



The LEWIN GROUP

Medicaid Capitation Expansion's Potential Cost Savings

Sponsored by:

**Association of Community Affiliated Plans
Medicaid Health Plans of America**

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ACAP

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I. Introduction

Controlling the growth of Medicaid expenditures is a policymaking priority in virtually every state and at the Federal level. Despite the implementation of a myriad of cost containment efforts (included eligibility and benefits cuts that states have reluctantly felt forced to implement), national Medicaid expenditures have risen at an average of 8.2 percent annually since 1995. While this rate of escalation is not unusually high in the health care arena, it has far outpaced states' revenue growth. Many states' revenues have been virtually flat during the past several years.

The options for slowing the growth in Medicaid costs are not particularly numerous or complex. They include:

- limiting or cutting eligibility for the Medicaid program;
- reducing the benefits that Medicaid covers;
- lowering Medicaid's payment rates to providers; and
- lowering per capita costs through cost-effective treatment and improved health status.

A recent development being considered in some states involves "consumer driven" coverage models. This typically involves offering Medicaid beneficiaries choices of reconfigured benefits options through competing health plans, and thus potentially combines the second and fourth techniques described above.

There is considerable interest in maximizing the fourth option, as this is the only opportunity to achieve savings while preserving eligibility and benefits. Further cuts to provider payment rates are of course possible, but the Medicaid program is already beset with low provider participation and access problems precisely because its provider payment rates are so low in most states. While different models of coordinated or managed care exist in the Medicaid arena, many studies have indicated that capitation contracting with Medicaid health plans achieves the most savings, provides the strongest array of outreach, education, and access initiatives, and creates the greatest opportunity to measure quality.¹

The Lewin Group (Lewin) has been engaged by the Association of Community Affiliated Plans (ACAP) and the Medicaid Health Plans of America (MHPA) to quantify the savings that can be realized through optimal adoption of the full-risk, integrated care model that involves state

¹ Four publicly available relevant studies in this area conducted by The Lewin Group include: Comparative Evaluation of Pennsylvania's HealthChoices Program, May 2005, http://www.lewin.com/Lewin_Publications/Medicaid_and_S-CHIP/ComparativeEvalPAHealthChoices.htm
Assessment of Medicaid Managed Care Expansion Options In Illinois, May 2005, http://www.lewin.com/Lewin_Publications/Medicaid_and_S-CHIP/MedicaidMCExpansionOptionsIllinois.htm
Actuarial Assessment of Medicaid Managed Care Expansion Options, January 2004, http://www.hhsc.state.tx.us/pubs/121503 MMC_CostEff_Amend.pdf,
Comparison of Medicaid Pharmacy Costs and Usage between the Fee-for-Service and Capitated Setting, Jan. 2003, http://www.chcs.org/publications3960/publications_show.htm?doc_id=213037

Medicaid agencies entering into capitation contracting with Medicaid managed care organizations (MCOs).

Lewin's process for creating these estimates involved the following major components:

- obtaining and arraying baseline Medicaid cost data from each state;
- isolating the expenditures that are highly amenable to savings through expanded use of capitation contracting;
- trending baseline data forward such that capitation savings impacts can be estimated across a ten year timeframe; and
- developing and applying a set of capitation cost savings factors that are tailored to different eligibility categories (i.e., TANF and related populations versus SSI,² the urban/rural population mix, and the degree to which a the Medicaid fee-for-service program is already adopting managed care techniques).

The remainder of this document describes this process in detail, and presents the resulting savings estimates.

² TANF is the acronym for Temporary Assistance for Needy Families, a Medicaid subgroup predominantly comprised of low-income mothers and children. SSI is the acronym for Supplemental Security Income. Non-elderly persons with SSI coverage in the Medicaid arena are low-income adults and children who are disabled.

II. Baseline Data Compilation

CMS has developed a user-friendly mechanism for arraying Medicaid data, the Medical Statistical Information System (MSIS) State Summary Datamart.³ For this engagement, Lewin primarily worked with the “FY2003 Quarterly Cube” database, since FY2003 was the most recent year for which the needed data fields were available for each state.

Table 1 presents total Medicaid costs for each state as of FY2003, from the above-mentioned MSIS data site. Table 1 also shows the amount and percentage of these expenditures that represent capitation payments, sorting the states by the percentage of FY2003 Medicaid dollars that are capitated.⁴ The right-hand columns of Table 1 provide FY1999 comparison information for each state. Several noteworthy statistics are presented in Table 1, including:

- Only 16% of national Medicaid expenditures were capitated as of FY2003. Thus, there is clearly room for Medicaid capitation contracting to increase dramatically.
- Growth in the use of capitation has been fairly modest. In FY1999, 14.4% of total Medicaid funds were paid via capitation. This figure increased as of FY2003, but only to 16.0%.
- Arizona (85%) is the only state “capitating” more than half its Medicaid expenditures; five other states capitated more than 30 percent of expenditures in FY2003 -- Pennsylvania (46%), Michigan (45%), New Mexico (44.0%), Oregon (39%) and Hawaii (36%).
- Half of the states capitate less than 12% of their Medicaid spending. These relatively low level adopters of capitation are by no means limited to the smaller, most rural states. Seven of the nation’s ten largest Medicaid programs, for example (FL, IL, MA, NC, NY, OH, and TX), rank 25th or lower in the degree of their Medicaid spending that is capitated.

Table 2 summarizes the percentage of dollars capitated for the TANF and SSI populations, respectively. This table excludes dual eligibles, those persons who are eligible for both Medicare and Medicaid. The dual eligible population accounts for approximately half of national Medicaid spending and is probably the most challenging subgroup to include in a capitated model. Key findings from Table 2 include:

- Once dual eligibles are removed, the portion of Medicaid dollars paid via capitation in FY2003 rises to 25% (versus 16% for all Medicaid spending including dual eligibles).
- Capitation is most common for the TANF population subgroups, as 36% of Medicaid spending in this subgroup is paid via capitation.
- Conversely, for SSI eligibles (even after excluding dual eligibles), only 14% of Medicaid spending was capitated in FY2003. This statistic is above 10% for SSI in only 18 states; in most large states, less than 10% of SSI non dual eligibles’ expenditures are capitated.

³ The website link to the data tables is: <http://msis.cms.hhs.gov>

⁴ Non-claims based Medicaid dollars are not included in the MSIS tables and thus are excluded from this study as well. Most significantly, the MSIS data files exclude disproportionate share payments, medical education payments, and intergovernmental transfer payments to hospitals that occur outside the claims process. Prescription drug rebates are also not captured in the baseline data.

Table 1. Medicaid Expenditures by State, FY2003 and FY1999 (page 1 of 2)

State	FISCAL YEAR 2003				FISCAL YEAR 1999		
	Total Paid Amount	Capitation Paid	Percent of Dollars Capitated	Rank By Percent of Dollars Capitated	Total Paid Amount	Capitation Paid	Percent of Dollars Capitated
Arizona	\$3,285,364,385	\$2,778,324,747	84.6%	1	\$1,877,596,603	\$1,531,576,481	81.6%
Pennsylvania	\$9,450,026,724	\$4,333,424,804	45.9%	2	\$6,133,018,019	\$2,103,198,015	34.3%
Michigan	\$6,479,029,763	\$2,904,244,816	44.8%	3	\$4,700,675,939	\$1,091,484,657	23.2%
New Mexico	\$2,033,470,195	\$894,868,688	44.0%	4	\$1,123,377,560	\$521,145,600	46.4%
Oregon	\$2,115,608,505	\$831,188,693	39.3%	5	\$1,610,784,460	\$768,466,061	47.7%
Hawaii	\$753,463,428	\$268,696,757	35.7%	6	\$536,432,156	\$234,819,885	43.8%
Maryland	\$4,398,301,341	\$1,307,524,976	29.7%	7	\$2,794,393,435	\$842,493,067	30.1%
Delaware	\$750,252,370	\$216,486,577	28.9%	8	\$462,393,250	\$148,705,511	32.2%
Minnesota	\$4,701,612,364	\$1,160,767,487	24.7%	9	\$3,038,407,690	\$612,653,698	20.2%
Virginia	\$3,180,990,089	\$704,444,392	22.1%	10	\$2,212,643,671	\$216,313,799	9.8%
Wisconsin	\$3,921,363,613	\$848,960,196	21.6%	11	\$2,245,816,439	\$328,699,863	14.6%
District of Columbia	\$1,199,837,436	\$257,396,461	21.5%	12	\$758,834,650	\$138,955,663	18.3%
California	\$25,812,495,569	\$5,447,299,449	21.1%	13	\$15,780,443,913	\$3,509,058,459	22.2%
Utah	\$1,200,789,487	\$248,711,171	20.7%	14	\$799,806,239	\$62,364,942	7.8%
New Jersey	\$6,029,601,253	\$1,187,436,276	19.7%	15	\$4,387,406,509	\$622,130,171	14.2%
Connecticut	\$3,359,497,127	\$618,636,112	18.4%	16	\$2,671,204,140	\$393,978,945	14.7%
Alabama	\$3,471,319,724	\$628,510,702	18.1%	17	\$1,695,032,495	\$0	0.0%
Oklahoma	\$2,128,524,455	\$384,131,235	18.0%	18	\$1,433,715,169	\$125,719,800	8.8%
Colorado	\$2,268,794,322	\$409,342,921	18.0%	19	\$1,640,946,271	\$299,357,464	18.2%
Rhode Island	\$1,338,212,632	\$211,025,831	15.8%	20	\$881,475,373	\$112,925,197	12.8%
Missouri	\$4,406,852,103	\$683,889,202	15.5%	21	\$2,801,854,313	\$285,936,120	10.2%
Nevada	\$881,323,024	\$135,385,506	15.4%	22	\$458,836,685	\$58,826,348	12.8%
Washington	\$4,524,032,645	\$680,763,945	15.0%	23	\$2,575,524,385	\$581,237,439	22.6%
Kentucky	\$3,557,820,183	\$439,584,361	12.4%	24	\$2,598,408,726	\$448,643,128	17.3%
New York	\$35,206,760,472	\$4,177,113,409	11.9%	25	\$19,709,130,540	\$834,168,101	4.2%
Florida	\$11,104,376,050	\$1,246,828,073	11.2%	26	\$6,047,280,067	\$721,166,169	11.9%

Table 1. Medicaid Expenditures by State, FY2003 and FY1999 (page 2 of 2)

State	FISCAL YEAR 2003				FISCAL YEAR 1999		
	Total Paid Amount	Capitation Paid	Percent of Dollars Capitated	Rank By Percent of Dollars Capitated	Total Paid Amount	Capitation Paid	Percent of Dollars Capitated
Texas	\$12,524,526,333	\$1,295,382,939	10.3%	27	\$8,125,825,818	\$615,598,443	7.6%
Indiana	\$3,950,802,203	\$399,171,211	10.1%	28	\$2,749,567,218	\$143,548,909	5.2%
Massachusetts	\$6,391,977,781	\$644,991,869	10.1%	29	\$4,964,336,416	\$546,115,008	11.0%
Tennessee	\$5,459,293,763	\$531,739,476	9.7%	30	\$3,285,322,973	\$2,274,525,750	69.2%
Iowa	\$1,996,207,221	\$188,938,548	9.5%	31	\$1,364,392,000	\$127,445,624	9.3%
Ohio	\$10,235,239,405	\$773,547,905	7.6%	32	\$6,329,289,738	\$367,474,244	5.8%
Kansas	\$1,614,744,381	\$110,835,408	6.9%	33	\$1,095,942,670	\$22,842,202	2.1%
Nebraska	\$1,282,568,106	\$60,761,432	4.7%	34	\$876,028,776	\$86,985,981	9.9%
West Virginia	\$1,829,967,627	\$71,717,596	3.9%	35	\$1,344,198,009	\$0	0.0%
New Hampshire	\$786,014,720	\$16,910,999	2.2%	36	\$527,048,146	\$8,108,505	1.5%
South Carolina	\$3,641,714,949	\$78,023,312	2.1%	37	\$2,551,062,393	\$18,900,551	0.7%
Illinois	\$9,391,357,857	\$196,110,074	2.1%	38	\$6,327,012,706	\$201,095,275	3.2%
South Dakota	\$541,910,489	\$7,178,545	1.3%	39	\$369,468,750	\$843,350	0.2%
North Dakota	\$444,803,367	\$4,647,039	1.0%	40	\$346,449,063	\$1,171,073	0.3%
North Carolina	\$6,521,288,060	\$20,466,589	0.3%	41	\$4,285,938,027	\$45,969,779	1.1%
Alaska	\$835,515,131	\$0	0.0%	42	\$397,769,879	\$0	0.0%
Arkansas	\$2,211,952,987	\$0	0.0%	42	\$1,365,423,117	\$0	0.0%
Georgia	\$5,357,550,658	\$0	0.0%	42	\$3,247,985,709	\$29,811,897	0.9%
Idaho	\$867,160,476	\$0	0.0%	42	\$520,559,197	\$0	0.0%
Louisiana	\$3,614,909,979	\$0	0.0%	42	\$2,534,164,208	\$0	0.0%
Maine	\$2,074,246,677	\$0	0.0%	42	\$1,208,902,412	\$4,934,018	0.4%
Montana	\$536,372,686	\$0	0.0%	42	\$358,898,426	\$33,134,350	9.2%
Vermont	\$641,738,944	\$0	0.0%	42	\$422,442,103	\$76,325,711	18.1%
Wyoming	\$324,630,777	\$0	0.0%	42	\$198,733,463	\$0	0.0%
Mississippi	\$2,569,776,154	\$0	0.0%	42	\$1,600,445,609	\$26,632,297	1.7%
USA TOTAL	\$233,205,989,990	\$37,405,402,095	16.0%		\$147,372,645,523	\$21,225,487,550	14.4%

Source: Lewin tabulations using MSIS data. Source data are available on CMS website: <http://msis.cms.hhs.gov>.
 Figures include both State and Federal share of costs.

Table 2. Percentage of FY2003 Medicaid Spending Paid Via Capitation (page 1 of 2)

State	Total Paid Amount	Capitation Paid	Percent of Dollars Capitated	Percent of TANF Dollars Capitated	Percent of SSI Dollars Capitated	Rank by Total Percent Capitated, FY03	Rank by TANF Percent Capitated, FY03	Rank by SSI Percent Capitated, FY03
Arizona	\$3,285,364,385	\$2,778,324,747	84.6%	80.6%	87.7%	1	3	1
Pennsylvania	\$9,450,026,724	\$4,333,424,804	45.9%	76.6%	65.1%	2	5	3
Michigan	\$6,479,029,763	\$2,904,244,816	44.8%	62.0%	70.8%	3	11	2
New Mexico	\$2,033,470,195	\$894,868,688	44.0%	78.9%	49.2%	4	4	4
Oregon	\$2,115,608,505	\$831,188,693	39.3%	54.4%	44.1%	5	15	5
Hawaii	\$753,463,428	\$268,696,757	35.7%	89.6%	3.6%	6	1	25
Maryland	\$4,398,301,341	\$1,307,524,976	29.7%	63.0%	35.7%	7	8	6
Delaware	\$750,252,370	\$216,486,577	28.9%	55.9%	30.6%	8	14	8
Minnesota	\$4,701,612,364	\$1,160,767,487	24.7%	69.9%	1.4%	9	6	27
Virginia	\$3,180,990,089	\$704,444,392	22.1%	52.0%	32.0%	10	16	7
Wisconsin	\$3,921,363,613	\$848,960,196	21.6%	65.6%	7.3%	11	7	21
District of Columbia	\$1,199,837,436	\$257,396,461	21.5%	61.3%	10.8%	12	12	18
California	\$25,812,495,569	\$5,447,299,449	21.1%	46.7%	8.4%	13	19	19
Utah	\$1,200,789,487	\$248,711,171	20.7%	23.9%	16.2%	14	30	12
New Jersey	\$6,029,601,253	\$1,187,436,276	19.7%	62.9%	19.2%	15	9	11
Connecticut	\$3,359,497,127	\$618,636,112	18.4%	82.9%	0.2%	16	2	34
Alabama	\$3,471,319,724	\$628,510,702	18.1%	28.1%	10.9%	17	27	17
Oklahoma	\$2,128,524,455	\$384,131,235	18.0%	39.0%	21.5%	18	20	10
Colorado	\$2,268,794,322	\$409,342,921	18.0%	29.9%	23.5%	19	25	9
Rhode Island	\$1,338,212,632	\$211,025,831	15.8%	62.9%	0.9%	20	10	29
Missouri	\$4,406,852,103	\$683,889,202	15.5%	47.7%	0.3%	21	17	32
Nevada	\$881,323,024	\$135,385,506	15.4%	47.1%	0.4%	22	18	31
Washington	\$4,524,032,645	\$680,763,945	15.0%	58.3%	-0.1%	23	13	38
Kentucky	\$3,557,820,183	\$439,584,361	12.4%	21.9%	13.7%	24	32	13
New York	\$35,206,760,472	\$4,177,113,409	11.9%	37.0%	5.3%	25	21	24
Florida	\$11,104,376,050	\$1,246,828,073	11.2%	26.9%	12.4%	26	29	14

Table 2. Percentage of FY2003 Medicaid Spending Paid Via Capitation (page 2 of 2)

State	Total Paid Amount	Capitation Paid	Percent of Dollars Capitated	Percent of TANF Dollars Capitated	Percent of SSI Dollars Capitated	Rank by Total Percent Capitated, FY03	Rank by TANF Percent Capitated, FY03	Rank by SSI Percent Capitated, FY03
Texas	\$12,524,526,333	\$1,295,382,939	10.3%	23.1%	6.5%	27	31	23
Indiana	\$3,950,802,203	\$399,171,211	10.1%	33.1%	1.3%	28	23	28
Massachusetts	\$6,391,977,781	\$644,991,869	10.1%	27.3%	12.3%	29	28	15
Tennessee	\$5,459,293,763	\$531,739,476	9.7%	14.2%	11.7%	30	33	16
Iowa	\$1,996,207,221	\$188,938,548	9.5%	31.2%	7.3%	31	24	22
Ohio	\$10,235,239,405	\$773,547,905	7.6%	33.1%	0.2%	32	22	33
Kansas	\$1,614,744,381	\$110,835,408	6.9%	29.0%	0.1%	33	26	37
Nebraska	\$1,282,568,106	\$60,761,432	4.7%	11.1%	7.9%	34	35	20
West Virginia	\$1,829,967,627	\$71,717,596	3.9%	12.9%	0.1%	35	34	36
New Hampshire	\$786,014,720	\$16,910,999	2.2%	7.8%	0.0%	36	37	38
South Carolina	\$3,641,714,949	\$78,023,312	2.1%	4.7%	2.1%	37	38	26
Illinois	\$9,391,357,857	\$196,110,074	2.1%	8.4%	0.0%	38	36	38
South Dakota	\$541,910,489	\$7,178,545	1.3%	3.6%	0.4%	39	39	30
North Dakota	\$444,803,367	\$4,647,039	1.0%	1.3%	0.0%	40	40	38
North Carolina	\$6,521,288,060	\$20,466,589	0.3%	0.9%	0.2%	41	41	35
Alaska	\$835,515,131	\$0	0.0%	0.0%	0.0%	42	42	38
Arkansas	\$2,211,952,987	\$0	0.0%	0.0%	0.0%	42	42	38
Georgia	\$5,357,550,658	\$0	0.0%	0.0%	0.0%	42	42	38
Idaho	\$867,160,476	\$0	0.0%	0.0%	0.0%	42	42	38
Louisiana	\$3,614,909,979	\$0	0.0%	0.0%	0.0%	42	42	38
Maine	\$2,074,246,677	\$0	0.0%	0.0%	0.0%	42	42	38
Montana	\$536,372,686	\$0	0.0%	0.0%	0.0%	42	42	38
Vermont	\$641,738,944	\$0	0.0%	0.0%	0.0%	42	42	38
Wyoming	\$324,630,777	\$0	0.0%	0.0%	0.0%	42	42	38
Mississippi	\$2,569,776,154	\$0	0.0%	0.0%	0.0%	42	42	38
USA TOTAL	\$233,205,989,990	\$37,405,402,095	16.0%	36.4%	13.9%			

Note: Spending on dual eligibles is included in the totals, but is removed from the TANF-specific and SSI-specific columns.

Source: Lewin tabulations using MSIS data. Source data are available on CMS website: <http://msis.cms.hhs.gov>.

III. Defining Baseline Expenditures For Managed Care Savings

Potential savings from the capitated model have been derived separately for the TANF and SSI populations. The specific MSIS data definitions used to define these populations are derived from the Basis of Eligibility (BOE) field in the MSIS State Summary DataMart database. Table 3 indicates how the populations were categorized.

Table 3. Categorization of Medicaid Subgroups (for purposes of this study)

Population Groups Categorized As TANF	Population Groups Categorized As SSI	Population Groups Excluded in This Study
<ul style="list-style-type: none"> • Children • Adults • Foster Children • Unemployed Adults • Children of Unemployed Parents 	<ul style="list-style-type: none"> • Blind and Disabled 	<ul style="list-style-type: none"> • Aged • Unknown • Breast and Cervical Cancer Act (BCCA) Women

Persons simultaneously enrolled in both the Medicare and Medicaid program are commonly referred to as “dual eligibles.” As the Medicare and Medicaid programs are currently configured, this subgroup is not ideally suited for the capitated model from the perspective of a Medicaid MCO. Medicare coverage is primary, thus a Medicaid MCO (as the secondary payer) is not able to enforce its primary care case management, limited network, prior authorization, and other care management features. The savings that occur through improved care coordination therefore primarily accrue to the Medicare program.

If serving a dual eligible, the Medicaid MCO typically receives a relatively small capitation rate depicting the “wrap-around” services that Medicare does not cover. One of the highest-cost and most manageable components of this wrap-around coverage, prescription drugs, has now become a Medicare-covered benefit (beginning in January 2006), further dampening the viability of Medicaid MCOs to serve dual eligibles.^{5,6}

Therefore, in addition to excluding the expenditures on the aged population (since Medicare is the primary payer for this subgroup), **all Medicare/Medicaid dual eligibles have been removed.** This exclusion significantly affects the blind/disabled subgroup, as nearly half (44%) of Medicaid spending within this subgroup is for dual eligibles.

⁵ One of the few states that has included dual eligibles in its capitated Medicaid program, Pennsylvania, is discontinuing the enrollment of dual eligibles in 2006 as a result of the implementation of Medicare Part D.

⁶ An opportunity now exists for Medicaid MCOs to develop a Medicare Special Needs Plan line of business, through which dual eligibles can be exclusively targeted and enrolled. This creates greater potential for states, CMS and MCOs to work together to foster a coordinated care setting for “the whole person” with regard to dual eligibles.

Capitation Payments: Payments already occurring on a capitated basis are removed from the base of funds from which expansion of the MCO model can create additional savings. Note that this adjustment involves only capitation funds. Fee-for-service carve-out funds (for persons enrolled in capitated programs) remain in the baseline of funds that could be favorably impacted by expanded use of capitation.

Retrospective Eligibility: When an uninsured person obtains health care services (particularly hospital-based care), efforts are often made to discern whether the patient is eligible for Medicaid. If the patient does seem eligible, further efforts are made to help the patient or patient’s family apply for Medicaid. When the Medicaid agency approves the application, Medicaid coverage is awarded retrospectively for up to three months to pay for health care services that were recently rendered. Clearly, such retrospective eligibility periods are not manageable for MCOs and are not typically included in capitation arrangements. For the TANF population, we have estimated that retrospective eligibility periods account for 15% percent of the Medicaid costs derived after removing dual eligibles spending.⁷ For the SSI population, where eligibility is more stable and long-lasting, we have removed only 5% of Medicaid costs (after removing spending on dual eligibles).⁸

Long Term Care: Long term care expenses pose a variety of challenges to the capitated model, and these costs were removed from the pool of funds deemed “highly amenable” to savings.⁹ The removal of dual eligibles eliminates most long-term care spending. However, there were sufficient remaining nursing home dollars in the base MSIS claims that a specific adjustment was also made to isolate nursing home and intermediate care facility mental retardation (ICF-MR) expenditures and remove these costs.

Special Payment Arrangements: Many states have implemented measures to maximize Federal matching funds that are tied to the fee-for-service payment structure. Most often, these arrangements involve special payment mechanisms for hospitals. It is often argued that capitated Medicaid managed care savings *for a state* will be reduced or eliminated to the extent the special arrangements will not be preserved under a capitated model. Because these arrangements vary in size and structure (and are not readily visible in the base data), and because a wide range of possibilities exists for Federal and state governments to preserve the special Federal match advantage while transitioning persons into a capitated model, we have not made any specific adjustments to the baseline in relation to this issue.

Summary: The funds most amenable to savings from full use of the capitated model are summarized in Table 4, which isolates the TANF and SSI components. Table 4 also presents the total across both subgroups.

⁷ In one state in which Lewin sets capitation rates, we were able to isolate and remove retrospective eligibility for the TANF population, 17% of total claims costs were found to occur during retrospective coverage periods.

⁸ No data were readily available upon which to make this estimate, but we deem the 5% figure to be a reasonable assumption.

⁹ One such problem is that approximately half of Medicaid nursing home residents were institutionalized before or concurrent to obtaining Medicaid eligibility, leaving no opportunity for a managed care program to divert the admission. Notwithstanding such challenges, when given the opportunity the Medicaid MCO industry has had some success in lowering the rate of institutionalization when long-term care beneficiaries are included. Arizona, for example, has included dual eligibles and long-term care services in its capitated initiative.

Table 4. Summary Of FY2003 Baseline Cost Derivation
(All figures in \$ billions and include both Federal and State share.)

	TANF	SSI Non-Dual Eligibles	TANF & SSI
Total Spending	\$66.4	\$102.0	\$168.4
Less Dual Eligibles Spending	\$6.3	\$45.1	\$51.4
Subtotal, Non-Duals Spending	\$60.1	\$56.9	\$117.0
Less Existing Capitation	\$21.9	\$7.9	\$29.8
Less Estimated Retrospective Eligibility	\$9.0	\$2.8	\$11.8
Less Remaining Long Term Care	\$0.1	\$7.3	\$7.4
Remaining Medicaid Expenditures Amenable To Savings Via Capitation	\$29.1	\$38.8	\$67.9

Upon completion of these adjustments, at the national level, \$68 billion of additional FY2003 spending (29% of total national FY2003 Medicaid spending) is categorized as being highly amenable to savings from expansion of the capitated model. Excluded from this figure is the more than \$30 billion of capitation payments that already occurred in FY2003.

Another way to view these figures is that as of FY2003 the capitated MCO model was applied toward only approximately 30% of the Medicaid funds that this model is clearly well-positioned to impact. Enormous room for expansion of the MCO model exists, both in serving additional populations (e.g., SSI recipients throughout many states, TANF recipients in additional counties, etc.) and in some instances by making the capitated benefits package more comprehensive (e.g., discontinuing carve-outs of pharmacy, mental health, etc.).

Of the \$67 billion in funds identified as being highly amenable to capitation, \$39 billion (or 57%) involves the non-dual eligible SSI population. As documented earlier in Table 2, this SSI subgroup has often been excluded from capitated Medicaid initiatives (or included on a much smaller scale). However, the characteristics of the SSI population appear to be more conducive to use of the capitated model than the characteristics of the TANF population, as shown in Table 5. The SSI Medicaid-Only subgroup has stable eligibility, a high prevalence of chronic illnesses, and high PMPM costs, particularly in service categories (e.g., inpatient hospital, outpatient hospital and pharmacy) that the capitated model can strongly influence. This situation, where capitation is least-used for the subgroup that it seems best-suited to serve, reinforces the opportunity for greatly expanded use of MCOs.

More detailed TANF baseline figures are presented in Table 6, and corresponding SSI figures are shown in Table 7. All figures in both Tables 6 and 7 remove spending on dual eligibles.

Table 5. Comparison of Medicaid Population Subgroups' Characteristics With Regard to Capitation Contracting

Key:	●	◐	○
Characteristic is	Strongly Met	Partially Met	Usually Not Met

Population Characteristics that Enhance Effectiveness of Capitation Model	TANF	SSI (Medicaid-Only)	SSI (Dual Eligibles)*
Sufficient Number of Persons to Support Choice-Based Model	●	◐	◐
Large Revenue Stream to Provide Administrative Scale Economies	●	●	○
Stable & Long-Lasting Medicaid Eligibility	○	●	●
High PMPM Medicaid Costs in Service Categories that MCOs Can Impact	○	●	○
High Prevalence of Chronic Conditions	○	●	●
Enrollee Outreach and Education Investments Likely to Pass Cost/Benefits Test	◐	●	○
Medicaid Typically Primary and Only Payer	●	●	○
Subgroup Can Be Included in a Mandatory MCO Program Without Political Resistance	◐	○	○

* Ratings for SSI dual eligibles apply to a Medicaid MCO serving this population without also serving these persons through a Medicare Advantage contract with CMS. Dual eligibles are a much better fit for capitation when enrolled in a Medicare health plan, since Medicare is the primary payor and thus network requirements and other managed care model features can be fully utilized.

Table 6. TANF Baseline Expenditure Calculations, FY2003 (page 1 of 2)

State	Total Paid Amount, FY03	Capitation Paid Amt, FY03	Percent Of Dollars Capitated	Fee-For-Service Spending, FY03	Adjustment To Remove Retrospective Eligibility Periods (15% of total)	Remaining Nursing Home and ICF/MR Costs	Fee-For-Service Spending Deemed Highly Amenable To Capitation
Alabama	\$795,892,220	\$223,629,317	28.1%	\$572,262,903	\$119,383,833	\$15,530	\$452,863,540
Alaska	\$349,582,697	\$0	0.0%	\$349,582,697	\$52,437,405	\$28,347	\$297,116,945
Arizona	\$1,390,858,201	\$1,121,036,148	80.6%	\$269,822,053	\$208,628,730	\$71,457	\$0
Arkansas	\$553,871,421	\$0	0.0%	\$553,871,421	\$83,080,713	\$75,768	\$470,714,940
California	\$7,405,575,294	\$3,457,561,077	46.7%	\$3,948,014,217	\$1,110,836,294	\$10,358,015	\$2,826,819,908
Colorado	\$606,380,968	\$181,498,009	29.9%	\$424,882,959	\$90,957,145	\$29,747	\$333,896,067
Connecticut	\$710,230,401	\$588,446,327	82.9%	\$121,784,074	\$106,534,560	\$7,436,995	\$7,812,519
Delaware	\$258,880,170	\$144,761,723	55.9%	\$114,118,447	\$38,832,026	\$115,675	\$75,170,747
District of Columbia	\$322,015,148	\$197,418,362	61.3%	\$124,596,786	\$48,302,272	\$910,704	\$75,383,810
Florida	\$2,429,742,964	\$653,937,452	26.9%	\$1,775,805,512	\$364,461,445	\$706,293	\$1,410,637,774
Georgia	\$1,703,391,908	\$0	0.0%	\$1,703,391,908	\$255,508,786	\$2,320	\$1,447,880,802
Hawaii	\$276,033,523	\$247,407,887	89.6%	\$28,625,636	\$41,405,028	\$245,069	\$0
Idaho	\$224,282,064	\$0	0.0%	\$224,282,064	\$33,642,310	\$46,000	\$190,593,754
Illinois	\$2,194,363,383	\$185,042,021	8.4%	\$2,009,321,362	\$329,154,507	\$920,766	\$1,679,246,089
Indiana	\$1,070,273,989	\$354,358,304	33.1%	\$715,915,685	\$160,541,098	\$5,694,156	\$549,680,431
Iowa	\$427,816,626	\$133,547,954	31.2%	\$294,268,672	\$64,172,494	\$271,930	\$229,824,248
Kansas	\$336,144,439	\$97,560,063	29.0%	\$238,584,376	\$50,421,666	\$671,583	\$187,491,127
Kentucky	\$916,486,835	\$201,053,149	21.9%	\$715,433,686	\$137,473,025	\$116,380	\$577,844,281
Louisiana	\$790,739,152	\$0	0.0%	\$790,739,152	\$118,610,873	\$80,442	\$672,047,837
Maine	\$721,476,889	\$0	0.0%	\$721,476,889	\$108,221,533	\$286,002	\$612,969,354
Maryland	\$1,201,426,203	\$757,382,632	63.0%	\$444,043,571	\$180,213,930	\$2,468,663	\$261,360,978
Massachusetts	\$1,145,247,758	\$312,371,903	27.3%	\$832,875,855	\$171,787,164	\$4,858,725	\$656,229,966
Michigan	\$1,378,517,480	\$855,328,105	62.0%	\$523,189,375	\$206,777,622	\$260,974	\$316,150,779
Minnesota	\$1,138,283,676	\$795,659,658	69.9%	\$342,624,018	\$170,742,551	\$5,079,285	\$166,802,182
Mississippi	\$607,250,760	\$0	0.0%	\$607,250,760	\$91,087,614	\$462,542	\$515,700,604
Missouri	\$1,391,137,440	\$663,004,526	47.7%	\$728,132,914	\$208,670,616	\$311,126	\$519,151,172

Table 6. TANF Baseline Expenditure Calculations, FY2003 (page 2 of 2)

State	Total Paid Amount, FY03	Capitation Paid Amt, FY03	Percent Of Dollars Capitated	Fee-For-Service Spending, FY03	Adjustment To Remove Retrospective Eligibility Periods (15% of total)	Remaining Nursing Home and ICF/MR Costs	Fee-For-Service Spending Deemed Highly Amenable To Capitation
Montana	\$147,915,793	\$0	0.0%	\$147,915,793	\$22,187,369	\$830,941	\$124,897,483
Nebraska	\$367,535,546	\$40,702,626	11.1%	\$326,832,920	\$55,130,332	\$512,728	\$271,189,860
Nevada	\$261,662,437	\$123,165,817	47.1%	\$138,496,620	\$39,249,366	\$101,192	\$99,146,062
New Hampshire	\$210,747,690	\$16,543,435	7.8%	\$194,204,255	\$31,612,154	\$1,896,582	\$160,695,520
New Jersey	\$1,181,893,175	\$743,889,611	62.9%	\$438,003,564	\$177,283,976	\$278,236	\$260,441,352
New Mexico	\$780,829,358	\$615,807,478	78.9%	\$165,021,880	\$117,124,404	\$9,801	\$47,887,675
New York	\$7,915,194,981	\$2,930,541,311	37.0%	\$4,984,653,670	\$1,187,279,247	\$21,420,415	\$3,775,954,008
North Carolina	\$1,715,470,847	\$16,082,481	0.9%	\$1,699,388,366	\$257,320,627	\$1,681,794	\$1,440,385,945
North Dakota	\$83,155,485	\$1,111,669	1.3%	\$82,043,816	\$12,473,323	\$1,741,836	\$67,828,657
Ohio	\$2,277,982,359	\$754,352,267	33.1%	\$1,523,630,092	\$341,697,354	\$706,657	\$1,181,226,081
Oklahoma	\$633,306,855	\$247,179,048	39.0%	\$386,127,807	\$94,996,028	\$215,976	\$290,915,803
Oregon	\$732,144,087	\$398,274,504	54.4%	\$333,869,583	\$109,821,613	\$596,432	\$223,451,538
Pennsylvania	\$2,146,942,921	\$1,644,540,726	76.6%	\$502,402,195	\$322,041,438	\$380,519	\$179,980,238
Rhode Island	\$311,777,680	\$196,124,325	62.9%	\$115,653,355	\$46,766,652	\$365	\$68,886,338
South Carolina	\$1,007,980,346	\$47,403,541	4.7%	\$960,576,805	\$151,197,052	\$28,007	\$809,351,746
South Dakota	\$149,873,390	\$5,413,618	3.6%	\$144,459,772	\$22,481,009	\$14,360	\$121,964,404
Tennessee	\$1,983,232,992	\$281,466,179	14.2%	\$1,701,766,813	\$297,484,949	\$217,418	\$1,404,064,446
Texas	\$4,193,653,920	\$969,446,521	23.1%	\$3,224,207,399	\$629,048,088	\$248,507	\$2,594,910,804
Utah	\$317,825,480	\$76,000,505	23.9%	\$241,824,975	\$47,673,822	\$558,423	\$193,592,730
Vermont	\$219,043,780	\$0	0.0%	\$219,043,780	\$32,856,567	\$11,730	\$186,175,483
Virginia	\$736,171,864	\$383,167,967	52.0%	\$353,003,897	\$110,425,780	\$2,749,859	\$239,828,258
Washington	\$1,116,381,510	\$651,194,062	58.3%	\$465,187,448	\$167,457,227	\$219,875	\$297,510,347
West Virginia	\$369,168,643	\$47,449,539	12.9%	\$321,719,104	\$55,375,296	\$20,187	\$266,323,621
Wisconsin	\$830,598,206	\$545,035,772	65.6%	\$285,562,434	\$124,589,731	\$242,179	\$160,730,524
Wyoming	\$98,409,707	\$0	0.0%	\$98,409,707	\$14,761,456	\$3,957	\$83,644,294
USA TOTAL	\$60,134,800,661	\$21,905,897,619	36.4%	\$38,228,903,042	\$9,020,220,099	\$76,212,470	\$29,084,373,068

Source: Lewin tabulations using MSIS data. Source data are available on CMS website: <http://msis.cms.hhs.gov>.

Table 7. SSI Baseline Expenditure Calculations, FY2004 (page 1 of 2)

State	Total Paid Amount, FY03 (excluding spending on dual eligibles)	Capitation Paid Amt, FY03	Percent Of Dollars Capitated	Fee-For-Service Spending, FY03	Adjustment To Remove Retrospective Eligibility Periods (5% of total)	Remaining Nursing Home and ICF/MR Costs	Fee-For-Service Spending Deemed Highly Amenable To Capitation
Alabama	\$621,389,019	\$67,792,806	10.9%	\$553,596,213	\$31,069,451	\$53,923,789	\$468,602,973
Alaska	\$183,667,661	\$0	0.0%	\$183,667,661	\$9,183,383	\$7,233,392	\$167,250,886
Arizona	\$823,966,774	\$722,256,527	87.7%	\$101,710,247	\$41,198,339	\$5,264,110	\$0
Arkansas	\$582,030,929	\$0	0.0%	\$582,030,929	\$29,101,546	\$78,249,668	\$474,679,715
California	\$6,554,525,061	\$549,251,044	8.4%	\$6,005,274,017	\$327,726,253	\$706,453,289	\$4,971,094,475
Colorado	\$530,990,548	\$124,804,076	23.5%	\$406,186,472	\$26,549,527	\$37,717,374	\$341,919,571
Connecticut	\$500,210,067	\$879,224	0.2%	\$499,330,843	\$25,010,503	\$97,196,879	\$377,123,461
Delaware	\$170,114,342	\$52,044,989	30.6%	\$118,069,353	\$8,505,717	\$19,412,783	\$90,150,853
District of Columbia	\$375,352,209	\$40,435,829	10.8%	\$334,916,380	\$18,767,610	\$74,504,684	\$241,644,086
Florida	\$2,864,644,857	\$354,221,119	12.4%	\$2,510,423,738	\$143,232,243	\$283,651,174	\$2,083,540,321
Georgia	\$1,239,176,850	\$0	0.0%	\$1,239,176,850	\$61,958,843	\$95,269,833	\$1,081,948,175
Hawaii	\$134,845,097	\$4,872,505	3.6%	\$129,972,592	\$6,742,255	\$17,595,359	\$105,634,978
Idaho	\$254,820,038	\$0	0.0%	\$254,820,038	\$12,741,002	\$36,322,925	\$205,756,111
Illinois	\$2,112,858,746	\$331,944	0.0%	\$2,112,526,802	\$105,642,937	\$424,438,557	\$1,582,445,308
Indiana	\$883,515,467	\$11,886,962	1.3%	\$871,628,505	\$44,175,773	\$145,014,646	\$682,438,086
Iowa	\$422,759,152	\$30,775,507	7.3%	\$391,983,645	\$21,137,958	\$67,718,952	\$303,126,735
Kansas	\$351,063,345	\$437,111	0.1%	\$350,626,234	\$17,553,167	\$29,111,675	\$303,961,392
Kentucky	\$1,100,533,636	\$150,797,130	13.7%	\$949,736,506	\$55,026,682	\$87,667,231	\$807,042,593
Louisiana	\$1,103,971,479	\$0	0.0%	\$1,103,971,479	\$55,198,574	\$223,503,975	\$825,268,930
Maine	\$518,845,646	\$0	0.0%	\$518,845,646	\$25,942,282	\$19,911,840	\$472,991,524
Maryland	\$1,328,819,898	\$474,945,049	35.7%	\$853,874,849	\$66,440,995	\$93,327,114	\$694,106,740
Massachusetts	\$1,513,457,994	\$186,705,138	12.3%	\$1,326,752,856	\$75,672,900	\$176,049,676	\$1,075,030,280
Michigan	\$1,777,399,613	\$1,258,040,845	70.8%	\$519,358,768	\$88,869,981	\$68,088,688	\$362,400,099
Minnesota	\$1,031,084,906	\$14,214,715	1.4%	\$1,016,870,191	\$51,554,245	\$87,192,925	\$878,123,021
Mississippi	\$642,124,710	\$0	0.0%	\$642,124,710	\$32,106,236	\$113,004,160	\$497,014,315
Missouri	\$902,377,446	\$2,289,363	0.3%	\$900,088,083	\$45,118,872	\$79,266,438	\$775,702,773
Montana	\$112,463,915	\$0	0.0%	\$112,463,915	\$5,623,196	\$9,647,545	\$97,193,174

Table 7. SSI Baseline Expenditure Calculations, FY2004 (page 2 of 2)

State	Total Paid Amount, FY03 (excluding spending on dual eligibles)	Capitation Paid Amt, FY03	Percent Of Dollars Capitated	Fee-For-Service Spending, FY03	Adjustment To Remove Retrospective Eligibility Periods (5% of total)	Remaining Nursing Home and ICF/MR Costs	Fee-For-Service Spending Deemed Highly Amenable To Capitation
Nebraska	\$197,971,442	\$15,597,870	7.9%	\$182,373,572	\$9,898,572	\$30,429,494	\$142,045,506
Nevada	\$242,265,200	\$1,070,162	0.4%	\$241,195,038	\$12,113,260	\$28,236,499	\$200,845,279
New Hampshire	\$114,409,224	\$26,652	0.0%	\$114,382,572	\$5,720,461	\$5,721,705	\$102,940,406
New Jersey	\$1,509,034,920	\$289,922,977	19.2%	\$1,219,111,943	\$75,451,746	\$246,478,446	\$897,181,751
New Mexico	\$471,145,131	\$231,980,754	49.2%	\$239,164,377	\$23,557,257	\$23,885,031	\$191,722,089
New York	\$8,905,839,152	\$468,399,928	5.3%	\$8,437,439,224	\$445,291,958	\$1,812,475,319	\$6,179,671,947
North Carolina	\$1,714,765,826	\$2,574,108	0.2%	\$1,712,191,718	\$85,738,291	\$204,585,014	\$1,421,868,413
North Dakota	\$69,008,485	\$1,374	0.0%	\$69,007,111	\$3,450,424	\$21,003,535	\$44,553,152
Ohio	\$2,584,975,991	\$5,882,121	0.2%	\$2,579,093,870	\$129,248,800	\$407,044,106	\$2,042,800,964
Oklahoma	\$456,962,960	\$98,438,924	21.5%	\$358,524,036	\$22,848,148	\$74,157,540	\$261,518,348
Oregon	\$442,272,877	\$195,187,315	44.1%	\$247,085,562	\$22,113,644	\$23,086,453	\$201,885,465
Pennsylvania	\$2,825,318,744	\$1,840,133,663	65.1%	\$985,185,081	\$141,265,937	\$240,666,789	\$603,252,355
Rhode Island	\$324,587,355	\$2,825,596	0.9%	\$321,761,759	\$16,229,368	\$55,426,362	\$250,106,029
South Carolina	\$716,889,163	\$14,733,864	2.1%	\$702,155,299	\$35,844,458	\$78,125,841	\$588,185,000
South Dakota	\$115,499,671	\$517,913	0.4%	\$114,981,758	\$5,774,984	\$12,781,380	\$96,425,394
Tennessee	\$1,135,268,265	\$132,574,293	11.7%	\$1,002,693,972	\$56,763,413	\$122,924,139	\$823,006,420
Texas	\$2,905,547,998	\$188,586,439	6.5%	\$2,716,961,559	\$145,277,400	\$455,153,843	\$2,116,530,316
Utah	\$238,478,960	\$38,707,493	16.2%	\$199,771,467	\$11,923,948	\$26,228,570	\$161,618,949
Vermont	\$139,629,894	\$0	0.0%	\$139,629,894	\$6,981,495	\$2,941,601	\$129,706,798
Virginia	\$839,651,812	\$268,640,477	32.0%	\$571,011,335	\$41,982,591	\$108,043,240	\$420,985,504
Washington	\$838,013,716	-\$464,980	-0.1%	\$838,478,696	\$41,900,686	\$37,243,782	\$759,334,228
West Virginia	\$516,723,098	\$659,669	0.1%	\$516,063,429	\$25,836,155	\$33,388,306	\$456,838,968
Wisconsin	\$843,407,862	\$61,569,041	7.3%	\$781,838,821	\$42,170,393	\$92,400,921	\$647,267,507
Wyoming	\$74,137,188	\$0	0.0%	\$74,137,188	\$3,706,859	\$4,490,618	\$65,939,711
USA TOTAL	\$56,858,814,339	\$7,904,547,536	13.9%	\$48,954,266,803	\$2,842,940,717	\$7,283,657,215	\$38,772,421,073

Source: Lewin tabulations using MSIS data. Source data are available on CMS website: <http://msis.cms.hhs.gov>.

IV. Cost Trending

Savings from full adoption of the MCO model have been estimated annually across a ten year period, beginning in Federal Fiscal Year 2006 and extending through FY2015.

Baseline costs were trended forward from FY2003 through FY2015 using an across-the-board annual trend factor of eight percent. In arriving at the eight percent figure, Lewin took into consideration the following factors:

- According to published National Health Expenditures data, Medicaid expenditures have risen at an annual average rate of 8.2 percent from 1995-2005. This rate of increase results from a complex mixture of changes in eligibility and provider payment policies, program enrollment growth, and the underlying forces driving up per capita health spending.
- Using the MSIS data sets on the CMS website, the average annual trend in Medicaid spending from FY1999 to FY2003 has been 12.2%. Using the CMS National Health Expenditures published data source, Medicaid costs during this same four-year period increased at an annual average rate of 9.5%.
- Medicare provides a useful means of identifying rates of cost escalation for public beneficiaries when the demographics and benefits package are stable. National Medicare costs increased at an average annual rate of 7.4% per year from 1999 to 2003; Medicare *per capita* costs have increased 6.2% annually across the five year period 2000-2005, as well as at 6.2% annually across the 20 year period 1985-2005.

The eight percent assumption acknowledges that Medicaid costs will rise due to both per capita spending increases and due to continued growth in the size of the covered population. However, we expect that Medicaid cost growth outside of the long-term care arena will be less sharp over the upcoming decade than the observed rate of annual increase in recent years, primarily due to the intense efforts many states are undertaking to find ways to lower the slope of their Medicaid outlays.

We do not intend to imply that the single annual trend factor used in this study means that we anticipate that the rate of cost escalation will be equal in all states, nor do we intend to imply that cost escalation is likely to be constant on a yearly basis throughout the decade ahead. Rather, we are simply trying to establish a reasonable inflation trend for purposes of estimating Medicaid's cost savings potential through full adoption of capitation.

V. Calculation of Capitation Savings Factors

The percentage savings factors derived for the capitated model were based on the following criteria.

- As a starting point, Lewin estimates that Year 1 savings for an urban TANF capitation initiative will average 5%, and that Year 1 savings for an urban SSI capitation initiative will average 8%. These starting points are deemed reasonable based on Lewin's extensive actuarial and financial work in the Medicaid arena,¹⁰ as well as external published sources. Historically, capitation rates have most typically been initially set to represent 95% of estimated fee-for-service costs.
- The higher savings percentage for SSI versus TANF is based on the characteristics of the SSI population described earlier (e.g., a large segment of chronically ill persons with stable eligibility whose long-term cost trajectory can be influenced), as well as SSI enrollees requiring lower MCO administrative costs on a percentage of premium basis. Lewin has recently prepared detailed cost estimates for the State of Illinois showing estimated first-year savings of approximately 5 to 11% through capitation of the SSI population.¹¹
- A compilation of several studies conducted by Lewin¹² for America's Health Insurance Plans, indicates that savings through capitation range from 2 to 19%. A recent statewide initial MCO procurement for the TANF population in Georgia is anticipated to yield 6.7% savings.¹³
- An additional factor working in the favor of states currently is that an unprecedented "buyers market" exists when states expand their capitated initiatives. A wide range of experienced Medicaid MCO organizations is likely to compete aggressively for the opportunity to serve additional enrollees.

We believe that the initial savings assumptions of 5% for TANF and 8% for SSI allow the capitation rates to be set in an actuarially sound manner that ensures substantial savings for the Medicaid program. Importantly, this level of state savings also permits the health plans to operate viably with a modest (less than 5%) but positive operating margin. While there is sometimes considerable profitability variation among health plans across and within states, the industry as a whole appears to be in sound balance. A Lewin assessment of 211 Medicaid MCO plan-years of data indicates an average operating gain of 2.7%, an average medical loss ratio of 84.7%, and an average administrative cost ratio of 12.6%.

¹⁰ Lewin has served as the capitation rate-setting consultant on behalf of ten Medicaid agencies states and also works extensively with MCOs in preparing price bids and assessing state capitation rate methodologies.

¹¹ "Assessment of Medicaid Managed Care Expansion Options in Illinois," The Lewin Group, May 2005. The range of savings for the SSI population reflects different geographic regions, with the highest savings projected for the most urban area of the state (the Chicago area).

¹² "Medicaid Managed Care Cost Savings - A Synthesis of Fourteen Studies", conducted by The Lewin Group on behalf of America's Health Insurance Plans, 2004.

¹³ Source is a press release from the state agency, distributed after reviewing the price bids and selecting MCO vendors.

In each state, the starting point savings factor was reduced based on the percentage of the population that resides in rural areas (as determined by the US Census Department). Rural regions create very limited opportunity for competitive provider networks, for example, and pose economies of scale challenges for many MCO activities (e.g., outreach initiatives that involve face-to-face interaction with enrollees become prohibitively expensive). While Medicaid MCOs are serving many rural areas, Lewin estimates that the savings from the capitated model will only be half as large (on a percentage basis) in rural areas as in urban areas.

The potential savings from capitation was further reduced based on the degree to which a state had implemented managed fee-for-service arrangements to lower the costs of the non-capitated setting. The MSIS data files include statistics on the number of enrollees who received primary care case management (PCCM) services, and this percentage was used as a proxy to estimate the involvement of managed fee-for-service cost containment programs. The starting point savings was reduced based on the percentage of Medicaid eligibles in each category (TANF or SSI) receiving PCCM services. The savings opportunity under capitation was assumed to be only half (on a percentage basis) for persons that are already receiving PCCM services. This assumption is based on Lewin's previous project work where the cost containment attributes of PCCM and HMO models of Medicaid coverage have been compared and modeled extensively.

The Year 1 percentage savings calculations are presented for each state in Table 8 for TANF and Table 9 for SSI. The maximum Year 1 savings percentages (5.0% for TANF and 8.0% for SSI), were applied only in the District of Columbia, since this "state" has a 100% urban population and no PCCM program. The smallest Year 1 percentage savings for TANF (1.46%) was applied in Vermont, which has both a large rural population (62%) and a high proportion of TANF enrollees receiving PCCM services (80%). For similar reasons, Vermont also had the smallest Year 1 percentage savings for SSI (2.35%).

Percentage savings after Year 1 are estimated to increase slowly and steadily, compounding upwards by 0.25 percentage points in each year. For example, if a state's Year 1 savings percentage is 3.0 percent, the percentage savings in Year 2 would increase to 3.25% (and Year 3 savings would be 3.5%, etc.). There is considerable evidence suggesting that as capitated programs mature, they are effective at slowing the rate of growth in costs versus what would otherwise occur outside of the capitated environment.¹⁴ It also makes logical sense that the longer the health plans' outreach and education initiatives and utilization management programs are in place, the greater impact they will have on health care costs. The specific compounding factor used (one-fourth of a percentage point annually) assumes that this cumulative effect will be fairly modest.

¹⁴ The largest percentage savings Lewin has observed in the Medicaid managed care arena have occurred in mandatory enrollment programs (e.g., in Arizona and Pennsylvania) that have been implemented for many years. Lewin's recent assessment of Pennsylvania's program, referenced earlier, quantified a 2.5 - 3.0 percentage point difference between the rate of annual escalation of PMPM fee-for-service costs and the corresponding trendline from the capitated setting. (The capitated setting was assessed both in terms of annual rate increases and in terms of the rate of increase in MCOs' PMPM medical costs, and showed similar results.)

Table 8: Year 1 Managed Care Savings Factors, TANF Population (page 1 of 2)

State	Percent Of State Population Residing In Urban Area, CY2000	Percent Of TANF Eligibles Receiving PCCM Services, FY2003	Estimated Year 1 Medicaid % Savings (TANF)	Reduction For Lower Savings In Rural Areas	Reduction For Savings Already Occurring Through Managed FFS	Year 1 Percentage Savings Estimate
Alabama	55.5%	59.5%	5.00%	1.11%	1.49%	2.40%
Alaska	65.6%	0.0%	5.00%	0.86%	0.00%	4.14%
Arizona	88.2%	0.0%	5.00%	0.30%	0.00%	4.70%
Arkansas	52.5%	66.7%	5.00%	1.19%	1.67%	2.15%
California	94.4%	0.0%	5.00%	0.14%	0.00%	4.86%
Colorado	84.5%	18.2%	5.00%	0.39%	0.46%	4.16%
Connecticut	87.7%	0.0%	5.00%	0.31%	0.00%	4.69%
Delaware	80.1%	0.0%	5.00%	0.50%	0.00%	4.50%
District of Columbia	100.0%	0.0%	5.00%	0.00%	0.00%	5.00%
Florida	89.3%	44.2%	5.00%	0.27%	1.11%	3.63%
Georgia	71.6%	72.4%	5.00%	0.71%	1.81%	2.48%
Hawaii	91.5%	0.0%	5.00%	0.21%	0.00%	4.79%
Idaho	66.4%	66.8%	5.00%	0.84%	1.67%	2.49%
Illinois	87.8%	0.0%	5.00%	0.30%	0.00%	4.70%
Indiana	70.8%	43.1%	5.00%	0.73%	1.08%	3.19%
Iowa	61.1%	37.4%	5.00%	0.97%	0.93%	3.09%
Kansas	71.4%	44.9%	5.00%	0.71%	1.12%	3.16%
Kentucky	55.8%	73.5%	5.00%	1.11%	1.84%	2.06%
Louisiana	72.6%	60.8%	5.00%	0.68%	1.52%	2.80%
Maine	40.2%	81.1%	5.00%	1.49%	2.03%	1.48%
Maryland	86.1%	0.0%	5.00%	0.35%	0.00%	4.65%
Massachusetts	91.4%	0.0%	5.00%	0.22%	0.00%	4.78%
Michigan	74.7%	5.1%	5.00%	0.63%	0.13%	4.24%
Minnesota	70.9%	0.0%	5.00%	0.73%	0.00%	4.27%
Mississippi	48.8%	0.0%	5.00%	1.28%	0.00%	3.72%
Missouri	69.4%	0.0%	5.00%	0.76%	0.00%	4.24%
Montana	54.1%	0.0%	5.00%	1.15%	0.00%	3.85%

Table 8: Year 1 Managed Care Savings Factors, TANF Population (page 2 of 2)

State	Percent Of State Population Residing In Urban Area, CY2000	Percent Of TANF Eligibles Receiving PCCM Services, FY2003	Estimated Year 1 Medicaid % Savings (TANF)	Reduction For Lower Savings In Rural Areas	Reduction For Savings Already Occurring Through Managed FFS	Year 1 Percentage Savings Estimate
Nebraska	69.7%	23.9%	5.00%	0.76%	0.60%	3.65%
Nevada	91.5%	0.0%	5.00%	0.21%	0.00%	4.79%
New Hampshire	59.3%	0.0%	5.00%	1.02%	0.00%	3.98%
New Jersey	94.4%	0.0%	5.00%	0.14%	0.00%	4.86%
New Mexico	74.9%	0.0%	5.00%	0.63%	0.00%	4.37%
New York	87.5%	0.0%	5.00%	0.31%	0.00%	4.69%
North Carolina	60.2%	87.3%	5.00%	0.99%	2.18%	1.82%
North Dakota	55.9%	75.2%	5.00%	1.10%	1.88%	2.02%
Ohio	77.4%	0.0%	5.00%	0.57%	0.00%	4.43%
Oklahoma	65.3%	1.1%	5.00%	0.87%	0.03%	4.11%
Oregon	78.7%	1.7%	5.00%	0.53%	0.04%	4.43%
Pennsylvania	77.1%	15.1%	5.00%	0.57%	0.38%	4.05%
Rhode Island	90.9%	0.0%	5.00%	0.23%	0.00%	4.77%
South Carolina	60.5%	0.0%	5.00%	0.99%	0.00%	4.01%
South Dakota	51.9%	62.0%	5.00%	1.20%	1.55%	2.25%
Tennessee	63.6%	0.0%	5.00%	0.91%	0.00%	4.09%
Texas	82.5%	16.6%	5.00%	0.44%	0.41%	4.15%
Utah	88.2%	0.0%	5.00%	0.29%	0.00%	4.71%
Vermont	38.2%	80.0%	5.00%	1.55%	2.00%	1.46%
Virginia	73.0%	15.1%	5.00%	0.67%	0.38%	3.95%
Washington	82.0%	0.6%	5.00%	0.45%	0.01%	4.53%
West Virginia	46.0%	48.8%	5.00%	1.35%	1.22%	2.43%
Wisconsin	68.3%	0.0%	5.00%	0.79%	0.00%	4.21%
Wyoming	65.1%	0.0%	5.00%	0.87%	0.00%	4.13%
USA TOTAL	79.0%	15.0%	5.00%	0.52%	0.38%	4.10%

Table 9: Year 1 Managed Care Savings Factors, SSI Population (page 1 of 2)

State	Percent Of State Population Residing In Urban Area, CY2000	Percent Of SSI Eligibles Receiving PCCM Services, FY2003	Estimated Year 1 Medicaid % Savings (SSI)	Reduction For Lower Savings In Rural Areas	Reduction For Savings Already Occurring Through Managed FFS	Year 1 Percentage Savings Estimate
Alabama	55.5%	77.3%	8.00%	1.78%	3.09%	3.13%
Alaska	65.6%	0.0%	8.00%	1.38%	0.00%	6.62%
Arizona	88.2%	0.0%	8.00%	0.47%	0.00%	7.53%
Arkansas	52.5%	75.8%	8.00%	1.90%	3.03%	3.07%
California	94.4%	0.0%	8.00%	0.22%	0.00%	7.78%
Colorado	84.5%	35.6%	8.00%	0.62%	1.42%	5.96%
Connecticut	87.7%	0.0%	8.00%	0.49%	0.00%	7.51%
Delaware	80.1%	0.0%	8.00%	0.80%	0.00%	7.20%
District of Columbia	100.0%	0.0%	8.00%	0.00%	0.00%	8.00%
Florida	89.3%	57.5%	8.00%	0.43%	2.30%	5.27%
Georgia	71.6%	69.8%	8.00%	1.13%	2.79%	4.07%
Hawaii	91.5%	0.0%	8.00%	0.34%	0.00%	7.66%
Idaho	66.4%	3.4%	8.00%	1.34%	0.14%	6.52%
Illinois	87.8%	7.0%	8.00%	0.49%	0.28%	7.23%
Indiana	70.8%	0.0%	8.00%	1.17%	0.00%	6.83%
Iowa	61.1%	61.3%	8.00%	1.56%	2.45%	3.99%
Kansas	71.4%	65.8%	8.00%	1.14%	2.63%	4.22%
Kentucky	55.8%	55.9%	8.00%	1.77%	2.24%	3.99%
Louisiana	72.6%	61.0%	8.00%	1.09%	2.44%	4.46%
Maine	40.2%	2.1%	8.00%	2.39%	0.08%	5.53%
Maryland	86.1%	0.0%	8.00%	0.56%	0.00%	7.44%
Massachusetts	91.4%	0.0%	8.00%	0.35%	0.00%	7.65%
Michigan	74.7%	0.0%	8.00%	1.01%	0.00%	6.99%
Minnesota	70.9%	0.0%	8.00%	1.16%	0.00%	6.84%
Mississippi	48.8%	0.0%	8.00%	2.05%	0.00%	5.95%
Missouri	69.4%	0.0%	8.00%	1.22%	0.00%	6.78%
Montana	54.1%	75.9%	8.00%	1.84%	3.04%	3.13%

Table 9: Year 1 Managed Care Savings Factors, SSI Population (page 2 of 2)

State	Percent Of State Population Residing In Urban Area, CY2000	Percent Of SSI Eligibles Receiving PCCM Services, FY2003	Estimated Year 1 Medicaid % Savings (SSI)	Reduction For Lower Savings In Rural Areas	Reduction For Savings Already Occurring Through Managed FFS	Year 1 Percentage Savings Estimate
Nebraska	69.7%	21.7%	8.00%	1.21%	0.87%	5.92%
Nevada	91.5%	0.0%	8.00%	0.34%	0.00%	7.66%
New Hampshire	59.3%	0.0%	8.00%	1.63%	0.00%	6.37%
New Jersey	94.4%	0.0%	8.00%	0.23%	0.00%	7.77%
New Mexico	74.9%	0.0%	8.00%	1.00%	0.00%	7.00%
New York	87.5%	0.0%	8.00%	0.50%	0.00%	7.50%
North Carolina	60.2%	75.1%	8.00%	1.59%	3.00%	3.41%
North Dakota	55.9%	3.2%	8.00%	1.76%	0.13%	6.11%
Ohio	77.4%	0.0%	8.00%	0.91%	0.00%	7.09%
Oklahoma	65.3%	0.9%	8.00%	1.39%	0.04%	6.58%
Oregon	78.7%	4.5%	8.00%	0.85%	0.18%	6.97%
Pennsylvania	77.1%	7.9%	8.00%	0.92%	0.32%	6.77%
Rhode Island	90.9%	0.0%	8.00%	0.36%	0.00%	7.64%
South Carolina	60.5%	0.0%	8.00%	1.58%	0.00%	6.42%
South Dakota	51.9%	30.9%	8.00%	1.93%	1.23%	4.84%
Tennessee	63.6%	0.0%	8.00%	1.45%	0.00%	6.55%
Texas	82.5%	9.5%	8.00%	0.70%	0.38%	6.92%
Utah	88.2%	0.0%	8.00%	0.47%	0.00%	7.53%
Vermont	38.2%	79.5%	8.00%	2.47%	3.18%	2.35%
Virginia	73.0%	19.7%	8.00%	1.08%	0.79%	6.13%
Washington	82.0%	0.0%	8.00%	0.72%	0.00%	7.28%
West Virginia	46.0%	12.4%	8.00%	2.16%	0.50%	5.34%
Wisconsin	68.3%	0.0%	8.00%	1.27%	0.00%	6.73%
Wyoming	65.1%	0.0%	8.00%	1.40%	0.00%	6.60%
USA TOTAL	79.0%	16.9%	8.00%	0.84%	0.68%	6.48%

VI. Capitation Savings Estimates

Summary Results

With the above assumptions and estimates in place, the estimates of state and national savings from full use of capitation becomes a straightforward mathematical calculation. The derived percentage savings factors from Section V are applied to the trended baseline fee-for-service expenditures from Section IV, in each state and year. Note that the savings from the capitated model estimated herein include only savings from expansion of capitated programs -- the savings existing capitation programs are creating are not included in these figures.

We estimate that the Medicaid program would realize considerable additional savings from full use of the MCO model. As shown in Table 10, total savings in the first year would be \$4.6 billion, accumulating to \$13.1 billion in the 10th year. The figures in Table 10 differentiate the state and Federal savings components, based on each state's rate of Federal matching funds. Detailed state-specific estimates are presented in Table 11 for TANF and Table 12 for SSI.

Table 10. Summary, Nationwide Savings Through Optimal Adoption Of MCO Model

	FY2006	FY2010	FY2015	5 Year Total 2006-2010	10 Year Total 2006-2015
TOTAL SAVINGS					
Federal	\$2.6	\$4.2	\$7.4	\$16.7	\$46.6
State	\$2.0	\$3.2	\$5.7	\$13.0	\$36.0
Total	\$4.6	\$7.4	\$13.1	\$29.7	\$82.6
TANF SAVINGS					
Federal	\$0.8	\$1.4	\$2.6	\$5.4	\$15.7
State	\$0.6	\$1.0	\$1.9	\$4.0	\$11.6
Total	\$1.4	\$2.4	\$4.5	\$9.4	\$27.2
SSI SAVINGS					
Federal	\$1.8	\$2.8	\$4.8	\$11.3	\$31.0
State	\$1.4	\$2.2	\$3.8	\$9.0	\$24.4
Total	\$3.2	\$5.0	\$8.6	\$20.3	\$55.4

Cumulative national savings from full use of the MCO model across the first five years would be \$30 billion, and would reach \$83 billion across the first ten years. Of these total ten-year savings, \$55 billion (67%) are projected to occur through maximizing use of the MCO model for the SSI population. Across the ten years, the average SSI savings nationally represent 7.8% of the baseline fee-for-service costs that would be transferred into the capitated setting.

Substantial savings opportunities also exist through maximal use of capitation for TANF subgroups (\$27 billion across ten years). Across ten years, average TANF savings represent 5.1% of the baseline fee-for-service costs that would be transferred into the capitated setting.

The Federal share of these national savings, aggregating the state-specific savings according to each state's FY04 Federal match rate, is consistently 56%. These Federal and state shares vary at the state level in accordance with the matching funds formula. The geographic distribution of all estimated savings is 87% urban and 13% rural.

Table 11: Capitation Savings By State, TANF Population, 2006-2015 (page 1 of 2)
 (Figures represent both State and Federal savings.)

State	FY2006	FY2010	FY2015	5 Year Total 2006-2010	10 Year Total 2006-2015	10 Year Total As % Of Baseline FFS
Alabama	\$13,691,817	\$26,388,851	\$53,028,723	\$98,342,808	\$304,309,347	3.7%
Alaska	\$15,490,610	\$26,166,866	\$47,800,098	\$102,698,814	\$293,925,747	5.4%
Arizona	\$0	\$0	\$0	\$0	\$0	0.0%
Arkansas	\$12,725,623	\$25,380,296	\$52,108,735	\$93,384,797	\$294,489,421	3.4%
California	\$173,102,560	\$283,950,847	\$506,197,120	\$1,127,996,201	\$3,169,086,460	6.1%
Colorado	\$17,481,155	\$29,505,311	\$53,863,070	\$115,839,907	\$331,367,570	5.4%
Connecticut	\$461,881	\$762,277	\$1,365,951	\$3,020,515	\$8,519,062	6.0%
Delaware	\$4,263,623	\$7,088,906	\$12,782,088	\$28,003,842	\$79,353,851	5.8%
District of Columbia	\$4,748,094	\$7,751,676	\$13,762,621	\$30,854,521	\$86,422,034	6.3%
Florida	\$64,448,955	\$111,857,945	\$208,758,842	\$434,222,283	\$1,263,707,883	4.9%
Georgia	\$45,258,068	\$86,387,234	\$172,506,316	\$323,118,818	\$994,412,098	3.8%
Hawaii	\$0	\$0	\$0	\$0	\$0	0.0%
Idaho	\$5,980,626	\$11,403,018	\$22,754,118	\$42,669,228	\$131,234,253	3.8%
Illinois	\$99,338,767	\$163,928,622	\$293,722,769	\$649,594,181	\$1,831,990,866	6.0%
Indiana	\$22,104,629	\$39,493,661	\$75,331,505	\$151,549,539	\$448,835,504	4.5%
Iowa	\$8,953,881	\$16,120,440	\$30,920,422	\$61,673,018	\$183,485,732	4.4%
Kansas	\$7,472,449	\$13,379,453	\$25,560,487	\$51,297,709	\$152,119,675	4.4%
Kentucky	\$14,969,990	\$30,269,742	\$62,665,059	\$110,814,031	\$352,068,946	3.3%
Louisiana	\$23,678,990	\$43,732,723	\$85,411,852	\$165,654,396	\$500,274,362	4.1%
Maine	\$11,421,025	\$26,043,396	\$57,560,807	\$91,391,214	\$308,875,283	2.8%
Maryland	\$15,315,202	\$25,315,432	\$45,423,567	\$100,247,124	\$283,018,442	5.9%
Massachusetts	\$39,549,253	\$65,052,950	\$116,240,360	\$258,129,542	\$726,478,825	6.1%
Michigan	\$16,884,306	\$28,389,181	\$51,664,538	\$111,632,387	\$318,569,195	5.5%
Minnesota	\$8,980,087	\$15,076,005	\$27,402,051	\$59,319,254	\$169,119,321	5.6%
Mississippi	\$24,161,414	\$41,709,539	\$77,517,770	\$162,263,897	\$470,680,573	5.0%
Missouri	\$27,696,298	\$46,577,847	\$84,779,525	\$183,138,942	\$522,696,265	5.5%
Montana	\$6,061,404	\$10,386,996	\$19,193,319	\$40,529,217	\$117,032,689	5.1%
Nebraska	\$12,454,966	\$21,592,562	\$40,262,835	\$83,858,328	\$243,883,235	4.9%

Table 11: Capitation Savings By State, TANF Population, 2006-2015 (page 2 of 2)
 (Figures represent both State and Federal savings.)

State	FY2006	FY2010	FY2015	5 Year Total 2006-2010	10 Year Total 2006-2015	10 Year Total As % Of Baseline FFS
Nevada	\$5,979,239	\$9,833,877	\$17,570,025	\$39,022,597	\$109,817,022	6.1%
New Hampshire	\$8,060,323	\$13,720,019	\$25,217,443	\$53,680,398	\$154,366,257	5.3%
New Jersey	\$15,941,021	\$26,151,091	\$46,622,477	\$103,881,964	\$291,869,231	6.1%
New Mexico	\$2,638,376	\$4,410,192	\$7,987,386	\$17,383,638	\$49,425,861	5.7%
New York	\$222,954,559	\$368,040,432	\$659,628,322	\$1,458,221,815	\$4,113,351,001	6.0%
North Carolina	\$33,110,528	\$69,732,192	\$147,798,679	\$251,555,849	\$816,682,346	3.1%
North Dakota	\$1,723,250	\$3,506,926	\$7,287,876	\$12,808,362	\$40,834,661	3.3%
Ohio	\$65,975,896	\$110,003,618	\$198,813,007	\$434,052,481	\$1,232,149,766	5.7%
Oklahoma	\$15,045,999	\$25,455,701	\$46,559,970	\$99,843,733	\$286,033,913	5.4%
Oregon	\$12,461,264	\$20,782,978	\$37,570,626	\$81,995,875	\$232,804,545	5.7%
Pennsylvania	\$9,178,976	\$15,572,440	\$28,546,285	\$61,010,382	\$175,083,972	5.3%
Rhode Island	\$4,142,192	\$6,815,997	\$12,183,279	\$27,041,411	\$76,124,291	6.1%
South Carolina	\$40,907,796	\$69,525,472	\$127,631,795	\$272,191,931	\$781,987,211	5.3%
South Dakota	\$3,449,517	\$6,783,285	\$13,805,961	\$25,089,618	\$78,509,138	3.5%
Tennessee	\$72,354,478	\$122,500,666	\$224,189,582	\$480,339,292	\$1,376,693,688	5.4%
Texas	\$135,601,381	\$228,956,393	\$418,092,392	\$898,764,627	\$2,571,560,696	5.4%
Utah	\$11,475,483	\$18,930,108	\$33,908,281	\$75,024,684	\$211,537,550	6.0%
Vermont	\$3,412,417	\$7,833,276	\$17,369,922	\$27,426,776	\$92,995,933	2.7%
Virginia	\$11,926,538	\$20,336,158	\$37,429,592	\$79,510,443	\$228,890,064	5.2%
Washington	\$16,994,013	\$28,218,971	\$50,827,698	\$111,534,334	\$315,796,941	5.8%
West Virginia	\$8,155,584	\$15,659,901	\$31,392,634	\$58,441,952	\$180,461,353	3.7%
Wisconsin	\$8,519,467	\$14,345,279	\$26,137,257	\$56,375,404	\$161,025,863	5.5%
Wyoming	\$4,349,357	\$7,350,769	\$13,433,573	\$28,843,954	\$82,578,507	5.4%
USA TOTAL	\$1,411,053,327	\$2,418,177,517	\$4,468,588,610	\$9,435,286,033	\$27,246,536,449	5.1%

Table 12. Capitation Savings By State, SSI Population, 2006-2015 (page 1 of 2)
 (Figures represent both State and Federal savings.)

State	FY2006	FY2010	FY2015	5 Year Total 2006-2010	10 Year Total 2006-2015	10 Year Savings As % Of Baseline \$\$ Moved To Capitation
Alabama	\$18,463,896	\$33,150,958	\$63,459,908	\$126,964,926	\$377,123,114	4.4%
Alaska	\$13,951,776	\$21,847,624	\$37,365,904	\$88,504,025	\$241,246,998	7.9%
Arizona	\$0	\$0	\$0	\$0	\$0	0.0%
Arkansas	\$18,359,709	\$33,113,357	\$63,595,939	\$126,595,482	\$377,035,652	4.4%
California	\$487,054,263	\$747,827,771	\$1,255,280,110	\$3,055,141,236	\$8,218,889,398	9.1%
Colorado	\$25,654,909	\$40,763,121	\$70,657,044	\$164,111,294	\$451,654,519	7.2%
Connecticut	\$35,673,260	\$54,996,310	\$92,678,385	\$224,285,641	\$605,023,066	8.8%
Delaware	\$8,181,251	\$12,675,529	\$21,462,201	\$51,583,028	\$139,611,899	8.5%
District of Columbia	\$24,352,156	\$37,272,195	\$62,371,344	\$152,478,837	\$409,319,438	9.3%
Florida	\$138,410,652	\$224,014,384	\$394,734,486	\$894,899,264	\$2,492,605,811	6.6%
Georgia	\$55,532,841	\$94,094,507	\$172,312,321	\$368,837,208	\$1,057,636,536	5.4%
Hawaii	\$10,192,849	\$15,677,657	\$26,360,707	\$64,000,349	\$172,376,050	8.9%
Idaho	\$16,899,141	\$26,517,393	\$45,439,362	\$107,327,073	\$292,953,723	7.8%
Illinois	\$144,207,453	\$223,312,980	\$377,930,862	\$908,969,383	\$2,459,334,240	8.5%
Indiana	\$58,729,407	\$91,596,499	\$156,066,498	\$371,694,611	\$1,010,465,554	8.1%
Iowa	\$15,239,308	\$25,927,970	\$47,638,253	\$101,463,643	\$291,691,434	5.3%
Kansas	\$16,175,936	\$27,216,547	\$49,557,868	\$106,991,677	\$305,455,254	5.5%
Kentucky	\$40,593,229	\$69,057,932	\$126,872,140	\$270,254,614	\$776,889,911	5.3%
Louisiana	\$46,403,091	\$77,274,552	\$139,518,764	\$305,063,940	\$865,319,479	5.7%
Maine	\$32,921,322	\$52,895,338	\$92,609,019	\$211,955,484	\$587,588,357	6.8%
Maryland	\$65,077,107	\$100,432,456	\$169,416,713	\$409,398,306	\$1,105,152,173	8.7%
Massachusetts	\$103,662,793	\$159,456,215	\$268,132,358	\$650,921,183	\$1,753,255,427	8.9%
Michigan	\$31,892,990	\$49,600,962	\$84,287,399	\$201,522,499	\$546,814,948	8.3%
Minnesota	\$75,640,458	\$117,957,494	\$200,959,047	\$478,690,847	\$1,301,235,338	8.1%
Mississippi	\$37,257,490	\$59,206,355	\$102,638,142	\$238,349,862	\$656,025,430	7.2%
Missouri	\$66,212,992	\$103,376,227	\$176,310,488	\$419,308,605	\$1,140,699,256	8.1%

Table 12. Capitation Savings By State, SSI Population, 2006-2015 (page 2 of 2)
 (Figures represent both State and Federal savings.)

State	FY2006	FY2010	FY2015	5 Year Total 2006-2010	10 Year Total 2006-2015	10 Year Savings As % Of Baseline \$\$ Moved To Capitation
Montana	\$3,829,742	\$6,876,042	\$13,162,523	\$26,334,657	\$78,221,264	4.4%
Nebraska	\$10,596,093	\$16,850,278	\$29,229,771	\$67,814,708	\$186,737,076	7.2%
Nevada	\$19,379,922	\$29,808,305	\$50,120,211	\$121,685,432	\$327,742,659	8.9%
New Hampshire	\$8,261,417	\$13,003,784	\$22,347,093	\$52,562,194	\$143,765,749	7.7%
New Jersey	\$87,863,119	\$134,912,923	\$226,472,048	\$551,154,626	\$1,482,759,088	9.1%
New Mexico	\$16,900,715	\$26,279,016	\$44,647,357	\$106,777,926	\$289,692,814	8.3%
New York	\$583,814,752	\$900,182,243	\$1,517,181,359	\$3,670,882,890	\$9,903,401,835	8.8%
North Carolina	\$61,001,734	\$107,360,512	\$202,504,147	\$414,445,655	\$1,216,397,271	4.7%
North Dakota	\$3,428,566	\$5,428,090	\$9,378,050	\$21,886,697	\$60,092,784	7.4%
Ohio	\$182,556,923	\$283,376,698	\$480,674,842	\$1,152,266,898	\$3,122,601,247	8.4%
Oklahoma	\$21,671,853	\$33,966,282	\$58,139,458	\$137,545,319	\$375,141,282	7.9%
Oregon	\$17,721,514	\$27,569,887	\$46,863,983	\$111,997,604	\$303,961,422	8.3%
Pennsylvania	\$51,409,444	\$80,280,666	\$136,947,288	\$325,600,695	\$885,896,409	8.0%
Rhode Island	\$24,062,526	\$37,023,179	\$62,271,816	\$151,116,375	\$407,103,641	8.9%
South Carolina	\$47,566,665	\$74,794,380	\$128,411,856	\$302,457,149	\$826,702,258	7.7%
South Dakota	\$5,879,352	\$9,651,355	\$17,216,201	\$38,328,352	\$107,733,420	6.1%
Tennessee	\$67,858,082	\$106,425,055	\$182,279,198	\$430,841,788	\$1,175,599,153	7.8%
Texas	\$184,520,083	\$287,311,146	\$488,776,626	\$1,166,717,491	\$3,168,292,033	8.2%
Utah	\$15,328,307	\$23,623,858	\$39,798,498	\$96,355,504	\$259,870,433	8.8%
Vermont	\$3,835,879	\$7,441,617	\$15,016,974	\$27,664,299	\$85,917,771	3.6%
Virginia	\$32,525,944	\$51,466,139	\$88,872,057	\$207,566,762	\$569,692,212	7.4%
Washington	\$69,608,343	\$107,715,036	\$182,170,387	\$438,576,506	\$1,186,056,268	8.6%
West Virginia	\$30,758,501	\$49,676,018	\$87,370,347	\$198,624,407	\$552,477,115	6.6%
Wisconsin	\$54,893,111	\$85,774,499	\$146,405,001	\$347,789,239	\$946,661,528	8.0%
Wyoming	\$5,486,000	\$8,593,733	\$14,702,605	\$34,807,758	\$94,901,993	7.9%
USA TOTAL	\$3,197,498,869	\$5,014,653,072	\$8,588,614,956	\$20,301,113,951	\$55,392,821,729	7.8%

State Level Changes Since Base Year

The savings estimates presented above are tied to a “2003 world” with respect to the degree each state has implemented capitation. Many capitation program changes at the state level have occurred since that time, and many others are proposed or in the process of being implemented. In some states (e.g., Georgia, Ohio, Texas, and South Carolina), the use of capitation has substantially increased since 2003. In others (e.g., Illinois and Oklahoma), capitation programs have been discontinued or significantly cut back.

While it is not possible to accurately model all the existing or anticipated changes in state programs, we did conduct a sensitivity analysis to assess the degree to which the national figures would change based on programmatic changes known to be occurring. Specifically, we significantly reduced the amount of dollars available for further managed care expansion in Georgia, Ohio, Texas and South Carolina, and significantly increased the available dollars for expansion in Illinois and Oklahoma. These adjustments lowered the 10 year savings from full adoption of capitation by less than \$3 billion. This small difference suggests that the basic magnitude of our findings would not meaningfully change if we were able to depict the current level of capitation use. We therefore chose not to apply any state-specific adjustments to the FY2003 baseline data, given the difficulty associated with tracking each program and making these adjustments accurately.

VII. Impact Of A Federal Match Incentive

This study has documented the large-scale Federal Medicaid savings that optimal nationwide use of capitation can create. However, expansion of the capitated model only occurs when a state opts to do so.

Given that a Federal incentive exists for states to expand their use of capitation, we have modeled a specific policy change whereby the Federal Government would increase its match rate by three percentage points for three years on all state capitation expansion funds. The results of this policy approach are shown in Table 13.

New York State is used to provide a narrative example of how this matching funds incentive would be applied. A three percentage point enhancement in the Federal match rate **applied only to increased capitation funds** would change the match from 50% to 53% in New York. This change would last for three years and then revert back to the “regular” match rate of 50%. Estimated total savings from full use of capitation would be unaffected, and in New York would total \$14 billion across ten years and \$2.7 billion across the first three years.

In this situation, the Federal Government would still realize some savings during the first three years of enhanced use of capitation, \$142 million across three years in the New York example (assuming a full transition to capitation occurs in Year 1). However, the vast majority of the savings during the first three years (\$2.6 billion or 95% of the total) would accrue to the state. From Year 4 onward, managed care savings would be shared at the “regular” match rate (50% in New York). Across ten years under this policy option, the Federal share of the savings would be \$6 billion, or 41% of the total savings. The state share would be \$8 billion, or 59%.

As quantified previously, maximum national expansion of the capitated model would lead to a net savings across ten years of \$83 billion, shared 56% Federal and 44% state. The enhanced match would allocate the same \$83 billion savings 46% to the Federal Government and 54% to the states.

While an enhanced Federal match incentive will reduce the share of overall savings the Federal Government initially achieves when the Medicaid capitated model is expanded, the Federal Government will not realize additional managed care savings if the expansion does not occur in the first place. Thus, the Federal incentive might be important in motivating states to increase their use of the cost-effective capitation model.

It should be noted that a wide range of Federal match incentive configurations and options could be considered. This study focused on only one option -- a three percent enhanced match, limited only to expanded capitation funds for three years. This particular option was modeled because it could be applied consistently to any state, is fairly straightforward to administer, and would not result in added Federal payments in the initial years (just a reduction in Federal savings).¹⁵

¹⁵ This particular enhanced match structure would increase short-term Federal expenses in some states. In the aggregate, the Federal Government would realize immediate net savings if all states expanded their use of capitation.

Table 13. Example Application Of Enhanced Federal Match Policy

State	Total Federal Savings (TANF & SSI)					
	Without Any Adjustment To Federal Match			With Enhanced Federal Match For 3 Years		
	FY2006	5 Year Total 2006-2010	10 Year Total 2006-2015	FY2006	5 Year Total 2006-2010	10 Year Total 2006-2015
Alabama	\$22,351,436	\$156,611,406	\$473,663,704	-\$12,472,037	\$43,560,484	\$360,612,782
Alaska	\$14,768,301	\$95,907,344	\$268,442,649	-\$2,780,791	\$38,935,972	\$211,471,277
Arizona	\$0	\$0	\$0	\$0	\$0	\$0
Arkansas	\$22,931,649	\$162,279,451	\$495,384,046	-\$12,796,101	\$46,292,885	\$379,397,480
California	\$330,078,411	\$2,091,568,719	\$5,693,987,929	\$35,384,622	\$1,134,874,800	\$4,737,294,010
Colorado	\$21,568,032	\$139,975,600	\$391,511,045	-\$3,971,960	\$57,062,570	\$308,598,014
Connecticut	\$18,067,571	\$113,653,078	\$306,771,064	\$3,520,316	\$66,426,872	\$259,544,858
Delaware	\$6,233,637	\$39,865,063	\$109,679,944	-\$14,091	\$19,582,439	\$89,397,319
District of Columbia	\$20,370,176	\$128,333,351	\$347,019,030	\$8,389,260	\$89,438,507	\$308,124,187
Florida	\$119,464,023	\$782,719,679	\$2,212,093,134	-\$12,585,720	\$354,033,396	\$1,783,406,851
Georgia	\$61,079,291	\$419,325,351	\$1,243,541,472	-\$34,526,387	\$108,951,080	\$933,167,200
Hawaii	\$5,532,482	\$34,623,869	\$92,890,306	\$2,032,605	\$23,261,867	\$81,528,305
Idaho	\$15,995,245	\$104,862,414	\$296,549,814	\$1,016,645	\$56,235,885	\$247,923,286
Illinois	\$121,773,110	\$779,281,782	\$2,145,662,553	-\$1,490,644	\$379,118,332	\$1,745,499,103
Indiana	\$50,909,276	\$329,539,165	\$919,067,806	\$4,345,841	\$178,375,632	\$767,904,273
Iowa	\$15,389,288	\$103,771,230	\$302,260,195	-\$4,751,655	\$38,385,674	\$236,874,639
Kansas	\$14,285,990	\$95,622,618	\$276,421,015	-\$4,286,670	\$35,328,338	\$216,126,734
Kentucky	\$38,483,085	\$263,928,144	\$781,916,905	-\$13,853,673	\$94,022,092	\$612,010,852
Louisiana	\$48,910,284	\$328,514,327	\$953,047,942	-\$7,675,353	\$144,814,715	\$769,348,330
Maine	\$27,891,336	\$190,805,073	\$563,875,630	-\$13,148,602	\$57,573,017	\$430,643,573
Maryland	\$40,196,155	\$254,822,715	\$694,085,308	\$4,087,730	\$137,600,326	\$576,862,918
Massachusetts	\$71,606,023	\$454,525,363	\$1,239,867,126	\$6,179,344	\$242,124,191	\$1,027,465,955
Michigan	\$27,603,072	\$177,214,350	\$489,720,887	\$1,959,711	\$93,965,744	\$406,472,281
Minnesota	\$42,310,272	\$269,005,051	\$735,177,330	\$2,821,128	\$140,807,492	\$606,979,771
Mississippi	\$46,678,367	\$304,466,457	\$856,296,562	\$8,406,493	\$180,220,645	\$732,050,750
Missouri	\$58,158,024	\$373,095,766	\$1,030,140,846	\$9,223,732	\$214,235,481	\$871,280,562
Montana	\$6,977,214	\$47,165,777	\$137,732,138	-\$1,415,894	\$19,918,391	\$110,484,752

State	Total Federal Savings (TANF & SSI)					
	Without Any Adjustment To Federal Match			With Enhanced Federal Match For 3 Years		
	FY2006	5 Year Total 2006-2010	10 Year Total 2006-2015	FY2006	5 Year Total 2006-2010	10 Year Total 2006-2015
Nebraska	\$13,756,872	\$90,518,468	\$256,994,202	-\$1,859,854	\$39,820,327	\$206,296,061
Nevada	\$13,886,676	\$88,003,717	\$239,607,682	\$2,549,595	\$51,199,018	\$202,802,982
New Hampshire	\$8,160,870	\$53,121,296	\$149,066,003	-\$1,802,290	\$20,776,893	\$116,721,600
New Jersey	\$51,902,070	\$327,518,295	\$887,314,159	\$8,153,919	\$185,494,296	\$745,290,161
New Mexico	\$13,902,063	\$88,340,953	\$241,282,937	\$4,846,885	\$58,944,220	\$211,886,204
New York	\$403,384,656	\$2,564,552,352	\$7,008,376,418	\$27,148,011	\$1,343,137,709	\$5,786,961,775
North Carolina	\$59,751,876	\$422,844,354	\$1,290,802,249	-\$48,416,609	\$71,686,185	\$939,644,080
North Dakota	\$3,392,471	\$22,846,697	\$66,460,723	-\$854,590	\$9,059,036	\$52,673,062
Ohio	\$148,821,452	\$949,888,045	\$2,607,624,907	\$26,981,086	\$554,345,478	\$2,212,082,340
Oklahoma	\$24,935,094	\$161,210,905	\$449,004,075	\$4,057,856	\$93,435,040	\$381,228,210
Oregon	\$18,583,536	\$119,441,785	\$330,486,806	\$2,509,473	\$67,258,945	\$278,303,965
Pennsylvania	\$33,353,925	\$212,829,398	\$584,069,700	\$3,754,500	\$116,737,825	\$487,978,127
Rhode Island	\$15,357,469	\$97,006,915	\$263,117,609	\$3,302,314	\$57,871,058	\$223,981,752
South Carolina	\$61,330,497	\$398,346,742	\$1,115,143,540	\$8,515,682	\$226,888,729	\$943,685,527
South Dakota	\$6,070,295	\$41,266,074	\$121,188,032	-\$2,182,952	\$14,472,731	\$94,394,689
Tennessee	\$89,722,017	\$583,064,773	\$1,633,212,189	\$5,557,980	\$309,834,644	\$1,359,982,060
Texas	\$194,185,680	\$1,252,921,453	\$3,481,794,665	\$16,133,912	\$674,894,195	\$2,903,767,407
Utah	\$18,966,362	\$121,268,621	\$333,568,289	\$5,542,430	\$77,689,166	\$289,988,835
Vermont	\$4,239,528	\$32,222,770	\$104,646,625	-\$7,698,093	-\$6,531,523	\$65,892,332
Virginia	\$22,226,241	\$143,538,602	\$399,291,138	-\$2,746,810	\$62,466,090	\$318,218,626
Washington	\$43,301,178	\$275,055,420	\$750,926,605	\$3,361,584	\$145,395,523	\$621,266,707
West Virginia	\$28,403,391	\$187,632,736	\$534,971,788	\$1,074,093	\$98,910,903	\$446,249,956
Wisconsin	\$36,557,351	\$233,000,917	\$638,581,781	\$6,022,007	\$133,870,975	\$539,451,839
Wyoming	\$5,333,714	\$34,518,324	\$96,247,675	-\$319,269	\$16,166,480	\$77,895,832
USA TOTAL (Federal Share)	\$2,589,137,033	\$16,742,442,753	\$46,640,586,174	\$25,228,709	\$8,418,970,771	\$38,317,114,192
USA TOTAL (State Share)	\$2,018,629,696	\$12,988,831,000	\$35,984,345,803	\$4,582,538,020	\$21,312,302,982	\$44,307,817,785
USA TOTAL (Federal & State Shares)	\$4,607,766,729	\$29,731,273,753	\$82,624,931,977	\$4,607,766,729	\$29,731,273,753	\$82,624,931,977

VIII. Summary Of Key Findings

Several findings emerged from our analyses and modeling efforts. First, the degree to which capitation is currently being relied upon in the Medicaid program has been quantified and ranked on a state-by-state basis. Specific findings include:

- In the most recent year in which full national data are currently available, FY2003, 16% of national Medicaid expenditures were paid in the form of capitation.
- Only one state, Arizona at 85%, “capitates” more than 50% of Medicaid spending. Five other states capitate more than 30% of Medicaid spending – Pennsylvania (46%), Michigan (45%), New Mexico (44%), Oregon (39%), and Hawaii (36%).
- Seven of the nation’s ten largest Medicaid programs (FL, IL, MA, NC, NY, OH and TX) rank 25th or lower in the degree of their Medicaid spending that is capitated.
- By removing spending on Medicare/Medicaid dual eligibles, as well as estimated costs during retrospective coverage periods and remaining long term care spending, Lewin has identified a subset of Medicaid funds that are deemed highly amenable to savings from the capitated model. Within this subset of funds, capitation is more frequently used for TANF and TANF-related subgroups, where 36% of nationwide expenditures were paid via capitation.
- For the blind/disabled subgroup (after removing dual eligibles), only 14% of Medicaid spending was paid via capitation in FY2003. We believe the characteristics of this SSI population subgroup are more amenable to the use of the capitated model than the TANF population. Thus, capitation has been least-used for the SSI subgroup, where this coverage model seems best-suited to have beneficial impacts.

Taken collectively, there is clearly a great deal of room for expansion of the capitated MCO model. Nationally, Lewin estimates that \$67 billion of Medicaid fee-for-service spending (29% of total FY2003 expenditures) is amenable to being favorably impacted by expansion of the capitated model.

We further estimated the savings that full adoption of the capitated model on these funds would create across a ten year period. At the state level, the savings estimates vary based on the level of TANF and SSI fee-for-service spending that is deemed highly amenable to capitation, the urban/rural population mix and the degree to which the fee-for-service population is enrolled in a primary care case management program. Key findings included:

- At a national level, maximum savings of \$83 billion would occur across ten years if the capitation model were immediately applied to all the Medicaid funds that this model seems well-suited to impact. These savings are entirely attributable to expansion of the capitated model and do not include the savings already occurring through existing Medicaid capitation programs.
- Most of these savings (\$55 billion or 67% of the national total) would occur through transitioning the non-Medicare blind/disabled population into the capitated setting.

- 87% of the total savings would result from expanded use of the capitation model in urban areas; 13% of the total savings would be attributable to use of this model in rural areas.
- The state and federal share of savings is determined by the match rate in each state; maximum nationwide savings would be split 56% Federal and 44% state.
- A policy option was modeled whereby the Federal government would increase its match rate by three percentage points for the first three years on all fee-for-service funds that are transitioned into the capitated setting. This approach still creates a modest level of short-term Federal savings, but the vast majority of the savings achieved during Years 1 to 3 accrue to the state as an incentive to expand use of the capitated model.