## UCsF

# UCSF Department of Psychiatry Supplies Controls Assessment 

Audit and Advisory Services

June 2018

## Background

Audit and Advisory Services (A\&AS) completed a controls design assessment of printer toner supplies management within three research laboratories (labs) at Genentech Hall. The purpose of the review was to determine whether any controls deficiencies failed to prevent or detect the recent fraudulent incidents that involved purchasing printer toner cartridges with UCSF funds and subsequently re-selling to eBay.

Objective: To assess the adequacy of the ordering and inventory controls over printer toner cartridges for preventing and detecting error and misappropriation.

Scope: Printer toner purchases and inventory management within Department of Psychiatry and other supported Labs.

## Background Cont'd

## Procedures Performed:

- Gathered information from BearBuy purchasing system to understand system and process controls for purchases.
- Reviewed all Xerox toner purchases made by the employee involved in the fraud incident (during the period January 2012 - December 2017) and performed analysis on expected vs. actual usage to identify purchase trends.
- Interviewed Print Management Program Manager to understand printer toner cartridges capacity and usage.
- Interviewed relevant personnel within the three labs to understand and evaluate current controls over supplies ordering and inventory management and to identify any process/controls improvement opportunities.


## Incident - Overview

The employee ("employee") in the Department of Psychiatry provided administrative support, including ordering supplies and managing printer toner cartridges for three research labs related to the departments of Psychiatry, Anatomy and Hematology/Oncology (Hem/Onc). The employee diverted supplies of printer toners purchased with University's funds and re-sold them online.

The labs used two printers:

- Xerox Phaser 6700 printer - bought in July 2012 and each toner cartridges yield between 12,000-15,000 pages. This printer is shared by Psychiatry (Zastrow lab) and Anatomy (Mostov lab). The employee has a BearBuy Requestor role so toner cartridges requires Psychiatry purchase approval for items exceeding $\$ 500$.
- Xerox Phaser 6500 printer - bought in December 2014 and each toner cartridges yield between 2,500 - 3,000 pages. This printer is used by Hem/Onc (Bivona lab). The employee has a BearBuy Preparer role, so all toner cartridge purchases require Hem/Onc's BearBuy Requestor approval.
- The Phaser 6500 and 6700 cost per toner is $\$ 104$ and $\$ 266$ respectively, and the toners for the two printer models are not interchangeable.


## Summary

Currently, BearBuy has some mitigating controls to prevent and detect errors and potential misappropriation of assets, including approval required over certain financial thresholds and monitoring reports available for items not requiring approvals. Key control deficiencies identified during the review that require strengthening include:

- Segregation of duties between ordering and receiving were not implemented.
- Baseline for office supplies usage was not established and corresponding budget plan developed to monitor against actual expenses.
- Inaccurate classification of expenses due to incorrect posting to the appropriate expense account, thereby limiting ability to identify anomalies in purchasing patterns.
- Review of BearBuy Reports for orders under $\$ 500$ and self approving requesters for purchases under $\$ 5,000$ was not performed to monitor and validate purchases for appropriateness.
- Verification of lab supplies purchases and cost percentages sharing among labs were inconsistently conducted by finance staff .


## Summary Cont'd

Additionally opportunities for improvements were identified for management's consideration; these include implementing inventory controls for high cost supplies and use of Print Management Services for managing printers.

Department of Psychiatry Finance management will be reviewing the recommendations in the report and develop plans to implement them.

The following action have been or in the process of implementation:

- Effective January 2018, Psychiatry Department Finance staff are ordering supplies and these are being shipped directly to the Lab thereby instituting segregation of duties.
- For FY19 budget, Psychiatry has created more detailed transactional budgets to enable better monitoring of budget variances.


## Toner Usage vs Actual Toner Purchases

The following gap analysis are for only toner items that were ordered by and received by the employee who manages these two printers for the three labs. It excluded items the employee had ordered and sent directly to other employees.

| Labs | Printers | Average Toner <br> Yield Capacity <br> (for a set of four colors <br> together) | Estimated <br> Toner <br> Usage | Actual <br> Toners <br> Ordered | Cost of <br> Actual <br> Toners <br> Ordered |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  <br> Anatomy | Phaser 6700 <br> It has printed 314,338 total pages | 13,500 pages | $93^{*}$ | 212 | $\$ 36,580$ |
| Hem/Onc | Phaser 6500 <br> It has printed 75,983 total pages | 2,750 pages | $111^{*}$ | 175 | $\$ 17,881$ |

*Calculation based on total pages printed /average toner yield = \# toners x 4 (set of 4 colors)
Based on total pages printed from inception of the printers and capacity yield, we estimated that an excess of 120 for Phaser 6700 and 155 toners for Phaser 6500 were ordered than required.

The trend analysis of actual printed pages vs the toner yield capacity over the life of each printer is shown in Appendix A.

## Summarized List of <br> Controls Observations

## Supplies Controls Observations

| Risks | Expected Controls | Control Gap | A\&AS Recommended Controls |
| :--- | :--- | :--- | :--- |

## Ordering, Receiving \& Management of Supplies

1. Without proper segregation of duty and inventory control, an individual may have opportunity to misappropriate assets.

Good internal control practices is to have different people performing the following functions:

- Approve purchase requisitions
- Receive ordered materials
- Approve invoices for payment
- Review and reconcile financial records
- Perform inventory counts

The employee was ordering, receiving shipments and overseeing supplies inventory.
Also, the employee had ordered high quantity per order than usage such as 5 black toners and/or 3 toners per color (i.e. 3 magenta, 3 cyan and 3 yellow).
a. Department could consider if there is a benefit to using the University's Print Management Program service for the two printers. This will preclude the need for the department to institute some of the additional controls set out below.
b. Department should consider limiting high cost product ordering to no more than two items per color: one for use and one for backup until the next order can take place.
c. Department should consider additional control for high cost supplies such as locked storage and/or inventory count.

## Supplies Controls Observations (cont.)

| Risks | Expected Controls | Control Gap | A\&AS Recommended Controls |
| :---: | :---: | :---: | :---: |
| General Ledger (GL) Review |  |  |  |
| 2. Not performing reviews of transactions and/or monitoring budget variances may result in misappropriation and/or errors to go undetected. | Perform GL review according to the GL Verification Procedures posted on the Controller's website including "analyzing results through trend analysis of revenue and expense categories and comparing the activity to budget." | Departments stated they perform GL review for unallowable expenses. However, they are not performing budget to actual analysis for supplies expense to identify variances, which would provide a detective control. <br> This is illustrated through Psychiatry being charged for 131 toner cartridges, totaling $\$ 13,992$, that belonged to another department's printer., Phaser 6500. | a. Departments should review the Controller's Office GL Verification Procedures for understanding of expectations including budget variance report to detect unexpected transactions/volume for the specific concern area of variance. <br> b. Psychiatry should consider removing erroneous charges from the state funds to other departmental funds as appropriate. |

## Supplies Controls Observations (cont.)

## Risks

Expected Controls
Control Gap
A\&AS Recommended Controls

## General Ledger (GL) Review Continued

3. Inconsistent used or incorrect posting to supplies account, between Office Supplies and NonMedical Supplies, may impact management's ability to effectively monitor expenses at the Account Level and may permit unallowable items be charged to federal awards.

When performing GL review, the "Description" in addition to the "Account Description" field should be examined to determine legitimacy of items or appropriateness of classification of expenses.

Also, as purchases less than $\$ 500$ do not require approval, the BearBuy User Roles states that "Requestor must have a solid understanding of accounting / funding sources."

For Anatomy, Xerox toner charges were incorrectly posted to NonMedical Supplies account \#52312 instead of Office Supplies account \#52301, resulting in $\$ 4,529$ charges to federal funds that was not permitted.

Additionally, scientific vendors such as Fisher, Quest Diagnostics, Bio-Rad Laboratories, Spectrum Chemical \& Lab Products, were charged to office supplies account when they may be more appropriately charged under the Non-Medical Supplies account.
Example of potential odd vendor transactions where there were 55 transactions for Oriental Trading and AT\&T Mobility totaling $\$ 15,838$ charged to a federal grant under NonMedical Supplies that may need to be reviewed for appropriateness by Psychiatry.
Also, P-Card transactions with food were charged to supplies expense.
a. Anatomy should confirm the erroneous charges and assess whether these should be removed from the federal fund to discretionary fund as appropriate.
b. Departments should review their current use of account codes especially non-scientific vendors under the Non-
Medical Supplies account on federal funds and determine appropriateness of these expenses.
c. Training should be provided to financial staff on the correct use of office supplies and nonmedical supplies account.

## Supplies Controls Observations (cont.)

$\left.\begin{array}{|l|l|l|l|}\hline \text { Risks } & \text { Expected Controls } & \text { Control Gap } & \text { A\&AS Recommended Controls } \\ \hline \text { Purchase Approvals and Monitoring: } & \begin{array}{l}\text { Review of BearBuy } \\ \text { reports for transactions } \\ \text { that do not require } \\ \text { approval to determine } \\ \text { appropriateness of } \\ \text { expenses. }\end{array} & \begin{array}{l}\text { Departments were not aware of } \\ \text { BearBuy monthly monitoring } \\ \text { reports including: } \\ \text { - Requisition less than } \$ 500 \\ \text { - Sack of monitoring } \\ \text { controls may result in a } \\ \text { failure to detect } \\ \text { unauthorized or } \\ \text { inappropriate purchases. }\end{array} & \begin{array}{l}\text { Departments should review these } \\ \text { monthly reports where applicable to } \\ \text { detect unusual transactions or } \\ \text { volume for items that do not require } \\ \text { the same approval process. }\end{array} \\ \hline \begin{array}{l}\text { As such, monthly BearBuy control } \\ \text { reports were not reviewed, which } \\ \text { may have hindered the department's } \\ \text { ability to identify trends, confirm } \\ \text { established business processes are } \\ \text { working, or validate items for } \\ \text { appropriateness. }\end{array} & \\ \hline \begin{array}{ll}\text { 5. Inconsistent practices by } \\ \text { Requestors or Approvers or } \\ \text { lack of operational } \\ \text { knowledge on the sharing } \\ \text { environment for the } \\ \text { number of printers and } \\ \text { normal usage may hinder } \\ \text { ability to identify suspicious } \\ \text { activities. }\end{array} & \begin{array}{l}\text { Best practice is to } \\ \text { review items ordered } \\ \text { for familiarity in order } \\ \text { to identify suspicious } \\ \text { activity or inquire about } \\ \text { unknown items to } \\ \text { verify cost sharing with } \\ \text { the source department. }\end{array} & \begin{array}{l}\text { Requestor or Approver relies on } \\ \text { Shopper for accurate Accounting } \\ \text { Codes and may not always review } \\ \text { items ordered or may not inquire } \\ \text { about the accuracy of the share } \\ \text { percentage or the Account Codes. }\end{array} & \begin{array}{l}\text { Develop quality check procedures to } \\ \text { include reviewing items ordered for } \\ \text { suspicious items, volume of orders, } \\ \text { accuracy of Account classification, } \\ \text { and verifying with source } \\ \text { department(s)/ Psychiatry Units for } \\ \text { any cost sharing items and }\end{array} \\ \text { percentage, at least for new items, to } \\ \text { determine the accuracy on the }\end{array}\right]$

## Additional Consideration

MyExpense transactions included supplies reimbursement that did not go through the University's negotiated supplies contracts. Below depicts the volume of supplies reimbursements to employees from July 2013 to December 2017:

- Psychiatry had 83 employees reimbursed for 309 items totaling $\$ 56,708$, including 40 transactions totaling \$15,397 for calendar year 2017.
- Anatomy had 97 employees reimbursed for 571 items totaling $\$ 174,598$, including 150 transactions totaling $\$ 56,234$ for calendar year 2017.
- Hem/Onc had 8 employees reimbursed for 39 items totaling \$7,344, including 10 transactions totaling $\$ 514$ for calendar year 2017.

Departments should evaluate whether items should or could have been purchased through the BearBuy process.

## Appendix A - Gap Analysis on Printed Pages

## Phaser 6700

Actual Printed Pages vs Toners Purchased Yield


Over the life of this printer, July 2012 to January 2018, it has an annual prorated printed pages of 55,439 . However, the quantity of toners purchased exceeded the actual usage. The 2012 data only reflects toner purchases beginning in July and does not reflect quantity on hand prior.

## Appendix A - Gap Analysis on Printed Pages (cont.)



Phaser 6500 printer has an annual pro-rated printed pages of 23,969; however, the quantity of toners purchased exceeded the actual usage. This graph excludes December 2014 data when the printer was purchased.

## UCSF

University of California San Francisco

