5.7	5.3
Insurance administration	6	6	6	5	5.7	2.4	3.3	3.1

SOURCES: Substance Abuse and Mental Health Services Administration (SAMHSA) spending estimates: T.L. Mark et al., *National Expenditures for Mental Health Services and Substance Abuse Treatment, 1993–2003* (Rockville, Md.: SAMHSA, 2007); and K.R. Levit et al., *Projections of National Expenditures for Mental Health Services and Substance Abuse Treatment, 2004–2014* (Rockville, Md.: SAMHSA, forthcoming).

NOTES: MHSA is mental health and substance abuse. MSMHOs are multiservice mental health organizations. SSACs are specialty substance abuse centers.

[a] Spending under the State Children's Health Insurance Program (SCHIP) is distributed to Medicaid, other federal, and other state and local, depending on whether the SCHIP program was run through Medicaid or as a separate state program.

[b] Federal government SAMHSA block grants to state and local agencies are included as part of "other federal" government spending. In 2003, block grants amounted to $1.2 billion for SA treatment.

[c] All spending for psychiatric services in Department of Veterans Affairs hospitals is included in general hospital providers.

[d] Includes psychologists and counselors/social workers.

[e] Includes residential treatment centers for children.

[f] Includes other facilities for treating substance abuse.

private SA spending has been the lack of funding increases from private health insurance, which declined an average of 1.6 percent annually between 1986 and 2003 (Exhibit 4). We expect private insurance SA spending growth to accelerate somewhat during the projection period—to 1.3 percent annually. However, actual spending in 2014 is anticipated to be below that estimated for 1986, and the private health insurance share of SA spending is expected to continue falling (from 10 percent in 2003 to 7 percent in 2014). Barriers to SA in-

surance coverage exist that are not present in medical/surgical coverage, including annual and lifetime limits for inpatient hospital stays and outpatient visits, and higher cost sharing through deductibles and coinsurance.[18] In addition, the increasing emphasis on drug-free workplaces in industries such as transportation has heightened employees' reluctance to file claims for SA treatment through job-based insurance. Out-of-pocket spending is also expected to accelerate, but growth is projected to remain slower than for all SA spending.

SA provider spending. Specialty SA centers (SSACs) have emerged as major providers in the delivery of SA treatment, with spending for their services increasing from 19 percent of SA spending in 1986 to a projected 42 percent in 2014 (Exhibit 4). SSACs are multidimensional facilities that deliver services ranging from outpatient care to residential services. Programs can include those targeted to special populations (for example, people with HIV/AIDS or opiate addictions). SA spending on treatment in SSACs is forecasted to increase at a 5.3 percent average annual rate over the projection period, similar to the overall SA annual growth rate between 1993 and 2003.

Spending for SA hospital treatment fell from 48 percent of SA spending in 1986 to 24 percent in 2003, where the share is expected to remain in 2014. SSACs likely supplied the outpatient treatment venue for people who previously would have been treated in expensive hospital settings.

Spending on treatment by other SA treatment providers (including other professionals in independent practice, such as psychologists, social workers, and counselors; physicians [including psychiatrists]; and other SA providers) is anticipated to change little in the share of spending between 2003 and 2014.

In contrast to MH spending, prescription drugs have an insignificant impact on SA treatment spending and account for less than 1 percent of SA spending throughout the 1986–2014 period, despite the addition of several new medications (acamprosate, naltrexone IM, buprenorphine) as treatment options.

Conclusion

These projections suggest several important issues for policymakers to track over the coming decade. First, prescription drug spending is expected to increase its share of MH spending. Although treatment with medications is more cost-effective, widely accessible, and associated with less stigma than other treatment mechanisms, there are many unanswered questions about the efficacy of certain medications for children, and interactions and side effects for adults, especially the elderly. Some question the ability of nonpsychiatric physicians, who prescribe an increasing share of MH medications, to properly diagnose some of the more complicated MH conditions and follow up with patients to ensure high-quality treatment. More research is needed to address these issues.

Second, both MH and SA spending relies more on public payers than does all health spending. The effects of payer changes, such as the implementation of the Medicare inpatient PPS for psychiatric hospital stays and Medicare coverage of prescription drugs, likely will be compounded for the MHSA providers (especially those specializing in MHSA treatment alone), magnifying potentially unintended consequences that often surround new policies. The effects on access and spending should be carefully monitored.

Third, the continued decline in private insurance spending for SA treatment, attributable at least in part to greater limits on benefits and utilization controls, is expected to cause spending from this source in 2014 to be lower than it was in 1986. Treatment costs are borne instead mostly by state and local governments, which struggle to maintain funding for these critical services. Private insurance coverage needs renewed policy consideration, given the tremendous costs for individuals and society as substance use disorders go untreated.

The projections of MHSA spending will help to sharply focus policymakers on critical issues that are likely to emerge over the next decade; they are a tool to help understand the

future implications of current trends. By envisioning the future, analysts and lawmakers can help redesign it by taking action today. The unmet need for MHSA treatment, which can result in or exacerbate a variety of physical health problems, is great, and the consequences too large to ignore.

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NOTES

1. Substance Abuse and Mental Health Services Administration, "Need and Receipt of Specialty Treatment," Sec. 7.3 in *2006 National Survey on Drug Use and Health: National Results,* 5 May 2008, http://www.oas.samhsa.gov/nsduh/2k6nsduh/2k6Results.cfm (accessed 10 September 2008).
2. SAMHSA, "Adults Aged Eighteen or Older," Sec. 8.1 in *2006 National Survey on Drug Use and Health.*
3. Centers for Disease Control and Prevention, "CDC Report Shows Largest One-Year Increase in Youth Suicide Rate in Fifteen Years," Press Release, 6 September 2007, http://www.cdc.gov/media/pressrel/2007/r070906.htm (accessed 10 September 2008).
4. T.L. Mark et al., *National Expenditures for Mental Health Services and Substance Abuse Treatment, 1993–2003* (Rockville, Md.: SAMHSA, 2007).
5. R.C. Kessler et al., "Prevalence, Severity, and Comorbidity of Twelve-Month DSM-IV Disorders in the National Comorbidity Survey Replication," *Archives of General Psychiatry* 62, no. 6 (2005): 617–627.
6. For more information, see Centers for Medicare and Medicaid Services, "National Health Expenditure Data: Overview," 28 May 2008, http://www.cms.hhs.gov/NationalHealthExpendData/01_Overview.asp (accessed 10 September 2008).
7. Mark et al., *National Expenditures.*
8. Boards of Trustees, *2006 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds,* 1 May 2006, http://www.ssa.gov/OACT/TR/ TR06 (accessed 4 February 2008); and K.R. Levit et al., *Projections of National Expenditures for Mental Health Services and Substance Abuse Treatment, 2004–2014* (Rockville, Md.: SAMHSA, forthcoming).
9. J.A. Buck, "Medicaid, Health Care Financing Trends, and the Future of State-Based Public Mental Health Services," *Psychiatric Services* 54, no. 7 (2003): 969–975; and J. Verdier, A. Barrett, and S. Davis, *Administration of Mental Health Services by Medicaid Agencies* (Rockville, Md.: SAMHSA, 2007).
10. Levit et al., *Projections of National Expenditures.*
11. Authors' analysis of prescription drug information by physician specialty from IMS; S.H. Zuvekas, "Prescription Drugs and the Changing Patterns of Treatment for Mental Disorders, 1996–2001," *Health Affairs* 24, no. 1 (2005): 195–205; and Mark et al., *National Expenditures.*
12. J.A. Poisal et al., "Health Spending Projections through 2016: Modest Changes Obscure Part D's Impact," *Health Affairs* 26, no. 2 (2007): w242–w253 (published online 21 February 2007; 10.1377/hlthaff.26.2.w242).
13. Ibid.; L. Simoni-Wastila et al., *Projected Spending on Prescription Drugs Used to Treat Mental Health and Substance Abuse Disorders: Impact of Clinical and Economic Factors,* project report submitted to SAMHSA on 6 April 2006 under Contract no. 270-01-7088 (Rockville, Md.: Substance Abuse and Mental Health Services Administration, 2006), 3–4; and S. Keehan et al., "Health Spending Projections through 2017: The Baby-Boom Generation Is Coming To Medicare," *Health Affairs* 27, no. 2 (2008): w145–w155 (published online 26 February 2008; 10.1377/hlthaff.27.2.w145).
14. Poisal et al., "Health Spending Projections through 2016."
15. E. Salinsky and C. Loftis, *Shrinking Inpatient Psychiatric Capacity: Cause for Celebration or Concern?* Issue Brief no. 823 (Washington: George Washington University, National Health Policy Forum, 1 August 2007); and P.G. Cotterill, "Medicare Psychiatric Admissions, 1987–2004: Does the Past Offer Insights for the Future?" *Health Affairs* 27, no. 4 (2008): 1132–1139.
16. D.A. Regier et al., "Comorbidity of Mental Disorders with Alcohol and Other Drug Abuse: Results from the Epidemiologic Catchment Area (ECA) Study," *Journal of the American Medical Association* 264, no. 19 (1990): 2511–2518.
17. J. Gabel et al., "Substance Abuse Benefits: Still Limited after All These Years," *Health Affairs* 26, no. 4 (2007): w474–w482 (published online 7 June 2007; 10.1377/hlthaff.26.4.w474).
18. Ibid.