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Community Information

APR 22 2010

County of Volusia

Date: April 21, 2010
To: Pam Renfro
From: Mark Wolcott, EMS Director 
Subject: PRR-042010: VolusiaExposed (re: Joell Cianfrocca records)

Attached are documents intended to comply with the above referenced public records request. Redactions have been made in an effort to comply with, and are consistent with, Chapter 365.171, Florida Statutes.

- Final report, inadvertently labeled Draft 5 (8 pages, finalized March 17, 2010)

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Review of [redacted] Response, January 8, 2010

The EMS Division was informed of an extended ambulance response to [redacted] on January 8, 2010 by the City of Edgewater Fire Chief, Stephen Cousins. Two concerns were raised in his email: a prolonged response and a request to reconsider contingency ambulance transport. During the review by this office, additional problems were identified involving communications and patient care. This document addresses the ambulance response and communications. Patient care is addressed under separate correspondence as it is afforded exemption from disclosure as a public record pursuant to Chapter 401.425, Florida Statutes.

As a precursor to the review, an explanation of the current delivery model of emergency medical services follows:

Persons requesting an emergency medical response within Volusia County initiate the request through one of three public safety answering points (PSAP) providing emergency medical dispatch (EMD). EMD expanded the role of the conventional 9-1-1 operator by including caller interrogation to determine the extent of the emergency, an appropriate resource allocation and pre-arrival instruction to effectively provide a zero minute response through instruction to the caller when life threats are identified. Under our present delivery system, that information results in a concurrent, or tiered, response.

The county and various municipal fire departments comprise the first tier, providing non-transport service from geographically-based stations throughout the community. With the exception of the City of DeLand and four¹ county fire stations, all have indicated that advanced life support is provided on a continuous basis. There is no locally defined response time performance parameter for the first tier; however the National Fire Protection Association (NFPA) has established standards for *reaction time*² and *response time*³, sixty (60) seconds and two hundred forty (240) seconds, respectively. The standard recommends that basic life support units should arrive within the above time limits in ninety percent (90%) of responses.

The second tier is provided by EVAC Ambulance. Performance parameters are established under contract with the County of Volusia and are consistent with nationally recognized performance parameters and the NFPA. They include: urban emergency responses: ninety percent (90%) of responses in eight minutes, fifty-nine seconds, or less ($\leq 8:59$) and countywide emergency responses: ninety percent (90%) of responses in eleven minutes, fifty-nine seconds, or less ($\leq 11:59$). EVAC Ambulance's percentiles in the above categories for fiscal year 2008-09 were 92.069% and 96.561%, respectively.

¹ Does not include the fire station at Daytona Beach International Airport.
² Difference between physical response of the vehicle and time of notification of the response request.
³ Difference between vehicle arrival at the scene and physical response of the vehicle.

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Additionally, no more than two percent (2%) of emergency responses in urban and countywide categories can exceed 17:59 and 39:59, respectively. Fiscal year 2008-09 percentiles for responses exceeding these parameters were 0.168% and 0.000%, respectively.

Attachment A further details the above values. The historic perspective is consistent with monthly performance.

All times within this document are formatted hour-minute-second (h:m:ss) unless otherwise indicated.

Delayed ambulance response

Computer aided dispatch (CAD) records from the Volusia County Sheriff's Office Fire-EMS (SOFEMS) communications center confirm that EVAC Ambulance's *response time*⁴ was delayed: 0:31:04. EVAC Ambulance does not contest the delay.

At a January 15 meeting, EVAC Ambulance's Executive Director, Michael Mellon, attributed the delay to high ambulance demand within a narrow window of time that exceeded the number of available ambulances (based upon their demand-based deployment). Volusia County Sheriff's Office Fire-EMS Communications Center (SOFEMS) computer aided dispatch (CAD) records indicate a concentration of response requests outlined below:

6:43:16 a.m.: New Smyrna Beach, unincorporated area
6:52:13 a.m.: Daytona Beach, incorporated area
6:55:09 a.m.: Daytona Beach, unincorporated area
6:57:21 a.m.: Port Orange, incorporated area
7:00:39 a.m.: New Smyrna Beach, incorporated area
7:06:59 a.m.: Edgewater, incorporated area
7:09:33 a.m.: New Smyrna Beach, unincorporated area

The demand-based model that is utilized by EVAC predisposes the system to inherent fluctuations in demand. As evidenced in the [REDACTED] response, these vulnerabilities can, and will, lead to delayed responses from time to time.

As it relates to contractual performance, this response did not breach established performance parameters under the existing contract. Neither did it interfere with the patient receiving a timely advanced life support response: Edgewater Fire-Rescue arrived on scene 0:05:53 following time call received.

Contingency transport

On February 4, 2010, the EMS Division received an application for Certificate of Public Convenience and Necessity (COPCN) – transport from the City of Edgewater. Prior to receipt of this application, no written request to consider contingency transport had been received by the Division from the City of Edgewater. The application is being considered separate from this document.

⁴ *Response time* is the difference between the physical arrival of the unit on scene and the time the first ambulance received notification of the response from SOFEMS.

Had a contingency transport agreement been in place on January 8, 2010, the Edgewater ambulance arrival on scene at 7:27:05 could have allowed earlier transport.

Communications

During the review of this response, communications surfaced as a separate matter of concern that, in part, contributed to the delay.

Receipt of the 9-1-1 call

The Regional Communications Center (RCC) was the primary public safety answering point (PSAP) and received the 9-1-1 call. A telecommunicator spoke with the caller, gathered information and relayed information to SOFEMS. RCC maintained possession of the caller; no other agency spoke with the reporting party.

The duration of the 9-1-1 call from the [REDACTED] address was 0:01:19. Information gathered from the caller included: address; age; and how to access the residence. Medical information gathered by the telecommunicator included: [REDACTED]

The emergency medical dispatcher describes the patient's [REDACTED] in the CAD notes.

The information is [REDACTED]

In the minutes following the receipt of the Edgewater 9-1-1 call, RCC received another in the New Smyrna Beach area. The duration of the telephone conversation was 0:01:07 and the recording confirms that RCC was informed by a caller [REDACTED]

relevance of [REDACTED]

9-1-1 relay

The relay of information for the Edgewater response provided an abbreviated description of the event: address; cross streets; subdivision; [REDACTED]

The caller's descriptions of [REDACTED] were absent in that transfer of information.

Details relayed from the subsequent New Smyrna Beach 9-1-1 call were also condensed: the patient had [REDACTED]

Prioritization of ambulance response

The ambulance initially tasked to the Edgewater event was diverted to the New Smyrna Beach 9-1-1 response slightly over seven minutes into their response. The suggestion to divert was made by the responding ambulance crew which had the ability to review SOFEMS CAD notes for both responses. The available information indicated a [REDACTED] at the Edgewater location and [REDACTED] at the New Smyrna

Beach location. With the concurrence of the emergency medical dispatcher at SOFEMS, the ambulance was reassigned to the New Smyrna Beach response. Neither SOFEMS nor the responding ambulance had access to RCC CAD information. A more detailed description of the Edgewater request [REDACTED]; would have allowed a more informed decision regarding the Edgewater response. Subsequently, the ambulance initially assigned to [REDACTED] wouldn't have been diverted and the response time would have been marginally reduced.

The relay of information raises questions as to the efficacy of communications in the presence of multiple and independent emergency medical communications centers. Information is not transmitted electronically between communication centers since CAD systems are not integrated. Information pertinent to incident location and patient condition is transmitted by way of telephone or radio and relies on the conveying telecommunicator's understanding and perception of the response and the receiving telecommunicator's interpretation and manual input of the same.

The susceptibility to error becomes clearer when giving consideration to information being communicated between field providers. RCC was provided information from the first arriving apparatus indicating [REDACTED]. In order for that information to reach the responding ambulance, the RCC telecommunicator would have to relay it to the SOFEMS telecommunicator who, in turn, would have to convey it to the responding ambulance. The relay of that particular information to SOFEMS was delayed nearly ten minutes.

Attachments' B and C, unofficial telephone transcripts and CAD notes from RCC and SOFEMS, respectively, are demonstrative evidence of the aforementioned weaknesses.

This document is intended to address the concerns raised by the City of Edgewater Fire Chief as well as identifying other problems that occurred during the January 8, 2010 response to [REDACTED]. The content is based upon information provided by all of the involved agencies and, to the best of my knowledge and ability, is factual and complete. Portions of this document are subject to redaction under Chapter 365.171(12), Florida Statutes.

Attachment A: Ambulance Emergency Response Times

Ambulance Emergency Response Times by Contract

URBAN					
Response Time	Occurrences	Percentile for RT Minute	Cumulative Total	Percentile	
09:00 - 09:59	28,581	92.069%	28,581	92.069%	
9:00 - 9:59	882	2.873%	28,473	94.942%	
10:00 - 10:59	568	1.830%	30,641	96.772%	
11:00 - 11:59	358	1.153%	30,399	97.925%	
12:00 - 12:59	246	0.792%	30,645	98.718%	
13:00 - 13:59	135	0.435%	30,780	99.153%	
14:00 - 14:59	84	0.271%	30,864	99.423%	
15:00 - 15:59	76	0.245%	30,940	99.668%	
16:00 - 16:59	27	0.087%	30,967	99.755%	
17:00 - 17:59	24	0.077%	30,991	99.832%	
18:00 - 18:59	15	0.048%	31,006	99.881%	
19:00 - 19:59	11	0.035%	31,017	99.916%	
20:00 - 20:59	9	0.029%	31,026	99.945%	
21:00 - 21:59	7	0.023%	31,033	99.968%	
22:00 - 22:59	1	0.003%	31,034	99.971%	
23:00 - 23:59	1	0.003%	31,035	99.974%	
24:00 - 24:59	1	0.003%	31,036	99.977%	
25:00 - 25:59	3	0.010%	31,039	99.987%	
26:00 - 26:59	1	0.003%	31,040	99.990%	
27:00 - 27:59	1	0.003%	31,041	99.994%	
28:00 - 28:59	1	0.003%	31,042	99.997%	
29:00 - 29:59	1	0.003%	31,043	100.000%	
30:00 - 30:59					
31:00 - 31:59					
32:00 - 32:59					
33:00 - 33:59					
34:00 - 34:59					
35:00 - 35:59					
Percentage of urban responses >0:17:59				0.168%	

COUNTYWIDE					
Response Time	Occurrences	Percentile for RT Minute	Cumulative Total	Percentile	
09:00 - 09:59	31,350	95.631%	31,350	95.631%	
12:00 - 12:59	323	0.995%	31,683	97.555%	
13:00 - 13:59	205	0.631%	31,888	98.186%	
14:00 - 14:59	140	0.431%	32,028	98.617%	
15:00 - 15:59	126	0.388%	32,154	99.005%	
16:00 - 16:59	55	0.169%	32,209	99.175%	
17:00 - 17:59	50	0.154%	32,259	99.329%	
18:00 - 18:59	47	0.145%	32,306	99.473%	
19:00 - 19:59	29	0.089%	32,335	99.563%	
20:00 - 20:59	33	0.102%	32,368	99.664%	
21:00 - 21:59	27	0.083%	32,395	99.748%	
22:00 - 22:59	19	0.059%	32,414	99.806%	
23:00 - 23:59	5	0.015%	32,419	99.821%	
24:00 - 24:59	16	0.049%	32,435	99.871%	
25:00 - 25:59	10	0.031%	32,445	99.901%	
26:00 - 26:59	8	0.025%	32,453	99.926%	
27:00 - 27:59	9	0.028%	32,462	99.954%	
28:00 - 28:59	4	0.012%	32,466	99.966%	
29:00 - 29:59	6	0.018%	32,472	99.985%	
30:00 - 30:59					
31:00 - 31:59	2	0.006%	32,474	99.991%	
32:00 - 32:59	1	0.003%	32,475	99.994%	
33:00 - 33:59					
34:00 - 34:59	1	0.003%	32,476	99.997%	
35:00 - 35:59	1	0.003%	32,477	100.000%	
Percentage of countywide responses >0:39:59				0.000%	

Attachment B: Unofficial transcript of 9-1-1 call to RCC and subsequent relay of information to SOFEMS.

9-1-1 call from [REDACTED] n to RCC (duration: 0:01:19)

RCC: 9-1-1, where is the emergency?
Caller: [REDACTED]

RCC: Okay, how old is she?
Caller: [REDACTED]

RCC: [REDACTED]
Caller: [REDACTED]

RCC: Okay.
Caller: (coughs)

RCC: And how long has this been going on?
Caller: [REDACTED]

RCC: Okay.
RCC: [REDACTED]

Caller: [REDACTED]

RCC: Okay. [REDACTED]

Caller: [REDACTED]

RCC: Okay.
Caller: [REDACTED]

RCC: Okay.
Caller: Just a minute (apparently calling out to someone else in the residence).

RCC: Okay, I've got them... I've already got them on the way to you, okay?
Caller: Thank you.

RCC: Is the door open so they can come on in?
Caller: Yes, it will be.

RCC: Okay, front door or garage door?
Caller: Front door, right out in the front door.

RCC: Okay, I've got them on the way to you.
Caller: Thank you.

RCC: You're welcome.
Caller: Bye-bye.
RCC: Bye-bye.

9-1-1 Relay from RCC to SOFEMS (duration: 0:00:56)

SOFEMS: Emergency communications, where is the emergency?
RCC: Hi this is RCC, we need you in Edgewater.
SOFEMS: Go ahead.
RCC: It's [REDACTED]
SOFEMS: [REDACTED]

RCC: Uh huh.
SOFEMS: Cross streets?
RCC: 14th and 16th.
SOFEMS: Nature?
RCC: [REDACTED]
SOFEMS: Okay.
RCC: [REDACTED]
SOFEMS: Okay, is that in a subdivision?
RCC: Ahh... [REDACTED]
SOFEMS: Okay, we're on the way.
RCC: Thank you.
SOFEMS: You're welcome

Attachment C: Unofficial CAD notes - Regional Communications Center and the Sheriff's Office Fire-EMS Communications Center

RCC notes were manipulated from original format to provide time formatting in ascending order. CAD clocks from two communications centers are not synchronized.

RCC CAD notes
[01/08/10 07:06:27 BPETERS]
UDTS: CENTRAL FIRE NOTIFIED [01/08/10 07:06:31 MMCCORMICK]
[01/08/10 07:06:32 BPETERS]
[01/08/10 07:06:39 BPETERS]
Radio Channel: FIRE 3 10/08/10 07:06:43 TBRADYI
[01/08/10 07:06:48 BPETERS]
[01/08/10 07:07:02 BPETERS]
[01/08/10 07:07:09 BPETERS]
FRONT DOOR IS OPEN [01/08/10 07:07:28 BPETERS]
[01/08/10 07:07:40 BPETERS]
[01/08/10 07:07:44 BPETERS]
[LAW] PER 317A CLOSE OUT UNLESS BEING REQD BY FD [01/08/10 07:08:09 MMCCORMICK]
UDTS: {E55} PATIENT CONTACT [01/08/10 07:13:49 TBRADY]
UDTS: {E55} PATIENT CONTACT [01/08/10 07:14:22 TBRADY]
{E55} [01/08/10 07:14:28 TBRADY]
{FM55} PAGE R57 TO SCENE GET APPROVAL FRON CF FOR TRANSPORT REF TO CARDIAC ARREST [01/08/10 07:23:15 TBRADY]
{FM55} GET ETA AND LOCATION ON EVAC UNIT (10 MIN NOVA/US 1) [01/08/10 07:26:59 TBRADY]
{E55} [01/08/10 07:28:24 TBRADY]
cf adv neg on r57 transporting at 0725 [01/08/10 07:29:27 TBRADY],
{C55} UPDATE ON LOCATION AND ETA FOR MED

SOFEMS CAD notes
NOTES FOR 01/08/10 1/8/2010 7:07:16 AM
Nature [000844-115] 1/8/2010 7:07:16 AM
Ambulance service incident 1001419 1/8/2010 7:07:16 AM
[000844-115] 1/8/2010 7:07:48 AM
[000844-115] 1/8/2010 7:07:57 AM
CALL DELAYED FOR CODE WL WORKLOAD (008030-130) 1/8/2010 7:10:25 AM
CALL DELAYED FOR CODE DIS DISTANCE (008030-130) 1/8/2010 7:10:28 AM
Unit Exchanged, Original Unit 198, Run Number 1001419 (008030-130) 1/8/2010 7:14:57 AM
*Ambulance incident 1001419 closed (008030-130) 1/8/2010 7:14:59 AM
RAISING 210 (001036-101) 1/8/2010 7:22:03 AM
RCC REQ PERMISSION TO TRANSPRT (001036-101) 1/8/2010 7:22:55 AM
[001036-101] 1/8/2010 7:23:03 AM
OVER EVAC2 (001036-101) 1/8/2010 7:23:24 AM
210 ADV NEG ON PERMISSION TO (001036-101) 1/8/2010 7:23:57 AM
TRANSPORT (001036-101) 1/8/2010 7:23:57 AM
RCC WAS ADV OVER EVAC2 (001036-101) 1/8/2010 7:24:39 AM
RCC WANTED ETA (001036-101) 1/8/2010 7:24:42 AM
FROM MED UNIT (001036-101) 1/8/2010 7:24:59 AM
41 ADV 10-15 MIN ETA (001036-101) 1/8/2010 7:25:18 AM
RCC WAS ADVISED (001036-101) 1/8/2010 7:25:37 AM

UNIT (5 MIN ETA 10/US1) [01/08/10
07:34:43 TBRADY]

{E55}

[01/08/10 07:36:55 TBRADY]

{C55} M41 ON SCENE [01/08/10 07:38:58 TBRADY]

UDTS: {C55} PT CARE TO EVAC [01/08/10 07:42:29
TBRADY]

{C55} PT ON EVAC STRETCHER [01/08/10
07:42:35 TBRADY]

{C55} 2 RIDERS W/ M41 ENROUTE TO 705
[01/08/10 07:45:24 TBRADY]

{C55} NOTIFY CHAPLIN [01/08/10 07:48:44
TBRADY]

CALL DELAYED TO SCENE: WL - WORKLOAD
(008030-130) 1/8/2010 7:38:31 AM

PATIENT CONTACTED (008030-130) 1/8/2010
7:40:55 AM

POSTS RECOMMENDED: 4B, PT, F1; POST
SELECTED: IR 1/8/2010 8:23:39 AM

*Ambulance incident 1001421 closed (000812-130)
1/8/2010 8:23:39 AM