

STATE OF CONNECTICUT

**PERFORMANCE AUDIT
STATEWIDE PHARMACEUTICAL
PURCHASING, INVENTORY, DELIVERY AND USE**

October 23, 2002

**AUDITORS OF PUBLIC ACCOUNTS
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TABLE OF CONTENTS

EXECUTIVE SUMMARY	<i>i-v</i>
AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY	1
BACKGROUND	3
State-Funded Prescription Drug Programs.....	3
Direct Procurement and Distribution of Pharmaceuticals	4
University of Connecticut Health Center Pharmacy	5
Other State-Operated Pharmacies	7
NOTEWORTHY ACCOMPLISHMENTS.....	9
AREAS REQUIRING FURTHER REVIEW	10
RESULTS OF REVIEW	11
Item No. 1 - Economies of Scale – Eight Autonomous Pharmacies.....	11
Item No. 2 - Pharmaceutical Costs – Development of One Statewide Contract	14
Item No. 3 - Manufacturer Rebates.....	17
Item No. 4 - University of Connecticut Health Center Pharmacy – Prescription Drug Returns.....	19
Item No. 5 - Property Control – Safeguarding of Pharmaceuticals.....	21
Item No. 6 - Vouching of Invoices – Pharmaceutical Purchases	23
RECOMMENDATIONS.....	26
CONCLUSION	29
APPENDIX 1.....	30
EXHIBITS:	
Section 17b-274 of the General Statutes	A
Memorandum of Understanding - Addendum.....	B
Excerpts - Public Act 01-9 of the June 2001 Special Session of the General Assembly	C
Analysis of Operating Costs and Pharmaceutical Purchases	D
Excerpts - Property Control Manual	E

EXECUTIVE SUMMARY

In accordance with the provisions of Section 2-90 of the Connecticut General Statutes and with generally accepted government auditing standards, we have conducted a performance audit of statewide pharmaceutical purchasing, inventory, delivery and use.

Our review focused on the delivery systems of pharmaceutical products Statewide and included comparisons of cost and other factors between the principal systems used by State agencies. In general terms, there are four principal systems, as follows:

- ❖ The Department of Social Services incurs costs for pharmaceutical products through the programs it administers. The Department operates in a fashion similar to a third-party insurance carrier, in that clients purchase prescriptions directly and pharmacies bill the Department through an intermediary contracted with to process such claims.
- ❖ The University of Connecticut Health Center operates a centralized pharmacy. It provides prescriptions for Department of Correction inmates, as well as for patients of the hospital.
- ❖ The Department of Administrative Services issues a Statewide contract award with a pharmaceutical wholesaler. This contract is used by a significant number of agencies other than the Department of Social Services, Department of Correction, University of Connecticut Health Center, and the Department of Veterans Affairs.
- ❖ The Department of Veterans' Affairs has an exclusive contract to provide veterans with prescription drugs through a pharmacy that it operates on-site.

We discuss the above systems in greater detail in the "Background" section of this report.

The conditions noted during the audit, along with our recommendations, are summarized below. Our findings are discussed in detail in the "Results of Review" section of this report.

Economies of Scale – Eight Autonomous Pharmacies



The State currently operates eight autonomous on-site pharmacies. These pharmacies were staffed with 71 employees and cost approximately \$6,600,000 to operate during the 2001-2002 fiscal year. Hiring and retaining enough pharmacy staff is a daunting task due to a shortage in the field.

The University of Connecticut Health Center operates the largest such pharmacy, accounting for approximately 73 percent of prescription drug expenditures of the eight pharmacies in total. The pharmacy has invested significant resources to automate its function, as it dispenses prescriptions for Department of Correction inmates. It has also developed a courier system to provide delivery to the 18 correctional facilities located throughout the State.

Three State Agencies that lack pharmacies, the Southbury Training School, Southwest Connecticut Mental Health System and Riverview Hospital, have separate contracts to purchase prescription drugs from local pharmacies that are located within their respective geographical areas. Under those contracts, the Agencies were afforded the preferred Department of Social Services fee schedule, which offers prices that are significantly lower than the two contracts from which the State pharmacies purchase.

The consolidation of pharmacy services into one facility and/or the purchase of dispensed prescription drugs from local pharmacies should be considered and studied. The data we reviewed indicates that significant savings could be realized. This would also address pharmacy staffing issues to some extent. (See Item 1.)

**Pharmaceutical
Costs –
Development of
One Statewide
Contract**



The State “purchases” pharmaceuticals under two principal delivery systems. Approximately \$445,000,000 was expended for pharmaceuticals under social service type programs, such as Medicaid and ConnPACE, during the 2001-2002 fiscal year. Of that amount, approximately \$92,500,000 was recovered in the form of manufacturers rebates. Eligible recipients have prescriptions dispensed by local pharmacies that, in turn, bill the Department of Social Services through an intermediary. Approximately \$30,000,000 is expended by direct purchase from the eight State-operated pharmacies. The pharmacies procure under three separate contracts with three individual wholesalers. It is a general principle in the pharmaceutical industry that entities may negotiate better prices as expected volume increases.

Our review disclosed that the prices charged to the social service programs are significantly lower than the prices charged to the State-operated pharmacies. As described above, three State Agencies that lack pharmacies are afforded the preferred Department of Social Services fee schedule, which offers prices that are significantly lower than the two contracts from which the State pharmacies purchase.

The State should consider increasing its purchasing power by negotiating a Statewide contract, to the extent that it may negotiate with pharmaceutical manufacturers. At a minimum, purchases by the State-operated pharmacies should be contracted for as a whole. (See Item 2.)

**Manufacturer
Rebates**



It is a common practice for pharmaceutical manufacturers to provide rebates to buyers based on the volume of individual drugs purchased. The Department of Social Services has a process in place to identify available rebates and to claim, track, receive and deposit them. For the fiscal year ended June 30, 2002, the Department received \$92,500,000 in rebates, based on purchases of \$445,000,000.

Our review disclosed that rebates received by other agencies that purchased pharmaceuticals were minimal. There are no formal policies and procedures in place to ensure that rebates are appropriately recouped. It is not uncommon, we were informed, for manufacturer representatives to send or deliver rebate checks that are not expected, and not supported by adequate explanatory documentation. This is of concern, as it indicates that management would not identify rebates due but not received, in a timely manner.

Policies and procedures to ensure that pharmaceutical manufacturer rebates are recouped should be established. Staff of either the contracting agencies or the agencies that purchase could accomplish this. (See Item 3.)

**University of
Connecticut
Health Center
Pharmacy –
Prescription Drug
Returns**



Prescription Drugs that are dispensed from the State-operated pharmacies, but not administered, or expired, damaged or recalled, are to be returned to the pharmacy from which they were distributed. Depending on the specific product and manufacturer, drugs that are expired, damaged or recalled may be returned for replacements, refunds or credits. Pharmacies have contracted with a private firm to manage the returned goods they accumulate. However, at the time of our review, we noted that the contract had expired.

Dispensed drugs that are ultimately not administered are quite common at the University of Connecticut Health Center pharmacy, as inmates often refuse them. In those instances, the pharmacy is supposed to “recycle” the drugs when possible. Our initial observations disclosed that returned goods were being stockpiled at the Health Center. While there was an original plan to sort and recycle the returns, a decision was later made to destroy the entire amount on hand due to cross-contamination and shelf life concerns. It should be noted that, as we were concluding our review, we observed that an effort was being made to sort and recycle returned drugs.

It was also noted that there are no records to document the return of goods from the correctional facilities, that accountability over tote locks used on the return containers was lacking, and that a contract with a firm to destroy/discard certain unused prescription drugs had expired.

Policies, procedures and records should be established to receive and record returned prescription drugs at the University of Connecticut Health Center pharmacy, and to document the final disposition of such. An accounting of numbered tote locks used to “seal” transporting containers should also be performed on a regular basis to enhance internal control over the returns. The Center should procure a new contract for the disposition of returned pharmaceuticals that need to be destroyed/discarded. (See Item 4.)

**Property Control
– Safeguarding of
Pharmaceuticals**



The State-operated pharmacies maintain a significant inventory of purchased stock. We also observed that large quantities of “manufacturer samples” are on hand at the University of Connecticut Health Center. Except for “controlled substances” and certain items that are administered through automated medical carts, there are no perpetual inventory records maintained by any of the individual pharmacies. For the items that are administered through the medical carts, an audit trail between purchases and the replenishment of the carts is lacking.

As regards “manufacturer samples” at the Health Center, we noted that various recordkeeping systems are used at the individual clinics where the samples are stored. While we noted that efforts are made to track items received and distributed, the systems do not provide for any substantive form of accountability.

It should be noted that our review did not identify any loss or irregularities over purchased stock and manufacturer samples. However, due to the records maintained, losses or irregularities, should they occur, would not be detected by management within a timely period.

The State-operated pharmacies should establish perpetual inventory records or provide for some other form of accountability over the pharmaceuticals that are received, stored and distributed. (See Item 5.)

**Vouching of
Invoices –
Pharmaceutical
Purchases**



The purchase of pharmaceutical products is unique in that a specific price list or schedule, virtually always included with contracts that the State enters into, does not accompany contract awards for pharmaceutical products. As such, the State is not “locked into” prices that are established for the contract period for prescription drugs.

The contracts entered into are based on the “Average Wholesale Price” (AWP), which are rates that are established based on periodic surveys of national wholesalers. These prices fluctuate often which, in turn, affects the prices ultimately passed onto the State agencies. Other than a review that is performed of prices charged for agencies that serve veteran populations, by the Federal Department of Veterans’ Affairs - Office of Inspector General, we could not identify any efforts made, or independent review performed, to ensure that prices charged are accurate. It should be noted that the reviews performed on prices charged to the Department of Veterans’ Affairs often identify overcharges, which result in refunds and/or credits.

State agencies should establish policies to verify that the prices charged for the pharmaceuticals they purchase are proper. This effort should be independent of the queries made with the wholesalers and consortiums that the agencies procure from. Justifications for interim price increases should be obtained. (See Item 6.)

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AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

The Auditors of Public Accounts, in accordance with Section 2-90 of the Connecticut General Statutes, are responsible for examining the performance of State entities to determine their effectiveness in achieving expressed legislative purposes.

We conducted this performance audit related to the purchase, inventory and use of pharmaceutical products in accordance with generally accepted government auditing standards. This audit encompassed economy and efficiency issues, which are types of performance audits. Our objective was to determine if State agencies that procure, provide and distribute pharmaceuticals, are doing so in an efficient manner. More specifically, we wanted to evaluate the following criteria:

- ❖ Are all State agencies receiving the best possible “net” prices for the pharmaceuticals they purchase?
- ❖ Are all State agencies storing and distributing pharmaceutical products in the most efficient manner?
- ❖ Are there duplicative processes that could be eliminated?
- ❖ Are resources properly safeguarded?

The scope of our review was broad in that, except for some minor exceptions, we considered and reviewed contracts, agreements, procedures, and processes for the systems in which pharmaceutical products are procured and eventually delivered. It is estimated that the State of Connecticut incurred approximately \$475,000,000 in pharmaceutical costs during the 2001-2002 fiscal year through four principal delivery systems. Of that amount, approximately \$92,500,000 was recovered in the form of manufacturer rebates. There are a few agencies that purchase minor amounts of pharmaceuticals from local sources due to geographic limitations related to the Department of Administrative Services contract award. We did not consider these purchases.

A significant percentage of our audit work was performed at the Department of Administrative Services, University of Connecticut Health Center, and Department of Social Services. We performed pharmacy site reviews at the University of Connecticut Health Center, Connecticut Valley Hospital, Greater Bridgeport Community Mental Health Center, and the Department of Veterans’ Affairs.

We obtained pricing information for the four delivery systems and analyzed differences of prices for a select sample of individual prescription drug products. It should be noted that there are unique nuances in procuring pharmaceutical products, as compared to other commodities that are purchased by the State. We explain these in greater detail in the “Background” section of this report.

We performed site visits at agencies to observe and review inventory systems, where applicable, and to evaluate records and procedures to account for prescription drug returns. The receipt and distribution of “manufacturers samples” was also reviewed at the University of Connecticut Health Center. We obtained and analyzed expenditure information and personnel statistics for each of the State operated pharmacies as well.

We did not rely on computer generated data to any material degree and did not, therefore, assess the reliability of such. We obtained certain information from certain databases and considered the reasonableness of such data where possible. We comment on our concerns over reliance on computer generated pricing information by certain State agencies in the “Results of Review” section of this report. We also comment on the lack of automated perpetual inventory systems within that same section.

BACKGROUND

The State of Connecticut provides prescription drugs for clients/patients of various State agencies and for inmates of the Department of Correction. Prescription drug costs are also incurred for eligible recipients under certain social service type programs such as:

- ❖ Medical Assistance Program (Medicaid; Title XIX);
- ❖ Connecticut Pharmaceutical Assistance Contract to the Elderly and Disabled Program (ConnPACE);
- ❖ State Administered General Assistance (SAGA); and
- ❖ Connecticut AIDS Drug Assistance Program (CADAP)

The Department of Social Services administers the social service programs listed above. The Department operates in a manner quite similar to that of a third party insurer, in that eligible participants/clients have prescriptions filled by local participating pharmacies of their choice after providing proof of eligibility/participation. The pharmacies bill the Department through an intermediary in a similar manner as they would an insurance company.

Clients/patients of State agencies and inmates, in almost all instances, receive prescriptions from State operated pharmacies. There are a few agencies that use local pharmacies contracted with due to geographical considerations; however, these purchases constitute a minor percentage of prescription drug purchases in total.

The cost of prescription drugs has been a long-standing concern. In addition to State budgetary considerations, the financial ability of citizens to obtain necessary prescription drugs has also been at issue.

State-Funded Prescription Drug Programs:

As concerns the Medicaid (Title XIX) program, which accounts for a significant majority of prescription drug purchases in total, the Federal government pays for approximately 50 percent of the cost. Initiatives have been made at that level to control costs. The most significant effort was implemented with the Medicaid Drug Rebate Program, which was created by the Omnibus Budget Reconciliation Act (OBRA) of 1990. All drug manufacturers participating in the program must now have a rebate agreement with the Secretary of the Department of Health and Human Services for States to receive Federal funding for outpatient drugs dispensed to Medicaid patients. States apply for and receive rebates from drug manufacturers based on usage. The State of Connecticut has successfully applied the rebate agreements to the other programs listed above. For the 2001-2002 fiscal year, rebates exceeding \$66,000,000 were received, based on gross expenditures by the Medicaid program of approximately \$344,000,000.

Public Act 00-2 of the June 2000 Special Session of the General Assembly, in part, amended Section 17b-274 of the General Statutes, requiring the Commissioner of the Department of Social Services to establish a procedure whereby physicians are required to obtain advance authorization to prescribe brand-name drugs if an equivalent generic is available (**See Exhibit A.**) It should also be noted that as we were performing our review, the General Assembly approved a plan to require more use of generic drugs in State-funded pharmacy programs.

The ConnPACE program, with gross expenditures of approximately \$63,000,000 during the 2001-2002 fiscal year, is second to the Medicaid program in activity. Rebates exceeding \$18,000,000 were received for that same period. This program was initially established in 1986 as a pilot program to provide prescription drug benefits to persons 65 years or older with limited incomes. It became a permanent program in 1987, at which time disabled persons, 18 years or older, became eligible. At June 30, 2002, there were approximately 47,000 participants in the program.

During the 2001-2002 fiscal year, gross prescription drug expenditures under the State Administered General Assistance (SAGA) program and Connecticut AIDS Drug Assistance Program (CADAP), totaled approximately \$29,000,000 and \$9,000,000, respectively. At June 30, 2002, there were approximately 23,750 and 1,150 participants in those two programs, respectively.

Direct Procurement and Distribution of Pharmaceuticals:

Direct purchases of pharmaceutical products from pharmaceutical wholesalers are made under three separate contracts, as follows:

- ❖ The University of Connecticut Health Center operates a centralized pharmacy for most Department of Correction inmates and patients of the Health Center hospital. The Center has an exclusive contract with a wholesaler and purchases a significant portion of its pharmaceutical products from that source. A courier system has been developed to transport prescriptions to and from the correctional facilities.
- ❖ The Department of Administrative Services has a separate contract award with a different pharmaceutical wholesaler that is used by most other State agencies. Agencies purchase off this contract and operate pharmacies on-site. There are six pharmacies that use this contract; they are located within the following facilities:
 - ❖ Connecticut Valley Hospital - Middletown
 - ❖ Greater Bridgeport Community Mental Health Center - Bridgeport
 - ❖ Cedarcrest Hospital - Newington
 - ❖ Connecticut Mental Health Center – New Haven
 - ❖ Capitol Region Mental Health Center - Hartford
 - ❖ University of Connecticut Student Health Services Infirmary – Storrs
- ❖ The Department of Veterans' Affairs has an exclusive contract with a wholesaler for which it receives "Federal Supply Schedule Pricing" for the veterans it serves. The Department operates a pharmacy at its facility in Rocky Hill.

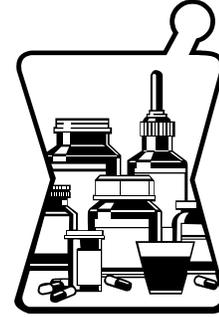
As noted above, a few "local" pharmacies are contracted with to dispense prescriptions for certain facilities that do not have on-site pharmacies.

It should be noted that the procurement of pharmaceutical products is unique. Unlike most commodities that are purchased based on a State contract with specific terms and prices, pharmaceutical products fluctuate in price to a significant degree. The contract terms for the University of Connecticut Health Center and Department of Administrative Services contracts are based on percentages negotiated from the "average wholesale price" (AWP) of individual

products. Adjustments made to the AWP of products can be made throughout a contract period, and result in changes to the individual prices charged to State agencies. The Health Center and Department of Administrative Services belong to “consortiums”, which are organized to negotiate pharmaceutical prices with the manufacturers. Our concern over this issue is presented in the “Results of Review” section of this report.

An analysis of prescription drug expenditures, by pharmacy, for the fiscal year ended June 30, 2002, follows:

University of Connecticut Health Center	\$ 21,984,865
Connecticut Valley Hospital	3,037,737
Greater Bridgeport Community Mental Health Center	1,079,489
Connecticut Mental Health Center	1,182,550
Cedarcrest Hospital	963,518
Capitol Region Mental Health Center	54,912
Department of Veterans’ Affairs	1,118,148
University of Connecticut Student Infirmary	593,015
Total	<u>\$ 30,014,234</u>



An additional \$1,604,421 is expended on pharmaceutical products which are dispensed at non-State operated pharmacies, and \$8,518,715 is expended at the Department of Public Health for vaccines.

An analysis of pharmacy operating expenditures, for the fiscal year ended June 30, 2002, follows:

Pharmacy	Personal Services	Fringe Benefits	Other Expenses	Total
University of Connecticut Health Center	\$ 2,504,685	\$ 822,680	\$ 327,463	\$ 3,654,828
Connecticut Valley Hospital	752,414	295,398	86,354	1,134,166
Greater Bridgeport Community Mental Health Center	171,872	67,477	74,930	314,279
Connecticut Mental Health Center (See Note)			452,039	452,039
Cedarcrest Regional Hospital	261,186	102,542	67,599	431,327
Capitol Region Mental Health Center	69,701	27,365	6,621	103,687
Department of Veterans’ Affairs	246,458	104,227	30	350,715
University of Connecticut Student Infirmary	91,533	36,539	3,500	131,572
Total	<u>\$ 4,097,849</u>	<u>\$ 1,456,228</u>	<u>\$ 1,018,536</u>	<u>\$ 6,572,613</u>

Note – the Connecticut Mental Health Center is under contract with Yale New Haven Hospital for personnel and other costs associated with the pharmacy.

As indicated above, the University of Connecticut Health Center has, by far, the most active pharmacy.

University of Connecticut Health Center Pharmacy:

The University of Connecticut Health Center operates a pharmacy that serves two basic populations:

- ❖ John Dempsey Hospital – Since inception, the pharmacy has dispensed prescriptions for patients of the hospital. The Hospital is governed by the Board of Trustees of the University of Connecticut Health Center.

- ❖ Department of Correction - Beginning in July 2001, the pharmacy began to dispense prescriptions for Department of Correction's inmates. In September 1995, responsibility for inmate health services, in general, came under the Health Center's purview. At that time, a private out-of-State pharmacy was contracted with to provide and ship prescriptions, and did so until the Health Center began performing those duties. The Health Center accounts for operations related to this activity under the "Correctional Managed Health Care" program. A "Memorandum of Understanding" (See Exhibit B) exists which defines the terms of the agreement between the two agencies.

The Health Center segregates pharmacy activity. Based on pharmaceutical expenditure amounts, approximately 67 percent of pharmacy operations are related to Department of Correction activity, while 33 percent relates to the John Dempsey Hospital.

The pharmacy increased staffing and capacity when it began to directly serve the Department of Correction. A significant technological investment was made with the purchase of two robotic medication-dispensing ("Auto-Med") systems, at a cost of \$325,000 each. In general terms, the system allows the correctional facilities to fax the prescriptions to the Health Center. The prescriptions are data entered into a personal computer and forwarded to the robot for dispensing. Prescriptions are packaged by time of day they are to be taken and by inmate name. The packages are filled for a one-week supply and, as such, there will be seven bags dispensed for inmates taking medications once per day and 14, for those taking them twice per day.



The robots are metal cabinets, approximately six feet high, five feet wide and four feet deep. There are 520 cells which each hold between 100 and several thousand pills. Based on a computer program and a database of prescriptions, the robot will rotate the cells until the appropriate individual pills are above the dispenser and dropped into plastic bags. The bags are sealed, and the inmates' names and time of dispensation are entered.

The machine on the right is in an operating mode, while the machine on the left (door open) is ready to be refilled.

The packets are manually reviewed and then placed in totes for delivery. The pharmacy has established a network of couriers that deliver filled prescriptions to each of the correctional institutions. Quite often, Department of Correction inmates will refuse to consume prescription drugs that have been prescribed and dispensed on their behalf. In those instances, the unused prescriptions are returned in the delivery totes. Section 27 of Public Act 01-9 (See Exhibit C) of the June 2001 Special Session of the General Assembly (not codified within the General Statutes at the time this report was prepared,) specifically requires the correctional institutions to return unused prescription drugs to the vendor pharmacy, so that they may be redispensed when possible. We comment on our concerns over returned prescription drugs in the “Results of Review” section of this report.

Automated medication carts are also used to distribute “contingency items” and “controlled substances.” A perpetual inventory record of each item is maintained, as detailed records of the disposition of each dose must be recorded. A record of the “on hand” amount is maintained; items removed from the carts must be accounted for before the pharmacy will re-fill. A record of the nursing staff accessing the carts is also maintained, thus establishing an audit trail should a shortage be identified.

At June 30, 2002, the pharmacy operated with a staff of 44, which included an Interim Director, 18 Pharmacists, 17 Pharmacy Technicians and nine other support staff.

Other State-Operated Pharmacies:

Besides the University of Connecticut Health Center Pharmacy, we performed site visits at three of the larger State-operated pharmacies listed above. The Connecticut Valley Hospital, Greater Bridgeport Community Mental Health Center, and Department of Veterans’ Affairs pharmacies were selected. The pharmacies, in all material respects, operate autonomously. Our general observations of operations follow:

❖ **Connecticut Valley Hospital**

The pharmacy is staffed with one pharmacy supervisor, six full-time and one part-time pharmacist, three pharmacy technicians and two assistants. All prescription drugs, except methadone, are distributed through the use of 28 automated medication distribution carts. The Hospital Pharmacy uses the Statewide contract for pharmaceuticals. Accounts payable staff verify per unit charges on invoices by comparing invoices to price lists provided by the vendor/wholesaler of the Department of Administrative Services contract.

❖ **Greater Bridgeport Community Mental Health Center**

The pharmacy is staffed with three pharmacists. Most prescription drugs are dispensed manually, based on the needs of the individual floors. Nursing staff maintain dispensing logs for each drug, and submit a report to the Pharmacy of the patients and doses that are dispensed. The Health Center Pharmacy uses the Statewide contract for pharmaceuticals. Pharmacy staff verify per unit charges on invoices by comparing the data to monthly price data bases provided by the consortium involved with the Department of Administrative Services contract.

❖ **Department of Veterans' Affairs**

The pharmacy is staffed with one pharmacy supervisor, two pharmacists, and three part time pharmacy technicians. Prescriptions are distributed manually based on electronic requests made from the individual hospital floors. Medical carts, with individual patient compartments are used. There are no perpetual inventory records for pharmaceuticals other than controlled substances. The pharmacy supervisor reviews per unit costs on invoices and will question any such amounts that appear incorrect by checking the vendors price lists. The Department receives Federal Supply Schedule (FSS) pricing, which is provided for agencies serving veterans. It should be noted that the Department relies on an annual review that is performed by the Federal Department of Veterans' Affairs' – Office of Inspector General. The Department receives credits for invoices that must be "re-billed" due to incorrect charges that are identified by the review.

NOTEWORTHY ACCOMPLISHMENTS

The Department of Social Services has made some progress in accomplishing its goal of addressing pharmaceutical costs, as follows:

- ❖ In our January 1995, Performance Audit report of the “Connecticut Pharmaceutical Assistance Contract to the Elderly and the Disabled (ConnPACE)”, we had recommended that the Department seek to calculate rebates received from pharmaceutical manufacturers at the same rate as the percentages recovered for the Medicaid program. The Department was successful in making that change, effective July 1, 1995.
- ❖ The Department has been successful in expanding its favorable Medicaid price structure for prescription drugs to the other social service programs that it administers. This change was made on October 1, 1995.

While faced with staffing and other challenges presented within this report, The University of Connecticut Health Center Pharmacy has implemented an automated pharmaceutical dispensing process and courier system, which has the potential to achieve significant cost savings through efficiency.

AREAS REQUIRING FURTHER REVIEW

As regards Item Number 1, which describes our observations and analysis of the eight State-operated pharmacies, a more thorough review of the issues raised is warranted. Most importantly, the level of staffing that would be required under a Statewide pharmacy model, to dispense the same number of prescriptions in total Statewide, needs to be determined. Geographic and timeliness of delivery issues also need to be addressed under such a model. It is not known whether the courier system in place could meet the needs of agencies that currently have on-site pharmacies.

RESULTS OF REVIEW

Our examination of pharmaceuticals and the State-operated pharmacies disclosed matters of concern requiring disclosure and attention. We addressed our recommendations to a multiple of agencies that were either referred to in our report and/or have the authority to make changes in response to our findings. All such agencies were afforded the opportunity to present comments and/or responses, which are incorporated within this Section of the report. For some of the more lengthy responses, we provide excerpts of the response within this Section and present the full response within Appendix 1 of this report.

Item No. 1 – Economies of Scale – Eight Autonomous Pharmacies:

Background: The State operates eight pharmacies throughout the State. The University of Connecticut Health Center is, by far, the most active, with a staff of 44, operating expenses of approximately \$3,700,000 annually, and pharmaceutical purchases of approximately \$22,000,000, per year. Statewide, there are approximately 71 staff at the eight pharmacies; annual operating expenses and pharmaceutical purchases for the eight pharmacies totaled approximately \$6,600,000, and \$30,000,000, respectively, for the fiscal year ended June 30, 2002.

Criteria: Centralizing activities to deliver services and goods in a more efficient manner is a good business practice if the efficiencies realized exceed the geographic, timeliness of delivery and other cost considerations involved. Such an initiative becomes more practical if there are different processes in place to perform a similar function and there can be a “sharing” of technological or other efficiencies. In general terms, “per unit” costs decrease as volume increases, since fixed costs of an operation are distributed over more units of production.

Staffing the eight pharmacies with qualified managers and staff is essential to the delivery of necessary services.

Condition: Our review disclosed that the costs to operate the eight individual pharmacies are disproportionate with the volume of prescription drugs purchased and dispensed. An analysis of annual operating costs by major category, as compared to pharmaceutical purchases, is presented in **Exhibit D**. We present the following summary of operating costs as a percentage of pharmaceutical purchases, for the fiscal year ended June 30, 2002, by pharmacy:

University of Connecticut Health Center	16.6%
Connecticut Valley Hospital	37.3%
Greater Bridgeport Mental Health Center	29.1%
Connecticut Mental Health Center	38.2%
Cedarcrest Regional Hospital	44.8%
Capitol Region Mental Health Center	188.8%
Department of Veterans' Affairs	31.4%
University of Connecticut Student Infirmary	22.2%

As indicated by the analysis, costs to operate pharmacies vary to a considerable degree. In general terms, operating costs as a percentage of pharmaceutical purchases would be expected to decrease as volume increases.

As noted in the "Background" section of this report, automated dispensing equipment has been invested in at the University of Connecticut Health Center. Our observations disclosed that equipment and facilities at the pharmacies other than the University of Connecticut Health Center were quite outdated and in need of replacement/renovation in order to improve efficiency.

It was also noted that State agencies have a difficult time recruiting and retaining pharmacy staff. At June 30, 2002, of 80 pharmacy positions established Statewide, nine were vacant. Seven vacant positions were subsequently eliminated at the Department of Mental Health and Addiction Services facilities.

Three State agencies that lack pharmacies have separate contracts to purchase prescription drugs from local pharmacies located within their respective geographically areas. Under the contracts, the Agencies were afforded the preferred Department of Social Services fee schedule, which offers prices that are significantly lower than the two contracts from which the State pharmacies purchase.

Effect: It appears that the present system of operating eight autonomous pharmacies is not the most efficient method to deliver prescription drugs. Further, the number of vacant positions indicates that the delivery of services could be adversely affected under the current structure.

Cause: A cause for these conditions was not determined, other than the fact that on-site pharmacies have been operating for a significant period of time.

Recommendation: The consolidation of pharmacy services into one facility and/or the purchase of dispensed prescription drugs from local pharmacies should be considered and studied. The data we reviewed indicates that significant savings could be realized. This would also address pharmacy staffing issues to some extent. (See Recommendation 1.)

Agency Responses: **Office of Policy and Management:**

“Many of your points concerning the operation of eight autonomous pharmacies are well taken. I will direct my staff to convene a meeting of the agencies to discuss additional steps that might be taken to consolidate operations and purchase more cost effectively.”

Department of Administrative Services:

“We concur with the finding that a study should be performed to make recommendations about all encompassing statewide pharmacy services.”

University of Connecticut Health Center:

Excerpts of Response - Consolidation of pharmacy services into one facility could provide the State of Connecticut with cost savings. An interesting alternative is the creation of a “virtual central” State pharmacy. A “virtual” pharmacy would offer economies of scale with regard to purchasing, management, personnel and information technology while enabling the unique State programs described in this audit. UCHC is very interested in participating in a process to define cost savings opportunities for the State. Of the programs surveyed, UCHC’s pharmacy had the lowest operating cost.

See Appendix 1 for the complete response.

Department of Mental Health and Addiction Services:

“The Department finds the concepts outlined in the report interesting and would support further study of the recommendation. We could not, however, automatically support centralization without careful consideration of its impact and the operational details that would be inherent in such a change. The Department would be glad to participate in any further study of these issues.”

University of Connecticut Student Infirmary – Storrs:

Excerpts of Response – The Infirmary does not support the recommendation. The infirmary is nearly self-supporting due to sales of pharmaceuticals and student fees. While the physical facility of the pharmacy is in need of renovation, some state-of-

the-art equipment is utilized. The infirmary believes that an institution-based population could be served by one central facility, but believes it does not fit into that model.

See Appendix 1 for the complete response.

Item No. 2 - Pharmaceutical Costs – Development of One Statewide Contract:

Background:

The State has four principal price structures for pharmaceuticals, with two delivery systems, as follows:

- 1) Social service type programs, administered through the Department of Social Services (DSS), reimburse pharmacies at Federally negotiated rates including dispensing fees.
- 2) For “direct purchase” pharmaceuticals, three contracts with three separate wholesalers are used. The Department of Veterans’ Affairs (DVA) has an exclusive pricing structure that it is allowed to use due to the population of clients (veterans) that it serves. The University of Connecticut Health Center (UCHC) has a contract with another wholesaler that is used to serve the John Dempsey Hospital and the Department of Correction. The Department of Administrative Services (DAS) has a contract with a third wholesaler that is used for all other pharmacies (five Department of Mental Health and Addiction Services facilities and the University of Connecticut Student Health Services Infirmary.)

To determine if the State could benefit by consolidating its prescription drug purchasing, we compared the prices paid by each of the pricing structures for the most commonly purchased prescription drugs. We did not consider the delivery/dispensing costs for such prescriptions, as costs were not uniform among the delivery systems in place. This issue is addressed within Item #1. We selected October 2001 as the base month for obtaining uniform pricing information. The pharmaceutical industry uses an NDC (National Drug Code) coding system to ensure that the sizes and strengths of items are consistent, and we used these codes in our test. Price comparisons were made from computer generated lists supplied by the wholesalers for each contract. Our concern over the use of these price lists by agencies, without a process to scrutinize or seek justification for price increases, is presented within Item #6.

Criteria:

State purchasing statutes, rules and regulations are based on the concept of obtaining needed goods and services in the most economical and efficient manner, from the most favorable source.

Condition: The existence of multiple systems for purchasing pharmaceuticals may reduce the economy and efficiency of the State’s purchasing power. There currently are four major systems for purchasing pharmaceuticals throughout the State. Each system has unique nuances that affected our analysis. The purchase of pharmaceuticals through the Department of Veterans’ Affairs use of Federal Supply Schedule vendor resulted in the lowest costs. However, as a Federal program available only to Veterans’ facilities, it could not be utilized for all State programs. Pharmaceutical expenditures through the Social Services programs are Federally regulated and although the second lowest in costs, involved additional individual prescription dispensing fees that could not be broken out of manufacturers’ unit costs. Although pharmaceutical rates charged under the DAS Statewide contract and those charged under the UCHC consortium vendor were comparable, it was noted by the Statewide vendors that the current rates would be significantly lower with a much larger purchase volume. Some examples of the more common drugs purchased under the four systems and the differences in costs follow:

<u>Drug</u>	<u>DAS</u>	<u>UCHC</u>	<u>DSS</u>	<u>DVA</u>
Sample # 1	\$ 64.24	\$ 65.55	\$ 48.85	\$ 37.63
Sample # 2	119.59	116.97	98.85	67.82
Sample # 3	195.20	196.26	145.54	125.09
Sample # 4	589.42	584.50	535.59	332.68
Sample # 5	580.66	568.37	522.10	413.69
Sample # 6	467.40	432.45	352.84	255.33
Sample # 7	1996.82	1868.91	1666.20	1246.93
Sample # 8	195.47	206.81	141.12	175.91
Sample # 9	174.34	170.18	152.24	141.16

Effect: Purchasing pharmaceuticals through multiple systems without comparison or coordination between the groups could result in higher costs or inadequate product availability to user agencies.

Cause: Each of the user groups involved with the purchase of pharmaceuticals was unaware of alternative options throughout the State. Each group was of the opinion that the system it used was unique and concentrated solely on its own needs when pursuing pharmaceuticals.

Recommendation: The State should consider increasing its purchasing power by negotiating a Statewide contract, to the extent that it may negotiate with pharmaceutical manufacturers. At a minimum, purchases by the State-operated pharmacies should be contracted for as a whole. (See Recommendation 2.)

Agency Responses:

Office of Policy and Management:

“Your point concerning the improved price available with larger volume is well taken. I must note, however, that a significant aspect of the State’s volume was overlooked when you failed to consider the volume of pharmaceuticals purchased through State employee and retiree health plans and through the State Workers’ Compensation Program.

I will ask DAS and the UHC to discuss the options available to consolidate pharmaceutical purchases.”

Department of Administrative Services:

“We agree with this finding and believe the study called for in the first item should also address statewide contracts as part of the pharmacy study.”

Department of Social Services:

Excerpts of Response - The Department of Social Services is acutely aware of the costs of providing pharmaceutical assistance to the low-income, elderly, and disabled populations in this state, and continuously reviews systems to minimize these costs within the full spectrum of healthcare costs while maintaining adequate health care for our clients. This Department is committed to explore all opportunities of containing the spiraling costs of its pharmaceutical programs while always being cognizant of the health and welfare of the clients who need this crucial service.

See Appendix 1 for the complete response.

University of Connecticut Health Center:

Excerpts of Response - Development of one statewide contract for the purchase of pharmaceuticals could further support UHC’s ability to provide pharmaceutical care, on site or statewide, at an even lower cost. A single contract, however, needs to take into account the needs of an acute care hospital with a large ambulatory base, such as JDH. Membership in one of our consortia, The University Health System Consortium, could be jeopardized. Nonetheless UHC remains interested in evaluating less expensive strategies to purchase medications.

See Appendix 1 for the complete response.

Department of Mental Health and Addiction Services:

“The Department would support consideration of negotiating a Statewide contract for the purchase of pharmaceuticals.”

University of Connecticut Student Infirmary – Storrs:

“We are in full agreement with this recommendation. There was a time (when a prior DAS purchasing agent was responsible for pharmaceutical supplies) that all state agencies made the majority of their pharmaceutical purchases directly from the manufacturers and not through a wholesaler. Since that purchasing agent’s retirement, it would appear that the current purchasing agent in charge of pharmaceuticals has adopted a policy of turning over negotiations with manufacturers to the purchasing consortium, leading to our purchasing through a wholesaler and thus adding another layer of acquisition costs.”

Auditors’ Concluding Comments:

As regards the Office of Policy and Management response, the scope of our review was limited to an analysis of prescription drugs purchased and/or billed directly to State agencies. Prescription drug benefits for State employee and retirees are provided through third party insurers; cost information is not readily available. Nonetheless, the point made is worth noting and reinforces the rationale behind our recommendation.

Item No. 3 - Manufacturer Rebates:

Background: It is a common practice for pharmaceutical manufacturers to provide rebates to buyers based on the volume of individual drugs purchased.

Criteria: It is a good business practice to have procedures in place to recoup available pharmaceutical manufacturer rebates. The Department of Social Services has a process in place to identify available rebates and to claim, track, receive and deposit them. For the fiscal year ended June 30, 2002, the Department received \$92,500,000 in rebates, based on purchases of \$445,000,000.

Condition: Our review disclosed that rebates received by agencies that purchased pharmaceuticals, other than the Department of Social Services, were minimal. There are no formal policies and procedures in place to ensure that rebates are appropriately recouped. It is not uncommon, we were informed, for manufacturer representatives to send or deliver rebate checks that are not expected, and not supported by adequate explanatory documentation.

Effect: The procedures in place to recover rebates at agencies other than the Department of Social Services are haphazard. The State is

losing revenue in those instances where manufacturer rebates are available but not pursued.

Cause: Our discussions with agency staff disclosed that, although there was some knowledge that pharmaceutical manufacturers offer rebates, they were not aware of the process to recover them. At the University of Connecticut Health Center pharmacy, where we noted that some recoveries were received, staff told us that the Director of Pharmacy had processed the rebates in the past. Subsequent to our initial inquiries, the Director left the employ of the Center. We noted that, as of June 2002, no other staff member had taken up the task of processing and accounting for rebates.

Recommendation: Policies and procedures to ensure that pharmaceutical manufacturer rebates are recouped should be established. Staff of either the contracting agencies or the agencies that purchase could accomplish this. (See Recommendation 3.)

Agency Responses: **Office of Policy and Management:**
“As part of our review and follow up of Item No. 2, we will ask that affected agencies explore a cost-effective system to monitor and pursue available rebates.”

Department of Administrative Services:
“We agree with this finding and believe that the statewide pharmacy study should address this rebate issue.”

University of Connecticut Health Center:
“UCHC pharmacy is a member of a purchasing consortium called Novation. Novation has trended toward contracting to provide the lowest cost per unit in lieu of rebates. This trend away from rebates came at the request of member hospitals and is becoming the industry standard. UCHC pharmacy will investigate any and all rebate opportunities and implement a system that will monitor available rebates and track receipt of rebates. Novation consortium provides monthly updates of rebates available; UCHC pharmacy will monitor these updates and enroll in all applicable rebate programs, although we believe these opportunities are limited.

It is important to note that DSS receives a substantial dollar amount in rebates annually; this is secondary to a federally mandated rebate program. Perhaps consideration of a State mandated program from pharmaceutical manufacturers for State purchases would be worth investigating.”

Department of Mental Health and Addiction Services:

“The Department is aware that pharmaceutical manufacturers offer rebates and will review its policies and procedures to accomplish this as appropriate.”

University of Connecticut Student Infirmary – Storrs:

“It is our understanding that pharmaceutical manufacturer rebates are built into the prices negotiated by the purchasing consortium. In the past, the consortium has advised us that UC-SHS Pharmacy is not always eligible for many of these rebates because our patients are not Medicaid patients.”

Auditors’ Concluding Comments:

As regards the University of Connecticut Health Center response, we take no issue with efforts made to obtain more favorable rates in lieu of rebates. However, where there are opportunities to recover rebates, due to the price structure in force, the Center should have a process in place to identify and collect such rebates.

The University of Connecticut Student Infirmary should research the issue further. Manufacturer rebates are not expressly built into the established prices and are not limited to Medicaid patients.

Item No. 4 – University of Connecticut Health Center Pharmacy – Prescription Drug Returns:

Background:

At times, prescription drugs are not consumed by the patients under the care of State agencies that dispense the prescriptions through their pharmacies. This occurs quite often with Department of Correction inmates that are prescribed pharmaceuticals that are expensive in nature.

Criteria:

Prescription Drugs that are dispensed from the State-operated pharmacies, but not administered, or expired, damaged or recalled, are to be returned to the pharmacy from which they were distributed. Depending on the specific product and manufacturer, drugs that are expired, damaged or recalled may be returned for replacements, refunds or credits.

Section 27 of Public Act 01-9 of the June 2001 Special Session of the General Assembly, effective July 1, 2001, specifically requires the return of unused prescription drugs so that they may be redispensed when possible.

Condition:

Our initial observations disclosed that correctional facilities were returning unused prescription drugs to the University of Connecticut Health Center pharmacy. At that time we noted that they were being stockpiled in a storage room at the Center. While there was an original plan to sort and recycle the returns, a decision was later made to destroy the entire amount on hand due to cross-contamination and shelf life concerns. Due to a lack of records, we could not determine the value of the items destroyed. However, the amount appeared significant in that nine, 67-gallon drums were filled and discarded.

It should be noted that, as we were concluding our review, we observed that an effort was being made to sort and recycle returned drugs.

It was also noted that there are no records to document the return of goods from the correctional facilities, and that accountability over tote locks used to seal the return containers was lacking.

For pharmaceuticals that could not be recycled, pharmacies have historically contracted with a private firm to dispose of the items. We noted that the contract with this firm expired on February 28, 2001.

Effect:

The State incurred increased costs for prescription drugs by not taking advantage of recycling opportunities.

Lacking an effective internal control system over the return of unused goods from the correctional facilities, the loss, theft or misplacement of prescription drugs could occur and would not be detected by Agency management in a timely manner.

Cause:

The conditions were caused by a combination of factors. Since this was a relatively new operation, developing policies and procedures for the disposition of returned goods was not a high priority of the Health Center at the time.

A lack of internal control policies and procedures exists regarding the lack of records to accompany returns sent back from the correctional facilities.

The use of tote locks to seal transported containers would be an effective control if there were an accounting of such. Our review disclosed that tote lock numbers were not used sequentially; a process to ensure that they are sequentially accounted for is lacking.

Recommendation: Policies, procedures and records should be established to receive and record returned prescription drugs at the University of Connecticut Health Center pharmacy, and to document the final disposition of such. An accounting of numbered tote locks used to “seal” transporting containers should also be performed on a regular basis to enhance internal control over the returns. The Center should procure a new contract for the disposition of returned pharmaceuticals that need to be destroyed/discarded. (See Recommendation 4.)

Agency Responses: **University of Connecticut Health Center:**
Excerpts of Response - A recycling policy was initiated as of May 2002. Recycling is performed on a daily basis and within the guidelines provided for in Section 27 of Public Act 01-9. Monthly totals of recycling dollars are reported back to the Department of Correction. UCHC pharmacy has a long-standing history with several companies that accept returns on the pharmaceutical manufacturer’s behalf. They are in turn paid by the pharmaceutical manufacturers to process the returns. Since they are reimbursed directly from the manufacturer there are no contracts established between UCHC pharmacy and return companies. Once the returns are processed a reimbursement check is issued to the UCHC pharmacy. UCHC believes the new policies and procedures described above and in place for recycling are cost effective and do not require reinitiating contracts with a recycling company.
See Appendix 1 for the complete response.

Office of Policy and Management:

“In order to assure minimal loss, I have asked the UCHC and the Department of Correction to develop a system to improve the timely return of unused goods to inventory.”

Item No. 5 - Property Control – Safeguarding of Pharmaceuticals:

Background: The State-operated pharmacies maintain a significant inventory of purchased stock. We also observed that large quantities of “manufacturer samples” are on hand at the University of Connecticut Health Center.

Criteria: State agencies have a fiduciary responsibility to safeguard items purchased with State resources. The use of perpetual inventory records is a good business practice that provides records of amounts that should be “on hand” at any point in time, based on entries made for the specific purchase and distribution of individual items in/out of stock.

Per the “Property Control Manual” issued by the Office of the State Comptroller, perpetual inventory systems should be maintained for supplies if the estimated value of the entire inventory exceeds \$1,000. Complete physical inventories are to be taken each fiscal year to verify the accuracy of inventory records, to identify any excess, defective or obsolete assets on hand, and to identify any losses not previously disclosed **(See Exhibit E.)**

Condition: Except for “controlled substances” and certain items that are administered through automated medical carts, there are no perpetual inventory records maintained by any of the individual pharmacies. For the items that are administered through the medical carts, an audit trail between purchases and the replenishment of the carts is lacking.

As regards “manufacturer samples” at the Health Center, we noted that various recordkeeping systems are used at the individual clinics where the samples are stored. While we noted that efforts are made to track items received and distributed, the systems do not provide for any substantive form of accountability.

Effect: It should be noted that our review did not identify any loss or irregularities over purchased stock and manufacturer samples. However, due to the records maintained, losses or irregularities, should they occur, would not be detected by management within a timely period.

Cause: The establishment of perpetual inventory records or some other form of accountability over pharmaceutical inventories has not been a high priority of the State-operated pharmacies.

Recommendation: The State-operated pharmacies should establish perpetual inventory records or provide for some other form of accountability over the pharmaceuticals that are received, stored and distributed. (See Recommendation 5.)

Agency Responses: **University of Connecticut Health Center:**
“UCHC pharmacy does not accept or purchase samples. Samples are maintained within freestanding clinics in UCHC physician practices. The clinics have their own policies and procedures regarding the handling of manufacturer’s samples.

Presently, UCHC pharmacy does not maintain a perpetual inventory. Of note, a perpetual inventory system, although desirable, does not appear to be the industry standard. Only one of

twenty-six hospitals in the state of Connecticut (UCHC survey) has a perpetual inventory system. Implementation of a perpetual inventory system can be investigated with regard to availability, resource allocation and personnel expenditures.”

Department of Mental Health and Addiction Services:

“The Department does maintain perpetual inventory for controlled substances, and other pharmaceuticals are subject to inventory once a year. The Department is in the process of acquiring a new pharmacy system that we expect will assist us further in these efforts.”

Office of Policy and Management:

“The agencies will be asked to address the inventory of pharmaceutical stocks in cooperation with the Office of the Comptroller.”

University of Connecticut Student Infirmary – Storrs:

“Our QS/1 Pharmacy software performs perpetual inventory tracking for us.”

Item No. 6 - Vouching of Invoices – Pharmaceutical Purchases:

Background:

With rare exception, State contract awards or purchase orders are in place for goods and services purchased by State agencies which provide specific prices negotiated for individual items and services. However, pharmaceutical manufacturer costs fluctuate to a significant degree, and the prices charged to agencies, by contract, fluctuate accordingly based on a percentage of the “Average Wholesale Cost” of each individual drug.

As explained in the “Background” section of this report, the Department of Administrative Services, Department of Veterans’ Affairs and University of Connecticut Health Center pharmaceutical contracts are with three separate wholesalers. The Department of Administrative Services and University of Connecticut Health Center belong to “consortiums,” which are considered to provide favorable group purchasing agreements.

Criteria:

Vouching of invoices to an established contract is a good business practice that provides assurance that an organization is purchasing goods and services at the proper amounts/rates. Due to the unique nature of pharmaceutical purchases, whereby a contract with specifically set prices is not available, another means to verify prices charged and to be paid is prudent.

The Federal Department of Veterans' Affairs performs reviews for agencies that serve veteran populations. These reviews consist of a verification of pharmaceutical prices charged to the Connecticut Department of Veterans' Affairs, and often identify overcharges which result in refunds and/or credits.

Condition:

The two contracts that the State enters into for the pharmacies that use the Department of Administrative Services and University of Connecticut Health Center contracts are based on the "Average Wholesale Price" (AWP) of individual drugs. The rates established are based on periodic surveys of national wholesalers, and fluctuate often. As such, prices ultimately passed onto the State agencies are affected. Our review disclosed that agencies will normally inquire of price changes with the applicable wholesaler or consortium.

The Department of Veterans' Affairs contract has a definitive price structure, by item.

Other than a review by the Federal Department of Veterans' Affairs - Office of Inspector General, we could not identify any efforts made, or independent review performed, to ensure that prices charged are accurate. It should be noted that the reviews performed on prices charged to the Department of Veterans' Affairs often identify overcharges, which result in refunds and/or credits.

Effect:

The State could be expending more on prescription drug items than is appropriate.

Cause:

Agencies have been satisfied that prices charged by wholesalers are accurate based on their inquiries with the consortiums and wholesaler price lists they receive.

Recommendation:

State agencies should establish policies to verify that the prices charged for the pharmaceuticals they purchase are proper. This effort should be independent of the queries made with the wholesalers and consortiums that the agencies procure from. Justifications for interim price increases should be obtained. (See Recommendation 6.)

Agency Responses:

Department of Administrative Services:

"We agree with this finding and believe the study should also address this independent price verification policy."

University of Connecticut Health Center:

“UHC pharmacy policy 03-029 Purchasing and Receiving Pharmaceuticals dated 06/14/91 states all prices are verified by the pharmacy purchasing manager. The pharmacy purchasing manager verifies each item on every invoice against the Novation contract database. Variances in purchase price are then resubmitted to the wholesaler for credit and refill. Novation negotiates a three-year contract; this is not reflective of a percentage of AWP. The Novation database is updated regularly and provides a reliable source of contract information.”

Department of Mental Health and Addiction Services:

“The Department’s facilities and Local Mental Health Authorities do random checks to verify that prices charged for pharmaceuticals are proper and do request updated price lists on a periodic basis.”

Office of Policy and Management:

“Automated review of AWP updates will be explored to determine how cost effectively they are to assure that the most up-to-date information is used.”

University of Connecticut Student Infirmary – Storrs:

“Please refer back to the response for Item 2. When UC-SHS had contracts in place allowing the purchase of pharmaceuticals directly from the manufacturers, the item-by-item price structure remained fixed for the entire contract period and those prices were substantially below AWP rates. It was thus easy to compare and verify that we were being charged the contracted price.

In summary, we strongly support improvements in statewide purchasing agreements that may enable us to reduce the acquisition cost of pharmaceutical items. However, we firmly believe that the current pharmacy system at UC-SHS provides high quality, accessible, cost effective service to the student population.”

RECOMMENDATIONS

1. **The consolidation of pharmacy services into one facility and/or the purchase of dispensed prescription drugs from local pharmacies should be considered and studied. The data we reviewed indicates that significant savings could be realized. This would also address pharmacy staffing issues to some extent.**

Comment:

Our review disclosed that the costs to operate the eight individual pharmacies are disproportionate with the volume of prescription drugs purchased and dispensed. Automated dispensing equipment has been invested in at the University of Connecticut Health Center, while equipment and facilities at the other pharmacies were quite outdated and in need of replacement/renovation.

It was also noted that State agencies have a difficult time recruiting and retaining pharmacy staff. Three State agencies that lack pharmacies, and thus the related expense of operating them, receive prescription drugs at preferred rates from local pharmacies that they are under contract with.

2. **The State should consider increasing its purchasing power by negotiating a Statewide contract, to the extent that it may negotiate with pharmaceutical manufacturers. At a minimum, purchases by the State-operated pharmacies should be contracted for as a whole.**

Comment:

There currently are four major systems for purchasing pharmaceuticals throughout the State. For “direct purchase” pharmaceuticals, there are three contracts with three separate wholesalers that are used. The existence of multiple systems for purchasing pharmaceuticals may reduce the economy and efficiency of the State’s purchasing power.

Purchasing pharmaceuticals through multiple systems without comparison or coordination between the groups could result in higher costs or inadequate product availability to user agencies.

- 3. Policies and procedures to ensure that pharmaceutical manufacturer rebates are recouped should be established. Staff of either the contracting agencies or the agencies that purchase could accomplish this.**

Comment:

Our review disclosed that rebates received by agencies that purchased pharmaceuticals, other than the Department of Social Services, were minimal. There are no formal policies and procedures in place to ensure that rebates are appropriately recouped. It is not uncommon, we were informed, for manufacturer representatives to send or deliver rebate checks that are not expected, and not supported by adequate explanatory documentation. This is of concern, as it indicates that management would not identify rebates due but not received, in a timely manner. The State is losing revenue in those instances where manufacturer rebates are available but not pursued.

- 4. Policies, procedures and records should be established to receive and record returned prescription drugs at the University of Connecticut Health Center pharmacy, and to document the final disposition of such. An accounting of numbered tote locks used to “seal” transporting containers should also be performed on a regular basis to enhance internal control over the returns. The Center should procure a new contract for the disposition of returned pharmaceuticals that need to be destroyed/discarded.**

Comment:

Dispensed drugs that are ultimately not administered are quite common at the University of Connecticut Health Center pharmacy, as inmates often refuse them. In those instances, the pharmacy is supposed to “recycle” the drugs when possible. Our initial observations disclosed that returned goods were being stockpiled at the Health Center. While there was an original plan to sort and recycle the returns, a decision was later made to destroy the entire amount on hand due to cross-contamination and shelf life concerns. It should be noted that, as we were concluding our review, we observed that an effort was being made to sort and recycle returned drugs.

It was also noted that there are no records to document the return of goods from the correctional facilities, that accountability over tote locks used on the return containers was lacking, and that a contract with a firm to destroy/discard certain unused prescription drugs had expired.

- 5. The State-operated pharmacies should establish perpetual inventory records or provide for some other form of accountability over the pharmaceuticals that are received, stored and distributed.**

Comment:

Except for “controlled substances” and certain items that are administered through automated medical carts, there are no perpetual inventory records maintained by any of the individual pharmacies. For the items that are administered through the medical carts, an audit trail between purchases and the replenishment of the carts is lacking.

As regards “manufacturer samples” at the University of Connecticut Health Center, we noted that various recordkeeping systems are used at the individual clinics where the samples are stored. While we noted that efforts are made to track items received and distributed, the systems do not provide for any substantive form of accountability.

- 6. State agencies should establish policies to verify that the prices charged for the pharmaceuticals they purchase are proper. This effort should be independent of the queries made with the wholesalers and consortiums that the agencies procure from. Justifications for interim price increases should be obtained.**

Comment:

The two contracts that the State enters into for the pharmacies that use the Department of Administrative Services and University of Connecticut Health Center contracts are based on the “Average Wholesale Price” of individual drugs, and fluctuate often. As such, prices ultimately passed onto the State agencies fluctuate as well. Our review disclosed that agencies normally inquire of price changes with the applicable wholesaler or consortium for these two contracts. An independent review to ensure that prices charged are accurate is not routinely performed.

CONCLUSION

In conclusion, we wish to express our appreciation for the cooperation and courtesies extended to our representatives by the officials and staff of the Department of Administrative Services, University of Connecticut Health Center, Department of Mental Health and Addiction Services, and the Department of Veterans' Affairs.

John A. Rasimas
Principal Auditor

Approved:

Kevin P. Johnston
Auditor of Public Accounts

Robert G. Jaekle
Auditor of Public Accounts

APPENDIX 1

As noted in the “Results of Review” section of this report, we provided excerpts of the more lengthy comments/responses within that section. We present the complete comments/responses within this appendix, by item number.

Item No. 1 – Economies of Scale – Eight Autonomous Pharmacies:

Recommendation:

The consolidation of pharmacy services into one facility and/or the purchase of dispensed prescription drugs from local pharmacies should be considered and studied. The data we reviewed indicates that significant savings could be realized. This would also address pharmacy staffing issues to some extent.

University of Connecticut Health Center:

“Consolidation of pharmacy services into one facility could provide the State of Connecticut with cost savings. An interesting alternative is the creation of a “virtual central” State pharmacy. A “virtual” pharmacy would offer economies of scale with regard to purchasing, management, personnel and information technology while enabling the unique State programs described in this audit.

John Dempsey Hospital (JDH) is the only acute care hospital within the state system. As such it has unique needs such as running 24 hours per day seven days per week 365 days per year. The JDH pharmacy must operate within the confines of state regulations, comply with federal guidelines, as well as JCAHO (Joint Commission on Accreditation of Healthcare Organizations) regulations. As an acute care hospital, an off-site centralized pharmacy could cause delays in therapies, risk to patient care and safety. For example, JDH pharmacy provides life-saving clotting factors for patients who are at risk of fatal hemorrhage. If these factors are not administered in a timely manner, death could result. The emergency department and cardiac catheterization lab provide emergency life-saving services that are all supported by the JDH pharmacy 24/7.

UHC is very interested in participating in a process to define cost savings opportunities for the State. Of the programs surveyed, UHC’s pharmacy had the lowest operating cost. Additionally, to improve patient safety, the University of Connecticut Health Center has contracted for a fully integrated institution-wide physician order-entry system for John Dempsey Hospital and the Department of Corrections. There are data demonstrating that physician order entry systems reduce medication errors, save money, and utilize best prescribing habits.”

University of Connecticut Student Infirmary – Storrs:

“We do not support this recommendation for the following reasons.

The audit report noted that, for the fiscal year ending June 30, 2002, the UC-SHS Pharmacy had Operating Expenditures of \$131,572 and Pharmaceutical Purchases of \$593,015 (which total \$724,587.) It made no note of our gross Pharmaceutical Sales, which were \$717,329, demonstrating that the pharmacy is nearly self-supporting. A planned increase in prescription

pricing for FY02-03 is predicted to favorably impact these figures. In addition to our sales, as cited above, student fees help support our pharmacy expenditures.

With regard to the implication that only the UConn Health Center has state-of-the-art facilities and equipment: We agree that the physical facility of the UC-SHS Pharmacy is in need of renovation and replacement, as is the entire Student Health Services facility. However, we are using current, state-of-the-art equipment identical to that used in many retail pharmacies (e.g., the current version of the QS/1 dispensing software and the Kirby-Lester automatic pill counter.)

The number of vacant positions and the current shortage of pharmacists is alarming, particularly when we must compete with the chain pharmacies that are paying a premium to hire newly licensed pharmacists. However, there are no vacant positions at UC-SHS; furthermore, we only have one full-time pharmacist and recently hired a part-time pharmacist.

We would agree that an **institution-based** population could be served by one central facility, in the same way that the UConn Health Center provides pharmacy services to the Dept. of Corrections. Most of the state-operated pharmacies fall into this category. However, the UC-SHS does not fit this model as it provides care to a community-based, residential student population in a relatively isolated rural setting. An AAAHC accredited provider of ambulatory care, the mission of the UC-SHS Pharmacy is to provide pharmaceutical care specific to a "College Health" program.

A comprehensive analysis of the mix of pharmaceuticals purchased by UC-SHS would reveal the utilization of low tech pharmaceuticals as the first line of treatment as opposed to an institutional pharmacy that might use bio-engineered pharmaceuticals. Consequently, if the number of prescriptions filled per year was figured into the analysis (20,500 prescriptions and 7,300 O.T.C's) the per unit cost per prescription is quite low. Furthermore, the expenses allocated to our pharmacy support a process that includes filling the prescription in addition to billing for the transaction. As we are functioning as a community/retail pharmacy (the community of students), we are using a "clearing house" that enables us to directly bill a myriad of prescription plans. A comprehensive analysis would analyze the entire process, as well as all revenues and expenses."

Item No. 2 - Pharmaceutical Costs – Development of One Statewide Contract:

Recommendation:

The State should consider increasing its purchasing power by negotiating a Statewide contract, to the extent that it may negotiate with pharmaceutical manufacturers. At a minimum, purchases by the State-operated pharmacies should be contracted for as a whole.

Department of Social Services Response:

“The Department of Social Services is acutely aware of the costs of providing pharmaceutical assistance to the low-income, elderly, and disabled populations in this state, and continuously reviews systems to minimize these costs within the full spectrum of healthcare costs while maintaining adequate health care for our clients. Unlike the other programs identified in Item No. 2 of the draft audit report, the Department of Social Services does not directly purchase pharmaceutical products, but reimburses service providers.

Within this understanding, I believe that the Department of Social Services is moving in the direction indicated by the audit report, i.e., reducing overall prescription drugs costs to the state. You may be aware of the wide range of initiatives that have been proposed by the Department to maintain or reduce DSS pharmacy expenditures. Throughout recent years we have proposed changes ranging from implementation of client co-pays, reductions in the product reimbursement paid to pharmacies (AWP), reductions in the dispensing fee paid to pharmacies, reductions in the generic product reimbursements, voluntary mail order to a full pharmaceutical contract through a Pharmacy Benefit Manager. As few of these proposals have made it through the legislative process, we are concentrating our efforts in those areas that have legislative approval. At the present time, the Department is negotiating a Prior Authorization contract, whereby pharmaceutical prescribers will have to obtain authorization to have brand name drugs dispensed when generic substitutes are available. In addition, pharmacy providers will have to obtain authorization to dispense medications before a previous prescription is nearly consumed. Based on the recently passed 2003 Appropriations Act, we are also in the process of developing a Preferred Drug List to obtain more favorable pricing from drug manufacturers for fee-for-service drug reimbursement programs.

This Department is committed to explore all opportunities of containing the spiraling costs of its pharmaceutical programs while always being cognizant of the health and welfare of the clients who need this crucial service. We cannot afford to lose sight of either issue.”

University of Connecticut Health Center:

“Development of one statewide contract for the purchase of pharmaceuticals could further support UCHC’s ability to provide pharmaceutical care, on site or statewide, at an even lower cost. A single contract, however, needs to take into account the needs of an acute care hospital with a large ambulatory base, such as JDH. Membership in one of our consortia, The University Health System Consortium, could be jeopardized. Nonetheless UCHC remains interested in evaluating less expensive strategies to purchase medications.

When comparing drug acquisition costs across State agencies one must consider differences between each agency. Both DSS and DVA have access to federal pricing provided for specific

government controlled patient populations. Other agencies, like JDH, do not qualify for this pricing by law.

DSS does not actually procure medications. Rather it functions much like a third party payor. Patients have their prescriptions filled at a local pharmacy and then DSS reimburses the pharmacy at average wholesale price (AWP) minus 14% plus a dispensing fee. These procurement costs are low because of legislative mandates, but pharmacies can opt out of Medicaid programs entirely. For example, in Massachusetts several community pharmacies have decided not to accept Medicaid and State funded programs.

The conclusion(s) that DSS pricing is less expensive than current JDH purchasing is confusing. Over the last two quarters, UCHC purchasing for medications was AWP minus 45%, compared to DSS pricing of AWP-14%. Hence UCHC overall drug acquisition costs should be lower than that of DSS.”

Item No. 4 – University of Connecticut Health Center Pharmacy – Prescription Drug Returns:

Recommendation:

Policies, procedures and records should be established to receive and record returned prescription drugs at the University of Connecticut Health Center pharmacy, and to document the final disposition of such. An accounting of numbered tote locks used to “seal” transporting containers should also be performed on a regular basis to enhance internal control over the returns. A contract for disposition of returned pharmaceuticals that must be destroyed/discarded should be re-awarded.

University of Connecticut Health Center:

“A recycling policy was initiated as of May 2002. Recycling is performed on a daily basis and within the guidelines provided for in Section 27 of Public Act 01-9. Monthly totals of recycling dollars are reported back to the Department of Corrections. Development of this policy incorporated the following principles:

- a) Recycling of all medications is cost in-effective: many medications cost a nominal fee some less than 0.01 per tablet. It is not cost effective to dedicate personnel resources to recycle all medications. As such, medications are targeted to be recycled, with regard to price per unit as well as volume purchased.
- b) Ninety percent of drug expenditures for the DOC pharmacy are for antiretroviral medications used in the treatment of HIV and psychiatric medications. Federal consent decrees mandate provision of both HIV and psychiatric medications (Doe v. Meecham, West v. Manson). Frequently, inmates refuse medications, which result in significant returns. It is essential to insure medications are available at all times in order to comply with the federal consent decrees.
- c) To insure patient safety, a chain of custody and adequate documentation has been developed to insure lot number integrity and expiration dating of recycled medications.

d) Exploration of mechanisms to prevent returns from facilities and stay within the confines of the consent decree are underway. Implementation of automated dispensing devices (Pyxis®) may provide the solution.

Several factors should be considered when addressing the volume of medications destroyed noted in the audit. Dispensing to the correctional facilities is a new program. The manner of dispensing (patient specific packaging, for specified time of administration) for inmates is the only model in existence in the United States. Management was unprepared for the volume of returns from the 18,000 inmates housed in twenty-three correctional facilities. This resulted in an underestimation of the workload and needed personnel for recycling. In an effort to accommodate this volume a system was put in place to recycle. The initial recycling program involved “cherry-picking” the most expensive medications, hence, much of the bulk destroyed consisted of less expensive medications. Medications were packaged in patient specific packages, which also provided a fair amount of bulk. For patient confidentiality, the packaging materials were included in the containers incinerated. It is estimated that if only the pills were destroyed and not the packaging the number of drums sent for destruction would have been significantly less. It should also be noted that a considerable amount of medication included in the bulk destruction was from the previous vendor; recycling of these medications would be in violation of State law. Many medications fell outside of the ninety-day recycling window provided for in Section 27 Public Act 01-9. Of note, the vendor who previously provided pharmaceuticals to the Department of Corrections did not recycle medications.

The budgetary estimate for recycling annually is \$200,000.00. The current recycling program has demonstrated that it will meet and perhaps exceed the previous estimate.

In reference to reinitiating a drug recycling contract: when medications exceed the manufacturer’s expiration dating they are no longer suitable for recycling. Many pharmaceutical manufacturers will accept drug product and issue credit. UHC pharmacy has a long-standing history with several companies (BFI, One-Box Returns Inc.) that accept these returns on the pharmaceutical manufacturer’s behalf. They are in turn paid by the pharmaceutical manufacturers to process the returns. Since they are reimbursed directly from the manufacturer there are no contracts established between UHC pharmacy and return companies. There are strict guidelines established by the pharmaceutical industry that determines eligibility for credit. For example, medications must be returned in the original manufacturer’s packaging. This renders the returns from the DOC pharmacy ineligible. Once the returns are processed a reimbursement check is issued to the UHC pharmacy.

UHC believes the new policies and procedures described above and in place for recycling are cost effective and do not require reinitiating contracts with a recycling company.”

EXHIBIT A

Section 17b-274 of the General Statutes

As amended by Public Act 00-2 of the June 2000 Special Session of the General Assembly – Emphasis Added.

Sec. 17b-274. (Formerly Sec. 17-134q). Dispensing fee for pharmacists for substituting generically equivalent drug products. Investigation by Division of Criminal Justice. Brand medically necessary. Procedure for prior approval to dispense brand name drug. Disclosure. (a) The Commissioner of Social Services shall pay a pharmacist a professional dispensing fee of fifty cents per prescription, in addition to any other dispensing fee, for substituting a generically equivalent drug product, in accordance with section 20-619, for the drug prescribed by the licensed practitioner for a Medicaid recipient, provided the substitution is not required by federal law or regulation.

(b) The Division of Criminal Justice shall periodically investigate pharmacies to ensure that the state is not billed for a brand name drug product when a less expensive generic substitute drug product is dispensed to a Medicaid recipient. The Commissioner of Social Services shall cooperate and provide information as requested by such division.

(c) A licensed medical practitioner may specify in writing or by a telephonic or electronic communication that there shall be no substitution for the specified brand name drug product in any prescription for a Medicaid, state-administered general assistance, general assistance or ConnPACE recipient, provided (1) the practitioner specifies the basis on which the brand name drug product and dosage form is medically necessary in comparison to a chemically equivalent generic drug product substitution, and (2) the phrase "brand medically necessary" shall be in the practitioner's handwriting on the prescription form or, if the prohibition was communicated by telephonic communication, in the pharmacist's handwriting on such form, and shall not be preprinted or stamped or initialed on such form. If the practitioner specifies by telephonic communication that there shall be no substitution for the specified brand name drug product in any prescription for a Medicaid, state-administered general assistance, general assistance or ConnPACE recipient, written certification in the practitioner's handwriting bearing the phrase "brand medically necessary" shall be sent to the dispensing pharmacy within ten days. A pharmacist shall dispense a generically equivalent drug product for any drug listed in accordance with the Code of Federal Regulations Title 42 Part 447.332 for a drug prescribed for a Medicaid, state-administered general assistance, general assistance or ConnPACE recipient unless the phrase "brand medically necessary" is ordered in accordance with this subsection and such pharmacist has received approval to dispense the brand name drug product in accordance with subsection (d) of this section.

(d) The Commissioner of Social Services shall establish a procedure by which a pharmacist shall obtain approval from an independent pharmacy consultant acting on behalf of the Department of Social Services, under an administrative services only contract, whenever the pharmacist dispenses a brand name drug product to a Medicaid, state-administered general assistance, general assistance or ConnPACE recipient and a chemically equivalent generic drug product substitution is available, provided such procedure shall not require approval for other than initial prescriptions for such drug product. If such approval is not granted or denied within two hours of receipt by the commissioner of the request for approval, it shall be deemed granted. The

pharmacist may appeal a denial of reimbursement to the department based on the failure of such pharmacist to substitute a generic drug product in accordance with this section.

(e) A licensed medical practitioner shall disclose to the Department of Social Services or such consultant, upon request, the basis on which the brand name drug product and dosage form is medically necessary in comparison to a chemically equivalent generic drug product substitution. The Commissioner of Social Services shall establish a procedure by which such a practitioner may appeal a determination that a chemically equivalent generic drug product substitution is required for a Medicaid, state-administered general assistance, general assistance or ConnPACE recipient.

(P.A. 83-52, S. 1, 2, 4; P.A. 84-217, S. 1, 2; P.A. 89-111, S. 1; P.A. 93-262, S. 1, 87; P.A. 95-264, S. 46; P.A. 96-169, S. 13; June Sp. Sess. P.A. 00-2, S. 38, 53.)
History: P.A. 84-217 removed language that limited payment of fee to the period from July 1, 1983, to June 30, 1984, and increased fee from twenty-five to fifty cents; P.A. 89-111 added a new Subsec. (c) containing provisions for when there is to be no substitute for the specified brand name drug product; P.A. 93-262 authorized substitution of commissioner and department of social services for commissioner and department of income maintenance, effective July 1, 1993; Sec. 17-134q transferred to Sec. 17b-274 in 1995; P.A. 95-264 made technical changes; P.A. 96-169 amended Subsec. (b) to require the Commissioner of Social Services to cooperate and provide information as requested by the Division of Criminal Justice; **June Sp. Sess. P.A. 00-2 amended Subsec. (c) to apply provisions to state-administered general assistance, general assistance and ConnPACE recipients, to require specification of the basis of medical necessity and to add provision re approval to dispense, added new Subsec. (d) requiring the Commissioner of Social Services to establish a procedure for approval of dispensing brand name drug products and added new Subsec. (e) re disclosure of the basis of medical necessity, effective July 1, 2000.**

Cited as "17b-260 et seq. (providing for supplemental medical assistance)". 233 C. 557, 565.

EXHIBIT B

**Addendum
State of Connecticut
MEMORANDUM OF UNDERSTANDING
DEPARTMENT OF CORRECTION/
UNIVERSITY OF CONNECTICUT HEALTH CENTER**

The Department of Correction (DOC) and the University of Connecticut Health Center (UCHC) constructed a partnership through a Memorandum of Understanding (MOU). The MOU formalized a plan to consolidate the inpatient hospitalization and the clinical professional specialty services needs of inmates. It is now agreed that UCHC will provide DOC with a comprehensive Correctional Managed Healthcare Program. While this program will be managed by UCHC, the Commissioner of Correction retains the authority for the care and custody of inmates and has responsibility for the supervision and direction of all institutions, facilities and activities of the Department. The purpose of this MOU is to enlist the services of UCHC to carry out the responsibility of the commissioner of DOC for the provision and management of comprehensive medical care. The DOC and the UCHC agree to amend their existing MOU as provided herein.

The MOU was executed on 9/19/95. Section I of the original Memorandum, the inpatient unit at John Dempsey Hospital, has been implemented to the satisfaction of both parties. Implementation of the terms of Section II is underway. In Section III it was contemplated that an analysis would be completed and recommendations made for a comprehensive system for delivery of health care services in a managed care model. In December of 1996, UCHC delivered to the DOC a proposal which called for the implementation by UCHC of a Correctional Managed Healthcare Program. UCHC proposed to assume full responsibility for operation of the correctional health care system and to manage the program on a fixed budget.

The parties understand and agree that the program will be implemented with as little disruption as possible to existing personnel, and without any interruption to the delivery of health care services to inmates.

In acknowledging the agreement made with the Town of Farmington to limit the number of DOC inpatients and outpatients treated at UCHC, both parties agree that the terms of this MOU will be executed in compliance with this agreement. (Attached; dated: November 8, 1966, actual: 11 /8/96).

Program Description

No provision of this agreement is intended nor shall it be construed as creating or enlarging the legal obligations of the State of Connecticut with regard to providing medical care.

UCHC will manage a comprehensive health care delivery system that includes medical, mental health, dental services, and ancillary services (e.g. pharmacy, laboratory, etc.). UCHC will insure the provision of, at minimum, the current scope of services in current DOC correctional facilities. UCHC will insure the provision of those services required to support the health care delivery system. It will provide and manage programs in compliance with consent decrees attached hereto: Valerie West, et al v. John Manson, et al (re: Niantic CI mental health services); Valerie West, et al v. John Manson, et al (re: Niantic CI conditions of confinement including medical care); David Doe, et al vs Larry Meachum, et al (re: AIDS education and Pre and Post HIV Test Counseling); David Doe, et al vs Larry Meachum, et al (re: Health Care for HIV-Infected Inmates and Confidentiality of HIV-Related Information); Edward Roe, et al vs Larry Meachum, et al (re: Bridgeport CC mental health services); Nevin Mawhinney, et al vs John R. Manson, et al (Civil No. B78-251); Jeremiah O'Sullivan, et al vs John Mason, et al (Civil No. B78-24); Gary Andrews, et al vs John Mason, et al (Civil No. 81-20); Donald Lareau vs John Manson (Civil No. 78-145); and Jesus Campos, et al vs John Manson, et al (Civil No.78-199).

UCHC will organize the program in such a way as to insure the provision of the maximum number of services on-site at DOC facilities in order to minimize transportation and other costs as well as security risks.

UCHC will provide, or contract with other health care entities to provide, routine primary health care services, specialty physician services and ancillary provider services, hospital inpatient and out-patient services, laboratory, pharmacy and radiology services. UCHC will control utilization of high intensity and off-site services through the implementation of a rigorous case management and utilization review program.

UCHC shall manage and oversee the system of providing primary response, triage, emergency care and other medically necessary services that may be delivered on-site or at hospitals and by other off-site providers other than UCHC and UCHC contractors. UCHC shall be responsible for payments to such providers in amounts not to exceed present reimbursement rates as specified in the Connecticut General Statutes involving compensation for services to inmate populations.

UCHC will implement quality and risk management programs, including infection control programs in accordance with standards in the health care industry.

UCHC will develop a comprehensive set of health care policies in accordance with DOC Administrative Direction 1.3, "Administrative Directives, Manuals, Forms Management and Post Orders". The policies and procedures will be reviewed and/or revised on an annual basis. UCHC will comply with all DOC policies that impact inmate health care.

UCHC will establish, in collaboration with DOC, a formal policy and procedure for the communication and resolution of inmate, staff, and outside complaints regarding any aspect of the health care services. All policies will comply with DOC Grievance Policy

and Procedure. UCHC will report the number of medically-oriented grievances filed each month.

UCHC will designate an Administrator and Medical Director for as liaisons with DOC officials and DOC institutional staff. The administrator will attend meetings, upon reasonable request of DOC, and will provide timely and informed responses to operational and administrative problems concerning delivery of the health care program. If the administrator is not available, an alternate will be designated. UCHC staff will cooperate with DOC in discussions with local civic groups or visiting officials as mutually agreed upon by both parties.

DOC shall be responsible for the transport of prisoners as may be necessary to provide medically necessary health care services. DOC will coordinate these activities with UCHC.

UCHC shall not be required to provide or arrange for any health care services for DOC employees except the provision of emergency treatment and medical stabilization services in the case of an on-site event requiring such emergency treatment or stabilization. UCHC will provide, under the terms of this agreement, OSHA required immunization services for DOC employees; DOC shall, however, be responsible for maintaining required records for compliance and monitoring.

UCHC shall provide or arrange for the provision of medically necessary services for inmates. Medically necessary means services that are necessary and appropriate for the treatment of an illness or injury or for preventive care, according to the prevailing and accepted standards of medical practice. Decisions and actions regarding the health care services provided to inmates are the responsibility of qualified health care personnel. Health care personnel are subject to the same security regulations as other correctional employees. It is understood that the delivery of health care is a joint effort of DOC and UCHC and can be achieved only through mutual cooperation.

Personnel

UCHC assumes full responsibility of correctional health care personnel. UCHC will respect the interests of DOC in minimizing disruptions for existing personnel. While UCHC and DOC anticipate achieving staffing level changes through attrition and reassignment within the correctional health care program, nothing in this agreement shall preclude UCHC from achieving personnel reductions through layoffs if such are determined to be necessary following the transfer of positions from DOC. UCHC shall not be required to fill vacancies where an alternative plan has been made for the delivery of services.

DOC will cooperate with UCHC in the orderly transfer of personnel to UCHC. positions as documented in Attachment A will be transferred to UCHC. The effective date of the transition will be completed not later than January 1, 1998.

UCHC will assume responsibility for recruitment, proper credentialing, orientation and training of new personnel related to health care and UCHC policies, procedures and programs, as well as implementation of professional development and retention programs.

UCHC understands and agrees that new employees shall undergo orientation and training with respect to the policies and procedures of DOC. UCHC agrees to cooperate with the requirement of DOC for staff to undergo such orientation and training. Time commitments to such activities shall not exceed 6 weeks for new employees, and 34 hours annually for existing personnel.

UCHC will provide an additional six hours of HIV training annually.

UCHC understands and agrees that prospective employees will be subject to a security background check and clearance conducted by DOC, as a requisite for initial and/or continued employment in accordance with Administrative Directive 2.3 "Employee Selection, Transfer and Promotion". When processing a background check for an applicant, a COLLECT check is required. It is understood that DOC reserves the right to question and/or reject candidates being considered for health care employment at a DOC correctional facility and reserves the right to require the immediate removal of anyone who has broken the rules and/or regulations of the correctional facility or who poses an unacceptable risk to the security of the institution. DOC may require the removal of an individual or firm employed or engaged by UCHC should DOC determine that there is a security risk posed by such individual or firm. Thus, initial and continual employment of staff will be subject to approval of DOC Administration.

UCHC may subcontract with other health care entities to provide services pursuant to this agreement. UCHC understands and agrees that expeditious prior approval of DOC, will be sought prior to the implementation of services at DOC correctional facilities under the terms of such contracts.

Equipment, Facilities, Records

DOC agrees to authorize the use of all space, facilities and equipment (described in Attachment B) currently used for/by health services without charge to UCHC. Facilities and equipment will remain the property of DOC. DOC will be responsible for maintenance and repair of facilities and equipment other than medical equipment. UCHC will be responsible for inventory, maintenance and repair of, medical equipment. UCHC shall not be responsible for the funding, under the terms of this agreement, the acquisition of any equipment. UCHC and DOC will cooperate in assessing needs and developing a long term plan for replacement and acquisition of medical and other equipment as well as space and facilities.

Maintenance of medical and other records related to the delivery of health care services will be the responsibility of UCHC. Such records will, however, be the property of DOC and will be made available to DOC or the Office of the Attorney General upon request.

DOC will provide and arrange for the proper storage of inactive records. DOC will also assume responsibility for record transfer between facilities along with inmate transfer for any reason.

DOC agrees to make available to UCHC computers, information systems, and voice systems now in use in the health care areas of correctional facilities as are necessary to locate inmates and receive other DOC facility/management information. UCHC will make available to DOC health care management information and systems as such systems are developed over time and as appropriate. DOC agrees to purchase and install equipment exclusively associated with the Correctional Managed Health Care Telemedicine program. UCHC will assume responsibility for operation and maintenance of the Telemedicine equipment after its installation.

Program Oversight and Monitoring

DOC shall appoint a liaison between DOC and UCHC for the operation of the correctional health care program. Further, the parties agree to cooperate in the monitoring of the Correctional Managed Health Care Program. There shall be a six member steering committee composed of not more than three members from DOC and UCHC appointed by the DOC Commissioner and the UCHC Chancellor or their designees.

DOC shall monitor provision of services under the terms of this agreement and inspect all records, charges, billings and supporting documentation as may be necessary. Such monitoring and inspection shall be conducted upon reasonable notice and may include, but not be limited to, on-site inspection, interviews with employees, patients and contracted providers and review of records.

Compensation

In compensation for health care and support services associated with the correctional health care program described in this Memorandum of Understanding DOC will transfer to UCHC \$48,475,000 in year one and \$47,500,000 in year two. Should the transfer of responsibility for all services not be completed on the effective date of this MOU, and upon the prior agreement of both parties, UCHC and DOC agree that DOC will deduct from payments to UCHC actual amounts incurred by DOC in providing health care or health care support services after the effective date of this agreement. Transfers will be made in quarterly amounts in advance of the start of each quarter.

The compensation is based on the assumption that the inmate count will be between 15,000 and 16,100. UCHC may charge DOC a per diem rate when the average daily inmate count for a calendar month exceeds a total of 16,100 inmates housed in facilities operated by DOC and served by the Correctional Health Care Program. The rate for the first year is established at \$5.72 per inmate per day for each inmate above the estimated total for the calendar month. The rate for the second year will be \$5.53. Rates for succeeding years shall be established by mutual agreement of the parties based upon the legislative appropriation for correctional health care services during those years. Should the average daily inmate count dip below 15,000, this will constitute

a material change; UCHC and DOC agree to renegotiate a potential reduction in the compensation.

Material Changes

If a statute, regulation, legislative action, court order, union contract, salary adjustment, or additional correctional facility(s) added, or there occurs a natural or manmade catastrophe after the effective date of this agreement that materially affects the Correctional Managed Healthcare Program, UCHC and DOC will determine the implementation process and the change in compensation required to cover the costs associated with such change. If additional funds are required, DOC will provide additional funds for the program change either through a reallocation of the existing DOC appropriation, a new DOC appropriation, or a deficiency appropriation. UCHC shall not be required to use its own budget appropriation or other resources to support costs of such changes.

A material change shall be established in the event that after the transfer of positions from DOC, UCHC has not been able to achieve the anticipated personal services cost reductions due to restrictions on lay-offs dictated by the new law embodying 1997 Early Retirement Incentive Program. To rectify this material change, DOC shall provide up to two million dollars (\$2,000,000) in additional funds in each of the first two (2) years of the agreement to reimburse UCHC for actual personal services costs incurred in the operation of the Correctional Managed Health Care Program.

Term and Termination

The initial term of this agreement shall commence on July 11, 1997 and continue through June 30, 1999. Thereafter it will be automatically renewed for successive two-year terms unless either party gives written notice of non-renewal to the other party at least one hundred and eighty (180) days prior to the end of the then current term.

The 180-day notice period presumes that the parties will reach agreement on all renewal terms, including compensation, prior to January 1st of the year of renewal. UCHC and DOC understand that, even with the agreement on compensation terms, the Governor's budget recommendation and/or legislative action may reduce the funds available to DOC to pay for Health Service subsequent to January 1st in the year of the renewal, or in the second year of the two-year contract term. In that event, UCHC and DOC will enter into negotiations to determine the potential for achieving cost reductions through changes in delivery of services and the structure of the program, or the potential for supplementing the funding through other DOC funds. If the parties can not reach agreement, UCHC and DOC may elect to terminate this agreement in less than 180 days. In such event UCHC and DOC will work together to affect an orderly transition of Health Services back to DOC or to another vendor selected by DOC. DOC will reimburse UCHC actual costs incurred during the transition period. UCHC shall not be required to use its own budget appropriation or other resources to support costs incurred by UCHC during any such transition period.

Upon material breach of this Agreement by either party hereto, the non-breaching party shall submit written notice to the breaching party specifying the facts and circumstances of the breach. Should the breaching party fail to cure the breach to the satisfaction of the non-breaching party within a 30 day period, the parties agree to cooperate in the resolution of disputes. Failure to resolve disputes may result in termination of this agreement by the non-breaching party not earlier than 180 days subsequent to the initial notice of breach.

Defense and Payment of Claims

DOC confirms that its Assistant Attorneys General will retain responsibility for the defense of all claims arising from or relative to the provision of health care services to its inmate population by UCHC in the same manner as existed prior to implementation of this agreement. Defense and payment of such claims shall be made in the same manner and fashion as in effect prior to the effective date of this agreement.

UCHC shall cooperate with the Office of the Attorney General in providing records, policies, briefings and testimony as may be reasonably required for the defense of claims.

Effective Date

The effective date of the foregoing clauses shall be July 11, 1997. Should personnel not be transferred on this date, DOC will make adequate provision to allow UCHC to direct the health care personnel and approve compensation of health care personnel. The compensation paid by DOC to health care personnel during any such period will be deducted from the amount owed by DOC to UCHC as provided under the terms of this agreement.

Transition

The parties recognize that prior to the effective date joint planning is required. The Steering Committee referenced in the foregoing sections will meet regularly through the period prior to the effective date for purposes of transition planning.

During the transition period prior to the effective date UCHC will recruit permanent staff for the administrative and medical management of the Managed Correctional Healthcare Program and will engage in intensive program planning activities including the preparation of RFPs for contracted services.

During the transition period DOC will:

- provide to UCHC all existing policies, procedures, administrative directives and such other documents that currently guide or direct health care services.
- cooperate with UCHC in planning and implementing joint communications to/with union officials and the workforce at large, public officials, and the general public. UCHC and DOC will cooperate in assuring that complete and timely information is provided to each individual employee prior to the transfer.
- cooperate with UCHC in the identification of existing personnel for positions in the UCHC Correctional Managed Healthcare Program, and reassign to other

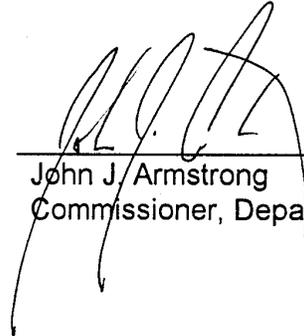
positions any personnel identified as holding positions not required based on the UCHC organizational plan, including but not limited to staff in central administration and pharmacy.

- provide and arrange for the orderly transfer of all personnel records intact including necessary documentation of credentials of personnel holding positions and performing duties that require licensure or certification.
- cooperate with UCHC by providing all information regarding personnel schedules, open grievances, and other personnel information as may be required by UCHC to administer the program and manage personnel.
- identify and clearly describe space, facilities, and equipment now used in the operation of the correctional health care program.



Leslie S. Cutler, D.D.S., Ph.D.
Chancellor and Provost of Health Affairs
and President, UConn Health System

8/11/97
Date



John J. Armstrong
Commissioner, Department of Correction

8/11/97
Date

EXHIBIT C



Excerpts To:

House Bill No. 7507

June Special Session, Public Act No. 01-9

AN ACT CONCERNING THE EXPENDITURES OF THE OFFICE OF POLICY AND MANAGEMENT.

Sec. 27. (NEW) (a) Each correctional institution shall return to the vendor pharmacy which shall accept, for repackaging and reimbursement to the Department of Correction, drug products that were dispensed to a patient and not used if such drug products are (1) prescription drug products that are not controlled substances, (2) sealed in individually packaged units, (3) returned to the vendor pharmacy within the recommended period of shelf life for the purpose of redispensing such drug products, (4) determined to be of acceptable integrity by a licensed pharmacist, and (5) oral and parenteral medication in single-dose sealed containers approved by the federal Food and Drug Administration, topical or inhalant drug products in units of use containers approved by the federal Food and Drug Administration or parenteral medications in multiple-dose sealed containers approved by the federal Food and Drug Administration from which no doses have been withdrawn.

(b) Notwithstanding the provisions of subsection (a) of this section:

(1) If such drug products are packaged in manufacturer's unit-dose packages, such drug products shall be returned to the vendor pharmacy for redispensing and reimbursement to the Department of Correction if such drugs may be redispensed for use before the expiration date, if any, indicated on the package.

(2) If such drug products are repackaged in manufacturer's unit-dose or multiple-dose blister packs, such drug products shall be returned to the vendor pharmacy for redispensing and reimbursement to the Department of Correction if (A) the date on which such drug product was repackaged, such drug product's lot number and expiration date are indicated clearly on the package of such repackaged drug; (B) ninety days or fewer have elapsed from the date of repackaging of such drug product; and (C) a repackaging log is maintained by the pharmacy in the case of drug products repackaged in advance of immediate needs.

(3) No drug products dispensed in a bulk dispensing container may be returned to the vendor pharmacy.

(c) The Department of Correction shall establish procedures for the return of unused drug products to the vendor pharmacy from which such drug products were purchased.

(d) The Department of Correction shall reimburse to the vendor pharmacy the reasonable cost of services incurred in the operation of this section, as determined by the Commissioner of Correction.

(e) The Department of Consumer Protection, in consultation with the Department of Correction, shall adopt regulations, in accordance with the provisions of chapter 54 of the general statutes, which shall govern the repackaging and labeling of drug products returned pursuant to subsections (a) and (b) of this section. The Department of Consumer Protection shall implement the policies and procedures necessary to carry out the provisions of this section until January 1, 2003, while in the process of adopting such policies and procedures in regulation form, provided notice of intent to adopt the regulations is published in the Connecticut Law Journal within twenty days after implementation.

Sec. 129. Section 69 of public act 01-2 of the June special session is repealed and the following is substituted in lieu thereof:

This act shall take effect from its passage, except that sections 3 to 6, inclusive, [13,] 20 to 22, inclusive, 24, [25,] 27 to 31, inclusive, 36 to 38, inclusive, 42 to [66] 58, inclusive, 61 to 66, inclusive, and 68 shall take effect July 1, 2001, sections 59 and 60 shall take effect August 1, 2001, and sections 1, 2, 12, 13, 14 to 16, inclusive, 23, 25, 32 to 35, inclusive, 39 and 40 shall take effect October 1, 2001.

Sec. 130. Sections 12-62j and 12-382 of the general statutes, section 84 of public act 01-6 of the June special session, sections 41 to 47, inclusive, and 50 of special act 01-2 of the June special session and section 67 of public act 01-2 of the June special session are repealed.

Sec. 131. This act shall take effect July 1, 2001.

Approved July 2, 2001

EXHIBIT D

Analysis of Operating Costs and Pharmaceutical Purchases

Pharmacy					Expenses
Personal Services	Fringe Benefits	Other Expenses	Total Expenses	Pharmaceuticals	as a Percentage
University of Connecticut Health Center					
\$ 2,504,685	\$ 822,680	\$ 327,463	\$ 3,654,828	\$ 21,984,865	16.6
Connecticut Valley Hospital					
\$ 752,414	\$ 295,398	\$ 86,354	\$ 1,134,166	\$ 3,037,737	37.3
Greater Bridgeport Community Mental Health Center					
\$ 171,872	\$ 67,477	\$ 74,930	\$ 314,279	\$ 1,079,489	29.1
Connecticut Mental Health Center					
<i>See Note</i>		\$ 452,039	\$ 452,039	1,182,550	38.2
Cedarcrest Hospital					
\$ 261,186	\$ 102,542	\$ 67,599	\$ 431,327	\$ 963,518	44.8
Capitol Region Mental Health Center					
\$ 69,701	\$ 27,365	\$ 6,621	\$ 103,687	\$ 54,912	188.8
Department of Veterans' Affairs					
\$ 246,458	\$ 104,227	\$ 30	\$ 350,715	\$ 1,118,148	31.4
University of Connecticut Student Infirmary					
\$ 91,533	\$ 36,539	\$ 3,500	\$ 131,572	\$ 593,015	22.2

Note - the Connecticut Mental Health Center is under contract with Yale New Haven Hospital for personnel and other costs associated with the pharmacy.

EXHIBIT E

State of Connecticut



Excerpts - Property Control Manual

Nancy Wyman
State Comptroller

September 2001

CHAPTER 3 - Fixed Assets/Property Inventory Report, The GAAP Inventory Reporting Form – (Emphasis Added)

N. **Stores & Supplies** - Summary total from the agency's stores and supplies (perpetual) inventory.

Stock items and supplies, used and consumed in the daily operations of an agency, such as food, office supplies, perishables, table or bed linens, dishes, small tools, appliances, and articles of a similar nature should be recorded on a separate register page, in total, for each building.

A separate perpetual (continuous) inventory should be maintained of all stores and supplies (including repair parts for machinery, plumbing, general housekeeping, etc.) if the estimated value of the entire inventory is over \$1,000. Perpetual inventories valued at less than \$1,000 would not need to be maintained. Due to the rapid rate of turnover, strong internal control is especially important. A perpetual inventory system can provide the strongest possible internal control over the inventory of merchandise. The information required for a perpetual inventory system can be processed electronically or manually.

In a manual system a subsidiary record card is used for each type of merchandise on hand. If the agency has in stock 100 different kinds of products then 100 inventory record cards will make up the subsidiary inventory record. It should be reconciled annually for verification of amounts.

The record card or system should contain the following data:

1. **Item Type**
2. **Location**
3. **Maximum Number** - that should be on-hand
4. **Minimum Number** - that should be on-hand before reordering
5. **Date Column**

6. **Purchased Column**
 - a. Quantity received
 - b. Unit Cost
 - c. Total Dollar Value
7. **Distributed Column**
 - a. Units Distributed
 - b. Unit Cost
 - c. Total Dollar Value
8. **Balance Column**
 - a. Units available
 - b. Unit Cost
 - c. Total Dollar Value

The perpetual inventory system should be maintained on a first-in, first-out (FIFO) basis. However, it may be maintained on an average-cost basis.

Listing on each inventory card the maximum and minimum quantities that should be kept in stock can strengthen additional control over the amount invested in the inventory. By maintaining quantities within these limits, overstocking and out-of-stock situations can be avoided.

An adjusting entry can be made to reflect shortages, overages, or out-of-condition stock as disclosed by an annual or periodic physical inventory.

CHAPTER 6 – Maintaining the Property Control System– (Emphasis Added)

Taking the Physical Inventory - A complete physical inventory of all property must be taken at the end of the fiscal year (June) to insure that property control records accurately reflect the actual inventory on hand within the current fiscal year. The key to ensuring an accurate physical inventory is the quality of the planning effort prior to conducting the physical counts. It is permissible to perform physical inventories prior to the end of the fiscal year to redistribute the major time commitment involved. However, an adequate control system must exist for updating the inventory balance from the interim inventory date to year-end. The accuracy of the interim transactions may be tested during an audit.

In addition to the verification of the property control records, a physical inventory will identify if unrecorded or improperly recorded transactions have occurred, identify any excess, defective or obsolete assets on hand and identify losses not previously revealed. Conducting a physical inventory will enable you to inspect the physical condition of each item with respect to the need for repairs, maintenance, or replacement.