Audit Report on the Inventory Controls of Kings County Hospital Center, New York City Health and Hospitals Corporation, over Noncontrolled Drugs and Medical and Surgical Supplies

MG03-059A

June 30, 2003
To the Citizens of the City of New York

Ladies and Gentlemen:

In accordance with the Comptroller’s responsibilities contained in Chapter 5, § 93, of the New York City Charter, my office has reviewed the internal controls of Kings County Hospital Center, New York City Health and Hospitals Corporation, over noncontrolled drugs and medical and surgical supplies.

The results of our audit, which are presented in this report, have been discussed with officials from Kings County Hospital Center and the Health and Hospitals Corporation, and their comments have been considered in the preparation of this report.

Audits such as this provide a means of ensuring that adequate internal controls are maintained over inventory to properly safeguard assets, thereby reducing the risk of misappropriation and theft.

I trust that this report contains information that is of interest to you. If you have any questions concerning this report, please e-mail my audit bureau at audit@comptroller.nyc.gov or telephone my office at 212-669-3747.

Very truly yours,

William C. Thompson, Jr.

Report: MG03-059A
Filed: June 30, 2003
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The City of New York
Office of the Comptroller
Bureau of Management Audit

Audit Report on the Inventory Controls of
Kings County Hospital Center,
New York City Health and Hospitals Corporation,
Over Noncontrolled Drugs and
Medical and Surgical Supplies

MG03-059A

AUDIT REPORT IN BRIEF

The New York City Health and Hospitals Corporation (HHC) provides City residents with comprehensive medical and mental health services, as well as treatment for substance abuse, regardless of ability to pay. HHC hospitals, clinics, and other facilities require substantial quantities of drugs and medical and surgical supplies, and must ensure that items are in stock when needed. Each facility stores its perpetual inventory records in the HHC computerized OTPS (Other Than Personal Services) procurement management system. During Fiscal Year 2002, Kings County Health Center (Kings County Hospital), the facility covered by this audit, spent approximately $13 million for drugs (controlled and noncontrolled) and $6 million for medical and surgical supplies. Our audit objective was to review the internal controls over Kings County Hospital’s inventory of noncontrolled drugs and medical and surgical supplies.

Audit Findings and Conclusions

Kings County Hospital has inadequate controls over its inventory of noncontrolled drugs and medical and surgical supplies. Our review of its inventory practices disclosed significant weaknesses in its issuing, recording, security, and maintenance of both inventories. Kings County Hospital failed to institute and enforce the controls necessary to ensure the proper safeguarding and accounting of its inventories.

Our inventory count of sampled noncontrolled drugs revealed a gross discrepancy of 71 percent between the amounts on hand and the amounts recorded in OTPS. Our inventory count of sampled medical and surgical supplies revealed a gross discrepancy of 91 percent between the amounts on hand and the amounts recorded in OTPS. Furthermore, approximately four months prior to our inventory count, the Kings County Hospital officials made adjustments of $6.1 million and $2.5 million, respectively, to its Fiscal Year 2002 year-end inventory count of
noncontrolled drugs and medical and surgical supplies, without investigating the cause of the discrepancies.

These inventory discrepancies may result from the extensive record-keeping and security weaknesses that we found. Because of those weaknesses, Kings County Hospital inventory records for noncontrolled drugs and medical and surgical supplies cannot be relied on to ensure that adequate stock levels are maintained and that loss from thefts and misappropriation would be detected.

We also found that there was unrestricted access to the Pharmacy stockroom, noncontrolled drugs were issued from the stockroom without proper authorization, and there were inadequate controls over the expired drugs as well as inadequacies in the related checks and credits that can be received for returnable expired drugs. In addition, we found that Materials Management took up to two months to record in OTPS the issuances of medical and surgical supplies from the stockroom. Besides the delay in entering information, we found that there were many discrepancies between the data in the OTPS system and in the Scan Module system—the computer system used to determine the medical and surgical supplies needed in the supply rooms in the patient units. In many cases, the two systems had different catalog numbers for the same item.

**Audit Recommendations**

The report makes 20 recommendations, some of which are listed below. Kings County Hospital officials should:

- Require periodic physical counts of the inventory to verify the accuracy of its inventory records, and investigate all variances to determine their cause.

- Ensure that appropriate adjustments are made to the OTPS system to accurately reflect the inventory of noncontrolled drugs and of medical and surgical supplies. Officials should review, approve, and document all adjustments.

- Ensure that a written authorized requisition is obtained for all noncontrolled drugs issued from the Pharmacy stockroom. The requisition should include the names and quantities of drugs requested, the names of subdivision personnel requesting the drug, and the authorizing signature.

- Restrict access to the Pharmacy stockroom to authorized stockroom personnel.

- Adequately safeguard expired drugs before they are removed from the hospital.

- Ensure that all checks and credits for returnable drugs are received by the hospital and, if applicable, applied to vendor payments.

- Ensure that all issues from the Materials Management stockroom are immediately entered in the OTPS inventory system.
- Ensure that the Scan Module system has up-to-date catalog numbers for medical and surgical supplies and that those numbers are identical to the catalog numbers in OTPS.

**HHC Response**

The matters covered in this report were discussed with Kings County Hospital officials during and at the conclusion of this audit. A preliminary draft report was sent to HHC officials on May 28, 2003 and was discussed at an exit conference on June 11, 2003. We submitted a draft report to HHC officials with a request for comments on June 12, 2003, with a request for comments. We received a written response from HHC officials on June 25, 2003.

HHC officials agreed with the findings and either have implemented or are in the process of implementing all 20 recommendations. However, they disagreed with the auditors’ representation of the inventory discrepancies in the aggregate, in which inventory overages and shortages are combined. They stated, “This is neither fair nor appropriate and can be misleading. Overages and shortages should be netted against each other or presented separately, to properly reflect the value of inventory variances.”

**Auditor Comment**

This report fairly and accurately presents the discrepancies found in the inventories of noncontrolled drugs and medical and surgical supplies in Kings County Hospital. The combined discrepancies represent the total (absolute) value of the inaccuracies in the inventories. When ensuring the accuracy of inventory, each unjustified shortage and overage is considered a discrepancy. To present a complete picture of the conditions found, the combined discrepancies, as well as the shortages and overages, should be presented in the report. To net the shortages and overages, as suggested by HHC, would distort the effect of the internal control weaknesses noted.
INTRODUCTION

Background

The New York City Health and Hospitals Corporation (HHC) provides City residents with comprehensive medical and mental health services, as well as treatment for substance abuse, regardless of ability to pay. Within its seven regional health care networks, HHC operates 11 acute-care hospitals; four long-term care facilities; six diagnostic and treatment centers; one certified home health agency; and a large number of community-based primary care, dental, and child health clinics.

HHC hospitals, clinics, and other facilities require substantial quantities of drugs and medical and surgical supplies, and must ensure that items are in stock when needed. HHC has a computerized OTPS (Other Than Personal Services) procurement management system that stores perpetual inventory records. To maintain and update its records as necessary, each facility has access to the system, and the system, based on minimum and maximum quantities, includes a reorder point for each item at each facility.¹ The OTPS system can generate a purchase requisition when the reorder point is reached. The requisitions can be printed out at each facility’s Pharmacy Department or Materials Management Department—the entities that order and maintain inventories of drugs and medical and surgical supplies. HHC requires that each facility perform a physical inventory at the end of each fiscal year.

Kings County Health Center (Kings County Hospital), the facility covered by this audit, is part of the HHC Central Brooklyn Family Health Network (Network). At Kings County Hospital, the Assistant Director of the Pharmacy stockroom purchases the drugs needed by the Pharmacy stockroom and various Pharmacy subdivisions. To order medical and surgical supplies, the Coordinating Manager of the Central Stores sends requisitions of items needed to the hospital Purchasing Department. That department enters the data in the OTPS system, and purchase orders are printed. The Associate Director of the Purchasing Department reviews and approves the purchase orders.

Drugs are categorized into two groups: controlled and noncontrolled. Controlled drugs are regulated by the Drug Enforcement Administration (DEA), a federal law-enforcement agency that has strict requirements for storage, record keeping, and dispensing of controlled drugs. The DEA, however, does not regulate noncontrolled drugs. This audit reviews the inventory controls put in place by HHC and Kings County Hospital over noncontrolled drugs and medical and surgical supplies.

During Fiscal Year 2002, the total cost of drugs (controlled and noncontrolled) purchased by the Pharmacy Department was approximately $13 million. The total for medical and surgical supplies purchased by the Materials Management Department (Materials Management) was about $6 million. The value of the inventory of all drugs in the Pharmacy Department stockroom at the end of Fiscal Year 2002 was $538,776, and the value of the medical and surgical supplies in the Materials Management stockrooms was $1,103,300.

¹ The reorder point is reached when the quantity of a stored item is so depleted that it is necessary to reorder.
All shipments to Kings County Hospital are delivered to the hospital receiving dock. When shipments for the Pharmacy are unloaded, the delivery person and one or more Pharmacy stockroom employees take the delivery to the stockroom. The Pharmacy personnel check each shipment for accuracy and then enter the items in the OTPS system. For medical and surgical shipments, hospital receiving personnel check the shipments for accuracy and enter the items in the OTPS system.

The Pharmacy stockroom receives requests for noncontrolled drugs from the 10 subdivisions of the Pharmacy Department. The names and functions of these subdivisions are listed in Appendix I of this report.

Materials Management stores medical and surgical supplies (i.e., intravenous solutions, syringes, needles, bed linens, and tubing) in three stockrooms. Each unit of the hospital has one or more supply rooms where medical and surgical supplies are stored in bar-coded bins. Each day the stockroom staff inspects the inventory levels in assigned supply rooms. They use scan-guns to scan bar codes of the empty bin compartments. The scan-guns register the maximum capacity of each bin compartment that must be replenished.

Objective

Our audit objective was to review the internal controls over Kings County Hospital’s inventory of noncontrolled drugs and medical and surgical supplies.

Scope and Methodology

The scope of this audit was Fiscal Year 2003. To achieve our audit objectives, we reviewed the following HHC documents and procedures: Inventory Verification for Fiscal Year 2002 and the inventory procedure manual; Operating Procedure No. 140-2, Repackaging of Drugs, Proper Labeling and Maintaining of Appropriate Records; Operating Procedure No. 140-1, Requisitioning Drugs and Pharmaceuticals; Operating Procedure No. 140-6, Requisitioning of Drugs and Pharmaceuticals for Ward, Clinic, Emergency Room and All Other Medication Areas; Operating Procedure No. 110-24, Unauthorized Procurements; Operating Procedure No. 110-1, Procurement of Supplies, Services and Equipment; and the Automated Materials Management Inventory System Manual. We also reviewed the contract between HHC and Guaranteed Returns, Inc., for the services associated with disposing of expired drugs and obtaining credit, where applicable. We interviewed hospital officials, including the Associate Executive Director of Materials Management and Receiving and the Director of the Pharmacy.

To familiarize ourselves with the operations at the Pharmacy Department, we performed a walk-through of all areas of the Pharmacy with the Pharmacy Director and three Associate Directors, and obtained additional information about the Pharmacy’s operations at each Pharmacy subdivision. We also interviewed the personnel of several Pharmacy subdivisions.

Accompanied by the Assistant Executive Director of Materials Management and Receiving Department and the Coordinating Managers of Receiving and Central Stores, we
performed a walk-through of the intake and distribution system for medical and surgical supplies—from the receiving dock, to the storerooms, to the supply rooms on the hospital floors. We traced the flow of medical and surgical supplies from the time shipments arrive at the receiving dock until the items reach the hospital floors.

We reviewed the policies and procedures issued by the Pharmacy Department covering the following subjects: drug purchasing and maintenance of adequate inventory levels; receiving medication from vendor, storing it in the stockroom, and issuing it to the various subdivisions of the Pharmacy; re-packing of medication; administration of medication to in-patients and out-patients; disposition of unused and expired drugs; and the annual count of the inventory in the Pharmacy stockroom.

We also reviewed the policies and procedures of the Materials Management Department that govern the following operations: acquisition of supplies, equipment, and services; receiving of supplies and recording the receipts; storing and maintenance of the inventory in storerooms; Scan Module System operations; issuing intravenous (I.V.) solutions to nursing units; and supplying and maintenance of the storage areas on the patients’ units.

To determine whether the above policies and procedures were actually followed, we performed observations at each area operated by the Pharmacy Department and Materials Management.

We observed, at each Pharmacy subdivision, the loading of carts and patient cassettes, and the receipt and storage of noncontrolled drugs ordered from the stockroom. We also accompanied Materials Management personnel when they inspected the inventory levels of supplies in the supply rooms, then assembled and delivered the supplies.

To assess the hospital’s internal controls, we prepared detailed flow charts of the movement of noncontrolled drugs and medical and surgical items. We observed how the shipments arrived at the receiving dock, reviewed the logbook entries, and traced each shipment to its final destination by comparing the entries in the receiving logbook with the delivery receipts signed by the end-users.

To determine whether accurate inventory records are maintained, we performed a physical inventory count of noncontrolled drugs and medical and surgical supplies. We randomly selected our sample from the OTPS perpetual inventory records, which we obtained from HHC in hard-copy form and on diskette. We adjusted the OTPS recorded inventory balances to reflect the issuances and receipts that were not yet recorded at the time of our inventory count. For the noncontrolled drugs inventory, we randomly selected 283 items from a population of 1,321. We then compared the inventory count results to the adjusted recorded balances. For the medical and surgical supplies inventory, we randomly selected 270 items from a population of 1,218. We then compared our inventory count results with the adjusted, recorded balances.

This audit was conducted in accordance with generally accepted government auditing standards (GAGAS) and included tests of the records and other auditing procedures considered
necessary. It was performed in accordance with the audit responsibilities of the City Comptroller as set forth in Chapter 5, § 93, of the New York City Charter.

**Discussion of Audit Results**

The matters covered in this report were discussed with Kings County Hospital officials during and at the conclusion of this audit. A preliminary draft report was sent to HHC officials on May 28, 2003 and was discussed at an exit conference on June 11, 2003. We submitted a draft report to HHC officials with a request for comments on June 12, 2003, with a request for comments. We received a written response from HHC officials on June 25, 2003.

HHC officials agreed with the findings and either have implemented or are in the process of implementing all 20 recommendations. However, they disagreed with the auditors’ representation of the inventory discrepancies in the aggregate, in which inventory overages and shortages are combined. They stated, “This is neither fair nor appropriate and can be misleading. Overages and shortages should be netted against each other or presented separately, to properly reflect the value of inventory variances.”

**Auditor Comment**

This report fairly and accurately presents the discrepancies found in the inventories of noncontrolled drugs and medical and surgical supplies in Kings County Hospital. The combined discrepancies represent the total (absolute) value of the inaccuracies in the inventories. When ensuring the accuracy of inventory, each unjustified shortage and overage is considered a discrepancy. To present a complete picture of the conditions found, the combined discrepancies, as well as the shortages and overages, should be presented in the report. To net the shortages and overages, as suggested by HHC, would distort the effect of the internal control weaknesses noted.
FINDINGS AND RECOMMENDATIONS

Kings County Hospital has inadequate controls over its inventory of noncontrolled drugs and medical and surgical supplies. Our review of its inventory practices disclosed significant weaknesses in its issuing, recording, security, and maintenance of both inventories. Kings County Hospital failed to institute and enforce the controls necessary to ensure the proper safeguarding and accounting of its inventories.

We found the following discrepancies and areas of concern:

- Our count of sampled noncontrolled drugs revealed a gross discrepancy of 71 percent between the amounts on hand and the amounts recorded in OTPS.
- Our count of sampled medical and surgical supplies revealed a gross discrepancy of 91 percent between the amounts on hand and the amounts recorded in OTPS.
- Without investigating the cause of the discrepancies, the Kings County Hospital officials made adjustments of $6.1 million and $2.5 million, respectively, to its Fiscal Year 2002 year-end inventory count of noncontrolled drugs and medical and surgical supplies.
- Access to the Pharmacy stockroom was unrestricted.
- Controls over expired drugs were inadequate.

These discrepancies may result from the extensive record-keeping and security weaknesses we found. Because of those weaknesses, Kings County Hospital inventory records for noncontrolled drugs and medical and surgical supplies cannot be relied on to ensure that adequate stock levels are maintained and loss from thefts and misappropriation would go undetected. During Fiscal Year 2002, the total cost of drugs (controlled and noncontrolled) purchased was approximately $13 million and the total cost of medical and surgical supplies purchased was about $6 million.

Inaccurate Inventory Records at the Pharmacy Stockroom

We conducted a physical inventory count on October 17 and 18, 2002, of a random sample of 283 noncontrolled drugs of the 1,321 listed in the population and compared our results to the balances recorded in OTPS on the morning of October 17, 2002. For 200 (70.67%) of the 283 items, the inventory count differed from the OTPS recorded inventory: for 116 items, there was less in the inventory (valued at $92,445) than was recorded, and for 84 items, there was more in the inventory (valued at $135,953) than was recorded. We are therefore 95 percent confident (+ or - 4.7%) that there were discrepancies (both shortages and overages) in the inventory records for 934 of the 1,321 items in the population of noncontrolled drugs (542 shortages and 392 overages). We also estimated that the dollar value of the discrepancies was $1,533,861, ($622,125 in shortages and $911,736 in overages), as shown in Table I, below.

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2 We adjusted the OTPS balances to reflect issuances and receipts not yet recorded at the time of our count.
TABLE I

Estimated Dollar Value of Discrepancies Found in The Inventory for Noncontrolled Drugs

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Number of Items/ Percentage</th>
<th>Dollar Value/ Percentage</th>
<th>Number of Items/ Percentage</th>
<th>Dollar Value/ Percentage</th>
<th>Number of Items/ Percentage</th>
<th>Dollar Value/ Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Discrepancies</td>
<td>116</td>
<td>$92,445</td>
<td>84</td>
<td>$135,953</td>
<td>200</td>
<td>$228,398</td>
</tr>
<tr>
<td>(b) Items Sampled (Recorded Value)</td>
<td>283</td>
<td>$79,856</td>
<td>283</td>
<td>$79,856</td>
<td>283</td>
<td>$79,856</td>
</tr>
<tr>
<td>(c) Percent of the Discrepancies (a/b)</td>
<td>40.99%</td>
<td>116%</td>
<td>29.68%</td>
<td>170%</td>
<td>70.67%</td>
<td>286%</td>
</tr>
<tr>
<td>(d) Recorded Value of the Total Inventory</td>
<td>1,321</td>
<td>$536,315</td>
<td>1,321</td>
<td>$536,315</td>
<td>1,321</td>
<td>$536,315</td>
</tr>
<tr>
<td>(e) Estimated Number and Dollar Value of Discrepancies (c X d)</td>
<td>542</td>
<td>$622,125</td>
<td>392</td>
<td>$911,736</td>
<td>934</td>
<td>$1,533,861</td>
</tr>
</tbody>
</table>

Examples of noncontrolled drugs for which there was a different quantity on hand than that recorded in OTPS are shown in Table II, following.

TABLE II

Examples of Noncontrolled Drugs with Differences Between the Inventory Count and Inventory Records

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Quantity Recorded</th>
<th>Auditor’s Count</th>
<th>(Shortage)/ Overage</th>
<th>Dollar Value of (Shortage)/ Overage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carboprost Tromethamine 250 ($423.71 per package)</td>
<td>49</td>
<td>5</td>
<td>(44)</td>
<td>($18,643.24)</td>
</tr>
<tr>
<td>Estrogenic Subs Conj Inj 25 ($21.32 per vial)</td>
<td>405</td>
<td>0</td>
<td>(405)</td>
<td>($8,634.60)</td>
</tr>
<tr>
<td>Simvastatin Tablets 40MG UOU 30 ($32.910 per package)</td>
<td>202</td>
<td>0</td>
<td>(202)</td>
<td>($6,647.82)</td>
</tr>
<tr>
<td>Linezolid Inj 600MG/300ML ($64.36 per bottle)</td>
<td>90</td>
<td>0</td>
<td>(90)</td>
<td>($5,792.13)</td>
</tr>
<tr>
<td>Halothane Liquid F/Anesthesia ($166.56 per case)</td>
<td>33</td>
<td>2</td>
<td>(31)</td>
<td>($5,163.36)</td>
</tr>
<tr>
<td>Diphtheria/Pertussis/Tetanus ($77.20 per vial)</td>
<td>(470)</td>
<td>100</td>
<td>570</td>
<td>$44,004.00</td>
</tr>
<tr>
<td>Fluconazole I.V. Inj 200MG ($457.73 per bag)</td>
<td>(60)</td>
<td>0</td>
<td>60</td>
<td>$27,463.80</td>
</tr>
<tr>
<td>Chlorpromazine Inj. 25MG/ML ($68.99 per vial)</td>
<td>0</td>
<td>150</td>
<td>150</td>
<td>$10,348.50</td>
</tr>
<tr>
<td>Esmolol HCL Inj 250MG/ML ($805.70 per box)</td>
<td>(9)</td>
<td>0</td>
<td>9</td>
<td>$7,251.30</td>
</tr>
</tbody>
</table>
We provided the Director of the Pharmacy Department with a list of all the discrepancies. We received no explanations or comments from the Director that would account for any of the differences.

Approximately four months prior to our inventory count, Pharmacy officials conducted their Fiscal Year 2002 year-end inventory count. Our review disclosed that substantial adjustments were made to the inventory balances recorded in OTPS. Of 1,392 controlled and noncontrolled drugs listed in OTPS, adjustments were made to 891 drugs (64%), valued at $6,141,380: 497 adjustments, totaling $4,675,433, were made to lower the recorded quantity and value of drugs; and 394 adjustments totaling $1,465,947 were made to increase the recorded quantity and value of drugs.

The Assistant Director of the Pharmacy stockroom stated that the adjustments were made to inventory balances recorded in OTPS to match the physical year-end balance in the inventory count.

The error rate we found during our inventory count and the large fiscal year-end adjustments made by Kings County Hospital Pharmacy officials are indications that the internal controls over noncontrolled drugs are inadequate and a perpetual inventory system is not being maintained. Furthermore, Pharmacy officials did not investigate the discrepancies. Making adjustments to inventory records without proper investigation and adequate justification removes a key control to safeguarding assets. Also, adjusting the inventory balances at fiscal year end makes loss due to theft and misappropriation more difficult to detect.

**Internal Control Weaknesses over Noncontrolled Drugs**

During our observations in the Pharmacy stockroom we found inadequate controls over the issuance and receipt of noncontrolled drugs. Noncontrolled drugs were issued from the Pharmacy stockroom to its subdivisions and directly to patient units without requiring authorized written requisitions; and issuances of noncontrolled drugs were inaccurately recorded, if recorded at all. The Pharmacy stockroom ordered and received noncontrolled drugs from vendors before it prepared the purchase orders; and receipt of noncontrolled drugs was often misclassified and recorded in OTPS under a wrong catalog number. In addition, access to the pharmacy stockroom was unrestricted; and there was inadequate control over expired drugs. These internal control weaknesses are discussed in the following sections.

**Noncontrolled Drugs are Issued Without Proper Requisitions**

The Pharmacy stockroom issued noncontrolled drugs to the Pharmacy subdivisions without requiring authorized written requisitions. At times, drugs were issued based on verbal requests or requests written on small pieces of paper or post-it notes. Therefore, there is no documentation to verify that the requisition of noncontrolled drugs was approved and authorized. The Pharmacy stockroom also issued noncontrolled drugs directly to nurses and patient units, thereby bypassing the Pharmacy subdivisions.
Noncontrolled drugs can be issued in two ways. Drugs that are unique to a specific Pharmacy subdivision are purchased by the Assistant Director of the Pharmacy stockroom upon request. These drugs are transferred to the requesting subdivision after delivery is checked for accuracy.

Drugs that are of general use are issued directly from the stockroom. For these noncontrolled drugs, subdivision personnel identify the quantity of drugs needed in weekly issue books. These are OTPS printouts that list all the drugs used by a particular subdivision. The Pharmacy sends the printouts to the subdivisions so that the quantity needed for the week can be indicated next to the drug listed. When the printout is returned to the stockroom, the requested drugs are prepared for distribution and the actual quantity of drugs issued is noted in the issue book. Any additional drugs issued during the week are also noted in the subdivisions’ issue books. At the end of each weekly cycle, the quantity of issued drugs are totaled and entered in OTPS perpetual inventory system.

We found that the Pharmacy stockroom did not require the weekly issue books to be signed off by authorized personnel from the Pharmacy subdivisions. Such a signature would indicate approval for the requested medication. As for drugs unique to the subdivisions, the Assistant Director of the Pharmacy stockroom placed orders with vendors based on verbal requests or on requests written on small pieces of paper or post-it notes, (which were not retained). The Pharmacy stockroom did not require documentation or authorization for requisitions of these drugs either.

Also, during our observations, we noticed that the subdivisions made frequent daily requests for additional noncontrolled drugs but did not submit written authorization. We observed pharmacists from the D-Main Pharmacy subdivision, for example, verbally requesting noncontrolled drugs several times a day from the stockroom. The stockroom personnel issued the drugs without requiring any documentation or authorization. The frequent requests for additional noncontrolled drugs also indicate that the subdivisions are not accurately calculating the level of medication needed from week to week.

In addition to the drugs issued to the Pharmacy subdivisions, noncontrolled drugs were issued directly to nurses and patient units, thereby bypassing oversight by pharmacists of the subdivisions. Again, these drugs were issued without documentation and authorization. This is of significant concern, since the Assistant Director of the Pharmacy stockroom is generally the only pharmacist assigned to work in the stockroom (the other stockroom personnel are stockhandlers and clerks). Therefore, when drugs are directly issued to nurses or patient units, it is very likely that a pharmacist is not the one issuing the drugs. This creates a potentially hazardous condition, whereby an incorrect drug could be erroneously issued.

An authorizing signature would indicate approval and document the need for the requested drugs. It would also hold the signatory responsible for the request. By not requiring proper documentation and authorization before noncontrolled drugs are issued from the stockroom, the Pharmacy Department is not adequately safeguarding its inventory of noncontrolled drugs and ensuring that only drugs approved by authorized hospital personnel are
issued. Therefore, there is a greater potential for errors to occur and for loss due to theft or misappropriation to go undetected.

**Issuances of Noncontrolled Drugs are Not Recorded Properly**

We found a number of instances in which issuances of noncontrolled drugs were recorded in the wrong issue book or not recorded at all. Moreover, the OTPS inventory records cannot always be up-to-date, given that the usual practice of the Pharmacy stockroom is to record issuances only once a week. Consequently, the OTPS inventory records are inaccurate.

As discussed above, the Pharmacy stockroom issues noncontrolled drugs to its subdivisions weekly. The quantities of drugs issued are noted in the subdivision issue books, and once a week the totals issued is entered in the OTPS inventory system. However, we found that when drugs were issued outside the weekly cycle, the additional drugs were not always recorded in the issue books. Therefore, they were not included in the totals entered in the OTPS system, and there would be no record of the issuances of additional drugs.

In addition, when noncontrolled drugs were issued directly to nurses and patient units, the issuances of the drugs were always incorrectly recorded in one of the subdivision issue books or not recorded at all. For example, we observed noncontrolled drugs being issued to the Anesthesia Department and the Dental Unit, and the quantities were recorded in the B-Main pharmacy subdivision issue book. Though there is record of the issuance, the destination is inaccurate, and there is no record of where the noncontrolled drugs were actually issued.

Another situation we observed was that a pharmacist assigned to the B-Main pharmacy subdivision had a workstation in the stockroom. He filled crash trays (filled with medication needed in emergency situations) and in-patient prescriptions. This pharmacist took the noncontrolled drugs directly from the stockroom, without recording the quantity in any issue book. Again, as in the situations described above, there is no record of the issuance of these drugs.

All inventory transactions—both issuances and receipt—should be immediately recorded to ensure that management has the most reliable information on the availability of its inventory. The purpose of a perpetual inventory system, such as the OTPS system, is to maintain accurate, up-to-date inventory records. Documentation and authorization should be required on all requests for noncontrolled drugs. Every drug removed from the stockroom should be accounted for, recorded in an issue book, and immediately recorded in the OTPS perpetual inventory system. However, in the Pharmacy stockroom, issues of noncontrolled drugs were entered in OTPS only once a week (based on the quantities listed in the issue books) and there were instances in which they were not recorded at all. This recording delay causes the inventory records to be inaccurate and out-of-date, and there is a greater risk that issuances will not be recorded at all. The poor record-keeping and lack of proper requisitioning creates an atmosphere in which theft and misappropriation can go undetected. In addition, the inaccuracies in the records could potentially lead the hospital to run out of noncontrolled but critical pharmaceuticals and could be causing a larger volume of expired drugs.
Noncontrolled Drugs are Not Purchased and Recorded Properly

Pharmacy officials ordered and received drugs without purchase orders, as required by HHC. Noncontrolled drugs were received before the purchases were approved, authorized, and recorded in OTPS. Therefore, the recorded inventory balances for noncontrolled drugs will not reflect what is actually on hand. Though for the most part purchase orders are eventually prepared after the drugs are received, the OTPS system will not accurately reflect when drugs were ordered and when they were received.

When Pharmacy officials determine that drugs should be purchased, the quantity and description of the drugs should be entered into the OTPS system so that a purchase order can be prepared. OTPS creates the purchase order, automatically assigning the next available purchase-order number. The purchase order should be approved and authorized by appropriate Pharmacy officials before the noncontrolled drugs are ordered from the vendor. The Pharmacy generally orders its drugs on-line from its primary vendor, or by telephone from other vendors. An order confirmation is generated after the drugs are ordered. When drugs are received from the vendors, the receipts should be recorded in OTPS inventory records.

We reviewed all 468 purchase orders\(^3\) that were prepared from July 3 through October 1, 2002, and determined that the majority of purchase orders were prepared after the drugs were ordered and received.

We compared the purchase orders listed in OTPS with the order confirmations and concluded that 444 (95%) purchase orders were prepared after the drugs were ordered. These purchase orders were prepared on average six days after the order was placed with the vendors (with a range of one to 118 days). In addition, when we compared the 468 purchase orders with the vendors’ packing slips, we found that 398 (85%) of the purchase orders were prepared after the drugs were delivered. The 398 late purchase orders were prepared on average four days after the drugs were delivered (with a range of one to 42 days). Consequently, the receipts of drugs were not recorded in the inventory when they were received, but considerably later.

In addition, receipts of noncontrolled drugs may not be entered into OTPS at all. On the first day of our inventory count the Assistant Director of the Pharmacy stockroom informed us that one shipment of a noncontrolled drug, Flutamide 125mg, was never included in the OTPS inventory records. He stated that the drug became available at an inexpensive price but was not obtainable through the primary vendor so he purchased it directly from the manufacturer. He ordered 288 units of the drug on August 1, 2002, and received 280 units in September. However, a purchase order was never prepared; consequently the drug was not recorded in OTPS. After we brought this matter to the attention of the Director of the Pharmacy, a purchase order was created at the end of October 2002, and the receipt of the drug was posted to the OTPS system.

\(^{3}\) We originally selected 476 purchase orders, (numbers 8-131030001 to 8-1310300477). Eight had been cancelled, leaving the 468 that we reviewed.
Receipt of Noncontrolled Drugs is Incorrectly Recorded

In addition to the delay in preparing purchase orders, receipts of noncontrolled drugs have been incorrectly recorded in the OTPS inventory system. Therefore, the inventory balances for those items are inaccurate and do not reflect what is actually on hand.

All drugs that are purchased and recorded in OTPS have an HHC catalog number. When a new drug is ordered, a catalog number should be requested from HHC. Instead, when preparing the purchase order the Pharmacy uses the catalog number of another drug—or possibly the same drug, but of a different strength or size. Pharmacy personnel said that this is done to expedite the process, in this way the Pharmacy would not have to request and wait for a new catalog number. Therefore, the information entered in OTPS will not reflect the actual items purchased and received, but items that match the catalog number. Thus, the inventory balances recorded in OTPS do not reflect the actual physical inventory: the quantity of drugs that have a catalog number will be overstated, and the quantity of drugs actually received will not be recorded at all.

By allowing drugs to be ordered and received before a purchase order is prepared, the Pharmacy is circumventing the controls put in place to ensure that only drugs that have been approved and authorized will be purchased. Also, since there is a time delay in recording these purchases, the OTPS inventory records will not be up-to-date. Moreover, the Pharmacy Department entered incorrect data in the OTPS inventory system. Therefore, the recorded inventory balances for noncontrolled drugs will never reflect what is actually on hand. This creates a greater potential for theft and misappropriation.

Unrestricted Access to the Stockroom

The Pharmacy has inadequate controls to safeguard the inventory of noncontrolled drugs. The Pharmacy stockroom, in the basement of Kings County Hospital, consists of three areas: the office area, the stock area for noncontrolled drugs, and the controlled drug room, which is locked behind double doors.

We observed that non-stockroom employees had unrestricted access to the stockroom area. Everyone picking up drug orders—pharmacists or technicians from the Pharmacy subdivisions or nurses from patient units, was allowed in the area that houses noncontrolled drugs.

Furthermore, there was no separation in the stockroom between the office area and the stock area. Anyone working in the office had free access to the stockroom at all times. In fact, the data entry clerk, who is responsible for all the record-keeping for the Pharmacy is stationed in the stockroom office. Her duties include preparation of the purchase orders, entries in OTPS—both receipt and issuances—and she occasionally assists in checking the accuracy of deliveries from vendors. Essentially, she has unlimited access to the inventory records, as well as to noncontrolled drugs.
Unrestricted access to the stockroom allows thefts and misappropriations to go undetected. It is the hospital’s responsibility to immediately institute controls to ensure that only authorized personnel have access to the stock area. Furthermore, Pharmacy officials should consider moving the stockroom clerk to a workstation outside the stockroom, thereby ensuring that employees who perform record-keeping functions do not have access to the goods.

After we discussed our concerns with Pharmacy officials, they installed a metal divider with a door to separate the office area and the stock area. However, we do not know whether Pharmacy officials took any further steps to restrict access to the stock area.

**Inadequate Controls Over Expired Drugs**

The Pharmacy has inadequate controls over its expired drugs. It does not maintain its own records of the quantity or value of expired drugs and does not properly safeguard those drugs before they are removed from the hospital. Moreover, the expired drugs were not removed from the OTPS inventory records. Therefore, the inventory balances are inaccurate, since they include drugs that can no longer be used.

Furthermore, the hospital procedure regarding expired drugs is insufficient. According to the Pharmacy policy and procedure, *Disposition of Unused Medication Returned to the Pharmacy From In-Patient and Out-Patient Units*, “All out-of-date or deteriorated drugs are to be returned to the Pharmacy Stores Center, . . . who shall return them to the vendor for credit or replacement.” This procedure does not address the tracking, maintaining, security, and record-keeping for expired drugs. Nor does it address the tracking of checks and credits for returnable drugs.

The Pharmacy uses a private company, Guaranteed Returns, Inc., to dispose of all expired drugs—noncontrolled and controlled. According to the Pharmacy Director, when there is a sufficient accumulation of expired drugs, Pharmacy officials schedule a pick-up date with Guaranteed Returns. Before controlled drugs leave the hospital, Pharmacy personnel list all items being returned. However, no such list is prepared for expired noncontrolled drugs. According to the Pharmacy Director, because of the large volume of expired noncontrolled drugs it is not possible to generate an accurate list. Instead, a few weeks after the drugs are picked up, Guaranteed Returns sends the Pharmacy a list of the expired drugs.

The list is broken down by drugs that are returnable and non-returnable. Drugs that can be returned are sent to the Pharmacy’s primary vendor or to the manufacturer. The Pharmacy should: (1) receive a check for the value of the drugs, or (2) obtain a credit to its account, or (3) obtain replacement drugs. Nonreturnable drugs are disposed of by Guaranteed Returns.

Under the current procedure, Pharmacy personnel do not know whether the list of drugs submitted by Guaranteed Returns is accurate nor whether the hospital is receiving the maximum credit for the returnable drugs. In addition, until they are picked up, the expired noncontrolled drugs are kept in a room in the basement, near the Pharmacy stockroom. Although the door is locked, we were told and observed that non-Pharmacy hospital employees have access to that

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4 This is only a concern when the drugs expire before they are issued from the stockroom.
room, since other items are stored there. Therefore, these drugs could be stolen and it would never be detected.

Table III, below, summarizes the four lists the Pharmacy Department received from Guaranteed Returns, Inc., between December 6, 2001, and March 13, 2003.

**TABLE III**

**Dollar Value of Expired Drugs Collected by Guaranteed Returns Inc. from Kings County Hospital between December 6, 2001 and March 13, 2003**

<table>
<thead>
<tr>
<th>Service Date</th>
<th>Number of Returnable Drugs</th>
<th>Dollar Value of Returnable Drugs</th>
<th>Total Value of Credit</th>
<th>No. of Nonreturnable Drugs</th>
<th>Dollar Value of Nonreturnable Drugs</th>
<th>Total Value of Expired Drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/6/01</td>
<td>4,671</td>
<td>$156,979.06</td>
<td>$142,850.94</td>
<td>Not available</td>
<td>$156,979.06</td>
<td></td>
</tr>
<tr>
<td>6/30/02</td>
<td>3,258</td>
<td>$130,625.57</td>
<td>$118,869.27</td>
<td>2,610</td>
<td>$129,900.73</td>
<td>$260,526.30</td>
</tr>
<tr>
<td>11/16/02</td>
<td>1,583</td>
<td>$ 99,538.24</td>
<td>$ 89,086.72</td>
<td>1,964</td>
<td>$ 44,159.00</td>
<td>$143,697.24</td>
</tr>
<tr>
<td>3/13/03</td>
<td>1,741</td>
<td>$125,895.18</td>
<td>$112,676.19</td>
<td>2,197</td>
<td>$ 62,748.79</td>
<td>$188,643.97</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>$513,128.23</strong></td>
<td><strong>$463,483.12</strong></td>
<td><strong>$236,808.52</strong></td>
<td></td>
<td><strong>$749,846.57</strong></td>
<td></td>
</tr>
</tbody>
</table>

The hospital should receive credit for all returnable drugs. However, according to the Pharmacy Director, no one tracks whether all checks or credits are received. As shown in Table III, the hospital was entitled to $463,483 in checks or credits for expired drugs returned to various vendors between December 6, 2001, and March 13, 2003. We found evidence in the hospital Cash Management Office that some checks were received from vendors. However, it appears that the credits received by the Pharmacy Department were never forwarded to the hospital Accounts Payable Department to be applied against vendor payments. We brought this matter to the hospital’s attention. Subsequently, on April 28, 2003, the Pharmacy Department submitted a number of credit memos, totaling $151,302, to the Accounts Payable Department to be applied against future purchases.

Good internal controls and business practices dictate that Pharmacy personnel track all expired drugs, that drugs be properly safeguarded, that checks and credits for returned drugs be tracked and applied against payments, and that expired drugs be removed from OTPS inventory records.

**Conclusion**

Kings County Hospital Pharmacy Department has serious weaknesses in keeping accurate inventory records and maintaining adequate controls over the safeguarding of noncontrolled drugs. Based on our observations of the Pharmacy’s inventory operations, it appears that an environment exists in which it would be difficult, if not impossible, to detect theft and misappropriation of noncontrolled drugs.

Noncontrolled drugs are issued and purchased without proper approval and authorization. The recording of those transactions—issuances and receipts—is haphazard and creates inaccuracies in the inventory balance. Moreover, the safeguarding of non-controlled drugs and
expired drugs are insufficient. These conditions contributed to the 71 percent discrepancy, that we found during our inventory count, between the physical inventory and the inventory balances recorded in OTPS. Furthermore, after conducting their year-end physical inventory count, Pharmacy officials adjusted the inventory records to reflect the count results, without investigating the discrepancies.

    The goal of effective inventory management is to ensure that an adequate amount of goods is on hand to meet operating needs, that inventory costs are appropriate, and that assets are safeguarded. Accurate inventory records are necessary to maintain sufficient control over inventory levels.

    Kings County Hospital should take immediate action and require the Pharmacy Department to institute proper controls over its noncontrolled drugs. We believe that the recommendations herein address many of the problems identified. However, it is management’s responsibility to ensure that proper controls are in place and are adhered to.

    **Recommendations**

    Kings County Hospital Pharmacy officials should:

    1. Require periodic physical counts of the inventory to verify the accuracy of its inventory records, and investigate all variances to determine their cause.

    **HHC Response:** “The Pharmacy Department will maintain a perpetual inventory and perform physical counts on a monthly basis to verify the accuracy of its records. Any variances will be investigated and discussed with the Director of Pharmacy. Additionally, the Controller’s Office will conduct independent physical counts on a quarterly basis.”

    2. Ensure that appropriate adjustments are made to the OTPS system to accurately reflect the inventory of noncontrolled drugs. Pharmacy officials should review, approve, and document all adjustments.

    **HHC Response:** “Maintaining a physical inventory system, as described above, will vastly reduce the need for year-end adjustments. The Director of Pharmacy will review and authorize any adjustments.”

    3. Ensure that a written authorized requisition is obtained for all noncontrolled drugs issued from the Pharmacy stockroom. The requisitions should include the names and quantities of drugs requested, the names of subdivision personnel requesting the drug, and the authorizing signature.

    **HHC Response:** “A paper requisition is submitted for any request of non-controlled medication. The requisition includes all the necessary information recommended.”
4. Require the Pharmacy to document all issuances of noncontrolled drugs. This should include the names and the quantities of the drugs issued, the destinations of the drugs issued, the names of stockroom employees who issued the drugs, and the names of subdivision personnel who received the drugs.

**HHC Response:** “Response–See recommendation #3”

5. Ensure that all issuances are immediately recorded in OTPS inventory records.

**HHC Response:** “All issuances will be documented by the stockroom clerks at the end of the day.”

6. Consider having more frequent scheduled distribution of noncontrolled drugs for the subdivisions.

**HHC Response:** “Kings County is in the process of installing Pyxis machines at 13 different locations, which will dispense medication with running inventory. The locations are: nursing units, operating room, and emergency rooms (adult, peds, and psych).”

7. Require crash trays and patients’ prescriptions to be prepared by pharmacists in the appropriate subdivision location rather than the stockroom.

**HHC Response:** “The function of tray preparation and distribution of meds to nursing station has been moved to B main Pharmacy.”

8. Ensure that all purchase orders are prepared, approved, and authorized before drugs are ordered from vendors.

**HHC Response:** “The staff has been in-serviced to prepare the purchase order before ordering meds except for emergencies where approval of the Director of pharmacy and the Associate Exec Dir of Diagnostic services will be obtained.”

9. Ensure that all receipts of drugs are immediately recorded in the OTPS inventory system.

**HHC Response:** “The stockroom clerks have been in-serviced to input all the receipts of drugs, immediately, in the OTPS system. All entries will be verified by the Assistant Director of Pharmacy.”

10. Ensure that each drug purchased has a valid catalog number and the Pharmacy uses this catalog number when recording the receipt of drugs.

**HHC Response:** “The policy of using valid catalog number has been strictly enforced. If the valid catalog number is not available, one will be requested from the Central Office before the order is processed.”
11. Restrict access to the Pharmacy stockroom to authorized stockroom personnel.

_HHC Response:_ “The distribution of Meds to non-pharmacy areas, such as nursing stations and Emergency Departments, have been relocated to the B-Main area. The stock room will only be accessible to the pharmacy staff.”

12. Consider moving the data entry clerks to a workstation outside the stockroom, and ensure that Pharmacy employees who perform record-keeping functions do not have access to drugs.

_HHC Response:_ “An iron partition has been placed between the stock room and the data entry clerical staff to ensure segregation of duties. In the new hospital building the purchasing clerks will be in a different location than the stock room.”

13. Ensure that the staff maintain their own records of the name, quantity, and value of expired drugs, and verify the accuracy of Guaranteed Returns, Inc., lists.

_HHC Response:_ “When staff return the expired meds to the stockroom, a form listing the expired meds, the return date, and the signature of the person returning the meds will be completed. A list will be compiled of all the returns, on monthly basis, and then reconciled with the list generated by Guaranteed at the time of pick up. The current stock of expired meds will be inventoried and recorded immediately.”

14. Adequately safeguard expired drugs before they are removed from the hospital.

_HHC Response:_ “The expired drugs will be adequately safeguarded and maintained in a locked cage within a private room. Entry to that room requires the director’s permission and documentation in the log book. Additionally, the cage will only be opened by the Asst. Director or his designee.”

15. Ensure that all checks and credits for returnable expired drugs are received by the hospital and, if applicable, applied to vendor payments.

_HHC Response:_ “All checks and credits will be routed to the Pharmacy Dir. who would document receipt in a spreadsheet. The checks would be forwarded to the Cash Mgm’t dept. and the credits would be forwarded to the Accounts Payable dept. to ensure immediate offset against payables. Monthly reconciliations will be done by the Controller’s office. The Pharmacy Dir will issue notices when credits are not issued timely.”
Inaccurate Inventory Records at the Materials Management Central Stores

We conducted a physical inventory count from October 29 through October 31, 2002, of a random sample of 270 medical and surgical supplies of the 1,218 listed in the population and compared our results to the balances recorded in OTPS on the morning of October 29, 2002. For 247 (91.48%) of the 270 items, the inventory count differed from the OTPS recorded balance: for 113 items, there was less in the inventory (valued at $91,934) than was recorded, and for 134 items, there was more in the inventory (valued at $156,874) than was recorded. We are therefore 95 percent confident (+ or - 2.94%) that there were discrepancies (both overages and shortages) in the inventory records for 1,114 of the 1,218 items in the population of medical and surgical supplies (510 shortages and 604 overages). We also estimated that the dollar value of the discrepancies was $1,075,725, ($397,080 in shortages and $678,645 in overages), as shown in Table IV, below.

TABLE IV

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Shortages</th>
<th>Overtages</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Items/ Percentage</td>
<td>Number of Items/ Percentage</td>
<td>Number of Items/ Percentage</td>
<td>Number of Items/ Percentage</td>
</tr>
<tr>
<td>(a) Discrepancies</td>
<td>113</td>
<td>$91,934</td>
<td>134</td>
</tr>
<tr>
<td>(b) Items Sampled (Recorded Value)</td>
<td>270</td>
<td>$167,273</td>
<td>270</td>
</tr>
<tr>
<td>(c) Percent of the Discrepancies (a/b)</td>
<td>41.85%</td>
<td>55%</td>
<td>49.63%</td>
</tr>
<tr>
<td>(d) Recorded Value of the Total Inventory</td>
<td>1,218</td>
<td>$721,963</td>
<td>1,218</td>
</tr>
<tr>
<td>(e) Estimated Number and Dollar Value of Discrepancies (c X d)</td>
<td>510</td>
<td>$397,080</td>
<td>604</td>
</tr>
</tbody>
</table>

Examples of medical and surgical supplies for which there was a different quantity on hand than the adjusted recorded amount in OTPS are shown in Table V, below.

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5 We adjusted the OTPS balances to reflect issuances and receipts not yet recorded at the time of our count.
TABLE V

Examples of Medical and Surgical Supplies with Differences Between the Inventory Count and Inventory Records

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Adjusted Quantity Recorded</th>
<th>Auditor’s Count</th>
<th>(Shortage)/Overage</th>
<th>Dollar Value of (Shortage)/Overage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solution Cidex OPA (Gallon) ($29.00 per gallon)</td>
<td>695</td>
<td>46</td>
<td>(649)</td>
<td>($18,821.00)</td>
</tr>
<tr>
<td>Luer-Lock Smartsite Needle ($1.09 each)</td>
<td>7,086</td>
<td>1,800</td>
<td>(5,286)</td>
<td>($5,761.74)</td>
</tr>
<tr>
<td>Gown Surgical Ultra Zoned ($3.576 each)</td>
<td>2,732</td>
<td>1,430</td>
<td>(1,302)</td>
<td>($4,655.95)</td>
</tr>
<tr>
<td>Kit Catheter Perc Sheath ($21.40 each)</td>
<td>300</td>
<td>105</td>
<td>(195)</td>
<td>($4,173.00)</td>
</tr>
<tr>
<td>Set Cath Central Venous 3 L ($48.00 each)</td>
<td>(325)</td>
<td>140</td>
<td>465</td>
<td>$22,320.00</td>
</tr>
<tr>
<td>Cover Probe F/Electronic ($15.00 per box)</td>
<td>(794)</td>
<td>49</td>
<td>843</td>
<td>$12,645.00</td>
</tr>
<tr>
<td>Cuff Blood Pressure Adult ($15.524 each)</td>
<td>(150)</td>
<td>570</td>
<td>720</td>
<td>$11,177.28</td>
</tr>
<tr>
<td>Sensor Cable ($205.00 each)</td>
<td>(53)</td>
<td>0</td>
<td>53</td>
<td>$10,865.00</td>
</tr>
</tbody>
</table>

We gave the Coordinating Manager of Central Stores and the Associate Executive Director of Materials Management a list of all discrepancies but received no specific explanations or comments from them that would account for the differences.

Approximately four months prior to our inventory count, Materials Management officials conducted their Fiscal Year 2002 year-end inventory count. Our review disclosed that substantial adjustments were made to the inventory balances recorded in OTPS. Of 1,218 medical and surgical supplies listed in OTPS, adjustments were made to 1,073 items (88%), valued at $2,509,911: 675 adjustments totaling $1,610,154 were made to lower the recorded value of medical and surgical supplies, and 398 adjustments totaling $899,757 were made to increase the recorded value of medical and surgical supplies.

The Associate Executive Director of Materials Management stated that the adjustments were made to inventory balances recorded in OTPS so that it would reflect the physical year-end balance found during the inventory count.

The error rate we found during our inventory count and the large fiscal year-end adjustments made by Kings County Hospital Materials Management officials are indications that the internal controls over noncontrolled drugs are inadequate and a perpetual inventory system is not being maintained. Furthermore, Materials Management officials did not investigate the discrepancies. Making adjustments to inventory records without proper investigation and adequate justification removes a key control to safeguarding assets. Also, adjusting the inventory balances at fiscal year end makes loss due to theft and misappropriation more difficult to detect and renders the hospital vulnerable to running out of critical supplies.
Inadequate Controls over Recording of Medical and Surgical Supplies

The Materials Management Department does not immediately record the issuances from the stockroom of medical and surgical supplies in the OTPS inventory system. Instead, every month the department totals the quantities of each item distributed to the various supply rooms in the hospital and then records the totals in OTPS. Therefore, the inventory records for medical and surgical supplies are not accurate and up-to-date.

Materials Management uses two computerized systems to track its inventory: the OTPS system and the Scan Module system. The quantities of medical and surgical supplies issued daily are recorded in the Scan Module system, which is summarized each month and entered in the OTPS system.

Each day the stockroom staff inspects the inventory levels in assigned supply rooms. They use scan-guns to scan the barcodes of the empty supply bins. The scan-guns register the maximum capacity of each bin to be replenished. Once all supply areas are scanned, the data stored in the scan-gun are downloaded into the Scan Module computer system. The computer processes the information and prints pick lists. After the items from the pick lists are pulled and distributed to the supply rooms, the Scan Module is updated with the actual quantity of items distributed. Each month, the number of specific items distributed to each supply room is totaled and entered in the OTPS inventory system. However, we found that in fact it may take more than two months for the entries to be made. On the first day of our inventory count, October 29, 2002, the September issues from the Scan Module system were just being entered in the OTPS system. Obviously, those delays have a substantial impact on the accuracy of the inventory records.

In addition to the pick lists generated from the Scan Module system, written requests come from various supply areas for specific medical and surgical supplies. Although these issuances should be entered in OTPS when dispensed, we found that entries were not being made until the end of the month. As of October 29, 2002, no October written requests for supplies had been entered in OTPS.

All inventory transactions—both issuances and receipt—should be immediately recorded to ensure that management has the most reliable information on the availability of its inventory. The purpose of such a perpetual inventory system as OTPS is to maintain accurate, up-to-date inventory records. Therefore, issuances of medical and surgical supplies should be recorded immediately in OTPS. In Materials Management, issues of medical and surgical supplies were not entered in OTPS for approximately two months. These record-keeping delays render the inventory records inaccurate and unreliable. They also contribute to errors in the inventory that might go undetected. For better controls over the safeguarding of assets, Materials Management should record all transactions promptly and accurately and should designate the personnel responsible for keeping the OTPS system up-to-date.
Discrepancies Between the Scan Module and OTPS Systems

Besides the delay in entering information in OTPS, we found that there were many discrepancies between the data in Scan Module and in OTPS. In many cases, the two systems had different catalog numbers for the same item. In other cases, there were differences in the number of items issued: in Scan Module items were recorded by individual unit (e.g., one feeding tube) and in OTPS items were recorded by the case (e.g., one case containing 50 feeding tubes).

After conducting our inventory count of the medical and surgical supplies, and adjusting the recorded inventory balances to reflect all the unrecorded September and October 2002 issuances (as discussed in the previous section), we met with Materials Management officials to determine the cause for the 91 percent error rate between the physical and adjusted recorded inventory. The officials could not account for the differences. However, the Materials Management clerk, who enters the issues, informed us that the Scan Module and OTPS systems are not compatible and the records therein will not reconcile. Since we had used the data from the Scan Module system to make adjustments to the OTPS inventory balances, the adjustments we made did not accurately account for the September and October issuances.

Specifically, many of the catalog numbers in the Scan Module system are obsolete and do not match the catalog numbers in OTPS, even though every item in the medical and surgical supplies inventory has to have a valid catalog number. When purchasing medical and surgical supplies for Materials Management, the hospital Purchasing Department prepares a purchase order in OTPS, using a valid OTPS catalog number for each item purchased. When medical and surgical supplies are received from the vendors, they are recorded in the OTPS inventory, using the same valid catalog numbers. Therefore, in order to correctly record the issues of medical and surgical supplies in OTPS, Materials Management must use the same valid catalog number. Since some issuances from the Scan Module system are categorized by obsolete catalog numbers, these issuances have to be converted to the valid OTPS catalog numbers.

When the Materials Management clerk knows the correct catalog number, he accurately records the issuance in OTPS; otherwise he records the issuance in OTPS using the catalog number for another item that best fits the description of the issued item. However, he does not document the change in catalog numbers.

After we were informed of this situation, we asked for the list of obsolete catalog numbers used in Scan Module, as well as the comparable catalog numbers in OTPS. In this way, we wanted to use the list to adjust the recorded OTPS inventory balances to account for all the issuances, in order to determine the actual balance that should have been reflected in OTPS on the day of our physical count of the inventory.

Officials from Materials Management created a list of comparable catalog numbers. When we continued to find problems adjusting the balances, they submitted a second list of comparable catalog numbers.

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6 Issuances for the two months of September and October had not been entered into OTPS when we conducted our physical count of the inventory from October 29 through October 31.
Using both lists, we determined that various quantities of a total of 189 items were issued during September and October from the stockroom, using obsolete catalog numbers. For 129 items, Materials Management had a comparable OTPS catalog number. For example, 8,950 of one item with the description “syringe w/o needle luer loc” were issued with the obsolete catalog number (10-80-000-40); the comparable catalog number, according to Materials Management, is 10-80-000-68. For the remaining 60 items, Materials Management had no comparable catalog numbers. For example, 300 of one item with the description “tube vacutainer red silicone” were issued with the obsolete catalog number 10-86-003-82; Materials Management did not give us a comparable catalog number but instead said that the catalog number was “invalid” and that it was “discontinued.” Even though all items, to be purchased, must have an OTPS catalog number, Materials Management could not supply us with valid catalog numbers. Thus, it appears that the quantities issued for those 60 items were never recorded in OTPS. Therefore, the recorded balances in OTPS are inaccurate and cannot be relied upon to have accurate information on the availability of medical and surgical supplies.

There are additional discrepancies between the Scan Module and OTPS systems, since each system records the units of measure differently. For many items, the inventory in OTPS is recorded by case or box, whereas in the Scan Module system items are issued and recorded by individual unit (i.e., one feeding tube). In total, for the months of September and October, we found 53 items for which the units of measure were accounted for differently in the two systems. Therefore, since the units of measures for the issuances were not always converted from the Scan Module system when entered in the OTPS system, the OTPS inventory balances for these items would be inaccurate.

The discrepancies caused by the differences between the Scan Module and OTPS systems have been a continual problem in Materials Management. Some of the catalog numbers used in the Scan Module system have been obsolete for many years, requiring the Materials Management clerk to try to remember (or guess) the valid catalog number before entering the issuance in OTPS. In addition, it appears that obsolete catalog numbers may not always be converted to a valid catalog number. Though Materials Management officials could update the Scan Module to reflect the valid catalog numbers, they have chosen not to.

Delays in recording issued inventory in OTPS, as well as the recording of invalid and inconsistent information, contribute to errors in the inventory that make it difficult, if not impossible, to detect theft and misappropriation of medical and surgical supplies. Those conditions contributed to the 91 percent discrepancy, that we found during our inventory count, between the physical inventory and the inventory balances recorded in OTPS. Furthermore, after conducting their year-end physical inventory count, Materials Management officials adjusted the inventory records to reflect the count results without investigating the discrepancies.

The goal of effective inventory management is to ensure that an adequate amount of goods is on hand to meet operating needs, that inventory costs are appropriate, and that assets are safeguarded. For better controls, Materials Management should record all transactions promptly and accurately, and the data recorded in its two systems should be correct and compatible.
**Recommendations**

Kings County Hospital Materials Management officials should:

16. Require periodic physical counts of the inventory to verify the accuracy of the inventory records, and investigate all variances to determine their cause.

**HHC Response:** “The Materials Management Department will maintain a perpetual inventory and perform physical counts on a monthly basis to verify the accuracy of its records. Any variances will be investigated and discussed with the Materials Management Director. Additionally, the Controller’s Office will conduct independent physical counts on a quarterly basis.”

17. Ensure that appropriate adjustments are made to the OTPS system to accurately reflect the inventory of medical and surgical supplies. Materials Management officials should review, approve, and document all adjustments.

**HHC Response:** “Maintaining a physical inventory system, as described above, will vastly reduce the need for year-end adjustments. The Materials Management Director will review and authorize any adjustments.”

18. Ensure that all issues from the Materials Management stockroom are immediately entered in the OTPS inventory system.

**HHC Response:** “Dedicated FTE’s will provide timely, continuous, consistent, and accurate data entry into the OTPS system. Cross-train and re-assign supervisory responsibilities to some FTE’s.”

19. Ensure that the Scan Module system has up-to-date catalog numbers for medical and surgical supplies and that they are identical to the catalog numbers in OTPS. Any discrepancies should be documented and explained.

**HHC Response:** “Scan Module software upgrade will facilitate modification/changes implemented on the OTPS. Reinforce and monitor the process involved on adding/deleting supply code numbers. A full conversion to a computerized perpetual inventory system on OTPS will be implemented. The Scan Module will be utilized as an enhancement to the primary perpetual inventory system that will be maintained on OTPS.”

20. Ensure that the recorded units of issue are the same for the OTPS and Scan Module systems.

**HHC Response:** “Scan Module software upgrade as per recommendation #19 will accommodate this uniformity between OTPS and Scan Module data entries. A full conversion to a computerized perpetual inventory system on OTPS will be implemented.”
The Scan Module will be utilized as an enhancement to the primary perpetual inventory system that will be maintained on OTPS.”
APPENDIX I

LIST OF SUBDIVISIONS

• D-Main In-patient Pharmacy prepares cassettes containing 24 hours of medication for all in-patients except psychiatric patients. This satellite is the heart of the pharmaceutical in-patient care in Kings County Hospital. The majority of the cassettes are assembled by a robot stationed in the satellite.

• B-Main Pharmacy prepares orders for controlled drugs. This satellite also dispenses floor medication stock to the Emergency Departments, Ambulatory Clinics on and off site, Operating Room, Post Anesthesia Care Unit, and B Building Diagnostic Areas.

• Central Pre-packing Unit repacks noncontrolled drugs supplied in large quantities (100 to 1000 pills) into small bottles containing such common dosages as a 30-day, 60-day or 90-day supply.

• Out-patient Pharmacy fills prescriptions for outpatients treated at Kings County Hospital by clinic physicians.

• Total Parenteral Nutrition Unit mixes IV solutions life-supporting nutrients, vitamins, and minerals for intravenous administration for all in-patient units.

• Chemotherapy Unit prepares the cytotoxic drugs used to treat cancer patients. The unit consists of two different sections: the preparation room for in-patients’ prescriptions, in the basement of B-building; and preparation room for out-patients’ prescriptions, in the Oncology Clinic, H building.

• ICU Satellite is next to the Intensive Care Unit. It prepares only the initial prescription order for new patients, and emergency prescription orders. It also provides information regarding specific drugs to doctors and nurses.

• G Building In-Patient Satellite prepares the prescriptions for adult in-patients of the Kings County Hospital Psychiatric Units.

• E Building In-Patient Satellite prepares the prescriptions for pediatric in-patients of the Kings County Children Mental Health Hospital.

• K Building Methadone Pharmacy primarily distributes Methadone to Detoxification Units. The pharmacist also prepares the crash tray (tray filled with medication needed in emergency situations) for the K building and patient care areas of the Office Support Building. He also stores some noncontrolled drugs (pain medication, common antibiotics, etc.) to distribute them to the nurses’ stations of the units he services.
Control No. OIA 03-02

June 26, 2003

Mr. Greg Brooks
Deputy Comptroller, Policy, Audits, Accountancy and Contracts
The City of New York
Office of Comptroller
1 Centre Street, Room 1100 North
New York, New York 10007-2341

RE: DRAFT AUDIT REPORT ON THE INVENTORY CONTROLS OF KINGS COUNTY HOSPITAL CENTER, NEW YORK CITY HEALTH AND HOSPITALS CORPORATION, OVER NON-CONTROLLED DRUGS AND MEDICAL AND SURGICAL SUPPLIES (Audit # MG03-059A)

Dear Mr. Brooks:

Thank you for the opportunity to respond to the draft audit report concerning the Corporation's inventory controls over non-controlled drugs and medical and surgical supplies at Kings County Hospital Center.

While pharmaceutical and medical surgical supplies are properly accounted for at the Facility's receiving area and delivered to the respective departments, the Facility will implement and utilize the Corporation's Other Than Personnel Services (OTPS) computerized perpetual inventory system as an important component of inventory control. It will ensure appropriate recording, accounting and safeguarding of our assets.

The Facility's Departments are expected to complete the conversion to a computerized perpetual inventory system, including the training of personnel with the appropriate segregation of responsibilities, by December 2003.

The system will enable the Facility to:

- Obtain current quantity, dollar value and usage history information on all inventory items in a timely manner; and
- Generate reports that will enable expeditious review of purchases, inventory management, and payments.

In response to your report, the Facility has in fact begun corrective action in several areas prior to the completion of the audit. For instance, the pharmacy stock area has been properly secured with the installation of an iron gate, crash trays are prepared in the main pharmacy area, orders will not be placed without the
correct catalog number and expired drugs marked for return will include a comprehensive list for a full accounting of those drugs.

In addition, the Facility is in the process of implementing the use of the PYXIS system, a reliable automated distribution system, in 13 key areas such as the emergency rooms, nursing units and operating room suites.

We do object however, to the auditor’s representation of the inventory discrepancies in the aggregate whereby inventory overages and shortages were combined. This is neither fair nor appropriate and can be misleading. Overages and shortages should be netted against each other or presented separately, to properly reflect the value of inventory variances.

Attachment I is the HHC’s detailed response. Attachment II is the Audit Implementation Plan, which addresses all the recommendations cited in the report.

Should you have any questions concerning this response, please contact Mr. Alex Scoufaras, Assistant Vice President, Internal Audits at (212) 730-3123.

Sincerely,

[Signature]

Benjamin K. Chu, M.D.

Enclosures
CC: F. J. Cirillo, Senior Vice President, Operations
    J. G. Leon, Senior Vice President, Central Brooklyn Network
    G. Proctor, Chief Operating Officer/CFO, Kings County Hospital Center
    D. Cates, Chief of Staff, Office of the President
    A. Scoufaras, Assistant Vice President, Office of Internal Audits
    K. McGrath, Corporate Director, Communications & Marketing
    F. Hornung, Audit Director, NYC Office of the Comptroller
    D. Baines, Audit Manager, NYC Office of the Comptroller
    J. John, Controller, Kings County Hospital Center
    S. Ahmed, Associate Executive Director, Kings County Hospital Center
    B. McCulloch, Associate Executive Director, Kings County Hospital Center
    R. Bernstein, Audit Liaison, Mayor’s Office of Operations
June 18, 2003

TO: Alex Scoularas  
    Assistant Vice President  
    Internal Office

FROM: George M. Proctor

SUBJECT: AUDIT IMPLEMENTATION PLAN TO ADDRESS AUDIT ISSUES RELATED TO THE NYC COMPTROLLER'S AUDIT OF KCHC'S INVENTORY CONTROLS OVER NON-CONTROLLED DRUGS AND MEDICAL/SURGICAL SUPPLIES (AUDIT # MGO3-059A)

Attached, please find Kings County's Audit Implementation Plan (AIP) to correct the audit findings of the NYC Comptroller's Office audit of our inventory controls over non-controlled drugs and medical/surgical supplies. We agree with the findings and have begun implementing some of the corrective measures in the AIP. Complete implementation of the corrective measures will be fully accomplished by the end of Fiscal Year 2004.

Implementation of the measures outlined in the AIP will result in more stringent controls over our inventory of non-controlled drugs and medical/surgical supplies. It should be noted that a new Director of Pharmacy will be involved in the implementation of the corrective actions for pharmacy.

Our Controller Department will be performing periodic operational reviews to ensure that the measures outlined will be adhered to for the timetable projected.

If you have any questions, please contact me.

GMP:dc
Attachment

cc: J. G. Leon  
    S. Ahmed  
    B. McCulloch  
    J. Scalera  
    J. John
## RECOMMENDATION WITH WHICH THE AGENCY AGREES AND INTENDS TO IMPLEMENT

<table>
<thead>
<tr>
<th>Recommendation #1</th>
<th>METHODS/PROCEDURES</th>
<th>IMPLEMENTATION TARGET DATE</th>
<th>PROGRAM IMPROVEMENT/DOLLARS SAVINGS INCREASED REVENUE WITH TIME TABLE</th>
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<tbody>
<tr>
<td>Kings County Hospital Pharmacy officials should require periodic physical counts of the inventory to verify the accuracy of its inventory records, and investigate all variances to determine their cause. Pg. 17</td>
<td>The Pharmacy Department will maintain a perpetual inventory and perform physical counts on a monthly basis to verify the accuracy of its records. Any variances will be investigated and discussed with the Director of Pharmacy. Additionally, the Controller's Office will conduct independent physical counts on a quarterly basis.</td>
<td>9/1/2003</td>
<td>This system will enable the pharmacy to track everything received and dispensed.</td>
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<tr>
<th>Recommendation #2</th>
<th>METHODS/PROCEDURES</th>
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<td>Kings County Hospital Pharmacy officials should ensure that appropriate adjustments are made to the OTPS system to accurately reflect the inventory of noncontrolled drugs. Pharmacy officials should review, approve and document all adjustment. Pg. 17</td>
<td>Maintaining a physical inventory system, as described above, will vastly reduce the need for year-end adjustments. The Director of Pharmacy will review and authorize any adjustments.</td>
<td>9/1/2003</td>
<td>Accurate inventory</td>
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<th>Recommendation #3</th>
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<tr>
<td>Kings County Hospital Pharmacy officials should ensure that a written authorized requisition is obtained for all noncontrolled drugs issued from the Pharmacy stockroom. The requisitions should include the names and quantities of drugs requested, the names of subdivision personnel requesting the drug, and the authorizing signature. Pg. 17</td>
<td>A paper requisition is submitted for any request of non-controlled medication. The requisition includes all the necessary information recommended.</td>
<td>Implemented April, 2003</td>
<td>Will enable to track every item and avoid excessive dispensing and improve accountability.</td>
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<td>Recommendation #4</td>
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<td>Implemented April, 2003</td>
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<tr>
<td>Kings County Hospital Pharmacy officials should require the Pharmacy</td>
<td>Response - See recommendation #3</td>
<td>Implemented April, 2003</td>
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<td>to document all issuances of noncontrolled drugs. This should include</td>
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<td>Implemented April, 2003</td>
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<td>the names and the quantities of the drugs issued, the destinations</td>
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<td>Implemented April, 2003</td>
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<td>of the drugs issued, the names of stockroom employees who issued</td>
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<td>Implemented April, 2003</td>
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<td>the drugs, and the names of subdivision personnel who received</td>
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<td>Implemented April, 2003</td>
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<td>the drugs. Pg. 17</td>
<td>Pg. 17</td>
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<td>Recommendation #5</td>
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<td>Kings County Hospital Pharmacy officials should ensure that all</td>
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<td>issuances are immediately recorded in OTFS inventory records.</td>
<td>Pg. 17</td>
<td>Pg. 17</td>
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<td>Recommendation #6</td>
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<tr>
<td>Kings County Hospital Pharmacy officials should consider having</td>
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<td>more frequent scheduled distribution on noncontrolled drugs for</td>
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<td>the subdivisions. Pg. 17</td>
<td>Pg. 17</td>
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<tr>
<td>Recommendation #7</td>
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<td>Kings County Hospital Pharmacy officials should require</td>
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<td>crash trays and patients' prescriptions to be prepared by</td>
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<td>pharmacists in the appropriate subdivision location rather than</td>
<td>Pg. 17</td>
<td>Pg. 17</td>
<td>Pg. 17</td>
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<td>the stockroom. Pg. 17</td>
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| **Recommendation #8**  
Kings County Hospital Pharmacy officials should ensure that all purchase orders are prepared, approved, and authorized before drugs are ordered from vendors. Pg. 18  
The staff has been in-serviced to prepare the purchase order before ordering. In addition to normal ordering, the policy of approval and the Associate Exec Dir of Diagnostic services will be obtained. | 7/1/2003 | Improved control of purchase orders. |
| **Recommendation #9**  
Kings County Hospital Pharmacy officials should ensure that all receipts of drugs are immediately recorded in the OTPS inventory system. Pg. 18  
The stockroom clerks have been in-serviced to input all the receipts of drugs, immediately, in the OTPS system. All entries will be verified by the Assistant Director of Pharmacy. | 7/1/2003 | Improved Inventory Control. |
| **Recommendation #10**  
Kings County Hospital Pharmacy officials should ensure that each drug purchased has a valid catalog number and the pharmacy uses this catalog number when recording the receipt of drugs. Pg. 18  
The policy of using valid catalog number has been strictly enforced. If the valid catalog number is not available, it will be requested from the Central Office before the order is processed. | January, 2003 | Improved Inventory Control. |
| **Recommendation #11**  
Kings County Hospital Pharmacy officials should restrict access to the Pharmacy stockroom to authorized stockroom personnel. Pg. 18  
The distribution of Meds to non-pharmacy areas, such as nursing stations and Emergency Departments, have been restricted to the B-Man area. The stock room will only be accessible to the pharmacy staff. | 7/1/2003 | Limit access to the stock room. |
| **Recommendation #12**  
Kings County Hospital Pharmacy officials should consider moving the data entry clerks to a workstation outside the stockroom, and ensure that Pharmacy employees who perform record-keeping functions do not have access to drugs. Pg. 18  
An iron partition has been placed between the stock room and the data entry clerical staff to ensure segregation of duties. In the new hospital building, the purchasing clerks will be in a different location than the stock room. | Completed | Limit access and control to the pharmacy stockroom. |
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<tr>
<td>Recommendation #13: Kings County Hospital Pharmacy officials should ensure that the staff maintain their own records of the name, quantity and value of expired drugs, and verify the accuracy of Guaranteed Returns, Inc. lists. Pg. 18</td>
<td>When staff return the expired meds to the stockroom, a form listing the expired meds, the return date, and the signature of the person returning the meds will be completed. A list will be compiled of all the returns on a monthly basis, and then reconciled with the list generated by Guaranteed at the time of pick up. The current stock of expired meds will be inventoried and recorded immediately.</td>
<td>7/1/2003</td>
<td>Cross reference of the return goods.</td>
</tr>
<tr>
<td>Recommendation #14: Kings County Hospital Pharmacy officials should adequately safeguard expired drugs before they are removed from the hospital. Pg. 18</td>
<td>The expired drugs will be adequately safeguarded and maintained in a locked cage within a private room. Entry to that room requires the director's permission and documentation in the log book. Additionally, the cage will only be opened by the Asst. Director or his designee.</td>
<td>8/1/2003</td>
<td>Safeguard the expired medication.</td>
</tr>
<tr>
<td>Recommendation #15: Kings County Hospital Pharmacy officials should ensure that all checks and credits for returnable expired drugs are received by the hospital and, if applicable, applied to vendor payments. Pg. 18</td>
<td>All checks and credits will be routed to the Pharmacy Dir. who would document receipt in a spreadsheet. The checks would be forwarded to the Cash Mgmt dept. and the credits would be forwarded to the Accounts Payable dept. to ensure immediate offset against payables. Monthly reconciliations will be done by the Controller's office. The Pharmacy Dir will issue notices when credits are not issued timely.</td>
<td>February, 2003</td>
<td>Receive proper credits</td>
</tr>
<tr>
<td>Recommendation #16: Kings County Hospital Materials Management officials should require periodic physical counts of the inventory to verify the accuracy of the inventory records, and investigate all variances to determine their cause. Pg. 23</td>
<td>The Materials Management Department will maintain a perpetual inventory and perform physical counts on a monthly basis to verify the accuracy of its records. Any variances will be investigated and discussed with the Materials Management Director. Additionally, the Comptroller's Office will conduct independent physical counts on a quarterly basis.</td>
<td>September, 2003</td>
<td>This will ensure the perpetual inventory is appropriately maintained and accurate.</td>
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## RECOMMENDATION WITH WHICH THE AGENCY AGREES AND INTENDS TO IMPLEMENT

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<th>Program Improvement/Dollar Savings Increased Revenue with Time Table</th>
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<td>Kings County Hospital Materials Management officials should ensure that appropriate adjustments are made to the OTPS system to accurately reflect the inventory of medical and surgical supplies. Material Management officials should review, approve, and document all adjustments. Pg. 23</td>
<td>Maintaining a physical inventory system as described above, will vastly reduce the need for year-end adjustments. The Materials Management Director will review and authorize any adjustments.</td>
<td>September 2003 and ongoing.</td>
<td>Our ability to practice continuous critical review of OTPS data keeps the perpetual inventory current reliable and enhances our efforts at maintaining appropriate supply levels.</td>
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<tr>
<th>Recommendation #18</th>
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<td>Kings County Hospital Materials officials should ensure that all issues from the Materials Management stockroom are immediately entered in the OTPS inventory system. Pg. 23</td>
<td>Dedicated FTEs will provide timely, continuous, consistent and accurate data entry into the OTPS system. Cross-train and re-assign supervisory responsibilities to same FTE's.</td>
<td>September 2003.</td>
<td>A reliable perpetual inventory system relies completely on the timely, continuous, uniform and accurate data entry and data monitoring functions on the OTPS. This can only be achieved when the FTEs selected are dedicated to these functions and are monitored by supervision with these specific responsibilities.</td>
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<tr>
<th>Recommendation #19</th>
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<td>Kings County Hospital Materials Management officials should ensure that the Scan Module system has up-to-date catalog numbers for medical and surgical supplies and that they are identical to the catalog numbers in OTPS. Any discrepancies should be documented. Pg. 23</td>
<td>Scan Module software upgrade will facilitate modifications and changes implemented on the OTPS. Reinforce and monitor the process involved on adding/deleting supply code numbers. A full conversion to a computerized perpetual inventory system on OTPS will be implemented. The Scan Module will be utilized as an enhancement to the primary perpetual inventory system that will be maintained on OTPS.</td>
<td>By September 2003. Ongoing.</td>
<td>The software upgrade of Scan Module will enhance major functions and provide additional applications to facilitate the accuracy of a perpetual inventory system. It will offer greater possibilities for an OTPS/Scan Module Interlink.</td>
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<tr>
<th>Recommendation #20</th>
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<td>Kings County Hospital Materials Management officials should ensure that the recorded units of issue are the same for the OTPS and Scan Module systems. Pg. 23</td>
<td>Scan Module software upgrade as per recommendation #19 will accommodate this uniformity between OTPS and Scan Module data entries.</td>
<td>By September 2003.</td>
<td>Attaining and maintaining uniformity of the data entry elements on both systems improve all process and outcomes of the perpetual inventory system.</td>
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<tr>
<th>Recommendation #21</th>
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<tr>
<td>Kings County Hospital Materials Management officials should ensure that the recorded units of issue are the same for the OTPS and Scan Module systems. Pg. 23</td>
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<td>December 2003</td>
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<td>RECOMMENDATION WITH WHICH THE AGENCY AGREES BUT IS UNABLE TO IMPLEMENT</td>
<td>REASONS FOR INABILITY TO IMPLEMENT</td>
<td>WHAT IS NEEDED TO ALLOW FOR IMPLEMENTATION (RESOURCES, PERSONNEL, LEGISLATION, LEGAL OPINION, ETC.)</td>
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**Audit Title:** Audit Report on the Inventory Controls over Noncontrolled Drugs and Medical and Surgical Supplies at Kings County Hospital Center  
**Date:** June 12, 2003  
**Audit Agency:** City of New York Office of the Comptroller Bureau of Management Audit  

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