



MICHIGAN

OFFICE OF THE AUDITOR GENERAL

AUDIT REPORT



THOMAS H. MCTAVISH, C.P.A.
AUDITOR GENERAL

The auditor general shall conduct post audits of financial transactions and accounts of the state and of all branches, departments, offices, boards, commissions, agencies, authorities and institutions of the state established by this constitution or by law, and performance post audits thereof.

– Article IV, Section 53 of the Michigan Constitution

Audit report information can be accessed at:

<http://audgen.michigan.gov>



Michigan
Office of the Auditor General
REPORT SUMMARY

Performance Audit

Pharmaceutical Costs

Department of Corrections

Report Number:
471-0325-09L

Released:
March 2011

Within the Department of Corrections (DOC), the Bureau of Health Care Services (BHCS) is responsible for coordinating medical services, including pharmaceutical operations, throughout the State-run prison system. DOC's goal is to provide the greatest amount of public protection while making the most efficient use of the State's resources.

Audit Objective:

To assess the effectiveness of DOC's efforts to manage prisoner pharmaceutical costs.

Audit Conclusion:

We concluded that DOC's efforts to manage prisoner pharmaceutical costs were not effective. We noted three material conditions (Findings 1 through 3) and six reportable conditions (Findings 4 through 9).

Material Conditions:

DOC, in conjunction with DCH, had not timely implemented measures to contain the prescribing of high-cost atypical antipsychotic medications. As a result, DOC's pharmaceutical costs for atypical antipsychotic medications far exceed the levels reported for prison populations in other states and significantly impact DOC's overall pharmaceutical costs. We estimated annualized potential savings from \$852,000 to \$8.5 million. ([Finding 1](#))

DOC had not established sufficient procedures and contract language to ensure that it could minimize pharmaceutical waste and maximize the cost savings benefit of returning unused medications to the pharmacy contractor. As a result, BHCS was

unable to determine and manage the quantity and cost of returned and discarded medications and could not ensure that proper credit was received for all returned medications. DOC spent \$98.4 million for prisoner pharmaceuticals from October 1, 2007 through July 15, 2010. The contractor provided \$10.1 million in return credits from January 2008 through July 2010. We estimated that the contractor denied return credit for \$6.1 million. ([Finding 2](#))

BHCS had not implemented sufficient controls over the medication refill process. As a result, facilities had excessive inventory, waste, and return of medication, which contributed to increased pharmaceutical costs. ([Finding 3](#))

Reportable Conditions:

BHCS did not document the regional medical officer's approval for nonformulary drugs prescribed by health care professionals. Also, BHCS did not document the justification for the use of a nonformulary drug rather than a formulary drug. In addition, BHCS did not periodically examine the continued use of approved nonformulary drugs for appropriateness. ([Finding 4](#))

BHCS had not established controls to prevent the pharmacy contractor from dispensing duplicate medication orders for prisoners admitted to the Duane L. Waters Health Care Center (Finding 5).

DOC did not require prisoners having available funds to purchase their over-the-counter (OTC) medications from the prisoner store. During the period October 2007 through July 2010, approximately 853,000 OTC medication orders were provided to prisoners. The total cost to the State for these OTC medications was \$1.8 million. (Finding 6)

DOC had not established a process to verify that it receives all applicable rebates associated with pharmaceuticals purchased by DOC (Finding 7).

DOC did not ensure that its correctional facilities had implemented an effective process to verify the accuracy of pharmaceutical billings (Finding 8).

The Bureau of Fiscal Management had not established an effective process to verify that the pharmacy contractor provided pharmaceuticals to DOC correctional facilities at the same price as the contractor's actual acquisition cost (Finding 9).

~ ~ ~ ~ ~

Audit Objective:

To assess the effectiveness of DOC's efforts to control and safeguard prisoner pharmaceuticals.

Audit Conclusion:

We concluded that DOC's efforts to control and safeguard prisoner pharmaceuticals were not effective. We noted one material

condition (Finding 10) and four reportable conditions (Findings 11 through 14).

Material Condition:

DOC had not established sufficient controls related to receiving, maintaining, and distributing prisoner medications. Failure to ensure that medications are properly controlled and distributed increases pharmaceutical costs and the risk that medications could be subject to loss, theft, or abuse. (Finding 10)

Reportable Conditions:

DOC did not ensure that sufficient controls were established at its facilities for the return or disposal of unused or expired medications (Finding 11).

DOC did not maintain proper controls and accountability over State-owned inventories of stock pharmaceuticals (Finding 12).

BHCS did not ensure that proper controls were established and followed by health care staff for controlled substance medication inventories within its correctional facilities (Finding 13).

DOC did not ensure that facilities had complied with DOC operating procedures regarding inventory controls over medication boxes (Finding 14).

~ ~ ~ ~ ~

Agency Response:

Our audit report includes 14 findings and 16 corresponding recommendations. DOC's preliminary response indicates that it agrees with 14 recommendations and partially agrees with 2 recommendations

~ ~ ~ ~ ~

A copy of the full report can be obtained by calling 517.334.8050 or by visiting our Web site at: <http://audgen.michigan.gov>



Michigan Office of the Auditor General
201 N. Washington Square
Lansing, Michigan 48913

Thomas H. McTavish, C.P.A.
Auditor General

Scott M. Strong, C.P.A., C.I.A.
Deputy Auditor General



STATE OF MICHIGAN
OFFICE OF THE AUDITOR GENERAL
201 N. WASHINGTON SQUARE
LANSING, MICHIGAN 48913
(517) 334-8050
FAX (517) 334-8079

THOMAS H. MCTAVISH, C.P.A.
AUDITOR GENERAL

March 11, 2011

Mr. Richard M. McKeon, Director
Department of Corrections
Grandview Plaza Building
Lansing, Michigan

Dear Mr. McKeon:

This is our report on the performance audit of Pharmaceutical Costs, Department of Corrections.

This report contains our report summary; description; audit objectives, scope, and methodology and agency responses and prior audit follow-up; comments, findings, recommendations, and agency preliminary responses; various exhibits, presented as supplemental information; and a glossary of acronyms and terms.

Our comments, findings, and recommendations are organized by audit objective. The agency preliminary responses were taken from the agency's responses subsequent to our audit fieldwork. The *Michigan Compiled Laws* and administrative procedures require that the audited agency develop a plan to address the audit recommendations and submit it within 60 days of the release of the audit report to the Office of Internal Audit Services, State Budget Office. Within 30 days of receipt, the Office of Internal Audit Services is required to review the plan and either accept the plan as final or contact the agency to take additional steps to finalize the plan.

We appreciate the courtesy and cooperation extended to us during this audit.

AUDITOR GENERAL

TABLE OF CONTENTS

PHARMACEUTICAL COSTS DEPARTMENT OF CORRECTIONS

	<u>Page</u>
INTRODUCTION	
Report Summary	1
Report Letter	3
Description	7
Audit Objectives, Scope, and Methodology and Agency Responses and Prior Audit Follow-Up	9
COMMENTS, FINDINGS, RECOMMENDATIONS, AND AGENCY PRELIMINARY RESPONSES	
Effectiveness of Efforts to Manage Prisoner Pharmaceutical Costs	13
1. Atypical Antipsychotic Medications	14
2. Monitoring of Medication Returns and Disposals	17
3. Medication Refills	23
4. Nonformulary Prescriptions	27
5. Duplicate Medication Orders	29
6. Over-the-Counter (OTC) Medications	30
7. Verification of Pharmaceutical Rebates	32
8. Pharmaceutical Billing Verification	34
9. Actual Acquisition Cost Verification	36
Effectiveness of Efforts to Control and Safeguard Prisoner Pharmaceuticals	39
10. Prisoner Medications	40
11. Facility Controls Over Unused or Expired Medications	44
12. Stock Pharmaceuticals	47

13. Controlled Substance Medication Controls	50
14. Medication Box Controls	54

SUPPLEMENTAL INFORMATION

Exhibit 1 - Comparison of Total Pharmaceutical Costs and Average Prisoner Count	60
Exhibit 2 - Comparison of Michigan's and Other States' Average Pharmaceutical Costs Per Prisoner Per Month	61
Exhibit 3 - Breakdown of DOC Pharmaceutical Utilization by Primary Drug Category	62
Exhibit 4 - Breakdown of DOC Pharmaceutical Utilization by Secondary Drug Category	63
Exhibit 5 - Comparison of Michigan's and Other States' Average Atypical Antipsychotic Pharmaceutical Costs Per Prisoner Per Month	67
Exhibit 6 - Top 40 Drug Utilization for the Month of June 2010	68

GLOSSARY

Glossary of Acronyms and Terms	70
--------------------------------	----

Description

The Department of Corrections' (DOC's) goal is to provide the greatest amount of public protection while making the most efficient use of the State's resources. DOC had 35 correctional facilities located throughout the State as of September 2010 and was responsible for the custody and safety of 45,710 prisoners, on average, during fiscal year 2009-10. Within DOC, the Bureau of Health Care Services is responsible for coordinating medical services, including pharmaceutical operations, throughout the State-run prison system. Exhibit 1 shows a comparison of total pharmaceutical costs and average prisoner count for fiscal year 2005-06 through fiscal year 2008-09.

Effective April 1, 2004, DOC entered into a contract with a correctional pharmacy provider. Initially, 21 correctional facilities participated in the contract, and DOC later added 9 more correctional facilities. As of July 1, 2006, the contract was expanded to include all correctional facilities Statewide.

The contractor provides pharmacy services supporting DOC facilities, including acquisition, packaging, dispensing, and coordinating next-day delivery of the pharmaceuticals to the State-run correctional facilities. As opposed to a fee per prescription, the cost of these services is based on a fixed per prisoner per month rate (\$7.04 as of October 1, 2008), plus the acquisition cost of the pharmaceuticals. The contractor is required to bill DOC for the pharmaceuticals provided at the same per unit price as that acquired from the drug manufacturer/wholesaler, referred to as the "actual acquisition price." Also, DOC pays the contractor for the salaries of the pharmacists provided and, until October 2010, also paid a fuel surcharge associated with the pharmaceutical deliveries.

DOC contracts with the Department of Community Health (DCH) and an external contractor for prison-based mental health services. These services include the prescribing of medications for prisoners. DOC's costs for prisoner pharmaceuticals,

including psychotropic medications* for mental health prisoners under the care of DCH, for fiscal year 2007-08 through fiscal year 2009-10 (through July 15, 2010) are summarized as follows:

	Fiscal Year 2007-08		Fiscal Year 2008-09		Fiscal Year 2009-10 (through July 15, 2010)	
	Dollar Amount	Percent of Total	Dollar Amount	Percent of Total	Dollar Amount	Percent of Total
Contract drug costs	\$34,413,437	90.7%	\$37,450,056	93.1%	\$28,136,847	91.4%
Other drug costs	171,122	0.5%	32,436	0.1%	298,170	1.0%
Drug rebates	(379,357)	(1.0%)	(1,183,047)	(2.9%)	(510,163)	(1.7%)
Drug cost subtotal	<u>\$34,205,202</u>	<u>90.1%</u>	<u>\$36,299,446</u>	<u>90.2%</u>	<u>\$27,924,854</u>	<u>90.7%</u>
Contract dispensing/administration fees	3,709,218	9.8%	3,916,608	9.7%	2,860,334	9.3%
Contract pharmacist compensation	432,198	1.1%	382,613	1.0%	279,763	0.9%
Contract fuel surcharges		0.0%	44,409	0.1%	25,839	0.1%
Contract prompt payment discounts	<u>(385,549)</u>	<u>(1.0%)</u>	<u>(411,950)</u>	<u>(1.0%)</u>	<u>(313,024)</u>	<u>(1.0%)</u>
Total pharmaceutical costs	<u><u>\$37,961,069</u></u>	<u><u>100.0%</u></u>	<u><u>\$40,231,125</u></u>	<u><u>100.0%</u></u>	<u><u>\$30,777,765</u></u>	<u><u>100.0%</u></u>

* See glossary at end of report for definition.

Audit Objectives, Scope, and Methodology and Agency Responses and Prior Audit Follow-Up

Audit Objectives

Our performance audit* of Pharmaceutical Costs, Department of Corrections (DOC), had the following objectives:

1. To assess the effectiveness* of DOC's efforts to manage prisoner pharmaceutical costs.
2. To assess the effectiveness of DOC's efforts to control and safeguard prisoner pharmaceuticals.

Audit Scope

Our audit scope was to examine the program and other records related to prisoner pharmaceuticals. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. Our audit procedures, conducted from May through September 2010, generally covered the period October 1, 2007 through July 31, 2010.

Specifically, we reviewed records related to prisoner pharmaceutical data, costs, controls, and other related records at the DOC central office; 9 correctional facilities (Bellamy Creek, Chippewa, Florence Crane, Gus Harrison, Kinross, Oaks, Parnall, Richard A. Handlon, and Women's Huron Valley Correctional Facilities); and DOC's Duane L. Waters Health Care Center, including the on-site pharmacy. We judgmentally selected and performed on-site visits at these locations based on geographical location, facility characteristics, and other data.

Our audit was not directed toward examining medical decisions made by health care professionals, including contracted health care professionals, concerning patient

** See glossary at end of report for definition.*

treatment and prescribed medications or expressing conclusions on those medical decisions; accordingly, we express no conclusion on those medical decisions.

As part of our audit, we compiled supplemental information about DOC pharmaceutical costs and utilization based on information provided by DOC and its pharmacy contractor. Our audit was not directed toward expressing a conclusion on this information and, accordingly, we express no conclusion on it.

Audit Methodology

Our audit methodology included a preliminary review of DOC's management of prisoner pharmaceuticals. This included interviewing DOC staff; analyzing pharmaceutical expenditure and prisoner prescription data; and reviewing applicable statutes, the pharmacy services contract, and DOC operating procedures.

To assess the effectiveness of DOC's efforts to manage prisoner pharmaceutical costs, we interviewed staff from DOC's Bureau of Health Care Services and Bureau of Fiscal Management and health care staff at the facilities. We examined reports and information that were available to manage prisoner pharmaceuticals, analyzed pharmaceutical prescription data provided by the pharmacy contractor, inquired as to pharmaceutical price monitoring efforts, analyzed total DOC pharmaceutical costs in relation to prisoner count (see Exhibit 1), and obtained information related to DOC's pharmaceutical costs in relation to the costs of other states serviced by the pharmacy contractor (see Exhibits 2 and 5). Also, we reviewed DOC's processes and controls related to prisoner medication returns, disposals, and refills; approvals for the use of nonformulary drugs* and the use of over-the-counter medications*; the magnitude of prisoner medications purchased by facilities at local pharmacies; and pharmaceutical rebates received by DOC. In addition, we examined supporting documentation and discussed processes related to pharmaceutical billings and actual acquisition cost verifications with Bureau of Fiscal Management and facility staff.

To assess the effectiveness of DOC's efforts to control and safeguard prisoner pharmaceuticals, we reviewed DOC procedures on medication management, interviewed Bureau of Health Care Services staff at the facilities, observed the administering* of medications to prisoners at the facilities, observed the receipt of pharmaceutical deliveries at the facilities and examined related documentation,

** See glossary at end of report for definition.*

reviewed controls over restricted medication* and keep-on-person medication*, and performed physical counts of prisoner medications at the facilities. We also observed controls; reviewed documentation; and performed physical counts and comparisons to inventory records for controlled substances*, emergency drug boxes, and physician and dentist dispensing boxes at the facilities. In addition, we examined processes and controls related to stock pharmaceuticals maintained and dispensed* at the Duane L. Waters Health Care Center on-site pharmacy. Further, we interviewed staff and examined documentation related to the closure of the on-site pharmacy at the Huron Valley Complex.

Agency Responses and Prior Audit Follow-Up

Our audit report includes 14 findings and 16 corresponding recommendations. DOC's preliminary response indicates that it agrees with 14 recommendations and partially agrees with 2 recommendations.

The agency preliminary response that follows each recommendation in our report was taken from the agency's written comments and oral discussion subsequent to our audit fieldwork. Section 18.1462 of the *Michigan Compiled Laws* and the State of Michigan Financial Management Guide (Part VII, Chapter 4, Section 100) require DOC to develop a plan to address the audit recommendations and submit it within 60 days after release of the audit report to the Office of Internal Audit Services, State Budget Office. Within 30 days of receipt, the Office of Internal Audit Services is required to review the plan and either accept the plan as final or contact the agency to take additional steps to finalize the plan.

Within the scope of this audit, we followed up 4 of the 9 audit recommendations from our March 2008 performance audit of Prisoner Medical and Dental Services, Department of Corrections (471-0300-06). We repeated 2 prior audit recommendations in Finding 4 of this report and rewrote issues related to 2 prior audit recommendations in Findings 2, 10, and 11 for inclusion in this report.

* See glossary at end of report for definition.

COMMENTS, FINDINGS, RECOMMENDATIONS, AND AGENCY PRELIMINARY RESPONSES

EFFECTIVENESS OF EFFORTS TO MANAGE PRISONER PHARMACEUTICAL COSTS

COMMENT

Background: During calendar year 2009, the Department of Corrections (DOC) provided 1.35 million new and refill prescription orders for approximately 40,000 prisoners. For the period January through July 2010, the average number of different medications prescribed per prisoner was eight and the average pharmaceutical cost per prisoner for that same period was approximately \$730. Exhibit 2 shows a comparison of Michigan's average pharmaceutical costs compared to the costs of nine other states on a per prisoner per month basis. Exhibits 3 and 4 provide a breakdown of the primary and secondary categories of pharmaceuticals and their percentage of total DOC pharmaceutical cost, and Exhibit 6 presents DOC's top 40 drug utilizations for the month of June 2010.

As shown in Exhibits 3 and 4, the most significant category is atypical antipsychotic pharmaceutical costs. Although, atypical antipsychotic medication prescriptions represented less than 5% of the total prescriptions that the pharmacy contractor dispensed for the period January through July 2010, these medications accounted for 35% or \$7.3 million of DOC's total pharmaceutical costs. From July 2006 through March 2009, the number of prisoners under mental health care who were also prescribed atypical antipsychotic medications more than doubled from 1,400 to 2,900. Also, from July 2006 through January 2009, monthly costs for atypical antipsychotic medications tripled from \$400,000 to \$1.2 million. Three atypical antipsychotics (Seroquel, Zyprexa, and Abilify) accounted for 89% or \$6.5 million of the total atypical antipsychotic medication cost for the period January through July 2010 (see Exhibit 4). Michigan's average atypical antipsychotic drug costs per prisoner per month compared to the cost of nine other states that utilize the same pharmacy contractor were substantially higher than the other nine states in the comparison (see Exhibit 5).

Audit Objective: To assess the effectiveness of DOC's efforts to manage prisoner pharmaceutical costs.

Audit Conclusion: We concluded that DOC's efforts to manage prisoner pharmaceutical costs were not effective. We noted three material conditions*. DOC,

* See glossary at end of report for definition.

in conjunction with the Department of Community Health (DCH), had not timely implemented measures to contain the prescribing of high-cost atypical antipsychotic medications (Finding 1). Also, DOC had not established sufficient procedures and contract language to ensure that it could minimize pharmaceutical waste and maximize the cost savings benefit of returning unused medications to the pharmacy contractor (Finding 2). In addition, the Bureau of Health Care Services (BHCS) had not implemented sufficient controls over the medication refill process (Finding 3).

We also noted six reportable conditions* related to nonformulary prescriptions, duplicate medication orders, over-the-counter (OTC) medications, verification of pharmaceutical rebates, pharmaceutical billing verification, and actual acquisition cost verification (Findings 4 through 9).

FINDING

1. Atypical Antipsychotic Medications

DOC, in conjunction with DCH, had not timely implemented measures to contain the prescribing of high-cost atypical antipsychotic medications. As a result, DOC's pharmaceutical costs for atypical antipsychotic medications far exceed the levels reported for prison populations in other states and significantly impact DOC's overall pharmaceutical costs.

Within DOC, BHCS is responsible for coordinating medical services, including pharmaceutical operations, throughout the State-run prison system. DOC has contracted with a pharmacy contractor to provide most of its pharmacy services. In addition, through an interagency agreement and external contractor, DOC utilizes DCH and contracted psychiatrists for mental health care within the DOC prison system. Accordingly, about 80% of atypical antipsychotic medications prescribed for DOC prisoners are written by DCH and contracted psychiatrists. Atypical antipsychotic medications include Abilify, Geodon, Invega, Risperdal, Seroquel, and Zyprexa.

DOC targeted high-cost atypical antipsychotic medications for reduction in utilization in 2007. DOC and DCH discussed several options for addressing concerns with controlling the cost of these medications. However, the departments were unable to come to a consensus on the best way to reduce and control the

** See glossary at end of report for definition.*

prescribing of these medications. In a June 2009 letter to DOC, the former medical services contractor reported that Seroquel prescriptions within DOC were nine times the average of other states for which the contractor provided statewide prison pharmaceutical services and in which Seroquel was targeted for reduction. Also, the current pharmacy contractor continued to report these medications among DOC's highest cost medications in its monthly pharmaceutical cost reports, indicating that DOC and DCH's efforts to date had not resulted in any significant reduction in the prescribing of the targeted medications.

We analyzed Seroquel, the most prescribed atypical antipsychotic medication, and, from our discussion with DOC's medical professionals and the pharmacy contractor, learned that Risperdal was an industry recognized lower-cost alternative to Seroquel. Seroquel was still on patent, meaning that there was no generic equivalent. However, the patent on Risperdal expired and, therefore, generic versions existed which translated into this medication being substantially less costly. Using data obtained from the pharmacy contractor, we calculated the average number of Seroquel prescriptions per month for the period January through July 2010. We then estimated how much DOC could have saved if it converted 10%, 25%, 33%, 50%, 75%, or 100% of these prescriptions to Risperdal. As shown in the following table, these adjustments could result in a significant annualized cost savings:

Potential Savings Based on Seroquel and Risperdal Prescription Data
January through July 2010

Percentage reduction in Seroquel	10%	25%	33%	50%	75%	100%
Average monthly number of Seroquel scripts	2,386	2,386	2,386	2,386	2,386	2,386
Potential reduction in number of Seroquel scripts	239	597	787	1,193	1,790	2,386
Average monthly cost of Seroquel script	\$ 335	\$ 335	\$ 335	\$ 335	\$ 335	\$ 335
Projected reduction in Seroquel cost	\$ 80,065	\$ 199,995	\$ 263,645	\$ 399,655	\$ 599,650	\$ 799,310
Average monthly cost of Risperdal script	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38
Projected increase in Risperdal cost	\$ 9,082	\$ 22,686	\$ 29,906	\$ 45,334	\$ 68,020	\$ 90,668
Average monthly reduction in cost	\$ 70,983	\$ 177,309	\$ 233,739	\$ 354,321	\$ 531,630	\$ 708,642
Annualized potential savings	\$851,796	\$2,127,708	\$2,804,868	\$4,251,852	\$6,379,560	\$8,503,704

We acknowledge that, as with any prescription drug, there are factors other than cost, both medical and safety and security related, that would have to be evaluated before prescribing Risperdal rather than Seroquel or converting a prisoner's prescription from Seroquel to Risperdal. However, we believe that it would be cost beneficial to evaluate such options for the most prescribed and most costly atypical antipsychotic medications.

RECOMMENDATION

We recommend that DOC, in conjunction with DCH, timely implement measures to contain the prescribing of high-cost atypical antipsychotic medications.

AGENCY PRELIMINARY RESPONSE

DOC

DOC agrees with the recommendation and informed us that it is implementing measures to contain prescribing of high-cost atypical antipsychotic medications. DOC indicated that all employees of the Corrections Mental Health Program (CMHP) became employees of DOC effective February 20, 2011, integrating with the Psychological Services Unit. Just under half of the psychiatrists treating prisoners are civil servants, the remainder are provided by contract with MHM Correctional Services, Inc. (MHM). The consolidated mental health system, including developing formulary* and policy for all prescribers, will be under the clinical direction of the DOC Chief Psychiatric Officer (CPO) (new June 2010) and operational direction of the CMHP Director. DOC informed us that during the first 180 days of the consolidation, all existing atypical antipsychotic prisoner prescription medications will be reviewed through a new process which includes the addition of a utilization management nurse to strengthen provider education about efficacy, cost, and alternatives during the process. The Medical Services Advisory Committee (MSAC) will receive recommendations for updating the mental health formulary from the Psychiatric Services Advisory Committee (PSAC), under the leadership of DOC's CPO. DOC indicated that PSAC and MSAC together shall monitor overall system prescribing patterns, consider formulary changes, and determine training needs and action plans. DOC also informed us that with the above action steps, the sharp decline in prescriptions of high-cost medications which began in June 2010 (after addition of the CPO and MHM) will continue until

** See glossary at end of report for definition.*

CMHP expenditures are within normal ranges as compared to similar state corrections systems.

DCH

DCH agrees that timely measures were not implemented to contain high-cost atypical antipsychotic medications. DCH believes it has worked with DOC to contain the prescribing of high-cost atypical antipsychotic medications in its capacity as a contractual entity of DOC. DCH would like to point out, although Seroquel was the most frequently prescribed antipsychotic prior to 2010, it was never the most expensive one, when calculated on a per-patient-treated basis. On this basis, it was intermediate in cost, being less expensive than Zyprexa and Abilify but more expensive than Risperdal and Geodon. Before Risperdal became generic (October 2008), removing Seroquel from the formulary would have resulted in increased prescribing of other expensive drugs with little net change in cost overall. As mentioned in DOC's response, CMHP was transferred from DCH to DOC effective February 20, 2011, based on changes made in the DOC appropriations act for fiscal year 2010-11 that transferred the full-time equated positions and the funding to DOC. DCH will continue, when requested by DOC, to collaborate and assist DOC regarding this finding.

FINDING

2. Monitoring of Medication Returns and Disposals

DOC had not established sufficient procedures and contract language to ensure that it could minimize pharmaceutical waste and maximize the cost savings benefit of returning unused medications to the pharmacy contractor. As a result, the BHCS was unable to determine and manage the quantity and cost of returned and discarded medications and could not ensure that proper credit was received for all returned medications. DOC spent \$98.4 million for prisoner pharmaceuticals from October 1, 2007 through July 15, 2010.

Correctional facility health care clinic staff are required to discard medications when medications are expired or discontinued by the physician, when the prisoner is paroled or discharged, or when the medication is prepared in advance but not taken by the prisoner. DOC can return packaged medications, including refills that arrive too soon, to the pharmacy contractor and, in some cases, the contractor will credit DOC's account for the medication that has been returned.

Our review at 9 correctional facilities and the Duane L. Waters Health Care Center (DWH) disclosed:

- a. DOC had not established a process to record and compile data related to the amount of medication either discarded at its facilities or returned to the pharmacy contractor. Without this information, BHCS was unable to sufficiently evaluate and implement changes to reduce the amount of wasted medications and, in turn, its total pharmaceutical costs. The following chart shows medication order return information based on data provided by the pharmacy contractor:

	Number of Returns for Which Credit Was Granted	Dollar Value of Return Credits	Number of Returns for Which Credit Was Denied	Dollar Value of Returns for Which Credit Was Denied	Total Number of Returns
Calendar year 2008	81,017	\$ 2,767,158	41,598	Unavailable	122,615
Calendar year 2009	128,688	4,380,692	76,827	Unavailable	205,515
Calendar year 2010 (through July 31, 2010)	79,774	2,960,441	56,155	Unavailable	135,929
Total	289,479	\$10,108,291	174,580	Unavailable	464,059

Note: The number of returns equates to the number of full and partially used blister cards*, not the number of individual pills.

Based on the information provided by the pharmacy contractor related to the dollar value of return credits, we calculated an average unit price of \$34.92. We applied this amount to the returns denied credit and estimated that the value of these pharmaceuticals was \$6,096,334 for the 31-month period. However, this amount does not include the value of medications disposed of at the facilities as DOC had not collected any information regarding medication that was disposed of at its facilities (see part b.). Therefore, we believe it would be cost beneficial for DOC to compile data related to returned and destroyed medication and analyze it to implement cost saving measures that could reduce the volume of medications that are being returned or destroyed.

* See glossary at end of report for definition.

- b. BHCS did not ensure that facilities implemented procedures to limit the amount of discarded medications associated with prisoner refusals and prisoners not showing up to medications lines. As a result, a significant amount of medications are unnecessarily wasted by facilities.

At 8 of the 9 facilities that administered medications to prisoners through a medication line, it was standard practice for the nurses to prepare for the next medication line by prepunching pills from the prisoners' blister cards and/or prepouring liquid medications into individual pill cups. If the prisoner fails to show up for medication line, or refuses a medication, the nurses simply discard the medications into a sharps container*. Although the amount is undeterminable because facilities do not account for discarded medications, the cost savings to DOC by prohibiting facilities from prepunching and prepouring medications or requiring facilities to save them for the prisoner's next medication line could be substantial. For example, the one facility that no longer prepares medications in advance informed us that it observed a considerable reduction in discarded medications and a noticeable reduction in its monthly pharmaceutical cost when it stopped prepunching medications.

Also, at 1 of the 8 facilities, we observed that the nurses had prepared prisoner medications in advance for up to the next 20 days. The pills were stored in individual pill cups within prisoner medicine trays. However, the facility would have to discard the medications that were prepunched if a prisoner died; if a prisoner was paroled, discharged, or transferred; or if the physician discontinued the medication. If the medications had not been prepunched, they could have been returned to the pharmacy contractor for possible billing credit or transferred for utilization at the prisoner's new facility.

- c. DOC employees did not have a consistent understanding of when medications could be returned to the contractor for credit and/or disposal. DOC's operating procedure only requires that the health unit manager ensure that there is a system in place to return unused medication that has not been in the prisoners' possession. Some facilities made reference to guidance within the pharmacy contractor's policy manual; others mentioned e-mail correspondence from the pharmacy contractor or BHCS regional health

** See glossary at end of report for definition.*

administrators over the years; and still others responded that they did not know and, therefore, they simply returned all medications no longer needed. For example:

- (1) Nine of the 10 locations that we visited informed us that they return all full blister cards to the pharmacy contractor for potential credit. However, for 1 of these 9 locations, any full blister cards containing stray marks outside the prisoner prescription label were placed in a separate return box labeled for destruction. At the tenth location, full blister cards that did not have the medication information printed on the back of each individual pill cell were discarded by a nurse into a sharps container.
 - (2) Five of the 10 locations informed us that they return all partially used blister cards to the pharmacy contractor for potential credit. At 1 of the remaining 5 locations, all partially used blister cards were returned to the contractor, but they were placed in a separate box labeled for destruction. At another of the remaining 5 locations, all partially used blister cards were returned to the contractor; however, those that did not have the medication information printed on the back of each individual pill cell were placed in a separate box marked for destruction. At two other locations, partially used blister cards without the information printed on the back of each pill cell were discarded into sharps containers at the location. The final location did not return any partially used blister cards to the pharmacy contractor. Instead, clinic staff took the individual pills out of the blister card packaging and discarded them into a sharps container.
- d. DOC had not established a process that required health care clinics within its facilities to reconcile the medications that they returned to the pharmacy contractor with future invoices showing the credited amounts received or denied by the contractor. Without DOC's independent verification that all returned items are accounted for and that denials were proper, DOC cannot ensure that it has received the proper amount of credit for returned medications. We noted:
- (1) Eight of the 9 facility health care clinics that we visited did not reconcile the logs of returned medication with the pharmacy contract billings to ensure that all items were accurately reflected. BHCS indicated that

reconciliations were not performed because the contractor may not process the return credit until several months after the medication is returned to the contractor and the total credit applicable to an individual item may be split over several billing periods.

- (2) The information reported by the pharmacy contractor on its billings to DOC for returned items was not sufficient to allow facilities to reconcile returned medications to billing credits. The contractor identified the date that it processed the return, as opposed to the date dispensed, the date returned, or the prescription number, making reconciliation at the facility level virtually impossible.
- e. DOC had not established specific contract language that described the medications that could be returned and did not require the pharmacy contractor to provide an explanation for medications it denied a billing credit. Furthermore, we determined that the DOC contract compliance inspector was also unaware of the pharmacy contractor's criteria for granting billing credit in relation to returned medications.

In addition, staff at several facilities informed us that they had contacted the contractor in the past to inquire why a returned item had not shown up as a credit on their billing/invoice. However, they indicated that the contractor never provided a sufficient answer. DOC informed us that, within the pharmacy contractor's process, the contractor does not document and is unable to go back and determine why credit was denied for returned items. Further, DOC did not require the pharmacy contractor to return these non-credited medications or validate that the medications were destroyed. As a result, DOC could not ensure that the contractor was not redispensing the medication to DOC or another entity without cost to the contractor.

We noted similar conditions in a prior performance audit (471-0300-06). BHCS agreed with the prior finding and indicated that it would take steps to comply.

RECOMMENDATION

We recommend that DOC establish sufficient procedures and contract language to ensure that it can minimize pharmaceutical waste and maximize the cost savings benefit of returning unused medications to the pharmacy contractor.

AGENCY PRELIMINARY RESPONSE

DOC agrees with the recommendation and informed us that it is taking steps to comply. While BHCS acknowledges that opportunities exist to improve its processes, the benefits of improving the processes must be weighed against significant costs and factors such as the need to purchase or develop technological solutions to make improvement of the processes feasible, personnel resources needed to perform and monitor compliance with prescribed tasks, and the need to run correctional facilities in a safe manner.

DOC indicated that utilizing information acquired through a January 2010 lean six sigma process, BHCS is developing a request for proposal (RFP) to acquire technological solutions. The desired technology will address critical points in the process affecting efficacy and degree of control. One example of desired technology is medication card scanning which will create logs for returns and disposals to reduce the administrative burden on health care staff and allow automated tracking and reconciliation of medications returned and credited. This technology has not been previously available in DOC or long-term care industries and is currently in beta test stages in most systems.

BHCS indicated that it is clarifying its operating procedure to prohibit prepunching of medications beyond the current medication line and to discourage prepunching of medications whenever feasible, especially high-cost medications. The Directors of Nursing, Regional Health Administrators (RHAs), and Administrator of Operations will periodically observe processes to ensure compliance.

BHCS indicated that it is also clarifying its operating procedure to require staff to return all unused medications contained within full or partially used blister cards to the vendor for credit, except for controlled substances. This requirement currently exists within the PharmaCorr Manual, which is available to staff at each facility.

Through the RFP, BHCS informed us that it will also seek better methods to reconcile returned medications to pharmacy contractor credits and will require the contractor to provide an explanation for medications it denied a billing credit.

In addition, BHCS informed us that it has developed performance factors for medication management counting and accountability for all staff from the RHA on

down. BHCS will also use its third party review contractor to lead a team, including the pharmacy contractor and BHCS staff, to audit all facilities annually and to determine compliance with proper return and disposal processes.

FINDING

3. Medication Refills

BHCS had not implemented sufficient controls over the medication refill process. As a result, facilities had excessive inventory, waste, and return of medication, which contributed to increased pharmaceutical costs.

Our review of the medication refill process at 9 correctional facilities disclosed:

- a. BHCS had not established an efficient and consistent process for submitting medication refill requests to the pharmacy contractor. At 8 of the 9 facilities we visited, refills were ordered or automatically dispensed 20 to 26 days after the previous amount was dispensed, rather than ordering based on the date the medication was expected to run out. The remaining facility used the birth date system and placed refill requests each month based on the date the prisoner was born. Obtaining refills based on the date the previous dispensation was received can lead to unnecessary surplus of medication and potential waste.

For example, assume a prisoner was prescribed 1 pill of a medication a day for a six-month period; the start date for the medication is January 1, making the stop date June 30; and the facility orders refills 20 days after the most recent order dispensed. As shown in the following table, the pharmacy contractor may have dispensed all 180 pills to the facility by April 10. However, because only 100 days had elapsed, the facility would have at least an 80-day supply on hand. If a physician discontinues the prescription or writes a new prescription, even for the same medication, or the prisoner is

discharged or dies, the facility may be able to return the medication to the contractor for credit. Otherwise, the remaining 80 pills would be wasted.

Illustration of Refills Dispensed Every 20 Days

Date	Number of Pills Dispensed	
December 31	30	Initial prescription
January 20	30	First refill
February 9	30	Second refill
March 1	30	Third refill
March 21	30	Fourth refill
April 10	30	Fifth refill
Total pills dispensed	180	
Calendar days elapsed	100	
Number of pills on hand at April 11	80	

As an alternative, assume the same facts as above, except now the facility orders refills 3 days before the accumulated amount should run out. As shown in the following table, the pharmacy contractor would have dispensed only 120 pills to the facility by April 10. Therefore, the facility would have only a 20-day supply on hand, a 75% reduction in potential waste.

Illustration of Refills Dispensed 3 Days Before the Accumulated Amount Should Run Out

Date	Number of Pills Dispensed	
December 31	30	Initial prescription
January 27	30	First refill
February 26	30	Second refill
March 28	30	Third refill
April 10	0	Refill not due until April 27
	120	
Calendar days elapsed	100	
Number of pills on hand at April 11	20	

- b. Facility staff did not ensure that medication refills were needed prior to submitting a refill order. We noted:
- (1) For 49 (51%) of the 97 prisoners included within our physical counts of restricted prisoner medications at 7 facilities, the amount of medication on hand exceeded a 40-day supply. Further, the facilities maintained at least a two-month supply of one or more medications for 31 (63%) of these 49 prisoners and at least a three-month supply for 12 (24%) of these 49 prisoners. Facility staff could not always identify the cause for the excessive amounts on hand; however, we believe that the lack of controls related to the refilling of medication as identified in parts a. through d. of this finding were the primary cause of the excess.
 - (2) For 48 (38%) of the 125 prisoners included within our review of prisoner keep-on-person (KOP) medications at 7 facilities, the amount of medication dispensed within a 20-day period exceeded a one-month supply. At 8 of the 9 facilities visited, the refills were automatically ordered by the facility or automatically dispensed by the pharmacy contractor without requiring the prisoner to request the refill or verifying that the prisoner's on-hand supply was getting low. We noted an instance at one facility where a prisoner refused to accept a blister card of KOP medication because the nurse had already provided him with a 30-day supply of the medication a couple days earlier. Our review of prescription data provided by the pharmacy contractor confirmed that two 30-day supplies of the medication were dispensed within a three-day time period.
- c. In March 2010, BHCS instructed the pharmacy contractor to turn off the automated dispensing system edit that prevented refills from being dispensed too soon. BHCS did this to implement a "birthdate" medication order and refill process wherein the facility would place medication refill orders each month for the prisoner based on the day the prisoner was born. As a result of allowing all refill orders to be dispensed, facilities experienced a significant surplus of medications that were stored at the facility, distributed to the prisoner if KOP, or returned to the pharmacy contractor for possible credit. Therefore, this resulted in an undetermined amount of unnecessary cost and waste. Due to complaints from the facilities concerning overstock and the significant increase in medication returns, the pharmacy contractor turned the

edit back on in August 2010, prior to successful implementation of the "birthdate" system.

- d. BHCS did not ensure that medical providers considered the existing medication order stop date when writing a new prescription for the same medication. As a result, additional medications were dispensed to the facility, contributing toward a surplus of medication at the facility. Facility staff informed us that if a physician examines the prisoner prior to the stop date of the existing prescription, the physician will oftentimes write a new prescription for the same medication with an immediate start date. When the medical provider writes a new prescription, it technically discontinues the old prescription and the facility staff are supposed to return or dispose of all medications on hand under the old prescription. This is true even if the medication, strength, and dosage remain unchanged. This contributes to the amount of medication surplus, returned medications, and potential waste.

RECOMMENDATION

We recommend that BHCS implement sufficient controls over the medication refill process.

AGENCY PRELIMINARY RESPONSE

DOC agrees with the recommendation and informed us that it has been taking steps to comply. BHCS has been working to improve the process of medication refills including a process of refilling medications based on date of birth. BHCS is re-evaluating this process as the complexities involved have minimized the positive impact at many facilities.

BHCS indicated that it is clarifying its operating procedure to help ensure that medical providers and nursing staff consider medications on hand prior to order or refill, and to clearly denote position(s) responsible for this process. BHCS also informed us that it has developed performance factors for all staff from the RHA on down to ensure proper medication ordering processes are followed. In addition, BHCS informed us that it will also work with current and future vendors to create reports to identify duplication or overlapping orders of the same class and/or same medication.

FINDING

4. Nonformulary Prescriptions

BHCS did not document the regional medical officer's approval for nonformulary drugs prescribed by health care professionals. Also, BHCS did not document the justification for the use of a nonformulary drug rather than a formulary drug. In addition, BHCS did not periodically examine the continued use of approved nonformulary drugs for appropriateness. As a result, BHCS was unable to ensure that medications were being prescribed at the lowest cost to the State while maintaining prisoner health care. Based on data provided by the pharmacy contractor, BHCS purchased \$14.5 million in nonformulary drugs between October 1, 2007 and July 31, 2010. This represents 14% of total prescription expenditures for the period.

When a nonformulary drug must be used because of medical necessity, DOC formulary guidelines require the medical provider to submit a request and the regional medical officer to approve the request. Further, DOC operating procedure 03.04.100C states that generic drugs are to be substituted for brand name drugs whenever a generic equivalent is available. Typically, formulary drugs are significantly less expensive than nonformulary drugs; therefore, requiring the use of formulary drugs whenever possible provides a cost savings to the State.

Our review of 30 prescriptions written for nonformulary drugs prescribed between January 2008 and April 2010 disclosed:

- a. BHCS did not document the regional medical officer's approval for 11 (37%) prescriptions written for a nonformulary drug rather than a formulary drug. Also, the regional medical officer did not approve 1 nonformulary prescription request prior to the medication being dispensed by the pharmacy contractor and administered to the patient.

We noted the same condition in a prior performance audit (471-0300-06). BHCS agreed with the finding and indicated that the pharmacy contractor and State pharmacists were instructed to ensure that nonformulary drugs are only provided when the prescription for such had been approved by the regional medical officer.

- b. BHCS did not require DCH psychiatrists, working within DOC prisons, to submit nonformulary prescription orders that they initiate for review and approval by a second authorized individual. Of the 30 prescriptions reviewed, 4 (13%) were initiated and approved by the same person.
- c. BHCS did not document the justification for 4 (27%) of 15 prescriptions approved by a regional medical officer.

We noted the same condition in a prior performance audit (471-0300-06). BHCS agreed with the prior finding and indicated that the regional medical officers were instructed to ensure that justification for prescriptions for nonformulary drugs are documented prior to their approval.

- d. BHCS did not require its regional medical officers to periodically review approved nonformulary prescriptions to determine whether continued use of the medication is justified. Once a prescription for a nonformulary drug is approved by the regional medical officer, it is not required to be reviewed again and the prisoner can remain on the drug indefinitely.

RECOMMENDATIONS

WE AGAIN RECOMMEND THAT BHCS DOCUMENT THE REGIONAL MEDICAL OFFICER'S APPROVAL FOR NONFORMULARY DRUGS PRESCRIBED BY HEALTH CARE PROFESSIONALS.

WE ALSO AGAIN RECOMMEND THAT BHCS DOCUMENT THE JUSTIFICATION FOR THE USE OF A NONFORMULARY DRUG RATHER THAN A FORMULARY DRUG.

We further recommend that BHCS periodically examine the continued use of approved nonformulary drugs for appropriateness.

AGENCY PRELIMINARY RESPONSE

BHCS agrees with the recommendation and informed us that it is taking steps to comply.

BHCS indicated that it will require the contractor to develop a monthly report showing missing regional medical officer approvals and nonformulary medications

that were dispensed prior to regional medical officer approval. BHCS will work with the regional medical officer and Chief Medical Officer to review each case and determine whether dispensing prior to approval was within policy (as in emergent pain management situation) or whether targeted education and monitoring of providers is needed by the managed care vendor.

BHCS also informed us that the new psychiatric services contractor (MHM) has hired a utilization management nurse, who will work with the new CPO to implement an approval process for nonformulary mental health medications. This process will apply to medications prescribed by civil servant psychiatrists and MHM.

BHCS indicated that it will work with the third party review contractor to audit proper history or justification for nonformulary medications.

In addition, BHCS informed us that it will continue to review its pharmaceutical practices using MSAC, which includes staff from the pharmacy contractor, managed care contractor, and mental health contractor. For the past year and a half, MSAC has been targeting certain high-risk or high-cost medications regarding continued use. After it achieves sufficient progress with targeted drugs, MSAC will determine a strategy for a broad based review of continued use of nonformulary medications.

FINDING

5. Duplicate Medication Orders

BHCS had not established controls to prevent the pharmacy contractor from dispensing duplicate medication orders for prisoners admitted to the Duane L. Waters Health Care Center (DWH). As a result, medications were dispensed by the pharmacy contractor to facilities no longer housing the prisoners, causing DOC to incur unnecessary pharmaceutical costs if the medications were not accepted for return credit by the contractor. Based on prescription data provided by the contractor, it appears that as many as 23,000 unnecessary duplicate orders may have been dispensed from January through July 2010.

DWH is the only State correctional institution with its own dispensing pharmacy. Medication orders for prisoners housed at DWH are dispensed from this pharmacy.

However, the medication orders are also transmitted to the pharmacy contractor who dispenses the medication to the facility where the prisoner was previously housed. This occurs because the pharmacy contractor's system is designed for the contractor to dispense medication orders to the prisoners' "home" location. Under the existing system, DWH is not established as a "home" location.

BHCS did not independently evaluate or obtain information from its pharmacy contractor related to the significance of this issue in terms of the number of duplicate medication orders dispensed or the potential amount of medication, and corresponding dollars, wasted as a result. Therefore, it had not implemented controls to stop the duplication and could not quantify the amount of wasted medication.

RECOMMENDATION

We recommend that BHCS establish controls to prevent the pharmacy contractor from dispensing duplicate medication orders for prisoners admitted to DWH.

AGENCY PRELIMINARY RESPONSE

BHCS agrees with the recommendation and informed us that it is taking steps to update its data systems to inform the pharmacy contractor when prisoners are admitted to DWH. This will allow the pharmacy contractor to recognize facility medication orders for DWH prisoners as "mail order - no fill" so that medications are not delivered to the primary housing facility for a prisoner who is temporarily housed at DWH.

FINDING

6. Over-the-Counter (OTC) Medications

DOC did not require prisoners having available funds to purchase their OTC medications from the prisoner store. During the period October 2007 through July 2010, approximately 853,000 OTC medication orders were provided to prisoners. The total cost to the State for these OTC medications was \$1.8 million.

Prisoners can obtain OTC medications by requesting a prescription from a facility physician or by purchasing them with available funds from the prisoner store at the facility. In addition, the health units at most facilities can dispense a short-term supply of many OTC medications to prisoners from an emergency drug box, a

physician dispensing box, or a dentist dispensing box. OTC medications obtained through a facility physician, including all applicable refills and those dispensed from the previously mentioned boxes, are paid for by the State and provided free of charge to the prisoner. The following chart shows the top 15 OTC medications:

Drug Name		General Use	Cost to the State
1.	Urea	Dermatitis, psoriasis, eczema, corns, and calluses	\$ 355,523
2.	Metamucil	Occasional constipation	312,172
3.	Zantac	Stomach acid	238,738
4.	Ibuprofen	Fever, pain, and inflammation	143,219
5.	Naproxen	Pain and inflammation	137,365
6.	Gaviscon	Acid indigestion, heartburn, and sour stomach	100,010
7.	Prilosec	Duodenal ulcer	53,957
8.	Lactaid	Lactose intolerance	52,227
9.	Calcium Polycarbophil	Constipation, diarrhea, and gastrointestinal pain	48,022
10.	Zyrtec	Allergy symptoms	46,248
11.	Tylenol	Fever and pain	44,188
12.	Hemorrhoid Cream	Hemorrhoids	43,246
13.	Colace	Constipation	33,957
14.	Aspirin	Fever, pain, and inflammation	31,832
15.	Mylanta/Maalox	Acid indigestion, heartburn, and sour stomach	30,647
			<u>\$1,671,349</u>

BHCS informed us that it does not require prisoners to purchase OTC medications from the prisoner store primarily because of concerns that it would result in prisoners not taking a necessary medication and the potential negative health consequences. Also, BHCS indicated that any revenue from passing the cost of OTC medications to the prisoners would be negated by the costs of staff monitoring, collecting, and tracking payments.

We acknowledge that many prisoners may not have available funds to purchase OTC medications from the prisoner store. However, BHCS could reduce its OTC medication costs by requiring prisoners to purchase OTC medications or at least contribute toward their cost.

RECOMMENDATION

We recommend that DOC require prisoners having available funds to purchase their OTC medications from the prisoner store.

AGENCY PRELIMINARY RESPONSE

DOC partially agrees with the recommendation. DOC wishes to clarify that BHCS must provide medically necessary medications to prisoners including OTC regardless of available funds. DOC informed us that it will continue to implement OTC cost saving improvements. MSAC has made many of the listed medications nonformulary during the past year. DOC also informed us that its expenses are decreasing as the managed care contractor educates its medical providers and works with custody on prisoner store issues. The current managed care vendor has focused on reduction of OTC prescribed medications and scrutiny of medical necessity of OTC and indigent status, resulting in significantly less OTCs delivered by pharmacy vendor. BHCS will explore other options with facility management, the pharmacy vendor, and the managed care vendor.

FINDING

7. Verification of Pharmaceutical Rebates

DOC had not established a process to verify that it receives all applicable rebates associated with pharmaceuticals purchased by DOC. The pharmacy contractor provided DOC with over \$2.0 million in rebates from October 1, 2007 through June 30, 2010. This equates to 2% of the total amount charged to DOC for pharmaceutical purchases during this time period. However, DOC had no assurance that it received all rebates it was entitled to.

The pharmacy contractor receives rebates from pharmaceutical wholesalers on the purchase of drugs. Not all drugs have an associated rebate, and rebate amounts vary based on various factors, including the drug purchased, the drug manufacturer, and the quantity purchased. The pharmacy services contract requires that the contractor pass on to DOC 100% of the rebates related to pharmaceuticals sold to DOC.

Our review disclosed:

- a. DOC did not obtain any documentation from the pharmacy contractor to support the amount of rebates passed on to DOC. On a quarterly basis, the contractor sends a check to DOC for the rebates associated with pharmaceuticals purchased by DOC for that time period. Along with the check, the contractor provides DOC with an allocation of the rebate amount to the applicable DOC facility, based on purchases made by each facility for the quarter. However, DOC does not verify that the amounts reported by the contractor are complete and accurate. DOC informed us that it has no way of knowing which purchases are eligible for a rebate and, therefore, accepts the rebate amounts reported by the contractor to be complete and accurate.
- b. The pharmacy services contract did not include language specifying the extent of supporting documentation or independent certification that should be provided by the pharmacy contractor for verification purposes.

Without contract language that requires the pharmacy contractor to provide independent certification or documentation supporting the rebate determination, DOC may be unable to obtain the necessary accounting records or other supporting documentation from the contractor to gain assurance that the rebate amounts are complete and accurate.

RECOMMENDATION

We recommend that DOC establish a process to verify that it receives all applicable rebates associated with pharmaceuticals purchased by DOC.

AGENCY PRELIMINARY RESPONSE

DOC agrees with this recommendation and informed us that it will comply. DOC indicated that the new RFP for pharmaceuticals will include a requirement to participate in a revenue audit that will be conducted by an external third party. The audit will review all sources of rebate/discount/revenue that the vendor has received and ensure that DOC has received all sources of revenue generated as a result of the DOC book of business. Additionally, DOC informed us that the Bureau of Fiscal Management (BFM) will set up additional procedures to spot check drugs that have received a rebate to ensure that the appropriate share of the rebate is passed on to DOC.

FINDING

8. Pharmaceutical Billing Verification

DOC did not ensure that its correctional facilities had implemented an effective process to verify the accuracy of pharmaceutical billings. Without an effective process in place, DOC risks paying the pharmacy contractor for medications it did not receive.

Twice a month, the pharmacy contractor sends a summary invoice to BFM along with electronic spreadsheets detailing the pharmaceutical activity for the period. The spreadsheets are facility specific and are forwarded by BFM to the health unit managers or their designees at the corresponding facilities. The facilities are expected to review each item on the billing spreadsheet and reply back to BFM with the amount approved for payment. For the period October 2007 through July 2010, the pharmacy contractor billed DOC \$88.6 million for the cost of dispensed pharmaceuticals.

Our review of the billing verification process at 10 locations disclosed the following weaknesses:

a. BHCS staff did not conduct a complete verification of the billing spreadsheets and the extent of their review varied by location. We noted:

- (1) At 3 of the 10 locations, BHCS staff asserted that they spot check items on the billing spreadsheet.
- (2) At 2 of the 10 locations, BHCS staff asserted that they conduct a spot check or 100% review of the billing detail depending on the amount of time they have available.

During our visit at one of these locations, we noted an item on the approved shipping manifest marked "Not in Box." We reviewed the corresponding billing spreadsheet for this period and determined that the pharmacy contractor billed DOC for this item. BHCS staff at the location could not support that the discrepancy was resolved with the contractor.

- (3) At 4 of the 10 locations, BHCS staff asserted that they conduct a 100% review of items on the billing spreadsheet. However, at 1 of these 4

locations, the health unit manager acknowledged that staff only reviewed 2 or 3 of the 24 billing spreadsheets received each year.

- (4) At 1 of the 10 locations, the pharmacy assistant responsible for performing the review informed us that staff did not conduct any review of the billing spreadsheet forwarded by BFM. The pharmacy assistant indicated that a predecessor instructed staff to simply reply to BFM that the total amount reported on the billing spreadsheet was approved for payment.

Of the 5 locations that claimed to conduct a spot check of the billing spreadsheet, only 1 had an established process (checked all items exceeding \$299.99). This location was also the only one able to provide documentation of its verification process.

- b. DOC operating procedures did not address how the verification process should be performed.

At 2 of the 9 locations that represented to us that verification was performed, BHCS staff stated that they traced items from the shipping manifest to the billing spreadsheet, as opposed to tracing items from the billing spreadsheet to the shipping manifest. The process of tracing items from the manifest to the billing spreadsheet only verifies that DOC was charged for all items on the shipping manifest. It would generally not reveal items for which DOC was billed but did not actually receive.

- c. In general, the locations did not maintain documentation of the billing verifications. At 8 (89%) of the 9 locations that represented to us that verification was performed, BHCS staff could not provide documentation supporting their assertion:

- (1) At 2 of the 8 locations, staff indicated that they disposed of the documentation after they verified the bill.
- (2) At 6 of the 8 locations, staff acknowledged that they did not document the verification.

- d. BHCS staff did not verify that medications returned to the pharmacy contractor for a refund appeared as credits on their billing spreadsheets. This weakness is addressed in Finding 2.

RECOMMENDATION

We recommend that DOC ensure that its correctional facilities implement an effective process to verify the accuracy of pharmaceutical billings.

AGENCY PRELIMINARY RESPONSE

DOC agrees with the recommendation and informed us that it is taking steps to comply. DOC indicated that through the RFP process, BHCS will seek technology to reduce the administrative burden on health care staff to manually verify receipts to billings.

BHCS indicated that it will also update its operating procedures to clarify how staff should perform, document, and retain the verification of billings to receipts and returns. BHCS informed us that it has developed performance factors for all staff from the RHA on down to ensure compliance with medication verification processes. BHCS will also use a third party review contractor to conduct independent reviews of pharmaceutical billing verifications.

FINDING

9. Actual Acquisition Cost Verification

BFM had not established an effective process to verify that the pharmacy contractor provided pharmaceuticals to DOC correctional facilities at the same price as the contractor's actual acquisition cost.

The pharmacy services contract requires that the pharmacy contractor charge DOC its acquisition costs. DOC has assigned the responsibility for monitoring the financial aspects of the pharmacy services contract to BFM and the responsibility for monitoring the service delivery aspects to BHCS. To determine compliance with the actual acquisition cost requirement, BFM compares a sample of items on the billing to shipping invoices from pharmaceutical suppliers of the contractor.

Our review of BFM's process disclosed the following weaknesses:

- a. BFM did not select its sample of pharmaceuticals from the pharmaceutical supplier invoices. Instead, BFM provided the pharmacy contractor with a list of items chosen from the contractor's billing and asked the contractor to provide copies of supplier invoices supporting the amounts billed. Because the supplier invoices are sent to BFM by the contractor, this provides the contractor with the opportunity to modify the supplier invoices or to ensure that the pharmaceutical prices on the invoices provided for BFM's verification do not exceed the amounts billed by the contractor.
- b. BFM performed its verification on a monthly basis from October 2006 through August 2008; however, it performed the verification for only 3 of the 23 months from September 2008 through July 2010. DOC informed us that it had moved to a quarterly reconciliation. However, the 3 verifications it completed were for November 2008, September 2009, and December 2009. This pattern did not meet the intended quarterly review, and the December 2009 verification was not completed until June 2010.

BFM informed us that the verifications were not performed on a regular basis because it had not identified any instances in which the price charged by the pharmacy contractor exceeded the cost reported on the supplier invoices provided by the contractor. Also, BFM indicated that delays by the contractor in providing copies of the supporting invoices prevented BFM from performing the verifications in a timely manner.

We examined the three acquisition cost verifications completed by BFM since September 2008. We noted:

- (1) For 2 of the 30 medication billings selected by BFM, the supplier invoices provided by the pharmacy contractor were dated after the date the medications were dispensed by the contractor. The price may have been the same on earlier supplier invoices, but BFM did not question this and follow up with the contractor to determine why the actual invoice was not provided or to obtain some other validation that the pricing was in compliance with contract requirements.

- (2) For 4 of the 30 medication billings selected by BFM, the supplier invoices provided by the pharmacy contractor indicated that the contractor received the medications on the same day that the contractor dispensed them to DOC. Although not impossible, it appears logistically unlikely that the contractor received and dispensed these medications on the same day. The price may not have changed from earlier supplier shipments, but again, BFM did not question this and follow up with the contractor to determine why the actual invoice was not provided or to obtain some other validation that the pricing was in compliance with contract requirements.
- (3) For 2 of the 30 medication billings selected by BFM, the supplier invoices provided by the pharmacy contractor did not match the price charged to DOC. In both instances, the amounts shown on the supplier invoices were higher than the amounts billed to DOC. However, even though the amounts billed to DOC were lower, the discrepancies call into question the reliability of documentation provided by the contractor. BFM did not question or follow up on the discrepancies because the differences favored DOC.

Although the pharmacy services contract requires the pharmacy contractor to charge DOC the actual acquisition cost of the pharmaceuticals, it does not address how the acquisition dates of the medications dispensed are to be determined.

RECOMMENDATION

We recommend that BFM establish an effective process to verify that the pharmacy contractor provides pharmaceuticals to DOC correctional facilities at the same price as the contractor's actual acquisition cost.

AGENCY PRELIMINARY RESPONSE

BFM agrees with the recommendation and informed us that it will comply.

BFM indicated that the new RFP for pharmaceuticals will require the contractor, through a transition plan, to work with DOC to disclose the inventory valuation method and to establish a formalized process to address how actual acquisition cost will be computed and how cost verifications will be completed.

Additionally, BFM indicated that it will develop a written procedure and template for verifying contractor actual acquisition cost. The template will document the results of the cost verification process, reconciliation of discrepancies, and the necessary corrective action taken.

Upon issuance of the new pharmacy contract, BFM informed us that it will resume monthly samplings.

EFFECTIVENESS OF EFFORTS TO CONTROL AND SAFEGUARD PRISONER PHARMACEUTICALS

COMMENT

Background: DOC maintains medication inventories in the following categories:

- Restricted medication: Medication that has been prescribed to a specific prisoner and identified by DOC's BHCS as a medication that is required to be administered by a nurse or medication that the prescriber or registered nurse has determined is unsafe for the prisoner to possess.
- Controlled substance: Restricted medication that is subject to special handling requirements by federal regulations. These substances are included in Schedule I, II, III, IV, or V of the federal Controlled Substances Act (i.e., Title 21, section 801, et seq., of the *United States Code*, which controls the manufacture, distribution, and dispensing of controlled substances).
- Keep-on-person (KOP) medication: Nonrestricted medication also referred to as self-administered medication, which has been prescribed to a specific prisoner and determined to be safe for the prisoner to possess.
- Stock medication: Bulk quantities of medication that have not yet been prescribed or dispensed to a prisoner. DOC maintains stock medication in the pharmacy at DWH.

- Dispensing and emergency box medications: A variety of medications maintained by facilities in dispensing boxes for physicians and dentists to use immediately, in case of emergency, or until a prescription can be ordered.

Audit Objective: To assess the effectiveness of DOC's efforts to control and safeguard prisoner pharmaceuticals.

Audit Conclusion: We concluded that DOC's efforts to control and safeguard prisoner pharmaceuticals were not effective. We noted one material condition. DOC had not established sufficient controls related to receiving, maintaining, and distributing prisoner medications (Finding 10).

We also noted four reportable conditions related to facility controls over unused or expired medications, stock pharmaceuticals, controlled substance medication controls, and medication box controls (Findings 11 through 14).

FINDING

10. Prisoner Medications

DOC had not established sufficient controls related to receiving, maintaining, and distributing prisoner medications. Failure to ensure that medications are properly controlled and distributed increases pharmaceutical costs and the risk that medications could be subject to loss, theft, or abuse.

Sound business practice requires adequate internal control* over inventories of assets most susceptible to misuse, theft, or abuse. Adequate internal control over the inventory includes the segregation of duties among those responsible for maintaining the inventory, receipting the inventory, and accounting for the inventory. Adequate internal control also includes limiting access to inventory, requiring appropriate approvals for inventory adjustments, and performing periodic and annual physical inventory counts. Prescription medications can be costly, easy to conceal, and sought after for their mind-altering properties or street value.

* See glossary at end of report for definition.

Our review of prisoner medications at 9 correctional facilities disclosed:

- a. BHCS did not periodically inventory restricted medications. As a result, BHCS increased its risk that these medications could be lost or stolen without being detected in a timely manner.

Restricted medications are those medications administered to prisoners by facility nurses on a dose-by-dose basis. Under DOC operating procedure 03.04.100C, restricted medications include controlled substances, other medications with a high potential for abuse identified in the DOC formulary, and other medications determined to be unsafe by the prescriber or registered nurse for the prisoner to possess. However, DOC policy does not require that all restricted medications be inventoried; only those that are located in the emergency drug box, the physician dispensing box, and the dentist dispensing box or that are classified as a controlled substance must be inventoried. All other restricted medications are stored in locked medication storage areas but are not periodically inventoried. Many of these restricted medications, such as Abilify, Atripla, Seroquel, Truvada, and Zyprexa, cost in excess of \$10 per individual pill and the price of a single blister card of 30 pills could exceed \$1,000. In contrast, DOC requires inventories on a monthly basis for the relatively low-cost, low-quantity medications stored with emergency drug boxes and physician dispensing boxes and expends resources to inventory other relatively low-cost, nonpharmaceutical items, such as prisoner food stock. DOC should expand its procedures to inventory high-cost restricted medications.

We performed physical counts of restricted prisoner medications at 8 of the 9 facilities. We compared the counts to expected amounts based on medication dispensing data and medical administration records. For 29 (27%) of the 108 prisoners included within our review, the amount of medication on hand was less than the amount the records indicated should have been on hand. We observed instances at 2 facilities in which nurses inappropriately administered medication to a prisoner from another prisoner's supply. The nurses indicated that if they run out of a prisoner's medication, they generally take the needed medication from another prisoner's medication until the prisoner's refill arrives. This practice may account for some of the noted discrepancies.

We noted a similar condition in a prior performance audit (471-0300-06). BHCS agreed with the prior finding and indicated that it would comply by incorporating further controls over restricted medications and make reconciliation of inventories of restricted medications with the potential for theft or abuse more feasible.

- b. Nursing staff did not ensure that prisoners swallowed their restricted medications as required by operating procedures. As a result, staff were not assured that the prisoners had taken the prescribed medications, thereby increasing the risk that prisoners could prolong health issues, stockpile the medications for a possible suicide attempt, or introduce them as contraband* in the facility.

DOC operating procedure 03.04.100C requires that nurses observe each prisoner taking restricted medication, ask the prisoner to repeat his or her name and number to ensure that the medication was swallowed, and perform a mouth check, if necessary. Some facilities require the custody staff monitoring the medication line to perform mouth checks instead of a nurse.

We observed the distribution of medications at the 9 facilities. None of the 9 facilities required the prisoners to speak after placing the medication in their mouth to help assure the nurses that it was actually swallowed. In addition, mouth checks were not performed at 1 facility and did not appear to be standard practice or closely observed by nurses or officers at 3 additional facilities.

We noted a similar condition in a prior performance audit (471-0300-06). BHCS agreed with the prior finding and indicated that it would comply by reminding staff to ensure that prisoners have swallowed their restricted medication as required.

- c. DOC should enhance its controls over the medication receiving process. At 6 of the 9 facilities, a single person was responsible for receiving and processing medication deliveries to the facility. Not having a second person involved increases the risk that medications could be subject to loss, theft, or abuse.

** See glossary at end of report for definition.*

RECOMMENDATION

We recommend that DOC establish sufficient controls related to receiving, maintaining, and distributing prisoner medications.

AGENCY PRELIMINARY RESPONSE

DOC agrees in part with the recommendation. BHCS informed us that it agrees that it is desirable to periodically count restricted medications and compare them to what should be on hand; however, current staffing levels and the lack of technology prevent this at this time.

DOC indicated that given the significant increase in quantities of restricted medications over the past five years, a technological solution is necessary as the number of prisoners receiving mental health outpatient treatment and psychotropic medications has more than doubled from 2,000 in 2004 - 2005 to over 5,000 in 2010. Because psychotropic medications are restricted and require individual distribution by health care staff, this has significantly increased health care staff work load. In addition, according to a November 2010 Senate fiscal report entitled *Michigan's Prisoner Health Care: Costs in Context*, "data suggest that an aging population more adversely affects Michigan than the country as a whole." The quantity of prescriptions increases with the aging of the prisoner population, directly impacting the numbers of prescriptions written, received, and administered. The combined impact of increased medications for the mentally ill and the aging prisoner population make it clear that a technological solution is required.

DOC informed us that through an RFP, it will seek technology that provides for an effective method to periodically count and compare the counts to what should be on hand. In the interim, DOC will periodically count high-cost restricted medications and compare them to what should be on hand.

BHCS also informed us that it will establish performance factors requiring nurses to ensure that prisoners swallowed their medications. BHCS will also develop performance factors for all staff from the RHA on down to ensure proper medication passing practices are followed. In addition, BHCS will use its third party review contractor to lead a team, including pharmacy contractor staff, to conduct periodic on-site audits of facilities concerning distribution of medications.

Through the RFP, BHCS indicated that it will seek to acquire scanning technology to assist in reconciling the receipt of medications to the manifests. DOC will also take steps to ensure that two persons receive and process medication deliveries.

DOC indicated that it is important to note that it utilizes a pharmacy contractor who packages and delivers a limited supply of medications in blister cards that are designated for a specific prisoner for whom a prescription was prescribed. Consequently, DOC believes that theft or loss of a prisoner's medications would be detected when a refill or reorder of the prisoner's medications was required before the supply should have been exhausted, or sooner based upon a nurse's observation of the remaining supply. DOC also believes that this process creates a significant compensating method to control and safeguard prisoner medications.

FINDING

11. Facility Controls Over Unused or Expired Medications

DOC did not ensure that sufficient controls were established at its facilities for the return or disposal of unused or expired medications. As a result, BHCS was unable to effectively control the disposition of unused or expired medications. In addition, this increased the risk of loss, theft, or abuse of medications.

Our review at 9 correctional facilities and DWH disclosed:

- a. At 9 (90%) of the 10 locations visited, health care staff did not have adequate segregation of duties when preparing medications for return to the pharmacy contractor. Generally, one person accumulated the medications, prepared the return log, boxed the medications, and delivered the boxed medications to the mailroom or handed them directly to the delivery service. In addition, at all 10 locations, health care staff did not maintain documentation of medications that were set aside for return or disposal. Sound controls dictate that two people should be involved in the process and medications should be accounted for from the beginning of the process to reduce the risk of loss or theft before the medications are prepared for return or disposal.

A standard return log, containing a line for health unit managers or their designee to place their signature as reviewer of the prepared return, was used at 6 of the 10 locations. However, we noted that the line was consistently not

signed at 3 of the 6 locations. Also, we determined that the health unit manager's signature at 1 of the 3 locations was photocopied onto a stock of blank return logs. In addition, we were informed by the health unit manager at another location that, although he signs the return log, he does not actually perform any verification procedures.

- b. BHCS did not ensure that the on-site disposal of non-controlled substance medications by facility health care staff was documented or witnessed. Non-controlled substances include medications such as Atripla, Catapres, Norvir, Truvada, Ultram, Zyprexa, and other psychiatric drugs that can be expensive and have a high potential for abuse. At 9 of the 10 locations, health care staff did not document or ensure that there was a witness to the disposal of medications. At the tenth location, a medication destruction log was maintained and contained two signatures; however, the location only documented the date and total number of pills discarded. The name and dosage of the discarded medication was not recorded.

The lack of controls over the disposal process may facilitate and conceal loss or theft of medications. We observed varying amounts of individual pills discarded in sharps containers during our visits to the 10 locations. Nurses indicated that some containers were relatively new. These containers had only a small amount of discarded pills; however, others appeared to contain thousands of discarded pills.

DOC operating procedure 03.04.100C requires that two nurses dispose of unused medications and that both must sign a medication destruction log. DOC operating procedures do not address the standard information that should be documented when medications are disposed of at facility health care clinics.

We noted a similar condition in a prior performance audit (471-0300-06). BHCS agreed with the prior finding and indicated that it would take steps to comply.

- c. At 9 of the 9 facilities visited, health care staff did not render unusable the prisoner medications that were discarded into sharps containers. The deposit of prisoner medications into sharps containers makes them less accessible;

however, it does not prevent a determined individual from gaining access to the discarded medications. The U.S. Food and Drug Administration and the Office of National Drug Control Policy recommend that medications be mixed with an undesirable substance, such as kitty litter or coffee grounds, to make them less appealing and unrecognizable. For those facilities that maintained separate sharps containers for discarded medications, pouring water or used coffee grounds into the containers would not make the pills unattainable but would at least make them less desirable.

- d. DWH did not use the medications dispensed by the pharmacy contractor and transferred, from the prisoners' former correctional facility, to DWH upon the prisoners' admission into DWH. Also, DWH did not document the disposition of the medications transferred to DWH.

Pharmacy staff at DWH informed us that the prisoner medications transferred to DWH are not administered to prisoners while at DWH. Instead, the medications are returned by pharmacy staff to the pharmacy contractor for potential credit or disposed of by pharmacy staff at the pharmacy. However, no documentation existed to support what was returned, what was disposed of, or the potential cost savings DOC may have realized if the medications were administered to the prisoners while at DWH. DWH is a 122-bed facility. Approximately 1,000 prisoners were admitted into DWH from October 2009 through September 2010.

RECOMMENDATION

We recommend that DOC ensure that sufficient controls are established at its facilities for the return and disposal of unused or expired medications.

AGENCY PRELIMINARY RESPONSE

DOC agrees with the recommendation and informed us that it will comply.

In conjunction with BHCS's efforts to obtain technological solutions to reduce the administrative burden on staff, BHCS informed us that it will further segregate duties using BHCS staff, where possible, to prepare medications for return and document and witness on-site disposal of medications. At sites where BHCS staffing is not as full, BHCS will work with custody to obtain assistance with the return and disposal processes.

Through the RFP, DOC indicated that it will require the pharmacy contractor to establish a Statewide reverse distributor for disposal of controlled substances. DOC will also require the contractor to establish a best practice method for on-site disposal of single pill, non-controlled substances. Subsequent to the issuance of a new contract, BHCS will update its operating procedure to address the reverse distributor process for controlled substances and on-site disposal of loose pills.

BHCS informed us that it will establish an operating procedure to provide guidelines for the control of medications that are transferred with prisoners to DWH, so that the medications can be used by the prisoners upon their admission into DWH.

BHCS informed us that it will also use its third party review contractor to lead a team, including pharmacy contractor and BHCS staff, to audit all facilities annually and to determine compliance with controls over unused or expired medications.

FINDING

12. Stock Pharmaceuticals

DOC did not maintain proper controls and accountability over State-owned inventories of stock pharmaceuticals. Without proper controls over inventory, DOC cannot be reasonably assured that its pharmaceutical purchases are adequately safeguarded, properly accounted for, and protected against waste, loss, and misuse.

Part II, Chapter 12, Section 100 of the State of Michigan Financial Management Guide requires each agency to implement and maintain an inventory system that provides adequate internal control over the inventory. Adequate internal control over the inventory includes the segregation of duties among those responsible for maintaining the inventory, receipting the inventory, and accounting for the inventory. Adequate internal control also includes limiting access to inventory, requiring appropriate approvals for inventory adjustments, and performing physical inventory counts. An accurate physical inventory is essential to being able to reconcile pharmaceutical purchases, disbursements, and disposals to the pharmaceuticals actually on hand.

Our review of the stock pharmaceuticals disclosed:

- a. DOC inappropriately delegated responsibility and accountability over stock pharmaceuticals to the pharmacy contractor during the closure of the Huron Valley Complex pharmacy.

The Huron Valley Complex pharmacy was a State-run pharmacy that dispensed pharmaceutical prescriptions for prisoners housed at the Men's Huron Valley Correctional Facility, the Women's Huron Valley Correctional Facility, Camp Valley, and the Robert Scott Correctional Facility. DOC closed the pharmacy during September 2008. Pharmacy services for prisoners at these facilities were converted to DOC's mail-order pharmacy contractor. BHCS enlisted the pharmacy contractor to perform the closeout process of the pharmacy. This included performing a final inventory of the remaining pharmaceutical stock on hand. The contractor provided all the manpower to perform the inventory counts, box up the inventory and supplies, clean pharmacy areas, transfer certain inventory to DOC's DWH pharmacy, and return other inventory to the pharmaceutical manufacturer for billing credit or disposal.

There was no involvement or oversight by BHCS or other DOC employees during the final inventory and pharmacy closeout process. Further, BHCS did not attempt to reconcile the September 30, 2008 inventory amount reported by the pharmacy contractor using purchase invoices and records of pharmaceuticals dispensed by the pharmacy or perform any analysis to determine the reasonableness of the inventory performed by the contractor. State law does not preclude BHCS from delegating tasks and responsibilities to a contractor. However, sound business practice dictates that BHCS should have maintained proper controls and accountability over State resources by overseeing the performance of the final inventory at the pharmacy.

Also, staff at the DWH pharmacy stated that there was no documentation prepared to support the completeness of the inventory transferred to the DWH pharmacy. Items were brought in and simply added to the shelves within the DWH pharmacy.

Invoices indicate that a total of \$1,098,501 in pharmaceutical stock was purchased by the Huron Valley Complex pharmacy during the final three months leading up to its closure. The final inventory valuation assigned by the contractor on September 30, 2008 was \$253,392. This amount was broken down as follows:

Returned to the drug wholesaler for credit (preliminary estimate)	\$121,000
Transferred to the DWH pharmacy for utilization	122,094
Outdated medications - no credit	9,334
Controlled substances sent for destruction	964
	<hr/>
Total	<u>\$253,392</u>

- b. DOC did not maintain a perpetual inventory of non-controlled substance stock pharmaceuticals at its DWH pharmacy. Non-controlled substance stock pharmaceuticals include high-cost drugs such as Abilify, Atripla, Pegasys, Seroquel, Zyprexa, and Zyvox.

The DWH pharmacy is the only remaining dispensing pharmacy within the DOC prison system. Medications for prisoners housed at DWH are purchased in bulk quantities and then dispensed by pharmacists at the DWH pharmacy. For fiscal years 2008-09 and 2007-08, pharmaceutical purchases by the facility totaled \$2,773,384 and \$3,117,637, respectively.

DWH performs an annual estimated inventory count for purposes of determining the year-end value of the inventory. However, these estimated counts and valuations are not compared with pharmaceutical purchases, disposals, and amounts dispensed to ensure that all pharmaceuticals are properly accounted for.

Pharmacists at the DWH pharmacy manually maintain a perpetual inventory of the relatively small quantity of controlled substance stock pharmaceuticals stored within the facility. However, the pharmacists informed us that the electronic prescription dispensing system used by the facility is not designed to maintain a perpetual inventory of non-controlled substance stock pharmaceuticals and the quantities are too large to track on a manual basis.

RECOMMENDATION

We recommend that DOC maintain proper controls and accountability over State-owned inventories of stock pharmaceuticals.

AGENCY PRELIMINARY RESPONSE

BHCS agrees with the recommendation and informed us that it will seek to comply.

BHCS indicated that it will update its operating procedure to include responsibility of key staff during closure of State pharmaceutical stock centers.

Through an RFP, BHCS indicated that it will seek to acquire technology to assist with the process of maintaining a perpetual inventory record for State-owned inventories of stock pharmaceuticals. BHCS is also exploring whether it should require the vendor to own and dispense the pharmacy stock.

FINDING

13. Controlled Substance Medication Controls

BHCS did not ensure that proper controls were established and followed by health care staff for controlled substance medication inventories within its correctional facilities. Without proper inventory controls over controlled substance medications, BHCS cannot provide assurance that the medications are properly accounted for and safeguarded.

Sound business practice requires adequate internal control over inventories of assets most susceptible to misuse, theft, and abuse. Adequate internal control over the inventory includes the segregation of duties among those responsible for maintaining the inventory, receipting the inventory, and accounting for the inventory. Adequate internal control also includes limiting access to inventory, requiring appropriate approvals for inventory adjustments, and performing physical inventory counts. Controlled substance medications can be costly, easy to conceal, and sought after for their mind-altering properties or street value. Therefore, these medications are susceptible to misuse, theft, and abuse.

Our review of BHCS's controlled substance medication inventory controls at 10 locations disclosed the following weaknesses:

- a. At 7 of the 10 locations visited, health care staff access to the controlled substance medications was not sufficiently limited.

The controlled substances were stored within locked rooms at all locations visited. However, at the majority of these locations, all nurses, pharmacy technicians, and the health unit administrator had the keys on their assigned key rings, which allowed them direct access to the locked room as well as the storage unit (cabinet, medication cart, and/or box) where the controlled substances were kept. Because of the addictive nature, value, and federal requirements regarding the handling of controlled substances, we believe that the access should be limited. Past practice at most locations limited access to one person per shift by retaining only one set of keys that were signed over at the shift change. If it is not practical to have one set of keys signed over at shift-end, DOC may consider implementing the use of prenumbered plastic seals similar to those required for dispensing boxes that contain non-controlled substances.

- b. At 1 of the 10 locations visited, we noted that an auxiliary health unit to the main health care facility stored its controlled substance medications in a cabinet for which staff informed us the lock has been broken for three years. The cabinet was located within a locked room of the auxiliary health unit to prevent access by prisoners.
- c. At 5 of the 10 locations visited, a master index did not exist to track all of the individual perpetual inventory sheets for controlled substance medications currently administered to prisoners. Also, at 3 of the 5 locations, health care staff did not maintain a master index to account for the discontinued controlled substance medications set aside for disposal by a pharmacy contract inspector. Without a master index of the controlled substance medications and the corresponding individual perpetual inventory sheets, the risk that a theft of a controlled substance medication would not be detected in a timely manner increases.

To account for the inventory of controlled substance medications, the locations maintained a separate perpetual inventory sheet for each prisoner's blister card or bottle that was either rubber-banded to the medication or maintained in a three-ring binder. However, a combined listing of all the separate perpetual inventory logs did not exist. Therefore, if both the medication and corresponding perpetual inventory sheet were taken, the theft may go unnoticed for some time. This is especially true for any surplus prisoner blister cards, bottles, and controlled substances set aside for disposal by the pharmacy contractor.

- d. At 7 of the 10 locations visited, we noted instances in which the shift-change counts of controlled substance medications were not performed, were not performed at the same time by the on-coming and off-going nurses, or were not documented.

DOC operating procedure 03.04.100C requires a physical count of all controlled substances and comparison to the perpetual inventory record at each shift change. We noted:

- (1) At 3 of the 7 locations, our review of the controlled substances count logs noted several instances in which the log was not signed by the on-coming nurse, the off-going nurse, or both nurses. This indicated that the counts were not performed, that the counts were performed but the nurses forgot to sign the log, or that both nurses were not present at the count.
- (2) At the majority of locations we visited, the standard practice was that the on-coming nurse and the off-going nurse performed a count of the controlled substances together. However, at 2 of the 7 locations, it was the location's practice for the off-going nurse to perform the count and sign the count log without the on-coming nurse. It was not until the off-going shift had left the location and the on-coming nurses finished setting up the evening prisoner medication line that an on-coming nurse would perform the count and sign the count log.
- (3) At 1 of the 7 locations, the on-coming and off-going nurses properly counted the prisoners' current controlled substance blister cards at the

same time and properly signed the count log. However, we observed that the nurses did not count the inventory of prisoners' surplus blister cards.

- (4) At 1 of the 7 locations, we noted that the nurses did not maintain a count log for controlled substances stored at and administered from an auxiliary health unit.

Failure to perform and document the required counts increases the risk that controlled substances are not properly accounted for and that theft would not be identified in a timely manner.

- e. At 2 of the 10 locations visited, health care staff did not maintain a perpetual inventory sheet for all controlled substance medications. At one location, there were two full bottles of Phenobarbital dispensed for a prisoner that was not being accounted for on a perpetual inventory sheet. At the other location, perpetual inventory sheets did not exist to properly account for the surplus blister cards stored within an auxiliary health unit.
- f. At 1 of the 10 locations visited, we noted a controlled substance (Testosterone Cypionate) that did not have a prescription label and it did not appear that the substance was assigned or being administered to any prisoner at the location.

RECOMMENDATION

We recommend that BHCS ensure that proper controls are established and followed by health care staff for controlled substance medication inventories within its correctional facilities.

AGENCY PRELIMINARY RESPONSE

BHCS agrees with the recommendation and informed us that it has taken steps to comply.

BHCS informed us that it is updating its operating procedure to clarify the requirements for locking and gaining access to controlled substances and performing and documenting counts at shift-change. In addition, the lock was replaced at the auxiliary health unit.

Also, BHCS informed us that it will seek technological solutions to combine individual perpetual inventory sheets into a full inventory. BHCS will require staff to maintain master indexes of inventory sheets for all boxes until the point where technological solution is acquired.

In addition, BHCS informed us that it will establish performance factors requiring health unit managers to monitor compliance with required procedures. BHCS will also use its third party review contractor and pharmacy contractor to conduct periodic audits of all facilities concerning controls over controlled substance medications.

FINDING

14. Medication Box Controls

DOC did not ensure that facilities had complied with DOC operating procedures regarding inventory controls over medication boxes. Without proper inventory controls over medication boxes, DOC cannot provide assurance that the medications are available, properly accounted for, safeguarded from unauthorized use, and dispensed as prescribed.

Most correctional facilities' health services units maintain a physician dispensing box that contains prescription medications such as Amoxicillin, Augmentin, Keflex, Prednisone, and Flexeril and other medications such as Motrin and Imodium. Also, most facilities maintain an emergency drug box that contains prescription medications such as Atrovent inhalers, epinephrine, Narcan, Tamiflu, and Toradol. In addition, some facilities maintain a dentist dispensing box that contains medications such as Amoxicillin, Motrin, and Naproxen.

Our review of 9 physician dispensing boxes at 8 facilities, 10 emergency drug boxes at 9 facilities, and 4 dentist dispensing boxes at 4 facilities disclosed the following weaknesses:

- a. A numbered plastic seal and log were not used to secure the medication boxes and to document access to the boxes. We noted:
 - (1) For 4 (44%) of the 9 physician dispensing boxes and 6 (60%) of the 10 emergency drug boxes, the facilities did not use numbered plastic seals.

Also, for a seventh emergency drug box, numbered plastic seals were used by the facility, but during our visit, we observed that the seal was not properly attached and therefore did not restrict access to the box.

- (2) For 2 (40%) of the 5 physician dispensing boxes, 2 (50%) of the 4 emergency drug boxes, and 1 (25%) of the 4 dentist dispensing boxes on which numbered seals were used, logs documenting access history were either not complete or not maintained throughout the audit period.

DOC operating procedure 03.04.100C requires facilities to secure medication boxes using numbered plastic seal, and to document the opening and resealing of the boxes.

- b. Medication boxes were not stored within a secured area and locked. We noted:

- (1) One (10%) of the 10 emergency drug boxes was not stored within a secured area. We observed that the box was locked.
- (2) One (11%) of the 9 physician dispensing boxes and 3 (30%) of the 10 emergency drug boxes were not separately locked. All of these boxes were stored within a secured area.

DOC operating procedure 03.04.100C requires that all medication be secured and locked in a medication storage area when not under the immediate supervision and control of a person authorized to have the medication.

- c. Medication boxes were not properly maintained. We noted:

- (1) Two (22%) of the 9 physician dispensing boxes, 4 (40%) of the 10 emergency drug boxes, and 1 (25%) of the 4 dentist dispensing boxes had medications dispensed to the boxes that were stored outside of the box.
- (2) Three (33%) of the 9 physician dispensing boxes, 3 (30%) of the 10 emergency drug boxes, and 1 (25%) of the 4 dentist dispensing boxes

contained expired medications or medications for which the expiration date was removed.

- (3) Six (67%) of the 9 physician dispensing boxes and 4 (40%) of the 10 emergency drug boxes contained medications that were not on the list of approved medications for the medication boxes.
- (4) Five (56%) of the 9 physician dispensing boxes and 6 (60%) of the 10 emergency drug boxes contained medications that were not prescribed to the medication box or medications for which the prescription label was removed.

DOC operating procedure 03.04.100C requires that facilities ensure that medications are available, accounted for, and safeguarded and that outdated medications are replaced.

- d. Facilities did not maintain an accurate inventory of medications dispensed to the boxes. We noted:

- (1) For 1 (11%) of the 9 physician dispensing boxes and 2 (20%) of the 10 emergency drug boxes, the facilities did not maintain an inventory system and did not perform periodic inventory counts.
- (2) For 1 of the remaining 8 physician dispensing boxes and 1 of the remaining 8 emergency drug boxes, the inventory system was not a perpetual inventory system, as it was not designed to account for each addition to and reduction from the inventory. As a result, monthly periodic inventories would not disclose if a theft occurred.
- (3) For 1 of the 7 physician dispensing boxes and 1 of the 7 emergency drug boxes with a perpetual inventory, the perpetual inventory system was not implemented until June 2010, although the facility had used the boxes for at least a year.
- (4) For 1 of the 7 physician dispensing boxes, 1 of the 7 emergency drug boxes, and 2 of the 4 dentist dispensing boxes with a perpetual inventory, the facility did not maintain a master list of medications included within the

perpetual inventory. The inventory for each medication was maintained on a separate sheet of paper. Without a master list, theft of the medication and corresponding inventory sheet may not be detected in a timely manner.

- (5) For 4 of the 7 physician dispensing boxes, 4 of the 7 emergency drug boxes, and 2 of the 4 dentist dispensing boxes with a perpetual inventory, the recorded inventory amounts were not periodically compared with physical counts to ensure that medications were properly accounted for. Also, for a fifth physician dispensing box and a fifth emergency drug box, the facility was not able to provide documentation that it had performed the comparisons prior to January 2009. We compared the inventory with the physical amounts and noted that for 5 of the 7 physician dispensing boxes, 5 of the 7 emergency drug boxes, and 3 of the 4 dentist dispensing boxes with a perpetual inventory, the recorded inventory amounts did not accurately reflect our physical counts of the medication. The inventory records either overstated or understated the amount of medication on hand.
- (6) For 3 of the 7 physician dispensing boxes, 4 of the 7 emergency drug boxes, and 3 of the 4 dentist dispensing boxes with a perpetual inventory, the inventory records did not include all medications that were being dispensed to prisoners from the medication box.

DOC operating procedure 03.04.100C requires facilities to inventory all medications contained in the physician, emergency, and dentist medication boxes as often as necessary based on use, but at least monthly.

RECOMMENDATION

We recommend that DOC ensure that facilities comply with DOC operating procedures regarding inventory controls over medication boxes.

AGENCY PRELIMINARY RESPONSE

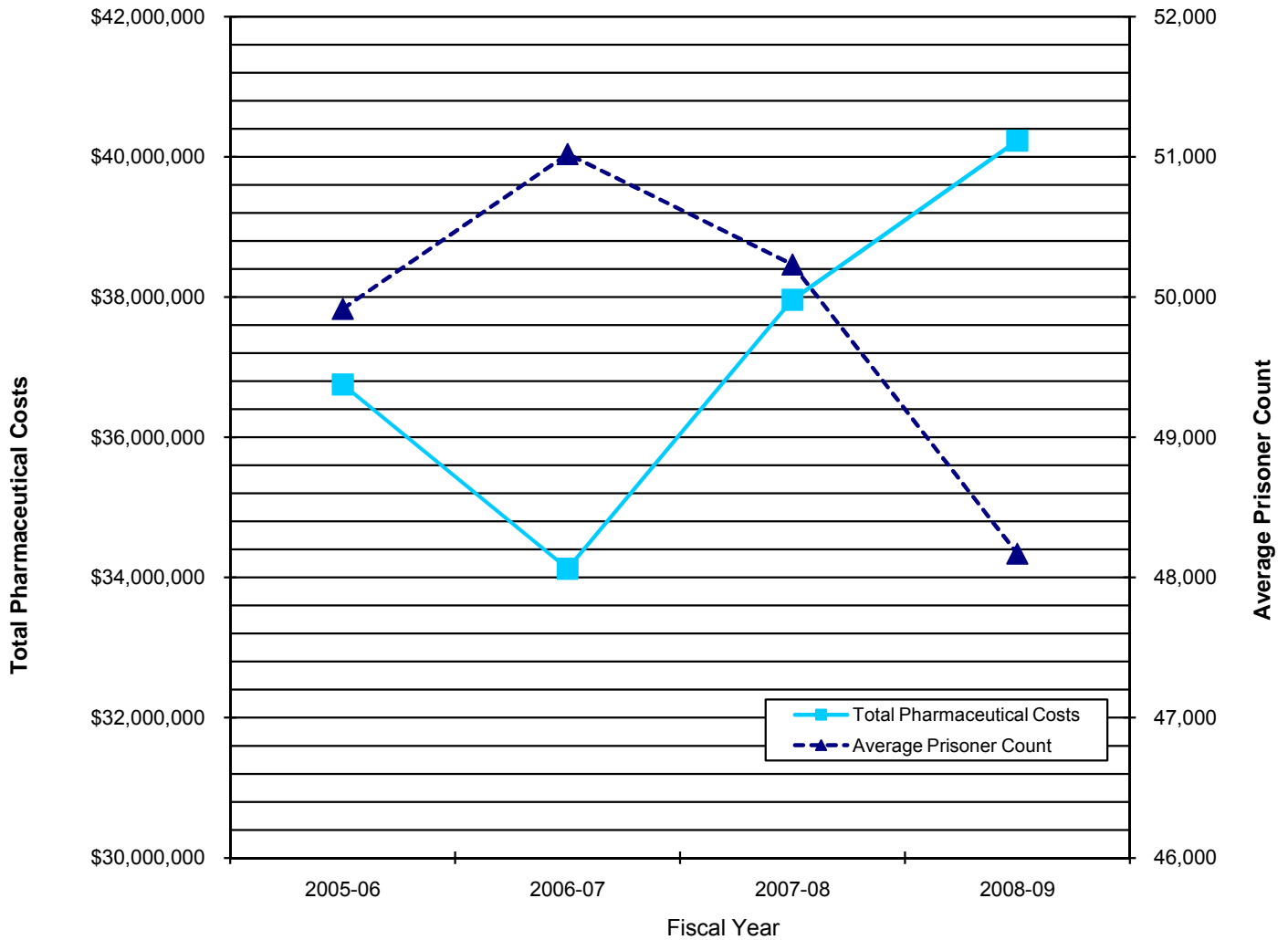
BHCS agrees with the recommendation and informed us that it is taking steps to comply.

BHCS indicated that it is updating its operating procedure to clarify the use of seals and logs to document access to medication boxes, storage of boxes, maintenance of perpetual inventory records, and periodic inventory counts.

BHCS also indicated that it will require the pharmacy contractor and the third party review contractor to conduct periodic on-site audits of facilities concerning controls over medication boxes.

SUPPLEMENTAL INFORMATION

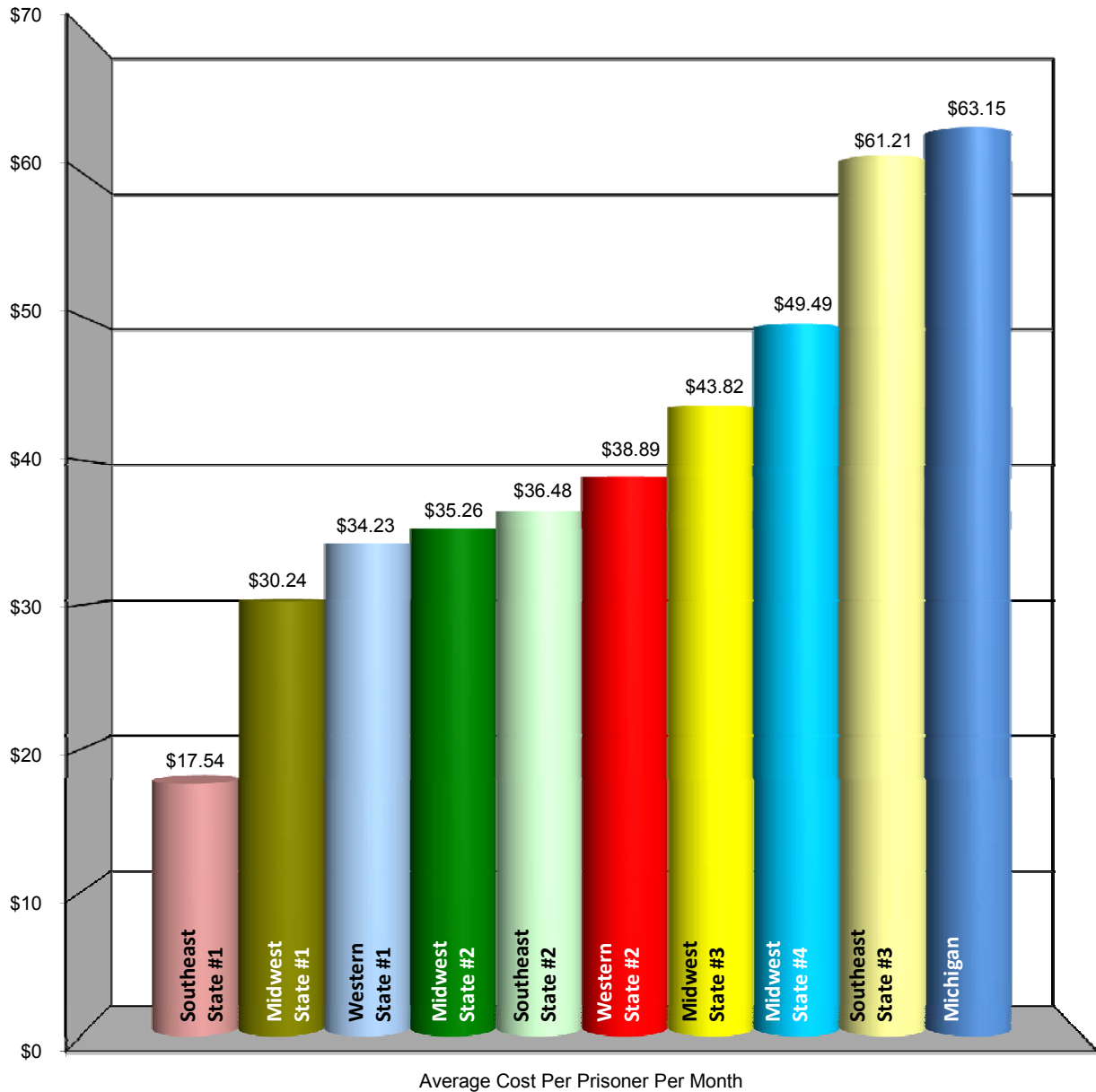
PHARMACEUTICAL COSTS
Department of Corrections (DOC)
Comparison of Total Pharmaceutical Costs and Average Prisoner Count
Fiscal Year 2005-06 through Fiscal Year 2008-09



Fiscal Year	Total Pharmaceutical Costs	Average Prisoner Count	Average Pharmaceutical Cost Per Prisoner
2005-06	\$ 36,751,745	49,916	\$736
2006-07	\$ 34,123,648	51,020	\$669
2007-08	\$ 37,961,069	50,232	\$756
2008-09	\$ 40,231,125	48,170	\$835

Source: The Office of the Auditor General prepared this exhibit based on unaudited accounting records and prisoner census reports obtained from DOC.

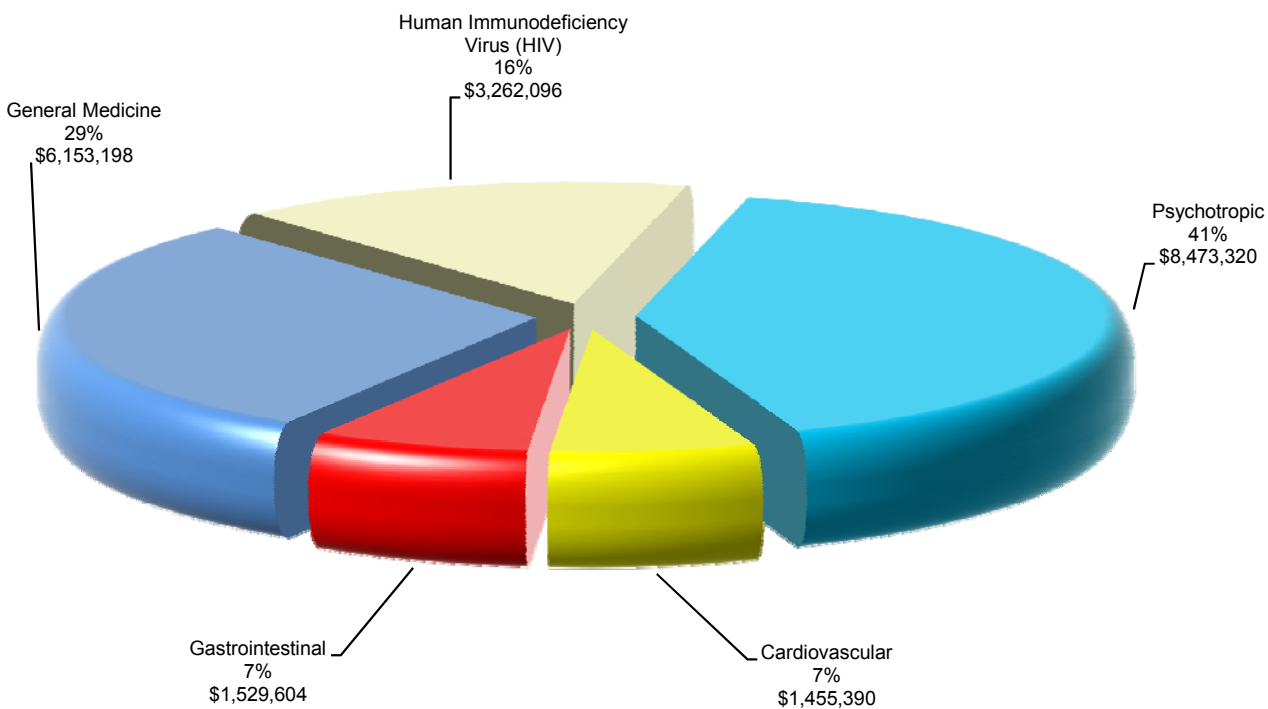
PHARMACEUTICAL COSTS
Department of Corrections (DOC)
Comparison of Michigan's and Other States' Average Pharmaceutical Costs
Per Prisoner Per Month
For the Period February 2010 through July 2010



Note: The chart includes 10 states whose department of corrections contract with PharmaCorr, LLC, for statewide pharmacy services.

Source: DOC's pharmacy contractor (PharmaCorr, LLC).

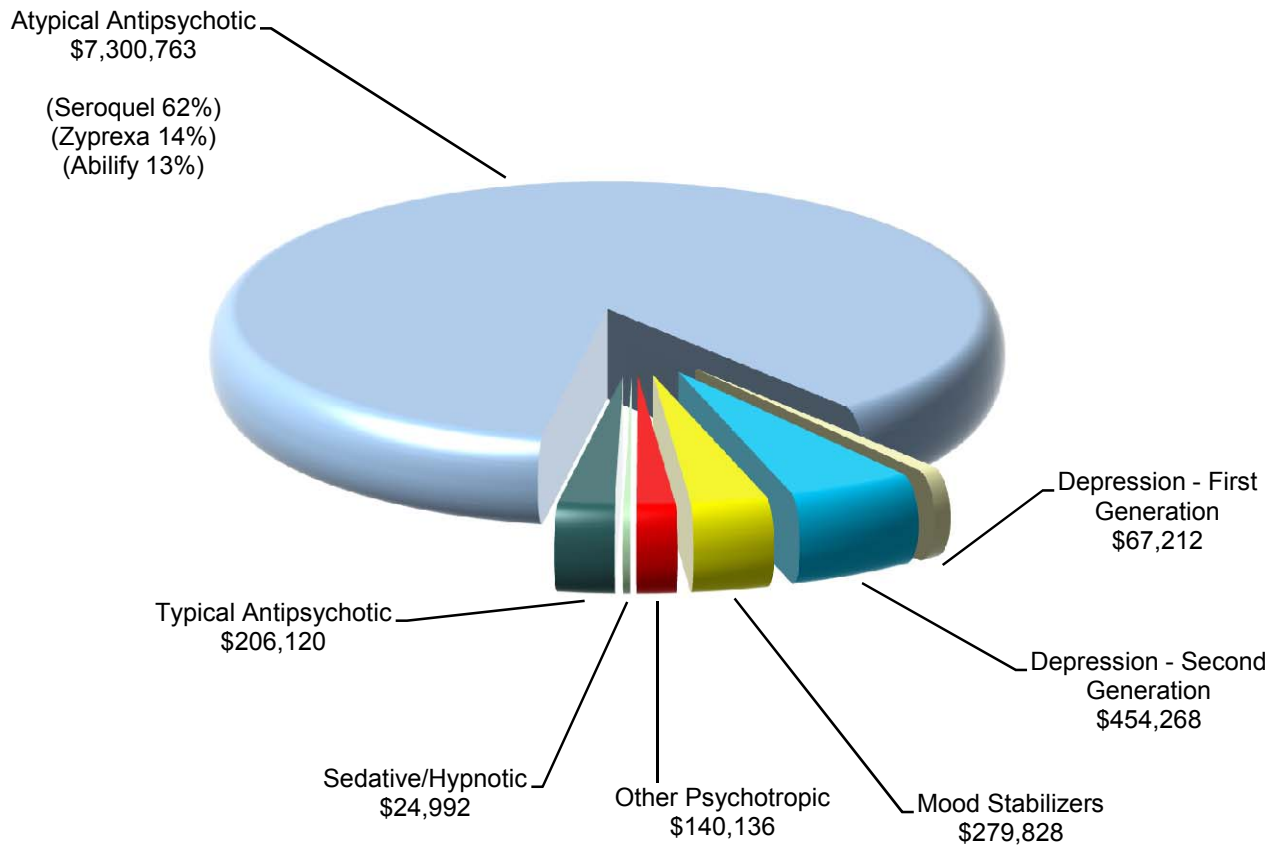
PHARMACEUTICAL COSTS
Department of Corrections (DOC)
Breakdown of DOC Pharmaceutical Utilization by Primary Drug Category
January 1, 2010 through July 31, 2010



Source: The Office of the Auditor General prepared this exhibit based on pharmaceutical data obtained from DOC's pharmacy contractor. Total pharmaceutical cost for this period was \$20,873,608.

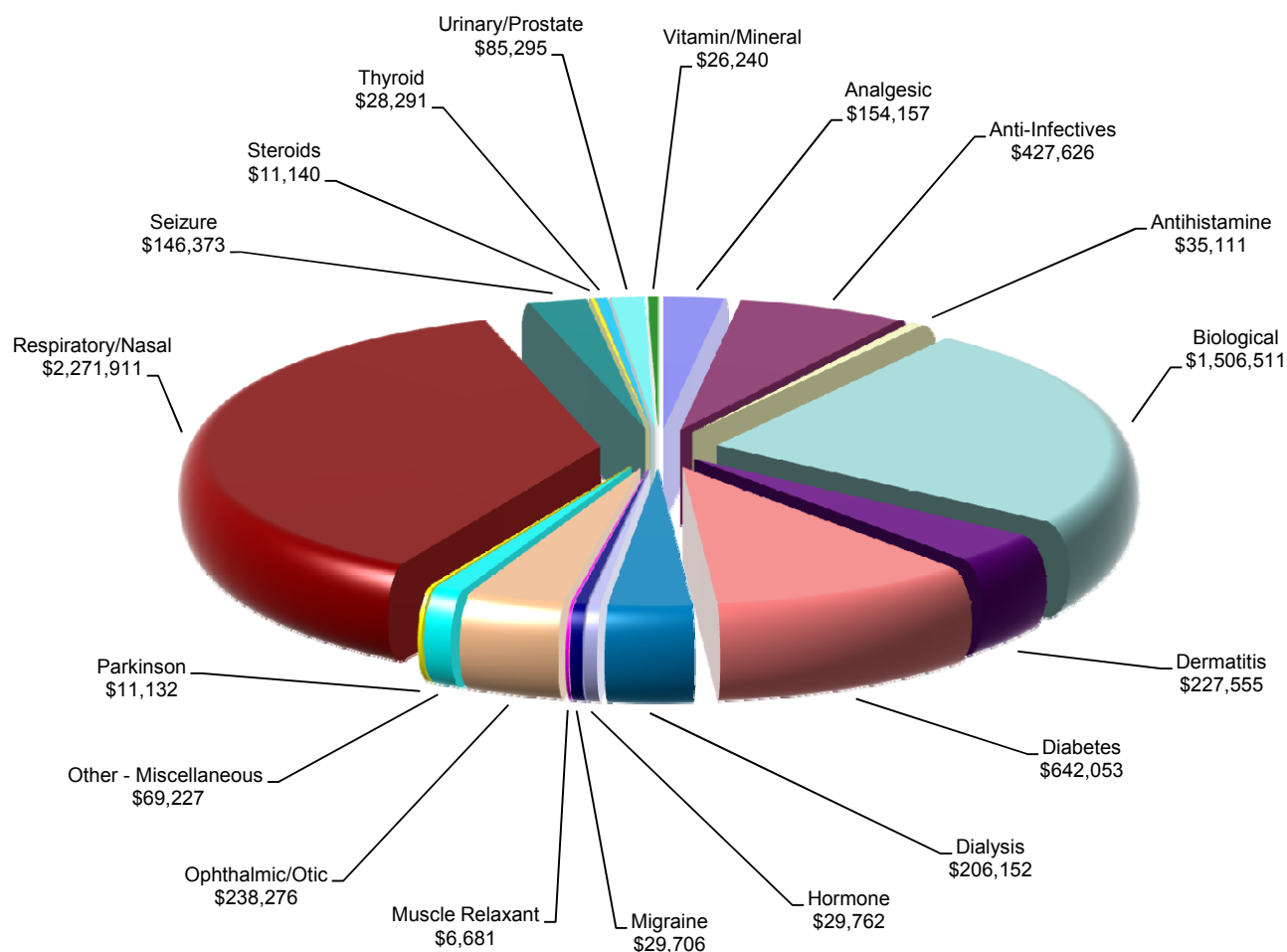
PHARMACEUTICAL COSTS
Department of Corrections (DOC)
Breakdown of DOC Pharmaceutical Utilization by Secondary Drug Category
January 1, 2010 through July 31, 2010

Psychotropic Drugs



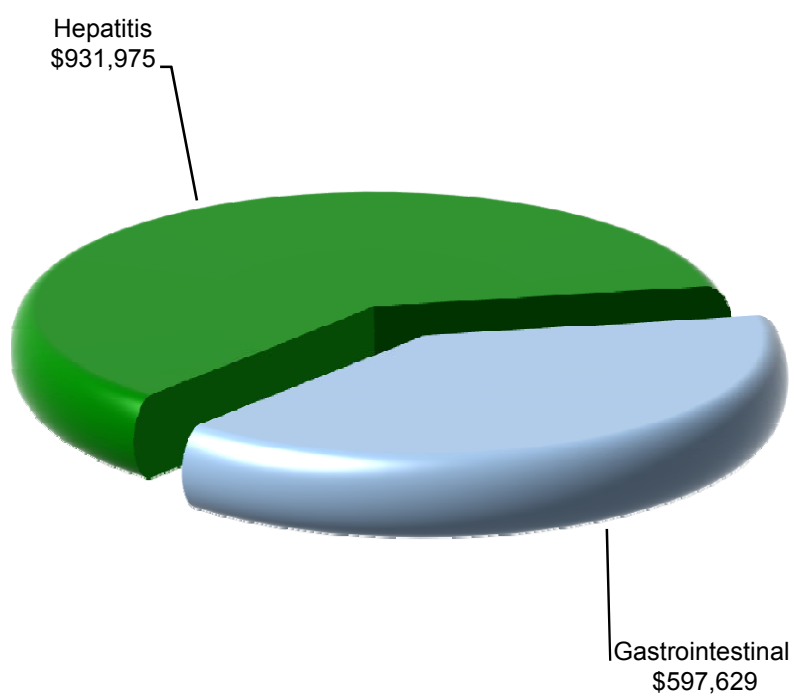
PHARMACEUTICAL COSTS
Department of Corrections (DOC)
Breakdown of DOC Pharmaceutical Utilization by Secondary Drug Category
January 1, 2010 through July 31, 2010

General Medicine Drugs



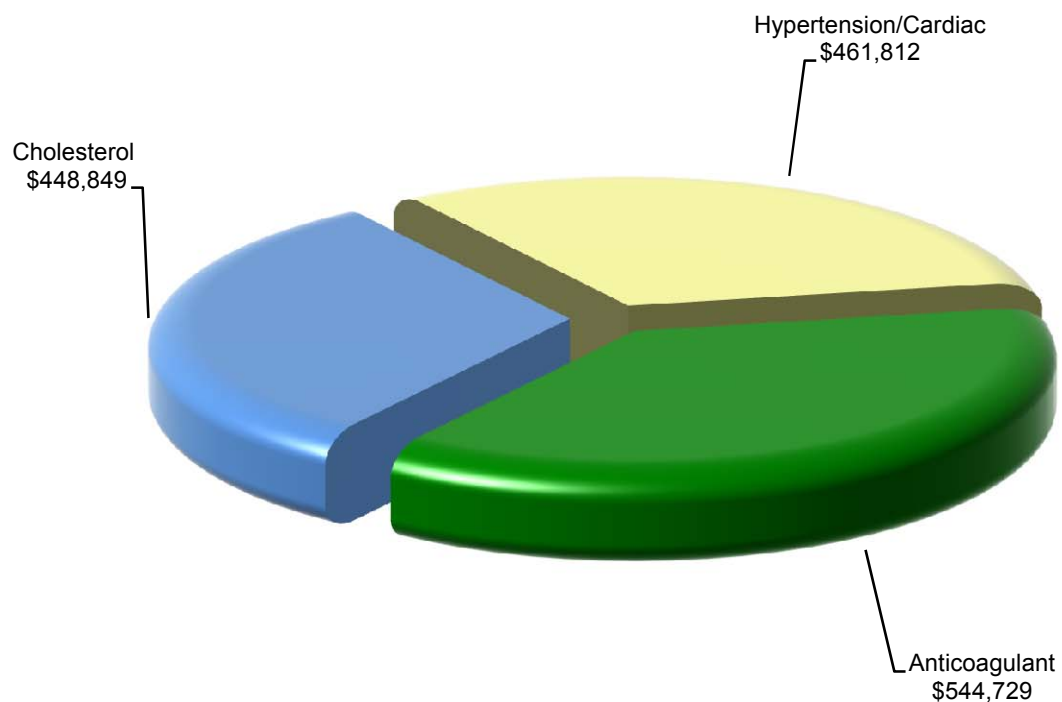
PHARMACEUTICAL COSTS
Department of Corrections (DOC)
Breakdown of DOC Pharmaceutical Utilization by Secondary Drug Category
January 1, 2010 through July 31, 2010

Gastrointestinal Drugs



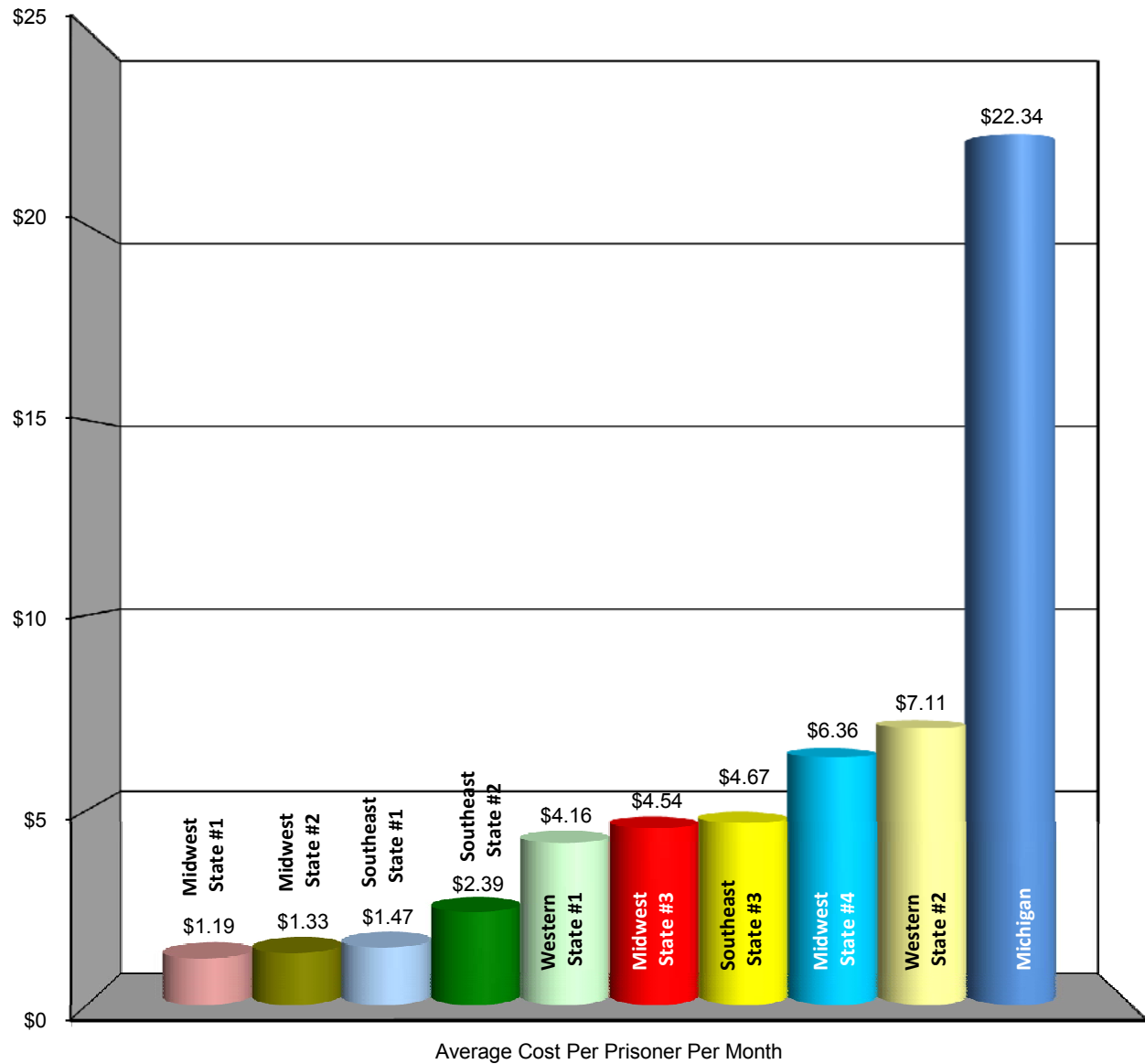
PHARMACEUTICAL COSTS
Department of Corrections (DOC)
Breakdown of DOC Pharmaceutical Utilization by Secondary Drug Category
January 1, 2010 through July 31, 2010

Cardiovascular Drugs



Source: The Office of the Auditor General prepared this exhibit based on pharmaceutical data obtained from DOC's pharmacy contractor.

PHARMACEUTICAL COSTS
Department of Corrections (DOC)
Comparison of Michigan's and Other States' Average Atypical Antipsychotic Pharmaceutical Costs
Per Prisoner Per Month
For the Period February 2010 through July 2010



Note: The chart includes 10 states whose departments of corrections contract with PharmaCorr, LLC, for statewide pharmacy services. As noted in Finding 1, about 80% of Michigan's atypical antipsychotic medications prescribed for DOC prisoners are written by the Department of Community Health and contracted psychiatrists.

Source: DOC's pharmacy contractor.

PHARMACEUTICAL COSTS
Department of Corrections (DOC)
Top 40 Drug Utilization
For the Month of June 2010

Rank	Drug Name	Cost	Quantity	Primary Drug Category	Percentage of Primary Drug Category Total Cost
1	Quetiapine Fumarate (SEROQUEL)	\$ 606,694	67,977	Psychotropic	50%
2	Efavirenz-Emtricitabine-Tenofovir Disoproxil Fumarate (ATRIPLA)	171,267	3,480	HIV	36%
3	Peginterferon alfa-2a (PEGASYS)	155,721	442	Gastrointestinal	65%
4	Aripiprazole (ABILIFY)	149,785	9,823	Psychotropic	12%
5	Olanzapine (ZYPREXA)	139,306	8,166	Psychotropic	12%
6	Beclomethasone Dipropionate	123,590	11,512	General Medicine	15%
7	Ipratropium Bromide HFA (ATROVENT)	79,046	8,931	General Medicine	9%
8	Emtricitabine-Tenofovir Disoproxil Fumarate (TRUVADA)	68,400	2,130	HIV	14%
9	Epoetin Alfa	62,592	512	General Medicine	8%
10	Albuterol Sulfate	58,074	46,465	General Medicine	7%
Total cost of the top 10 drug utilization		\$ 1,614,474			
Top 10 drug cost as a percentage of total pharmaceutical cost		55%			
11	Insulin Glargine	55,170	6,210	General Medicine	7%
12	Ziprasidone HCl	53,505	7,684	Psychotropic	4%
13	Clopidogrel Bisulfate	49,886	9,965	Cardiovascular	26%
14	Antihemophilic Factor (Recombinant)	41,006	38	General Medicine	5%
15	Atazanavir Sulfate	39,314	1,609	HIV	8%
16	Fosamprenavir Calcium	36,033	3,081	HIV	8%
17	Ritonavir	32,557	3,930	HIV	7%
18	Abacavir Sulfate-Lamivudine	26,653	920	HIV	6%
19	Glatiramer Acetate	26,311	9	General Medicine	3%
20	Venlafaxine HCl	26,286	10,503	Psychotropic	2%
Total cost of the top 20 drug utilization		\$ 2,001,195			
Top 20 drug cost as a percentage of total pharmaceutical cost		68%			
21	Fluticasone-Salmeterol	24,110	7,068	General Medicine	3%
22	Bupropion HCl	24,072	58,251	Psychotropic	2%
23	Omeprazole	23,366	145,918	Gastrointestinal	10%
24	Rosuvastatin Calcium	22,647	6,023	Cardiovascular	12%
25	Etanercept	21,179	52	General Medicine	3%
26	Tenofovir Disoproxil Fumarate	19,179	926	HIV	4%
27	Risperidone Microspheres	18,136	90	Psychotropic	2%
28	Latanoprost	16,783	630	General Medicine	2%
29	Imatinib Mesylate	15,839	180	General Medicine	2%
30	Raltegravir Potassium	15,419	1,069	HIV	3%
Total cost of the top 30 drug utilization		\$ 2,201,923			
Top 30 drug cost as a percentage of total pharmaceutical cost		75%			
31	Lopinavir-Ritonavir	14,916	2,640	HIV	3%
32	Enoxaparin Sodium	14,530	175	Cardiovascular	8%
33	Cinacalcet HCl	14,252	660	General Medicine	2%
34	Mesalamine	13,592	10,770	Gastrointestinal	6%
35	Risperidone	12,367	49,542	Psychotropic	1%
36	Sevelamer HCl	12,321	5,640	General Medicine	1%
37	Gabapentin	12,247	75,873	Psychotropic	1%
38	Filgrastim	11,501	52	General Medicine	1%
39	Darunavir Ethanolate	11,180	754	HIV	2%
40	Gemfibrozil	11,129	57,326	Cardiovascular	6%
Total cost of the top 40 drug utilization		\$ 2,329,959			
Top 40 drug cost as a percentage of total pharmaceutical cost		79%			
Total June 2010 PharmaCorr, LLC, dispensed drug total		\$2,936,112			

Source: The Office of the Auditor General prepared this exhibit based on an unaudited report and pharmaceutical data obtained from DOC's pharmacy contractor (PharmaCorr, LLC).

GLOSSARY

Glossary of Acronyms and Terms

administer	The act of giving a single dose of medication to a prisoner for immediate ingestion or injection into a prisoner.
BFM	Bureau of Fiscal Management.
BHCS	Bureau of Health Care Services.
blister card	Unit dose packaging for pharmaceutical tablets, capsules, or lozenges consisting of a transparent, molded piece of plastic sealed to a sheet of cardboard. Also referred to as a "blister pack."
CMHP	Corrections Mental Health Program.
contraband	Property that is not allowed on facility grounds or in visiting rooms by State law, rule, or DOC policy. For prisoners, this includes any property that they are not specifically authorized to possess, authorized property in excessive amounts, or authorized property that has been altered without permission.
controlled substance	A drug or other substance, or immediate precursor, included in Schedule I, II, III, IV, or V of the federal Controlled Substances Act (i.e., Title 21, section 801, et seq., of the <i>United States Code</i> , which controls the manufacture, distribution, and dispensing of controlled substances).
CPO	Chief Psychiatric Officer.
DCH	Department of Community Health.
dispense	To issue one or more doses of a drug in a suitable container appropriately labeled, usually by a pharmacist, but sometimes by a physician, dentist, or delegated registered

nurse (e.g., in the use of the physician, emergency, or dentist medication box).

DOC

Department of Corrections.

DWH

Duane L. Waters Health Care Center.

effectiveness

Success in achieving mission and goals.

formulary

The book of prescription drugs and their uses. The book includes generic prescription drugs approved by DOC for use and the brand name equivalents, as applicable, with instructions on the process for approving the use of brand name equivalents or nonformulary prescription drugs.

HIV

human immunodeficiency virus.

internal control

The plan, policies, methods, and procedures adopted by management to meet its mission, goals, and objectives. Internal control includes the processes for planning, organizing, directing, and controlling program operations. It includes the systems for measuring, reporting, and monitoring program performance. Internal control serves as a defense in safeguarding assets and in preventing and detecting errors; fraud; violations of laws, regulations, and provisions of contracts and grant agreements; or abuse.

**keep-on-person (KOP)
medication**

Nonrestricted medication, also referred to as self-administered medication, which has been prescribed to a specific prisoner and determined to be safe for the prisoner to possess.

material condition

A reportable condition that could impair the ability of management to operate a program in an effective and efficient manner and/or could adversely affect the judgment of an interested person concerning the effectiveness and efficiency of the program.

MHM	MHM Correctional Services, Inc.
MSAC	Medical Services Advisory Committee.
nonformulary drug	A prescription that is not included in the listing of prescription drugs approved for use unless approved by a regional medical officer.
over-the-counter (OTC) medications	Medications that do not require a prescription by state or federal law or regulation.
performance audit	An economy and efficiency audit or a program audit that is designed to provide an independent assessment of the performance of a governmental entity, program, activity, or function to improve program operations, to facilitate decision making by parties responsible for overseeing or initiating corrective action, and to improve public accountability.
PSAC	Psychiatric Services Advisory Committee.
psychotropic medication	A drug that acts primarily upon the central nervous system where it alters brain function, resulting in changes in perception, mood, consciousness, cognition, and behavior. Common types of psychotropic drugs include antidepressants, anti-anxiety agents, antipsychotics, and mood stabilizers.
reportable condition	A matter that, in the auditor's judgment, falls within any of the following categories: an opportunity for improvement within the context of the audit objectives; a deficiency in internal control that is significant within the context of the objectives of the audit; all instances of fraud; illegal acts unless they are inconsequential within the context of the audit objectives; significant violations of provisions of contracts or grant agreements; and significant abuse that has occurred or is likely to have occurred.

restricted medication	Medication that has been prescribed to a specific prisoner and identified by DOC's BHCS as a medication that is required to be administered by a nurse or medication that the prescriber or registered nurse has determined is unsafe for the prisoner to possess.
RHA	Regional Health Administrator.
sharps container	A container, often made of hard plastic, designed for disposal of used needles and syringes.

