

## Internal Control Failures in a Student Health Center

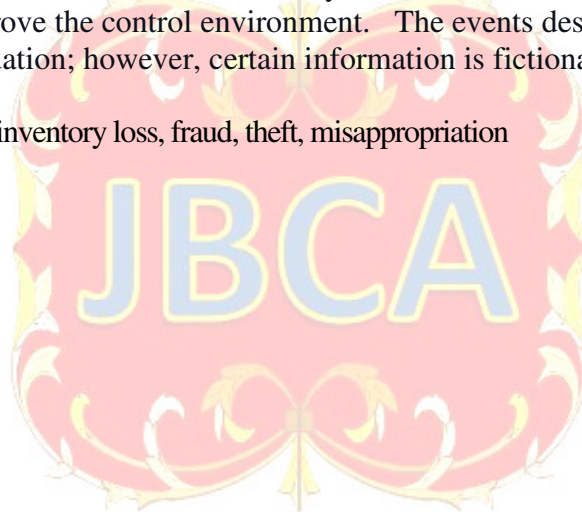
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### ABSTRACT

Internal control failures within a nonprofit university's student health pharmacy resulted in the diversion of pharmaceutical inventory over five years. The pharmacy formulary contained several controlled substances, and the full-time pharmacist had the opportunity to capitalize on diverting medications for personal gain by selling to third-parties. The institution was made aware of the suspected wrongdoing, and an internal review estimated shortage in the pharmacy inventory at approximately \$340,000. The employee was dismissed, and an external investigation was initiated.

The case explores the internal control failures that allowed the fraud to occur without timely detection. Students are also asked to identify internal control weaknesses and provide recommendations to improve the control environment. The events described in this case are based on a real-world situation; however, certain information is fictionalized.

Keywords: internal control, inventory loss, fraud, theft, misappropriation



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## INTRODUCTION

Bask University (the university), located in Saskatoon, ND, was founded in 1915 and is currently a public institution of higher education offering undergraduate, graduate, and doctoral degrees. The total student enrollment is approximately 11,000. As part of the services provided to students, a non-retail pharmacy is located on campus to assist in providing convenient access to pharmaceuticals as prescribed by the university's attending physician or nurse practitioners. The complementary health services (including Pharmacy) are available for enrolled full-time students who have paid the mandatory health fee (Appendix II). The Pharmacy is recognized by the university as an "Auxiliary Enterprise Activity" and operates as a subunit of the self-operated Student Health Department within the Division of Student Affairs. The Pharmacy's organizational structure includes an attending physician, and an administrative director who is supported by a full-time pharmacist, a part-time pharmacist, and a pharmacy technician, all reporting to an administrative director (Appendix I). The head pharmacist began employment at the university on January 1, 2014, and was responsible for the Pharmacy's overall operations.

On average, the department serves 11,148 students per year and fills on average 9,722 prescriptions per year at an average cost of \$10.42 per medication. The operating revenues and expenditures are approximately \$2.9 and \$2.6 million per year respectively. Over the past several years, enrollment has been a challenge, and this continual decline has negatively impacted the revenues available to provide needed services to students. The major contributing factor to this decline has been associated with the exponential growth of online class offerings (nationwide) and a significant decrease in overall face-to-face students who pay the mandatory student fees. Students who enrolled in face to face classes (1 credit hour minimum) are required to pay mandatory fees (i.e., health fees, parking fees, athletic fees), whereas online students are not assessed these fees.

The institution's non-retail pharmacy offers limited medications (including several controlled substances) to enrolled fee-paying students who visit the student health department. Student patients are prescribed a medicine by the physician (or nurse practitioner) available from the Pharmacy's formulary<sup>1</sup>, which is determined by a Health Committee consisting of the pharmacist, attending physician, administrator, and nursing supervisor. The intent is to provide free or low-cost medications to its stakeholders (i.e., students). In order to control expenses, the Pharmacy does not fill prescriptions from outside providers or medications for chronic illnesses.

## PHARMACY OPERATIONS

As budgets were tightened with the decline in enrollment, the health center's administrator was concerned with controlling the Pharmacy's increased operating costs, especially medication costs. Over the past four years, the administrator noted a puzzling trend, medication costs were increasing while the student enrollment and prescriptions filled count were decreasing. This was troubling since the health center's goal was to maintain the same service level since students pay health fees each semester.

The administrator and the pharmacist had an ongoing contentious working relationship. Any time the administrator inquired of the pharmacist about the operating budget and how the Pharmacy was being managed on a day to day basis, the pharmacist would become irate, creating

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<sup>1</sup> Formulary: an official list giving details of medicines that may be prescribed (see Appendix III)

a contentious working environment within the Pharmacy. The environment became so toxic that the pharmacist restricted the administrator access to the Pharmacy.

In October 2018, pharmacy staff notified the administrator and the university's Office of Legal Affairs of nefarious acts committed by the pharmacist. These included allowing non-student personnel access to the Pharmacy to retrieve medications, receiving phone messages from community members for prescription refills, and operating a personal business during work hours. As a result, the administrator requested that the Internal Audit Department conduct a review of the operations to better understand the scope of the problem.

### **Internal Review of Pharmacy Operations**

The internal review was initiated immediately, and the significant concerns were centered around the pharmacy inventory. Interviews were conducted with the administrator and pharmacy staff to obtain an understanding of the operations. The head pharmacist was not available for interview since they were placed on probation a few days before the internal review commenced. An unknown individual was seen in the pharmacist's office the entire day using the computer. Upon inquiry by the administrator, the pharmacist noted that the individual was there to retrieve luggage and was not in the Pharmacy. The conversation became problematic and the university's police were summoned to escort the pharmacist away from the premises.

The pharmacy did not have formal policies and procedures so the Internal Audit Department personnel relied on observation and inquiry of staff to assist with the documentation of Pharmacy operations. Financial data was provided from all systems, and a physical inventory was performed on-site of all medications.

The pharmaceutical inventory's overall purchasing process was controlled by the pharmacist, who performed all relevant functions: ordering, receiving, disbursing, counting, returning expired inventory for credit, and adjusting the inventory records in the systems. Two vendors were utilized for stocking the pharmacy shelves with annual purchases averaging approximately \$179,000. Two systems are used to receive pharmaceutical inventory, check drug interactions, patient medical history, and known allergies, and they were not integrated.

Each time inventory was received, the pharmacist would physically receive the pharmaceuticals and provide the pharmacist technician with handwritten inventory sheets to enter into the two systems. Purchase requisitions were primarily manual, and bills of lading were not required to be provided to the administrator to match with the final invoices and were not kept by the pharmacist. All manual inventory adjustments made in the systems were supervised and, at times, adjusted by the pharmacist, and no supporting documentation was ever provided to the administrator for these adjustments (Appendix IV).

The administrator would receive the final invoices from the vendors and would approve for payment each month. Additionally, no reconciliations or physical inventory counts were performed. During the walkthrough observation of the pharmacy, the controlled substances were not secured as required by the U.S. Food and Drug Administration regulations (specifically CFR 1301.71). There is a high demand for controlled substances as noted by Muha (2017):

The street values of some controlled prescription substances are astronomical even when compared to their retail prices. Unlike stolen merchandise, where the street value is characteristically less than the retail price, prescription products uniformly have street values in excess of their retail value. In the prescription drug world, just the opposite is true. A 100-count bottle of OxyContin 80mg, the brand name of a powerful prescription

pain medication, has an average street value of about \$8,000, or \$80 per tablet. A 500-count bottle of hydrocodone/acetaminophen 5/500, the generic name of another prescription pain medication with multiple brand names, the most common being Vicodin, has a value of about \$2,500, or \$5 per tablet.”

### Data Analysis

The administrator provided operating information to management on an annual basis for budgetary planning purposes. Financial operating data from 2014 to current are summarized in the following table:

	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Purchases</b> \$	96,701.00	\$ 114,425.00	\$ 87,120.00	\$ 47,371.00	\$ 52,500.00
<b>Sales</b> \$	70,566.84	\$ 69,630.00	\$ 68,142.45	\$ 53,013.75	\$ 46,348.26

The Internal Audit Department validated the above provided information using the following approach to determine:

1. the actual quantity and value of the current on-hand inventory,
2. "estimated" inventory using vendor-provided sales invoices, accounts payable payment and dispensary (sales) data beginning when the pharmacist was hired in 2014 to the current period, and
3. any significant variances.
4. the estimated amount of inventory potentially diverted

The physical inventory was performed in early November 2018, and the value of the pharmaceutical inventory on-hand totaled to \$52,543.50, an average cost of \$11.50. The two vendors provided sales data from 2014 to 2018 totaling \$ 893,843.74, which reconciled to the payments made to vendors during that same time period. Dispensary data was generated from the pharmacy systems for the same period totaling 48,610 prescriptions dispensed. Details of the data by year are in Appendix III. Based on the available date, the internal audit department estimated that approximately \$340,000 worth of inventory was diverted from the pharmacy.

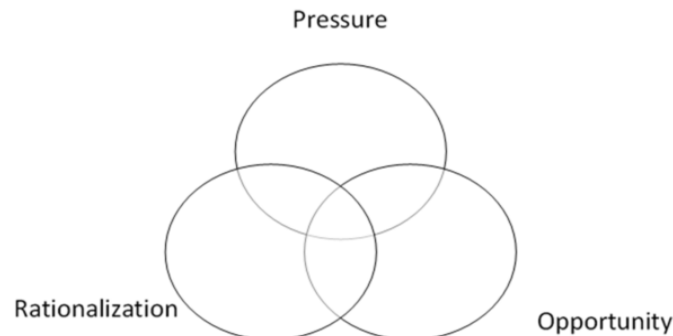
The costs of the pharmacy medications were included in the overall supplies expenditures and were not separately tracked, and as noted above, they were not reconciled. Numerous manual adjusting entries were made by both the pharmacist and pharmacy technician in the Pharmacy's inventory systems daily, and supporting documentation was not able to be identified to determine the value of these adjustments.

The details of the vendor-provided invoices highlighted additional information related to trends in pharmaceutical purchases, specifically controlled substances that were not identified in the approved formulary. (i.e., large quantities of decongestants) and pain medications (were purchased regularly. Additionally, heart medications were purchased and would not be a prescription filled at the Pharmacy.

## A CALL TO ACTION

Students are asked to respond to the following questions:

- Using the fraud triangle below, discuss (a) the opportunities or conditions at the Institution that enabled the fraud to occur, (b) the motivation that encouraged the employee to commit the fraud, and (c) the rationalization used by the employee in carrying out the fraud.

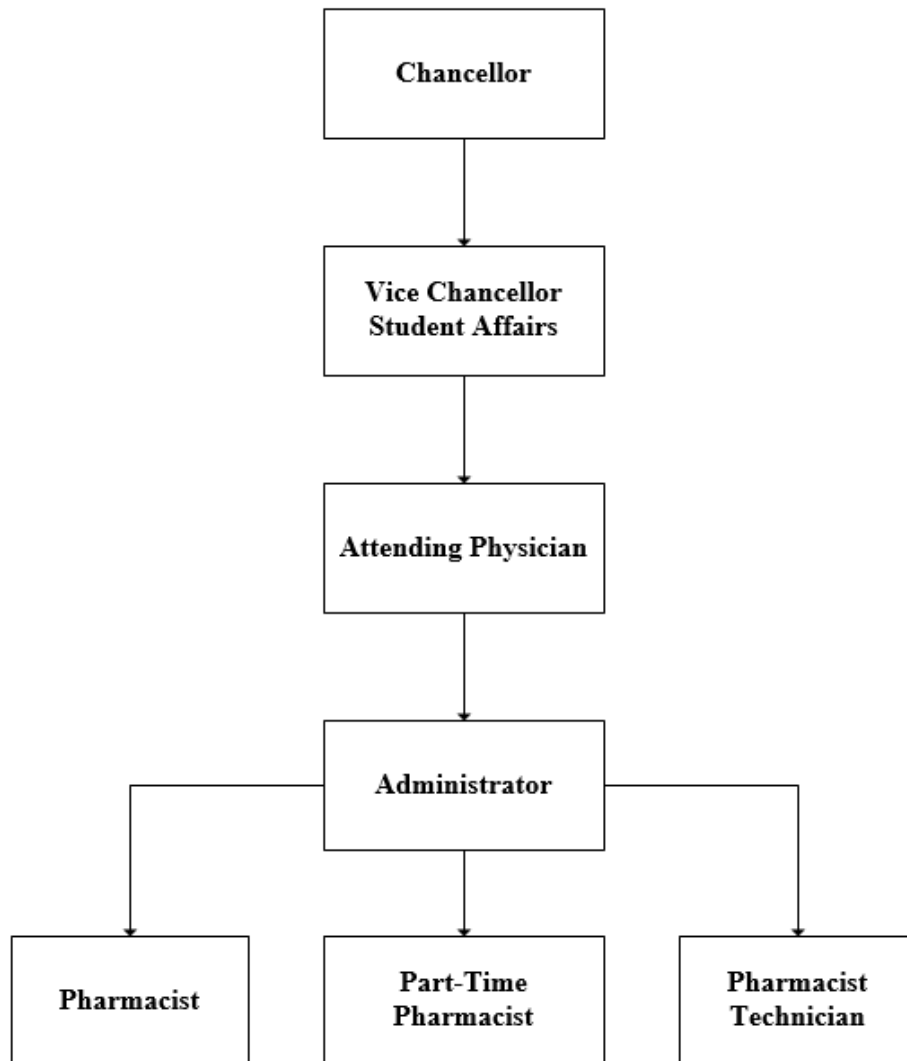


- Identify at least four internal control issues noted in the case discussion and provide recommendations to management to strengthen internal controls. Use the table provided to formulate your response.

Issue	Observation	Recommendation
A.		
B.		
C.		
D.		

Interested faculty may contact the authors for a copy of the teaching note

**Appendix I: Student Health Department – Pharmacy Organization Chart**



**Appendix II: Schedule of Student Mandatory Health Fees**

	2012	2013	2014	2015	2016
Student Health Fee	\$ 90.00	\$ 90.00	\$ 90.00	\$ 104.00	\$ 104.00
Facility Fee	\$ -	\$ -	\$ -	\$ 46.00	\$ 46.00
<b>Total Fee</b>	<b>\$ 90.00</b>	<b>\$ 90.00</b>	<b>\$ 90.00</b>	<b>\$ 150.00</b>	<b>\$ 150.00</b>

**Appendix III: Testing Data Details**

Fiscal Year	Supplies	Vendor Purchases/Payments	% Pharmacy Spend	Dispensed QTY	Average Cost	Inventory Value as of 11/15/2016	Qty On-Hand Actual
2014	\$401,154.00	\$ 204,365.95	51%	11,148	\$ 8.90	Unknown	
2015	\$422,930.00	\$ 226,733.41	54%	11,000	\$ 9.86	Unknown	
2016	\$324,548.00	\$ 171,987.30	53%	10,765	\$ 10.85	Unknown	
2017	\$217,056.00	\$ 147,115.22	68%	8,375	\$ 11.01	Unknown	
2018	\$214,906.93	\$ 143,641.86	67%	7,322	\$ 11.50	\$ 52,543.50	4,569
Total	\$	\$ 893,843.74		48,610	\$ 52.12		
Average	\$	\$ 178,768.75		9,722	\$ 10.42		

**Appendix IV: Inventory Adjustments without Supporting Documentation**

Adjustment Description	Total Items
911	1
CHECKING FOR SHORTAGE VIA PHARMEDIX	-22
DAMAGE	-5
DELAYED SHIPMENT	20
DISPENSED TO NURSING	-3
ERROR	-231
EXPIRED	-139
INVENTORY ADJUSTMENT	105
MISPLACED ON SHELF ADDED BACK TO INVENTORY	20
PUT IN THE NON ACTIVE	-40
RECALL/RETURN	-124
REPACKAGE	17
TRANSFER TO COMPOUNDING	-245
USED	-7
<b>Grand Total</b>	<b>-653</b>

**EPILOGUE**

The institution developed and implemented internal controls for the pharmacy inventory process. Subsequently, the employee was dismissed, and an external investigation was initiated. The results of that investigation are unknown.





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