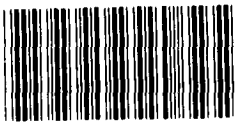
BY THE COMPTROLLER GENERAL

Report To The Subcommittee On Special Investigations, House Committee On Veterans' Affairs OF THE UNITED STATES

Reassessment Of Veterans Administration's Controls Over Drugs: Million-Dollar Problem Still Exists

Although GAO first reported on shortcomings in VA's pharmacy systems in 1975, VA's efforts to date to strengthen drug controls are largely ineffective. Few pharmacies have been converted to the unit dose system, and recommended controls over drug dispensing practices have not been carried out. As a result, millions of potentially dangerous drugs are vulnerable to pilferage and abuse. VA should carry out GAO's prior recommendations.



HRD-80-86
JUNE 24, 1980

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-133044

The Honorable Ronald M. Mottl
Chairman, Subcommittee on Special
Investigations
Committee on Veterans' Affairs
House of Representatives

Dear Mr. Chairman:

In response to your April 18, 1979, letter, we reviewed VA's controls over drugs and found the same basic problems identified in our previous report still exist.

As requested by your office, we have not obtained written agency comments on the matters discussed in the report.

As arranged with your office, we have limited distribution of the report to VA. Also, as arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of the report. At that time, we will send copies to interested parties and make copies available to others upon request.

Sincerely yours,

Milton J. Socolar

Acting Comptroller General
of the United States

COMPTROLLER GENERAL'S REPORT TO THE SUBCOMMITTEE ON SPECIAL INVESTIGATIONS, HOUSE COMMITTEE ON VETERANS' AFFAIRS

REASSESSMENT OF VETERANS ADMINISTRATION'S CONTROLS OVER DRUGS: MILLION-DOLLAR PROBLEM STILL EXISTS

D I G E S T

The Veterans Administration (VA) spends millions of dollars for drugs used at its medical centers. However, VA does not have an effective program for controlling the use of, or accounting for, drugs dispensed by many of its pharmacy units.

There are two basic pharmacy systems used by VA to dispense drugs--the ward stock system and the unit dose system. In the ward stock system, most drugs are stored in the wards. In the unit dose system, drugs are delivered by the pharmacy to the wards at least once every 24 hours.

In 1975, GAO reviewed the effectiveness of both pharmacy systems and found that conversion to unit dose would decrease VA drug losses and improve patient care. At that time, GAO recommended that interim controls be placed in effect to strengthen drug security at ward stock centers, and a definite timetable be established for VA-wide conversion of ward stock centers to unit dose.

In a followup study, GAO found that VA's efforts to implement the recommended interim control measures were largely ineffective. No effective program exists for adequately controlling the use of drugs at the ward stock centers reviewed.

As a result, the same basic weaknesses previously identified still exist. Currently, VA estimates its annual drug dollar losses to be $17.4 million--$16.4 million from ward stock centers and $1.0 million from unit dose centers. (See pp. 9 to 17.)

In addition, controls over VA prescription filling procedures are weak. Pharmacy units have filled a large number of prescriptions despite the lack of required documentation. Closely related to this problem, unused VA prescription pads were readily accessible to unauthorized persons. Under such conditions, the possibility of VA pharmacies filling fraudulent prescriptions is great. Detection of such actions or other irregularities are almost impossible when required control procedures are not strictly enforced. (See pp. 18 to 21.)

Since GAO's 1975 report, VA has made some progress in converting its pharmacy units to unit dose. As of December 31, 1979, 45 of the 172 VA centers had unit dose systems in operation. However, 84 percent of all drugs dispensed in VA centers continue to be dispensed by the ward stock system. Moreover, since the end of fiscal year 1978, no funding has been provided for additional conversions. Agency officials attributed the lack of significant progress in converting to unit dose to inadequate resources and higher priorities. (See pp. 22 to 24.)

GAO believes that its prior recommendations are still valid and should be put into effect.

RECOMMENDATIONS

The Administrator of Veterans Affairs should direct the Chief Medical Director to take immediate steps to:

--Implement the interim ward stock control measures previously recommended by GAO.

--Revise the pharmacy manual issued by VA's central office to include the interim control measures.

--Require the VA Central Office Pharmacy Service to conduct periodic compliance checks at the medical center level.

--Take steps to ensure that the pharmacy units in VA medical centers do not fill prescriptions that are incomplete or inaccurate.

--Strengthen the security over prescription forms by requiring prescribing physicians and dentists to store prescription pads in locations that are not readily accessible to unauthorized persons.

Also, the Administrator should identify the amount of funding necessary to permit systemwide conversion of ward stock systems to unit dose and provide the resources required to the affected medical centers to achieve total conversion.

Contents

ABBREVIATIONS

DEA	Drug Enforcement Administration
GAO	General Accounting Office
VA	Veterans Administration

CHAPTER 1

INTRODUCTION

In an April 18, 1979, letter, the Chairman, House Veterans' Affairs Subcommittee on Special Investigations, advised us that they had received allegations of serious drug security problems at the Cleveland, Ohio, Veterans Administration (VA) Medical Center. Because of the seriousness of these allegations, the Chairman asked us to update our report, "Potentially Dangerous Drugs Missing in VA Hospitals--Different Pharmacy System Needed" (MWD-75-103, Sept. 30, 1975). Specifically, we were asked to obtain information on (1) the adequacy of VA's efforts to rectify problems identified in our prior report and (2) additional steps that should be taken to strengthen controls over drugs dispensed by VA pharmacies.

VA's Department of Medicine and Surgery administers VA's health care delivery system. As of December 31, 1979, VA provided care in 172 medical centers, 220 outpatient clinics, 92 nursing homes, and 16 domiciliaries. During fiscal year 1979, about 36 million prescriptions were filled by VA pharmacies. VA's total drug expenditure was $225 million in fiscal year 1979.

PHARMACY OPERATIONS IN VA

All of VA's medical care units have pharmacies. The center pharmacy is part of a total medication, or drug, distribution system that includes ordering and receiving medications into the center, supplying medications to wards, filling physician medication orders, administering medications to patients, and recording results of medication therapy.

There are two basic pharmacy systems used by VA to dispense drugs to inpatients--the traditional ward stock system and an improved system called unit dose. Under the ward stock system, a separate supply of most commonly used drugs is maintained in the wards at each nursing unit. (See photograph on p. 2.) Nurses are primarily responsible for coordinating all medication activity in the wards. The pharmacy's responsibility in the ward stock system primarily involves procuring medications from outside the center and distributing them to the wards. Pharmacy personnel, however, are not directly involved in patient medication.

WARD STOCK MEDICATION CABINET

Under the unit dose system, a pharmacist interprets the physicians' orders and records them in patient medication profiles in the pharmacy. Pharmacy personnel then prepare the doses and place them in medication carts containing an individual drawer or cassette for each patient. The pharmacy delivers the medications to the patient care areas at least once every 24 hours. Nurses administer the individually packaged drugs to the patients directly from the personal cassettes. The medications dispensed are immediately recorded in the patients' records, which are kept on the ward medication cart. (See photograph on p. 4.)

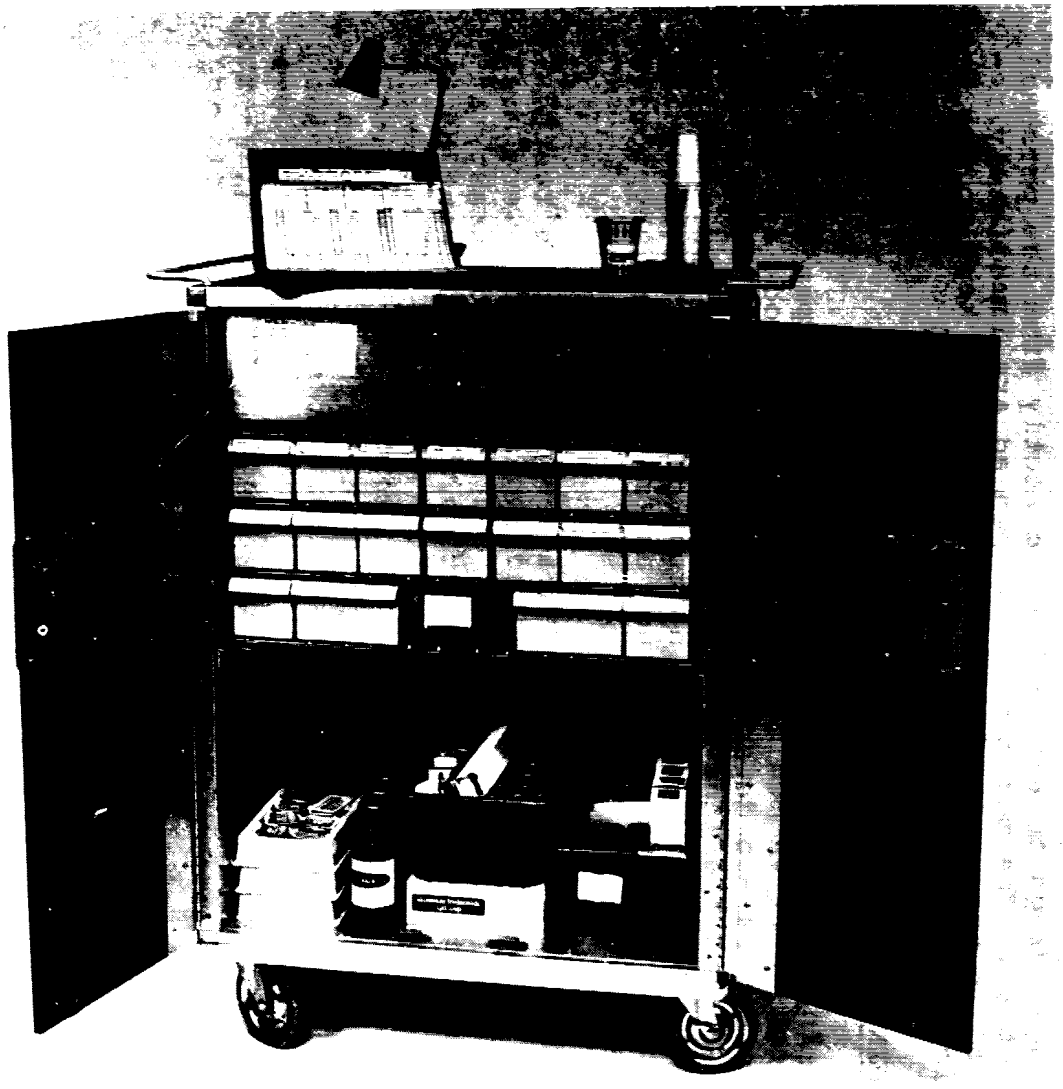
FINDINGS OF PRIOR REPORT

In our 1975 study, we reviewed both types of pharmacy systems at 11 VA medical centers--9 ward stock and 2 unit dose centers--to determine how effective the two systems were and whether the drug controls they provided were adequate. We reviewed certain drugs that have the potential for abuse and addiction, such as tranquilizers, hypnotics, and sedatives.

We found that large quantities of the drugs tested--24 to 57 percent of those withdrawn from stock--were missing at the nine ward stock medical centers. By contrast, at the two centers with unit dose systems, 9 to 12 percent of the drugs tested were unaccounted for. From our sample, we estimated that, in fiscal year 1974, as many as 1.1 million tablets and capsules, or 43 percent of those withdrawn from stock, could have been unaccountably missing at the nine ward stock centers. On the other hand, the two unit dose medical centers had about 30,000 tablets and capsules--about 11 percent of the selected drugs--estimated to be missing.

We reported that VA's drug losses could be reduced and patient care improved in VA medical centers by converting from ward stock pharmacy systems to unit dose. Recognizing that it may not have been economically feasible to convert all medical centers to unit dose in a short period of time, we recommended that the Administrator of Veterans Affairs:

--Establish a definite timetable for VA-wide conversion of ward stock centers to the unit dose system, with conversion priority given to the large general centers.



WARD UNIT DOSE STORAGE CART SHOWING INDIVIDUAL PATIENT CASSETTES

We also recommended that the Administrator of Veterans Affairs strengthen controls in the interim over drugs at ward stock centers by directing the centers to:

--Establish and enforce a ward stock quota system to reduce quantities of drugs kept in the wards.

--Maintain adequate records of drugs ordered by and delivered to the wards.

--Reconcile all order and receipt discrepancies.

--Designate not more than two nurses--one to be an alternate--on each ward to be responsible for maintaining ward stock quota levels and ordering from the pharmacy when necessary.

--Monitor drugs dispensed by periodically reviewing pharmacy and warehouse receipts and deliveries and ward stock quota levels.

--Establish periodic test procedures similar to those used in our review.

The illustration on the following pages show the improved ward stock ordering procedures we proposed in comparison to the ward stock system used by VA.

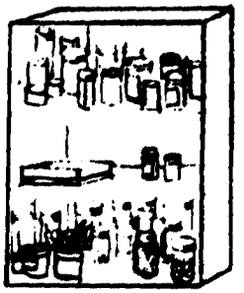
In commenting on our report, VA agreed on the need to strengthen controls over drugs at its ward stock centers to alleviate the problem of missing drugs. VA further agreed that the unit dose system for distribution of drugs provided greater drug controls and planned to increase the number of unit dose systems.

SCOPE OF REVIEW

Our review was performed at six VA medical centers--Prescott, Arizona; Brentwood, California; Long Beach, California; Allen Park, Michigan; Cleveland (Wade Park division), Ohio; and Cleveland (Brecksville division), Ohio--and the VA central office in Washington, D.C. Four of the centers were general hospitals and two--Brecksville and Brentwood--were psychiatric hospitals. All of the centers used ward stock systems. The two Cleveland centers were selected because of allegations about serious drug security problems at

PRESENT WARD STOCK ORDERING PROCEDURE

NURSE



A nurse checks the ward medicine

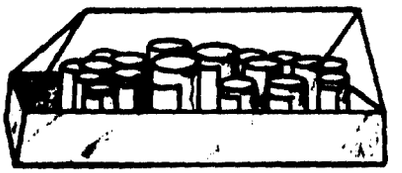
** WEAK POINT **
The ward retains no record of what has been ordered.

Makes out a "one original no copies" order for needed drugs.

&

Form is sent to the pharmacy.

A pharmacist or pharmacy technician fills the order.



The drugs and order sheet are sent back to the ward.

** WEAK POINT **
The pharmacist now has no record in the pharmacy of what was sent to the ward.

NURSE

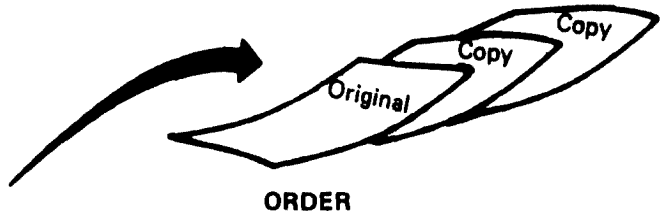
Nurse accepts delivery.

Form is later returned to the pharmacy.

** WEAK POINT **
Since this is a "one order sheet" system there is no chance to reconcile what was sent to the ward against what was received at the ward.

PROPOSED WARD STOCK ORDERING PROCEDURE

NURSE



ORDER

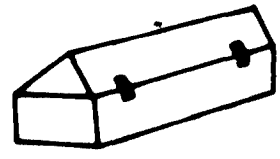
The nurse responsible for ordering drugs checks the ward medicine cabinet to see if the drugs are at assigned levels.

The nurse makes out and signs the order form — one original and two copies.

IF NOT

Original and one copy are sent to the pharmacy. The ward retains one copy so they know what's on order.

Pharmacist (or pharmacy technician with supervision) fills order; records quantities on the order form and keeps the copy of the order.



Drugs and original order are sent to the ward in a locked carrier.

NURSE

A nurse verifies the type and quantity of drugs in the order against the ward's copy of the drugs. Nurse then signs the original form.

Signed original is returned to the pharmacy.

Pharmacy's copy of the ward order and the original are compared to make sure they match. Any differences are reconciled.

these locations. The Brentwood and Long Beach centers were selected because they were reviewed by us in 1975, and we wanted to know if actions at the centers previously reviewed might be different than at those centers not previously reviewed. The remaining two locations, Prescott and Allen Park, were selected because they were medical centers within the boundaries of our two regional offices selected to perform the audit work. VA central office pharmacy officials said that the centers selected were typical of ward stock centers.

At each of the medical centers, we reviewed local policies and procedures relating to pharmacy operations, medication dispensing, and prescription practices to determine:

--The extent that VA implemented our prior recommendations.

--Whether problems identified in our earlier report still existed.

--The extent that prescriptions were filled by VA pharmacies without all the required documentation and identification to properly safeguard against pilferage and abuse.

We made physical inspections of warehouses, pharmacies, and nursing areas used to store and dispense drugs. We also analyzed selected records used to order and dispense drugs and sampled prescriptions filled by VA pharmacies. In addition, we interviewed medical center officials, including the director, chief of staff, chief of pharmacy service, chief of nursing service, and other medical center staff.

We interviewed VA central office officials from the Pharmacy Service and obtained information regarding the actions they had taken to implement our previous recommendations. We also reviewed a May 1980 report prepared by VA's Inspector General on VA's efforts to convert to the unit dose pharmacy system.

CHAPTER 2

CONTROLS OVER DRUGS ARE STILL WEAK

With few exceptions, interim drug controls we recommended in 1975 were not implemented by VA at the ward stock medical centers reviewed. To date, VA's efforts to strengthen drug controls have been largely ineffective. VA does not have an effective program for controlling the use of, or accounting for, drugs dispensed at ward stock centers. As a result, millions of potentially dangerous drugs dispensed annually in such centers are vulnerable to pilferage and abuse.

ACTIONS TAKEN BY VA

After our 1975 report, VA's Department of Medicine and Surgery issued four directives to all VA medical centers showing interim measures to strengthen drug controls at ward stock centers. Two of these directives, issued in April 1976, incorporated our recommendations as outlined on page 5.

On December 5, 1977, the VA central office issued a new Pharmacy Service Manual--M-2, Part VII, which provided the required operating standards and criteria to be followed by center pharmacies. However, the revised manual did not incorporate the interim ward stock drug control measures shown in the April 1976 directives.

The director of VA's Pharmacy Service told us that the interim measures were not incorporated in the revised pharmacy manual because it would have significantly delayed its issuance. He said that the manual had not been updated for 20 years and that 2 years were spent getting it through the review and approval processes. According to the director, there could be confusion at the medical center level regarding the need to implement the interim control measures because of the timing of the interim directives and issuance of the new pharmacy manual. The director said that the revised manual would be modified to incorporate the interim measures; however, he had no established timetable for the changes.

Pharmacy Service officials told us that they had not taken steps to evaluate the extent of medical center compliance with the required interim control measures. They said that the service has no authority to enforce the centers' compliance with required drug control procedures. Such authority primarily rests with management at the local level.

As discussed below, our followup review indicated that little had been done at the local level to improve drug controls.

SAME INTERNAL CONTROL WEAKNESSES AT WARD STOCK MEDICAL CENTERS

Although it has been over 4 years since we issued the 1975 report, our followup review showed that the same internal control weaknesses previously identified, continue to exist. With minor exceptions, the interim control measures issued by the VA central office in April 1976 have not been placed in effect. (See p. 6 for an illustration of the weak points in the ward stock system.)

While the directives had been received at each of the six centers we reviewed, little effort was made to put these policies and procedures in effect. Some officials believed that added personnel were necessary to implement the interim controls. Others said that, due to increasing pharmacy workloads, it would have been hard to put the required controls in effect.

THE CLEVELAND MEDICAL CENTER-- A CASE STUDY

The pharmacy operations at the Cleveland VA Medical Center are used to illustrate the types of internal control problems existing at ward stock medical centers. We found at the Cleveland center, which includes the Brecksville and Wade Park divisions, that there was not an adequate system of drug controls through the maintenance of records, monitoring of drug use, and audits of drug receipts and deliveries.

Drug ordering procedures provide few controls

Drug ordering procedures at the Cleveland center provide limited means to verify what was ordered against what was received.

At the Brecksville division, we found no single procedure for ordering drugs. Ward stocks of drugs are maintained through both automatic stock replenishment and drug orders completed by ward nurses on VA pharmacy order forms. These

procedures are used to maintain ward stock of both controlled 1/ and noncontrolled drugs other than schedule II substances and narcotics. Schedule II drugs are accounted for on a pill-by-pill basis.

Under the automatic replenishment system at Brecksville, ward personnel leave empty bottles outside medicine cabinets and pharmacy technicians replace them with full ones. After replacing the empty bottles, the pharmacy technician servicing the ward completes a VA pharmacy order form for the drugs and signs it "Automatic Stock Replenishment." Other drugs ordered by ward nurses are picked up from the pharmacy by ward personnel.

At the Wade Park division, drugs such as stimulants and depressants are usually ordered from the pharmacy by ward nurses on a VA pharmacy order form overprinted with the drug name. The pharmacy fills the order and the drugs are either delivered to the ward or picked up by nurses or other personnel. Also, controlled drugs other than schedule II drugs are sometimes automatically replenished by pharmacy personnel.

The interim control measures we recommended were delineated in the April 1976 VA central office directives, and required that (1) drug orders prepared by nurses be completed in triplicate, (2) the nurses keep one copy and send two to the pharmacy, and (3) the pharmacy retain a copy and send the original back to the nurse with the drugs. The nurses were to verify drugs received against the copy and to send only the original completed order form back to the pharmacy. In addition, each ward was to maintain an active file of completed drug orders for potential review.

These procedures were not being followed at the Cleveland center. When ordering drugs, most wards at both facilities did not complete orders in triplicate or keep duplicate copies of pharmacy order forms, as required. In some instances, orders were completed in single copy. As a result, the pharmacy copy, when signed as "received," was generally the only

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1/The Drug Enforcement Administration (DEA) classifies certain drugs (both narcotic and nonnarcotic) that have the potential for abuse and/or addiction into five control classes. Schedule I drugs have the highest potential for abuse and schedule V the least. Schedule I drugs have no medical use in treatment and are not available in hospitals. (See 21 CFR Section 1308.11.)

documentation available to indicate that drugs were actually received in the wards. Furthermore, the few wards that maintained duplicate copies did not properly file them. Some wards stored them in a drawer with other paper supplies, while others placed them loosely in the back of their narcotic administration book. In addition, we noted that these files contained some original and duplicate copies. The length of time that copies were kept ranged from 1 week to 6 months.

VA's April 1976 interim control directives specifically assigned the responsibility of ordering drugs to only head nurses and their designated alternates. However, at the Cleveland center any nurse or pharmacy technician could order drugs.

Because of the drug ordering procedures used at the Cleveland center, it is impossible to (1) reconcile discrepancies between the pharmacy and the wards, (2) establish responsibility for drug losses, or (3) accurately account for drugs dispensed.

Lack of control and accountability for drugs dispensed to wards

There is a need for increased control and accountability over controlled drugs dispensed from the Cleveland center pharmacies. Frequently abused drugs, such as Valium and Librium are often ordered, dispensed, and delivered to the wards by the same individual. Further, pharmacy orders for controlled drugs are frequently not signed by the drug orderer or receiver. In addition, at the Brecksville division, ward stocks of controlled drugs are maintained by both automatic replenishment and pharmacy orders completed by nurses--making control and accountability impossible.

At Brecksville, most pharmacy orders were not signed by the receiver of the drug. In fact, some were not signed by the orderer or receiver, and others had no signatures at all. Our review of pharmacy orders for July 1979 showed that there were no acknowledged receivers for 72 percent of the controlled drugs dispensed from the pharmacy. In addition, there were no acknowledged orderers or receivers for 16 percent of the controlled drugs dispensed and, more significantly, no acknowledged orderer, receiver, or dispenser for 4 percent of all controlled drugs dispensed during July 1979. Our analysis of completed pharmacy orders at Brecksville for controlled drugs dispensed during July 1979 follows.

Analysis of Completed Pharmacy Orders for Controlled Drugs July 1979

	Tablets	Percent (note a)
Total units of controlled substances dispensed	14,360	
Number of units dispensed without an acknowledged receiver	10,305	72
Number of units dispensed without an acknowledged orderer or receiver	2,350	16
Number of units dispensed without an acknowledged receiver or dispenser	1,785	12
Number of units dispensed without an acknowledged orderer, receiver, or dispenser (all signatures missing)	620	4
Number of units distributed without dispenser's signature only	300	2

a/Does not total 100 percent because some orders fell into more than one category.

About one-fourth of Brecksville's pharmacy orders for controlled drugs were automatically replenished and signed only by the pharmacy technician servicing the ward. This technician initiated the order, filled it, and delivered it to the wards.

At Brecksville there were few elements of control and accountability in the drug ordering and dispensing procedures. The facility used a modified automatic stock replenishment system, yet nurses were allowed to order large quantities of drugs without any question of need.

For example, one 27-bed ward--an alcohol treatment unit--received 300 Valium 10 mg. tablets during a 4-day period. The pharmacy filled an order for 100 tablets on July 10, 1979. On July 12, 100 more were dispensed through automatic replenishment. Again, on July 13, 100 more tablets ordered by ward personnel were received. In addition, 235 tablets of other controlled drugs were dispensed to the ward during the same 4-day period. The use of these drugs cannot be determined because the system lacks accountability. Federal,

State, and county drug abuse agencies estimated the street value of a single Valium 10 mg. tablet to be between $2 and $5 in the Cleveland area. Because of the high street value and potential for abuse of this drug, some community hospitals have severely restricted the use of Valium 10 mg., and at least one VA facility discontinued its use.

At Wade Park most pharmacy orders for controlled drugs were signed by the registered nurse ordering the drugs, the pharmacist filling the order, and the person receiving the order. Orders were generally received by registered nurses and licensed practical nurses.

However, our review of pharmacy orders completed in August 1979 showed that a substantial number of controlled drugs were ordered and delivered to the wards by the same pharmacy technician. In addition, several pharmacy orders were not signed by the drug receiver or the dispensing pharmacist. We also identified one possible fraudulent pharmacy order. The receiver's signature on the pharmacy order for 60 units of a controlled substance (Dalmane 30 mg.) could not be traced to anyone on the ward.

Ward stock quotas are needed

Contrary to the April 1976 interim control directives and the Cleveland center memorandum No. 119-4, requiring the establishment and enforcement of a ward stock quota system, we found no quotas in effect at either division of the Cleveland center. Pharmacy orders for hundreds of controlled drugs were filled without established needs for such quantities. As a result, excessive quantities of controlled drugs and narcotics were stored in the wards--making drug control and accountability more difficult.

For example, one ward at Wade Park used only 24 tablets of Tylenol with Codeine (narcotic) between August 2, 1979, and August 16, 1979. The drugs used during this period were ordered and received on July 14, 1979. The ward did not begin using these drugs until August 2, 1979; however, 25 additional tablets Tylenol with Codeine were ordered on July 31, and 25 more were ordered on August 3, 1979. If the usage level had remained relatively constant, the ward was maintaining a 4-week supply of this drug. Furthermore, there were at least two and up to five bottles of popular stimulants and depressants--Phenobarbital, Dalmane, Librium, Valium--in the medicine cabinet in this ward. Other drugs, such as Lomatil,

issued as far back as August 1978, were also in the cabinet. These excessive quantities were unnecessary because the pharmacy delivered drugs to the wards twice a week. In addition, drugs were picked up from the pharmacy 6 days a week.

In another example, one ward at Brecksville had four bottles (100 tablets each) of Librium 10 mg. in its medicine cabinet. In addition to Librium, there were several half-filled bottles of the most popular depressants and stimulants--Valium, Phenobarbital, Talwin, etc.

According to one pharmacy official, attempts were made to establish quotas immediately after the April 1976 directives were issued; however, they proved unsuccessful. This official stated that quota levels for drugs by ward were tested; however, no test results, proposed forms, quota sheets, or other data were available to document these actions. The head nurses we interviewed were unaware of any actions taken or planned to establish drug quota levels. Another pharmacy official told us that the required efforts to establish drug quotas were discontinued because the nursing service and pharmacy service could not arrive at a workable set of quotas. As a result, local pharmacy management concluded that established quotas were unmanageable and not responsive to changes and reorganization occurring in the wards.

No effort to monitor drug dispensing and utilization

According to the VA Pharmacy Manual, local pharmacies were required to document and maintain monthly ward inspections of all areas of the medical centers where drugs were used (ward, clinic, research area, etc.), and report any discrepancies which occurred since the previous inspection. The pharmacies were also required to assess drug use through controlled monitoring of drug receipts, deliveries, and administration. This included (1) reviewing patient charts and medication administration records to verify the need for various drugs kept in the nursing units, (2) comparing drug medication orders with drugs dispensed, and (3) reviewing the volume of drugs sent to the individual nursing units.

The Cleveland center was not adequately monitoring drug dispensing and utilization. Although thousands of controlled drugs are delivered to the pharmacies and dispensed to the wards, no effort was made to correlate drug receipts and

deliveries with actual (gross) drug use, or reconcile pharmacy ward orders with actual drug administration in the wards.

No internal audit review system

Each year, the Cleveland center purchases thousands of controlled drugs; however, we found no audits of records, receipts, and deliveries of these drugs. In addition, no physical inventory had been taken of the controlled drugs in the pharmacies, wards, and clinics.

The April 1976 directives required each VA center to provide an internal audit review system to periodically check files maintained by pharmacy, nursing, and supply services. In addition, the Cleveland center memorandum No. 119-4 established an audit committee to review records and spot check selected drug items as necessary.

However, there was no functional audit review committee at the Cleveland center. The only inspection activities at the center were monthly narcotic inspections which were limited to transactions involving narcotics and precious metals. These inspections did not cover transactions for the receipt, delivery, and administration of schedule III, IV, or V controlled drugs.

LIMITED CONTROL MEASURES TAKEN AT SOME CENTERS SHOW BENEFITS

Two of the medical centers we reviewed--Prescott and Allen Park--placed certain drugs with high abuse potential--Valium, Librium, and Dalmane--under tighter control.

At the Prescott center, spot drug utilization checks at selected wards showed high loss rates--20 to 90 percent--for these drugs. Local management required that these drugs be accounted for in the same way as narcotics--unit by unit. A comparison made by the pharmacy, during a 3-month period, showed that overall usage of all three drugs dropped after tighter controls.

Controls similar to those used by the Prescott center were applied in ordering, dispensing, and administering Valium and Librium at Allen Park. At Allen Park, ward orders for such drugs were accounted for by each dosage dispensed. Further, the pharmacy unit maintained a register (VA Form 10-2320) of Valium and Librium. The inventory of each drug is reduced by each ward order or prescription, and

each receipt is added to the ending balance. According to the chief of pharmacy at Allen Park, this action resulted in an estimated 40-percent reduction in the quantity of these drugs ordered by the wards. However, they could not provide data to adequately support their findings.

In addition to strengthening controls over Valium and Librium, Allen Park also eliminated Valium 10 mg. tablets from the medical center formulary. This drug was eliminated in July 1976, based on recommendations from the medical center's pharmacy and therapeutic agents committee. The committee's suggestion was based on the abuse potential of the medication and its high street value. It was reported to the committee that a single Valium 10 mg. tablet could be sold for $1.

CONCLUSIONS

VA does not have an effective program for insuring accountability and control over drugs dispensed at its ward stock medical centers.

Actions taken by the VA central office, to implement our prior recommendations that were specifically aimed at eliminating weak drug controls, have been largely ineffective. As a result, millions of potentially dangerous drugs continue to be dispensed without adequate safeguards or accountability.

We believe that our prior recommendations are still valid and should be implemented immediately.

RECOMMENDATIONS TO THE ADMINISTRATOR OF VETERANS AFFAIRS

We recommend that the Administrator direct the Chief Medical Director to take immediate steps to:

--Implement the interim ward stock control measures we previously recommended.

--Revise the pharmacy manual issued by VA's central office to include the interim control measures.

--Require the VA Central Office Pharmacy Service to conduct periodic compliance checks at the medical center level.

CHAPTER 3

COMPLIANCE WITH PRESCRIPTION CONTROLS NEEDS IMPROVEMENT

Closely related to the drug control weaknesses previously discussed, our review at the six VA medical centers also showed a high percentage of prescriptions filled that were incomplete or improperly prepared. Also, unused prescription pads were readily accessible to unauthorized persons and certain physician signature cards were incomplete or outdated. Under such conditions, prescription forgeries and other irregularities are difficult to detect.

VA AND DEA REQUIREMENTS

According to VA Manual M-2, part VII, properly completed prescriptions must contain the following information:

--A legible physician's signature.

--Physician's name (typed, stamped, or printed).

--Patient's name and address.

--Certain drug information.

For controlled drug prescriptions DEA and VA require that the physician's DEA registration number be shown on the prescription. Title 21 of the Federal Code of Regulations, section 1306-05(b), allows VA physicians to use a DEA registration number assigned to the center, plus a special internal center code number, in lieu of the practitioners' registration number. VA procedures require that prescriptions for controlled drugs be stamped with the letter "C" in red ink, not less than 1-inch high on the lower right corner. The medical centers in our review were not closely adhering to VA and DEA procedures governing the controls over prescriptions.

Many prescriptions filled by pharmacies had discrepancies or were incomplete

To determine the extent of compliance with the VA and DEA prescription requirements, we reviewed a sample of prescriptions which were filled in 1979, by the pharmacies at each of the six VA centers. Because of the various methods used to store and file prescriptions at each facility, it

was not practical to use scientific sampling techniques. Therefore, we randomly selected a sample of prescriptions covering various periods at each center.

The schedule below identifies the prescription information elements analyzed for compliance and shows the combined number of cases sampled with the number and percent of errors identified.

	Total sampled	All six medical centers Errors	Error rate (percent)
Physician signature missing, not legible, or not on file	579	179	31
Physician DEA or center registration number missing	579	196	34
Physician's name not typed, stamped, or printed	579	340	59
Prescription not stamped with "C"	579	71	12

We found that most of the prescriptions sampled had at least one error, as shown by VA center below.

	Prescriptions with at least one error (percent)
Brecksville	98
Wade Park	96
Allen Park	93
Long Beach	91
Brentwood	67
Prescott	50

Physician signature cards are outdated and inaccurate

VA procedures require that a physician's signature card, with an assigned DEA or center number, be on file. To validate physicians' signatures on prescriptions, VA's pharmacy staff

are required to compare the signature and center number with the signature card.

The maintenance of physician signature cards generally was poor at the six centers we reviewed. At one center, the pharmacy had no listing of medical center assigned or DEA numbers with the corresponding physician's name. Because of the poor condition of the signature files, the pharmacies may not be properly validating physicians' signatures to detect prescription forgeries or other irregularities.

We attempted to verify physicians' signatures and center numbers for each prescription reviewed. This was not possible in many cases--for the reasons shown on page 19. At one center, we identified two apparent forgeries that occurred because the pharmacy staff did not properly validate the physicians' signatures. Both apparent forged prescriptions appeared to be written by the same person. Even though an incorrect physician's name and center number was used, the prescriptions were filled.

Officials at some of the medical centers told us that, because of the large number of physicians, interns, residents, and consultants that practice at the centers combined with high staff turnover, maintenance of a current and complete file of signature cards is difficult.

Unused prescription pads were easily accessible to unauthorized users

At the medical centers we visited, unused prescription pads were easily accessible to unauthorized persons. For example, at Wade Park, we observed that prescription pads were left on top of desks in unoccupied physicians' offices that were adjacent to patient waiting rooms and to main hallway traffic areas. According to a security police officer at the Cleveland center, it is common for many physicians to leave prescription pads unattended in their offices. The officer said that he periodically walks through the center and picks up "hundreds" of prescription forms. At the time of our review at this center, the officer, accompanied by our auditor, picked up 30 unused prescription forms from one physician's office.

At the Long Beach Medical Center, we noted that the chief of staff issued a memorandum to all physicians telling them that several forged narcotic prescriptions had recently been received by the pharmacy. He told the physicians that it was

imperative that they maintain proper security of prescription pads and store the pads in locations where they are not readily accessible to unauthorized users.

Similar conditions were found by the VA Inspector General. A May 1980 report noted that during a half-hour walkthrough in one VA medical center, a VA auditor picked up 21 unattended prescription pads. It also noted that, by stealing prescription pads and forging a physician's signature, a VA employee obtained 50 original prescriptions and 195 refills from a medical center pharmacy during 1975-79. Another employee at the same facility admitted doing the same. In total, these two employees had 383 unauthorized prescriptions filled.

CONCLUSIONS

Compliance with security measures, established by DEA and VA to safeguard against prescription forgeries and other irregularities, was poor at the VA medical centers we reviewed. Given these conditions, the possibility for improper use of drugs is great. In view of the high turnover of medical staff, we believe that frequent reminders to prescribing physicians should be issued by local medical center directors.

RECOMMENDATIONS TO THE ADMINISTRATOR OF VETERANS AFFAIRS

We recommend that the Administrator direct the Chief Medical Director to:

--Take steps to ensure that pharmacy units in VA medical centers do not fill prescriptions that are incomplete or inaccurate.

--Strengthen the security over prescription forms by requiring prescribing physicians and dentists to store prescription pads in locations that are not readily accessible to unauthorized persons.

CHAPTER 4

SOME PROGRESS IN UNIT DOSE CONVERSION--FUTURE IS UNCERTAIN

Since issuance of our prior report, VA has made some progress in converting its ward stock medical centers to unit dose. As of December 31, 1979, 45 of the 172 VA centers are using unit dose pharmacy systems. However, since the end of fiscal year 1978, no funding has been provided for additional conversions. Agency officials attributed the lack of significant progress in converting to the unit dose system to inadequate resources and higher priorities.

STATUS OF CONVERSION EFFORTS

VA has increased the number of unit dose medical centers from 7, at the time of our 1975 review, to 45 centers. Thus, 26 percent of the 172 VA centers now have unit dose systems. The remaining 127 centers (74 percent) continue to use the ward stock system. A more relevant measure of unit dose coverage, however, is units of drugs dispensed. For example, in 1976 about 6 percent of all drugs dispensed to medical center patients were unit dose. By 1979, this increased to 16 percent. Thus, 84 percent of all drugs provided to medical center patients were dispensed by ward stock systems.

STUDIES ON CONVERSION BENEFITS

After our 1975 report, studies were made to evaluate the benefits of converting ward stock VA centers to unit dose. The studies were directed at the drug cost savings that would accrue if the unit dose systems were used in VA centers.

CSF, Ltd., contract study

VA central office awarded a contract to CSF, Ltd., to perform an evaluation of the unit dose system. The primary objective of the study, completed in October 1977, was to conduct a cost/benefit analysis of the conversion from the ward stock system to unit dose. The study, which was performed at five ward stock and five unit dose medical centers, showed a 2 to 1 benefit ratio in favor of unit dose. According to the study, net benefits of $14 million over a 25-year period would be achieved if the five ward stock centers were converted to unit dose.

The report also noted that medication costs are substantially reduced under the unit dose system, as a result of decreased medication losses. According to the report, the average loss rate in the ward stock centers surveyed was 33 percent, while the unit dose centers showed 14 percent. However, the report noted, to convert to unit dose in the five centers surveyed would require a substantial outlay of initial capital plus a projected increase in recurring budget costs. According to the report, this outlay would be offset, to some extent, by reduced nursing time.

VA central office evaluation

In addition to the contract study, the Central Office Pharmacy Service prepared an analysis of the benefits of unit dose conversion. In this study, two VA centers were compared before and after conversion to unit dose. One center had 303 beds and the other had 757 beds. The analysis showed that significant one-time inventory savings were realized upon conversion. The inventory reduction was $13,868 at the smaller center and $43,980 at the larger center. The analysis showed also that the average number of doses dispensed per patient day decreased from 18 to 6, at the smaller center, and from 21 to 7, at the larger. Overall, the conversion to unit dose resulted in a combined annual savings at both centers of about $575,000. In addition to the drug cost savings, the analysis showed savings in nursing and clerical staff and fewer medication errors.

CONVERSION TIMETABLE

Since 1975, VA central office has established several timetables for the conversion of all VA medical centers to unit dose. Although a total of 45 centers were funded for conversion through fiscal year 1978, no conversions have been funded since that time. On June 1, 1978, VA established a timetable that provided for the conversion of 10 centers annually, beginning in fiscal year 1980 and continuing through fiscal year 1982. In June 1979, VA's Department of Medicine and Surgery took the position that all new and replacement centers would be constructed with unit dose pharmacy systems. However, conversion to unit dose at existing ward stock centers depends on the willingness of center directors to redirect staffing and funding for this purpose.

According to the May 1980 report prepared by VA's Inspector General, it is doubtful that the conversion timetable will be achieved, particularly in view of the present

rate of conversion. The report noted that VA's annual drug losses from ward stock systems were estimated to be about $16.4 million. These losses were primarily attributed to the absence of the unit dose system, according to a VA official. In contrast, VA's annual drug losses from unit dose systems were estimated to be about $1 million, according to the report.

VA's Inspector General concluded that VA could significantly reduce inpatient medication losses and medication errors by complete conversion to unit dose.

CONCLUSIONS

VA has made some progress in converting ward stock medical centers to unit dose through fiscal year 1978. Since then, little progress has been made. It appears to us that any significant increase in the number of unit dose conversions is questionable. Without specific funding local center direc tors will find it hard to convert existing ward stock pharmacy systems to unit dose.

RECOMMENDATION TO THE ADMINISTRATOR OF VETERANS AFFAIRS

We recommend that the Administrator identify the amount of funding necessary to permit systemwide conversion of ward stock systems to unit dose and provide the resources required to the affected medical centers to achieve total conversion.

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