FEDERAL EMPLOYEES’ HEALTH BENEFITS

Effects of Using Pharmacy Benefit Managers on Health Plans, Enrollees, and Pharmacies
The PBMs reviewed produced savings for health plans participating in FEHBP by obtaining drug price discounts from retail pharmacies and dispensing drugs at lower costs through mail-order pharmacies, passing on certain manufacturer rebates to the plans, and operating drug utilization control programs. For example, the average price PBMs obtained from retail pharmacies for 14 brand name drugs was about 18 percent below the average price paid by customers without third-party coverage.

Enrollees in the plans reviewed had wide access to retail pharmacies, coverage of most drugs, and benefited from cost savings generated by the PBMs. Enrollees typically paid lower out-of-pocket costs for prescriptions filled through mail-order pharmacies and benefited from other savings that reduced plans' costs and therefore helped to lessen rising premiums.

Most retail pharmacies participate in the FEHBP plans' networks in order to obtain business from the large number of enrollees covered. Pharmacy associations report that the PBMs' large market shares leave some retail pharmacies with little leverage in negotiating with PBMs. Retail pharmacies must accept discounted reimbursements from PBMs they contract with and perform additional administrative tasks associated with claims processing.

OPM generally concurred with GAO's findings. The plans and PBMs reviewed provided technical comments, and two independent reviewers stated the report was fair and balanced. One pharmacy association expressed strong concerns, including that the report did not more broadly address economic relationships in the PBM industry. GAO examined relationships between the PBMs and manufacturers and pharmacies specific to their FEHBP business. However, relationships between PBMs and other entities for other plans were beyond the report's scope.
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Abbreviations

AMP average manufacturer price
AWP average wholesale price
BCBS Blue Cross and Blue Shield
FEHBP Federal Employees Health Benefits Program
GEHA Government Employees Hospital Association
HMO health maintenance organization
IOM Institute of Medicine
MAC maximum allowable cost
NACDS National Association of Chain Drug Stores
NCPA National Community Pharmacists Association
NDC National Drug Code
OPM Office of Personnel Management
PBM pharmacy benefit managers
SEC Securities and Exchange Commission
VA Department of Veterans Affairs
WAC wholesale acquisition cost
January 10, 2003

The Honorable Byron L. Dorgan
United States Senate

Dear Senator Dorgan:

The increasing cost of prescription drugs has been a key component of rising employer health care costs in recent years. In 2001, total employer health benefit costs rose 11 percent, while prescription drug costs rose 17 percent.¹ Many employer-sponsored health plans and insurers contract with pharmacy benefit managers (PBMs) to help manage their prescription drug benefits. PBMs negotiate drug prices with pharmacies and drug manufacturers on behalf of health plans and, in addition to other administrative, clinical, and cost containment services, process drug claims for the health plans. In 2001, nearly 200 million Americans had their prescription drug benefits managed by a PBM. Most federal employees, retirees, and their dependents participating in the Federal Employees Health Benefits Program (FEHBP), the largest employer-sponsored health insurance program in the United States, are enrolled in plans that contract with PBMs to manage their prescription drug benefits.

Because PBMs play a critical role in managing prescription drug benefits, you asked us to examine PBMs’ role within the FEHBP program. In particular, we addressed the following questions:

1. Do PBMs achieve savings, and, if so, how?
2. How do FEHBP plans’ use of PBMs affect enrollees, including access to prescription drugs and out-of-pocket spending?
3. How do FEHBP plans’ use of PBMs affect retail pharmacies, including pharmacies’ reimbursements for drugs dispensed and administrative requirements?
4. How are PBMs compensated for services provided to FEHBP plans?

To respond to these questions, we examined the use of PBMs by three FEHBP plans: Blue Cross and Blue Shield (BCBS), Government Employees Hospital Association (GEHA), and PacifiCare of California. Together, these plans accounted for about 55 percent of the 8.3 million people covered by FEHBP as of July 2002 and represented various plan types and PBM contractors. BCBS contracted with the two largest PBMs in the United States for its pharmacy benefit services—Medco Health Solutions, a subsidiary of the pharmaceutical company Merck & Co., Inc., and AdvancePCS. GEHA contracted with Medco Health Solutions and PacifiCare of California contracted with Prescription Solutions, another subsidiary of PacifiCare Health Systems.

We reviewed contracts between the PBMs and plans, financial statements regarding payments made between the plans and PBMs, and retail and mail-order prices for selected drugs from the FEHBP plans we reviewed and the PBMs with which they contracted. We also obtained pricing information from retail pharmacies, interviewed officials at the Office of Personnel Management (OPM), and associations representing PBMs and retail pharmacies, and reviewed studies regarding the use of PBMs and prescription drug payments. Specifically:

- To assess whether PBMs achieve cost savings, we obtained April 2002 prices for 18 drugs that the three FEHBP plans paid to their PBMs for retail and mail order prescriptions. We compared these prices to cash prices that customers would pay at retail pharmacies in California, North Dakota, Washington, D.C., and the Virginia and Maryland suburbs of Washington, D.C., and to Medicaid reimbursement rates in these locations. In addition, we obtained plan and PBM data on drug manufacturers' rebates that PBMs pass on to plans and any estimated savings resulting from certain PBM intervention techniques such as drug utilization reviews and prior authorization.

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2BCBS and GEHA are fee-for-service plans, while PacifiCare of California is a health maintenance organization (HMO).

3OPM has overall administrative responsibility for FEHBP and authority to contract with private plans, including fee-for-service insurers and HMOs, to operate the program. As of July 2002, OPM had contracts with 183 participating plans.

4These prices represent the combined enrollee and plan portion paid.

5Cash prices refer to the price paid for a prescription without any insurance or other third-party coverage.
To examine the effect of PBM services on enrollees’ access to drugs and out-of-pocket costs, we reviewed plan documents; compared the plans’ retail pharmacy networks to the number of licensed retail pharmacies in California, the District of Columbia, Maryland, North Dakota, and Virginia; and compared the number of drugs and therapeutic classes included on the plans’ formularies with the National Formulary for the Department of Veterans Affairs (VA).  

To examine the effect of PBMs on retail pharmacies, we interviewed representatives of retail pharmacies and associations and representatives of FEHBP plans and PBMs. We also compared the PBMs’ payments to retail pharmacies for selected drugs to industry-reported manufacturer and wholesale prices that estimate pharmacy acquisition costs.

To examine how PBMs were compensated for services they provided FEHBP plans, we examined the contracts between plans and PBMs and associated annual financial statements and financial information that PBMs filed with the Securities and Exchange Commission (SEC).

While the plans and PBMs provided certain data that they considered proprietary, we do not report such data that can be linked to a specific plan or PBM but instead report aggregated drug price, cost, savings, and compensation data. We did not independently verify information provided by plans, PBMs, or pharmacies. Appendix I provides additional information on our scope and methodology, and a list of our related products is included at the end of this report. Our work was conducted from September 2001 through December 2002 according to generally accepted government auditing standards.

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6Formularies include lists of prescription drugs, grouped by therapeutic class (groups of drugs that are similar in chemistry, method of action, and purpose of use), that health plans or insurers encourage physicians to prescribe and beneficiaries to use.

7We used the VA formulary as a benchmark for comparison because the Institute of Medicine has determined that it is not overly restrictive. The IOM committee also concluded that the VA formulary is in some respects more but in many respects less restrictive than other public or private formularies. See David Blumenthal and Roger Herdman editors, VA Pharmacy Formulary Analysis Committee, Division of Health Care Services, Institute of Medicine, Description and Analysis of the VA National Formulary (National Academy Press, Washington, D.C.: 2000).
Results in Brief

The three PBMs we examined achieved savings for FEHBP-participating health plans by using three key approaches: obtaining drug price discounts from retail pharmacies and dispensing drugs at lower costs through their mail-order pharmacies; passing on certain manufacturer rebates to the plans; and using intervention techniques that reduce utilization of certain drugs or substitute other, less costly, drugs. The average price PBMs negotiated for drugs from retail pharmacies was about 18 percent below the average cash price customers would pay at retail pharmacies for 14 selected brand-name drugs and 47 percent below the average cash price for 4 selected generic drugs. These price savings may overstate PBMs' negotiating success because, absent a PBM, plans would likely manage their own drug benefits and also attempt to negotiate discounts with retail pharmacies. PBMs provide plans even greater savings when drugs are dispensed through their mail-order pharmacies. The average mail-order price was about 27 percent and 53 percent below the average cash price customers would pay at a retail pharmacy for the selected brand name and generic drugs, respectively. In addition to discounts, PBMs passed through to plans certain rebates they earned from drug manufacturers. Across the three plans, rebates reduced total annual drug spending by 3 percent to 9 percent from 1998 through 2001. Although difficult to precisely quantify, PBMs also achieved savings through intervention techniques such as prior authorization and drug utilization reviews that identify excess use, duplicative therapies, or the availability of effective, low-cost drug alternatives. For example, plans reported savings in 2001 for various intervention techniques that ranged from less than 1 percent to 9 percent of their total spending on prescription drug benefits.

FEHBP enrollees generally had unrestricted access to retail pharmacies and prescription drugs, savings in out-of-pocket spending, and other safety and customer service benefits. PBMs maintained retail pharmacy networks for the FEHBP plans that included most retail pharmacies—typically 90 percent to nearly 100 percent in five jurisdictions we reviewed. Drug formularies administered by the PBMs were generally not overly restrictive; they included drugs in most major therapeutic categories and mechanisms existed to allow enrollees to obtain nonformulary drugs when prescribed by a physician, although sometimes at a higher out-of-pocket cost. Enrollees also shared in the savings PBMs generated for FEHBP plans. For example, enrollees generally paid less in out-of-pocket costs for drugs from the PBMs' mail-order services than they would at retail pharmacies. Additional PBM savings passed on to plans translated into smaller premium increases for enrollees. Further, each PBM operated a program to review prescriptions at the point of purchase to help prevent
potentially adverse drug interactions, and the PBMs reported that they
generally met or exceeded contractual standards on customer service
quality.

Pharmacies that participate in retail networks established by FEHBP
plans’ PBMs must accept discounted prices and undertake additional
administrative tasks not required for cash-paying customers’ transactions.
Although these pharmacies were reimbursed by the PBMs below the level
paid by cash-paying customers, we estimate that PBM reimbursements
exceeded pharmacies’ drug acquisition costs—not including overhead
costs or any discounts or rebates some pharmacies may obtain—by an
average of approximately 8 percent for brand-name drugs we selected for
review. Administrative requirements to process PBM and other third-party
prescriptions are greater than for cash transactions. For example,
pharmacy staff must file claims electronically, may be required to contact
physicians to approve formulary drug substitutions, or counsel patients on
plan benefits. Also, retail pharmacies may lose market share to PBM mail-
order pharmacies because some PBMs use cost incentives and enrollee
health information to promote the use of mail order over retail
pharmacies. Nevertheless, most retail pharmacies participate in PBM
networks because of the large market share PBMs represent and the
prescription and nonprescription sales generated by customers the PBMs
help bring into the stores. Pharmacy associations report that retail
pharmacies often have little leverage with PBMs, with negotiations only
occurring when a large chain will not accept the PBM’s contractual terms
or an independent pharmacy in a rural area must be included to meet
health plans’ access requirements.

PBMs received compensation for their FEHBP business from FEHBP
plans and payments from pharmaceutical manufacturers through various
methods.

- PBMs collected fees from FEHBP plans for various administrative and
  clinical services including processing claims and conducting drug
  utilization reviews. These administrative fees, which varied by plan
  depending on contracted services, accounted for an average of about 1.5
  percent of each plan’s total drug benefit spending in 2001.
- FEHBP plans we reviewed paid PBMs discounted prices for retail drugs
  that were virtually the same as prices PBMs paid to reimburse retail
  pharmacies. However, plans paid lower prices for mail-order drugs
  supplied by the PBM. While not disclosing their acquisition costs for mail-
  order drugs, PBM officials said that discounted prices paid by the plans to
PBMs for mail-order drugs were generally higher than prices PBMs paid manufacturers to acquire drugs.

- The PBMs we reviewed varied in the extent to which they retained a share of drug manufacturers’ rebates associated with their FEHBP business or passed it all on to the FEHBP plans they contracted with. The PBMs also received other rebates or payments from manufacturers based on their total business with a particular drug manufacturer. While information on the size of these payments was unavailable, PBMs’ public financial information suggests that rebates or other payments from drug manufacturers may be a large source of PBM earnings.

In commenting on a draft of this report, OPM generally concurred with our findings. The plans and PBMs we examined reviewed the report for the accuracy of information regarding their arrangements and provided technical comments that we incorporated as appropriate. Two independent experts indicated that the report was fair and balanced and provided technical comments. An official for the National Association of Chain Drug Stores (NACDS) expressed strong concerns in response to our draft report, primarily regarding the scope of our work. An official of the National Community Pharmacists Association (NCPA) separately said he concurred with the NACDS official’s comments. A major concern was that the report’s focus on FEHBP plans did not adequately address the full scope of economic relationships in the PBM industry, including those between drug manufacturers and PBMs and the extent to which these relationships create incentives for PBMs to encourage the use of certain potentially higher-cost drugs. We examined contracts and relationships between the PBMs and drug manufacturers and pharmacies specific to their FEHBP line of business. However, relationships between PBMs and manufacturers and pharmacies for other plans were beyond the report’s scope.

Most FEHBP plans contract with a PBM to help manage their prescription drug benefits, and those that do not contract with a PBM have internal components that employ techniques commonly used by PBMs, according to OPM officials. The three FEHBP plans we reviewed covered more than half of all FEHBP enrollees and paid $3.3 billion for about 65 million prescriptions dispensed to these enrollees in 2001. Table 1 shows plan enrollment and PBMs we reviewed.

Background
Table 1: FEHBP Plans and PBMs Reviewed

<table>
<thead>
<tr>
<th>July 2002 Enrollment (percentage of total FEHBP enrollment)</th>
<th>PBMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCBS</td>
<td>4,038,671 (48.8) AdvancePCS (retail)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>GEHA</td>
<td>441,151 (5.3) Medco Health Solutions</td>
</tr>
<tr>
<td>PacifiCare of California</td>
<td>57,042 (0.7) Prescription Solutions</td>
</tr>
</tbody>
</table>

Source: OPM.

Notes: As of July 2002, FEHBP plans covered 8.3 million people.

Some FEHBP plans offer two benefit options, including BCBS (standard and basic options) and GEHA (high and standard options).

PBMs offer health plans a variety of services including negotiating price discounts with retail pharmacies, negotiating rebates with manufacturers, and operating mail-order prescription services and administrative claims processing systems. PBMs also provide health plans with clinical services such as formulary development and management, prior authorization and drug utilization reviews to screen prescriptions for such issues as adverse interactions or therapy duplication, and substitution of generic drugs for therapeutically equivalent brand-name drugs. In order to provide these services, PBMs operate with multiple stakeholders in a complex set of relationships, as shown in figure 1.
Health plans are primarily responsible for overseeing PBM activities and for reporting to OPM any problems that could affect benefits service delivery to enrollees. OPM oversight responsibilities include negotiating plan benefits and changes, monitoring drug benefit service delivery, reviewing customer service reports, conducting on-site visits with pharmacy benefit managers, and handling appeals and complaints from FEHBP enrollees regarding their pharmacy benefits.
PBMs Achieved Savings through Price Discounts, Rebate Payments, and Managing Drug Use

PBMs achieved savings for FEHBP plans primarily by obtaining price discounts for drugs, obtaining rebate payments from manufacturers, and employing various intervention techniques to control drug utilization and cost. In comparison to cash-paying customer prices, PBMs we reviewed obtained significant discounts from retail pharmacies and offered even greater discounts when prescriptions were dispensed through mail-order pharmacies. In addition, PBMs passed on to plans some or all manufacturers’ rebates associated with the FEHBP plans’ contracts and used intervention techniques that reduced plan spending on drug benefits.

PBMs Obtained Discounted Prices Significantly Below Those Paid by Cash-Paying Customers

In comparison to prices cash-paying customers without third-party coverage would pay at retail pharmacies, the PBMs we examined achieved significant discounts for drugs purchased at retail pharmacies and offered even greater discounts through their mail-order pharmacies. The average price PBMs obtained for drugs from retail pharmacies was about 18 percent below the average price cash-paying customers would pay at retail pharmacies for 14 selected brand-name drugs and 47 percent below the cash price for 4 selected generic drugs. For the same quantity, the average price paid at mail order for the brand and generic drugs was about 27 percent and 53 percent below the average cash-paying customer price, respectively. (See fig. 2.)

**Note:** In addition to greater discounts, mail-order programs also save money for plans because only one dispensing fee is assessed for a typical 90-day supply of drugs rather than three dispensing fees for each of three 30-day supplies at retail pharmacies. Accounting for the dispensing fee savings for a 90-day supply, effective average discounts from cash-paying customer prices rise slightly from 27.3 to 27.7 percent for the selected brand drugs and from 52.5 to 59.1 percent for the selected generic drugs. Two of the three plans we reviewed limit coverage for prescriptions dispensed at retail pharmacies to a 30-day supply. The third plan limits coverage for retail prescriptions up to an initial 34-day supply but allows up to a 90-day supply for subsequent prescriptions under its lower option; it allows 90-day supplies for all prescriptions under its higher option. We did not survey retail pharmacies for drug prices for a 90-day supply.
Moreover, PBMs we reviewed obtained greater discounts from retail pharmacies than did state Medicaid programs, which represent another major purchaser of drugs through retail pharmacies. We estimate that the average reimbursement rate for drugs by 5 Medicaid programs we reviewed was about 11 percent below the average price cash-paying customers would pay at retail pharmacies for the selected brand-name drugs (compared to 18 percent for the FEHBP plans we reviewed) and 23
percent below the average cash price for the selected generic drugs (compared to 47 percent for the FEHBP plans we reviewed).³

While PBMs negotiated prices significantly lower than a cash-paying customer would pay, these discounts may overstate the level of savings plans achieve from using PBMs since no benchmark exists to accurately determine what discounts plans would obtain without a PBM. In the absence of a PBM, FEHBP plans could obtain some level of drug price discounts from retail pharmacies and drug manufacturers but would also directly incur the costs associated with undertaking these responsibilities. Also, PBMs can negotiate deeper discounts for plans with smaller networks of retail pharmacies because the pharmacies can anticipate receiving a higher concentration of the plans’ enrollees. For example, BCBS introduced its basic option in 2002 that includes a smaller network of retail pharmacies—about 70 percent as many pharmacies as its standard option—and deeper discounts in its retail pharmacy payments compared to its standard option.

PBMs also passed through to the FEHBP plans they contracted with some or all of drug manufacturer rebates associated with their FEHBP business. Over the past 4 years, we estimate that the plans we reviewed received rebate payments that effectively reduced plans’ annual spending on prescription drugs by 3 percent to 9 percent. The share of rebates PBMs pass through to plans varies and is subject to contractual agreements negotiated between PBMs and the plans.⁴ Rebates and formularies are interrelated. Drug manufacturers provide PBMs certain rebates depending not only on inclusion of their drugs on a plan’s formulary but also on the PBMs’ ability to increase a manufacturer’s market share for certain drugs. Formulary incentives, such as lower

³Medicaid reimbursement and cash-paying customer prices are for California, North Dakota, Washington, D.C., and the Virginia and Maryland suburbs of Washington, D.C.

⁴Under FEHBP, plans may negotiate rebates as part of contractual agreements with PBMs. In contrast, as a condition of Medicaid coverage for outpatient drugs, manufacturers are required to provide state Medicaid programs with certain rebates. For brand name drugs, Medicaid rebates must be a minimum of 15.1 percent of the average manufacturers’ price (AMP). For the 14 brand name drugs we reviewed, we estimate that the minimum Medicaid rebate would reduce costs by an average of at least 12 percent. For generic drugs, Medicaid rebates must equal 11 percent of the AMP, which we estimate would reduce costs by an average of about 2 percent for the 4 generic drugs we reviewed. Moreover, states may negotiate additional rebates with manufacturers in order to reduce costs.
enrollee cost sharing for certain drugs compared to competing therapeutically equivalent drugs, encourage the former’s use. Manufacturers may pay higher rebates when formularies have stronger incentives to use specific drugs. Therefore, PBMs may be able to provide other health plans with higher rebates if their formularies are more restrictive than those of the FEHBP plans we examined.

PBM Intervention Techniques Contributed to Plans’ Savings, but Are Difficult to Quantify

Although PBM intervention techniques help contain plans’ cost increases by managing drug utilization and identifying opportunities to dispense less expensive drugs, their full impact on savings is not easily quantifiable. The FEHBP plans and PBMs we reviewed reported savings for individual intervention techniques ranging from less than 1 percent to 9 percent of plans’ total drug spending in 2001.11 Because plans varied in their use of intervention techniques and employed different cost savings methodologies, these estimates may not be comparable across plans. Techniques plans most commonly used included concurrent drug utilization review, prior authorization, therapeutic brand interchange, and brand to generic substitution. The reported cumulative effect of several techniques for one plan amounted to 14 percent of drug spending.

Measuring cost savings from PBM intervention techniques is difficult for various reasons, including:

- Savings methodologies did not reflect the effect intervention techniques may have over time on enrollees’ utilization patterns and physicians’ prescribing practices. That is, there may be a sentinel effect from PBMs’ reviews whereby enrollees and physicians may stop filling or prescribing drugs that do not meet PBMs’ utilization review or refill criteria, but the extent to which these behavior changes occur is beyond the scope of PBMs’ data systems.
- Plans and PBMs we reviewed did not consistently measure the number or costs of drugs not dispensed as a result of PBM interventions that result in drug substitutions, denials for adverse drug interaction, or other interventions, making it difficult to estimate savings from certain intervention techniques.
- Plans did not systematically measure savings when the primary goal of the intervention technique was patient safety and compliance with drugs’ clinical guidelines.

11Plans did not have estimates for all of their intervention techniques.
Among various intervention techniques, concurrent drug utilization and prior authorization provided some plans the largest quantifiable savings. The following are examples of intervention savings estimates reported by plans we reviewed.

- **Drug utilization review** includes the PBM examining prescriptions concurrently at the time of purchase to assess safety considerations, such as potential adverse interactions, and compliance with clinical guidelines, including quantity and dose. These reviews can also occur retrospectively to analyze enrollees’ drug utilization and physicians’ prescribing patterns. Two plans estimated savings from drug utilization review ranging from 6 percent to 9 percent, with about 60 percent to 80 percent of the savings from concurrent reviews, including claim denials from the PBM to prevent early drug refills and safety advisories to caution pharmacists about potential adverse interactions or therapy duplications. The remaining estimated savings are from retrospective reviews.

- **Prior authorization** requires enrollees to receive approval from the plan or PBM before dispensing certain drugs that treat conditions or illnesses not otherwise covered by plans, have high costs, have a high potential for abuse, or are ordered in unusual quantities. Some plans may also require prior authorization for nonformulary drugs. Each of the plans we reviewed required prior authorization for certain drugs such as growth hormones and a drug used to treat Alzheimer’s disease. Two plans reported savings from prior authorization ranging from 1 percent to 6 percent of plan spending for drugs that either were not dispensed or were substituted for with less costly alternatives.

- **Therapeutic interchange** encourages the substitution of less expensive formulary brand-name medications considered safe and effective for more expensive nonformulary drugs within the same drug class. Two plans reported savings ranging from 1 percent to 4.5 percent from therapeutic

\[\text{ Savings from concurrent utilization review may be reduced if an enrollee subsequently obtains a prescription or refill. One PBM estimated savings for claims denied for early refills only if a refill had not been obtained within 14 days.}\]
interchange. These estimates are in addition to savings associated with rebates plans earned for drugs in the formulary.\textsuperscript{13}

- **Generic substitution** involves dispensing less expensive, chemically-equivalent generic drugs in place of brand name drugs. Where a PBM specifically intervened by contacting the physician to change a prescription from requiring a brand name to allowing a generic drug, one plan reported savings of less than 1 percent of the plan’s total drug spending. The other two plans said they do not have readily available data to measure savings from PBM interventions for generic drugs. All three plans reported more general information on their generic drug use, but the extent to which generic drugs are used cannot solely be attributed to PBMs because plan benefit design and physician prescribing patterns also influence generic drug use. On average, the plans we reviewed reported that generic drugs were dispensed more often by retail pharmacies (about 45 percent of all drugs dispensed) than by mail-order pharmacies (about 34 percent). The difference in use of generic drugs may in part reflect differences in the types of drugs that are typically dispensed through retail and mail-order pharmacies. For drugs where a generic version was available, the retail and mail-order pharmacies dispensed generic drugs at more similar rates—on average 89 percent of the time for retail pharmacies and 87 percent of the time for mail-order pharmacies.

\textsuperscript{13}While plans reported savings from therapeutic interchange, concerns have been raised that in some cases PBMs’ relationships with manufacturers and retail pharmacies influence PBM interventions, such as substituting higher-cost drugs when lower-cost therapeutic equivalent drugs are available. Medco Health Solutions and Advance PCS filings with the SEC indicate that the Department of Justice is undertaking an industrywide investigation to examine PBM relationships with pharmaceutical manufacturers and retail pharmacies and PBMs’ programs related to drug formulary compliance, which includes rebates and other payments made by manufacturers to PBMs. The SEC filings show that the Department of Justice is also investigating payments made by PBMs to retail pharmacies or others in connection with PBM interventions.
PBMs we reviewed generally provided enrollees with access to a nearby pharmacy, maintained formularies for plan enrollees that included drugs in most major therapeutic categories, and provided access to nonformulary drugs when medically necessary. The FEHBP plans passed on savings generated by the PBMs to enrollees in the form of lower out-of-pocket costs for prescription drugs in certain instances, such as through lower cost sharing for drugs obtained through mail-order pharmacies, and a smaller increase in premiums for all enrollees than might occur absent the PBM savings. Enrollees also benefited from PBM intervention programs to prevent potentially dangerous drug interactions and customer service that generally met or exceeded quality standards established in contracts negotiated with the FEHBP plans.

Nearly all FEHBP enrollees had a retail pharmacy participating in their plan within a few miles of their residence. Two of the plans required the PBM to assure that at least 90 percent of enrollees had at least one pharmacy located within 5 miles of their residences. The PBMs for these plans reported to us they exceeded plans’ access standards and that close to 100 percent of enrollees live within 5 miles of a network pharmacy. The third plan did not have a specific contractual access standard, but plan officials said they have verified that well over 90 percent of enrollees live within 5 miles of a network pharmacy. We also compared the PBMs’ networks statewide in five states to the total of licensed retail pharmacies and found high levels of pharmacy participation. In most instances, we estimate that more than 90 percent to nearly 100 percent of licensed retail pharmacies participated in the PBM networks.\(^{14}\)

Enrollees also had few restrictions on which drugs they could obtain. While the plans’ formularies varied with respect to the number of drugs covered, they included prescription drugs in most major therapeutic categories.

\(^{14}\) The states are California, the District of Columbia, Maryland, North Dakota, and Virginia. Estimates of pharmacy participation rates are approximate because of ongoing changes in the number of pharmacies licensed in each state and included in each PBM network and because PBM retail pharmacy networks may include a small number of nonretail pharmacies, such as hospital pharmacies. In 2002, BCBS began offering a basic option to FEHBP enrollees that includes about 70 percent as many pharmacies nationwide as the BCBS standard option but still meets contractual standards for a retail pharmacy to be located within a few miles of nearly all basic option enrollees. More than 200,000 people are in BCBS’s basic option compared to about 3.8 million people in the standard option.
categories. To provide a benchmark for comparing the breadth and depth of the FEHBP formularies, we compared the three formularies to the outpatient prescription drugs included in the Department of Veterans Affairs (VA) National Formulary, considered by the Institute of Medicine to be not overly restrictive. Each plan included over 90 percent of the drugs listed on the VA formulary or a therapeutically equivalent alternative, and included at least one drug in 93 percent to 98 percent of the therapeutic classes covered by VA. (See table 2.)

Formularies may be developed by the plan with suggestions for changes from a PBM, or entirely by a PBM and used by the plan. BCBS and PacifiCare designed their own formularies, while GEHA used a formulary developed by Medco Health Solutions. Decisions on inclusion of drugs in a formulary are typically made by a pharmacy and therapeutics committee composed of physicians and pharmacists. Plan officials and documents described such committees as being designed to evaluate the safety, efficacy, and cost of drugs in all therapeutic categories before recommending drugs for inclusion on the formulary. Plans we reviewed had no or few committee members affiliated with the plan or PBM.

See Blumenthal and Herdman, Description and Analysis of the VA National Formulary.

BCBS excluded from its formulary 7 percent of the VA therapeutic classes, which contain drugs to treat insect stings, itching, psoriasis and other skin disorders, erectile dysfunction, certain types of rheumatoid arthritis, fungal eye infections, lung diseases where mucous complicates the condition, constipation, and a topical anesthetic and water inhaler. GEHA excluded from its formulary 2 percent of the VA therapeutic classes, which contain drugs to treat opiate (e.g., heroin, morphine) dependence, constipation, and a topical anesthetic. PacifiCare of California excluded from its formulary 5 percent of the VA therapeutic classes, which contain drugs to treat various infections, opiate (e.g., heroin, morphine) dependence, psoriasis and other skin disorders, erectile dysfunction, and inflamed gingiva. PacifiCare of California’s formulary also did not include several injectable drugs that are covered separately under the plan’s medical benefit.
Table 2: FEHBP Plans’ Formularies Compared to VA National Formulary

<table>
<thead>
<tr>
<th>Plan</th>
<th>Percent of VA formulary drugs included in plan formulary</th>
<th>Percent of VA formulary drugs not in plan formulary but having a therapeutic equivalent in plan formulary</th>
<th>Percent of VA formulary’s therapeutic classes covered by plan formulary</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCBS</td>
<td>80</td>
<td>16</td>
<td>93</td>
</tr>
<tr>
<td>GEHA</td>
<td>97</td>
<td>2</td>
<td>98</td>
</tr>
<tr>
<td>PacifiCare of California</td>
<td>79</td>
<td>15</td>
<td>95</td>
</tr>
</tbody>
</table>


A VA therapeutic class was considered included if the plan formulary listed one or more VA drugs or a therapeutically equivalent alternate within the VA therapeutic class.

Each plan provided enrollees access to nonformulary drugs, although sometimes with higher cost sharing requirements. GEHA provided coverage to all nonformulary drugs at no additional cost to enrollees. BCBS had additional cost sharing requirements for nonformulary and certain formulary drugs under its basic option plan. Enrollees must pay a flat $25 copayment for formulary brand drugs but must pay the greater of a $35 copayment or 50 percent of the plan’s cost for nonformulary brand drugs (known as coinsurance). BCBS required the enrollees to pay the same 25 percent coinsurance for formulary and nonformulary drugs under its standard option plan. PacifiCare of California did not impose additional cost sharing for nonformulary drugs but generally required enrollees (or their physicians) to demonstrate the medical necessity and lack of effective alternative formulary drugs prior to approving coverage of a nonformulary drug.

PBM Savings Helped Reduce Enrollees’ Costs for Out-of-Pocket Prescription Drug Spending and Premiums

FEHBP enrollees benefited from cost savings generated from PBM services through lower costs for mail-order prescriptions, lower cost sharing linked to PBMs’ discounts obtained from retail pharmacies, and a lower increase in premiums overall. PBM mail-order pharmacy programs often provided for lower out-of-pocket costs for 90-day supplies of drugs than an enrollee would pay for the same prescriptions filled at a retail pharmacy.

18OPM indicates that, in conducting annual negotiations with plans, it seeks to ensure enrollee access to nonformulary drugs although such access may involve higher cost sharing requirements.
pharmacy. The GEHA high option plan and PacifiCare of California imposed lower cost-sharing requirements for mail order while the BCBS standard option plan imposed a flat copayment for mail order but required enrollees to pay 25-percent coinsurance at retail. The flat copayments provided an incentive for enrollees to use mail order for more expensive brand drugs. Only the GEHA standard plan included the same cost sharing requirements for both retail and mail order. (See table 3.)

<table>
<thead>
<tr>
<th>Plan</th>
<th>Option</th>
<th>Enrollee’s cost share at retail pharmacy</th>
<th>Enrollee’s cost share at mail-order pharmacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCBS</td>
<td>Standard</td>
<td>25% coinsurance</td>
<td>$10 copayment generic</td>
</tr>
<tr>
<td></td>
<td>Basic*</td>
<td>$30 generic</td>
<td>$10 copayment brand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$75 brand</td>
<td>$35 copayment brand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Greater of 50% coinsurance or</td>
<td>Mail-order not available</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$105 copayment for nonformulary brand</td>
<td></td>
</tr>
<tr>
<td>GEHA</td>
<td>High</td>
<td>$15 generic</td>
<td>$10 generic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$45 single-source brand*</td>
<td>$35 single-source brand*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$90 multisource brand*</td>
<td>$50 multisource brand*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Second and subsequent refills are greater of 50% coinsurance or applicable copayment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Standard</td>
<td>$15 copayment generic</td>
<td>$15 copayment generic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50% coinsurance brand</td>
<td>50% coinsurance brand</td>
</tr>
<tr>
<td>PacifiCare of</td>
<td>HMO</td>
<td>$15 copayment generic</td>
<td>$10 copayment generic</td>
</tr>
<tr>
<td>California</td>
<td></td>
<td>$45 copayment brand</td>
<td>$30 copayment brand</td>
</tr>
</tbody>
</table>

Source: GAO analysis of BCBS, GEHA, and PacifiCare of California prescription drug benefits literature.

*BCBS basic option limits initial prescription to a 34-day supply with a $10 copayment for generic drugs, $25 copayment for brand-name drugs, and the greater of 50 percent coinsurance or $35 for nonformulary brand-name drugs. Continuing prescriptions and refills can be for up to a 90-day supply with the enrollee paying the higher cost share amount.

*GEHA and PacifiCare of California limit the quantity of drugs dispensed through retail pharmacies to a 30-day supply; therefore, we tripled the copayments required for a 30-day supply.

*Brand-name drugs available from only one manufacturer, no generic equivalent available.

*Brand-name drugs available from more than one manufacturer and have a generic equivalent available.
The interaction between a plan’s benefit design and PBM cost savings can also affect the amount of enrollees’ out-of-pocket costs for prescription drugs.\(^\text{19}\) For example, in instances where a plan required enrollees to pay a coinsurance rate representing a portion of the actual drug cost, enrollees shared directly in price discounts PBMs obtained from pharmacies. To illustrate, for a hypothetical drug with an undiscounted cash price of $64, and a PBM-obtained discount price of $52, an enrollee in a plan with a 25-percent coinsurance requirement would pay $13 rather than $16. In contrast, where a plan’s benefit design provides for a fixed copayment, such as $15 per prescription, enrollees would pay the same regardless of the discount that PBMs obtained.

PBM savings were also passed on to enrollees in the form of premiums that were less than they otherwise would be. Fee-for-service FEHBP plan premiums are based on past years’ claims data for FEHBP enrollees.\(^\text{20}\) Consequently, PBM reductions in plan claims costs for prescription drugs translate into lower premiums for enrollees in later years. For example, we estimate that PBM savings in the form of rebates passed on to the two fee-for-service FEHBP plans we examined between 1998 and 2000 translate into about a 1-percent decrease from what the plans’ future premiums would have been. In contrast to savings through cost sharing and other benefit design features that accrue only to those enrollees who use the prescription drug benefit, PBM savings in the form of premium savings accrue to all enrollees, regardless of whether they use prescription drugs.

| Enrollees Also Benefit from PBM Drug Utilization Review Programs and Customer Service | Each FEHBP plan’s PBM provided a drug utilization review program to screen prescription drug therapies for such problems as adverse interactions, incorrect dosages, or improper duration of treatment. PBMs maintained a centralized database on each enrollee’s drug history and shared this information electronically with pharmacies at the time the |

\(^{19}\)A plan’s pharmacy benefit design includes the drugs a plan will cover through its formulary, the quantities in which drugs will be dispensed, the sources from which drugs may be obtained, and enrollee’s cost-sharing requirements, such as copayments.

\(^{20}\)For most HMOs, the premium rate is based on rates charged to the two employer groups closest in size to the plan’s FEHBP enrollment. Because these premiums are based on the HMO’s overall premium setting strategies and not just the FEHBP claims experience, the extent to which rebates and other PBM savings for the plan’s FEHBP business would yield lower premiums depends on the HMO’s current market strategies for setting competitive premiums and passing on lower costs in the form of lower premiums to FEHBP and similarly sized groups. About 30 percent of FEHBP enrollees are covered under an HMO plan.
prescription was filled. PBMs are often the only entity with complete information on a patient’s medications—particularly when enrollees are prescribed medication by more than one physician or fill prescriptions at different pharmacies. We have previously reported that automated drug utilization systems linked to a centralized database provide a more thorough prospective review and more benefits than reviews based on manual or local systems.\(^{21}\)

PBMs provide customer service when they interact directly with FEHBP enrollees, such as when enrollees contact the PBMs to seek information about their prescriptions, resolve problems with having their prescription drugs filled, or obtain drugs through the mail-order pharmacy. Customer service quality is measured against customer service standards negotiated between each FEHBP plan and PBM. These standards included such measures as phone call answer time, mail-order prescription turn-around time and accuracy rates, and customer satisfaction as measured through enrollee surveys. Data provided by the PBMs indicate that they generally met or exceeded these standards, although we did not independently verify these data.\(^ {22}\)

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**Pharmacies Included in PBM Retail Networks Must Accept Discounted Prices and Perform Various Administrative Tasks**

Retail pharmacies that participate in the PBM networks used by FEHBP plans are affected by PBM policies and practices. For example, PBMs reimbursed pharmacies at levels below cash-paying customers, but above the pharmacies’ estimated drug acquisition costs. Processing PBM or other third-party prescriptions involves additional administrative requirements compared to cash transactions, and some PBMs may draw business away from retail pharmacies by providing savings and other incentives to encourage pharmacy customers to use PBMs’ mail-order pharmacies. Nevertheless, participation in the PBM retail networks is important for pharmacies because the PBMs serving the FEHBP plans we reviewed also

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\(^{22}\)Contracts called for the PBMs to regularly report to the plans their actual performance in relation to the standards and usually provided plans with the right to audit these performance reports and impose penalties or terminate the contract if PBM performance fell below the standards. In a few recent instances, financial penalties were imposed when performance temporarily fell short of a standard. For example, one PBM paid a penalty of $40,000 for failing to meet the plan standard concerning call answer time during 2 months of 2001, but the PBM met the standard during the remainder of the year.
contract with other clients that cumulatively represent a large share of the national population that purchase prescription and other nonprescription items from retail pharmacies.

<table>
<thead>
<tr>
<th>PBMs Reimbursed Retail Pharmacies Less than Cash-Paying Customers but Above Estimated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBMs for the three FEHBP plans we reviewed reimbursed retail pharmacies at rates below what a cash-paying customer would pay but still above the pharmacies’ estimated acquisition costs. The average price paid for a typical 30-day supply was nearly 18 percent below the cash-paying customer price for 14 selected brand-name drugs and 47 percent below the average case price for 4 selected generic drugs. As a result, the gross margin earned by retail pharmacies on the PBM transactions is lower on average than for cash-paying customers.²³</td>
</tr>
</tbody>
</table>

We estimate that these PBM discounted prices are higher on average than the pharmacies’ cost to acquire these drugs. Retail pharmacies typically purchase drugs from intermediary wholesale distributors and, to a lesser extent, from drug manufacturers directly. Because no data source exists to identify pharmacies’ actual acquisition costs for drugs, we used the wholesale acquisition cost (WAC) and added a mark-up of 3 percent to estimate pharmacy acquisition costs for drugs purchased from wholesalers.²⁴ Accordingly, for the three FEHBP plans we reviewed, we estimate that the prices that the PBMs paid to retail pharmacies provided an average margin of about 8 percent above the pharmacies’ average

²³In 2001, about 16 percent of all prescriptions were purchased by customers who paid the entire cost without any third-party coverage, and the remainder were paid by customers with third-party payers, including Medicaid, according to the National Association of Chain Drug Stores.

²⁴WAC is a published, industry-reported measure of the average price manufacturers charge wholesalers. According to retail pharmacy representatives, wholesalers sell drugs to retail pharmacists for about 1 to 3 percent above WAC on average. WAC does not include rebates or discounts manufacturers may offer to wholesalers.
These estimated margins on the drugs do not reflect a drug store’s profit on drug sales because store overhead and dispensing costs are not deducted. They also do not reflect the costs of drugs when purchased directly from manufacturers rather than wholesalers nor any rebates or discounts that pharmacies may receive from suppliers or manufacturers. Moreover, because WAC is an average of prices charged by manufacturers to multiple purchasers, it may not accurately reflect the acquisition costs for any individual retail pharmacy.

PBM Transactions Require Additional Administrative Tasks and Incur Higher Processing Costs for Retail Pharmacies

PBM and other third-party transactions require pharmacy staff to undertake tasks not associated with cash-paying customer transactions, such as submitting claims electronically, responding to prior authorization requests, contacting physicians to approve formulary drug substitutions, and responding to patients’ questions about their health plan benefits. Pharmacists and pharmacy association representatives we interviewed indicated that the administrative requirements imposed by FEHBP-participating PBMs are generally similar to those imposed by PBMs.

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25Margins on drugs represent the portion of PBM drug reimbursements (including dispensing fees) and enrollees’ share of costs that exceed the pharmacy’s acquisition costs for the selected drugs. Retail plan prices represent 10 of the 14 brand-name drugs we examined because the wholesale acquisition cost was not available for the other 4 brand-name drugs. The PBM negotiated prices were also higher than the estimated acquisition costs for all four generic drugs we reviewed.

26The U.S. Department of Health and Human Services Office of Inspector General recently released estimates of pharmacy acquisition costs for drugs reimbursed by state Medicaid programs. Using its approach to estimate the acquisition costs for the drugs we reviewed would result in prices that PBMs paid retail pharmacies providing an average margin of about 6 percent above the pharmacies’ average acquisition costs for the 10 brand drugs and about 14 percent above for the 4 generic drugs. See Department of Health and Human Services, Office of Inspector General, Medicaid Pharmacy – Additional Analyses of the Actual Acquisition Cost of Prescription Drug Products, (Washington, D.C.: September 2002).

27While it was not possible to identify the pharmacies’ overhead costs for the 18 drugs we reviewed, recent studies done for the California and Texas Medicaid programs estimate that the median dispensing costs for pharmacies participating in these states’ Medicaid programs were about $6.95 and $5.95 per prescription, respectively. See Myers and Stauffer LC, “Study of Medi-Cal Pharmacy Reimbursement,” (Missouri: June 2002) and “Determination of the Cost of Dispensing Pharmaceutical Prescriptions for the Texas Vendor Drug Program,” (Missouri: August 2002). The National Association of Chain Drug Stores (NACDS) estimates that retail pharmacies’ dispensing costs were on average $7.26 per prescription in 2001. See NACDS, The Chain Pharmacy Industry Profile 2002 (Alexandria, Virginia: 2002).
associated with other health plans. Several studies have found that pharmacy staff spent significant time addressing third-party payment issues. For example, based on surveys of 201 retail pharmacies, one consultant found that 20 percent of pharmacy staff time was spent on activities directly related to third-party issues. A synthesis of multiple studies concluded that third-party prescriptions cost from $0.36 to $1.55 more than cash transactions to process.

Compared to larger chain pharmacies, independent pharmacies may find PBM processing tasks particularly burdensome or costly. For example, independent pharmacies may be more likely to use pharmacists to process third-party transactions because they tend to have fewer other staff available, such as pharmacy technicians and clerks, according to a retail pharmacy association official. One study found that the average labor cost to process third-party prescriptions that required pharmacy staff intervention (such as responding to an initial claim denial) was 44 percent higher for an independent than a chain pharmacy. This study attributes the higher costs to the independent pharmacy’s greater reliance on pharmacists for performing certain third-party processing tasks.

PBMs may also attempt to steer some enrollees away from retail pharmacies to their mail-order pharmacies. Two of the PBMs we reviewed send letters to some enrollees who purchase medications at a retail pharmacy informing them that their costs under the mail-service pharmacy program would be lower. These letters may include forms to facilitate the transfer of the prescription from the retail to the mail-order pharmacy. In 2001, the three FEHB plans we reviewed dispensed 21 percent of all prescriptions through mail order, a higher share than the industry average. Nationally, a growing but still small share of prescription drugs is


29Richard N. Herrier et al., “Case Study Using Descriptive Analysis to Estimate Hidden Costs In Processing Third Party Prescriptions,” *Journal of the American Pharmaceutical Association*, 40, no. 5 (September/October 2000). In addition to synthesizing other studies, this study also conducted time and motion measurement of retail pharmacies and based on this new research estimated that third-party prescriptions cost an average of $0.44 to $0.61 more than cash transactions to process.

30Richard N. Herrier, et al.
dispensed through mail-order pharmacies—about 5 percent of prescriptions and 17 percent of prescription sales in 2001.31

Most Pharmacies Participate in PBMs’ Retail Networks

Most licensed pharmacies participate in the FEHBP PBMs’ retail pharmacy networks, in part because PBMs represent such a substantial market share—nearly 200 million Americans in 2001.32 Plan and PBM representatives noted that access to these enrollees benefits retail pharmacies by increasing traffic in the stores and thus sales of prescriptions and nonprescription items. According to NACDS, nonprescription sales nationally accounted for 5 percent of total sales for independent pharmacies and 39 percent of total sales for chain pharmacies in 2001.33 However, pharmacy association representatives report that PBMs’ large market shares leave many retail pharmacies with little leverage in negotiating with PBMs. These officials indicate that retail pharmacies may have to “take or leave” a PBMs’ proposed contract with actual negotiations only occurring in instances when a large chain will not accept the contractual terms or an independent pharmacy without nearby competitors in a rural area must be included to meet health plans’ access requirements. While it is difficult to assess how frequently these situations occur, chain pharmacies constituted 37 percent of all retail pharmacies and the top four chain drugs stores accounted for 30 percent of all pharmacy sales in 2000, according to NACDS.34


32Independent pharmacies were somewhat less likely to participate in FEHBP PBM retail networks than chain pharmacies. For example, we found that all but one of the pharmacies not participating in two PBM retail networks in the District of Columbia were independent. Similarly, a 2001 survey of pharmacies in Connecticut, New Jersey, New York, and Pennsylvania by the Pharmaceutical Care Management Association found independent drug stores somewhat less likely to participate in PBM retail networks (96.5 percent) than chain drug stores (99.9 percent). According to a pharmacy industry representative, independent pharmacies may have fewer staff available to manage third-party transactions and contracting functions. In addition, certain PBM contract requirements can pose a challenge, such as requiring the use of computer systems or software that may be unaffordable to some small, independent pharmacies, according to another pharmacy industry representative.


PBM earnings from administrative fees and payments for mail-order drugs paid by the plans we reviewed varied depending on contractual arrangements. In addition, the PBMs we reviewed varied as to whether they retained a portion of drug manufacturer rebates associated with the FEHBP contracts, and all the PBMs received other rebates or payments from drug manufacturers.
Specifically, the PBMs we reviewed received administrative fees, payments for drugs, and manufacturer rebates for their FEHBP business. They also received other rebates or payments from drug manufacturers based on their entire line of business with a particular manufacturer.

**Administrative fees.** PBMs charged plans fees for a broad range of clinical and administrative services, including utilization reviews, prior authorization, formulary development and compliance, claims processing, and reporting. Administrative fees for plans we reviewed varied but on average accounted for about 1.5 percent of total plan drug spending in 2001.

**Payments for Retail and Mail-Order Drugs.** PBMs we reviewed retained little or no revenue from plan payments for retail drug costs and dispensing fees because they were largely passed through to retail
While not disclosing their acquisition costs for mail-order drugs, PBM officials said that plan payments were somewhat higher than their payments to pharmaceutical manufacturers for mail-order drugs. Using the average manufacturer price (AMP) as a proxy for PBMs’ mail-order acquisition costs, we estimate that the discounted price for mail-order drugs that plans and enrollees paid were on average higher than the estimated mail-order acquisition cost for some (but not all) brand-name drugs and all generic drugs that we reviewed. On average, the AMP was about 2 percent below the plan prices for 7 of the 14 brand-name drugs we reviewed but about 3 percent higher than the plan prices for the other 7 brand-name drugs. The AMP was below plan prices for all four generic drugs we reviewed.

**Rebates.** PBMs shared with the FEHBP plans certain rebates that a drug manufacturer provides a PBM associated with their FEHBP business, although the extent to which the PBMs retained a portion of these rebates varied, depending on the contracts negotiated between the plans and PBMs. We estimate the rebates retained by the PBMs we reviewed represented less than half of one percent of total plan drug spending. The plans we reviewed varied as to whether they reimbursed PBMs separately for administrative services in exchange for a larger share of contractual rebates or they received less of the contractual rebates and were charged low or no fees for administrative services.

PBMs also received other manufacturer rebates or payments for services based on their total volume of a particular manufacturer’s drugs sold through FEHBP plans and other plans. For example, one PBM we reviewed earned additional manufacturer rebates for its efforts to increase drug manufacturers’ share of certain products. The PBMs also received fees from manufacturers for various services, such as encouraging physicians to change prescribing patterns, educational services to enrollees regarding compliance with certain drug regimens, and data reporting services. These rebates and other payments were a large portion

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35The plan and enrollees share the cost of retail drugs, with the enrollee share paid directly to the retail pharmacy.

36The AMP is the average price paid to a drug manufacturer by wholesalers for prescription drugs distributed to the retail pharmacy class of trade, after deducting customary prompt pay discounts. AMP was created by the Omnibus Budget Reconciliation Act of 1990 (Pub. L. No. 101-508, § 4401, 104 Stat. 1388, 1388-156) for determining Medicaid rebates and is not publicly available. It is calculated by the manufacturer and submitted to the Centers for Medicare & Medicaid Services, the federal agency that determines Medicaid rebates.
of PBMs’ earnings, according to PBM officials and industry experts, but the actual amounts were undisclosed because they are proprietary. Public financial information suggests that manufacturer payments are important sources of earnings. For example, in financial reports submitted to the SEC, two of the PBMs we reviewed stated that manufacturer rebates and fees were key to their profitability.\(^{37}\)

**Concluding Observations**

PBMs are central to most FEHBP plan efforts to manage their prescription drug benefits, and PBMs have helped the FEHBP plans we reviewed reduce what they would likely otherwise pay in prescription drug expenditures while generally maintaining wide access to most retail pharmacies and drugs. As the cost of prescription drugs continues to increase, FEHBP plans are likely to encourage PBMs to continue to leverage their purchasing power with drug manufacturers and retail pharmacies and pass on the savings to the plans and their enrollees. However, attempts to achieve additional cost savings can involve trade-offs for plan enrollees. For example, additional savings through formulary management can accrue if more restrictive formularies are used, but enrollees would likely have unrestricted access to fewer drugs. Similarly, retail pharmacies may be willing to provide deeper discounts as part of smaller, more selective retail pharmacy networks. Smaller networks have the potential to draw more enrollees into participating stores but offer enrollees access to fewer retail pharmacies. OPM, FEHBP plans, and PBMs must balance these trade-offs in designing affordable and accessible prescription drug benefits for federal employees.

**Agency and Other Comments and Our Evaluation**

We provided a draft of this report to OPM, the three plans and three PBMs we reviewed, two pharmacy associations (NACDS and NCPA), and two independent expert reviewers.

In written comments, OPM generally concurred with our findings. OPM highlighted the advantages and trade-offs associated with FEHBP plans’

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\(^{37}\)See AdvancePCS, 10-K Form filed with SEC on June 28, 2002 and Medco Health Solutions Form S-1, filed with SEC on April 17, 2002. A 10-K Form is an annual report that many for-profit corporations must file with SEC within 90 days of the close of their fiscal year and a S-1 Form is a basic registration form that may be used to register a proposed public offering with SEC. These publicly available documents contain audited financial statements and other information on a corporation’s financial condition.
use of PBMs in providing affordable drug benefits and providing enrollees with access to prescription drugs. Appendix II contains OPM’s comments.

The plans and PBMs reviewed the report for the accuracy of information regarding their arrangements and provided technical comments regarding information we reported about them, which we incorporated as appropriate. Two independent external experts on pharmaceutical drug pricing who were not affiliated with PBMs, pharmacies, or drug manufacturers indicated that the draft was fair and balanced. They also provided technical comments that we incorporated as appropriate.

In oral comments, NACDS’ Vice President for Policy and Programs expressed strong concerns, particularly focusing on the scope of our work, and NCPA’s Senior Vice President for Government Affairs and General Counsel separately informed us that he generally concurred with NACDS’ comments. NACDS’ concerns included the following:

- Our draft did not adequately address the overall PBM industry and how it operates, including special economic relationships that may exist between some drug manufacturers and PBMs. The NACDS representative stated that these relationships create incentives for PBMs to encourage use of certain manufacturers’ drugs even if they are more costly to the plan or enrollees. As we noted in the draft, we were asked to examine the role of PBMs specifically for FEHBP-participating plans and enrollees, not the PBM industry in general. While the savings we report through discounts, rebates, and certain interventions do not reflect whether PBMs encourage higher-cost drugs, the FEHBP plans we reviewed informed us they believed they saved money from using PBMs. Relationships between PBMs and manufacturers and pharmacies for other plans were beyond the scope of this report. In response to the concern about PBMs’ influence on drug switching, we added information based on two PBMs’ filings with the SEC regarding an ongoing Department of Justice investigation of certain PBMs’ relationships with pharmaceutical manufacturers and retail pharmacies.

- The draft report did not include information about all three plans’ use of generic drugs, which is one means to reduce the overall cost of the drug benefit. In the draft report, we addressed savings PBMs achieve through direct interventions to switch from a prescribed brand drug to a generic, as opposed to overall generic use rates, which are affected by other factors such as plans’ benefit designs. To clarify our findings, we added information on the relative use of generic drugs among the retail and mail order pharmacy services for the plans we reviewed.

- Our finding that the PBMs we reviewed retained little or no compensation from the payments they receive from plans for retail drugs because they pass these payments on in total to the retail pharmacies seemed
inconsistent with NACDS’ experience. While PBMs’ contractual arrangements with other plans may differ, the contractual arrangements with the FEHBP-participating plans we reviewed resulted in the PBMs passing through to the retail pharmacies the entire payment that they receive from the plans.

- Our estimate that retail pharmacies’ drug acquisition costs are on average about 8 percent below the payments they receive from the FEHBP plans we reviewed implies this is a profit and does not adequately acknowledge overhead costs. Our draft report stated that this estimated margin does not reflect a retail drug store’s profit because it does not include overhead costs nor certain other savings that may be available to some drug stores. We revised the report to better clarify this point and added information regarding NACDS’ and other recent studies’ estimates of overhead costs for retail pharmacies on a per prescription basis.

We are sending copies of this report to the Director of the Office of Personnel Management, appropriate congressional committees, and other interested parties. We will also make copies available to others upon request. This report is also available at no charge on GAO’s Web site at http://www.gao.gov.

If you or your staff have any questions, please call me at (202) 512-7118. Another contact and key contributors to this assignment are listed in appendix III.

Sincerely yours,

Kathryn G. Allen
Director, Health Care—Medicaid and Private Health Insurance Issues
We examined the use of pharmacy benefit managers (PBM) by three Federal Employees Health Benefits Program (FEHBP) plans: Blue Cross and Blue Shield (BCBS), Government Employees Hospital Association (GEHA), and PacifiCare of California. Together, these plans accounted for about 55 percent of the 8.3 million people covered through FEHBP plans as of July 2002 and represented various plan types and PBM contractors.\(^1\) BCBS contracted with the two largest PBMs in the United States, Medco Health Solutions and AdvancePCS, for its pharmacy benefit services. GEHA contracted with Medco Health Solutions and PacifiCare of California contracted with Prescription Solutions, another subsidiary of PacifiCare Health Systems.

We reviewed contracts between the PBMs and plans, financial statements regarding payments made between the plans and PBMs, and retail and mail-order prices for selected drugs from the FEHBP plans we reviewed and the PBMs with which they contracted. We also obtained pricing information from retail pharmacies, interviewed officials at the Office of Personnel Management (OPM), the federal agency responsible for administering FEHBP, and associations representing PBMs and retail pharmacies, and reviewed studies regarding the use of PBMs and prescription drug payments.

Specifically, to assess the drug discount savings PBMs achieved, we selected 18 drugs that were among the drugs with the highest expenditures or number of prescriptions dispensed based on data reported by the plans. Combined, these 18 high-volume/high-expenditure drugs represented 12 percent of all prescriptions dispensed to enrollees of the selected FEHBP plans and 16 percent of total plans' drug expenditures in 2001. In selecting these drugs, we also sought to ensure a distribution of generic and brand drugs for a range of treatment conditions sold by different drug manufacturers. Table 4 lists the drugs included in our price comparisons.

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\(^1\)BCBS and GEHA are fee-for-service plans, while PacifiCare of California is a health maintenance organization (HMO).
### Table 4: Selected High-Volume or High-Expenditure Drugs for 3 FEHBP Plans

<table>
<thead>
<tr>
<th>Drug name (strength) and dosage form</th>
<th>Condition for which drug is used</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brand</strong></td>
<td></td>
</tr>
<tr>
<td>Aciphex (20 mg), tablets</td>
<td>Ulcers</td>
</tr>
<tr>
<td>Allegra (180 mg), tablets</td>
<td>Allergies</td>
</tr>
<tr>
<td>Celebrex (200 mg), capsules</td>
<td>Arthritis</td>
</tr>
<tr>
<td>Celexa (20 mg), tablets</td>
<td>Depression</td>
</tr>
<tr>
<td>Claritin (10 mg), tablets</td>
<td>Allergies</td>
</tr>
<tr>
<td>Fosamax (70 mg), tablets</td>
<td>Osteoporosis</td>
</tr>
<tr>
<td>Lipitor (10 mg), tablets</td>
<td>Cholesterol</td>
</tr>
<tr>
<td>Lotensin (20 mg), tablets</td>
<td>High blood pressure</td>
</tr>
<tr>
<td>Norvasc (5 mg), tablets</td>
<td>High blood pressure</td>
</tr>
<tr>
<td>Paxil (20 mg), tablets</td>
<td>Depression</td>
</tr>
<tr>
<td>Premarin (0.625 mg), tablets</td>
<td>Osteoporosis</td>
</tr>
<tr>
<td>Prevacid (30 mg), capsules</td>
<td>Ulcers</td>
</tr>
<tr>
<td>Prilosec (20 mg), capsules</td>
<td>Ulcers</td>
</tr>
<tr>
<td>Zocor (20 mg), tablets</td>
<td>Cholesterol</td>
</tr>
<tr>
<td><strong>Generic</strong></td>
<td></td>
</tr>
<tr>
<td>Albuterol (90 mcg), aerosol</td>
<td>Asthma</td>
</tr>
<tr>
<td>Atenolol (50 mg), tablets</td>
<td>High blood pressure</td>
</tr>
<tr>
<td>Furosemide (40 mg), tablets</td>
<td>High blood pressure</td>
</tr>
<tr>
<td>Hydrocodone with Acetaminophen (5-500 mg), tablets</td>
<td>Pain</td>
</tr>
</tbody>
</table>


*These drugs may also be used to treat conditions other than those listed in the table.

At our request, the plans provided prices paid as of April 2002 for the most common strength, dosage form, and quantity dispensed for these drugs at retail pharmacies (typically, a 30-day supply) and at mail-order pharmacies (typically, a 90-day supply). Prices represent the plan and enrollees’ share of the drug ingredient cost—expressed as a discount from an industry standard price such as the average wholesale price (AWP) or maximum

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2 We were unable to obtain the retail and mail-order price for one drug from one plan because the drug was not available on the plan’s formulary at the specified strength.

3 Drug manufacturers suggest a list price that wholesalers charge pharmacies. The average of the list prices, collected for many wholesalers, is called a drug’s AWP.
allowable cost (MAC)\(^4\)—plus a dispensing fee. We did not independently verify the accuracy of these plan-reported prices.

To compare prices negotiated with PBMs for retail and mail-order prescriptions to cash prices a customer without third-party coverage would pay at retail pharmacies, we surveyed 36 pharmacies in California, North Dakota, Washington, D.C., and the Virginia and Maryland suburbs of Washington, D.C., from April 18 through April 30, 2002. We selected the locations to be geographically diverse, specifically including California because it is the only state in which PacifiCare of California operates, North Dakota to include a state with a low population density, and the Washington, D.C., metropolitan area because it includes a large number of FEHBP enrollees. We randomly selected 12 pharmacies in each of these areas, including both large chain pharmacies and independent or small chain pharmacies. We determined that each of the pharmacies surveyed participated in the retail networks for each of our selected FEHBP plans serving that area. From each pharmacy, we obtained prices for a 30-day supply of the 18 selected drugs. These prices are applicable only to the pharmacies surveyed and at the time they were obtained.

We also compared prices plans paid to retail and mail-order pharmacies to the pharmacies’ estimated acquisition costs. Retail pharmacies typically purchase drugs from intermediary wholesale distributors and—to a lesser extent—drug manufacturers, while PBM-owned mail-order pharmacies more typically purchase drugs from manufacturers. Since no data source exists to identify pharmacy acquisition costs, we estimated retail pharmacies’ acquisition costs for drugs purchased from wholesalers using the wholesale acquisition prices (WAC) reported in Red Book, a compilation of drug pricing data published by Medical Economics Company, Inc., as of April 2002.\(^5\) We added 3 percent to WAC to estimate the wholesalers’ margin, based on information provided by retail pharmacy officials. To estimate mail-order pharmacies’ acquisition costs for drugs purchased directly from drug manufacturers, we used industry-reported and confidential average manufacturers’ price information (AMP) obtained from the Centers for Medicare & Medicaid Services. We selected WAC and AMP prices for our 18 selected drugs using the most common national drug code reported by the plans for reimbursing retail and mail-

\(^4\)MACs represent upper limit prices that an insurer or health plan will reimburse for generically available or multiple source medications.

order prescription claims. The acquisition costs we have estimated cannot be generalized beyond the drugs we reviewed. Also, the acquisition costs we reported are based on averages for the drugs we reviewed, and individual pharmacies or mail-order operations may have higher or lower acquisition costs.

To assess enrollee access to prescription drugs, we compared the number of retail pharmacies in the plans' retail pharmacy networks to the total number of licensed retail pharmacies in California, the District of Columbia, Maryland, North Dakota, and Virginia. To examine the breadth and depth of each plan’s formulary, we compared each plan’s formulary to the National Formulary developed by the Department of Veterans Affairs (VA). Although the VA formulary was designed for the veteran-specific population, it is considered by the Institute of Medicine as not overly restrictive based on its comparison with other formularies and clinical literature. We obtained the National Formulary from the VA’s Pharmacy Benefits Management Strategic Healthcare Group. The VA formulary contains approximately 1,200 items, including generic, brand name, and over-the-counter drugs, devices, and supplies. We requested that VA officials remove devices, supplies, and drugs that are usually prescribed on an in-patient basis or are available over-the-counter because the FEHBP plans we reviewed cover inpatient drugs as part of the hospital benefit and do not cover drugs available over-the-counter. The resulting list included 513 outpatient prescription drugs representing 162 therapeutic classes. To examine the breadth and depth of each plan’s formulary relative to these outpatient prescription drugs from the VA formulary, we determined whether each of the drugs and therapeutic classes included on the list of drugs drawn from the VA formulary was also included on each of the plan formularies. Each plan also provided us with examples of therapeutically equivalent drugs included on the plan’s formulary for drugs that did not have an exact match on the VA formulary.

6National Drug Codes (NDCs) are the universal product identifiers for drugs for human use and are unique for each chemical entity, dosage form, manufacturer, strength, and package size.

7See IOM, Description and Analysis of the VA National Formulary. The IOM used several criteria to assess the restrictiveness of the VA formulary, including how the VA formulary compares to formularies used in other public and private health care systems, and how it compares to reasonableness standards in the literature. The IOM committee also concluded that the VA formulary is in some respects more but in many respects less restrictive that other public or private formularies. The VA formulary does not contain specific types of drugs, such as pediatric drugs, that typically would be covered by the FEHBP plans we reviewed.
list. We considered a VA therapeutic class to be included on a plan formulary if at least one of the VA drugs in that class or a therapeutically equivalent drug was listed in the plan formulary. For VA therapeutic classes not included on a plan formulary, we used National Institutes of Health and Medco Health Solutions on-line databases to analyze the types of medical conditions treated by the excluded drugs within these classes.
Appendix II: Comments from the Office of Personnel Management

UNITED STATES
OFFICE OF PERSONNEL MANAGEMENT
WASHINGTON, DC 20415-1000

OFFICE OF THE DIRECTOR

NOV 2 2 2002

Ms. Kathryn G. Allen
Director, Health Care -- Medicaid
and Private Health Insurance Issues
U.S. General Accounting Office
Washington, D.C. 20548

Dear Ms. Allen:

Thank you for the opportunity to comment on draft report FEDERAL EMPLOYEES' HEALTH BENEFITS: Effects of Using Pharmacy Benefit Managers on Health Plans, Enrollees, and Pharmacies (GAO-03-196).

We have always believed our health plans' private sector Pharmacy Benefit Management (PBM) partners help our health plans provide affordable drug benefits that meet our enrollees' needs and help keep costs down. I was pleased to see you determined that PBMs do help keep costs down while offering excellent access to prescriptions for our consumers. We understand and agree that PBMs add administrative costs, but that they are not excessive.

The President's health care agenda is based on patient-centered health care, preservation of choice and excellent quality. The Federal Employees Health Benefits (FEHB) Program is a competitive model and health plans offer the benefits that they believe their current enrollees want and that would also be attractive to prospective enrollees. Our consumers are also price sensitive, so health plans make efforts to offer their benefit packages at affordable prices. FEHB is market-driven - aspects of the insurance industry that work in the private sector are also reflected in the FEHB Program. Many private sector employers take advantage of the opportunities offered through the use of PBMs.

Your review of PBMs in the FEHB Program rightly points out the advantages of PBMs as well as the trade-offs. Our Federal consumers have come to expect convenient and easy-to-use pharmacy benefits programs that offer a broad range of affordable prescription drugs. The role of the Office of Personnel Management (OPM) as a purchaser is to balance our consumers' expectations for comprehensive benefits against cost implications and marketplace realities. We believe our traditional private-sector partnerships have allowed us to deliver the goods and services our consumers want and to help keep the FEHB Program on the cutting-edge of employer-sponsored benefit programs.

It should be pointed out that OPM's reliance on the private sector is fundamental. The private sector PBMs must generate income above actual costs in order to stay in business, as is the case in any market. That is why, for example, net pharmacy acquisition costs are incorporated into the negotiated price health plans pay for the services offered by PBMs. The fundamentals of the
Ms. Kathryn G. Allen

market place also contribute to the reasons why some pharmacies devote more resources to managing their PBM business than others do. Likewise, the customer service component of each type of vendor plays a big role in building customer business and retention.

We have also provided comments on several technical issues related to the draft report in the enclosure.

Thank you, again, for the opportunity to comment.

Sincerely,

Kay Coles James
Director

Enclosure
### Appendix III: GAO Contact and Staff

#### Acknowledgments

The following staff made important contributions to this report: Rashmi Agarwal, Randy Dirosa, Betty Kirksey, Carmen Rivera-Lowitt, and Annesha White.
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