U.S. Department of Health and Human Services
Assistant Secretary for Planning and Evaluation
Office of Disability, Aging and Long-Term Care Policy

Developing Medicare and Medicaid Substance Abuse Treatment Spending Estimates

September 2012

Office of the Assistant Secretary for Planning and Evaluation

The Office of the Assistant Secretary for Planning and Evaluation (ASPE) is the principal advisor to the Secretary of the Department of Health and Human Services (HHS) on policy development issues, and is responsible for major activities in the areas of legislative and budget development, strategic planning, policy research and evaluation, and economic analysis.

ASPE develops or reviews issues from the viewpoint of the Secretary, providing a perspective that is broader in scope than the specific focus of the various operating agencies. ASPE also works closely with the HHS operating divisions. It assists these agencies in developing policies, and planning policy research, evaluation and data collection within broad HHS and administration initiatives. ASPE often serves a coordinating role for crosscutting policy and administrative activities.

ASPE plans and conducts evaluations and research--both in-house and through support of projects by external researchers--of current and proposed programs and topics of particular interest to the Secretary, the Administration and the Congress.

Office of Disability, Aging and Long-Term Care Policy

The Office of Disability, Aging and Long-Term Care Policy (DALTCP), within ASPE, is responsible for the development, coordination, analysis, research and evaluation of HHS policies and programs which support the independence, health and long-term care of persons with disabilities--children, working aging adults, and older persons. DALTCP is also responsible for policy coordination and research to promote the economic and social well-being of the elderly.

In particular, DALTCP addresses policies concerning: nursing home and community-based services, informal caregiving, the integration of acute and long-term care, Medicare post-acute services and home care, managed care for people with disabilities, long-term rehabilitation services, children's disability, and linkages between employment and health policies. These activities are carried out through policy planning, policy and program analysis, regulatory reviews, formulation of legislative proposals, policy research, evaluation and data planning.

This report was prepared under contract #HHSP23320095642WC between HHS's ASPE/DALTCP and Mathematica Policy Research. For additional information about this subject, you can visit the DALTCP home page at http://aspe.hhs.gov/_/office_specific/daltcp.cfm or contact the ASPE Project Officer, John Drabek, at HHS/ASPE/DALTCP, Room 424E, H.H. Humphrey Building, 200 Independence Avenue, S.W., Washington, D.C. 20201. His e-mail address is: John.Drabek@hhs.gov.

DEVELOPING MEDICARE AND MEDICAID SUBSTANCE ABUSE TREATMENT SPENDING ESTIMATES

Ellen Bouchery
Rick Harwood
Rosalie Malsberger
Emily Caffery
Jessica Nysenbaum
Kerianne Hourihan

Mathematica Policy Research

September 28, 2012

Prepared for
Office of Disability, Aging and Long-Term Care Policy
Office of the Assistant Secretary for Planning and Evaluation
U.S. Department of Health and Human Services
Contract #HHSP23320095642WC

TABLE OF CONTENTS

INTRODUCTION 1

I. PROPOSED METHODOLOGY FOR PRODUCING MEDICARE SUBSTANCE ABUSE TREATMENT EXPENDITURES ESTIMATES 2
- A. Overview of Medicare Coverage of SA Treatment 2
- B. Part A & B FFS Expenditures 6
- C. Part C: Medicare Advantage 7
- D. Part D: Prescribed Drug Expenditures 8

II. PROPOSED METHODS AND RESOURCES REQUIRED FOR UPDATING MEDICAID ESTIMATES WITH FUTURE YEARS OF DATA 10

APPENDICES
- APPENDIX A: Diagnosis Codes 14
- APPENDIX B: FY 2011 SA Treatment Spending 21

LIST OF TABLES

TABLE 1. MA Enrollment 2007-2011 8

TABLE 2. MA Enrollment as a Share of Overall Medicare Enrollment, 2011 9

TABLE 3. Mapping CMS-64 Categories into Groups, 2011 13

TABLE 4. Crosswalk of CMS-64 Groups to Study Categories 13

TABLE A.1. Alcohol Abuse Diagnosis Codes 14

TABLE A.2. Drug Abuse Diagnosis Codes 15

TABLE A.3. MH Diagnosis Codes 16

TABLE A.4. Prescription Drug Codes 19

TABLE A.5. Classification of SA/MH Treatment Services by Type 20

TABLE B.1. FY 2011 SA Treatment Spending by SA Care Group 21

TABLE B.2. FY 2011 Non-Core SA Treatment Spending 22

INTRODUCTION

As federal and state substance abuse (SA) agencies work to establish priorities and coordinate their efforts, policymakers need reliable national and state estimates of Medicaid and Medicare SA treatment spending and accurate methods for projecting these estimates forward. Spending estimates and projections are essential for both aligning funding with policy objectives and developing realistic budgets to support treatment and prevention. Given these needs the Office of the Assistant Secretary for Planning and Evaluation in the U.S. Department of Health and Human Services (HHS) and the Office of National Drug Control Policy (ONDCP) contracted with Mathematica Policy Research to conduct this of Medicare and Medicaid SA treatment spending. This study included both methodological and programmatic issues. This technical report addresses two methodological issues:

- What methods should be used to develop estimates of Medicare SA treatment spending?

- How should estimates of Medicaid SA treatment spending be projected forward when estimates derived from observed data are not available to policymakers?

A separate findings report produced under this project presents the programmatic findings of this study and addresses methodological issues related to estimating Medicaid SA treatment expenditures in Medicaid Analytic eXtract (MAX) data.

This report contains two sections. The first section presents an approach for developing estimates of SA treatment spending in the Medicare program. The second section presents methods for trending estimates of Medicaid SA treatment.

I. PROPOSED METHODOLOGY FOR PRODUCING MEDICARE SUBSTANCE ABUSE TREATMENT EXPENDITURES ESTIMATES

In this section, we propose a methodology for developing estimates of Medicare SA treatment spending. The methods parallel the approach used to develop Medicaid spending estimates in this project. In Section A, we provide an overview of Medicare coverage of SA treatment services and the payment approaches Medicare uses to reimburse providers for these services. In Section B, we discuss Part A and B expenditures. In Section C, we propose methods for imputing SA treatment expenditures for Medicare Advantage (MA) managed care beneficiaries, based on fee-for-service (FFS) spending on SA treatment services and encounter data (when those data become available for 2012 and later years). Finally, in Section D, we discuss Part D, prescribed drug expenditures.

A. Overview of Medicare Coverage of SA Treatment

In this section, we first describe the SA treatment services covered under the Medicare program. Then, we describe the approaches Medicare uses to reimburse providers for these services.

1. Service Coverage

Medicare covers a full spectrum of SA treatment services:

- **Inpatient hospital care**--Medicare covers medically necessary inpatient hospital care for SA with the same coinsurance levels (for example, $1,156 deductible for 2012) and length of stay restrictions (up to 90 days in a benefit period, with a one-time 60-day reserve) as other types of hospitals stays. Medicare covers only a total of 190 days spent in a psychiatric hospital for an entire lifetime. Medicare may cover further inpatient mental health care in a general hospital, but not a psychiatric hospital.

- **Outpatient treatment**--Medicare Part B covers outpatient SA treatment. Visits to a doctor or other health professional to diagnose a SA disorder are covered with a 20 percent coinsurance amount. Outpatient treatment of SA is covered with a 40 percent coinsurance in 2012. This coinsurance amount will decrease until 2014, when it will be 20 percent. Partial hospitalization is covered by Medicare if inpatient treatment would be necessary otherwise.

- **Preventive treatment**--In October 2011, Medicare Part B initiated a new preventive benefit related to SA. This comprises an annual screening for alcohol misuse and up to four counseling visits to reduce alcohol misuse. Medicare fully covers these services from providers who accept assignment.

- **Prescribed drugs**--Medicare Part D covers prescribed drugs for SA treatment at the same coverage levels as other prescribed drugs.

It should be noted that Medicare coverage of SA treatment is increasing from 2010 through 2014 including the reduction in coinsurance for outpatient services to 20 percent by 2014. This increase in coverage results from the implementation of mental health parity and the addition of preventive alcohol use screening in 2011. These enhanced benefits are likely to result in a higher use rate and greater expenditures for SA treatment over time.

2. Payment Method

Medicare provides Part A and B services to beneficiaries through the traditional Medicare FFS or MA managed care plans. When beneficiaries elect to enroll in MA, Medicare pays health plans chosen by beneficiaries a monthly premium to manage their care. For beneficiaries covered under the traditional Medicare FFS program, Medicare maintains administrative data on the services received and the associated Medicare payment amounts. However, until 2012, for beneficiaries enrolled in MA, Medicare maintained administrative data only on premium payment amounts but did not require the MA plans to submit data on the services they provided to their enrollees. Thus, through 2011 for individuals enrolled in FFS Medicare, Medicare administrative data can be used to calculate the number of beneficiaries using SA treatment services and expenditures related to these services. However, for individuals covered under MA, Medicare administrative data cannot be used to analyze service use.

Beginning in 2012, MA plans are required to submit encounter data enumerating the services provided to MA enrollees. It is expected that initial submissions may be incomplete or that other data quality issues may exist (for example, non-uniform coding across plans). The quality of the MA data likely will improve over time, but the analysis of the MA encounter data likely will be more resource intensive in the initial years, as it will require assessment of reporting quality and adjustments to allow for incomplete, inconsistent, or inaccurate reporting. Analyses based on the initial encounter data are also likely to be less accurate. Thus, it likely will be necessary to allow time for the Centers for Medicare and Medicaid Services (CMS) to assess encounter data reporting and work with plans to improve such data before undertaking research using them. Thus, in the near future, we recommend that estimates of Medicare SA spending not rely on MA encounter data reporting and instead use FFS data to impute SA spending among MA enrollees.

Medicare prescription drug coverage, known as Medicare Part D, is provided through private companies approved by Medicare. Medicare pays these plans a

monthly premium amount for each Medicare beneficiary covered. Utilization of Part D services is recorded in the CMS administrative data. These utilization data can be used to estimate SA related expenditures for prescribed drugs under Part D.

Table 1 displays the number of MA enrollees in each state and the District of Columbia for the last five years. MA enrollment has been increasing at a rate of 9.4 percent annually, with the rate of increase varying across states. Table 2 displays MA enrollment as a share of overall Medicare enrollment by state for 2011. Overall, almost one-quarter of Medicare enrollees are in an MA plan. Since MA enrollees represent a significant share of overall Medicare enrollment, the expenditures estimated for this population will represent a significant share of the overall estimate of SA treatment spending in Medicare.

B. Part A & B FFS Expenditures

Medicare's Chronic Condition Warehouse (CCW) can provide claims data to estimate total Medicare SA treatment spending for traditional Medicare FFS beneficiaries. Data files with 100 percent of FFS beneficiaries are available, as well as sample files. However, use of SA treatment is rare in the population ages 65 and older. Thus, there may be an insufficient sample of users to develop precise estimates in smaller states if a sample file is used. However, the 5 percent sample should provide sufficient precision for national estimates of SA treatment expenditures.

We recommend using the CCW Institutional and Non-Institutional claims files to estimate SA treatment spending in institutional and non-institutional settings, respectively. In parallel to the analysis of Medicaid SA treatment spending, we recommend that SA expenditures be divided into the following six types:

- **Core**--Services included in the Substance Abuse and Mental Health Services Administration's (SAMHSA) definition of SA treatment.

- **Fetal exposure**--Medical services primarily resulting from fetal exposure to alcohol or drugs. We expect that few of these services will be identified in the Medicare population, however, they are included as a separate category to parallel the Medicaid estimates.

- **Poisoning**--Medical services primarily resulting from poisoning by alcohol or drugs.

- **Supplemental**--Medical services primarily related to medical conditions fully attributable to alcohol or drug use.

- **Mental health claim with secondary SA diagnosis**--Individuals with an SA disorder often have a co-morbid mental health condition. Thus, it will be desirable

to identify claims with a primary mental health diagnosis and a secondary SA diagnosis.

- **Other claim with secondary SA diagnosis**--Expenditures on these claims are related primarily to a medical condition other than SA; however, the SA co-morbidity increases the cost of this care to the Medicare program.

SA treatment claims within each of these types will be identified based on diagnosis code. Appendix A, Table A.1 and Table A.2, list diagnosis codes indicating SA treatment. For the first four SA treatment types only the first listed diagnosis on the Medicare claim should be examined. The final column of the Table A.1 and Table A.2 identifies which of these four SA treatment types is associated with each diagnosis code (Core, Fetal, Poisoning, or Supplemental). Claims will be assigned to the fifth group if they have a first listed mental health diagnosis, including any of the codes listed in Table A.3, and a secondary or later diagnosis listed in Table A.1 and Table A.2. All other Medicare claims with a secondary or later diagnosis in Table A.1 and Table A.2 will be classified into the sixth category.

Once claims with an SA diagnosis are identified, the total Medicare payment amount will be summed across the claims to determine the Medicare expenditures for these services.

C. Part C: Medicare Advantage

Because encounter data reporting is not mature for MA enrolled beneficiaries, we propose initially estimating SA treatment expenditures for the MA population based on the average level of expenditures for non-MA enrolled Medicare beneficiaries with similar characteristics. As complete encounter data become available for MA enrollees, the second approach, described below, entailing an estimation of the value of the utilization represented in the encounter data, could be used.

1. Imputation Based on FFS Experience

The following steps can be used to impute SA treatment expenditures for the MA enrolled population:

- **Step 1: Develop homogenous tiers**--The Beneficiary Summary File can be used to divide Medicare enrollees into two groups based on whether they were enrolled in an MA plan at any point in the year. Within each of these two groups beneficiaries then should be divided into tiers based on their personal characteristics, including age, gender, state of resident, Medicare status code (aged, disabled, End Stage Renal Disease), and dual-eligible status.

- **Step 2: Calculate mean FFS expenditures per enrolled month**--Calculate mean SA treatment expenditure per enrolled month among Medicare

beneficiaries never enrolled in MA during the year for each tier created in Step 1 for each of the six SA treatment service types listed in Section B above.

- **Step 3: Calculate total MA enrolled months**--For each tier in Step 1, calculate the total number of MA enrolled months.

- **Step 4: Calculate total imputed MA SA expenditures**--For each SA service type, multiply the estimated mean FFS expenditure per enrolled month from Step 2 times the total number of MA enrolled months in Step 3 for each tier and sum across the tiers to obtain the total imputed MA SA expenditures for the service type.

This approach adjusts for differences in cost related to beneficiary characteristics observable in the administrative data. However, unobservable characteristics of MA enrollees may influence their treatment use. For example, wellness benefits offered by MA plans may appeal to healthier Medicare beneficiaries. Meanwhile, sicker beneficiaries may be less likely to make the effort to sign up for MA and may desire the broader choice of providers obtainable under traditional Medicare. Adjustment differences in these two groups of beneficiaries not linked to characteristics observable in the administrative data could be assessed by using multiple years of Medicare data and assessing whether MA enrollees had a lower SA treatment use rate prior to enrollment in MA relative to their counterparts who chose to remain in traditional FFS Medicare.

2. Imputation Based on Encounter Data

Once encounter data reporting is mature, encounter claims for SA treatment can be identified based on diagnosis codes in a manner similar to the identification of FFS SA treatment claims, as described in Section B. The encounter claims may not include accurate information on payment amount. If accurate information on the payment amount is not available from the encounter claims, we recommend estimating the price per unit of service based on mean expenditures per unit of service among traditional Medicare beneficiaries receiving the same service types. We also recommend that inpatient and other institutional care be priced per treatment day. Table A.5 can be used to classify outpatient treatment visits into homogeneous service types. The units of service observed in the encounter data then would be multiplied by the unit prices from traditional FFS Medicare and the total expenditures summed across the services types to determine total expenditures.

D. Part D: Prescribed Drug Expenditures

Expenditures for prescribed drugs can be estimated based on the CCW Part D Event file. Prescribed drug expenditures are categorized as core SA treatment services. The Part D Event file includes event records for both traditional Medicare FFS and MA enrollees, as well as the variable product service identification number, which provides

the National Drug Code (NDC) of the prescribed drug. Table A.4 lists the NDC codes of pharmaceuticals used to treat SA. Only the first 8 digits of the 11-digit NDC code are used to identify the SA treatment pharmaceuticals. Event records listing these codes should be obtained. The values for the covered D plan paid amount and the non-covered plan paid amount are included in the Part D Event file. However, these values typically cannot be used for research. If they are available to this study then they should be summed to estimate payments under Part D. If they are not available national average payment amounts can be used to value the utilization observed in the Part D Event file.

TABLE 1. MA Enrollment 2007-2011						
State	**2007**	**2008**	**2009**	**2010**	**2011**	**Annual % Increase 2007-2011**
Alabama	115,569	148,889	170,475	176,216	174,202	10.8
Alaska	73	162	394	124	120	13.2
Arizona	263,637	266,647	279,833	331,444	342,978	6.8
Arkansas	38,567	51,037	60,177	71,654	75,645	18.3
California	1,449,282	1,412,343	1,547,064	1,663,441	1,734,900	4.6
Colorado	163,998	174,566	185,673	203,035	206,116	5.9
Connecticut	54,825	70,232	82,334	101,430	108,766	18.7
Delaware	3,140	4,276	5,074	4,882	5,149	13.2
District of Columbia	6,251	6,423	6,675	7,476	7,567	4.9
Florida	771,603	855,488	919,561	1,000,565	1,072,453	8.6
Georgia	94,412	126,626	153,374	250,725	269,574	30.0
Hawaii	68,224	71,525	75,142	84,418	88,986	6.9
Idaho	40,546	48,248	55,464	62,366	63,070	11.7
Illinois	136,851	153,977	167,047	168,636	163,256	4.5
Indiana	91,768	117,454	139,203	156,636	172,124	17.0
Iowa	55,755	56,579	61,156	64,737	64,749	3.8
Kansas	27,522	33,780	39,191	42,728	45,560	13.4
Kentucky	63,617	80,431	92,212	113,633	121,501	17.6
Louisiana	111,436	131,631	145,465	160,276	164,979	10.3
Maine	6,366	13,189	23,760	31,872	35,414	53.6
Maryland	37,104	42,526	49,058	60,424	61,840	13.6
Massachusetts	159,051	167,209	174,549	197,798	185,692	3.9
Michigan	237,200	334,732	383,595	255,650	389,983	13.2
Minnesota	206,593	216,208	237,035	321,109	349,715	14.1
Mississippi	31,003	38,503	42,584	44,821	46,676	10.8
Missouri	147,011	167,229	185,281	204,265	213,298	9.8
Montana	18,187	22,590	26,085	28,792	24,349	7.6
Nebraska	22,534	26,549	28,071	29,555	28,771	6.3
Nevada	93,213	98,477	102,090	106,276	109,757	4.2
New Hampshire	4,961	8,473	11,845	14,439	12,593	26.2
New Jersey	112,637	126,013	148,061	161,670	169,125	10.7
New Mexico	59,177	64,021	69,416	75,661	81,106	8.2
New York	674,029	746,644	802,917	885,826	918,606	8.0
North Carolina	190,081	219,180	241,331	257,240	262,974	8.5
North Dakota	6,247	7,225	7,458	7,789	9,472	11.0
Ohio	315,607	453,920	487,578	620,138	640,245	19.3
Oklahoma	66,441	74,625	81,765	88,723	89,678	7.8
Oregon	215,613	226,220	243,304	253,412	254,056	4.2
Pennsylvania	675,179	771,986	813,279	854,489	865,200	6.4
Rhode Island	59,740	60,309	60,713	62,751	63,553	1.6
South Carolina	56,316	75,797	89,143	118,221	123,989	21.8
South Dakota	4,863	7,162	8,504	9,623	11,663	24.4
Tennessee	170,217	193,201	211,865	251,137	265,842	11.8
Texas	373,014	440,729	492,428	569,606	600,193	12.6
Utah	45,406	60,705	71,429	83,301	88,115	18.0
Vermont	1,522	2,644	3,362	4,107	5,407	37.3
Virginia	95,991	121,193	141,101	155,855	155,941	12.9
Washington	170,145	190,271	209,878	237,487	247,229	9.8
West Virginia	60,515	66,944	72,009	71,267	73,222	4.9
Wisconsin	174,345	202,829	230,406	261,377	273,527	11.9
Wyoming	2,000	2,515	2,964	4,037	3,360	13.8
United States	**8,049,384**	**9,060,132**	**9,938,378**	**10,993,140**	**11,542,286**	**9.4**

TABLE 2. MA Enrollment as a Share of Overall Medicare Enrollment, 2011			
State	**Medicare Beneficiaries**	**MA Enrollees**	**MA Share (%)**
Alabama	852,740	174,202	20.4
Alaska	65,356	120	0.2
Arizona	933,435	342,978	36.7
Arkansas	536,817	75,645	14.1
California	4,806,469	1,734,900	36.1
Colorado	631,387	206,116	32.6
Connecticut	571,020	108,766	19.0
Delaware	151,077	5,149	3.4
District of Columbia	78,860	7,567	9.6
Florida	3,390,801	1,072,453	31.6
Georgia	1,256,047	269,574	21.5
Hawaii	210,009	88,986	42.4
Idaho	232,471	63,070	27.1
Illinois	1,854,402	163,256	8.8
Indiana	1,014,432	172,124	17.0
Iowa	519,726	64,749	12.5
Kansas	435,802	45,560	10.5
Kentucky	767,801	121,501	15.8
Louisiana	692,718	164,979	23.8
Maine	267,012	35,414	13.3
Maryland	794,039	61,840	7.8
Massachusetts	1,067,929	185,692	17.4
Michigan	1,669,386	389,983	23.4
Minnesota	791,566	349,715	44.2
Mississippi	501,142	46,676	9.3
Missouri	1,009,613	213,298	21.1
Montana	171,499	24,349	14.2
Nebraska	280,441	28,771	10.3
Nevada	359,968	109,757	30.5
New Hampshire	221,168	12,593	5.7
New Jersey	1,336,988	169,125	12.6
New Mexico	316,973	81,106	25.6
New York	3,009,756	918,606	30.5
North Carolina	1,505,942	262,974	17.5
North Dakota	108,878	9,472	8.7
Ohio	1,909,462	640,245	33.5
Oklahoma	607,465	89,678	14.8
Oregon	625,594	254,056	40.6
Pennsylvania	2,290,509	865,200	37.8
Rhode Island	183,433	63,553	34.6
South Carolina	783,904	123,989	15.8
South Dakota	137,314	11,663	8.5
Tennessee	1,067,534	265,842	24.9
Texas	3,044,936	600,193	19.7
Utah	286,630	88,115	30.7
Vermont	112,831	5,407	4.8
Virginia	1,155,428	155,941	13.5
Washington	983,167	247,229	25.1
West Virginia	383,035	73,222	19.1
Wisconsin	918,344	273,527	29.8
Wyoming	80,994	3,360	4.1
United States	**47,672,971**	**11,542,286**	**24.2**

II. PROPOSED METHODS AND RESOURCES REQUIRED FOR UPDATING MEDICAID ESTIMATES WITH FUTURE YEARS OF DATA

ONDCP develops the annual National Drug Control Strategy Budget Summary and so needs an approach for updating the estimates of Medicaid SA treatment spending annually. We recommend direct derivation of the estimates of SA treatment spending from MAX files every 5-7 years or after major policy changes take place, such as implementation of the Affordable Care Act. For the intervening years, we recommend projecting base year estimates forward using the CMS-64 reporting and Medicaid enrollment data. The CMS-64 report summarizes annual Medicaid expenditures for each state. Information from the forms is currently available through FY 2011 for each state by service category. The benefit of using the information from the CMS-64 reports is that the available trends are state and service specific, and are available with only limited lag. One drawback to the CMS-64 data is that they are not broken out by eligibility group. Another limitation is that they are based on date of payment, therefore lump sum adjustments or lags in payment processing can impact trends artificially. Since SA treatment utilization varies by age, gender, and eligibility, we propose using Medicaid enrollment information in combination with the CMS-64 data.

We propose using the following steps to develop projections for each state:

- **Step 1: Obtain data**. The CMS-64 reports, containing cost and service data, can be downloaded from the CMS website.[1] Medicaid monthly enrollment data for December and June can be obtained from the Kaiser Commission on Medicaid and the Uninsured website.[2] Data currently are compiled through June 2011. Projections of SA treatment spending by SA care group and type of SA Spending for FY 2011 are provided in Appendix B. These estimates would be trended forward until updated estimates are directly derived from MAX.

- **Step 2: Map CMS-64 service categories to the five SA care groups**. Map the service categories available in CMS-64 data to the five SA care groups included in the FY 2011 projections (Table B.1) developed from MAX data for the base year of the data (FY 2011 for the first round) and the desired year of the estimates. Map services in two steps. (a) First, group together individual categories from the CMS-64 into broader service groups shown in Table 3. Include relevant "C" categories, which represent expenses reported for Medicaid expansion Children's Health Insurance Program (CHIP) populations, and "T"

[1] Available at https://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidBudgetExpendSystem/CMS-64-Quarterly-Expense-Report.html. Accessed July 26, 2012.

[2] Available at http://www.kff.org/medicaid/enrollmentreports.cfm. Accessed July 26, 2012.

categories, which account for expenses in those states that qualify to expend 20 percent of their CHIP allotment on the Medicaid program and still receive the enhanced CHIP match rate. Table 3 shows the groups by care setting developed based on the 2011 CMS-64 categories. (b) Next, crosswalk these groups to the five SA care groups included in the FY 2011 projections. Table 4 shows this crosswalk.[3]

- **Step 3: Estimate overall Medicaid expenditures**. Estimate the overall level of Medicaid spending represented in the CMS-64s for each state in each SA care group in the base year and the most recent year of CMS-64 data available. Also, estimate the overall level of Medicaid spending for the state in the base year and the most recent year of data available.

- **Step 4: Calculate spending per enrolled month**. Divide the total Medicaid spending for each state in each SA care group and overall by 12 times the number of Medicaid enrolled months in the state in June of the given year. The June months are multiplied by 12 to represent a full year of enrollment.

- **Step 5: Estimate the trend in spending per enrolled month**. Estimate the overall Medicaid expenditure trend for each state for each SA care group and overall from the base period through the most recent year available.[4] In rare cases, where trends for a particular service category indicates more than a 35 percent increase or decrease, replace the service category-specific trend with the overall trend in state Medicaid spending.

- **Step 6: Adjust overall Medicaid general health expenditure trends for the historical difference in growth between SA treatment and general health care spending**. Between 1986 and 2005, the estimated trend in Medicaid SA treatment spending based on the SAMHSA Spending Estimates (SSE) was 98 percent of the National Health Expenditure Accounts (NHEA) estimated trend in Medicaid spending. Given that the rate of growth in SA treatment expenditures (as identified in the SSE) historically has fallen below that of general health care expenditures (as identified in the NHEA), multiply the annual trend estimates developed in Step 5 by 0.98.

- **Step 7: Estimate the trend in adult/disabled enrollment**. Medicaid expenditures on SA are concentrated in the adult/disabled populations. Ideally, expenditure trend estimates specific to SA treatment services and Medicaid adults would be developed, however, since the CMS-64s are not developed by eligibility nor demographic group and do not include categories tailored to SA, the

[3] Note that we found some differences between the CMS-64 categories for 2008 and 2011. Some new categories were added to the CMS-64 in 2010 and 2011 that were not included in the CMS-64 in prior years. If the CMS categories change again in the future, it will be necessary to map the categories in the CMS-64 in the base and estimate year as closely as possible so that trends can be developed.

[4] Estimate the trend as $T_t = (S_t/S_b)^{(1/(t-b))}$. Where T is the trend, S is Medicaid spending per enrolled month from Step 4, t is current year, and b is base year.

method proposed in Steps 1-6 uses the expenditure trends per enrolled month across all Medicaid enrollees in each SA care group as a proxy for trends in SA expenditures which are primarily for adults. Since enrollment information is available by eligibility group in this step the Medicaid enrollment information obtained from the June Kaiser enrollment report should be limited to the adult and disabled populations. Then, the enrollment trend between the base and the most recent year of data available should be calculated.

- **Step 8: Project the base period MAX estimates to the most recent year of data available**. Multiply the base year SA spending in each SA care group by the trend in expenditures per enrolled month for the group, adjusted for the historical difference between the general health and SA expenditure trends (the latter is 98 percent of the former). Then multiply this product by the trend in enrollment for the adult and disabled population for the same period. Estimates for the non-core SA treatment expenditures reported in Table B.2 were not developed by type of care, so they cannot be trended by SA care groups. Instead, trend these estimates based on the overall spending per enrolled month trend for Medicaid times 0.98 times the enrollment trend for the adult and disabled population.

- **Step 9: Project beyond the observed data**. If projections beyond the most recent period of available CMS-64 and Kaiser enrollment data are needed, assess available information on the likely trend in Medicaid expenditures. Although the NHEA projections largely reflect trends in services other than SA treatment, these trends incorporate both anticipated enrollment changes and change in economic conditions. Since the SA treatment expenditure trend is 98 percent of the general health trend in the historical data, 98 percent of the projected increase in Medicaid spending in the NHEA projections could be used to project SA treatment expenditures beyond the period for which observable data is available. Another approach would be to assume that the trend observed in CMS-64 and Kaiser enrollment data for the recent historical period will continue. If there are no economic or policy-related factors that caused shifts in the recent past or are likely to cause a substantial shift in the future trends, then this approach would be reasonable. Under this approach, annualize the trend in expenditures per enrolled month between the base year and most recent year of data available as calculated in Step 5. Multiply the annualized trend by 0.98 reflecting the historical difference between growth in SA treatment spending and overall health care spending. Then annualize the enrollment trend between the base year and the most recent year of data available as calculated in Step 7. Multiply the projection for the most recent period of CMS-64 data available as calculated in Step 8 by the annualized trend in expenditures per enrolled month and the annualized trend in enrollment in the historical data. Repeat this multiplication for each additional year of trend desired.

TABLE 3. Mapping CMS-64 Categories into Groups, 2011	
Inpatient Hospital	
C-Inp. Hosp. Services -- DSH	Inpatient Hospital -- DSH
C-Inp. Hosp. Serv. -- Reg. Payments	Inpatient Hospital -- Sup. Payments
C-Inpatient Mental Health -- DSH	T-Critical Access Hospitals
C-Inpatient Mental Health -- Reg. Payment	T-Inp Hosp -- DSH
Critical Access Hospitals	T-Inp Hosp -- GME Payments
Inpatient Hospital -- GME Payments	T-Inp Hosp -- Reg. Payments
Inpatient Hospital -- Reg. Payments	T-Inp Hosp -- Sup. Payments
Residential Treatment	
C-Other Services	T-Other Care Services
Other Care Services	
Prescribed Drug	
C-Drug Rebate -- National	Prescribed Drugs
C-Drug Rebate -- State	T-Drug Rebate Offset -- National
C-Prescribed Drugs	T-Drug Rebate Offset -- State Sidebar Agreement
Drug Rebate Offset	T-Prescribed Drugs
Drug Rebate Offset -- State Sidebar Agreement	
Managed Care	
Increased ACA OFFSET -- MCO	T-Increased ACA OFFSET -- MCO
MCO -- National Agreement	T-MCO -- National Agreement
MCO -- State Sidebar Agreement	T-MCO -- State Sidebar Agreement
MCO -- Natl Agreement	T-Medicaid -- MCO
Medicaid -- MCO	T-Prepaid Ambulatory Health Plan
Prepaid Ambulatory Health Plan	T-Prepaid Inpatient Health Plan
Prepaid Inpatient Health Plan	
Outpatient Care Group	
C-Clinic Services	T-Outpatient Hospital Services -- Sup. Payments
Clinic Services	T-Physician & Surgical Services -- Reg. Payments
C-Outpatient Hospital Services	T-Physician & Surgical Services -- Sup. Payments
C-Outpatient Mental Health	T-Rehabilitative Services (non-school-based)
C-Physician/Surgical	T-Rehabilitative Services (non-school-based)
C-Screening Services	Mental Health Facility -- DSH
Diagnostic Screen & Preventive Services	Mental Health Facility Services -- Reg. Payments
EPSDT Screening	T-Mental Health Facility -- DSH
Federally Qualified Health Center	T-Mental Health Facility Services -- Reg. Payments
Outpatient Hospital Service -- Reg. Payments	Case management -- Statewide
Outpatient Hosp Service -- Sup. Payments	C-Case Management
Phys & Surgical Service -- Reg. Payments	Targeted Case Management Services -- Com. Case-Man.
Phys & Surgical Service -- Sup. Payments	T-Case Management -- Statewide
Rehabilitative Services	T-Targeted Case Management Service -- Com. Case-Man.
T- Diagnostic Screening and Preventive Services	T-Emergency
T-Clinic Services	T-Emergency Hospital Services
T-EPSDT Screening	Emergency Hospital Services
T-Federally Qualified Health Center	
T-Outpatient Hospital Services -- Reg. Payments	

TABLE 4. Crosswalk of CMS-64 Groups to Study Categories	
Study Category	**CMS-64 Group Used for Trend**
Inpatient Hospital	Inpatient Group
Residential Treatment	Other Care Services Group
Outpatient Care	Outpatient Services Group
Prescribed Drugs	Prescribed Drugs Group
Managed Care (Imputed Expenditures)	Managed Care Group

APPENDIX A: DIAGNOSIS CODES

TABLE A.1. Alcohol Abuse Diagnosis Codes		
ICD-9-CM	**Description**	**Category of Service**
291	Alcoholic psychoses	Core
2910	Delirium tremens	Core
2911	Alcohol amnestic syndrome	Core
2912	Alcoholic dementia NEC	Core
2913	Alcohol hallucinosis	Core
2914	Pathologic alcohol intoxication	Core
2915	Alcoholic jealousy	Core
2918	Alcoholic psychosis NEC	Core
2919	Alcoholic psychosis NOS	Core
303	Alcohol dependence syndrome	Core
3030	Acute alcohol intoxication	Core
3039	Alcohol dependency NEC/NOS	Core
3050	Alcohol abuse	Core
9800	Toxic effects of ethyl alcohol	Poisoning
9801	Toxic effects of methyl alcohol	Poisoning
E8600	Accidental poisoning by alcoholic beverages	Poisoning
E8601	Accidental poisoning by ethyl alcohol	Poisoning
E8602	Accidental poisoning by methyl alcohol	Poisoning
E8609	Accidental poisoning by unspecified alcohol	Poisoning
7903	Excessive blood level of alcohol	Poisoning
3575	Alcoholic polyneuropathy	Supplemental
4255	Alcoholic cardiomyopathy	Supplemental
5353	Alcoholic gastritis	Supplemental
5710	Alcoholic fatty liver	Supplemental
5711	Acute alcoholic hepatitis	Supplemental
5712	Alcoholic cirrhosis of liver	Supplemental
5713	Alcoholic liver damage, unspecified	Supplemental
6554	Suspected damage to fetus from alcohol addiction	Fetus
76071	Fetal alcohol syndrome	Fetus

TABLE A.2. Drug Abuse Diagnosis Codes		
ICD-9-CM	**Description**	**Category of Service**
292	Drug psychoses	Core
2920	Drug withdrawal syndrome	Core
2921	Drug paranoid/hallucinosis	Core
2922	Pathologic drug intoxication	Core
2928	Other drug mental disease	Core
2929	Drug mental disorder NOS	Core
304	Drug dependence	Core
3040	Opioid type dependence	Core
3041	Barbiturate dependence	Core
3042	Cocaine dependence	Core
3043	Cannabis dependence	Core
3044	Amphetamine dependence	Core
3045	Hallucinogen dependence	Core
3046	Drug dependence NEC	Core
3047	Opioid/other drug dependence	Core
3048	Combinations of drug dependence NEC	Core
3049	Drug dependence NOS	Core
305	Non-dependent drug abuse	Core
3052	Cannabis abuse	Core
3053	Hallucinogen abuse	Core
3054	Barbiturate abuse	Core
3055	Opioid abuse	Core
3056	Cocaine abuse	Core
3057	Amphetamine abuse	Core
3058	Antidepressant abuse	Core
3059	Drug abuse NEC/NOS	Core
6483	Drug dependence in pregnancy	Fetus
357.6	Polyneuropathy due to drugs	Supplemental
6555	Suspected damage to fetus from drugs	Fetus
76072	Fetus affected by narcotics	Fetus
76073	Fetus affected by hallucinogenic agents	Fetus
76075	Fetus affected by cocaine	Fetus
7795	Drug withdrawal symptoms in newborns	Fetus
965	Poisoning related to narcotics	Poisoning
967	Poisoning by sedatives and hypnotics	Poisoning
968	Poisoning by central nervous system muscle tone depressants	Poisoning
969	Poisoning by psychotropic agents	Poisoning
970	Poisoning by central nervous system stimulants	Poisoning
E850-E858	Accidental poisoning by drugs, medicaments, and biologicals	Poisoning
E863	Accidental poisoning by agricultural and horticultural chemical and pharmaceutical preparations other than plant food and fertilizer	Poisoning
E950.0-E950.6	Suicide and self-inflicted injury by drugs or medicinal substances	Poisoning

TABLE A.3. MH Diagnosis Codes		
ICD-9-CM	**Description**	**Analytical Classification**
295	Schizophrenic disorders	Schizophrenia
2950	Simple schizophrenia	Schizophrenia
2951	Hebephrenia	Schizophrenia
2952	Catatonic schizophrenia	Schizophrenia
2953	Paranoid schizophrenia	Schizophrenia
2954	Acute schizophrenic episode	Schizophrenia
2955	Latent schizophrenia	Schizophrenia
2956	Residual schizophrenia	Schizophrenia
2957	Schizoaffective type	Schizophrenia
2958	Schizophrenia NEC	Schizophrenia
2959	Schizophrenia NOS	Schizophrenia
296	Affective psychoses	Other affective disorder
2960	Manic disorder, single episode	Bipolar I
2961	Manic disorder, recurrent episode	Bipolar I
2962x (x = 3 or 4)	Depressive psychosis, single episode, severe	Major depression, severe
2962x (x ne 3 or 4)	Depressive psychosis, single episode, non-severe	Major depression, non-severe
2963x (x = 3 or 4)	Depressive psychosis, recurrent episode, severe	Major depression, severe
2963x (x ne 3 or 4)	Depressive psychosis, recurrent episode, non-severe	Major depression, non-severe
2964	Bipolar affective, manic	Bipolar I
2965	Bipolar affective, depressive	Bipolar I
2966	Bipolar affective, mixed	Bipolar I
2967	Bipolar affective NOS	Bipolar I
2968	Manic-depressive NEC/NOS	Other or unspecified bipolar
2969	Affective psychoses NEC/NOS	Other affective disorder
297	Paranoid states	Delusional disorder
2970	Paranoid state, simple	Delusional disorder
2971	Paranoia	Delusional disorder
2972	Paraphrenia	Delusional disorder
2973	Shared paranoid disorder	Delusional disorder
2978	Paranoid states NEC	Delusional disorder
2979	Paranoid state NOS	Delusional disorder
298	Other non-organic psychoses	Other MH diagnosis
2980	Reactive depressive psychosis	Other MH diagnosis
2981	Excitative-type psychosis	Other MH diagnosis
2982	Reactive confusion	Other MH diagnosis
2983	Acute paranoid reaction	Other MH diagnosis
2984	Psychogenic paranoid psychosis	Other MH diagnosis
2988	Reactive psychosis NEC/NOS	Other MH diagnosis
2989	Psychosis NOS	Other MH diagnosis
299	Psychoses of childhood	Other MH diagnosis
2990	Infantile autism	Other MH diagnosis
2991	Disintegrative psychosis	Other MH diagnosis
2998	Early childhood psychoses NEC	Other MH diagnosis
2999	Early childhood psychosis NOS	Other MH diagnosis
300	Neurotic disorders	Anxiety disorder
3000	Anxiety states	Anxiety disorder
3001	Hysteria	Anxiety disorder
3002	Phobic disorders	Anxiety disorder
3003	Obsessive-compulsive disorder	Anxiety disorder
3004	Neurotic depression	Anxiety disorder
3005	Neurasthenia	Anxiety disorder
3006	Depersonalization syndrome	Anxiety disorder
3007	Hypochondriasis	Anxiety disorder
3008	Neurotic disorders NEC	Anxiety disorder
3009	Neurotic disorder NOS	Anxiety disorder
301	Personality disorders	Other personality disorder

TABLE A.3 (*continued*)		
ICD-9-CM	**Description**	**Analytical Classification**
3010	Paranoid personality	Other personality disorder
3011	Affective personality	Other personality disorder
3012	Schizoid personality	Other personality disorder
3013	Explosive personality	Other personality disorder
3014	Compulsive personality	Other personality disorder
3015	Histrionic personality	Other personality disorder
3016	Dependent personality	Other personality disorder
3017	Antisocial personality	Antisocial personality disorder
3018	Other personality disorder	Other personality disorder
3019	Personality disorder NOS	Other personality disorder
302	Sexual disorders	Other MH diagnosis
3020	Ego-dystonic homosexuality	Other MH diagnosis
3021	Zoophilia	Other MH diagnosis
3022	Pedophilia	Other MH diagnosis
3023	Transvestism	Other MH diagnosis
3024	Exhibitionism	Other MH diagnosis
3025	Trans-sexualism	Other MH diagnosis
3026	Psychosexual identity disorder	Other MH diagnosis
3027	Psychosexual dysfunction	Other MH diagnosis
3028	Psychosexual disorder NEC	Other MH diagnosis
3029	Psychosexual disorder NOS	Other MH diagnosis
306	Psychophysiologic disease	Other MH diagnosis
3060	Psychogenic musculoskeletal disease	Other MH diagnosis
3061	Psychogenic respiratory disease	Other MH diagnosis
3062	Psychogenic cardiovascular disease	Other MH diagnosis
3063	Psychogenic skin disease	Other MH diagnosis
3064	Psychogenic GI disease	Other MH diagnosis
3065	Psychogenic GU disease	Other MH diagnosis
3066	Psychogenic endocrine disease	Other MH diagnosis
3067	Psychogenic sensory disease	Other MH diagnosis
3068	Psychogenic disorder NEC	Other MH diagnosis
3069	Psychogenic disorder NOS	Other MH diagnosis
307	Special symptom NEC	Other MH diagnosis
3070	Stammering and stuttering	Other MH diagnosis
3071	Anorexia nervosa	Other MH diagnosis
3072	Tics	Other MH diagnosis
3073	Stereotyped movements	Other MH diagnosis
3074	Non-organic sleep disorder	Other MH diagnosis
3075	Eating disorders NEC/NOS	Other MH diagnosis
3076	Enuresis	Other MH diagnosis
3077	Encopresis	Other MH diagnosis
3078	Psychalgia	Other MH diagnosis
3079	Special symptom NEC/NOS	Other MH diagnosis
308	Acute reaction to stress	Acute reaction to stress
3080	Stress reaction, emotional	Acute reaction to stress
3081	Stress reaction, fugue	Acute reaction to stress
3082	Stress reaction, psychomotor	Acute reaction to stress
3083	Acute stress reaction NEC	Acute reaction to stress
3084	Stress reaction, mixed disorder	Acute reaction to stress
3089	Acute stress reaction NOS	Acute reaction to stress
309	Adjustment reaction	Adjustment reaction
3090	Brief depressive reaction	Adjustment reaction
3091	Prolonged depressive reaction	Adjustment reaction
3092	Adjustment reaction/other emotion	Adjustment reaction
3093	Adjustment reaction -- conduct disorder	Adjustment reaction
3094	Adjustment reaction -- emotion/conduct	Adjustment reaction
3098	Other adjustment reaction	Adjustment reaction

TABLE A.3 (*continued*)		
ICD-9-CM	**Description**	**Analytical Classification**
3099	Adjustment reaction NOS	Adjustment reaction
310	Non-psychotic brain syndrome	Other MH diagnosis
3100	Frontal lobe syndrome	Other MH diagnosis
3101	Organic personality syndrome	Other MH diagnosis
3102	Postconcussion syndrome	Other MH diagnosis
3108	Non-psychotic brain syndrome NEC	Other MH diagnosis
3109	Non-psychotic brain syndrome NOS	Other MH diagnosis
311	Depressive disorder NEC	Other depressive disorder
312	Conduct disturbance NEC	Conduct disorder
3120	Unsocialized aggression	Conduct disorder
3121	Unsocialized, unaggressive	Conduct disorder
3122	Socialized conduct disorder	Conduct disorder
3123	Impulse control disorder NEC	Conduct disorder
3124	Mixed disturbance conduct/emotion	Conduct disorder
3128	Other conduct disturbance	Conduct disorder
3129	Conduct disturbance NOS	Conduct disorder
313	Emotional disorder child/adolescent	Other MH diagnosis
3130	Overanxious disorder	Other MH diagnosis
3131	Misery and unhappiness disorder	Other MH diagnosis
3132	Sensitivity and withdrawal	Other MH diagnosis
3133	Relationship problems	Other MH diagnosis
3138	Other emotional disturbance, child	Other MH diagnosis
3139	Emotional disturbance, child, NOS	Other MH diagnosis
314	Hyperkinetic syndrome	Other MH diagnosis
3140	Attention deficit disorder	Other MH diagnosis
3141	Hyperkinetic with developmental delay	Other MH diagnosis
3142	Hyperkinetic conduct disorder	Other MH diagnosis
3148	Other hyperkinetic syndrome	Other MH diagnosis
3149	Hyperkinetic syndrome NOS	Other MH diagnosis
6484	Mental disorders in pregnancy	Other MH diagnosis
V402	Mental problems NEC	MH V-code
V403	Behavioral problems NEC	MH V-code
V409	Mental/behavior problems NOS	MH V-code
V61	Other family circumstances	MH V-code
V610	Family disruption	MH V-code
V611	Marital problems	MH V-code
V612	Parent-child problems	MH V-code
V613	Problem with aged parent	MH V-code
V614	Health problem in family	MH V-code
V615	Multi-parity	MH V-code
V616	Illegitimate pregnancy	MH V-code
V617	Unwanted pregnancy NEC	MH V-code
V618	Family circumstances NEC	MH V-code
V619	Family circumstance NOS	MH V-code
V663	Mental disorder convalescence	MH V-code
V673	Psychiatric followup	MH V-code
V701	Psychiatric exam -- authority required	MH V-code
V702	General psychiatric exam NEC	MH V-code
V710	Observation for mental conditions	MH V-code
E950.7-E950.9, E951-E959	Suicide and self-inflicted injury by cause other than drugs or medicinal substances	Suicide and self-inflicted injury
MH = Mental Health. ne = not equal.		

TABLE A.4. Prescription Drug Codes	
Drug Name	**NDC Code**
Alcoholism Medications	
Campral	0456-3330
Naltrexone HCl (Revia)	51285-275, 0555-0902, 52152-105, 185-39, 406-1170, 16590-897, 16729-81, 47335-326, 60793-430, 60793-431, 60793-433, 60793-434, 60793-435, 60793-437
Vivitrol	63459-300, 65757-300, 65757-301
Disulfiram (Antabuse)	51285-523, 51285-524, 64980-171, 64980-172, 65473-706
Opiate and Heroin Addition Medications	
Subutex	12496-1310, 12496-1278
Suboxone	12496-1202, 12496-1208, 54868-5707, 54868-5750, 63629-4028, 63629-4034
Vivitrol	65757-300, 65757-301
Naltrexone HCl (Revia)	See above
Nalmefene Hydrochloride (Revex)	10019-315, 10019-311, 11098-311
Other Drug Abuse Medications	
Naloxone Hydrochloride (Narcan)	63481-365, 63481-368, 63481-359, 0409-1212, 0409-1215, 0409-1219, 63481-358, 63481-3771, 52584-469, 52584-782, 16590-556, 63739-463, 54868-2062,54868-6259, 60429-570, 68387-531, 548-1469, 548-3369, 43063-142, 43386-680, 52584-212, 52584-215, 409-1782
SOURCE: FDA's NDC database. **NOTE**: NDCs are for the listed drug and for any generic equivalent.	

TABLE A.5. Classification of SA/MH Treatment Services by Type			
Types of SA Treatment Services	**SA-Specific Codes**	**Other Behavioral Health Codes***	**Other Types of Identifiers**
Emergency room care	NA	NA	OT file claim with place of service code = 23
Inpatient care	H0008, H0009		
Residential treatment	H0010, H0011	H0017, H0018, H0019, S5145, S5146, T2048	
Intensive treatment program	H0015, S9475, H2036,	S9480, S9485, H0035, T2034	
Treatment program service	H2035, S0201	H2012	
Individual/group psychotherapy		90804, 90805, 90807, 90808, 90809, 90810, 90811, 90812, 90813, 90814, 90815, 90816, 90817, 90818, 90819, 90821, 90822, 90823, 90824, 90826, 90827, 90828, 90829, 90875, 90876, 90846, 90847, 90849, 90853, 90857, G0410, G0411	
Other assessment/ screening/intervention/ evaluation/prevention/ treatment planning	H0001, H0003, H0022, H0028, H0049, H0050, H0007, H0048, H0026, G0396, G0397, T1007, 99408	H0030, H2011, S9484, 90801, S9083, H0002, H1011, 96150, 96151, 90802, H0031, T1001, H1000, 90889, 90801, 90885, 96101, 96102, 96103, 96100, 96125, 99456, S9446, H1003, H0023, H0032, 00100, G8405 G8404, 96115, 96116, 96117, T2010, T2011, T1023, 96105, 96111, 96110, 96125	
Other medication management	H0020, J0592, J1230, J3490, J2315, J8499, S0109	90862, H0034, H2010, H0033, M0064, T1502	
Other counseling/ therapy	H0005, T1006	H0004, 90806, 90845, 90870, 90871, 90880, 96152, 99510, H2032, G0176, 96153, 96154, 96155	
Other case management or community supports	H0006, T1007, T1012, T1009	T1016, T1017, H0037, H2015, H2016, H2021, G0177, S5110, H5111, T1027, H2014, H2017, H2018, H2027, H0025, H2023, H2024, H2025, H2026, H2019, H2020, S0280, S0281, 90882, H0039, H0040, T1024, H1004, H0036, H2022, S9482, H2033 H0038, T2040, T2041, G0409	
Detoxification	H0012, H0013, H0014		
Housing (including halfway house)	H2034	H0043, H0044	
Other	H0016, H0047, T1010, T1011, T1013, T2025, H2037	90899	
* These behavioral health codes will be classified as SA treatments when they are associated with a primary SA diagnosis. NA = not available.			

APPENDIX B: FY 2011 SA TREATMENT SPENDING

TABLE B.1. FY 2011 SA Treatment Spending by SA Care Group (in $ thousand)						
State	**Inpatient Hospital**	**Residential Treatment**	**Outpatient Care**	**Prescribed Drugs**	**Managed Care**	**Total**
Alabama	6,215	0	3,790	630	0	10,635
Alaska	1,894	163	6,741	313	0	9,112
Arizona	2,447	10	42,201	0	116,417	161,075
Arkansas	4,127	0	1,589	132	0	5,848
California	24,577	0	221,880	1,069	171,971	419,497
Colorado	13,104	0	8,532	551	50,959	73,146
Connecticut	16,101	5,850	66,172	2,532	1,888	92,543
Delaware	723	23	4,909	483	7,425	13,563
District of Columbia	2,940	0	1,533	493	11,458	16,424
Florida	15,250	27	17,050	578	17,332	50,238
Georgia	5,698	3	7,968	136	8,288	22,092
Hawaii	457	1,111	2,775	126	4,735	9,204
Idaho	2,370	0	804	228	0	3,402
Illinois	46,377	1,094	59,062	2,664	4,534	113,731
Indiana	4,924	206	8,984	620	17,583	32,318
Iowa	1,920	0	660	244	7,985	10,809
Kansas	2,384	133	388	169	16,308	19,383
Kentucky	16,450	1,299	17,037	3,621	1,534	39,941
Louisiana	8,772	0	2,483	112	0	11,367
Maine*	NA	NA	NA	NA	0	55,107
Maryland	6,442	0	9,025	201	71,167	86,835
Massachusetts	14,015	1,980	47,085	12,474	32,344	107,899
Michigan	4,884	0	1,245	1,457	74,845	82,430
Minnesota	19,442	343	20,581	702	20,181	61,250
Mississippi	16,946	0	4,397	598	0	21,941
Missouri	11,266	1,913	28,979	1,112	30,595	73,865
Montana	3,851	826	2,419	482	0	7,579
Nebraska	10,066	810	2,499	120	2,579	16,073
Nevada	1,922	78	1,226	133	7,758	11,117
New Hampshire	1,479	0	5,328	635	0	7,443
New Jersey	9,863	411	17,547	1,517	56,433	85,771
New Mexico	910	0	907	22	34,176	36,014
New York	291,580	0	508,596	15,585	515,774	1,331,535
North Carolina	8,044	2,973	40,028	1,687	222	52,954
North Dakota	1,182	493	2,540	92	0	4,306
Ohio	16,361	0	84,892	1,429	100,836	203,518
Oklahoma	4,976	408	5,170	490	0	11,043
Oregon	2,048	4	6,705	109	51,299	60,165
Pennsylvania	8,565	14	2,719	4,802	111,738	127,838
Rhode Island	2,939	387	9,508	180	14,901	27,916
South Carolina	3,936	5,237	5,154	666	5,432	20,426
South Dakota	779	4,161	1,302	16	0	6,257
Tennessee	2,855	0	1,175	4,539	8,909	17,477
Texas	6,689	0	6,186	1,664	14,961	29,501
Utah	2,159	3	4,652	1,042	0	7,856
Vermont	2,228	7,583	6,711	5,284	0	21,806
Virginia	3,269	650	6,088	1,265	10,422	21,695
Washington	6,894	4,241	50,785	349	104,640	166,909
West Virginia	6,482	1,025	4,528	1,790	13,032	26,857
Wisconsin	14,634	176	12,711	2,668	13,758	43,947
Wyoming	767	4	1,002	86	0	1,859
Total	**664,205**	**43,639**	**1,376,252**	**77,894**	**1,734,421**	**3,951,517**

* Expenditures for Maine were imputed because only prescribed drug claims data were available in MAX 2008 for Maine. Imputations are only available overall. SA care group estimates were not developed.

TABLE B.2. FY 2011 Non-Core SA Treatment Spending (in $ thousand)				
State	**Fetal Exposure or Poisoning**	**Other Conditions**	**MH Expenditures with Secondary SA Diagnosis**	**Non-MH Expenditures with Secondary SA Diagnosis**
Alabama	637	397	1,528	9,752
Alaska	1,050	764	7,787	3,807
Arizona	1,999	4,573	21,894	71,397
Arkansas	325	1,146	12,252	3,581
California	6,790	47,412	78,013	155,809
Colorado	2,313	5,030	48,716	62,696
Connecticut	613	2,481	43,503	43,035
Delaware	239	968	3,684	14,638
District of Columbia	421	1,993	20,697	66,679
Florida	15,658	6,382	15,841	198,955
Georgia	1,275	4,937	13,669	86,666
Hawaii	222	483	3,735	14,598
Idaho	175	776	4,108	8,936
Illinois	1,275	15,166	70,014	173,238
Indiana	1,296	3,586	34,794	51,116
Iowa	739	2,428	8,815	32,533
Kansas	548	3,568	12,105	37,841
Kentucky	6,142	848	13,594	74,532
Louisiana	493	3,439	13,951	28,853
Maine	531	1,499	27,464	20,151
Maryland	2,849	6,895	93,516	89,845
Massachusetts	5,516	8,541	35,704	127,036
Michigan	1,970	10,397	40,099	126,295
Minnesota	10,591	5,713	48,642	59,004
Mississippi	340	1,560	23,396	25,790
Missouri	358	3,957	35,988	26,617
Montana	109	1,069	4,026	7,780
Nebraska	263	1,296	6,367	17,217
Nevada	506	1,325	8,364	15,619
New Hampshire	641	445	1,760	5,894
New Jersey	3,014	5,015	59,312	77,158
New Mexico	1,015	2,293	21,889	24,272
New York	6,749	36,190	334,403	714,649
North Carolina	875	6,400	29,894	87,035
North Dakota	20	406	3,880	6,585
Ohio	3,347	15,584	52,883	195,056
Oklahoma	190	3,056	16,519	35,687
Oregon	949	3,317	32,342	35,039
Pennsylvania	3,642	15,875	74,367	209,702
Rhode Island	320	1,407	11,097	6,031
South Carolina	294	3,056	6,887	60,448
South Dakota	68	727	3,210	5,254
Tennessee	1,580	3,394	2,675	37,071
Texas	2,496	24,491	32,925	184,274
Utah	319	1,063	498	9,574
Vermont	269	311	5,590	7,918
Virginia	1,343	3,254	15,931	90,353
Washington	2,307	8,183	81,123	125,621
West Virginia	278	1,762	24,629	20,923
Wisconsin	3,258	6,461	17,405	62,276
Wyoming	17	385	4,859	4,402
Total	**98,236**	**291,703**	**1,586,344**	**3,659,241**

DEVELOPING MEDICAID ESTIMATES FOR SUBSTANCE ABUSE TREATMENT

Reports Available

Developing Medicare and Medicaid Substance Abuse Treatment Spending Estimates

HTML	http://aspe.hhs.gov/daltcp/reports/2012/MSATest.shtml
PDF	http://aspe.hhs.gov/daltcp/reports/2012/MSATest.pdf

Medicaid Substance Abuse Treatment Spending: Findings Report

Executive Summary	http://aspe.hhs.gov/daltcp/reports/2012/MSATspendes.shtml
HTML	http://aspe.hhs.gov/daltcp/reports/2012/MSATspend.shtml
PDF	http://aspe.hhs.gov/daltcp/reports/2012/MSATspend.pdf

To obtain a printed copy of this report, send the full report title and your mailing information to:

U.S. Department of Health and Human Services
Office of Disability, Aging and Long-Term Care Policy
Room 424E, H.H. Humphrey Building
200 Independence Avenue, S.W.
Washington, D.C. 20201
FAX: 202-401-7733
Email: webmaster.DALTCP@hhs.gov

NOTE: All requests must be in writing.

RETURN TO:

Office of Disability, Aging and Long-Term Care Policy (DALTCP) Home
http://aspe.hhs.gov/office_specific/daltcp.cfm

Assistant Secretary for Planning and Evaluation (ASPE) Home
http://aspe.hhs.gov

U.S. Department of Health and Human Services (HHS) Home
http://www.hhs.gov