

**UNIVERSITY OF CALIFORNIA, DAVIS  
INTERNAL AUDIT SERVICES**

**University of California Davis Health System  
Stores & Distribution  
Internal Audit Services Project #14-11**

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**University of California Davis Health System  
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**MANAGEMENT SUMMARY**

**Background**

The Stores and Distribution Departments (Stores and Distribution) are part of the Supply Chain organization at the UC Davis Health System (UCDHS). Stores and Distribution had a combined fiscal year (FY) 2013 operating budget of over \$13.8<sup>1</sup> million, and over \$246<sup>2</sup> million of supplies and equipment passed through the units during the same time period. Stores and Distribution have a combined 68 FTEs headed by the Supply Chain Director and the Stores and Distribution Manager. The Supply Chain organization reports to the UCDHS Chief Operating Officer (COO).

The Stores (Warehouse) facilities are located on 14th Avenue in Sacramento, and serve as the central receiving location for the UC Davis Medical Center and for medical supply shipments to be delivered to UC Davis Medical Group clinic locations. The Stores Department is also responsible for the collection and final disposition of goods to be returned to vendors. The Warehouse also contains duplicating services, serves as a storage area for medical records archives, and is used as a hub for transportation vehicles assigned to the Stores Department to ensure ongoing daily transport to all outlying UCDHS locations.

The Distribution Center is located in the basement of the Main Hospital. Distribution Department operates around the clock, seven days a week, delivering medical and surgical supplies to inpatient and hospital based clinics. Inventory is maintained in the Main Hospital, including exchange carts, medical equipment such as beds and wound vacs, and on-demand oxygen tanks. The Distribution Department is also responsible for the delivery of linens and distribution of scrubs.

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<sup>1</sup> Includes a \$2.5 Million encumbrance that was cleared in March 2014

<sup>2</sup> Source: FY13 Medical Center Financial Statements, medical and other supplies expense plus ending inventory, excluding pharmacy

**Purpose and Scope**

The objective of our review was to assess internal controls over central receiving, warehousing, record archiving, and distribution of all items including medical and surgical supplies in Stores and Distribution.

To complete our review, we analyzed financial and operational data from FY 2010 through FY 2013, visited and observed operations at the Warehouse and Distribution Center, interviewed UCDHS personnel from the Stores and Distribution Departments and Accounting and Financial Services, and conducted other audit procedures as considered necessary.

**Conclusions**

Currently, Stores and Distribution relies on Eclipsys, an antiquated automated procurement system, which necessitates various auxiliary processes to track orders, requisitions, receipts and inventories. Because Eclipsys has been in service for nearly 30 years and is no longer supported by the vendor, system limitations pose separation of duties issues (such as allowing staff with receiving rights to post returns and cancel receiving records) and requires compensating controls to ensure the integrity of inventory and accounting records. Further, a recent retirement of the Eclipsys Systems Administrator who served the UCDHS for many years and held the primary responsibility for system management and maintenance creates a risk to business continuity and could have a negative impact on the UCDHS supply chain operations. Without proper system support, Stores and Distribution may not be able to run the Eclipsys application properly and provide adequate controls over inventory including providing accurate data to UCDHS Financial Services. To address the risk in the short term, UCDHS will utilize internal resources and potentially engage the retired Systems Administrator in a consulting capacity. For a more permanent solution, UCDHS is planning to leverage the hiring of a Supply Chain System Executive at the system-wide level, as well as the implementation of an advanced procurement technology platform at the system-wide level.

Our review identified opportunities to improve processes and internal controls in the areas of, inventory valuation and reporting, physical security of inventory, returned goods tracking, and purchase order closing processes for partially received goods. Additionally, we noted concerns with separation of duties for several positions within Stores and Distribution and for the Eclipsys Systems Administrator. There is presently a heightened level of risk associated with the internal control concerns noted during our review, because adjustments are made to inventory balances and related expense accounts on the general ledger (GL) that are not fully supported by underlying inventory records in Eclipsys. Those adjusting entries can mask errors or fraudulent activity in the over \$246 million of supplies and equipment that pass through Stores and Distribution each year that could otherwise be identified and investigated due to an unusual or significant out of balance condition between Eclipsys and the GL account balances.

As of the date of our review, UCDHS was exploring options to acquire a new centralized purchasing system in order to automate the buying cycle, inventories, approvals and the accounting interface. Issues noted in this review should be considered as part of developing the “future state” of the centralized purchasing and inventory management process for UCDHS, to ensure appropriate internal controls.

Our observations and recommendations are presented in the body of this report along with corresponding management corrective actions.

**OBSERVATIONS, RECOMMENDATIONS, AND MANAGEMENT CORRECTIVE ACTIONS****A. Accounting for Inventory**

**The process for reporting Eclipsys inventory balances and making adjustments to the corresponding general ledger accounts must be enhanced.**

Stores and Distribution relies on Eclipsys to maintain a perpetual supplies inventory for both the Warehouse and the Distribution Center. Inventory balances from Eclipsys are sent to UCDHS Accounting and Financial Services each month via email by Stores and Distribution, and are typically not accompanied by supporting documentation from Eclipsys. Journal entries are made to the GL inventory balances in DaFIS based upon the information contained in these emails. When emails are not received, the monthly adjustments to the GL inventory balances are estimated.

While the overall year-to-year inventory balances have been relatively consistent over the last four years, the monthly inventory balances fluctuated significantly in some instances. These fluctuations appear to be due to estimated adjustments of GL inventory balances. For example, increases in inventory balances from a \$170K balance in March 2013 to \$1.2M balance in May 2013 were not supported by the underlying Eclipsys detail. Because Stores and Distribution management does not review the activity in balance sheet accounts as part of their ongoing financial review practices, they were unaware of the fluctuations in the inventory account balances.

Further analysis of adjustments to inventory GL balances revealed a process whereby the adjustments were recorded as a lump sum to multiple GL inventory asset and expense accounts in one entry. The net effect of these adjustments on the corresponding expense accounts could not be determined because there was not a one-to-one relationship between the asset and expense accounts for specific types of inventories (e.g., Stores, Distribution, Pharmacy, etc.). Therefore, the monthly inventory adjustments for the Stores and Distribution asset accounts netting over \$300K for both locations in FY 2013 could not be reconciled to the corresponding net inventory expenses for the Stores and Distribution.

University of California (UC) Business and Finance Bulletin (BFB) BUS-54, “Operating Guidelines for University Supply Inventories”, requires stock adjustments be approved by the Materiel Manager or the designee who must not be the individual responsible for the inventory. Large adjustments shall be supported by an explanation. The UC Accounting Manual, Section I-581, “Inventories” also requires proper controls over inventory accounting. Operating procedures are required for departments handling supplies and inventories to ensure accuracy and validity of the inventory records booked in the accounting system. Finally, when adjustments are made to inventory balances and related expense accounts that are not fully understood and supported, those entries can mask errors or fraudulent activity that could otherwise be identified and investigated due to an out of balance condition between Eclipsys and the GL account balances.

### **Recommendations**

1. The Supply Chain Director or delegate should provide UCDHS Financial Services reports of monthly inventory balances generated in Eclipsys to ensure that any adjusting entries necessary to bring the accounting and subsidiary ledgers in balance are properly supported by Eclipsys monthly inventory detail.
2. UCDHS Financial Services should coordinate efforts with the Stores and Distribution management to develop inventory adjusting entries estimates, where necessary, in the event that the inventory on hand amounts in Eclipsys are not available or cannot be validated. The reason for estimates should be documented.
3. The Supply Chain Director or delegate should monitor inventory asset account balances monthly, review for any unusual activity and work with UCDHS Financial Services to timely resolve any issues.
4. UCDHS Financial Services should determine the net effect of the monthly inventory adjusting entries on all expense accounts, and determine proper use of provisional and inventory write off accounts.

**Management Corrective Actions**

- a. The Supply Chain Director or delegate will provide UCDHS Financial Services reports of monthly inventory balances generated in Eclipsys, on an ongoing basis starting with the July 31, 2014 reports. The July 2014 reports will be provided to Financial Services by August 15, 2014. Going forward, monthly reports will be generated on the last working day of the month by both Stores and Distribution to be sent to Financial Services.
- b. UCDHS Financial Services will inform the Stores and Distribution management of instances of missing Eclipsys reports and any resulting estimated inventory adjustments, on an ongoing basis starting with July 31, 2014 balances. The notification regarding any missing reports for July 2014 will be completed by September 15, 2014.
- c. The Supply Chain Director or delegate will monitor monthly inventory balances in Eclipsys and DaFIS, and resolve any issues with UCDHS Financial Services in a timely manner, on an ongoing basis starting with the July 31, 2014 balances. The review of July balances will be completed by September 15, 2014.
- d. UCDHS Financial Services will review the inventory accounting process, including the accounting entries resulting from the monthly Eclipsys “automated feed” and any adjusting entries, and develop procedures to properly capture inventory activity flow and related costs. Included in the analysis will be consideration of the need to establish a separate cost center for inventory costs that are not billed to recipient departments by Stores and Distribution. The assessment will be completed by March 15, 2015.

**B. Inventory Safeguarding****Physical security over supplies inventory in the Warehouse and Distribution Center could be enhanced.**

Access to both the Warehouse and the Distribution Center is currently restricted by manual keys. While there are also security cameras at the Warehouse and the Distribution Center, there is no process in place to monitor the surveillance activity on a regular basis.

The Warehouse contains current and archived medical records for all UCDHS departments. The current medical records are segregated from the rest of the storage area with key card controlled access for the Health Information Management (HIM) staff and two designated Warehouse employees. However, archived storage boxes containing medical “shadow” files (i.e. copies of patient’s records that contain protected health information) are maintained in the general Warehouse area, with no controlled access.

During a physical walk-through at the Distribution Center, we noted physicians accessing the supplies area which should be restricted to the Distribution staff only.

UCD Policy and Procedure Manual (PPM) 350-60, “Supplies and Equipment-Management of Major Supply Inventories” requires the department head to establish adequate safeguards to protect supply inventories from theft or other loss. UCDHS Policies & Procedures (P&P) 2278, “Major Supply Inventory Control” further states that proper physical security guidelines be in place to protect supplies inventory. To minimize the risk of loss and inappropriate activity, best practices dictate that the supplies area should be secured at all times with ongoing monitoring of access. Further, HIPAA requires proper safeguards over protected health information (PHI).

### **Recommendations**

Stores and Distribution should:

1. Consider a key card system at the Distribution Center.
2. Control access to the Distribution Center by locking the doors.
3. Ensure ongoing monitoring of surveillance cameras for inappropriate access at both the Warehouse and Distribution Center.
4. Increase safeguards around the archived medical records at the Warehouse. This could be accomplished by moving the archives to a restricted area with a lock, and limiting access to the area by issuing a key/pass to authorized staff only.
5. Work with HIM to develop strategies to identify documents subject to disposal and minimize paper archiving.



**Management Corrective Actions**

- a. Stores and Distribution management will immediately ensure that doors are locked at the Distribution Center to restrict access to authorized staff.
- b. Stores and Distribution management will develop and implement a process for reviewing surveillance cameras activity at both the Warehouse and Distribution Center on a regular basis by October 15, 2014.
- c. Stores and Distribution management will coordinate with HIM and the appropriate UCDHS Departments to review the contents of the archived boxes, and relocate the archived boxes containing protected health information to a secured area by March 15, 2015.
- d. Stores and Distribution management will work with HIM and the appropriate UCDHS Departments to develop strategies to identify archived documents subject to disposal and begin work disposing of those documents by March 15, 2015.

**C. Returned Goods**

**The current returned goods process poses an increased risk of error or theft of inventory items.**

UCDHS Policy 2265, "Return of Merchandise to Vendors", stipulates that returns to the Medical/Surgical prime vendor be processed through Stores (departments outside the main hospital) and Distribution (departments inside the main hospital).

Within the Stores and Distribution Departments designated personnel complete a Return of Goods Authorization (RGA), and send copies to the requesting department, UCDHS Financial Services, and Purchasing, and arrange for shipment of the returned items back to the vendor. An RGA is also required when Stores and Distribution personnel process returns for the items going back into inventory. There is no clear policy or procedure on record keeping for returns in Eclipsys. Within Eclipsys, returns can be processed against any received item. Additionally, all Stores and Distribution personnel who act as receivers in Eclipsys have the ability to change a receiver ID on a purchase, cancel receipt of an item, and process returns. There is also no report of returns processed that is generated from Eclipsys for supervisory review. The lack of separation of duties combined with the lack of review of returns creates an increased risk of errors going undetected and/or fraudulent activity.

We reviewed a sample of 20 returns comprising approximately \$125K of the nearly \$500K in total returns processed in Eclipsys during FY 2013 and compared them to the associated vendor credits recorded in DaFIS. We found four exceptions (20%) where returns in Eclipsys could not be traced to vendor credits recorded in DaFIS. While the reasons behind the discrepancies may be that vendor credits were netted against vendor invoices or timing differences, the level of transparency in this area should be improved. Without an established process to reconcile returns processed in Eclipsys and vendor credits recorded in the accounting records, the risk of errors or fraudulent activity going undetected is heightened.

### **Recommendations**

1. Stores and Distribution management should consider modifying Eclipsys to provide the capability to limit the ability to process returns to designated individuals to enhance separation of duties.
2. Stores and Distribution management should obtain and review on a monthly basis a report of returns processed in Eclipsys by Stores and Distribution in order to identify and follow-up on any unusual transactions or trends
3. Stores and Distribution should collaborate with UCDHS Accounts Payable to develop a process to track and compare returns issued in Eclipsys with the accounting records of vendor credits. Monthly activity should be reviewed and any variances investigated and resolved.
4. Going forward, in designing a new purchasing and materials management system, ensure the system has the capability to: 1) segregate duties within the system, and 2) track and report on returns to vendors.

### **Management Corrective Actions**

- a. Stores and Distribution management will begin a monthly review of a sample of returns processed in Eclipsys to identify and follow-up on any unusual transactions. The follow-up process may include verification with Accounts Payable that a vendor credit has in fact been received. The review process will be implemented by October 15, 2014.
- b. Stores and Distribution management determined that no reporting is available in Eclipsys to help detect and identify segregation of duties issues in processing of returns, changes of receiver IDs and/or cancellations of receipts. Towards this end, Stores and Distribution management will incorporate the design of these reporting capabilities in the system requirements for the new procurement system as noted in (c) below.

- c. Stores and Distribution will collaborate with Financial Services to establish a plan for developing system requirements for the new procurement system. Part of the plan will include ensuring issues raised in this audit, such as the need to:

- 1) have the capability to segregate duties within the system and generate exception returns, i.e. cancelled receipts and partial returns, and 2) track and report on returns to vendors, will be addressed in the new system. A draft plan will be completed by April 15, 2015.

#### D. Purchase Orders

**Purchase Orders where items were only partially received remained open in Eclipsys, resulting in an increased risk of duplicate payment of vendor invoices.**

Eclipsys purchases and inventory sales data is transferred to DaFIS through a monthly automated feed process. However, the purchase orders (POs), receiving records and internal approvals are only maintained in Eclipsys with no automated interface with accounting records. Accounts Payable (AP) relies on Eclipsys records to validate receipt when processing payments; thus the accuracy of Eclipsys data is very important to ensure accurate payment.

The receiving process in Eclipsys allows authorized staff to record missed shipment items by PO line item as they are received. The PO with partial receipts remains open until all items have been received and the record is manually adjusted to mark “fully received” or the PO is closed. Our review of 10 of partially received POs identified that all of the POs remained open even after all items were received and/or the remaining order was cancelled. Additionally, we found one instance where AP issued a duplicate payment on a partially received purchase order in error due to Eclipsys records incorrectly showing the open PO status. Finally, in the process of reviewing partially received POs, we also noted a small number of payments made to vendors by AP with no record of receipt in Eclipsys.

A weakness in internal controls exists since there is no process in place to review aged open POs with partial receipts to determine the validity of their “open” status, thus presenting a risk of improper receipts and duplicate payments. Under the existing “special method” AP process, invoices for goods under \$5K are expedited and require only matching between PO and invoice amounts, without the departmental approval. The risk of duplicate payment is higher for partially received POs under \$5K.

**Recommendations**

1. Stores and Distribution management should regularly review aging of POs and identify POs that need to be closed in Eclipsys.
2. Stores/Distribution management should ensure that receiving records are properly entered into Eclipsys on an on-going basis.
3. Accounts Payable should ensure that payments are made only upon verification that the goods were received and posted in Eclipsys.
4. Going forward, in designing a new purchasing system, explore system capabilities to generate reports to identify completed and fully received POs and ensure timely closing of these POs.

**Management Corrective Actions**

- a. In order to prepare for the transition to a new procurement system, Stores and Distribution management will review the aging of POs and identify all old POs that currently need to be closed in Eclipsys. Significant progress on closing the old POs (80%) will have been made by April 15, 2015.
- b. In addition to clearing out old PO's per (a) above, Stores and Distribution will establish an ongoing process for review of aging POs in Eclipsys to ensure timely closing of POs. Specifically, the review will focus on POs that have been partially received or back-ordered. The ongoing review process will be established by October 15, 2014.
- c. Stores and Distribution will collaborate with Financial Services to establish a plan for developing system requirements for the new procurement system. Part of the plan will include ensuring issues raised in this audit, such as the need to track and report on the status of purchase orders, will be addressed in the new system. A draft plan will be completed by April 15, 2015.

**E. Separation of Duties****Separation of duties within the Supply Chain organization could be enhanced.**

Currently, the System Administrator, the Stores and Distribution Manager, and the Purchasing Supervisor each have job duties that are incompatible in terms of ensuring an appropriate level of separation of duties is maintained. Additionally, there is not an appropriate separation of duties over the conduct of the physical inventory within Stores and Distribution.

- ***System Administrator***

The Systems Administrator for Eclipsys also has access to post transactions in Kuali. Currently, the System Administrator receives vendor reimbursements (rebate checks), and initiates and processes the deposit in Kuali. The risk posed by the dual access would become more significant if the System Administrator also had the ability to initiate and approve transactions in Kuali that relate to purchasing and vendor payments.

In a complex information technology environment, unauthorized access is often difficult to detect. As such, the most important control is to segregate system administration rights and financial management application rights. The system administration role should be clearly separated from the accounting function, especially as it relates to modifying vendor information, vendor order detail and processing vendor rebates.

PPM 350-21, "Supplies & Equipment-Departmental Purchase Delegations", also requires that vendor rebates be approved by the UCDHS Purchasing/Materiel Manager and all approved rebates must be immediately mailed or delivered directly to the Cashier's Office.

- ***Stores and Distribution Manager***

The Stores and Distribution Manager who has responsibility over the unit operations, including ordering and inventory reporting, also has access to accounting records in Kuali to post transactions.

PPM 350-21 also states, "Purchasing, receiving and financial reports reviewing duties must be separated so that one person's work routinely serves as a complementary check on another's work, and no one person has complete control of a purchase transaction. An individual other than the person who approved an order shall review purchasing documents to verify that the expenditures listed in DaFIS transaction listing are valid."

- ***Purchasing Supervisor***

The Purchasing Supervisor has a purchasing card (P-card). Currently, purchases made on the P-card are not independently reviewed and reconciled to the receipts and/or receiving documents. Instead, the Purchasing Supervisor places and receives the P-card orders, and tracks the P-card activity in an Excel workbook. The Systems Administrator distributes the P-card transactions to UCDHS cost centers in DaFIS based upon the data contained in the Excel spreadsheet without viewing the underlying supporting documentation.

PPM 350-22, "Supplies and Equipment-Purchasing Cards" states, "The card holder is responsible for collecting and forwarding source documents to the account manager or account delegate within 5 days of receipt. The account manager is responsible for ensuring that expenditures are properly authorized; verifying the appropriateness and reasonableness of purchases... ensuring that source documentation provides sufficient detail to verify all expenditures; verifying the transactions of no more than 10 cardholders; establishing a process that ensures there is evidence that items purchased were properly received.

- ***Participants in Year-End Physical Inventory Count***

The year-end inventory counts are performed by the same staff members who have access to ordering and distribution records in Eclipsys. A mitigating control is needed to ensure an independent review of inventory counts and write-off adjustments. The UC Accounting Manual, Section I-581 states, "Someone independent of the inventory operation should verify physical counts, prices, extensions, and totals".

### **Recommendations**

1. The Supply Chain Director should work with the Supply Chain management team to separate incompatible duties for the Systems Administrator, Stores and Distribution Manager, and individuals taking the year-end physical inventory.
2. The Supply Chain Director should work with Purchasing to develop a process to track all vendor rebates and incentives and accruals, and reconcile those records to GL on a routine basis.

3. P-card transactions initiated by the Purchasing Supervisor should be independently reviewed in comparison to receipt records and bank statements by another manager and before the related expenses are distributed in DaFIS/Kuali.

**Management Corrective Actions**

- a. The Supply Chain Director will ensure that the rebate checks are processed by a designated staff person who is not responsible for system administration or processing of transactions related to purchasing or accounts payable in Kuali by September 15, 2014.
- b. The Supply Chain Director will work with Purchasing to develop a process to identify rebates and incentives, and to reconcile the receipt of those rebates and incentives to the GL, by October 15, 2014.
- c. The Supply Chain Director will restrict access to accounting records for Stores and Distribution Manager to “read only” in DaFIS/Kuali, effective immediately.
- d. Stores and Distribution management will engage an independent staff person who is not part of the inventory purchasing and distribution process, to observe the physical inventory, perform test counts, and verify proper recording of inventory counts on a sample basis during the July 2015 physical inventory.
- e. The Supply Chain Director will establish a process to ensure the purchasing card transactions of the Purchasing Supervisor are independently reviewed to ensure purchases were authorized, source documentation such as a receipt or invoice is present, and there is evidence the goods were properly received, in accordance with PPM 350-22. The process will be established and implemented by September 15, 2014.