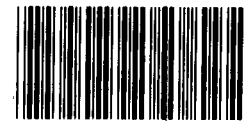


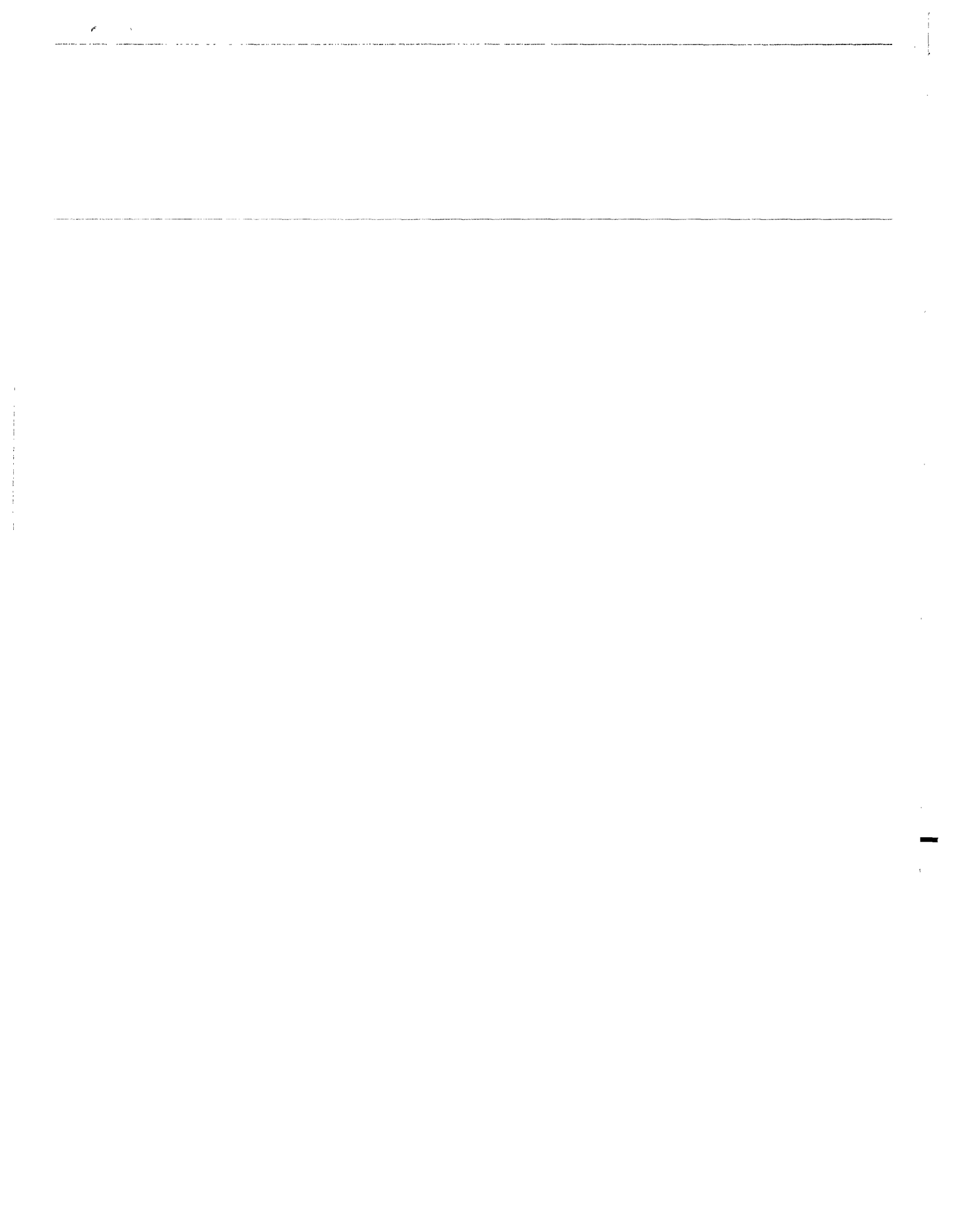
January 1993

# MEDICAID

## Changes in Drug Prices Paid by HMOs and Hospitals Since Enactment of Rebate Provisions



148334





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Human Resources Division

B-245873

January 15, 1993

The Honorable Lloyd Bentsen, Chairman  
The Honorable Bob Packwood, Ranking Minority Member  
Committee on Finance  
United States Senate

The Honorable John D. Dingell, Chairman  
The Honorable Carlos J. Moorhead, Ranking Minority Member  
Committee on Energy and Commerce  
House of Representatives

The Honorable David Pryor, Chairman  
The Honorable William S. Cohen, Ranking Minority Member  
Special Committee on Aging  
United States Senate

In 1990, the Congress attempted to control Medicaid's increasing expenditures for prescription drugs by significantly changing the way Medicaid pays for outpatient drugs.<sup>1</sup> Medicaid had been paying near retail prices for outpatient drugs, while other purchasers, such as hospitals and health maintenance organizations (HMOs), were able to negotiate significant discounts with drug manufacturers.<sup>2</sup> The Omnibus Budget Reconciliation Act of 1990 (OBRA), enacted November 5, 1990, required that drug manufacturers give state Medicaid programs rebates for outpatient drugs based on the lowest prices available to any purchaser.

The Congress recognized that, in response to the Medicaid rebate requirement, drug manufacturers might increase prices to other purchasers. Because of this concern, the Congress required the Comptroller General to report on changes in the prescription drug prices that manufacturers charged the Department of Veterans Affairs (VA), other federal programs, retail and hospital pharmacies, and other purchasing groups and managed care plans.

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<sup>1</sup>These are drugs that can be dispensed on an outpatient basis to ambulatory patients, typically as capsules or tablets. In contrast, inpatient drugs are typically injectable forms of a drug which are administered by intramuscular or intravenous injections.

<sup>2</sup>Medicaid was established in 1966 as a means-tested entitlement program of medical assistance for certain low-income people. Eligibility and coverage standards are determined jointly by the federal government and the states. Coverage of outpatient prescription drugs is an optional Medicaid service provided by all states and the District of Columbia.

In September 1991, we reported on changes in prescription drug prices charged VA and the Department of Defense.<sup>3</sup> This report focuses on changes in drug prices charged hospitals and HMOs. To study prices charged hospitals, we obtained prices from group purchasing organizations (GPOs), which typically represent many hospitals in negotiating prices with drug manufacturers. Specifically, we studied how GPO and HMO drug prices, including prices for both inpatient and outpatient drugs, changed from the year before OBRA to the year after. Representatives of GPOs and HMOs in our study told us that manufacturers targeted price increases on outpatient drugs—the type of drugs covered by the rebate provisions—while some of the GPO representatives also noted increases in inpatient drugs as well.

## Results in Brief

Price changes experienced by the HMOs and GPOs we studied varied considerably since the enactment of OBRA's Medicaid rebate provisions. Some prices increased substantially, while others declined. Price increases tended to be more common and more significant for outpatient drugs than for inpatient drugs, but few other clear patterns emerged. We could not determine the extent to which the price increases were attributable to OBRA.

In our analysis, we obtained prices from eight GPOs that represent thousands of hospitals and four HMOs that cover millions of enrollees. Each provided prices for the 100 drugs on which they spent the most money in 1991. GPOs also provided us prices for the 50 outpatient drugs on which they spent the most money on in 1991. This provided us with 1,600 unique price observations which, when duplicate drugs were considered, represent 888 different drug products.<sup>4</sup>

We found that after OBRA the prices for the HMOs' drugs rose, on average, more than twice as fast as the year before. These drugs, which are almost exclusively outpatient drugs, had more large price increases the year after OBRA than the year before.<sup>5</sup> In contrast, prices increased for the GPOs' inpatient drugs, on average, at a lower rate the year after OBRA than the

<sup>3</sup>Medicaid: Changes in Drug Prices Paid by VA and DOD Since Enactment of Rebate Provisions (GAO/HRD-91-139, Sept. 18, 1991). In 1992, the Congress amended OBRA to exclude VA, DOD, and some other public purchasers from OBRA provisions that based rebate amounts on the lowest prices available in the market.

<sup>4</sup>Drugs are purchased in different dosage amounts and package sizes, which are considered individual drug products. For example, some drugs, such as Zantac, appear on several of the lists in different dosage amounts and package sizes. However, each drug form is a different product.

<sup>5</sup>We defined a large price increase as an increase over 20 percent.

year before. Price increases for the GPOS' outpatient drugs were slightly higher, on average, the year after OBRA.

Of the 888 drug products we studied, 77 were among the top drugs used by at least half the 12 purchasers. The pattern of price changes among these 77 was also mixed. Although some GPOS and HMOs experienced significant price increases for some of the 77 products, only 20 drug products had average price increases that exceeded the producer price index (PPI) for prescription drugs the year after OBRA.<sup>6</sup>

Representatives of the GPOS and HMOs were also concerned that OBRA would reduce the substantial price discounts off average wholesale price (AWP) they traditionally received from drug manufacturers.<sup>7</sup> Although the HMOs and GPOS experienced some large price increases after OBRA, on average, the discounts they received rose slightly for both HMO outpatient and GPO inpatient drugs and remained constant for GPO outpatient drugs. This occurred because the AWP for many drugs rose faster than the HMO or GPO price after OBRA.

After OBRA, most of the GPOS and HMOs also reported changes in how they contract for drug prices with many manufacturers. The purchasers were concerned that these contract changes created uncertainty about future drug prices because they provided the manufacturers more flexibility to increase prices. GPO and HMO representatives reported that manufacturers shortened contract periods and refused to provide fixed prices for the duration of the contract periods.

## Background

From 1986 through 1991, the prices consumers paid for prescription drugs increased at a rate more than two and one-half times the general rate of inflation. During the first 9 months of 1992, the rate of increase slowed slightly to less than twice the general rate of inflation.<sup>8</sup> The effect of drug price inflation is particularly acute for the Medicaid program because it is the nation's single largest payer for prescription drugs. In 1991, state Medicaid programs paid an estimated \$5.5 billion for outpatient

<sup>6</sup>The PPI for prescription drugs, prepared by the Bureau of Labor Statistics, tracks changes in manufacturers' prices for a market basket of prescription drugs over time.

<sup>7</sup>Drug manufacturers suggest a list price that wholesalers charge pharmacies. The average of the list prices, collected from many wholesalers, is a drug's AWP.

<sup>8</sup>From 1986 through 1991, the consumer price index (CPI) for prescription drugs increased 67 percent, while the CPI for all consumer goods increased 26 percent. For the first 9 months of 1992, the CPI for prescription drugs increased 4.6 percent, while the CPI for all goods increased 2.5 percent.

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prescription drugs dispensed to Medicaid recipients, about 13 percent of annual U.S. drug sales.

Historically, hospitals and HMOs routinely negotiated significantly discounted drug prices. They were able to obtain such prices because of strategies they used to attempt to control costs. For example, many hospitals and HMOs promote cost-effective drug therapy by restricting a physician's prescribing to an approved list of drugs known as a formulary. To determine whether a drug should be included on a formulary, an institution considers the drug's usefulness in patient care, its costs, and whether generic equivalents are available. To ensure that their products are included on a formulary, drug manufacturers have an incentive to negotiate discounted prices. In addition, many GPOs and HMOs have been able to negotiate significant discounts because of the amount of business they represent to a drug manufacturer. Some GPOs, for instance, have hundreds of member institutions, including hospitals, HMOs, and nursing homes, that collectively represent a considerable percentage of the market for a drug manufacturer's product.

Before OBRA, state Medicaid programs' ability to control drug costs was generally limited to restricting coverage, increasing the beneficiary's share of costs, and reducing pharmacy reimbursements. To help reduce Medicaid's drug costs, the Congress, in OBRA, required that drug manufacturers pay rebates on outpatient prescription drugs to state Medicaid programs. In exchange, the Congress required that the state programs cover, with some exceptions, all outpatient drugs of a manufacturer who agreed to provide rebates. In general, the rebate amount equals the greater of (1) a fixed percentage (12.5 percent in 1991 and 1992, 15 percent after 1992) of the average manufacturer price (AMP)<sup>9</sup> or (2) the difference between the AMP and the best price for a particular drug.<sup>10</sup> (See app. I for more details on how Medicaid rebates are determined.)

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<sup>9</sup>The average price paid to a manufacturer by retail pharmacies or by wholesalers for drugs distributed to the retail pharmacy class of trade.

<sup>10</sup>The best price is the lowest price available from the manufacturer to any purchaser.

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## Scope and Methodology

To determine how drug prices have changed for hospitals and HMOs, we contacted eight GPOs and four HMOs. We focused on GPOs rather than individual hospitals because the GPOs, collectively, negotiate prices for several thousand hospitals. We selected GPOs and HMOs that (1) covered a substantial percentage of hospitals and HMO enrollees, (2) were geographically dispersed, and (3) represented different types of hospitals and HMO models. The GPOs we studied cover about 55 percent of the approximate 6,500 nonfederal U.S. hospitals while the HMOs we studied cover about 22 percent of the approximate 38.6 million U.S. enrollees in HMOs. The GPOs represent all hospital types, including rural, urban, nonprofit, for-profit, and teaching hospitals. The HMO types include staff, group, and network models,<sup>11</sup> but exclude models based on independent practice associations (IPAs).<sup>12</sup>

Because of the proprietary nature of information on specific drug prices, we provided each GPO and HMO in our study a pledge of confidentiality. The pledge meant that no one would have access to the identity of the GPOs and HMOs or individual responses to questions we asked their representatives. To further protect the identity of the GPOs and HMOs, this report contains no specific drug prices. Only percentage changes in the prices of specific drugs are reported.

We obtained prices from each GPO and HMO for the 100 drugs on which each spent the most money in 1991. This approach ensured that we obtained prices on those drugs for which expenditures were significant for each GPO's and HMO's total drug budget.<sup>13</sup> Six of the HMOs and GPOs also provided expenditure and utilization data for these top-100 drugs. The percentage of the six organizations' total 1991 drug expenditures represented by their top-100 drugs ranged from about 10 to 54 percent, with an average of about 27 percent.<sup>14</sup>

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<sup>11</sup>A staff model HMO delivers health services through a salaried physician group that is employed by the HMO. A group model HMO delivers health services by contracting with an independent group practice, while a network model contracts with two or more independent group practices.

<sup>12</sup>IPA model HMOs, which serve about 43 percent of U.S. HMO enrollees, deliver health services by contracting with physicians in independent practice. We excluded IPAs from the study because the IPAs we contacted did not maintain price data in a way that would allow us to study specific drug prices.

<sup>13</sup>Some GPO and HMO representatives noted, however, that their top-100 lists of drugs did not include all drugs that experienced significant price increases.

<sup>14</sup>While a GPO negotiates a drug's price with a manufacturer, hospitals represented by the GPO actually purchase the drug. Therefore, each GPO's expenditures for a drug represented the total dollar amount spent by all of the hospitals represented by the GPO that purchased the drug.

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The GPOS' top-100 lists included few outpatient drugs because hospitals purchase mostly inpatient drugs. For this reason, we also obtained prices for the 50 outpatient drugs that each GPO spent the most money on in 1991.

Each drug on the HMOs' and GPOS' top lists is a unique drug price observation. We received 1,600 observations which, when duplicate drugs were considered, represent 888 different drug products. Because hospitals and HMOs represent different segments of the pharmaceutical market, we analyzed the HMO and GPO drug price data separately. Specifically, we analyzed price changes for (1) HMO drugs (from the 4 HMOs' top-100 lists, which consisted of virtually all outpatient drugs), (2) GPO inpatient drugs (from the 8 GPOS' top-100 lists, which consisted of virtually all inpatient drugs) and (3) GPO outpatient drugs (from the 8 GPOS' top-50 lists).

Initially, we asked the GPOS and HMOs for the drug prices they paid on July 1 of 1987, 1988, 1989, 1990, 1991, and the first quarter of 1992.<sup>15</sup> However, 8 of the 12 could not provide any prices or complete price data before 1989, primarily because the data were not computerized. Because we could not obtain data before 1989 from all the GPOS and HMOs, our analysis of drug price changes was limited to two time periods—one year before OBRA and one year after.

We considered a drug's price change between July 1, 1989, and July 1, 1990, the pre-OBRA price change and the price change between July 1, 1990, and January 1, 1992, annualized to a yearly rate, the post-OBRA price change.<sup>16</sup> We used an annualized, 18-month period as the year after OBRA to ensure that the study included the most recent price data possible. This was necessary because many drug price contracts between manufacturers and the organizations we studied did not come up for renewal until more than 12 months after OBRA's enactment.

For each of the three groups of drugs (HMO outpatient, GPO inpatient, and GPO outpatient), we analyzed price changes before and after OBRA to determine the

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<sup>15</sup>We selected July 1 as a benchmark rather than the date of OBRA's enactment (Nov. 5, 1990) so that we could include any drug price changes that may have occurred during the period the legislation was under consideration.

<sup>16</sup>The change in price between July 1990 and January 1992 reflects 18 months of drug price change. To compare a drug's price change one year before OBRA with one year after, we determined what the drug's price would have been in July 1991 if its price changed at a constant rate over the 18 months.



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- difference in the rates of price changes;
  - effect of price changes on each GPO's and HMO's expenditures for their top drugs, assuming recent utilization remained constant; and
  - effect of price changes on discounts the GPOS and HMOs received off AWP.

We did not analyze the extent to which OBRA may have altered the supply and demand conditions in particular drug product markets. Changes in market conditions, including the relative strength of purchasers' negotiating positions with manufacturers, might be expected to change the prices paid by individual GPOS and HMOs for particular drugs. However, a determination of the factors that affect market conditions, as well as the broader discussion of pricing factors considered by drug manufacturers, were outside the study's scope.

Our work was performed between October 1991 and September 1992 in accordance with generally accepted government auditing standards.<sup>17</sup>

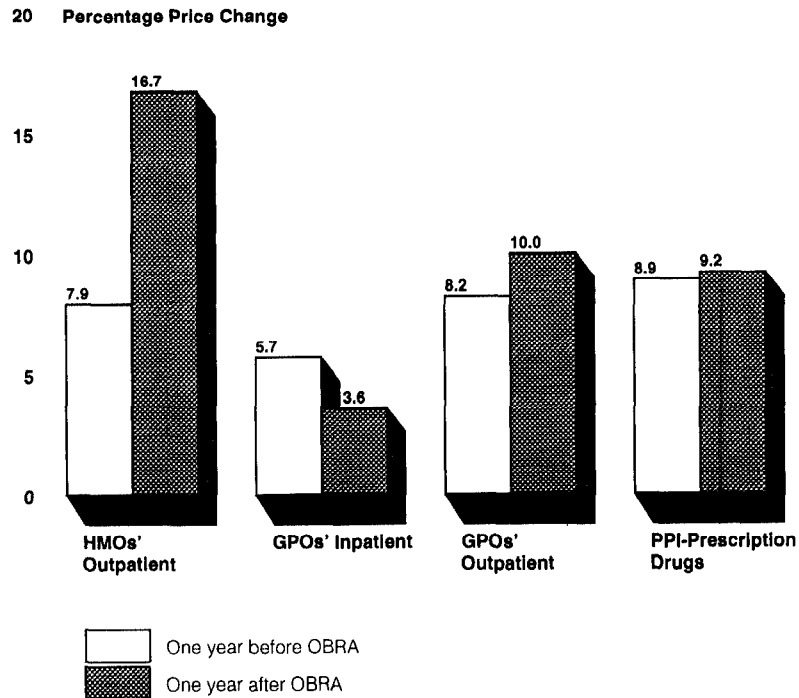
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<sup>17</sup>We developed the study's scope and methodology in consultation with Professor Stephen W. Schondelmeyer, who holds the Endowed Chair in Pharmaceutical Management and Economics at the University of Minnesota and is the Director of the PRIME Institute.

## Price Increases Greater for Outpatient Drugs

Prices for the HMOs' drugs rose, on average, much faster the year after OBRA than the year before. After OBRA, the HMOs' drugs, which are almost exclusively outpatient drugs, had almost twice as many large price increases as the year before. Figure 1 shows that prices for HMOs' drugs increased twice as fast the year after OBRA compared to the year before.<sup>18</sup> In contrast, price increases slowed for the GPOs' inpatient drugs and rose slightly for their outpatient drugs the year after OBRA. During the same period, the PPI for prescription drugs stayed almost constant. (See app. II for the mean price change for each HMO and GPO since OBRA.)

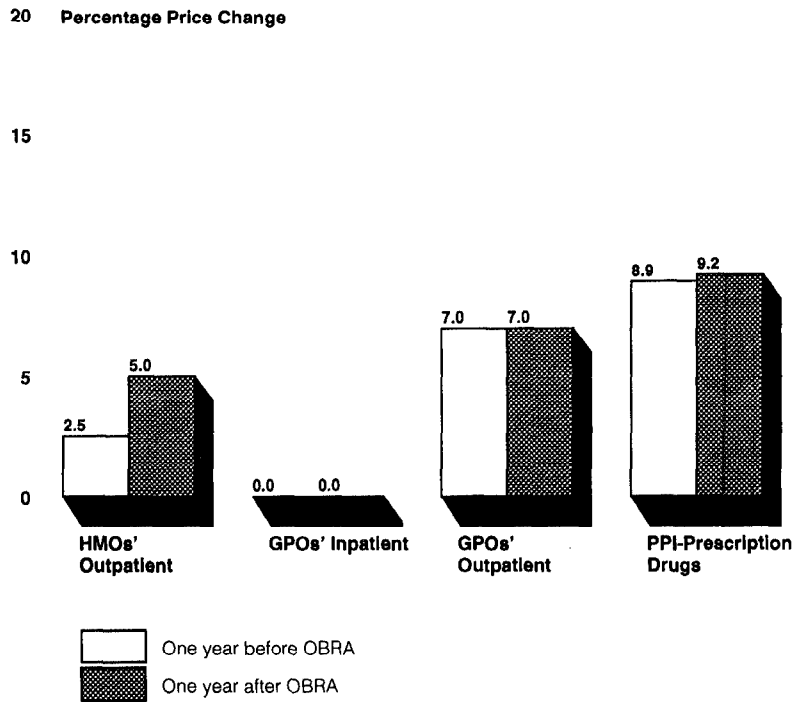
**Figure 1: Mean Price Changes for HMOs and GPOs and the Producer Price Index for Prescription Drugs**



<sup>18</sup>Only six of the HMOs and GPOs gave us expenditure data for their top-100 and top-50 drugs. As a result, the rates in figure 1 represent unweighted mean price changes.

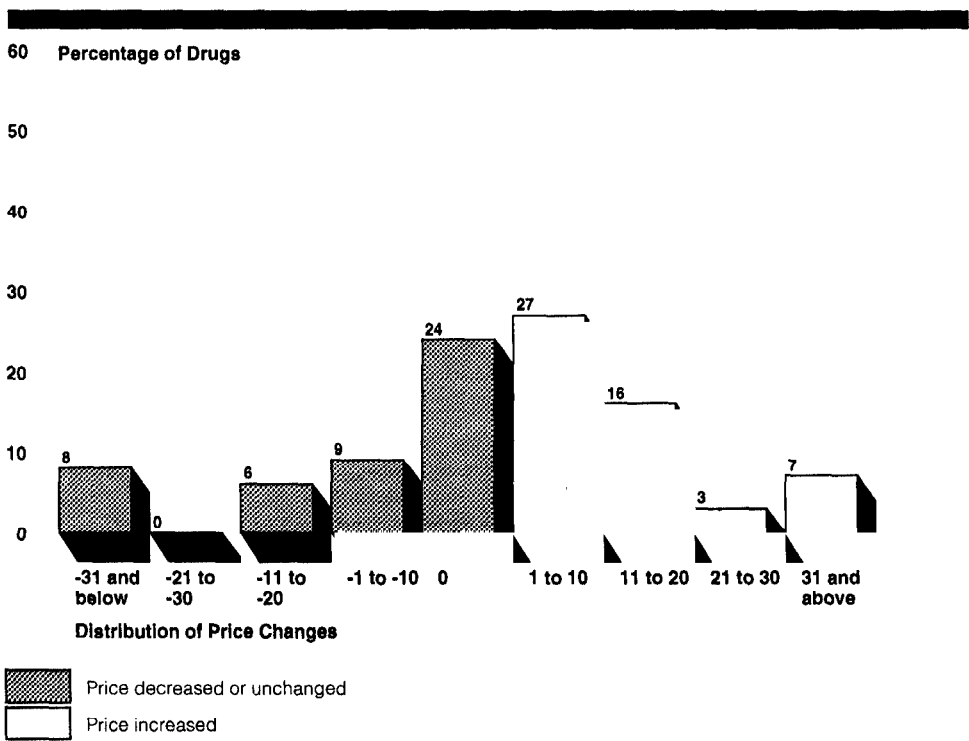
Because the mean price changes are sensitive to a few drugs with relatively large price increases, the median price changes are lower than the means. However, the medians also reflect much faster increases for the HMOs' drugs the year after OBRA than the year before. Figure 2 shows the HMOs' median change was 5 percent the year after OBRA; that is, one-half the price changes were higher than 5 percent and one-half were lower. The year before, the HMOs' median increase was 2.5 percent. The GPOs' inpatient median change was 0 percent both before and after OBRA, while the GPOs' outpatient median increase was 7 percent both years. The PPI-Prescription Drugs median increase was 8.9 percent the year before OBRA and 9.2 percent the year after OBRA.

**Figure 2: Median Price Changes for HMOs and GPOs and the Producer Price Index for Prescription Drugs**



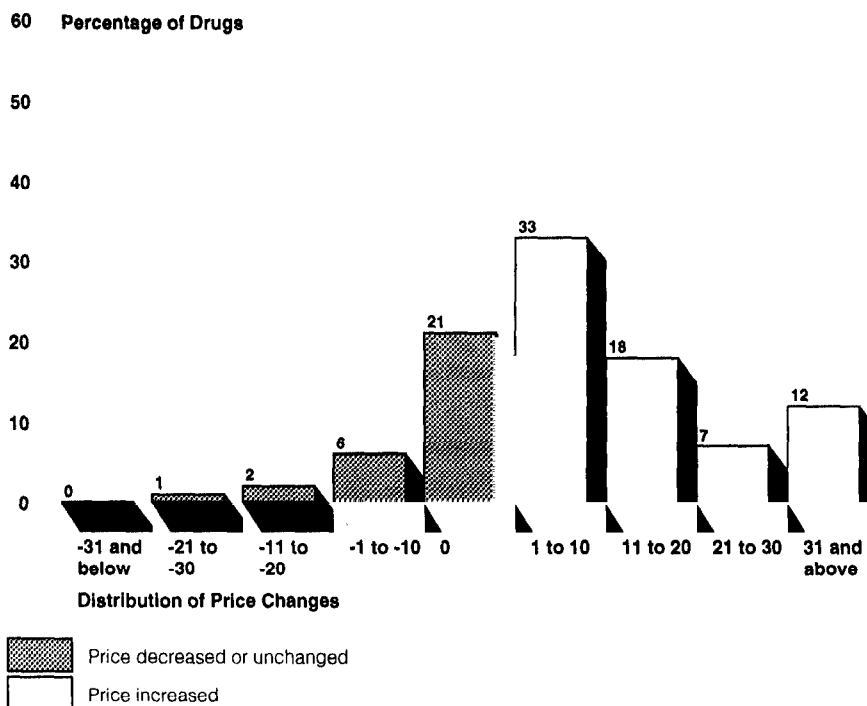
The range of price changes for the HMOs and GPOs varied widely both before and after OBRA. Before OBRA, prices increased for 48 percent of the drugs we studied and stayed the same or decreased for 52 percent. After OBRA, prices increased for 58 percent and stayed the same or decreased for 42 percent of the drugs we studied. Figures 3 through 8 display the distributions of price changes both before and after OBRA for the (1) HMO outpatient drugs, (2) GPO inpatient drugs, and (3) GPO outpatient drugs. The shaded bars represent the drugs that have decreased in price or remained the same, and the white bars the drugs that have increased in price. For example, figure 3 shows that the year before OBRA 24 percent of the HMO outpatient drug prices did not change and 27 percent increased up to 10 percent.

**Figure 3: Distribution of HMO Outpatient Price Changes the Year Before OBRA**



Range: 91 percent decrease to 400 percent increase.

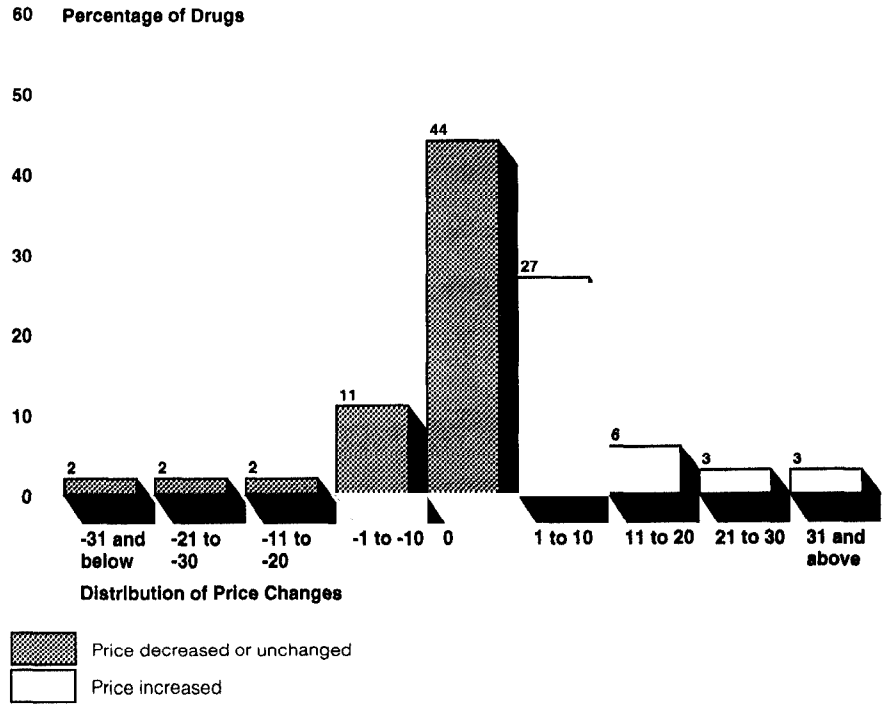
**Figure 4: Distribution of HMO Outpatient Price Changes the Year After OBRA**



Range: 30 percent decrease to 587 percent increase.

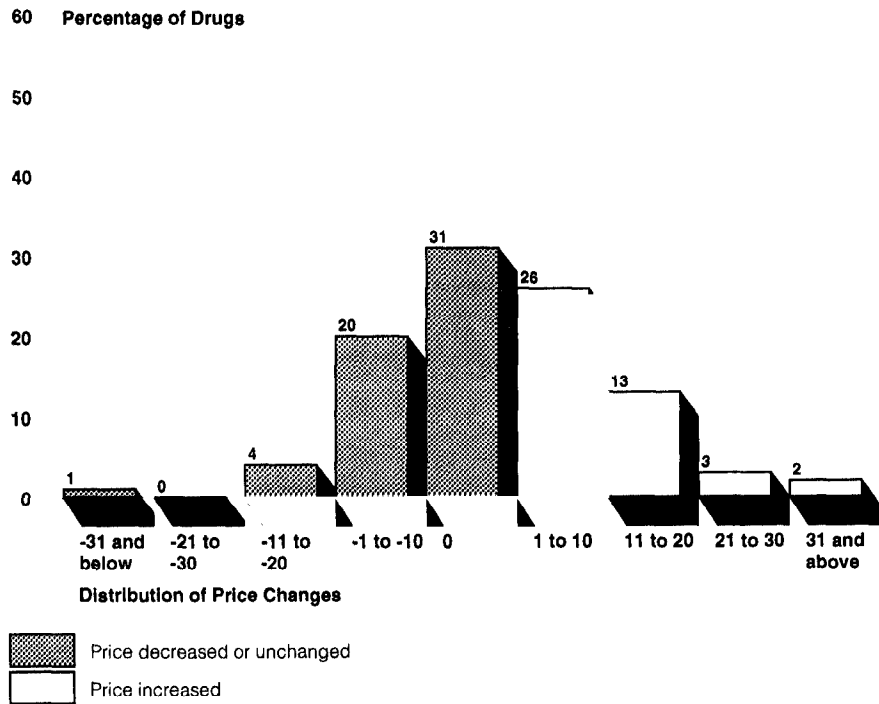
A comparison of figures 3 and 4 shows that almost twice as many HMO drugs experienced large price changes the year after OBRA than the year before. Nineteen percent of the HMOs' drugs increased more than 20 percent after OBRA compared to 10 percent of them the year before. Also, the year after OBRA, far fewer HMO drug prices decreased or remained the same than the year before.

Figure 5: Distribution of GPO Inpatient Price Changes the Year Before OBRA



Range: 94 percent decrease to 900 percent increase.

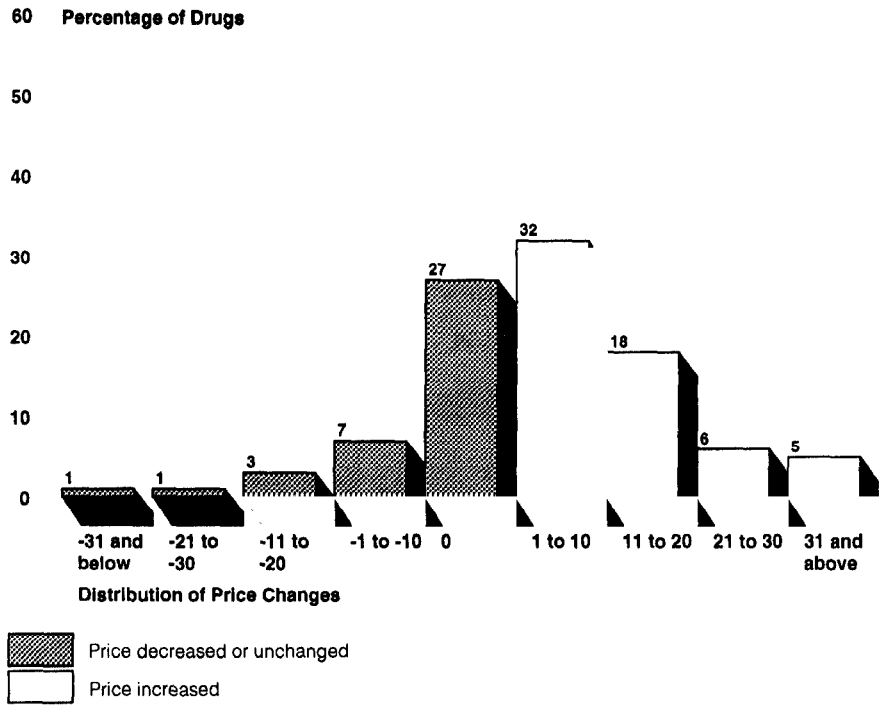
**Figure 6: Distribution of GPO Inpatient Price Changes the Year After OBRA**



Range: 51 percent decrease to 357 percent increase.

The distribution of price changes after OBRA in figure 6 is flatter and more spread out than in figure 5 because fewer GPO inpatient prices stayed the same after OBRA. However, the distribution still centers around 0 percent because the price increases or decreases were relatively small. After OBRA, more GPO inpatient prices decreased up to 10 percent and more experienced increases of 11 to 20 percent compared to the year before.

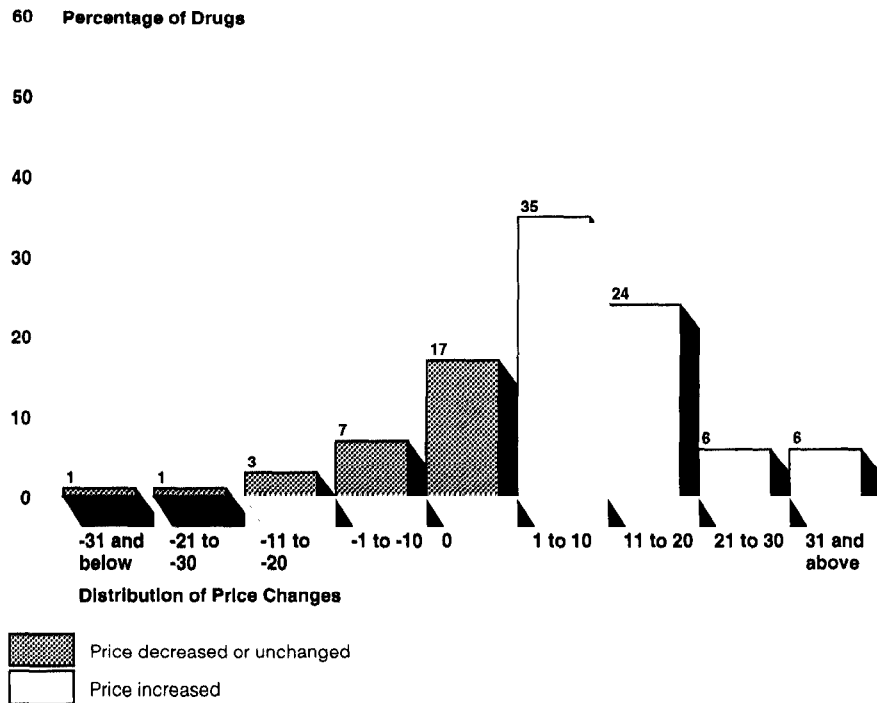
**Figure 7: Distribution of GPO  
Outpatient Price Changes the Year  
Before OBRA**



Range: 45 percent decrease to 259 percent increase.



**Figure 8: Distribution of GPO Outpatient Price Changes the Year After OBRA**



Range: 52 percent decrease to 141 percent increase.

A comparison of figures 7 and 8 shows that after OBRA fewer of the GPO outpatient drug prices remained the same and a slightly higher percentage increased in price compared to the year before. Before OBRA, 61 percent of the GPO outpatient drugs increased in price while after OBRA, 71 percent did.

Although some of the price increases to individual HMOs and GPOs were large, in few instances did any one drug increase substantially to most of the organizations studied. We identified those drugs included on the top-100 and top-50 lists of at least half of the purchasers we studied. This resulted in a group of 77 drugs. When we averaged the price changes for each of the 77 drugs, we found few that increased substantially after OBRA. Of the 77 drugs, 20 rose faster than the PPI the year after OBRA.<sup>19</sup> Twenty-six of the drugs, on average, decreased in price or remained the same. (See

<sup>19</sup>The increase in the PPI for prescription drugs the year after OBRA was 9.2 percent.

app. III for price changes after OBRA for drugs included on the lists of at least half of the HMOs or GPOs.)

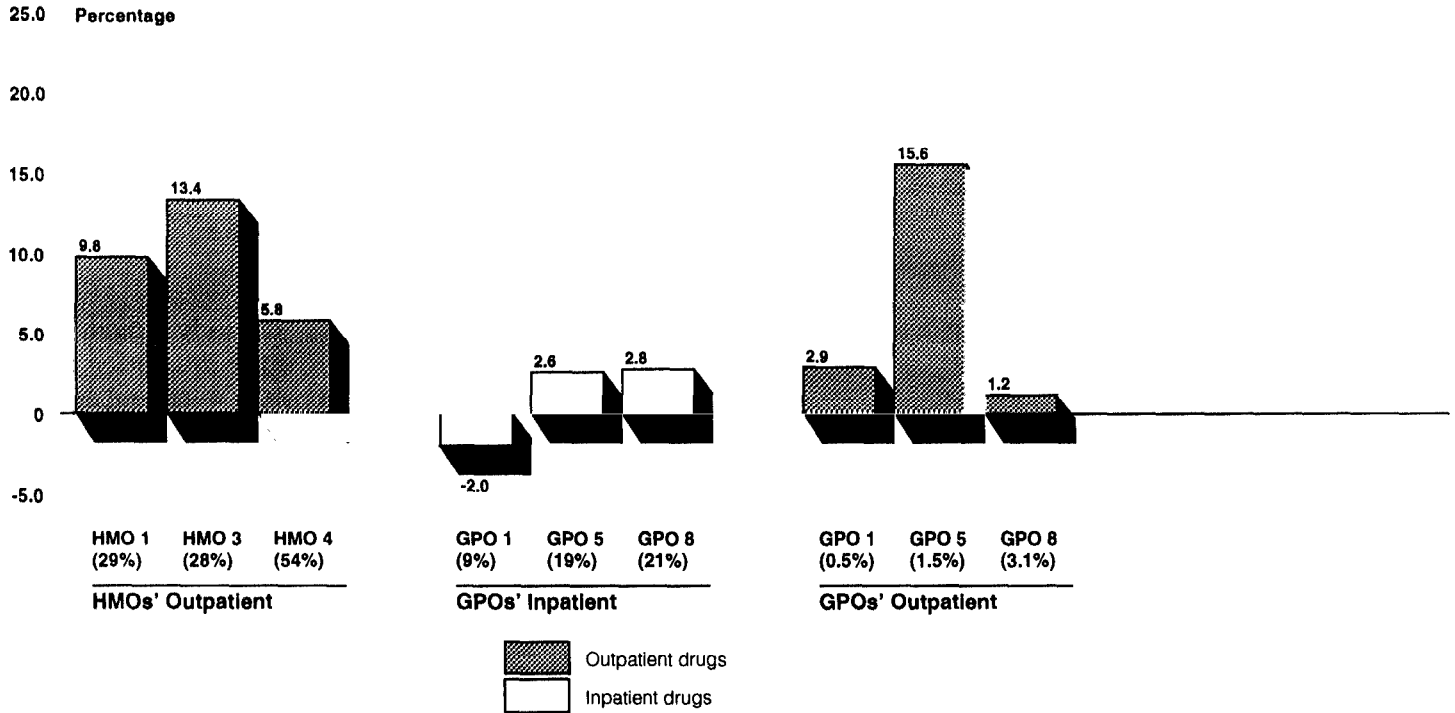
## Potential Effect of Price Increases Greater for the HMOs Studied

The effect of the price increases on an HMO's or GPO's drug costs, or expenditures, can vary considerably. For example, a very high price increase on a low-cost drug, or a little-used drug, may not substantially affect the HMO's or GPO's drug costs. On the other hand, a high price change on a high-cost drug could considerably increase a purchaser's drug costs. To illustrate the effect of price increases after OBRA on the expenditures for the top drugs for organizations in our study, we obtained from three HMOs and three GPOs annual utilization data for each drug on their top-100 and top-50 lists.<sup>20</sup> For the six purchasers, we calculated how the price changes could affect their expenditures for these drugs. We assumed each drug's most recent annual utilization remained constant.<sup>21</sup>

<sup>20</sup>The remaining six HMOs and GPOs did not provide utilization data for the drugs on their top-100 and top-50 lists.

<sup>21</sup>To the extent that an HMO or GPO changes its drug utilization patterns in response to price increases after OBRA, the actual effects of the price changes could be different than our estimates.

Figure 9: Potential Expenditure Change for the Top Drugs for Three HMOs and Three GPOs



Percentages in parentheses under each HMO and GPO are the percentage of total expenditures for all drugs represented by each group's top-100 and top-50 drugs.

Figure 9 shows that the price changes after OBRA could result in higher drug expenditures for several of the purchasers, particularly the HMOs we studied. The HMOs' expenditure increases were among the largest because of the price increases for outpatient drugs. The effect of outpatient drug price increases on expenditures is particularly difficult for the HMOs, for two reasons. First, the HMOs' outpatient price increases would not be offset with lower increases for inpatient drugs because the HMOs purchase outpatient drugs almost exclusively. In contrast, the 15.6 percent increase in one GPO's outpatient drugs would be offset to some extent by the much lower 2.6 percent increase in its inpatient drug expenditures. Second, we found that 80 percent of the drugs with large price increases are

single-source drugs that have no generic alternatives.<sup>22</sup> Thus, the HMOs cannot easily cushion the effect of some large price increases on their expenditures by switching to other drugs.

## Effect of Price Increases on Discounts Varied Widely

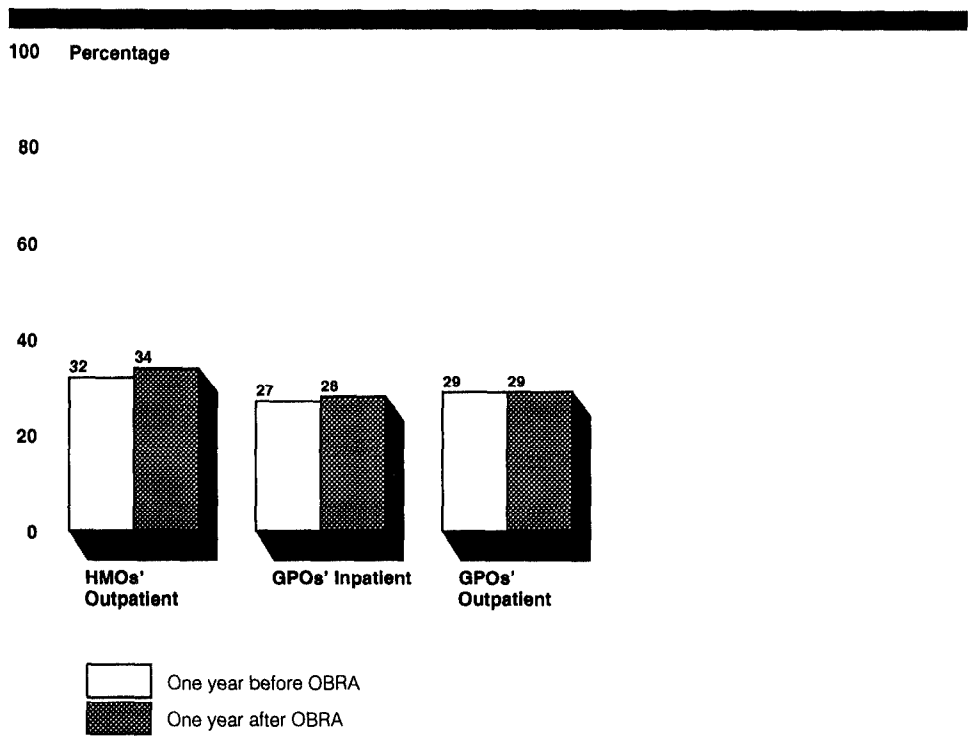
HMOs and GPOs have traditionally received substantial discounts off a drug's average wholesale price. A discount is the percentage difference between the price the purchaser pays for a drug and the drug's AWP and is expressed as a percentage off the AWP. Representatives of the HMOs and GPOs were concerned that, after OBRA, drug manufacturers would reduce these discounts.

The year before OBRA, the discounts for the drugs in our study ranged from 2 percent to 99 percent off the AWP. To determine how the drug price changes after OBRA affected the discounts received by the HMOs and GPOs in our study, we calculated each drug's discount for both the year before and after OBRA and then averaged the discounts across the HMOs and GPOs.<sup>23</sup>

<sup>22</sup>These are patented drugs for which there is only one manufacturer or supplier or for which there is a cross-licensing/marketing agreement between two manufacturers.

<sup>23</sup>To determine the size of a drug's price discount, we obtained each drug's AWP from the Medi-Span database for the year before and the year after OBRA. We then calculated each drug's discount for both the year before and after OBRA by determining the percentage difference between the purchaser price and the AWP.

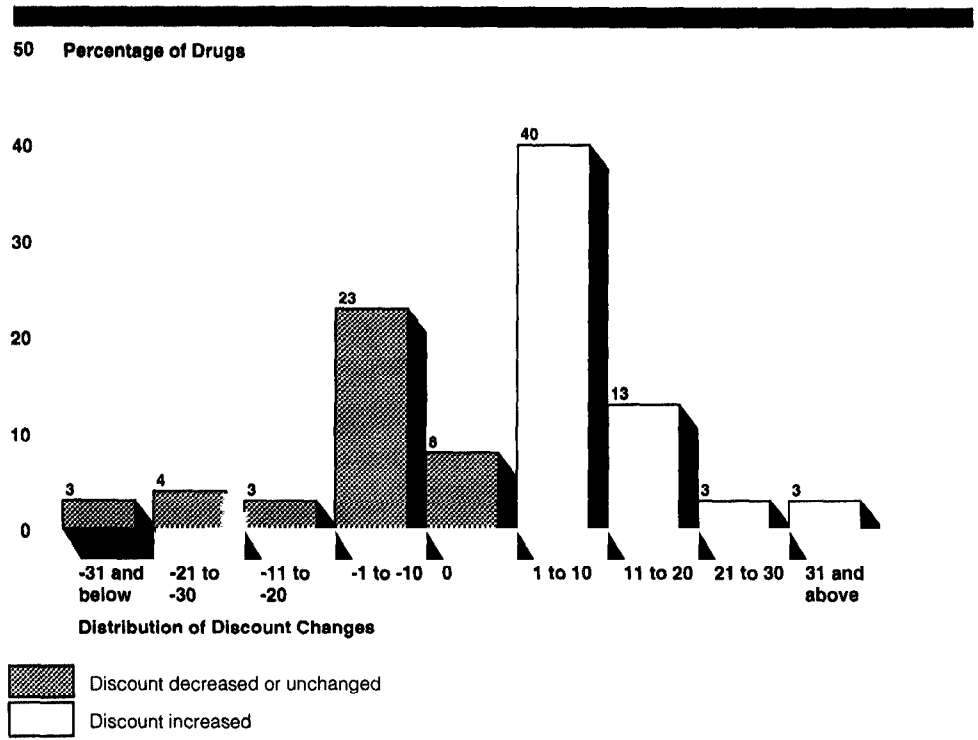
**Figure 10: Average Percentage Discounts Off AWP Received by HMOs and GPOs**



Although one might have expected discounts to shrink as the prices paid by HMOs and GPOs increased, figure 10 shows that, on average, the discounts HMOs and GPOs received rose slightly the year after OBRA for both HMO outpatient and GPO inpatient drugs and remained constant for GPO outpatient drugs. This occurred because the AWP for many drugs rose faster than the HMO or GPO price after OBRA.

A comparison of the discounts off AWP before and after OBRA showed that changes in the individual discounts for the drugs we studied varied widely. Overall, discounts increased for 50 percent of the drugs, stayed the same for 21 percent of the drugs, and decreased for 29 percent. The following figures show the distributions of discount changes for (1) HMO outpatient drugs, (2) GPO inpatient drugs, and (3) GPO outpatient drugs.

**Figure 11: Distribution of HMO Outpatient Discount Changes the Year After OBRA**

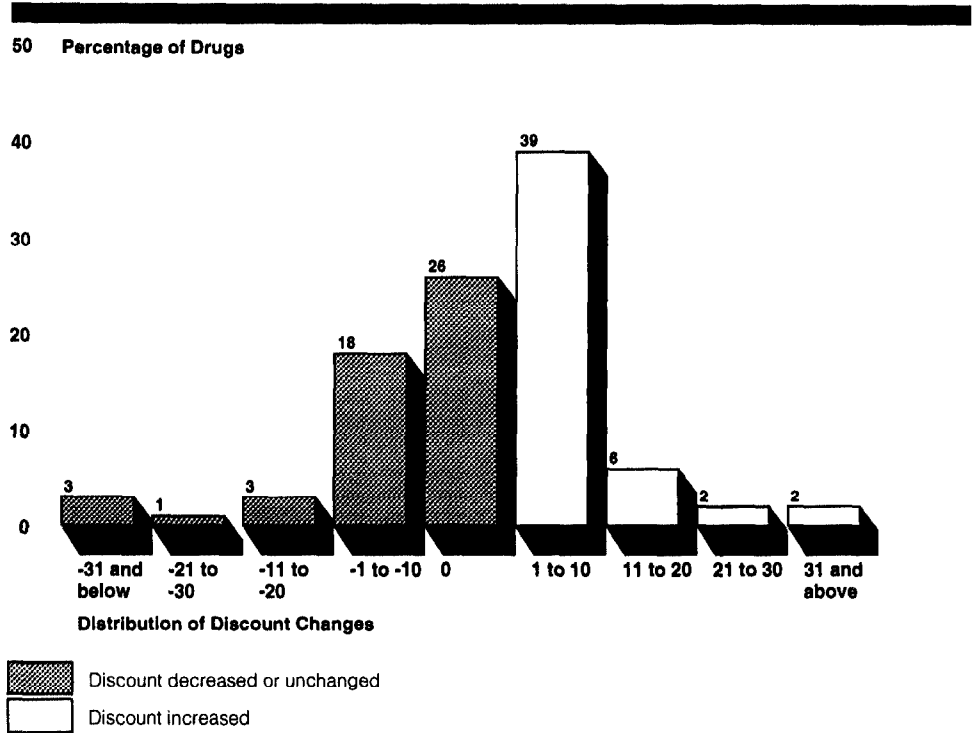


Range: 54-percentage-point decrease to 73-percentage-point increase.

Figure 11 shows that 40 percent of the HMO drugs saw their discounts increase by up to 10 percentage points.<sup>24</sup> The range of changes varied from a decrease of 54 percentage points to an increase of 73 percentage points. Fifty-nine percent of the HMO outpatient drug discounts increased after OBRA. Forty-one percent decreased or stayed the same.

<sup>24</sup>Figures 11 through 13 show discount changes in terms of percentage points. For example, a discount change from 10 to 20 percent is expressed here as an increase of 10 percentage points.

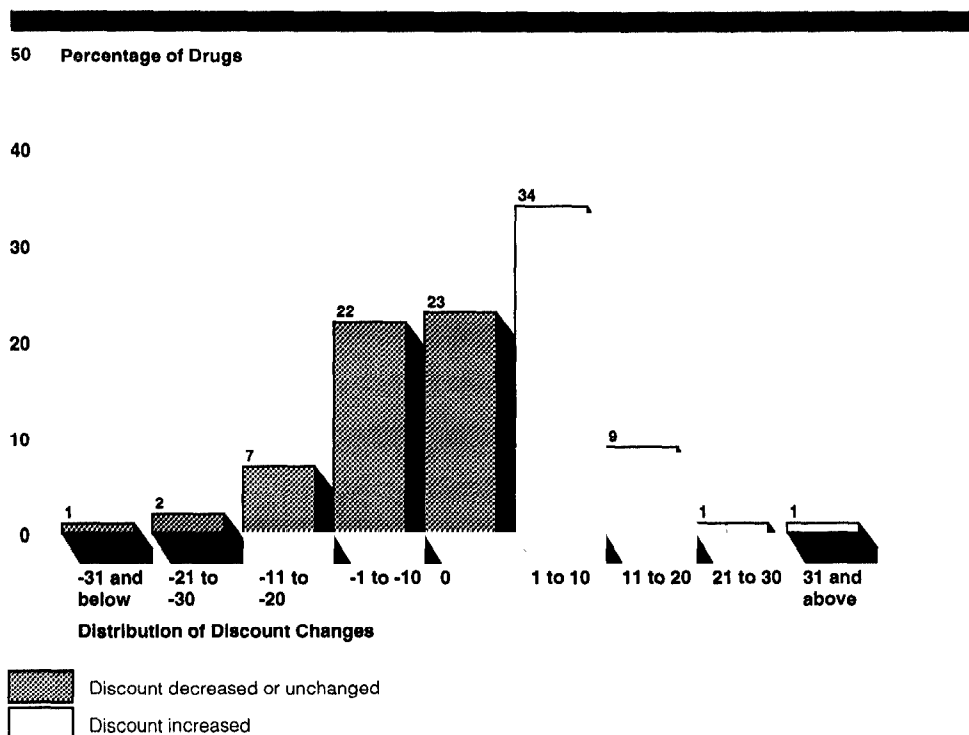
**Figure 12: Distribution of GPO Inpatient Discount Changes the Year After OBRA**



Range: 75-percentage-point decrease to 71-percentage-point increase.

GPO inpatient discount changes, shown in figure 12, ranged from a 75-percentage-point decrease to a 71-percentage-point increase. Forty-nine percent of the GPO inpatient discounts increased after OBRA. Fifty-one percent of the discounts decreased or stayed the same.

**Figure 13: Distribution of GPO Outpatient Discount Changes the Year After OBRA**



Range: 45-percentage-point decrease to 42-percentage-point increase.

Figure 13 shows the GPO outpatient discount changes, which vary from a decrease of 45 percentage points to an increase of 42 percentage points. Discounts increased on 45 percent of the GPO outpatient drugs and decreased or remained the same on 55 percent of the drugs.

## Contracts Shortened and Terms Changed

Before OBRA, representatives of the GPOs and HMOs said that they negotiated contracts with drug manufacturers that typically ranged in duration from 1 to 5 years. However, representatives of most of the GPOs and HMOs told us that after OBRA, as contracts expired and were renegotiated, many drug manufacturers offered shorter-term contracts of 1 year or less.

Representatives of the affected GPOs and HMOs were concerned that the reduction in contract duration will result in more frequent price increases.



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One HMO representative stated that 90 percent of the 50 contracts the HMO recently renewed were reduced to 1-year terms. Before OBRA, all of these contracts were at least 2 years in duration.

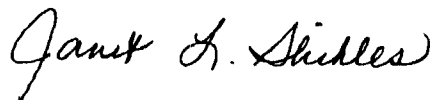
Representatives of most of the GPOs and HMOs also told us that after OBRA many manufacturers changed their practice of offering fixed prices for the duration of a contract to offering a certain percentage off a drug's wholesale price. Some manufacturers offered a percentage off a drug's AWP while others offered a percentage off the price charged wholesalers.<sup>25</sup> Typically, prices are set by drug manufacturers for the duration of the contract or indexed to rise each year by a fixed percentage. In contrast, offering prices that are a percentage off wholesale means that a drug's price can change whenever its wholesale price changes. One HMO representative explained that not one of the contracts that expired since OBRA was renewed on a fixed-price basis. Most of the contracts provided a maximum of 12.5 to 15 percent off a list price charged wholesalers.

GPO and HMO representatives reported that changes in contracting practices have created an environment of uncertainty about future drug prices. In their view, shorter contract periods and refusals to set fixed prices for such periods allow manufacturers much flexibility in developing pricing strategies.

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We are sending copies of this report to the Health Care Financing Administration and other interested parties. Copies also will be made available to others upon request.

Should you or any of your staffs have any questions about this report, please call me at (202) 512-7119. Other major contributors are listed in appendix V.



Janet L. Shikles  
Director, Health Financing  
and Policy Issues

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<sup>25</sup>While AWP represents the average of a drug's list prices that manufacturers suggest that wholesalers charge pharmacies, the percentage discount that some GPOs and HMOs were offered was off a manufacturer's list price to wholesalers. Representatives of these organizations believed that this price approximated AMP—the manufacturer's average price charged wholesalers or retail pharmacies.

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**Abbreviations**

AMP	average manufacturer price
AWP	average wholesale price
CPI	consumer price index
DOD	Department of Defense
VA	Department of Veterans Affairs
GPO	group purchasing organization
HMO	health maintenance organization
IPA	individual practice association
OBRA	Omnibus Budget Reconciliation Act of 1990
PPI	producer price index

# OBRA 1990 Medicaid Drug Rebate Provisions

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OBRA provides for a basic rebate and additional rebate for single-source drugs and innovator multiple-source drugs.<sup>1</sup> In general, the basic rebate equals the greater of (1) a fixed percentage (12.5 percent in 1991 and 1992, 15 percent after 1992) of the average manufacturer price (AMP) or (2) the difference between the AMP and the best price for a particular drug. The rebate is capped at 25 percent of the AMP during the first year (1991) and 50 percent during the second (1992). Thereafter, the rebate is the greater of 15 percent of the AMP or the full difference between the AMP and best price.

The additional rebate allows state Medicaid programs to recapture increases in the AMP that exceed the rate of inflation. It is based on the difference between increases in the AMP for a particular drug and increases in the consumer price index. In 1994, the additional rebate formula will change to a weighted AMP to be calculated on an aggregate basis by the Secretary of Health and Human Services.

Rebates for noninnovator multiple-source or generic drugs are initially a flat 10 percent of the AMP, increasing to 11 percent after 1993.

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<sup>1</sup>Innovator multiple-source drugs are the original patented brand of a product that is now a multiple-source drug available in generic versions from several manufacturers.

# Average Price Changes for Individual HMOs and GPOs the Year After OBRA

The mean price changes (unweighted) for the individual HMOs and GPOs varied from a 4 percent decrease to a 37.2 percent increase. The higher price changes are on the HMOs' and GPOs' outpatient drugs. The following three figures display the individual HMOs' and GPOs' mean price changes the year after OBRA.

**Figure II.1: Mean Price Changes for Individual HMOs' Outpatient Drugs the Year After OBRA**

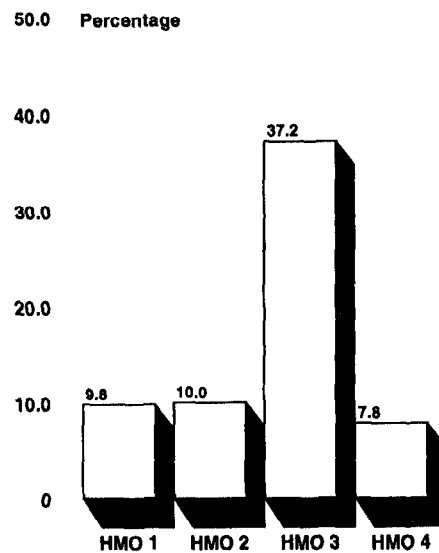


Figure II.1 shows that the mean price changes for the HMOs' outpatient drugs varied widely after OBRA, from a 7.8 to a 37.2 percent increase. Overall, the mean increase for HMO outpatient drugs after OBRA was 16.7 percent.

Appendix II  
Average Price Changes for Individual HMOs  
and GPOs the Year After OBRA

Figure II.2: Mean Price Changes for  
Individual GPOs' Inpatient Drugs the  
Year After OBRA

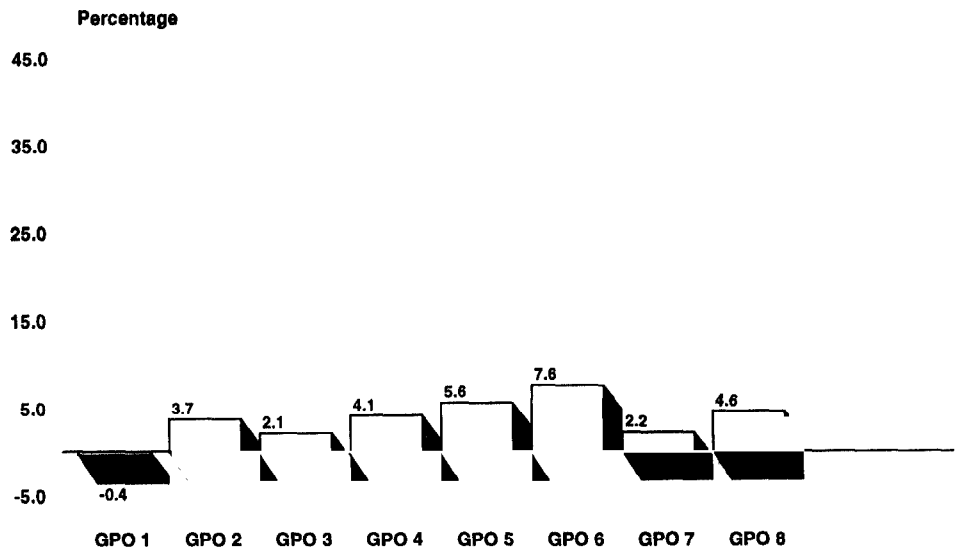


Figure II.2 displays the mean changes for the GPOs' inpatient drugs, which range from a 0.4 percent decrease to a 7.6 percent increase. The mean price increase for all GPO inpatient drugs after OBRA was 3.6 percent.

Appendix II  
Average Price Changes for Individual HMOs  
and GPOs the Year After OBRA

Figure II.3: Mean Price Changes for  
Individual GPOs' Outpatient Drugs the  
Year After OBRA

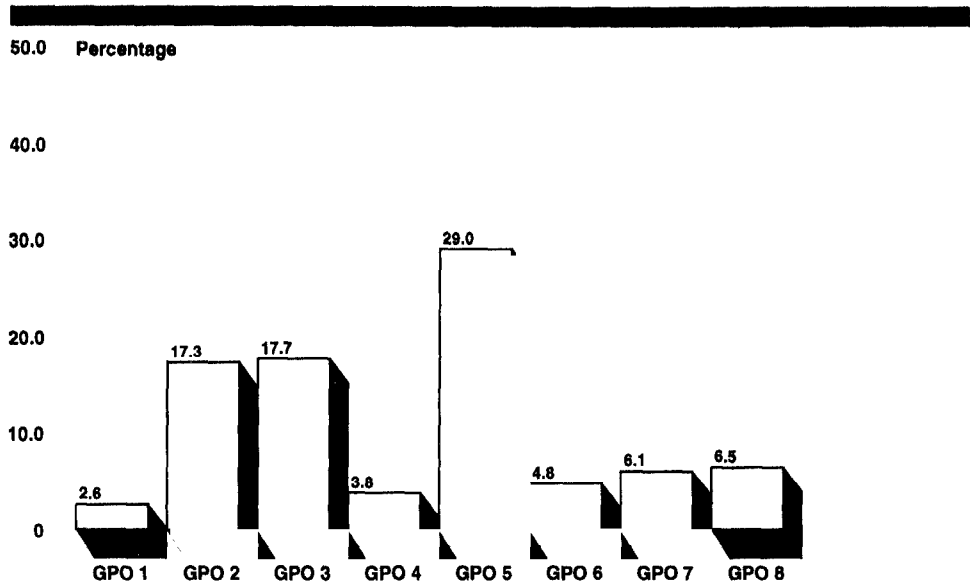


Figure II.3 shows that the mean price changes for individual GPOs' outpatient drugs varied from a 2.6 percent to a 29 percent increase. Overall, the mean price increase for GPO outpatient drugs was 10 percent after OBRA.

# Drugs Included on the Top-100 or Top-50 Lists by at Least Half the HMOs or GPOs

The following table displays 77 drugs included on the lists of at least half the HMOs or GPOs, the vendor or manufacturer, package information, the percentage price changes reported by the HMOs or GPOs after OBRA, and the drug's average wholesale price (AWP) change after OBRA. The number of price changes shown corresponds to the number of HMOs or GPOs that included the drug on their lists. For example, the four price changes for Burroughs' Retrovir are the price changes reported by the four HMOs the year after OBRA.<sup>1</sup>

Vendor/ manufacturer	Product	Package size	Percentage price change(s)	AWP change
<b>HMO outpatient</b>				
Burroughs	Retrovir, 100mg	100 caps	0.1	0.0
			0.0	
			0.0	
			-0.6	
Burroughs	Zovirax, 200mg	100 caps	15.0	15.0
			10.7	
			15.0	
Dista	Prozac, 20mg	100 caps	6.7	14.7
			14.7	
			10.8	
Genentech	Protropin, 5mg	1 injectable	0.0	0.0
			0.0	
			0.0	
Glaxo	Zantac, 150mg	60 caps	-0.6	7.9
			2.8	
			11.3	
			3.9	
ICI	Tenormin, 50mg	100 caps	1.0	9.3
			0.0	
			4.9	
MSD	Mevacor, 20mg	60 caps	4.6	4.2
			4.2	
			4.2	
			4.2	
MSD	Vasotec, 5mg	100 caps	4.5	7.0
			7.0	
			7.0	
Parke-Davis	Dilantin, 100mg	1,000 caps	52.2	22.9
			0.0	
			67.6	

(continued)

<sup>1</sup>When a price change of 0.0 is reported, an HMO or GPO included the drug on its top list but showed the same price after OBRA as before. A continuing multiyear contract could be why a drug's price remains the same.



**Appendix III  
 Drugs Included on the Top-100 or Top-50  
 Lists by at Least Half the HMOs or GPOs**

<b>Vendor/ manufacturer</b>	<b>Product</b>	<b>Package size</b>	<b>Percentage price change(s)</b>	<b>AWP change</b>
SK Beecham	Augmentin, 500mg	30 caps	7.6 0.0 11.6	7.6
Stuart	Zestril, 20mg	100 caps	15.9 4.2 -1.6	4.2
Stuart	Zestril, 10mg	100 caps	16.0 4.2 7.7	4.2
Upjohn	Colestid	500 grams	6.7 0.0 55.0	6.1
<b>GPO inpatient</b>				
Abbott	Abbokinase, 250,000 iv, Inj	1 vial	12.6 22.1 6.4 6.4 -1.3 6.5 12.6	5.9
Amgen	Epogen, 2,000 units/ml	10 vials (1ml)	-3.7 -7.2 -4.0 0.0 -3.3	-2.7
Amgen	Epogen, 4,000 units/ml	10 vials (1ml)	-3.3 -3.7 -7.2 -4.0 0.0 -0.2 -3.3	-2.7
Astra	Xylocaine, 2% gel	30gm	16.1 16.1 27.7 9.4 23.1 13.8	14.3
Boehringer Ingelheim	Atrovent Inh.	14gm	23.0 15.5 12.0 23.0 16.8 7.8 24.6	12.0

(continued)

**Appendix III  
 Drugs Included on the Top-100 or Top-50  
 Lists by at Least Half the HMOs or GPOs**

<b>Vendor/ manufacturer</b>	<b>Product</b>	<b>Package size</b>	<b>Percentage price change(s)</b>	<b>AWP change</b>
Bristol-Myers	Paraplatin, 450mg, Inj	1 vial	4.6	9.3
			9.3	
			9.3	
			5.0	
Bristol-Myers	Vepesid, 20mg/ml, Inj	5ml vial	10.7	10.7
			10.7	
			10.7	
			5.5	
Burroughs	Tracrium, 10mg/ml, Inj	10 vials	14.3	14.3
			14.3	
			9.3	
			14.3	
			8.5	
Burroughs	Zovirax, 500mg, Inj	10 vials (10ml)	3.9	3.9
			3.9	
			3.9	
			-0.1	
Cutter	Gamimune N, 12.5gm, Inj	1 vial	-1.4	0.0
			-10.1	
			-6.3	
			-10.6	
Cutter	Gamimune N, 50m, Inj	1 vial	-2.8	0.0
			-12.6	
			-10.1	
			-5.0	
			-6.3	
			-9.2	
DuPont	Hespan, Inj	500ml	2.3	0.0
			28.5	
			5.1	
			6.5	
Genentech	Activase, 50mg, Inj	1 vial	-3.8	0.0
			0.0	
			0.0	
			-0.2	
Glaxo	Fortaz, 2gm, Inj	50 vials	-3.3	0.0
			0.0	
			-2.2	
			-2.3	
Glaxo	Fortaz, 1gm, Inj	50 vials	-3.4	0.0
			0.0	
			-2.4	
			-2.5	
			0.0	

(continued)

**Appendix III  
 Drugs Included on the Top-100 or Top-50  
 Lists by at Least Half the HMOs or GPOs**

Vendor/ manufacturer	Product	Package size	Percentage price change(s)	AWP change
Glaxo	Fortaz, 1gm, Inj	25 vials	-3.3	0.0
			-3.3	
			-3.3	
			0.0	
Glaxo	Zantac, 25mg/ml, Inj	10 vials (10ml)	-4.4	0.0
			-1.3	
			-4.4	
			-7.5	
			-1.3	
Glaxo	Zantac, 150mg	60 caps	0.0	7.9
			4.8	
			0.0	
			8.9	
Glaxo	Zantac, 25mg/ml, Inj	10 vials (2ml)	-4.4	0.0
			-16.7	
			0.0	
			-4.4	
			-4.4	
Glaxo	Zantac, 150mg	100 caps (UD)	0.0	7.9
			4.7	
			4.3	
			0.0	
			0.0	
			-11.5	
Glaxo	Zantac, 25mg/ml, Inj	10 vials (40ml)	-3.7	0.0
			0.0	
			-7.5	
			0.0	
Glaxo	Zantac, 50mg/100ml	24 vials	-2.8	0.0
			0.0	
			0.0	
			-2.8	
			-2.8	
Glaxo	Zinacef, 1.5gm, Inj	24 vials	-3.1	0.0
			-2.1	
			-3.7	
			-3.5	
Hoechst	Claforan, 10gm, Inj	1 vial	-2.8	0.0
			-2.8	
			-2.8	
			-2.8	
			0.0	
			-2.9	

(continued)

**Appendix III  
 Drugs Included on the Top-100 or Top-50  
 Lists by at Least Half the HMOs or GPOs**

<b>Vendor/ manufacturer</b>	<b>Product</b>	<b>Package size</b>	<b>Percentage price change(s)</b>	<b>AWP change</b>
Kabi	Healon, Inj, 10mg/ml	1 syringe (0.4ml)	1.6	0.0
			1.3	
			0.0	
			-12.1	
Kabi	Healon, Inj, 10mg/ml	1 syringe (0.85ml)	0.0	0.0
			0.8	
			0.0	
			0.0	
			-1.5	
			-20.1	
Lilly	Dobutrex, 250mg, Inj	10 vials (20ml)	0.0	7.8
			-10.8	
			0.0	
			11.4	
Lilly	Dobutrex, 250mg, Inj	1 vial (20ml)	0.0	7.8
			-10.8	
			7.8	
			0.0	
Lilly	Kefzol, 1gm, Inj	10ml vials	12.9	0.0
			17.6	
			0.0	
			13.1	
Lilly	Tazidime, 1gm, Inj	25 vials (Add-Vantage)	-5.6	0.0
			4.4	
			0.0	
			0.0	
Miles	Cipro, 500mg	100 caps	11.7	11.7
			11.7	
			11.7	
			8.9	
MMD	Carafate, 1gm	100 caps (UD)	18.1	8.8
			18.1	
			18.1	
			25.6	
			11.5	
			18.1	
MMD	Seldane, 60mg	100 caps	12.9	9.0
			20.0	
			35.5	
			11.9	
MSD	Primaxin, 500mg, Inj.	25 vials	4.2	7.0
			4.2	
			4.2	
			3.3	

(continued)

**Appendix III  
 Drugs Included on the Top-100 or Top-50  
 Lists by at Least Half the HMOs or GPOs**

<b>Vendor/ manufacturer</b>	<b>Product</b>	<b>Package size</b>	<b>Percentage price change(s)</b>	<b>AWP change</b>
MSD	Vasotec, 1.25mg/ml	2ml vial	0.5	10.6
			10.6	
			0.5	
			4.4	
Roche	Rocephin, 1gm, Inj	10 vial (piggyback)	0.0	2.6
			3.2	
			0.0	
			-1.3	
			2.4	
Roche	Rocephin, 2gm, Inj	10 vials (Add-Vantage)	-0.5	2.6
			0.0	
			0.0	
			0.6	
			-1.3	
Roche	Rocephin, 2gm, Inj	10 vials	0.0	2.6
			2.6	
			0.0	
			0.6	
			-1.3	
Roche	Rocephin, 2gm, Inj	10 vials	2.5	2.6
			1.3	
			-1.1	
			2.6	
			0.0	
Roche	Rocephin, 1gm, Inj	10 vials (Add-Vantage)	0.0	2.6
			0.0	
			0.6	
			-1.3	
			1.3	
Roche	Rocephin, 10gm, Inj	1 vial	0.0	2.6
			3.5	
			0.0	
			0.0	
			-1.3	
Roche	Rocephin, 250mg, Inj	10 vials	1.3	2.6
			0.0	
			0.0	
			0.6	
			1.3	
Roche	Rocephin, 1gm, Inj	10 vials	0.0	2.6
			2.6	
			0.0	
			0.0	
			0.6	
Roche	Rocephin, 1gm, Inj	10 vials	-1.3	2.6
			2.5	
			0.0	
			0.6	
			-1.3	

(continued)

**Appendix III  
 Drugs Included on the Top-100 or Top-50  
 Lists by at Least Half the HMOs or GPOs**

<b>Vendor/ manufacturer</b>	<b>Product</b>	<b>Package size</b>	<b>Percentage price change(s)</b>	<b>AWP change</b>
Roerig	Diflucan, 200mg/100ml	6 vials (100ml)	0.0	0.0
			0.0	
			0.0	
			-0.1	
Roerig	Unasyn, 3gm	10 vials	3.9	3.9
			3.9	
			3.9	
			1.2	
Sandoz	Sandoglobulin, 6gm/200ml, Inj	1 vial	0.0	0.0
			0.0	
			0.0	
			0.0	
Schering	Proventil, Sol., 0.83mg/ml, Inh.	25 bottles (3ml)	23.7	15.2
			47.6	
			-4.7	
			0.0	
			14.2	
			0.0	
SK Beecham	Ancef, Inj, 1gm/50ml	24 vials	23.2	8.1
			-2.6	
			-0.4	
			0.0	
			0.0	
			-1.3	
SK Beecham	Eminase, 30 units	1 vial	0.0	1.6
			1.6	
			1.6	
			-0.9	
Stuart	Diprivan, Inj, 10mg/ml	5 vials (20ml)	0.0	5.9
			0.0	
			0.0	
			0.0	
			-1.3	
Syntex	Toradol, 60mg/2ml, Inj	10 syringes	1.4	0.0
			0.0	
			0.0	
			-1.9	
Upjohn	Gelfoam, sponge, 80x125x10mm	pk size 6	13.6	11.6
			19.1	
			13.6	
			13.6	
			7.1	
Wyeth-Ayerst	Ativan, 2mg/ml, Inj	10 vials (1ml)	6.1	6.1
			6.1	
			9.8	
			2.6	

(continued)

**Appendix III  
 Drugs Included on the Top-100 or Top-50  
 Lists by at Least Half the HMOs or GPOs**

Vendor/ manufacturer	Product	Package size	Percentage price change(s)	AWP change
<b>GPO outpatient</b>				
Dista	Prozac, 20mg	100 caps	14.7	14.7
			14.7	
			14.7	
			7.6	
Glaxo	Zantac, 150mg	60 tabs	4.8	7.9
			0.0	
			0.0	
			-1.2	
ICI	Nolvadex, 10mg	60 tabs	8.9	3.3
			9.4	
			3.3	
			9.4	
ICI	Tenormin, 50mg	100 tabs	10.8	9.3
			5.9	
			16.1	
			14.7	
MMD	Carafate, 1gm	100 tabs	5.9	7.8
			16.1	
			-34.0	
			20.0	
MMD	Cardizem, 60mg	100 tabs	-26.6	6.0
			13.7	
			9.3	
			9.3	
MMD	Cardizem, 60mg	100 tabs (UD)	-1.3	6.2
			6.0	
			8.9	
			7.4	
MMD	Seldane, 60mg	100 tabs	8.9	9.0
			10.6	
			14.7	
			14.7	
MSD	Mevacor, 20mg	60 tabs	6.6	4.2
			16.9	
			20.0	
			0.0	
Parke-Davis	Lopid, 600mg	60 tabs	23.9	6.4
			4.2	
			4.2	
			3.6	
Parke-Davis	Lopid, 600mg	60 tabs	4.3	6.4
			8.4	
			10.5	
			5.0	
			2.0	

(continued)

**Appendix III  
 Drugs Included on the Top-100 or Top-50  
 Lists by at Least Half the HMOs or GPOs**

<b>Vendor/ manufacturer</b>	<b>Product</b>	<b>Package size</b>	<b>Percentage price change(s)</b>	<b>AWP change</b>
Sandoz	Parlodel, 2.5mg	30 tabs	11.3	8.7
			8.7	
			14.3	
			0.0	
Schering	Proventil, 17gm, Inhaler	1 inhaler	140.0	15.2
			0.0	
			99.6	
			0.0	



# Drugs With Average Price Increases or Decreases of More Than 20 Percent

The following drugs are those with increases or decreases of more than 20 percent after OBRA when their price changes are averaged across the HMOs and GPOS. For each drug, the table shows the vendor or manufacturer, package information, and the price change(s) after OBRA. When a drug shows one price change, only one HMO or GPO included it on its list of top drugs. Those drugs showing more than one price change were included on the lists of several HMOs or GPOS.<sup>1</sup> We also report the drug's AWP change after OBRA.

Vendor/ manufacturer	Product	Package size	Percentage price change(s)	AWP change
<b>HMO outpatient</b>				
Abbott	Hytrin, 2mg	100 tabs	50.8	14.5
Alpha Therapeutic	Albutein, 25%, 50ml	1 vial	24.4	0.0
Boehringer Ingelheim	Catapres-TTS, 0.1mg	12 units	72.7	14.1
Boehringer Ingelheim	Catapres-TTS, 0.3mg	4 units	80.6	14.1
Bristol Labs	Corgard, 40mg	100 caps	31.2	6.0
Bristol Labs	Corgard, 80mg	1,000 tabs	30.5	16.1
Bristol Labs	Questran, 4gm	1 can (378gm)	7.9 32.9	11.4
Dupont	Percocet, 5mg	100 tabs	524.9	9.8
Fisons	Intal, 20mg/2ml	60 amps	23.9	16.6
Geigy	Lopressor, 50mg	100 tabs	61.7	11.0
Geigy	Tegretol, 200mg	1,200 tabs	35.7	0.0
Geigy	Tegretol, 200mg	100 tabs	91.4	0.0
ICI	Nolvadex, 10mg	60 tabs	22.7	3.3
Key	K-Dur, 750mg	100 tabs	255.4	6.2
Lederle	Doxepin HCL, 50mg	100 caps	125.1	0.0
Lederle	Doxepin HCL, 25mg	100 caps	81.5	0.0
Lederle	Hibititer, 0.5ml	5 vials	21.5	0.0
Lederle	Sulindac, 200mg	100 tabs	-30.2	-24.5
Lederle	Tri-Immunol, 7.5ml	1 vial	30.5	0.0

(continued)

<sup>1</sup>When a price change of 0.0 is reported, the HMO or GPO included the drug on its top list but showed no change in price after OBRA. A continuing multiyear contract could be why a drug's price did not change.

**Appendix IV  
Drugs With Average Price Increases or  
Decreases of More Than 20 Percent**

<b>Vendor/ manufacturer</b>	<b>Product</b>	<b>Package size</b>	<b>Percentage price change(s)</b>	<b>AWP change</b>
Lilly	Humulin N, 100 units/ml	10ml vial	82.8 3.5	6.6
Mead Johnson	Duricef, 500mg	100 caps	22.0	17.8
Miles	Cipro, 500mg	100 tabs	20.5	0.0
MMD	Carafate, 1gm	100 tabs	57.6	7.8
MMD	Cardizem, 30mg	100 tabs	29.5	7.4
Norwich	Macrochantin, 100mg	1,000 caps	21.4	5.9
Norwich	Macrochantin, 50mg	100 caps	23.7	16.4
Ortho	Terazol 7, 0.4%, Cream	1 tube (45gm)	22.6	12.9
Parke-Davis	Dilantin, 100mg	1,000 caps	52.2 67.6	22.9
Parke-Davis	Nitrostat, 0.4mg, Sub	100 tabs	20.7	31.0
Pfizer	Feldene, 20mg	100 caps	32.8	11.5
Rhone-Poulenc	Azmacort, 60mg, 20g	1 inhaler	68.3	12.1
Sandoz	Pamelor, 25mg	100 caps	122.5 83.5	16.2
Sandoz	Pamelor, 50mg	100 caps	10.3 72.1	16.1
Sandoz	Parlodol, 5mg	100 caps	24.4	8.7
Sandoz	Tavist, 2.68mg	100 tabs	53.4	11.4
Schering	Celestone Soluspan, 5ml	1 vial	29.0	6.5
Schering	Lotrimin, 1%, Cream	30 grams	1.1 118.0	13.3
Schering	Lotrisone, Cream	45 grams	32.5 32.3	19.2
Schering	Proventil, Sol, Inh, 0.83mg/ml	25 bottles (3ml)	-28.7	15.2
Schering	Proventil	1 inhaler	51.6	15.2
Schering	Trinalin	100 tabs	52.4	12.5
Sclavo	Sclavotest-PPD	250 test packages	20.9	0.0
Squibb	Capoten, 50mg	100 tabs	26.0	16.6
Summit	Slow-K, 600mg	1,200 tabs	586.5	10.4
Upjohn	Cleocin-T, 1% Topcl, Sol	60ml	59.5	11.6
Upjohn	Colestid, 5mg	30 packages	41.9	14.2

(continued)

**Appendix IV  
Drugs With Average Price Increases or  
Decreases of More Than 20 Percent**

<b>Vendor/ manufacturer</b>	<b>Product</b>	<b>Package size</b>	<b>Percentage price change(s)</b>	<b>AWP change</b>
Upjohn	Colestid	500 grams	6.7 55.0	6.1
Upjohn	Micronase, 5mg	1,000 tabs	21.2 21.2	9.2
Upjohn	Provera, 2.5mg	100 tabs	71.5	12.0
Upjohn	Provera, 5mg	100 tabs	79.3	12.0
Wyeth-Ayerst	Ativan, 2mg/ml	10 vials	34.9	6.1
Wyeth-Ayerst	Bicillin L-A, 2400000U, 4ml	10 syringes	21.8	3.3
Wyeth-Ayerst	Cerubidine, 20mg	10 vials	29.1	12.6
Wyeth-Ayerst	Orudis, 75mg	500 caps	65.2	8.0
Wyeth-Ayerst	Premarin, cream	42.5gm	12.7 192.1	12.6
Wyeth-Ayerst	Premarin, 0.3mg	1,000 tabs	65.8	11.2
Wyeth-Ayerst	Premarin, 1.25mg	1,000 tabs	46.2	11.2
Wyeth-Ayerst	Premarin, 0.625mg	1,000 tabs	52.6 46.9	11.2
Wyeth-Ayerst	Premarin, 0.9mg	100 tabs	103.9	11.2
Wyeth-Ayerst	Premarin, 1.25mg	100 tabs	42.3	11.2
Wyeth-Ayerst	Sectral, 200mg	100 caps	61.2	12.6
<b>GPO inpatient</b>				
Abbott	Clindamycin, 150mg/ml	25 vials (6ml)	-30.9	0.0
Allen & Hanburys	Ventolin, 0.5% solution	1 bottle (20ml)	-51.4	11.9
Allen & Hanburys	Ventolin	1 inhaler	-48.9	11.9
Bristol Labs	Stadol, 2mg/ml	1 vial	22.1 22.1	22.1
Cetus	Doxorubicin HCL, 2mg/ml	1 vial (25ml)	-35.4	0.0
Cetus	Doxorubicin HCL, 50mg	1 container	-27.6	0.0
Lederle	Diamox Sodium, 500mg	1 vial	28.1 84.3	7.3
Lilly	Vancocin HCL, 1gm, powder	10 containers (Add-Vantage)	22.5	0.0
Lilly	Vancocin HCL, 500MG, powder	10 containers (Add-Vantage)	21.9	0.0
Miles	Adalat, 20mg	100 caps (UD)	-21.7	0.0

(continued)

**Appendix IV  
Drugs With Average Price Increases or  
Decreases of More Than 20 Percent**

<b>Vendor/ manufacturer</b>	<b>Product</b>	<b>Package size</b>	<b>Percentage price change(s)</b>	<b>AWP change</b>
MMD	Seldane, 60mg	100 tabs	12.9 35.5 11.9 20.0	9.0
MSD	Vasotec, 5mg	100 tabs	-31.8	7.0
Parke-Davis	Nitrostat, 0.4mg Sub	100 tabs	36.3	31.0
Roche	Versed, 5mg/ml	10 vials (10ml)	23.9 23.1	23.1
Schering	Lotrisone, 45gm, Cream	1 tube	25.3	19.2
Upjohn	Solu-Medrol, 125mg	25 Act-O-Vials	0.0 73.7	0.0
Upjohn	Xanax, 0.5mg	100 tabs (UD)	32.1	12.4
Upjohn	Xanax, 0.25mg	100 tabs (UD)	46.7	12.4
Upjohn	Xanax, 1mg	100 tabs (UD)	34.2	12.4
<b>GPO outpatient</b>				
Adria	Nitrol, 2% Ointment	Appli-Kit (30gm)	22.6	0.0
Astra	Xylocaine HCL, DuoTrac	5 vials	-28.6	7.3
Bausch & Lomb	Octicair, 1% Otic, Sus	10ml	-22.1	35.0
Boehringer Ingelheim	Atrovent	1 inhaler (14gm)	23.0 16.8 24.6	12.0
Fougera	Nitroglycerin, 2%, Ointment	1 tube (30gm)	141.2	53.6
Iolab	Tetracaine HCL, 0.5%, Ophthalmic	12 bottles (1ml)	46.6	0.0
Lilly	Humulin N, 100 units/ml	10ml vial	86.0 14.5	6.6
Lilly	Humulin R, 100 units/ml	1 vial (10ml)	20.2	6.6
Lilly	Iletin Regular, 100 units/ml	1 vial (10ml)	34.4	7.5
Mead Johnson	Duricef, 500mg	100 caps	27.9 17.8	17.8
Parke-Davis	Dilantin, 100mg	100 caps (UD)	101.0	23.0
Parke-Davis	Dilantin, 100mg	1,000 caps	57.3	22.9
Parke-Davis	Nitrostat, 0.4mg, Sub	100 tabs	16.8 36.3 33.4	31.0

(continued)

**Appendix IV  
 Drugs With Average Price Increases or  
 Decreases of More Than 20 Percent**

<b>Vendor/ manufacturer</b>	<b>Product</b>	<b>Package size</b>	<b>Percentage price change(s)</b>	<b>AWP change</b>
Parke-Davis	Thrombostat, 20,000 units	1 vial	-25.9	0.0
Rhone-Poulenc	Azmacort, 60mg, 20gm	1 inhaler	92.4 96.0	12.1
Sandoz	Pamelor, 25mg	500 caps	75.4	19.1
Sandoz	Pamelor, 50mg	100 caps	60.4	16.1
Sandoz	Pamelor, 25mg	100 caps (UD)	69.8 69.8	16.7
Schein	Sulindac, 150mg	100 tabs	-41.2	0.0
Schering	Lotrimin, 1%, cream	1 tube (15gm)	24.9	13.3
Schering	Lotrimin, 1%, cream	1 tube (30gm)	24.9	13.3
Schering	Proventil	1 inhaler	140.0 0.0 99.6 0.0	15.2
SK Beecham	Tagamet, 300mg	100 tabs (UD)	31.1	5.9
Upjohn	Halcion, 0.25mg	500 tabs	24.8	12.3
Upjohn	Halcion, 0.25mg	100 tabs (UD)	31.7	12.3
Upjohn	Halcion, 0.25mg	100 tabs	31.7	12.3
Upjohn	Micronase, 5mg	1,000 tabs	21.2	9.2
Upjohn	Micronase, 5mg	100 tabs (UD)	20.4 23.3	9.2
Upjohn	Xanax, 0.25mg	500 tabs (Visipak)	21.3	12.4
Upjohn	Xanax, 0.25mg	100 tabs (Visipak)	28.1	12.4
Upjohn	Xanax, 0.5mg	100 tabs (UD)	28.1	12.4
Upjohn	Xanax, 0.25mg	100 tabs	28.1	12.4
Upjohn	Xanax, 0.5mg	100 tabs	28.1	12.4
Upsher-Smith	Acetaminophen, 650mg	50 sup. (UD)	-51.7	0.0
Wyeth-Ayerst	Premarin, 0.625mg	100 tabs	41.7	11.2
Wyeth-Ayerst	Premarin, 0.625mg	1,000 tabs	97.2 7.1	11.2

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