

July 2002

Honorable John L. Burton
President pro Tempore
California State Senate
State Capitol, Room 205
Sacramento, CA 95814

Dear Senator Burton:

I am pleased to submit the Commission's report and recommendations on *Controlling the Costs of California's Prison Pharmacy Operations*. This report is being released in conjunction with our companion report that focuses on the overall technology problems within the Department of Corrections.

The costs of pharmaceutical drugs have been skyrocketing in California's prison pharmacies. Pharmaceutical drugs in the Department of Corrections' health care budget, increasing from \$26.6 million in 1995-96 to an estimated \$125 million in 2001-02. Costs have increased from \$197 per inmate to a projected \$768 per inmate in the same time period.

But there is much more to these figures than merely the cost of a particular drug. The department is in critical need of a strategic integrated plan to upgrade its overall prison pharmacy operations, to create an operational monitoring and oversight committee, and to modernize its 20-year-old outmoded technology system. Without these key reforms in place, the department will be incapable of reining in its pharmaceutical costs and providing cost-efficient health care delivery.

While the Commissioners are aware of California's current fiscal crisis, we recommend that this year's budget writers earmark funding for the purchase of commercially available pharmacy drug management software that can be interfaced with Corrections' existing technology system. This software is crucial to implementing other significant drug benefit management reforms to improve the overall prison pharmacy operations. Tremendous cost-savings opportunities are lost each year by the department's inability to electronically track inmates and their medical history, to track drug use, and to gather and analyze key data.

The Commission extends its appreciation to the Administration and Legislature staff for their assistance in our study. We are also grateful to the private sector officials who shared their time and expertise with us. I would like to give my special thanks to the Commission members who served on the task force that studied the prison pharmacy operations: Chair, Jacki Bacharach, and members, Werner Austel, Judith D'Amico, Jerrold Fine, David Lopez-Lee, Ph.D., and Olivia K. Singh. Their commitment and contributions to this report have been invaluable. The Commission also wishes to thank the former Executive Director, Norma J. Dillon, for her contribution in the research of this report.

Sincerely,

MILTON G. GORDON

Chair

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Controlling the Costs of California's Prison Pharmacy Operations



SENATE ADVISORY COMMISSION ON COST CONTROL IN STATE GOVERNMENT
JULY 2002

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IN STATE GOVERNMENT



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Executive Summary

The California Department of Corrections (CDC) must begin to take control of its skyrocketing pharmaceutical spending and make every effort to implement programs and policies to rein in these unmonitored costs. CDC should acquire the leadership and expertise capabilities needed to make the important decisions that will move the department into the modern technological and pharmaceutical management era.

It has been 20 years since the technological infrastructure has been upgraded. Yet technology continues to change at lightning speed, leaving CDC further and further behind than the 20 years might even suggest. The department's continual lack of commitment to technological modernization and health care cost-containment principles is costing the state millions of dollars.

California has an archaic prison pharmacy system and an unmonitored, yet soaring, pharmaceutical drug budget. But the department does not seem to have the know-how or capability to do what is necessary to make the required changes to turn this around.

The Commission recognizes the challenges faced by the physicians, pharmacists, and other health care delivery professionals within the corrections system. But the lack of decisive, knowledgeable leadership at its administrative level continues to paralyze reform and cost-containment efforts. The lack of personnel with expertise in the critical areas of managed care principles¹, pharmacy management, and available technology is alarming.

The department points to its efforts to gain funding for technology upgrades through the Governor's annual budget; yet, there is no proof that this is its top priority. Another

¹Managed care principles are cost containment strategies that are utilized by managed health care organizations, including mandatory generic programs, quantity level limits, disease management programs, and step therapy programs (using less expensive medications before the new blockbuster drugs).

budget cycle will close and CDC has not moved forward to correct these costly problems. Instead, CDC administrators have appointed another task force to tackle the issues. Staff members from various divisions have been pulled in to “brainstorm”; however, the *new vision* for reform is not based on the big picture filtering down, but rather merely on fixing the small things and working up. The new health systems task force members are disadvantaged from the start – they are not experts in managed care practices and do not have expert knowledge in managing a \$125 million drug benefit.

The department desperately needs a strategic overall plan – a total vision for the future. Will it take another 10 to 20 years before something is done; before the department starts adopting managed care practices, as do other private and public medical programs, and starts making cost containment a top priority?

Major Problems Remain

Pharmaceutical drugs are one of the fastest growing expenditures in Corrections’ health care budget, increasing from \$26.6 million in 1995-96 to a projected expenditure of \$125 million in 2001-02. Costs have increased from \$197 per inmate in 1995-96 to a projected \$768 per inmate in that same time period. While part of the cost can be attributed to the higher price of newer drugs, especially those prescribed for mental health, CDC continues to operate under a system that cannot account for the escalating drug budget, and it has not implemented measures to slow the climb.

CDC must develop an overall strategic plan for its prison pharmacies – one that would establish medical and drug protocols and guidelines that physicians and pharmacists could follow. To improve service delivery and reduce costs associated with pharmacy services, this plan should be integrated uniformly throughout the system.

CDC currently is operating with an outdated drug *formulary* that does not reflect its growing use of mental health drugs in the past five years. A well-developed closed formulary (a list of prescription drugs by therapeutic class that a health plan has approved for use by doctors) is one of the most

important tools the state has for negotiating drug contracts, pursuing manufacturers' rebates, monitoring drug-prescribing practices, and capturing drug utilization data.

The Department of General Services (DGS) is currently responsible for negotiating drug prices for CDC and four other state agencies. California is a major purchaser of pharmaceutical drugs and could better flex its buying power by consolidating all state agencies that purchase drugs into a mega-purchasing pool under a new central purchasing agency. Armed with up-to-date closed formularies and increased purchasing volume, the agency could skillfully negotiate the deepest discount contracts and better manufacturers' rebates.

Neither DGS nor CDC currently have an effective team of health care professionals responsible for monitoring and enforcing compliance to the closed formulary and best-practice treatment models, as is done in managed care organizations and public and private health care systems. The relationship between pharmacists, physicians, and the budget is a critical element to controlling costs. Physicians must prescribe the medications on the adopted formulary. This allows the state to negotiate a contract for a medication with favorable pricing through volume purchasing and to keep costs lower. A new Pharmacy & Therapeutics Committee should be established within a new central drug-purchasing agency. The committee would be held responsible for tracking drug use patterns and prescribing trends in order to monitor appropriate use and effectively manage the drug benefit. Such oversight would lead to tremendous cost savings without compromising patient health care.

Furthermore, the technology information system throughout CDC must be modernized. The critical need for an updated, integrated technology information system is well documented. Yet, CDC continues to operate with a 20-year-old system that is not scheduled for replacement until November 2006. The lack of an automated data management system cripples the health care system staff, making it impossible to track inmates' location and health history, to track physicians' drug prescribing patterns, and to monitor a closed formulary.

In order to maximize cost-savings potential within the department's health care system, the Administration and the Legislature must take necessary budgetary steps to replace this outmoded technology system. This single investment in the future should be a top budgetary priority for the department's advocacy efforts.

Given the serious nature of today's economic climate and the difficult task facing the Legislature and the Administration in producing a balanced budget, the Commission respectfully offers its findings and recommendations as a way to reduce costs, increase efficiency, enhance accountability and control, and apply modern improved programs and systems to the Department of Corrections' prison pharmacy operations.

GENERAL RECOMMENDATIONS

The CDC overall pharmacy delivery system must be significantly improved in order to control escalating costs by implementing the following general reforms that are elaborated on as specific recommendations in the following chapters:

Chapter 1: Overall Strategic Plan

- **Make cost efficiency in pharmaceutical purchasing a priority.**
- **Develop an overall plan for CDC pharmacy operations, develop key strategies for implementing the plan, and aggressively seek the necessary funding to reach these goals.**

Chapter 2: Information Technology

- **Implement an integrated technology information system in all 33 institutions that is capable of tracking each inmate's medical and drug history regardless of location, and one that instructs physicians in diagnosis and drug therapy guidelines established by the department.**

- **Push pharmacy technology modernization as the *top* budget priority for the department and aggressively pursue funding through the budget process for its purchase and implementation.**

Chapter 3: Drug Contracts

- **Establish a central drug-purchasing agency within the Administration responsible for negotiating the deepest discounts and rebate contracts with drug manufacturers on pharmaceuticals purchased for all state agencies.**

Chapter 4: Closed Formulary

- **Produce an up-to-date closed formulary that demonstrates effective treatment of illness for each therapeutic class at the most affordable price.**

Chapter 5: Managing the Drug Benefit

- **Establish a centralized authority within a new drug purchasing agency (a new Pharmacy & Therapeutics Committee) responsible for managing the overall drug benefit for the 33 prisons, including extensive monitoring of medication usage and formulary adherence.**

Chapter 6: Pharmacy Staff Shortages

- **Work with the state's Department of Personnel Administration to upgrade state pharmacist salaries to make CDC more competitive with the private sector in recruiting and retaining prison pharmacists.**

Introduction

The national crisis in health care spending is mirrored within the Department of Corrections. Overall spending on health care in the United States increased to more than \$1.3 trillion in 2000, according to the Federal Health and Human Services Department. The biggest increase came from prescription drugs. Spending on these drugs shot up 18.8 percent last year, reaching \$131.9 billion – a trend that is also seen in California’s prison system. CDC’s budget for prescription drugs has skyrocketed during the past five years, and there is no end in sight. But higher drug costs is just one source of the escalating expense of the health care delivery system in California’s prisons.

Background

California’s prison system is the largest in the nation. CDC is responsible for housing, rehabilitating, educating, and caring for 161,500 inmates in its 33 institutions. It also operates four acute care hospitals, one skilled nursing facility, one hospice, and 16 community correctional facilities. There are 12 reception centers and a number of camp facilities. Its management and health care delivery responsibilities are among the most far-ranging and difficult in state government.

As a result of several successful lawsuits filed by inmates, CDC is under court mandate to provide adequate medical care to all inmates that is equivalent to those services provided to the *community at large*. However, because of the cost of implementing these reforms, the department has generally only done so in the prison from which the lawsuit emanated. The mental health program is the only mandated treatment that the department has implemented systemwide.

Of CDC’s total \$4.6 billion budget for 2001-02, \$735 million was appropriated for inmate health care – of that, a projected expenditure of \$125 million would be spent on pharmaceutical drugs. Corrections noted in December 2000 that its drug expenditure was one of the fastest

growing components of its health care costs and could be attributed, in part, to the:

- Aging inmate population.
- Specific disease brought in by inmates.
- Rising drug costs.
- Use of new drugs.
- Increase in prescriptions.
- Litigation, which, among other reforms, has led to a comprehensive mental health treatment throughout the system.

Prison pharmacy operations are further complicated by numerous factors: inmates are transported between facilities at a rate of 10,000 a week, health care staff is unable to track inmates or their health history electronically, and inmates are generally less healthy than the general public and often refuse medications. Moreover, many of the facilities are in rural, geographically isolated locations, which, in addition to low pharmacist and pharmacist technician salaries in the prison pharmacies, contribute to staffing deficiencies.

Other dynamics, such as increased inmate population, aging, increased prevalence of HIV, AIDS, Hepatitis C and mental health problems, result in additional expensive drug therapies that have contributed to the increased pharmacy budget over the last five years. It is a further challenge to manage these mounting disease trends with an outmoded technology system and significant staff shortages.

The Legislative Analyst's Office (LAO) withheld its recommendation on CDC's request for a budget augmentation for pharmaceuticals and medical contracting in 2001-02 until it produced a plan on how it intended to reduce costs associated with pharmacy services. The Legislature agreed with the LAO. It augmented the budget by \$56.9 million to cover the full estimated expenditures of \$125 million, but it tied the funding to provisional language that would only allow the department to expend these funds when it produced a plan for delivering pharmaceutical services based upon the recommendations set forth in an independent pharmacy services assessment report.

Additionally, the California State Auditor has issued two reports within the last two years with recommendations for containing prison pharmaceutical costs and improving pharmacy operations.

Current Purchase of CDC Drugs

Under current state law the Department of General Services is the state's purchaser for drugs for agencies that primarily serve institutionalized populations (Departments of Mental Health, Developmental Services, Youth Authority, Corrections) and the California State Universities. The department negotiates contracts with drug manufacturers so these five state agencies can purchase drugs at less than Wholesale Acquisition Cost. These contract drugs become part of an agreement that DGS enters into with a wholesaler (prime vendor) to distribute the drugs. The prime vendor provides warehouse and distribution services and maintains a computer network that contains the contract drug prices, allowing state agencies to purchase these drugs electronically.

State agencies must purchase contract drugs in accordance with this *master agreement* unless they receive an exemption from DGS. CDC participates in this agreement, which is designed to achieve competitive prices for the drugs that the five state agencies may purchase through it.

The prime contractor distributes the pharmaceuticals to CDC and other participating state agencies. It distributes some drugs that are purchased at lower than wholesale costs through contracts DGS has negotiated with various drug manufacturers. Currently, about 850 drug products fit into this category. They are known as "on-contract" drugs. Any drug products not secured through this process are generally purchased at the Wholesale Acquisition Cost and are referred to as "non-contract" drugs. During a six-month period from April 1999 through September 1999, costs for on-contract drugs were \$12.6 million, and non-contract drug costs were \$18 million. These figures show that CDC purchased 60 percent of its drugs without contracts. However, since January 1, 2002, the drugs that have been purchased through a recently joined group purchasing organization have increased the number of medications now available to the state on-contract by approximately

25 percent – bringing the total of on-contract drugs to about 65 percent.

No Overall Operating Plan and Obsolete Technology

CDC is currently operating without a system-wide strategic health care delivery system plan. Additionally, the department continues to work with an obsolete, 20-year-old information technology structure throughout the prison system with no plans to replace it, or implement interim measures to upgrade the system, until November 2006.

METHODOLOGY

The Commission's task force members interviewed dozens of health delivery professionals, including numerous CDC pharmacists and pharmacy staff, key health care division personnel in Sacramento, legislative policy-makers, and Governor's staff. The members met with pharmaceutical experts in the private and public sector. They also examined current software systems that could be appropriately used in a prison setting.

The members reviewed studies, analytical reports and budget proposals, researched other states' prison pharmacy systems, and examined the Federal Bureau of Prisons organization.

The task force also inspected the automated dispensing machine pilot project conducted in the prison pharmacy at California State Prison, Sacramento, and made an on-site visit to the North Kern State Prison pharmacy.

Chapter 1: Overall Strategic Plan

Finding: Strategic Planning

CDC does not have a targeted plan in place for running its pharmacy operations, nor does it have key strategies for oversight and operational monitoring of its drug benefit to ensure cost savings without compromising patient health care.

CDC does not have the technological capabilities of tracking its inmate population and their health care histories, nor the technological capabilities to gather the drug utilization data that is so crucial and integral to any type of fiscal health care management.

The Department of Corrections continues to operate its prison pharmacy system without benefit of an overall plan for improving the management and effectiveness of its operation. Considering the continually escalating costs of its operations, especially its pharmaceutical costs, CDC should make this strategic plan for controlling costs a top priority. Additionally, CDC must employ those with an expertise in managed care principles and who have the management and fiscal skills needed to develop a comprehensive strategy for the future.

The Commission studied several successful HMO models that have excellent health care delivery systems to determine the necessary steps CDC must take to rein in its unmanaged pharmaceutical budget – while making certain that inmates receive the quality of care found in the *community-at-large*.

Sutter Health has an annual budget of almost \$3 billion and operates 28 medical facilities – their pharmacy costs are about \$80 million. CDC's budget this year is about \$735 million – its pharmacy costs? – \$125 million. While other variables are included, such as inpatient/outpatient services, the differing numbers of patients, and predominant utilization of expensive mental health drugs within these five state agencies, this vast difference in drug spending

based on total budget is largely a result of a chaotic pharmaceutical system within CDC. It is a system that is “broken and needs to be fixed.”

As part of developing an overall strategic plan, it is essential that CDC review major health care providers to compare and contrast correctional pharmacy with what is being done by private managed health care organizations – using the successful models of Sutter Health, Kaiser and UC Davis Medical Center as possible examples.

The study should focus on how each system sets up its formulary, decides what drugs to use, and the process each uses to modify and change formulary decisions. It should also include the process by which each of these health care organizations implements pharmaceutical cost savings – zeroing in on several high-volume classes of drugs, such as mental health drugs, drugs for high blood pressure, ulcers, asthma, and for skin allergies, just to choose some examples. CDC should determine how each of the systems monitors these drugs and tries to implement cost savings. Furthermore, the department should make a determined effort to study the technology required to make each system effective.

The information gathered in the completed study should be contrasted with CDC’s current lack of basic managed care principles and fiscal accountability – then used to chart the dramatic course CDC must take to overhaul its pharmaceutical operations.

Below is a brief overview of the drug management systems utilized at Sutter Health, Kaiser, and the UC Davis Medical Center and submitted to the Commission.

Sutter Health (Sacramento)

The Commission found the following key processes occurring at Sutter Health:

Pharmacy & Therapeutics Committee (P&T Committee) – Sutter Health’s P&T Committee consists of 27 clinicians (physicians and pharmacists) from both inpatient and outpatient settings. The committee reviews clinical monographs, product utilization, formulary status, and cost

analyses. From the written recommendations and committee discussions, a formulary decision is made. The benefits of this P&T Committee are that the clinical attributes of pharmaceuticals are reviewed, key decision-makers and implementers are included in the committee, and a decision process is followed.

Data Warehouse and Analysis – Sutter Health has a data warehouse for both inpatient and outpatient pharmaceutical utilization. From this data, inpatient trend reports, medical group utilization reports, and physician report cards can be produced. The benefits of a data warehouse are that cost analyses can be performed for specific drugs, categories of drugs, and overall drug costs; and reports that monitor product trends and utilization can be used to influence physician prescribing.

Pharmacy Education Programs – The key purpose of these programs is to provide educational information for physicians and patients. Packets including recommended therapeutic guidelines, formulary information, cost information, product recommendations, utilization reports, patient information materials, and clinical literature are sent to physicians. The benefits of the programs are physicians receive updated clinical information and report cards comparing their prescribing to their peers, as well as having access to patient educational material and pocket formulary guides.

Pharmacy System Standardization – Almost every Sutter Health acute care facility has an inpatient pharmacy system, and Sutter Health is completing an evaluation process which will result in a pharmacy system standard which will be used throughout all its hospitals. The evaluation criteria included clinical functionality, ease of use, cost of the system, and implementation support. The benefits of system standardization are central to information technology support of the system, beneficial pricing for Sutter Health, and maximization of clinical capabilities.

Kaiser Permanente Medical Group

Drug management and oversight procedures at Kaiser:

The Kaiser P&T Committee has a relationship with the pharmacists who work for Kaiser and the physicians who work for the Permanente Medical Group. The Committee ultimately makes decisions based on safety, efficacy, and cost. Physicians, who receive input from the Division of Pharmacy, make all the pharmacy and therapeutic decisions. Pharmacists research various medications, studies that look at the above factors, and other pertinent information, and then make recommendations to the Committee.

Monitoring and Adhering to a Formulary. At Kaiser, the physicians respect the decision process, and for the most part, when a decision is made, they will usually use the formulary medications (except for situations of allergy, treatment failure, medication intolerance, etc.). This allows Kaiser to negotiate a contract for a medication with a favorable pricing. The P&T Committee has the ability to track patient use, individual physician's pattern of use, as well as guidelines which are developed by specialists in the relevant area. Therefore, it is able to get a handle on appropriate use, as well as ensure that appropriate and best medications are being prescribed.

Managing the Drug Benefit. The P&T Committee is very dependent on working with the pharmacists to be able to manage the drug benefit. There are extensive informational technology systems to track a patient's use of medications. The purchasing of medications can be done in large quantities and be warehoused and distributed centrally, reducing the need to buy medications at less than favorable costs or using medications not on the formulary. Medication use is fairly predictable; for example, the Committee has an idea of how much allergy medication they anticipate using, and it is ordered when it will be needed.

Physician Education, Updates, and Input. Finally, the Committee has buy-in from their physicians as far as following formulary medications, since their peers make the decisions, with input from its own experts. Physicians get regular feedback and education and are used to receiving it.

Physicians all have input. They can request that formulary decisions be reviewed and have medications which are not on the formulary be brought up for consideration. Additionally, the Committee gets information to the physicians to aid them in making medication decisions.

UC Davis Medical Center

UCD Med also emphasizes the importance of a strong Pharmacy and Therapeutics Committee:

Pharmacy & Therapeutics Committee. UC Davis Medical Center is able to control medication use, and thereby costs, because it has the support of the medical staff. UCD Med has a strong P&T Committee and determined pharmacists who help enforce the decisions of that Committee. The P&T Committee chair is very pro pharmacy and actively seeks pharmacists' input. The Committee also has Hematology/Oncology, Medication Safety, and Infectious Diseases subcommittees, and they are planning on developing a cardiovascular subcommittee. These subcommittees report to the P&T Committee. The full P&T Committee is composed of 20 physicians, three pharmacists, one administrative nurse, and one hospital senior administrator (who is also a pharmacist). UCD Med also has about ten pharmacists who act as clinical resources to the P&T Committee; however, they do not vote.

Pharmaceutical Review. The P&T Committee reviews all medications before they are added to the UCDHS Inpatient Pharmaceutical Formulary. A pharmacist composes a monograph on the new medication and presents it to the Committee. The medical staff then discusses the medication and makes a decision to add it or not. If the medication is added, restrictions and guidelines may be developed in order to optimize utilization and keep costs in balance. The Committee also develops guidelines for medication use and conducts medication use evaluations.

Medication Use Evaluations. UCD Med conducts medication use evaluations with the P&T Committee. The medical staff and P&T Committee develop criteria for appropriate medication use. Pharmacists then collect, analyze, and present it to the P&T Committee. This useful

process helps assure medications are used appropriately in the UC setting.

Data Monitoring. UCD Med has two managed care pharmacists who receive prescribing data from the HMOs. These pharmacists review this data and provide ongoing physician-specific prescribing trends to the medical staff. Using these physician-specific “report cards,” guidelines, and medical literature, UCD Med has been able to help its physicians prescribe medications in a cost-effective manner. The managed care pharmacists provide these reports for the Hospital Based Clinics and 11 offsite clinics. They present the data to the physicians at the offsite clinics at least every other month. One of the keys for successful medication use evaluations is the ability to readily retrieve prescription data.

Need for a Strong P&T Committee

All three systems point to the need for a strong P&T Committee with an effective chairperson – someone who believes that therapy should be evidence-based. Drug therapy selection and the development of criteria for appropriate medication use should, to the fullest extent, be based on scientific literature. These decisions should be made in the absence of pharmaceutical industry marketing influence. The chairperson must be willing to make unpopular decisions to change prescribing behavior in the face of physicians who could have alliances with the pharmaceutical industry.

Proposed Pilot Project at CDC

To provide CDC with the benefit of existing drug management expertise, guidelines, and protocols, the Legislature should establish a pilot project in one or more prison pharmacies. A team of pharmacists from a successful outside system, such as the UC Davis Medical Center, would come in, analyze existing procedures, and help CDC assess and implement cost-savings potentials. The goal of this team would be to accomplish the following:

- Review the existing CDC drug formulary.
- Detail evaluation and analysis of a few, selected institutions to assess patterns of prescribing high-cost, high-volume mental health medications.
- Study a representative sampling of patients receiving mental health medications to evaluate therapeutic indications for these drugs and to compare such practices with “standards in the community.”
- Measure CDC’s “physicians’ attitudes” and prescribing patterns.
- Inspect CDC’s pharmaceutical system and practices.
- Assess potential for possible reallocation of CDC resources and changes in practices to achieve cost containment.
- Explore influence of pharmaceutical industry in usage of medications.

Specifically, and pending the availability of resources, a pilot study team would assist CDC in developing a productive P&T Committee and conduct medication use evaluations. The first evaluation should focus on the heavily prescribed atypical antipsychotics. The pilot study should be conducted in at least two prisons (e.g. Folsom and Vacaville) with an appropriate number of mental health patients at each site. The pilot team could answer critical questions about the appropriate use of CDC’s most expensive and most purchased class of drugs – atypical antipsychotics – and shed some light on how to effectively control this type of medication usage. These identified processes would be used in effectively addressing the challenges that California’s correctional facilities are facing.

The pilot project findings and recommendations would be reported to the Administration and the Legislature for review and consideration. The results of the study would also provide valuable cost-benefit analysis information to CDC as they move to adopt an overall plan to implement

future cost-savings guidelines and protocols throughout its system.

RECOMMENDATIONS

In an effort to develop an overall strategic plan for its prison pharmacies – one that would establish medical and drug protocols and guidelines that physicians and pharmacists could follow – CDC must:

- **Evaluate methods by which the state could update and improve the quality of pharmacy health care and delivery in its prison system.**
- **Obtain help from knowledgeable business and health care leaders with expertise in the critical areas of managed care principles, pharmacoeconomics, pharmacy management, and current business practices to help create an overall plan.**
- **Develop a strong Pharmacy & Therapeutics Committee within a new drug-purchasing agency to develop a creditable process for clinical and financial evaluation of pharmaceuticals and to review all new medications before they are used in the system.**
- **Conduct medication use evaluations to determine if the current high-cost, high-use medications are being prescribed appropriately.**
- **Invest in a pharmacy informational technology system to process all pharmacy dispensing at all sites – this will become a data warehouse – generating reports of drug utilization and trends.**
- **Implement a standard pharmacy dispensing system, including a centralized pharmacy information technology system, which would allow clinicians to monitor patients' drug histories, prevent drug-drug interactions, and support preferred product recommendations.**
- **Support a pilot project that sends a team of pharmacists from a successful outside system into**

one or more prison pharmacies to assess cost-savings potentials and make recommendations for new procedures and guidelines.

Chapter 2: Information Technology

Finding: Up-to-Date Information Technology

An up-to-date information technology system linking prison pharmacies is the most important component needed to overhaul CDC's archaic pharmacy system. The department should make every effort to replace its 20-year-old system well before its current targeted date of November 2006.

Tremendous potential cost-savings opportunities are lost each year by the department's inability to electronically track inmates and their medical history, monitor drug utilization, and to gather and analyze key data.

The Department of Corrections has grown dramatically in the past two decades when the Legislature, responding to the public outcry over the escalating rate of violent crime, passed a flurry of new laws to put more offenders behind bars for longer periods of time.

CDC's inmate population increased from 23,511 in 1980 to over 160,000 in 2001. This growth was accommodated by building 21 new prisons and by adding beds to some of the 12 existing prisons.

While this rapid growth took place, technological information capabilities remained stagnant – leaving today's vastly different department to struggle with an outmoded 1980s computer network system. The same unprecedented commitment to build new prisons in record time should now be turned towards modernizing CDC's outmoded technology system. The public safety and taxpayer dollar depend on it.

Background

According to CDC, its operational needs are currently supported by three major systems that are not well integrated. Critical computer hardware for two of the systems is no longer manufactured, and maintenance and

technical support for all three systems is increasingly costly and difficult to obtain. Additionally, CDC lacks the basic networking infrastructure required to implement department-wide strategic information systems. Most institutions were designed and constructed prior to the widespread use of modern computer networks and do not meet minimum power and environmental standards for required computer and networking equipment. Yet, the serious need for a modern system is well documented – this basic groundwork must be laid before further significant cost-savings potentials can be realized. Information technology is the one investment in the future that California cannot continue to ignore.

Attempts to Upgrade

The Department of Corrections still has not achieved the Local Area Networks/Wide Area Network (LAN/WAN) connectivity that would support modernization to the fullest extent. A completed LAN/WAN system would allow communication within a single prison complex and between prisons. A contract with TRW, Inc. to develop LANs and WANs for the prison system fell apart five years ago. Frustratingly, fiber optic cable worth \$26 million has been installed in every prison so they could not only have LANs inside each prison, but a WAN hooking everybody up to a central database. But, for at least two years, the \$8 million appropriation needed to buy the final equipment required to link up everything has not been forthcoming.

In the meantime, CDC is stuck with the outmoded Distributing Data Processing System (DDPS) that is currently in each prison – one that is capable of generating no more than flat data such as how many prisoners are there, who came, and who went where.

As a result, CDC also continues to operate with its very limited Prison Pharmacy Tracking System (PPTS) . . . software that was developed in the early 1980s. This program provides the limited information for the delivery of prescription labels and some minimal reporting functions, but it is incapable of meeting growing prison pharmacy demands. Unfortunately, it is not capable of monitoring key cost-controlling elements of basic pharmacy management – managing care, formulary, drug utilization, and data.

Moreover, PPTS has not been updated to include current drug-drug interaction and other drug information guidelines, especially for the newer drugs that could provide the best medical benefit for the patients. Yet, CDC is required to provide medical care for its inmates equal to the care in the private sector. This system leaves the department vulnerable to more legal troubles.

Strategic Offender Management System

In 2001, CDC examined the feasibility of purchasing modern, already-developed prison management software from other states. It would be used to build a new information technology system known as the Strategic Offender Management System (SOMS). It would replace the three existing information systems and provide automated support for prisons, parolees, inmate health care, and administration. SOMS would be a less expensive solution that would use software systems now up and running in other states. Still, the health component of SOMS, the crucial pharmaceutical management part, is not scheduled for implementation until 2006, and preliminary word from the department indicates that the proposal is already behind schedule.

Commercially Available Pharmacy Management Software

The Commission found a number of pharmacy management systems currently available that can be interfaced with the existing PPTS that can act as a much needed short-term solution. Pharmacy management programs now on the market would provide the department with essential cost-effective management tools while promoting quality health care:

- Tracking inmate movement and health history information that is accessible in every institution, saving physician and pharmacist time and controlling drug waste.
- Alerting physicians when a prescribed medication is not on the formulary and authorization or an alternative drug choice is required.

- Identifying physicians who provide expensive health care treatments by monitoring prescription-writing practices and profiling patients that receive expensive drugs.
- Gathering drug utilization and inventory databases for drug management purposes.
- Following a closed formulary that indicates the medical best practices and accepted guidelines that physicians should follow in prescribing drugs.
- Showing comparative drug costs within therapeutic classes to help doctors choose the most effective and cost-effective therapies.
- Automating prescription writing that allows physicians to write, send, and “save” prescriptions at a speed comparable to handwriting a prescription.
- Allowing screening of prescriptions for drug interactions, dosage errors, and illegible writing errors.

In short, an effective system must maintain a profile on each inmate that is accessible at all locations by authorized staff. In addition, the system must provide a variety of informational reports: drugs prescribed for inmates, by whom, for how long, in what dose, when started and stopped, how much each drug cost per inmate, per pill and per dose, and what drugs are prescribed by which doctors. It should also report which drugs are the highest cost in rank order, which drugs are most prescribed in rank order, and which doctors prescribe the most costly drugs.

CDC must retrieve drug utilization data before it can even begin to manage the drug benefit. By immediately purchasing and implementing available pharmacy management software that can be interfaced with PPTS, the department can begin to rein in drug costs.

Currently Available Systems

Software manufacturers claim the level of management capable with most systems is as wide as imagined. Formulary integration and organization can be designed with specific objectives. Data can be queried and reported in virtually any form and, subsequently, facilitate accountability. Workflow can be improved, creating a superior health care environment. Adhering to pre-established best-practice methods, protocols can decrease liability and improve patient health care. There are several programs on the market that provide these capabilities, including:

Corrections Institutional Pharmacy System (CIPS). This program, currently the market leader, is operating in twelve states, the federal prison system, and the California Youth Authority. FOX Systems, Inc.² research found that CIPS offers prison-specific functionality to accommodate the various process variations for the prison population, health programs, and administration methods. For example, it can analyze drug-specific use for one institution or for an entire system, analyze drug-prescribing patterns, and identify those providers who are not adhering to the formulary.

FOX also found that “cost estimates for purchasing and installing a system such as CIPS cost less than two percent of the annual CDC drug budget and that the system implementation costs would be recaptured in less than one year. The cost recapture is primarily a result of reduced drug waste from inmate movement, duplicate therapy, and dispensing errors.”

Professional Pharmaceutical index (PPi). This physician-friendly system allows ready access to countless information – formulary guidelines, best-practice drug therapies, drug-drug interactions, drug costs in each therapeutic class, and drug dosage recommendations. It allows the physician to electronically prescribe medication that is transmitted directly to the pharmacy. The program

²As a result of state budget language, CDC contracted with independent healthcare systems consultants, Fox Systems, Inc., to examine and assess the delivery of pharmacy services, to prepare alternative solutions for improvement, and to develop an implementation plan to achieve quality and cost-effect pharmacy services.

module is available both as a stand-alone PC program and on a handheld that connects wirelessly to the PC program. The drug management program is capable of reporting drug utilization, physician writing practices, and forcing compliance to a closed formulary.

Automated Drug Dispensing Machines. The Commission found that automated dispensing and vending machines could be effective in limiting drug waste and dispensing errors. Currently, most of the prison facilities dispense medicines to inmates using manual systems. Each prescription must be counted and prepared individually for each inmate – a time-consuming process that often leads to error. Additionally, when inmates are transferred, refuse medications, or have a prescription change, medications cannot be returned or restocked and must be destroyed. These factors lead to a tremendous amount of drug waste in the current pharmacy operations system. Most facilities could efficiently utilize automated pharmacy packaging equipment and software for drug dispensing to reduce staff time, reduce errors, and eliminate much of the waste currently experienced.

CDC has conducted several pilot projects to investigate current software systems and automated equipment. Pharmacists at California State Prison, Sacramento, have been part of a pilot project that was completed in April 2001 to test the use of automated dispensing machines. “Envoy” – the machine used in the pilot – is described as a solution for “packaging, dispensing, filling, labeling, checking, delivering, preparing, administering, and tracking” drugs. The pharmacists report significant reductions in the waste of medications by using this method – an estimated savings of between \$2200-\$2400 a month by cutting down on drug waste, errors in processing orders, and time spent counting and distributing pills.

Automated dispensing machines are already an integral part of the pharmacy operations at Kaiser, Sutter Health, and UC Davis Medical Center.

“One issue resulted in more negative findings than any other in our analysis. A functional pharmacy information system is a tool that CDC pharmacies should use to increase productivity, reduce medication error, and enhance clinical services, resulting in cost effective drug therapy and improved patient care. The current system does not support these goals. The current PPTS (Prison Pharmacy Tracking System) is a twenty-year-old system, capable of generating medication labels. The current PPTS is inadequate in most other capabilities. Its lack of a central database is a major contributor to drug waste in the prisons today. This waste alone is estimated to exceed the costs of a new system by a significant margin.”

FOX Systems, Inc., December 20, 2001.

RECOMMENDATIONS

In order to implement significant cost savings drug benefit management reforms that improve overall prison pharmacy operations, CDC must aggressively pursue an updated Information Technology system by:

- **Seeking funding in the state budget for an up-to-date integrated technology system.**
- **Purchasing and implementing a new pharmacy information system and related hardware with capabilities needed to successfully manage the prison pharmacy operations in an effective and cost-efficient way.**
- **Taking the necessary steps to expedite its targeted upgrade.**
- **Requesting the \$8 million appropriation that is required to purchase the final equipment needed to link up the LAN/WAN system.**
- **Implementing an immediate solution by purchasing commercially available pharmaceutical management software that can interface with the current PPTS.**

- **Installing automated drug dispensing and vending machines in prisons to save manpower, minimize waste, and improve quality of care.**

Chapter 3: Drug Contracts

Finding: Negotiating Drug Contracts

The state has not maximized its volume buying power as a strength in negotiating discounts with pharmaceutical companies on the same scale as other large purchasers. And it has not negotiated rebates from manufacturers on even its most highly utilized drugs.

Under current law the Department of General Services (DGS) is responsible for negotiating pharmaceutical drug contracts for the Departments of Corrections, Youth Authority, Mental Health, and Developmental Services, and the California State Universities.

In a recent report³, the California State Auditor (BSA) found that annual drug expenditures for these five agencies combined increased from \$41.6 million in 1996-97 to \$135.1 million in 2000-01. This amounted to a 34 percent annual increase during this five-year period – almost three times the national average. The drug allocation for these agencies, especially CDC that accounts for two-thirds of the purchases, has become a hugely disproportionate percentage of the health care budgets.

Current Drug Procurement Process

BSA also reported that over the past five years DGS has secured individual contracts with manufacturers for only 40 percent of the drugs that the five agencies purchase. By November 2001, DGS secured contracts for about 850 of the 1,838 drugs needed. Reasons cited by DGS for low contract success are:

³ *State of California: Its Containment of Drug Costs and Management of Medications for Adult inmates Continue to Require Significant Improvements*, California State Auditor, Bureau of State Audits, January 2002 (2001-012).

- Purchase volume is too low to interest some manufacturers.
- Some drug companies have merged and consolidated their product lines.
- Some are unwilling to do business with state government.

While these factors may play a role in the low success rate, it is apparent that the department does not have the contracting knowledge, drug marketing expertise, and negotiating tools to carry out its goals. This failure is costing the state millions of dollars.

Currently, DGS has a pharmacy purchasing team consisting of two buyers and one recently added pharmacist. High-volume drugs are sent out for competitive bidding. Other drug prices are negotiated for directly with the manufacturers, and there are those drugs that DGS claims command a certain price and cannot be negotiated. Included in this group are the antiretrovirals used in the treatment of HIV/AIDS.

DGS negotiates contracts with drug manufacturers so those state agencies can purchase drugs at less than Wholesale Acquisition Cost (WAC). These are the “on-contract” drugs. DGS currently negotiates directly with manufacturers for about 40 percent of the total purchase.

In an effort to expand the on-contract drug procurement process, DGS recently entered into a major agreement with Massachusetts Alliance for State Pharmaceutical Buying, a group purchasing organization. Since January 1, 2002, the drugs that have been purchased through the Alliance have increased the number of medications now available to the state on-contract by approximately 25 percent – bringing the total of on-contract drugs to about 65 percent. While this new program has produced savings to the state, BSA points out in its report that DGS “entered into this agreement without fully analyzing all options before doing so – thus possibly preventing the state from achieving greater future savings.”⁴

⁴ Ibid.

For the remaining 35 percent, the purchase price is based on the *prime vendor's* Wholesale Acquisition Cost. DGS contracts with a prime vendor that distributes drugs to state agencies at either on contract or non-contract prices.

More Cost-Effective Ways to Purchase Drugs

Nationally, spending on prescription drugs increased by 18.8 percent nationwide last year to reach \$131.9 billion, according to a study by the National Institute for Health Care Management Foundation. This is having an alarming fiscal impact on federal, state, and local governments that are in the health delivery business. As a result, more and more states have begun searching for innovative cost-controlling measures in an effort, at least, to get more tools in their hands that they can use to control prescription drug prices. Some form of cost-control legislation on pharmaceuticals has been introduced in 40 states. Over 30 states have enacted legislation that include bulk purchasing, adopting formularies that promote the use of the most clinically appropriate, yet cost effective medications, expanding rebates from manufacturers, and other drug discounting measures.

Private and public health care providers interviewed by the Commission point to the critical need for an experienced contracting body to achieve cost-controlling objectives when negotiating best prices with drug manufacturers. The negotiators must be astute in contracting, knowledgeable of pharmaceutical manufacturers, market shares, pharmacoeconomics, drug pricing, group purchasing organizations, and armed with drug utilization data and a clinically sound and cost effective drug formulary. Ideally, the contract negotiators would be an arm of the overall drug management team – the Pharmacy & Therapeutic Committee team.

Consolidating Purchasing Power

This year legislation (SB 1315/Sher) was introduced to change the way the state buys prescription drugs. As introduced it would have required the Governor to designate a central purchasing agency for purchasing pharmaceuticals. That agency would execute prescription drug purchasing

agreements with state entities that purchase pharmaceuticals – such as CDC. The agency would then be authorized to execute these agreements with other state entities, including UC, local governmental entities, such as local mental health providers and county sheriffs, thus broadening the state purchasing pool considerably and paving the way for negotiating lower prices on drugs by purchasing in bulk.

Under federal law, only one state agency is authorized to negotiate drug prices for Medi-Cal. DHS is that agency in California – it is currently the department that negotiates for, and gets the “best-price” on drugs. (No other state agency can obtain a *better* price than what DHS negotiates for Medi-Cal.)

DHS has 43 million drug claims per year and spends \$3.8 billion reimbursing those claims. While it is important that all state agencies that seek rebates from pharmaceutical manufacturers – mental health, the prison system, state employees, retirees, and any other purchasing agency – be a part of these negotiations, it is absolutely critical that DHS be included into any new agency purchasing agreement. This department’s tremendous volume is key to the success of maximizing rebates for all the state agencies as well as supplemental rebates for CalPERS. At the very least, in the absence of a new central agency, DHS should use its tremendous leveraging power and considerable contract negotiating expertise – and *become* the new central agency responsible for all state agency drug contracts.

It is also important that no agency be able to “opt out” of the agency-pooling agreement and negotiate their own rebates with drug manufacturers, thus weakening the pool for the other players. Drug manufacturers that have not been given the priority status for their product on a formulary have been known to cut their own deals with separate departments, resulting in a loss of volume for the contract manufacturer.

The California Senate Office of Research estimated that implementation of the state-local agency purchasing pool established by the bill would produce ongoing annual savings to the state and to counties in the range of \$10 million to \$20 million.

Expanding the State's Group Pooling Efforts

According to the National Conference of State Legislatures (NCSL), efforts to use bulk-purchasing and multi-state purchasing coalitions have spread rapidly among the states. Agencies or departments in most states had previously negotiated and paid separately for pharmaceuticals. But that is changing. A growing number of states are banding together and creating purchasing pools in the hope that their purchasing power will be strengthened. Joining a large group-purchasing organization could generate significant cost-savings potential in California – growing documentation points to their success in obtaining favorable prices, terms, and conditions from manufacturers due to the larger purchasing volumes. As any smart shopper knows, bulk purchasing is the key to reduced consumer prices.

DGS recognizes that it lacks sufficient expertise in this mushrooming marketplace. While it recently joined such a coalition the department pointed out that its contract with the Massachusetts Alliance was a low-risk approach to learning more about group-purchasing organizations. This first venture, however, has met with some success – currently creating savings of about \$250,000 a month for an annualized savings total of \$3 million.

However, the State Auditor points out that even greater savings may have been achieved by considering other pooling options, such as joining the Minnesota Multistate Contracting Alliance for Pharmacy (MMCAP), a group of state agencies and nonfederal governmental entities. In existence since 1985, with members in 38 states, MMCAP has contracts with more than 130 manufacturers, giving its members access to more than 6,000 drugs.⁵ DGS's "primary reason for not pursuing MMCAP was that it did not see these savings as significant because prices can vary depending on where either entity is in their respective contract terms . . . and expressed concern that joining MMCAP would preclude them from entering into other pooling agreements."⁶

⁵ Ibid.

⁶ Ibid.

The Commission also found state coalitions being formed, or states seeking to form coalitions – often by geographic region. A national survey of legislative health leaders, conducted by NCSL’s Health Policy Tracking Service, showed 32 states predicted that purchasing pools for prescriptions are likely to be considered in 2002.⁷ Clearly states are seriously pursuing new innovative methods and regarding all options, such as pooling together, as potential weapons in its war on escalating drug costs. California drug contract negotiators must develop an expertise in this area and aggressively pursue this cost saving option.

Formulary as a Bargaining Tool

An up-to-date formulary that is strictly enforced is a valuable contract negotiating tool and essential to achieving the best prices possible. Rebates and/or discounts from drug manufacturers can be greatly enhanced by proving a shift in market share of certain products within a therapeutic class.

Updated Information Technology Tracking System

Once again, these cost-savings potentials cannot be maximized without modern pharmaceutical management software to track a patient’s medical and drug history, physician prescription writing practices and other drug utilization data. The various state agencies currently do not have this capability.

RECOMMENDATIONS

California should make every effort to strengthen its drug purchasing power by:

- **Establishing a central drug-purchasing agency within the Administration responsible for negotiating the deepest discounts with drug manufacturers on pharmaceuticals purchased for all state agencies that purchase drugs in bulk. And for negotiating rebates for pharmaceuticals on behalf of all state agencies**

⁷“The War on Drug Prices,” Garry Boulard, State Legislatures, National Conference of State Legislatures, March 2002.

including DHS, and a supplemental rebate for the California Public Employees Retirement System (CalPERS).

- Staffing the agency with a professional contract negotiating team experienced in pharmaeconomics, and with experience working with drug manufacturers, group purchasing organizations, formularies, and other cost-effective methods used to purchase drugs at a reduced rate.
- Increasing bulk-purchasing options through Group Pooling Organizations.
- Developing a formulary to be used by all state agencies that demonstrates effective treatment of illness for each therapeutic class at the most affordable price.
- Implementing an up-to-date pharmaceutical management information technology system capable of tracking drug use and utilization.

Chapter 4: Formulary

Finding: A Closed Formulary

A well-developed, closed formulary is one of the most important instruments the state has for providing guidelines to promote appropriate and cost-effective use of medication, monitoring drug prescribing practices, gathering key data, negotiating drug contracts, and pursuing drug manufacturer rebates.

The Department of Corrections has not updated its formulary since 1997.

A drug formulary is a list of prescription drugs by therapeutic class that a health plan has approved for use by doctors. Health plans that have formularies develop their own unique list of “approved drugs.” The list is the result of expert medical opinion derived from current medical and pharmaceutical data, and is believed to be in accord with accepted standards at the time of publication. Formularies may change at any time.

Faced with spiraling drug costs, CDC must create a formulary that is both clinically sound and cost effective, in conjunction with other state agencies that will get preferential treatment from the state. This list, or formulary, should determine which drugs are included in the pharmaceutical purchases California makes every year.

Outdated Formulary

The CDC formulary has not been updated since 1997. Since that time several lawsuits filed on behalf of inmates have resulted in the department implementing a comprehensive mental health program for all inmates. The new mental health system, plus AIDS and hepatitis therapy treatments, have led to a greater use of “newer” drugs – antipsychotic agents, antidepressants, and antiretroviral medications. These therapeutic classes of drugs account for the greatest expenditure in the drug budget and account for the greatest increase in prisons’ drug costs:

- The top five pharmaceuticals prescribed for California's prison inmates last year were all related to mental health, and consumed \$83.4 million of the total drug budget.
- Of that, \$48 million was spent for Zyprexa and another \$14.1 million for Risperidol administration, both antipsychotic agents.

Because these newer drugs are not on the current Corrections' formulary, General Services has been further handicapped in its ability to negotiate favorable manufacturers' prices and manufacturers' rebates. Additionally, CDC is unable to issue guidelines and prescribing protocols to physicians and pharmacists on a cost-effectiveness and efficacy basis for drugs by therapeutic class, and it is unable to gather the data necessary to monitor drug utilization.

Effective Negotiating Instrument

A closed formulary must be up to date and utilized throughout the system to become a valuable negotiating tool. Key data is the basis for contract bargaining power:

- Accurate drug listing of most-prescribed drugs – especially those high-volume drugs that reflect the health care problems of the inmate population, including mental health, AIDS, and hepatitis.
- Proven formulary adherence by physicians who are prescribing the medications.
- Demonstrated enforcement of the formulary.
- Drug utilization information demonstrating high volume of purchase.

Every drug manufacturer wants its drug on the formulary to expand the market for its products. It is even more lucrative to have its drug designated as the preferred drug in the specific therapeutic class. With accurate formulary

information, contract negotiators can aggressively pursue more favorable pricing on all prescribed drugs, especially on those single-source drug products, when it can show manufacturers' volume of purchase.

For example, the fact that the top five drugs currently prescribed for inmates have not been included in an updated formulary effectively dilutes purchasing power and negatively impacts the ability of DGS to negotiate favorable discounts on those drugs.

Effective Drug Management Tool

The decision to place a drug on the formulary should be based on safety, efficacy, and cost of the drug in each therapeutic class. At Kaiser, UC Davis Medical Center, and Sutter Health, physicians who receive input from pharmacists' research on the various medications and the studies that look at the three factors make all the pharmacy and therapeutic decisions. It is critical that the physicians play a key role in the process in developing a "closed formulary" and that they only prescribe medications included on the list once those decisions have been made.

By adhering to a closed formulary, CDC will be able to track patient drug use, an individual physician's pattern of prescribing drugs, and will provide physicians with the treatment protocol guidelines developed by specialists in the relevant area. With this information, CDC will be able to monitor its drug utilization as well as ensure that appropriate and best medications are being prescribed. If a drug has a generic counterpart, the physician should prescribe it. If several drugs that are equally as efficacious are used for the same diagnosis and one is less costly, the physician should use it. In any event, the physicians should be prescribing off the adopted formulary whenever possible.

And this must be enforced. A formulary that is ignored is not going to save the state a penny.

Benefits Patients

The closed formulary also benefits patient care by assuring that medications are being appropriately prescribed. Physicians have the benefit of accepted guidelines for drug

use by therapeutic class, and they are not prescribing drugs based on any pharmaceutical marketing and promotions or direct sales pressure.

Moreover, this formulary approach would not prohibit physicians from prescribing other medications when appropriate to the patient's health care. It is important that a process for authorization be included within the closed formulary system.

Information Technology Tracking System

An electronic data management system is crucial and integral to any type of health care/pharmaceutical management. And while a central committee must be responsible for enforcing the formulary, they cannot do it without an updated information technology tracking system in place to be successful.

There are currently appropriate data collection and monitoring systems on the market to track patients' medical history and use of medications.

RECOMMENDATIONS

To provide the state with an important contract negotiating tool and a key means of monitoring drug utilization, CDC should:

- **Develop a closed formulary that demonstrates effective treatment of illness for each therapeutic class at the most affordable price.**
- **Work in conjunction with the drug contract negotiators to get reduced drug prices for those drugs on the formulary – especially the high-priced, newer drugs used to treat mental illness.**
- **Establish a set of guidelines that encourage physicians to prescribe the proven, but most cost-effective drugs listed on the formulary in each therapeutic class as the first course of treatment.**

- **Implement a pharmaceutical management technology tracking system capable of monitoring the drug benefit based on the formulary.**
- **Analyze the formulary data for cost-effective prescribing treatments between the different prisons to find better treatment models in the system.**

Chapter 5: Managing the Drug Benefit

Finding: Operational Monitoring and Oversight

CDC does not have a clinical review body in place to monitor cost-effectiveness and efficiency in its prison pharmacy operations. It does not have a basic business plan that it follows. The department lacks a beneficial way of analyzing product utilization and trends, formulary status, and profiling physicians' prescribing practices. It does not have a physician education program in place, nor does it have an information technology system to help carry out these goals. All of these factors contribute to CDC's inability to rein in the spiraling costs of pharmaceuticals.

The Department of Corrections will spend about \$735 million in 2001-02 delivering health care to the 161,500 inmates that are housed in its 33 institutions. Of that, it is estimated that \$125 million will be spent on the purchase of pharmaceutical drugs. The question is: Are California's taxpayers getting the most out of their pharmaceutical dollar?

Currently, there is no centralized team responsible for monitoring the overall drug benefit for the 33 prisons – including prescription, administration, delivery of drugs, and physician practices. This is the “Achilles’ heel” of correctional health. Each prison operates under its own system. There is no accountability, no monitoring, no diagnosis and treatment guidelines, no drug formulary, no prescription accountability, and no drug utilization data gathering capabilities. And, there is not an up-to-date technology information system to gather the necessary oversight data – even if protocols and guidelines to analyze the data were in place.

Basic managed care principles that are the standard in community health care delivery are not in place at CDC.

Need for an Oversight Committee

The first step towards implementing a successful drug management program at CDC is to create a new *Pharmacy & Therapeutics Committee* (P&T Committee) at the administrative level. This clinical review body would develop a creditable process for clinical and financial evaluation of pharmaceuticals, and it would be responsible for ensuring that these policies are carried out. The process requires expertise, oversight, and constant review – an approach that is the community standard for essentially all managed health care plans today.

Following the principles set forth by managed care organizations, the P&T Committee should consist of a group of clinicians that make drug benefit decisions based on safety, efficacy, and cost. The committee should be responsible for reviewing product utilization, clinical information, formulary status, and cost analyses. Kaiser, Sutter Health, and UC Davis Medical Center all have such monitoring systems in place. Without a centralized oversight organization, each prison pharmacy will continue to operate without benefit of overall procedures and guidelines, and CDC will never be able to determine why such a disproportionate share of its budget is spent on drugs or be able to do anything about it. Ultimately, the committee becomes the drug benefit “enforcer.”

The Formulary is a Key Enforcement Tool

The closed formulary approach in fiscal and budgetary planning is essential. The physician’s adherence to the formulary will allow CDC to work with the contract negotiators for bulk purchasing of medication at favorable pricing. Adherence to a closed formulary will also allow the P&T Committee to track patient drug use, individual physician’s pattern of use, and provide guidelines, which are developed by specialists in the relevant area. This critical information allows the department to monitor appropriate and cost-effective use of medication, as well as to ensure that appropriate and best medications are being prescribed. Currently, CDC lacks any program to analyze and review physicians prescribing practices.

Drug Utilization Reviews

Appropriate Use of Drugs. The State Auditor recently reported in its January 2002 report that CDC “currently lacks sufficient data gathering capabilities to perform drug-utilization reviews, a process of evaluating drug use to identify and then intervene to correct drug use problems associated with inappropriate prescribing and use of drugs. CDC does not perform a system-wide analysis of drug use after the drugs have been dispensed.”

For example, are psychiatrists the only physicians prescribing the very expensive, increasingly used antipsychotic drug treatments? Or could there be other physicians who are not trained in this area who are also prescribing them? Are these drugs being dispensed *only* after a diagnosis has been made by a psychiatrist to determine the exact mental condition of the inmate? Are there alternative medications and treatment that would meet with community mental health standards *and* are more cost effective? Is there adequate quality control within correctional health care to safeguard the appropriate usage of these and other medications? Are new medications that offer no significant therapeutic breakthroughs over lower cost older drugs added to the formulary unnecessarily?

An oversight committee could determine how these patterns of medication use compare to other facilities that are dealing with populations with significant behavioral and mental health needs and adopt guidelines for their use.

The P&T Committee at UC Davis Medical Center keeps close watch on the top 50 prescribed drugs. The committee looks for any “spiking” in a drug’s popularity, any new drugs that suddenly appear on the top 50, and at any other changes that seem out of the ordinary. Once it identifies a potential problem, the team gathers data on which patients are receiving the drug and who is prescribing it. It may just be a matter of educating the prescribing physicians that there are other, more cost-effective treatments with the same results. Or, this information may lead the team to search for ways to control the costs of an emerging new drug that has no effective counterpart. But the fact remains – UC, unlike CDC, has a vigilant oversight committee,

armed with the necessary data, to act in a fiscally responsible manner to correct the problem.

Emergency Contracts. The lack of monitoring and accountability has led to many unnecessary and costly emergency drug procurement contracts. Prison pharmacy staff point to the critical staff shortage as the primary reason for entering into non-competitive bid emergency contracts as a way to supplement existing pharmacy operations. A contract is determined to be an emergency contract, implemented as the “last resort,” under the following designated conditions:

- Existing pharmacy staffing (civil service employees) must be at or below 50 percent of the approved staffing.
- Current registry contracts have failed to provide the necessary pharmacist staffing.
- Local pharmacy contracts for pharmacy staffing or local pharmacy delivery of prescription medications will be used if there is insufficient pharmacy staffing.

CDC must fully document the need for all contracts secured on an *emergency basis*, especially those made without benefit of a competitive bid, and DGS should not authorize the emergency contracts without benefit of other key information. This is another missed cost-savings opportunity due to lack of oversight and operational monitoring at CDC.

Reducing Drug Waste. CDC does not review the volume of wasted medication – a known contributor to increased drug costs. Pharmacists interviewed at North Kern State Prison estimated that waste accounted for as much as 10 percent to 25 percent of the institution’s drug budget. This is largely attributed to inadequate staffing, irregular drug packaging and dispensing methods, and ordering medications for inmates transferred to other institutions. The lack of a monitored central inventory database is also a major contributor to drug waste. A central oversight body would establish appropriate inventory management procedures and

ensure that each institution follow prescribed drug purchasing policies and procedures.

Without Updated Technology...

Once again, the need for updated pharmacy management software is crucial in providing the oversight committee the monitoring tools it needs to carry out effective and cost-efficient health care delivery to California's inmate population.

RECOMMENDATIONS

In an effort to effectively manage inmate health care and control costs in California's prison pharmacy operations, CDC must adopt the following reforms to ensure operational oversight and monitoring of its drug benefit:

- **Recognize that monitoring and data collection is crucial and integral to any type of health care and pharmaceutical management.**
- **Establish a new Pharmacy & Therapeutic Committee to develop a creditable process for clinical and financial evaluation of pharmaceuticals.**
- **Set overall pharmacy guidelines and protocols based on safety, efficacy, and cost and make certain the decision process is followed.**
- **Evaluate data to monitor product use and trends and therapeutic class utilization for cost-efficiency.**
- **Track physician prescription-writing practices and patient drug use to ensure cost-efficiency in prescribing practices.**
- **Purchase and implement commercially available pharmacy management software to effectively gather the data needed to monitor the drug benefit.**
- **Monitor the use of emergency contract services for their necessity, usefulness, and cost-effectiveness.**

Chapter 6: Pharmacy Staff Shortage

Finding: Pharmacy Staff Shortage

A continuing shortage of pharmacists remains a serious problem in all prison pharmacies. This shortage jeopardizes the quality of inmate health care and leads to high-cost, non-competitive contracting outside for drugs and relief pharmacy services.

There continues to be a national and state shortage of pharmacists, and as consumers require and demand more and more prescriptions, the search for pharmacists to fill those prescriptions increases. According to the California Pharmacists Association, American pharmacists filled two billion prescriptions in 2002 – and that number is expected to double by 2004.

The demand for pharmacists nationwide far exceeds the supply. Many factors have contributed to this shortage: the way insurance companies pay for drugs, drug advertising that has led to more consumer demand for drugs, proliferation of chain store pharmacies such as Walgreen's and Longs, and the diminishing interest in pursuing a degree in the field.

A December 2000 study by the U.S. Department of Health and Human Services that demonstrates the shortage of pharmacists further points out that California had 54 pharmacists per 100,000 population, while the national average was 68 per 100,000. Shortages are particularly acute in rural areas and hard-to-serve urban areas.

The state's pharmacists play an important role in providing safe quality care to thousands of Californians. Additionally, they play a critical role in California's huge prison system, delivering pharmaceuticals to an often difficult population that has suffered a surge in mental health, AIDS, hepatitis, and other health problems not generally seen in the community-at-large.

A Shortage of Civil Service Pharmacists

There is a shortage of Civil Service pharmacists in California. It is well acknowledged that this shortage is a growing problem in the state, and both the Legislature and the Administration are responding by looking at several proposed policy changes, including:

- Moving to have California use the national exam used by all other states for its pharmacist licensing exam – facilitating the ability of pharmacists elsewhere in the country to more easily and quickly qualifying to practice in California.
- Increasing the number of times per year that the State Pharmacy Board will administer its own licensing exam – from the current two times to 12 times per year.
- Expanding the use of pharmacy technicians – including increasing the ratio of pharmacist supervisors to pharmacy technicians.
- Allowing pharmacy technicians to check some of the work of other technicians in specified settings (instead of requiring that work to be checked by a pharmacist) referred to as “Tech-Check-Tech.”

By law each pharmacy in California, including prison pharmacies, must have a pharmacist in charge of its operations. In addition to the shortage of state pharmacists in general, there is also a critical shortage of those pharmacists who are willing to accept the position of pharmacy manager in the prison setting. Additionally, ten percent of California’s prisons have only one staff pharmacist. The BSA reported that the overall prison pharmacy position vacancy rate averaged 22 percent, with the highest vacancy rate in the acute care hospitals and skilled nursing facilities; about 32 percent and 36 percent, respectively.⁸

⁸ *State of California: Its Containment of Drug Costs and Management of Medications for Adult inmates Continue to Require Significant Improvements*, California State Auditor, Bureau of State Audits, January 2002 (2001-012).

Without adequate staffing in prison pharmacies, quality and consistency of care is jeopardized, opening the state to potential costly lawsuits. Also, this shortage of prison pharmacists has led to the very costly expansion of outside contracting for relief pharmacy services – often without benefit of a competitive bidding process.

The Commission found little evidence or documentation of efforts to compare the cost and quality of care provided by outside contract services with that of maintaining an adequate permanent staff. Since costs are significantly more to contract out, the state should readjust its pharmacist's pay scale upward in order to attract and retain staff pharmacists, thus creating a potential significant cost-savings opportunity.

Factors Leading to High Vacancy Rate

As with all professional staff positions, including pharmacists, it is difficult to attract qualified professionals to work in a prison environment. California's prisons are often sited in isolated locations that do not attract applicants. There are approximately 117 pharmacist I and II positions and 58 pharmacy technician positions authorized in CDC service. The average vacancy rate for these positions for the past three years:

- Pharmacist I at 26.6%.
- Pharmacist II at 19.6%.
- Pharmacy technicians at 8.2%.

State Salaries are not Competitive

The California Department of Personnel Administration completed a pharmacist salary survey in 1999 by averaging the top salary for a journeyman level staff pharmacist in ten counties and the City of Los Angeles. The study found that state pharmacists receive approximately \$35.65 per hour top salary (including a recruitment and retention bonus) compared to \$42-\$44 per hour in the private sector – approximately \$16,640 per year less than the private sector. As a result of these findings, CDC was able to offer additional compensation in the form of recruitment and retention bonuses beginning in July 2000. However, the

civil service pharmacist's top salary remains \$1,000-\$2,000 a month below the starting salary for pharmacists in the private sector, and the bonuses have had little impact on meeting staffing goals.

Persistent staffing difficulties can be attributed to a nationwide pharmacist shortage but also to the discrepancy between state salaries and those offered by competitors. Pharmacists at UC Davis Medical Center earn a maximum of \$8767/month – nearly 40 percent more. And the private sector offers new pharmacists (entry level) nearly \$8,000/month in addition to signing bonuses.

In an effort to attract the pharmacists that are needed, the department should consult with the Department of Personnel Administration to establish a higher-level pharmacist position that offers a salary and benefits package commensurate with the public and private sector.

Expand the Use of Pharmacy Technicians

Many pharmacists also complained that they were forced to carry out responsibilities that should not be in their “job descriptions.” To help alleviate this burden, the department should expand the use of pharmacy technicians. Pharmacists would be freed up from performing the more routine, repetitive tasks such as counting out medications, filling pill bottles, and checking prescriptions. This would give pharmacists time to focus on the administrative and professional duties for which they are trained as well as providing more direct patient care. CDC is exempt from the state laws governing the ratio of technicians to pharmacists, thus free to increase their numbers to help alleviate the pharmacy staff shortage and provide pharmacists with increased job satisfaction.

Inadequate Working Conditions

In addition to geographically isolated locations and a lack of pharmacy management information systems, prison staff that were interviewed often complained of insufficient physical workspace to handle the increased volume of patients and their prescriptions. Many prison pharmacies are as small as 400 square feet with staff processing over 1,000 prescriptions daily. In the private sector, pharmacies

average much greater physical space. For example, the space in a Walgreen's pharmacy is a minimum of 600 square feet and usually larger – with staff filling, typically, 300-400 prescriptions per day.

The FOX report found that the lack of efficient workspace hampered the workflow, which impacted work productivity and staff morale. This resulted in increased staffing costs and left open the possibility for medication delivery errors including missed doses, wrong medication, and documentation inaccuracies.

Lack of Communication

The Commission found that CDC's health care leadership does not adequately communicate with pharmacy field staff, include them in the planning of new programs, or make adequate on-site evaluations to determine the unique pharmaceutical needs of each institution. Pharmacists consistently complained that this lack of communication hindered their ability to carry out their administrative responsibilities.

The task force interviewed a number of staff pharmacists – all of whom expressed concern over the lack of feedback on the studies and reports that had been requested of them. Additionally, staff is rarely apprised of any new policy or directives from administrators, nor do they learn what other institutions are doing to increase productivity or control costs.

Several staff pointed to studies done within the last two years that strongly recommended the modernization of pharmacy operations, including the critical need to update pharmacy software and utilize automated dispensing machines where likely to be effective. There has been no response to these staff recommendations.

Staff consistently spoke of the need for e-mail capabilities within the prison, with the other institutions, and with Sacramento. Not only would this enable staff to converse with each other, it would be a time saving and effective means of asking and answering questions and communicating important information.

CDC must improve communications with its field pharmacy staff to ensure maximum success of any new plans or pharmacy management directives or contracts that may be implemented in the future. Additionally, CDC administrators should perform on-site visits to learn first hand what is needed to alleviate the problems currently experienced in the prison pharmacy delivery of services. Field staff wants to play a role and they want to be heard.

RECOMMENDATIONS

In an effort to cut the high costs of outside contracts, CDC should take action to retain existing staff and to fill state pharmacist positions by:

- **Working with the state's personnel department to upgrade state pharmacist salaries to make CDC more competitive with the private sector in recruiting and retaining prison pharmacists.**
- **Obtaining authorization for needed staff positions to handle the increasing inmate medical caseload.**
- **Increasing the number of pharmacy technicians in each pharmacy to handle the high volume of drug packaging and other tasks not legally required to be performed by a pharmacist.**
- **Upgrading pharmacy staff' working conditions by providing a pharmacy management information system to ensure delivery of quality care to the inmates.**
- **Planning for future renovations or new building programs to include adequate physical space for pharmacies to ensure efficient operations.**
- **Making a concerted effort to improve communications between the CDC administration and field pharmacy operations.**

- **Establishing a state program that forgives education loans for pharmaceutical students who agree to work in targeted prison pharmacies for a specified number of years.**

Conclusion

As CDC's pharmaceutical expenditures have continued to climb from \$26.6 million to \$125 million in the past five years, its overall pharmacy operations have remained stagnant, preventing the department from reining in this fastest growing item in its health care budget.

Basic, proven cost-savings methods that are widely used in the health care community have not been introduced into the overall pharmacy operations in the prisons. Regrettably, the department does not have a strategic integrated plan in place, or one that is being developed, in order to deal with the mounting fiscal problems. And the department continues to operate with an appallingly inadequate technology information.

CDC's ability to manage its operations in a cost-effective manner has also been seriously handicapped by a lack of effective leadership personnel who have expertise in managed care principles, and who have the management and fiscal skills needed to develop a big picture strategy for the future.

In order to get a handle on these widespread problems, increase efficiency, reduce costs, and enhance accountability, the Commission recommends that the department develop a plan to upgrade its overall prison pharmacy operations – one that recognizes the best proven managed care practices. It urges the creation of an operational monitoring and oversight committee, and modernization of CDC's 20-year-old outmoded technology system well before the targeted November 2006 date. Without these key reforms in place, CDC will never be capable of controlling its pharmaceutical budget and providing cost-efficient health care delivery services.

Furthermore, the Commission recommends that this year's budget writers begin a technology upgrade by earmarking funding for the purchase of commercially available pharmacy drug management software that can be interfaced with Corrections' existing technology system. The

Commission recognizes the serious nature of California's economic climate. But this appropriation is a key investment in the future and the crucial first step needed to implement other significant drug benefit management reforms that will improve the overall prison pharmacy operations. Tremendous cost-savings opportunities will continue to be lost each year that CDC is unable to electronically track inmates and their medical history, gather key drug utilization data, and monitor drug purchase and use.

Additionally, the Commission recommends that a pilot study be initiated through the budget process that authorizes a team of pharmacists from a successful outside system, such as UC Davis Medical Center, to go into one or more prison pharmacies to assess cost-savings potentials and make recommendations for new procedures and guidelines.

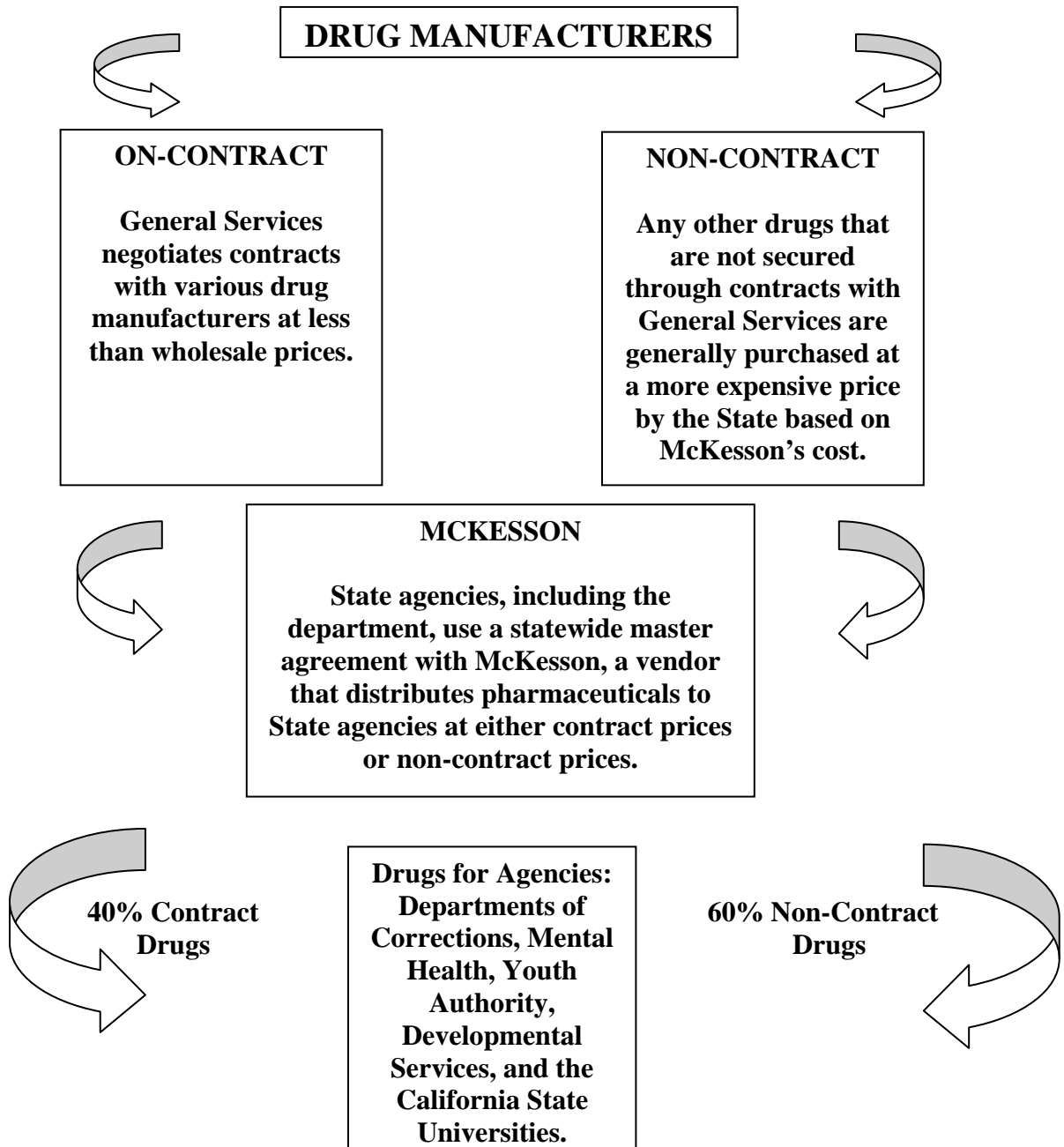
The pilot project findings and recommendations would be reported to the Administration and the Legislature and would provide valuable information to CDC as they move to adopt an overall plan to implement future cost-savings guidelines and protocols throughout its system.

Appendices 1 and 2

Appendix 1

Appendix 2

The Process for Securing On-Contract and Non-Contract Drugs*



*California State Auditor, State of California: Its Containment of Drug Costs and Management of Medications for Adult Inmates Continue to Require Significant Improvements, January 2002 (2001-012).

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