

Secretary of State AUDIT REPORT

Report No. 2002-25 June 13, 2002

Department of Human Services: Institutional Pharmacy Costs



Bill Bradbury, Secretary of State
Cathy Pollino, Director, Audits Division

Summary

PURPOSE

The Audits Division received a request from the Senate president and the governor's office to provide information on institutional pharmacy costs in Oregon. For the purpose of this audit, institutional pharmacies are those that specialize in supplying drugs to Medicaid recipients in nursing homes. The objective of this audit was to provide information on pharmacies' costs to supply drugs to these recipients.

BACKGROUND

The state's Medicaid reimbursement formula for pharmaceutical services has two components: estimated acquisition costs and a dispensing fee. Acquisition costs are estimated as the Average Wholesale Price (AWP) minus a percentage discount. Dispensing fees are intended to include other costs that pharmacies incur in providing drugs such as staff time, packaging, labeling and documentation.

On October 1, 2001, the state's institutional pharmacy reimbursement rates were reduced. The acquisition component was reduced from AWP minus 11 percent to AWP minus 13 percent. The dispensing fee was reduced from a maximum of \$4.28 for institutional pharmacies to \$3.80 per prescription. For fiscal year 2001, \$59 million was paid to institutional pharmacies.

RESULTS IN BRIEF

We reviewed cost information from institutional pharmacies receiving approximately 2/3 of Oregon's Medicaid payments for nursing home residents' prescription drugs. For these pharmacies, we found:

Acquisition Costs—During 2000, institutional pharmacies purchased drugs at a weighted average of AWP minus 26.7 percent.¹ Brand name drugs, which accounted for approximately 87 percent of institutional pharmacy Medicaid drug payments, were purchased at a weighted average of AWP minus 21.3 percent, while generic drugs averaged AWP minus 61.2 percent.

Dispensing Costs—Dispensing costs are more difficult to quantify because certain policy decisions need to be made in order to determine what costs should be included. The institutional pharmacies reported to us that their dispensing costs averaged \$11.75 per prescription. We made limited

adjustments to reported costs. For instance, adjustments were made to conform to federal guidelines and to follow the design of the original cost survey. We estimated total costs at \$10.97 per prescription after adjustments.² Finally, certain costs should be considered for exclusion, depending on policy decisions outlined below:

- **Delivery Costs**—We estimate the cost to deliver drugs to nursing homes at \$2.20 per prescription. Department of Human Services rules allow these costs to be reimbursed to the nursing home. A decision needs to be made as to whether these costs should be included in the institutional pharmacy reimbursement rate or whether they should be borne by the nursing homes.
- **Consulting Pharmacists' Costs**—We estimate the cost to provide consulting pharmacist services at \$1.98 per prescription. Nursing homes are required by both federal law and state rule to provide these services. A decision needs to be made as to whether these costs should be included in the institutional pharmacy reimbursement rate or whether they should be borne by nursing homes.
- **Other Costs**—We were unable to estimate the costs for other items and services, such as emergency medication kits and drug return processing, with the data available to us. These items need to be reviewed to determine whether they should be included in the institutional pharmacy reimbursement rate or whether they should be borne by nursing homes.

RECOMMENDATIONS

We recommend that the department:

- Work with policy-makers to determine whether costs outlined in this audit should be included when determining the dispensing fee reimbursement rate.
- Consider rebalancing the reimbursement rates so that they are based on the actual components of cost.
- Consider, as a part of the rate-setting process, a periodic analysis of actual pharmacy costs.

AGENCY RESPONSE

The Department of Human Services generally agrees with the findings and recommendations. Their complete response can be seen on page 6 of this report.

¹ During this period there were three different reimbursement methods used. Our analysis is based only on claims paid under the AWP method. This method accounted for 86 percent of the dollars paid during the period.

² The following discussion of costs utilizes the adjusted estimates.

Background

During the 2001 legislative session, Medicaid reimbursement rates to all pharmacies were cut. At that time, the Legislative Assembly requested that the Department of Human Services (department) conduct a review of institutional pharmacy costs. The department responded with a literature study of the published research on the issue but did no direct analysis of costs in Oregon. Subsequently, the Audits Division received requests from the governor and the Senate president to conduct a review of institutional pharmacy costs in Oregon.

Prescription drugs are provided by primarily retail and institutional pharmacies. Institutional pharmacies are those that specialize in providing medications for dispensing to institutionalized patients. Our survey found that these entities received 36 percent of their pharmacy revenues from Medicaid and 70 percent in total from federal and state programs. The department paid \$211 million in prescription drug claims in fiscal year 2001. Of that total, \$59 million was paid to institutional pharmacies.

The state's Medicaid reimbursement formula for pharmaceutical services has two elements: estimated acquisition cost and dispensing fee.

- Acquisition cost reimbursement is the same for all types of pharmacies, and is currently at AWP minus 13 percent.³
- The dispensing fee varies depending on the type of pharmacy. Institutional pharmacies are now paid \$3.80 per prescription filled, and all others are paid \$3.50 per

³ During this period there were three different reimbursement methods. The AWP method accounted for 86 percent of dollars paid.

prescription. According to the department, institutional pharmacies are reimbursed at a higher rate because additional services are required of them.

Audit Results

Drug Acquisition Costs

We reviewed drug purchases for four institutional pharmacies, representing 65 percent of Oregon's Medicaid payments for nursing home residents' prescription drugs in fiscal year 2001. We determined that the weighted average for all drugs paid under the average wholesale price (AWP) method was AWP minus 26.7 percent. The acquisition costs for these pharmacies ranged from AWP minus 24.2 percent to AWP minus 27.9 percent.

We noted that the average acquisition cost as a percent of AWP varied substantially for different types of drugs. The weighted average for brand name drugs was AWP minus 21.3 percent, while the weighted average for generic drugs was AWP minus 61.2 percent. Brand name drugs accounted for 87 percent of purchases reimbursed by the AWP method, while generics accounted for 13 percent.

Dispensing Costs

Dispensing costs are difficult to quantify because certain policy decisions need to be made in order to determine what costs should be included in this figure.

We reviewed dispensing cost data from five institutional pharmacies. The pharmacies reported weighted average dispensing costs of \$11.75 per prescription.

We made adjustments to the costs reported to us. The adjustments amounted to a net reduction of \$.78 per prescription, bringing the total

average to \$10.97 per prescription. These adjustments included:

- Eliminating certain costs not allowed under federal guidelines,
- Reallocating certain costs to conform to the original survey design. For instance, we allocated utilities and depreciation on the basis of floor space, and
- Adjusting certain costs that did not appear consistent in comparison among peer pharmacies.

Finally, other costs should be considered for exclusion or clarification. These costs include delivery costs, consulting pharmacy costs, and costs for items and services such as emergency medication kits, emergency dispensing and drug return processing.

Delivery Costs

Most institutional pharmacies include delivery as part of their service in providing drugs. We estimate that delivery costs accounted for an average of \$2.20 per prescription.

Our review of the department rules and requirements, however, indicates that the cost of delivery services could be reimbursed to nursing facilities. As such, it should be determined whether these costs should be borne by the nursing home or whether they should be borne by the pharmacy.

Consulting Pharmacists' Costs

Nursing homes are required by both federal law and state rules to provide consulting pharmacist services.^{4, 5} These services include:

- Ensuring compliance with The Oregon Pharmacy Act (ORS Chapter 689),

⁴ 42 CFR 483.60

⁵ OAR 411-086-0260

- Reviewing pharmaceutical services,
- Overseeing on-site drug supply, storage and labeling,
- Overseeing drug administration and policies,
- Reviewing monthly medications,
- Managing an emergency medication kit, and
- Determining whether documentation of medication administration is accurate.

We sampled contracts between the pharmacies and the nursing homes, and found that in all cases the institutional pharmacy providing drugs to the nursing home was also the contracted consulting pharmacist. In 57 percent of these contracts there were provisions for separate payment of consulting pharmacist services, averaging \$2 per month per resident. We estimate that consulting pharmacist services accounted for \$1.98 per prescription. It should be noted, however, that the average nursing homes resident had seven different prescriptions each month.

Our review of the department rules indicates that the cost of consulting pharmacist services could be reimbursed to nursing facilities. As such, it should be determined whether these costs should be included in the pharmacy reimbursement formula, or whether these costs should be borne by the nursing homes.

Other Costs

There is a third broad category of costs that need to be evaluated. We were unable to identify a specific per-prescription cost for these items based on information available to us.

- Emergency Medication Kits— This is a requirement of the nursing home. Associated costs include: record-keeping of drug

lot numbers and expiration dates, purchase and upkeep of containers, delivery, and inventory loss due to mishandling or expired pull dates.

- Emergency dispensing—Local pharmacies may provide a limited supply of a drug in an emergency situation for the institutional pharmacy. The institutional pharmacy fills the remainder of the prescription shortly thereafter. Because of a department rule limiting dispensing fee payments to one per prescription per 30-day period, the institutional pharmacy bills the department for the allowable amount and reimburses the local pharmacy. As a result, it appears that the institutional pharmacies incur extra costs for these types of transactions.
- Drug return processing— Certain unused drugs are required to be returned by the nursing home to the pharmacy and credited back to the department.⁶ Cost associated with the restocking process should be considered.
- 24-hour staffing—Contracts include provisions for accepting prescription orders at all times. Costs for providing daily 24-hour service should be considered.
- Other supplies to nursing homes. These include items supplied to the nursing home by the institutional pharmacy such as medication carts and fax machines.
- I.V. drug dispensing—We were unable to obtain clear information regarding this subject. It appeared that there are several different programs through which these drugs and related equipment could be billed. Programs that may be involved include Pharmacy, Home Enteral/Parenteral

Nutrition and IV Services and, possibly, Durable Medical Equipment.

Department Access to Data

During the course of this review, we found that good cost data by specific cost categories is a necessary part of developing accurate dispensing cost figures and this information is not being required of the pharmacies. It appears that the department has the regulatory ability to require pharmacies to provide relevant cost data.

We recommend that the department:

- Work with policy-makers to determine which costs outlined in this audit should be included when determining the dispensing fee reimbursement rate.
- Consider rebalancing the reimbursement rates so that they are based on the actual components of cost.
- Consider, as a part of the rate-setting process, a periodic analysis of actual pharmacy costs.

Other Matters

Drug Credits

Under department rules, certain unused drugs should be returned to the pharmacy and credited back to the department.⁷

We performed an analysis of expected credits as a result of the death of nursing home residents during fiscal year 2001. We found that the rate of identifiable credits in these conditions was only four to six percent of what we expected. We estimate that the department should have recognized between \$200,000 and \$300,000 in credits resulting from the death of Medicaid patients while in nursing

⁶ OAR 410-121-0148

⁷ IBID

homes. Further, credits could be generated for other reasons such as a change in dosage or discontinuation of a medication.

Based on this analysis, we believe that there is a substantial risk of non-compliance with this rule, and the department should consider measures designed to determine the extent of non-compliance and to ensure that the state is receiving the credits due.

Objectives, Scope and Methodology

The objective of this audit was to provide information on institutional pharmacies' actual costs to supply drugs to Medicaid recipients in nursing homes.

This review was limited to analyzing the costs of institutional pharmacies in the Medicaid fee-for-service setting. Data was provided to us by five institutional pharmacies representing 68 percent of the pharmacy payments for Oregon Medicaid nursing home residents in fiscal year 2001. Some of these pharmacies also provide services to Oregon Medicaid managed care health plans. Those services are provided under contractual agreements between the institutional pharmacies and the managed care plans and the state is not a party to those agreements. We made no attempt to include the costs for those services in our analysis.

Acquisition Costs

We obtained acquisition cost data in electronic format from four institutional pharmacies, representing 65 percent of Oregon's Medicaid payments for nursing home residents' prescription drugs in fiscal year 2001. Our analysis covered a three-month period in 2000. We confirmed the accuracy of this information through sampling of actual invoices. We also

interviewed representatives of pharmacy suppliers to confirm our understanding of business practices in this industry. Our testing indicated the acquisition cost data provided to us was accurate. We were unable to test the data for completeness.

We analyzed acquisition data in conjunction with the department's claims data for the same period. We obtained data on average wholesale drug prices from an independent provider.

Some of our analyses involved identifying drugs according to their National Drug Code (NDC). This code provides three pieces of information: the manufacturer, the active ingredient and strength, and the package size. We found, in some instances, that drugs were mis-reported on reimbursement claims due to incorrect coding of the package size. For instance, it appeared that some drugs were purchased in bottles of 500 but reported sold from bottles of 100. As a result, all package sizes of a product were considered a single drug for our testing.

To determine an overall weighted average acquisition cost, data for each pharmacy and drug went through several calculations. The first calculation found the average ratio of cost to wholesale for each drug at each pharmacy.

For each drug, a weighted average of these ratios across pharmacies was then computed. The weighted average uses the Medicaid reimbursement for the specific drug and pharmacy as the weight. If a pharmacy had no purchases for a drug, that pharmacy's weight was not used in calculating the weighted average.

Using the weighted average ratio of cost to wholesale for each drug, an overall weighted average was computed. For each drug, this average used the total Medicaid

reimbursement for all included pharmacies as weight.

Weights used in this analysis were the amount paid by the department to the pharmacy for drug ingredients. That is, any dispensing fee was subtracted from the total paid to determine the weight. For the period, pharmacies and drugs included in the review, this weighting was intended to establish a discount from AWP that would calculate a total estimated cost that was exactly equal to total actual cost.

Results reported specifically use the total paid for each drug under the AWP method.

Generic drugs were identified as drugs where the 'brand name' field and the 'generic name' field were identical in the data used.

The analysis was based on complete data, rather than on a sample. Pharmacies did not always report the same NDC for purchases, however, as they did for Medicaid reimbursement. This incongruity may have created a bias in the reported results. An analysis that did not include Medicaid claims data showed results similar to the reported results, indicating that any bias is small.

Dispensing Costs

We included five institutional pharmacies that represented 68 percent of the payments for Oregon Medicaid nursing home residents in fiscal year 2001 in the dispensing cost analysis. The pharmacies reported their dispensing costs on a template that they provided. The template was a dispensing cost survey based on published work. The responses received enabled us to quantify some of the costs attributable to items identified by institutional pharmacies as unique to them. The data reported did not provide sufficient detail of all services provided. Because of differing

fiscal years used by the pharmacies, reported costs were for various periods between July 2000 and February 2002. Since costs were analyzed on a per prescription basis, the varying time periods should not have had a significant effect on the analysis of reported costs.

Labor costs accounted for more than 60 percent of the total dispensing costs. We analyzed reported labor costs through comparison of filings with the state Employment Department. We also interviewed pharmacy human resource staff to confirm appropriate classification of labor costs.

While we performed analytical reviews to assess the data received, we did not attempt to confirm all data to source records at each business.

We allocated costs reported by the pharmacies to administrative, providing, consulting or delivery costs. Administrative costs were allocated to providing, consulting or delivery based on the percentage of costs identified in each category.

For guidance in making cost adjustments, we reviewed federal laws governing cost assignment for federal contracts. Interest costs are disallowed for federal contracts, thus we adjusted interest costs to zero.⁸

We corrected the allocation method for a limited number of cost items for which the pharmacies' template used an allocation method different from the original survey. In addition, one pharmacy reported floor space as approximately three times that reported by other pharmacies with equivalent prescription volume. For this pharmacy, we adjusted floor space; thereby reducing estimated costs that were allocated based on floor space.

The weight used to calculate weighted average dispensing costs was each pharmacy's number of Medicaid dispensing fees paid during fiscal year 2001.

The data provided by the pharmacies to us was based on a dispensing cost survey designed by Myers and Stauffer, L.C.

We conducted this audit in accordance with generally accepted government auditing standards. We limited our review to those items specified in this section of the report.

Commendation

This review was accomplished with the cooperation of five of the largest institutional pharmacies that provide services to Oregon Medicaid nursing home residents. They provided us with a list of services that they considered to be unique to their business, facility tours and access to confidential financial information necessary to complete this audit. The courtesies and cooperation of the representatives and staff of these pharmacies were commendable and much appreciated.

⁸ 48 CFR 31.205-20

Department of Human Services' Response to the Audit Report

Thank you for your review and recommendations regarding our fee-for-service institutional pharmacy reimbursement formula. The Department of Human Services is committed to providing adequate reimbursement to pharmacies to ensure access to services for our clients. What follows are the Department's comments on the draft report.

Acquisition costs. *The estimated acquisition costs for brand name (AWP minus 21.3 percent) and generic drugs (AWP minus 61.2 percent) were consistent with the federal Department of Health and Human Services Office of Inspector General studies of acquisition costs.*

Dispensing costs. *The dispensing cost estimate in this report of \$10.97 per prescription is very high, especially when compared to other studies that show costs to be significantly lower in other states. We appreciate the comments in the report noting the difficulty in quantifying dispensing costs. Not only are these costs difficult to quantify, but as the report states, "policy decisions need to be made in order to determine what costs should be included".*

We recommend that the final report reflect the fact that institutional pharmacies supply both nursing facilities and community-based settings in roughly equal proportions. This is a critical point for two reasons: first of all, each setting has different pharmacy services requirements; and second, each setting is reimbursed using a different rate setting methodology.

For example, questions were raised concerning consulting pharmacists' costs (\$1.98 per prescription). Each setting (skilled nursing, assisted living, adult foster care, etc.) has a different requirement for these services. It is a required nursing home service; however, current OAR (411-070-0320) precludes nursing facilities from recognizing this cost for rate setting. This cost is also not part of the OHP Pharmacy program and, therefore, is not included in the pharmacy reimbursement rate.

Another example is the emergency medication kits. This is a nursing home requirement, but not a requirement in community-based settings. This cost is not part of the OHP Pharmacy program and is not included in the pharmacy reimbursement rates.

Delivery costs (\$2.20 of the estimated \$10.97 for dispensing) are not covered by OMAP, but potentially could be covered if the pharmacy routinely charges customers for delivery.

Recommendations. *The Department agrees with the recommendations presented in this report and will also look into the issues that were raised in the section entitled "Other matters".*

This report, which is a public record, is intended to promote the best possible management of public resources. Copies may be obtained by mail at Oregon Audits Division, Public Service Building, Salem, Oregon 97310, by phone at 503-986-2255 and 800-336-8218 (hotline), or internet at Audits.Hotline@state.or.us and <http://www.sos.state.or.us/audits/auditph.htm>.

AUDIT ADMINISTRATOR: *James D. Pitts*

AUDIT STAFF: *Darcy A. Johnson, CPA • Jonathan E. Hart, MA • Jean M. Hodges, CPA • Rex R. Kappler, MBA*

DEPUTY DIRECTOR: *Charles A. Hibner, CPA*

The courtesies and cooperation extended by the officials and staff of the Department of Human Services were commendable and much appreciated.

Auditing to Protect the Public Interest and Improve Oregon Government