BACKGROUND INFORMATION

The University of Texas Health Science Center at San Antonio had purchases of medications totaling $27,267,799 for the period from September 1, 2011 through April 30, 2013 at the various locations and in the amounts denoted in the chart. The inventories of medications are spread over multiple locations throughout the institution and external clinical sites. Clinical personnel utilize the medications in the treatment of patients.

The medications include controlled substances (prescription medications regulated by the Controlled Substances Act), non-controlled substances (medications that require a prescription that are not regulated by the Controlled Substances Act), over-the-counter/first aid medications, and sample medications provided by pharmaceutical manufacturers.

These medications represent a significant expense and inventory controls are required to prevent loss to the university. Proper inventory controls over these assets reduce the possibility of theft, overstocking and expired medications.

It is the responsibility of each department/clinic and the institution as a whole to ensure that all medications are safeguarded and inventoried. Each department/clinic developed their own methods and procedures to receive, store and inventory the medications.

There are many Federal, State, and institutional regulations that require controls over medication inventory. Most of these regulations are in regards to controlled substance medications due to their potential for abuse and addiction.

OBJECTIVE AND SCOPE

The objective of the audit was to determine the effectiveness of controls over clinical drug inventories.

The scope included a risk based sample of departmental drug inventories at the UT Health Science Center at San Antonio with the exception of the Cancer Treatment and Research Center (CTRC), Pediatrics and the Ambulatory Surgical Center (ASC). The CTRC inventory controls and operations were reviewed in FY2012 (12-18: CTRC Pharmacy Review). Pediatrics and the ASC were excluded due to a transition from the UT Health Science Center to University Health System locations.

Internal Audit selected six clinical locations for further review (UTM Urology MARC, UTM Neurology MARC, UTM Obstetrics MARC, UTM Family and Community Medicine MARC, UTM Family and Community Medicine Westover Hills and Anesthesiology/Westgate Pain Clinic). The medications purchased for these six locations amounted to $1,000,109 or 40% of the $2,473,650 in the total sample population.

We conducted our audit in accordance with the Institute of Internal Auditors' Standards for the Professional Practice of Internal Auditing.
SUMMARY OF RESULTS

Interviews with the clinic managers and staff were conducted to review the processes for ordering, receiving, storing and inventory of medications. The following opportunities for improvement were noted below:

Segregation of Duties. The purchasing, receiving, inventory reconciliation, inventory counts, and stocking of medications were not properly segregated. Segregation of duties is a key preventive control for misappropriation. Clinics recently transitioned to the PeopleSoft system to order medications. A hierarchy of secondary approvers based on dollar amounts had not been established to ensure timely delivery of medications to the clinics.

Regulatory Compliance. Two clinics did not maintain a log of sample medications dispensed as required by UT Medicine policy.

Inventory Records. Clinics did not have a system or method of reporting the dollar amount of medication inventories. Proper inventory accountability requires detailed records be maintained. The actual count of non-controlled medications did not agree to the log amount. Clinics did not perform an inventory count of non-controlled medications. There was no standardized report available to management for medication inventories and usage by clinic. There are no written procedures for any of the processes for proper inventory management of medications.

Physical Security. Storage areas containing non-controlled medications are unlocked during business hours and the drug inventory is potentially accessible to unauthorized persons.

These items, along with recommendations and management action plans, are detailed in the attached table of Issues and Recommendations. We would like to thank management for the support and assistance provided during this audit.

SUMMARY OF SIGNIFICANT FINDINGS

This audit identified no findings considered significant to the institution. According to the UT System Policy 129 – Internal Audit Activities, an audit finding identified as significant is one that is material to the operation, financial reporting, or legal compliance of the institution. The UT System Audit Office receives and tracks significant audit findings on a quarterly basis. It also provides a summary report to the UT System Internal Audit Committee and the Audit, Compliance, and Management Review Committee of the UT System Board of Regents.

DISTRIBUTION

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Mr. Michael Black, Senior Executive Vice President and Chief Operating Officer
Dr. Francisco Gonzalez-Scarano, Dean, School of Medicine and Vice President for Medical Affairs
Mr. Dale Flowers, Chief Administrative Officer, UT Medicine
Dr. Raymond Greenberg, Executive Vice Chancellor for Health Affairs, UT System
Mr. J. Michael Peppers, Chief Audit Executive, UT System

An *** preceding your name indicates you are required to respond to recommendations contained in this report; an adequate response describing the action taken or planned is required to be sent to the Director, Internal Audit.

Approved for Release

CHIEF AUDIT EXECUTIVE, AD INTERIM

[Signature]

12/12/13

Auditors
Robert McDermott
Roland Miller

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# Issues and Recommendations

<table>
<thead>
<tr>
<th>Observation/Condition</th>
<th>Business Implication</th>
<th>Recommendation</th>
<th>Management Action Plan</th>
<th>Due Date</th>
<th>Responsible Party</th>
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<tr>
<td><strong>SEGREGATION OF DUTIES</strong></td>
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<td>1 The purchasing, receiving, inventory reconciliation, inventory counts, and stocking of medication are performed by one or two individuals for each of the six clinics sampled.</td>
<td>Potential misappropriation of medications or inventory errors will remain undetected.</td>
<td>Management should require each clinic to document written procedures for the ordering, receiving, reconciling, counting and stocking of medications. Management should review and approve the procedures to ensure proper segregation of duties within the clinic.</td>
<td>Medications are now ordered through PeopleSoft so ordering of medications is segregated from approval of orders. In addition, a UTM Clinical Enterprise policy regarding Clinic Medication Management is under development. It will specify guidelines for ordering, approving, receiving, reconciling, counting and stocking medications. Segregation of duties will be clearly articulated.</td>
<td>1-31-14</td>
<td>Barbara Cordell / Senior Director, UT Medicine Clinical Operations</td>
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<td>2 Clinics recently transitioned to PeopleSoft for ordering medications. In the previous ordering system (MMOS), clinics were given a dollar limit for ordering. If the dollar limit was exceeded, a secondary approval from UT Medicine was required causing delays in obtaining approval. Clinics are concerned these delays will continue with PeopleSoft.</td>
<td>Control over approval amounts circumvented by splitting of orders. Delays in receiving medications could affect clinic revenue.</td>
<td>Management should review and adjust the clinics approval limits appropriate to medications required. Management should also establish a hierarchy of secondary approvers based on dollar amounts to ensure timely approval of medication orders.</td>
<td>Medication approval limits for clinic managers are under review for all UTM clinics. The hierarchy of secondary approvers is also under review. The desired outcome is to establish realistic dollar amounts the clinic managers can approve for expensive medications such as</td>
<td>1-31-14</td>
<td>Barbara Cordell / Senior Director, UT Medicine Clinical Operations Cynthia Clemmons / Director Financial Operations, Medical Dean's Office</td>
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<td>Two of the six clinics sampled are not complying with the UT Medicine policy on sample medications. The policy requires maintaining a logbook of sample medications dispensed.</td>
<td>Potential misappropriation of sample medications. Inability to contact patients in cases of a medication recall.</td>
<td>UT Medicine should provide training to clinics on polices that relate to medication inventories. Management should establish ownership for the dispensing/inventory controls at the facility level.</td>
<td>The UTM Sample Medication Policy &quot;Management of Medication Samples&quot; was reviewed at the 11-18-13 Clinic Manager meeting with all managers. The policy clearly states guidelines that should be followed if a clinic stocks sample medications. Follow-up rounds in the clinics are conducted twice annually to check compliance with sample medication management. Rounds will be repeated to ensure the sample medication logs are being completed correctly so that the process for contacting patients in cases of medication recall can be utilized successfully should the need arise.</td>
<td>4/1/14</td>
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<td>Clinics did not have a system or method of reporting the dollar amount of the medication inventories. It is not transparent if the medication inventories are included on the annual financial report.</td>
<td>Overstating expenses and understating inventories on financial reports.</td>
<td>Management should develop a policy for medication inventories to ensure a dollar amount can be calculated and to ensure proper financial reporting.</td>
<td>As part of the Business Continuity and Disaster Preparedness Plan that is required by UT System, the dollar amount of drug/medication inventory is currently being determined. The medication inventory stocked in a clinic is reflected each month in the clinic financial statements. These medications represent expenses that have been incurred when the medications were purchased. Clinic managers track their monthly medication expenditures through the detailed vendor information that is provided each month in the General Ledger reports. Due to the relatively small value of the drugs in each clinic, an inventory amount will not be included on the balance sheet.</td>
<td>1-31-14</td>
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<td>The six clinics maintain a written log of counts for controlled drugs; however, a random sample count of medications on hand did not match the amount listed in the inventory log for two of the six clinics sampled. Incorrect inventory count could result in critical medications being out of stock when needed. Potential misappropriation of medications. Management should ensure inventory policies require medications to be logged out when removed from storage area. If medication is not used, return medication to storage and adjust returned quantity to inventory. Independent reconciliation procedures should be formalized and staff training on procedures should be conducted. Controlled Medication management was reviewed with all clinic managers at the 11-18-13 Manager Meeting. Clinic rounds are conducted twice annually to check compliance with Controlled medication Management. Rounds will be repeated to ensure the Controlled Medication policy is being followed in all UTM clinics.</td>
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<td>4/1/14 Pam Glasscock / Director, UT Medicine Clinical Operations</td>
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<td>Three of the six clinics sampled did not count non-controlled medication inventory. Potential theft/loss, shortages of critical medications, unnecessary purchases of medication already in stock, expired medications. Management should develop policies that require all medications to be inventoried on a periodic basis dependent on inventory levels and risk. Management will develop policies and procedures for all medications (controlled and uncontrolled) to be counted on a periodic basis.</td>
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<td>2-28-14 Barbara Cordell / Senior Director, UT Medicine Clinical Operations</td>
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<td>There is no reporting to management of the types of medications or amounts ordered and dispensed by clinics. Decision makers are unaware of usage, reorder points and trends. Loss of favorable pricing by ordering medications for multiple clinics. Management should develop reporting procedures to provide medication usage by clinics. Reports will be developed to provide information on the medications purchased by the clinics.</td>
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<td>2-28-14 Barbara Cordell / Senior Director, UT Medicine Clinical Operations and Walter Stone / Senior Project Coordinator, UT Medicine</td>
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<td>Storage rooms containing non-controlled medications and medical supplies for five of the six clinics sampled are unlocked during business hours. The medications are accessible to unauthorized persons.</td>
<td>Potential theft/loss of medications and medical supplies.</td>
<td>Management should require clinics to maintain secure store rooms with access limited to only authorized personnel.</td>
<td>As the policy referenced in #1 (Clinic Mediation Management), security of the storage rooms will be addressed. Clinic rounds are conducted twice annually to check compliance with UTM policies and procedures. These rounds will be repeated and all medication storage areas will be reviewed to repeated to ensure that these storage areas are secured. In addition, the Clinic Managers have been advised to budget to have card or key pad access to the storage rooms in the FY 2014/15 budgets.</td>
<td>4/1/14</td>
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