

**Date:** December 20, 2017

**To:** Harry Black, City Manager

**From:** Lauren Sundararajan, CFE, Internal Audit Manager *LS*

**Copies to:** Internal Audit Committee  
Dr. Marilyn Crumpton, MD, MPH, Interim Health Commissioner

**Subject:** **Cincinnati Health Department – Pharmacy Inventory Audit**

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Attached is the Pharmacy Inventory audit report. The primary objective of this performance audit was to determine if effective and efficient controls were in place over the procurement, security and distribution of drugs. This audit was completed in accordance with Internal Audit's current work plan.

We would like to thank management and staff of the Cincinnati Health Department for their assistance and cooperation during this audit.

If you need any further information, please contact me.

Attachment

# Cincinnati Health Department – Pharmacy Inventory Audit

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December 2017



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## **Executive Summary**

Internal Audit (IA) performed an audit of the Cincinnati Health Department's (CHD) Pharmacy Inventory. The audit objective was to determine if effective and efficient controls were in place over the procurement, security and distribution of drugs.

The CHD pharmacies provide pharmaceutical care in dispensing, counseling, and medication therapy management for the health and wellness of uninsured and underinsured Cincinnatians. These services are administered at five of the CHD's health centers: Elm Street, Madisonville, Millvale, Northside and Price Hill. The pharmacies obtain drugs at contract pricing as determined through the federal 340B drug pricing program, which allows them to provide drugs at a discounted price to eligible patients.

The audit revealed several opportunities for improvement in the pharmacies' inventory control structure. The pharmacies have not deployed an electronic inventory tracking system, allowing for inventory errors and potentially creating an opportunity for drug diversion. Additionally, IA uncovered receival functions that are not properly performed and documented, and a lack of adherence to interdepartmental billing procedures. These practices present opportunities for errors, a lack of accountability, and deprive the pharmacies of potential funds.

IA also discovered the existence of generic group accounts with drug ordering privileges that could compromise the logical security of user login controls. The existence of these accounts creates opportunities for individuals to inappropriately utilize these group accounts to access drug ordering software without the risk of being identified. The pharmacies also have physical security barriers that are weakened by the lack of routine replacement of locks and testing of panic buttons. This allows for current or former staff to circumvent security measures and retain access to the pharmacies.

Further, the lack of consistency within pharmacy management has weakened operational controls across the pharmacies. This includes accountability measures that are not in place and the succession planning of key positions that has not been implemented.

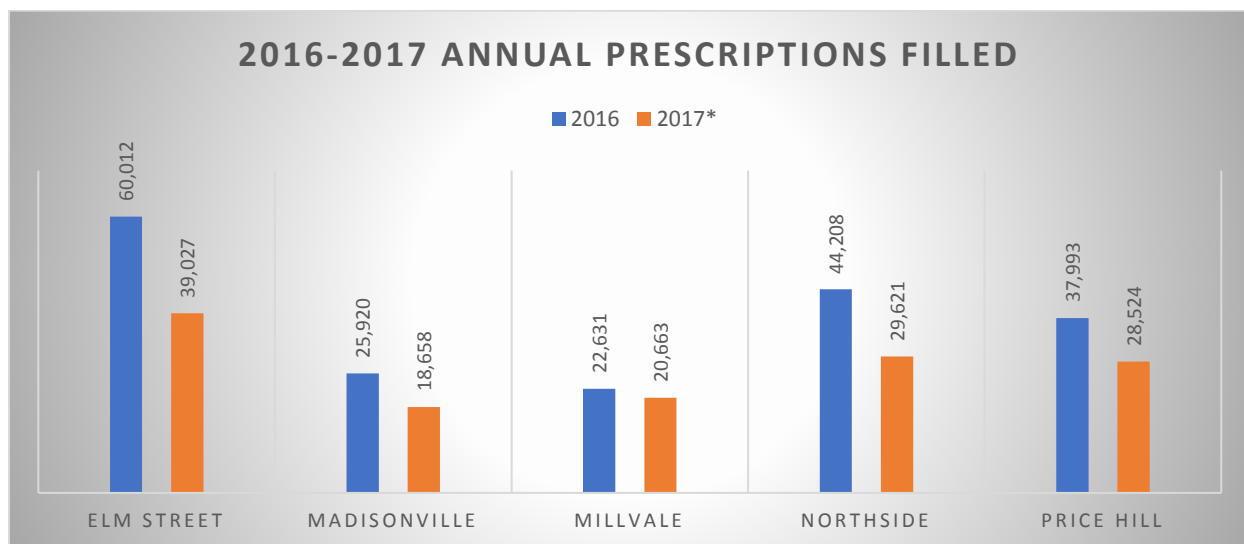
To reduce the risk in daily operations, IA recommends the CHD pharmacies implement an electronic inventory tracking system, increase accountability of receival functions, adhere to correct interdepartmental billing procedures, and delete any group accounts with drug ordering privileges. Additionally, they should ensure consistency within pharmacy management is maintained and create succession plans for key pharmacy positions. Implementing these recommendations could assist pharmacy personnel in tracking inventory, ensure accountability for all funds, and increase customer service through improved and more efficient pharmacy operations.

## I. Introduction

### Background

The Cincinnati Health Department provides preventative and primary health care services to uninsured and underinsured Cincinnatians who do not have access to medical services. These services include pharmaceutical needs which are provided by CHD pharmacies. The mission of the CHD pharmacies is to “provide quality pharmaceutical care in dispensing, counseling, and medication therapy management for the health and wellness of the citizens of Cincinnati.”<sup>1</sup> The pharmacies operate within five of the City’s seven community health centers: Elm Street, Madisonville, Millvale, Northside, and Price Hill. Services provided by the CHD pharmacies include “comprehensive prescription services, including over-the-counter medications and diabetic testing supplies to our patients.”<sup>1</sup>

According to the Human Resources and Services Administration (HRSA) City of Cincinnati Health Center Profile, in 2016 approximately 43,280 patients were served. Of these patients with known income, 96% of the patients were at or below 200% of the poverty line.<sup>2</sup> Below is a graphical depiction of total prescriptions filled for calendar year 2016 and through the third quarter of calendar year 2017, per pharmacy.



*\*This includes total amount of prescriptions filled through the third quarter of calendar year 2017*

“The 340B program is used by the CHD pharmacy department for the contract pricing of medications. The 340B drug pricing program allows for covered entities to purchase medications at discounted prices. This pricing allows for eligible patients to receive their medications at a reasonable price point.”<sup>1</sup> All five of the CHD operated outpatient pharmacies are 340B eligible participants.<sup>3</sup> The Elm Street pharmacy is the only pharmacy that provides both 340B and non 340B drugs. The non 340B drugs are separately managed through a contract with the Cincinnati Health Network.

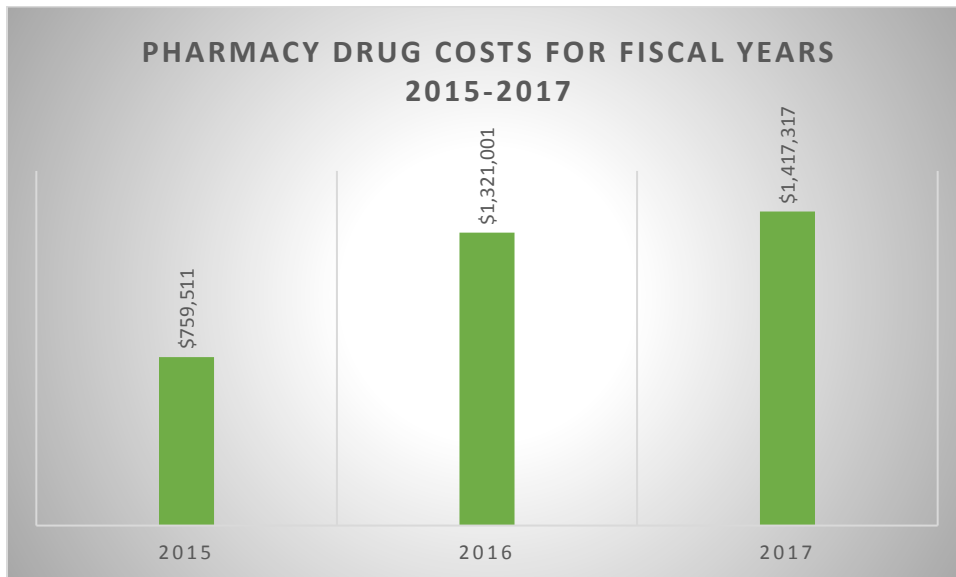
<sup>1</sup> *Pharmacy Policy & Procedures Manual*. City of Cincinnati Primary Care/Cincinnati Health Department, 2017.

<sup>2</sup> HRSA 2016 Cincinnati, City of Health Center Profile

<sup>3</sup> Since the CHD pharmacies participate in the 340B drug pricing program, they are required to recertify each year and are subject to compliance audits from manufacturers and the federal government. The most recent 340B compliance audit was conducted in May of 2017; however, IA was unable to obtain any audit documentation from CHD.

The pharmacy operation is part of the CHD Federally Qualified Health Center (FQHC) operation. The FQHC is funded from three major sources: revenue generated from providing service to patients, the City's general fund, and the Federal 330 grant awarded to the CHD to provide medical, dental, vision and pharmacy services.

For fiscal year 2018, the total pharmacy budget for direct costs is \$3,249,230 with a projected revenue of \$3,525,000. This budget includes costs for personnel, which includes a Pharmacy Director, six Pharmacists, ten Pharmacy Technicians and one Administrative Technician. The majority of non-personnel costs are allocated for pharmacy drugs, with a budgeted total of \$1,277,000 for fiscal year 2018. Below is a graphical depiction of the pharmacy drug costs for fiscal years 2015 through 2017. Note: Drug costs have increased since 2015 due to the State of Ohio's expansion of Medicaid in January of 2014 that now includes low income adults.



### **Audit Selection**

IA conducted this audit in accordance with the current work plan.

### **Audit Objective**

Determine if effective and efficient controls are in place over the procurement, security and distribution of drugs.

### **Audit Scope and Methodology**

This audit reviewed the current practices and performance of CHD's pharmacy inventory management during fiscal year 2016 through fiscal year 2017. In order to achieve the objective, IA compared current practices to industry standards, examined inventory tracking systems, sought verification of actions through documented reports, interviewed appropriate staff and calculated statistics of relevant data.

### **Statement of Auditing Standards**

As required by the Cincinnati Administrative Code Article II §15, this audit was conducted in accordance with the Generally Accepted Government Auditing Standards (GAGAS), except for standard 3.96 pertaining to external peer review requirements. This exception did not have a material effect on the audit.

IA continues to conduct internal quality reviews to assure the conformance with applicable GAGAS. IA performed the fieldwork between September 2017 and November 2017.

### **Commendations**

IA commends the staff of the Cincinnati Health Department for their cooperation throughout the audit.

## II. Audit Findings and Recommendations

*Electronic inventory tracking is not utilized.*

Pharmacy drugs and prescriptions are managed through multiple software applications that provide operational support through drug ordering and patient prescription data. Electronic inventory tracking is an essential component of most pharmacy service applications that allow pharmacies to compute the number of drugs in stock at any given time. Since this form of tracking is generally very accurate, there is a significantly reduced risk for drug diversion<sup>4</sup> which makes this inventory system ideal for pharmacies.

However, IA found that the pharmacies do not use a formalized electronic tracking system, and instead, use a periodic inventory system to track drugs. The periodic inventory system involves conducting annual counts, which are used to calculate the cost of drugs sold using the following formula:

$$\text{Cost of drugs sold} = \text{Beginning inventory} + \text{Purchases} - \text{Closing inventory}$$

Although periodic inventory systems are easier to manage and may be preferable for small inventory operations, they are not considered as precise as maintaining an up-to-date tracking system as minor inventory discrepancies can go unnoticed.

Through further review, IA also found that the software applications utilized by the pharmacies do have the ability to provide up-to-date tracking, but this feature has not been deployed. When questioned why, it was revealed to IA that to implement the electronic tracking system would require staff from each pharmacy to conduct a full inventory count and input the data into the application. This would give each drug in stock a starting count value, that could then be added to and subtracted from as drugs go in and out of the pharmacies. Although, doing this would be arduous, most pharmacy staff feel the current tracking method is sufficient. Regardless, without the proper controls in place to ensure accurate inventory counts, there is an increased risk for drug diversion.

**Recommendation 1:** Implement electronic tracking systems for all pharmacies that will ensure current and accurate inventory counts.

**Department Response:** Disagree. We do not see a tangible benefit by using that type of system. Also, it is not clear if IT will allow an upload Cardinal order into QS1 pass the FTP site. (must be cleared with ETS and IT) Currently, QS1 remote access to help solve QS1 computer problems or troubleshooting is not allowed.

*Verification of inventory receipt duties are not routinely performed and documented.*

When drug inventory deliveries are received at the pharmacies, Pharmacy Technicians are tasked with verifying invoices to ensure all items are accurate. This process requires the technician to go down the items listed on the invoice and verify that each one has been included in the delivery. However, IA found there is either little to no documentation of this process at the pharmacies. Documentation could include check marking or initialing each item as it is verified and/or signing off on the invoice. These practices would ensure that all delivered items have been received and would allow management to determine which employee performed the

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<sup>4</sup> Drug diversion is the illicit transfer of drugs.

verification duties. These practices are necessary to ensure that invoices are accurate before they are processed and that there is accountability of inventory receipt.

In addition to either little to no documentation of the receipt process, IA also found the pharmacies are not routinely reconciling prices listed on invoices to ensure they match the contractual 340B drug prices; price reconciliations are only performed if a discrepancy is suspected. Without routinely sampling invoices for pricing accuracy, pricing errors could go unnoticed. Further, the importance of pricing oversight is also evident in a 2011 report released by the Government Accountability Office (GAO) that found HRSA's oversight of the 340B program was inadequate regarding assurance that the manufacturers' sales of drugs were at or below the 340B price.<sup>5</sup>

**Recommendation 2:** Ensure that inventory invoices have been verified by receiving staff either through initialing or checking each item listed and/or providing a signature on the invoice.

**Department Response:** Agree. Staff that places the order will not be the person who puts away the order. Staff that receives/puts away order will use an identifying mark to indicate the items actually received. The receiving staff will sign and date after putting away order. The invoice is to be sent to admin tech the same day that it is received but no later than the next day.

**Recommendation 3:** Routinely sample invoices for any pricing discrepancies.

**Department Response:** Agree. On or about the 15<sup>th</sup> of month. (March, June, September, December) pharmacy staff will take a routine sample of 5 medications from invoice and check pricing on invoice versus price when order.

*Inventory duties are not properly and consistently segregated.*

In addition to their primary duties, the Pharmacy Technician is tasked with inventory custody functions such as ordering drugs and performing annual inventory counts of drugs. The only exception is for the receipt of controlled substances, which is completed by the Pharmacist. Drugs are generally ordered from their wholesale vendor on a weekly basis, with deliveries arriving the next business day. To maintain proper segregation of duties for the Pharmacy Technician position, procurement, receipt and stocking functions must be separated to prevent any erroneous or intentional misuse of inventory control and any adverse effects to the objectivity of inventory counts.

It was revealed to IA, that although receipt and stocking duties are occasionally performed by the Pharmacist, Pharmacy Technicians oversee the majority of both these duties. According to the GAO, personnel approving transactions that effect on-hand inventory balances should not be responsible for the physical custody of the inventory or recording transactions.<sup>6</sup> These duties, in conjunction with procurement and inventory count duties, allow for an imbalance of inventory control, creating the potential for abuse or theft of pharmacy inventory.

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<sup>5</sup> "Drug Pricing: Manufacturer Discounts in the 340B Program Offer Benefits, but Federal Oversight Needs Improvement." Government Accountability Office. September, 2011.

<sup>6</sup> "Executive Guide: Best Practices in Achieving Consistent, Accurate Physical Counts of Inventory and Related Property." United States General Accounting Office. March, 2002.

**Recommendation 4:** To maintain proper segregation of duties, procurement, receiving and stocking functions should be separated from one another. If this is not practical due to limited personnel resources, management should design alternative control activities to address the imbalance of inventory control.

**Department Response:** Agree. Pharmacy managers at each pharmacy location will make sure that proper segregation of duties, procurement, receiving and stocking functions should be separated from one another.

*Pharmacy staff do not adhere to interdepartmental billing procedures.*

The pharmacies provide prescriptions and other supplies to the School Based Health Centers and Reproductive Health Education programs within the CHD. In order for the pharmacies to be reimbursed, they are required to identify such items on invoices for interdepartmental billing. However, pharmacy staff are not coding and separating invoices, as needed. As a result, these programs are not remitting payment to the pharmacies for their pharmaceutical products. Funds within these programs that are made available for pharmaceutical needs are then returned to CHD's general budget and the pharmacies incur losses in funds in addition to the cost of purchased goods.<sup>7</sup>

**Recommendation 5:** Properly identify applicable interdepartmental billing codes on invoices and separate to ensure that the appropriate funds are reimbursed to the pharmacies.

**Department Response:** Agree. Pharmacy Admin tech will check to make sure that all of the invoices for all of the different departments that are sent to Fiscal department are grouped together by department. Designation of department will be clearly marked at top of invoice. Pharmacy staff will make sure that it uses the correct billing codes for RHIC, SBHC and HOMELESS when processing prescriptions.

*Unverifiable individual and group accounts with active software access.*

The pharmacies use the vendor, *Cardinal*, as their primary wholesale drug distributor. *Cardinal* supplies approximately 90% – 100% of the drugs at each pharmacy. Each respective pharmacy is given their own *Cardinal* purchasing account number and employees are given unique login credentials. IA obtained a list of all active user accounts across all the pharmacies to determine if the accounts corresponded to individual employees whose duties necessitated drug ordering privileges. Out of the total 24 identified accounts with login credentials, four (16.7%) were identified as generic group accounts. These four accounts were identified by their corresponding clinic location: Elm Street, Millvale, Northside, and Price Hill.

Although there may have been a legitimate need for these accounts, the pharmacies should remove all group accounts and assign unique login credentials for each individual employee. For the purposes of conducting an audit trail, the National Institute of Standards and Technologies (NIST) recommends any software account include sufficient information that establishes what events occurred and who caused them.<sup>8</sup> The use of group accounts prevents

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<sup>7</sup> At the time of this audit, IA could not determine an approximate amount of funds that were owed to the pharmacies.

<sup>8</sup> "Generally Accepted Principles and Practices for Securing Information Technology Systems." National Institute of Standards and Technology. September, 1996.

system audits from determining the personnel origins of any unintentional errors or misuse of drug ordering capabilities.

IA also reviewed all user accounts with access to the QS1 database- the pharmacies' management system for processing and electronic billing of prescriptions which also contains HIPAA-protected information. Of these 37 uniquely identified users, IA determined two (5.4%) were duplicates of City employee accounts and three (8.1%) were unidentifiable.<sup>9</sup> The existence of these five (13.5%) accounts create opportunities for unidentified users to gain access to patient sensitive information.

**Recommendation 6:** To increase accountability for database auditing purposes, ensure that all active accounts belong to individual users whose access need is appropriate. Terminate any duplicate, group, terminated, or non-city employee accounts who do not consist of routinely used temporary pharmacy employees.

**Department Response:** Agree. Identified staff members will contact Cardinal and QS1 to terminate any duplicate, group or non-city employee accounts who do not consist of routinely used temporary employees.

**Recommendation 7:** Create additional Cardinal accounts with unique login credentials for individuals who utilize the same group account.

**Department Response:** Agree. Contacted cardinal and request unique login for individuals.

**Recommendation 8:** Ensure all QS1 accounts correspond to active employees only and remove any duplicate or unidentifiable accounts within the system.

**Department Response:** Agree. Contacted QS1 and request unique login for individuals.

*CHD does not verify background checks for temporary employees granted access to the pharmacies.*

CHD maintains contracts with two temporary staffing agencies that provide temporary Pharmacists or Pharmacy Technicians if the pharmacies are short-staffed due to educational, vacation, or sick leave. Although it is not explicitly stated in the contract, the temporary staffing agencies are required to perform background checks on temporary staff that are not seeking to gain full-time employment with the City. However, CHD does not seek verification of any background checks conducted for temporary employees. Since the City classifies the Pharmacist and Pharmacy Technician positions as sensitive,<sup>10</sup> any prospective individuals offered employment are required to undergo a criminal background check, as a requirement of permanent City employment.

**Recommendation 9:** CHD should adopt policies that require background checks be conducted for all non-employees granted access to the pharmacies. They should also seek to obtain copies of background checks to ensure non-employees are properly vetted and mitigate any risks associated with pharmacy inventory.

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<sup>9</sup> The pharmacies are currently in the process of removing these five accounts.

<sup>10</sup> "Human Resources Policies and Procedures, Policy No. 2.11 Criminal Background Checks." City of Cincinnati. July, 2012.

**Department Response:** Agree. Contacted Truststaff to make sure that all non-employees receive background checks.

*Drug disposal records could not be verified by a third party.*

Most pharmacy drugs that are either expired or have been recalled are sent to a third-party vendor to ensure they are properly disposed of as permitted by the Ohio State Board of Pharmacy. The pharmacies have an agreement with the vendor, *Guaranteed Returns*, where drugs requiring disposal are shipped to them monthly. This process requires pharmacy staff to complete a log (provided by *Guaranteed Returns*) of all drugs that are included in the monthly shipment for disposal. This log is then copied and sent with the shipment. Unfortunately, IA was unable to verify the accuracy of this log, since any separate documentation does not exist.

Additionally, drugs are generally shipped by one employee and are not verified by other staff members. The lack of verification was also evident without the requirement of any employee signatures. IA reviewed logs for all pharmacies during the given audit scope period and noted that there were operational inconsistencies of log documentation and maintenance. For example, out of 47 total log forms, 25 (53%) included signatures, while 22 (47%) did not. Without proper documentation and verification of all expired drugs before they are sent for disposal, there is no assurance that all drugs are accounted for and are not being diverted.

**Recommendation 10:** Ensure that additional documentation is maintained of all drugs as they are separated from stock and that this process is verified by another employee. Further, require all employees reviewing the log to provide their signature.

**Department Response:** Agree. Items that are separated from stock and sent to GRx (Guaranteed Returns) will be recorded on a log. The log will include person performing duty, date, drug name, NDC and qty.

*Pharmacy security features are not routinely replaced and tested.*

Entry to each pharmacy is accessed through a single Dutch door that is secured by a key lock. In addition, the pharmacies are secured with locking steel door curtains at the dispensing windows and are equipped with panic buttons within to minimize any physical security threats. The primary Pharmacist at each clinic is the only employee who retains a key to their designated pharmacy. Combination lock boxes sit adjacent to each pharmacy entry door, which also contain a key to the corresponding pharmacy. Combination codes to these lock boxes are made available to all Pharmacists in the event of a primary Pharmacist's absence, so that the Pharmacist filling in may gain access. Per state law, Pharmacy Technicians are not allowed pharmacy access without a Pharmacist present,<sup>11</sup> and therefore, are prohibited from retaining pharmacy keys and combination codes.

Pharmacy locks should be replaced and combination codes changed every time an employee resigns.<sup>12</sup> Through staff interviews at each pharmacy, IA attempted to determine the degree to which the pharmacies were adhering to these standards, and found that although keys were stamped 'Do not duplicate,' almost all could not recall ever having the locks or codes replaced.

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<sup>11</sup> Ohio Admin. Code 4729-9-11

<sup>12</sup> "Drug Theft Prevention." Drug Enforcement Administration. September, 2012.

One pharmacy did recall the locks being replaced, but could not recall when it occurred and another pharmacy had changed the combination code within the past year. However, without consistent routine replacement to pharmacy locks and combination codes, access may be retained by former employees, exposing pharmaceutical inventory to risk of theft.

In addition to routinely replacing locks and codes, all alarm systems should be regularly maintained to ensure they are functioning properly.<sup>13</sup> This would include testing all panic buttons on either a quarterly or monthly basis. IA found that none of the pharmacy panic buttons were regularly tested, if at all. Without the assurance of regular testing, panic buttons may malfunction in the event of an actual emergency.

**Recommendation 11:** Replace locks and change combination codes to any pharmacy location when an employee resigns.

**Department Response:** Agree. Contacted CHD maintenance to replace locks and change key holder combination codes.

**Recommendation 12:** Ensure that panic buttons are routinely tested.

**Department Response:** Agree. Contacted CHD maintenance to see how to schedule to do routine checks of alarm panic buttons.

*Pharmacy refrigerators are not connected to backup generators.*

Currently, Elm Street clinic has the only pharmacy refrigerator that is connected to a backup power supply in the event of a power outage. If a power outage occurs, the Pharmacy Director or Pharmacist is alerted and any perishable drugs and vaccines are transported to the Elm Street clinic for storage until power is restored. While IA was informed that power outages are infrequent and the perishable drugs stored in the refrigerators are limited, drugs and vaccines that require a controlled environment may be lost, exposing the pharmacies to incur unnecessary costs.

IA recognizes that backup power generators are an advanced and costly piece of technology. However, investment in a backup power supply can play a significant role in disaster preparedness, and is essential in not only keeping electrical devices running during a power outage, but also preserving perishable drugs and vaccines.

**Recommendation 13:** CHD management should further research the costs and benefits compared to the risks of investing in an alternate power source at each clinic.

**Department Response:** Disagree. Pharmacy director will research costs of alternate power source for each clinic for refrigerated medications. Pharmacy director will check Emergency Plan to see which clinic do actually have an alternative power source connected to refrigerator. Currently, only pharmacy is Elm. Current emergency plan requires pharmacies to remove refrigerated medications and take to Elm Street Health center that has a generator. Each pharmacy will follow emergency plan to remove medications as the health center. Pharmacy

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<sup>13</sup> "Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers." Occupational Safety and Health Administration. June, 2016.

medications will also be moved along with vaccines if/when vaccine refrigerator alarm is activated.

*Outdated pill counting equipment impacts pharmacy operations.*

Pharmacies utilize several equipment items that assist them daily in meeting the demands of fulfilling prescriptions. Many of these items experience a high volume of use and are subject to breakdowns, which negatively impact operations. For example, the Madisonville clinic currently uses an outdated pill counter from the 1970s. Pill counters are pill dispensing mechanisms that allow pharmacy staff to automate the pill counting process, creating an efficient and reliable output of prescriptions. Although the Madisonville pill counter remains accurate, it often breaks down and must be sent off site for repairs. The turnaround times for repair can often extend to two weeks. Without the assistance of pill counters, staff must count pills by hand, which could allow for the occurrence of an adverse event related to human error. This also creates a slow and less efficient workflow that can be exacerbated by high volume days and allows for a decline in customer service.

**Recommendation 14:** Prioritize funds for the replacement of any aging or outdated pill counters.

**Department Response:** Agree. Research pricing for pill counters. Research to include vendors' specials at conferences and research to include vendor's specials at conference and Prime vendor discounts. Submit requests for purchase. Research prices /submit proposal to fiscal.

*Lack of consistency with pharmacy management.*

Pharmacies are overseen by the Pharmacy Director, who primarily serves in an administrative capacity that includes planning and implementing the goals and objectives of the pharmacies, while coordinating departmental development and programs. As a key role among the pharmacies, the Pharmacy Director is tasked with ensuring that strong and uniform internal controls are in place across the five pharmacies. However, the pharmacies currently have an interim Pharmacy Director and there has been significant turnover for this position in recent years. For example, within the past year, there have been three individuals in the Pharmacy Director position, and five in total within the previous eight years.

Due to this inability to retain a long-term Director, operations are not consistent across all pharmacies and enforcement of certain accountability measures are not in place. This includes issues arising from variation among inventory tracking and drug receipt and disposal functions, identified previously in this report.

Due to inconsistencies with the Pharmacy Director position, certain succession plans have also not been properly implemented and many key processes have shifted to the Administrative Technician employee, who has held this position for 14 years. Succession planning is the process of identifying internal personnel with the ability to fulfill key roles within an organization and fostering the development of these individuals. As personnel turnover, a succession plan facilitates business continuity. Without a succession plan for key roles and policies documented, sudden personnel changes can compromise internal control systems.

Through interviews, IA determined there is a limited amount of succession planning documented for both the Pharmacy Director and Administrative Technician positions. Additionally, IA found that although another individual has been trained to fulfill some of the duties of the Administrative Technician in that employee's absence, the trained individual is still not fully capable of completing all duties encompassed within this position. Since the positions of Pharmacy Director and Administrative Technician perform key processes and retain a significant amount of institutional knowledge, succession plans are essential for the seamless transition of personnel in the event of an abrupt vacancy.

IA also found contract administrative oversight duties are not adequately identified and administered, and are currently managed by the Administrative Technician. These duties consist of overseeing multiple contracts and agreements that the pharmacies have with various entities.

Although duties pertaining to contract administration are to be overseen by the Pharmacy Director, the Administrative Technician assumed these duties as a result of pharmacy management turnover and task-specific roles that were not clearly defined. This lack of designation of contract administrative duties may result in an employee being unable or unsure of how to best familiarize themselves with the terms of the contract and identify pertinent documentation that would ensure all entities are held accountable to contract and agreement provisions.

**Recommendation 15:** CHD management should ensure that recruitment, mentoring and retainment of competent personnel for the Pharmacy Director position is addressed and achieved.

**Department Response:** Agree. Research the salaries, incentives and benefit packages of Pharmacy directors at other FQHCs. The salary survey that is a study of benefits will also be used in this determination.

**Recommendation 16:** Ensure a comprehensive succession plan is in place for both the Pharmacy Director and Administrative Technician positions.

**Department Response:** Agree. At time of audit, pharmacy director was interim. Now, the pharmacy director is permanent. Administrative tech duties will be reviewed and assessed with contracts, vendors, websites, organizations and any other businesses. Assessment will include but not be limited to each duty performed, who has administrative rights, who are listed as CHD contact person, current status of business relationship, move important document related to business on the J drive. Cross train other staff members to do duties of administrative technician. Develop a list of reports done and step by step how to of each.

**Recommendation 17:** Clearly define all duties pertaining to contract administration and assign appropriately.

**Department Response:** Agree. The administrative technician/pharmacy technician took on so many duties due to no permanent director at the time. Current duties pertaining to contract administration will be clearly identified, defined and appropriately re-assigned.

### **III. Conclusion**

The Cincinnati Health Department's pharmacies provide essential pharmaceutical services to underserved and indigent populations within the City and facilitate health-based educational practices for certain chronic diseases. This audit revealed several opportunities for improvement over the internal controls surrounding pharmacy inventory.

Lack of a comprehensive inventory tracking system, insufficiently documented receipt duties, deficient interdepartmental billing procedures and turnover within pharmacy management increase the risk for drug diversion, payment of erroneous invoices, non-receipt of funds owed, and inconsistencies across the pharmacies. IA recommends the implementation of an electronic inventory tracking system, increased accountability of receipt functions, adherence to correct interdepartmental billing procedures, and the retention and succession planning of key pharmacy positions. Implementing these recommendations could assist pharmacy personnel in tracking inventory, accountability of funds, and increase customer service through improved and more efficient pharmacy operations.

#### **IV. Cincinnati Health Department Response**

## Cincinnati Health Department – Pharmacy Inventory Audit

Recommendation	Agree (A) or Disagree (D)	Who will be responsible from the department for implementing the recommendation(s)?	Department Response:	When the implementation will be completed?
<b>Recommendation 1:</b> Implement electronic tracking systems for all pharmacies that will ensure current and accurate inventory counts.	D	IT /ETS Pharmacy Department	We do not see a tangible benefit by using that type of system. Also, it is not clear if IT will allow an upload Cardinal order into QS1 pass the FTP site. (must be cleared with ETS and IT) Currently, QS1 remote access to help solve QS1 computer problems or troubleshooting is not allowed.	
<b>Recommendation 2:</b> Ensure that inventory invoices have been verified by receiving staff either through initialing or checking each item listed and/or providing a signature on the invoice.	A	Pharmacy department staff/ SBHC staff Central/Pharmacy staff	Staff that places the order will not be the person who puts away the order. Staff that receives/puts away order will use an identifying mark to indicate the items actually received. The receiving staff will sign and date after putting away order. The invoice is to be sent to admin tech the same day that it is received but no later than the next day.	This process will be implemented immediately.
<b>Recommendation 3:</b> Routinely sample invoices for any pricing discrepancies.	A	Pharmacy staff (admin asst)	On or about the 15 <sup>th</sup> of month. (March, June, September, December) pharmacy staff will take a routine sample of 5 medications from invoice and check pricing on invoice versus price when order.	This process will be implemented January.
<b>Recommendation 4:</b> To maintain proper segregation of duties, procurement, receiving and stocking functions should be separated from one another. If this is not practical due to limited personnel resources, management should design alternative control activities to address the imbalance of inventory control.	A	Pharmacy managers at each pharmacy location/Pharmacy staff	Pharmacy managers at each pharmacy location will make sure that proper segregation of duties, procurement, receiving and stocking functions should be separated from one another.	This process will be implemented January.
<b>Recommendation 5:</b> Properly identify applicable interdepartmental billing codes on invoices and separate to ensure that the appropriate funds are reimbursed to the pharmacies.	A	Admin Tech/pharmacy staff	Pharmacy Admin tech will check to make sure that all of the invoices for all of the different departments that are sent to Fiscal department are grouped together by department. Designation of department will be clearly marked at top of invoice. Pharmacy staff will make sure that it uses the correct billing codes for RHIC, SBHC and HOMELESS when processing prescriptions.	This process will be implemented immediately.
<b>Recommendation 6:</b> To increase accountability for database auditing purposes, ensure that all active accounts belong to individual users whose access need is appropriate. Terminate any duplicate, group, terminated, or non-city employee accounts that do not consist of routinely used temporary pharmacy employees.	A	Pharmacy director/Admin tech	Identified staff members will contact Cardinal and QS1 to terminate any duplicate, group or non-city employee accounts who do not consist of routinely used temporary employees.	Done
<b>Recommendation 7:</b> Create additional Cardinal accounts with unique login credentials for individuals who utilize the same group account.	A	Pharmacy Director/Admin tech/Cardinal	<b>Contacted cardinal and request unique login for individuals.</b>	Done
<b>Recommendation 8:</b> Ensure all QS1 accounts correspond to active employees only and remove any duplicate or unidentifiable accounts within the system.	A	Pharmacy Director/Admin tech/QS1	<b>Contacted QS1 and request unique login for individuals.</b>	Done
<b>Recommendation 9:</b> CHD should adopt policies that require background checks be conducted for all non-employees granted access to the pharmacies. They should also seek to obtain copies of background checks to ensure non-employees are properly vetted and mitigate any risks associated with pharmacy inventory.	A	Pharmacy director/Trustaff	<b>Contacted Trustaff to make sure that all non-employees receive background checks.</b>	Done

## Cincinnati Health Department – Pharmacy Inventory Audit

Recommendation	Agree (A) or Disagree (D)	Who will be responsible from the department for implementing the recommendation(s)?	Department Response:	When the implementation will be completed?
<b>Recommendation 10:</b> Ensure that additional documentation is maintained of all drugs as they are separated from stock and that this process is verified by another employee. Further, require all employees reviewing the log to provide their signature.	A	Pharmacy managers/Pharmacy location staff	Items that are separated from stock and sent to GRx (Guaranteed Returns) will be recorded on a log. The log will include person performing duty, date, drug name, NDC and qty.	This process will be implemented January.
<b>Recommendation 11:</b> Replace locks and change combination codes to any pharmacy location when an employee resigns.	A	CHD Maintenance staff	Contacted CHD maintenance to replace locks and change key holder combination codes.	Work order request has been sent to maintenance.
<b>Recommendation 12:</b> Ensure that panic buttons are routinely tested.	A	CHD Maintenance staff	Contacted CHD maintenance to see how to schedule to do routine checks of alarm panic buttons.	Work order request has been sent to maintenance
<b>Recommendation 13:</b> CHD management should further research the costs and benefits compared to the risks of investing in an alternate power source at each clinic.	D	CHD management/Pharmacy Director	Pharmacy director will research costs of alternate power source for each clinic for refrigerated medications. Pharmacy director will check Emergency Plan to see which clinic do actually have an alternative power source connected to refrigerator. Currently, only pharmacy is Elm. Current emergency plan requires pharmacies to remove refrigerated medications and take to Elm Street Health center that has a generator. Each pharmacy will follow emergency plan to remove medications as the health center. Pharmacy medications will also be moved along with vaccines if /when vaccine refrigerator alarm is activated.	Emergency Evacuation plan already in place.
<b>Recommendation 14:</b> Prioritize funds for the replacement of any aging or outdated pill counters.	A	Pharmacy director/Administrative Tech/Fiscal	Research pricing for pill counters. Research to include vendors' specials at conferences and research to include vendor's specials at conference and Prime vendor discounts. Submit requests for purchase. Research prices /submit proposal to fiscal.	Submit proposal to fiscal.
<b>Recommendation 15:</b> CHD management should ensure that recruitment, mentoring and retainment of competent personnel for the Pharmacy Director position is addressed and achieved.	A	CHD Management/HR	Research the salaries, incentives and benefit packages of Pharmacy directors at other FQHCs. The salary survey that is a study of benefits will also be used in this determination.	Ongoing
<b>Recommendation 16:</b> Ensure a comprehensive succession plan is in place for both the Pharmacy Director and Administrative Technician positions.	A	CHD management/Administrative tech/Pharmacy director	At time of audit, pharmacy director was interim. Now, the pharmacy director is permanent. Administrative tech duties will be reviewed and assessed with contracts, vendors, websites, organizations and any other businesses. Assessment will include but not be limited to each duty performed, who has administrative rights, who are listed as CHD contact person, current status of business relationship, move important document related to business on the J drive. Cross train other staff members to do duties of administrative technician. Develop a list of reports done and step by step how to of each.	March 2018
<b>Recommendation 17:</b> Clearly define all duties pertaining to contract administration and assign appropriately.	A	CHD Management/Administrative tech/Pharmacy director	The administrative technician/pharmacy technician took on so many duties due to no permanent director at the time. Current duties pertaining to contract administration will be clearly identified, defined and appropriately re-assigned.	March 2018