



**A Report to the  
Audit Committee**

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**Audit Committee Members**  
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# Audit of the Metro Public Health Department's Immunization Services

February 18, 2016

Metropolitan  
Nashville  
Office of  
Internal Audit

## EXECUTIVE SUMMARY

February 18, 2016



### Why We Did This Audit

The Immunization Program plays an important role to ensure children in Davidson County are immunized against preventable diseases.

### What We Recommend

- Keep school visit records, and update the State information system.
- Enforce insurance verification at clinics.
- Establish a bad debt write-off policy and procedure.
- Improve vaccine inventory procedures and cash handling processes at clinics.

For more information on this or any of our reports, email [Mark.Swann@nashville.gov](mailto:Mark.Swann@nashville.gov)

# AUDIT OF METRO PUBLIC HEALTH DEPARTMENT'S IMMUNIZATION SERVICES

## BACKGROUND

The Metro Public Health Department Immunization Program is essential for minimizing the risk of spreading preventable diseases within Davidson County. Staff monitors compliance with the federal Vaccines for Children and Section 317 Immunization programs and determines the immunization coverage in Davidson County. Audits are performed at 201 daycare and kindergarten facilities and 57 program providers.

Also, Metro Public Health Department clinics administer free vaccines to eligible individuals, as well as paid vaccines to others.

### Exhibit 1 - Vaccines Administered Between September 2013 and August 2015

Services	Shots Administered	Cost to Metro
Vaccines for Children and Section 317 Immunization Programs	59,647	None
Private Paid Vaccine	4,602	\$412,644

Source: Patient Tracking & Billing Management Information System

## OBJECTIVES AND SCOPE

The objectives of this audit were to determine if the Metro Public Health Department:

- Immunization Program processes ensure coverage goals are achieved, and staff monitors program providers' compliance with Vaccines for Children Program requirements.
- Clinics' internal controls ensure accountability and safe keeping of vaccine inventory.
- Vaccine billing and collection processes are effective.

The audit scope included all Immunization Program audits completed, and all vaccines administered in the Metro Public Health Department clinics between September 2013 and August 2015.

## WHAT WE FOUND

The Immunization Program did not retain all backup documentation to support completed daycare and kindergarten audit engagements. The Metro Public Health Department Clinic's vaccine inventory procedures did not require shots administered to be reconciled to month-end inventory counts, insurance information collected at clinics routinely contained errors resulting in denied claims by insurance carriers, segregation of duties controls were not implemented in vaccine inventory and cash handling processes, and bad debt write-off procedure did not exist.

## GOVERNANCE

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The Metro Public Health Department immunizations services fall within two separate bureaus. The Immunization Program reports to the Communicable Disease and Emergency Preparedness Bureau. It is funded by a State Immunization Program grant renewable annually. The \$512,400 grant covers the salary and benefits of the program staff. The program has six employees and a director, who is in charge of monitoring the federal Vaccines for Children and Section 317 Immunization programs, and ensuring that program providers comply with requirements specified by the Centers for Disease Control and Prevention.

The three clinics providing immunizations are part of the Community Health Bureau. Each clinic has an individual supervisor, who reports to the Community Health Bureau director. Like other program providers, they administer free vaccines to eligible patients. Vaccines are ordered through a statewide ordering system and provided either for free or at a discounted price to program providers.

## OBJECTIVES AND CONCLUSIONS

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1. *Are processes in place to ensure the Immunization Program reaches its coverage goals?*

**Yes.** Processes are in place to ensure the Immunization Program completes daycare and kindergarten audit engagements timely and follows up with deficiencies to reach coverage goals. However, record retention policies could be improved to document daycare audits. (See Observation A.)

2. *Did the Immunization Program effectively monitor compliance of Vaccines for Children Program providers?*

**Yes.** The Immunization Program follows the Centers for Disease Control and Prevention's *Site Visit Reviewer Guide* when completing a site visit to determine compliance for Vaccine for Children Program providers. These site visits found shot records are not diligently updated by providers into the State Tennessee TennIIS information system. (See Observation A.)

3. *Are controls in place to ensure the accountability and security of vaccine inventory?*

**Generally no.** No inventory records are kept for the private stock vaccines paid for by the Metro Public Health Department. Monthly physical counts of federally funded vaccines were not reconciled with what was ordered, administered, and disposed of. (See Observation B.)

4. *Are immunization revenue billing and collection processes effective?*

**Generally yes.** Within the two-year audit scope, 87 percent of the total amount billed for private pay and 71 percent billed to TennCare were collected. However, only 14 percent billed to private insurance was collected and all claims submit to Medicare were rejected. None of the charges billed to Medicare was collected. (See Observation C, D, and E.)

## AUDIT OBSERVATIONS

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Internal control helps entities achieve important objectives and sustain and improve performance. The Committee of Sponsoring Organizations of the Treadway Commission (*COSO*), *Internal Control – Integrated Framework*, enables organizations to effectively and efficiently develop systems of internal control that adapt to changing business and operating environment, mitigate risks to acceptable levels, and support sound decision making and governance of the organization. The audit observations listed are offered to assist management in fulfilling their internal control responsibilities.

### ***Observation A – Audit Supporting Documentation***

The Immunization Program does not retain all backup documentation to support their completed daycare and kindergarten audits. After completing an audit, the immunization program does not keep the list of all children enrolled, nor do they retain any documentation supporting their coverage totals. Furthermore, many shot records were not updated into the State Tennessee TennIIS information system.

#### *Criteria:*

- *COSO*, Information & Communication – Principle 13 – The organization obtains or generates and uses relevant, quality information to support the functioning of internal control.

#### *Recommendations for the management of Metro Public Health Department to:*

1. Implement a new procedure to ensure all shot records reviewed are updated in TennIIS.
2. Retain the list of all students enrolled in each daycare and kindergarten at the time of the audit.
3. Reiterate the importance of updating TennIIS with immunization records on a timely basis to Vaccines for Children providers.

### ***Observation B – Improve Inventory Procedures***

There was no procedure in place to count and reconcile the inventory of the private stock vaccines, (funded by the Metropolitan Nashville Government) at Metro Public Health Department clinics.

While it was the practice at the clinics to physically count federally funded vaccines every month, there was no reconciliation of the count results with the numbers of vaccines administered or otherwise disposed of.

#### *Criteria:*

- *COSO*, Control Activities—Principle 12—The organization deploys control activities through policies that establish what is expected and procedures that put policies into action.
- Centers for Disease Control and Prevention Vaccine Storage and Handling Toolkit, page 63.

#### *Recommendation for the management of Metro Public Health Department to:*

Improve the procedure for vaccine inventory, to ensure that tally sheets are used to keep track of the movements of vaccines, tally sheets are reconciled with the monthly physical counts, reasons for discrepancies are identified and documented, and inventory records are retained for the period of time required by the Metropolitan Nashville Records Retention Schedule.

### ***Observation C – Segregation of Duties***

Several issues were observed involving employees with overlapping responsibilities and duties:

- Employees at two clinics were found having the daily responsibility to collect cash, reconcile the cash drawer and prepare cash to be transferred to the business office. At all the clinics, multiple clerks were found sharing the same cash drawer.
- A single nurse in each clinic is responsible for administering vaccines, physical count, updating inventory in TennIIS, ordering and receiving new stocks.
- One finance employee has the ability to write off bad debt, as well as to make changes to patient information in the Patient Tracking and Billing Management Information System.

#### *Criteria:*

*COSO, Control Activities—Principle 10—The organization selects and develops control activities that contribute to the mitigation of risks to the achievement of objectives to acceptable levels.*

#### *Recommendation for the management of Metro Public Health Department to:*

1. Revise procedure at clinics to ensure:
  - a. Tills are not shared.
  - b. Evidence exists that clerks agree on the amounts of cash collections transferred between employees.
  - c. Cash collections and reconciliation of daily receipts functions are separated.
  - d. Vaccine physical inventory, ordering, and receiving functions are separated.
2. Restrict the responsibility of updating patient insurance information to the clerks at the clinic front desk, rather than allowing an employee in the finance office to make changes in the Patient Tracking and Billing Management Information System.

### ***Observation D – Insurance Verification***

During the period from September 2013 to August 2015, \$158,866 out of the \$430,289 (37 percent) of the total amount billed to insurance providers, including TennCare and Medicare, was not collected. Claims submitted by Metro Health Department were often rejected due to errors in patient insurance information captured in the Patient Tracking Billing Management Information System. These errors result in bad debt write-offs when not timely corrected. Also, the department stopped submitting claims to Medicare after every claim had been turned down, while still accepting Medicare as a form of payment. The accumulated service charge to Medicare amounted to \$21,053 within the audited period. The department could not provide documentation to show the cause of this issue.

#### *Criteria:*

- *COSO, Control Activities – Principle 12- The organization deploys control activities through policies that establish what is expected and procedures that put policies into action.*
- Metro Public Health Department’s Clerical Registration and Procedures Manual, pages 21-26.

*Recommendations for the management of Metro Public Health Department to:*

1. Obtain copies of valid proof of insurance and verify coverage with insurance providers such as TennCare or other private carriers, and correct errors in the Patient Tracking Billing Management Information System at the time of the service.
2. Identify the reasons why Medicare claims were rejected or denied and make correction accordingly.

***Observation E – Write Off Policies***

There was no written policy or procedure regarding the process of bad debt write-offs. Reasons for the write-offs were not documented. Bad debt write-offs totaled \$51,381 (nine percent) out of \$550,019 total charges for immunization services for the 2014 and 2015 fiscal years.

*Criteria:*

COSO, Control Activities – Principle 12- The organization deploys control activities through policies that establish what is expected and procedures that put policies into action.

*Recommendation for the management of Metro Public Health Department to:*

Establish a process to ensure bad debt write-offs are reviewed, approved, and root causes identified.

## **GOVERNMENT AUDITING STANDARDS COMPLIANCE**

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We conducted this performance audit 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 findings 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.

## **METHODOLOGY**

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To accomplish our audit objectives, we performed the following steps:

- Interviewed key personnel within the department and from State agency.
- Reviewed and analyzed documentation for compliance with the Tennessee Code Annotated, Metropolitan Nashville Code of Laws, and other applicable laws, regulations, and policies.
- Evaluated internal controls currently in place.
- Reviewed sample selections to determine the effectiveness of internal controls.
- Reviewed financial related transaction files using analytic audit software.
- Surveyed customers.
- Considered risk of fraud, waste, and abuse.
- Considered information technology risks.

## **AUDIT TEAM**

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Mark Swann, Metropolitan Auditor

Qian Yuan, CIA, CISA, ACDA, Quality Assurance

Laura Henry, CFE, Auditor-in-Charge

Nan Wen, Staff Auditor

## APPENDIX B – MANAGEMENT RESPONSE AND CORRECTIVE ACTION PLAN

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Megan Barry, Mayor

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

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February 17, 2016

Mr. Mark Swann  
Metropolitan Auditor  
Office of Internal Audit  
404 James Robertson Parkway  
Suite 190  
Nashville, TN 37219

Dear Mr. Swann:

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

It was a pleasure working with you and your staff on this project.

Sincerely,



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



## APPENDIX B – MANAGEMENT RESPONSE AND CORRECTIVE ACTION PLAN

We believe that operational management is in a unique position to best understand their operations and may be able to identify more innovative and effective approaches, and we encourage them to do so when providing their response to our recommendations.

Recommendations	Concurrence and Corrective Action Plan	Proposed Completion Date
<b>Management of the Metro Public Health Department should:</b>		
<b>A.1</b> Implement a new procedure to ensure all shot records reviewed are updated in TennIIS.	<b>Accept.</b> We have started scanning all daycare shot records to prove which records were reviewed and updated.	Immediate
<b>A.2</b> Retain the list of all students enrolled in each daycare and kindergarten at the time of the audit.	<b>Accept.</b> Enrollment records are not required of daycares and kindergartens. Going forward, we will require a roster and scan both the roster and shot records for documentation of which records were reviewed and updated.	Immediate
<b>A.3</b> Reiterate the importance of updating TennIIS with immunization records on a timely basis to Vaccines for Children providers.	<b>Accept.</b> Starting in 2017, VFC providers will be required to enter into TennIIS. It will take one year of monitoring before we can take action against a VFC provider that does not update TennIIS.	2018
<b>B.1</b> Improve the procedure for vaccine inventory, to ensure that tally sheets are used to keep track of the movements of vaccines, tally sheets are reconciled with the monthly physical counts, reasons for discrepancies are identified and documented, and inventory records are retained for the period of time required by the Metropolitan Nashville Records Retention Schedule.	<b>Accept.</b> We are currently investigating an immunization module to track vaccine inventory in PTBMIS. If we can acquire the module, we believe this will eliminate the issue.  If unable to utilize the module in PTBMIS then we will improve our vaccine inventory procedures and reconcile our inventory log with vaccine reports.	March 1, 2016

## APPENDIX B – MANAGEMENT RESPONSE AND CORRECTIVE ACTION PLAN

Recommendations	Concurrence and Corrective Action Plan	Proposed Completion Date
<p><b>C.1</b> Revise procedure at clinics to ensure:</p> <ul style="list-style-type: none"> <li>a. Tills are not shared.</li> <li>b. Evidence exists that clerks agree on the amounts of cash collections transferred between employees.</li> <li>c. Cash collections and reconciliation of daily receipts functions are separated.</li> <li>d. Vaccine physical inventory, ordering, and receiving functions are separated.</li> </ul>	<p><b>Accept.</b> The Department will be working toward a system in which each clerk has their own till. However due to budget constraints it may be difficult to implement such a practice immediately. Regarding documentation for transfers of cash between clerks, this may also be difficult due to staffing needs. It has been proposed that cash collection be the responsibility of a specified clerk. If that is the case, then we would require evidence of agreement between clerks when one clerk is relieved by another. Our policy currently requires that cash collections be reconciled by the charge nurse or designee who is not involved with cash activity. In addition, the clinic charge nurse or designee is supposed to review all documentation related to daily activity and sign a date such documentation. Staff shortages may impact these procedures.</p> <p>Regarding vaccine inventory procedures, we will implement a process that will ensure proper separation of duties. In addition, vaccine physical inventories will be audited on a periodic basis by MPHD Finance personnel.</p>	December 31, 2016
<p><b>C.2</b> Restrict the responsibility of updating patient insurance information to the clerks at the clinic front desk, rather than allowing an employee in the finance office to make changes in the Patient Tracking and Billing Management Information System.</p>	<p><b>Partially accept.</b> We are currently working on giving more responsibility to the clerks for the updating of patient information. However, if an insurance remit reflects that a patient is not covered under insurer’s policy or that they are not the primary insurer, we feel that it is only practical for MPHD Finance to implement the appropriate changes and note any changes in the note field of the patient registration screen.</p>	May 1, 2016
<p><b>D.1</b> Obtain copies of valid proof of insurance and verify coverage with insurance providers such as TennCare or other private carriers, and correct errors in the Patient Tracking Billing Management Information System.</p>	<p><b>Accept.</b> The clerks are now required to get a screen print of the TennCare verification page as well as a copy of private insurance cards.</p>	March 1, 2016
<p><b>D.2</b> Decide either to enroll in Medicare going forward or not to accept Medicare as a form of payment.</p>	<p><b>Accept.</b> We are currently enrolled in Medicare but have a technological problem that prevents the Health Department from billing.</p>	April 1, 2016
<p><b>E.1</b> Establish a process to ensure bad debt write-offs are reviewed, approved, and root causes identified.</p>	<p><b>Accept.</b> We are currently developing and drafting a policy to deal with bad debt.</p>	March 1, 2016