



HEALTH CARE AND HUMAN SERVICES POLICY, RESEARCH, AND CONSULTING—WITH REAL-WORLD PERSPECTIVE.

Projected Impacts of Adopting a Pharmacy Carve-In Approach Within Medicaid Capitation Programs

Sponsored by: Medicaid Health Plans of America

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I. Executive Summary

An important opportunity appears to exist in 14 states to simultaneously achieve Medicaid savings and strengthen their integrated care models. These 14 states currently implement pharmacy “carve-outs” within their Medicaid capitation programs, whereby prescription drugs are paid for through the traditional fee-for-service program and are not included in the managed care organizations’ capitation payments. These carve-out states include Connecticut, Delaware, Illinois, Indiana, Iowa, Missouri, Nebraska, New York, Ohio, Tennessee, Texas, Utah, West Virginia, and Wisconsin. Several additional states have partial pharmacy carve-outs, where most medications are carved-in but where certain therapeutic classes (e.g., behavioral health medications, anti-retroviral medications, etc.) are carved-out or where all outpatient medications for certain enrollee subgroups (e.g., non-Medicare aged, blind and disabled beneficiaries in New Jersey) are carved-out.

With the passage of the Affordable Care Act (ACA), the pharmacy rebate advantages of the carve-out approach – which had been quite large – no longer exist. The Federal rebates for prescriptions purchased by Medicaid managed care organizations (MCOs) are now identical to the Federal rebates for medications purchased directly by a state Medicaid fee-for-service (FFS) program.

The carve-in model is used in most states, and considerable evidence exists demonstrating that MCOs manage the pharmacy benefit more efficiently than occurs in the FFS setting. This report summarizes past studies and presents new data demonstrating that the MCOs achieve savings in the following ways:

- **Paying pharmacies a considerably lower dispensing fee.** Medicaid FFS programs typically pay higher dispensing fees (the amounts paid for the pharmacist to fill a prescription) than nearly all other payers – even commercial insurers. Medicaid MCO dispensing fees are more in line with those paid by Medicare Part D plans and other private payers.
- **Paying pharmacies a slightly lower ingredient cost.** On average, Medicaid MCOs appear to pay slightly less for the ingredient component (i.e., the costs of the pills and capsules themselves) of the medications compared to Medicaid FFS programs.
- **Steering medications to the lowest-cost clinically effective product.** Medicaid MCOs have much higher generic dispensing rates than Medicaid FFS programs (after adjusting for demographics and when comparing to FFS drug mix in the carve-out setting). Medicaid MCOs also steer volume towards low-cost generics and to relatively low-cost brands when generics are not available.
- **Lowering the usage rate.** Fewer medications are prescribed in the Medicaid MCO carve-in setting than in the carve-out environment. Medicaid MCOs are likely more effective at identifying (and avoiding paying for) unnecessary or even fraudulent prescriptions.

- **Lowering cost escalation trends.** The usage and drug mix savings the MCOs are able to achieve are expected to increase favorably as their management of the drug benefit matures in the carve-in setting. This leads to widening savings in the carve-in setting relative to the carve-out setting over time.

Large-Scale Savings Are Projected To Immediately Occur

Modeling all of above dynamics across the 10 year timeframe 2012-2021, Lewin estimates that total Medicaid savings across the 14 states would be **\$750 million in Year 1 (2012)** and **\$11.7 billion across the full ten-year period**. Across the 14 states, 58.2 percent of the savings would accrue to the Federal government with the remaining 41.8 percent distributed among the 14 state governments. The savings levels vary widely among the 14 states based on the size of their Medicaid capitation programs and the characteristics of their FFS pharmacy programs (e.g., dispensing fees, generic/brand mix, etc.).

The savings opportunity is also large when viewed on a percentage basis -- projected savings would average 16.6 percent in 2012 and 20.6 percent across the full ten-year period and across the 14 full carve-out states.

Additional savings estimates in the partial carve-out states (such as California, Maryland, Michigan and New Jersey) were not derived in this report. However, savings opportunities likely exist in these states by moving to a comprehensive carve-in approach.

The savings estimates take into consideration the Medicaid enrollment increases that will occur (related to the health reform bill's passage) beginning in 2014, and other known expansions to state capitation programs that are being planned and/or implemented. The figures represent net savings, after manufacturer rebates are factored in.¹

There are also several programmatic advantages to adopting the carve-in model. Including, rather than carving out, something as central as prescription drugs has widely been regarded as the best programmatic approach for designing and operating a strong integrated care program. These programmatic strengths are the reason that most states had maintained their carve-in model in the face of the growing rebates, and represent an important advantage (in addition to the large financial savings) for the 14 carve-out states to switch to the carve-in approach.

¹ Pharmacy carve-in savings were estimated for the Medicaid expansion enrollment based on the degree to which each state's TANF population has enrolled into capitated health plans, and to account for known extensions of the use of the capitated model. Otherwise, this study has not estimated the savings that would occur by bringing additional population groups into the capitated setting. Savings from such population expansions have been estimated in each state in an earlier study that is also available on the MHPA website (www.mhpa.org): "Medicaid Capitation Expansion's Potential Cost Savings," Lewin Group, April 2006. This study was jointly sponsored by MHPA and ACAP.

II. Introduction

State Medicaid programs have always faced pressure to achieve the most value out of the available dollars. However, the unprecedented fiscal challenges states have faced recently – which show little if any evidence of subsiding during the upcoming years – heightens the importance of achieving Medicaid savings in any manner that is not clinically detrimental to the beneficiary population.

This document describes and quantifies a specific Medicaid savings opportunity in the 14 states that utilize a prescription drug “carve-out” model in their capitated Medicaid managed care programs. Of the 41 states that contract with Medicaid managed care organizations (MCOs) on a capitated basis, 27 include pharmacy in the capitated benefits package (which is commonly referred to as a “carve-in” approach). The remaining 14 states use the carve-out approach whereby the MCO enrollees’ prescription drugs are paid for through the Medicaid fee-for-service (FFS) claims process and are not included in the capitation payments.²

Exhibit 1 shows these 14 states and an estimate of the CY2011 pharmacy costs associated with each state’s Medicaid MCO enrollees. Collectively across the 14 states, it is estimated that MCO enrollees will incur about \$6.9 billion in Medicaid pharmacy spending during CY2011. This figure represents pre-rebate costs; net costs for the prescription drug benefit will be considerably less once manufacturer rebates are factored in.

Exhibit 1. Estimated Baseline Pharmacy Costs for MCO Enrollees, Carve-Out States

State	Estimated CY2011 Spend, MCO Enrollee Medications			Estimated CY2011 Scripts, MCO Enrollee Medications			Estimated CY2011 Cost Per Script, MCO Enrollee Medications		
	Brand	Generic	Total	Brand	Generic	Total	Brand	Generic	Total
Connecticut	\$127,924,927	\$32,061,016	\$159,985,943	655,590	1,206,816	1,862,406	\$195	\$27	\$86
Delaware	\$119,487,600	\$27,255,562	\$146,743,162	650,933	1,346,052	1,996,984	\$184	\$20	\$73
Illinois	\$45,708,843	\$12,186,300	\$57,895,144	271,198	743,039	1,014,237	\$169	\$16	\$57
Indiana	\$326,942,787	\$53,782,138	\$380,724,925	1,311,343	3,654,491	4,965,834	\$249	\$15	\$77
Iowa	\$23,705,517	\$4,200,000	\$27,905,517	131,638	296,543	428,180	\$180	\$14	\$65
Missouri	\$253,066,350	\$73,378,320	\$326,444,670	1,266,086	3,157,919	4,424,005	\$200	\$23	\$74
Nebraska	\$19,513,335	\$5,909,379	\$25,422,714	101,827	313,338	415,165	\$192	\$19	\$61
New York	\$1,775,722,238	\$316,178,550	\$2,091,900,788	9,213,486	15,988,775	25,202,262	\$193	\$20	\$83
Ohio	\$1,207,419,302	\$211,571,416	\$1,418,990,718	6,068,724	15,117,307	21,186,031	\$199	\$14	\$67
Tennessee	\$718,870,244	\$179,717,561	\$898,587,805	4,261,223	8,351,488	12,612,711	\$169	\$22	\$71
Texas	\$727,485,462	\$220,840,528	\$948,325,990	3,943,269	9,076,865	13,020,133	\$184	\$24	\$73
Utah	\$10,023,198	\$3,928,222	\$13,951,420	53,367	152,170	205,537	\$188	\$26	\$68
West Virginia	\$57,940,278	\$12,842,139	\$70,782,417	363,879	761,480	1,125,359	\$159	\$17	\$63
Wisconsin	\$250,359,230	\$56,328,080	\$306,687,310	1,763,280	3,352,722	5,116,002	\$142	\$17	\$60
TOTAL	\$5,664,169,310	\$1,210,179,211	\$6,874,348,521	30,055,843	63,519,004	93,574,847	\$188	\$19	\$73

² Several additional states have partial pharmacy carve-outs, where most medications are carved-in but where certain therapeutic classes (e.g., behavioral health medications, anti-retroviral medications, etc.) are carved-out. Savings in these states (California, Maryland, and New Jersey, and others) were not derived in this report. However, savings opportunities likely also exist in these states by moving to a comprehensive carve-in approach.

III. Background on Pharmacy Carve-In/Carve-Out Decisions

In designing and operating their Medicaid managed care programs, states must determine whether to carve-in or carve-out the pharmacy benefit. While there are a variety of general and state-specific dynamics to consider, the primary advantages of the carve-in model involve facilitating a “whole person” focused integrated care program more fully, and drawing upon the MCOs to manage the pharmacy benefit more effectively/efficiently than would otherwise occur in the Medicaid FFS environment.

The large Federal rebates available on Medicaid prescription drugs, historically accessible only for medications directly purchased by the State Medicaid agency, have been the primary driver in adopting the carve-out approach. In recent years, the carve-in/carve-out options have been on the “front burner” of policymaking in several states, as summarized below.

2007-2009: During each year leading up to 2010, the Federal rebates continued to grow in size (as did supplemental rebates negotiated by the states), making the carve-out approach increasingly attractive to Medicaid agencies as their fiscal situation forced them to find new sources of savings. Entering 2010, the federally mandated rebates averaged more than 30 percent of initial payments to the pharmacies whereas the MCOs’ negotiated rebates averaged an amount similar to the states’ supplemental rebates (typically six percent or less of initial pharmacy payments). Five states – Connecticut, Indiana Missouri, Ohio and Wisconsin – decided to move from a pharmacy carve-in approach to a carve-out model during this timeframe, and many other states were strongly considering making a similar policy change. No states moved from a carve-out to a carve-in model during this timeframe.

2010: The Affordable Care Act (ACA) included several provisions related to Medicaid rebates. Some of these provisions extended the same Federal rebates that were previously available only for FFS Medicaid medications to Medicaid medications purchased by MCOs. These rebate equalization provisions created substantial Medicaid savings in the carve-in states, and removed the primary advantage of moving to a carve-out model. While many states were poised to switch to a carve-out in early 2010, no state has done so since the rebate equalization provisions were enacted. Additional ACA provisions increased the level of the Federal Medicaid rebates, creating further Medicaid savings.

2011 and Beyond: Looking ahead to 2011 and beyond, it now appears unlikely that any of the carve-in states will adopt a carve-out model. However, it is an opportune time for the 14 carve-out states to consider switching to a carve-in approach. Texas has already announced its intention to move to a carve-in approach, and several other carve-out states have been discussing/considering a similar policy change.

IV. Key Advantages of the Carve-In and Carve-Out Approaches

The key *programmatic* advantages and disadvantages of the carve-in and carve-out approaches are described in Exhibit 2. Taking all the information in **Exhibit 2** into consideration, the programmatic advantages of the carve-in approach far outweigh those of the carve-out model. The primary rationale for adopting the carve-out approach to date -- access to the large federal FFS rebates -- no longer exists due to the rebate equalization provisions of the health reform bill.

The importance of prescription medications to the overall health of the US population has steadily increased over the past several decades, with the Medicaid population being no exception. Prescription drugs have evolved from a peripheral component of a health benefits package to one of the highest-cost “line items” accounting for 17 percent of total Medicaid expenditures for non-dual eligibles. Medications now play a central role in the treatment of most health conditions. Given this, the notion of “carving out” prescription drugs from a coordinated care program is fundamentally problematic. Including, rather than carving out, something as central as prescription drugs has widely been regarded as the best programmatic approach for designing and operating a strong integrated care program.³

Exhibit 2. Programmatic Comparisons between Carve-In and Carve-Out Settings

Issue	Carve-In Setting	Carve-Out Setting	Comments
Integration of Care by MCO Medical Management Staff	Pharmacy data are typically used extensively in the MCOs’ broader care coordination efforts.	Care coordination efforts do not typically include pharmacy data.	Between the lack of a financial incentive to manage the drug benefit in the carve-out setting and the data integration challenges (described below), MCOs do not work nearly as closely with Rx data in their care coordination efforts as occurs in a carve-in setting.
Ease of Assimilation of Rx Data	Rx data is typically provided to the MCO on a real-time basis by a contracted vendor (PBM) in a manner that is tailored to the system requirements of a given MCO.	Rx data files are typically provided to each MCO on a timeframe and with a data structure that is convenient to the State and which is not tailored to the system used by each MCO.	The pharmacy files provided to the MCOs in carve-out states can be cumbersome for the health plans to use and are not routinely integrated into the MCOs’ care coordination efforts. For example, ascertaining the medications any given member has recently taken can occur almost immediately in the carve-in setting but requires extensive file loading and manipulation in a carve-out state.

³ A detailed exploration of the programmatic dynamics of pharmacy carve-ins versus the carve-out approach is: Programmatic Assessment of Carve-In and Carve-Out Arrangements for Medicaid Prescription Drugs, Lewin Group, 2007 (funded by Association for Community Affiliated Plans). This report can be downloaded at no cost at www.communityplans.net.

Issue	Carve-In Setting	Carve-Out Setting	Comments
Enrollee Confusion	Enrollees receive medical and pharmacy coverage through same entity, and have a single place to turn with concerns on either or both fronts.	Members have a separate ID card for Rx services and must obtain information from different entities when seeking to address medical vs. Rx concerns.	MCOs in carve-out states are experienced in helping enrollees navigate the carve-out program, but the carve-in approach would create less enrollee confusion and would allow for enrollees' concerns to be addressed more expeditiously.
Administrative Ease for Prescribing Physicians	Physicians participating in multiple networks usually deal with multiple MCO rules/formularies plus those of Medicaid FFS program.	All Medicaid prescriptions occur via a single set of rules/formularies.	This issue, the lone programmatic advantage of the carve-out approach, is often over-emphasized given that physician practices must typically deal with dozens of drug coverage programs regardless as to how the Medicaid pharmacy benefit is administered. Single Medicaid formularies also lead to a major financial concern, creating a political opportunity for drug manufacturers to achieve favorable placement of their products.
Data Analytics to Support Care Coordination	As one of their costliest line items and because of the critical role Rx plays in maintaining health and averting crises, MCOs draw heavily upon Rx data in their analytic efforts.	Pharmacy data are drawn upon only sporadically to assess whether enrollees are receiving and adhering to indicated drug regimens.	The pharmacy data are typically well-integrated into the MCOs' overall care coordination efforts in the carve-in setting. While it is possible to conduct similar analytics with the carve-out data files, it is cumbersome to do so and carve-out MCOs generally do far less analytic work with Rx data in a carve-out environment.
"Whole Person" Focus of Integrated Care Program	Carve-in approach keeps MCOs focused on meeting beneficiaries' overall health needs.	Carve-outs create "buckets" of financial responsibility.	Having various parties focus just on "their piece" of an individual's care does not foster optimally integrated care coordination.

The *financial* dynamics of the carve-in and carve-out models are summarized in **Exhibit 3**. There are numerous ways in which the carve-in approach can yield considerable savings relative to the carve-out, including initial prices paid to pharmacies, drug mix, and drug volume. Conversely, the only area in which the carve-out is expected to yield lower costs than the carve-in involves the administrative costs of the drug benefit (since less intensive benefits management activity is taking place in the carve-out setting).

Exhibit 3. Financial Comparisons between Carve-In and Carve-Out Settings

Issue	Carve-In Setting	Carve-Out Setting	Comments
Dispensing Fee Paid to Pharmacies	MCOs negotiate the dispensing fee (or “fill fee”) with pharmacies. These negotiated amounts typically average around \$2.00.	The Medicaid FFS dispensing fees apply. In the 14 carve-out states, these fees range from \$2.50 - \$7.50 with a weighted average of \$4.74.	Substantial savings will occur through lower dispensing fees. Most private payers’ dispensing fees are in the vicinity of \$2.00. Medicaid fee-for-service programs tend to be “high outliers” in this area.
Ingredient Cost Paid to Pharmacies	MCOs negotiate the ingredient payment rates with pharmacies.	States establish Medicaid ingredient payment rates with pharmacies through legislation/negotiation.	While ingredient payment levels can be difficult to compare, prior analyses found Medicaid FFS ingredient payments to be slightly above Medicaid MCOs and other payers. ^{4, 5, 6}
Drug Mix Between Brands and Generics (as well as <i>within</i> Brands and Generics)	Generics represent >80% of Medicaid MCO prescriptions in the carve-in setting. MCOs also channel volume towards lower-cost brands and relatively low-cost generics.	Across the 14 carve-out states, 67% of Medicaid FFS prescriptions were generics during the first quarter of 2010. MCOs have no incentive to favorably impact drug mix in the carve-out setting.	MCOs have consistently demonstrated a higher generic dispensing rate than have Medicaid FFS programs and strong overall formulary compliance. ⁷ Substantial savings opportunities exist to channel volume towards lower-cost medications.
Drug Volume	Carve-in MCOs have a strong incentive to avoid unnecessary prescriptions.	MCOs have no incentive to favorably impact prescription volume in the carve-out setting.	Prior data analyses have found Rx volume to be lower in the MCO carve-in setting than in the Medicaid FFS setting. ⁸

⁴ “Comparing Pharmacy Reimbursement: Medicare Part D to Medicaid,” DHHS Office of the Inspector General, February 2009; “A Comparison of Medicaid Federal Upper Limit (FUL) Amounts to Acquisition Costs, Medicare Payment Amounts, and Retail Prices,” DHHS Office of the Inspector General, August 2009. The OIG found that the AMP-based FUL amounts for ingredient costs under the DRA-mandated method (never implemented due to an injunction) were slightly less than average Part D payments. With the new definition of AMP and formula for determining FULs projected to increase FULs over the DRA amounts, it is likely that the new FULs will be at or above average Part D payments.

⁵ Coster, John, “Trends in Generic Drug Reimbursement in Medicaid and Medicare”, *US Pharmacist*, 2010; 35(6)(Generic Drug Review suppl):14-19; US Government Accountability Office, “Medicaid Outpatient Prescription Drugs: Second Quarter 2008 Federal Upper Limits for Reimbursement Compared with Average Retail Pharmacy Acquisition Costs,” GAO-10-118R Medicaid Federal Upper Limit, November 30, 2009.

⁶ CMS Medicaid pharmacy reimbursement information, <http://www.cms.gov/Reimbursement/>, Accessed July 2010.

⁷ Comparison of Medicaid Pharmacy Costs and Usage between the Fee-for-Service and Capitated Setting, Lewin Group, 2003 (funded by Center for Health Care Strategies), page 7.

⁸ Lewin also compared the volume and mix of prescription drugs *in the same health plan and the same state* under both a carve-in and carve-out environment. New York structures its pharmacy benefits

Issue	Carve-In Setting	Carve-Out Setting	Comments
Federal Rebates	Under the ACA, Federal rebates on Medicaid MCO drugs will likely exceed 35% of the initial amount paid to pharmacies.	Under the ACA, Federal rebates on Medicaid FFS drugs will likely exceed 35% of the initial amount paid to pharmacies.	From 2010 forward, there will be no difference in the Federal rebates on Medicaid medications between the MCO carve-in and FFS carve-out settings.
Supplemental Rebates	MCOs negotiate additional rebates with manufacturers (beyond the Federal Medicaid rebates), related to formulary placement, and have achieved strong formulary compliance.	States negotiate additional rebates with manufacturers (beyond the Federal Medicaid rebates), related to preferred drug list placement.	The supplemental rebates negotiated by states and the rebates MCOs have directly negotiated have generally been comparable in size although there is variation from state to state and from MCO to MCO. Since the ACA's passage, these additional rebates have diminished in size due to the large-scale increases in Federal rebates being paid by the drug manufacturers. We expect that manufacturers will continue to negotiate and pay rebates to the MCOs and supplemental rebates to states (for preferred product placement), but at a reduced level relative to pre-ACA dynamics.*
Administrative Costs and Risk Margins	MCOs must be paid fairly to administer the pharmacy benefit, including an adequate risk or profit margin.	There are also administrative costs for processing pharmacy claims in the carve-out setting.	The administration costs are expected to be higher in the carve-in setting, to compensate for the heightened benefits management efforts that occur.

* Most -- but not all -- states use preferred drug lists and collect supplemental rebates.

As delineated in the footnotes to Exhibit 3, numerous studies have documented the unit price, drug mix, and usage rate differentials. In addition to these prior studies, additional analyses were conducted by two large Medicaid MCOs comparing their recent statistical experience in the carve-in setting with their members in other states in a carve-out setting. These findings are summarized below.

differently for children in CHIP (carved-in) and TANF Medicaid (carved-out). For both demographic groups assessed (Children Age 1-5; Children Age 6-17), the generic dispensing rate was typically about four percentage points higher for CHIP (the carve-in) than for Medicaid (where the carve-out exists) - despite the fact that generic dispensing rates are typically higher for Medicaid TANF subgroups than for CHIP. Additionally, the prescription usage rate was considerably (often more than 20 percent) higher for Medicaid children than for Child Health Plus (CHIP).

- The average CY2010 cost per prescription in a Medicaid health plan (with several hundred thousand enrollees in both pharmacy carve-in and pharmacy carve-out states) was \$31.55 in the carve-in states and \$56.84 in the carve-out states. This differential of 44 percent occurred through a combination of significantly lower dispensing fees, a 10 percentage point difference in the generic dispensing rate (85 percent for carve-in members versus 75 percent for carve-out members), a slightly shorter average days supply per prescription, a lower average cost *within* brand prescriptions, and a lower average cost *within* generic prescriptions. This health plan reported similar results for its CHIP enrollees, where the average cost per prescription for carve-in enrollees (\$40.75) was 41% below the average for this health plan's carve-out enrollees (\$69.49). All these figures depict initial, pre-rebate payments to pharmacies.
- The average CY2010 usage rate (Medicaid prescriptions per 1,000 enrollees per year) was 6,894 for this MCO across carve-in TANF members, 15 percent below its usage rate of 8,114 across carve-out TANF members.
- Another MCO provided comparison data across CY2008 and CY2009 for its enrollees in one carve-in state and one carve-out state. This plan also had several hundred thousand enrollees in both pharmacy carve-in and pharmacy carve-out states). For this MCO, average costs per prescription (pre-rebate) were 36 percent lower for TANF enrollees in the carve-in state than for TANF enrollees in the carve-out state in both 2008 and 2009. This MCO experienced a 16 percentage point differential in the generic dispensing rate each year between its TANF enrollees in these two states each year (84 percent versus 68 percent in 2008, and 85 percent versus 69 percent in 2009). For this MCO, the usage rate was 3-4 percent higher in the carve-in setting for TANF enrollees, and 21-23 percent lower in the carve-in setting for CHIP enrollees.

These statistics suggest that considerable pharmacy benefits management efficiencies are occurring in the carve-in setting relative to the carve-out environment. The next section of the Report prepares specific savings estimates for each carve-out state.

V. Financial Estimates of Carve-Out States Switching to the Carve-In Approach

The estimated financial savings the carve-in model would create has been derived through a variety of steps. The methodology, data and assumptions used are described below.

Baseline Costs

Total Medicaid FFS pharmacy costs and usage in each state were obtained from a CMS website⁹ for CY2009 for most of the carve-out states. This information separately reports brand and generic prescriptions and costs, with all costs representing pre-rebate amounts. The amount of Medicaid spending paid via capitation in each state was derived from a separate CMS website.¹⁰ The percentage of each state's Medicaid spending on non-dual eligibles paid via capitation was applied to the overall pharmacy costs to approximate the level of pharmacy spending occurring on behalf of each state's MCO enrollees. These baseline cost estimates were shown in Exhibit 1.

Baseline Cost Trending

The MCO enrollee costs under the existing carve-out model have been estimated from CY2012 through CY2021 to allow for an assessment of savings across a 10-year timeframe. Given the planning and implementation work required to implement a carve-in, CY2012 is viewed to represent an appropriate "Year 1." The trending assumptions used are as follows:

- Throughout the 10-year timeframe, a 2 percent annual inflation factor has been applied to the average unit cost of all Medicaid medications; an additional 2% annual inflation factor has been applied to the prescription usage rate.
- For 2012 and 2013, additional cost escalation factors were used to acknowledge that three of the 14 carve-out states (Illinois, Texas, and West Virginia) are expanding their baseline Medicaid capitation programs to include new populations. The estimated magnitude of these expansions is shown in **Exhibit 4**.
- The ACA's health reform provisions will create a large-scale increase in Medicaid enrollment beginning in 2014. The Lewin Group's estimated percentage enrollment impacts vary considerably by state, from a low of 0.8 percent in New York to a high of 35.1 percent in Utah (among the carve-out states). The overall increase was apportioned 50 percent to 2014 and then fully to 2015 and beyond, allowing for a phase-in of the expansion population during 2014. The estimated percentage increase in Medicaid enrollment attributable to the ACA is also shown in **Exhibit 4** for each carve-out state (multiplying the two right-hand columns together yields the estimated overall increase).¹¹

⁹ CMS Medicaid pharmacy data, <http://www.cms.gov/Reimbursement/>, accessed July 2010.

¹⁰ This website is the MSIS State Summary Datamart: <http://msis.cms.hhs.gov>

¹¹ These figures represent an estimate the increase in Medicaid *enrollment* created by the ACA. We assume that 70 percent of uninsured persons who become eligible for Medicaid through the ACA will enroll. The "take-up rate" for already insured persons made eligible for Medicaid is much lower – around 30 percent.

Exhibit 4. Medicaid MCO Population Growth Factors

State	Managed Care Expansion		Health Reform Expansion	
	2012	2013	2014	2015
Connecticut	1.00	1.00	1.08	1.08
Delaware	1.00	1.00	1.02	1.02
Illinois	5.00	1.00	1.11	1.11
Indiana	1.00	1.00	1.08	1.08
Iowa	1.00	1.00	1.14	1.14
Missouri	1.00	1.00	1.12	1.12
Nebraska	1.00	1.00	1.15	1.15
New York	1.00	1.00	1.00	1.00
Ohio	1.00	1.00	1.13	1.13
Tennessee	1.00	1.00	1.09	1.09
Texas	1.20	1.10	1.14	1.14
Utah	1.00	1.00	1.16	1.16
West Virginia	3.00	1.00	1.12	1.12
Wisconsin	1.00	1.00	1.17	1.17

- The population increase factors in **Exhibit 4** were used to estimate the volume of prescriptions the Medicaid MCO enrollees will receive in each year and in each state through 2015.
- From 2016 forward, a 1.0 percent annual increase in the Medicaid population is assumed due to overall population growth. Aside from the factors described above, no Medicaid enrollment growth (or shrinkage) is projected from 2011-2015.
- The generic dispensing rate (GDR) has been rising over time in all payer sectors, as an ever-increasing proportion of medications reach patent expiration. Each carve-out state’s Medicaid FFS GDR is projected to evolve steadily towards 82 percent as of 2021 from its known 2010 starting point. The estimated evolution of the GDR in each state is shown in **Exhibit 5**. **Exhibit 6** presents the estimated volume of MCO enrollee prescriptions, divided between brand and generic medications.

Exhibit 5. Estimated Progression of Generic Dispensing Rate Under Continued Carve-Out

State	2012	2016	2021
Connecticut	67.33%	73.85%	82.00%
Delaware	69.50%	75.06%	82.00%
Illinois	74.33%	77.74%	82.00%
Indiana	74.68%	77.93%	82.00%
Iowa	71.08%	75.93%	82.00%
Missouri	72.75%	76.86%	82.00%
Nebraska	76.14%	78.74%	82.00%
New York	66.28%	73.27%	82.00%
Ohio	72.82%	76.90%	82.00%
Tennessee	72.18%	76.55%	82.00%
Texas	71.35%	76.09%	82.00%
Utah	74.88%	78.04%	82.00%
West Virginia	69.73%	75.18%	82.00%
Wisconsin	67.96%	74.20%	82.00%

Exhibit 6. Estimated Prescription Volume for Medicaid MCO Enrollees Under Carve-Out

Estimated Generic Scripts for MCO Enrollees, Carve-Out

State	2012	2016	2021
Connecticut	1,279,086	1,796,266	2,314,373
Delaware	1,415,762	1,753,678	2,223,171
Illinois	3,844,609	5,390,004	6,597,565
Indiana	3,782,630	5,054,186	6,170,937
Iowa	310,435	473,583	593,454
Missouri	3,282,739	4,766,549	5,900,999
Nebraska	322,422	479,774	579,752
New York	17,037,635	20,763,576	26,966,449
Ohio	15,735,697	23,308,824	28,841,856
Tennessee	9,286,166	12,873,234	16,002,574
Texas	11,371,419	19,073,825	23,853,791
Utah	156,975	241,645	294,626
West Virginia	2,401,099	3,570,110	4,518,487
Wisconsin	3,546,492	5,804,678	7,443,691
14 State Total	73,773,167	105,349,932	132,301,725

Estimated Brand Scripts for MCO Enrollees, Carve-Out

State	2012	2016	2021
Connecticut	620,569	636,004	508,033
Delaware	621,162	582,744	488,013
Illinois	1,327,998	1,543,650	1,448,246
Indiana	1,282,521	1,431,106	1,354,596
Iowa	126,309	150,102	130,270
Missouri	1,229,746	1,435,054	1,295,341
Nebraska	101,046	129,512	127,263
New York	8,668,672	7,576,577	5,919,464
Ohio	5,874,054	7,002,271	6,331,139
Tennessee	3,578,799	3,944,530	3,512,760
Texas	4,565,224	5,995,107	5,236,198
Utah	52,673	67,989	64,674
West Virginia	1,042,500	1,178,554	991,863
Wisconsin	1,671,830	2,018,203	1,633,981
14 State Total	30,763,102	33,691,403	29,041,842

Estimated Total Scripts for MCO Enrollees, Carve-Out

State	2012	2016	2021
Connecticut	1,899,655	2,432,270	2,822,406
Delaware	2,036,924	2,336,422	2,711,184
Illinois	5,172,607	6,933,653	8,045,811
Indiana	5,065,151	6,485,292	7,525,533
Iowa	436,744	623,685	723,724
Missouri	4,512,485	6,201,603	7,196,340
Nebraska	423,468	609,286	707,015
New York	25,706,307	28,340,153	32,885,914
Ohio	21,609,751	30,311,095	35,172,995
Tennessee	12,864,965	16,817,764	19,515,334
Texas	15,936,643	25,068,932	29,089,989
Utah	209,648	309,635	359,300
West Virginia	3,443,598	4,748,664	5,510,350
Wisconsin	5,218,322	7,822,882	9,077,672
14 State Total	104,536,269	139,041,335	161,343,568

Exhibit 7 conveys estimated total (pre-rebate) spending for the MCO enrollees by state and year, including the distribution of costs between brand and generic medications. The years 2012, 2016 and 2021 are shown to represent baseline costs for Years 1, 5 and 10 of the policy change to a carve-out.

Exhibit 7. Estimated Expenditures for MCO Enrollees Under Carve-Out (Pre-Rebate)

Estimated Pre-Rebate Cost, Generic Scripts for MCO Enrollees, Carve-Out

State	2012	2016	2021	Ten Year Total
Connecticut	\$34,660,589	\$52,687,491	\$74,949,910	\$543,251,466
Delaware	\$29,240,440	\$39,205,242	\$54,874,169	\$410,884,986
Illinois	\$64,315,066	\$97,600,112	\$131,900,311	\$987,219,112
Indiana	\$56,781,278	\$82,122,707	\$110,704,171	\$836,969,923
Iowa	\$4,484,703	\$7,405,586	\$10,245,921	\$74,509,637
Missouri	\$77,804,252	\$122,284,610	\$167,145,276	\$1,234,736,648
Nebraska	\$6,202,327	\$9,990,024	\$13,328,261	\$99,550,456
New York	\$343,658,184	\$453,336,001	\$650,043,896	\$4,809,601,306
Ohio	\$224,630,497	\$360,166,889	\$492,048,022	\$3,623,856,412
Tennessee	\$203,827,720	\$305,854,700	\$419,776,566	\$3,117,736,547
Texas	\$282,200,494	\$512,367,499	\$707,460,264	\$5,123,269,052
Utah	\$4,133,310	\$6,887,238	\$9,271,264	\$68,477,275
West Virginia	\$41,303,730	\$66,475,487	\$92,891,037	\$674,215,205
Wisconsin	\$60,775,227	\$107,672,903	\$152,446,501	\$1,080,997,008
14 State Total	\$1,434,017,817	\$2,224,056,490	\$3,087,085,569	\$22,685,275,033

Estimated Pre-Rebate Cost, Brand Scripts for MCO Enrollees, Carve-Out

State	2012	2016	2021	Ten Year Total
Connecticut	\$123,513,059	\$137,019,892	\$120,841,626	\$1,294,349,010
Delaware	\$116,303,204	\$118,104,161	\$109,199,326	\$1,154,131,992
Illinois	\$228,302,987	\$287,252,353	\$297,548,706	\$2,756,788,769
Indiana	\$326,152,072	\$393,938,019	\$411,686,691	\$3,824,058,272
Iowa	\$23,200,746	\$29,843,946	\$28,596,723	\$278,741,440
Missouri	\$250,718,710	\$316,694,277	\$315,614,637	\$3,002,740,840
Nebraska	\$19,750,854	\$27,401,793	\$29,728,372	\$261,432,635
New York	\$1,704,134,083	\$1,612,222,289	\$1,390,705,492	\$15,770,008,724
Ohio	\$1,192,062,081	\$1,538,156,537	\$1,535,480,575	\$14,525,264,031
Tennessee	\$615,820,015	\$734,703,996	\$722,381,263	\$7,026,467,563
Texas	\$859,073,222	\$1,221,140,841	\$1,177,567,301	\$11,328,762,682
Utah	\$10,090,636	\$14,098,578	\$14,806,909	\$132,985,201
West Virginia	\$169,316,496	\$207,192,220	\$192,520,282	\$1,939,809,471
Wisconsin	\$242,122,178	\$316,379,255	\$282,807,516	\$2,889,668,892
14 State Total	\$5,880,560,344	\$6,954,148,157	\$6,629,485,418	\$66,185,209,523

Estimated Total Pre-Rebate Cost, All Scripts for MCO Enrollees, Carve-Out

State	2012	2016	2021	Ten Year Total
Connecticut	\$158,173,649	\$189,707,383	\$195,791,536	\$1,837,600,476
Delaware	\$145,543,645	\$157,309,403	\$164,073,494	\$1,565,016,977
Illinois	\$292,618,053	\$384,852,465	\$429,449,017	\$3,744,007,881
Indiana	\$382,933,350	\$476,060,727	\$522,390,862	\$4,661,028,195
Iowa	\$27,685,448	\$37,249,532	\$38,842,644	\$353,251,078
Missouri	\$328,522,963	\$438,978,886	\$482,759,913	\$4,237,477,489
Nebraska	\$25,953,181	\$37,391,817	\$43,056,634	\$360,983,091
New York	\$2,047,792,267	\$2,065,558,290	\$2,040,749,388	\$20,579,610,031
Ohio	\$1,416,692,578	\$1,898,323,426	\$2,027,528,596	\$18,149,120,443
Tennessee	\$819,647,735	\$1,040,558,696	\$1,142,157,830	\$10,144,204,110
Texas	\$1,141,273,716	\$1,733,508,339	\$1,885,027,565	\$16,452,031,734
Utah	\$14,223,946	\$20,985,816	\$24,078,173	\$201,462,477
West Virginia	\$210,620,226	\$273,667,707	\$285,411,319	\$2,614,024,676
Wisconsin	\$302,897,404	\$424,052,158	\$435,254,016	\$3,970,665,900
14 State Total	\$7,314,578,161	\$9,178,204,647	\$9,716,570,987	\$88,870,484,556

Exhibit 8 conveys these same estimates after rebates are taken into consideration. Rebates are assumed to represent 15 percent of initial generic costs and 44 percent of initial brand costs.

Exhibit 8. Estimated Expenditures for MCO Enrollees under Carve-Out (Post-Rebate)

Estimated Post-Rebate Cost, Generic Scripts for MCO Enrollees, Carve-Out

State	2012	2016	2021	Ten Year Total
Connecticut	\$31,194,530	\$47,418,742	\$67,454,919	\$488,926,320
Delaware	\$26,316,396	\$35,284,718	\$49,386,752	\$369,796,487
Illinois	\$57,883,559	\$87,840,101	\$118,710,280	\$888,497,201
Indiana	\$51,103,150	\$73,910,437	\$99,633,753	\$753,272,931
Iowa	\$4,036,232	\$6,665,027	\$9,221,329	\$67,058,673
Missouri	\$70,023,827	\$110,056,149	\$150,430,748	\$1,111,262,983
Nebraska	\$5,582,094	\$8,991,022	\$11,995,435	\$89,595,410
New York	\$309,292,366	\$408,002,401	\$585,039,506	\$4,328,641,176
Ohio	\$202,167,447	\$324,150,200	\$442,843,220	\$3,261,470,771
Tennessee	\$183,444,948	\$275,269,230	\$377,798,910	\$2,805,962,892
Texas	\$253,980,445	\$461,130,749	\$636,714,238	\$4,610,942,147
Utah	\$3,719,979	\$6,198,515	\$8,344,137	\$61,629,548
West Virginia	\$37,173,357	\$59,827,939	\$83,601,934	\$606,793,684
Wisconsin	\$54,697,704	\$96,905,613	\$137,201,851	\$972,897,307
14 State Total	\$1,290,616,035	\$2,001,650,841	\$2,778,377,012	\$20,416,747,530

Estimated Post-Rebate Cost, Brand Scripts for MCO Enrollees, Carve-Out

State	2012	2016	2021	Ten Year Total
Connecticut	\$67,932,183	\$75,360,941	\$66,462,894	\$711,891,955
Delaware	\$63,966,762	\$64,957,289	\$60,059,629	\$634,772,596
Illinois	\$125,566,643	\$157,988,794	\$163,651,788	\$1,516,233,823
Indiana	\$179,383,640	\$216,665,910	\$226,427,680	\$2,103,232,050
Iowa	\$12,760,410	\$16,414,171	\$15,728,197	\$153,307,792
Missouri	\$137,895,291	\$174,181,852	\$173,588,050	\$1,651,507,462
Nebraska	\$10,862,970	\$15,070,986	\$16,350,605	\$143,787,949
New York	\$937,273,745	\$886,722,259	\$764,888,021	\$8,673,504,798
Ohio	\$655,634,145	\$845,986,095	\$844,514,316	\$7,988,895,217
Tennessee	\$338,701,008	\$404,087,198	\$397,309,695	\$3,864,557,160
Texas	\$472,490,272	\$671,627,462	\$647,662,015	\$6,230,819,475
Utah	\$5,549,850	\$7,754,218	\$8,143,800	\$73,141,861
West Virginia	\$93,124,073	\$113,955,721	\$105,886,155	\$1,066,895,209
Wisconsin	\$133,167,198	\$174,008,590	\$155,544,134	\$1,589,317,890
14 State Total	\$3,234,308,189	\$3,824,781,486	\$3,646,216,980	\$36,401,865,238

Estimated Post-Rebate Cost, All Scripts for MCO Enrollees, Carve-Out

State	2012	2016	2021	Ten Year Total
Connecticut	\$99,126,713	\$122,779,682	\$133,917,814	\$1,200,818,275
Delaware	\$90,283,159	\$100,242,007	\$109,446,381	\$1,004,569,082
Illinois	\$183,450,202	\$245,828,895	\$282,362,068	\$2,404,731,024
Indiana	\$230,486,789	\$290,576,347	\$326,061,434	\$2,856,504,981
Iowa	\$16,796,642	\$23,079,198	\$24,949,527	\$220,366,466
Missouri	\$207,919,118	\$284,238,001	\$324,018,799	\$2,762,770,446
Nebraska	\$16,445,064	\$24,062,008	\$28,346,040	\$233,383,360
New York	\$1,246,566,111	\$1,294,724,660	\$1,349,927,527	\$13,002,145,974
Ohio	\$857,801,592	\$1,170,136,296	\$1,287,357,536	\$11,250,365,988
Tennessee	\$522,145,956	\$679,356,428	\$775,108,605	\$6,670,520,052
Texas	\$726,470,717	\$1,132,758,211	\$1,284,376,253	\$10,841,761,622
Utah	\$9,269,829	\$13,952,732	\$16,487,938	\$134,771,409
West Virginia	\$130,297,430	\$173,783,659	\$189,488,089	\$1,673,688,893
Wisconsin	\$187,864,902	\$270,914,203	\$292,745,984	\$2,562,215,198
14 State Total	\$4,524,924,224	\$5,826,432,327	\$6,424,593,992	\$56,818,612,768

Estimated Costs under Switch to Pharmacy Carve-In Model

The carve-in model is projected to yield savings in a variety of ways. The specific assumptions used are shown below:

Drug Mix and Generic Dispensing Rate (GDR): Medicaid MCOs currently average above an 80 percent GDR. Recent data obtained for this study across several hundred thousand covered lives indicates the GDR to be at approximately 85 percent. We have more conservatively estimated the GDR in the carve-in setting to average 80 percent in each carve-out state in 2012, increasing by 0.5 percentage points each year such that the GDR reaches 84.5 percent in 2021 (Year 10). It is important to note that MCOs achieve savings on the “mix” of drugs provided to their enrollees that go beyond substituting generics for brands. Considerable savings are also possible *within* brands and in many cases within generics as well. MCOs are adept at steering volume to the lowest-cost clinically appropriate medication.

Overall Prescription Volume: The available data on prescription volume in the carve-in setting is mixed. For many populations, the rate of prescriptions per 1,000 enrollees per year is far lower in the carve-in setting – in some cases more than 20 percentage points lower. Conversely there have also been situations where the usage rate is slightly (3-4 percentage points) higher in the carve-in setting than MCO enrollees are experiencing in the carve-out setting. Collectively, the available data average out to a considerable decrease in prescription volume in the carve-in setting. We estimate a modest decrease in overall prescription volume of 2.0 percent in CY2012. We estimate that as the carve-in matures, the usage rate will increase by one percent per year, which creates a modest compounding savings given that our annual usage rate increase in the carve-out setting is two percent. By 2021, a ten percent usage reduction is assumed.

Unit Price Impacts: We have assumed that the MCOs will pay, on average, a \$2.00 dispensing fee for each prescription. Each carve-out state’s dispensing fees are considerably above this amount, as shown in **Exhibit 9**. Thus, dispensing fee savings are estimated as the difference between each state’s fee and \$2.00. In addition, ingredient costs are projected to one percent lower in the carve-in setting in Year 1 (2012), then increase by only one percent annually thereafter (versus an annual price increase of two percent in the carve-out setting).

Exhibit 9. Baseline Dispensing Fees and Estimated Savings

State	FFS Dispensing Fee		MCO Dispensing Fee (All)	MCO Savings	
	Generic	Brand		Generic	Brand
Connecticut	\$3.15	\$3.15	\$2.00	\$1.15	\$1.15
Delaware	\$3.65	\$3.65	\$2.00	\$1.65	\$1.65
Illinois	\$4.60	\$3.40	\$2.00	\$2.60	\$1.40
Indiana	\$4.90	\$4.90	\$2.00	\$2.90	\$2.90
Iowa	\$4.57	\$4.57	\$2.00	\$2.57	\$2.57
Missouri	\$4.09	\$4.09	\$2.00	\$2.09	\$2.09
Nebraska	\$3.27	\$3.27	\$2.00	\$1.27	\$1.27
New York	\$4.50	\$3.50	\$2.00	\$2.50	\$1.50
Ohio	\$3.70	\$3.70	\$2.00	\$1.70	\$1.70
Tennessee	\$3.00	\$2.50	\$2.00	\$1.00	\$0.50
Texas	\$7.50	\$7.50	\$2.00	\$5.50	\$5.50
Utah	\$3.90	\$3.90	\$2.00	\$1.90	\$1.90
West Virginia	\$5.30	\$2.50	\$2.00	\$3.30	\$0.50
Wisconsin	\$3.94	\$3.44	\$2.00	\$1.94	\$1.44

MCO Administration and Operating Margin: The transition to a carve-in model creates additional administrative costs for the MCOs. In addition, the pharmacy component of the capitation must also include a risk margin -- MCOs must be paid this margin in exchange for their willingness to accept the financial risk transferred to them under the carve-in approach. Collectively, we assume that the marginal administrative costs and the risk margin will represent 5 percent of pre-rebate costs in the carve-out setting.

MCO Rebates: Due to the provisions of the ACA bill, Federal Medicaid rebates have been equalized for a given medication regardless as to whether the MCO or the state Medicaid agency serves as the payer. For any given medication, there will be no difference in the Federal rebates. Because the MCOs steer volume to generics (where rebates are much smaller), the average percentage rebate will be smaller in the MCO setting and this dynamic has been factored into our estimates. The additional rebates the MCOs are able to negotiate on their own (for preferential placement of drugs on their formularies) are assumed to be equal in size to the supplemental rebates state Medicaid agencies receive in the carve-out setting.¹² Thus, no rebate differentials are assumed to occur in the carve-out on any medication. We have assumed an average 15 percent rebate under the carve-in for generics and an average rebate of 44 percent on brand drugs - identical to the baseline assumptions in the carve-out setting.

Taking into account the estimated MCO impacts discussed above, total estimated costs under the carve-in are shown in **Exhibit 10** on a post-rebate basis.

¹² These rebate levels vary from state to state and from MCO to MCO. There are states where the MCO rebates exceed the state's supplemental rebates, and visa versa.

Exhibit 10. Estimated Pharmacy Costs under Carve-In Model, Post-Rebate (Including Allocations for MCO Administration and Risk Margin)

State	2012	2016	2021	Ten Year Total
Connecticut	\$86,383,112	\$102,993,661	\$107,982,315	\$1,002,269,792
Delaware	\$74,616,620	\$80,409,366	\$85,390,892	\$803,776,490
Illinois	\$157,862,654	\$199,800,333	\$213,929,532	\$1,932,028,595
Indiana	\$197,180,699	\$234,503,098	\$245,069,829	\$2,280,983,474
Iowa	\$13,221,158	\$17,633,804	\$18,558,775	\$167,788,123
Missouri	\$174,925,896	\$228,015,465	\$245,652,946	\$2,195,740,470
Nebraska	\$14,968,020	\$20,366,729	\$21,872,129	\$194,223,020
New York	\$1,033,412,660	\$1,033,485,988	\$1,040,164,123	\$10,354,090,211
Ohio	\$719,465,819	\$940,439,465	\$987,249,974	\$8,977,887,020
Tennessee	\$457,659,811	\$568,658,460	\$614,625,574	\$5,536,595,526
Texas	\$577,783,890	\$866,938,326	\$940,673,504	\$8,233,728,838
Utah	\$8,437,383	\$11,913,332	\$12,988,108	\$113,334,569
West Virginia	\$103,754,463	\$134,494,210	\$142,925,361	\$1,291,114,251
Wisconsin	\$155,194,856	\$215,920,255	\$225,165,614	\$2,031,317,799
14 State Total	\$3,774,867,043	\$4,655,572,493	\$4,902,248,676	\$45,114,878,178

The estimated net savings to each state's Medicaid program are presented in **Exhibit 11**. These savings are derived by subtracting the **Exhibit 10** figures from the baseline costs in **Exhibit 8**. Immediate annual Medicaid savings of more than \$20 million are projected to occur in nine of the 14 carve-out states, as shown in the 2012 column of **Exhibit 11**. Across the 10-year timeframe 2012-2021, net Medicaid savings from the carve-in approach are estimated to exceed \$1 billion in four states - New York, Texas, Ohio and Tennessee. Net 10-years savings of \$150 million to \$600 million are projected in eight states - Connecticut, Delaware, Illinois, Indiana, Missouri, Tennessee West Virginia and Wisconsin. Iowa, Nebraska and particularly Utah have smaller-scale capitation programs that will yield less savings.

Exhibit 11. Net Medicaid Savings by State and Year from Transition to Carve-In Approach (all figures are post-rebate)

State	2012	2016	2021	Ten Year Total
Connecticut	\$12,743,601	\$19,786,022	\$25,935,499	\$198,548,483
Delaware	\$15,666,539	\$19,832,641	\$24,055,489	\$200,792,593
Illinois	\$25,587,548	\$46,028,562	\$68,432,537	\$472,702,428
Indiana	\$33,306,090	\$56,073,249	\$80,991,604	\$575,521,507
Iowa	\$3,575,484	\$5,445,393	\$6,390,751	\$52,578,343
Missouri	\$32,993,222	\$56,222,536	\$78,365,853	\$567,029,976
Nebraska	\$1,477,043	\$3,695,279	\$6,473,911	\$39,160,340
New York	\$213,153,451	\$261,238,672	\$309,763,404	\$2,648,055,763
Ohio	\$138,335,773	\$229,696,830	\$300,107,562	\$2,272,478,968
Tennessee	\$64,486,145	\$110,697,968	\$160,483,030	\$1,133,924,526
Texas	\$148,686,827	\$265,819,885	\$343,702,748	\$2,608,032,784
Utah	\$832,446	\$2,039,400	\$3,499,830	\$21,436,839
West Virginia	\$26,542,966	\$39,289,449	\$46,562,728	\$382,574,642
Wisconsin	\$32,670,045	\$54,993,948	\$67,580,370	\$530,897,399
14 State Total	\$750,057,182	\$1,170,859,834	\$1,522,345,316	\$11,703,734,590

Exhibit 12 presents the carve-in savings on a percentage basis, dividing the figures in Exhibit 11 by those in Exhibit 8. These percentage savings vary in each state due to their baseline generic dispensing rates and dispensing fee levels. The lower a state’s GDR and the higher the dispensing fees, the greater the expected percentage savings from the carve-in approach. During Year 1 of the switch to a carve-in approach (2012), the largest percentage savings is estimated to be 21.3 percent in Iowa; the smallest is 9.0 percent in Nebraska and Utah.

The percentage savings are projected to increase slightly over time, due to the expectation that the carve-in setting will lower the rates of annual price and utilization increases to 1% each (rather than 2%). An offsetting dynamic is our expectation that the generic dispensing rate (GDR) will increase more rapidly in the FFS setting than in the carve-in setting. However, the FFS GDR is never projected to reach the levels achieved by the MCOs in the carve-in setting. The MCOs have demonstrated a continued ability to achieve a considerably higher GDR than the FFS setting throughout the past decade -- despite the substantial GDR increases that have occurred in the Medicaid FFS setting.

Exhibit 12. Net Percentage Medicaid Savings from Transition to Carve-In Approach

State	2012	2016	2021	Ten Year Total
Connecticut	12.9%	16.1%	19.4%	16.5%
Delaware	17.4%	19.8%	22.0%	20.0%
Illinois	13.9%	18.7%	24.2%	19.7%
Indiana	14.5%	19.3%	24.8%	20.1%
Iowa	21.3%	23.6%	25.6%	23.9%
Missouri	15.9%	19.8%	24.2%	20.5%
Nebraska	9.0%	15.4%	22.8%	16.8%
New York	17.1%	20.2%	22.9%	20.4%
Ohio	16.1%	19.6%	23.3%	20.2%
Tennessee	12.4%	16.3%	20.7%	17.0%
Texas	20.5%	23.5%	26.8%	24.1%
Utah	9.0%	14.6%	21.2%	15.9%
West Virginia	20.4%	22.6%	24.6%	22.9%
Wisconsin	17.4%	20.3%	23.1%	20.7%
14 State Total	16.6%	20.1%	23.7%	20.6%

Exhibit 13 shows the share of the overall net Medicaid savings that will accrue to each state government versus the federal government. The overall savings have been apportioned based on the CY2010 “regular” federal medical assistance percentage (FMAP) rates, which does not include the enhanced FMAP percentages paid during this calendar year). (We assume that the enhanced FMAP rates will be discontinued after calendar year 2011.)

While the Federal Government will realize at least half of the Medicaid savings in each carve-out state, the carve-in yields large-scale state-fund savings. The Year 1 (2012) state fund savings exceed \$10 million in 8 states, and the 10 year cumulative state fund savings exceeds \$100 million in 11 states.

Each state has its own unique dynamics that can make it necessary for such states to refine the estimates herein. For example, Missouri has a pharmacy tax program that would lead to reduced State fund savings from the carve-out (relative to our projections), and Texas has a premium tax that would cause increased State fund savings relative to our projections. The scope of this engagement did not permit identifying and adjusting for these kinds of issues.

Exhibit 13. State and Federal Share of Net Medicaid Savings from Transition to Carve-In Approach (all figures are post-rebate)

Estimated Net Carve-In Savings Versus Carve-Out Approach (post-rebate), STATE FUNDS

State	2012	2016	2021	Ten Year Total
Connecticut	\$6,371,800	\$9,893,011	\$12,967,749	\$99,274,241
Delaware	\$7,800,370	\$9,874,672	\$11,977,228	\$99,974,632
Illinois	\$12,750,275	\$22,936,032	\$34,099,933	\$235,547,620
Indiana	\$16,596,425	\$27,941,300	\$40,358,116	\$286,782,367
Iowa	\$1,304,694	\$1,987,024	\$2,331,985	\$19,185,837
Missouri	\$11,709,294	\$19,953,378	\$27,812,041	\$201,238,938
Nebraska	\$582,546	\$1,457,418	\$2,553,310	\$15,444,838
New York	\$106,576,726	\$130,619,336	\$154,881,702	\$1,324,027,882
Ohio	\$50,603,226	\$84,023,100	\$109,779,346	\$831,272,806
Tennessee	\$22,202,580	\$38,113,310	\$55,254,307	\$390,410,214
Texas	\$61,363,054	\$109,703,866	\$141,846,124	\$1,076,335,130
Utah	\$235,749	\$577,558	\$991,152	\$6,070,913
West Virginia	\$6,890,554	\$10,199,541	\$12,087,684	\$99,316,377
Wisconsin	\$12,999,411	\$21,882,092	\$26,890,229	\$211,244,075
14 State Total	\$317,986,703	\$489,161,640	\$633,830,908	\$4,896,125,871

Estimated Net Carve-In Savings Versus Carve-Out Approach (post-rebate), FEDERAL FUNDS

State	2012	2016	2021	Ten Year Total
Connecticut	\$6,371,800	\$9,893,011	\$12,967,749	\$99,274,241
Delaware	\$7,866,169	\$9,957,969	\$12,078,261	\$100,817,961
Illinois	\$12,837,273	\$23,092,529	\$34,332,604	\$237,154,808
Indiana	\$16,709,666	\$28,131,949	\$40,633,488	\$288,739,140
Iowa	\$2,270,790	\$3,458,369	\$4,058,766	\$33,392,505
Missouri	\$21,283,927	\$36,269,158	\$50,553,812	\$365,791,037
Nebraska	\$894,498	\$2,237,861	\$3,920,600	\$23,715,502
New York	\$106,576,726	\$130,619,336	\$154,881,702	\$1,324,027,882
Ohio	\$87,732,548	\$145,673,730	\$190,328,216	\$1,441,206,161
Tennessee	\$42,283,565	\$72,584,658	\$105,228,723	\$743,514,312
Texas	\$87,323,774	\$156,116,018	\$201,856,624	\$1,531,697,654
Utah	\$596,697	\$1,461,842	\$2,508,678	\$15,365,927
West Virginia	\$19,652,412	\$29,089,908	\$34,475,044	\$283,258,265
Wisconsin	\$19,670,634	\$33,111,856	\$40,690,141	\$319,653,324
14 State Total	\$432,070,478	\$681,698,195	\$888,514,407	\$6,807,608,719

VI. Conclusion

Lewin estimates that total Medicaid savings of the carve-in across the 14 states would be \$750 million in Year 1 (2012) and \$11.7 billion across the full 10-year period. The magnitude of the Medicaid savings opportunity, combined with the programmatic advantages of the carve-in approach, make this policy change important for the 14 carve-out states to closely consider.

Each state has its own dynamics that will make the state-specific savings different than the amounts estimated herein, and each state faces its own set of operational challenges in switching to the carve-in model. Nonetheless, we expect that large-scale savings can be achieved in most of the 14 states at a time when such savings are particularly needed in light of states' economic situation. Additional savings are also likely to be achievable in the states that currently utilize a partial carve-out model.