California State Auditor

BUREAU OF STATE AUDITS

Pharmaceuticals:

State Departments That Purchase Prescription Drugs Can Further Refine Their Cost Savings Strategies

May 2005
2004-033

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May 26, 2005 2004-033

The Governor of California
President pro Tempore of the Senate
Speaker of the Assembly
State Capitol
Sacramento, California 95814

Dear Governor and Legislative Leaders:

As required by Chapter 938, Statutes of 2004, the Bureau of State Audits presents its audit report concerning the State's procurement and reimbursement practices as they relate to the purchase of drugs for or by state departments.

This report concludes that the Department of General Services (General Services) generally got the best prices for the drug ingredient cost because of its up-front discounts through contract negotiations with manufacturers of high-cost brand name drugs and through competitively bidding for high-volume generic drugs. More important, putting rebates, dispensing fees, and co-payments into other cost calculations, we found that the Department of Health Services' (Health Services) prices are far lower than General Services' or the California Public Employees' Retirement System's because it receives substantial federal Medicaid program (Medi-Cal) and state supplemental rebates. Moreover, our comparison of 57 prescription drugs across the Canadian, U.S., and California governments found that Canada's governmental entities got the lowest prices about 58 percent of the time, while the U.S. governmental entities got the lowest prices 32 percent of the time. California got the lowest prices for 10 percent of the sample drugs because of Health Services' rebates. However, federal law strictly limits the importation of prescription drugs through the federal Food, Drug, and Cosmetic Act, whose stringent requirements for approving, labeling, and dispensing drugs generally exclude any drugs made for foreign markets. Furthermore, state departments generally do not have access to federal procurement methods.

Respectfully submitted,

Steven M Hendrickson

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Chief Deputy State Auditor

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SUMMARY

Audit Highlights

Our review of the State's procurement and reimbursement practices as they relate to the purchase of drugs for or by state departments revealed the following:

- ☑ ***Although the Department of General Services (General Services) generally got the best prices for the drug ingredient cost because of up-front discounts, it had the highest state cost after considering rebates, dispensing fees, co-payments, and third-party payments.***
- ☑ ***The Department of Health Services' (Health Services) net drug ingredient cost and state cost are lower than General Services' and the California Public Employees' Retirement System's (CalPERS) because it receives substantial federal Medicaid program and state supplemental rebates.***
- ☑ ***Although CalPERS receives rebates through entities it contracts with to provide pharmacy services to its members, it cannot directly verify it is receiving all of the rebates to which it is entitled.***

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RESULTS IN BRIEF

Chapter 938, Statutes of 2004, requires the Bureau of State Audits (bureau) to report on the State's procurement and reimbursement practices as they relate to the purchase of drugs for or by state departments. This report examines the purchasing strategies of the three primary departments that contract for prescription drugs— the Department of General Services (General Services), the Department of Health Services (Health Services), and the California Public Employees' Retirement System (CalPERS). These departments procured more than $5 billion in prescription drugs during fiscal year 2003–04. These costs would be higher without the savings they obtain through manufacturers' discounts, federal and state supplemental rebates, co-payments, and third-party payments. We compared these three departments' relative performance on cost savings for the following three types of prescription drug costs in fiscal year 2003–04: drug ingredient cost, the cost of the drug itself; net drug ingredient cost, the drug ingredient cost minus any rebates or additional discounts, if applicable; and state cost, the net drug ingredient cost plus dispensing fees and minus any co-payments or third-party payments, if applicable.

However, our analysis does not address the clinical management or formulary decisions made by the departments and entities they contract with to provide drug coverage nor does it reflect their decisions related to product mix such as encouraging the use of generic over brand name drugs or shifting from older to newer drugs. Therefore, the data that the bureau presents may not represent the best value for each drug. In addition, as described more fully in the Introduction, one CalPERS entity selected for review did not work cooperatively with the bureau to allow access to its proprietary and confidential drug pricing information and strategies. This entity represents roughly one third of CalPERS' membership, and thus, the exclusion of its data could materially skew CalPERS' results in this report. Further, under General Services' bulk drug purchasing program, agencies can purchase some of their drugs at the prime vendor's wholesale acquisition costs rather than the reimbursement prices Health Services' and CalPERS' entities pay to retail pharmacies. Also, unlike CalPERS and Health Services the pricing information used for General Services in this analysis does not include any of the state agencies' costs associated with dispensing the prescription drugs, nor any co-payments these agencies may collect.

☑ *In our comparison of 57 prescription drug costs across the three state departments and select U.S. and Canadian governmental entities, the Canadian entities got the lowest prices about 58 percent of the time. However, federal law strictly limits the importation of prescription drugs through the Food, Drug, and Cosmetic Act, whose stringent requirements generally exclude any drugs made for foreign markets.*

In this comparison, General Services generally got the best prices for the drug ingredient cost because of its up-front discounts through contract negotiations with manufacturers of high-cost brand name drugs and through competitively bidding contracts for high-volume generic drugs. More important, putting rebates, dispensing fees, and co-payments into other cost calculations, we found that Health Services' prices are far lower than either of the other two departments for the net drug ingredient cost and state cost for 95 percent and 72 percent, respectively, of the drugs common to all three departments because it receives substantial federal Medicaid program (Medi-Cal) and state supplemental rebates.

In contrast, General Services' net drug ingredient cost and state cost are high compared with those Health Services obtains. Although rebates are the key to Health Services' lower net drug ingredient cost and state cost, General Services receives a rebate for only one prescription drug product class. General Services says it prefers to focus on obtaining the up-front discounts from drug manufacturers rather than seeking rebates, which require state departments to tie up funds needed for other drug purchases. General Services' net ingredient cost and state cost remained the same because under its bulk drug purchasing program agencies' costs of dispensing drugs and any co-payments they receive are not reflected in the prime vendor's invoice data. Still, General Services has the highest state cost of the three departments we studied.

CalPERS receives rebates, but only through entities it contracts with to provide pharmacy services to its members. In some instances CalPERS receives rebates under a pass-through method. In the pass-through method, the entity negotiates rebates and contracts with pharmaceutical manufacturers so that rebate payments between the manufacturer and the entity are based on historical and prospective pharmacy utilization data for all of the members of the health care plan that the entity administers. The entity then collects and passes through to plan sponsors, such as CalPERS, either a percentage or the entire amount of the rebates earned by the sponsors based on their member utilization. Typically, these entities prohibit CalPERS from having access to any information that would cause them to breach the terms of any contract with the pharmaceutical manufacturers to which they are a party. Because CalPERS does not have access to the entities' rebate contracts with the manufacturers, CalPERS cannot directly verify that it is receiving all of the rebates to which it is entitled. According to CalPERS, this rebate practice between the entity and the manufacturer is an industry practice and is not unique to it. CalPERS intends to continue to pursue greater disclosure requirements in future contracts with its contracting entities.

CalPERS achieves additional cost savings from co-payments members pay for their prescription drugs, deducting those co-payments from its costs when its contracting entities reimburse the participating pharmacies. Such co-payments could reduce Health Services' state cost, but most of the stakeholders of the governor's Medi-Cal Redesign efforts, which are aimed at containing Medi-Cal costs, largely dismissed deducting co-payments from its pharmacy reimbursement rate because they believed that many beneficiaries would not be able to afford them.

In contrast to the other two departments, General Services' cost savings strategies are more varied and have more potential for improving the bottom line. General Services has broad authority to explore strategies for reducing prescription drug costs for the departments participating in its program. For example, General Services is in the early stages of direct negotiations with manufacturers to achieve reduced drug costs. In a 2002 audit report, we recommended that General Services thoroughly analyze how it could improve its procurement strategies, working to place more individual prescription drugs under contract with manufacturers and considering the advantages of joining a larger, multistate pharmacy alliance or contracting directly with a group-purchasing organization. Although General Services has made some progress, it realizes it can do more to reduce the State's prescription drug costs and has hired a contractor to identify those opportunities. General Services is working with the contractor to award a new prime vendor contract, to award a pharmacy benefits manager contract to provide pharmaceuticals to those parolees who continue to receive mental health treatment as a condition of their parole, and to negotiate new and renegotiate existing contracts with certain manufacturers. General Services stated that, as resources become available, it intends to solicit bids to contract directly with a group-purchasing organization to determine if additional savings can be realized beyond the savings generated under its current contract with an alliance.

Chapter 938, Statutes of 2004, also requires the bureau, to the extent possible, to compare the State's cost to those of other appropriate entities such as the federal government and Canadian government, and private payers. We compared 57 prescription drugs, excluding any generics, across the Canadian, U.S., and California governments and found that Canada's governmental entities got the lowest prices about 58 percent of the time. Canada's Patented Medicine Prices Review Board (Review Board) partly accounts for these savings. Canada's Patent Act and the Review

Board's regulations limit the prices of patented drugs in Canada. In the United States, federal laws ensure that drug manufacturers extend favorable prices to federal agencies and certain public sector purchasers of prescription drugs. These discounted prices account for the U. S. government getting the lowest prices for 32 percent of our comparison sample. California got the lowest prices for only 10 percent, or six of the 57 prescription drugs in our sample, because of Health Services' federal and state supplemental rebates.

California and other states have tried to reduce prescription drug costs by considering or implementing importation programs. In 2004, the California Legislature passed a bill allowing General Services to purchase prescription drugs from authorized Canadian pharmacies and sources. The governor vetoed that bill. The federal Food and Drug Administration (FDA) maintains that federal law would preempt any state law legalizing the importation of prescription drugs in contravention of the federal Food, Drug, and Cosmetic Act (Drug Act). Federal law strictly limits the importation of prescription drugs through the Drug Act, whose stringent requirements for approving, labeling, and dispensing drugs generally exclude any drugs made for foreign markets. The Drug Act also prohibits anyone other than the original domestic manufacturer from reimporting prescription drugs. In addition, state departments generally do not have access to federal procurement methods.

RECOMMENDATIONS

The Legislature should consider enacting legislation that would allow CalPERS to obtain relevant documentation to ensure that it is receiving all rebates to which it is entitled to lower the prescription drug cost of health benefits program established by the Public Employees' Medical and Hospital Care Act.

CalPERS should continue to explore various contract negotiation methods that would yield more rebates for the drugs it purchases and that would allow it to achieve greater disclosure requirements to verify that it is receiving all of the rebates to which it is entitled.

To ensure that state departments purchasing drugs through General Services' contracts are obtaining the lowest possible drug prices, General Services should:

- Seek more opportunities for departments to receive rebates by securing more rebate contracts with manufacturers.

- Continue its efforts to obtain more drug prices on contract, by working with its contractor to negotiate new and renegotiate existing contracts with certain manufacturers.

- Follow through on its plan to solicit bids to contract directly with a group-purchasing organization to determine if additional savings can be realized. However, in doing so it should thoroughly analyze its ability to secure broader coverage of the drugs state departments purchase by joining the Minnesota Multistate Contracting Alliance for Pharmacy. The analysis should include the availability of current noncontract drugs from each organization being considered and the savings that could result from spending less administrative time trying to secure additional contracts directly with drug manufacturers.

AGENCY COMMENTS

General Services agrees with our recommendations and intends to take appropriate action to address them. Health Services agrees with most of our recommendations, but disagrees with two that were designed to address problems associated with the accuracy of its pharmacy reimbursement claim data. CalPERS asserts that the cost comparisons contained in our report do not yield reliable results because of differences in the methods the three departments use to procure drugs for state beneficiaries. Our comments follow Health Services' and CalPERS' responses. ■

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INTRODUCTION

BACKGROUND

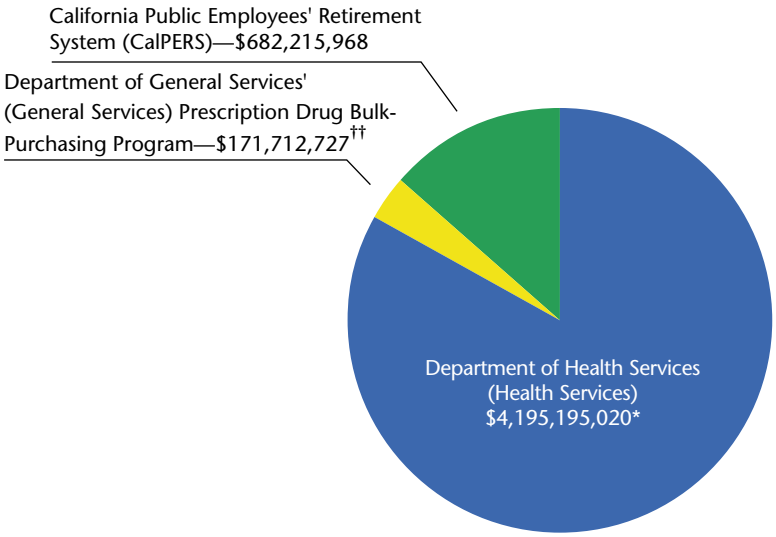
In California, several departments purchase prescription drugs for various beneficiaries, including state employees, recipients of federal Medicaid (known as California's Medical Assistance Program or Medi-Cal), inmates, and individuals receiving services at the State's developmental centers and hospitals. Although state law establishes the Department of General Services (General Services) as the State's purchaser of drugs, certain departments such as Department of Health Services (Health Services) and the California Public Employees' Retirement System (CalPERS) also can contract to purchase drugs. As Figure 1 on the following page shows, in fiscal year 2003–04, drug purchases made by or through these departments were $5 billion. Health Services' drug purchases for its Medi-Cal fee-for-service and managed care systems make up almost 79 percent, or nearly $4 billion of this amount. These expenditures are net of rebates and represent roughly 14 percent of Health Services' final Medi-Cal budget for fiscal year 2003–04.

General Services Has a Prescription Drug Bulk Purchasing Program

State law authorizes General Services to establish a bulk purchasing program for prescription drugs, and requires the following four departments to participate in that program: the Department of Developmental Services (Developmental Services), the Department of Corrections (Corrections), the Department of the Youth Authority (Youth Authority), and the Department of Mental Health (Mental Health). Although state law requires state departments purchasing goods, including prescription drugs, in excess of $100 to be made by or under the supervision of General Services, state law exempts such acquisition by the Trustees of the California State University, the Board of Governors of the California Community Colleges and the University of California from General Services' approval. However, these entities may choose to purchase drugs through General Services' program.

FIGURE 1

Fiscal Year 2003–04 Prescription Drug Expenditures for Departments Reviewed†



Sources: Health Services' fee-for-service system expenditures were calculated by the Bureau of State Audits (bureau) using Health Services' claim and rebate data. Prescription drug expenditures for its managed care system were estimated by the bureau using the pharmacy component of the capitated rate upper payment limits and projected enrollment data provided by Health Services' Medi-Cal Managed Care Division. Prescription drug expenditures for the AIDS Drug Assistance Program (ADAP) are based on unaudited data provided by Health Services and do not include more than $64 million in rebates because the rebates it received were deposited into a revolving account instead of a separate account for the ADAP. Recent legislation allows the ADAP to deposit rebates it receives into a separate interest-bearing account.

General Services' expenditures were calculated by the bureau using invoice data provided by its prime vendor and rebate terms in General Services' contract with one manufacturer. Lastly, prescription drug expenditures for CalPERS are based on information it compiled, which has not been audited by the bureau and may not include rebates.

* Fee-for-service system—$2,522,347,563; Managed care system—$1,452,745,698; ADAP—$220,101,759.

† Unless we state otherwise in the source, prescription drug expenditures are net of rebates and any additional discounts.

†† These expenditures were incurred by the following state agencies: Corrections—$125,975,857; Youth Authority—$1,770,413; Mental Health—$27,302,209; Developmental Services—$14,370,877; Other—$2,293,371.

State law gives General Services broad authority to explore strategies for reducing prescription drug costs for departments participating in its program. General Services employs these strategies:

- It establishes contracts with drug manufacturers so state departments can purchase drugs.

- Since October 2001, General Services has contracted with the Massachusetts Alliance for State Pharmaceutical Buying (alliance). Currently, the states of Massachusetts and California are the only members of the alliance, which contracts with a group-purchasing organization, Managed Healthcare Associates Inc. (MHA). Through its agreement with the alliance, the State has access to MHA contract prices and drug manufacturers' rebates.

- General Services enters into a contract with a wholesaler (prime vendor) to distribute drugs purchased through its program. The prime vendor provides warehouse and distribution services and maintains a computer network with the contract drug prices, allowing state departments to purchase these drugs electronically. If a drug is not available at General Services' or MHA's prices, departments can purchase it at the prime vendor's wholesale acquisition cost (WAC), the standard price a wholesaler pays a manufacturer for drug products that may not include special deals, such as rebates or discounts.

- Since November 2002, departments are eligible to receive rebates from one manufacturer that contracts with General Services for a particular drug.

Health Services Purchases Prescription Drugs for Medicaid Beneficiaries

Health Services administers Medi-Cal, which generally covers low-income individuals and families who receive public assistance or lack health coverage. Federal law requires Medi-Cal to provide a set of basic services, including doctor visits, laboratory tests, and hospital inpatient and outpatient care. Federal matching funds, based on the State's per capita income, supplement state Medi-Cal funds. Such funds are also available for several optional services, including prescription drugs.

Medi-Cal beneficiaries receive services through a fee-for-service or managed care system. Under the fee-for-service system, a Medi-Cal beneficiary can obtain prescription drugs from any pharmacy enrolled as a provider in the Medi-Cal program. The pharmacy in turn submits a reimbursement claim to Medi-Cal for the drug costs. Generally, when a beneficiary goes to a pharmacy with a physician's prescription and presents a Medi-Cal card, the pharmacist enters the prescription into the Medi-Cal on-line claims adjudication system, maintained by Health Services' fiscal intermediary, Electronic Data Systems Federal Corporation (EDS). The on-line system runs the claim through a series of edits and audits to determine its validity

and propriety. The system first verifies the customer's status as a Medi-Cal beneficiary and then begins to check for criteria set by Health Services, such as the inclusion of the drug on the drug list, a list of preferred drugs that a pharmacy can seek reimbursement for without first obtaining approval from Health Services. If a claim passes each of the edits and audits or is approved through its treatment authorization request process, Health Services reimburses pharmacies for each drug's ingredient cost at the lowest of one of three predetermined reimbursement rates (see text box) or, if lower, at the usual and customary rate the pharmacies charge the general public.

Besides reimbursement for the drug itself, the pharmacy receives a dispensing fee and is assessed a charge for each prescription. In fiscal year 2003–04, state law required Health Services to pay pharmacies a dispensing fee of $4.05 for each prescription filled for a Medi-Cal beneficiary.[1] Also during this period, state law required Health Services to deduct an additional 50 cents per prescription from all pharmacy reimbursement claims except for claims submitted by pharmacies for beneficiaries residing in a nursing facility, which were subject to a deduction of only 10 cents per prescription.[2]

State supplemental and federal rebates substantially reduce Medi-Cal fee-for-service system prescription drug costs. State law directs Health Services to contract with drug manufacturers to obtain discount prices at least comparable to those the manufacturers offer to other high-volume purchasers of drugs. On drugs prescribed for Medi-Cal beneficiaries, this discount takes the form of manufacturer rebates, called supplemental rebates. In addition to these supplemental rebates, negotiated when adding drugs to the drug list, Health Services receives federal rebates from drug manufacturers. In January 1991,

Health Services' Three Predetermined Reimbursement Rates

Estimated Acquisition Cost (EAC)—Health Services' best estimate of the price generally and currently paid by pharmacies for a drug product sold by a particular manufacturer or principal labeler in a standard package. In fiscal year 2003–04, the EAC was equal to the lower of the following:

- **Average sales price,** which is the price reported to it as required by agreements between the State of California and the manufacturer.
- **Average wholesale price (AWP)** minus 10 percent.* AWP is the price of a drug product listed for standard package in Health Services' primary price reference source First DataBank Inc., or Redbook or the principal labeler's catalog.

Federal Upper Limit (FUL)—the maximum per unit reimbursement established by the federal Centers for Medicare and Medicaid Services for multiple-source or generic drugs. Payments for other medically necessary drugs prescribed by a physician must not exceed in the aggregate the lower of the following:

- Estimated acquisition cost plus reasonable dispensing fees.
- Provider's usual and customary charges to the general public.

Maximum Allowable Ingredient Cost (MAIC)—the price established by Health Services for a generic drug type. State law requires Health Services to base the MAIC on the mean of the wholesale selling prices of drugs generically equivalent to the brand drug that are available in California from selected wholesale distributors. The wholesale selling price is the price paid by a pharmacy to a wholesale drug distributor for a drug, including discounts and rebates.† Health Services must publish the list of MAICs for generic drugs in its provider bulletins.

* Effective August 16, 2004, Health Services reimburses pharmacies at the EAC, plus a dispensing fee. State law defines the EAC as the lowest of the following: AWP minus 17 percent, the selling price, the FUL, or the MAIC. The law requires Health Services to base the selling price on the average sales price reported by manufacturers. However, because state law also requires Health Services to notify pharmacies of reductions in drug cost reimbursement 30 days in advance, it did not implement these changes until September 1, 2004.

† Effective August 16, 2004, state law defines the wholesale selling price used to establish the MAIC as the weighted (by unit volume) mean price paid by a pharmacy to a wholesale drug distributor, including discounts and rebates.

[1] Effective August 16, 2004, state law increased the dispensing fee to $7.25 per prescription except if the beneficiaries reside in a skilled nursing facility or intermediate care facility, in which case the dispensing fee is $8 per prescription. However, because state law also requires Health Services to notify pharmacies of reductions in drug cost reimbursement 30 days in advance, it did not implement these changes until September 1, 2004.

[2] The law no longer requires Health Services to deduct these additional amounts as of September 1, 2004.

the federal government implemented a nationwide mandatory drug rebate program under which a drug manufacturer must submit quarterly rebates directly to 49 states and the District of Columbia for each drug reimbursed through the federal Medicaid program, as described in the agreement between the manufacturer and the federal Centers for Medicare and Medicaid Services (center).[3] Thus, all drugs on the Medi-Cal drug list are covered under a federal rebate agreement, and some also are covered under the state supplemental rebate program. Because the federal government and the State jointly fund Medi-Cal, Health Services must return to the federal government, in the form of an offset to its Medi-Cal expenditures, a portion of the federal and state supplemental rebates it collects, using its current federal reimbursement rates, which cannot be lower than 50 percent nor greater than 83 percent.

In contrast to its fee-for-service system, the Medi-Cal managed care system delivers prescription drug benefits through various managed care plans that Health Services pays a fixed monthly per member rate (capitated rate) for eligible members. Medi-Cal managed care plans, excluding those under the County Organized Health System (COHS) model, can negotiate contracts for rebates or discounts with manufacturers. According to Health Services, an adjustment is made to their capitation rates, discussed later, using an estimate of the amount of rebates the plan will receive. However, managed care plans under the COHS model submit utilization data allowing Health Services to submit claims and collect rebates from manufacturers for their drugs.

State law allows Health Services to contract on a bid or non-bid basis with any qualified individual, organization, or entity to provide services to arrange for or case-manage the care of Medi-Cal beneficiaries in a manner consistent with managed care principles, techniques, and practices. Specifically, state law defines managed care plans as any person or entity contracting with Health Services to provide, or arrange for, health care services to Medi-Cal beneficiaries covered under its contract, as an alternative to the Medi-Cal fee-for-service system. According to Health Services, it uses three primary managed care delivery models—the Two-Plan Model Managed Care program (two-plan model), the Geographic Managed Care program (GMC model), and the COHS model.

Twelve counties participate in the two-plan model, which has only two prepaid health plans providing health care services to Medi-Cal beneficiaries. State law and regulations define a

[3] Arizona has a waiver for which special rules apply. That state provides medical services to its indigent population in a managed care system rather than in a fee-for-service system.

prepaid health plan as a health care service plan licensed by the Department of Managed Health Care, which has entered into a contract with Health Services at a capitated rate to arrange for health services to Medi-Cal beneficiaries. Health Services awards one contract through a competitive bid process and one contract to a prepaid health plan organized or designated by the county or by stakeholders of a region designated by the director of Health Services. State regulations require that each plan under the two-plan model provide prescription drugs to beneficiaries using licensed pharmacies.

Operating in two counties, the GMC model uses prepaid health plans and primary care case management plans to provide health care services to Medi-Cal beneficiaries. According to Health Services, it contracts with multiple plans within each county. Health Services requires plans to submit an application containing such information as a description of the existing or proposed delivery system. Primary care case management plans also must submit a more detailed proposal if Health Services approves their application. State regulations also require plans to provide prescription drugs to beneficiaries using licensed pharmacies.

Eight counties participate in five COHS systems. Under the COHS model, the California Medical Assistance Commission (CMAC) negotiates exclusive contracts with any county that seeks to provide or arrange for health care services to Medi-Cal beneficiaries. State law created CMAC to negotiate contracts for Medi-Cal beneficiaries' health services. Counties may provide services directly, or arrange for any or all of the services to be performed by subcontractors.

Generally, Health Services pays each plan a capitated rate. State law requires Health Services to determine capitation payment rates annually by actuarial methods considering such factors as historical cost and utilization data, age, and gender. However, the rates cannot exceed the actuarially equivalent costs paid under the fee-for-service system. According to Health Services, the CMAC uses these data to negotiate capitation rates for all plans under the GMC model and the COHS model, excluding Santa Barbara County.

Finally, Health Services contracts with a pharmaceutical benefits manager (benefits manager) for prescription drugs under its AIDS Drug Assistance Program (ADAP), a program established to provide drugs to HIV-infected individuals age 18 or older who could not otherwise afford them. Through contracts

with participating pharmacies, the benefits manager obtains and dispenses prescription drugs to beneficiaries according to ADAP's drug list. The benefits manager also provides services, such as claims processing, reimbursement coordination, and data reporting. California's ADAP qualifies for the federal 340B pricing discussed on pages 17 and 18. For drugs the pharmacies purchase at 340B pricing, Health Services' reimbursement to the benefits manager is the actual cost charged by the manufacturer or wholesaler plus 2 percent and a dispensing fee per prescription of $4.05. For drugs the pharmacies purchase at other than 340B pricing, Health Services reimburses the benefits manager at AWP minus a specified percentage plus a dispensing fee per prescription of $4.05.[4] In 1998, the center published a federal register notice that provided ADAPs in all states with an option to receive the same federal rebates as the Medicaid program. State law requires manufacturers of the drugs on ADAP's drug list to pay rebates equal to Medi-Cal rebates plus additional rebates that Health Services negotiates with the manufacturers. The ADAP works with other state ADAPs to obtain additional rebates for drugs on its drug list.

CalPERS Provides Health Benefits to Certain Public Employees

In 1932, the State established CalPERS, whose participants include members, retirees, and their survivors and beneficiaries, collectively referred to here as members. The 1962 Public Employees' Medical and Hospital Care Act (act), authorized CalPERS to establish a health benefits program (program) for state employees, and subsequent amendments to the act expanded the program to include employees of public agencies and schools.[5] The program offers CalPERS members health care coverage through four health maintenance organizations (HMOs) and four preferred provider organizations (PPOs) (see text box on the following page). As of March 31, 2005, CalPERS reports that its program was providing health coverage to 1.2 million members, with nearly 70 percent being covered by the HMOs.

[4] For fiscal year 2003–04, ADAP's reimbursement rate for brand name drugs was AWP minus 10.5 percent and for generic drugs was AWP minus 20 percent.

[5] CalPERS' definition of schools includes school districts, charter schools, county offices of education, and community colleges.

CalPERS' Health Care Plans

Health Maintenance Organizations

- Blue Shield of California*
- Kaiser Health Plan Foundation, Inc.
- Western Health Advantage
- Health Net–California Correctional Peace Officers Association†

Preferred Provider Organizations

- PERS Care
- PERS Choice
- California Association of Highway Patrolmen†
- Peace Officers Research Association of California†

Sources: Department of Managed Health Care, CalPERS Web site, and evidence of coverage with the PPOs.

* The Blue Shield health care plan available to CalPERS members consists of an HMO. It also has an exclusive provider organization, which is available in six counties.

† Participation in the plan is limited to members in these associations.

According to CalPERS, its data shows that during fiscal year 2003–04, it incurred $361 million in pharmacy costs for its HMO plans and $321 million for its PPO plans. An HMO is a health care system that assumes or shares both the financial and delivery risks of providing comprehensive medical services to a voluntarily enrolled population in a particular geographic area, usually in return for a capitated rate. Among the several HMO models, the HMOs that CalPERS contracts with are either a staff or a network model. In a staff or closed-panel HMO, the enrollees receive services through HMO employees such as physicians and pharmacists in the HMO's own facilities. However, in a network HMO, the HMO contracts with multiple physician groups, hospitals, and retail pharmacists to provide services to enrollees.

PPOs are similar to the network model HMO in that they provide services to enrollees through a network of selected health care providers such as hospitals and physicians. However, PPO enrollees may choose to go outside the network and pay a greater percentage of their health care costs. CalPERS sponsors and operates two self-funded plans and pays fees to an administrator to provide claims and administrative services and use of its PPO network. Members' premiums are deposited into a designated fund and claims for the services they receive and any fees or other expenses are paid out of the fund. CalPERS' payments to providers for members' services are based on discounted fee-for-service rates.

The act allows CalPERS to enter into contracts to provide health benefits for its members without competitive bidding. Instead, CalPERS uses a rate renewal process to evaluate an HMO's costs for services. The HMOs submit rate renewal proposals to CalPERS almost a year in advance of the effective date of the rate changes, or January 1 of each year. CalPERS explains that it uses analyses of historical and actuarial projections of utilization and costs prepared by its staff and an actuarial consultant to negotiate the HMOs' premiums. The HMOs build the expected cost of prescription drugs into their premiums.

HMOs CalPERS contracts with that use the network model, contract with retail and mail pharmacies to dispense prescription drugs to CalPERS members. The HMO's contracts

may specify various methods of reimbursing the pharmacies, such as specifying that the price for a drug is the AWP minus a specified percentage or a maximum allowable cost for certain generic drugs. In addition, contracts may define the price of some drugs as WAC plus a defined percentage. The pharmacies also receive dispensing fees. The network model HMOs receive drug rebates from drug manufacturers that they typically pass on to the plan sponsor, such as CalPERS, as a reduction to the total pharmacy costs that are used to establish premiums.

A staff model HMO, on the other hand, uses its own facilities to dispense prescription drugs. The HMO generally enters into contracts with manufacturers and wholesalers to purchase drugs. The negotiated contract prices for the drugs include any rebates or discounts offered by the manufacturer or wholesaler. Although the staff model HMO generally does not pass on rebates to the plan sponsor such as CalPERS, it may pass on significant savings resulting from its ability to negotiate directly with manufacturers and wholesalers and to avoid additional expenses associated with using a retail pharmacy network.

For its two PPO plans, CalPERS competitively bids a multiyear contract to obtain an administrator to perform the services previously described.[6] This contract does not include pharmacy services. Instead, CalPERS competitively bids a multiyear contract to obtain a benefits manager to provide clinically appropriate, cost effective drugs for its PPO members.

The benefits manager contracts with retail pharmacies and operates a mail order pharmacy so CalPERS' members can obtain prescription drugs. It reimburses its contracted retail pharmacies for drugs at AWP minus a specified percentage or a maximum allowable cost for certain drugs plus a dispensing fee. A similar pricing method is used for prescriptions dispensed through the mail order pharmacy. For each prescription dispensed to CalPERS members, the benefits manager pays CalPERS an agreed-upon guaranteed drug rebate amount that it remits within 90 days of the end of the calendar year in which the rebates are earned.

[6] For the other two PPOs, the associations that represent the highway patrolmen and peace officers enter into contracts with CalPERS and the applicable health care plans to provide services to their members. According to CalPERS, during fiscal year 2003–04, its role was limited to the approval of plan rates and the ability to perform audits.

FEDERAL REGULATION OF PRESCRIPTION DRUGS

In the United States, the Food and Drug Administration's (FDA) Center for Drug Evaluation and Research (CDER) reviews all new drugs for safety, effectiveness, and quality before they enter the market. CDER reviews the drug sponsor's preclinical research, clinical studies, and new drug application.[7] Manufacturers can begin marketing a drug in the United States on the day the FDA approves it for use. The FDA assigns a National Drug Code (NDC), a specific number that identifies the labeler, product, and trade package size. The FDA assigns the labeler code. A labeler is any firm that manufactures, repacks, or distributes a drug product. The firm assigns the product code of the NDC, which identifies a specific strength, dosage form, and formulation and the trade package size code. CDER monitors the use of marketed drugs for unexpected health risks and manufacturer changes to ensure that they will not adversely affect the medicine's safety or efficacy.

Federal Definitions of the Brand Name and Generic Drug Classifications

The federal Food and Drug Administration (FDA) has two application processes for the approval of prescription drugs.

Brand Name Drugs

The FDA uses its New Drug Application (NDA) process as a vehicle through which drug sponsors can formally propose their new pharmaceuticals for sale and marketing in the United States. The FDA refers to prescription drugs approved under its NDA process as innovator, pioneer, or brand name drugs.

Generic Drugs

The FDA uses its Abbreviated New Drug Application process to expedite the availability of less costly generic drugs. The sponsor of a generic drug generally does not have to establish the safety and effectiveness of the drug. Instead, the sponsor must demonstrate that its drug is comparable to a brand name drug in dosage form, strength, route of administration, quality, performance characteristics, and intended use.

THE FEDERAL GOVERNMENT'S PROCUREMENT OF PRESCRIPTION DRUGS

The federal government does not set or regulate the price pharmaceutical manufacturers can charge for prescription drugs. However, federal laws ensure that manufacturers extend favorable prices to federal agencies and certain public sector purchasers of those drugs.

Federal law governing the payment of covered outpatient prescription drugs under the Medicaid program in California requires manufacturers to provide rebates to states participating in Medicaid for their covered prescription drugs dispensed by the states during each calendar quarter. Federal law generally prohibits Medicaid reimbursement of any manufacturer refusing to execute such an agreement. The Medicaid rebate amounts for brand name single source or multiple source drugs equals the total number of units of each dosage form and strength times either 15.1 percent of the average manufacturer price (AMP)

[7] The FDA defines drug sponsor as the person or entity assuming responsibility for the marketing of a new drug, including the responsibility for compliance with applicable provisions of the federal Food, Drug, and Cosmetic Act and related regulations. The sponsor is usually an individual, partnership, corporation, government agency, manufacturer, or scientific institution.

or times the difference between the AMP and the best price for the brand name drug.[8] However, the rebate amounts for generic drugs equals 11 percent of AMP times the total number of units dispensed during the quarterly rebate period.

Federal law also authorizes the federal Centers for Medicare and Medicaid Services to establish an upper limit for services available under the Medicaid program. The center establishes a federal upper limit (FUL) for generic drugs if at least three formulations of the drug approved by the FDA have been evaluated as therapeutically and pharmaceutically equivalent and at least three suppliers list the drug with commercial organizations such as First DataBank Inc. The FUL for these generic drugs must not exceed, in the aggregate, payment levels determined by applying to each drug a reasonable dispensing fee established by the state, plus an amount equal to 150 percent of the lowest price listed in any published compendia of drug cost information such as First DataBank Inc. The FUL for other drugs such as brand name drugs certified as medically necessary by a physician or a drug other than a generic drug must not exceed, in the aggregate, the lower of the estimated acquisition costs, plus a reasonable dispensing fee established by the state, or the provider's usual and customary charges to the general public.

Section 602 of the Veterans Healthcare Act of 1992 (Veterans Act) limits the prices of drugs purchased by certain entities, such as federally qualified health centers, and commonly is referred to as the 340B Program. The 340B Program requires the secretary of the federal Department of Health and Human Services to enter into agreements with manufacturers of covered drugs whereby the amounts paid to them by covered entities do not exceed an amount equal to Medicaid's average manufacturer price for the drug in the preceding calendar quarter reduced by a calculated rebate percentage.[9] Thus, the Veterans Act establishes a ceiling price for the 340B program. The Veterans Act does not prevent covered entities such as federally qualified health centers, state-operated AIDS drug purchasing assistance programs, and certain hospitals,

[8] The average manufacturer price is the average price paid to the manufacturer for the drug in the United States by wholesalers for drugs distributed to retail pharmacies after deducting customary prompt payment discounts. The best price is the lowest price available from the manufacturer during the rebate period to any wholesaler, retailer, provider, HMO, nonprofit entity, or federal government entity. However, the best price calculation excludes certain federal entities such as the Department of Veterans Affairs, the Department of Defense, and the Public Health Service; federal supply schedule prices; state pharmaceutical assistance program prices; depot and single award contract prices.

[9] The rebate percentage is equal to Medicaid's average total rebate for the drug during the preceding calendar quarter divided by the average manufacturer price for the drug during that quarter.

from negotiating even greater discounts with manufacturers. However, the Veterans Act does preclude those entities eligible for 340B Program pricing from receiving duplicate discounts or rebates. Specifically, the law prohibits covered entities from requesting payment under Medicaid for a drug covered under the 340B Program if the drug is subject to the payment of a federal Medicaid rebate.

Section 201 of the Federal Property and Administrative Act of 1949, as amended, authorizes the administrator of the General Services Administration to procure and supply personal property and nonpersonal services to numerous federal entities, the District of Columbia, U.S. territories, international organizations, and qualified nonprofit agencies. The administrator is responsible primarily for the Federal Supply Schedule program (supply schedule), which is aimed at simplifying the process of acquiring commercial supplies and services in varying quantities while obtaining volume discounts. However, under the Veterans Act, each manufacturer of covered drugs must enter into an agreement with the secretary of the federal Department of Veterans Affairs (Veterans Affairs) to make their covered drugs available for procurement on the supply schedule of the General Services Administration. During its negotiations, Veterans Affairs attempts to obtain prescription drug prices that are equal to or better than the best prices given by manufacturers to their "most-favored" commercial customers under comparable terms and conditions.

The Veterans Act also places limitations or a ceiling on the prices of drugs procured by Veterans Affairs, the Department of Defense, the Public Health Service, and the Coast Guard, commonly referred to as the "Big 4." Specifically, Big 4 purchases of the manufacturers' covered drugs that are listed on the supply schedule cannot exceed 76 percent of the non-federal average manufacturer price[10] less the amount of an additional discount.[11] This stipulation is part of the agreement that Veterans Affairs enters into with the manufacturers. The Veterans Act contains several requirements that allow Veterans Affairs to ensure that manufacturers comply with the agreement. For example, if manufacturers do not make their covered drugs available for

[10] The Veterans Act defines the non-federal average manufacturer price as the weighted average price of each single form and dosage unit of a drug that is paid to a manufacturer by wholesalers, taking into account any cash discounts or similar price reductions, but excluding prices that are nominal in amount or paid by the federal government.

[11] The Veterans Act establishes the methodology for calculating the additional discount as the change in which the non-federal price exceeds the non-federal average manufacturer price of a drug for a federally defined period, multiplied by the percentage increase in the Consumer Price Index for all urban consumers (United States city average) for the same federally defined period.

procurement on the supply schedule they may not receive payment for drugs purchased under the Medicaid program or by the Big 4 and any entity that receives funds under the Public Health Services Act. Also, manufacturers must provide Veterans Affairs certain drug pricing information, and Veterans Affairs may determine the accuracy of the manufacturers' drug prices by auditing the relevant records of the manufacturers or of any wholesaler that distributes the drug.

Finally, Veterans Affairs negotiates national contracts with manufacturers for select drugs, seeking competitive bids from manufacturers for products it considers therapeutically equivalent within specific drug classes. Veterans Affairs then contracts favorable prices with those manufacturers in exchange for including the drugs on its national formulary.

VARIOUS CANADIAN ENTITIES PROCURE PRESCRIPTION DRUGS

Canada has a publicly funded health care system, known as Medicare, that provides universal comprehensive coverage for medically necessary hospital and physician services; however, Medicare does not provide coverage for outpatient prescription drugs. Despite this lack of coverage, six federal government organizations and the 13 provinces and territories offer some type of prescription drug coverage to segments of the population, such as those receiving social assistance, inmates, veterans, and people 65 years of age and older. The Office of the Auditor General of Canada, in a November 2004 report, stated that the federal government was the fourth-largest payer of drug benefits in Canada, after the provinces of Ontario, Quebec, and British Columbia.

Similar to the FDA, Health Canada regulates Canada's Food and Drugs Act and Regulations, and Health Canada's Therapeutic Products Directorate (directorate) evaluates and approves drugs for sale in Canada. After a drug's approval, the directorate issues a drug identification number that permits the manufacturer to market the drug. For drugs where there is minimal market history in Canada, Health Canada also issues a notice of compliance indicating that the manufacturer has complied with certain sections of the Food and Drug Regulations. Health Canada monitors the use of the drug while it is on the Canadian market for safety and effectiveness and ensures that manufacturers comply with the regulations.

Also, in accordance with Canada's Patent Act, the Patented Medicine Prices Review Board (Review Board) is responsible for ensuring that manufacturers' prices of patented, or brand name, drugs sold in Canada to wholesalers, hospitals, or pharmacies are not excessive. The Patent Act and the Review Board's regulations require manufacturers to provide pricing information of patented drugs sold in Canada and corresponding pricing information in seven other countries, such as the United States and Sweden. The Review Board considers at a minimum the following factors: the prices of the drug in the relevant Canadian market, the prices of other drugs in the same therapeutic class in the relevant Canadian market, the prices of the drug and other drugs in the same therapeutic class in countries other than Canada, and changes in the Consumer Price Index (CPI).[12] The Review Board limits drug prices in Canada to the median of the prices for the same drugs charged in the seven countries. It ensures that existing patented drug prices do not increase by more than the CPI and that Canadian drug prices will never be the highest prices in the world. The Review Board has no authority to regulate the prices of non-patented drugs, including generic drugs. However, Canada's federal government, provinces, and territories use a variety of methods to procure prescription drugs (some methods are discussed more fully later).

STATE LEGISLATION ADDRESSING RISING PRESCRIPTION DRUG COSTS

Many states, including California, have proposed legislation to address concerns over the rising cost of prescription drugs in the United States. According to the National Conference of State Legislatures, state legislatures filed more than 320 bills and resolutions related to pharmaceuticals in 2004 sessions. Many of these measures address discount or subsidy programs, as well as other access, disclosure, and cost-containment strategies. Also, 27 states addressed the importation of prescription drugs.

In recent years, California has proposed and passed a number of bills focused on reducing prescription drug costs and obtaining additional information on its state drug purchases. For instance, Chapter 383, Statutes of 2004, requires that Corrections—in coordination with General Services' prescription drug bulk purchasing program—adopt policies, procedures, and criteria to identify selected medication categories to develop uses based on best practices and the use of generic and therapeutic

[12] The CPI is an index of prices used to measure the change in the cost of basic goods and services in comparison with a fixed base period.

substitutes, as appropriate. Also, in January 2005 the governor announced the "California Rx" program, later introduced in legislation as the California State Pharmacy Assistance Program (Cal Rx), which would provide prescription drug discounts to certain California residents with a family income not exceeding 300 percent of the federal poverty level. Generally, the program would achieve these discounts by authorizing Health Services to negotiate voluntary drug rebate agreements with manufacturers. Cal Rx also would allow any licensed pharmacy or drug manufacturer to provide services under the program.

According to the National Conference of State Legislatures, other states also have proposed legislation to reduce the cost of prescription drugs. In spring 2000, the Maine Legislature enacted a law to create the "Maine Rx Program," allowing the state of Maine to negotiate with manufacturers Medicaid-like rebates that would benefit any resident enrolled in the program. The legislation also allows Maine to release the names of manufacturers not willing to enter such rebate agreements and to impose certain prior authorization requirements on them. Although a drug manufacturer association challenged this legislation on grounds that it was preempted by federal law and impermissibly restricted interstate commerce, the U.S. Supreme Court issued a decision in spring 2003 that permitted Maine to continue with the program.

Maine reconfigured the program to meet federal concerns and implemented the program in January 2004 as "Maine Rx Plus." Unlike the original legislation, the revised legislation limits discounts to Maine residents meeting certain income requirements, but still provides the state with the authority to release the names of manufacturers not entering into rebate agreements and to impose certain prior authorization requirements on them. More specifically, the legislation allows Maine to require prior authorization on nonparticipating manufacturers' drugs before they are covered under the Medicaid program. Prior authorization requires a physician to obtain special permission from state Medicaid officials before prescribing a drug to a Medicaid recipient.

In a letter dated September 18, 2002, to the state Medicaid directors, the director of the federal Centers for Medicare and Medicaid Services addressed, among other things, the issue of states obtaining non-Medicaid supplemental rebates by using prior authorizations for the Medicaid program. The letter reads as follows:

> A number of states secure prescription drug benefits, rebates, or discounts for non-Medicaid populations by linking such benefits to a Medicaid prior authorization program. The Act does not preclude states from negotiating prices, including manufacturer discounts and rebates for non-Medicaid drug purchases. However, the establishment of a prior authorization program for Medicaid covered drugs to secure drug benefits, rebates, or discounts for non-Medicaid populations is a significant component of a State plan and we would therefore expect that a State would submit such a program for CMS review under the State plan process. Similarly, the use of any pre-existing prior authorization program to secure drug benefits, rebates, or discounts for non-Medicaid populations would constitute a '[m]aterial change[] in State law, . . . policy, or in the State's operation of the Medicaid program' and we would therefore expect that a State would submit a plan amendment to CMS for review. (See section 430.12(c)(1)(ii) of the regulations.) In submitting such a State plan amendment, the State should be prepared to demonstrate through appropriate evidence that the prior authorization program will further the goals and objectives of the Medicaid program.

Thus, it is the opinion of CMS that states seeking to obtain non-Medicaid supplemental rebates by using prior authorizations for the Medicaid program first must seek its approval.

SCOPE AND METHODOLOGY

Chapter 938, Statutes of 2004, requires the Bureau of State Audits (bureau) to report to the Legislature on the State's procurement and reimbursement practices as they relate to the purchase of drugs for or by state departments, including, but not limited to, Mental Health, Corrections, the Youth Authority, Developmental Services, CalPERS, and Health Services. Specifically, the statutes require the bureau to:

- Review a representative sample of the State's procurement and reimbursement of drugs to determine whether it is receiving the best value for the drugs it purchases.

- To the extent possible, compare the State's cost to those of other appropriate entities such as the federal government, Canadian government, and private payers.

- Determine whether the State's procurement and reimbursement practices result in savings from strategies such as negotiated discounts, rebates, and contracts with multistate purchasing organizations, and whether the State's strategies result in the lowest possible costs.

Our analysis does not address clinical management or formulary decisions made by the departments and the entities they contract with to provide drug coverage nor does it reflect their decisions related to product mix such as encouraging the use of generic over brand name drugs or shifting from older to newer drugs. Therefore, the data in this report may not represent the best value for each drug. Further, under General Services' bulk drug purchasing program, state agencies can purchase some of their drugs at the prime vendor's wholesale acquisition cost rather than the reimbursement prices Health Services' and CalPERS' entities pay to retail pharmacies. Also, unlike CalPERS and Health Services the pricing information used for General Services in this analysis does not include any of the state agencies' costs associated with dispensing the prescription drugs, nor any co-payments these agencies may collect.

To identify the prices at which the State purchases prescription drugs, we reviewed prescription drug costs, procurement methods, and pharmacy reimbursement methods for General Services, CalPERS, and Health Services for fiscal year 2003–04. Our report presents high-level analyses of the prescription drug costs of the various entities. Federal law prohibits the bureau from disclosing data in a form that reveals the manufacturer or prices charged by the manufacturer. Also, the state auditor operates under statutes that allow it to receive and review confidential information, but prohibit it from disclosing that information if some law prohibits disclosure or allows that information to be withheld from public disclosure. Based on that authority, the various private parties contracting with CalPERS worked cooperatively with the bureau to allow *access* to their highly confidential drug pricing information and strategies, with the clear understanding that it would not be *disclosed*, either publicly or to any other party who did not have the legal authority to obtain this information. Consequently, some of the information that the bureau reviewed and analyzed during this audit cannot be shared with any other party or made public.

However, one CalPERS entity selected for review did not work cooperatively with the bureau. Specifically, the entity indicated to us that the information we were requesting was proprietary and confidential and that certain information was subject to contractual restrictions on disclosure. The bureau offered the entity assurance that the statutes governing the bureau would allow the state auditor to review and analyze this confidential information and to present the results of that analysis in a way that would not publicly disclose any information that it was legally obligated to keep confidential. Despite these assurances, the entity was of the opinion that it was legally prohibited from providing this information to the bureau and did not provide the requested information. Generally accepted government auditing standards require that we disclose significant constraints imposed on the audit approach by scope impairments, including demands of access to certain records or individuals. This entity represents roughly one third of CalPERS' membership, and thus, the exclusion of its data could materially skew CalPERS' results in this report.

To understand General Services' role in procuring prescription drugs for state departments, we interviewed its staff and reviewed all relevant laws and regulations pertaining to its bulk drug purchasing program and to identify the departments required or exempt from purchasing drugs through the program. We also reviewed recommendations to General Services in the bureau's January 2002 audit report titled *State of California: Its Containment of Drug Costs and Management of Medications for Adult Inmates Continue to Require Significant Improvements* and followed up with General Services to learn how it has implemented the recommendations related to drug procurement and drug costs.

To understand Health Services' role in procuring prescription drugs, we reviewed the Medi-Cal fee-for-service and managed care systems, as well as the ADAP. We reviewed each program's expenditures, relevant policies and procedures; and relevant federal and state laws, rules, and regulations pertaining to procuring prescription drugs through these programs. We found that Medi-Cal managed care and ADAP use procurement methods similar to those used by entities contracting with CalPERS, such as paying a capitated rate to health plans and contracting with a benefits manager to procure and provide pharmacy services to program recipients or enrollees. We also found that Medi-Cal managed care and ADAP prescription drug expenditures for fiscal year 2003–04 totaled approximately

$1.7 billion, compared with the Medi-Cal fee-for-service system expenditures of more than $4 billion. We excluded Medi-Cal managed care and ADAP from our review because the Medi-Cal managed care system and the ADAP's procurement methods are similar to those used by CalPERS, and the costs of these two programs were significantly smaller than the Medi-Cal fee-for-service system. In addition, we reviewed the recommendations made to Health Services in the bureau's April 2003 audit report titled *Department of Health Services: Its Efforts to Further Reduce Prescription Drug Costs Have Been Hindered by Its Inability to Hire More Pharmacists and Its Lack of Aggressiveness in Pursuing Available Cost-Saving Measures* and followed up with Health Services to determine the implementation status of those recommendations related to drug procurement and drug costs. We present this information in Appendix B.

To understand CalPERS' role in procuring prescription drugs, we reviewed information for the entities providing pharmaceutical services to CalPERS in fiscal year 2003–04. To determine whether its processes are adequate to ensure that it pays the lowest possible prescription drug costs, we reviewed CalPERS' process for selecting HMOs and an administrator and benefits manager for its self-funded PPOs. Our review included interviewing CalPERS staff and reviewing documents relating to CalPERS' rate renewal and competitive bid process.

To determine the costs of prescription drug products purchased by the three state departments in fiscal year 2003–04, we obtained claim and rebate data, including discounts, co-payments, dispensing fees, and third-party payments, if applicable. We received this information directly from Health Services, General Services' prime vendor, and certain entities providing pharmaceutical services to CalPERS. Based on expenditure data from General Services' prime vendor, we sent surveys to departments that purchased drugs in fiscal year 2003–04, requesting each of them to provide the following: the fiscal year's total drug purchases, the total purchased from the State's prime vendor, and the total purchased from other sources. We also asked them to identify any drugs purchased from other sources, the purchasing methods used, and, if applicable, to provide the legal authority under which the purchases were made.

To determine whether the procurement and reimbursement practices for our selected entities result in savings from strategies such as negotiated discounts and rebates, we used the provided data to calculate the following three types of cost:

- Drug ingredient cost: the cost of the drug itself as stated on the prescription drug claim or invoice, which is based on pricing methods such as the average wholesale price minus a specified percentage, a maximum allowable ingredient cost, or the pharmacy's usual and customary rate.

- Net drug ingredient cost: the drug ingredient cost minus any rebates or additional discounts, if applicable.

- State cost: the net drug ingredient cost plus any dispensing fees and minus any co-payments or third-party payments, if applicable.

For each of these three cost types, we then identified the top 500 drugs, using the FDA's NDC, for each department. We ranked each NDC in these lists by the total costs during fiscal year 2003–04. Appendix A gives more information on our methodology for developing the top 500 lists and assessing the reliability of the data used in our analysis.

To compare state departments' prescription drug costs with those of the federal government, we requested information from the Big 4. Specifically, we requested the lowest, highest, and weighted-average net drug ingredient cost for 100 comparable drugs identified in our analysis of state departments. We also requested a description of the purchase methods underlying these costs.

To compare state department prescription drug costs with the Canadian government's costs, we contacted Canada's Federal Healthcare Partnership to help us understand Canada's public drug benefit programs and to assist us in identifying federal organizations and provinces with superior and/or innovative procurement strategies. From each of our identified entities, we requested the lowest, highest, and weighted-average net drug ingredient cost for the same 100 drugs requested from the Big 4 and requested a description of the purchase methods underlying these costs.

Using the information provided by the Big 4 and the Canadian entities, we compared the net drug ingredient cost information with the same information calculated for each state department. To ensure an appropriate comparison, we used an average of the Bank of Canada's daily nominal noon exchange rates for our audit period to convert Canadian prices into U.S. prices. The Bank of Canada is Canada's central bank. ■

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AUDIT RESULTS

ALTHOUGH GENERAL SERVICES' UP-FRONT DISCOUNTS YIELD LOWER COSTS FOR THE DRUGS THEMSELVES, HEALTH SERVICES' REBATES YIELD LOWER NET DRUG INGREDIENT COSTS AND LOWER COSTS TO THE STATE

To analyze the relative cost of California's prescription drug purchases, we examined the drug costs for the Department of General Services (General Services), the Department of Health Services (Health Services), and the California Public Employees' Retirement System (CalPERS). Of the three departments, Health Services has been most successful in reducing the cost of its drug purchases, thus costing the State fewer dollars relative to the other two departments. Health Services has reduced its drug costs significantly through substantial rebates, totaling roughly $1.6 billion in fiscal year 2003–04. Although paying less than Health Services for the drug ingredient cost, General Services has higher net drug ingredient costs because it receives minimal amounts in rebates from the manufacturers it contracts with. Although CalPERS' rebates do not reduce its net drug ingredient costs substantially, it comes in second among the three departments in costs to the State (state cost) because it can reduce its pharmacy reimbursements by the amount of co-payments its members make to the pharmacies that fill their prescriptions. The text box defines these cost categories.

Three Definitions of Drug Costs as Used in This Report

Drug Ingredient Cost—The cost of the drug itself as stated on the prescription drug claim or invoice, which is based on pricing methods such as the average wholesale price minus a specified percentage, a maximum allowable ingredient cost, or the pharmacy's usual and customary rate.

Net Drug Ingredient Cost—The drug ingredient cost minus any rebates or additional discounts, if applicable.

State Cost—The net drug ingredient cost plus any dispensing fees and minus any co-payments or third-party payments, if applicable.

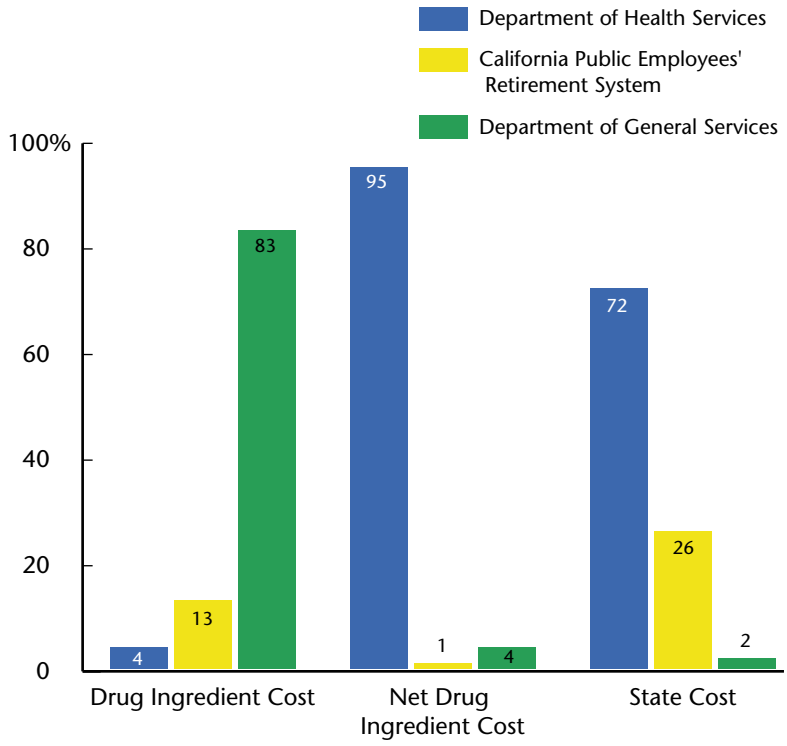
After compiling the top 500 drugs purchased by the three departments during fiscal year 2003–04, we identified: 141 common drugs based on the drug ingredient cost; 133 common drugs based on the net drug ingredient cost; and 131 common drugs based on state cost. The majority of the comparable drugs are brand name drugs and many were found in the general therapeutic classes of psychotherapeutic, anti-infectives, cardiovascular, and central nervous system drugs.

Figure 2 on the following page compares the drug ingredient cost, net drug ingredient cost, and state cost for each of the departments in our analysis. As the figure shows, using

weighted-average prices, General Services had the lowest drug ingredient costs, while Health Services had the lowest net drug ingredient costs and state costs.

FIGURE 2

The Percentage of Comparable Drugs for Which a State Department Achieved the Minimum Weighted-Average Price



Sources: Claim and rebate data from Health Services, invoice data from General Services' prime vendor and rebate terms in General Services' contract with one drug manufacturer, and claim and rebate data from certain CalPERS' entities providing pharmaceutical services in fiscal year 2003–04.

Notes:

1. Our analysis does not address clinical management or formulary decisions made by the departments and the entities they contract with to provide drug coverage nor does it reflect their decisions related to product mix such as encouraging the use of generic over brand name drugs or shifting from older to newer drugs. Therefore, the data in Figure 2 may not represent the best value for each drug.
2. As described in the Introduction, one CalPERS entity selected for review did not work cooperatively with the bureau to allow access to its proprietary and confidential drug pricing information and strategies. This entity represents roughly one-third of CalPERS' membership, and thus, the exclusion of its data could materially skew the results shown in Figure 2 for CalPERS.
3. In contrast to the other two departments in our analysis, General Services' net drug ingredient cost and state cost remained the same because, under its bulk drug purchasing program, the prime vendor's invoice data does not include any of the state agencies' costs associated with dispensing the prescription drugs, nor any co-payments these agencies may collect.

Because of Up-Front Discounts, General Services Typically Pays a Lower Drug Ingredient Cost Than Health Services or CalPERS

Comparing the three departments' purchases of prescription drugs at the ingredient cost level, we found that General Services got the lowest weighted-average price for 117, or 83 percent of the 141 comparable drugs. General Services' lower prices are attributable partly to one of its procurement strategies, which is to reduce costs by obtaining up-front discounts. General Services explains that this strategy involves gaining these up-front discounts through contract negotiations with manufacturers of high-cost brand name drugs and through competitively bidding contracts for high-volume generic drugs. General Services also stated that it supplements its contracts discounts by using its agreement with the Massachusetts Alliance for State Pharmaceutical Buying (alliance). The alliance contracts with a group-purchasing organization that negotiates contracts with manufacturers for its pool of customers. The group-purchasing organization says its largest benefit for customers comes in up-front discounts off the drug's list price.

For the 117 drugs that General Services obtained the lowest weighted-average price, its prices were on average 13 percent less than Health Services' prices and 5 percent less than CalPERS' prices.

For the 117 drugs that General Services obtained the lowest weighted-average price, its prices were on average 13 percent less than Health Services' and 5 percent less than CalPERS' prices. However, the price differences among some drugs were greater than among other drugs. For example, General Services' price for one drug was 45 percent less than Health Services' price and 40 percent less than CalPERS' price. Conversely, for another drug, the price differential from General Services to Health Services and to CalPERS was less than 3 percent and 2 percent, respectively.

Health Services' and CalPERS' drug ingredient costs were generally higher because for almost all the comparable drugs their prices were based on average wholesale price (AWP) minus a specified percentage. However, CalPERS achieved lower prices than Health Services because its entities were able to negotiate greater discounts off the AWP.

Health Services' Rebates Yield Lower Net Drug Ingredient Costs Than CalPERS' or General Services' Costs

At the net drug ingredient cost level, our comparison of the three departments' purchases of prescription drugs found that General Services no longer achieved the lowest weighted-average prices for the majority of the comparable prescription drugs. Instead, as Figure 2 shows, Health Services obtained the lowest weighted-average prices because of the rebates it receives. General Services' net drug ingredient costs are higher than those

of Health Services, primarily because it is in the early stages of its direct negotiations with manufacturers. Though it does receive rebates from the entities it contracts with for pharmacy services to its members, CalPERS' net drug ingredient costs are the highest of the three departments.

Health Services' Rebates Significantly Reduce Its Net Drug Ingredient Costs

Because Health Services receives both federal and state supplemental rebates for the federal Medicaid program (known as California's Medical Assistance Program or Medi-Cal), its net ingredient cost for prescription drugs was significantly lower than such costs for CalPERS or General Services. As of January 19, 2005, Health Services had received a total of roughly $1.6 billion in federal and supplemental rebates for fiscal year 2003–04, with about one-third of these rebates resulting from Health Services' state supplemental rebate negotiations.

Although Health Services' procurement methods resulted in the lowest drug ingredient cost for only five drugs, it had the lowest net drug ingredient cost for 95 percent, or 127 of the 133 drugs in our comparison.

Although Health Services' procurement methods resulted in the lowest drug ingredient cost for only five drugs, it had the lowest net drug ingredient cost for 95 percent, or 127 of the 133 drugs in our comparison. For example, Health Services' drug ingredient cost for one drug was 20 percent more than General Services' price for the same drug. However, because of its rebates, Health Services' net drug ingredient cost for this same drug dropped by 73 percent, and was at least 63 percent less than the price for CalPERS and General Services. On average, Health Services' costs for the 127 drugs were 33 percent lower than CalPERS' costs and 34 percent lower than General Services' costs for the same drugs.

CalPERS' Rebates Did Not Always Provide Significant Reductions in the Cost of the Prescription Drugs in Our Analysis

Negotiating drug rebates is one tool available to reduce drug expenditures. Drug manufacturers typically offer rebates based on the extent to which health care plans influence their products' market share. Although CalPERS does not directly contract with drug manufacturers, it receives rebates from some entities it contracts with for pharmaceutical services. We would expect the amount of rebates CalPERS receives to be substantially lower than the amount Health Services receives because it does not have access to federal rebates. However, CalPERS entities' rebate methods resulted in the lowest net drug ingredient cost of the three analyzed departments for less than 1 percent, or only one out of 133 drugs.

Those entities with which CalPERS contracts to provide pharmaceutical services that are included in our analysis receive rebates from contracting directly with drug manufacturers based on their entire book of business and performance relative to the market. However, the portion of the rebates CalPERS realizes can vary depending on the method it chooses. CalPERS receives rebates using two types of methods—guaranteed and pass-through. Using a guaranteed rebate method, CalPERS receives guaranteed rebate amounts for each dispensed prescription regardless of the amount the drug manufacturer rebates to the entity providing pharmacy services for CalPERS. Under this method the entity negotiates and contracts with manufacturers on its own behalf, thus assuming the risk that the rebates it receives will, in aggregate, allow it to meet the prices it offers plan sponsors. Thus, CalPERS is relieved from negotiating directly with manufacturers and assuming the risks associated with market volatility, rebate discontinuation, and rebate non-payment. CalPERS' contract with entities using the guaranteed method specifically precludes it from having access to rebate, discount, data, and services agreements with pharmaceutical manufacturers or distributors. However, CalPERS is able to verify the amount it receives in rebates by multiplying the guaranteed rebate amounts by its drug utilization data.

In the pass-through method, the entity negotiates rebates and contracts with pharmaceutical manufacturers so that rebate payments between the manufacturer and the entity are based on historical and prospective pharmacy utilization data for all members of the health care plan that the entity administers. The entity then collects and passes through to plan sponsors, such as CalPERS, either a percentage or the entire amount of the rebates earned by the sponsors based on their member utilization.

Because CalPERS lacks access to the entities' rebate contracts under the pass-through method, its health benefits branch staff cannot directly verify the accuracy of the pharmaceutical manufacturers' rebates to which it is entitled.

However, CalPERS lacks access to the entities' rebate contracts under this method. Typically, these entities prohibit CalPERS from having access to any information that would cause them to breach the terms of any contract with pharmaceutical manufacturers to which they are a party. Consequently, CalPERS health benefits branch staff cannot directly verify the accuracy of the pharmaceutical manufacturers' rebates to which CalPERS is entitled. CalPERS health benefits staff intend to pursue greater pharmacy rebate disclosure and accountability requirements in future contracts. For example, CalPERS plans to seek the greater of 100 percent of all drug rebates or a predetermined minimum amount in its next pharmacy benefits manager contract. CalPERS also plans to include greater disclosure requirements

in all contracts with entities that will enable it to verify that it is receiving all of the rebates to which it is entitled. However, if CalPERS fails to negotiate these disclosure requirements, it will continue to be unable to ensure that the State receives all of the rebates to which it is entitled so that it can reduce its net drug ingredient costs further.

General Services Is in the Early Stages of Its Direct Negotiations With Manufacturers and Aims to Increase Its Ability to Reduce the Net Ingredient Cost of Prescription Drugs

Although rebates typically decreased the cost of prescription drugs for Health Services and CalPERS, General Services' net ingredient costs for the drugs in our sample are about the same as its costs for the drugs before any discounts or rebates. For example, at the drug ingredient cost level, General Services' weighted-average price for one drug was at least 11 percent less than the price that the other two departments paid for the same drug. However, that price became at least 3 percent higher after applying rebates and discounts. In fact, General Services purchased only 3.8 percent of the drugs in our net drug ingredient cost sample at the lowest net cost, despite having the lowest drug ingredient cost for 83 percent of our drug cost sample. General Services says this is because it is still in the early stages of its direct negotiations with manufacturers to achieve reduced drug costs.

During fiscal year 2003–04, state agencies purchased $28 million in drugs, but according to the alliance's group-purchasing organization's unaudited data, only $2.1 million of these purchases qualified for rebates of only $133,000, or 6 percent.

Currently, departments purchasing drugs through General Services can obtain rebates only for one drug product class, a rebate General Services obtained through contract negotiation efforts. For that one drug product class, state agencies received at least $1.5 million in rebates for their purchases in fiscal year 2003–04. Some of the drugs that state agencies purchased through the alliance's group-purchasing organization also qualified for rebates. During fiscal year 2003–04, state agencies purchased $28 million in drugs, but according to the alliance's group-purchasing organization's unaudited data, only $2.1 million of these purchases qualified for rebates of only $133,000, or 6 percent. Clearly, if state agencies had more opportunities to receive rebates through the alliance as well as through General Services' pursuit of rebate contracts with more drug manufacturers, General Services could reduce its net drug ingredient costs further.

General Services explains that, although its primary objective is the best overall price, rebates are a less desirable strategy than up-front discounts. General Services believes state agencies benefit most from the best up-front discount prices,

which do not require them to wait for manufacturers to remit rebates before making funds available for other drug purchases. General Services also states that rebates require oversight and management to ensure they are accounted for properly and credited to the correct accounts. For example, as mentioned earlier, state agencies received at least $1.5 million in rebates for one drug product class from one manufacturer's contract with General Services, but between August 2003 and June 2004 some state agencies missed out on rebates totaling $248,876. The manufacturer's contract terms require state and local agencies to sign and turn in a certification form before they can receive payment for the rebates. According to the manufacturer's unaudited data, between August 2003 and October 2003, 27 of the 49 state entities qualifying for rebates, such as state prisons, did not receive payment for rebates totaling $217,676. Although entities improved their submission of the forms after October 2003, the manufacturer's unaudited data shows that by the end of fiscal year 2003–04, two of the 27 entities still had not received rebate payments. According to General Services, its procurement staff made various efforts to remind departments to submit the rebate certification form, including making direct phone calls to pharmacy managers and negotiating an extension of the form deadline with the drug manufacturer, and elevating the issue to the Pharmacy Advisory Board. However, General Services explains that it does not have the authority to control the actions of other departments or make submission of the form mandatory. As of the contract year beginning July 1, 2004, all eligible state departments that purchase the drug product have signed and turned in the certification form to receive rebates from the manufacturer.

Between August 2003 and October 2003, 27 of the 49 state entities qualifying for rebates from one manufacturer, did not receive rebates totaling $217,676 because they did not turn in required certification forms.

According to the alliance's group-purchasing organization, state agencies have earned $133,000 in rebates for drug purchases made during fiscal year 2003–04 and a total of $164,000 in rebates since October 2002. However, at the request of General Services it did not immediately remit these rebates to the State. According to General Services, in the past, when the group-purchasing organization issued a check to General Services, the funds were deposited into the State's General Fund and the individual state agencies making the purchases did not receive the rebate credit. Being unable to arrange with the prime vendor a system that would allow each state department purchasing drugs to benefit from the rebates they earned, General Services requested the rebates be withheld until this issue was resolved. General Services did not resolve this issue until April 25, 2005 because the alliance's group-purchasing organization was still waiting

on the prime vendor to send account routing information that is needed to transfer the rebates to each agency electronically. To prevent this from occurring in the future, General Services plans to include in its next contract a requirement that the prime vendor collect all rebate payments owed to the State and submit an electronic remittance or order credit to each agency account for its earned rebates.

Lower Dispensing Fees and Co-payments Reduce CalPERS' Prescription Drug Costs for the State, While Health Services' Higher Average Dispensing Fees Increase the State's Costs

Despite the decrease in CalPERS' state cost due to lower average dispensing fees and co-payments from members, Health Services still achieved lower prescription drug costs for a majority of the comparable drugs.

Our analysis of the three departments' comparable drugs at the level of the state cost, which takes into consideration dispensing fees, co-payments, and other third-party payments, found that CalPERS' prescription drug costs were generally lower than its net drug ingredient costs while Health Services' and General Services' costs increased or remained roughly the same. Lower average dispensing fees than Health Services and co-payments received from CalPERS members are the reason for this decline in CalPERS' state cost for prescription drugs. CalPERS members pay their co-payments directly to the retail or mail pharmacy dispensing the prescription, and the CalPERS entity providing pharmaceutical services reimburses the retail and mail pharmacies for the drug cost minus the applicable co-payment plus a dispensing fee, if applicable. Despite the decrease in CalPERS' cost to the State, Health Services still achieved lower prescription drug costs for a majority of the comparable drugs. On average, Health Services' cost to the State for 94 out of 131 drugs was 30 percent lower than CalPERS' cost for the same drugs.

General Services' net drug ingredient cost and state cost were the same because under its bulk drug purchasing program agencies' cost of dispensing drugs and any co-payments they receive are not reflected in the prime vendor's invoice data. However, although Health Services is able to reduce its prescription drug costs by reimbursements from third parties such as Medicare, private insurance carriers, and beneficiaries, its higher dispensing fees and lack of co-payments contributed to an almost 2 percent increase in cost, or roughly $17 million. Co-payments do not affect Health Services' state cost for several reasons. State law allows each Medi-Cal participating pharmacy to retain the $1 co-payment it collects from each Medi-Cal beneficiary for each drug prescription or refill, so the beneficiary remains liable to the pharmacy for any unpaid co-payments. Also, state law does not allow Health Services to reduce its pharmacy reimbursements by the co-payment

amount. Further, although federal law allows states to establish nominal co-payments, it does not allow states to charge for certain services, such as emergency services and services provided to any beneficiary under age 18, nor to deny services to beneficiaries based on their inability to pay the co-payment.

Health Services has yet to fully implement six out of the 16 recommendations that the Bureau of State Audits made in its April 2003 report.

In the Bureau of State Audits' (bureau) April 2003 report titled *Department of Health Services: Its Efforts to Further Reduce Prescription Drug Costs Have Been Hindered by Its Inability to Hire More Pharmacists and Its Lack of Aggressiveness in Pursuing Available Cost-Saving Measures*, we made numerous recommendations aimed at helping Health Services reduce its prescription drug costs. Health Services has yet to fully implement six of the 16 recommendations that can be found in Appendix B. One of the 16 recommendations was that Health Services should evaluate the pros and cons of deducting co-payments from its pharmacy reimbursement rate and having pharmacies collect these payments from beneficiaries. We reported that at least one state, Montana, had taken a more aggressive approach toward collecting co-payments from beneficiaries, instituting co-payments to reduce the State's cost and allow beneficiaries to share in the cost of their medical care. Montana deducted the co-payments from the pharmacies' reimbursements, placing the responsibility of collecting co-payments on the providers. However, as of April 2005, Health Services had not implemented the deduction of co-payments from its pharmacy reimbursement rate.

In July 2004, Health Services informed the bureau that it was evaluating various beneficiary cost sharing proposals as part of the Medi-Cal Redesign effort proposed by the governor in his budget for fiscal year 2004–05. The goal of the Medi-Cal Redesign effort is to restructure Medi-Cal to maintain health care coverage for eligible Californians, while containing costs and maximizing operational efficiencies. Workgroup meetings were held with Medi-Cal stakeholders during March and April 2004 to discuss topics such as benefit design and cost-sharing, program eligibility and simplification, organized service delivery, and other financing and savings options. On April 14, 2004, Health Services presented to stakeholders a conceptual framework for a tiered approach to benefits cost sharing that included a $5 co-payment for nonemergency services, a $1 co-payment for outpatient and dental services, and a $1 co-payment for each prescription and refill. Health Services framework also would require pharmacies to be responsible for the collection of co-payments. Further, Health Services would deduct the

co-payments for nonemergency services from the provider reimbursement rate for these services and allow the provider to refuse the services if the beneficiary did not pay the co-payment.

However, the Medi-Cal Redesign Proposal issued by the Health and Human Services Agency and Health Services in January 2005 does not include co-payments, but instead focuses on the establishment of monthly premiums that range between $21 and $27 for individuals with incomes above the federal poverty level and above the monthly Supplemental Security Income/State Supplemental Payment level for seniors and persons with disabilities. According to Health Services, co-payments were largely dismissed by most of the stakeholders because many beneficiaries would not be able to afford them. In addition, Health Services stated that the State would have to obtain a waiver from the federal Centers for Medicare and Medicaid Services to allow providers to refuse service if the beneficiary could not pay the co-payment. Furthermore, it stated that deducting the co-payment from the provider reimbursement without obtaining the waiver has the effect of imposing no cost-sharing responsibility on the beneficiaries. Finally, Health Services believes that the large reduction in pharmacy reimbursement rates from AWP minus 10 percent to AWP minus 17 percent, which Health Services implemented on September 1, 2004, provides a much larger cost reduction than the enforcement of a $1 co-payment. However, also implemented on September 1, 2004, was an increase in pharmacy dispensing fees from $4.05 to at least $7.25. According to Health Services, it estimates that the net effect of these two changes will result in $121 million in fiscal year 2004–05, which is more than double its estimate of the potential savings of a $1 co-payment.

Health Services estimates that the net effect of changes in its reimbursement rates and dispensing fees will result in savings of $121 million in fiscal year 2004–05.

GENERAL SERVICES CAN REDUCE ITS PRESCRIPTION DRUG COSTS FURTHER

Besides obtaining rebates from more drug manufacturers, General Services has other opportunities to achieve the lowest possible costs for prescription drugs. To be able to expand its prescription drugs bulk-purchasing program to include drugs that best serve the needs of departments, General Services should ask those departments that are otherwise required to participate in this program to notify it of the volume, type, and price of prescription drugs they purchase from other sources. In this manner, General Services may reduce such instances as the Department of Developmental Services (Developmental Services) purchasing more than $6 million of prescription drugs from other vendors in fiscal year 2003–04.

Because 48 percent of state departments' drug purchases through General Services did not use the contracts General Services has with drug manufacturers nor the alliance through which General Services obtains group pricing, General Services' procurement methods leave room for improvement. We addressed this issue in our January 2002 report, *State of California: Its Containment of Drug Costs and Management of Medications for Adult Inmates Continue to Require Significant Improvements*, recommending among other things that General Services increase its efforts to solicit bids from drug manufacturers and fully analyze its procurement of prescription drugs through the alliance. If General Services fully implemented our recommendations, it might have more individual drugs under contract and more covered through participation in a larger group-purchasing organization than the alliance.

General Services Does Not Have Information Concerning Non-Prime Vendor Drug Purchases Made by Departments Required to Participate In Its Bulk Purchasing Program

Although state law requires specific state departments to purchase drugs through General Services, our survey of various departments indicates they are not always doing so. Specifically, California Government Code requires the departments of Corrections (Corrections), Developmental Services, Youth Authority (Youth Authority), and Mental Health (Mental Health) to participate in General Services' bulk purchasing program. In addition, California Public Contract Code requires that all state departments purchasing drugs totaling more than $100 must purchase them through General Services. California State University, the University of California, and some entities within the California Department of Veterans' Affairs are exempt from this requirement. Although we found that departments generally purchase most drugs through General Services' contract with its prime vendor, they also purchase drugs through other vendors.

Nine state entities purchased prescription drugs using General Services' prime vendor, but each of these entities also purchased drugs from non-prime vendor sources during fiscal year 2003–04.

As Table 1 on the following page shows, nine state entities purchased prescription drugs using General Services' prime vendor, but each of these entities also purchased drugs from non-prime vendor sources during fiscal year 2003–04. For example, although the Youth Authority purchased drugs from the prime vendor costing roughly $1.8 million, it also purchased drugs costing almost $451,000 through other vendors. Moreover, Developmental Services purchased more than $6 million of its drugs through non-prime vendor sources. Seven of the nine entities we surveyed purchased 20 percent to 100 percent of their drugs through non-prime vendor sources.

TABLE 1

Drugs Purchased During Fiscal Year 2003–04 by State Entities

State Entity	Purchases Using Prime Vendor*	Purchases Using Source Other Than Prime Vendor†	Total Drugs Purchased
California Department of Corrections	$126,824,969	$ 863,799	$127,688,768
Department of the Youth Authority	1,777,052	450,988	2,228,040
Department of Developmental Services	14,503,362	6,376,408	20,879,770
Department of Mental Health	27,942,810	165,962	28,108,772
California Highway Patrol	251	5,101	5,352
California Department of Veterans Affairs—Barstow	39	305,630	305,669
Emergency Medical Services Authority	97,757	339,022	436,779
California State University	1,824,946	761,316	2,586,262
University of California—Riverside	370,380	120,960	491,340
Totals	**$173,341,566**	**$9,389,186**	**$182,730,752**

Sources: Invoice data from General Services' prime vendor for fiscal year 2003–04 and survey responses from state entities.

* This information is based on the invoice data at the drug ingredient cost level for fiscal year 2003–04 provided by General Services' prime vendor and includes only prescription drug purchases.

† This information is based on actual expenditures attributable to fiscal year 2003–04 purchases as provided by the respective state agency. In compiling their data, a few state agencies erroneously included non-prescription drugs and pharmaceutical supplies, but believe the amount of these items is nominal.

Entities cited various reasons for purchasing drugs through non-prime vendor sources. The two most common reasons they used other sources were that the drug was not in stock when the order was placed or the prime vendor did not offer the drug. State entities also stated that they purchased drugs through other sources for reasons such as the prime vendor would not allow one of its facilities to purchase drugs due to the lack of pharmacy and Drug Enforcement Administration licenses, or it could obtain much lower prices using the Federal Supply Schedule program. General Services stated that it did not have insight into the amounts and kinds of drugs that entities were purchasing through other sources and therefore has not analyzed these purchases.

Under the General Services' contract, the prime vendor must stock those drugs under contract. If the prime vendor causes a distribution facility to be out of stock, the facility must determine the availability from other distribution facilities with available stock and deliver the product within 24 hours of the order at no

additional cost. The contract also states that if the manufacturer cannot supply the product, ordering pharmacies may ask the prime vendor to locate available stock and ship the product within 24 or 48 hours at the contract price plus a shipping fee. Without knowing the amounts and reasons entities purchase drugs through other sources, General Services is unable to ensure that the prime vendor is complying with the contract terms.

Without knowing the amounts and reasons entities purchase drugs through other sources, General Services is unable to ensure that the prime vendor is complying with the contract terms.

Most entities that were required to purchase drugs through General Services' bulk purchasing program noted that they also can purchase drugs that are not available through this program from other sources by using the delegated authority General Services grants them. State law requires General Services to establish a program for delegating the authority to acquire goods to state departments that meet specific requirements, including establishing written policies and procedures for ensuring competitive purchasing, establishing written policies and procedures for training personnel in purchasing, and designating an agency officer as responsible and accountable for the agency's purchasing program. General Services has granted most state departments a delegated authority to purchase $25,000 in goods per transaction and says that because drugs are considered goods, they can be purchased through the delegated authority if they are not available through General Services' bulk purchasing program.

Because Corrections, the Youth Authority, Developmental Services, and Mental Health are able, under this delegated authority, to purchase prescription drugs that are not available through the bulk purchasing program, General Services does not have information concerning the volume, type, and cost of prescription drugs that these agencies purchase outside the bulk purchasing program. For example, although Developmental Services did not provide detailed supporting documentation for the more than $6 million of its drug purchases from non-prime vendor sources, our review of the documents that it did provide shows that some drugs were purchased by its centers using agreements that they enter into with manufacturers in the event drugs are not available through General Services' contracts. Additionally, the developmental centers also appear to purchase drugs through General Services' Leveraged Procurement Agreements program, which is designed to streamline state purchases by removing repetitive, resource intensive, costly and time consuming bid processes by departments. However, Developmental Services' data is not sufficient to determine how much of its more than $6 million drug purchases were made using these or other methods.

Given that the legislative intent of this program was to achieve cost savings by having General Services act as a centralized purchasing agent, it would be beneficial if General Services were to ask those departments that otherwise must participate in the bulk purchasing program to notify it of the volume, type, and price of prescription drugs they purchase outside of the bulk purchasing program. By having this information, General Services would be able to make more informed decisions concerning the operation of the bulk purchasing program and would be able to expand the program to include those prescription drugs that best serve the needs of these departments. The provisions of the bulk purchasing program that authorize General Services, in consultation with those departments that must participate in the program, to "investigate and implement other options and strategies to achieve the greatest savings on prescription drugs with prescription drug manufacturers and wholesalers" could reasonably be interpreted to allow General Services to request this information from those departments.

General Services Has Only Partly Implemented Prior Audit Recommendations Aimed at Reducing Drug Costs

In a January 2002 report, *State of California: Its Containment of Drug Costs and Management of Medications for Adult Inmates Continue to Require Significant Improvements*, the bureau concluded that General Services could do more to reduce prescription drug costs. General Services has not fully implemented any of the bureau's three recommendations. First, opportunities still exist for it to place more drugs on contract with drug manufacturers. Second, it is unable to demonstrate that it has completed an analysis to broaden the coverage of drugs it can provide by joining other alliances or directly contracting with a group purchasing organization. Third, it has not fully considered how to identify and mitigate barriers to enforcing a statewide formulary to create competition among drug manufacturers. If General Services had implemented the last two audit recommendations that would increase the number of drugs on contract, it might have been able to reduce the amount spent on prescription drugs purchased at the prime vendor's price even further.

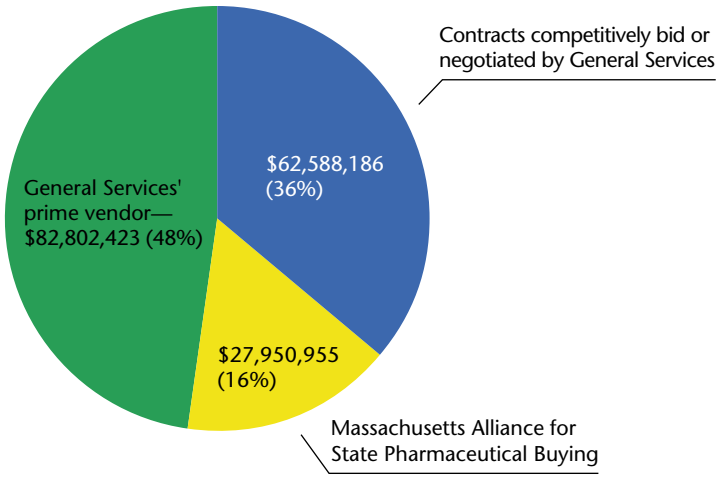
Although General Services Has Made Progress, it Still Needs to Negotiate More Contracts With Drug Manufacturers

In our January 2002 report, the bureau recommended that General Services increase its efforts to solicit bids from drug manufacturers to obtain more drug prices on contract. At that time, General Services had about 850 drugs on contract, but during most of fiscal

year 2003–04 had only 665 drugs on contract. General Services states that because of limited resources, it is focusing on negotiating contracts with manufacturers of high-cost drugs. It also points out that it has access to more than 3,000 drugs under its contract with the alliance, yet as shown in Figure 3, 48 percent of state agencies' drug purchases, or almost $83 million, were at the prime vendor's prices rather than General Services' contract prices.

FIGURE 3

State Agencies' Drug Purchases Using General Services' Contracts, Alliance, or Prime Vendor's Prices for Fiscal Year 2003–04



Source: General Services' prime vendor invoice data at the drug ingredient cost level for fiscal year 2003–04.

This is an improvement from our prior audit findings, which indicated that over five fiscal years, on average, 60 percent of drug purchases were at the prime vendor's wholesale acquisition cost. However, opportunities still exist for General Services to increase the amount of purchases made under contract with drug companies.

General Services Was Not Able to Demonstrate That It Fully Analyzed How to Improve Its Procurement Process

General Services was unable to provide documentation demonstrating that it addressed another recommendation: that it fully analyze measures to improve its procurement process, such as joining the Minnesota Multistate Contracting Alliance for Pharmacy (MMCAP) or contracting directly with a group-purchasing organization. General Services does contract with the alliance, but that contract covers only 16 percent of the drug purchases state

departments made. With state departments purchasing almost half their prescription drugs at the prime vendor's price, General Services stands to reap benefits for the State by figuring out additional ways to procure prescription drugs.

With many drugs left uncovered by either a contract or the alliance, we also recommended the analysis include from each organization being considered the availability of drugs General Services lacked contracts for and the possible savings from spending less administrative time trying to secure additional contracts directly with drug manufacturers. A July 2000 state law had suggested that Corrections, in cooperation with General Services, should consider membership in MMCAP or other cooperative purchasing arrangements with other governmental entities. However, it was not until January 2001 that state law reaffirmed General Services' legal authority to consolidate the needs of multiple state agencies for goods such as drugs and gave it new authority to maximize its buying power by establishing contracts, master agreements, and cooperative agreements, including agreements with entities outside the State.

Our 2002 report pointed out that General Services did not perform a thorough analysis of its options before contracting with the alliance.

Our 2002 report pointed out that General Services did not perform a thorough analysis of its options before contracting with the alliance. Rather, its analysis of the alliance's group-purchasing organization's prices did not focus on the primary purpose for using a group-purchasing organization: to obtain better prices for its drugs not on contract. In its January 2003 follow-up response to our audit, General Services stated it was performing a detailed effectiveness review of its pilot project with the alliance, which entailed an analysis of MMCAP's procurement information and a market survey to provide insight on the advantages the State could derive from relationships with different group purchasing organizations. However, General Services could not provide us with the results of its effectiveness review of the pilot project because a former pharmaceutical consultant performed the review and the data and survey historical information were not available.

Instead, General Services provided us with an informal analysis that calculated savings by computing the difference between the contract price and the prime vendor's wholesale acquisition cost for drugs purchased between December 2004 and February 2005. Based on its analysis, General Services concluded that projected savings from its contracts with manufacturers and the alliance over the course of 12 months would total almost $25 million. Our review of General Services' analysis found its projection includes almost $1.2 million in savings attributable to non-prescription drug purchases.

General Services recognizes that it can do more to ensure that its strategies result in the lowest possible cost to the State. It views its contract with the alliance as a supplemental alternative to its other contracting efforts, to be used if it cannot secure more favorable prices through its direct manufacturer negotiations or the prime vendor. In September 2004, General Services hired a contractor to analyze state spending and identify opportunities to generate savings. General Services' resources are directed toward working with the contractor to award a new prime vendor contract, to award a pharmacy benefits manager contract to provide pharmaceuticals to those parolees who continue to receive mental health treatment as a condition of their parole, and to negotiate new and renegotiate existing contracts with certain manufacturers. General Services stated that, as resources become available, it intends to solicit bids to contract directly with a group-purchasing organization to determine if additional savings can be realized beyond the savings generated by the alliance.

General Services Has Not Fully Considered How to Identify and Mitigate Obstacles to Enforcing Its Statewide Formulary

In its prior audit, the bureau also recommended that General Services fully consider and try to mitigate all obstacles that could prevent the successful development of a statewide formulary, such as departments not strictly enforcing such a formulary at their institutions. However, although it has developed a statewide formulary, General Services has not identified the obstacles to enforcing it. General Services has not required departments to adopt a policy requiring strict adherence to the statewide formulary and does not monitor departments' adherence to the formulary. General Services does not believe its role is to enforce the formulary, but the goals of a statewide formulary in reducing drug costs cannot be realized without such enforcement.

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A drug formulary is a list of drugs and other information representing the clinical judgment of physicians, pharmacists, and other experts in the diagnosis and treatment of specific conditions. A main purpose of a formulary is to create competition among manufacturers of similar drugs when the clinical uses are roughly equal. However, the success of a statewide formulary and the State's ability to create enough competition to negotiate lower drug prices for certain products depends on how well state departments adhere to the formulary when they prescribe drugs.

During our prior audit, General Services was in the early stages of developing a statewide formulary. In October 2001, the Common Drug Formulary Committee (Formulary Committee) composed of medical and pharmacy representatives from Corrections, Developmental Services, Mental Health, and Youth Authority, as well as the state university system, held its first meeting to discuss the development of a statewide formulary. The Formulary Committee agreed to work with the existing Pharmacy and Therapeutic committees, which are responsible for developing, managing, updating, and administering their drug formulary systems at the individual departments. According to General Services, the Formulary Committee began meeting regularly in October 2001, with General Services serving as the facilitator. General Services states that the role of committee members is to decide what drugs will be included in the formulary, provide data from their respective departments to support General Services' contracting process, and serve as a conduit between General Services and their departments' pharmacy staffs.

To help establish inter-department requirements, General Services created the Pharmacy Advisory Board (Board), which held its first meeting in September 2002. Appointed by department directors, the Board is composed of representatives of state departments that maintain pharmacy programs. According to General Services, one of the Board's roles is to facilitate the implementation and administration of guidelines, procedures, policies, and contracts developed in agreement between the Board and General Services. The Formulary Committee is now a subcommittee of the Board. Issues of significance relative to a specific department are elevated to the department representative on the Board. Furthermore, General Services believes that any obstacles to preventing the success of the statewide formulary have been addressed through its collaborative and cooperative process with members of the Formulary Committee and Board.

Despite these efforts, a complete statewide formulary did not exist until January 2005. General Services cited a variety of reasons for why it took so long to complete the formulary. For example, it stated that there were various challenges inherent in bringing five different departments together with competing goals and populations to serve, such as some departments wanting the formulary to only cover a few therapeutic classes and each department to retain their own individual formularies, while other departments wanted the formulary to be the main formulary for all state departments and only items unique to each department to be excluded. According to General Services,

because of these kinds of debates, it often takes months for the members of the Formulary Committee to come to agreement. In addition, General Services stated that the selection of drugs from a therapeutic category is a long and difficult process, requiring data collection from each department, analysis of the data by the Formulary Committee and each department, and then the Formulary Committee's discussion and selection of drugs to include. For example, General Services stated it took approximately six months to develop a protocol for selection of the first therapeutic class and get approval from the Formulary Committee, evaluate the efficiency of the drugs, and negotiate contracts for this first therapeutic class of drugs, atypical antipsychotics, to be included in the formulary.

Neither General Services nor the Board, nor the Formulary Committee has adopted policies and procedures to require adherence to the statewide formulary.

In addition, neither General Services, nor the Board, nor the Formulary Committee has adopted policies and procedures to require adherence to the statewide formulary. According to General Services, it does not view its role as requiring state agencies to adhere to the formulary by acting as an enforcement entity. Instead, General Services views its role as being limited to securing drugs through contract negotiations and competitive procurements and facilitating the development and maintenance of the statewide formulary. Although General Services sends each pharmacy a copy of drug contracts and indicates that purchasing contracted items is mandatory, it states that departments are responsible for managing their own day-to-day operations, including adherence to the formulary. Yet, despite agreement in the Formulary Committee's May 2004 meeting that departments are to formalize a plan to maintain compliance with their formulary commitment, as of May 2005, only one department, Development Services, had submitted a preliminary plan for implementing the formulary and only one department, Mental Health, had developed official guidelines, policies, or procedures for formulary adherence. Corrections stated that it is in the process of developing a plan, but is awaiting the final determination of some critical issues. The Youth Authority stated that it is in the process of developing policies and expects to have them in place by September 2005.

Further, although one of the Formulary Committee's primary goals is to develop guidelines, procedures, and policies for the administration of the drug formulary, according to General Services, neither the Formulary Committee nor the Board has established any policies and procedures. General Services stated that it has been focusing on formulary development and providing data to support contracting activities. General Services also stated that policies and procedures will be addressed at a

future point when resources can be directed to administrative duties. Without guidelines, policies, and procedures to require the departments' adherence to the statewide formulary, it is unclear whether the State can create enough competition to negotiate lower drug prices for certain products or how well state departments adhere to the formulary when they prescribe drugs.

HEALTH SERVICES NEEDS TO IMPROVE THE ACCURACY OF ITS PHARMACY REIMBURSEMENT CLAIM DATA

Our review found that Health Services sometimes uses incorrect information when paying pharmacies. In several instances Health Services' payments to pharmacies were based on outdated or incorrect information. Although Health Services began corrective action after we brought the issues to its attention, its analyses to quantify the full extent and dollar impact of these errors was not complete as of April 2005.

Health Services-processed pharmacy claims in fiscal year 2003–04 contained outdated drug prices. Health Services receives updates from a pricing clearinghouse and changes its prices monthly. One factor that Health Services uses to determine the appropriate drug price for a claim is the date of service. Specifically, Health Services uses this date to query its pricing file and identify the price in effect during the date of service on the claim. However, Health Services holds the price updates it receives from its primary reference source until the subsequent month because its budgetary authority only allows for monthly updates. Additionally, Health Services did not update its prices to reflect the elimination of the direct pricing method, which was the price listed by Health Services' primary or secondary reference source or the principal labeler's catalog for 11 specified pharmaceutical companies. Despite state law eliminating this method as of December 1, 2002, Health Services continued to use it during fiscal year 2003–04 to reimburse pharmacies. Health Services stated that the system change error related to the direct pricing method occurred prior to the July 2003 implementation of its fiscal intermediary's Integrated Testing Unit, which is responsible for performing comprehensive tests of system changes to prevent program errors.

Health Services did not update its fiscal year 2003–04 prices to reflect the elimination of the direct pricing method, despite state law eliminating this method as of December 1, 2002.

Health Services also incorrectly calculated drug prices. Specifically, during fiscal year 2003–04, state law required Health Services to reimburse pharmacies for each drug's ingredient cost at the lowest of three predetermined rates or, if lower, the usual and customary rate the pharmacies charge the general public. One of the three predetermined rates was the AWP minus 10 percent. Our

recalculation of the 173,440 drug prices in Health Services' pricing files identified almost 16,000 with discounts off the AWP that were not 10 percent. Additionally, we found that for roughly 2,100 of these drug prices the prices were even higher than the AWP. When we brought this issue to Health Services' attention, it was unaware of the error and could not explain why it occurred. However, Health Services believes that the Integrated Testing Unit will be able to detect these type of errors in the future.

Health Services had not determined the full extent of these problems as of April 2005. Specifically, Health Services communicated the problems to its fiscal intermediary to correct those claims affected by these errors, but the corrections had not been made as of April 2005. Therefore, Health Services is unable to fully quantify the extent and dollar impact of these errors. Health Services' fiscal intermediary estimated that less than 40,000 claims are affected by these errors, of which only 2 percent could have resulted in inaccurate payments. Our analyses of Health Services' fiscal year 2003–04 prescription drug claims included more than 47 million claims, so we would not expect these erroneous claims to have a significant overall impact on our analyses.

CANADA GENERALLY OBTAINS LOWER PRICES ON PRESCRIPTION DRUGS IN OUR SAMPLE THAN THE UNITED STATES AND CALIFORNIA

As discussed in the Introduction, the Canadian government, the United States government, and California state departments use various methods for procuring prescription drugs. To compare our state departments' prescription drug costs with those of the United States government and Canadian government, we identified a list of comparable drugs from our analysis of our state departments and requested the net drug ingredient cost of these drugs from select United States and Canadian entities. Our comparison of 57 prescription drugs shown in Table 2 on the following page indicates that Canadian government entities obtained the lowest prices for 33 drugs, or 57.9 percent, while the United States government and California state departments obtained the lowest prices 31.6 percent and 10.5 percent, respectively.[13] For the 33 drugs in which a Canadian entity obtained the lowest price, the prices ranged from 4.5 percent to 255 percent lower than the lowest United States and California government prices.

For the 33 drugs in which a Canadian entity obtained the lowest price, the prices ranged from 4.5 percent to 255 percent lower than the lowest United States and California government prices.

[13] The FDA identifies each drug as a unique drug with its own National Drug Code (NDC) that is specific to manufacturer and product and includes the drug's specific strength, dosage form, formulation, and trade package size. Although we requested that the United States and Canadian government entities provide cost for 100 drugs for net drug ingredient cost, we were unable to compare some drugs due to incomplete or inconsistent information.

TABLE 2

Which Government—California, the United States, or Canada—Obtained the Lowest Price for 57 Prescription Drugs

	Label Name and Dosage	State of California	United States Government	Canadian Government	Entity or Method Receiving the Lowest Price
1	ZYPREXA 2.5 MG TABLET			X	Province of Quebec
2	ZYPREXA 5 MG TABLET			X	Province of Quebec
3	ZYPREXA 10 MG TABLET			X	Province of Quebec
4	PRAVACHOL 20 MG TABLET		X		Restricted Federal Supply Schedule†
5	VIOXX 25 MG TABLET			X	Province of British Columbia
6	SINGULAIR 10 MG TABLET		X		Federal Supply Schedule; Restricted Federal Supply Schedule†
7	EFFEXOR XR 75 MG CAPSULE SA			X	Province of Quebec
8	EFFEXOR XR 150 MG CAPSULE SA			X	Province of Quebec
9	PROTONIX 40 MG TABLET EC	X			Department of Health Services*
10	CELEBREX 200 MG CAPSULE			X	Province of Quebec
11	CELEBREX 200 MG CAPSULE			X	Province of Quebec
12	CIPRO 500 MG TABLET			X	Province of Manitoba
13	AVANDIA 4 MG TABLET		X		Federal Ceiling Price; Restricted Federal Supply Schedule†
14	PAXIL 10 MG TABLET			X	Province of Manitoba
15	PAXIL 20 MG TABLET			X	Province of Manitoba
16	TOPAMAX 25 MG TABLET	X			Department of Health Services*
17	TOPAMAX 100 MG TABLET	X			Department of Health Services*
18	LEVAQUIN 500 MG TABLET	X			Department of Health Services*
19	ZOLOFT 50 MG TABLET			X	Province of British Columbia
20	ZOLOFT 100 MG TABLET			X	Province of British Columbia
21	SUSTIVA 600 MG TABLET		X		Federal Supply Schedule
22	NORVASC 5 MG TABLET		X		Federal Supply Schedule
23	NORVASC 10 MG TABLET		X		Federal Supply Schedule
24	LIPITOR 10 MG TABLET		X		Unable to determine‡
25	LIPITOR 20 MG TABLET			X	Province of Quebec
26	LIPITOR 40 MG TABLET			X	Province of Quebec
27	NEURONTIN 600 MG TABLET		X		Federal Supply Schedule
28	NEURONTIN 800 MG TABLET		X		Federal Supply Schedule
29	NEURONTIN 600 MG TABLET			X	Province of British Columbia
30	NEURONTIN 100 MG CAPSULE			X	Province of Manitoba
31	NEURONTIN 300 MG CAPSULE			X	Provinces of Ontario and Manitoba
32	NEURONTIN 400 MG CAPSULE			X	Province of Manitoba
33	LAMISIL 250 MG TABLET			X	Province of British Columbia
34	TRILEPTAL 300 MG TABLET		X		Federal Ceiling Price
35	WELLBUTRIN SR 150 MG TAB SA	X			Department of Health Services*
36	EPIVIR 150 MG TABLET		X		Federal Ceiling Price
37	COMBIVIR TABLET		X		Federal Ceiling Price
38	LAMICTAL 100 MG TABLET			X	Province of Manitoba
39	ZIAGEN 300 MG TABLET		X		Federal Ceiling Price
40	TRIZIVIR TABLET		X		Unable to determine‡

	Label Name and Dosage	State of California	United States Government	Canadian Government	Entity or Method Receiving the Lowest Price
41	PREVACID 30 MG CAPSULE DR		X		Blanket Purchase Agreement§
42	SEROQUEL 100 MG TABLET			X	Province of British Columbia
43	SEROQUEL 200 MG TABLET			X	Province of British Columbia
44	SEROQUEL 300 MG TABLET			X	Province of Quebec
45	SEROQUEL 25 MG TABLET			X	Province of Quebec
46	CELEXA 20 MG TABLET			X	Province of Manitoba
47	CELEXA 40 MG TABLET			X	Province of Manitoba
48	VIRAMUNE 200 MG TABLET		X		Unable to determine‡
49	FLOMAX 0.4 MG CAPSULE SA			X	Province of British Columbia
50	RISPERDAL 1 MG TABLET			X	Province of Ontario
51	RISPERDAL 0.5 MG TABLET			X	Province of Ontario
52	RISPERDAL 2 MG TABLET			X	Province of Ontario
53	RISPERDAL 3 MG TABLET			X	Province of Ontario
54	KEPPRA 500 MG TABLET	X			Department of Health Services*
55	RENAGEL 800 MG TABLET		X		Federal Supply Schedule
56	VIREAD 300 MG TABLET		X		Federal Supply Schedule
57	PLAVIX 75 MG TABLET			X	Province of Quebec
	Total number of times receiving the lowest price	**6**	**18**	**33**	
	Percentage of the time receiving the lowest price	**10.5%**	**31.6%**	**57.9%**	

Sources: State of California—weighted-average prices calculated by the Bureau of State Audits (bureau) for the period of July 2003 through June 2004.

United States Government—pricing data for the period of July 2003 through June 2004 provided by the entities. The bureau did not audit the entities' pricing data.

Canadian Government—pricing data for the period of July 2003 through June 2004 provided by the entities, including their wholesalers' markup. The bureau did not audit the entities' pricing data.

* California's Department of Health Services was able to obtain the lowest prices for six drugs because of its rebates. For one drug, its weighted-average price was 283 percent lower than the lowest United States government price and 200 percent lower than the lowest Canadian government price.

† Restricted federal supply prices are only available to certain entities and are typically lower than the Federal Supply Schedule program prices.

‡ One federal entity stated that its pricing data reflected the lowest price available through four pricing schemes. We were unable to determine the pricing scheme that resulted in the lowest price for the specific drugs in our sample.

§ Federal regulations allow entities to establish contracts to fill recurring needs for supplies and services.

Canada's lower prices result partly from efforts of its Patented Medicine Prices Review Board (Review Board). As discussed in the Introduction, Canada's Patent Act and the Review Board's regulations limit the prices of drugs patented in Canada. For example, the Review Board limits prices in Canada to the median of the prices for the same drugs charged in seven countries, including the United States and Sweden. However, the Review Board has no authority to regulate the prices of

non-patented drugs, including generic drugs. Although our sample does not include generic drugs, according to a United States Food and Drug Administration white paper issued in November 2003, Canada's prices for these drugs are typically higher than the United State's prices.

Canadian government entities use various strategies to lower their prescription drug costs. For instance, the Province of Quebec (Quebec) maintains a List of Medications (list) drawn up by its Minister of Health and Social Services. It includes all drugs whose cost is covered by Quebec's basic prescription drug insurance plan. Quebec establishes prices on the list according to a guaranteed selling price whereby the manufacturer submits a guaranteed price, per package size, for each drug. The guaranteed selling price is the price for sales to pharmacists and serves, where applicable, in establishing the lowest price. The guaranteed selling price must not be higher than any selling price the manufacturer grants for the same drug under other provincial drug insurance programs and must remain in effect during the period for which the list is valid. Quebec pays the pharmacies the price shown on the list at the time they fill the prescription. If the manufacturer's name does not appear on the list, the price Quebec pays is the pharmacist's cost. For generic drugs that have been on its list 15 years or more, Quebec reimburses pharmacies at the lowest guaranteed selling price submitted by manufacturers. The Minister of Health and Social Services may also establish a maximum allowable cost for each drug. Quebec's procurement strategies appear to be effective because as previously shown in Table 2, in 12 instances it was able to obtain the lowest price among all other entities.

The provinces of Ontario, British Columbia, and Manitoba have policies and programs in place that limit their cost of some prescription drugs to the cost of similar lower priced drugs.

Due to Quebec's policy that a manufacturer's guaranteed selling price may not be higher than the selling price under other provincial drug insurance programs, we would expect its price to be the lowest among the provincial entities in our comparison. However, this did not always occur due to procurement strategies used by the other provinces, such as the reimbursement of lower-priced alternative drugs. Specifically, the provinces of Ontario, British Columbia, and Manitoba have policies and programs in place that limit their cost of some prescription drugs to the cost of similar lower priced drugs. For instance, the Province of British Columbia's (British Columbia) Low Cost Alternative Program limits the cost of prescription drugs to the price of the lowest priced drug among those drugs that have identical active ingredients. Its Reference Drug Program applies to drugs that are not identical but are part of

the same therapeutic category and are used to treat the same conditions. Under this program, the drug insurance program obtains independent, expert advice on which prescription drugs within a group of similar medications are equally safe and beneficial, and the most cost-effective. The cost for the preferred drug will then be the price of the "reference drug" for the level of coverage that the insurance program will establish for any medication in that class, used to treat that condition. Finally, British Columbia has a maximum pricing policy whereby payments to pharmacies are based on the actual acquisition cost up to a maximum price of 7 percent above the manufacturer's price for wholesale drugs. All pharmacies are subject to audits by British Columbia's Ministry of Health Services, including audits of the actual acquisition cost of drugs. Those three strategies resulted in British Columbia receiving the lowest price for eight of 57 prescription drugs, in which the prices ranged from 15 percent to 157 percent lower than the lowest United States and California government prices.

Federal Law Strictly Limits the Importation of Prescription Drugs

As mentioned in the Introduction, some states have addressed the importation of prescription drugs in recent legislation. However, because current federal law strictly limits the importation of prescription drugs through the federal Food, Drug, and Cosmetic Act (Drug Act), the federal Food and Drug Administration (FDA) contends that nearly all prescription drugs imported into the United States are illegal. Still, some states have considered or implemented importation programs. For example, in the 2004 session, the California Legislature passed a bill that would have allowed General Services to purchase prescription drugs from authorized Canadian pharmacies and sources. Although the governor later vetoed that bill, the FDA maintains that federal law would preempt any state law legalizing the importation of prescription drugs in contravention of the Drug Act.

Among other things, the Drug Act makes the FDA responsible for ensuring the safety and effectiveness of prescription medications. Containing a number of provisions relating to new drug approvals, labeling, and dispensing, the Drug Act strictly limits the ability of prescription drugs made for a foreign market to comply with existing statutory requirements. For instance, the Drug Act requires that all words, statements, and other information required on the label of the product appear in English. In a review of 68 drugs ordered from domestic

and foreign-based Internet pharmacies, the Government Accountability Office (GAO) found numerous instances in which imported drugs did not meet all the Drug Act's approval, labeling, and dispensing requirements. The GAO found that not all drugs were approved for the U.S. market, labeling did not always provide warning information or instructions for use, and some drugs did not contain a chemical composition comparable to the product the GAO ordered. Also, in three instances the GAO received drugs requiring temperature-controlled environments in envelopes without insulation.

The Drug Act explicitly prohibits anyone other than the original U.S. manufacturer from reimporting prescription drugs back into the United States.

The Drug Act also addresses prescription drug importation, explicitly prohibiting anyone other than the original U.S. manufacturer from reimporting prescription drugs. Thus, even when the drug originally is manufactured in the United States, is sent abroad, and meets the Drug Act's requirements, only the original manufacturer may import the drug back into the United States. Under the Drug Act, violators of this provision may be subject to fines or imprisonment or both.

According to the FDA, Congress enacted the Drug Act's provisions to create a relatively "closed" drug system, which helps ensure a safe and effective drug supply in the United States. In a letter to California's Office of the Attorney General in August 2003, the FDA stated that it is extremely unlikely that any program in California could meet all the Drug Act's legal requirements for importing prescription drugs. The FDA also stated that the Drug Act preempts the state of California (and any city or county within the State) from passing legislation legalizing the importation of certain drugs from Canada that do not meet the Drug Act's requirements. The FDA further advised that California entities importing drugs in violation of the Drug Act's requirements would be subject to liability under the statute, regardless of whether the State sanctioned the importation.

In the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Congress authorized the FDA to allow individuals to import prescription drugs from Canada for personal use under certain circumstances, provided the Secretary of Health and Human Services (Secretary) certifies that importation is safe and cost effective. Although the Secretary has not yet made this certification, the FDA has an existing enforcement policy that allows for individuals to import limited amounts of prescription drugs for personal use. The policy applies to products that do not present an unreasonable health risk and that are intended to treat a serious condition for

which effective treatment may not be available domestically. However, the FDA states that this policy is not a license for individuals to import violative items, such as unapproved (and therefore illegal) drugs. The policy only describes the agency's enforcement priorities and is not intended to change the existing law.

Current Federal Law Also Prevents California State Agencies from Accessing Certain Federal Pricing Arrangements

Federal law generally restricts access to the Federal Supply Schedule program of the General Services Administration to numerous federal entities, the District of Columbia, U.S. territories, international organizations, and qualified nonprofit agencies.

As shown in Table 2 on pages 50 and 51, the results of our analysis found that the federal entities in our review achieved more instances of the lowest price than California state departments. However, similar to the way federal law limits California's ability to import Canadian prescription drugs, federal law also limits its access to certain federal pricing arrangements. For instance, federal law generally restricts access to the Federal Supply Schedule program (supply schedule) of the General Services Administration to numerous federal entities, the District of Columbia, U.S. territories, international organizations, and qualified nonprofit agencies.[14] Additionally, the Veterans Healthcare Act of 1992 (Veterans Act) establishes maximum prices for drugs procured by the federal Department of Veterans Affairs, Department of Defense, the Public Health Services, and the Coast Guard, the "Big 4". The Veterans Act also establishes the 340B program for covered entities such as federally qualified health centers, state-operated AIDS drug purchasing assistance programs, and certain hospitals.

Although current federal law generally does not allow states and local governments to purchase prescription drugs from the supply schedule, the issue of making the supply schedule available to states and local governments has been considered for at least a decade. In 1994 the 103rd Congress enacted the Federal Acquisition Streamlining Act of 1994 (Acquisition Act) that authorized the administrator of the General Services Administration (administrator) to provide for use of the supply schedule by state, local, and Indian tribal governments and the Commonwealth of Puerto Rico to purchase pharmaceuticals and other goods and services from the supply schedules. The General Services Administration proposed a plan for implementing this law in the Federal Register on April 7, 1995. However, the

[14] Section 211 of the E-Government Act of 2002 amends federal law to authorize the administrator of the General Services Administration to provide states or local governments limited access to certain federal supply schedules. Specifically, states and local governments can only procure from the information technology federal supply schedules contracts and Consolidated Products and Services Schedule contracts containing information technology special item numbers.

administrator made a determination that it would not be in the best interest of the federal government to make the schedule for drugs and pharmaceutical products, as well as one of the schedules for medical equipment and supplies, available to non-federal users. The administrator indicated that certain unique statutory requirements established in the Veterans Act, when combined with the cooperative purchasing provisions in the Acquisition Act, would have the unintended effect of increasing costs to the federal users of the schedules.

The GAO stated that the effects of opening the supply schedule for pharmaceuticals on schedule prices would ultimately depend on the outcome of negotiations between the federal government and drug manufacturers.

The 104th Congress enacted a law to delay expanding access to the supply schedules and to direct the Comptroller General to submit a report to the administrator and Congress assessing the effects that the legislation may have on the industry, such as small businesses, and the entities using the supply schedules. In the GAO's June 1997 report in response to this request, the GAO stated that the effects of opening the supply schedule for pharmaceuticals on schedule prices would ultimately depend on the outcome of negotiations between the federal Department of Veterans Affairs and drug manufacturers. Further, the GAO stated that because of the uncertainties related to these negotiations, it is not possible to predict how the supply schedule drug prices would change or what the ultimate impact on federal, state, and local purchasers would be. However, the GAO stated that if drug manufacturers succeeded in raising their schedule prices in response to the expanded access, the impact on different government purchasers would vary. For instance, although Big 4 entities would have some protection against price increases because the Veterans Act sets maximum prices for these entities for certain drugs on the supply schedule, other federal purchasers would not have that protection. Meanwhile, state and local purchasers would benefit to the extent that supply schedule prices were lower than the prices they or their representatives could negotiate with drug manufacturers. Ultimately, the 105th Congress repealed the section of the Acquisitions Act that made supply schedules available to state, local, and Indian tribal governments and the Commonwealth of Puerto Rico.

Although federal law limits access to certain pricing arrangements, California state entities still benefit from federal procurement methods. Specifically, under federal law, California's Medi-Cal fee-for-service system can receive rebates negotiated by the federal Centers for Medicare and Medicaid Services in negotiations with manufacturers. As of January 2005, Health Services received approximately $1.1 billion in federal rebates for fiscal year 2003–04.

Additionally, California's AIDS Drug Assistance Program is eligible to receive 340B pricing because it provides drugs to HIV-infected individuals age 18 or older who could not otherwise afford them.

RECOMMENDATIONS

The Legislature should consider enacting legislation that would allow CalPERS to obtain relevant documentation to ensure that it is receiving all rebates to which it is entitled to lower the prescription drug cost of the health benefits program established by the Public Employees' Medical and Hospital Care Act.

CalPERS should continue to explore various contract negotiation methods that would yield more rebates for the drugs it purchases and that would allow it to achieve greater disclosure requirements to verify that it is receiving all of the rebates to which it is entitled.

To ensure that state departments purchasing drugs through General Services' contracts are obtaining the lowest possible drug prices, General Services should:

- Seek more opportunities for departments to receive rebates by securing more rebate contracts with manufacturers.

- Continue its efforts to obtain more drug prices on contract by working with its contractor to negotiate new and renegotiate existing contracts with certain manufacturers.

- Follow through on its plan to solicit bids to contract directly with a group-purchasing organization to determine if additional savings can be realized. However, in doing so it should thoroughly analyze its ability to secure broader coverage of the drugs state departments purchase by joining MMCAP. The analysis should include the availability of current noncontract drugs from each organization being considered and the savings that could result from spending less administrative time trying to secure additional contracts directly with drug manufacturers.

- General Services should facilitate the Formulary Committee and Board's development of guidelines, policies, and procedures relating to the departments' adherence to the statewide formulary and ensure that departments formalize their plans for compliance.

In order to make more informed decisions concerning the operation of its prescription drugs bulk-purchasing program and to be able to expand the program to include those prescription drugs that best serve the needs of state departments, General Services should ask those departments that are otherwise required to participate in the bulk purchasing program to notify General Services of the volume, type, and price of prescription drugs they purchase outside of the bulk purchasing program.

To improve its procurement of prescription drugs, Health Services should continue to work toward fully implementing the recommendations listed in Appendix B.

To ensure that it reimburses pharmacies the appropriate amounts for prescription drug claims, Health Services should:

- Analyze the cost-effectiveness of increasing the frequency of its pricing updates. If this analysis shows that it would be cost effective to conduct more frequent updates, Health Services should seek budgetary authority to do so.

- Identify prescription drug claims paid using the direct pricing method, determine the appropriate price for these claims, and make the necessary corrections.

- Ensure that the fiscal intermediary's Integrated Testing Unit removes future outdated pricing methods promptly.

- Make the necessary corrections to the claim data to adjust for the incorrect data in the estimated acquisition cost and AWP percent field.

- Ensure that its fiscal intermediary's Integrated Testing Unit verifies that, in the future, drug prices in the pricing file are calculated correctly before authorizing their use for processing claims.

We conducted this review under the authority vested in the California State Auditor by Section 8543 et seq. of the California Government Code and according to generally accepted government auditing standards. We limited our review to those areas specified in the audit scope section of this report.

Respectfully submitted,

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APPENDIX A

Methodology Used by the Bureau of State Audits to Calculate Prescription Drug Costs

To determine and compare the prices paid for prescription drugs by the Department of Health Services (Health Services), the California Public Employees' Retirement System (CalPERS), and the Department of General Services (General Services), we obtained and analyzed their fiscal year 2003–04 pharmaceutical claim or invoice data. The claim or invoice data includes dispensing fees, co-payments, and third-party payments, if applicable. The departments or their contracting entities provided the claim data as well as information necessary for us to calculate or estimate discounts and rebates on a per claim basis. We interviewed the department's and contracting entities' staff and reviewed data processing system information to determine how to calculate each of the three costs we used in our analysis—drug ingredient cost (ingredient cost), net drug ingredient cost (net ingredient cost), and net cost to the State (state cost)—for their drug purchases. In the subsequent sections we describe specific steps taken to compute the three costs for each department.

We also performed general procedures for all the departments as follows:

- Assessed the reliability of data we received, using criteria from the Government Accountability Office's *Assessing the Reliability of Computer-Processed Data* or "Gray Book." Specifically, we interviewed IT and pharmacy staff, performed electronic testing on relevant data fields, and reviewed corroborating evidence such as control totals and source documents. We determined that the claim and rebate data were sufficiently reliable for the purposes of this audit.

- Assessed the reliability of the First DataBank Inc. data used in our analysis. First DataBank Inc., a health care database, provides Health Services' fiscal intermediary with identifying drug information, such as label name, dosage, therapeutic class, and brand versus generic classifications. We traced a sample of drugs listed in First DataBank Inc. data, and their corresponding descriptions, to the federal Food and Drug Administration's

(FDA) National Drug Code Directory. The FDA identifies each drug as a unique drug with its own National Drug Code (NDC) that is specific to manufacturer and product and includes the drug's specific strength, dosage form, formulation, and trade package size. The First DataBank Inc. data was used to determine comparable prices among departments, when necessary. Specifically, we derived a per package price by calculating the price per unit, then multiplying the per unit price by the package size listed for the NDC in the First DataBank Inc. directory. For example, if an NDC is listed as a package size of 30 tablets and the claim is for 10 tablets, we calculated the per tablet price and multiplied it by 30 to compare per package prices for the common NDC among departments. We used this method to calculate and compare the weighted average prices per package for the common NDCs by each of the three costs. For each of these common NDC lists, we calculated the weighted average prices—weighted on the quantities of drugs purchased at each of the various prices—paid by each department for each of the three costs and compared the prices paid among the departments for each common NDC.

- We excluded certain claim data for drugs. For example, we compared the NDCs for each claim to the First DataBank Inc. directory of NDCs and included only those claims where the NDC matched the directory. We excluded claims associated with compounded prescriptions because they are a combination of two or more drugs and do not have unique NDC numbers, thus, making the comparison of these drugs infeasible. We also excluded those drugs the First DataBank Inc. directory defined as not requiring a prescription because prescription drugs are the focus of our audit.

We then identified the top 500 drugs for each department by NDC and ranked the list by total dollars paid for each of our calculated costs—ingredient cost, net ingredient cost, and state cost. Health Services expressed concerns with presenting its top 500 drugs using net ingredient costs because federal law prohibits it from disclosing data in a form that reveals the manufacturer or prices charged by the manufacturer. Therefore, Table A.1 beginning on page 66 presents Health Services' top 500 drugs based on ingredient costs. However, because Health Services' federal and state supplemental rebates can reduce its prescription drug costs substantially, Table A.1 also presents, on an aggregate basis, the total net ingredient costs for these top 500 drugs. Unlike Health Services, General Services' and CalPERS' entities did not express concerns with presenting their

top 500 drugs using net ingredient costs. Therefore, Tables A.2 and A.3 beginning on pages 77 and 88, respectively, present the top 500 drugs for CalPERS and General Services, based on net ingredient cost, which represents a more accurate depiction of the department's expenditures. We compared the top 500 lists for each department to identify the common NDCs that Health Services, CalPERS entities, and General Services spent the most on during fiscal year 2003–04. We performed this comparison separately for each of the three costs and present the results on pages 29 through 38.

Calculation of Prescription Drug Costs for Health Services

Health Services provided us with drug claim data that we used to identify those claims that were specific to its Medi-Cal fee-for-service system. The drug claims included the ingredient cost, dispensing fees, and payments from other parties. The claim data were for drugs dispensed and billed by pharmacies during our audit period. We also obtained summary level rebate data to determine per unit rebate amounts for each drug.

We obtained the ingredient cost directly from the claim data, which is based on Health Services' various reimbursement methods that we discuss in the Introduction. We then calculated the net ingredient cost by subtracting rebates from the ingredient cost. Health Services obtains two types of rebates that are applicable to the claims in our analysis—federal Medicaid and state supplemental rebates it negotiates. Using Health Services' data on rebates billed and received, we matched the unit rebate amounts billed for specific drugs in each quarter of our audit period to the claim data and calculated the total rebate amount for each claim.

We calculated the state cost by adding dispensing fees and subtracting rate reductions, patient liability amounts, and third-party insurance liability amounts. Specifically, we subtracted from the net ingredient cost Health Services' 50-cent-per-claim reduction, which decreases to 10 cents if the prescription is provided at a long-term care facility. In addition, we subtracted any applicable patient or other insurance liability amounts. Lastly, we added a dispensing fee of $4.05 to each claim. As we discuss on pages 36 to 38, Health Services does not deduct co-payments from its pharmacy reimbursement rate.

Calculation of Prescription Drug Costs for CalPERS

For CalPERS, we obtained either directly from certain entities it contracts with to provide pharmacy services to its members or from the State Controller's Office, claim data including the ingredient cost, dispensing fees, and co-payment amounts. We limited our analysis to state employee claims, unless the claims data did not allow us to distinguish between state employees, local government employees, or other CalPERS members.

To provide drugs to CalPERS members, these entities contract with retail pharmacies and reimburse them based on negotiated rates. These entities also make available to CalPERS' members the use of mail service pharmacies, which they reimburse using similar payment methods. The ingredient cost is the price found in the entities' contracts with the pharmacies, such as average wholesale price or wholesale acquisition cost plus or minus a specified percentage or a maximum allowable cost for generic drugs. Each entity provided us with the information necessary to calculate the amount of manufacturer rebates for each drug. We subtracted these calculated rebates from the ingredient cost to determine net ingredient cost. For state cost, we added dispensing fees to and subtracted co-payments from the net ingredient cost. Because these entities do not collect third-party payments for drug claims, this was not a factor in our calculation of state cost.

Calculation of Prescription Drug Costs for General Services

For General Services we used two data sets to calculate its ingredient costs. We obtained transaction level invoice data for drug purchases from the prime vendor and summary level invoice data from General Services. We removed transactions for non-drug items, over-the-counter drugs, and vendor fees. We used the vendor's invoice prices before applicable discounts to calculate ingredient cost.

To calculate net ingredient cost, we deducted applicable contract discounts and rebates from the ingredient cost for each transaction. General Services contracts with four manufacturers for discounts relating to certain drugs. We used these state pharmaceutical contracts to calculate the drug claim discount amounts. General Services also contracts for drug rebates with one pharmaceutical manufacturer. Although neither General Services nor the manufacturer provided us with transaction level data for these rebates, General Services provided summary level rebate data that we used to calculate rebates according to

terms of the contract. We subtracted these discounts and rebates from ingredient costs when calculating net ingredient cost. We did not, however, subtract a small cash discount that state agencies can receive from the prime vendor for timely payment because we were unable to identify the invoices that were affected by the discount. Further, although General Services also receives rebates through a group-purchasing organization, neither General Services nor the group-purchasing organization could provide us with sufficient information to enable us to apply these rebates to the transaction level data. Nevertheless, we determined that because the amount of rebates received by General Services through the group-purchasing organization was nominal, the absence of these rebates would not significantly impact the overall net ingredient cost calculations for General Services. For these reasons, we did not include rebates from the group-purchasing organization in the calculations of net ingredient cost.

General Services' net ingredient cost and state cost remained the same because unlike CalPERS and Health Services, the pricing information used for General Services in this analysis does not include any of the state agencies' costs associated with dispensing the prescription drugs nor any co-payments these agencies may collect.

TABLE A.1

Health Services' Top 500 Prescription Drugs by NDC Represented Nearly 80 Percent of Its Total Net Drug Ingredient Cost for the Period July 1, 2003, Through June 30, 2004

Rank	Label Name	Dosage	Drug Ingredient Cost
1	PREVACID	30MG CAPSULE	$98,547,971
2	ZYPREXA	10MG TABLET	98,355,909
3	CELEBREX	200MG CAPSULE	79,977,729
4	SEROQUEL	200MG TABLET	57,522,543
5	LIPITOR	20MG TABLET	51,117,350
6	LIPITOR	10MG TABLET	48,286,145
7	PROTONIX	40MG TABLET	45,929,946
8	PRILOSEC	20MG CAPSULE	41,300,077
9	ZYPREXA	5MG TABLET	41,209,998
10	NEXIUM	40MG CAPSULE	40,970,250
11	ZYPREXA	20MG TABLET	40,019,049
12	NEURONTIN	300MG CAPSULE	36,782,432
13	VIOXX	25MG TABLET	35,286,135
14	RISPERDAL	3MG TABLET	33,286,381
15	RISPERDAL	2MG TABLET	31,176,721
16	FOSAMAX	70MG TABLET	29,930,305
17	ZYPREXA	15MG TABLET	28,767,966
18	PRAVACHOL	40MG TABLET	27,623,473
19	OXYCONTIN	80MG TABLET	27,202,068
20	SEROQUEL	100MG TABLET	26,937,657
21	PLAVIX	75MG TABLET	24,425,748
22	VIREAD	300MG TABLET	23,890,252
23	NORVASC	10MG TABLET	23,787,069
24	RISPERDAL	4MG TABLET	23,712,696
25	AMBIEN	10MG TABLET	23,607,570
26	KALETRA	33.3-133.3 CAPSULE	23,104,004
27	RENAGEL	800MG TABLET	22,742,825
28	ACIPHEX	20MG TABLET	22,222,958
29	RISPERDAL	1MG TABLET	21,900,519
30	ZYPREXA	2.5MG TABLET	20,961,901
31	PAXIL	20MG TABLET	19,490,809
32	PROCRIT	40000 U/ML VIAL	19,464,365
33	SEROQUEL	300MG TABLET	19,332,546
34	DEPAKOTE	500MG TABLET	19,198,083
35	LEVAQUIN	500MG TABLET	18,839,026
36	COMBIVIR	150-300MG TABLET	18,610,565
37	ADVAIR	250-50MCG DISK	18,423,240
38	NORVASC	5MG TABLET	18,198,428
39	TRIZIVIR	150-300MG TABLET	18,097,962
40	BEXTRA	10MG TABLET	17,978,471
41	LIPITOR	40MG TABLET	17,717,610
42	SINGULAIR	10MG TABLET	17,711,574
43	ACTOS	45MG TABLET	17,492,040
44	ACTOS	30MG TABLET	17,145,361

Rank	Label Name	Dosage	Drug Ingredient Cost
45	EFFEXOR	75MG CAPSULE	16,619,585
46	PRAVACHOL	20MG TABLET	16,517,957
47	GLUCOPHAGE	500MG TABLET	16,145,684
48	ZYRTEC	10MG TABLET	15,619,621
49	SEROQUEL	25MG TABLET	15,279,077
50	ZOLOFT	50MG TABLET	15,223,355
51	CELEBREX	200MG CAPSULE	15,188,503
52	ENBREL	25MG KIT	15,181,136
53	PLAVIX	75MG TABLET	14,805,006
54	FLOMAX	0.4MG CAPSULE	14,581,703
55	ZOLOFT	100MG TABLET	14,328,619
56	WELLBUTRIN	150MG TABLET	14,129,104
57	TOPAMAX	100MG TABLET	13,815,075
58	ZOCOR	20MG TABLET	13,733,402
59	GLUCOPHAGE	1000MG TABLET	13,571,943
60	EPIVIR	150MG TABLET	13,111,834
61	AVANDIA	8MG TABLET	12,631,421
62	OXYCONTIN	40MG TABLET	12,482,113
63	CLOZARIL	100MG TABLET	12,461,016
64	ZYPREXA	7.5MG TABLET	12,133,687
65	PREVACID	15MG CAPSULE	12,129,160
66	AVANDIA	4MG TABLET	12,080,575
67	PATANOL	0.1% DROPS	11,736,238
68	EFFEXOR	150MG CAPSULE	11,638,653
69	RISPERDAL	0.5MG TABLET	11,615,038
70	DURAGESIC	100MCG/HR PATCH	11,539,046
71	GEODON	80MG CAPSULE	11,517,763
72	LAMISIL	250MG TABLET	11,464,057
73	NEURONTIN	600MG TABLET	11,399,240
74	DEPAKOTE	500MG TABLET	11,019,968
75	DEPAKOTE	500MG TABLET	11,017,645
76	NORVASC	5MG TABLET	11,005,547
77	NASONEX	50MCG SPRAY	10,958,971
78	CLOZAPINE	100MG TABLET	10,598,332
79	CLARINEX	5MG TABLET	10,342,788
80	LOTREL	5-20MG CAPSULE	10,315,358
81	ZOCOR	40MG TABLET	10,299,411
82	COMBIVENT	103-18MCG AEROSOL	10,110,134
83	ADVAIR	500-50MCG DISK	10,043,436
84	SUSTIVA	600MG TABLET	9,673,588
85	CIPRO	500MG TABLET	9,652,806
86	ZOCOR	20MG TABLET	9,603,166
87	VIRACEPT	250MG TABLET	9,524,640
88	XALATAN	0.005% DROPS	9,451,604
89	ABILIFY	15MG TABLET	9,402,172
90	CELEXA	20MG TABLET	9,382,600
91	ALLEGRA	180MG TABLET	9,373,101
92	NORVIR	100MG CAPSULE	9,349,195

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Rank	Label Name	Dosage	Drug Ingredient Cost
93	LEXAPRO	10MG TABLET	9,345,506
94	AMBIEN	5MG TABLET	9,297,298
95	ACTONEL	35MG TABLET	9,246,408
96	ZIAGEN	300MG TABLET	9,168,754
97	RISPERDAL	3MG TABLET	9,150,436
98	ALLEGRA	60MG TABLET	9,123,443
99	ZOCOR	20MG TABLET	8,979,221
100	EVISTA	60MG TABLET	8,900,024
101	VIRAMUNE	200MG TABLET	8,839,181
102	GLUCOVANCE	5-500MG TABLET	8,802,870
103	ADVAIR	100-50MCG DISK	8,708,446
104	ZYPREXA	10MG TABLET	8,619,936
105	CELEBREX	100MG CAPSULE	8,607,132
106	DEPAKOTE	250MG TABLET	8,594,345
107	PREVACID	30MG CAPSULE	8,590,211
108	SYNAGIS	100MG VIAL	8,552,831
109	DIOVAN	80MG TABLET	8,474,552
110	NEURONTIN	400MG CAPSULE	8,458,351
111	ARICEPT	10MG TABLET	8,388,265
112	SINGULAIR	10MG TABLET	8,366,811
113	DIOVAN	160MG TABLET	8,364,922
114	ARICEPT	5MG TABLET	8,350,550
115	PROCRIT	10000 U/ML VIAL	8,346,587
116	LAMICTAL	100MG TABLET	8,229,011
117	DIFLUCAN	200MG TABLET	8,210,313
118	RISPERDAL	2MG TABLET	8,209,568
119	TOPAMAX	25MG TABLET	8,031,786
120	ALBUTEROL	90MCG AEROSOL	7,895,793
121	ZOCOR	40MG TABLET	7,827,252
122	DIOVAN	160-12.5MG TABLET	7,589,529
123	REYATAZ	150MG CAPSULE	7,586,305
124	GLUCOPHAGE	850MG TABLET	7,492,973
125	FLONASE	50MCG AEROSOL	7,468,112
126	ZYPREXA	10MG TABLET	7,452,686
127	RISPERDAL	1MG TABLET	7,412,895
128	PROCRIT	20000 U/ML VIAL	7,342,763
129	AZMACORT	100MCG AEROSOL	7,331,640
130	SEROSTIM	6MG VIAL	7,298,253
131	ZITHROMAX	250MG TABLET	7,220,955
132	DETROL	4MG CAPSULE	7,207,729
133	ACTIQ	1600MCG LOLLIPOP	7,152,724
134	ALTACE	10MG CAPSULE	7,144,532
135	ACTOS	15MG TABLET	7,076,014
136	LOTENSIN	20MG TABLET	7,068,648
137	MEGESTROL	40MG/ML SUSPENSION	6,968,910
138	TRICOR	160MG TABLET	6,959,869
139	KEPPRA	500MG TABLET	6,898,913
140	LAMICTAL	25MG TABLET	6,833,419

Rank	Label Name	Dosage	Drug Ingredient Cost
141	GEODON	40MG CAPSULE	6,811,448
142	PAXIL	10MG TABLET	6,744,405
143	ATROVENT	18MCG AEROSOL	6,602,678
144	ZERIT	40MG CAPSULE	6,482,295
145	PAXIL	40MG TABLET	6,384,456
146	PAXIL	25MG TABLET	6,375,534
147	AVANDIA	8MG TABLET	6,337,769
148	REBETOL	200MG CAPSULE	6,336,615
149	COZAAR	50MG TABLET	6,318,221
150	ZOCOR	40MG TABLET	6,227,097
151	LOTREL	5-10MG CAPSULE	5,861,489
152	OXYCONTIN	20MG TABLET	5,677,866
153	COREG	6.25MG TABLET	5,526,833
154	LOTENSIN	10MG TABLET	5,474,472
155	MARINOL	5MG CAPSULE	5,401,728
156	RISPERDAL	1MG/ML SOLUTION	5,352,352
157	TRILEPTAL	300MG TABLET	5,346,423
158	EPOGEN	10000 U/ML VIAL	5,340,337
159	WELLBUTRIN	100MG TABLET	5,327,475
160	COPAXONE	20MG KIT	5,293,750
161	PAXIL	30MG TABLET	5,272,197
162	AMARYL	4MG TABLET	5,254,801
163	PROGRAF	1MG CAPSULE	5,250,292
164	CLOZAPINE	100MG TABLET	5,240,826
165	HUMIRA	40MG/0.8ML KIT	5,159,744
166	ZETIA	10MG TABLET	5,130,202
167	REMERON	15MG TABLET	5,113,812
168	HUMALOG	100 U/ML VIAL	5,086,783
169	MARINOL	10MG CAPSULE	5,075,264
170	MOBIC	7.5MG TABLET	5,033,575
171	GEODON	20MG CAPSULE	4,865,407
172	DURAGESIC	75MCG/HR PATCH	4,863,037
173	RISPERDAL	0.25MG TABLET	4,854,565
174	AVANDIA	4MG TABLET	4,847,663
175	REMERON	30MG TABLET	4,840,457
176	VALCYTE	450MG TABLET	4,749,281
177	NEURONTIN	800MG TABLET	4,739,295
178	NEURONTIN	100MG CAPSULE	4,737,813
179	GEODON	60MG CAPSULE	4,707,248
180	DURAGESIC	50MCG/HR PATCH	4,687,025
181	PEG-INTRON	120MCG/0.5 KIT	4,682,755
182	PEGASYS	180MCG/ML KIT	4,578,739
183	PLETAL	100MG TABLET	4,573,007
184	DITROPAN	10MG TABLET	4,551,443
185	DEPAKOTE	250MG TABLET	4,494,232
186	VIOXX	12.5MG TABLET	4,443,220
187	CASODEX	50MG TABLET	4,429,324
188	ORTHO	20-150/24H PATCH	4,405,869

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Rank	Label Name	Dosage	Drug Ingredient Cost
189	ALTACE	5MG CAPSULE	4,303,186
190	NEURONTIN	600MG TABLET	4,279,040
191	PRILOSEC	20MG CAPSULE	4,218,135
192	LOTENSIN	40MG TABLET	4,213,529
193	ACTOS	30MG TABLET	4,212,943
194	CATAPRES-TTS	0.3MG/24HR PATCH	4,207,454
195	ZYPREXA	20MG TABLET	4,134,595
196	COREG	3.125MG TABLET	4,117,102
197	ABILIFY	30MG TABLET	4,090,152
198	LANTUS	100 U/ML VIAL	4,085,054
199	PEG-INTRON	150MCG/0.5 KIT	4,054,726
200	SEREVENT	50MCG DISK	4,045,447
201	AVONEX	30MCG/.5ML KIT	4,008,913
202	NEUPOGEN	300MCG/ML VIAL	4,007,481
203	GLUCOPHAGE	500MG TABLET	3,987,000
204	RISPERDAL	0.5MG TABLET	3,935,908
205	FUZEON	90MG KIT	3,928,765
206	TRACLEER	125MG TABLET	3,901,917
207	CLARITIN	10MG TABLET	3,867,972
208	ISOSORBIDE	60MG TABLET	3,828,390
209	ACTOS	45MG TABLET	3,817,946
210	ORTHO	7 DAYS X 3 TABLET	3,815,405
211	NASACORT	55MCG AEROSOL	3,806,878
212	DIOVAN	80-12.5MG TABLET	3,803,295
213	EFFEXOR	37.5MG CAPSULE	3,797,356
214	PRILOSEC	40MG CAPSULE	3,768,705
215	COZAAR	50MG TABLET	3,761,266
216	GLYBURIDE	5MG TABLET	3,752,842
217	BIAXIN	500MG TABLET	3,708,834
218	VIOXX	25MG TABLET	3,703,471
219	LOTREL	10-20MG CAPSULE	3,662,234
220	COREG	12.5MG TABLET	3,649,696
221	GLUCOPHAGE	500MG TABLET	3,647,686
222	CELEXA	40MG TABLET	3,637,958
223	XELODA	500MG TABLET	3,634,561
224	NORVASC	2.5MG TABLET	3,628,136
225	DITROPAN	5MG TABLET	3,600,851
226	GLYBURIDE	5MG TABLET	3,552,248
227	PREMARIN	0.625MG TABLET	3,531,433
228	DDAVP	0.2MG TABLET	3,522,967
229	REBETOL	200MG CAPSULE	3,513,815
230	TOPAMAX	200MG TABLET	3,459,867
231	REYATAZ	200MG CAPSULE	3,454,230
232	HYZAAR	50-12.5MG TABLET	3,445,755
233	ARICEPT	10MG TABLET	3,437,122
234	GLUCOVANCE	2.5-500MG TABLET	3,429,473
235	COREG	25MG TABLET	3,395,101
236	ACIPHEX	20MG TABLET	3,394,586

Rank	Label Name	Dosage	Drug Ingredient Cost
237	ZOLOFT	25MG TABLET	3,392,196
238	ZONEGRAN	100MG CAPSULE	3,384,225
239	ABILIFY	10MG TABLET	3,324,329
240	DIFLUCAN	100MG TABLET	3,281,694
241	EPIVIR	300MG TABLET	3,240,401
242	ARAVA	20MG TABLET	3,220,638
243	IRESSA	250MG TABLET	3,172,108
244	GLEEVEC	100MG CAPSULE	3,135,604
245	CEREZYME	400 UNIT VIAL	3,113,980
246	MACROBID	100MG CAPSULE	3,106,546
247	LEXAPRO	20MG TABLET	3,100,766
248	STARLIX	120MG TABLET	3,052,625
249	MIACALCIN	200 U/DOSE AEROSOL	3,043,278
250	COSOPT	0.5-2% DROPS	3,005,630
251	NIFEDIPINE	60MG TABLET	2,989,808
252	ARIMIDEX	1MG TABLET	2,981,388
253	LEVAQUIN	250MG TABLET	2,975,929
254	EPOGEN	40000 U/ML VIAL	2,969,810
255	ZELNORM	6MG TABLET	2,955,792
256	PULMOZYME	1MG/ML SOLUTION	2,935,500
257	NEXIUM	20MG CAPSULE	2,909,276
258	PROMETHAZINE/CODEINE	10-6.25/5 SYRUP	2,864,575
259	PAXIL	20MG TABLET	2,829,853
260	CELLCEPT	500MG TABLET	2,805,713
261	COPEGUS	200MG TABLET	2,774,721
262	VIDEX	400MG CAPSULE	2,749,579
263	CATAPRES-TTS	0.2MG/24HR PATCH	2,742,444
264	DURAGESIC	25MCG/HR PATCH	2,739,298
265	ZYPREXA	5MG TABLET	2,737,580
266	ZYPREXA	15MG TABLET	2,736,928
267	ALPHAGAN	0.15% DROPS	2,733,157
268	PULMICORT	0.5MG/2ML AMPUL	2,725,373
269	SUSTIVA	200MG CAPSULE	2,718,459
270	ZOLOFT	100MG TABLET	2,710,297
271	NUTROPIN	10MG/2ML VIAL	2,709,571
272	MORPHINE	100MG TABLET	2,708,130
273	EVISTA	60MG TABLET	2,701,595
274	PAXIL	12.5MG TABLET	2,685,965
275	MORPHINE	60MG TABLET	2,669,653
276	PEGASYS	180MCG/ML VIAL	2,666,143
277	BETASERON	0.3MG VIAL	2,652,915
278	CELLCEPT	250MG CAPSULE	2,648,813
279	DEPAKOTE	125MG CAPSULE	2,646,392
280	FOSAMAX	10MG TABLET	2,639,441
281	ACTONEL	5MG TABLET	2,637,710
282	CONCERTA	36MG TABLET	2,637,280
283	ZOFRAN	8MG TABLET	2,624,939
284	FOSAMAX	10MG TABLET	2,620,026

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Rank	Label Name	Dosage	Drug Ingredient Cost
285	LUMIGAN	0.03% DROPS	2,596,693
286	TRILEPTAL	600MG TABLET	2,595,468
287	DETROL	2MG TABLET	2,584,742
288	PULMICORT	0.25MG/2ML AMPUL	2,570,375
289	ALPHAGAN	0.15% DROPS	2,567,334
290	COZAAR	100MG TABLET	2,563,947
291	PULMICORT	200MCG AEROSOL	2,562,252
292	NIFEDIPINE	90MG TABLET	2,558,468
293	FAMOTIDINE	20MG TABLET	2,557,945
294	HYZAAR	100-25MG TABLET	2,542,238
295	CARBIDOPA/LEVO	50-200MG TABLET	2,501,719
296	ZOLOFT	50MG TABLET	2,498,326
297	NEXIUM	40MG CAPSULE	2,491,845
298	COZAAR	50MG TABLET	2,444,877
299	ZYPREXA	15MG TABLET	2,420,059
300	LIPITOR	80MG TABLET	2,407,289
301	GLEEVEC	100MG TABLET	2,402,731
302	TOBI	300MG/5ML AMPUL	2,393,970
303	WELCHOL	625MG TABLET	2,381,463
304	IMITREX	50MG TABLET	2,379,618
305	WELLBUTRIN	200MG TABLET	2,372,269
306	AVANDIA	4MG TABLET	2,365,478
307	PROSCAR	5MG TABLET	2,361,895
308	PRAVACHOL	10MG TABLET	2,350,503
309	ARICEPT	5MG TABLET	2,340,619
310	PROCRIT	10000 U/ML VIAL	2,312,443
311	REBETOL	200MG CAPSULE	2,280,864
312	ACCOLATE	20MG TABLET	2,270,583
313	GAMMAR-P	5G VIAL	2,248,582
314	ZYPREXA	5MG TABLET	2,237,022
315	ABILIFY	20MG TABLET	2,234,640
316	SONATA	10MG CAPSULE	2,233,347
317	TRIAMTERENE/HCTZ	50MG-25MG CAPSULE	2,211,183
318	GLYBURIDE	5MG TABLET	2,194,283
319	SINGULAIR	5MG TABLET	2,192,812
320	REMINYL	4MG TABLET	2,178,850
321	HYZAAR	50-12.5MG TABLET	2,173,231
322	BACLOFEN	10MG TABLET	2,171,143
323	AVONEX	30MCG KIT	2,157,942
324	BETAPACE	80MG TABLET	2,153,156
325	DILANTIN	100MG CAPSULE	2,141,360
326	SPORANOX	100MG CAPSULE	2,137,666
327	FLUOXETINE	40MG CAPSULE	2,135,716
328	ZYVOX	600MG TABLET	2,129,427
329	INVIRASE	200MG CAPSULE	2,121,853
330	MEGESTROL	40MG/ML SUSPENSION	2,070,748
331	PRANDIN	2MG TABLET	2,053,743
332	CONCERTA	54MG TABLET	2,052,791

Rank	Label Name	Dosage	Drug Ingredient Cost
333	TERAZOSIN	2MG CAPSULE	2,041,476
334	PREMARIN	0.625MG/G CREAM	2,040,685
335	LAMICTAL	200MG TABLET	2,037,774
336	OXANDRIN	2.5MG TABLET	2,037,444
337	VIDEX	250MG CAPSULE	2,034,703
338	XOPENEX	0.63MG/3ML SOLUTION	2,018,724
339	ZITHROMAX	600MG TABLET	2,013,922
340	LAMISIL	250MG TABLET	2,011,366
341	TRAVATAN	0.004% DROPS	2,009,894
342	SYNAGIS	50MG VIAL	2,008,654
343	TOPROL	50MG TABLET	1,996,369
344	MOBIC	15MG TABLET	1,995,351
345	ACTOS	15MG TABLET	1,986,979
346	CRIXIVAN	400MG CAPSULE	1,985,862
347	EPOGEN	20000 U/ML VIAL	1,982,086
348	ALBUTEROL	90MCG AEROSOL	1,956,839
349	AMBIEN	10MG TABLET	1,948,630
350	VIOXX	25MG TABLET	1,940,477
351	HYZAAR	100-25MG TABLET	1,897,992
352	ALTACE	2.5MG CAPSULE	1,890,825
353	ZADITOR	0.025% DROPS	1,886,055
354	AUGMENTIN	875-125MG TABLET	1,864,091
355	NEUPOGEN	480MCG/1.6 VIAL	1,855,591
356	ZITHROMAX	250MG TABLET	1,850,180
357	ZOCOR	80MG TABLET	1,849,668
358	PREMARIN	0.625MG TABLET	1,841,361
359	PHENYTOIN	100MG CAPSULE	1,839,621
360	PHENYTOIN	100MG CAPSULE	1,828,112
361	ALLEGRA	60MG TABLET	1,816,767
362	BACLOFEN	20MG TABLET	1,792,425
363	EXELON	3MG CAPSULE	1,780,128
364	ZOCOR	10MG TABLET	1,772,389
365	TERAZOSIN	5MG CAPSULE	1,770,333
366	LEXIVA	700MG TABLET	1,767,960
367	LIPRAM-CR20	66.4-20-75 CAPSULE	1,762,883
368	MS	100MG TABLET	1,738,536
369	EXELON	1.5MG CAPSULE	1,737,282
370	REMINYL	8MG TABLET	1,730,134
371	ACETAMINOPHEN/COD	30-300MG TABLET	1,722,112
372	PEG-INTRON	80MCG/0.5 KIT	1,719,611
373	AVANDIA	2MG TABLET	1,717,939
374	THALOMID	50MG CAPSULE	1,706,677
375	TOBRADEX	0.3-0.1% SUSPENSION	1,703,983
376	ZOCOR	10MG TABLET	1,702,098
377	MORPHINE	30MG TABLET	1,702,080
378	IPRATROPIUM	0.2MG/ML SOLUTION	1,701,249
379	FAMVIR	500MG TABLET	1,700,240
380	ADAGEN	250U/ML VIAL	1,686,960

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Rank	Label Name	Dosage	Drug Ingredient Cost
381	CIPRO	250MG TABLET	1,680,172
382	PREMPRO	0.625-2.5 TABLET	1,680,042
383	NIFEDIPINE	30MG TABLET	1,679,563
384	ARTHROTEC	75-0.2MG TABLET	1,670,025
385	MIACALCIN	200 U/DOSE AEROSOL	1,665,457
386	COZAAR	25MG TABLET	1,661,744
387	LESCOL	40MG CAPSULE	1,659,341
388	ACTIQ	800MCG LOLLIPOP	1,658,562
389	HALOPERIDOL	10MG TABLET	1,657,831
390	DIOVAN	160-25MG TABLET	1,653,010
391	AGENERASE	150MG CAPSULE	1,652,231
392	ORTHO	0.35MG TABLET	1,636,979
393	ZERIT	30MG CAPSULE	1,636,347
394	ANDROGEL	1%(50MG) GEL	1,629,890
395	ZOCOR	20MG TABLET	1,628,620
396	LESCOL	20MG CAPSULE	1,625,201
397	PROVIGIL	200MG TABLET	1,620,737
398	REMERON	45MG TABLET	1,619,259
399	DETROL	4MG CAPSULE	1,615,443
400	LOVENOX	60MG/0.6ML DISPOSABLE	1,612,983
401	ENALAPRIL	20MG TABLET	1,611,363
402	LOVENOX	100MG/ML DISPOSABLE	1,610,458
403	FOLIC	1MG TABLET	1,602,239
404	ACETAMINOPHEN/COD	30-300MG TABLET	1,600,868
405	PREMARIN	1.25MG TABLET	1,599,665
406	COMTAN	200MG TABLET	1,593,607
407	NEORAL	100MG CAPSULE	1,570,296
408	CEPHALEXIN	500MG CAPSULE	1,568,551
409	COZAAR	100MG TABLET	1,560,070
410	ADDERALL	20MG CAPSULE	1,548,697
411	ACTIQ	1200MCG LOLLIPOP	1,548,384
412	XOPENEX	1.25MG/3ML SOLUTION	1,543,951
413	PROZAC	90MG CAPSULE	1,538,629
414	CONCERTA	18MG TABLET	1,523,218
415	PROGRAF	5MG CAPSULE	1,506,661
416	GEMFIBROZIL	600MG TABLET	1,504,732
417	STRATTERA	40MG CAPSULE	1,499,766
418	NIFEDIAC	60MG TABLET	1,495,561
419	MARINOL	2.5MG CAPSULE	1,495,352
420	MEPRON	750MG/5ML SUSPENSION	1,494,041
421	ACCUPRIL	20MG TABLET	1,487,854
422	PLAVIX	75MG TABLET	1,478,104
423	VALTREX	500MG TABLET	1,477,017
424	NEURONTIN	800MG TABLET	1,476,866
425	HYDROXYZINE	25MG TABLET	1,475,761
426	PRAVACHOL	80MG TABLET	1,448,416
427	NIASPAN	500MG TABLET	1,445,558
428	LOVENOX	80MG/0.8ML DISPOSABLE	1,434,235

Rank	Label Name	Dosage	Drug Ingredient Cost
429	REMERON	30MG TABLET	1,431,935
430	CREON	66.4-20-75 CAPSULE	1,431,130
431	ROCEPHIN	1G VIAL	1,412,544
432	ACULAR	0.5% DROPS	1,400,331
433	BUSPIRONE	30MG TABLET	1,398,699
434	PACERONE	200MG TABLET	1,397,983
435	FORTOVASE	200MG CAPSULE	1,392,945
436	PROCRIT	4000 U/ML VIAL	1,373,000
437	OXYCONTIN	10MG TABLET	1,365,336
438	FLOLAN	1.5MG VIAL	1,362,848
439	CIPRO	0.2-1% SUSPENSION	1,353,112
440	AMIODARONE	200MG TABLET	1,348,042
441	PROCRIT	10000 U/ML VIAL	1,347,054
442	BIAXIN	500MG TABLET	1,341,216
443	HYDROCODONE/APAP	5-500MG TABLET	1,339,930
444	TOPROL	100MG TABLET	1,332,927
445	VALTREX	1000MG TABLET	1,318,782
446	METROGEL-VAGINAL	0.75% GEL	1,304,096
447	RISPERDAL	0.25MG TABLET	1,295,165
448	ACTIQ	1600MCG LOLLIPOP	1,286,335
449	LOTENSIN	5MG TABLET	1,285,867
450	ALDARA	5% PACKET	1,281,548
451	EMTRIVA	200MG CAPSULE	1,275,076
452	VFEND	200MG TABLET	1,270,298
453	ZOCOR	10MG TABLET	1,269,788
454	FOSAMAX	70MG TABLET	1,268,139
455	AGGRENOX	25-200MG CAPSULE	1,267,391
456	AVELOX	400MG TABLET	1,256,824
457	TOPROL	25MG TABLET	1,250,453
458	BACLOFEN	10MG TABLET	1,246,911
459	AMARYL	2MG TABLET	1,242,115
460	QVAR	80MCG AEROSOL	1,241,741
461	FEMARA	2.5MG TABLET	1,238,870
462	FORTEO	750MCG/3ML DISPOSABLE	1,236,473
463	ACULAR	0.5% DROPS	1,231,450
464	GENOTROPIN	36 UNIT CARTRIDGE	1,230,780
465	FLUOXETINE	40MG CAPSULE	1,227,309
466	REBIF	44MCG/.5ML DISPOSABLE	1,221,849
467	ZOCOR	80MG TABLET	1,210,673
468	RAPAMUNE	1MG TABLET	1,209,730
469	COZAAR	25MG TABLET	1,209,286
470	LOPROX	0.77% LOTION	1,208,822
471	REMERON	15MG TABLET	1,206,649
472	HYDROXYZINE	25MG TABLET	1,204,597
473	SINGULAIR	4MG TABLET	1,201,792
474	ACTIMMUNE	2MMIU/.5ML VIAL	1,199,386

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Rank	Label Name	Dosage	Drug Ingredient Cost
475	NIFEDIAC	30MG TABLET	1,196,464
476	ASACOL	400MG TABLET	1,193,362
477	HYDROCODONE/APAP	5-500MG TABLET	1,187,925
478	OXYCODONE	80MG TABLET	1,182,834
479	DETROL	2MG CAPSULE	1,182,611
480	AEROBID	250MCG AEROSOL	1,181,284
481	ACCUPRIL	40MG TABLET	1,178,913
482	IMITREX	100MG TABLET	1,177,393
483	SERZONE	100MG TABLET	1,175,356
484	URECHOLINE	25MG TABLET	1,172,399
485	LESCOL	80MG TABLET	1,170,070
486	CELLCEPT	250MG CAPSULE	1,161,224
487	ULTRASE	65-20-65 CAPSULE	1,159,165
488	DILTIAZEM	240MG CAPSULE	1,158,789
489	CLOTRIMAZOLE	1% CREAM	1,156,530
490	GLYBURIDE	5MG TABLET	1,149,895
491	DIOVAN	160MG TABLET	1,148,761
492	AGRYLIN	0.5MG CAPSULE	1,147,378
493	DITROPAN	15MG TABLET	1,145,681
494	CILOXAN	0.3% DROPS	1,145,664
495	QUININE	325MG CAPSULE	1,141,010
496	ATACAND	32MG TABLET	1,140,492
497	AFEDITAB	30MG TABLET	1,139,273
498	PREVACID	15MG CAPSULE	1,129,897
499	BETASERON	0.3MG VIAL	1,124,968
500	LORAZEPAM	1MG TABLET	1,124,536

Top 500 Prescription Drugs by Drug Ingredient Cost	**$3,321,907,560**
Same Top 500 Prescription Drugs by Net Drug Ingredient Cost*	**$1,956,749,469**
All Prescription Drugs by Net Drug Ingredient Cost	**$2,522,347,563**
Same Top 500 as a Percentage of all Prescription Drugs	**77.58%**
Brand Name Drugs at the Net Drug Ingredient Cost as a Percentage of All Prescription Drugs	**82.76%**
Generic Drugs at the Net Drug Ingredient Cost as a Percentage of All Prescription Drugs	**17.24%**

* This amount is net of the billed rebates in Health Services' rebate accounting information system as of January 19, 2005. Because Health Services continually obtains rebate information for billing purposes, this amount will decrease accordingly as it updates its system with more current per-unit rebate information.

TABLE A.2

CalPERS' Top 500 Prescription Drugs by NDC Represented Nearly 75 Percent of Its Total Net Drug Ingredient Cost for the Period July 1, 2003, Through June 30, 2004

Rank	Label Name	Dosage	Net Drug Ingredient Cost
1	LIPITOR	20MG TABLET	$9,223,128
2	LIPITOR	10MG TABLET	8,028,124
3	PROTONIX	40MG TABLET	6,540,818
4	ACIPHEX	20MG TABLET	5,380,726
5	FOSAMAX	70MG TABLET	5,304,501
6	PRAVACHOL	40MG TABLET	4,571,988
7	ENBREL	25MG KIT	4,297,199
8	LIPITOR	40MG TABLET	3,762,829
9	NEURONTIN	300MG CAPSULE	3,482,653
10	PREVACID	30MG CAPSULE DELAYED	3,444,325
11	PLAVIX	75MG TABLET	3,416,228
12	ADVAIR DISKUS	250-50MCG DISK	3,394,128
13	EFFEXOR XR	75MG CAPSULE	3,260,824
14	AMBIEN	10MG TABLET	3,081,828
15	PREVACID	30MG CAPSULE DELAYED	3,044,582
16	FLONASE	50MCG AEROSOL	2,973,285
17	PRAVACHOL	20MG TABLET	2,806,350
18	CELEBREX	200MG CAPSULE	2,796,990
19	OMEPRAZOLE	20MG CAPSULE DELAYED	2,523,494
20	EFFEXOR XR	150MG CAPSULE	2,517,340
21	WELLBUTRIN SR	150MG TABLET	2,355,380
22	NEXIUM	40MG CAPSULE DELAYED	2,339,345
23	ZITHROMAX	250MG TABLET	2,295,684
24	ADVAIR DISKUS	100-50MCG DISK	2,211,795
25	LEXAPRO	10MG TABLET	2,168,481
26	CELEBREX	200MG CAPSULE	2,153,462
27	VIOXX	25MG TABLET	2,151,248
28	CELEXA	20MG TABLET	2,125,825
29	ZOLOFT	50MG TABLET	2,049,879
30	CIPRO	500MG TABLET	2,013,688
31	ZYRTEC	10MG TABLET	1,998,578
32	ZOLOFT	100MG TABLET	1,971,218
33	ZOCOR	20MG TABLET	1,860,803
34	NASONEX	50MCG SPRAY	1,804,107
35	LIPITOR	10MG TABLET	1,798,656
36	FLOMAX	0.4MG CAPSULE	1,794,635
37	SINGULAIR	10MG TABLET	1,768,784
38	NORVASC	10MG TABLET	1,714,658
39	NORVASC	5MG TABLET	1,687,212
40	COPAXONE	20MG KIT	1,668,561
41	TRICOR	160MG TABLET	1,653,648
42	NEXIUM	40MG CAPSULE DELAYED	1,644,946
43	DURAGESIC	100MCG/HR PATCH	1,633,377
44	SINGULAIR	10MG TABLET	1,575,736

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Rank	Label Name	Dosage	Net Drug Ingredient Cost
45	OXYCONTIN	80MG TABLET	1,571,618
46	LEVAQUIN	500MG TABLET	1,543,176
47	OXYCONTIN	40MG TABLET	1,515,239
48	AVANDIA	8MG TABLET	1,483,333
49	ADVAIR DISKUS	500-50MCG DISK	1,474,249
50	PLAVIX	75MG TABLET	1,470,895
51	AVONEX	30MCG/.5ML KIT	1,445,819
52	EVISTA	60MG TABLET	1,363,201
53	ZOCOR	40MG TABLET	1,326,720
54	VIOXX	25MG TABLET	1,284,144
55	ACTONEL	35MG TABLET	1,265,727
56	HUMALOG	100 U/ML VIAL	1,227,304
57	DETROL LA	4MG CAPSULE	1,220,392
58	ASACOL	400MG TABLET	1,210,791
59	TOPAMAX	100MG TABLET	1,183,608
60	ACTOS	45MG TABLET	1,117,302
61	ALLEGRA	60MG TABLET	1,113,008
62	PAXIL CR	25MG TABLET	1,106,340
63	LANTUS	100 U/ML VIAL	1,085,355
64	PROCRIT	40000 U/ML VIAL	1,080,053
65	IMITREX	50MG TABLET	1,068,714
66	VIAGRA	100MG TABLET	1,065,086
67	ARIMIDEX	1MG TABLET	1,028,766
68	CELEXA	40MG TABLET	1,025,198
69	ALLEGRA	180MG TABLET	1,021,844
70	CLARINEX	5MG TABLET	1,021,431
71	CLARINEX	5MG TABLET	1,020,193
72	ZETIA	10MG TABLET	1,016,505
73	NEURONTIN	600MG TABLET	1,004,107
74	ZOCOR	20MG TABLET	997,553
75	ACTOS	45MG TABLET	993,384
76	HUMIRA	40MG/0.8ML KIT	989,310
77	ANDROGEL	1%(50MG) GEL	987,989
78	ACTOS	30MG TABLET	978,671
79	SEREVENT DISKUS	50MCG DISK	969,655
80	LAMISIL	250MG TABLET	964,287
81	LEXAPRO	20MG TABLET	958,446
82	TOPAMAX	25MG TABLET	942,784
83	PREMARIN	0.625MG TABLET	920,321
84	ZOCOR	40MG TABLET	900,774
85	PROVIGIL	200MG TABLET	900,664
86	OXYCONTIN	20MG TABLET	887,187
87	AVANDIA	4MG TABLET	861,078
88	PATANOL	0.1% DROPS	849,931
89	VALTREX	500MG TABLET	840,041
90	ACIPHEX	20MG TABLET	831,327
91	ACTOS	30MG TABLET	827,562
92	PAXIL	20MG TABLET	815,920

Rank	Label Name	Dosage	Net Drug Ingredient Cost
93	PAROXETINE HCL	20MG TABLET	807,549
94	DURAGESIC	75MCG/HR PATCH	798,594
95	NASACORT AQ	55MCG AEROSOL	789,165
96	DIOVAN	160MG TABLET	767,909
97	PROGRAF	1MG CAPSULE	748,986
98	COZAAR	50MG TABLET	748,600
99	LIPITOR	80MG TABLET	746,794
100	AMBIEN	5MG TABLET	741,013
101	REBIF	44MCG/.5ML DISPOSABLE	736,366
102	LOTREL	5-20MG CAPSULE	726,589
103	LAMICTAL	100MG TABLET	726,009
104	ZYPREXA	5MG TABLET	724,987
105	DIOVAN	80MG TABLET	719,945
106	COMBIVIR	150-300MG TABLET	719,486
107	PREMARIN	0.625MG TABLET	707,026
108	COMBIVENT	103-18MCG AEROSOL	706,410
109	ARICEPT	10MG TABLET	705,279
110	TOPROL XL	50MG TABLET	701,590
111	ZYPREXA	10MG TABLET	699,896
112	ZYPREXA	2.5MG TABLET	690,682
113	WELLBUTRIN SR	200MG TABLET	688,016
114	ORTHO TRI-CYCLEN	7 DAYS X 3 TABLET	681,231
115	WELLBUTRIN XL	300MG TABLET	680,535
116	PEGASYS	180MCG/ML KIT	677,976
117	VALTREX	1000MG TABLET	663,579
118	NIASPAN	500MG TABLET	651,724
119	CASODEX	50MG TABLET	650,920
120	XALATAN	0.005% DROPS	649,444
121	IMITREX	100MG TABLET	648,812
122	AMBIEN	10MG TABLET	637,380
123	FLOVENT	110MCG AEROSOL	635,462
124	AVANDIA	8MG TABLET	633,269
125	DURAGESIC	50MCG/HR PATCH	629,459
126	NEURONTIN	400MG CAPSULE	609,448
127	TOPROL XL	100MG TABLET	608,043
128	PRAVACHOL	80MG TABLET	604,357
129	LESCOL XL	80MG TABLET	602,036
130	ARAVA	20MG TABLET	598,275
131	COPEGUS	200MG TABLET	595,253
132	PLENDIL	10MG TABLET	593,798
133	EFFEXOR XR	37.5MG CAPSULE	593,757
134	VIREAD	300MG TABLET	591,503
135	DEPAKOTE	500MG TABLET	582,948
136	RHINOCORT AQUA	32MCG SPRAY	579,457
137	ZOFRAN	8MG TABLET	579,358
138	TRIZIVIR	150-300MG TABLET	569,945
139	PRILOSEC	20MG CAPSULE DELAYED	567,643
140	IRESSA	250MG TABLET	565,274

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Rank	Label Name	Dosage	Net Drug Ingredient Cost
141	BEXTRA	20MG TABLET	556,775
142	NEURONTIN	600MG TABLET	550,550
143	COREG	25MG TABLET	544,114
144	BETASERON	0.3MG VIAL	537,138
145	ACCUPRIL	20MG TABLET	534,603
146	ATROVENT	18MCG AEROSOL	534,366
147	XELODA	500MG TABLET	529,371
148	AMOX TR-POTASSIUM CLAVULANATE	875-125MG TABLET	529,169
149	TRACLEER	125MG TABLET	528,896
150	DITROPAN XL	10MG TABLET	528,393
151	CELLCEPT	500MG TABLET	522,634
152	PAXIL CR	12.5MG TABLET	522,042
153	KALETRA	33.3-133.3 CAPSULE	519,382
154	OMEPRAZOLE	20MG CAPSULE DELAYED	517,156
155	SEROQUEL	100MG TABLET	516,703
156	SEROQUEL	200MG TABLET	516,568
157	RISPERDAL	1MG TABLET	509,835
158	DIFLUCAN	200MG TABLET	506,332
159	BIAXIN	500MG TABLET	504,855
160	FLOVENT	220MCG AEROSOL	504,376
161	RENAGEL	800MG TABLET	502,735
162	ACCUPRIL	40MG TABLET	502,022
163	AMNESTEEM	40MG CAPSULE	500,372
164	METFORMIN HCL	500MG TABLET	496,648
165	CELLCEPT	250MG CAPSULE	494,115
166	REBETOL	200MG CAPSULE	494,029
167	STRATTERA	40MG CAPSULE	493,604
168	ALBUTEROL	90MCG AEROSOL	483,445
169	ZOLOFT	50MG TABLET	481,866
170	PROSCAR	5MG TABLET	480,359
171	IMITREX	50MG TABLET	477,550
172	ARICEPT	10MG TABLET	476,669
173	YASMIN 28	0.03-3MG TABLET	475,108
174	BIAXIN XL	500MG TABLET	473,730
175	COREG	6.25MG TABLET	472,565
176	GLEEVEC	100MG TABLET	472,050
177	FORTEO	750MCG/3ML DISPOSABLE	470,852
178	AVAPRO	150MG TABLET	469,962
179	PLENDIL	5MG TABLET	466,842
180	ZOLOFT	100MG TABLET	466,750
181	SEROQUEL	25MG TABLET	463,154
182	ACTIMMUNE	2MMIU/.5ML VIAL	462,604
183	WELLBUTRIN SR	100MG TABLET	458,686
184	OMEPRAZOLE	20MG CAPSULE DELAYED	457,909
185	PROSCAR	5MG TABLET	457,849
186	NEURONTIN	800MG TABLET	450,629
187	PREMPRO	0.625-2.5 TABLET	448,152
188	PREVACID	15MG CAPSULE DELAYED	446,308

Rank	Label Name	Dosage	Net Drug Ingredient Cost
189	BEXTRA	10MG TABLET	443,445
190	GLUCOVANCE	5-500MG TABLET	441,389
191	GLUCOPHAGE XR	500MG TABLET	440,903
192	LOTENSIN	20MG TABLET	439,464
193	FOSAMAX	35MG TABLET	439,305
194	IMITREX	6MG/0.5ML KIT REFILL	438,212
195	DEPAKOTE ER	500MG TABLET	436,658
196	LAMISIL	250MG TABLET	433,196
197	LAMICTAL	25MG TABLET	431,887
198	WELLBUTRIN XL	150MG TABLET	431,088
199	THALOMID	50MG CAPSULE	430,179
200	DIOVAN HCT	160-12.5MG TABLET	429,549
201	VIAGRA	50MG TABLET	427,124
202	AVIANE	0.1-0.02 TABLET	426,336
203	FEMARA	2.5MG TABLET	424,276
204	RISPERDAL	0.5MG TABLET	420,754
205	AZMACORT	100MCG AEROSOL	418,791
206	TRILEPTAL	300MG TABLET	418,295
207	KEPPRA	500MG TABLET	417,178
208	ALLEGRA	60MG TABLET	409,063
209	DEPAKOTE	250MG TABLET	408,733
210	NEURONTIN	100MG CAPSULE	407,178
211	ULTRACET	37.5-325MG TABLET	405,619
212	ALTACE	10MG CAPSULE	403,891
213	WELCHOL	625MG TABLET	401,312
214	PEGASYS	180MCG/ML VIAL	400,923
215	ARICEPT	5MG TABLET	399,758
216	COZAAR	50MG TABLET	393,271
217	COREG	12.5MG TABLET	392,086
218	ORTHO EVRA	20-150/24H PATCH	390,824
219	PREMARIN	1.25MG TABLET	389,719
220	TRIVORA-28	6-5-10 TABLET	388,493
221	IMITREX	100MG TABLET	383,294
222	LIDODERM	5% ADHESIVE	383,038
223	ABILIFY	15MG TABLET	379,264
224	PULMICORT	200MCG AEROSOL	379,190
225	TRAVATAN	0.004% DROPS	379,168
226	BETASERON	0.3MG VIAL	378,737
227	PEG-INTRON	150MCG/0.5 KIT	377,481
228	MOBIC	7.5MG TABLET	376,299
229	DURAGESIC	25MCG/HR PATCH	373,739
230	PAROXETINE HCL	20MG TABLET	373,260
231	SINGULAIR	5MG TABLET	372,461
232	SUSTIVA	600MG TABLET	369,554
233	AGGRENOX	25-200MG CAPSULE	368,562
234	EPIVIR	150MG TABLET	364,796
235	ACCUTANE	40MG CAPSULE	362,194
236	NIASPAN	1000MG TABLET	362,190

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Rank	Label Name	Dosage	Net Drug Ingredient Cost
237	ASTELIN	137MCG AEROSOL	362,068
238	AMOX TR-POTASSIUM CLAVULANATE	875-125MG TABLET	361,555
239	PEG-INTRON	120MCG/0.5 KIT	360,106
240	AMOX TR-POTASSIUM CLAVULANATE	875-125MG TABLET	359,195
241	CEREZYME	400 UNIT VIAL	358,139
242	ACTOS	15MG TABLET	357,064
243	HYZAAR	100-25MG TABLET	356,242
244	AVONEX ADMINISTRATION PACK	30MCG KIT	352,473
245	LOTREL	5-10MG CAPSULE	351,062
246	GLEEVEC	100MG CAPSULE	349,903
247	CIPRO	250MG TABLET	347,267
248	AVANDIA	4MG TABLET	345,649
249	PREMARIN	0.625MG/G CREAM	343,794
250	MACROBID	100MG CAPSULE	339,642
251	PRAVACHOL	10MG TABLET	339,487
252	PROCRIT	20000 U/ML VIAL	337,884
253	LOTENSIN	10MG TABLET	337,356
254	PREVACID	15MG CAPSULE DELAYED	337,080
255	PAROXETINE HCL	40MG TABLET	337,027
256	CRESTOR	10MG TABLET	336,755
257	MINOCYCLINE HCL	100MG CAPSULE	335,894
258	FLUOXETINE HCL	20MG CAPSULE	333,710
259	ALLEGRA	180MG TABLET	333,254
260	DITROPAN XL	5MG TABLET	332,991
261	ZOCOR	10MG TABLET	330,031
262	AVELOX	400MG TABLET	329,947
263	AMARYL	4MG TABLET	325,554
264	CONCERTA	36MG TABLET	325,310
265	LOTENSIN	40MG TABLET	323,979
266	PULMICORT	0.5MG/2ML AMPUL	322,729
267	IMITREX	25MG TABLET	321,797
268	CARBIDOPA/LEVODOPA	50-200MG TABLET	320,917
269	PRILOSEC	40MG CAPSULE DELAYED	319,143
270	ALLEGRA-D	120-60MG TABLET	314,680
271	AVAPRO	300MG TABLET	309,571
272	DETROL	2MG TABLET	309,482
273	PULMOZYME	1MG/ML SOLUTION	309,200
274	LOTREL	10-20MG CAPSULE	308,710
275	GEMFIBROZIL	600MG TABLET	308,038
276	NECON	1-0.035MG TABLET	307,062
277	BEXTRA	20MG TABLET	306,829
278	ELMIRON	100MG CAPSULE	305,010
279	ALTACE	10MG CAPSULE	304,335
280	RISPERDAL	2MG TABLET	303,958
281	MIACALCIN	200 U/DOSE AEROSOL	302,712
282	LOVENOX	100MG/ML DISPOSABLE	301,821
283	ERYTHROMYCIN-BENZOYL PEROXIDE	3-5% GEL	301,282
284	VIOXX	25MG TABLET	300,022

Rank	Label Name	Dosage	Net Drug Ingredient Cost
285	ACCUPRIL	10MG TABLET	299,677
286	DDAVP	0.2MG TABLET	299,573
287	PROZAC	20MG CAPSULE	299,111
288	ZOLOFT	25MG TABLET	298,260
289	MAXALT	10MG TABLET	296,818
290	ESTRACE	0.01% CREAM	293,442
291	COSOPT	0.5-2% DROPS	286,801
292	METFORMIN HCL	1000MG TABLET	286,622
293	ATENOLOL	50MG TABLET	286,491
294	PREMARIN	0.9MG TABLET	286,439
295	ALPHAGAN P	0.15% DROPS	286,411
296	ALDARA	5% PACKET	285,278
297	ADDERALL XR	20MG CAPSULE	284,921
298	AGRYLIN	0.5MG CAPSULE	281,930
299	ZIAGEN	300MG TABLET	281,190
300	TOBI	300MG/5ML AMPUL	279,775
301	BENZACLIN	1-5% GEL	278,932
302	METROGEL	0.75% GEL	278,767
303	PAXIL	40MG TABLET	278,241
304	FLUOXETINE HCL	40MG CAPSULE	277,238
305	COREG	3.125MG TABLET	276,481
306	TOPROL XL	25MG TABLET	273,838
307	PENLAC	8% SOLUTION	273,150
308	PROMETRIUM	100MG CAPSULE	271,197
309	LESCOL	40MG CAPSULE	270,672
310	GLUCOVANCE	2.5-500MG TABLET	267,623
311	LOW-OGESTREL	0.3-0.03MG TABLET	267,458
312	PAROXETINE HCL	10MG TABLET	266,219
313	ACCOLATE	20MG TABLET	263,966
314	ALTACE	5MG CAPSULE	261,885
315	FAMVIR	500MG TABLET	261,836
316	METHOTREXATE	2.5MG TABLET	261,456
317	OXYCONTIN	10MG TABLET	260,650
318	ZELNORM	6MG TABLET	259,912
319	ZOCOR	20MG TABLET	259,418
320	NEUPOGEN	480MCG/0.8 DISPOSABLE	258,085
321	BEXTRA	10MG TABLET	257,612
322	PREMARIN	0.3MG TABLET	256,281
323	DIFLUCAN	150MG TABLET	255,083
324	ZOMIG	5MG TABLET	254,588
325	VIOXX	50MG TABLET	254,471
326	VIRAMUNE	200MG TABLET	253,717
327	IMITREX	20MG SPRAY	253,692
328	ACTIQ	1600MCG LOLLIPOP	252,405
329	ZYPREXA	15MG TABLET	251,532
330	FOSAMAX	10MG TABLET	250,044
331	MOBIC	15MG TABLET	249,752
332	MAXALT MLT	10MG TABLET	248,924

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Rank	Label Name	Dosage	Net Drug Ingredient Cost
333	TEMODAR	100MG CAPSULE	248,088
334	ZETIA	10MG TABLET	246,730
335	ACTOS	15MG TABLET	246,433
336	EFFEXOR	75MG TABLET	245,647
337	PULMICORT	0.25MG/2ML AMPUL	244,014
338	EVISTA	60MG TABLET	242,942
339	TEMODAR	100MG CAPSULE	242,549
340	HYDROCODONE/ACETAMINOPHEN	10-325MG TABLET	242,510
341	PLETAL	100MG TABLET	241,740
342	ZOLOFT	100MG TABLET	241,331
343	LOVASTATIN	40MG TABLET	240,948
344	ZONEGRAN	100MG CAPSULE	240,754
345	ZITHROMAX	250MG TABLET	239,570
346	NEORAL	100MG CAPSULE	239,253
347	PAROXETINE HCL	20MG TABLET	237,690
348	FLOVENT	44MCG AEROSOL	235,460
349	ZOCOR	80MG TABLET	235,134
350	ANDRODERM	5MG/24HR PATCH	235,000
351	MORPHINE SULFATE	60MG TABLET	234,432
352	ESTRATEST H.S.	1.25-0.625 TABLET	234,428
353	PAXIL	10MG TABLET	233,637
354	HYDROCODONE/ACETAMINOPHEN	10-325MG TABLET	232,410
355	ZYPREXA	20MG TABLET	231,586
356	COZAAR	100MG TABLET	231,432
357	NORVASC	5MG TABLET	231,112
358	LUMIGAN	0.03% DROPS	230,957
359	NORVASC	2.5MG TABLET	230,821
360	ALPHAGAN P	0.15% DROPS	226,851
361	PLAVIX	75MG TABLET	226,790
362	ALBUTEROL	90MCG AEROSOL	226,279
363	HYZAAR	50-12.5MG TABLET	225,456
364	PROCRIT	10000 U/ML VIAL	222,938
365	SPORANOX	100MG CAPSULE	222,735
366	CONCERTA	54MG TABLET	222,577
367	ARICEPT	5MG TABLET	222,382
368	NEULASTA	6MG/0.6ML DISPOSABLE	221,562
369	VIOXX	12.5MG TABLET	220,389
370	LOVENOX	80MG/0.8ML DISPOSABLE	220,268
371	PRANDIN	2MG TABLET	219,861
372	CONCERTA	18MG TABLET	219,609
373	TOPAMAX	200MG TABLET	218,848
374	ZOCOR	40MG TABLET	217,512
375	ZOCOR	80MG TABLET	217,177
376	AMNESTEEM	20MG CAPSULE	215,604
377	ABILIFY	10MG TABLET	215,061
378	RISPERDAL	0.25MG TABLET	214,751
379	DIOVAN	320MG TABLET	214,634
380	AUGMENTIN XR	1000-62.5 TABLET	214,324

Rank	Label Name	Dosage	Net Drug Ingredient Cost
381	SONATA	10MG CAPSULE	214,043
382	ESTRATEST	2.5-1.25MG TABLET	213,412
383	MARINOL	5MG CAPSULE	213,044
384	CATAPRES-TTS 3	0.3MG/24HR PATCH	212,343
385	ZOLOFT	50MG TABLET	212,250
386	PREMARIN	1.25MG TABLET	210,323
387	SYNTHROID	100MCG TABLET	209,604
388	VERAPAMIL HCL	240MG TABLET	209,492
389	NORVIR	100MG CAPSULE	209,153
390	ZYRTEC-D	120-5MG TABLET	208,516
391	CASODEX	50MG TABLET	207,840
392	IMITREX	6MG/0.5ML KIT	207,668
393	LISINOPRIL	20MG TABLET	207,617
394	CELEBREX	100MG CAPSULE	207,282
395	PRILOSEC	20MG CAPSULE DELAYED	206,716
396	MICROGESTIN FE	1-0.02MG TABLET	205,914
397	ACTIQ	800MCG LOLLIPOP	205,320
398	LUMIGAN	0.03% DROPS	205,227
399	TOBRADEX	0.3-0.1% SUSPENSION	204,879
400	DETROL LA	4MG CAPSULE	203,436
401	RISPERDAL	3MG TABLET	203,198
402	SEROQUEL	300MG TABLET	203,036
403	NEURONTIN	800MG TABLET	202,040
404	TRINESSA	7 DAYS X 3 TABLET	201,476
405	ADDERALL XR	30MG CAPSULE	200,777
406	MINOCYCLINE HCL	100MG CAPSULE	200,381
407	PAXIL CR	37.5MG TABLET	200,254
408	INDERAL LA	80MG CAPSULE	200,240
409	VFEND	200MG TABLET	199,763
410	XOPENEX	0.63MG/3ML SOLUTION	199,633
411	DIOVAN HCT	80-12.5MG TABLET	198,503
412	LISINOPRIL	40MG TABLET	197,841
413	FLUOXETINE HCL	40MG CAPSULE	196,787
414	PENTASA	250MG CAPSULE	196,544
415	ZITHROMAX	200MG/5ML SUSPENSION	196,471
416	COMTAN	200MG TABLET	196,223
417	ROWASA	4G/60ML ENEMA	195,857
418	AVANDIA	4MG TABLET	194,540
419	TEQUIN	400MG TABLET	193,688
420	SORIATANE	25MG CAPSULE	193,669
421	HUMALOG	300 U/3ML DISPOSABLE	193,414
422	PAROXETINE HCL	30MG TABLET	193,262
423	AMERGE	2.5MG TABLET	193,012
424	LEVOXYL	100MCG TABLET	192,805
425	COUMADIN	5MG TABLET	192,701
426	NEXIUM	20MG CAPSULE DELAYED	192,422
427	ATENOLOL	25MG TABLET	192,230
428	RAPAMUNE	1MG TABLET	192,161

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Rank	Label Name	Dosage	Net Drug Ingredient Cost
429	LEVAQUIN	250MG TABLET	191,106
430	REBETOL	200MG CAPSULE	189,553
431	EVISTA	60MG TABLET	189,421
432	XALATAN	0.005% DROPS	189,241
433	MONOPRIL	20MG TABLET	188,738
434	LOVENOX	60MG/0.6ML DISPOSABLE	188,551
435	REMINYL	8MG TABLET	187,580
436	SINGULAIR	4MG TABLET	187,048
437	LESCOL	20MG CAPSULE	186,767
438	CARTIA XT	240MG CAPSULE	186,027
439	COZAAR	100MG TABLET	185,628
440	GLEEVEC	400MG TABLET	185,255
441	MORPHINE SULFATE	100MG TABLET	184,091
442	ACTONEL	5MG TABLET	184,064
443	MORPHINE SULFATE	30MG TABLET	183,838
444	PAXIL	30MG TABLET	183,566
445	NUTROPIN AQ	10MG/2ML CARTRIDGE	182,692
446	COZAAR	100MG TABLET	182,508
447	DOVONEX	0.005% OINTMENT(GM)	181,415
448	NOVOLOG	100 U/ML VIAL	181,376
449	AUGMENTIN ES-600	600-42.9/5 SUSPENSION	181,176
450	BIAXIN XL	500MG TABLET	180,691
451	PREMPRO	0.625-2.5 TABLET	180,293
452	REYATAZ	150MG CAPSULE	179,950
453	LISINOPRIL	10MG TABLET	179,875
454	METFORMIN HCL	500MG TABLET	179,548
455	RILUTEK	50MG TABLET	179,301
456	HUMALOG MIX 75/25	75-25 U/ML VIAL	179,193
457	AFEDITAB CR	60MG TABLET	178,770
458	PREVPAC	30-500-500 COMBINATION	178,145
459	HYDROCODONE W/ ACETAMINOPHEN	5-500MG TABLET	177,996
460	LAMICTAL	200MG TABLET	177,516
461	TUSSIONEX	10-8MG/5ML SUSPENSION	177,514
462	MIACALCIN	200 U/DOSE AEROSOL	176,816
463	PROZAC WEEKLY	90MG CAPSULE DELAYED	175,432
464	LEVOXYL	75MCG TABLET	175,078
465	NUTROPIN AQ	10MG/2ML VIAL	174,480
466	CATAPRES-TTS 2	0.2MG/24HR PATCH	174,226
467	LEVOXYL	125MCG TABLET	173,372
468	VIRACEPT	250MG TABLET	173,196
469	MIRCETTE	21-5 TABLET	172,944
470	STRATTERA	25MG CAPSULE	172,842
471	SKELAXIN	800MG TABLET	172,615
472	METFORMIN HCL	850MG TABLET	172,026
473	HUMALOG MIX 75/25	75-25 U/ML DISPOSABLE	171,446
474	ZOCOR	10MG TABLET	170,704

Rank	Label Name	Dosage	Net Drug Ingredient Cost
475	STARLIX	120MG TABLET	167,800
476	XOLAIR	150MG VIAL	165,583
477	DOSTINEX	0.5MG TABLET	165,379
478	ARTHROTEC 75	75-0.2MG TABLET	163,913
479	AMIODARONE HCL	200MG TABLET	163,868
480	NABUMETONE	500MG TABLET	163,528
481	AMOX TR-POTASSIUM CLAVULANATE	500-125MG TABLET	163,454
482	VALCYTE	450MG TABLET	163,415
483	LEVOXYL	50MCG TABLET	163,137
484	PAXIL	20MG TABLET	162,014
485	HYTRIN	5MG CAPSULE	161,463
486	EFUDEX	5% CREAM	160,976
487	CELLCEPT	250MG CAPSULE	159,466
488	AVALIDE	150-12.5MG TABLET	158,295
489	SKELAXIN	400MG TABLET	157,851
490	ALTACE	5MG CAPSULE	157,601
491	CIPROFLOXACIN HCL	500MG TABLET	157,300
492	AVALIDE	300-12.5MG TABLET	157,040
493	TAMOXIFEN CITRATE	20MG TABLET	156,612
494	MEGESTROL ACETATE	40MG/ML SUSPENSION	156,217
495	MONOPRIL	10MG TABLET	155,946
496	VALTREX	500MG TABLET	155,850
497	SOTRET	40MG CAPSULE	155,674
498	CIPRO HC	0.2-1% SUSPENSION	155,656
499	HEPSERA	10MG TABLET	154,815
500	GEODON	40MG CAPSULE	154,774

Top 500 Prescription Drugs by Net Drug Ingredient Cost	**$320,387,808**
All Prescription Drugs by Net Drug Ingredient Cost	**$428,054,626**
Top 500 as a Percentage of all Prescription Drugs	**74.85%**
Brand Name Drugs as a Percentage of All Prescription Drugs	**84.58%**
Generic Drugs as a Percentage of All Prescription Drugs	**15.42%**

TABLE A.3

General Services' Top 500 Prescription Drugs by NDC Represented Nearly 90 Percent of Its Total Net Drug Ingredient Costs for the Period July 1, 2003, Through June 30, 2004

Rank	Label Name	Dosage	Net Drug Ingredient Cost
1	SEROQUEL	200MG TABLET	$ 6,204,407
2	SEROQUEL	300MG TABLET	3,842,088
3	ZYPREXA	20MG TABLET	3,223,877
4	PEGASYS	180MCG/ML VIAL	3,007,543
5	COPEGUS	200MG TABLET	2,877,736
6	SEROQUEL	200MG TABLET	2,846,497
7	ZYPREXA	10MG TABLET	2,798,001
8	ZYPREXA	15MG TABLET	2,691,887
9	ZYPREXA	10MG TABLET	2,279,594
10	ZYPREXA	10MG TABLET	2,150,199
11	DEPAKOTE	500MG TABLET	2,031,938
12	RISPERDAL	3MG TABLET	1,977,696
13	KALETRA	33.3-133.3 CAPSULE	1,925,966
14	RISPERDAL	4MG TABLET	1,906,528
15	TRIZIVIR	150-300MG TABLET	1,796,872
16	NEURONTIN	600MG TABLET	1,795,279
17	PROTONIX	40MG TABLET	1,687,962
18	VIREAD	300MG TABLET	1,634,671
19	AZMACORT	100MCG AEROSOL	1,571,900
20	RISPERDAL	2MG TABLET	1,482,733
21	REBETOL	200MG CAPSULE	1,480,437
22	ZYPREXA ZYDIS	10MG TABLET	1,471,710
23	PEGASYS	180MCG/ML KIT	1,411,411
24	NEURONTIN	300MG CAPSULE	1,371,896
25	SEROQUEL	300MG TABLET	1,348,420
26	ZYPREXA	20MG TABLET	1,290,826
27	DEPAKOTE	500MG TABLET	1,263,469
28	ZYPREXA ZYDIS	15MG TABLET	1,216,392
29	COMBIVIR	150-300MG TABLET	1,205,289
30	SEROQUEL	100MG TABLET	1,173,155
31	VIRACEPT	250MG TABLET	1,173,052
32	ZYPREXA ZYDIS	20MG TABLET	1,140,640
33	RISPERDAL	2MG TABLET	1,116,282
34	GEODON	80MG CAPSULE	1,089,552
35	RISPERDAL	3MG TABLET	1,086,357
36	RISPERDAL	2MG TABLET	1,063,434
37	PROTONIX	40MG TABLET	1,043,043
38	SUSTIVA	600MG TABLET	1,036,169
39	ZYPREXA	15MG TABLET	1,018,753
40	WELLBUTRIN SR	150MG TABLET	996,360
41	EPIVIR	150MG TABLET	975,725
42	TOPAMAX	100MG TABLET	955,275
43	ZYPREXA	20MG TABLET	927,252
44	NASONEX	50MCG SPRAY	919,229

Rank	Label Name	Dosage	Net Drug Ingredient Cost
45	ZYPREXA	15MG TABLET	915,539
46	COMBIVIR	150-300MG TABLET	909,701
47	LIPITOR	20MG TABLET	894,265
48	ZOLOFT	100MG TABLET	827,617
49	DIFLUCAN	200MG TABLET	810,229
50	ZERIT	40MG CAPSULE	806,743
51	RISPERDAL	3MG TABLET	753,502
52	NEURONTIN	400MG CAPSULE	746,896
53	VIRAMUNE	200MG TABLET	745,229
54	RISPERDAL	1MG TABLET	724,815
55	ZYPREXA	5MG TABLET	705,693
56	ABILIFY	15MG TABLET	678,974
57	DEPAKOTE ER	500MG TABLET	657,770
58	NEURONTIN	600MG TABLET	657,186
59	PEG-INTRON	120MCG/0.5 KIT	648,281
60	LAMICTAL	100MG TABLET	634,654
61	RISPERDAL	4MG TABLET	629,842
62	OMEPRAZOLE	20MG CAPSULE	628,005
63	ZYPREXA	5MG TABLET	626,366
64	LAMICTAL	25MG TABLET	625,939
65	PEG-INTRON	150MCG/0.5 KIT	623,591
66	GEODON	40MG CAPSULE	611,584
67	LIPITOR	20MG TABLET	609,964
68	ZOLOFT	50MG TABLET	599,180
69	LIPITOR	10MG TABLET	591,617
70	ZOLOFT	100MG TABLET	591,358
71	NEURONTIN	800MG TABLET	588,008
72	KEPPRA	500MG TABLET	580,587
73	CELEBREX	200MG CAPSULE	579,080
74	LIPITOR	10MG TABLET	562,145
75	ZYPREXA	7.5MG TABLET	542,310
76	RISPERDAL	1MG/ML SOLUTION	527,046
77	ROCEPHIN	1G VIAL	513,059
78	SEROQUEL	100MG TABLET	496,302
79	ZOLOFT	100MG TABLET	484,920
80	NORVIR	100MG CAPSULE	467,153
81	GEODON	60MG CAPSULE	464,999
82	EPOGEN	10000 U/ML VIAL	457,334
83	NEUPOGEN	300MCG/ML VIAL	451,241
84	EFFEXOR XR	75MG CAPSULE	443,523
85	RISPERDAL	2MG TABLET	441,172
86	GEODON	20MG CAPSULE	440,394
87	ZOLOFT	50MG TABLET	438,748
88	PEGASYS	180MCG/0.5 KIT	436,712
89	TOPAMAX	25MG TABLET	429,178
90	GEODON	80MG CAPSULE	421,079
91	TRILEPTAL	300MG TABLET	413,497
92	SUSTIVA	200MG CAPSULE	413,141

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Rank	Label Name	Dosage	Net Drug Ingredient Cost
93	ZIAGEN	300MG TABLET	410,066
94	CELEXA	20MG TABLET	406,832
95	PREVACID	30MG CAPSULE	404,499
96	ZYPREXA	5MG TABLET	402,223
97	CIPRO	500MG TABLET	401,134
98	DEPAKOTE ER	500MG TABLET	396,436
99	SEROQUEL	25MG TABLET	393,754
100	DEPAKOTE	250MG TABLET	388,421
101	PROCRIT	40000 U/ML VIAL	381,266
102	ATROVENT	18MCG AEROSOL	375,167
103	ABILIFY	15MG TABLET	373,435
104	FLONASE	50MCG AEROSOL	371,283
105	ENGERIX-B	20MCG/ML VIAL	368,728
106	DIFLUCAN	200MG TABLET	360,463
107	DEPAKOTE	500MG TABLET	356,670
108	RISPERDAL	1MG TABLET	356,333
109	PAXIL	20MG TABLET	355,377
110	RISPERDAL	1MG TABLET	354,751
111	EPIVIR	300MG TABLET	353,399
112	NEURONTIN	300MG CAPSULE	341,743
113	ABILIFY	10MG TABLET	333,447
114	EPOGEN	40000 U/ML VIAL	322,274
115	NEUPOGEN	480MCG/0.8 DISPOSABLE	321,030
116	PEG-INTRON	80MCG/0.5 KIT	318,857
117	ZYPREXA ZYDIS	5MG TABLET	313,840
118	ABILIFY	30MG TABLET	311,833
119	ALBUTEROL	90MCG AEROSOL	310,404
120	RISPERDAL CONSTA	25MG/2ML DISPOSABLE	307,899
121	WELLBUTRIN SR	100MG TABLET	301,596
122	OMEPRAZOLE	20MG CAPSULE	299,193
123	RENAGEL	800MG TABLET	292,570
124	TOPAMAX	200MG TABLET	291,502
125	CLOZAPINE	100MG TABLET	287,641
126	ZOLOFT	50MG TABLET	285,209
127	LIPITOR	10MG TABLET	281,497
128	EFFEXOR XR	150MG CAPSULE	279,311
129	ZITHROMAX	600MG TABLET	277,869
130	OMEPRAZOLE	20MG CAPSULE	269,850
131	GRIFULVIN V	500MG TABLET	268,230
132	VIDEX EC	400MG CAPSULE	267,960
133	WELLBUTRIN SR	200MG TABLET	265,577
134	DEPAKOTE ER	500MG TABLET	261,707
135	XALATAN	0.005% DROPS	256,238
136	NEURONTIN	800MG TABLET	252,466
137	OMEPRAZOLE	20MG CAPSULE	250,548
138	NASACORT AQ	55MCG AEROSOL	248,612
139	NORVASC	10MG TABLET	245,156
140	ZYPREXA	7.5MG TABLET	236,743

Rank	Label Name	Dosage	Net Drug Ingredient Cost
141	BENEFIX	500 (+/-)U KIT	236,250
142	PAROXETINE HCL	20MG TABLET	235,843
143	IMITREX	25MG TABLET	235,421
144	SINGULAIR	10MG TABLET	231,692
145	DEPAKOTE	250MG TABLET	231,544
146	CELEBREX	100MG CAPSULE	230,493
147	NEUPOGEN	480MCG/1.6 VIAL	230,254
148	SINGULAIR	10MG TABLET	229,614
149	VALPROIC ACID	250MG CAPSULE	223,292
150	PAXIL	20MG TABLET	222,870
151	EFFEXOR XR	75MG CAPSULE	220,423
152	PLAVIX	75MG TABLET	219,580
153	CIPROFLOXACIN HCL	500MG TABLET	219,394
154	APLISOL	5T U/0.1ML VIAL	219,350
155	TUBERSOL	5T U/0.1ML VIAL	216,124
156	IMITREX	25MG TABLET	215,145
157	NEURONTIN	400MG CAPSULE	206,303
158	FORTEO	750MCG/3ML DISPOSABLE	197,654
159	LAMISIL	250MG TABLET	197,257
160	DEPAKOTE SPRINKLE	125MG CAPSULE	195,542
161	RECOMBINATE	1000(+/-)U VIAL	193,019
162	WELLBUTRIN XL	300MG TABLET	190,610
163	RISPERDAL	0.5MG TABLET	190,007
164	STRATTERA	40MG CAPSULE	189,209
165	NEULASTA	6MG/0.6ML DISPOSABLE	185,024
166	PAROXETINE HCL	30MG TABLET	184,681
167	PHENYTOIN SODIUM	100MG CAPSULE	184,276
168	SPORANOX	100MG CAPSULE	184,170
169	SEROQUEL	25MG TABLET	182,386
170	GEODON	40MG CAPSULE	179,594
171	LEVAQUIN	500MG TABLET	179,406
172	INVIRASE	200MG CAPSULE	179,143
173	BECONASE AQ	42MCG AEROSOL	178,650
174	EFFEXOR	75MG TABLET	177,510
175	CELEXA	20MG TABLET	177,036
176	QVAR	40MCG AEROSOL	176,859
177	NORVASC	5MG TABLET	176,207
178	TRILEPTAL	600MG TABLET	175,478
179	PAXIL	30MG TABLET	172,326
180	ZYPREXA	2.5MG TABLET	171,854
181	ENBREL	25MG KIT	171,461
182	VIDEX EC	250MG CAPSULE	171,304
183	LUPRON DEPOT	7.5MG DISPOSABLE	169,618
184	PREVACID	30MG CAPSULE	169,138
185	MONARC-M	675 (+/-)U VIAL	167,524
186	LAMICTAL	150MG TABLET	167,250
187	FLOVENT	110MCG AEROSOL	166,262
188	ZANTAC	15MG/ML SYRUP	166,185

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Rank	Label Name	Dosage	Net Drug Ingredient Cost
189	DILANTIN	100MG CAPSULE	166,089
190	CIPRO	500MG TABLET	162,959
191	ZONEGRAN	100MG CAPSULE	162,124
192	IMITREX	50MG TABLET	162,033
193	CRIXIVAN	400MG CAPSULE	160,908
194	ZIAGEN	300MG TABLET	160,300
195	RISPERDAL CONSTA	50MG/2ML DISPOSABLE	156,989
196	ZITHROMAX	250MG TABLET	153,793
197	LOVASTATIN	20MG TABLET	152,087
198	WELLBUTRIN XL	150MG TABLET	151,809
199	FORTOVASE	200MG CAPSULE	151,344
200	ZOFRAN	8MG TABLET	150,763
201	RISPERDAL	1MG TABLET	148,534
202	AVONEX	30MCG/.5ML KIT	148,476
203	LEXAPRO	10MG TABLET	147,994
204	ABILIFY	10MG TABLET	145,685
205	GEODON	20MG CAPSULE	144,680
206	RECOMBIVAX HB	10MCG/ML VIAL	143,746
207	ADVAIR DISKUS	500-50MCG DISK	141,424
208	ABILIFY	30MG TABLET	141,274
209	SEREVENT DISKUS	50MCG DISK	139,037
210	TEGRETOL	100MG/5ML SUSPENSION	138,820
211	IMITREX	50MG TABLET	138,152
212	VIOXX	25MG TABLET	136,662
213	CELEBREX	200MG CAPSULE	135,741
214	DOVONEX	0.005% OINTMENT(GM)	134,659
215	FAMVIR	500MG TABLET	133,194
216	KEPPRA	750MG TABLET	131,764
217	NORVASC	5MG TABLET	131,051
218	VALCYTE	450MG TABLET	130,568
219	LIPITOR	40MG TABLET	129,217
220	PAROXETINE HCL	40MG TABLET	128,799
221	PAROXETINE HCL	20MG TABLET	127,762
222	GEODON	20MG VIAL	126,616
223	BIAXIN	500MG TABLET	126,074
224	TRILEPTAL	300MG TABLET	124,620
225	GLEEVEC	100MG TABLET	123,799
226	ADVAIR DISKUS	100-50MCG DISK	123,772
227	ABILIFY	20MG TABLET	122,512
228	ZOLOFT	25MG TABLET	121,543
229	NORVASC	10MG TABLET	121,077
230	AVANDIA	4MG TABLET	121,076
231	CELEXA	40MG TABLET	120,845
232	PAXIL	40MG TABLET	120,783
233	LIPITOR	20MG TABLET	119,132
234	PREVACID	15MG CAPSULE	117,607
235	HALOPERIDOL	10MG TABLET	116,147
236	REYATAZ	150MG CAPSULE	115,710

Rank	Label Name	Dosage	Net Drug Ingredient Cost
237	ADVAIR DISKUS	250-50MCG DISK	113,846
238	FLUOXETINE HCL	40MG CAPSULE	113,415
239	NIFEDIPINE ER	90MG TABLET	113,134
240	PLAVIX	75MG TABLET	112,352
241	PULMICORT	0.5MG/2ML AMPUL	107,948
242	EFFEXOR XR	150MG CAPSULE	107,773
243	ASACOL	400MG TABLET	106,748
244	NIFEDIPINE ER	60MG TABLET	106,592
245	REYATAZ	200MG CAPSULE	106,299
246	DEPO-PROVERA	150MG/ML VIAL	105,729
247	METFORMIN HCL	500MG TABLET	105,031
248	CELEBREX	100MG CAPSULE	104,369
249	DDAVP	0.2MG TABLET	103,472
250	PENICILLIN V POTASSIUM	500MG TABLET	99,518
251	ZEMPLAR	5MCG/ML VIAL	99,425
252	ACTOS	15MG TABLET	99,380
253	BUPROPION HCL	75MG TABLET	98,828
254	PAXIL	10MG TABLET	98,688
255	RIFAMPIN	300MG CAPSULE	98,523
256	BOTOX	100 UNIT VIAL	98,289
257	AUGMENTIN	500-125MG TABLET	98,080
258	MIRTAZAPINE	30MG TABLET	97,568
259	ALLEGRA	60MG TABLET	94,788
260	DILANTIN	100MG CAPSULE	94,313
261	PRILOSEC	20MG CAPSULE	94,111
262	PROZAC WEEKLY	90MG CAPSULE	94,033
263	DURAGESIC	100MCG/HR PATCH	92,700
264	MIRTAZAPINE	45MG TABLET	92,458
265	FLOMAX	0.4MG CAPSULE	92,449
266	DIFLUCAN	150MG TABLET	92,339
267	NIFEDIPINE ER	30MG TABLET	91,873
268	GLYBURIDE	5MG TABLET	91,681
269	NAPROXEN	500MG TABLET	91,255
270	RISPERDAL	0.5MG TABLET	90,330
271	NIFEDIAC CC	60MG TABLET	90,296
272	LOVENOX	100MG/ML DISPOSABLE	90,168
273	FLOVENT	220MCG AEROSOL	90,147
274	METHADONE HCL	10MG TABLET	89,597
275	AGENERASE	150MG CAPSULE	88,543
276	NIFEDIPINE ER	90MG TABLET	88,446
277	EPOGEN	4000 U/ML VIAL	88,306
278	LUPRON DEPOT	22.5MG DISPOSABLE	87,611
279	FLUNISOLIDE	0.025% AEROSOL	86,700
280	PAROXETINE HCL	20MG TABLET	86,667
281	INTRON A	6MMU/ML VIAL	86,547
282	SORIATANE	25MG CAPSULE	86,249
283	GEODON	60MG CAPSULE	85,271
284	DEPAKOTE ER	250MG TABLET	83,960

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Rank	Label Name	Dosage	Net Drug Ingredient Cost
285	DEPAKOTE	250MG TABLET	82,750
286	PAROXETINE HCL	20MG TABLET	82,417
287	HYDROXYZINE HCL	50MG TABLET	82,219
288	MIRTAZAPINE	30MG TABLET	82,108
289	RISPERDAL CONSTA	37.5MG/2ML DISPOSABLE	81,559
290	LEVAQUIN	500MG TABLET	80,528
291	NIFEDIPINE ER	60MG TABLET	80,467
292	ZITHROMAX	250MG TABLET	79,891
293	ZOVIRAX	5% OINTMENT(GM)	79,164
294	PREMARIN	1.25MG TABLET	78,925
295	QVAR	80MCG AEROSOL	77,005
296	ZYRTEC	10MG TABLET	76,886
297	PAROXETINE HCL	10MG TABLET	76,857
298	CHLORAMPHENICOL SOD SUCCINATE	1G VIAL	76,500
299	ROCEPHIN	2G VIAL	76,377
300	KEPPRA	250MG TABLET	76,220
301	LAMICTAL	200MG TABLET	75,750
302	DIFLUCAN	100MG TABLET	75,223
303	MIRTAZAPINE	15MG TABLET	74,809
304	ABILIFY	20MG TABLET	74,025
305	EFFEXOR XR	37.5MG CAPSULE	73,600
306	HYDROXYZINE HCL	50MG TABLET	73,405
307	ZERIT	30MG CAPSULE	73,236
308	PRAVACHOL	20MG TABLET	73,183
309	ACIPHEX	20MG TABLET	72,735
310	PRILOSEC	20MG CAPSULE	70,848
311	ENGERIX-B	20MCG/ML VIAL	70,543
312	ORTHO TRI-CYCLEN	7 DAYS X 3 TABLET	70,417
313	LUPRON DEPOT	11.25MG KIT	69,195
314	CIPRO	250MG TABLET	69,108
315	PROCRIT	10000 U/ML VIAL	68,552
316	TEGRETOL	200MG TABLET	68,233
317	ZITHROMAX	250MG TABLET	67,791
318	ENALAPRIL MALEATE	10MG TABLET	67,505
319	AMOX TR-POTASSIUM CLAVULANATE	500-125MG TABLET	66,358
320	RANITIDINE HCL	150MG TABLET	66,287
321	LAMISIL	250MG TABLET	65,633
322	CLOZAPINE	100MG TABLET	65,615
323	PREVACID	30MG CAPSULE	64,716
324	LEXAPRO	20MG TABLET	64,556
325	TRILEPTAL	600MG TABLET	64,546
326	NEURONTIN	100MG CAPSULE	64,450
327	ZYPREXA	2.5MG TABLET	64,249
328	GRIS-PEG	250MG TABLET	63,776
329	LANTUS	100 U/ML VIAL	63,722
330	MIRTAZAPINE	15MG TABLET	63,224

Rank	Label Name	Dosage	Net Drug Ingredient Cost
331	REMICADE	100MG VIAL	63,146
332	LOVASTATIN	20MG TABLET	62,979
333	TOBI	300MG/5ML AMPUL	62,920
334	DILANTIN	100MG CAPSULE	62,734
335	XENICAL	120MG CAPSULE	62,521
336	TWINRIX	20MCG-720U DISPOSABLE	62,463
337	VALPROIC ACID	250MG/5ML SYRUP	62,191
338	CELEBREX	200MG CAPSULE	62,127
339	NIFEDIAC CC	30MG TABLET	61,995
340	INTRON A	10MMU/ML KIT	61,701
341	PREMARIN	1.25MG TABLET	61,699
342	CELEBREX	100MG CAPSULE	61,024
343	REMERON	30MG TABLET	60,670
344	TWINRIX	20MCG-720U VIAL	60,001
345	BICILLIN L-A	2.4MMU/4ML DISPOSABLE	59,479
346	BUPROPION HCL	100MG TABLET	59,328
347	METFORMIN HCL	500MG TABLET	59,152
348	RECOMBIVAX HB	10MCG/ML VIAL	59,032
349	ALLEGRA	60MG TABLET	58,961
350	PHENYTOIN SODIUM	100MG CAPSULE	58,774
351	BIAXIN	500MG TABLET	58,755
352	CATAPRES-TTS 3	0.3MG/24HR PATCH	58,545
353	CELEXA	10MG TABLET	58,448
354	COZAAR	50MG TABLET	58,031
355	COSOPT	0.5-2% DROPS	57,983
356	PULMOZYME	1MG/ML SOLUTION	57,792
357	TRIAMTERENE W/HCTZ	37.5-25MG CAPSULE	57,153
358	EFFEXOR XR	37.5MG CAPSULE	57,136
359	LEVAQUIN	500MG/0.1L INTRAVENOUS	56,035
360	HAVRIX	1440 U/ML VIAL	55,588
361	VIRACEPT	625MG TABLET	55,448
362	DIFLUCAN	100MG TABLET	55,345
363	VIOXX	25MG TABLET	54,462
364	SPORANOX	100MG CAPSULE	54,335
365	COREG	3.125MG TABLET	54,283
366	ABILIFY	5MG TABLET	54,084
367	RISPERDAL	1MG TABLET	53,872
368	PROTONIX	20MG TABLET	53,859
369	CEPHALEXIN	500MG CAPSULE	53,777
370	REMERON	45MG TABLET	53,453
371	HYDROXYZINE HCL	50MG TABLET	52,649
372	DOVONEX	0.005% CREAM	52,645
373	LOVASTATIN	20MG TABLET	52,500
374	TEMODAR	100MG CAPSULE	52,023
375	ADALAT CC	30MG TABLET	51,960
376	IBUPROFEN	600MG TABLET	51,816
377	BACTROBAN	2% OINTMENT(GM)	51,626
378	LOTENSIN	10MG TABLET	51,114

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Rank	Label Name	Dosage	Net Drug Ingredient Cost
379	ALPHAGAN P	0.15% DROPS	50,901
380	PROCRIT	20000 U/ML VIAL	50,691
381	ALBUTEROL	90MCG AEROSOL	50,603
382	CLINDAMYCIN HCL	150MG CAPSULE	50,464
383	PATANOL	0.1% DROPS	50,315
384	CELLCEPT	500MG TABLET	50,179
385	EFFEXOR	100MG TABLET	50,086
386	ACTOS	30MG TABLET	50,077
387	PHENYTOIN	100MG/4ML SUSPENSION	50,057
388	NORVASC	5MG TABLET	49,761
389	OMEPRAZOLE	20MG CAPSULE	49,722
390	CLINDAMYCIN HCL	300MG CAPSULE	49,427
391	ALUPENT	650MCG AEROSOL	49,225
392	ESKALITH CR	450MG TABLET	49,103
393	AUGMENTIN	875-125MG TABLET	48,967
394	HEPSERA	10MG TABLET	47,797
395	HALOPERIDOL	10MG TABLET	47,570
396	AVANDIA	2MG TABLET	47,420
397	CAFERGOT	1-100MG TABLET	47,373
398	ACCUPRIL	10MG TABLET	47,360
399	PRAVACHOL	20MG TABLET	47,350
400	ATENOLOL	50MG TABLET	47,293
401	ALDARA	5% PACKET	47,251
402	CARBAMAZEPINE	200MG TABLET	47,142
403	CELEXA	40MG TABLET	46,503
404	CRIXIVAN	400MG CAPSULE	46,340
405	LOVENOX	60MG/0.6ML DISPOSABLE	46,229
406	MEGESTROL ACETATE	40MG/ML SUSPENSION	46,169
407	DICLOXACILLIN SODIUM	500MG CAPSULE	45,782
408	PREVACID	30MG SUSPENSION	45,686
409	REMERON	15MG TABLET	45,657
410	ZYPREXA	2.5MG TABLET	45,618
411	GLUCAGON EMERGENCY KIT	1MG KIT	45,163
412	KETOCONAZOLE	2% CREAM	45,138
413	LOXAPINE SUCCINATE	50MG CAPSULE	45,030
414	SEROQUEL	25MG TABLET	45,028
415	PREMARIN	1.25MG TABLET	45,012
416	GLYBURIDE	5MG TABLET	45,003
417	VIOXX	25MG TABLET	44,874
418	YASMIN 28	0.03-3MG TABLET	44,828
419	CEPHALEXIN	500MG CAPSULE	44,683
420	ZOCOR	20MG TABLET	44,551
421	LOVENOX	40MG/0.4ML DISPOSABLE	44,385
422	METFORMIN HCL	850MG TABLET	44,220
423	AMOX TR-POTASSIUM CLAVULANATE	875-125MG TABLET	43,655
424	DEPAKOTE SPRINKLE	125MG CAPSULE	43,607
425	EPOGEN	3000 U/ML VIAL	43,399
426	BACLOFEN	10MG TABLET	43,340

Rank	Label Name	Dosage	Net Drug Ingredient Cost
427	CASODEX	50MG TABLET	43,228
428	PREMARIN	0.625MG TABLET	42,955
429	SOTRET	40MG CAPSULE	42,875
430	RIBASPHERE	200MG CAPSULE	42,810
431	CIPRO	750MG TABLET	42,550
432	RANITIDINE HCL	150MG TABLET	41,781
433	PAXIL	10MG/5ML SUSPENSION	41,723
434	VALTREX	500MG TABLET	41,157
435	VAQTA	50 UNIT/ML VIAL	40,994
436	TEGRETOL XR	400MG TABLET	40,781
437	KOATE-DVI	1000(+/-)U KIT	40,656
438	AMBIEN	10MG TABLET	40,078
439	DURAGESIC	50MCG/HR PATCH	40,042
440	INDERAL LA	80MG CAPSULE	39,902
441	REMERON	15MG TABLET	39,785
442	EPOGEN	20000 U/ML VIAL	39,777
443	LOXAPINE SUCCINATE	25MG CAPSULE	39,726
444	NALTREXONE HYDROCHLORIDE	50MG TABLET	39,674
445	PAXIL	20MG TABLET	39,431
446	REBETRON 1200	1200-3/0.5 KIT	39,431
447	DEPO-PROVERA	150MG/ML DISPOSABLE	39,247
448	ZOMIG	2.5MG TABLET	39,197
449	LEXIVA	700MG TABLET	39,161
450	LITHIUM CARBONATE	600MG CAPSULE	39,116
451	ABELCET	5MG/ML VIAL	39,109
452	PROGRAF	1MG CAPSULE	39,023
453	PNEUMOVAX 23	25MCG/.5ML VIAL	39,011
454	AVONEX ADMINISTRATION PACK	30MCG KIT	38,829
455	ACCUTANE	40MG CAPSULE	38,788
456	LEXAPRO	10MG TABLET	38,715
457	REGRANEX	0.01% GEL	38,638
458	HALDOL DECANOATE 100	100MG/ML AMPUL	38,590
459	PAROXETINE HCL	10MG TABLET	38,490
460	EFFEXOR	37.5MG TABLET	38,397
461	DURAGESIC	75MCG/HR PATCH	38,076
462	RISPERDAL	0.25MG TABLET	37,681
463	SELENIUM SULFIDE	2.5% SHAMPOO	37,592
464	METROGEL	0.75% GEL	37,589
465	COREG	6.25MG TABLET	37,533
466	ARICEPT	5MG TABLET	37,519
467	GEMFIBROZIL	600MG TABLET	37,404
468	GEMFIBROZIL	600MG TABLET	37,351
469	LUPRON DEPOT	3.75MG KIT	37,347
470	PODOFILOX	0.5% SOLUTION	37,321
471	ACTICIN	5% CREAM	37,285
472	REMERON	30MG TABLET	37,280
473	BACLOFEN	10MG TABLET	37,182
474	LOVENOX	30MG/0.3ML DISPOSABLE	37,162

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Rank	Label Name	Dosage	Net Drug Ingredient Cost
475	NEOMYCIN/POLYMYXIN/HC	3.5-10K-1 SUSPENSION	37,044
476	COPAXONE	20MG KIT	36,928
477	LITHIUM CARBONATE	300MG CAPSULE	36,900
478	BUPROPION HCL	75MG TABLET	36,881
479	BETASERON	0.3MG VIAL	36,696
480	ROMAZICON	0.1MG/ML VIAL	36,635
481	EPIVIR HBV	100MG TABLET	36,589
482	BUPROPION HCL	100MG TABLET	36,572
483	RETROVIR	300MG TABLET	36,426
484	PROSCAR	5MG TABLET	36,398
485	PEG-INTRON	50MCG/0.5 KIT	36,279
486	ADALAT CC	60MG TABLET	35,940
487	METFORMIN HCL	500MG TABLET	35,845
488	LORAZEPAM	2MG TABLET	35,843
489	GABITRIL	4MG TABLET	35,770
490	STRATTERA	10MG CAPSULE	35,696
491	LEVAQUIN	250MG TABLET	35,234
492	NIZORAL	2% SHAMPOO	34,996
493	PREVACID	15MG CAPSULE	34,876
494	CLOZAPINE	25MG TABLET	34,725
495	MACROBID	100MG CAPSULE	34,554
496	COMBIVENT	103-18MCG AEROSOL	34,388
497	LITHIUM CARBONATE	600MG CAPSULE	33,910
498	DANTRIUM	25MG CAPSULE	33,680
499	REMERON	15MG TABLET	33,571
500	PENLAC	8% SOLUTION	33,287

Top 500 Prescription Drugs by Net Drug Ingredient Cost	**$153,663,006**
All Prescription Drugs by Net Drug Ingredient Cost	**$171,712,727**
Top 500 as a Percentage of all Prescription Drugs	**89.49%**
Brand Name Drugs as a Percentage of All Prescription Drugs	**90.89%**
Generic Drugs as a Percentage of All Prescription Drugs	**9.11%**

APPENDIX B

The Department of Health Services Has Not Fully Implemented Certain Prior Audit Recommendations Aimed at Reducing Drug Costs

In the Bureau of State Audits' (bureau) April 2003 report titled *Department of Health Services: Its Efforts to Further Reduce Prescription Drug Costs Have Been Hindered by Its Inability to Hire More Pharmacists and Its Lack of Aggressiveness in Pursuing Available Cost-Saving Measures*, we made numerous recommendations to help the Department of Health Services (Health Services) improve pharmacist staffing levels and take advantage of cost-saving strategies. Although our prior report included 23 recommendations, the focus of this Appendix is on Health Services' efforts to implement 16 of the recommendations that relate to its strategies for procuring drugs, including ensuring that it has adequate staff to negotiate contracts with manufacturers and collect rebates. Table B summarizes each of these 16 recommendations and Health Services' progress toward implementing them.

TABLE B

Status of Certain Recommendations From the Bureau of State Audits' 2003 Report Titled *Department of Health Services: Its Efforts to Further Reduce Prescription Drug Costs Have Been Hindered by Its Inability to Hire More Pharmacists and Its Lack of Aggressiveness in Pursuing Available Cost-Saving Measures*

Recommendation	Progress	Plan
Health Services should broaden its recruitment efforts for pharmacists beyond the counties of Sacramento and San Joaquin to all of California and advertise in pharmacy periodicals. If necessary, it should seek the appropriate approvals to expand its recruitment efforts beyond California.	According to Health Services, as of March 2005, all of its pharmacy positions have been filled and there is a waiting list of candidates, in case vacancies arise. Health Services stated that it received approval from the Department of Personnel Administration to implement a recruitment and retention payment of $2,000 per month for its pharmacists, which, according to Health Services, is primarily responsible for the full staffing levels.	Fully implemented.

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Recommendation	Progress	Plan
Health Services should perform an analysis to identify the number of staff it needs to meet its federal and state obligations. The analysis should include a reevaluation of the duties assigned to the pharmacist classifications to identify those that could be performed by nonpharmacist classifications. Further, it should quantify the effect that using nonpharmacist staff has on its federal reimbursements for personnel costs.	Although it did not perform a formal analysis, Health Services indicates it reclassified four pharmacy positions to either analyst or consultant positions and filled those positions in July 2004. According to Health Services, only one of the four reclassified positions had an impact on federal reimbursements, which reduced federal funding from 75 percent to 50 percent for one reclassified position.	Partially implemented. However, because Health Services has been able to hire more pharmacists, it believes its pharmacy program is fully staffed. Thus, the underlying reason for the recommendation has been addressed.
Health Services should research its ability to use the services of interns.	Health Services indicates it initiated discussions with the University of the Pacific in 2003, but did not succeed in getting a proposal from the school. According to Health Services, an informal analysis of the costs and benefits associated with an intern indicate that it is not cost-beneficial because of the length of time it takes to train interns and the limited term of their assignments. Instead, Health Services stated it would be better to pursue fellowship opportunities because the increased experience of a post-graduate would better meet its needs. However, in April 2005, Health Services stated the fellowship is no longer necessary because the recruitment and retention adjustment in salary has permitted it to hire more pharmacists.	Not implemented. However, because Health Services has been able to hire more pharmacists, the underlying reason for the recommendation has been addressed.
Health Services should revise its procedures for performing reviews of new drugs to include a timeline for completing reviews and specific steps on how staff should address manufacturers' nonresponsiveness.	Health Services published new policies and procedures for drug reviews in October 2004. Health Services' Medi-Cal Drug Review Policy and Procedures include timelines for drug reviews. Although the policies and procedures did not originally address manufacturer nonresponsiveness, Health Services added wording to address this in April 2005. Specifically, it drafted language to add to its policy and procedures stating that a manufacturer will have 30 business days to respond to the assigned pharmacist to accept, reject, or present an alternative to Health Services' counteroffer. If the manufacturer fails to respond within 30 business days, Health Services will conclude that the manufacturer is rejecting the counteroffer. Then Health Services will decide whether to add the petitioned drug to the drug list. As of April 27, 2005, Health Services was still conducting its internal review of the draft language. However, Health Services states that it will publish its updated policies and procedures for drug reviews on its Web site no later than June 1, 2005.	Partially implemented.
Health Services should conduct the therapeutic category reviews (TCRs) specified in its budget proposal for fiscal year 2002–03. Further, it should develop and adhere to annual schedules for future reviews.	According to Health Services, it develops a list of TCRs to be performed annually. Health Services completed four TCRs between July 2004 and December 2004. However, only one of the four TCRs were for drugs included in its budget proposal for fiscal year 2002–03. Health Services has not completed a TCR for atypical antipsychotics. According to Health Services, it chose to renegotiate contracts with manufacturers of the atypical antipsychotic drug contracts, which also generates savings.	Fully implemented.
Health Services should negotiate state supplemental rebate contracts with manufacturers of generic drugs, as the Legislature intended.	According to Health Services, it solicited contract proposals from five generic drug manufacturers in 2003. However, by May 2004 only one manufacturer had expressed an interest, which later was withdrawn. According to Health Services, generic drug manufacturers are not interested in entering into supplemental rebate agreements because their margins of profit are small and they have received negative feedback from the retail community. According to Health Services, it decided to shift from attempting to contract for generic drugs to implementing a new maximum allowable ingredient cost (MAIC) described in its response to the next recommendation.	Not implemented. However, according to Health Services, implementing the new MAIC should result in savings for generic drugs beyond those potential savings that may be achieved through its negotiations with manufacturers of generic drugs, assuming the manufacturers would even participate in the negotiations.

Recommendation	Progress	Plan
Health Services should obtain written assurance from drug wholesalers that they will provide their wholesale selling prices so that it can compute the new MAIC for generic drugs. If the wholesalers are not willing to provide this information, Health Services should seek legislation to compel them to do so.	In August 2004, state law was revised to impose penalties on wholesalers failing to comply with price reporting requirements. Specifically, the law requires wholesale drug distributors identified as a source of wholesale pricing information to provide Health Services with the wholesale selling price of all prescription and non-prescription drugs sold to pharmacies no later than 30 days after the end of each month. If a wholesaler fails to report the wholesale selling price, Health Services must deny payment for all drugs supplied by that wholesaler to Medi-Cal program beneficiaries. According to Health Services, it held its first meeting with manufacturers and wholesalers on April 8, 2005, to begin the discussions necessary to collect and calculate MAICs.	Fully implemented.
Health Services should perform an analysis to support its proposal to create a preferred prior-authorization list. The analysis should include an evaluation of the impact this proposal has on its workload and adequate documentation to support its estimated savings.	Health Services has not performed a formal analysis to support its creation of a preferred prior-authorization list. However, Health Services believes using a preferred prior-authorization list ultimately gets it closer to entering into additional supplemental rebate contracts. For example, Health Services already has conducted an evaluation of drugs used to treat erectile dysfunction and placed these drugs on a prior-authorization list. Health Services' analysis indicates that it was able to generate a substantial increase in the per unit supplemental rebates initially offered by the manufacturer. Health Services plans to continue performing analyses of the cost-effectiveness of the preferred prior authorization on a drug-by-drug or therapeutic drug category basis.	Not implemented. However, Health Services is addressing the spirit behind our recommendation by demonstrating that its preferred prior-authorization process can result in savings through the negotiation of supplemental rebate contracts.
Health Services should seek federal approval from the Centers for Medicare and Medicaid Services (center) to prohibit manufacturers from making retroactive adjustments to federal rebates owed as a result of revisions to their average manufacturer's prices or best prices.	According to Health Services, the center informally indicated that the state law prohibiting retroactive rebate recalculations could not supercede the federal rule. In May 2004, Health Services indicated to the bureau that it was seeking agreement from the center to incorporate language into its supplemental rebate contracts to prohibit manufacturers from making retroactive reductions to state rebates. Health Services' Pharmacy Policy and Contracting Section forwarded proposed contract language to the department's Office of Legal Services for approval in February 2003. On April 26, 2005, the Office of Legal Services made minor revisions and approved the proposed language to incorporate in the supplemental rebate contracts with manufacturers. Health Services intends to seek approval from the center before including the language in future contracts. Health Services anticipates sending its request for approval to the center by mid-June 2005. According to Health Services, in the meantime, a federal rule limiting manufacturers to a three-year retroactive window to adjust rebate amounts owed to states went into effect on January 1, 2004.	Partially implemented.
Health Services should evaluate periodically the number of staff needed to resolve disputed rebates within 90 days.	Health Services indicates it has not conducted a formal evaluation to determine the staff needed because available staff members have been working on "aged" disputes (those from 1991 through June 30, 2002). According to Health Services, with the increasing number of drugs, claims to review, and cost per claim, the staffing study is more likely than not to show that at least some of the currently limited term positions should be made permanent to resolve disputes in a timely manner, to get the money being withheld, and to prevent a backlog from recurring.	Not implemented. Health Services plans to implement this recommendation after its current backlog is resolved. Its current target date to resolve disputes arising from 1991 through June 30, 2002, is June 30, 2005.

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Recommendation	Progress	Plan
Health Services also should follow the center's guidance and ensure that the AIDS Drug Assistance Program (ADAP) staff and Medi-Cal staff coordinate their activities for obtaining federal rebates by using the Rebate Accounting and Information System (RAIS) for invoicing its manufacturers. Furthermore, it should ensure that its ADAP emulates the Medicaid model by seeking legislation to assess and collect interest from manufacturers when they delay submitting federal rebates.	Although the ADAP does not plan on using RAIS, it plans to establish an alternative approach whereby ADAP regularly sends its rebate claim forms with the number of drugs dispensed to Medi-Cal for verification that the ADAP is getting the correct unit rebate amount. Additionally, to more closely estimate rebates on invoices, the ADAP will continue to use the most recent unit rebate amount provided by drug manufacturers on their most recent rebate transmittals, a process the program implemented in July 2004. According to Health Services, this has resulted in less than 1 percent difference between estimated rebate totals and actual rebate amounts collected. In addition, Health Services indicates it plans to seek legislation by spring 2005 to assess and collect interest from manufacturers when they delay submitting federal rebates. In the meantime, the ADAP continues to implement a process of evaluating the appropriateness of removing the drug from the ADAP formulary when the manufacturer delays rebate payment.	Partially implemented. Health Services' ADAP's alternative approach to using RAIS may address our concern if it follows through on its plans to have Medi-Cal verify unit rebate amounts. However, the ADAP is still pending feedback from Medi-Cal on its willingness to cooperate with this plan. The ADAP's alternate approach to seeking legislation to assess and collect interest from manufacturers when they delay submitting federal rebates is reasonable. However, we encourage it to follow through with seeking legislation as recommended.
Health Services should establish policies and procedures to ensure that it follows up on and renegotiates supplemental contracts before their expiration dates. Further, it should establish a review process to ensure supplemental rebate contracts are appropriately entered into its contract tracking database and RAIS.	In April 2005, Health Services established draft policies and procedures for following up on and renegotiating supplemental contracts before they expire. Health Services still was conducting its internal review of the draft language as of April 27, 2005, but expects to finalize these draft policies and procedures no later than June 1, 2005. By November 2003, Health Services had established a process for entering contract expiration dates into a tracking system, as well as the RAIS system.	Partially implemented.
If Health Services is unable to complete negotiations for state supplemental rebates before contracts expire, it should immediately instruct Electronic Data Systems Federal Corporation (EDS) to remove the restriction on brand name drugs to allow pharmacies to dispense less expensive generic drugs without requiring a treatment authorization request (TAR) approval.	Health Services has said it evaluates the net cost impact on a case-by-case basis. If unable to renegotiate a state supplemental rebate contract on a labeler-restricted drug by the expiration date, Health Services stated that it instructs EDS to remove the restriction for a brand name drug only (thus making generically equivalent drugs available). Health Services believes this is an effective way of getting manufacturers motivated to participate in the renegotiation process. In addition, Health Services states that it compares the net cost of the generic drug in question to other brand and generic drugs within the same therapeutic category to determine if, based on the five statutory criteria, the drug in question should remain available without prior authorization. Finally, Health Services also indicates that these labeler-restrictive contracts have provisions that remove the exclusivity upon introduction of a federal upper limit or state maximum allowable ingredient cost, both of which typically make generic drugs the least costly alternative.	Fully implemented.
Health Services should ensure that it secures written assurance from the drug manufacturer for all agreements made during a negotiation and includes this information in the terms and conditions of the contract.	Health Services reports it changed its procedures for writing contracts in order to implement this recommendation. Rather than having one central person write all contracts, pharmacists are now responsible for negotiating and writing all contracts, using standard boilerplate language, but tailoring specific terms and provisions to reflect agreements reached with the manufacturer. Once the contract is signed by the manufacturer, Health Services' unit manager, section chief, division chief, and deputy director review it.	Fully implemented.

Recommendation	Progress	Plan
Health Services should require the ADAP to capitalize on the expertise of Medi-Cal's contract services unit and work with it to negotiate supplemental rebates with drug manufacturers. If it chooses not to work with Medi-Cal, the ADAP needs to ensure that it requires manufacturers to enter rebate agreements.	The ADAP indicates it has not worked with Medi-Cal's contract unit. Instead, the ADAP chooses to work with other ADAPs nationwide to combine purchasing power and negotiate additional rebates and/or price freezes with manufacturers of the program's most expensive drugs. By November 2003, the national organization had secured supplemental agreements with eight HIV drug manufacturers. According to the ADAP, costs for these drugs comprise approximately 82 percent of ADAP expenditures. Although the ADAP only provided us with two fully executed rebate agreements between it and manufacturers that identified the parties and authorized representatives, terms, and conditions, and signatures of authorized representatives of the State, the ADAP indicates it plans to pursue similar written agreements from the remaining six manufacturers.	Partially implemented.
Health Services should evaluate the pros and cons of deducting co-payments from its reimbursement rate and having pharmacies collect them from beneficiaries. The evaluation should include, at least, an analysis of costs, benefits, and pharmacies' collection rates.	Health Services did not conduct an evaluation of the pros and cons because various cost-sharing proposals, including co-payments, are being addressed at the statewide level in the governor's Medi-Cal Redesign Effort that we discuss on pages 36 through 38.	Fully implemented.

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Agency's comments provided as text only.

State and Consumer Services Agency
Office of the Secretary
915 Capitol Mall, Suite 200
Sacramento, CA 95814

May 9, 2005

Elaine Howle, State Auditor
Bureau of State Audits
555 Capitol Mall, Suite 300
Sacramento, CA 95814

Dear Ms. Elaine Howle:

Enclosed is our response prepared by the Department of General Services to the Bureau of State Audits' Report No. 2004-033 entitled, *Pharmaceuticals: State Departments That Purchase Prescription Drugs Can Further Refine Their Cost Savings Strategies*. A copy of the response is also included on the enclosed diskette.

If you have any questions or need additional information, please contact me at (916) 653-4090.

Sincerely,

(Signed by: Fred Aguiar)

Fred Aguiar, Secretary

Enclosures

State and Consumer Services Agency,
Department of General Services
Executive Office
707 Third Street
West Sacramento, CA 95605

May 10, 2005

Fred Aguiar, Secretary
State and Consumer Services Agency
915 Capitol Mall, Room 200
Sacramento, CA 95814

Response to Bureau of State Audits' Report No. 2004-033 – "Pharmaceuticals: State Departments That Purchase Prescription Drugs Can Further Refine Their Cost Savings Strategies"

Thank you for the opportunity to respond to the Bureau of State Audits' (BSA) Report No. 2004-033 which addresses recommendations to the Department of General Services (DGS). The following response addresses each of the recommendations.

OVERVIEW OF THE REPORT

The DGS has reviewed the findings, conclusions and recommendations presented in Report No. 2004-033. The DGS has implemented policies that provide for continually seeking new methods for procuring drugs at lower prices and evaluating the effectiveness of existing procurement methods. As part of this process, the DGS will take appropriate actions to address the BSA's recommendations.

Overall, upon comparing the DGS to the Department of Health Services' (DHS) and California Public Employees Retirement System's (CalPERS) prescription drug costs, we are pleased that the BSA found that the DGS generally had the best price for the cost of a drug when rebates, dispensing fees and co-payments were not taken into account. This reflects favorably on the performance of the professional pharmaceutical and acquisitions staff within the DGS' Procurement Division (PD). Based on a recent analysis of a three month period of purchases made by departments through the use of DGS' competitively bid or negotiated contracts or through the use of the State's contracted group purchasing organization (GPO), the DGS determined that approximately $6 million was saved during the period of December 1, 2004 through February 28, 2005, by departments purchasing drugs at the contracted price in contrast to wholesale acquisition cost.

The BSA's report does point-out that after rebates, dispensing fees and co-payments are included in the cost calculations, costs generally are lower at the other two departments. Since all information related to the DHS' and CalPERS' procurement programs had been redacted from the draft report provided to us for review and comment, we could not verify the BSA's calculations. Further, we could not determine if the BSA's report fully explained the significant differences in the drug prescription programs administered by the various departments. Therefore, we would point-out that, because of

the different types of procurement programs in place at those departments, it would be expected that after taking into account rebates and co-payments the DHS' and CalPERS' final State prescription drug costs may be lower than DGS' contracted costs. In brief, for the DHS, Federal regulations that govern the Medi-Cal program enable the DHS to negotiate rebates below the Medicaid Best Price for a drug. Further, only those manufacturers that offer rebates are included on the Medi-Cal preferred drug list. The DGS' drug prices cannot fall below Medicaid Best Price. Therefore, the DHS has advantages related to pricing and rebates that are not available to the DGS.

For CalPERS, drugs are provided as part of the health benefit plans it offers to public employees. The population served by these plans is very different than that served under the DGS' contracts. Therefore, CalPERS is able to subsidize its drug costs by requiring that plan participants pay co-payments for drugs dispensed through pharmacies. The DGS is not aware of any state department that requires co-payments to be paid by the population it serves, such as charging co-payment fees to California Department of Corrections' (CDC) inmates or Department of Mental Health patients.

As noted in the BSA's report, the DGS agrees that opportunities exist to obtain further savings within the State's drug procurement program. Toward this end, the overall category of pharmaceuticals has been included as part of the California Strategic Sourcing Initiative. Strategic sourcing is an approach where the buyer (State of California) analyzes what it is buying, what the conditions are, and who can supply those goods or services. Then the buyer uses that information, plus innovative contracting techniques, to find the best values available in the marketplace. Strategic sourcing is used to purchase goods and services that are bought in large quantities, generally by multiple agencies, where careful analysis shows it can be successful. Currently, the strategic sourcing contractor and its partners are providing consulting, data and strategic support services to the PD's pharmaceutical contracting activities.

It should be noted that the BSA's current audit report does show that the DGS has made significant progress toward including more drugs under contract since a prior report on the State's drug procurement program that it issued in January 2002. Specifically, the prior BSA report showed only 40% of State department purchases at contracted prices while the current report shows a 52% rate during the 2003/04 fiscal year, a 30% increase. At this time, the DGS has over 3,500 drugs available for use by State departments through either its competitively bid/negotiated contracts or its GPO contractor.

The following response only addresses the recommendations that were presented to the DGS. In general, the actions recommended by the BSA have merit and will be promptly addressed.

RECOMMENDATIONS

RECOMMENDATION # 1: ***General Services should seek more opportunities for departments to receive rebates by securing more rebate contracts with manufacturers.***

DGS RESPONSE # 1:

This recommendation pertains to the receiving of rebates within contracts entered into based on direct negotiations with manufacturers of prescription drugs. Since the statutory authority for negotiating drug contracts only became effective in January 1, 2003, the DGS is still in the early stages of implementing

this program. The DGS' policies and practices provide that the focus of negotiations be on achieving the best and lowest price overall to the State. To achieve this objective, the DGS attempts to negotiate prices that either match or are as close as possible to the Medicaid Best Price. Per Federal regulations, the manufacturers can not offer the State prices below the Medicaid Best Price.

To obtain the best and lowest price, the DGS' primary strategy is to negotiate price discounts upfront with the manufacturer. This approach is preferable to obtaining rebates to achieve pricing goals for various reasons including the necessity of the State incurring administrative costs to track and account for amounts due from manufacturers. However, it should be noted that, if they result in the State obtaining the best and lowest price, rebates have been and will continue to be pursued. In fact, one of the three contracts that have been negotiated to date includes provisions for the receipt of rebates.

RECOMMENDATION # 2: ***General Services should continue its efforts to obtain more drug prices on contract by working with its contractor to negotiate new and renegotiate existing contracts with certain manufacturers.***

DGS RESPONSE # 2:

As discussed in the Overview section of this response, pharmaceuticals have been included as a category within the California Strategic Sourcing Initiative. Consequently, the strategic sourcing contractor and its partners are providing support to the PD in its efforts to negotiate/renegotiate contracts with manufacturers. This includes the contractor providing consulting assistance during the negotiation/renegotiation of contracts within the Atypical Antipsychotic category of drugs, which makes-up approximately 30% of annual drug costs, and the negotiation of a contract for drugs used to treat hepatitis. It is estimated that the recently completed hepatitis contract, which was awarded on February 28, 2005, will result in annual savings of $1 million on a prior spending level of $5 million.

In the near future, the PD also plans to pursue the negotiation of contracts with manufacturers of two other classes of drugs that are widely used by the State: Anticonvulsants and Gastrointestinal drugs. The strategic sourcing contractor will be used to provide consulting support during this contracting effort.

RECOMMENDATION # 3: ***General Services should follow through on its plan to solicit bids to contract directly with a group-purchasing organization to determine if additional savings can be realized. However, in doing so it should thoroughly analyze its ability to secure broader coverage of the drugs state departments purchase by joining MMCAP. The analysis should include the availability of current noncontract drugs from each organization being considered and the savings that could result from spending less administrative time trying to secure additional contracts directly with drug manufacturers.***

DGS RESPONSE # 3:

As noted in the BSA's report, as staff resources become available, the DGS intends to conduct a solicitation to determine if additional savings can be realized by the State directly contracting with a GPO. The current arrangement of State departments accessing a GPO's prices through an alliance with the State of Massachusetts has been in place since October 2001 and has resulted in significant savings to the State. However, as part of its operating policy of continually seeking new methods for procuring drugs at lower prices and evaluating the effectiveness of existing procurement methods, the DGS has determined that an alternative method of accessing a GPO should be assessed as soon as feasible. As recommended by the BSA, this assessment will include an analysis of the benefits of joining the cooperative purchasing arrangement used by MMCAP.

At this time, the PD tentatively plans to begin the solicitation process for directly contracting with a GPO during the fourth quarter of the 2005/06 fiscal year. Currently, after consultation with the State's strategic sourcing contractor, the PD's pharmaceutical staff is working on such high priority activities as pursuing a new prime vendor contract, awarding a pharmacy benefits manager contract for the CDC and performing negotiations or renegotiations of contracts for high-dollar value therapeutic classes of drugs (see prior recommendation).

RECOMMENDATION # 4: ***General Services should facilitate the Formulary Committee and Board's development of guidelines, policies, and procedures relating to the departments' adherence to the statewide formulary and ensure that departments formalize their plans for compliance.***

DGS RESPONSE # 4:

At the next meetings of the Pharmacy Advisory Board and the Common Drug Formulary Committee, the DGS will discuss the BSA's recommended actions related to the need for written guidelines, plans, policies and procedures governing the administration and enforcement of the statewide drug formulary. As relatively new organizations with limited resources, to date, the groups' efforts have been focused on the area that will provide the most immediate benefit to the State, i.e., development and issuance of a common drug formulary for State departments. An effective drug formulary creates competition among manufacturers of similar drugs resulting in reduced prices.

RECOMMENDATION # 5: ***In order to make more informed decisions concerning the operation of its prescription drugs bulk purchasing program and to be able to expand the program to include those prescription drugs that best serve the needs of state departments, General Services should ask those departments that are otherwise required to participate in the bulk purchasing program to notify General Services of the volume, type, and price of prescription drugs they purchase outside of the bulk purchasing program.***

DGS RESPONSE # 5:

The DGS will study the feasibility of adding a requirement to each department's delegated purchasing authority that the PD be periodically provided with detailed information on prescription drugs purchased outside of the bulk purchasing program. Currently, the PD receives information on department drug needs that may not being met by maintaining ongoing direct communications with departments and surveying department needs during the formal bid process.

CONCLUSION

The DGS is firmly committed to effectively and efficiently controlling the State's prescription drug procurement program. As part of its continuing efforts to improve this process, the DGS will take appropriate actions to address the issues presented in the report.

If you need further information or assistance on this issue, please call me at 376-5012.

(Signed by: Ron Joseph)

Ron Joseph
Director

Agency's comments provided as text only.

State of California
Health and Human Services Agency
S. Kimberly Belshé, Secretary
1600 Ninth Street, Room 460, Sacramento, CA 95814

May 10, 2005

Elaine Howle, State Auditor*
Bureau of State Audits
555 Capitol Mall, Suite 300
Sacramento, California 95614-6404

Dear Ms. Howle:

Enclosed is the California Department of Health Services' (CDHS) response to the recommendations described in the Bureau of State Audits' (BSA) draft report entitled, "Pharmaceuticals: State Departments That Purchase Prescription Drugs Can Further Refine Their Cost Savings Strategies." The objective of the BSA review was to determine whether the State is getting the best value in purchasing prescription drugs. The CDHS is pleased that the BSA acknowledges that the CDHS negotiates the lowest prices of any of the departments considered in this review. The California Health and Human Services (CHHS) and CDHS will continue to work hard to achieve the lowest prices and appropriate services for Californians.

The CHHS and CDHS appreciates the opportunity to respond to the recommendations contained in the draft report.

Should you have any questions pertaining to the CDHS response to the draft's recommendations, please contact Mr. Stan Rosenstein, Deputy Director, Medical Care Services, at (916) 440-7800.

Sincerely,

(Signed by: David M. Topp)

David M. Topp
Assistant Secretary

* California State Auditor's comments appear on page 117.

Response to Bureau of State Audits
AB 1959 Pharmaceuticals: State Departments That Purchase Prescription Drugs Can Further Refine Their Cost Savings Strategies
2003/2004

BEST VALUE FOR PRESCRIPTION DRUGS

We were very pleased to see the audit findings that among the State programs reviewed the Department of Health Services Medi-Cal program obtained the lowest net ingredient cost for drugs in 95 percent of drugs reviewed in this audit. This confirms the effectiveness of Medi-Cal's approach of obtaining large discounts from drug manufacturers. Further, after deducting co-payment amounts from pharmacy payments and including dispensing fees in the calculation, Medi-Cal still was the lowest purchaser of drugs for 73 percent of the drugs reviewed in this audit. This is notable because:

- This calculation deducted co-payment amounts from pharmacy payments for State employee health plans. Under state law, Medi-Cal cannot deduct co-payment amounts from the amount paid to pharmacies.
- The calculation added in dispensing fee amounts. Medi-Cal has a higher dispensing fee than State employee health plans and there is no dispensing fee added to the cost of drugs provided by the Department of General Services (note these costs exist and are paid for by the State department dispensing the drug but were not included in this review).

Therefore, even though Medi-Cal must pay dispensing fees and is not able to reduce its expenditures by the use of co-payment amounts, in a large majority of cases, Medi-Cal was still able to generate enough savings on net ingredient costs to remain the best value for the State.

FINDING 1: HEALTH SERVICES NEEDS TO IMPROVE THE ACCURACY OF ITS PHARMACY REIMBURSEMENT CLAIM DATA

The audit findings state that, "Our review found that Health Services sometimes uses incorrect information when making payments to pharmacies. Specifically, in several instances Health Services' payments to pharmacies were based on outdated or incorrect information."

The Department of Health Services (DHS) generally agrees with this finding, which addresses prices used to pay pharmacies. However, it should be noted that a portion of the instances identified above was due to the timing of updates to DHS' pricing file, which were done within the timeframe established for posting newly received price changes. It is existing State policy based on Medi-Cal budget authority to post new prices to the file on a monthly basis. This sometimes results in payments being made to pharmacies according to the price on file without reflecting a new pricing change that came in after the monthly price update was made. This update gets applied the next month.

In recognition of the possibility that the normal frequency of updating the pricing file may result in pharmacies not being paid based upon the most recently updated price for a drug, DHS specifically allows pharmacies to re-bill any claim that has been paid inappropriately due to this timing circumstance. DHS believes this practice is the most cost effective policy for both the State and affected pharmacies.

1

All other instances in which incorrect pricing information was used when making payments to pharmacies were due to an error in implementing a specific computer system change (System Development Notice [SDN] 2063). This issue affected only about 40,000 out of 47 million claims processed in 2002-03, or less than one-tenth (1/10th) of one percent (1%) of the annual pharmacy claim volume. Also, DHS has determined that over ninety-eight percent (98%) of the affected formulary file records involved drugs that had already been inactivated for payment by the Medi-Cal program. As a result, only a small percentage of the total records affected could have resulted in inaccurate claim payment. In addition, this error occurred prior to DHS implementing additional system change testing requirements, involving an integrated test unit (ITU), which would most likely have prevented this kind of error from occurring in production.

DHS is in the process of working with the Medi-Cal Fiscal Intermediary (FI) in correcting the problems created by the above system change error, and plans to reprocess these claims to correct payment on all affected claims. We believe that the new ITU process will prevent these types of errors from occurring in the future.

RECOMMENDATIONS

Health Services should continue to work toward fully implementing the recommendations shown in Appendix B.

The DHS will continue to implement those recommendations described in the draft report pending budget constraints and resources.

To ensure it reimburses pharmacies the appropriate amounts for prescription drug claims, Health Services should:

1A Identify claims that were processed using outdated pricing file data, determine the appropriate price for the claim, and make the necessary corrections.

The DHS disagrees with the audit recommendation. The cause of this finding has been determined to be a normal consequence of DHS' policy to only apply pricing updates to its formulary file on a monthly basis due to existing budget authority limitation. Because the Department updates its pricing files on a monthly basis, whereas the pricing clearinghouse, currently First DataBank (FDB), updates the prices on a daily basis, the prices on file are sometimes out of synchronization with pricing dates from FDB. If the desire is to pay drug claims using the most up to date prices, increasing the frequency of pricing updates would be a more cost effective alternative than the auditor's recommendation of reprocessing claims. This change would increase Medi-Cal administrative and program cost.

In recognition of the fact that the frequency by which DHS normally updates its pricing file sometimes results in claims being paid based upon a recently outdated price, DHS allows pharmacies to re-bill claims paid inappropriately due to this timing circumstance. However, DHS does not attempt to identify or correct all such inappropriately paid claims, since such an effort would be extremely cost ineffective for both the State and affected pharmacies.

1B. Analyze the cost-effectiveness of establishing a process to review paid claims before and after its update process to ensure that the prices agreed with the appropriate process in the relevant pricing file.

The Department disagrees with this recommendation, since the basis for it has been found to be an error in the implementation of a computer system change (SDN 2063), rather than a problem with the process in updating DHS' pricing files. DHS has implemented an independent test unit function in implementing system changes that is specifically designed to prevent this type of error. DHS is in the process of working with the Medi-Cal FI to correct the computer system error and plans to conduct an erroneous payment correction to rectify payment on all affected claims.

DHS agrees that it is critical to ensure that the drug file includes correct prices. The most effective way of doing this is to have each update of the file reviewed, which is current policy.

1C. Identify prescription drug claims paid using the direct pricing method, determine the appropriate price for these claims, and make the necessary corrections.

The Department agrees with this recommendation and has written a Fiscal Intermediary Problem Statement to address those claims that were paid in error at the direct price. These errors were a direct result of the implementation of SDN 2063. This recommendation, in combination with recommendation 1E where the Average Wholesale Price percent field and Estimated Acquisition Cost (EAC) did not match, relate to the same issue.

Today, the FI has established the Integrated Testing Unit that currently prevents these errors from occurring with the implementation of an SDN by validating claims through regression testing. This allows the FI to see the differences after the system logic changes have occurred.

To address this finding, a FI Problem Statement has been written. It has been determined that between audit Finding 1C and 1E, there are 18,891 formulary records affected. However, the impact to claims reimbursement has been determined to be small, given that seventy-three percent (73%) of the affected records involved drugs that had already been inactivated at the time the system problem occurred, and subsequently over ninety-eight percent (98%) have been inactivated.

1D. Ensure that the fiscal intermediary's Integrated Testing Unit removes future outdated pricing methods promptly.

The Department agrees with this recommendation. Subsequent to the system problem occurring that allowed the application of the outdated direct pricing method, DHS has required the FI to establish an Independent Testing Unit to identify these types of errors prior to implementing the system change in production.

1E. Make the necessary corrections to the claim data to adjust for the incorrect data in the estimated acquisition cost and AWP percent field.

The Department agrees with this recommendation and a FI Problem Statement has been written. It has been determined that between audit Finding 1C and 1E, there are 18,891 formulary records affected. However, the impact to claims reimbursement has been determined to be small, given that seventy-three percent (73%) of the affected records involved drugs that had already been inactivated at the time the system problem occurred, and subsequently over ninety-eight percent (98%) have been inactivated.

1F. Ensure that its fiscal intermediary's Integrated Testing Unit verifies that, in the future, drug prices in the pricing file are calculated correctly before authorizing their use for processing claims.

The Department agrees with this recommendation. DHS already has a process to ensure the appropriateness of the pricing calculations used to process claims, including the use of its FI Integrated Testing Unit that is designed to prevent any problems with the system logic for these calculations prior to them being implemented into production.

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COMMENTS

California State Auditor's Comments on the Response From the Health and Human Services Agency

To provide clarity and perspective, we are commenting on the Department of Health Services' (Health Services) response to our audit. The numbers below correspond to the numbers we have placed in its response.

- Based on Health Services' response, we have revised our recommendation relating to it identifying claims that were processed using outdated pricing file data. Specifically, as stated on page 58, we now recommend that Health Services analyze the cost-effectiveness of increasing the frequency of its pricing updates. If it determines that it would be cost effective to conduct more frequent updates, it should seek budgetary authority to do so.

- Health Services incorrectly asserts that the basis for this recommendation is an error in the implementation of a computer system change. Rather, this recommendation stems from Health Services' policy of only updating pricing files on a monthly basis.

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Agency's comments provided as text only.

State and Consumer Services Agency
Office of the Secretary
915 Capitol Mall, Suite 200
Sacramento, CA 95814

May 11, 2005

Elaine Howle, State Auditor*
Bureau of State Audits
555 Capitol Mall, Suite 300
Sacramento, CA 95814

Dear Ms. Elaine Howle:

Enclosed is our response prepared by the California Public Employees' Retirement System to the Bureau of State Audits' Report No. 2004-033 entitled, *Pharmaceuticals: State Departments That Purchase Prescription Drugs Can Further Refine Their Cost Savings Strategies*. A copy of the response is also included on the enclosed diskette.

If you have any questions or need additional information, please contact me at (916) 653-4090.

Sincerely,

(Signed by: Fred Aguiar)

Fred Aguiar, Secretary

Enclosures

* California State Auditor's comments begin on page 123.

California Public Employees' Retirement System
Executive Office
P.O. Box 942701
Lincoln Plaza, 400 P Street Sacramento, CA 95814

May 11, 2005

Elaine M. Howle, State Auditor
Bureau of State Audits
555 Capitol Mall, Suite 300
Sacramento, CA 95814

Subject: Response to Draft Report on Pharmaceuticals

Dear Ms. Howle:

CalPERS appreciates the opportunity to respond to the Bureau of State Audits draft report titled *Pharmaceuticals: State Departments That Purchase Prescription Drugs Can Further Refine Their Cost Savings Strategies* (May 2005, Report No. 2004-033).

For our response, we offer the following comments:

1. **The cost comparisons presented in the report do not yield reliable results.** The report compares the pharmaceutical programs administered by the Department of Health Services, the Department of General Services and CalPERS. Each department, however, purchases and delivers prescription drugs in fundamentally different ways, operates under different laws and serves different populations. For example, the Department of Health Services' (DHS) Medicaid Program (i.e., Medi-Cal) is subject to statutory provisions requiring manufacturers to provide their "best price" when contracting to sell prescription drugs to DHS. Similar provisions are not available to CalPERS. The Department of General Services orders, stores and distributes drugs. This is not the delivery system under which CalPERS administers its pharmacy benefits. CalPERS contracts with three Health Maintenance Organi-zation (HMO) plans and self-funds two Preferred Provider Organization (PPO) plans. Each HMO administers its own pharmacy benefits program. For its PPOs, CalPERS contracts with a pharmacy benefits manager. These inherent differences preclude reliable cost comparisons.

2. **The Bureau's use of ingredient cost is not the best measure of the CalPERS pharmacy benefits programs.** The report's drug cost analysis uses ingredient cost, net ingredient cost and state cost to compare the three departments. Ingredient cost is not a sufficient metric for comparing the cost of prescription drugs because CalPERS health plans could lower ingredient costs by raising dispensing fees, but this action would not reduce overall prescription drug costs.

The report's calculation for state cost, identification of the top 500 drugs, and its comparison of the prices paid by the three departments all emphasize "best cost," with a focus on rebates (which are paid on brand-name drugs). CalPERS believes there are several key variables missing from the analysis that positively affect the quality and value of pharmacy benefit management. These variables include population demographics, disease burden, clinical and formulary management and delivery system variations. CalPERS focus has always been to provide best value to its members in a number of ways, including incentives to migrate from brand-name drugs to generic drugs (which does not generate a rebate), improvements in pharmacy management and use of formularies to achieve further savings. With this comprehensive approach, CalPERS believes the savings achieved are greater than seeking deeper discounts and rebates on brand-name drugs. Furthermore, effective clinical utilization of pharmaceuticals keeps costs from being shifted to more expensive medical care.

3. **Regarding CalPERS ability to ensure that the state receives all the rebates to which it is entitled, CalPERS has a guaranteed rebate provision in its self-funded pharmacy program, and intends to contractually negotiate for greater disclosure and transparency for pharmacy rebates with all contracting plans.** Our current self-funded programs' pharmacy benefits manager contract specifically prohibits access to information regarding rebates between the entity and drug manufacturers. While CalPERS is not entitled to the distribution of manufacturers' rebates, the pharmacy benefits manager contract provides for a discount off the Average Wholesale Price, in the form of a rebate, which CalPERS validates. The HMOs give CalPERS a percentage of rebates based on CalPERS-specific member utilization, effectively reducing the premium cost to the member and state.

   CalPERS is acutely aware of the need to contain pharmacy costs and uses a pharmacy benefit manager and HMOs to apply managed care principles to prescription drug programs with the goal of cost-effective drug prescribing and usage. In addition to rebates, these drug purchasers provide cost savings by taking advantage of economies of scale, as well as pharmacy group practice and health care network concepts. CalPERS cost containment more importantly focuses on Average Wholesale Price discounts, low dispensing fees, and claims processing fees, in addition to rebates. Nevertheless, CalPERS concurs with the need for greater disclosure and transparency for pharmacy rebates in both types of plans and intends to accomplish this through its contract negotiations.

4. **The Bureau indicates that its findings may be skewed because it excluded the experience of one-third of CalPERS membership.** The health plan providing pharmacy benefits to this portion of our membership is "the best overall performer for pricing and pharmacy benefit management,, " according to a recent CalPERS study. Consequently, excluding the data related to this group from the calculations used to compare CalPERS to the other state departments materially underrepresents CalPERS performance.

5. **Ensuring best value in pharmacy management for our members and employers has been a longstanding priority of the CalPERS Board of Administration.**

   Commencing in 2003, CalPERS conducted an extensive study to evaluate the effectiveness of its pharmacy programs. That study, concluded in February 2005, identified best industry practices. It also created a framework to optimize pharmacy utilization management programs to dispense evidence-based, clinically appropriate and cost-effective drugs to treat a disease or medical condition. CalPERS is using the results of this study in its annual health plan contract negotiations and current pharmacy request for proposal.

Thank you again for the opportunity to review and comment on this draft report. My staff and I appreciate your endorsement of our continuing efforts to promote transparency and accountability in our pharmacy program. Please contact me or Jarvio Grevious if you have any questions about our response or need further information before you release the final audit report.

Sincerely,

(Signed by: Jarvio Grevious for)

Fred Buenrostro
Chief Executive Officer
California Public Employees' Retirement System

COMMENTS

California State Auditor's Comments on the Response From the State and Consumer Services Agency

To provide clarity and perspective, we are commenting on the California Public Employees' Retirement System's (CalPERS) response to our audit. The numbers below correspond to the numbers we have placed in its response.

- Chapter 938, Statutes of 2004, requires the Bureau of State Audits (bureau) to report on the State's procurement and reimbursement practices as they relate to the purchase of drugs for or by state departments. Therefore, our report examines the purchasing strategies of the three primary departments that contract for prescription drugs— the Department of General Services (General Services), the Department of Health Services (Health Services), and CalPERS. Our report recognizes that there are fundamental differences in the procurement and reimbursement practices that these three departments use to purchase drugs for state beneficiaries and we clearly present those differences on pages 7 through 15. Notwithstanding these differences, we believe that the cost comparisons presented in this report are reliable and suggest that the State can further refine its cost savings strategies for prescription drugs.

- CalPERS' statement that the use of ingredient cost is not the best measure of its pharmacy benefit programs fails to recognize that ingredient cost is only one of the measures that we used to compare the prescription drug costs of the three departments. In fact, because we recognize that the drug ingredient cost is only one component in arriving at the ultimate cost of the drug, as we clearly state on page 36 of our report, we also analyzed the effect of any rebates or additional discounts, dispensing fees, co-payments, and third-party reimbursements. Consequently, our cost comparisons displayed in Figure 2 on page 30 of our report ultimately reflect the overall cost of the prescription drugs in our sample.

- CalPERS states correctly that there are other variables that affect the quality and value of pharmacy benefit management. Although Chapter 938, Statutes of 2004, requires the bureau to determine whether the State is receiving the best value of

the drugs it purchases, on pages 1, 23, and 30, we clearly state that our analysis does not address the clinical management or formulary decisions made by the departments and entities they contract with to provide drug coverage nor does it reflect their decisions related to product mix such as encouraging the use of generic over brand name drugs or shifting from older to newer drugs. Therefore, we acknowledge that the data in our report may not represent the best value for each drug.

- CalPERS did not offer any data to support its assertion that excluding the entity materially underrepresents its performance. Further, CalPERS states that this entity is the best overall performer for pricing. However, because CalPERS does not have access to the entity's actual drug pricing information, it cannot ensure that this entity's performance would have been better than the other CalPERS' entities in our sample. Although this entity represents roughly one-third of CalPERS' membership, without analyzing the actual pricing data, it is unclear whether the impact of the exclusion would be material. Thus, as we describe on pages 1, 24, and 30, it is more appropriate to state that the exclusion of the entity's data could materially skew CalPERS' results in this report. Finally, even including this entity, the conclusions we reached more than likely would not change. Specifically, as we state on page 2, Health Services' prices are far lower than either of the other two departments for the net drug ingredient cost and state cost for 95 percent and 72 percent, respectively, of the drugs common to all three departments because it receives substantial federal Medicaid program (Medi-Cal) and state supplemental rebates.

cc: Members of the Legislature
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