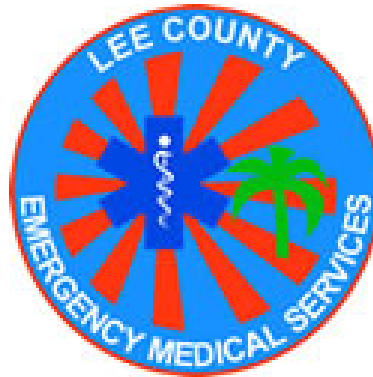
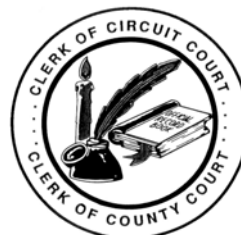


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# Lee County Government



## Lee County Emergency Medical Services



Prepared by:

Internal Audit Department  
Lee County Clerk of Courts  
Charlie Green, Clerk  
Lee County, Florida

Audit Number 2005.15  
December 2005

**Charlie Green**  
**Clerk of Circuit Court**  
**Lee County, Florida**

December 14, 2005

The Honorable Charlie Green  
Clerk, Lee County

Re: Lee County Emergency Medical Services

Dear Mr. Green:

The Internal Audit Department has conducted an audit of the Lee County Emergency Medical Services. Thomas Cianflone, CISA, CFE, CCP, CFSA, CSM, has completed this review.

The response to the auditor's conclusions, issues and recommendations is attached to this report. The auditors wish to thank the county employees for their assistance and cooperation during the review.

This Report has been posted to the Clerk of Courts website [www.leeclerk.org](http://www.leeclerk.org) under Internal Audit, Audit Reports. The [hyperlink](#) to the report has been sent to the Lee County Board of County Commissioners and appropriate parties.

Sincerely,



Chuck Short, Director  
Internal Audit Department

CTS/mjr

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# Lee County

## Emergency Medical Services



### Introduction

Lee County Clerk of Courts (Clerk) Internal Audit Department has completed a scheduled audit of Lee County's Emergency Medical Services (LCEMS) Program for the fiscal year (FY) 2004. The audit was performed in accordance with general standards for the professional practice of internal auditing. Audit workpaper files contain details supporting the findings, conclusions and recommendations in this report.

This audit focused on the EMS Program operations and its contribution to achievement of Public Safety mission, goals and objectives.

The scope of the audit is shown in **Exhibit 1**.

### Conclusions

Improvements to be considered are:

- ◆ *Modify County Ordinance 02-19 to reflect a more appropriate EMS transport agency standard relative to out-of-chute and response times.*
- ◆ *Investigate the use of a Medical Priority Dispatch System as a viable method to improve response time reliability.*
- ◆ *Implement a mechanism for customer satisfaction feedback.*
- ◆ *Resolve the payment lock-box issue as soon as possible.*
- ◆ *Enhance the collection efforts for self-pays, insurance and uncollectible accounts.*
- ◆ *Decrease duration periods for unpaid accounts to be sent to collection.*
- ◆ *Investigate methods to reduce lost revenues.*
- ◆ *Investigate and re-engineer processes that can interact with each other to save rework.*
- ◆ *Include IT goals and objectives in the LCEMS Strategic Plan.*
- ◆ *Investigate the implementation of state-of-the art technology.*
- ◆ *Tighten controls over inventories.*
- ◆ *Consider adding more people to the Logistics staff.*
- ◆ *Investigate an agreement between LCEMS and the fire districts for reimbursement of equipment and supplies.*
- ◆ *COOP should be tested as soon as possible to ensure that Public Safety mission-essential functions can be performed in the event of a disaster.*

## Background

Emergency medical personnel often are the first contact many residents and visitors to Florida have with the health care system, and these personnel provide education, assessment, prevention, and referrals in addition to their emergency services.

Generally, EMS systems focus on a major immediate need in the general public health field. EMS systems, as they relate to the care of life threatening or serious injuries and medical events, are one of the most important areas in the health care field.

The knowledge and services offered by EMS systems has benefits for individuals requiring comprehensive emergency medical care. Early research clearly established that EMS systems reduce preventable mortality and morbidity. Prevention activities also are having a positive effect, as evidenced by reductions in the number of motor vehicle fatalities over the last ten years. EMS system are still evolving, and becoming more important in prevention activities.

EMS systems have evolved and are now accepted by the public health community and the general public primarily because of their help in reducing premature death and disability.

### EMS History in Lee County

In February 1972, the Lee County Board of County Commissioners (BoCC) took over the operations of Southern Ambulance Service and renamed it Lee County Ambulance Service. The service started with four ambulances and approximately 12 employees. In 1975, the ambulance service name was changed to Lee County EMS (LCEMS) and became a Florida licensed Advanced Life Support Provider. LCEMS was unionized in 1997.

LCEMS covers more than 1,000 square miles, including 75 islands where only four islands have road access. LCEMS currently operates 30 Advanced Life Support (ALS) ambulances, a twin-engine helicopter, 2 ALS non-transport units, a paramedic bicycle team. LCEMS has interlocal agreements with 4 Lee County fire districts/departments providing ALS first response to emergency medical calls. In FY 2004, Lee County EMS was dispatched to more than 60,000 emergency calls and the air ambulance (Medstar) transported more than 600 patients.

Each EMS ambulance consists minimally of a State-certified Paramedic and EMT. LCEMS Paramedics and EMTs work under the direction of Emergency Physicians, and provide care on-scene and during transport to the most appropriate medical facility.

LCEMS has for 20 years, provided an on-going comprehensive training program for its employees. The training incorporates every aspect of medical specialties common to pre-hospital emergency medical care.

The department actively pursues grant monies to support special programs within EMS. Since 1990, EMS has received over four million dollar in grants.

The department recently celebrated its 33<sup>rd</sup> anniversary and has been recognized nationally for innovative programs such as the EMS Helicopter Program, Sudden Infant Death Syndrome Watch Program, Age Link Program, Community Health Program, Automatic External Defibrillator

Public Facility Program, Learn to Swim Program and Florida's Best Business & Educational Partnership Excellence Award. In 1987, the National Emergency Medical Technician Association selected the LCEMS for the prestigious ALS Service of the Year Award.

In May 2005, Paramedic Mike Hamel (Medtar) was awarded the Florida State Department of Health "Paramedic-of-the-Year" Award. Mike is the first Lee County EMS person to receive this award.

At the recent ClinCon 2005 conference, LCEMS placed 11<sup>th</sup> out of 42 teams in Advanced Life Support competition. It was the first time that LCEMS participated in the international event. Reaching the top 25% was quite an accomplishment for a first-time participant. The goal of ClinCon 2005 is to create an educational experience that will help EMS Personnel provide the highest quality pre-hospital care to their patients.

## EMS Organization and Staff

*LCEMS  
personnel  
satisfactorily  
perform their  
responsibilities.*

Based upon interviews, observations and job shadowing EMS management and staff, LCEMS personnel satisfactorily perform their roles and responsibilities in concert with their job descriptions.

The goals of the EMS staff are documents in the Strategic Plan. EMS staff appears to interact very well together. There have been no recent turnovers or absenteeism problems. Employees indicated that overall operation is efficient and effective.

The Air Ambulance Operation (Medstar) currently has 7 staff members. A manager for Aircraft Maintenance was hired in June 2005. Interviews are still being held for an aircraft mechanic.

There are 271 positions budgeted, 228 of them are EMTs and Paramedics with 14 openings. On August 20, 2005, we observed the testing process for EMT/Paramedic applicants. There are 4 phases to the testing (physical agility, written examination, individual practical scenario and individual oral interview). If an applicant fails any of the phases, they do not progress forward and are asked to leave and re-apply at a later date.

Sixteen applicants showed for the testing (13 for EMTs, 3 for paramedics). The results of the day were:

- Eleven of the 16 (68.75%) passed the physical agility test.
- Eight of the 16 (50%) passed the written exam. There were no paramedic applicants remaining at this point.
- Four of the 16 (25%) original applicants, or 50% of the remaining applicants, made it to the practical scenario phase.
- Of the four applicants who had an oral interview by the EMS officers, all four remain as candidates for the open EMS positions.

It is our opinion that the applicant testing is aggressive and sets a high standard for employment.

**Recommendation:**

*No corrective action is required.*

## EMS Program and Plans

The LCEMS program is responsible for providing advanced life support pre-hospital emergency and primary health care utilizing both ground and air ambulance support. LCEMS paramedics and emergency medical technicians (EMT) work under the direction of emergency physicians, and provide care on-scene and during transport to the most appropriate medical facility.

The air ambulance program is a vital component to LCEMS Advanced Life Support (ALS) program. While the primary duty is the rapid transport of high priority patients or critically ill and injured persons, it is called into service for search and rescue missions and plays a critical role in the search for missing children, swimmers and Alzheimer patients. LCEMS helicopters also provide mutual aid support to the surrounding counties (Collier, Charlotte, Hendry, Glades and Desoto).

EMS has signed a Memorandum of Understanding (MOU) (**Figure 1**) with each Lee County Fire District. The MOU allows the fire district EMTs and/or paramedics to perform Basic Life Support (BLS) or ALS procedures using the LCEMS medical protocol.

Fire District	Advanced Life Support MOU	First Responder MOU	Paramedic MOU
Alva **		✓	✓
Bayshore		✓	
Bonita Springs	✓		✓
City of Cape Coral *	✓	✓	✓
Captiva		✓	
Estero	✓	✓	
City of Fort Myers *	✓	✓	✓
Iona/McGregor *	✓	✓	✓
Lee County Port Authority		✓	
North Fort Myers		✓	✓
Pine Island **		✓	✓
San Carlos Park		✓	✓
Sanibel *		✓	✓
South Trail		✓	✓

\* Works under LCEMS Certificate of Need (CON) and falls under the LCEMS Medical Director (Dr. Lemmons).  
\*\* Licensed, ALS non-transport vehicles under LCEMS CON

Figure 1

In March 2005, the State evaluated the LCEMS. The State Inspector was very impressed with the LCEMS operations as cited in his report (see **Exhibit 2**). No deficiencies were found and the team received excellent ratings. In April 2005, the State reissued the LCEMS its ALS License (#002594). Associated documents note the EMS contact, medical director and insurance data as well as the vehicles

permitted ALS capability. There is a total of 61 vehicles including the 2 helicopters. Forty-four of the 59 land vehicles were listed as ALS transport. The remaining 15 were listed as non-transport.

## **Funding**

Most EMS programs systems are funded by a combination of public and/or private funds. Primary revenue streams include governmental subsidy via tax dollars and fees generated by providing service.

The LCEMS program is funded by monies assessed by ad valorem taxes and grants from the Federal, State and County governments. Fees for services are also charged. Ambulance transport fees were recently modified and approved by the Lee County Board of Commissioners in May 2005 as cited in Resolution 05-03-15.

Fees for service revenue come from five main sources: Medicare, Medicaid, private insurance companies, private paying patients, and special service contracts. Rates of payment, in general, are based on customary charges and the prevailing charge in the area. However, rules vary significantly among insurance carriers, and payments can be affected by what neighboring EMS systems charge.

*LCEMS  
Strategic Plan  
needs to be  
revised.*

## **Strategic Plan/Goals and Objectives**

The entire LCEMS Strategic Plan for its Program, including the mission/vision statements below, core values and goals and objectives was developed by an outside consultant, under the leadership of EMS staff and the Union delegates. Both the EMS Administration and Union officials work closely to achieve and maintain the Plan's goals.

We found the Plan to be very well organized and defined with mission/vision statements, short, medium and long-term goals.

***Mission Statement:*** *to provide the highest quality out-of-hospital emergency medical care and transportation for the residents and visitors of Lee County, Florida. Our highly trained professionals use the best technology to meet the needs of those who require assistance.*

***Vision Statement:*** *to be a leader in our profession and serve as a role model for other emergency medical services agencies and is an organization that people are proud to be associated with.*

*A mechanism  
for customer  
feedback needs  
to be  
implemented.*

However, the Strategic Plan has not been revised since July 2004. We found that some of the goals and objectives had been reached since July 2004, while others have not.

We also found that there is no mechanism currently in place for customer satisfaction with the LCEMS Program. The contracted vendor for billings and collections can perform this task by providing customer satisfaction cards to the clients.

### **Out-of-Chute and Response Times**

The National Fire Protection Association's (NFPA) Standards 1710 and 1720, which addresses the deployment of career and volunteer fire departments, requires EMS systems to have an ALS unit on-scene in eight minutes (7:59) or less, 90% of the time or better. Additionally, it requires an ambulance out-of-chute time of sixty seconds or less. NFPA defines response time as the time difference between unit en route and arrival at incident location.

The Commission for Accreditation of Ambulance Services (CAAS) mandates an ALS unit on-scene in 8:59 or less, 90% of the time or better and an out-of-chute time of less than or equal to 2:00, 90% of the time or better. CAAS defines response time as the time difference between call receipt time (in public safety answering point) and arrival at incident location.

*Out-of-chute and response times need to be improved.*

The Lee County Board of Commissioners adopted a municipal Ordinance (02-19) defining response time requirements, which closely follows the NFPA criteria:

*The County will rely on fractile and average response time reliability for this evaluation. It will be the goal of the Certificate Holder(s) within Lee County to comply with a turnout time of one (1) minute (60 seconds) and a response time of eight (8) minutes (480 seconds) or less at the ninetieth (90) percentile or have a six (6) minute overall average response time.*

Ordinance 02-19 defines "response time" as *the time beginning where units are en route to the emergency incident and ending when units arrive at the scene.*

A review was made of the LCEMS out-of-chute (turnout) times for FY 2002-2004 (See **Exhibit 3**). We found that the units did not meet the 60-second out-of-the-chute (or the 90 percentile) criteria on many occasions and has not improved over the years. Even if using the CAAS criteria for out-of-the-chute of 120 seconds or less, LCEMS would not meet the criteria. Reasons provided for not meeting the criteria included hardware equipment failure (i.e., Premier Mobil Data Computer) and personnel not performing their tasks.

- FY 2002 units met criteria 49.75%
- FY 2003 units met criteria 41.27%
- FY 2004 units met criteria 41.49%

A review was also made of the LCEMS unit response times for FY 2002-2004. LCEMS did not meet the criteria with response times under 8 minute (or the 90 percentile) criteria (See **Exhibit 4**). LCEMS fared better when using the CAAS criteria of under 9 minutes.

- FY 2002 units met the criteria on an average 85.13% for 8 minutes or under and 89.90% for 9 minutes and under. Units were over the 8 minute mark

- 14.87% of the time.
- FY 2003 units met the criteria on an average 85.27% for 8 minutes or under and 89.76% for 9 minutes and under. Units were over the 8 minute mark 14.73% of the time.
- FY 2004 units met the criteria on an average 82.78% for 8 minutes or under and 88.15% for 9 minutes and under. Units were over the 8 minute mark 17.22% of the time.

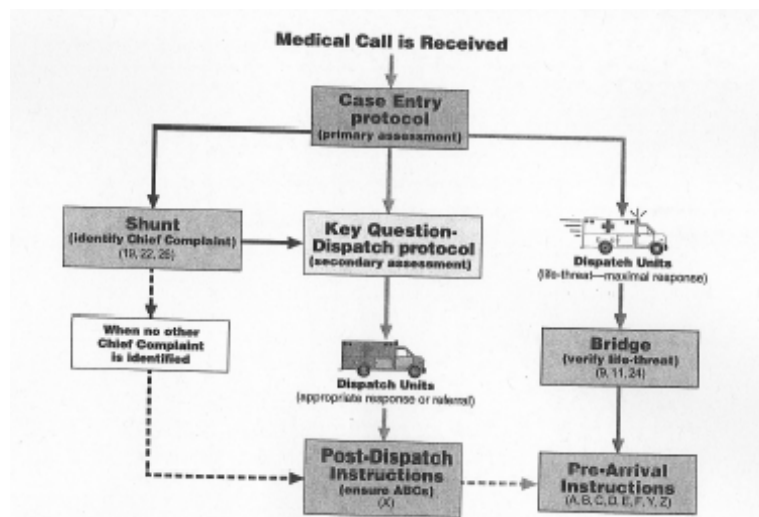
We have found that the patient's off-load time, at each hospital, is another factor affecting unit availability and response time reliability. There are two time components: (1) the time that it takes for the hospital staff to receive the patient and find an open stretcher, and (2) the time that it takes the ambulance crew to finish paperwork, transfer belongings, clean and restock portable equipment and ambulance. For example, in July 2005, Cape Coral Hospital, Lee Memorial Hospital, Lee Memorial Healthpark and Southwest Florida Regional Medical Center had poor off-load times. (See **Exhibit 5**).

*Consideration for a medical priority dispatch system is needed.*

Out-of-chute and response times would be more accurate if LCEMS followed the CAAS criteria instead of the NFPA. Yet, it can be concluded from the analysis of response times that there are deficits in Lee County regarding overall, urban and rural response times within the County. Improvements are still needed. The use of a medical priority dispatch system may be a solution to improved unit availability and reliability.

### Medical Priority Dispatch System

LCEMS should consider implementing a medical priority dispatch system to manage response calls. Part of the National Highway Traffic Safety Administrator's (NHTSA) *EMS Agenda for the Future* states that Emergency Dispatch could prioritize and categorize the type of call (emergency/non-emergency) to make EMS more efficient. The call can then be dispatched to the proper contact; for example, less serious calls can be diverted to an on-call nurse for advice instead of dispatching an EMS unit (**Figure 2**).



The use of a MPDS could improve LCEMS response by safely prioritizing responses. An MPDS would:

- Allocate limited resources more effectively and optimize their use.
- Ensure availability of these resources for medical conditions that require short response times and the highest level of clinical capability.
- Reduce the number of ALS lights and siren responses for minor injuries that can be effectively managed by a lower level of medical response.

### **Other Areas of Concern**

The term “diversions” is no longer used. The new terminology is called “seasonal surge.” EMS developed and maintains a taskforce of local hospital CEO's, Nursing and ER Managers, EMS providers (Lee County and local fire districts), Lee County Health Department (LCHD), Lee County Emergency Dispatch Center (EDC) and the International Association Of Fire Fighters (IAFF) that meets regularly to address this growing issue.

### **Recommendation:**

*The EMS Program is operating satisfactorily. However, improvements could be made:*

- 1) *Modify the Ordinance to reflect the more appropriate CAAS standards for EMS transport agencies relative to out-of-chute and response times.*
- 2) *Investigate the use of a Medical Priority Dispatch System as a viable method to improve response time reliability.*
- 3) *Implement a mechanism for customer satisfaction feedback.*

## **Billings and Collections**

On December 21, 2004, Lee County entered into a three-year agreement with Advanced Data Processing, Inc. (ADPI) to perform the billing and collection of LCEMS fees. The County piggy-backed on the City of Tamarac Agreement, *RFP 04-14R for Medical Billing Services*. The County's Agreement expires on December 20, 2007. Fees are 7% of monthly collections of non-Medicaid accounts and a flat-rate of \$150 monthly for Medicaid accounts. There is also a one dollar per transport fee to meet HIPAA requirements. ADPI follows the Medicare Ambulance Rules for Billing Manual.

In addition, the County entered into an agreement with Professional Adjustment Corporation of SW FL (PAC). Currently the County and PAC have a 2-year agreement (September 8, 2004 to September 7, 2006). No payments are directly made to PAC. The company collects on EMS bad debt accounts (uncollectible and non-deliverable) and sends a monthly check to the County for the money collected. The company withholds the contractual percentage on revenue collected before paying Lee County. The percentage is not to exceed 35% (for new accounts = 20%; old Accounts = 35%).

An investigation was made of surrounding areas (Charlotte, Collier, Desoto, Glades, City of North Port and Sarasota) relative to their methods of EMS billing

and collections. Charlotte, Glades, City of North Port and Sarasota also use ADPI for billing and collection services (**Exhibit 6**).

In addition, a comparison was made of the ambulance fees of the surrounding areas (**Exhibit 7**). Except for Collier, Lee County fees are more than the other areas. Charlotte just recently increased their fees to closely match Lee County.

### **Lock-box**

Each time the County changes its financial institution, the lock-box address, where collected EMS revenue are deposited, must be changed. This is often a very slow process.

*The lock-box issue must be resolved in a timely manner.*

We reviewed the "lock box" process to ensure that latest changes took effect. ADPI submitted forms for the payers to change the lock box address in December 2004. In January 2005, the County was in the process of changing lock boxes, where all EMS payments are sent. However, Medicare did not accept this address change due to additional information. At that time, Finance wanted to close it in February 2005.

As per ADPI, most other counties leave their old lock box open for 12 months after the new one is open, until all providers get their addresses changed. If the County closed the old lock-box before address changes take effect, there is a chance that a decrease in revenue could be realized until all controls are in effect. When the provider does not have the correct lock-box number, the claim is sent back to the provider and the County would have to try to collect monies twice. ADPI originally estimated that the County should be able to shut down the old box by April 2005.

We verified in August that there has been no change in lockbox status. The majority of revenue is still coming through the old account. However, revenue in the new account is beginning to increase. LCEMS recommended that the old account remain active through the remainder of the fiscal year. Finance has agreed.

On August 24, 2005 LCEMS received a response that ADPI is still working on the change. In the meantime, LCEMS is being assessed over \$1,000 per month by the old bank to handle the payments and miscellaneous paper work. ADPI expects the process to be complete by September 30, 2005. ADPI will notify the County and EMS as soon as the all address changes are in effect.

### **Billings and Collections Processes**

As previously mentioned the BoCC approved an increase in ambulance fees in May 2005. The new fees were provided to ADPI for billing purposes immediately after the BoCC approval.

*Collection rate does not meet industry-accepted criteria.*

EMS started billing for Medstar (helicopter) transports in May as well. As of August 29, 2005, the total amount billed (April to June) was \$880,465, of which \$767,056 was still owed. The revenue for helicopter services can supplement the cost of the proposed CIP project for the hangar as well as salaries for specialized jobs such as the aircraft maintenance staff (i.e., director and mechanics) and training.

We reviewed both the LCEMS (Data Services) and APDI processes for compiling and converting data for billing and collection. Both were found to have satisfactory controls.

A collections analysis on primary payers was done for FY 2003-2004 billings and collections data. It appears that ADPI does not meet the industry-experience percentage collection rate for self-pays and should concentrate on more collections before forwarding to bad debt collections. It also appears that ADPI does not meet the industry-experience percentage collection rate for Medicaid as well. (See **Exhibit 8**)

There was a minor problem with Data Services receiving data from ADPI for confirmation after their data entry and before submitting for billing and collection from major payers (Medicare, Medicaid, insurance and self-payers). Data was often not received for weeks delaying the billing process. This was discussed with ADPI in July. ADPI has since resolved this issue and downloads are now received in a timely manner.

**Uncollectible and Non-Deliverable Accounts**

We reviewed the PAC collection operations and found them to be satisfactory. PAC receives data from ADPI weekly. However, delinquent accounts are not forwarded to collections (PAC) until after twelve months.

*Duration for turning over uncollected accounts to collections is too long.*

PAC opines, as does LCEMS, that twelve months is too long of a cut-off for insurance claim submissions. PAC has found that there are uncollected accounts having insurance but the allowed time to file the claim has expired. PAC feels that 6 months should be the maximum time allotment for resolved insurance issues and self-pays, and 90 days for mail returns (bad addresses) before turning over for collection.

The duration should be shortened. We discussed billing and collections with an EMS subject matter expert. In the expert's opinion, the average number of days for the recovery of bad debt is between 80 and 120 days. (**Figure 3**).

<b>Payer</b>	<b>Days before</b>
Insurance	80-120 days
Self-pay	80-120 days

**Figure 3**

PAC uses LexisNexus as a third-party vendor to perform skip tracing on address and telephone numbers which are not valid. We found that LexisNexus

announced in March 2005 that hackers had gained access to its consumer information database. PAC advised that they received a letter from LexisNexus indicating that their account information was not hacked.

## Lost Revenues

*LCEMS must investigate ways to collect lost revenues.*

LCEMS is not reaching its full potential for revenues, which can be lost for the following:

### ☞ *Prisoner transports*

Currently LCMS does not collect for prisoner transports. During 2004, 92 prisoner trips amounted to \$36,244.51 (average per trip - \$393.96). As of June 2005 processing, 32 prisoner trips in 2005 amounted to \$12,863.00 (average - \$401.97).

LCEMS contacted the Lee County Sheriff Office (LCSO) Fiscal Officer and found that there is an empowering Florida Statute 951.32, where prisoner medical expenses can be reimbursed via his cash account, lien against his property or medical insurance.

During the course of the audit fieldwork, LCEMS is developing a new process with both ADPI and LCSO to bill for prisoners. LCEMS should be able to implement by end of the 1<sup>st</sup> quarter 2006.

### ☞ *John or Jane Does*

LCEMS cannot collect any reimbursements for John or Jane Doe's, who could be illegal aliens or non-responsive people where EMS personnel could or did not obtain appropriate info. Therefore, a claim cannot be billed. During 2004, 85 unknown trips amounted to \$36,428.24 (average - \$428.57).

If LCEMS personnel could get a "Medical Number" (hospital derived), then billing may occur.

### ☞ *Missing trips*

Missing trips result when data is not entered via field reporting devices from the responding unit. LCEMS Data Services sends paper documents to the respective Shift Supervisor for corrective action (data entry).

There were 171 missing trips in 2004, totaling \$69,289.20 (average - \$405.20). In June 2005 there 121 missing trips not entered totaling \$57,112.00 (average - \$472.00).

LCEMS has taken corrective action by reinforcing policy and implementing technology to improve reporting.

## Other Billing Areas

On December 8, 2003, the President signed into law the Medicare Prescription Drug, Improvement and Modernization Act of 2003. Under Section 1011 (Federal Reimbursement of Emergency Health Services Furnished to Undocumented Aliens), Congress has mandated that the Secretary of Health and Human Services directly pay hospitals, physicians, and ambulance providers for their otherwise un-reimbursed costs of providing services required by Section 1867 of the Social Security Act (EMTALA) and related hospital inpatient, outpatient, and ambulance services furnished to undocumented aliens, aliens paroled into the United States at a United States port of entry for the purpose of receiving such services, and Mexican citizens permitted temporary entry to the United States with a laser visa.

The Federal government has earmarked \$8.7 million for reimbursements for Florida. While the payments will probably be made to hospitals, there is a chance that payments could be made to EMS service providers. We investigated to determine whether LCEMS or ADPI has looked into the free illegal alien health care reimbursements. We found that ADPI has investigated but cannot submit claims until mid-October 2005 and does not expect to receive reimbursements, if any, until February 2006.

### Recommendations:

- 1) *Resolve the lock-box issue as soon as possible.*
- 2) *Enhance the collection efforts for self-pays, insurance and uncollectible accounts.*
- 3) *Decrease duration periods before unpaid accounts are sent to collection.*
- 4) *Implement the new process for collection of inmate transport fees.*
- 5) *Ensure that EMS employees obtain appropriate billing info from patient, when capable, or from the hospital.*

## Information Technology (IT) Strategic Planning

*Develop IT goals and objectives in the LCEMS Strategic Plan.*

We reviewed IT responsibility in the LCEMS and found the following:

- LCEMS does not have its own network. Network and servers are the responsibility of ITG.
- ITG also maintains the software on the desktop/laptops (includes MS products and HealthWare software).
- ITG does not maintain the field reporting devices (HammerHead laptops) nor any software on the field reporting devices.
- ITG maintains inventory of desktops/laptops, network equipment and licenses of associated software.
- LCEMS maintains inventory of field reporting devices and associated software licenses (includes MS products and HealthWare software).
- LCEMS maintains its own website.

We were advised that any discussion of the IT strategy should appear in the LCEMS Strategic Plan. However, we found that there was very little in regard to

*Re-engineer processes that can interact with each other to save rework.*

the IT in the Plan. IT areas addressed in the Strategy Plan included:

- Web site for "members-only."
- Intranet "punch-list" for reporting and tracking for EMS stations, which has not been completed.
- Web sites, online application, feedback mechanism, etc. for recruitment program, which has not been completed.

There appears to be opportunities for some IT enhancements (e.g., data/system integration, hardware/software installations, etc.), which could provide for more effective and efficient LCEMS operations. These include:

- Installation of memory cards into defibrillators to track performance and quality.
- Several applications and databases could interact with each other and reduce the rework of data entry. For example, Telestaff software is being acquired for staffing purposes. However, there does not appear to be any research performed to determine if Telestaff can integrate with other existing software used by LCEMS. Other system integration that could be investigated include Intellitrack (logistics software), Kronos (payroll, facility access), Healthware Solutions (field data reporting, training, certifications), PremierCAD (emergency dispatch, operational readiness, response times).

Other new technology could be investigated. EMS Telemedicine<sup>1</sup> Systems, in which real-time video images, digital voice communications and physiologic data are sent from a specially equipped ambulance to a physician's workstation. Hospitals, particularly trauma teams, can be better prepared to receive critically ill patients.

*Implement state-of-the-art technology.*

Mobile Area Routing and Vehicle Location Information System (MARVLIS) uses wireless communications between CAD and an in-vehicle laptop to recommend routes, providing maps based on historical drive times that update up to every 3 seconds as vehicle moves. MARVLIS allows the dispatcher to continuously monitor vehicle locations, constantly changing their view of the unit's service area to show locations they can reach within a certain time. This allows the dispatcher to determine which unit can reach a patient fastest.

We investigated our CAD system and features with the Telecommunications Communications Supervisor/CAD System Administrator, who advised that all the features, while the Motorola product in use does offer them, are not implemented due to budgetary or operational decisions to omit them.

Recently LCEMS hired a qualified and trained specialist capable of integrating IT and medical devices.

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<sup>1</sup> Telemedicine is defined by the [Telemedicine Information Exchange](#) (1997) as the "use of electronic signals to transfer medical data (photographs, x-ray images, audio, patient records, videoconferences, etc.) from one site to another via the Internet, Intranets, PCs, satellites, or videoconferencing telephone equipment in order to improve access to health care." Reid (1996) defines telemedicine as "the use of advanced telecommunications technologies to exchange health information and provide health care services across geographic, time, social, and cultural barriers."

**Recommendations:**

- 1) *Investigate and re-engineer processes that can interact with each other to save rework.*
- 2) *Include IT goals and objectives in the LCEMS Strategic Plan.*
- 3) *Investigate the implementation of state-of-the art technology, such as EMS Telemedicine System and MARVLIS.*

**Hardware and Software Inventories**

Public Safety was performing their annual confirmation of fixed assets at the time of this audit. A review of fixed asset inventory items was not performed to allow them to complete their reconciliation. We did review inventory controls in the following areas:

- Medstar
- Medical supplies and equipment
- Controlled substances

**Medstar (Air Ops):**

The inventory of Medstar assets are not part of the EMS fixed asset inventory process. Repair and replacement parts for both helicopters can be expensive and are not included in the County fixed asset process. Medstar must comply with the new inventory compliance (CFR Title 14, Part 135, effective May 2005) where controls are more stringent.

We reviewed the inventory process for this type equipment as well as smaller consumable parts (e.g., rivets, bolts, gaskets, etc.). We found that the current process needs improvement. Parts on the shelves are not managed properly and require better identification. Inventory storage is cramped and can be co-mingled (see **Exhibit 9**). Delivery of inventory is not within the Medstar Ops area. Packages are delivered to the Private Sky parts department, where Medstar picks up daily.

There is a need for a more controlled environment. Use of inventory software would make the inventory process more efficient and effective. Medstar inventory system must allow for immediate need and not only trigger to reorder, like the present IntelliTrack system used by Logistics.

LCEMS Medstar is planning to improve controls within the next 6 months.

**Medical Supplies:**

LCEMS Logistics is responsible for the inventory, storage and dispensing of medical supplies. Medical supplies are stored in two warehouses (North Fort Myers and Bonita Springs), 8 remote storage facilities and seven hospitals in Lee and Collier counties. Medical supplies do not include controlled drugs.

*Inventory controls need to be strengthened within Logistics and Medstar.*

Logistics uses a perpetual inventory system, IntelliTrack Warehouse Management Software (Version 6.0), for their inventory management. IntelliTrack was acquired in May 2004. Seven licenses are currently in use, with three in reserve. The latest version (6.01) is tentatively planned to be installed. However ITG will not install this software because the vendor contract states that only the vendor can install. Monies must be budgeted for the installation. We also noted that the printers in use were inadequate for Logistics' needs.

Logistics has documented policies and procedures for its inventory operation. We tested the instructions in a remote storage facility by scanning an item for dispensing. We found that the instructions were adequately documented and easy to follow.

Entry to the warehouse and remote locations is monitored by the Kronos system. Dispensing of medical supplies is performed by EMS personnel on the honor system at remote locations. Excessive dispensing is caught after the fact when the supply level is triggered by IntelliTrack. Investigations are then conducted via the use of Kronos (time of entry) and IntelliTrack.

On the first of each month, Logistics examines its inventory at all warehouse and remote locations for expiration. They investigate for 3-6 months left on expiration. On the 13<sup>th</sup> through the 15<sup>th</sup> of each month, each unit reviews their medical supplies for expired items. When supplies have passed their expiration date, they are properly disposed. To save money, Lee Memorial Hospital Pharmacy has agreed to dispose of the supplies.

We conducted inventories of randomly selected locations. For this audit, locations included the southern warehouse, Supply Center #1, Supply Center #6 and Supply Center #7 (see **Exhibit 10**). Discrepancies were noted at all locations. The inventories include the same items at each location (**Exhibit 11**). They included:

- Adhesive Band-aids 1X3" (100 per box)
- Alcohol Prep Pads (100 per box)
- Epinephrine 30ml(mg/ml)
- Glucometer Test Strips (50 per box)
- Hydrogen Peroxide (bottle)
- Lidocaine 100mg
- Narcotic Box Seals
- Nasopharyngeal Airway
- Sodium Chloride 0.9%
- Succinylcholine 200mg
- Syringe 3ml Twin Pack

Items with the greatest discrepancies were found in the supply centers. Of the 11 items inventoried at each of the selected locations, sodium chloride, syringes, narcotic box seals and succinylcholine had the biggest discrepancies.

As per Logistics, the discrepancies could be a result of one or all of the following causes:

- 1) Hardware and software problems
- 2) Inventory item counts and/or units of measure may be incorrectly entered by Logistics staff (e.g., 8 boxes entered as 80 boxes or a unit of measure may be a box of 100 but entered as 100 each)
- 3) Field personnel do not scan inventory items or unit bar code as required. This appears to be the major cause of the discrepancies in both the auditor and Logistics opinions. In-service training may help but it would not be fully utilized until it becomes part of the employee review process.

The Logistics Manager advised that they were investigating radio frequency identification (RFID) technology for inventory control. RFID technology is similar to the bar code identification systems; however, the difference between RFID and bar code technology is that RFID does not rely on the line-of-sight reading that bar code scanning requires to work. In addition, Logistics is investigating the new active tag system. The RFID tag that can be embedded in identity cards. The cards can be read from up to eight feet away, and can even be read through water or walls.

Besides using more technology, it appears that Logistics could use more personnel to perform on-spot inventories.

#### **Drugs (Controlled Substances):**

We conducted a review of controlled substances under LCEMS authority. Controlled substances include morphine sulfate, diazepam (AKA valium) and versed (midazolam). The Federal Drug Administration only lists morphine as a controlled substance. The controlled substances are stored in 2 safes (master and working).

*There were no discrepancies with controlled substances inventories.*

Procedures for controlled substances are contained in the Standard Operating Guidelines. Responsibilities and steps are defined in these procedures. Missing drugs have never been an issue in Lee County EMS.

Each unit has five vials of each controlled substance. Shift supervisors have six vials of each. Minimum stocking level is two of each vial. Drug disposal cards must be completed in order for drugs to be replenished on each unit. A Patient Care Report (PCR) can be used as an audit trail for the use of controlled substances and disposal of any remaining drug in the vial. To test this control, we satisfactorily ascertained a match for each disposal card, required for replenishment of morphine.

We reviewed the security controls over the controlled substances. LCEMS limits access to the stored controlled substances to a select few. The master safe is accessed by combination and key locks. The working safe is accessed by a combination lock. Working safe is also used for storage of field reporting devices (Hammerheads). Combinations have never been changed.

We performed an inventory of the stored controlled substances. No discrepancies were found. The LCEMS Medical Director must sign a Drug Enforcement Administration form for the replenishment of the morphine supply.

**Land and Air Inventory:**

We obtained current fleet inventory from LCEMS. We reconciled the LCEMS land and air inventory to State list of certified vehicles (as of 4-15-05). No discrepancies were found between the State list and the latest inventory.

**Other Concerns:**

As per Logistics, fire districts do not clean their equipment; rather they replenish their supplies with LCEMS inventory (i.e., on ambulances, at the hospitals, warehouses/remote storage locations). Minor medical supplies (backboards, splints, durable items at hospitals), which are normally furnished to the ambulance units at the hospitals, are also used by fire district ALS/BLS units. It is routine for fire district rescue to respond to calls in their Districts along with EMS. They use the same minor medical (disposable and durable) items as EMS. When on a tactical scene fire district rescue units replenish some of their depleted supplies (durable and consumable) from the LCEMS ambulance. Therefore, LCEMS are furnishing cleaned durable items and some limited numbers of other items. When these items are taken "on scene" there is no reimbursement.

*An agreement for supplies reimbursement between LCEMS and the fire districts should be reached.*

Of the 18 fire districts, four of them (Pine Island, Iona/McGregor, Cape Coral and Sanibel) have agreements with LCEMS to replenish the supply. Iona McGregor and Cape Coral get some of their consumable items from EMS Warehouse and Supply Centers and reimburse EMS for them. Pine Island and Sanibel do not reimburse but LCEMS does not supply a lot of equipment other than that replenished on scene. The other fourteen fire districts do not replenish. Taxpayers pay via ad valorem taxes for LCEMS. We did not investigate whether taxpayers pay via fire districts budgets as well. A possible solution may be to sign an agreement with all fire districts to reimburse LCEMS for their supplies.

**Recommendation:**

- 1) *Tighten controls over Medstar and Logistics (medical supplies) inventories.*
- 2) *Change combinations to safes storing controlled substances on a periodic basis.*
- 3) *Investigate adding 1-2 more people to the Logistics staff.*
- 4) *Consider high speed printers for Logistics.*
- 5) *Investigate an agreement between LCEMS and the fire districts for reimbursement of equipment and supplies.*

**Disaster Recovery/Business Resumption Planning**

The State approved the Lee County and Cape Coral Continuity of Operations Plan (COOP) on April 26, 2004. The final document was segmented into various agency and/or departments:

- ☞ E9-1-1
- ☞ Emergency Management (EM)
- ☞ Emergency Medical Services (EMS)
- ☞ Lee County Fire & Rescue Departments
- ☞ Lee County Sheriff Office
- ☞ Lee County Utilities

Relative to LCEMS, the Plan establishes policy and guidance to ensure the execution of the mission-essential functions for EMS in the event that an emergency threatens or incapacitates operations, and the relocation of selected personnel and functions of any essential facilities of EMS are required.

Specifically, EMS's section was developed to:

- Ensure that EMS is prepared to respond to emergencies, recover from them, and mitigate against their impacts.
- Ensure that EMS is prepared to provide critical services in an environment that is threatened, diminished, or incapacitated.
- Provide a means of information coordination to the Lee County government to ensure uninterrupted communications within the internal organization of the County and externally to all identified critical customers.
- Provide timely direction, control, and coordination to the Lee County leadership and other critical customers before, during, and after an event or upon notification of a credible threat.
- Establish and enact time-phased implementation procedures to activate various components of the "Plan" to provide sufficient operational capabilities relative to the event or threat thereof to the Lee County.
- Facilitate the return to normal operating conditions as soon as practical, based on circumstances and the threat environment.
- Ensure that the Lee County EMS COOP Plan is viable and operational, and is compliant with all guidance documents.
- Ensure that the EMS COOP Plan is fully capable of addressing all types of emergencies, or "all hazards" and that mission-essential functions are able to continue with minimal or no disruption during all types of emergencies.

*LCEMS should test the Continuity of Operations Plan as soon as possible.*

We recommended that Lee County perform a test of the COOP in the 2004 E9-1-1 and EM audits. Public Safety responded that Lee County was to test these plans through an exercise in 2005. The exercise's estimated cost is \$79,940 and would be funded through a grant from the Department of Homeland Security.

Public Safety conducted a Weapon of Mass Destruction (WMD) Exercise instead of a COOP test on September 14-16, 2005. As per Public Safety, if there was more time they could do both WMD and COOP tests. Public Safety requested time extension from the State in February 2005 due to hurricanes of last year. No response has been received from the State as yet.

Public Safety is not planning to conduct a COOP exercise if they do get an extension. The main reason is the additional cost for conducting the WMD Exercise. It has come in a lot higher than expected.

**Recommendation:**

*COOP should be tested as soon as possible to ensure that Public Safety mission-essential functions can be performed in the event of a disaster.*

**Contracts**

*Agreements address key issues.*

In accordance with Florida Statute 447, Labor Organizations, a tentative agreement was in the collective bargaining agreement between the Lee County Board of County Commissioners and Southwest Florida Professional Firefighters and Paramedics, Local 1826 of the International Association of Fire Fighters, Inc. was reached in April 2004. The agreement is in effect from October 1, 2003 to September 30, 2006. Union members ratified the Agreement on April 21, 2004. The Collective Bargaining Agreement was ratified by the Board on May 11, 2004.

However, negotiations are currently underway for salary and vacation issues. As per the existing agreement, the County or Union can open two articles a year. The salary and vacation articles were re-opened by the Union. The County did not open any articles. The Union declared an impasse. LCEMS and Union met with the official Public Employment Relations Commission Special Master. Board members have been briefed. All parties are awaiting the Special Master ruling before presenting it to the BoCC for their consideration. The BoCC is not bound by the Special Master's ruling.

The County (LCEMS) is under contract with several third-party vendors as well as the employee union. These vendors include:

- Advanced Data Processing, Inc (EMS Billings and Collections)
- Professional Adjustment Corporation (Bad Debt Collections)
- Dr Joseph Lemmons (EMS Medical Director)
- HealthWare Solutions (Software for Data Collection)
- Walkabout Computers (Handhelds for EMTs)
- Medical Transportation Consultants, Inc. (EMS Strategic Planning)
- Turbomeca (Aircraft Maintenance)
- Eurocopter (Aircraft Maintenance)
- Private Sky (Hangar Space Lease for Aircraft)

A review of the Agreements revealed that the components of Agreement address key concerns (e.g., payments, scope of services, right-to-audit clause, change orders, terminations agreement, HIPAA Business Associate Agreement).

Relative to the ADPI agreement, Lee County piggy-backed on the City of Tamarac Agreement, *RFP 04-14R for Medical Billing Services*. The first contract with ADPI was a piggyback of the City of Boca Raton. When the County severed its contract with the former billing vendor, LCEMS was in need of a new billing company as soon as possible. Boca Raton's contract contained everything Lee County needed, thus the first piggy back. Again, the City of Tamarac's contract with ADPI was acceptable to Lee County. It saved the

County a minimum of 2-3 months of compiling specifications, going out to bid, reviewing bids, selecting a vendor and entering into a contract. The County has been pleased with ADPI as a vendor and that is another reason a piggyback was preferred. There are some inherent problems when changing vendors as Lee County experienced in 1999/2000 (loss revenue).

**Recommendation:**

*Lee County should consider entering their own agreement with ADPI rather than piggy-backing with the City of Tamarac.*

## Revenue and Expenses

All revenue and expenses appear to be monitored adequately by the EM Program Manager and the Public Safety Fiscal Officer.

*Revenue and expenses are adequately monitored.*

We compared revenue and expenses for fiscal years (FY) 2002 through 2004. See **Exhibit 12** for details. As expected, comparisons revealed a significant increase in expenses from 2002 to 2004, primarily in salaries and the acquisition of the new EC145 Eurocopter.

Revenues for FY 2004 totaled \$11,323,146 while expenses totaled \$29,697,908. (See **Figure 4**). The \$18,374,762 unfunded difference is made up through ad valorem taxes.

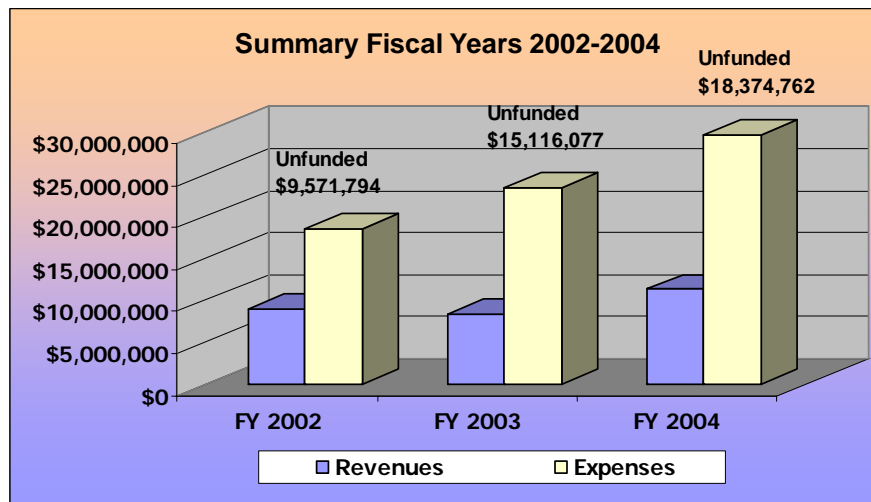


Figure 4

**Recommendation:**

*No corrective action is required.*

## Training

*The LCEMS training program is outstanding.*

### LCEMS Training Program

LCEMS training appears to be an outstanding, aggressive program, exceeding the Florida State and standard EMS training requirements. Education is a high priority within the LCEMS organization, structured by an EMS Training Coordinator. In March 2005, the State evaluated the LCEMS training program and record retention as excellent (**Exhibit 13**).

The LCEMS training section is responsible for the education and training of all EMT's and paramedics within the agency. LCEMS also offers classes to outside agencies (hospital/fire), which include Advanced Cardiac Life Support renewal, Basic Life Support renewal, Pediatric Advanced Life Support renewal and Basic Trauma Life Support. Additionally, LCEMS offers classes to the community under the coordination of the LCEMS Public Information Officer:

- Cardiopulmonary Resuscitation (CPR)
- Automated External Defibrillator
- First Aid

EMS training appears to follow the NHTSA's *Education Agenda* core content, model and standards. The National EMS Core Content is a comprehensive list of skills and knowledge needed for out-of-hospital emergency care. EMS provides training for many, if not all, of the areas cited in the core content, as evident in their Common EMS Treatment Guidelines.

The State requires that EMT/Paramedics have 30 hours of continuing education each 2 year cycle, with an additional 2 hours of AIDS update training every 2 years. Training is available on the LCEMS Intranet where general in-service training is provided as per the County/Union contract agreement. Topics vary each month.

Training is also provided via the Internet using the online CEU program, Medic Monthly. It is the goal of the LCEMS Training to use Medic Monthly for obtaining the required training for the State certification requirements. Each individual is responsible for maintaining his/her certification requirements. Each individual must complete and submit his/her paperwork as well.

Some of the LCEMS training programs include:

- 1) *New Employee Orientation Program* - New employees attend a 2 week, 8 hour/day Orientation Program. This program allows the new employee to become familiar with the general equipment and operations they will be exposed to in their job. They are then scheduled to ride as a 3rd person on an ambulance, until they have completed the necessary objectives to allow them to work alone with a lead paramedic.
- 2) *Monthly In-service Program* - Continuing Education Units (CEU) programs are scheduled monthly to allow employees to gain more than enough CEU's to recertify their license.

- 3) *Skills Credentialing* - Every two years, the organization participates in the Skills Credentialing program. This consists of written tests, as well as skills testing for all Basic Life Support (BLS) and Advanced Life Support (ALS) Skills. The purpose of this program is to maintain the standard of care regarding job knowledge and skills.
- 4) *Special Classes* - LCEMS provides educational classes to give the employees the necessary training to enhance job knowledge and skills. Classes include Basic Trauma Life Support (BTLS) Provider/Recertification, Advanced Cardiac Life Support (ACLS) Provider / Recertification, Basic Life Support Provider/Recertification, Pediatric Advanced Life Support Provider (PALS)/Recertification, and Emergency Vehicle Operations Course (EVOC) Provider/Recertification.
- 5) *Medical Examiner's Program* - Designed to allow EMS employees to view autopsies, and gain knowledge of the human anatomy.
- 6) *Interagency Training* - LCEMS participates in the yearly mass casualty incident drills with the Lee County Port Authority (Southwest International Airport), as well as the local Fire Districts. LCEMS also participates in the HAZMAT drills conducted throughout the year, in conjunction with the Lee County HazMat team.

We reviewed a sample of EMS staff training records, particularly current certifications and re-certifications. We concur with the State and found the record retention to be excellent. Individual training records are stored in cabinets and online as part of the menu on the field reporting devices (HammerHead). Training records are retained separately from the employee personnel folder.

### **Medstar Training**

All Medstar pilots are EMTs and need to follow standard EMT training requirements. However, Medstar personnel must also have adequate training to assure the pilot's proficiency in procedures and techniques. Medstar training is also an excellent program.

Training reference material is available to all Medstar personnel. Medstar training requirements are addressed in Code of Federal Regulations (CFR) Title 14, Parts 61, 91 and 135. The Federal Aviation Administration (FAA) requires "check-ride" observation every 6-months for maintaining licenses. Pilots are trained for Visual Flight Rules (VFR) for day and night. Pilots are tested once per year until they are instrument-certified. Instrument currency requirements are addressed CFR Title 14, Part 61.57 (3 take-offs and 3 landings every 90 days).

There is a standardized curriculum for training Lee County Helicopter Operations pilots (new hire, recurrent, re-qualification or transition). The Medstar Training Manual was approved by the FAA as required by Part 135. The LCEMS Training Manual meets or exceeds the FAA Air Transportation Operations Inspectors Handbook (8400.10) standards.

Medstar pilots also receive training from the Eurocopter instructor pilot and FlightSafety simulators. The Eurocopter instructor trains in emergency procedures and VFR. FlightSafety simulator training was contracted to maintain pilot proficiency. Medstar trains at FlightSafety's West Palm Beach Florida location.

USA Today reported (July 28, 2005) that air ambulance related helicopter crashes are due to pilot errors, industry carelessness and poor government oversight. About two-thirds of the fatal crashes occurred in poor visibility. The article indicated that air ambulance companies and the FAA have failed to impose safety requirements that might have saved lives. It also cited a 2002 study in The Journal of Trauma that found helicopters were used "excessively" for patients who weren't severely injured. The newspaper's investigation found that industry safeguards are so lax that pilots have repeatedly caused accidents by knowingly flying into bad weather, failing to check weather conditions or otherwise violating federal or company regulations.

The FAA and industry officials say they are moving to improve safety. Among the steps: encouraging companies to buy night-vision goggles, which allow pilots to see hazards in the dark, when the majority of crashes occur. In 2000, the air ambulance trade group called on the FAA to push companies to emulate the type of training used by airlines to minimize mistakes. Known at airlines as "Crew Resource Management," the training teaches pilots to listen to concerns from other crewmembers and to monitor themselves for factors such as fatigue and tension. Other actions to improve safety could include buying or using a helicopter flight simulator for training.

LCEMS Air Ops has implemented the following items mentioned in the article:  
Night vision technology installed in the aircraft.

- ☞ Night goggles.
- ☞ Training pilots to listen to concerns from other crewmembers and to monitor themselves for factors such as fatigue and tension.
- ☞ Tracking air hours.
- ☞ Provide training about what to do when they encounter inclement weather (e.g., fog, rain, winds, or darkness).

Medstar complies with FAA 8400.10, Volume 3, Air Operator Technical Administration, OpSpec A021 - Aeromedical Helicopter Operations (e.g., advising pilots to listen to weather reports, restrict how many hours pilots work, provide annual helicopter flight simulator training).

**Recommendation:**

*No corrective action at this time.*

*We strongly suggest that the LCEMS and Medstar Training program continue to be aggressive and provide the training that is outlined in the highly regarded consensus document "EMS Education Agenda for the Future."*

## Grants

The EMS Grant Coordinator appears to comply with the requirements of each grant agreement.

During FY 2004, LCEMS received three grants. The Florida Strategy Grant provided specialized communication equipment (Emergency Deployable Interoperable Communications System) and supplies. No match was required by the County. The County received \$470,661 in goods, equipment and/or supplies. An inventory was contained in the grant documents.

*LCEMS  
complies with  
grant  
requirements.*

In July 2003 the BoCC approved a matching grant of \$60,000 from the Bureau of EMS and approved a budget amendment for FY 2004 for the purpose of acquiring a vision enhancement device. EMS (Medstar) purchased Enhanced Vision Systems (night vision) for the new EC145 Eurocopter for \$80,000. The County matched \$20,000 as part of the 75%-25% split.

LCEMS also received \$288,281 from the Florida EMS County Grant Program, of which \$113,309 was a carryover from FY 2003. Monies for the Florida EMS Grant Trust Fund is supported by traffic violation fines, of which 45% goes back to Lee County annually through the EMS County Award Grant Program. Original approval for accepting grant monies was presented and approved at the April 27, 2004 BoCC meeting.

### **Recommendation:**

*No corrective action is needed.*

## Compliance

LCEMS must comply with many federal, state and local guidelines, which include but are not limited to:

*LCEMS  
complies with  
applicable laws  
and  
regulations.*

- Health Insurance Portability and Accountability Act of 1996
- Occupational Safety & Health Administration Regulations
- Code of Federal Regulations Title 14, Part 119 (Medstar)
- Code of Federal Regulations Title 14, Part 135 (Medstar)
- Code of Federal Regulations Title 21, Part 13 (Controlled Substances)
- Federal Aviation Administration 8400.10 (Medstar Air Operations)
- Florida Statute 401 (Medical Telecommunications and Transportation)
- Florida Administrative Code Chapter 64E (Emergency Medical Services)
- Florida State Trauma System Plan 2004-2005
- The National Fire Protection Association's (NFPA) 1710 and 1720 Standards (Organization and Deployment of Fire Suppression, Emergency Medical Operations, and Special Operations to the Public by Career and Volunteer Fire Departments)
- Commission for Accreditation of Ambulance Services (CAAS) Standards and Mandates
- County Ordinances, Resolutions and Administrative Codes.

We found that LCEMS satisfactorily complies with these applicable laws and

regulations. However, we did note that Public Safety did not have a paper shredder to properly destroy sensitive documents such as HIPAA or payroll related records. Florida Department of State (Division of Library and Information Services) advises that agencies should be aware that sensitive and confidential information needs to be safeguarded before disposal. Shredding prior to recycling provides an appropriate measure of security for such records.

**Recommendation:**

*No corrective action is required. Public Safety should consider acquiring a shredder to facilitate the proper disposal of sensitive documents.*

## Standards, Policies and Procedures

*LCEMS personnel comply with standards, policies and operating procedures.*

LCEMS has documented numerous standards, policies and operating procedures. All standards, policies, operating procedures and guidelines are also linked on the LCEMS Intranet.

All LCEMS personnel must comply with these internally developed standards, policies and operating procedures, particularly the Standard Operating Guidelines, General Guidelines and Common EMS Medical Guidelines. In addition to the EMS policies and procedures, Public Safety - Telecommunications also has Standard Operating Procedures (SOPs) that must be followed relative to EMS operations.

Medstar personnel must also follow their Operations Manual, filed with the Federal Aviation Administration. This manual provides guidance to County personnel in carrying out their assigned duties in accordance with FAA regulations and Company policies. Federal Aviation Regulations are included by reference and no attempt has been made to repeat the regulations in this manual.

**Recommendation:**

*No corrective action at this time.*

## Prior Audits

*Previous audit issues were addressed.*

We followed-up on the previous 2000 audit recommendations and found that corrective action was satisfactorily taken.

**Recommendations:**

*No further action is required.*

## Audit Scope:

The scope of the audit included:

- ☞ Reviewing the EMS Division's mission.
- ☞ Review general tasks (prior audits, organization, customer satisfaction, etc.)
- ☞ Review for compliance with applicable laws, regulations, policies, and procedures.
- ☞ Determine if job functions accurately reflect job classifications.
- ☞ Determine the economical and efficient use of resources employed by Department/Division's employees.
- ☞ Review the Division's budget and budget status for accurate and reliable operating information.
- ☞ Assess the Division's performance measurement system(s).
- ☞ Evaluate the department's information technology strategy (e.g., processes and operations are in place and functioning properly; processing is performed in a timely, effective and efficient manner; and integrity of the data is complete and accurate).

STATE OF FLORIDA DEPARTMENT OF HEALTH - EMERGENCY MEDICAL SERVICES Supplemental Inspection Form (Section 401.31, F.S.)	
Service Name: Lee County E.M.S.	Date: 03/18/05 Phone: (239) 335-1601
County: LEE Type of Inspection: Random Announced	Unit #: Medic 2 and N911LZ
Type of Service: ALS Transport	Page 1 of 1
Comments (Use additional sheet if necessary)	
Personnel Records Inspection form DH 1264, September 99 - No Deficiencies	
Service Records and Facilities Inspection form DH 1579, June 99- No Deficiencies	
BLS vehicle inspection form DH 627, June 99 - No Deficiencies	
ALS vehicle inspection form DH 1039, June 99 - No Deficiencies	
Air Ambulance inspection form DH 629, Sep. 99 - No Deficiencies - Beautiful Aircraft.	
Excellent personnel records, Excellent Medical Direction, Excellent QI and Training program.	
Excellent Management and well trained, professional Road Paramedics and EMT's.	
Very well organized service. Chief Cranford I thank you for your cooperation on this inspection.	
Excellent WEB site for employee communication and future data collection.	
Your program provides an excellent service to the citizens and visitors in Lee County and the State of Florida.	
Chief Hansen you should be proud of your excellent staff and service.	
If there is anything the Bureau can do to assist you in the future please call.	
Keep up the good work.	
I, the undersigned representative of the above service, acknowledge receipt of a copy of this inspection form, applicable supplemental forms and corrective action statement (if applicable). In addition, I am aware of the deficiencies listed (if any) and understand that failure to correct the deficiencies within the established time frames will subject the service and its authorized representatives to administrative action and penalties as outlined in Chapters 401, F.S., and 64E-2, F.A.C. Copy of Inspection and Corrective Action Statement Received by: No deficiencies!	
Person in Charge: <i>[Signature]</i>	Date: 03/18/05
Inspected by: John Stoler <i>[Signature]</i>	Date: 03/18/05
DH 1265, September 99	

Exhibit 3

	Total # of Units Enroute this Month:	Number of Units Meeting Criteria	Percent of Total Calls Meeting 60 second or less Criteria	Number of Units Not Meeting Criteria	Percent of Total Calls Not Meeting 60 second or less Criteria	If using the CAAS criteria 120 seconds or less	Percent of Total Calls Meeting CAAS Criteria 120 seconds or less
<b>FY 2002</b>							
October	4,044	2,169	53.64%	1875	46.36%	3643	90.08%
November	3,881	2,125	54.75%	1756	45.25%	3528	90.90%
December	4,174	2,160	51.75%	2014	48.25%	3800	91.04%
January	4,607	2,300	49.92%	2307	50.08%	4077	88.50%
February	4,061	2,073	51.05%	1988	48.95%	3607	88.82%
March	4,828	2,511	52.01%	2317	47.99%	4291	88.88%
April	4,251	2,317	54.50%	1934	45.50%	3836	90.24%
May	3,917	1,917	48.94%	2000	51.06%	3496	89.25%
June	3,610	1,671	46.29%	1939	53.71%	3219	89.17%
July	3,609	1,569	43.47%	2040	56.53%	3207	88.86%
August	3,772	1,702	45.12%	2070	54.88%	3360	89.08%
September	3,575	1,530	42.80%	2045	57.20%	3126	87.44%
<b>TOTALS</b>	<b>48,329</b>	<b>24,044</b>	<b>49.75%</b>	<b>24,285</b>	<b>50.25%</b>	<b>43,190</b>	<b>89.37%</b>
<b>FY 2003</b>							
October	3,835	1,719	44.82%	2116	55.18%	3389	88.37%
November	3,939	1,747	44.35%	2192	55.65%	3408	86.52%
December	4,103	1,764	42.99%	2339	57.01%	3492	85.11%
January	4,479	1,907	42.58%	2572	57.42%	3734	83.37%
February	4,236	1,820	42.97%	2416	57.03%	3601	85.01%
March	4,836	2,031	42.00%	2805	58.00%	4138	85.57%
April	4,485	2,043	45.55%	2442	54.45%	3934	87.71%
May	4,307	1,793	41.63%	2514	58.37%	3618	84.00%
June	3,751	1,456	38.82%	2295	61.18%	3070	81.84%
July	3,886	1,438	37.00%	2448	63.00%	3157	81.24%
August	4,330	1,585	36.61%	2745	63.39%	3513	81.13%
September	4,284	1,526	35.62%	2758	64.38%	3380	78.90%
<b>TOTALS</b>	<b>50,471</b>	<b>20,829</b>	<b>41.27%</b>	<b>29,642</b>	<b>58.73%</b>	<b>42,434</b>	<b>84.08%</b>
<b>FY 2004</b>							
October	4,402	1,688	38.35%	2714	61.65%	3565	80.99%
November	4,606	1,891	41.06%	2715	58.94%	3750	81.42%
December	5,113	2,139	41.83%	2974	58.17%	4095	80.09%
January	5,169	2,136	41.32%	3033	58.68%	4173	80.73%
February	5,176	2,304	44.51%	2872	55.49%	4232	81.76%
March	5,511	2,490	45.18%	3021	54.82%	4581	83.12%
April	4,988	2,166	43.42%	2822	56.58%	4081	81.82%
May	4,999	2,114	42.29%	2885	57.71%	4136	82.74%
June	4,772	1,870	39.19%	2902	60.81%	3815	79.95%
July	4,733	1,781	37.63%	2952	62.37%	3703	78.24%
August	5,811	2,512	43.23%	3299	56.77%	4608	79.30%
September	4,726	1,805	38.19%	2921	61.81%	3766	79.69%
<b>TOTALS</b>	<b>60,006</b>	<b>24,896</b>	<b>41.49%</b>	<b>35,110</b>	<b>58.51%</b>	<b>48,505</b>	<b>80.83%</b>

Below is a table showing LCEMS Unit Response times for when the unit goes en-route till it advises on scene of the incident location. Only emergency calls are considered and Medstar is factored out.

Year	Month	Total Count	Aggregates		
			0 TO 480	0 TO 540	480 & Over
<b>FY 2002</b>					
2001	October	3,407	2,865	3,058	542
			84.09%	89.76%	15.91%
2001	November	3,320	2,790	2,964	530
			84.04%	89.28%	15.96%
2001	December	3,550	3,009	3,183	541
			84.76%	89.66%	15.24%
2002	January	3,983	3,328	3,540	655
			83.56%	88.88%	16.44%
2002	February	3,460	2,861	3,027	599
			82.69%	87.49%	17.31%
2002	March	4,114	3,431	3,637	683
			83.40%	88.41%	16.60%
2002	April	3,643	3,104	3,270	539
			85.20%	89.76%	14.80%
2002	May	3,316	2,916	3,070	400
			87.94%	92.58%	12.06%
2002	June	3,090	2,703	2,822	387
			87.48%	91.33%	12.52%
2002	July	3,112	2,702	2,843	410
			86.83%	91.36%	13.17%
2002	August	3,250	2,819	2,962	431
			86.74%	91.14%	13.26%
2002	September	3,120	2,684	2,813	436
			86.03%	90.16%	13.97%
	<b>TOTALS</b>	<b>41,365</b>	<b>35,212</b>	<b>37,189</b>	<b>6,153</b>
			<b>85.13%</b>	<b>89.90%</b>	<b>14.87%</b>
<b>FY 2003</b>					
2002	October	3,429	2,887	3,041	542
			84.19%	88.68%	15.81%
2002	November	3,447	2,902	3,047	545
			84.19%	88.40%	15.81%
2002	December	3,576	3,054	3,214	522
			85.40%	89.88%	14.60%
2003	January	3,905	3,367	3,520	538
			86.22%	90.14%	13.78%
2003	February	3,667	3,049	3,226	618

			83.15%	87.97%	16.85%
2003	March	4,215	3,524	3,726	691
			83.61%	88.40%	16.39%
2003	April	3,842	3,225	3,422	617
			83.94%	89.07%	16.06%
2003	May	3,758	3,260	3,422	498
			86.75%	91.06%	13.25%
2003	June	3,177	2,739	2,873	438
			86.21%	90.43%	13.79%
2003	July	3,261	2,837	2,970	424
			87.00%	91.08%	13.00%
2003	August	3,510	3,029	3,189	481
			86.30%	90.85%	13.70%
2003	September	3,504	3,043	3,207	461
			86.84%	91.52%	13.16%
	<b>TOTALS</b>	<b>43,291</b>	<b>36,916</b>	<b>38,857</b>	<b>6,375</b>
			<b>85.27%</b>	<b>89.76%</b>	<b>14.73%</b>
<b>FY 2004</b>					
2003	October	3,624	3,090	3,260	534
			85.26%	89.96%	14.74%
2003	November	3,685	3,069	3,260	616
			83.28%	88.47%	16.72%
2003	December	4,110	3,417	3,631	693
			83.14%	88.35%	16.86%
2004	January	4,244	3,480	3,697	764
			82.00%	87.11%	18.00%
2004	February	4,190	3,350	3,597	840
			79.95%	85.85%	20.05%
2004	March	4,398	3,566	3,810	832
			81.08%	86.63%	18.92%
2004	April	4,002	3,299	3,516	703
			82.43%	87.86%	17.57%
2004	May	4,032	3,379	3,587	653
			83.80%	88.96%	16.20%
2004	June	3,795	3,195	3,396	600
			84.19%	89.49%	15.81%
2004	July	3,813	3,266	3,450	547
			85.65%	90.48%	14.35%
2004	August	4,550	3,636	3,924	914
			79.91%	86.24%	20.09%
2004	September	3,871	3,249	3,460	622
			83.93%	89.38%	16.07%
	<b>TOTALS</b>	<b>48,314</b>	<b>39,996</b>	<b>42,588</b>	<b>8,318</b>
			<b>82.78%</b>	<b>88.15%</b>	<b>17.22%</b>

<h2 style="text-align: center;">Patient Off Load Time % By Hospital</h2> <p style="text-align: center;">7/01/2005 12:00:00 AM to 8/01/2005 11:59:59 AM</p>						
Receiving Facility	Total	0 TO 15	15-30	30-45	45-60	60 +
<b>Cape Coral Hospital</b>	246	198	27	16	3	2
		80.49%	10.98%	6.50%	1.22%	.81%
<b>Cleveland Clinic</b>	1	1	0	0	0	0
		100.00%	.00%	.00%	.00%	.00%
<b>Gulf Coast Hospital</b>	74	68	5	1	0	0
		91.89%	6.76%	1.35%	.00%	.00%
<b>Lee Memorial Healthpark</b>	148	114	26	5	1	2
		77.03%	17.57%	3.38%	.68%	1.35%
<b>Lee Memorial Hospital</b>	259	219	34	4	1	1
		84.56%	13.13%	1.54%	.39%	.39%
<b>Lehigh Regional Med Ctr</b>	7	7	0	0	0	0
		100.00%	.00%	.00%	.00%	.00%
<b>N Collier Med Ctr</b>	23	22	1	0	0	0
		95.65%	4.35%	.00%	.00%	.00%
<b>SW FI Regional Med Ctr</b>	193	120	41	14	14	4
		62.18%	21.24%	7.25%	7.25%	2.07%
<b>Valid Delivery Code Not Entered</b>	43	35	6	0	1	1
		81.40%	13.95%	.00%	2.33%	2.33%
End of Report						

EMS Billing and Collection Comparisons

County	Billing	Collection	Collection of Debts	Comments
Charlotte	ADPI (Manual process)	ADPI (Manual process)	Outsourced (approx held 12 months before being sent as uncollectible debt)	ADPI has handled Charlotte since March 2002.
Collier	In-house	In-house	Outsourced (approx held 12 months before being sent as uncollectible debt)	Investigating vendors; currently cheaper to do in-house.
Desoto	EMS consultants	EMS consultants	Outsourced (approx held 12 months before being sent as uncollectible debt)	Desoto is trying to get the uncollectible calls to their collection agency quicker than one year. Their goal is 90 days and then out to collections.
Glades	ADPI (Manual process)	ADPI (Manual process)	Outsourced (approx held 12 months before being sent as uncollectible debt)	Glades County has a limited contract with ADPI (data entry). All other billing/collection processes are performed in-house.
Lee	ADPI (Electronic process)	ADPI (Electronic process)	Outsourced (approx held 12 months before being sent as uncollectible debt)	
City of North Port	ADPI (Manual process)	ADPI (Manual process)	The City does not have a vendor. ADPI continues to bill until the City writes the debt off.	The City of Northport hopes to be mechanized within the next few months.
Sarasota	ADPI (Electronic process)	ADPI (Electronic process)	Outsourced (approx held 12 months before being sent as uncollectible debt)	Sarasota County has been a client of ADPI for four years.

**Exhibit 7**

<u>City/County</u>		<u>Advanced Life Support 1</u>	<u>Advanced Life Support 2</u>	<u>Specialty Transport</u>	<u>Basic Life Support</u>	<u>MILE</u>	<u>New Rates Date</u>
<b>Charlotte</b>	Emergency	\$500.00	\$600.00	\$650.00	\$400.00	\$8.50	May-05
	Non-emergency				\$325.00	\$6.50	May-05
<b>Collier</b>	Emergency	\$575.00	\$625.00	\$650.00	\$575.00	\$10.00	Jul-05
	Non-emergency	\$575.00	\$575.00		\$575.00	\$10.00	Jul-05
	HEL (Logistical)	\$3,200.00				\$85.00	Jul-05
	HEL (Trauma)	\$5,000.00				\$85.00	Jul-05
<b>Glades</b>		\$345.00	\$480.00		\$300.00	\$7.50	
<b>Hendry</b>		\$345.00	\$480.00		\$300.00	\$6.00	
<b>City of North Port</b> <i>Northport also charges ALS1 and ALS2 rates for "no transport" or in preparation of Air Transport</i>		\$380.00	\$530.00	N/A	\$350.00	\$5.75	Sep-03
<b>Sarasota</b>		\$330.00	\$480.00	N/A	\$300.00	\$5.50	May-02
<b>Lee</b>	Emergency	\$500.00	\$600.00	\$650.00	\$400.00	\$10.00 Rural \$9.00 Non-rural	Apr-05
	Non-emergency	\$450.00			\$325.00	\$10.00 Rural \$9.00 Non-rural	Apr-05
	HEL (Non-rural)	\$3,200.00				\$35.00	Apr-05
	HEL (Rural)	\$4,050.00				\$50.00	Apr-05
	TWT	\$90.00			\$35.00		Apr-05

<b>Collections</b>										
<i>Lee County Summary Report April 2003 - September 2004</i>										
	Transports	Gross Amount	Adjustment Amount	Anticipated Amount	Refund Amount	Return Amount	Net Amount	% Collected	Industry Experience Percentages	Comments
<b>Self Pay</b>	3,761	\$1,446,926.00	\$4,355.30	\$298,925.59	-\$4,552.97	\$0.00	\$1,442,570.70	20.41%	30-50%	Falls below
<b>Insurance</b>	14,317	\$5,825,952.00	\$227,120.25	\$4,252,929.58	-\$78,242.28	\$0.00	\$5,598,831.75	74.56%	75-85%	Meets criteria
<b>Medicare</b>	26,917	\$11,011,850.00	\$1,289,301.20	\$8,972,584.75	-\$66,507.77	\$0.00	\$9,722,548.80	91.60%	90-95%	Meets criteria
<b>Medicaid</b>	5,368	\$2,175,229.00	\$838,636.57	\$862,502.45	-\$2,336.33	\$0.00	\$1,336,592.43	64.36%	90-95%	Falls below
<b>Total</b>	<b>50,363</b>	<b>\$20,459,957.00</b>	<b>\$2,359,413.32</b>	<b>\$14,386,942.37</b>	<b>-\$151,639.35</b>	<b>\$0.00</b>	<b>\$18,100,543.68</b>			
<i>Lee County Summary Report October 2003 - September 2004</i>										
	Transports	Gross Amount	Adjustment Amount	Anticipated Amount	Refund Amount	Return Amount	Net Amount	% Collected	Industry Experience Percentages	Comments
<b>Self Pay</b>	3,273	\$1,262,815.00	\$3,161.11	\$199,558.92	-\$2,700.17	\$0.00	\$1,259,653.89	15.63%	30-50%	Falls below
<b>Insurance</b>	10,084	\$4,147,110.00	\$135,782.08	\$3,070,754.94	-\$57,652.31	\$0.00	\$4,011,327.92	75.11%	75-85%	Meets criteria
<b>Medicare</b>	20,234	\$8,319,971.00	\$959,879.08	\$6,737,561.93	-\$46,157.12	\$0.00	\$7,360,091.92	90.91%	90-95%	Meets criteria
<b>Medicaid</b>	3,768	\$1,543,357.00	\$590,142.89	\$615,538.16	-\$827.82	\$0.00	\$953,214.11	64.49%	90-95%	Falls below
<b>Total</b>	<b>37,359</b>	<b>\$15,273,253.00</b>	<b>\$1,688,965.16</b>	<b>\$10,623,413.95</b>	<b>-\$107,337.42</b>	<b>\$0.00</b>	<b>\$13,584,287.84</b>			
<i>Lee County Summary Report October 2003 - April 2005</i>										
	Transports	Gross Amount	Adjustment Amount	Anticipated Amount	Refund Amount	Return Amount	Net Amount	% Collected	Industry Experience Percentages	Comments
<b>Self Pay</b>	8,245	\$3,326,498.00	\$5,595.02	\$365,832.73	-\$3,999.90	\$0.00	\$3,320,902.98	10.90%	30-50%	Falls below
<b>Insurance</b>	17,807	\$7,406,077.00	\$236,442.96	\$5,189,972.43	-\$80,146.35	\$0.00	\$7,169,634.04	71.27%	75-85%	Close but falls below
<b>Medicare</b>	33,740	\$14,090,809.00	\$1,653,103.97	\$11,159,123.14	-\$52,327.65	\$0.00	\$12,437,705.03	89.30%	90-95%	Close but falls below
<b>Medicaid</b>	6,075	\$2,523,683.00	\$994,308.60	\$962,087.06	-\$827.82	\$0.00	\$1,529,374.40	62.85%	90-95%	Falls below
<b>Total</b>	<b>65,867</b>	<b>\$27,347,067.00</b>	<b>\$2,889,450.55</b>	<b>\$17,677,015.36</b>	<b>-\$137,301.72</b>	<b>\$0.00</b>	<b>\$24,457,616.45</b>			

Medstar General Parts Inventory



# Medical Supplies Locations



Medical Supplies Inventory Items



1" Adhesive Strips



Alcohol Prep Pads



Epinephrine



Glucometer Strips



Hydrogen Peroxide



Lidocaine



Narcotic Box Seals



Nasopharyngeal Airway



Sodium Chloride



Succinylcholine



Syringe

**Summary Fiscal Years  
2002-2004**

	<b>FY 2002 Revenues:</b>	<b>FY 2003 Revenues:</b>	<b>FY 2004 Revenues:</b>
Ambulance Fee Related	\$8,926,492.49	\$8,340,916.57	\$11,305,812.07
Education/Loss Reimbursements	\$0.00	\$5,745.00	\$6,686.49
Donations	\$450.00	\$100.00	\$6,365.00
Reimbursed Labor Charges	\$15,420.00	\$13,863.75	\$4,282.50
Patient Records Request	\$4,535.64	\$3,065.00	\$0.00
<b>Total Fiscal Year Revenues</b>	<b>\$8,946,898.13</b>	<b>\$8,363,690.32</b>	<b>\$11,323,146.06</b>
	<b>FY 2002 Expenses:</b>	<b>FY 2003 Expenses:</b>	<b>FY 2004 Expenses:</b>
Salary-Related	\$13,197,380.75	\$15,335,496.35	\$17,662,177.32
Professional Services	\$796,888.82	\$763,486.78	\$938,907.48
Other Operating Expenses	\$615,134.44	\$811,286.07	\$850,036.78
Vehicles/Helicopter Purchases	\$1,706,941.12	\$2,340,300.58	\$5,604,972.81
Self-Insurance Related	\$348,786.00	\$490,082.00	\$810,531.00
Medical Supplies	\$442,919.14	\$695,966.51	\$766,437.60
Furniture and Equipment	\$271,179.26	\$1,594,363.22	\$404,369.88
Equipment Repair/Maintenance	\$125,200.57	\$166,161.87	\$345,570.37
Land/Building-Related	\$38,435.72	\$47,877.18	\$173,101.78
Other Contracted Services	\$30,658.93	\$63,848.90	\$125,779.56
Data Processing	\$8,757.03	\$1,174.71	\$44,149.05
Vehicle Maintenance Charge (IGS)	\$476,242.39	\$547,132.26	\$1,302,559.40
Motor Pool Charged (Var IGS)	\$136,191.42	\$168,996.45	\$201,809.07
Telephone-Related Charges (IGS-Var)	\$145,335.47	\$150,040.45	\$197,334.99
Data Proc & Network (IGS)	\$132,895.00	\$247,526.00	\$156,893.00
Internal Radio (IGS)	\$45,746.00	\$56,028.00	\$59,133.00
Refund Prior Year Revenue	\$0.00	\$0.00	\$54,144.69
<b>Total Fiscal Year Expenses</b>	<b>\$18,518,692.06</b>	<b>\$23,479,767.33</b>	<b>\$29,697,907.78</b>
<b>Difference</b>	<b>-\$9,571,793.93</b>	<b>-\$15,116,077.01</b>	<b>-\$18,374,761.72</b>

STATE OF FLORIDA DEPARTMENT OF HEALTH - EMERGENCY MEDICAL SERVICES Supplemental Inspection Form (Section 401.31, F.S.)	
Service Name: Lee County E.M.S. Date: 03/18/05 Phone: (239) 335-1601	
County: LEE Type of Inspection: Random Announced Type of Service: ALS Transport Unit #: Medic 2 and N911LZ Page <u>1</u> of <u>1</u> Comments (Use additional sheet if necessary)	
Personnel Records Inspection form DH 1264, September 99 - No Deficiencies	
Service Records and Facilities Inspection form DH 1579, June 99- No Deficiencies	
BLS vehicle inspection form DH 627, June 99 - No Deficiencies	
ALS vehicle inspection form DH 1039, June 99 - No Deficiencies	
Air Ambulance inspection form DH 629, Sep. 99 - No Deficiencies - Beautiful Aircraft.	
Excellent personnel records, Excellent Medical Direction, Excellent QI and Training program.	
Excellent Management and well trained, professional Road Paramedics and EMT's.	
Very well organized service. Chief Cranford I thank you for your cooperation on this inspection.	
Excellent WEB site for employee communication and future data collection.	
Your program provides an excellent service to the citizens and visitors in Lee County and the State of Florida.	
Chief Hansen you should be proud of your excellent staff and service.	
If there is anything the Bureau can do to assist you in the future please call.	
Keep up the good work.	
I, the undersigned representative of the above service, acknowledge receipt of a copy of this inspection form, applicable supplemental forms and corrective action statement (if applicable). In addition, I am aware of the deficiencies listed (if any) and understand that failure to correct the deficiencies within the established time frames will subject the service and its authorized representatives to administrative action and penalties as outlined in Chapters 401, F.S., and 64B-2, F.A.C. Copy of Inspection and Corrective Action Statement Received by: No deficiencies!	
Person in Charge: <i>[Signature]</i>	Date: 03/18/05
Inspected by: John Bider <i>[Signature]</i>	Date: 03/18/05
DH 1265, September 99	

# LEE COUNTY DIVISION OF PUBLIC SAFETY

## MEMORANDUM

TO: Chuck Short, Director, Internal Audit Department, Lee County Clerk of the Courts

FROM: John Wilson, Director and Chris Hansen, Deputy Director, Public Safety

The following is offered in response to the Conclusions presented by the Internal Audit performed by the Clerk of Courts.

- **Modify County Ordinance 02-19 to reflect a more appropriate EMS transport agency standard relative to out-of-chute and response times.** By September 2006, the Division will present recommended changes to the ordinance to assure that the most current industry standards typically seen in nationally-accredited ambulance services are considered. These recommendations will undergo review by a cross sectional team representing those agencies providing pre-hospital emergency medical care within Lee County.
- **Investigate the use of Medical Priority Dispatch (MPD) System as a viable method to improve response time reliability.** The Division has retained the consulting firm of Medical Transportation Consultants, Inc. to analyze and present a strategic plan that improves service delivery for the entire Division's Programs and customers. Slated for completion by July 1, 2006, the report will include the feasibility of MPD in Lee County.
- **Implement a mechanism for customer satisfaction feedback.** By January 2006, a two-sided single page Customer Satisfaction Survey will be included in the initial mailing of invoices to EMS customers by the agency's collection agency, Advanced Data Processing Incorporated (ADPI). A web site has been setup for customers who would like to complete the survey on-line (<http://internet.lee-com/customer>).
- **Resolve the payment lock-box issue soon as possible.** On November 1, 2005, ADPI advised EMS that Medicare Part B was electronically depositing funds in the Bank America lock-box. A message was sent to Jill Maschmyer in Finance, stating that the Wachovia lock-box has been closed effective November 14<sup>th</sup>.
- **Enhance the collection efforts for self-pays, insurance and uncollectible accounts.** EMS modified the procedures used by their ambulance billing vendor ADPI, Inc., in the Spring of 2005. This included increased activity to work or follow up with all self-pay customers by phone in order to assist them with payment arrangements. Since this change in practice, EMS self-pay revenues have increased by 6% (June – November 2005).

Upcoming federal changes will also assist in improving collection efforts for other self-pay clients (i.e., undocumented aliens, etc.) and EMS anticipates partial federal funding to offset costs. EMS has instructed ADPI, Inc. to make application on behalf of Lee County to secure these reimbursements.

EMS will work with Lee County Sheriff's Department to appropriately bill prisoners for EMS services without adding additional fees to County through department-to-department billing.

While billing revenues from insurance providers remain satisfactory, EMS will annually provide the Board of Commissioners with information concerning the need to increase ambulance service fees in accordance with economic indicators and industry standards.

EMS is concerned over lack of increases to Medicaid reimbursement rates. Subsequently, as EMS increases user fees, the collection percentage to billable Medicaid accounts will decrease. There is not much the department or the billing vendor can do until Medicaid increases reimbursement amounts for advanced life support and basic life support transports.

- ***Decrease duration periods for unpaid accounts to be sent to collection.*** By January 2006, EMS will present to the billing vendor a set of expectations in regarding forwarding unpaid / non-active claims to PAC within 90 to 120 days.
- ***Investigate methods to reduce lost revenues.*** EMS management is aware of where potential revenue was not being fully exploited. A multiple redundant quality control process has been implemented to monitor patient care reports (PCR) that are being uploaded to the Healthware server on a timely basis. EMT and Paramedics are updated real time and supervisors follow up with data provided by Medical Records to assure all PCR are uploaded and accounted for each shift. These new processes have increased the number of billable calls.
- ***Investigate and re-engineer processes that can interact with each other to save rework.*** EMS management will identify key administrative and operational processes that could be improved through either software and hardware technology and request the consulting firm of Medical Transportation Consultants, Inc. to analyze which ones could be handled more efficiently using such information technology.
- ***Include IT goals and objectives in the LCEMS Strategic Plan.*** Specific IT goals and objectives will be included in the next update to the LCEMS Strategic Plan in FY 2006.
- ***Tighten controls over inventories.*** EMS management will work with Public Safety Logistics and MEDSTAR Operations and Maintenance Managers to enhance inventory control over EMS equipment, supplies and aircraft parts inventories.
- ***Consider adding more people to the Logistics Staff.*** A staffing analysis will be performed during the FY 06-07 budget process to determine the need for additional Logistics staff.
- ***Investigate an agreement between LCEMS and the fire districts for reimbursement of equipment and supplies.*** EMS management will pursue agreements beginning with departments who are members of the Lee County Fire Chief's Association.
- ***COOP should be tested as soon as possible to ensure that Public Safety mission-essential functions can be performed in the event of a disaster.*** EMS management will test and revise COOP plan as soon as possible. Process and practices review has already begun with employees in the after-action reviews with employees post Hurricane Wilma. The All Hazards Committee will provide a completed report and revised COOP plan prior to the beginning of the 2006 hurricane season.

The only revision we found needed to properly reflect our operation was on pg. 22, *Some of the LCEMS training programs include:*

- 1) *New Employee Orientation Program – New employees attend a 2 3 week...*

We appreciate the additional time you allowed us to complete these responses to the audit document. Please phone me at 344-5400 or email me at [wilsonjd@leegov.com](mailto:wilsonjd@leegov.com) if you have any questions concerning this response.

JDW:HCH