

AUDIT OF FIRE RESCUE'S CONTROLLED SUBSTANCES, MEDICAL RECORDS, AND EQUIPMENT



WEST PALM BEACH

Internal Audit

Audit No.18-02
September 7, 2018

City of West Palm Beach Internal Auditor's Office

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Executive Summary

FIRE RESCUE'S CONTROLLED SUBSTANCES,
MEDICAL RECORDS, AND EQUIPMENT

AUDIT - AUD18-02

SEPTEMBER 07, 2018



OVERVIEW

- The Emergency Medical Services (EMS) Division is responsible for the purchase, storage, administration, and disposal of all controlled substances utilized by the West Palm Beach Fire Rescue Department. Both suppression and rescue units carry controlled substances, as well as other life-saving medications.
- The EMS Division is staffed by a Division Chief, Administrative Assistant, and 3 EMS Captains (one for each 24 hour shift rotation), who are responsible for coordinating EMS operations throughout the City.
- In FY17 and FY18, the Department had a budget of \$35.7 and \$40.1 million respectively, and responded to about 27,000 calls in FY17 and projects responses to about 30,000 calls in FY18.
- In 2017, crews began utilizing SafetyPAD, a comprehensive electronic Patient Care Reporting software system that allows agencies to collect, utilize, and share incident and patient EMS data in real-time. Based on our review of the records stored in SafetyPAD, it appears that Fire Rescue is in substantial compliance regarding the confidentiality of Medical Records.
- The suppression and rescue units, along with the crews, constitute the heart of the Department. Thus, Fire Rescue has plans to ensure for long-term asset sustainability and protection of its staff.

SUMMARY FINDINGS

1. **Paper-Based Inventory System:** We reviewed the controls in place over the inventory life-cycle process and noted that the entire system remains paper-based - crews document the receipt, storage, administration, and disposal of controlled substances on paper logs carried on the apparatus.
2. **Reconciliation of Inventory:** We were not provided with any inventory records showing at what points re-orders were done of the controlled substances and how those records were reconciled with the actual usage and waste of controlled substances records per SafetyPAD, or the paper-based system utilized on the apparatus.

SUMMARY RECOMMENDATIONS

1. The Department should evaluate and consider the implementation of an (electronic) inventory system that will enable EMS management to track all medications, including controlled substances, in a manner which ensures accountability and transparency.
2. The Department should initiate a system of periodic inventory reconciliations between supplies on hand and SafetyPAD data of medications administered.

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September 7, 2018

Audit Committee
City of West Palm Beach
401 Clematis Street
West Palm Beach, Florida

**RE: Fire Rescue: Controlled Substances, Medical Records, and Equipment,
AUD18-02**

Dear Audit Committee Members:

Attached is the City of West Palm Beach's Internal Auditor's Office report on the Fire Rescue Department's Controlled Substances, Medical Records, and Equipment. Although we commend the Fire Rescue Department for its response to an increased call volume, additional opportunities for improvement are presented in this report.

We thank the management and staff of the Fire Rescue Department for their time, assistance, and cooperation during this audit.

Respectfully Submitted,

/s/ Beverly Mahaso
Chief Internal Auditor

cc: Jeri Muoio, Mayor
Jeff Green, City Administrator
Dorritt Miller, Deputy City Administrator
Diana Matty, Fire Chief

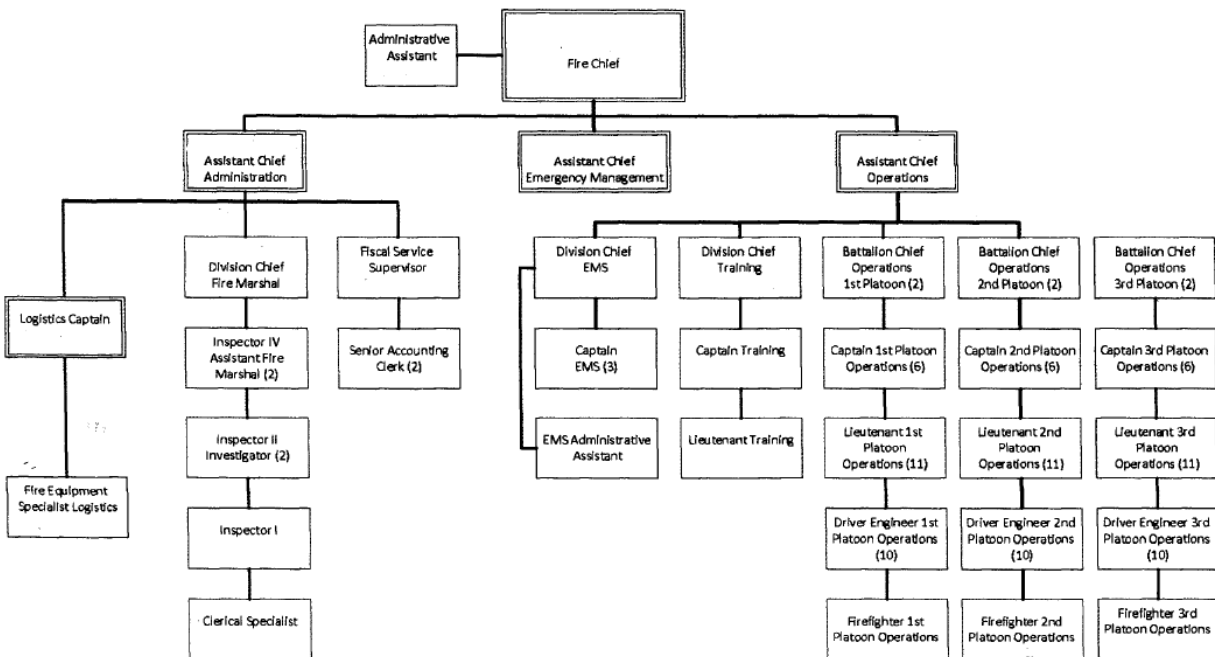
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Background

The City of West Palm Beach Fire Rescue (WPBFR) was organized in 1894 (known as the “Flagler Alerts”), and is one of the oldest established Fire Departments in South Florida. It provides a wide range of emergency services to residents, visitors, and the surrounding communities including: Fire Suppression, Emergency Medical Services, Hazardous Materials Response, Technical Rescue, Dive Rescue, and Emergency Management. All of these services are supported by a Fire Prevention Bureau and a Training Bureau. The Emergency Medical Services Division (EMS) is staffed by a Division Chief, Administrative Assistant, and 3 EMS Captains (one for each 24 hour shift rotation), who are responsible for coordinating EMS operations throughout the City. The following Organization Chart provides an overview of the operational responsibilities of WPBFR:



Source: WPBFR

There are 9 community Fire Stations throughout the City. Each team works a 24 hour shift, followed by two days off.

Every fire truck and ambulance vehicle (apparatus) is classified as an Advanced Life Support (ALS) apparatus. There is an Apparatus Committee, which is tasked with ensuring that the apparatus is maintained and discusses potential new technology. Every apparatus is staffed by 3 employees, one of whom is the highest ranking officer, tasked with supervising the apparatus and crew.

The EMS Protocols are developed by the Medical Director, who is a physician licensed in the State of Florida, which are similar to the Palm Beach County Fire Rescue’s EMS Division and several other municipalities in the area. The current Medical Director is also the Medical Director for Palm Beach County Fire Rescue (PBCFR). All WPBFR calls are dispatched by Palm Beach County Fire Rescue Dispatch (Dispatch), using Computer Aided Dispatch (CAD). Dispatch provides the City with a monthly report, which focuses on response times.

In FY17 and FY18, the Department had a budget of \$35.7 and \$40.1 million, respectively. The major challenge facing the Department is the increasing number of calls, as the City grows both vertically and in the western areas, as illustrated in the following chart:

	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Target
Emergency Response Time	06:19	06:22	06:29	06:00
Total Fire Calls	450	690	742	1,086
Total EMS Calls	19,250	22,404	23,111	24,110
Total Other	5,236	3,236	3,295	4,466
Total Calls	24,936	26,330	27,148	29,662

Source: City of West Palm Beach FY2018 Budget Book

The chart above shows that the increases in the Department’s call volume are primarily due to EMS, which as of FY17, accounted for 85% of all calls for assistance. Opioid overdoses increased by 84% from 2015 to 2017, accounting for approximately 900 opioid overdose calls in 2017. Further, the cost of the antidote, Narcan, was up 79% in 2017. Other factors contributing to increased calls are the growth of the City’s population, including more elderly, as well as office workers, and the growth in tourism.

Statement of Scope

The audit scope period was FY17 and the first three quarters of FY18. However, in some instances, the scope period may have been adjusted based on the availability of data. The audit included examining controls and conducting interviews with various members of WPBFR in order to understand the operations of EMS, Equipment Maintenance, and Medical Records, as well as challenges that the Department is facing as it moves forward.

Statement of Objectives

The objectives of this audit were to determine whether:

- Fire Rescue is in compliance with the applicable statutes and regulations related

- to safeguarding controlled substances, their use, and disposition;
- Fire Rescue is in compliance with the applicable statutes and regulations related to safeguarding confidential medical record information and responding to requests for that information; and
 - Fire Rescue is taking appropriate action to plan for long-term asset sustainability in accordance with its Strategic Plan.

Statement of Methodology

We utilized several audit methodologies to achieve the objectives. These evidence gathering techniques included:

- Conducting interviews of WPBFR Administration and personnel;
- Performing walk-throughs and observations of key business processes;
- Performing data analysis to verify key performance measures during the audit period; and
- Other audit procedures determined necessary.

Statement of Auditing Standards

We conducted this audit in accordance with Generally Accepted Government Auditing Standards (GAGAS). 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 findings and conclusions based on our audit objectives.

Audit Conclusions and Summary of Findings

Our review determined that Fire Rescue is in substantial compliance regarding the confidentiality of Medical Records. As of January 2017, the Department migrated to SafetyPAD, a cloud-based electronic Patient Care Reporting (ePCR) system, administered by a third-party vendor. In addition, the Department is planning to the best of its ability, to ensure for long-term asset sustainability and protection of its staff.

Opportunities for improvement are in the area of controlled substances. The Department continues to use a paper-based inventory management system, as funds for an electronic system were deferred in FY18. The Department should also ensure that inventory reconciliations are done in accordance with the Department's Administrative Policies.

Noteworthy Accomplishments

It is important to recognize the significant accomplishments achieved by management and staff of WPBFR. The Department's use of SafetyPAD, which is also used by PBCFR, has eliminated the need to manually enter patient data, and enables the rescue crews to focus on the medical needs of the patient. In addition, management has initiated activities,

which should result in improving the use of technology and permit them to focus more time on strategic objectives.

Opportunities for Improvement

1) Paper Based Inventory System

Condition:

The EMS Division is responsible for the purchase, storage, administration, and disposal of all controlled substances utilized by the West Palm Beach Fire Rescue Department. Both suppression and rescue apparatus carry controlled substances, as well as other life-saving medications. We reviewed the controls in place over the inventory life-cycle process and noted that the entire system remains paper-based, with current controlled substance logs maintained and carried on each apparatus, and prior month's logs remaining back at EMS' Administrative Base. In FY18, a request for an electronic inventory system was deferred to FY19.

We were not provided with documentation for any routine audits, or surprise counts performed of either the controlled substances, or general medication inventory within the Department. During our visits to all 9 City Fire Stations, we determined that in order to protect against expiration dates, some controlled substances are transferred from the suppression to the rescue apparatus, as the rescues will use the medications first, which adds to the challenge of tracking inventory.

Criteria:

The Medical Director for EMS carries the license for the Department, and is responsible for ordering the drug inventory in conjunction with the EMS Chief. WPBFR Administrative Policy 106.12, dated November 2017, defines the policies to be followed to track medications. Each vial of controlled substance medication should be tracked for the entire life cycle of the medication, from receipt of the shipment to patient administration, as well as any required waste disposal.

Cause:

The National EMS Advisory Council, in a Draft Statement in January 2017, noted that the use of controlled substances is critical to the practice of EMS, and that federal regulation through the DEA has not kept pace with modern EMS practice. As a result, EMS providers are challenged to create best practices in the administration of and accountability for controlled substances in the pre-hospital environment.

The Department does not have either a computerized inventory management system, or other form of medication dispensing system, beyond the paper-based system, that would provide better controls over supply management.

Effect:

Continuation of a paper-based inventory system, particularly for controlled substances, can lead to misappropriation of inventory, falsification of records, or unintentional errors

that would be difficult to detect.

Recommendation 1

The Department should evaluate and consider the implementation of an inventory system that will enable EMS management to track all medications, including controlled substances, in a manner which ensures accountability and transparency. Ideally, an electronic system would greatly improve controls and tracking of controlled substances.

Management Response

Paper based inventory system - Management agrees with the implementation of an electronic inventory system. The EMS Division spent the past year working on the cumbersome transition to the paperless EMS report system, SafetyPAD. We will begin research of an electronic system as soon as the new budget year begins on October 1, 2018. We agree that it would improve tracking controls.

Target Implementation Date: December 31, 2019 Budget Permitting

2) Reconciliation of Inventory

Condition:

The EMS Division is responsible for the ordering and securing of controlled substance medications used in the pre-hospital setting. As part of our review, we requested copies of the DEA Form 222, which is utilized for ordering controlled substances. After review of three completed forms, we noted that the forms appeared to be incomplete: the National Drug Code information was not entered, information was blank for the number of packages received, and the date of receipt was not stated. We were not provided with any inventory records showing at what points re-orders were done of the controlled substances and how those records were reconciled with the actual usage and waste of controlled substances records per SafetyPAD, or the paper-based system utilized on the apparatus.

We requested information from the SafetyPAD system for controlled substances and other specialty medications administered for the period January 2017 – June 2018. There were 665 instances of administration of controlled substance medications and specialized medications carried only by the EMS Captains. Our review of SafetyPAD data showed that there were no signatures by hospital personnel of any controlled substances waste by the receiving hospital for the patient. In addition, the chronology of the calls, and required signatures did not follow a consistent pattern.

We also reviewed the Controlled Substance Vehicle Logs in use as of August 7, 2018, and noted that the logs in use appear to pre-date the revision of the Administrative Policy in 2017, as they are dated 2016. Therefore, they do not include critical information that would allow for a reconciliation such as: run (call) number, date, time, amount of medication administered, or amount of wasted medication.

Criteria:

WPBFR Administrative Policy and Procedure 106.12, revised November 2017, defines all entries required to be made on the Controlled Substance Vehicle Logs for received, issued, and wasted medications used by operations personnel. The required entries for medication usage include lines for run (call) number, date, time, amount of medication administered, and amount of wasted medication. Both the Administering Paramedic and the Witness at the receiving hospital are required to legibly print and sign their legal name.

Cause:

The EMS Division has continued to utilize outdated manual sheets to maintain its controlled substances inventory records on paper, and does not have a methodology in place for periodic reconciliation of controlled substances inventories, or independent confirmation that all waste has been turned over to the receiving hospitals.

Effect:

The Department's practice of not performing periodic reconciliations between its supplies in inventory and usage as per SafetyPAD records, particularly for controlled substances, could lead to misappropriation of inventory, falsification of records, or unintentional errors that would be difficult to detect.

Recommendation 2

The Department should initiate a system of periodic inventory reconciliations between supplies on hand and SafetyPAD data of medications administered.

Management Response

Reconciliation of Inventory - Management will ensure that periodic reconciliations between supplies on hand and SafetyPad Data is conducted. We will create a schedule in addition to ensuring that crews obtain hospital signatures when appropriate. Preparation of the schedule and training analysis will commence on October 1, 2018.

Target Implementation Date: December 31, 2018