



**METROPOLITAN GOVERNMENT OF
NASHVILLE AND DAVIDSON COUNTY**

OFFICE OF INTERNAL AUDIT

Professional Audit and Advisory Service

FINAL REPORT



**Audit of the Metro Public Health Department
Drug Inventory Management**

Date Issued: August 10, 2012

Office Location and Phone Number

222 3rd Avenue North, Suite 401
Nashville, Tennessee 37201

615-862-6110

*The Metropolitan Nashville Office of Internal Audit is an independent audit agency
reporting directly to the Metropolitan Nashville Audit Committee*

EXECUTIVE SUMMARY

August 10, 2012

Results in Brief	Background and Recommendations								
<p>The Metropolitan Nashville Office of Internal Audit performed an audit of the of the Metro Public Health Department’s drug inventory management. Key areas reviewed included:</p> <ul style="list-style-type: none"> • Drug Inventory accountability • Handling of expired drugs • Drug storage security <p>The audit objective and its conclusion was:</p> <ul style="list-style-type: none"> • <i>Were controls in place and effective to manage drug inventory?</i> <p>Generally no. Although storage was safe and secure, existing recordkeeping controls at the Metro Public Health Department were not working effectively for the overall management of the drug inventory process.</p>	<div style="text-align: center;"> <p>Drug Expenditures July 1, 2010 through June 30, 2012</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 20%; text-align: center;">Expenses (000)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">All Programs</td> <td style="text-align: right;">\$641.4</td> </tr> <tr> <td style="text-align: center;">- Pharmacy (Drugs)</td> <td style="text-align: right;">\$491.1</td> </tr> <tr> <td style="text-align: center;">- Animal Care & Control (Drugs and Medical Supply)</td> <td style="text-align: right;">150.3</td> </tr> </tbody> </table> </div> <p>Drug expenditures equaled approximately seven tenths of one percent (0.7%) of the Metro Public Health Department expenditures of \$89.5 million for this period. Key recommendations of this report include:</p> <ul style="list-style-type: none"> • Management at the Metro Public Health Department should establish written policies and procedures for drug storage and handling in accordance with applicable state and federal requirements. • Establish procedures to record drug receipts at all drug storage sites. This procedure can be a part of the Department’s general drug inventory policy and should be in accordance with applicable state and federal requirements. • Establish drug disposal procedures that are consistent with regulatory requirements including details on storage, segregation of expired/defective drugs, documentation, etc. 		Expenses (000)	All Programs	\$641.4	- Pharmacy (Drugs)	\$491.1	- Animal Care & Control (Drugs and Medical Supply)	150.3
	Expenses (000)								
All Programs	\$641.4								
- Pharmacy (Drugs)	\$491.1								
- Animal Care & Control (Drugs and Medical Supply)	150.3								

TABLE OF CONTENTS

INTRODUCTION.....	4
Audit Initiation.....	4
Background.....	4
Information Systems.....	6
Financial Information.....	7
OBSERVATIONS AND RECOMMENDATIONS.....	9
A – Establish Drug Inventory Policy and Procedure.....	9
B – Improve Accountability for Drug Inventory.....	10
C – Improve the Handling of Expired or Defective Drugs.....	12
GENERAL AUDIT INFORMATION.....	14
Statement of Compliance with GAGAS.....	14
Scope and Methodology.....	14
Criteria.....	14
Staff Acknowledgement.....	14
APPENDIX A. ORGANIZATION CHART.....	15
APPENDIX B. MANAGEMENT RESPONSES.....	16

INTRODUCTION

Audit Initiation The performance audit of the Metro Public Health Department's drug inventory management was conducted as part of the approved 2012 Office of Internal Audit Work Plan. The audit was initiated based on the number of years elapsed since the last audit was conducted of the drug inventory management process and the inherent risk of misuse of drugs.

Background The Metro Public Health Department is overseen by the Board of Health with six board members, established by Metropolitan Nashville Charter Section 10.101. It is comprised of five divisions, namely Finance and Administration, Family Youth and Infant Health, Community Health, Population Health Programs and Environmental Health.

The mission of the Metro Public Health Department is to protect and improve the health and well-being of all people in Metropolitan Nashville. To accomplish this mission, various service programs were implemented where medications were administered to people in needs.

A diagram of the organization can be seen at **Appendix A**. This audit focused on processes in place for managing drug inventories for Pharmacy Services under supervision of the Community Health Division and Metro Animal Care and Control under supervision of the Environmental Health Division.

Pharmacy Services – General Operation

The Metro Public Health Department Pharmacy Services, located at Metro's Lentz Public Health Center facility, is the principle venue for all medication supplies with the exception of the Metro Animal Care and Control facility. The Pharmacy is regulated by the Tennessee State Board of Pharmacy which requires licenses for retail and wholesale distribution functions. The last State Board of Pharmacy audit was completed on December 6, 2011, and resulted in a passing rating.

The retail license serves primarily the Department's Bridges to Care program which links uninsured and indigent residents of Davidson County to a network of primary health care clinics. Approved indigent patients can fill their prescription at the Pharmacy with either no payment due or a flat seven (7) dollar fee. The wholesale license serves the distribution of medications to the three Metro clinics for the Preventative Health program.

The Pharmacy employs a part-time pharmacist-in-charge and a full-time technician. The pharmacist-in-charge has a federal Drug Enforcement Administration registration for ordering controlled substances. However, no controlled substances are carried or dispensed through this facility and other clinics. The Pharmacy is exempted from reporting to the Controlled Substance Monitoring Database Advisory Committee in accordance with Tennessee Code Annotated § 53-10-304.

The Pharmacy is open on Tuesday, Thursday and Friday. During these

days, the pharmacist-in-charge will be on-site and reviews all medication to be dispensed by the technician. All prescriptions are kept and dispensations recorded into a computer system called "QS1".

During the audit scope, drug inventory at the pharmacy was managed by the pharmacist at the Lentz site. The pharmacist-in-charge submitted orders on Metro Nashville's drug vendor's website. When the delivery arrived, the pharmacy technician, in the presence of the pharmacist, checked the delivery against the packing list.

The clinics, when in need, filled medication requisition order forms and submitted them to the pharmacy, where the pharmacist-in-charge created the vendor orders. Next, the full time pharmaceutical technician prepared shipments to the clinics upon vendor delivery. The pharmacist-in-charge was responsible for verifying each shipment before pick-up by a department runner who then made deliveries to each requesting clinic. Records of these orders and shipments were retained for one year in paper format. Physical inventories were not performed in the pharmacy.

Metro Animal Care and Control – General Operation

The Metro Animal Care and Control program mission is to enforce Metro's animal control ordinance, to prevent the spread of animal borne diseases and to promote responsible pet ownership. The shelter is located on Harding Place and next to the Metro Police East Precinct.

The shelter was fitted for twenty-four hour a day, seven days a week, protection by surveillance cameras and an entrance alarm system, which is connected directly to the Metropolitan Nashville Police Department precinct next door.

During the audit scope, animals were treated, vaccinated, spayed or neutered at the shelter site. Animal euthanasia was also performed at this site in accordance with Tennessee law. Drugs, including some controlled Schedule II, III, and IV drugs were purchased and administered during those treatments. The shelter maintained only a shallow inventory of those drugs.

Metro Animal Care and Control employed a full time licensed veterinarian, who submitted requests for orders of medications to the Office of Environment Health Division. The shelter maintains a premise permit issued by the Tennessee Board of Veterinary Medical Examiners, which allows the veterinarian to order and dispense medication to animals. Nurses at the shelter were licensed to perform euthanasia through injection.

The process used during the audit scope required the veterinarian to submit the order to the office where purchase requests were processed. When the deliveries arrived at the shelter, two shelter staff members other than the veterinarian checked the package against the packing list then signed the packing list and submitted a copy to the office. The veterinarian and her assistant nurse recorded each use of medication into a computer

system called “Chameleon” and printed out daily hard copies and reviewed the dispensation.

Information Systems

Information systems used at the Metro Public Health Department relevant to medication inventory were NRx Pharmacy Management System, Patient Tracking Billing Management Information System, and Chameleon.

NRx Pharmacy Management System

NRx Pharmacy Management System is a pharmacy management system provided by vendor QS/1, a large health software company based in South Carolina.

The system has functionality to provide a perpetual drug inventory so that received drug order quantities can be entered into the system. This functionality was not used by the Pharmacy. However, when prescriptions were filled, the dispensed amount was recorded into the system, and the on-hand quantity was automatically updated.

However, the system allows the dispensing of drugs to be recorded prior to the received quantities being entered, even when the inventory was zero.

Patient Tracking Billing Management Information System

Patient Tracking Billing Management Information System from Netsmart Technology is a program mandated by the State of Tennessee for county health departments to record all medical service activities with patient information. The system has been used by Metro Nashville for more than ten years. All Metro Public Health Department medical functions at the three facilities use this system. The Department’s Information Technology staff provided application support and system changes with help from the State of Tennessee who have access to all the county systems to pull and consolidate data nightly.

The system contains a pharmacy module but the Metro Public Health Department was not using it at the time of the audit. The system has procedure codes for every medical activity assigned by State of Tennessee for standardization purposes. Records for a particular patient’s visit on a particular day contained the procedure codes for medical issues, code for types of treatments, and codes for medication administered. Service site ID, encounter ID, provider (nurse) ID were also recorded for each visit. However, the pharmacy module to record dispensations was available but not utilized

Chameleon

Chameleon is the core animal control product of Chameleon Software Products by HLP Inc. Metro Animal Care and Control has been using the program since 2005. This program encompasses every component an animal control agency could have including inventory control. On-hand inventory can be automatically updated by inputting either received drugs, or dispensed drugs during treatments. The inventory window contains a

Drug Enforcement Administration code field where controlled substances can be easily identified per Drug Enforcement Administration regulation.

Financial Information

All medications ordered by the Pharmacy were recorded in the drug object account 503401. A summary of drug expenses for the last two fiscal years can be seen in Exhibit A below:

Exhibit A – Pharmacy Services Drug Expenditures for Fiscal Years 2011 and 2012

	FY 2011	FY2012
General Fund Programs		
Public Health Clinics	\$ 0	\$ 13,165
Bridges to Care Pharmacy	85,684	80,744
Civil Service Medical Exam Clinics	0	1,540
<i>General Fund Total</i>	<i>85,684</i>	<i>92,369</i>
Grants Programs		
Immunization Services Grant	9,360	0
Family Planning Grant	0	4,336
Grant in Aid	125,336	173,983
<i>Grants Total</i>	<i>134,696</i>	<i>178,319</i>
Grand Total	\$220,380	\$270,688

Source: Metro Nashville's EnterpriseOne Financial System

Drugs ordered by Metro Animal Care and Control were primarily assigned to the 503400 Medical Supply object accounts. This account consists of drugs and medical supplies required for care of animals. Also, some drug expenditures were assigned to the 502364 object account used to track food and other animal care expenses. A summary of the two accounts where drug expenses were charged can be seen in Exhibit B below. The numbers shown below included expenses for other medical related items such as medical supplies and food for animal care.

Exhibit B – Metro Animal Care and Control Drug and Medical Supply Expenditure for Fiscal Years 2011 and 2012

	FY 2011	FY 2012
Business Unit 38151222		
502364 Care of Animals	\$ 21,819	\$ 0
503400 Medical Supply	84,372	44,087
Grand Total	\$106,191	\$44,087

Source: Metro Nashville's EnterpriseOne Financial System

OBJECTIVES AND CONCLUSIONS

1. *Were controls in place and effective to manage drug inventory?*

Generally no. Although storage was safe and secure, existing recordkeeping controls at the Metro Public Health Department were not working effectively for the overall management of the drug inventory process. As detailed below, for the purpose of obtaining reasonable evidence to draw a conclusion for the above objective, we examined the following areas:

- *Were medication inventory records reconciled with purchases and dispensations?*

No. Drug inventory records were not reconciled with purchases and dispensations. Received drug quantities were not used to update on-hand quantities despite the fact that both the NRx Pharmacy Management System and Chameleon systems in use include this specific capability. Therefore, actual quantities of drugs were not readily available (see Observations A and B).

Metro Public Health Department did not have a written policy pertaining to drug inventory management (see Observation A).

- *Were expired medications handled in accordance with regulations?*

Generally yes. Expired medications were disposed of in a professional way. However, the department did not ensure records were created of all medications destroyed or otherwise disposed of as necessary for inventory accountability (see Observation C).

- *Were medication storages secured?*

Yes. Security measures were implemented for medication storage at the pharmacy, clinics and animal shelter.

OBSERVATIONS AND RECOMMENDATIONS

A – Establish Drug Inventory Policy and Procedure

The Metro Public Health Department did not have a written policy or procedures pertaining to drug inventory. A physical inventory of drugs was not performed at the pharmacy. Metro Animal Care and Control did perform inventory twice a year, but discrepancies were never investigated.

Criteria:

- *Tennessee Code Annotated Title 53 Food, Drugs And Cosmetics, Chapter 11 Narcotic Drugs and Drug Control, Part 306 states that:*

“Persons registered to manufacture, distribute or dispense controlled substances under this part and part 4 of this chapter and title 39, chapter 17, part 4, shall keep records and maintain inventories in conformance with the record keeping and inventory requirements of federal law, and with any additional rules the board of pharmacy and the appropriate occupational or professional licensing board governing persons who may legally dispense controlled substances.”

- *Code of Federal Regulation Title 21 Food and Drugs, Chapter I Food and Drug Administration, Subchapter C Drugs: General, Part 205.50 Guidelines for State Licensing of Wholesale Prescription Drug Distributors (g) requires written policies and procedures:*

“which shall be followed for the receipt, security, storage, inventory, and distribution of prescription drugs, including policies and procedures for identifying, recording, and reporting losses or thefts, and for correcting all errors and inaccuracies in inventories...”

Risk:

- Controls for drug inventory may not work effectively.
- Proof of regulatory compliance and demonstration of due diligence could be hampered due to a lack of written policies and procedures for the management of drug inventories.

Recommendation:

Management of the Metro Public Health Department should establish written policies and procedures for drug storage and handling in accordance with applicable state and federal requirements. At a minimum the policy should address the storage facility security, record keeping for drug receiving and disposition, handling of expired or defective drugs, inventory methodology and reconciliation.

B – Improve Accountability for Drug Inventory

An on-hand inventory of drugs at the Pharmacy and Metro Animal Care and Control was not available. The identities and quantities of drugs received at the Pharmacy and the animal facility were not used to update the on-hand inventory. The existing receiving features in the computer programs installed at those sites were not used for this purpose.

Furthermore, drugs in storage, including controlled substances, were not verified against purchase and dispensation records periodically through inventory reconciliation. Due to this lack of historical receiving and inventory data, it was impossible to verify the actual on-hand quantities at either location.

Metro Animal Care and Control inventory records on July 13, 2011, and May 5, 2012, were used to test six controlled substances. After adding the amounts purchased and subtracting the amounts used to the July 13, 2011, inventory, the computed inventory could not be reconciled to the actual inventory performed on May 5, 2012. Counting errors existed in the inventory records and disposition records for some drugs were incomplete.

The heavy workload prevented the veterinarian from spending time to enter records into the existing system.

Criteria:

- *Tennessee Code Annotated Title 53 Food, Drugs and Cosmetics, Chapter 11 Narcotic Drugs and Drug Control, Part 306 states that:*

“Persons registered to manufacture, distribute or dispense controlled substances under this part and part 4 of this chapter and title 39, chapter 17, part 4, shall keep records and maintain inventories in conformance with the record keeping and inventory requirements of federal law, and with any additional rules the board of pharmacy and the appropriate occupational or professional licensing board governing persons who may legally dispense controlled substances.”

- *Code of Federal Regulation Title 21 Food and Drugs, Chapter I Food and Drug Administration, Subchapter C Drugs: General, Part 205.50 Guidelines for State Licensing of Wholesale Prescription Drug Distributors,*

(f)(ii) states that drug inventory records to be kept should include:

"The identity and quantity of the drugs received and distributed or disposed of..."

(g) addresses written policies and procedures:

“which shall be followed for the receipt, security, storage, inventory, and distribution of prescription drugs, including policies and procedures for identifying, recording, and reporting losses or thefts, and for correcting all errors and inaccuracies in inventories...”

- *Title 21 United States Code Controlled Substances Act Section 827 Records and Reports of Registrants (a) Inventory (1) states that:*

“every registrant under this subchapter shall...make a complete and accurate record of all stocks thereof on hand...”

Risk:

- Misappropriation of prescription and controlled drugs might not be detected or provable if uncovered.
- On-hand inventories are not available in the event of loss of assets or loss of facility.
- Controls such as periodic inventory become ineffective as a deterrent, increasing the possibility of theft.
- Proof of regulatory compliance and demonstration of due diligence could be hampered.

Recommendations:

The Management of the Metro Public Health Department should:

- 1) Establish procedures to record receipt of drugs at all drug storage sites. This procedure can be a part of the department's general drug inventory policy and should be in accordance with applicable regulations.
- 2) Fully explore the functionality of existing computer programs to determine if they could be used more effectively to manage drug inventory recordkeeping and to provide meaningful reports for management review. At minimum, a spreadsheet could be utilized along with supporting paper documents.
- 3) Establish a physical inventory methodology as a part of a departmental drug inventory policy. For instance, cycle counting could be used for controlled substances and medications with high value. Set specific discrepancy levels for investigation, treating prescription drugs and controlled substance separately.
- 4) Coordinate needed office support for the Metro Animal Care and Control facility.

C – Improve the Handling of Expired or Defective Drugs

Records of expired drug disposals were not consistently maintained for all sites. The pharmacy used a vendor to pick up expired drugs from the pharmacy and Metro's Animal Care and Control incinerated expired or defective drugs. In both instances, logs or records were not maintained that precisely described what was picked up or destroyed. Furthermore, expired drugs were found comingled with non-expired drugs at both sites.

Criteria:

- *Code of Federal Regulation Title 21 Food and Drugs, Chapter I Food and Drug Administration, Subchapter C Drugs: General, Part 205.50 Guidelines for State Licensing of Wholesale Prescription Drug Distributors,*

(a)(3) states that all facilities at which prescription drugs are stored shall:

"Have a quarantine area for storage of prescription drugs that are outdated, damaged, deteriorated, misbranded, or adulterated, or that are in immediate or sealed, secondary containers that have been opened".

(f) states that records should be established and maintained for:

"all transactions regarding the receipt and distribution or other disposition of prescription drugs.", and the records "shall be made available for inspection and photocopying by authorized Federal, State, or local law enforcement agency officials for a period of 3 years after the date of their creation".

- *Code of Federal Regulation Controlled Substance Act Section 1304.22 Records for manufacturers, distributors, dispensers, researchers, importers and exporters,*

(c) states that:

"Each person registered or authorized to dispense or conduct research with controlled substances shall maintain records with the same information required of manufacturers pursuant to paragraph (a)2... (ix)..."

(a)2(ix) states that the records should include:

"The number of units of finished forms and/or commercial containers distributed or disposed of in any other manner by the registrant (e.g., by distribution of complimentary samples or by destruction), including the date and manner of distribution or disposal, the name, address, and registration number of the person to whom distributed and the quantity in finished form distributed or disposed."

Risks:

- Theft or other misappropriation of drugs since there is no record of what was received. Nothing prevents removal by employees prior to disposal.
- Waste of resources from accidental disposal due to comingling of inventory.
- Proof of regulatory compliance and demonstration of due diligence could be hampered.

Recommendations:

The Management of the Metro Public Health Department should:

1. Establish drug disposal procedures that are consistent with all regulatory requirements including details on storage, segregation of expired/defective drugs, documentation, etc.
2. Consider using a single vendor to handle expired or defective drugs for the entire department.

GENERAL AUDIT INFORMATION

Statement of Compliance with GAGAS

We conducted this performance audit between May 2012 and August 2012 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our observations and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our observations and conclusions based on our audit objectives.

Scope and Methodology

The audit period focused primarily on the period July 1, 2010, through June 30, 2012. The methodology employed throughout this audit was one of objectively reviewing various forms of documentation, conducting interviews, observations, performing substantive tests and tests of internal controls on the entity's financial information, written policies and procedures, contracts and other relevant data.

Criteria

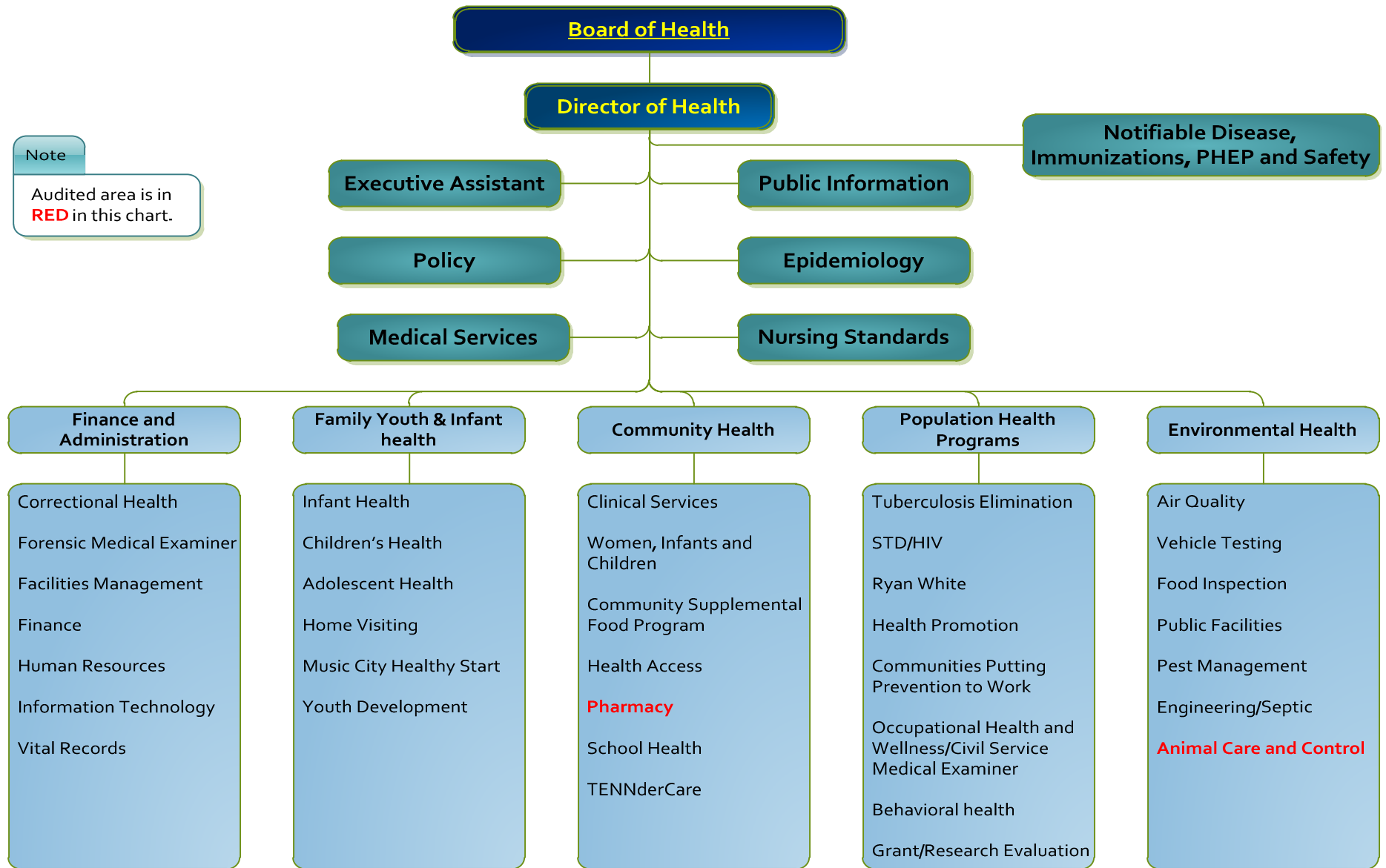
In conducting this audit, the existing processes were evaluated for compliance with:

- Code of Federal Regulation Title 21 Food and Drugs
- United States Code Controlled Substance Act Title 21 Section 822, 827, 1304, 1308, 1306.26
- Tennessee Board of Pharmacy Rules and Regulation Chapter 1140-03 Standard of Practice
- Tennessee Code Annotated title 63 chapter 10 Approval of Drugs dispersed by Health department, Sale of nonprescription drugs, Dispensing of medication prior to authorization
- Tennessee Code Annotated title 53 chapters 10, 11, Rules and fees for controlled drugs, Records and inventories required, Control substance data requirements, Criteria for registration issuance.

Audit Project Staff

Qian Yuan, CISA, In Charge Auditor
Sharhonda Cole, CFE, Staff Auditor
Carlos Holt, CPA, CFF, CFE, CIA, Project Quality Assurance

APPENDIX A. ORGANIZATION CHART



APPENDIX B. MANAGEMENT RESPONSES

- Management's Responses Starts on Next Page -

Metro Public Health Dept
Nashville / Davidson County

August 9, 2012

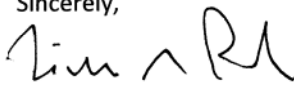
Mr. Mark Swann
Metropolitan Auditor
Office of Internal Audit
222 3rd Avenue North, Suite 401
Nashville, TN 37201

Dear Mr. Swann:

The appropriate personnel of the Metro Public Health Department have reviewed your department's audit of our drug inventories and have accepted all of your recommendations. We have provided a response to your findings and have established a timeline for corrective action.

We look forward to working with you further regarding this matter.

Sincerely,



William S. Paul, MD, MPH, FACP
Director of Health

Karl F. Dean
Mayor

William S. Paul, MD, MPH
Director of Health

311 23rd Avenue North
Nashville TN 37203-1511

Phone: (615) 340-5616
Fax: (615) 340-5665

www.health.nashville.gov

Board of Health

William N. Hance, JD
Chair

Ruth Stewart, MD
Vice Chair

Henry W. Foster, Jr., MD

Samuel L. Felker, JD

Carol Etherington,
MSN, RN

Alicia Batson, MD



**Promoting and
Protecting Health**

**Metro Public Health Department
Management Response to Audit Recommendations - August 2012**

Report Item and Description	Response to Recommendation / Action Plan	Assigned Responsibility	Estimated Completion
<p>A. Management of the Metro Public Health Department should establish written policies and procedures for drug storage and handling in accordance with applicable state and federal requirements. At a minimum the policy should address the storage facility security, record keeping for drug receiving and disposition, handling of expired or defective drugs, inventory methodology and reconciliation.</p>	<p>Accept – Currently MPH D uses the Rules and Regulations from the Tennessee Board of Pharmacy to guide our pharmacy operations. MPH D Finance and Community Health will develop a MPH D specific Policy & Procedure manual based on those guidelines which will address storage facility security, record keeping for drug receiving and disposition, handling of expired or defective drugs, inventory methodology and reconciliation. MPH D will not be able to finalize this manual until it has determined whether it will be using an electronic, manual, or hybrid system for recording inventory.</p>	<p>Chris Taylor RN, FNP-BC, Larry Goldberg, Pharm. D, John Koerner Rhonda Brooks For MACC, Dr. Dottie Diveley, Judy Ladebauche and Brent Hager</p>	<p>April, 2013</p> <p>For MACC 12/1/2012 following the use of Chameleon training by staff 10/17-19/2012</p>
<p>B. The Management of the Metro Public Health Department should:</p> <p>1. Establish procedures to record receipt of drugs at all drug storage sites. This procedure can be a part of the department's general drug inventory policy and must be in accordance with applicable regulations.</p>	<p>Accept – An electronic inventory control system would be the best long term solution for the MPH D. It is our plan to tie the drug receipting process in the clinics the future inventory control system and to utilize the existing software system in Animal Control for their receipts. Pending implementation of an electronic system, a manual log system will be developed, implemented, and maintained to address receipt inventory accounting in our drug storage sites. For MACC, following Chameleon training 10/17-10/19/2012, we will use Chameleon to track Schedule II and III drugs ordered, stored and used at the facility. This will also allow us to generate needed monitoring reports in an expeditious manner.</p>	<p>Chris Taylor RN, FNP-BC, Larry Goldberg, Pharm. D, Clinic Charge Nurses, Dr. Dottie Diveley, Brent Hager, Judy Ladebauche, John Koerner, Dianne Harden</p>	<p>September, 2012 for manual logs January, 2013 to March, 2013 for electronic implementation</p> <p>For MACC 11/1/2012</p>
<p>2. Fully explore the functionality of existing computer programs to determine if they could be used more effectively to manage drug inventory recordkeeping and to provide meaningful reports for management review. At minimum, a spreadsheet could be utilized along with supporting paper documents.</p>	<p>Accept – We have already contacted QS1 to explore what options for inventory control exist in our current QS1 system including the option to utilize a bar code inventory management system. As mentioned we will develop a manual system in the interim. Animal Control will be following up with Chameleon to develop the best method of inventory control available.</p>	<p>Chris Taylor, John Koerner, Stan Romine, Dr. Dottie Diveley, Brent Hager, Judy Ladebauche</p>	<p>September, 2012 to December, 2012</p> <p>For MACC 11/1/2012</p>
<p>3. Establish a physical inventory methodology as a part of a departmental drug inventory policy. For</p>	<p>Accept – MPH D will do a physical inventory of all sites and create a plan for physical inventory</p>	<p>Larry Goldberg, Cindy Shipman,</p>	<p>October, 2012</p> <p>For MACC 11/1/2012</p>

**Metro Public Health Department
Management Response to Audit Recommendations - August 2012**

Report Item and Description	Response to Recommendation / Action Plan	Assigned Responsibility	Estimated Completion
instance, cycle counting could be used for controlled substances and medications with high value. Set specific discrepancy levels for investigation, treating prescription drugs and controlled substance separately.	management. MPH D Finance will do surprise spot checks to determine that the process is functioning as designed. For MACC, Chameleon will be used to track drug orders, receipts and disposition.	Rhonda Brooks, Charge Nurses at clinic sites, Dr. Dottie Diveley, Brent Hager, Judy Ladebauche, John Koerner, Stan Romine	
4. Coordinate needed office support for the Animal Care and Control facility.	Accept – MPH D is looking at how best to provide the needed level of support with the limited staff at MACC. Likely we will be required to do a majority of the ordering and input of inventories in Chameleon at Lentz with the disposition responsibilities remaining at MACC.	Dr. Dottie Diveley, Judy Ladebauche, Brent Hager, Cheryl Edwards	For MACC 11/1/2012
<p>C. The Management of the Metro Public Health Department should:</p> <p>1. Establish drug disposal procedures that are consistent with all regulatory requirements including details on storage, segregation of expired/defective drugs, documentation, etc.</p>	Accept – MPH D has a drug disposal system in place through the company Guaranteed Returns, but need to add the documentation piece. We have already contacted them about providing a list of returns they receive which we can match with what we sent out. We will explore using Guaranteed Returns to dispose of Animal Control meds, but at this time we do not know if they deal in veterinary pharmaceuticals. Expired meds will be kept in a secure container quarantined away from other non-expired meds. If MPH D is unable to use Guaranteed Returns to dispose of Animal Control meds, an alternate methodology which complies with state and federal regulations will be implemented.	Chris Taylor, John Koerner, Stan Romine, Dr. Dottie Diveley, Brent Hager, Judy Ladebauche	October, 2012 For MACC, Chameleon representative is scheduled for staff training at MACC 10/17 through 10/19/2012. Following this training, we expect to have the schedule II and III drugs logged into Chameleon no later than 11/1/2012
1. Consider using a single vendor to handle expired or defective drugs for the entire department.	Accept – see above. If Guaranteed Returns does not deal in Veterinary pharmaceuticals we will develop an acceptable policy of inventory management for expired meds which can be reconciled in the Chameleon system.	Larry Goldberg, Dr. Dottie Diveley, Judy Ladebauche Dr. Brent Hager	October, 2012