



Internal Audit Department

Campus Health Pharmacy

**March 2016
Report Number FY 16-06**

This page left blank intentionally.

Northern Arizona University
Audit of the Campus Health Pharmacy
Audit Report
March 2, 2016

Summary

Our audit of the Campus Health Pharmacy is in NAU's Annual Audit Plan for FY 2016, as approved by the Arizona Board of Regents Audit Committee. The audit links to NAU's strategic goals of sustainability and effectiveness and of student success. This is first time the Campus Health Pharmacy (CHP) has been audited by Internal Audit.

Background: The Campus Health Pharmacy is a full-service pharmacy. After being closed during FY 2010 and FY 2011 due to budget cuts, the Pharmacy reopened in a new home in FY 2012. The CHP is located in the Health and Learning Center and occupies 2,071 square feet. In addition to dispensing prescription and over-the-counter medication, the Pharmacy sells retail items such as shampoos, shaving needs, toothpaste, paper towels, batteries, sunglasses, greeting cards, and makeup.

The Pharmacy reports through Campus Health Services to Enrollment Management and Student Affairs. The posted hours of the Pharmacy are 8:30 a.m. to 5:30 p.m. weekdays and 11:00 a.m. to 3 p.m. on most Saturdays. The pharmacy is required to be closed whenever a pharmacist is not present. It has one full-time pharmacist who operates the pharmacy during the work week and two part-time pharmacists to operate the Pharmacy during store hours on Saturdays. In addition, the pharmacy employs one full-time technician, one part-time technician, and several student workers. The Pharmacy, pharmacists, technicians, and retail operations are licensed by the Arizona State Board of Pharmacy. The CHP is licensed to dispense controlled substances.

The CHP is dedicated to students (and their family), faculty, and staff of NAU to provide a low cost, convenient, and accessible pharmacy experience. The CHP caters to the NAU population including:

- assisting the International population in navigating the American healthcare system;
- providing detailed counseling for medication side effects, specific to the NAU population (i.e. side effects due to alcohol consumption);
- enabling the charging of fees to a LOUIE account or use of a Jacks Card;
- providing a training program for pharmacy and medical students;
- serving as a convenient location for all students, faculty, and staff; and
- supporting prevention of multi-drug interaction and pharmaceutical support for CHS medical providers.

Northern Arizona University
 Audit of Campus Health Pharmacy
 Audit Report

The Campus Health Service’s Fiscal Operations Manager provided the financial data to prepare the following table.

Results of Operations for the Campus Health Pharmacy by Fiscal Year

	<i>FY 13</i>	<i>FY 14</i>	<i>FY 15</i>
Revenue	\$615,311	\$783,729	\$806,546
Expenses-Payroll	(225,063)	(287,277)	(291,322)
Expenses-Purchases	(483,217)	(528,757)	(576,871)
Loss	(\$92,969)	(\$32,305)	(\$61,647)

In 2012, a group of external MBA students from the NAU Franke College of Business conducted research that focused on the CHP and how to generate revenue to cover costs and provide additional cash flow. Similar to other universities, the research concluded that the CHP is operating as a service organization rather than a profit center. The losses in the above table have been identified due to the following:

- CHS is restricted to one vendor (Cardinal) due to the MMCAP (Minnesota Multistate Contracting Alliance for Pharmacy) program, which does not allow for competitive pricing. MMCAP is a free, voluntary group purchasing organization for government facilities that provide healthcare services.
- The volume of patients with insurance has increased over the years from 50% in FY12 to 65.6% FY15. These contracted rates have resulted in lower reimbursement.

The Pharmacy processed 23,819 prescriptions in CY 2015. Of those, 15,624 (65.6%) were submitted to patients’ insurance companies for reimbursement. The Pharmacy accepts most insurance. For drugs covered by insurance, the Pharmacy charges the amount allowed by the insurance company plus any required patient co-pay. If the patient is uninsured or the medicine is not covered by insurance, the Pharmacy calculates a product price using the product’s acquisition cost plus a mark-up and processing fee. Pharmaceutical software Pro-Pharm One™ is used to calculate the price charged for medications not covered by insurance using parameters set by the pharmacist. Patients may elect to have charges posted to their student account (LOUIE); pay using their JacksDebit Express account; or pay by check, cash, or credit card.

Northern Arizona University
Audit of Campus Health Pharmacy
Audit Report

Pro-Pharm One™ is also used to 1) record acquisition prices, 2) track and calculate inventory on hand, 3) record prescriptions dispensed to patients, and 4) report amounts billed to and due from insurance companies. Pro-Pharm One™ can be used by medical staff to electronically sign and issue prescriptions.

The Arizona State Board of Pharmacy performs periodic compliance audits of the CHP. The last time this review was performed was in February 2014. In July 2015, the retail division of the State Board of Pharmacy reviewed the Pharmacy's inventory for expired or recalled medicines. No major exceptions were found in either review.

Audit Objectives: The primary audit objectives for this review were to evaluate and assess the internal controls necessary to comply with government licensing regulations, University policies, pharmacy pricing, and financial reporting.

Scope: The scope of this audit focused on policies and procedures currently in effect and transactions that occurred during the first six months of FY 2016.

Methodology: Our audit objectives were accomplished by performing the following procedures:

- confirming that the Pharmacy and staff possess the proper licenses and the licenses are current;
- ensuring the Pharmacy is made secure;
- verifying that the Pharmacy provides sufficient training for new staff;
- confirming that the Pharmacy has developed or acquired sufficient documentation to operate the Pharmacy and its IT systems;
- ensuring that the Pharmacy retains confidential records pertaining to medicines dispensed to patients;
- matching a sample of pharmaceutical perpetual inventory records to inventory on hand ensuring accuracy and proper labeling;
- verifying that the Pharmacy retains an updated formulary (listing of medications generally in stock) and the drugs on hand have not expired;
- testing the Pharmacy's procedures to price medications fairly and consistently;
- confirming that the Pharmacy has a process to accurately charge and track receivables due from insurance companies;
- verifying that pharmaceuticals are adequately secured and that only the pharmacists have access to controlled substances;
- reviewing and assessing cash handling processes;
- obtaining and reviewing for reasonableness the financial results of operations for

Northern Arizona University
Audit of Campus Health Pharmacy
Audit Report

- the pharmacy for the last three fiscal years; and
- Confirming that there is a process in place to identify and report any unusual or suspicious activity or concerns.

The audit was conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing*.

Conclusion: With the exception of periodically reporting the Pharmacy’s results of operation to NAU management, the operations of the CHP are adequately controlled. Opportunities to improve internal controls include: greater oversight by the pharmacist over staff when purchasing and receiving medicines and obtaining up-to-date system documentation from Pro-Pharm One™.

Management is supportive of our recommendations and has actively begun working to implement their identified action items.

The control standards we considered during this audit and the status of the related control environment are provided in the following table.

General Control Standard (The bulleted items are internal control objectives that apply to the general control standards, and will differ for each audit.)	Control Environment	Recommendation No.	Page No.
Reliability and Integrity of Financial and Operational Information			
<ul style="list-style-type: none"> • The CHP has adequate procedures to ensure medications are priced fairly and consistently. 	Reasonable to Strong Controls in Place	2	8
<ul style="list-style-type: none"> • The CHP is able to accurately charge insurance companies and report on any amounts due. 	Reasonable to Strong Controls in Place		
<ul style="list-style-type: none"> • The CHP has adequate procedures to account for and report all revenues and expenses. 	Opportunity for Improvement	1	7
<ul style="list-style-type: none"> • Pharmaceutical inventory is accurately reported and routinely checked. 	Reasonable to Strong Controls in Place		
<ul style="list-style-type: none"> • Transactions are timely and accurately posted in PeopleSoft. 	Reasonable to Strong Controls in Place		

Northern Arizona University
Audit of Campus Health Pharmacy
Audit Report

Safeguarding of Assets			
<ul style="list-style-type: none"> Access to the Pharmacy and drugs is adequately restricted. Only the pharmacist has access to controlled substances. 	Reasonable to Strong Controls in Place		
<ul style="list-style-type: none"> Access to patient prescription records is made secure. 	Reasonable to Strong Controls in Place		
<ul style="list-style-type: none"> Cash is securely and safely processed and stored until deposited to the bank. 	Reasonable to Strong Controls in Place		
<ul style="list-style-type: none"> There is a system in place to ensure expired and recalled drugs are not kept or dispensed. 	Reasonable to Strong Controls in Place		
Authorization Procedures			
<ul style="list-style-type: none"> Prescriptions are properly authorized prior to dispensing. 	Reasonable to Strong Controls in Place		
<ul style="list-style-type: none"> Purchases and receipts of medications and products are thoroughly reviewed and authorized prior to submitting purchase orders to the vendor. 	Opportunity for Improvement	2	8
Effectiveness and Efficiency of Operations			
<ul style="list-style-type: none"> Prescriptions are efficiently dispensed. 	Reasonable to Strong Controls in Place		
<ul style="list-style-type: none"> The CHP provides sufficient training for new staff. 	Reasonable to Strong Controls in Place		
<ul style="list-style-type: none"> The CHP has sufficient documentation to operate the Pharmacy and understand its IT systems. 	Reasonable to Strong Controls in Place	3	9
<ul style="list-style-type: none"> The CHP has a system to ensure demanded pharmaceuticals are on-hand and are properly labeled. 	Reasonable to Strong Controls in Place		
<ul style="list-style-type: none"> Cash handling responsibilities are adequately segregated. 	Reasonable to Strong Controls in Place		
<ul style="list-style-type: none"> There is a process in place to identify and report any unusual or suspicious activity or concerns 	Reasonable to Strong Controls in Place		

Northern Arizona University
 Audit of Campus Health Pharmacy
 Audit Report

Compliance with Laws and Regulations			
<ul style="list-style-type: none"> The Pharmacy and staff have proper and up-to-date licenses. 	Reasonable to Strong Controls in Place		
<ul style="list-style-type: none"> Patient records are appropriately retained and kept confidential. 	Reasonable to Strong Controls in Place		
<ul style="list-style-type: none"> CHP operates within all University, state and federal regulations identified in the audit. 	Reasonable to Strong Controls in Place		

We appreciate the assistance of the staff of the Campus Health Pharmacy during this review.

/s/
 Penny Whitmore
 Senior Internal Auditor
 Northern Arizona University
 (928) 523-6459
penny.hock-whitmore@nau.edu

/s/
 Mark Petterson
 Chief Audit Executive
 Northern Arizona University
 (928) 523-6438
mark.petterson@nau.edu

Northern Arizona University
Audit of Campus Health Pharmacy
Audit Report

Audit Results, Recommendations and Responses

1. Periodic financial results of operation should be prepared and submitted to management for review.

Condition: The management of Campus Health Services has not been provided periodic reports that reflect the financial results of the Pharmacy's operations. To prepare this information requires significant effort as the Pharmacy's payroll records are not segregated from the financial records of other Campus Health Services activities.

Criteria: The Pharmacy's financial information should be easily identifiable and available for management review.

Cause: Pharmacy payroll data has not been segregated from other Medical Services payroll.

Effect: Management is not able to view and analyze a complete overview of financial data for Pharmacy operations.

Recommendation: Campus Health Services should work with the Comptroller's Office to set up a sub-department that can be used to capture all revenues and expenses incurred by the Pharmacy. Periodic financial reports reflecting the results of operations should be prepared and submitted to management for review.

Response: CHS Medical Services' monthly financial statements are currently compiled by the Fiscal Operations Manager. Although monthly and YTD pharmacy purchases and revenues are broken out, expenses are not itemized, preventing a thorough analysis (i.e. payroll, overhead). After discussions with the Executive Director and Director of Administration, the following changes are being prepared for FY17:

- New position numbers will be created for all pharmacy part time, pooled positions to ensure easy and accurate extraction of data from Enterprise Reporting.
- New object codes for expenses will be used to separate prescription medications from over-the-counter items, to assure the profit margins align with national standards.
- The Fiscal Operations Manager will create a new table in the monthly financial statements, breaking out all pharmacy expenses and revenues.
- CHS is implementing new automated pharmacy software that will allow management to access timely insurance payment reconciliation reports.

Northern Arizona University
Audit of Campus Health Pharmacy
Audit Report

2. Greater segregation of duties is needed within the Pharmacy.

Condition: Inventory of Pharmacy controlled substances and other medications indicated that all are properly accounted for. However, a review of internal control procedures indicated that the Pharmacy is exposed to misuse of controlled substances due to a lack of segregation of duties. For example, the full-time Pharmacy technician inputs medication purchases and receipt of medications to Pro-Pharm One™ without evidence of review and approval by the Pharmacist, potentially bypassing inventory controls.

Also, several minor pricing discrepancies were identified between suppliers' invoices and the acquisition costs recorded in Pro-Pharm One™.

Criteria: Incompatible functions such as authorizing, receiving, and reporting should be segregated or, at a minimum, closely supervised, in order to minimize the risk of theft and misuse of drugs.

Acquisition costs recorded in Pro-Pharm One™ are used to calculate the amounts charged to patients without prescription insurance and should be accurately recorded.

Cause: The tight level of staffing in the Pharmacy inhibits attainment of proper segregation of duties.

The Pharmacy technician's numerous duties limit the time available to input receipts of medications, resulting in errors.

Effect: Without a proper segregation of duties or strong oversight, the Pharmacy may not reflect all medicines received.

Pro-Pharm One™ may not accurately display the correct price of medications.

Recommendation: Campus Health Services administration should perform and document periodic surprise inventories of controlled substances and other medications.

The pharmacist should provide stronger oversight to the purchasing, receiving, and recording of medications. A report from Pro-Pharm One™ that shows inventory added by quantity and acquisition price should be reconciled to receiving reports. Evidence that the reports are independently reviewed and reconciled should be retained. Any discrepancies should be brought to the attention of the pharmacist and management.

Northern Arizona University
Audit of Campus Health Pharmacy
Audit Report

Response: Campus Health Services administration (Executive Director, Director of Administration or designee) will perform and document unscheduled inventories. Corrective action will take place if discrepancies are noted.

Oversight of the pharmacy will be improved by the segregation of duties:

- The pharmacist will order medications/supplies through the online (web-based) ordering system.
- The pharmacy technician will review contents of the received order and enter into inventory.
- The pharmacy technician will print the Historical Drug Shipment and attach to the packing slip received with the order, after entry into inventory.
- The Pharmacist will review for accuracy.
- If the information (inventory, price, totals) on the two forms match, the Pharmacist will forward these forms to the CHS Business Office where the Administrative Assistant will perform a final check before processing for payment.
- If the Pharmacist discovers a discrepancy, the discrepancy will be reviewed and resolved with correction action before forwarding to the CHS Business Office.

3. The Pharmacy should work with Pro-Pharm One™ to ensure it has complete and up-to-date system documentation.

Condition: The Pharmacy does not have complete and current system documentation for Pro-Pharm One™.

Criteria: The Pharmacy should have current system documentation on hand to enable staff to understand in detail how Pro-Pharm One™ works and how the software interfaces with the other processes of the Pharmacy.

Cause: The Pharmacy reports that Pro-Pharm One™ vendor as not been responsive in providing system documentation.

Effect: Pharmacy staff do not have the tools they need to fully understand and validate the functions available from Pro-Pharm One™.

Lack of understanding of Pro-Pharm One™ functions could lead to incorrect pricing of inventory and incorrect financial reporting.

Recommendation: The Pharmacy should obtain system documentation from the Pro-Pharm One™ vendor. System pricing tables, fees, and specific calculations should be

Northern Arizona University
Audit of Campus Health Pharmacy
Audit Report

verified periodically to ensure that system software is functioning properly. In addition, the Pharmacy should update its user's manual that provides specific guidelines on how Pharm One™ interfaces with the other processes and software used by the Pharmacy.

Response: An online User's Guide is available in the Pro-Pharm One™ system with current system documentation and user's manual. The online manual is all encompassing including chapters on, but not limited to: Pharmacy Setup, Security Setup, Filling Prescriptions, Inventory Management, Price Tables, Point of Sale instructions, and Accounts Receivables. There are detailed release notes (explanation of the changes in the upgrade) available when an upgrade is performed. The user's manual provides specific guidelines on how Pro-Pharm One™ interfaces with processes and software. The manual includes information on the data transfer protocol (HL7-2) between Pro-Pharm One™ and Point and Click, Campus Health Services' patient management system. This interface allows the submission of patient prescriptions (ordered by a medical provider) from Point and Click to the Pro Pharm One System for the pharmacy to fill these prescriptions. Ordering medications and supplies is performed through a secure web based site which does not interface with Pro-Pharm One™ or Point and Click. Pharmacy payments from insurance companies are transmitted to the comptrollers via EFT (electronic fund transfer) and the payments and patient detail is entered manually in Point and Click and Pro-Pharm One™.

The documentation and user manual for Pro-Pharm One™ will be incorporated into existing manuals and training. Also included will be the pharmacy and business office opening and closing procedures which provide specific guidelines on how the Pharmacy's systems interfaces with the other processes and software used by the Pharmacy including but not limited to: downloads from the cash register, reconciliation of the cash amounts, daily closing procedures and information on the upload to PeopleSoft. Targeted completion date is May 1, 2016.

Northern Arizona University
Audit of Campus Health Pharmacy
Audit Report

Distribution:

Audit Committee, Arizona Board of Regents
Internal Audit Review Board
Rita Cheng, President
Julie Ryan, Executive Director, Campus Health Services
Daniel Bruey, Director, Campus Health Services
Jennus Burton, Vice President for Finance and Administration
Jane Kuhn, Vice President, Enrollment and Student Affairs
Michelle Parker, Interim General Counsel
Wendy Swartz, Associate Vice President and Comptroller