EMERGENCY MEDICAL RESPONSE

in

ORANGE COUNTY

Where did all the "fires" go? Long time passing.

Apologies to Pete Seeger

SUMMARY

During the last forty years, the role of local fire departments has changed. The services have changed from fire prevention to medical emergency responses. In earlier days, the fire departments were predominately staffed with fire fighters with their fire trucks, but now these departments include paramedics and emergency medical technicians as part of the crews that respond to the calls. Today medical emergency calls account for at least 70 percent of fire departments emergency dispatches. The low percentage of fire emergencies, i. e., less than two percent in the Orange County Fire Authority (OCFA) alone, is attributed to improved building codes, more alarm devices, fire suppression systems, stricter code enforcement, and perhaps greater public awareness.

This transition from fire emergencies to medical emergencies has not generated major changes in the operation model for responding to these emergencies. Each emergency call generally results in both fire trucks and ambulances being dispatched to the site of the emergency regardless of the type of emergency. The emergency response communities have discussed developing new models, but little change has been accomplished. While the Orange County Emergency Medical Services (OCEMS) sets the medical standards and protocols for both non-emergencies and emergencies. The fire departments handle the actual operations.

The 2011-2012 Orange County Grand Jury concluded that the current emergency response models should be re-evaluated by independent outside consultants. This re-evaluation should consider the strengths, weaknesses, opportunities and threats to the economics and operations of both the OCFA and city fire department's emergency response models. This Grand Jury recommends that these studies be completed and made public by July 31, 2013.

PURPOSE

The 1996-1997 Orange County Grand Jury evaluated the Orange County Fire Authority (OCFA) shortly after the Authority was formed in 1995. That study compared the effectiveness of the new agency in relation to other fire departments within the county. That study addressed inequities in the costs to the various OCFA cities but did not address how the emergency services were provided. The 2011-2012 Orange County Grand Jury agreed that a restudy of the Authority

was due. During their review of the operations and finances of the OCFA it became apparent that the size of the organization lent itself to concentration on certain items. Consequently this Grand Jury has focused on the emergency response model of the OCFA and the twenty-three cities they serve. The results of this study could also apply to the neighboring eleven non-Authority city fire departments in Orange County.

METHODOLOGY

The 2011-2012 Orange County Grand Jury used the following methods to gather information about the current and future modeling of emergency medical services:

- Interviewed fire chiefs of independent city fire departments of Orange County;
- Interviewed the Chief of the Orange County Fire Authority;
- Interviewed various members of the OCFA staff:
- Interviewed selected members of the OCFA Board of Directors;
- Interviewed selected city managers of participating cities and non-participating cities;
- Reviewed OCFA files at their headquarters;
- Attended OCFA Board of Directors and Finance Committee meetings;
- Interviewed the General Manager of Orange County Medical Emergency Services;
- Interviewed officers of a private ambulance company in Orange County;
- Interviewed a former private ambulance company owner;
- Reviewed past studies regarding emergency medical services;
- Reviewed various sources for statistics related to fire and emergency medical services;
- Prepared this report containing the findings, conclusions and recommendations.

BACKGROUND

History

During the past 140 years, Orange County has grown from a rural agricultural area of less than 7,000 residents with one incorporated city into an urban county of more than 3,000,000 people in 34 cities. Major urbanization began in the 1950's when the population was only 216,000 with 11 incorporated cities. Each city had its own fire department supplemented by the Orange County Fire Department. Until the mid-1970's the fire departments' main responsibilities were fire prevention. At that time, emergency calls were handled by the local telephone operator. Calls such as, "I want to report a fire," or "I need an ambulance," were transferred by the operator to the fire department or to a private ambulance company depending on the type of emergency. After some machinations, "9-1-1" became the nationwide emergency reporting number for all types of emergencies. The combining of fire departments and ambulance companies began as the private ambulance services were gradually replaced by the fire departments. Today, the

Wikipedia, the free encyclopedia; *9-1-1*; 3/15/2012

typical emergency response model has both fire and medical emergencies covered by the fire departments. However, not all fire departments follow that model. Some cities contract the medical emergencies to private ambulance companies. Some provide both in-house and contracted ambulance service.

Today more than 70 percent of all non-police/fire emergency calls are for medical purposes. However, some city fire departments report more than 80 percent of their calls are for medical emergencies.² Of the 180,000 incidents reported in Orange County in 2010 by the various fire departments, approximately 134,000 (76%) were for medical emergencies and 44,000 (24%) were for fires and "other." The Orange County Fire Authority alone reported less than two percent of their 88,227 responses were for "Fire/Explosion." The relationship of the various responses of only the Orange County Fire Authority is illustrated in Figure No. 1. The "Other" includes "ruptures," "hazmat," "service calls," "good intent," "false alarms" and "natural disasters."

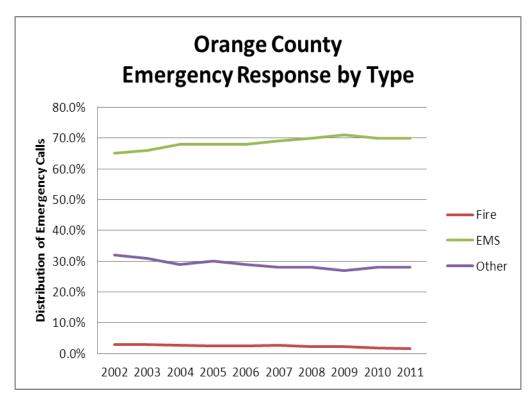


Figure No. 1 - Responses of the OCFA for the Past Ten Years

Current Emergency Medical Procedures

² Grand Jury communications with the various agencies.

³ Web sites of eleven Orange County fire departments; 2010; Nov. 2011

⁴ OCFA; Comprehensive Annual Financial Report, FY 2010-2011

Most fire departments now respond to traffic collisions, hazardous materials spills, remote rescues, medical aid calls and various other emergencies. The typical emergency responses include a fire truck and an ambulance. The staffing of the OCFA emergency equipment is specified by their Memorandum of Understanding that states:⁵

- 1. Each single-piece engine company shall have a minimum of three (3) personnel.
- 2. Each paramedic engine company shall have a minimum of four (4) personnel... Each truck company or urban search and rescue vehicle shall have a minimum of four (4) personnel...
- 3. Each paramedic van shall have a minimum of two (2) paramedic personnel.

The qualifications of the responders depend upon the contract obligations they have with the city and the standards set by the State Emergency Medical Services Authority, the Orange County Emergency Medical Services Agency, and the OCFA.

The response time standard used by the OCTA is arriving in 7 minutes 20 seconds occurring 80 percent of the time.⁶ The independent city fire departments have other response time standards. These depend upon the geography and the density of the community. Some city fire chiefs reported that depending on variables, the medical emergencies account for 80 to 85 percent of their calls with the response times of 5 minutes 90 percent of the time.⁷

Emergency medical qualifications and protocols, not the operations model, are governed and standardized by the Orange County Health Care Agency. These functions are assigned to the Orange County Health Disaster Management Department, Emergency Medical Services (OCEMS). This agency is staffed with a medical doctor as the director and a registered nurse as the program manager. Emergency Medical Services is guided by the 17 member Emergency Medical Committee, comprised of appointed members with background in health care.

OCEMS prescribes the standards for initial training and certification of emergency medical technicians (EMTs) and paramedics. OCEMS either provides or delegates (in the case of OCFA) oversight of the administration of emergency medicine certification. All fire departments, private ambulance companies, and hospitals are required to meet the same standards. OCEMS does not prescribe the delivery service, which is left to the fire departments.

OCEMS also monitors and validates all emergency treatment facilities and monitors facilities for special capabilities. All treatment administered by emergency medical personnel, from either private companies or local fire departments use the same Standing Orders and Protocols set forth by the Health Care Agency.⁹

⁵ OCFA & OCPFA; Memorandum of Understanding Relating to Employees in the Firefighter Representation Unit; July 1, 2000, amended 2001, 2002, 2006, 2010

⁶ No national standard exists. Regions adopt those standards that fit their budgets balanced against their health and safety risks.

⁷ Orange County Grand Jury communications with local fire chiefs.

⁸ Orange County Emergency Medical Services; *EMS Policies*; 12-22-11

⁹ Ibid,

The Orange County Board of Supervisors, upon advice of the Orange County Emergency Medical System (OCEMS), sets maximum rates for Advanced Life Support (ALS) and Basic Life Support (BLS). Cities take into consideration these rates when putting together Requests for Proposal and Invitation to Bid on ambulance transport services with private providers. Although the process is said to be competitive, meaning the award goes to the "most responsive and responsible bidder," all ambulance providers are under the oversight of OCEMS that administers and certifies the medical protocols (i.e., licensing). Further, the Orange County Board of Supervisors sets the maximum rates. These requirements limit the number of potential qualified bidders.

Several of the cities contract their medical emergencies to local private ambulance companies. Other cities either have OCFA or a combination of OCFA and private ambulance services providing emergency medical response to their citizens.

Currently, private ambulance companies are awarded long-term service contracts for up to ten years. ¹⁰ Fees are based on the rates set by Orange County Health Care Agency, which are approved by the Board of Supervisors. Typically, these contracts have prequalification dictated by OCFA and at least experience in similar sized cities. Potential private ambulance companies find the contract proposals vague in their billing requirements. ¹¹

Current Emergency Response Operations

Chiefs of the various fire departments of Orange County were interviewed by the 2011-2012 Orange County Grand Jury. All were relatively new in their position, some having been recently appointed, and some sitting in an interim capacity. All appeared to have been given the challenge of looking at their organization and proposing alternative ways of providing their services.

A problem that faces all of these agencies is financial. The labor agreements adopted in good times have become financial burdens during the recent business downturn. These burdens not only affect the current but also future budgets. In most departments, the costs of the long-term benefits are not transparent to the boards of directors, city councils, and the public, consequently the challenge that the governing bodies have given to the new fire chiefs.

Personnel from one Orange County private ambulance company and one former ambulance company owner were interviewed by the 2011-2012 Orange County Grand Jury. The local ambulance company contracts with several Orange County fire departments to provide emergency medical service. These contracts are a result of requests for proposals from the cities and are open to competitive bidding. Some city fire departments provide "home" for these private ambulance companies in the local fire stations. Other cities allow the ambulances to be

¹² Ibid.

¹⁰ Telephone conversations with various OC fire departments

Grand Jury conversations with city fire departments, and private ambulance companies.

housed wherever the private company determines to be a strategic location. In most areas, the fire departments dispatch the fire trucks at the same time that the private ambulances are dispatched. Private ambulance services are now required to have radio systems on the 800MHZ band for uniform communications with all surrounding fire departments and ambulances.

In the 1960's and 1970's, private ambulance companies were the predominant providers of emergency medical services. This changed at the onset of the "9-1-1" phone dial when emergency medical responses began to be taken over by the fire departments.¹³

Local labor union leaders note that the greatest challenge facing them today is "an increasing demand for services with fewer personnel while competing for limited funding resources." They go on to say "unscrupulous private vendors" are trying to profit from current financial difficulties.

FINDINGS/CONCLUSIONS

In accordance with *California Penal Code* §933 and §933.05, the 2011-2012 Orange County Grand Jury requires responses from each agency affected by the **Findings/Conclusions** presented in this section. The responses are to be submitted to the Presiding Judge of the Superior Court. The Board of Directors of the OCFA and the City Councils of each city fire department shall respond to these **Findings/Conclusions**.

Based on its study of the OCFA, the 2011-2012 Orange County Grand Jury makes the following **Findings/Conclusions**

- **F1.** Fire departments that once primarily responded to calls for fire emergencies now have become emergency medical response departments primarily responding to medical emergencies. This evolution has occurred since the onset of "9-1-1" call where all emergency calls are received at one place.
- **F2.** As the fire departments evolved into emergency medical departments, the model for operating the fire departments has not radically changed. The fire departments have simply absorbed the emergency medical responses into their departments under their old "fire response" model.
- **F3.** Economic recessions have forced local fire department boards of directors and city councils to re-evaluate their models for providing fire and emergency medical responses. While this brings to the fore issues of staffing, response times, public safety, training, consolidations, union rules and privatization of their various services, it also spotlights the model used for all emergency responses.

RECOMMENDATIONS

In accordance with *California Penal Code* §933 and §933.05, the 2011-2012 Orange County Grand Jury requires responses from each agency affected by the **Recommendations** presented

¹³ Grand Jury conversation with a former owner of a private ambulance company.

¹⁴ Kerr, Joseph V.; *Major Problems Facing firefighters in Today's Labor Movement*; Grand Jury correspondence; 3-20-12

in this section. The responses are to be submitted to the Presiding Judge of the Superior Court. The Board of Directors of the OCFA and the City Councils of each city fire department shall respond to these **Recommendations.**

Based on its investigation of emergency response models in Orange County, the 2011-2012 Orange County Grand Jury makes the following recommendations:

- **R1.** The city fire departments and the Orange County Fire Authority should engage independent private consultants to re-evaluate their models for providing response for both fire and medical emergencies. These re-evaluations should include the strengths, weaknesses, opportunities and threats of current models and alternative models. This re-evaluation should be accomplished by July 31, 2013. (See F1, F2 & F3)
- **R2**. Suggested alternative models should include forming a unified Emergency Response Department that includes fire and medical response, separating the fire response from the medical response, privatizing the emergency medical response, etc. (See F3)

REQUIRED RESPONSES

The Board of Directors of The OCFA and the City Councils with city fire departments shall respond to the **Findings/Conclusions** and the **Recommendations** as specified below. In accordance with *California Penal Code* §933 and §933.05, the 2011-2012 Orange County Grand Jury requires responses from each agency affected by the **Findings/Conclusions** and **Recommendations** presented in this section. The responses are to be submitted to the Presiding Judge of the Superior Court.

"Not later than 90 days after the grand jury submits a final report on the operations of any public agency subject to its reviewing authority, the governing body of the public agency shall comment to the presiding judge of the superior court on the findings and recommendations pertaining to matters under the control of the governing body, and every elected county officer or agency head for which the grand jury has responsibility pursuant to §914.1 shall comment within 60 days to the presiding judge of the superior court, with an information copy sent to the board of supervisors, on the findings and recommendations pertaining to matters under the control of that county officer or agency head and any agency or agencies which that officer or agency head supervises or controls. In any city and county, the mayor shall also comment on the findings and recommendations..."

The Penal Code lists the following response choices for a responding entity:

Responses to Findings

1. The respondent agrees with the finding.

2. The respondent disagrees wholly or partially with the finding, in which case the response shall specify the portion of the finding in dispute and shall include an explanation of the reason.

Responses to Recommendations

- 1. The recommendation has been implemented, with a summary regarding the implemented action.
- 2. The recommendation has not been implemented, but will be implemented in the future, with a timeframe for implementation.
- 3. The recommendation requires further analysis, with an explanation of the scope and parameters of that analysis and timeframe. This timeframe shall not exceed six months from the date of publication of the Grand Jury report.
- 4. The recommendation will not be implemented because it is not warranted or is not reasonable, with an explanation.

All responses should be received no later than October 1 (unless the agency or department has requested in writing an additional extension). Follow-up is the responsibility of the sitting Grand Jury.
