

**Department of Health and Human Services**

**OFFICE OF  
INSPECTOR GENERAL**

**STATE STRATEGIES TO CONTAIN  
MEDICAID DRUG COSTS**



**Inspector General**

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# ***Office of Inspector General***

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## A B S T R A C T

Escalating Medicaid drug expenditures, combined with strained State budgets, have led States to contain Medicaid drug costs. Federal Medicaid law and regulation prevent States from benefiting from some cost containment tools widely used by private purchasers. However, States do exercise flexibility within Federal Medicaid law and regulation to employ three main drug cost containment strategies. These key strategies contain costs by (1) limiting Medicaid reimbursement for drugs (reported by 32 States); (2) shifting use from higher to lower cost drugs (39 States); and (3) limiting the amount of prescription drugs a beneficiary can obtain within a given time period (25 States). Maximizing a State's ability to contain drug costs can provide a significant fiscal benefit to both State and Federal Medicaid budgets. However, there are significant challenges to maximizing drug cost savings, including a lack of accurate drug price information and stakeholder opposition to cost containment efforts.



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## OBJECTIVE

To describe States' key strategies to contain their Medicaid outpatient prescription drug costs.

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## BACKGROUND

Medicaid prescription drug coverage is one of the most expensive and fastest growing health care expenditures. In fiscal year (FY) 2001, Medicaid expenditures for prescription drugs totaled approximately \$20 billion, or 9 percent of the Medicaid budget. From 1997 to 2001, Medicaid expenditures for prescription drugs grew at more than twice the rate of total Medicaid spending.

Increasing Medicaid drug costs create concern for States. In FY 2002, 40 States faced budget shortfalls that totaled nearly \$40 billion. In a recent survey, 36 States identified prescription drug costs as the top Medicaid cost driver in FY 2001, and 12 additional States listed drugs as 1 of the top 3.

Federal Medicaid law and regulation prevent States from benefiting from the array of cost containment tools available to private purchasers. However, States retain some flexibility to set Medicaid drug reimbursement levels and to implement a variety of cost saving measures.

To assess States' strategies to contain their Medicaid drug costs, we collected information from multiple sources, including a national survey of State Medicaid pharmacy directors, State Medicaid plans, State cost saving reports, and interviews with staff from the Centers for Medicare & Medicaid Services (CMS) and State Medicaid agencies.

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## FINDINGS

**REDUCE PRICE: Thirty-two States Reported Strategies Designed to Reduce the Price Medicaid Pays for Drugs as Key to Cost Containment.** Seventeen States contain drug costs by lowering the rate at which they reimburse pharmacies for drugs, and 10 States reported annual savings up to \$21.7 million from these changes. However, States also face barriers to setting

reimbursement rates reflective of actual pharmacy acquisition costs, including lack of accurate drug prices and pharmacy opposition to reimbursement reductions.

When asked to identify top cost containment strategies, 24 States reported State maximum allowable cost (MAC) programs, which establish maximum reimbursement amounts for groups of equivalent drugs (*i.e.*, a brand name drug and its generic equivalents). Seventeen of these States reported cost savings from their MAC programs, ranging up to \$45.8 million per year.

**SHIFT USE: While Required to Cover Most Drugs, 39 States Encourage a Shift from Higher to Lower Cost Drugs.** Thirty-nine States report cost containment strategies aimed at shifting Medicaid prescription drug use toward lower cost drugs as central to their efforts to contain costs. These strategies include prior authorization programs (29 States), preferred drug lists (20), generic substitution requirements (15), and beneficiary cost sharing (10).

Prior authorization programs, which require State-sanctioned approval before particular drugs can be dispensed, discourage physicians from prescribing these drugs unless medically necessary. Sixteen States identified savings, which ranged up to \$89 million, through their prior authorization programs.

States create preferred drug lists by identifying the most cost-effective drugs in each therapeutic class. States encourage physicians to prescribe preferred drugs through outreach efforts and/or by creating disincentives for prescribing non-preferred drugs. States may achieve additional savings by obtaining supplemental rebates from drug manufacturers. Six States saved up to \$127 million annually through preferred drug lists. However, industry opposition to preferred drug lists creates challenges.

**LIMIT QUANTITY: While Required to Maintain Sufficient “Amount, Duration, and Scope” of Benefits, 25 States Limit the Quantity of Drugs Used as a Central Strategy to Contain Costs.** Eighteen States limit (1) the number of prescriptions filled in a specified time period, such as six prescriptions per month; (2) the amount of a drug, such as a maximum daily dosage; or (3) the frequency of dispensing a drug, such as limits on early refills as a central

means to contain costs. Nine States estimated annual savings of up to \$51 million through quantity limits.

Fourteen States find prospective drug utilization reviews important to drug cost containment because they help to prevent duplicative, contraindicated, or medically unnecessary prescriptions from being dispensed. These preventive measures produce annual State savings ranging up to \$27 million per State.

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## CONCLUSION

Maximizing States' ability to contain drug costs can provide a significant fiscal benefit to both State and Federal Medicaid budgets. In 2002, CMS centralized its efforts to provide guidance regarding States' Medicaid pharmacy programs through shifting responsibility for State plan amendment approval from CMS regional offices to its headquarters location. We support CMS's efforts to provide consistent, timely, and pertinent information to State Medicaid pharmacy representatives.



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## OBJECTIVE

To describe States' key strategies to contain their Medicaid outpatient prescription drug costs.

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## BACKGROUND

### Medicaid Drug Expenditures

All State Medicaid programs have elected to include prescription drug coverage, which is one of the most expensive Medicaid benefits. In fiscal year (FY) 2001, Medicaid expenditures on prescription drugs totaled approximately \$20 billion, representing 9 percent of the annual Medicaid budget.<sup>1</sup> The Medicaid program is the largest payer of prescription drugs nationally, representing 14 percent of the drug market.<sup>2</sup> The Federal Government contributes a matching percentage of State Medicaid outlays, ranging from 50 to 83 percent, depending on the State's per capita income.<sup>3</sup>

Payment for prescription drugs is the fastest growing health care expenditure. Nationally, total spending for prescription drugs rose from \$48.2 billion in 1992 to \$141.8 billion in 2001.<sup>4</sup> Likewise, Medicaid expenditures for prescription drugs grew at more than twice the rate of total Medicaid spending from FYs 1997 to 2001.<sup>5</sup> The Centers for Medicare & Medicaid Services (CMS) projects that Medicaid drug expenditures will continue to increase by an average rate of 12.7 percent per year through 2011.<sup>6</sup> In FY 2002, 40 States faced budget shortfalls that totaled nearly \$40 billion. The gap between State revenue and total spending is expected to widen to \$58 billion during FY 2003.<sup>7,8</sup> These expected increases are significant in light of State budget constraints. Further, in a recent survey, 36 States identified prescription drug costs as the top Medicaid cost driver in FY 2001, and 12 additional States listed drugs as 1 of the top 3.<sup>9</sup>

### Medicaid Pharmacy Reimbursement

**Drug Cost Reimbursement.** For Medicaid, CMS sets maximum drug reimbursement limits to ensure that the Federal Government acts as a prudent buyer.<sup>10</sup> Within these Federal parameters, each State determines its own pharmacy reimbursement formula(s).

For certain multiple source drugs with a sufficient number of equivalent products and at least three suppliers, CMS sets specific Federal upper limit (FUL) amounts. FUL equals 150 percent of the lowest published priced version of the drug listed in national pricing compendia.<sup>11</sup> FUL acts as a ceiling, and States may reimburse below this amount.

For drugs without a FUL, the Medicaid drug reimbursement limit is the lower of (1) the pharmacist's usual and customary charge; (2) the estimated [pharmacy] acquisition cost (EAC); or (3) the State's maximum allowable cost (MAC), if applicable.<sup>12</sup> EAC is the State Medicaid agency's best estimate of the price generally paid by providers for a drug.<sup>13</sup> CMS does not prescribe a method for calculating estimated acquisition cost; instead, each State establishes and specifies its own EAC formula in its State plan. Conceptually, State MAC programs resemble the FUL program in that they establish maximum reimbursement amounts for groups of equivalent drugs.

**Dispensing Fees.** In addition to reimbursing pharmacies for the cost of the drug (also known as the ingredient cost), States are required to determine "reasonable" dispensing fees.<sup>14</sup> This fee represents the charge for the professional services provided by a pharmacist when dispensing a prescription.

#### **Medicaid Drug Rebate Program**

In addition to setting reimbursement limits, the Medicaid program limits expenditures by obtaining rebates from drug manufacturers. Federal statute mandates that in order for their drugs to be reimbursed by Medicaid, drug manufacturers must generally enter into rebate agreements and pay quarterly rebates to the State Medicaid agencies.<sup>15</sup> CMS calculates rebate amounts using a statutory formula based on the average manufacturer price at which manufacturers sell drugs to wholesalers.<sup>a</sup>

#### **States' Flexibility to Contain Medicaid Drug Costs**

Federal law and regulations governing the Medicaid program include provisions, such as required coverage of almost all drugs and limited beneficiary cost sharing. These constraints prevent States from benefiting from certain cost saving tools available to

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<sup>a</sup> This summary is not meant to capture the full complexity of the Federal Medicaid rebate formula, which includes additional calculations using best price and an inflation factor.

private purchasers.<sup>b</sup> States retain some flexibility, however, to set Medicaid drug reimbursement levels and to implement a variety of cost saving measures within Federal Medicaid parameters. Common strategies include:

- **Limits on Amount, Duration, and Scope.** States may limit any Medicaid benefit, including prescription drugs, as long as each benefit is “sufficient in amount, duration, and scope to reasonably achieve its purpose.”<sup>16</sup> Within this guideline, States may set limits on utilization, such as the number of prescriptions per month for each beneficiary, the amount of medication per prescription, or the number of refills.
- **Prior Authorization.** A State may require providers to obtain prior authorization from the Medicaid agency before dispensing a particular drug or class of drugs. However, Medicaid agencies must respond to providers within 24 hours, and pharmacies must dispense a 72-hour supply of the drug to the beneficiary in an emergency situation.
- **Preferred drug lists.** In general, States that offer the Medicaid prescription drug benefit must cover all FDA-approved drugs produced by manufacturers with Medicaid rebate agreements. However, States can encourage the use of “preferred” drugs, so long as “non-preferred” drugs are available through an exception process like prior authorization.<sup>17</sup>
- **Supplemental Rebates.** States may negotiate with drug manufacturers to receive supplemental rebates in addition to Federally-mandated rebates.<sup>18</sup> Drug manufacturers may agree to provide States with supplemental rebates in exchange for including their drugs on the State’s preferred drug list.
- **Generic Substitution.** States may require the use of an equivalent generic drug in place of a brand name drug, unless the physician either deems the brand name drug medically necessary or obtains prior authorization.
- **Cost sharing.** Federal law allows States to require “nominal” cost sharing or co-payments from beneficiaries.<sup>19</sup> Co-

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<sup>b</sup> Federal law allows State Medicaid programs to exclude only a limited list of specific drugs and drug classes from coverage.

payments may not exceed \$3 per prescription.<sup>20</sup> Also, pharmacists may not withhold a drug from a beneficiary who cannot afford to pay the co-payment.<sup>21</sup>

- **Provider Education.** States' provider education or "counter-detailing" efforts seek to balance drug manufacturers' direct marketing to physicians and consumers by providing information on generic alternatives and less expensive brand name drugs.
- **Drug Utilization Review.** Federal Medicaid law requires States to perform drug utilization review (DUR) to examine the appropriateness, quality, and medical necessity of drug use.<sup>22</sup> In addition to improving quality of care, DUR can result in cost savings by reducing medically inappropriate drug use.

#### **Related Work by the Office of Inspector General**

The Office of Inspector General (OIG) has issued a significant body of work related to Medicaid drug pricing issues. Numerous OIG reports have concluded that Medicaid pays more than several other Federal and private purchasers for a wide variety of drugs. Also, a 2002 OIG report, "Medicaid Pharmacy - Additional Analyses of the Actual Acquisition Cost of Prescription Drug Products" (A-06-02-00041) found that the data upon which States base pharmacy reimbursement overstates pharmacy acquisition costs. In these reports, OIG recommends that CMS review the current reimbursement methodology, work with States to find a method that more accurately estimates pharmacy acquisition cost, and initiate a review of Federal Medicaid rebates.

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## **SCOPE**

This report is limited to describing State Medicaid key strategies for containing costs of prescription drugs purchased through the fee-for-service component of Medicaid. We do not include strategies negotiated by Medicaid managed care organizations. We did not examine the Federal rebate drug program; however, we did include States' efforts to acquire supplemental drug rebates beyond the mandated Federal rebates.

We did not evaluate the outcomes of individual States' cost containment strategies. However, we reviewed State documentation of their measured or estimated cost savings, when available.

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## METHODOLOGY

To provide descriptive information on all States' Medicaid drug cost containment efforts, we conducted a fax survey of State Medicaid directors and pharmacy directors. Forty-three States responded to our survey between November 2002 and February 2003. This survey requested information on efforts that States considered to be their top drug cost containment strategies or wished to highlight. States' responses included key efforts already in place and those that they planned to implement. Where multiple States adopted similar measures, we highlighted particular States based on characteristics, such as geography or size of the State's Medicaid population.

States were asked to submit relevant documentation of their efforts, including evaluations and supporting documentation of pharmacy cost savings, as applicable. State-submitted documents included outcome evaluations and analyses of drug cost data, reports to State legislatures, annual reports by the drug utilization review board, provider bulletins and instructions, and provider and beneficiary education materials.

We did not ask States for a comprehensive list of their efforts as this data is available from other researchers. Health Strategies Consultancy (contracted by CMS) and George Washington University (contracted by the Kaiser Family Foundation) have shared such data with us, and we have incorporated it contextually, where appropriate.

We interviewed staff from CMS central office and four regional offices. As needed, we collected additional information from State plan amendments, State Medicaid manuals, and other documents from several States. We interviewed selected State respondents, primarily from Oregon, Texas, Florida, Arkansas, Vermont, and Michigan. We interviewed respondents from these particular States because these States employ a variety of innovative or successful cost containment strategies and are recognized by CMS, States, and other experts as leaders in

## I N T R O D U C T I O N

particular areas of drug cost containment. In these States, we interviewed the Medicaid director, pharmacy director, and other Medicaid staff. We also interviewed experts, including representatives from State pharmacy benefit managers, drug utilization review boards, pharmacy and industry associations, consumer interest groups, and researchers.

Our review was conducted in accordance with the *Quality Standards for Inspections* issued by the President's Council on Integrity and Efficiency.

**REDUCE PRICE: Thirty-two States Reported Strategies Designed to Reduce the Price Medicaid Pays for Drugs as Key to Cost Containment**

Within Federal guidelines that seek to ensure that the Federal

Government acts as a prudent purchaser, each State determines its own pharmacy reimbursement methodology.<sup>23</sup> State strategies to reduce drug reimbursement prices include lowering their standard pharmacy reimbursement formulas in order to pay less for Medicaid drugs, in general, and setting State maximum allowable costs (MACs) for specific drugs with generic equivalents. Table 1 displays the number of States that reported reduction to reimbursement formulas, MAC programs, or both strategies in their survey responses as key methods used to contain Medicaid drug costs.

Table 1. Key State strategies to reduce drug reimbursement prices

States that reduced reimbursement formula and set MACs	9
States that reduced reimbursement formula only	8
States that set MACs only	15
<b>Total</b>	<b>32</b>

Source: OIG National Survey, 2002

Rising drug prices contribute to States' increasing Medicaid pharmacy expenditures and, in turn, to their mounting budget deficits. In 2001, the average brand name prescription drug price climbed to \$71.18, a nine percent increase from 2000. During this same time, the average generic drug price rose 14 percent, to \$21.96.<sup>24</sup>

**Seventeen States Lowered their Estimates of Pharmacy Acquisition Cost.**

When asked to identify top cost containment strategies, 17 States report changes to their estimated acquisition cost (EAC) formula, which, along with pharmacy's usual and customary charge, is the basis of reimbursement for drugs without a designated upper payment limit. These States lowered their EAC formulas to reduce reimbursement and more accurately reflect pharmacies' actual acquisition costs. Previous OIG work

found evidence that States overestimate actual pharmacy acquisition costs.<sup>25</sup>

Nationally, 43 States base their formulas exclusively on average wholesale price (AWP) minus a percentage-based discount, and 6 States use wholesale acquisition cost (WAC) plus some percentage-based mark-up. AWP and WAC are published reference prices. Typically, States' reimbursement changes increase the discount off AWP. For example, Nevada revised its estimated acquisition cost formula from AWP minus 10 percent to AWP minus 15 percent, while Oregon increased its discount off AWP from 11 to 14 percent.

Of the 17 States reporting reimbursement rate changes as key to cost containment, 5 have refined their estimated acquisition cost formulas to better reflect the complexity of the pharmaceutical marketplace. Instead of using a single EAC formula for all drugs, these States adopted a tiered formula to account for differences in pharmacy acquisition costs between brand name and generic drugs. Table 2 lists these formulas. The tiered reimbursement formulas incorporate larger discounts for generic drugs, which is consistent with previous OIG findings that AWP overstates generic drugs to a greater degree than brand name drugs. Specifically, OIG found that, on average, AWP overstated pharmacy acquisition costs for brand name drugs by 22 percent and overstated acquisition costs for generic drugs by 66 percent.<sup>c</sup>

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<sup>c</sup> The OIG report (A-06-02-00041) provided a further break down of variation within the "brand" and "generic" categories. More specifically, AWP overstated acquisition costs of single source brand name drugs by 17.2%, multi-source brand name drugs (without Federal upper limits (FULs)) by 24.4%, multi-source generic drugs (without FULs) by 54.2 percent, and all drugs with FULs by 72.1%.

Table 2. State EAC Changes Involving Tiered Formulas

State	Previous EAC	Revised EAC
AR	AWP-10.5%	Brand: AWP-14% Generic: AWP-20%
CO	AWP-12%	Brand: AWP-13.5% Generic: AWP-35%
IL	Brand: WAC+8% Generic: WAC+12%	Brand: AWP-12% Generic: AWP-25%
KS	AWP-10%	Brand: AWP-11% Generic: AWP-27%
WA	AWP-11%	Brand: AWP-14% Generic: AWP-50%

Sources: OIG National Survey, State Plan Amendments, and State websites

**Lack of Accurate Information on Drug Prices.** As reported by 12 States, the lack of accurate drug pricing information constitutes a significant barrier to containing Medicaid drug costs. Most States rely on AWP and/or WAC cost to determine pharmacy reimbursement. These are reference prices that States obtain from First Databank, a private company which issues a national drug pricing compendium. Reports by the OIG and other researchers have found AWP to substantially overstate pharmacies' actual acquisition costs and have discredited its validity. OIG audits have also suggested that WAC is unreliable.

Despite the widely recognized unreliability of AWP and WAC as a measure of pharmacy acquisition cost, States have few alternative sources for drug prices. Actual sales data are proprietary, and only three States indicated that they regularly obtain additional price information from drug manufacturers, pharmacies, or other sources. One State criticized the "obfuscation of price" by drug manufacturers. Several States suggested that CMS share average manufacturer price (AMP) data with States. CMS collects AMP from manufacturers as part of the Federal drug rebate program, but the agency does not share these prices with States. OIG has recommended that CMS provide States with AMP. However, CMS has not implemented this recommendation due to legal issues.<sup>26</sup>

One advantage of using AMP to more accurately estimate pharmacy acquisition cost is that AMP is a statutorily-defined price calculated from actual sales and subject to audit by the Department. Texas recently passed legislation requiring

manufacturers to provide AMP to the State Medicaid agency; however, many manufacturers have not yet complied.

### **Profile of Pharmacy Reimbursement by Texas Medicaid**

Texas stands out among Medicaid programs in its aggressive pursuit of accurate drug pricing information and its efforts to reflect the complexity of the pharmaceutical marketplace. Rather than relying solely on the national compendia used by most States to obtain AWP and WAC, Texas requires drug manufacturers to submit “cost to wholesaler” and “direct” prices to the Medicaid agency, as well as AMP data. Direct prices represent sales directly from manufacturers to pharmacies, rather than through wholesalers. “Cost to wholesaler” is conceptually equivalent to WAC, but drug manufacturers must certify these prices, which may increase their accuracy.

Texas also uses a complex system for estimating pharmacy acquisition cost that takes into account how the pharmacy purchased the drug. If the drug is purchased through a wholesaler, Texas applies its EAC formula. If a pharmacy obtains the drug through a warehouse, Texas modifies its methodology to account for the volume discount associated with warehouse purchasing. Finally, Texas reimburses at the direct price if the drug purchase is direct from the manufacturer.

CMS's primary role is to approve the State plan amendments required for a State's pharmacy reimbursement change. To obtain approval, States must submit documentation showing that the new estimated acquisition cost formula represents the State's “best estimate of the price generally, and currently, paid by providers” for the drug.<sup>27</sup> According to CMS staff, acceptable evidence includes audits of pharmacy acquisition costs, and reviews of pharmacy reimbursement by other payers, or by surrounding States' Medicaid agencies.

CMS considers the establishment of pharmacy reimbursement rates to be a State prerogative.<sup>28</sup> However, 10 States report wanting to receive additional reimbursement guidance, including more accurate drug price information, from CMS. In addition to specific requests for AMP, States also look for guidance from CMS in setting accurate drug reimbursement estimates and for support in overcoming stakeholder opposition to reimbursement changes.

**Pharmacy Opposition to Reimbursement Reductions.** States often face resistance to changing their estimated pharmacy acquisition cost formulas because reduced Medicaid drug

reimbursement decreases pharmacies' revenue. Of the 17 States that reported reductions to their EAC formula as an important cost containment strategy, all except 2 reported pharmacy opposition as a barrier to such efforts. Twelve additional States also reported pharmacy opposition as a barrier to reducing pharmacy reimbursement.

It is important to distinguish between two types of costs for which Medicaid reimburses pharmacies: (1) the cost of the drug itself (ingredient cost) and (2) the cost associated with dispensing the drug. States' estimated acquisition cost formulas represent the ingredient cost the provider paid for the drug, while dispensing fees cover the other professional costs of dispensing the drug.<sup>29</sup> The reductions to EAC discussed in this section address only this ingredient cost, not the additional dispensing fee.

States face competing demands as they reconcile the need to reduce drug prices with the need to maintain adequate pharmacy participation in Medicaid. Concerns about beneficiary access influence attempts to reduce drug reimbursement. In 2002, Massachusetts substantially scaled back proposed drug reimbursement reductions after 3 major pharmacy chains threatened to stop serving Medicaid beneficiaries.<sup>30</sup> In 2002, Washington successfully reduced pharmacy reimbursement while acting to protect beneficiary access to drugs through implementing a pharmacy mail order service and offering transportation services to beneficiaries in rural areas with limited pharmacy participation.<sup>31</sup>

**Savings Attributed to Changing States' Reimbursement Formulas.**

Two States, Arizona and Washington, measured cost savings achieved through reductions in reimbursement, and eight additional States provided estimates or projections of cost savings attributed to their EAC changes. States' annual savings ranged from \$500,000 to \$21.7 million, as shown in Table 3. States' savings represent a proportion of their total FY 2001 drug expenditures that ranged from less than 1 percent to more than 21 percent.

Table 3. Savings from Reductions in EAC Reimbursement Formulas

State	Projected/Estimated Annual Savings (in millions)	Savings as Percent of State's FY 01 Drug Expenditures
NV	\$9.6*	21.3%
AZ	\$0.5 (actual)	19.3%
WA	\$21.7 (actual)	5.9%
KY	\$11.4	2.3%
TX	\$20.3	1.9%
OH	\$16	1.8%
OR	\$3	1.6%
CO	\$1.4	1.1%
KS	\$1.5	1.0%
NE	\$1.2	0.9%

Source: OIG National Survey, 2002

\*Nevada projected \$2.4 million/quarter. We used this rate to estimate annual savings.

**Twenty-Four States Reported State Maximum Allowable Cost Programs to Rein in Drug Costs as Central to Cost Containment.**

Beyond the national Federal upper limits (FULs), States can achieve additional savings by setting State maximum allowable costs (MACs). Twenty-four States identified their MAC program as a successful drug cost containment effort. Conceptually, State maximum allowable cost programs resemble the Federal upper limit program in that they establish maximum reimbursement amounts for groups of equivalent drugs, *i.e.*, a brand name drug and its generic equivalents.

States with MAC programs achieve additional cost savings by (1) setting reimbursement limits for multisource drugs not covered by the FUL program, and (2) setting MACs at lower amounts than existing FULs. While the current FUL list includes less than 200 drug entities out of thousands of multisource drugs, Texas has established MACs for 837 drug entities.<sup>d32</sup> South Carolina reimburses at 10 percent below the FUL.

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<sup>d</sup> A drug entity includes the multiple strengths and forms in which a particular drug is available.

To set MACs, States commonly employ multiple methodologies and sources of drug price information. Eleven States report conducting pharmacy surveys or invoice reviews. Minnesota surveys the prices paid by private payers with State contracts, obtains actual acquisition costs from some pharmacies, and consults the MACs set by other State Medicaid agencies. Idaho and Michigan also consult other States' MAC lists; Michigan additionally reviews reimbursements by third party insurers. Six States rely on contracted vendors to set their MACs.

Seventeen of the 24 States provided actual or projected cost savings associated with their MAC program. Annual savings ranged from \$575,000 to \$45.8 million. Wyoming, which included only 3 drug entities during its MAC program's first quarter of operation, measured savings of \$143,603 for that quarter. These savings represent just over 2 percent of the State's average quarterly drug costs. Tables 4 and 5 below provide reported savings by State.

Table 4. Actual MAC Savings

State	Actual Annual Savings (in millions)	Savings as Percent of State's FY 01 Drug Expenditures
NE	\$22	15.7%
MO	\$45.8	8.5%
VT	\$4	4.9%
WA	\$15.3	4.2%
HI	\$1.5	2.5%
GA	\$5.5	0.9%
<b>Total</b>	<b>\$94.1</b>	-

Source: OIG National Survey, 2002

Table 5. Estimated/Projected MAC Savings

State	Estimated Annual Savings (in millions)	Savings as Percent of State's FY 01 Drug Expenditures
OK	\$10	7.6%
OR	\$12*	6.2%
MN	\$7	3.3%
NC	\$17.2	2.2%
NM	\$1	2.2%
WY	\$0.57#	2.2%
CT	\$5	2.1%
TX	\$16.4 +	1.6%
IA	\$0.58	1.2%
MA	\$7	1.1%
NH	\$0.7	0.9%
<b>Total</b>	<b>\$77.5</b>	-

Source: OIG National Survey, 2002

\* Oregon saved \$1million/month from March to November, 2002; we used this rate to calculate annual savings.

# Wyoming saved \$143,603 in the 1st quarter of its MAC program. We used this rate to calculate annual savings. This calculation is conservative. Wyoming will add at least three additional drugs as during the first year.

+ Texas's \$16.4 million in projected savings refers only to savings from the new drugs that Texas will add to its MAC in FY 2003.

**SHIFT USE: While Required to Cover Most Drugs, 39 States Encourage a Shift from Higher to Lower Cost Drugs**

States implement a variety of cost containment strategies aimed at shifting Medicaid

prescription drug use toward lower cost drugs. Thirty-nine States in our survey identified shifting utilization toward less expensive drugs as key to Medicaid pharmacy cost containment. Top strategies identified by States to stimulate this shift include prior authorization programs (29 States), preferred drug lists (20), generic substitution requirements (15), beneficiary cost sharing (10), and physician education (5). As Table 6 shows, many States use a combination of these strategies.

Table 6. Key State strategies to encourage use of lower cost drugs

Prior authorization only	8
Preferred drug list only	5
Beneficiary copayments only	2
At least two of the following: prior authorization, preferred drug list, generic substitution, beneficiary copayments, physician education	24
<b>Total</b>	<b>39</b>

Source: OIG National Survey, 2002

**Prior Authorization is Key to Containing Costs in 29 States.**

Twenty-nine States cited prior authorization as a central cost containment measure. Federal statute allows States to require approval of a prescription before its dispensed.<sup>33</sup> According to CMS, the statute “affords States broad authority and flexibility to implement a prior authorization program in order to secure cost savings for the Medicaid program.”<sup>34</sup>

In general, a State’s prior authorization process requires that a prescribing physician provide supplemental information before the pharmacist can dispense certain drugs. This information is provided to either the dispensing pharmacist or a pharmacist at the State’s designated call center. In practice, States report that call centers rarely deny provider requests. In the case of a denial, an appeals process is required to resolve the dispute.

Prior authorization processes contain prescription drug expenditures in three primary ways. First, the required call-in process may deter physicians from prescribing drugs subject to

prior authorization. According to State respondents, physicians tend to prescribe drugs subject to prior authorization only when medically necessary because they dislike the requirement to consult a second party. Second, the call between the pharmacist and the prescribing physician provides the opportunity to educate physicians about more cost-effective drug therapies and options. Third, prior authorization may prevent the inappropriate dispensing of a drug when the beneficiary's medical and drug histories do not meet clinical criteria for approving the prior authorization request. States can use prior authorization as a cost containment strategy itself, or to enforce other cost containment measures, such as preferred drug lists, generic substitution requirements, or script limits.

States' use of administrative disincentives to prescribing drugs subject to prior authorization include telephone and written authorization processes. Six States report requiring the pharmacy to contact the prescribing physician, who must then contact a clinical pharmacist at the State's call center. The physician must provide specified information about the beneficiary's medical history, diagnosis, or other information to make the case that an alternative drug is unacceptable. Two States require the prescribing physician to provide written authorization before the pharmacy will dispense the drug.

**Barriers to Prior Authorization.** Though prior authorization is a common cost containment measure, 18 States report facing provider and/or pharmacist opposition to its implementation. Twenty-one States report that providers and pharmacists oppose the administrative burdens required under prior authorization. However, five States indicated that physicians have expressed appreciation of the States' efforts to monitor beneficiaries' use of prior authorization-targeted drugs. Eight States respond to provider concerns about prior authorization by conducting outreach to physicians and pharmacists. These States attempt to include provider input into their decisions regarding the prior authorization process and the selection of drugs to be subject to prior authorization.

For example, New York posts online forms for providers to use to request that a drug be exempt from prior authorization consideration. Four States also report extensive efforts to educate providers on the prior authorization process and appeal procedures.

Seventeen States indicated that opposition from pharmaceutical manufacturers acts as a barrier to implementing prior authorization. These States report that, in general, manufacturers oppose any State-imposed restrictions on prescribing. In one State, pharmaceutical manufacturers successfully lobbied to require that manufacturers be notified in advance when one of their drugs is considered for inclusion on the prior authorization list.

Fifteen States also reported opposition to prior authorization from consumer interest groups. Medicaid regulations require a response to a prior authorization request within 24 hours and require pharmacists to dispense a 72-hour supply of the drug in emergency situations. Nonetheless, interest groups report concern about the potential for delays in beneficiary access due to perceived difficulty navigating the prior authorization process.

**Cost Savings Attributed to Prior Authorization.** States conveyed difficulty measuring cost savings attributable to prior authorization. The effects caused by prior authorization on prescription drug use patterns and expenditures are difficult to distinguish from the effects of other factors. In our survey, five States reported actual cost savings that they attributed to prior authorization. Some States measured savings attributed to prior authorization in general, while other States specified savings associated with prior authorization for specific drugs or classes of drugs. Table 7 breaks out the cost savings measured by these five States.

Table 7. Actual/Projected Savings from Prior Authorization

State	Actual/Projected Annual Savings (in millions)	Savings as Percent of State's FY 01 Drug Expenditures	Specific Drugs or Drug Classes (as applicable)
FL	\$89	7.6%	N/A
WV	\$13.9	6.8%	N/A
WY	\$1.1*	4.2%	2 classes: proton pump inhibitors and COX-2 inhibitors
AK	\$1.7#	3.7%	3 drugs in opioid class (pain medication)
WA	\$2.5	0.7%	One class: non-steroidal anti-inflammatory drugs
<b>Total</b>	<b>\$108.2</b>	-	-

Source: OIG National Survey, 2002

\* Wyoming measured \$180,000 in savings over 2 months. We used this rate to estimate annual savings.

# Alaska measured \$800,000 in savings over 5.5 months. We used this rate to estimate annual savings.

Eleven additional States reported estimated cost savings from prior authorization. States estimated prior authorization cost savings ranging from \$1 million to \$18 million per year, as shown in Table 8. In some cases, estimated savings reflect the implementation of prior authorization for specific drugs or classes of drugs.

Table 8. Estimated Savings from Prior Authorization

State	Estimated Annual Savings (in millions)	Savings as Percent of State's FY 01 Drug Expenditures	Specific Drugs or Drug Classes (as applicable)
ID	\$10.5	12.5%	4 classes: proton pump inhibitors, COX-2 inhibitors, non-steroidal anti-inflammatory drugs, and non-sedating antihistamines
OK	\$11	8.4%	N/A
NE	\$9.8	7.0%	N/A
MN	\$7.1	3.4%	N/A
MO	\$18	3.3%	One class: anti-ulcer drugs
NH	\$2.1	2.7%	N/A
PA	\$11	2.0%	One drug: Oxycontin
HI	\$1	1.7%	One drug: Oxycontin
KS	\$1.5	1.0%	One class: COX-2 inhibitors
NC	\$4.7	0.6%	N/A
<b>Total</b>	<b>\$76.7</b>	-	-

Source: OIG National Survey, 2002

Finally, two States reported measuring the impact of prior authorization on the use of selected drugs. Nevada estimates a 75 to 80 percent decrease in utilization and a 74 to 78 percent decrease in expenditures on each of two classes of drugs, protein pump inhibitors and COX-2 inhibitors, subject to prior authorization. Washington reports that generic Ranitidine use within its therapeutic class, H<sub>2</sub> receptor antagonists, increased from 69 to 97 percent the month following implementation of prior authorization for brand name drugs in that class.<sup>e</sup>

#### **Twenty States Report that Preferred Drug Lists are Central to Cost Containment.**

When asked to identify their top cost containment strategies, 20 States reported that a preferred drug list (PDL) is central to their State's efforts to contain Medicaid prescription drug expenditures. Though private health insurers routinely restrict access to high-priced drugs through the use of closed formularies, the Federal Medicaid statute prohibits States from implementing a formulary without means of accessing excluded drugs.<sup>35</sup> As an alternative, PDLs enable States to contain prescription drug costs and promote clinical effectiveness by encouraging physicians to prescribe less costly, therapeutically-appropriate drugs. At the same time, States must permit access to non-preferred drugs through an exception process. States strongly encourage physicians to prescribe preferred drugs through outreach and education efforts or by creating administrative disincentives to prescribing non-preferred drugs.

In this section we highlight Florida's, Oregon's, Vermont's, and Michigan's use of preferred drug lists to contain costs. Nationally, these States have the most experience with PDLs and emphasize that PDLs are their central strategy to containing Medicaid pharmacy costs. They are also recognized as leaders in this area by other States and Medicaid pharmacy experts. Finally, these four States exemplify a range of approaches to creating PDLs and to using PDLs to stimulate a shift toward lower cost-alternative drugs.

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<sup>e</sup> Proton pump inhibitors and H<sub>2</sub> receptor antagonists are both classes of drugs used to treat gastrointestinal problems, including ulcers and acid reflux disease. COX-2 inhibitors are a type of non-steroidal, anti-inflammatory drug (NSAID) used to treat pain and inflammation.

**Preferred Drug Selection.** While PDLs are created using both cost and clinical criteria, States use different types of information and development processes to determine which drugs to include on their preferred lists. These differences affect what type of clinical and cost data are considered, as well as which decision makers are involved in the preferred drug list development process.

By State law, Oregon incorporates both clinical evidence-based research on drug efficacy and public input into the preferred drug selection process.<sup>36</sup> Oregon's evidence-based research provides comparative effectiveness and safety information for each drug in a class. Through a series of State-wide public meetings, a commission identifies effective drugs that are available at the lowest AWP. Oregon's Medicaid agency uses these recommendations and public input to identify a benchmark drug they determine to be the most effective available for the best possible price.<sup>37</sup> PDL includes this benchmark drug and the other less expensive drugs in that class.<sup>f</sup>

Unlike Oregon, which compares drugs' relative merits to each other, Vermont uses clinical drug data, which compares individual drugs to a placebo to determine their effectiveness and suitability for inclusion on a PDL.<sup>38</sup> Vermont's Medicaid agency prioritized which drug classes to place on their PDL, based on the (1) existence of generic alternatives, and (2) amount spent on each drug class. Vermont's contracted pharmacy benefits manager reviewed the clinical and financial merits for each drug and developed an initial list of drugs. The State's Drug Utilization Review board used this list and public comments to determine the State's final PDL.

Because most drugs are considered clinically effective, cost ultimately determines which drugs are included on Vermont's preferred list. However, the State's Drug Utilization Review board retains the right to include a more expensive drug on the PDL for clinical reasons.

**Linking Supplemental Rebates to Preferred Drug Lists.** Florida, Michigan, and Vermont aim to achieve lower net prices and

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<sup>f</sup> All drugs deemed effective with AWP under 105 percent of benchmark are on the Oregon PDL.

greater cost savings with their PDLs through State-negotiated supplemental rebates.

Like Oregon and Vermont, Florida combines clinical and financial information to determine its PDL. In Florida, a contracted vendor researches clinical data and ranks the effectiveness of each drug in a class. In addition, manufacturers submit price bids for each drug. The vendor combines clinical and cost data and recommends drugs that are “effective, yet relatively inexpensive.” A committee of physicians and pharmacists hold public meetings and then make the final PDL designations.

Florida’s process of soliciting manufacturers’ bids affords the State the opportunity to reap enhanced cost savings as manufacturers compete to offer the lowest priced drug in each class. State law requires that manufacturers’ bids offer a total rebate of at least 25.1 percent of the average manufacturer prices.<sup>39</sup> § Through competition, Florida has received substantially greater rebates than this minimum.

Vermont and Michigan offer manufacturers of non-preferred drugs the opportunity to bring their drug costs “in line” with clinically-preferred drugs through supplemental rebates. Michigan identifies a reference-price drug for each class, and manufacturers of all drugs above that price must provide a supplemental rebate to be included on the preferred list. In addition, Michigan, Vermont, South Carolina, and Wisconsin are partnering to negotiate supplemental rebates from pharmaceutical manufacturers. It is the first time that States are partnering to negotiate prices for the Medicaid program. State officials estimate that States are likely to see savings of 10 to 15 percent from enhanced rebates and better pharmacy benefits management.<sup>40</sup>

**Stimulating the Use of Preferred Drugs.** States’ ability to contain costs through PDLs depends upon the extent to which physicians prescribe preferred versus non-preferred drugs. One way States promote preferred drugs is by creating administrative disincentives to prescribing non-preferred drugs. Florida and Michigan require prior authorization for non-

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§ Manufacturers’ bids include both the Federal and supplemental rebate.

preferred drugs. Though prior authorization requests are generally granted, the process itself deters physicians from making prior authorization requests, unless the non-preferred drug is medically necessary.

States also conduct provider outreach and education to facilitate and encourage the use of preferred drugs. Oregon and Vermont allow physicians to prescribe non-preferred drugs through a prescription-based notation, which presents a lesser administrative burden to obtaining these drugs. Oregon allows reimbursement of non-preferred drugs if doctors indicate “no substitution,” “dispense as written,” or “brand medically necessary.” Vermont physicians must indicate a clinical reason why a non-preferred drug is needed.

Both Oregon and Vermont emphasize collaboration with physicians and beneficiaries to further encourage use of the PDL. These States impress upon physicians and beneficiaries the importance of containing drug costs to maintain existing Medicaid coverage and services. Additional information is provided to physicians on generic and low-cost brand name drugs to counter balance pharmaceutical representatives’ efforts to promote their more costly brand drugs. Oregon, in particular, credits its open process with lending needed credibility to a system which relies on the voluntary compliance of physicians.

Initially, Medicaid providers opposed Vermont’s PDL, which State respondents attributed to insufficiently planning the implementation of the PDL. In response, Vermont’s Medicaid agency collaborated successfully with the Vermont Medical Association to implement a physician education and outreach program to explain PDL procedures and emphasize the necessity of this strategy to maintain Medicaid services. Vermont continues to assess prescribing of non-preferred drugs to determine if further intervention is necessary.

**Barriers to PDLs.** Nationally, 18 States cited barriers related to the use of PDLs. The most common barriers related to opposition from pharmaceutical manufacturers (17 States), consumers (13 States), physicians (7 States) and pharmacy representatives (3 States). In addition, some States raised concerns about approval delays associated with CMS’s State

plan amendment process, which, in turn, delayed implementation of their preferred drug list.

As a response to stakeholder concern, States may exempt certain drug classes, specific drugs, or beneficiaries with certain illnesses from their PDL. This compromise limits States' ability to contain costs. In Oregon, mental illness, HIV/AIDS and cancer drugs, which represent over 60 percent of the State's Medicaid drug expenditures, are exempted from the PDL. That is, all FDA-approved drugs in these classes are available to Medicaid beneficiaries. Florida also exempts mental health and HIV/AIDS drugs from its PDL requirements. Vermont designated preferred drugs within the psychotropic drug class, but allows individuals with serious mental illness to access any prescribed psychotropic drug.

In September 2002, CMS issued a State Medicaid director's letter clarifying a State's ability to create PDLs and supplemental rebate agreements with drug manufacturers. Eleven States in our survey commended CMS for this particular guidance and found it a useful support against pharmaceutical industry opposition.

Some Oregon respondents report that the Federal law preventing States from disclosing Federal Medicaid rebate information is a significant barrier. These respondents believe that the law hinders a true cost analysis because the State cannot publicly disclose Federal rebate pricing information when deciding which drugs to include on the PDL. Florida, on the other hand, overcomes this potential barrier by temporarily closing its public meetings when discussing proprietary pricing information. However, Oregon's State policy mandating information sharing and a completely open process for PDL decisions may prevent the State from adopting Florida's strategy.

**Cost Savings Attributed to PDLs.** Through their PDLs, States seek to shift beneficiaries' drug use toward less-costly preferred drugs. Restrictive formularies in the private sector typically stimulate an 80 to 90 percent market shift. State Medicaid programs generally expect to achieve a lesser shift due to required formulary exception procedures. However, Michigan and Florida estimate an 80 to 90 percent market shift toward

preferred drugs in particular classes. Oregon achieved a 30 to 40 percent shift in the first quarter of PDL implementation. Oregon officials expect to save less money with their PDL than those States with stricter exception processes.

A PDL can contain costs through a combination of (1) initial savings, as beneficiaries switch to lower cost drugs; (2) cost avoidance, as beneficiaries remain on lower cost drugs; and (3) supplemental rebates, if applicable. After implementation and initial savings are realized, a PDL becomes a long term cost avoidance strategy that States may use to stabilize their Medicaid pharmacy budgets.

PDLs have the potential to significantly reduce State Medicaid pharmacy costs. Table 9 lists the savings attributed to PDLs by these four States. Florida saved \$127 million in FY 2001 through its PDL and supplemental rebate provision. Michigan estimates saving \$850,000 per week. Michigan's overall annual savings measurement of \$45 million exceeds their initial savings projections.<sup>41</sup> While Oregon and Vermont have implemented their PDLs more recently, they have also realized cost savings. Oregon estimates that its PDL will save \$6 to \$8 million in its first year of implementation. In the first 6 months of implementation, Vermont estimates a \$2.8 million comparative savings of the three most costly classes of drugs on the PDL.

Table 9. Reported Market Shift and Cost Savings from PDLs

State	Estimated Market Shift	Savings in First Year	Savings as Percent of State's FY 01 Drug Expenditures
Florida	90%	\$127 million	10.8 %
Michigan	80 to 90%	\$45 million	9.5%
Vermont	Not available	\$2.9 million (6 months only)	7.1%
Oregon	30 to 40%	\$6 to 8 million (projected)	3.1 to 4.1%

Sources: OIG National Survey and Interviews with State Medicaid Staff, 2002

Two additional States measured savings from PDLs. Kentucky saved \$8.5 million from April to June 2002 from establishing a preferred drug in one therapeutic class, proton pump inhibitors. Massachusetts reported \$4 million in savings accrued from

August through November 2002. Six other States provided projections of savings they expect from PDLs. See Appendix A for information on these projections.

**Fifteen States Seek to Increase Generic Substitution.**

Fifteen States report either encouraging or requiring generic substitution to shift utilization towards generic drugs as central to their cost containment effort. On average, brand name drugs cost about three times more than their generic equivalents, so an increase in generic substitution can have a substantial fiscal impact. For example, Massachusetts Medicaid staff report that a State initiative requiring prior authorization for brand name drugs with available generic equivalents saved the State \$29 million from December 2001 to August 2002.

To contain costs through the use of generics, Florida limits beneficiaries to four brand name prescriptions per month, while placing no restrictions on generic prescriptions. However, beneficiaries may obtain additional brand name drugs through prior authorization. State Medicaid officials found that their 4 brand limit saves \$100 million annually, which represents over 8 percent of their Medicaid pharmacy expenditures in FY 2001. Florida Medicaid budget analysts determined that the policy has resulted in a shift to the use of generic drugs rather than a decline in overall utilization.

**LIMIT QUANTITY: While Required to Maintain Sufficient “Amount, Duration, and Scope” of Benefits, 25 States Limit the Quantity of Drugs Used as a Central Strategy to Contain Costs**

State Medicaid agencies may limit prescription drug utilization as long as these restrictions maintain sufficient “amount, duration and scope,” as required

under Federal Medicaid regulations. That is, any State-imposed benefit limit must maintain a sufficient level of the benefit to reasonably achieve its intended purpose. To contain drug expenditures, States frequently limit utilization through drug quantity limits, targeted drug utilization review programs, and pharmacy lock-in programs. Currently, based on national data, 44 States limit prescription drug utilization in 1 or more of these ways, and 25 States chose to report these limits as top cost containment strategies in our survey.<sup>44</sup> These limits include restrictions on drug quantities, restrictions through prospective

drug utilization review, and restrictions through pharmacy lock in. Several States use a combination of these strategies, shown in Table 10.

Table 10. Key State strategies that limit drug use

Quantity limits only	8
Prospective drug utilization review only	6
At least two of the following: quantity limits, prospective drug utilization review, pharmacy lock in	11
<b>Total</b>	<b>25</b>

Source: OIG National Survey, 2002

**Quantity Limits are Important in 18 States.**

Eighteen States report quantity limits as important to cost containment. Typically, States limit the (1) number of prescriptions filled in a specified time period, such as six prescriptions per month; (2) amount of a drug, such as a maximum daily dosage; or (3) frequency of dispensing a drug, such as limits on early refills. States often allow exemptions from these limits for specific therapeutic drug categories, beneficiaries with certain illnesses, and particular subsets of the population, such as children and pregnant women.

Six States specified limits on the number of prescriptions per month as a key cost saving strategy. These prescription limits ranged from 3 to 10 drugs allowed per month. Four of these six States allow beneficiaries to obtain additional prescriptions through prior authorization. Texas prohibits dispensing more than three prescriptions per month. However, beneficiaries may obtain a 180-day drug supply with each prescription and stagger the filling of each prescription which, in effect, allows up to 9 prescriptions per month. Arkansas limits beneficiaries to six prescriptions per month, and State Medicaid officials assert that this limits fraud and abuse.

Ten States reported restrictions on drug amounts, daily dosages, or number of refills dispensed in an effort to decrease drug waste and to prevent over-utilization. Eight of these States specified restrictions on the amount of drug dispensed, such as a 34-day supply, as an effective cost containing strategy.

Additionally, early refill restrictions are an important means to contain costs in seven States. Early refill limits require that a certain percentage, commonly 75 percent, of a medication be used before obtaining a refill. This helps to reduce waste by ensuring that refills are filled only when necessary.

**Cost Savings Attributed to Quantity Limits.** Two States reported cost savings associated with limits on the number of prescriptions per month. Mississippi projects \$5.4 million in savings from reducing the number of prescriptions allowed from 10 to 7 per month. Maryland projects savings of \$1.2 million per year to result from its pending limit of 10 prescriptions per month.

Four States identified cost savings from early refill limits. Wyoming only allows refills after 80 percent of the previously dispensed supply is used and reported, saving nearly \$900,000 per year, or 3.5 percent of their Medicaid drug budget. Additional cost savings information is summarized in Table 11.

Table 11. Actual and Projected Cost Savings from Quantity Limits

State	Type of Limit	Annual Savings (in millions)	Savings as Percent of State's FY 01 Drug Expenditures
MO	Early Refill	\$51 (projected)	9.4%
WY	Early Refill	\$0.9*	3.5%
ID	Early Refill	\$2.3 (projected)	2.7%
NJ	Days Supply	\$12	2.3%
MA	Early Refill	\$13.3 million <sup>#</sup>	2.2%
MS	7 prescriptions/month <sup>+</sup>	\$5.4 (projected)	1.3%
UT	Days Supply	\$1.1	1.2%
KS	Days Supply	\$1.5 (projected)	1.0%
MD	10 prescriptions/month	\$1.2 (projected)	0.6%

Source: OIG National Survey, 2002

\* Wyoming saved \$224,000 in 3 months; we used this rate to estimate annual savings.

<sup>#</sup> Massachusetts saved \$10 million in 9 months; we used this rate to estimate annual savings.

<sup>+</sup> Mississippi reduced its limit from 10 prescriptions per month to 7 prescriptions per month.

**Prospective Drug Utilization Review is a Cost Containment Strategy in 14 States.**

In addition to preventing adverse health outcomes, 14 States consider prospective drug utilization review (DUR), in which patient drug history is reviewed to detect therapeutic duplication, contraindications, drug interactions, and other inappropriate use, to be a top cost containment measure. All States are required to conduct prospective DUR prior to dispensing a drug.<sup>45</sup> Prospective DUR can contain pharmacy costs by preventing duplicative, medically unnecessary, or contraindicated prescriptions from being dispensed. Missouri is one of several States enhancing their prospective DUR program to link patients' drug history with their medical history to further ensure patient safety and medically-appropriate drug use.

Seven States reported yearly cost savings resulting from prospective DUR, ranging from \$300,000 in Iowa to \$27 million in Louisiana. Additional cost savings are listed in Table 12.

Table 12. Cost Savings from Prospective DUR

<b>State</b>	<b>Annual Savings (in millions)</b>	<b>Savings as Percent of State's FY 01 Drug Expenditures</b>
OR	\$20	10.4%
AK	\$4.8	10.1%
LA	\$27	5.7%
CT	\$2.8	1.1%
TX	\$5.3 (projected)	0.5%
NJ	\$1.6	0.3%
IA	\$0.3 (projected)	0.2%

Source: OIG National Survey, 2002

**Pharmacy Lock-in Programs Limit Drug Costs in Six States.**

Six States identified pharmacy lock-in programs as a key cost containment strategy. Pharmacy lock-in programs require that beneficiaries fill their Medicaid prescriptions in one pharmacy or pharmacy chain. Typically, States use retrospective DUR data to identify beneficiaries whose drug utilization patterns may justify being locked in to a particular pharmacy. State criteria

for lock in ranges from evidence of abuse, resale of drugs, or misuse of Medicaid cards to general use patterns that indicate a high risk for abuse or misuse. Oregon is the only State implementing lock-in programs for all Medicaid beneficiaries.

Last year, Wyoming locked in only 70 beneficiaries, all of whom filled prescriptions for pain medications from two or more physicians in two or more pharmacies. Wyoming projected a potential range of annual savings from their lock-in program of \$39,000 to \$98,000.

Arkansas estimated \$10,000 in savings in the first month of lock-in implementation, but expects savings to grow to \$123,000 per month when the program is fully operational. In Arkansas, beneficiaries have two chances to respond to warning letters citing concern about their pharmacy use before Arkansas imposes a lock in. As a result, less than half of those beneficiaries initially targeted, are ultimately locked in.

## ► C O N C L U S I O N

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Escalating Medicaid drug expenditures combined with strained State budgets have led States increasingly to seek strategies to contain Medicaid drug costs. Federal Medicaid law and regulation prevent States from benefiting from some cost containment tools widely used by private purchasers. However, States exercise their flexibility within Federal Medicaid parameters to employ three main pharmacy cost containment strategies. These strategies include drug reimbursement limits, tools to shift utilization toward lower cost drugs, and drug utilization limits.

Maximizing States' ability to contain drug costs can provide a significant fiscal benefit to both State and Federal Medicaid budgets. Thirty-seven States provided information on drug cost savings ranging up to \$127 million in annual savings attributed to various drug cost containment measures within those States.

However, States face significant challenges to maximizing drug cost savings. States report that they lack accurate drug pricing information upon which to set drug reimbursement limits. States also identified two primary constraints to shifting utilization toward lower cost drugs. First, Federal law, such as the prohibition on closed formularies and limits on beneficiary cost sharing, restrict States' ability to influence drug utilization patterns. Second, States' efforts to shift utilization have met with resistance from stakeholders, such as pharmaceutical manufacturer representatives and some patient advocacy groups.

In 2002, CMS issued a letter to State Medicaid directors offering support and guidance on how to implement a preferred drug list within Federal law. States found this CMS document beneficial in their efforts to garner needed support to implement a preferred drug list.

In FY 2002, CMS centralized its efforts to provide guidance regarding States' Medicaid pharmacy programs through shifting responsibility for State plan amendment approval from CMS regional offices to its headquarters location. We support CMS's efforts to provide consistent, timely, and pertinent information to State Medicaid pharmacy representatives.

**Additional State Savings Projections for Preferred Drug Lists (PDLs)**

In addition to the savings reported by Florida, Michigan, Oregon, and Vermont, two additional States reported preliminary cost savings from newly implemented PDLs. Kentucky saved \$8.5 million from April to June 2002 by establishing a preferred drug in a single therapeutic class, proton pump inhibitors. Massachusetts reported \$4 million in savings accrued from August through November 2002. Six other States, listed in Table 13 below, provided projections of savings they expect from PDLs.

Table 13. PDL Savings Projections from Additional States

<b>State</b>	<b>Projected Annual Savings from PDL</b>	<b>Savings as Percent of State's FY 01 Drug Expenditures</b>
Idaho	\$9 million	10.7%
New Mexico	\$4 million	8.7%
Wyoming	\$2.05 million	8.0%
Alaska	\$3.6 million	7.6%
Maryland	\$8 million	4.1%
Kansas	\$4.8 million	3.2%

Source: OIG National Survey, 2002



## A C K N O W L E D G M E N T S

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▶ E N D N O T E S

1. This figure is based on data from Centers for Medicare & Medicaid Services, Center for Medicaid and State Operations, Financial Management Reports, Fiscal Year 2001. Available at <http://www.cms.gov/medicaid/mbes/ofs-64.asp>
2. Bruen, Brian. "States Strive to Limit Medicaid Expenditures for Prescribed Drugs." Prepared for the Kaiser Commission on Medicaid and the Uninsured. Washington, DC; February 2002
3. 65 FR 69560, November 17, 2000. From the Federal Register Online via Government Printing Office Access; <http://wais.access.gpo.gov>
4. Kreling, David H., David A. Mott, Joseph B. Wiederholt, Janet Lundy, Larry Levitt. "Prescription Drug Trends: A Chartbook Update." Kaiser Family Foundation. Washington, DC; November 2001
5. This figure is based on data from Centers for Medicare & Medicaid Services, Center for Medicaid and State Operations, Financial Management Reports, Fiscal Year (FY) 2001 and FY 1997. Total Medicaid expenditures (minus drug expenditures) increased 31 percent from FYs 1997 to 2001; total Medicaid drug expenditures increased 94 percent during the same time period. Data available at <http://www.cms.gov/medicaid/mbes/ofs-64.asp>
6. National Association of State Budget Officers, <http://www.nasbo.org>
7. Associated Press. "In Budget Crises, State Leaders Call for US Aid." New York Times, Final, Section A, Page 15, Column 1; July 25, 2002
8. National Association of State Budget Officers, <http://www.nasbo.org>
9. Bruen, Brian. "States Strive to Limit Medicaid Expenditures for Prescribed Drugs." Prepared for the Kaiser Commission on Medicaid and the Uninsured. Washington, DC; February 2002
10. 52 FR 28648, July 31, 1987
11. 42 CFR § 447.332
12. 42 CFR § 447.331

13. 42 CFR § 447.301
14. 52 FR 28648, July 31, 1987
15. 42 U.S.C. § 1396r-8(a)
16. 42 CFR § 440.230
17. 42 U.S.C. § 1396r-8(d)(4)
18. State Medicaid Director Letter #02-014, Center for Medicaid and State Operations, Centers for Medicare & Medicaid Services, September 18, 2002
19. 42 U.S.C. § 1396o(a)(3)
20. 42 CFR § 447.54
21. 42 U.S.C. § 1396o(e)
22. 42 U.S.C. § 1396r-8
23. CMS Notice of Final Rule, 52 FR 28648, (July 31, 1987), which sets Medicaid pharmacy reimbursement limits
24. National Association of Chain Drug Stores, Industry Facts-at-a-Glance, [www.nacds.org](http://www.nacds.org), accessed February 26, 2003
25. Several OIG audits have found evidence that States' estimated acquisition cost formulas overestimate pharmacies' actual acquisition costs. These include "Medicaid Pharmacy: Additional Analyses of the Actual Acquisition Cost of Prescription Drug Products" (A-06-02-00041), "Medicaid Pharmacy: Actual Acquisition Cost of Generic Prescription Drug Products" (A-06-97-00011), and "Medicaid Pharmacy: Actual Acquisition Cost of Prescription Drug Products for Brand Name Drugs" (A-06-96-00030).
26. Office of Inspector General report "Cost Containment of Medicaid HIV/AIDS Drug Expenditures." OEI-05-99-00611. July, 2001
27. State Medicaid Manual, Part 6, Section 6305.1

28. Office of Inspector General report "Cost Containment of Medicaid HIV/AIDS Drug Expenditures." OEI-05-99-00611. July 2001
29. State Medicaid Manual, Part 6, Section 6305.1
30. Mohl, Bruce and Chris Reidy. "State Eases its Rate Curb on Druggists," Boston Globe. October 4, 2002
31. Childs, Siri. Washington Medicaid Pharmacy Manager. "Washington State's Experience with AWP Discounts." August 2002
32. "Overview of Select State Maximum Allowable Cost (MAC) Programs." The Health Strategies Consultancy LLC. DRAFT report to CMS. December 2002
33. 42 U.S.C. § 1396r-8(d)(5)
34. State Medicaid Director Letter #02-014, Center for Medicaid and State Operations, Centers for Medicare & Medicaid Services, September 18, 2002
35. A State may establish a formulary if the State plan permits coverage of a drug excluded from the formulary. 42 U.S.C. § 1396r-8(4)
36. Oregon Senate Bill 819, which became law on August 2, 2001
37. Oregon Department of Human Services, Pharmaceutical Services Billing Guide - Rev.#3 -- July 1, 2002
38. Personal interview with Ann Rugg, Vermont State Medicaid Agency, November 2002
39. Florida Statute 409.912
40. National Governors Association. "States Partner for Greater Discounts on Medicaid Drugs." March 6, 2003. Available at [www.nga.org](http://www.nga.org)
41. National Conference of State Legislature's Pharmaceutical Snapshot, March 3, 2003. Available at [www.nscl.org](http://www.nscl.org)
42. 42 CFR § 447.54

43. Rosenthal, Meredith B. "Promotion of Prescription Drugs to Consumers: A Look at the Numbers." The New England Journal of Medicine. February 2002
44. National Conference of State Legislature's Pharmaceutical Snapshot, February 17, 2003. Available at [www.ncsl.org](http://www.ncsl.org)
45. 42 U.S.C. § 1396r-8(g)