



# 2024 National EMS Medical Directors Course and Practicum®

## Student Case Study Booklet

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## **NAEMSP® National EMS Medical Directors Course and Practicum® Case Studies in EMS Problem Solving**

The following case studies form the heart of the NAEMSP® Medical Director's Course and are designed to stimulate discussion between course attendees with support from course faculty. Please review these in advance of each day's breakout sessions. They are meant to address common problems faced by EMS Medical Directors, and to enhance insight and share problem solving strategies used by EMS physicians.

You are asked to review and investigate the following cases as an EMS Medical Director. You are asked to consider these cases, evaluate the data presented and discuss the process for approaching these cases as well as the additional data that you would need to act on your conclusions. We will allocate approximately 15 minutes to each case to allow discussion amongst the small groups. We would appreciate any feedback that you have on the specific cases, and welcome suggestions to improve them. We also welcome submission of cases from you once you leave this course, to be discussed in this forum.

Issues to be considered include whether individual disciplinary action should be undertaken or whether there is training, equipment, system structural issues, or policy concerns that must be addressed. Political strategies are an important part of problem solving in EMS and those should be part of the discussions as well. We're sure there will be a variety of opinions on the optimal approach to these cases based on the group's background, knowledge and experience.

We have also included a listing of references that provide more detail on some of these cases.

We hope you find these exercises educational and stimulating.

## **Case Study #1**

You are asked by the Chief of Trauma at a local trauma center to investigate a case of a potential misplaced endotracheal tube. The physician states that one of your ALS units presented earlier in the day to the hospital with a 21-year-old male victim of a gunshot wound to the chest. The patient was found in cardiac arrest by EMS, CPR was started, and interventions en route included a peripheral IV and intubation.

Upon arrival at the trauma center, an emergency medicine resident looked in the airway with a video laryngoscope and stated that the ET tube was in place. However, when the trauma team performed a thoracotomy, they noted that neither lung was inflating with ventilation and a more careful look with video laryngoscopy showed the ET tube in the esophagus. The patient was re-intubated, and tube confirmation was confirmed by observing both lungs inflating with ventilation.

No immediately “fixable” injury was found on upon inspection of the heart and surrounding structures. The patient failed additional resuscitation efforts in the trauma bay and the resuscitation was called in the trauma bay.

### Items for Discussion

- Discuss how to manage this infrequent but difficult incident in your EMS system.
- Does your system have a surveillance system in place to identify events such as these?
- What is the gold standard for confirming advanced airway placement?
- How do you develop a system to prevent this type of event in the future?

### References

Katz SH, Falk JL. Misplaced endotracheal tubes by paramedics in an urban emergency medical services system. *Ann Emerg Med.* 2001 Jan;37(1):32-7. doi: 10.1067

Chief Complaint (Category: Traumatic Arrest)

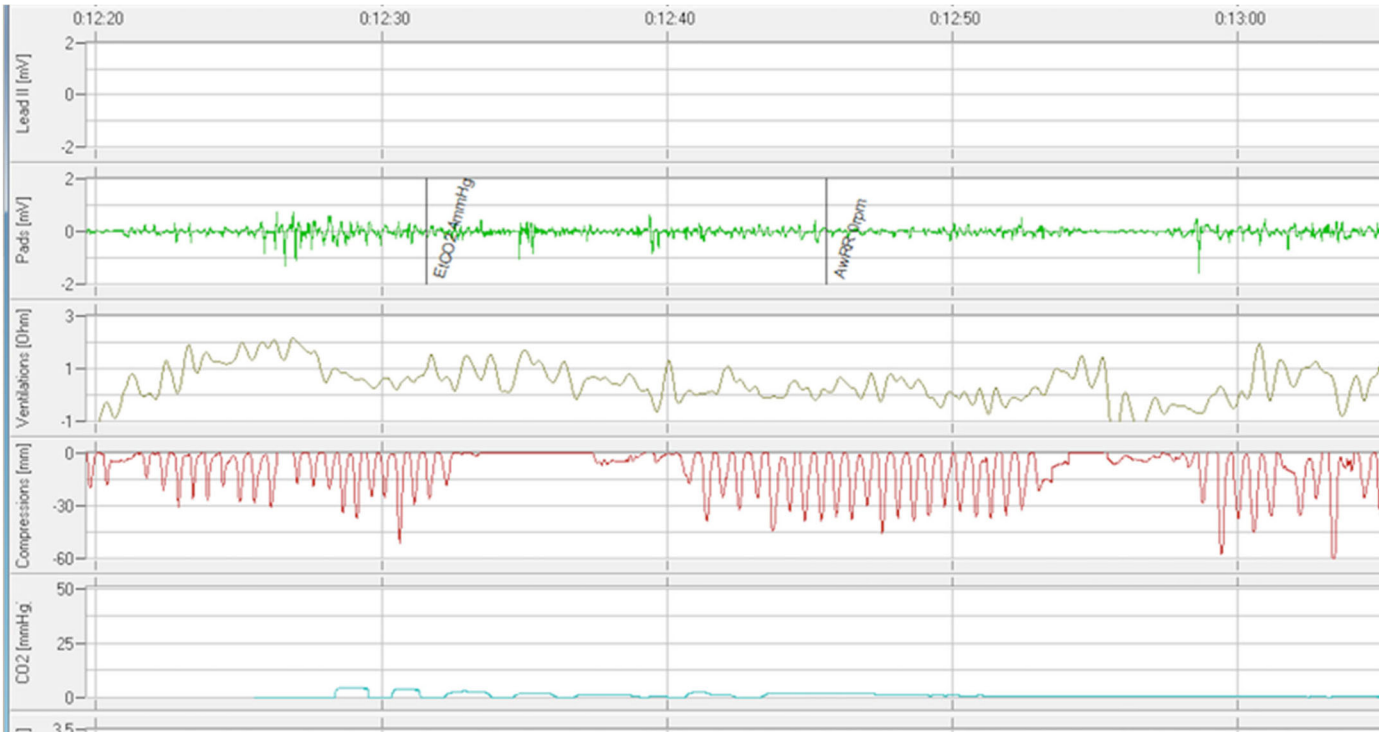
Traumatic Arrest

ALS Assessment: Completed for Suspected Illness

History of Present Illness

Medic 1 dispatched for an unknown age male who had been shot. Upon EMS arrival, the patient was found laying on the sidewalk. The patient was pulseless and apneic. A bullet hole was located in the patient's back. ACLS initiated. An 18G IV was inserted in the patient's left EJ. The patient was intubated with a 7.5 tube. Asystole on the monitor. The patient was transported to UPMC Presbyterian for treatment. Care was transferred to receiving facility staff.

Time	Activity							
	H.R.	B.P.	RA SpO2	ETCO2	Resp	Rhythm	GCS	ECG Method
	H.R. Method	B.P. Method	LOC		Resp Effort			
<b>Action Comment</b>								
12:39	Arrived on scene.							
12:40	0	0 / 0 Manual Cuff	0 Unresponsive		0 Absent		1/1/1	
Baseline vitals obtained.								
12:41	Cardiac CPR performed by [REDACTED]. Successful.							
12:45	Transport to UPMC Presbyterian initiated.							
12:47	Initiate IV Peripheral IV initiated by [REDACTED] with 18ga. at Left External Jugular. Attempts: 1, successful.							
12:50	Intubation Orotracheal Intubation by [REDACTED] with 7.5, 23cm at lips. Attempts: 1, successful. Placement verified via: Capnography (Waveform), Moisture in Tube, Direct Visualization. Verification by: Another Person on the Same Crew. Secured via Commercial Device.							
12:52	4							
13:01	Transport complete. Care transferred to receiving facility staff.							



## Case Study #2

You are asked by the local police to investigate two ambulance crashes in your community.

The first was a 47 y/o female who turned into the path of an ambulance which was responding with lights and sirens to a call at the time. The female was dead at the scene and both EMS employees were seriously injured. (6/15/05)

Six people were injured when an SUV broadsided an ambulance which was going through a red light in response to an emergency. The SUV was in the far-right lane of traffic and cars in the other lanes had stopped to allow the ambulance to proceed. No patient received life threatening injuries.

### Items for Discussion

- What is role of the medical director in assuring safety to public and EMS personnel for lights and siren driving?
- What authority does the medical director have for developing and enforcing dispatch protocols to prioritize emergency and non-emergency response?
- Would your adverse event investigation policy include vehicle accident investigation?

### References

Kahn, Christopher A., Pirrallo, Ronald G. and Kuhn, Evelyn M. (2001) 'CHARACTERISTICS OF FATAL AMBULANCE CRASHES IN THE UNITED STATES: AN 11-YEAR RETROSPECTIVE ANALYSIS', Prehospital Emergency Care, 5:3, 261 – 269

Kupas DF, Zavadsky M, Burton B, et al. Joint Statement on Lights & Siren Vehicle Operations on Emergency Medical Services Responses. Prehosp Emerg Care . 2022 May-Jun;26(3):459-461. doi: 10.1080/10903127.2022.2044417.

## **Case Study #3**

A 52 y/o male is running with a partner in neighborhood. He suddenly collapses and the partner, calls for help including 911. A medical first responder police officer responds and initiates CPR. He calls for back up, which is delayed by a traffic stop. The community is covered by a private ALS Service who has been experiencing difficulty maintaining staffing because of the patchwork nature of their coverage areas. They dispatch the closest available ALS unit, estimated ETA 20 minutes. Bystander CPR has been provided since that time of the collapse, and while the patient is still in VF on arrival of ALS, attempts to resuscitate the patient are unsuccessful. Comments from the bystanders on the scene, were that they wondered what was taking the ambulance so long to respond, but assumed that there was a good reason for it.

You are asked to review this call as the private agency Medical Director. You find that the ALS unit was, in fact the closest private unit available, but that there are 3 fire stations with ALS units from the same county (that were not in service) within 3 miles of the incident, but in different jurisdictions. The agency CEO says that those agencies would typically not respond to a request for mutual aid, and the fire departments state that they would, of course, consider any request for mutual aid and respond if requested. They do reflect that they are supposed to be available to their tax payers to respond, and this sort of thing isn't really their responsibility.

What is the role of the EMS MD in this situation?

### **Items for Discussion**

- What authority do you have for first response care provided in your system? Do you have authority for care provided by police?
- What punitive actions, if any, are appropriate in this circumstance?
- What strategies could be employed to encourage surrounding agencies to be integrated into a mutual aid response across different jurisdiction for day to day incidents? For critical patients?
- What is the authority of the EMS MD in provision of care across community borders? What is your role in facilitating mutual aid response?
- Is this incident beyond the scope of authority of the EMS Medical Director?

## Case Study #4

An ALS unit is on scene with two pediatric patients involved in a motor scooter crash. Paramedics report that the father of the children is on scene and is refusing to allow them to be evaluated for treatment and transfer. He indicates that he is a physician on staff at your hospital and he has checked them out and they are fine. Paramedics are concerned for the welfare of the children and contact medical control for further direction.

### Supplemental Materials:

Medical Control radio transmission

### Items for Discussion

- What is the role of online medical direction in this case?
  - What authority does a physician have for an emergency patient when they are on scene? Does this authority change if the patient has an existing doctor-patient relationship?
  - What is the role of medics in cases of injury to child and does it change with physician on scene? Does it change with a parent that is a physician?
  - What educational or policy changes need to occur after this case?
-

## **Case Study #5**

The City of Twain, California, has maintained a performance-based contract with a private ambulance company, Finn and Sawyer Transport Services (FASTS) for all transports within its municipality for the past ten years. Because FASTS continually exceeded all provisions in the agreement, two years ago the city extended its contract with FASTS, requiring the same response time reliability and clinical care performance.

In the last year, response times have fallen out of compliance, triggering a provision in the agreement that led the City of Twain to declare that FASTS was in breach of its contract and that the company needed to present both a plan of action and timetable to bring its response times back into compliance. The plan was submitted by FASTS but after six months, response times had not improved but, in fact, worsened slightly. However, even with the performance problems, response times either meet or exceed 98 percent of all other response times for similar size cities in the United States and are clearly superior to the surrounding suburban communities. In addition, clinical care remains exceptional.

City management reviewing the situation foresees no improvement in the immediate future. Local elected officials have long stated that all city functions must be accountable. Because the contract is performance-based, the City of Twain is now considering any options that might be available, from providing more time to FASTS to correct the problem, to terminating the agreement and either operating the system itself or issuing a Request for Proposal. In the midst of the deliberations, the city council and its manager have now asked you, the medical director, for your opinion on a course of action.

### **Items for Discussion**

- How do you proceed?
- What is the role of the medical director in selecting a provider of EMS services in a community?
- What conflicts of interest might the medical director have in the contracting process?
- What role does the EMS MD have in the selection of an EMS agency for a community.



## Case Study #6

This is a middle-aged male who was found down at 9:20 PM on January 6 by a resident of a community who had gone out to his car to retrieve an item. The resident's wife called 911 and emergency responders were dispatched to the scene for "man down". The initial assessment was performed by engine first response and did not detect any serious injury. Patient's mentation was altered, and he was not able to speak. The patient had also vomited, and a presumptive diagnosis of alcohol intoxication was made. The patient was transported code 3 to a busy receiving hospital, which happened to be the local trauma center but not the closest hospital as per protocol. A subsequent allegation is that the patient was taken to that institution because it was closer to one of the responder's home.

Earlier in the evening the hospital requested that it be allowed to divert because it was at capacity and this request was denied by the local health department. He was triaged to a hallway as non-emergent by the nursing staff for more than one hour. The EMS runsheet was turned in and documented that the initial GCS = 6. He was subsequently evaluated and identified as having a critical brain injury.

The EMS system MD was working the ED that night, ordered the crew out of service and they were told to write an incident report. The patient subsequently went to the OR and died on January 8.

Later that evening the EMSMD receives a call from the Mayor asking for an explanation as to what happened with this patient. Further discussion identifies that the patient is a former editor of a high-profile newspaper.

### Supplemental Materials:

EMS Station log

### Items for Discussion

- The initial investigation centers around the provision of care by the individual providers. How would you handle this?
- The accusation of how this case was handled (selection of destination because of proximity to the providers home, transport to a more distant hospital rather than following protocol, suggest systemic cultural issues in the system. How do you address these?
- It shouldn't be lost in the discussion that the hospital has requested to divert in that they were overloaded and had already identified their ability to care for critical patients was compromised.
- The unique part of this incident is that this is a high-profile celebrity and this event has brought substantial attention to the case and problems with the system. How does the system medical director handle this attention and the media in this circumstance?

## References

Willoughby CJ. Summary of Special Report: Emergency Response to the Assault on David E. Rosenbaum. Willoughby CJ. Summary of Special Report: Emergency Response to the Assault on David E. Rosenbaum. <http://www.dctrack.com/govern/ig0606.html>, accessed 11.8.22

Herman P. Audit Finds DC Fire Officials Failed to Implement Overhauls after 2006 Death.

[http://www.washingtonpost.com/local/crime/audit-finds-dc-fire-officials-failed-to-implement-reforms-after-2006-death/2015/06/18/35418904-15c8-11e5-9ddc-e3353542100c\\_story.html](http://www.washingtonpost.com/local/crime/audit-finds-dc-fire-officials-failed-to-implement-reforms-after-2006-death/2015/06/18/35418904-15c8-11e5-9ddc-e3353542100c_story.html)  
accessed 11.8.22

\* SATURDAY [REDACTED] 4, 2005

1300			EMT [REDACTED] & [REDACTED] REF with A-18 RECEIVED KEYS 2 PORTABLE RADIOS FUEL KEY AND ALL NECESSARY EMS SUPPLIES. OIL LEAK OILY.
1307 65448	1324	N/T	[REDACTED] AVE SE GAS IN EYE 35 y/o <sup>FD</sup> REFUSED
1343 65448	1358	N/T	[REDACTED] ST. SE F/ 25 y/o M SYNCOPE. PT WALKED AWAY
1439 65447	1534	T-13	[REDACTED] SE 43 y/o <sup>FD</sup> ♀ TROUBLE BREATHING
1406 65410	1731	T-2	[REDACTED] PL 14 m/o ♀ DIGESTION OF PILL
2023 65401	2037	N/T	[REDACTED] SE 90 y/o ♀ PDDA
2148 65138	2210	T-5	[REDACTED] SE 53 y/o <sup>FD</sup> DROOK & STUPID
<del>2210</del> 65132	0100	T-1	[REDACTED] SE 41 y/o <sup>FD</sup> LOCKED JAW

SUNDAY [REDACTED] 5, 2005

1300			F/F [REDACTED] AND F/F [REDACTED] REF ON AIR 1500 2 RADIOS, ALL EQUIPMENT CHECKED AND OK
1350 65913	1600	T-5	[REDACTED] ST NE 37 y/o F SICKLE CELL ATTACK
1530 65953	1600	N/T	[REDACTED] AV SE NO PATIENT FOUND
1717 65983	1400	N/T	[REDACTED] NE 52 - FEMALE REFUSED TRANSPORT / S/R

## Case Study #7

You have received a request from a dispatch supervisor of a large regional 911 center. Their request is to evaluate the performance of a dispatcher in the management of a difficult 911 call. The request included identification of the providing Telecommunicator CPR instructions for a 911 caller who witnessed a cardiac arrest and was able to provide CPR prior to EMS arrival. The patient survived to hospital discharge and has done well.

The request is accompanied by a recording of the 911 tape which is attached for your review.

### Supplemental Material:

Unedited recording 8:42

Recording removes confirmation of location and address (prior to recording 1), section on moving patient (recording 2) as well as CPR instruction (after recording 3)

Two recordings:

Recording 1 Time stamp 1:10- 2:04

Recording 3 Time Stamp 3:20-5:20

### Items for Discussion:

- How would you evaluate the performance of this dispatcher in managing this case?
  - What role does the EMSMD play in the quality of care of dispatch centers?
  - Are you able to access dispatch information/recordings at your center?
  - Are you engaged in policy formation at dispatch center?
  - What strategies might you employ to impact dispatch process in your system?
-

## Case Study #8

Scene Information
<p><b>Description:</b> Ems found a male lying face down on the floor wedged between a night stand and a mattress. Male had a coat on and was naked from the waist down. The apartment was cold and Poor living conditions.</p> <p><b>First Agency Unit on Scene?:</b> Yes</p>
History of Present Illness
<p>Ems called for a male that was found doa. Update from dispatch was this was an expected death and another comment said life status questionable. Upon arrival ems Was directed to the rear apartment. Ems found a male lying face down on the floor wedged between a night stand and a mattress. Male had a coat on and was naked from the waist down. No obvious signs of life. The apartment was cold and poor living conditions. Ems was working with flashlights to see. Male had what appeared to be scratches on his lower back and the back of his legs. Pt. Also appeared to have blood pooling in the back of his legs from the waist down. Upon touching the male/feeling for a pulse male was extremely cold and no palpable pulses were found via carotid or radial. Ems originally called for a doa time.</p> <p>Police officer on scene saw something move around the male and thought the male was breathing. EMS attempted to move the male onto his back when he became responsive. ems and police were able to get the male onto the bed. Male was unsure how long he was on the floor or what happened to him. Male has swelling around his right eye and what appeared to be blood pulling from the knees down to his feet. Male also had an abrasion to the forehead. A47 was unable to get vitals. Upon arrival of ALS Care was transferred to ALS. BLS crew assisted with extrication.</p>

Supplemental Materials:

Dispatch Log

Paramedic Statements

Statewide BLS Protocol

16:45:08est	CREATE	Location: xxx TypeDesc: DEATH QUESTIONABLE - COLD/STIFF IN RD Priority:E1
16:48:33	ENTRY	Comment: Medical ProQA recommends dispatch at this time
16:48:33	PROQA	Case09D2A Comment:65-YEAR-OLD, MALE, CONSCIOUSNESS UNKNOWN, BREATHING STATUS UNKNOWN. CC TEXT: EXPECTED DEATH CALLER STATEMENT: 65 YOM EXPECTED DEATH CAD RESPONSE: DELTA DISPATCH CODE: 09D02
16:48:57	DISP	BLS Unit, ALS Unit, Rescue Truck
16:50:10	INFO	Comment: S/C LANDLORDS DAUGHTER / STATES MALE WAS SUPPOSED TO BE OUT OF THE HOME AND SHE JUST WENT IN AND FOUND THE MALE FACE FIRST ON THE FLOOR

16:50:49	INFO	Comment: CALLER RAN OUT OF THE HOME AND STATED THE MALE WAS DEATH BUT COULD NOT CONFIRM / CALLER WOULD NOT CHECK FOR BREATHING /
16:51:12	INFO	Comment: CALLER STATED SHE THOUGHT THE MALE WAS BEYOND HELP BUT DID NOT CONFIRM
16:54:25	*ONSCN	<a href="#">BLS</a> Unit On Scene
16:56:35	MISCA	Comment: ****TIME 1656****
16:57:33	MISCA	EMTs PRONOUNCED AT 1656
17:00:01	MISCA	Comment: FROM Police unit 337 NOT A DOA, MALE STARTING TO MOVE SCRATCH THE DOA, MALE IS MOVING
17:00:53	-ASSOC	BLS Unit going back into residence
17:19:54		ALS Unit on scene
17:24:44	TRANSP	ALS Transporting patient to hospital Not a cardiac arrest

### EMT Statements

#### EMT1

I was carrying equipment down the steps and met my partner coming up the steps. He said the patient was DOA so we returned to the truck. The police officer on scene radioed for us to come back to the basement because the patient was moving.

#### EMT2

We were dispatched to a suspected DOA. I arrived on scene and said to the police officer, "I think patient is dead." He agreed. The patient was prone, it was in a dark and cramped area. The patient was cold to the touch. I could not feel pulses and the patient had blood pooling in the back of his legs. I thought he was DOA and did not want to disturb the scene. I returned to my vehicle but then the police officer radioed that the patient moved. I returned to the basement and rolled the patient over and he began to mumble. We initiated BLS care and told the ALS unit to continue.

#### Hospital Follow Up

In the ED, that patient was awake but confused. His core temperature was 32<sup>0</sup>F. He was COVID positive and had significant rhabdomyolysis.

#### Items for Discussion

- Discuss role of BLS services in determining death in your system
- Is there a role for termination of resuscitation by BLS Services in your system?
- How do you error proof field pronouncement and termination of resuscitation in your system?
- How common are patients pronounced in your system and subsequently receive further resuscitation. How often does this occur to in your ED?

**DEAD ON ARRIVAL (DOA)  
STATEWIDE BLS PROTOCOL**

**Criteria:**

- A. Patient presenting with the following
  - 1. Decomposition
  - 2. Rigor mortis (Caution: do not confuse with stiffness due to cold environment)
  - 3. Dependent lividity
  - 4. Decapitation
  - 5. Unwitnessed cardiac arrest of traumatic cause
  - 6. Traumatic cardiac arrest in entrapped patient with severe injury that is not compatible with life.
  - 7. Incineration
  - 8. Submersion greater than 1 hour
- B. In cases of mass casualty incidents where the number of seriously injured patients exceeds the providers and resources to care for them, any patient who is apneic and pulseless may be triaged as DOA. <sup>1</sup>

**Exclusion Criteria:**

- A. Obviously pregnant patient with cardiac arrest after trauma, if cardiac arrest was witnessed by EMS practitioners. These patients should receive resuscitation and immediate transport to the closest receiving facility. See Trauma Patient Destination Protocol # 180.
- B. Hypothermia. These patients may be apneic, pulseless, and stiff. Resuscitation should be attempted in hypothermia cases unless body temperature is the same as the surrounding temperature and other signs of death are present (decomposition, lividity, etc...). See hypothermia protocol #681.

**Treatment:**

**A. All patients:**

- 1. Initial Patient Contact – see Protocol # 201.
- 2. Verify pulseless and apneic.
- 3. Verify patient meets DOA criteria listed above.
  - a. **If any doubt exists, initiate resuscitation and follow Cardiac Arrest Protocol # 331 and consider medical command contact.**
  - b. If patient meets DOA criteria listed above, ALS should be cancelled.
- 4. If the scene is a suspected crime scene, see Crime Scene Preservation Guidelines #919.
- 5. In all cases where death has been determined, notify the Coroner or Medical Examiner's office or investigating agency. Follow the direction of the Coroner or Medical Examiner's office/investigating agency regarding custody of the body.

## Case Study #9

This is a 40 y/o male who was involved in a massive motor vehicle accident and has a difficult extrication. The medics arrive to find the patient with difficult respirations and are unable to intubate the patient so a cricothyrotomy is performed on scene. At the time of the radio report this procedure is noted, and the crew asks that the patient be pronounced prior to extrication.

### Supplemental Materials

EMS runsheets

OLMC radio tape

### Items for Discussion:

- Does your agency have a protocol for termination of traumatic cardiac arrest after initiation of treatment?
- This physician doesn't appear to be knowledgeable about local EMS protocols, but few agencies have protocols for terminating a traumatic resuscitation after initiation of treatment.
- Is the medical direction for this case appropriate? Who's responsible for assuring that online medical direction is appropriate?

### References

Millin MG, Glaagno SM, Khandker SR, et al . Withholding and termination of resuscitation of adult cardiopulmonary arrest secondary to trauma: resource document to the joint NAEMSP-ACSCOT position statements. J Trauma Acute Care Surg 2013 Sep;75(3):459-67. doi: 10.1097/TA.0b013e31829cfaea.

Matthew Chinn, MD, M. Riccardo Colella, DO, MPH, An Evidence based Review of Prehospital Traumatic Cardiac arrest. <https://www.jems.com/patient-care/cardiac-resuscitation/an-evidence-based-review-of-prehospital-traumatic-cardiac-arrest/>, accessed 10.31.23



Interventional Card Lab Number		Green Seat #	Red Seat #	Patient's Current Medications					
Time:	07:17	07:25	:	:					
Level of Consciousness	A-V-P-U	A-V-P-U	A V P U	A V P U	UNKNOWN				
Blood Pressure	UTO	UTO							
Pulse Rate	CAROTID PRESENT	CAROTID PRES							
Respiration Rate	8	20/H/GABING							
Breath Sounds	GURGLING	GURGLING							
Pupils	UTO	UTO							
Skin Perfusion	POOR	POOR							
Blood Sugar									
SpO <sub>2</sub> / Capillary Refill	> 2secs.	> 2sec.			Allergies				
Temperature					UNKNOWN				
Glasgow Coma Score	3	3							
Time:	ECG Interpretation	Medications/Defib:	Dose:	Router:	Airway/Other Treatment	Medic ID			
0725	CAROTID PULSE PRES.				SURGICAL CRICH 5.0mm	902			
0730	PEA-SINUS	CPR STARTED/IV ESTABLISHED			SUCTION AIRWAY	906			
0734	PEA	1MG EPI. IVP - 0735	1MG. ATROPINE IVP -		PEA SINUS BRADY	829			
0737	PEA	1MG EPI. IVP - 0739	1MG. EPI. IVP -			906			
Chief Complaint:	NVA								
Hx Present Illness:	PT. WAS UNRESTRAINED DRIVER OF 4DR. SEDAN TRAVELING NB ON ROCHESTER RA. THAT WAS STRUCK HEAD-ON BY PICK-UP TRUCK PER PD OFFICER DR. WHO WITNESSED ACCIDENT, STARTED TX. P.T.O.A. DR STATED SHE WAS ICU DR. AT HOSPITAL.								
Assessment:	A550 ATE AND DR. (STATED ABOVE) ON SCENE WITH APPROX 55-GOY/10 MALE PT. PT. WAS PINNED IN CAR IN MULTIPLE AREAS, WITH MASSIVE FACIAL TRAUMA AND AGONAL RESP. DR WAS HOLDING AIRWAY OPEN, EMTP BEGAN VENTILATIONS W/ BVM. PT. HAD SIGNIFICANT BLEEDING FROM FACIAL AREA, INCLUDING MOUTH, SUCTION APPLIED. CAROTID PULSE PRESENT. TRAUMA ASSESSMENT HEAD = LE FORTE FX. I, II AND III, LARGE AVULSION 4.5 CM. LONG ABOVE (R) EYE, GOLF BALL SIZE HEMATOMA TO (R) EYE, MULTIPLE TEETH BROKEN AND AVULSION 2-3 INCHES FROM TOP OF SKULL, APPROX 6.7 INCHES IN SEMI-CIRCULAR NOTION ON BACK OF HEAD. NECK = WNL AS PERFORMED BY PARAMEDIC. CHEST = (C) CREPITUS (CHEST NOT STABLE) (C) FLAIL CHEST (C) SIDE. ABDOMEN = BRUISING RLQ AND ULQ. ABDOMEN WAS SOFT AND WARM.								
Treatment:	I.P.S. VIS. O <sub>2</sub> , ECG, CRICH, ACLS, DOS								
Transport:	NOT PORT.								
Past Medical Hx:	Asthma	Angina	CAD	Cancer	CHF	COPD	CRF	CVA	Diabetes
	GERD	LITN	Pacemaker	Psych	Seizure	Other:	UNKNOWN		
Signature:						Technician ID #: 906	# of Medics: 4		

1st and 4th Copy - Receiving Facility

2nd and 3rd Copy - Responding Unit

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Form Date April 2005

OTHER TREATMENT / REMARKS: UPON PALPATION BY EMT [REDACTED]. PELVIS = APPEARS TO BE UNSTABLE PER PARAMEDIC [REDACTED]. LOWER EXTREM. = (L) FEMUR (R) FX. (L) DEFORMITY, U/A TO ASSESS (R) LEG AND LOWER (R) DUE TO PIN IN. UPPER EXTREM. = (R) ARM WNL, (L) ARM U/A TO ASSESS DUE TO PIN-IN. OVERALL ASSESSMENT OF VEHICLE = MASSIVE FRONTAL DAMAGE, PT. WAS PINNED BY STEERING WHEEL IN (L) EXTREMITIES, DASHBOARD WAS CAVED IN PINNING IN HIS LOWER EXTREMITIES. (R) DRIVER DOOR WAS CAVED IN, PINNING PTS. (L) SIDE. SECONDARY ASSESSMENT. AIRWAY = MAINTAINED BY BVM VENTILATIONS AND SUCTION. CRICH WAS ATTEMPTED/SUCCESSFUL BY EMT [REDACTED], 5.0MM ET TUBE INSERTED IN AIRWAY. VENTILATIONS BY BVM. FLAIL CHEST NOTED W/ VENTILATIONS. PULSE RE-CHECKED @ CAROTID FOUND TO BE ABSENT, CPR STARTED PADDLES APPLIED TO BARE CHEST, ECG SHOWS PEA, SINUS RHYTHM AT RATE OF 80BPM. ACLS STARTED. CPR CONTINUED W/ ACLS FOR 10 MIN. PT. ECG FROM PEA → ASYSTOLE, CAROTID PULSE STILL ABSENT, NO SPONTANEOUS RESPIRATIONS. EMT [REDACTED] CONTACTED MED CONTROL, SPOKE W/ DE. [REDACTED] ATTENDING MD GAVE FULL REPORT, ANNOUNCED PT. TOB 0746. PT. STILL PINNED IN DRK CONT. AC. [REDACTED]

OTHER TREATMENT / REMARKS: ALL EMS EFFORTS STOPPED. [REDACTED] PD REQUESTED PT. BE REMOVED FROM CAR. [REDACTED] FD FINISHED REMOVING TOP, SIDE AND FRONT OF CAR FROM PT. PT. REMOVED VIA BACKBOARD BY FD AND EMS. PT. PLACED ON GROUND (ON BACKBOARD) BEHIND CAR ON SIDE OF ROAD. A550 AND ALL OTHER EMS PERSONNEL CLR OF SCENE. [REDACTED]

## **Case Study #10**

A 28 y/o female walks into hospital A, a small community hospital with basic emergency and inpatient services. She complains of diarrhea, and crampy lower abdominal pain. She is 26 weeks pregnant. Hospital A does not have inpatient OB services. The emergency physician examines the patient and determines that she is in labor. Her cervical os is dilated to 1 cm and she has a bloody show. The physician calls hospital B, which is 1 hour away. Hospital B has inpatient OB, but does not care for babies < 900 gms, and refuses the transfer. The physician then calls hospital C, a tertiary care facility 1.5 hours away by ground, who agrees to accept the patient in transfer. The local EMS agency is called to effect the transfer. They arrive and after getting the doctor's assurances that the patient is not in imminent danger of delivery, load the patient in the ambulance and head off to hospital C. En route to the hospital, the patient's pain becomes much worse, the junior paramedic, who is caring for the patient assesses the patient, and identifies that delivery is imminent. The driver reroutes the patient to hospital D, which does have OB, but no dedicated NICU services. The delivery occurs en route to hospital D, resuscitation is initiated by the medic and the child arrives at hospital D gray, cyanotic but with a pulse. The child is resuscitated by hospital D, and transferred via air to hospital C, and has a predictably stormy course. Hospitals, A, B and C are named in the suit, as is the ambulance company and the EMS medical director for the ambulance agency.

The EMS agency is sued for transporting a patient beyond their scope of practice and for not having sufficient equipment to handle a 26-week gestation infant. The Medical Director is sued with the agency for not having appropriate policies in place to prevent crews from accepting patients beyond their scope of practice. Hospitals A and B get sued as well.

### **Items for Discussion**

- In retrospect what is the appropriate management of this case?
- How does the EMS system prevent the occurrence of events such as this?
- What policies and educational programs would you implement in the wake of this event?

Absent the opportunity to bring resources to deliver a child if necessary, the patient should have gone to the closest hospital with OB facilities (and transferred by personnel with more experience with an emergency deliver than the EMS providers would be expected to have.

### **References**

Thompson J. Lessons to Learn from Fla \$10M birth Lawsuit Outlined at EMS Expo, <https://www.ems1.com/ems-expo-2010/articles/lessons-to-learn-from-fla-10m-birth-lawsuit-outlined-at-ems-expo-NsV07OBVuBpmtbIU/>

Gonzalez ER. Mom Settles premature birth lawsuit with EVAC Ambulance, <https://www.orlandosentinel.com/news/os-xpm-2010-07-07-os-evac-settlement-20100707-story.html>

## **Case Study #11**

You receive a phone call from the operations manager of a local EMS organization for which you provide medical direction. She requests a face to face meeting to discuss the issue described below. During the meeting she gives you a copy of a letter from Dr. Ron Vasquez, the physician who treated the paramedic in question. A copy of that letter is attached.

Shelia Johnson is a 31-year-old paramedic who has worked for the EMS organization for 8 years, 7 years as an EMT and 1 year as a paramedic. About 1 year ago she began having chronic pain and weakness that caused her great discomfort and limited her ability to lift. After multiple consultations and diagnostic tests, she was found to have shoulder impingement syndrome. The condition was not felt to be work-related, but the operation was able to place Shelia on light duty for several months as she underwent a variety of therapies. Ultimately surgery was performed, and Sheila complied well with an aggressive physical therapy regimen, remaining on light duty working at the operation. One month following surgery, Sheila presented the attached letter from her physician qualifying her for a full return to independent duty.

Two weeks after she returned to duty one of the operations supervisors asked her about her new penchant for lollipops. She told him that they were fentanyl subscribed by her physician for use to manage her post-op healing and continuing pain.

### Supplemental Materials

Letter from Dr. Ron Vasquez

### Items for Discussion

- The operations manager involved you in the case because it involved a medical therapy prescribed by a physician and a letter from the same physician certifying that Sheila was safe for return to practice. She wonders what she should do. What are your thoughts?
- What is the role of the system or agency medical director in determining fitness for practice? If not the medical director, who should serve this function?
- Can EMS providers work clinically (and drive) if they are on medication? Who makes this determination? Are there standards for this decision?

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Dr. Ronald Vasquez  
Midtown Orthopedics  
Number 4 North Center Street  
Suite 100  
Anytown, USA

Anytown EMS  
3215 Hospital Drive  
Anytown, USA

12/19/2013

To whom it may concern,

I am writing concerning my patient Ms. Shelia Johnson. Ms. Johnson entered my practice approximately 6 months ago complaining of chronic pain and weakness. Following extensive evaluation I diagnosed Ms. Johnson with shoulder impingement syndrome. A variety of non-surgical interventions failed to resolve her symptoms and so on September 22 I performed a surgical repair. The surgery went well and on September 29<sup>th</sup> Ms. Johnson entered an aggressive physical therapy regimen with the goal of returning to her work as a paramedic with Anytown EMS.

Ms. Johnson has worked hard in physical therapy and I am happy to report that her strength and capacity have returned to normal. I certify that Ms. Shelia Johnson is physically and mentally ready to return to full duty as a paramedic with your organization.

Please don't hesitate to contact me if you have any questions. Thank you.

Dr. Ronald Vasquez, MD, FACS

Midtown Orthopedics  
*Incredible surgeons, exemplary service*

## Case Study #12

A 52 y/o male is imprisoned by police after being arrested for DUI. About 2 am your agency receives a call from the jail because the prisoner has begun to complain of chest pain. Paramedics arrive to find an obviously intoxicated obese male who c/o chest pain. He has no cardiac history but smokes ½ PPD. Initial vitals are unremarkable, a 12 lead EKG is read by paramedics as normal. After evaluating the patient, the patient and the police agree that he doesn't need to go to the hospital. He signs off the necessary forms for the agency.

The police call two hours later when they find the prisoner unresponsive in his cell, they place an AED, start CPR and the subsequent resuscitation is unsuccessful. The patient's family sues the EMS agency for alleged abandonment by the system. The EMSMD is also named for inadequate supervision.

### Items for Discussion

- What is the relationship between police and EMS in your system for incidents such as these? What safeguards are in place to provide patient care for the person in custody? Specifically does this person have capacity to accept or refuse EMS care in the absence of undue influence? Do all persons who are evaluated by EMS after arrest require transport to the hospital and, if not, how does this decision get made?
- Discuss opportunities for improving EMS care in jails, including stepping up initiative-mental health in jails.
- Briefly discuss innovations (e.g. video conferencing) that might improve the ability of providers to safely treat and triage prisoners. Discuss limitations and issues that must be addressed to implement such technology.
- How does the EMSMD defend himself/herself for this complaint of inadequate supervision?

## Case Study #13

You are asked to review and investigate the following case as an EMS Medical Director. Also report any possible system-wide implications and training issues that might arise after reviewing this incident.

Your agency is asked to respond to an agitated male who found to be acting strangely and upon police arrival, runs out into traffic. Police follow the individual, who they find to be incoherent. The initiate measures to restrain him. See the video for more detailed information. Upon your crew's arrival the patient is found to be apneic and pulseless. He is transported to the hospital and pronounced there.

You are asked by the police to investigate why the agency didn't respond sooner and by the mayor of the city as to whether EMS could have prevented this victim's death.

### Supplemental Materials

Video

### Items for Discussion

- What role does EMS play in the management of the agitated person when summoned by police? Is this person a prisoner or a patient? How is this determined on scene?
- Is there a policy in your system between police and EMS on how to address this type of incident? Should there be formal dialogue between leadership between police and EMS?
- What role does the EMSMD play in facilitating the optimal relationship between police and EMS?
- In many communities, chemical sedation is used for control of such patients. A issue has been raised in some by community groups, who argue that predominantly white EMS agency is being weaponized by police against marginalized people. How do you respond to this?

### References

Kupas DF, Wydro DC, Tan DK, et al . Clinical Care and Restraint of Agitated or Combative Patients by Emergency Medical Services Practitioners, *Prehospital Emergency Care*, 25:5, 721-723, DOI: 10.1080/10903127.2021.1917736

Hatten BW, Bonney C, Dunne RK, et al. ACEP Task Force Report on Hyperactive Delirium with Severe Agitation in Emergency Settings. <https://www.acep.org/globalassets/new-pdfs/education/acep-task-force-report-on-hyperactive-delirium-draft-.pdf>

## Case Study #14

On a Monday morning at 2:44 a.m. a call came to 911 from a pregnant, 31-year-old female of approximately six months gestation who was having abdominal pain and vaginal bleeding. Dispatch sent a priority 1 (presumed life or limb threat) EMS responder, which arrived on the scene at 2:55 a.m. The paramedics found the patient sitting on a bed and reporting that she had “miscarried” and had delivered the infant into the toilet prior to EMS arrival. The paramedics initially evaluated the mother, and upon attempting to evaluate the fetus was told by the significant other that they couldn’t look in the bathroom until they made sure to take care of her. Ultimately, the fetus was evaluated by the medics, found to be cool, cyanotic and absent of ventilations. It was determined to be not viable and placed it in a plastic bag for transport. The mother continued to have abdominal pain and brisk vaginal bleeding. Initial vitals were blood pressure 112/palp, pulse 120, and respiratory rate 22. Examination was significant for a gravid female with diffuse abdominal tenderness with guarding and brisk vaginal bleeding. Paramedics placed two 18-gauge peripheral intravenous catheters and started fluid resuscitation with 0.9 normal saline. At 3:06 a.m., EMS providers left the patient’s home for transport by ambulance to a tertiary care emergency center. Medical control was obtained en route to the hospital and is included.

The patient and presumed non-viable infant arrived in the emergency department at 3:15 a.m. The mother was in acute distress and was taken emergently to the operating room for dilatation and curettage. Almost immediately after arrival, the ED staff evaluated the infant and found it to have a bradycardic rhythm and agonal respirations. The infant was intubated, resuscitated, and admitted to the NICU. The baby’s hospital course was complicated by respiratory failure, metabolic acidosis, and intracranial hemorrhage. On hospital day seven, the parents and medical team decided that the baby should receive comfort care only, and he was electively extubated. The infant quickly expired.

### Supplemental Materials

Radio Call

### Items for Discussion

- How should this case be addressed with the personnel involved in this incident?
- How should the EMSMD approach the discussion with involved crew?
- How should investigation of this incident be performed?
- What policy and education changes, if any, should be made after review of this case?

### References

Donnelly E, Work-Related Stress and Post Traumatic Stress in EMS. PREHOSPITAL EMERGENCY CARE 2012;16:76-85



## Case Study #15

COVID-19 has stressed virtually the entire health care system, although many systems have dealt with problems of overcrowding before the pandemic.

This EMS system has had increasing difficulty with ED overcrowding despite attempts to implement ambulance diversion, nearly all hospitals are impacted. There are several hospitals with ambulance patient offload times exceeding 1-2 hours. The downstream effect of this problem is a shortage of response vehicles and increasing response times as EMS agencies in those areas are increasingly requiring mutual aid response. The underlying issues are that there not enough nurses to care for offloaded patients nor physical space in the ED. You are contact by one of your crews who have been waiting for 30 minutes at Hospital X with a 55-year-old male with history of COPD in moderate respiratory distress who continues to have wheezing and tachypnea despite CPAP and neb treatments. They report 5 total ambulances currently lined up unable to offload patients including multiple ALS patients, the longest has been waiting nearly 2 hours. How do you address this issue?

### Items for Discussion

- What authority does the medical director have to implement changes to address this issue?
- What strategies might the EMS system implement to address this issue?
- Who are the key stakeholders that need to be brought together? What resources might there be in the system to mitigate the impact of this problem on patient care?

### References

Hospital Surge Assistance Plan: COVID-19 Response,  
[https://file.lacounty.gov/SDSInter/dhs/1101027\\_855-HospitalEMSSurge.pdf](https://file.lacounty.gov/SDSInter/dhs/1101027_855-HospitalEMSSurge.pdf)

NHS Patients Dying in Back of Ambulances Stuck Outside of A&E, report says.  
<https://www.theguardian.com/society/2021/nov/14/patients-are-dying-from-being-stuck-in-ambulances-outside-ae-report>

Ambulance scarcity, long 911 response times: COVID pushes L.A. County to ‘brink of catastrophe’.  
<https://www.latimes.com/california/story/2020-12-31/back-to-back-records-push-californias-covid-deaths-past-25000>



## **Case Study #16**

You are called by an irate parent of a 12-year-old wanting to know how triage protocols and air medical use decisions are made in your EMS system. A relevant timeline and event summary prepared by the parent. The EMS field record and the air medical service record are attached.

Summary: Minor child, age 12 is at summer camp, and is found by campers in the bathroom holding her head and crying after all the girls had showered for the night. The child's counselor calls the camp nurse who moves the child to the camp medical office and calls 911.

Local EMS and Fire Respond to the camp, assess child, and prepare child for transport due to concern for possible occult brain injury, despite absence of documented LOC and the child has verbally responded to the camp staff since incident.

EMS calls for air medical evacuation to the pediatric trauma center bypassing closest hospital with 24 ED and closest trauma center. Initial assessment is by paramedic who finds a child verbally able to respond to questions and documents the child as AAOx4 but scores a GCS of 4 and notes the child had been found "unresponsive" by camp personnel.

Two different air medical services are called, and child eventually arrives at pediatric trauma center 1 hour 26 minutes after event with stable vitals and GCS of 15. There is no documentation at any time that the child had unstable vitals or had documented LOC. Documentation by air medical EMS services identify AAOx4 with GCS of 15. The parents were not notified of injury and were not told their child was being transported via helicopter. The child is discharged from the trauma center back to the camp in less than 2 hours after arrival with no identified injury.

The child, if transported by ground ambulance, would have arrived at closest ED at least 30 minutes prior to arrival at TC. The air medical service identified a completely stable child and performed no interventions. In addition to being concerned that his child was transported by a medical helicopter which he considers "dangerous", parents insurance company will only allow reimbursement for ground transport to closest ED. Total allowed reimbursement is \$1500 and the air medical service charge for the lift off and 31 mile flight is \$16,500. The parents will be responsible for the balance of the charges and believe this is an EMS system failure and are requesting your intervention with the EMS services as they have been stonewalled by both the ground and air EMS services who are also now claiming findings that are inconsistent with their documented records.

Supplemental materials: Timeline of events: EMS and Air Medical PCRs

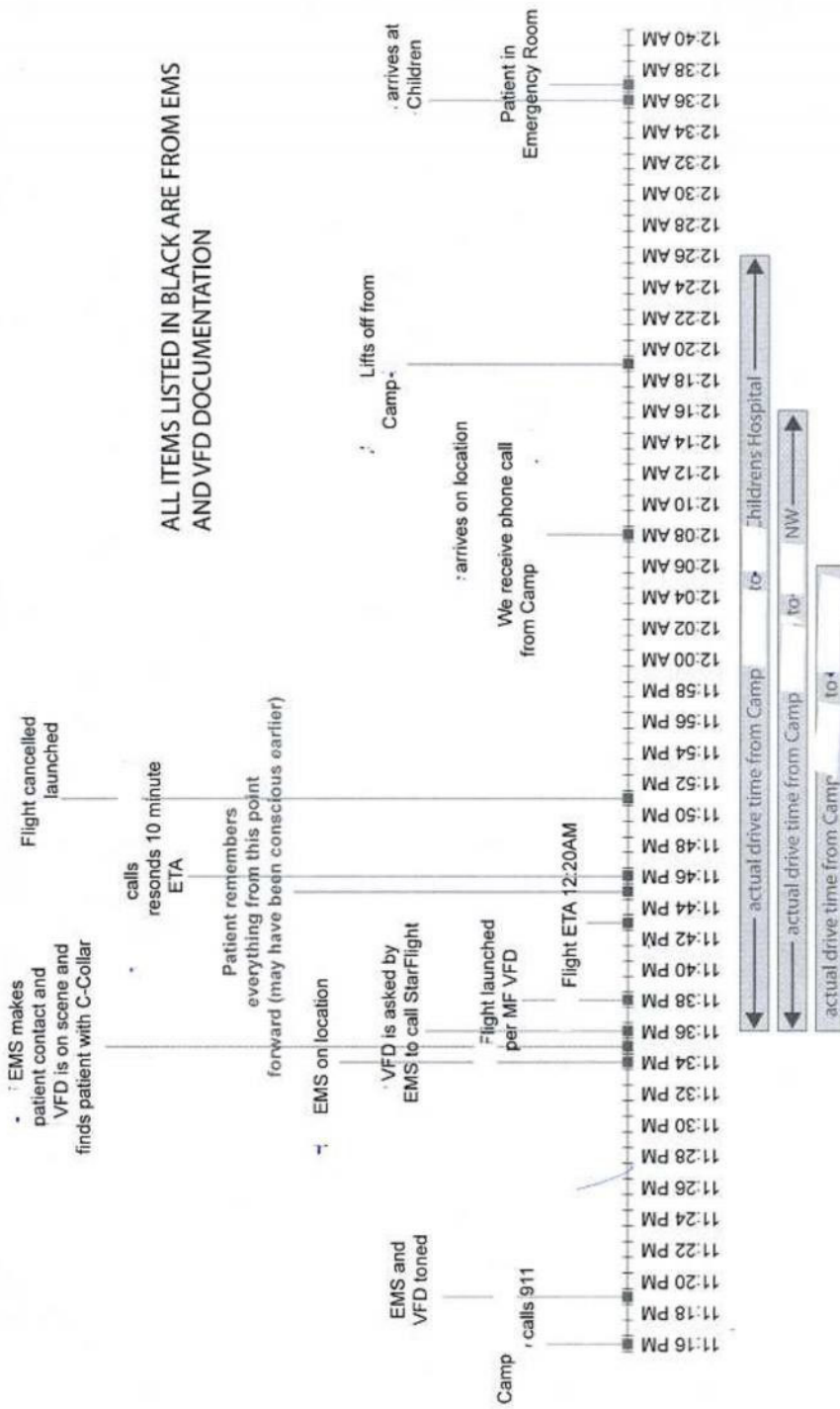
### Items for Discussion

- Was this patient appropriately managed? If not, what options existed or should have existed for optimal management?
- How does the EMSMD respond to the family regarding this incident?
- Discuss cost benefit of air medical care including flight risk

### References

Air Ambulance: Available Data Show Privately Insured Patients are at Financial Risk.  
<https://www.gao.gov/assets/700/698332.pdf>

ALL ITEMS LISTED IN BLACK ARE FROM EMS  
AND VFD DOCUMENTATION



- 1] Patient had an unobserved accident before 11:16pm.
- 2] Counselor who first found patient said "was not unconscious but was crying and holding her head"
- 3] Staff moved patient from cabin to infirmary. Nurse had limited communication with patient and used term "unresponsive".
- 4] Documentation from AAOx4, Total GCS=4, and some verbal communications. Specific timing unclear.
- 5] July 27 discussion with I was told that Natalie was unconscious first 3-4 minutes after they arrived.
- 6] Sept. 3 discussions with I was told that the AAOx4 entry was in error. Fire fighters stated that patient was unconscious till helicopter arrival.
- 7] Interesting to note that since unconsciousness played such a big part of decision for air transport, that no one documented time of conscious.

**AMBULANCE  
RECORD**

Page 4 of 6

**Monitor Events**

**Case 201006262353180031345354**

Time	Event	Vitals
23:53:18	Power On	
23:55:31	NIBP	Saturation 99; PulseRate 90; CO2 41; RespRate 21; Systolic 134; Diastolic 88; Mean 110; PulseRate 86
23:55:35	Low Battery	
23:58:15	Vital Signs	Saturation 100; PulseRate 87; CO2 13; RespRate 14
23:58:35	Alarm Apnea	Saturation 100; PulseRate 86
23:59:52	Alarm Apnea	Saturation 99; PulseRate 105; CO2 20; RespRate 10
00:03:02	NIBP	Saturation 99; PulseRate 90; CO2 29; RespRate 11; Systolic 137; Diastolic 96; Mean 109; PulseRate 86
00:03:15	Vital Signs	Saturation 99; PulseRate 94; CO2 29; RespRate 10
00:08:15	Vital Signs	
00:13:15	Vital Signs	
00:18:02	NIBP	
00:18:10	Power Off	

**Patient Assessment at Destination**

N/A

**Department Specifics**

Category	Selection
District Location	Burnet County Z 1
Truck Number	5496

**Narrative**

<S> Pt was under the supervision of \_\_\_\_\_ and other personnel at Camp \_\_\_\_\_ in \_\_\_\_\_. Pt was found unresponsive on bathroom floor just after 2300. Pt moved to "infirmary". Pt has been breathing and with stable vital signs since she was found until we arrived. Pt health information provided by camp staff and included in "Facesheet" documentation. Pt reported "tripping and falling in bathroom". She reported pain at her forehead. She rated this pain at 6/10. She denied neck pain or pain "anywhere else" two more times.

<P/E> Pt's father, \_\_\_\_\_ was contacted by camp staff at phone \_\_\_\_\_. Father was informed of pt transport to \_\_\_\_\_ Children's Medical Center \_\_\_\_\_. Camp staff departed scene in camp Suburban to meet pt at \_\_\_\_\_. Pain medication was drawn and not administered.

Air Medical Report

Record Number

Name

Transport Type

Trauma :  
Orthopedic

Dispatch Times	
Time of Call	06/26 23:46 CDT
Time Dispatch	06/26 23:48 CDT
Time Enroute	06/26 23:54 CDT
Arrive Scene	06/27 00:07 CDT
Depart Scene	06/27 00:18 CDT
Arrive Facility	06/27 00:36 CDT

Clinical Times	
Incident Time	06/26 23:00 CDT
Rendezvous	06/27 00:09 CDT
Depart with Patient	06/27 00:16 CDT
Accepting Unit	06/27 00:41 CDT
Signover	06/27 00:50 CDT

**History of Present Illness/Injury**

Scene/trauma flight. Rendezvous with \_\_\_\_\_ at a summer camp for a 12 year old female pt who had a witnessed ground level fall to a hard bathroom floor with an associated loss of consciousness lasting "45 minutes". EMS on scene reports arriving to find the pt alert and oriented x3 and complaining of head pain. Pt relates moderate head pain and denies nausea or vomiting. Pt unable to recall events and expresses anxiety about the upcoming flight. Pt reports that her parents are on vacation in \_\_\_\_\_ and she is unsure how to get in contact with them. EMS remaining on scene will continue attempts to inform parents of the transport.

Pt secured to AC stretcher on backboard and transferred to pediatric trauma center without incident. Care transferred to ED RN.

**SCORES**

Time	Total	Glasgow Scores	RTS Scores	Sedated/ Paralyzed	Comments
06/27/2010 00:10	Glasgow = 15 RTS =	Eye = 4, Motor = 6, Speech = 5	Cardio = , Resp = , Coded =	No/ No	
06/27/2010 00:20	Glasgow = 15 RTS =	Eye = 4, Motor = 6, Speech = 5	Cardio = , Resp = , Coded =	No/ No	
06/27/2010 00:30	Glasgow = 15 RTS =	Eye = 4, Motor = 6, Speech = 5	Cardio = , Resp = , Coded =	No/ No	
06/27/2010 00:40	Glasgow = 15 RTS =	Eye = 4, Motor = 6, Speech = 5	Cardio = , Resp = . Coded =	No/ No	

## Case Study #17

**Email from the Agency QA Director to the Agency Medical Director (names changed, grammar not edited, bold added for emphasis):**

Dear Dr. X,

I talked to JL earlier today about the issues we discussed earlier. I'm letting you know because JL was very defensive and argumentative during our discussion. He asked for your number to discuss it further with you.

He was in disagreement with the "critiquing". The xopenox he originally thought was allowed under his CCEMTP status. When pointed out the separation from SCT and ALS protocols he recognized the separation, but still believed he could administer it with an on line order. He also remarked that the patient had an allergy to albuterol and reported it after 2 doses of albuterol had already been given. He indicated given the pts status and continued distress it was warranted.

The Narcan and D50 he believed to be accepted industry standard even though not covered by protocol. He stated that both hold the possibility of helping the patient and are allowable even without cause to suspect hypoglycemia or opiate use. **He went on to cite** previous incidents where he deviated without authorization and it benefited the patient. And said he was also "not a protocol medic." He's under the impression that any deviation is acceptable so long as you contact Med Control to notify them after the med/procedure.

Now JL and I have disagreed in the past and don't have best working relationship. These comments he made might be out of contempt for me, and not his actual beliefs. Hopefully when he gets a hold of you, he'll convey himself differently and understand a little better.

### Items for Discussion

- This vignette identifies a medic who apparently has a history with the QI coordinator, who is looking for some help in handling this medic. How does the EMSMD respond to this request and interact with this medic? Should this be a formal incident?
- Discuss strategies for addressing paramedics who deviate from protocol.
- What recourse does a medical director have when a paramedic identifies that they are not bound by protocols?

## **Case Study #18**

One of your paramedics calls you personally to let you know about a medication error that had occurred earlier in the day (he has not yet notified anyone else except the Emergency Physician who received the patient, including his supervisors). He and a BLS partner went to a dermatologist's office for an "allergic reaction." On arrival they found a 28-year-old otherwise completely healthy man who, after an injection of lidocaine with epinephrine, had felt a racing/pounding heart. The dermatologist was worried he was having an allergic reaction so called EMS. The paramedic tells you that the patient's lungs were clear, and he had no edema, his HR was 108, but otherwise normal vitals.

Since the dermatologist was a medical authority, the paramedic treated the patient for severe anaphylaxis although he says was not convinced of the diagnosis at the time. He put the patient on oxygen and a monitor and started an IV in the dermatologist's office, then moved to the ambulance where her BLS partner helped her with continued treatment before starting out for the ED.

The paramedic explains that he had both diphenhydramine and epinephrine out and asked the BLS partner to draw up "the whole vial" of diphenhydramine (in this region, ambulances carry 50mg vials, so this dose is consistent with their protocol). The BLS partner handed over the syringe, and the paramedic gave the medication IV bolus. The patient then had acute onset of severe chest pressure, sweats, and a 1-minute run of VT which resolved spontaneously. The symptoms persisted for approximately 10-15 minutes and resolved shortly after ED arrival. In retrospect the paramedic figured out that the BLS partner had drawn up a full 1mg dose of 1:1000 epinephrine. The paramedic stated he was calling you to report the error, and asked you to check and make sure the patient is ok.

You ask the paramedic if he confirmed what had been drawn up by the BLS provider; he did not. He further explains that it is common practice in your agency for the BLS providers to draw up meds; you had not been aware of this. The paramedic also tells you that he has already disclosed the error the family, and that they were very upset.

Later you talk to the BLS partner, who tells you that the paramedic had asked for epi, not Benadryl, and when he asked how much he had said "the whole vial." Where the truth lies becomes unclear.

You follow up on the patient and learn he had ruled in for an MI, based on enzymes and some wall motion abnormalities on cardiac echo.

### Items for Discussion

- What role does the dermatologist play in the management of this patient and the decision to treat the patient for anaphylaxis?
- How do address the issue of the medical error of giving IV epinephrine to this patient by the paramedic. What should be your response to this incident at the individual and system level?
- How do address the decision by the paramedic to disclose the medical error to the family? Does your system have a process in place for disclosure of medical errors?

### References

Berlin L. Will Saying "I'm Sorry" prevent a Malpractice Lawsuit. American Journal of Roentgenology. 2006;187: 10-15. 10.2214/AJR.06.0110



## **Case Study #19**

You are the single Medical Director of a large fire-based urban-suburban EMS Agency. You are notified around 8 am on a Thursday of an active shooter event at a local high school.

You are called by the 911 supervisor who forwards that attached 911 call to you.

What actions should you take at this time and going forward?

### **Supplemental materials:**

9-1-1 Call

Hospital Resource List

Maps of EMS Resources and Hospitals

Patient List

### **Items for Discussion**

- What is the role of the EMS physician at the time of a MCI such as this? Scene response, triage, transport of patients? Online Medical command? Debriefing providers?
- This incident represents a complex event involving many patients, agencies and hospitals. What is the role of the EMS physician in optimizing a response to cases such as these?
- What is your role in disaster management in your region?

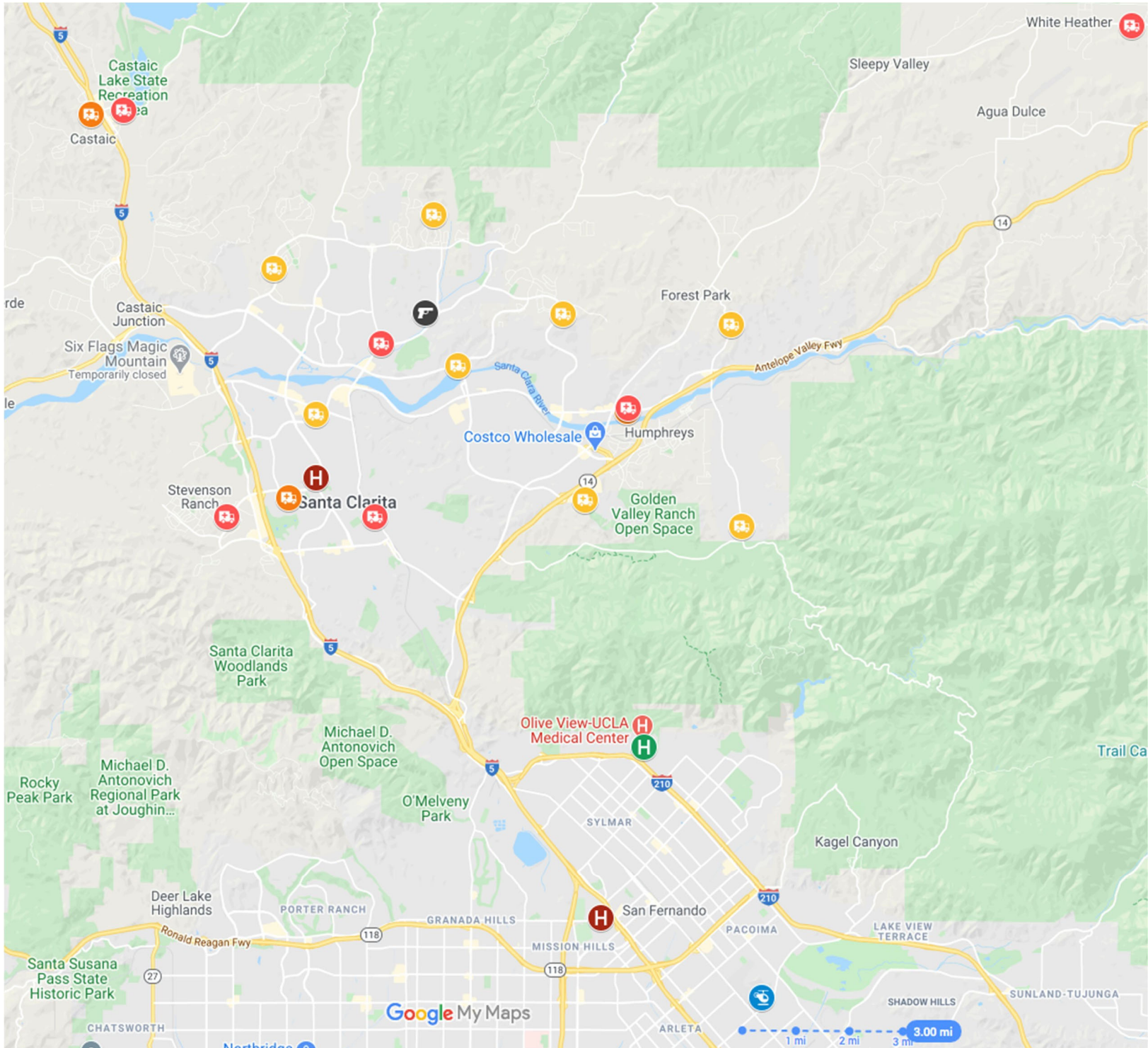
**Case #19 Supplemental Materials**

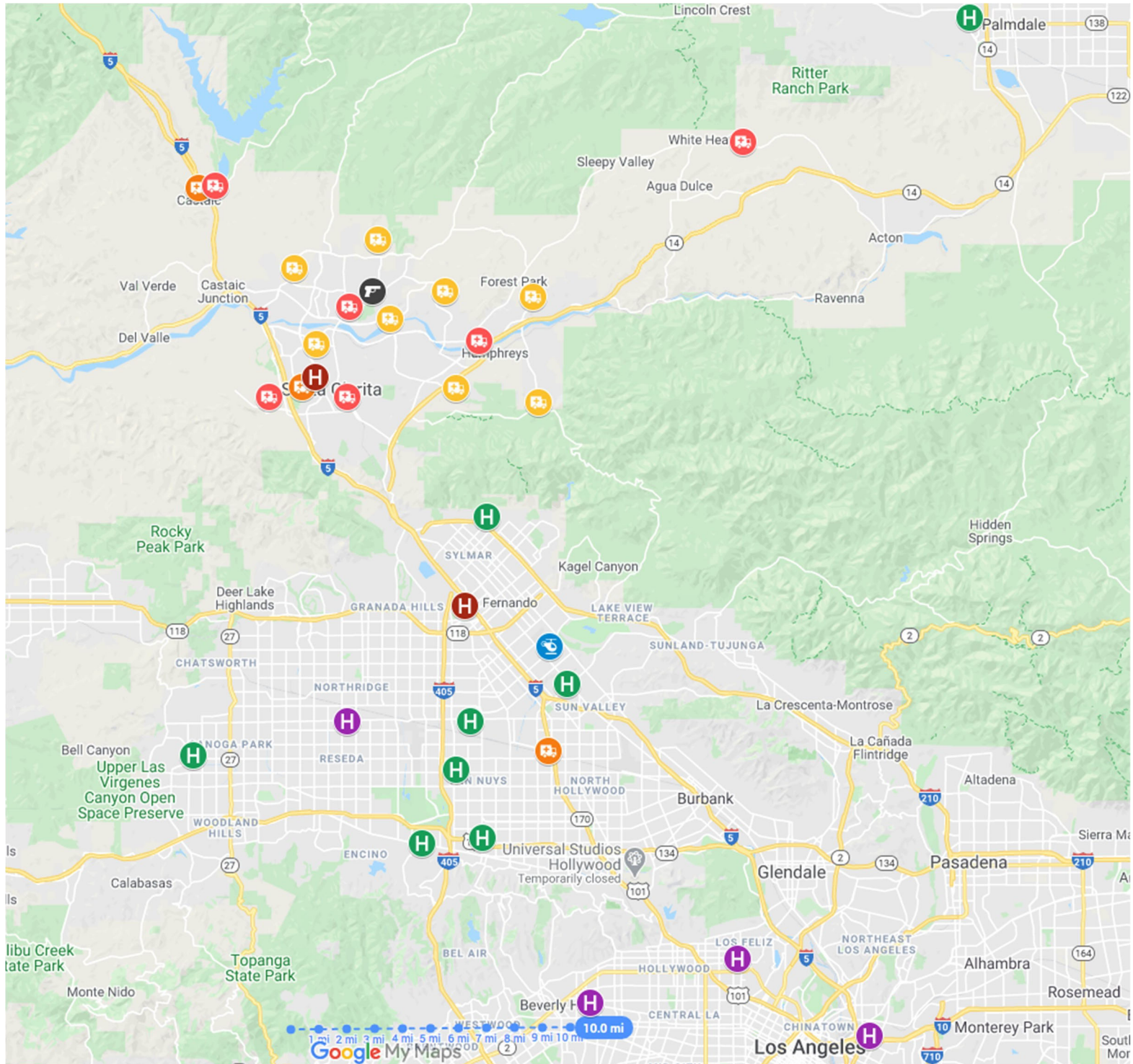
**HOSPITAL LIST**

<b>Hospital</b>	<b>Designation</b>	<b>ETA Ground</b>	<b>ETA Air</b>
1	Trauma Center/ED Approved for Pediatrics	15 minutes	5 minutes
2	Trauma Center/ED Approved for Pediatrics	25 minutes	10 minutes
3	Trauma Center/Pediatric Trauma Center	45 minutes	15 minutes
4	Pediatric Trauma Center	50 minutes	20 minutes
5	Trauma Center/Pediatric Trauma Center	60 minutes	20 minutes
6	Trauma Center/Pediatric Trauma Center	75 minutes	20 minutes
7	Academic Non-trauma Center	25 minutes	10 minutes
8-14	Community Hospitals	≥40 minutes	NA

**MAP LEGEND**

<b>Resource</b>	<b>Symbol</b>
BLS Assessment Unit	Yellow Ambulance
BLS Transport Unit (4 units)	Orange Ambulance
ALS Ground Unit	Red Ambulance
ALS Helo (3 units)	Blue Helicopter
Trauma Center (TC)	Red H
TC/Pediatric TC	Purple H
Non-Trauma Hospital	Green H





Patient List

<b>Victim</b>	<b>Age/Sex</b>	<b>Injuries</b>	<b>Condition</b>	<b>START/JumpSTART Triage Level</b>	<b>Transport</b>
1	14 M	GSW Abdomen	GCS 3, RR 8, weak radial pulse	Immediate	ALS Ground
2	16 M	GSW Head	GCS 3, apneic, HR 43, strong radial pulse	Immediate	ALS Ground
3	15 F	GSW L Chest	GCS 3, apneic and pulseless, asystole on monitor	Immediate	ALS Ground
4	15 F	GSW Pelvis	GCS 15, BP 118,68, HR 120, RR 16, strong distal pulses	Delayed	ALS Helo
5	14 F	GSWs L Shoulder, R Hip	GCS 15, BP 131/86, HR 85, RR 24, strong distal pulses	Delayed	ALS Ground
6	14 M	GSW R Thigh	GCS 15, BP 118/60, HR 100, RR 20, strong distal pulses	Delayed	ALS Ground
7	15 F	Fall, Blunt Knee Injury	GCS 15, BP 137/90, HR 140, RR 20, strong distal pulses	Minor	BLS Ground

## **Case Study #20**

The QI department for your agency received a patient care concern from a receiving hospital in your system. The complaint identified that an ALS provider failed to recognize the acuity of a diabetic patient brought to their institution, “perhaps due to limited assessment (vitals + Dexi but no EKG) and intervention (no IV).”

Upon initial assessment by your QI Committee, it identified a 47 y/o female that called EMS for chest pain, nausea and vomiting and a history of diabetes. The scene was somewhat challenging, the patient found lying in bodily fluids, there were multiple family members present, and a language barrier (Arabic). Limited history was obtained from the daughter. Based on ePCR and provider statements, patient’s non-responsiveness to provider questioning (“not cooperating”) was attributed to cultural differences and led to the provider’s decision to “make this a BLS” patient. No IV or EKG was performed. Vital signs were within normal limits.

Upon hospital arrival, ED staff immediately recognized that the patient was in acute distress. An ED EKG showed STEMI, the patient became hypotensive and was rushed to Cath Lab. She was found to have an occluded LAD, which was stented. Cardiogenic shock persisted despite multiple pressors and CPR. An Impella (a ventricular assist device) was placed and patient left Cath Lab on ECMO. After a rocky hospital course, she had a large left mid-cerebral artery stroke with shift followed by a cardiac arrest later that day. She did not survive.

All personnel on this call, as well as shift deputy, battalion chief and EMS supervisor, participated in the case review with the OMD, deputy chief of EMS and Quality Manager. The paramedic, who has a number of years of seniority in the system, identified that the patient was not at all cooperative, and some concern was voiced about exposing the patient in the presence of male family members. When the paramedic asked if the family was asked to leave, she responded “you know how those people are” and didn’t clarify what attempts, if any, were made to expose the patient enough to start an IV, do a 12 lead EKG and otherwise assess her clinically.

The discussion of the case was concluded, with the paramedic being unwilling to accept that their actions were anything less than satisfactory. They also observed that doing an IV or ECG would not have changed the outcome of this patient.

Supplemental Materials: CAD report  
ePCR

Items for Discussion:

- How do you address the assertion that failure to administer ALS care didn't change the outcome of this patient?
- What, if any, other information would you need to further evaluate this incident.
- What strategies does your system use to educate your workforce on managing a culturally diverse patient population and assure appropriate care to the community?
- What strategies can you use to remediate senior level personnel in these circumstances? What are the barriers to these strategies?
- Are there systematic changes that could be implemented after receiving such an incident?

**Prehospital Care Report - No PHI**

**Patient Information**

**Age:** 47 Years

**Gender:** Female

**Provider Impression**

**Primary Impression:** GI/GU - Diarrhea

**Secondary Impression:** GI/GU - Nausea (With Vomiting)

**Narrative**

**Narrative:** T410 and M408 responded for an ALS emergency for trouble breathing. On arrival, 47 year old female was found lying on the floor of a bedroom. Multiple family members were in the room which made it difficult to assess patient, family was ask to leave the room. Daughter of the patient stated that she had been having nausea and vomiting and diarrhea since that morning. Daughter stated that she has diabetes but doesn't know of any medications or other medical problems. Patient was alert and oriented but uncooperative and would not sit up. Patient was placed on the stairchair to be carried down the stair and to the stretcher. Patient had a bowel movement while she was lying on the floor and was lying in her vomit. Patient would not answer any other questions. Vitals were taken, dexi was high, no fever present. Patient denied any pain or trouble breathing. Patient would only ask for water, it was explained why we could not give her any water. Patient was transported to ER with no changes. Patient care was transferred to ER staff.

**Past Medical History**

**Patient Medications**

**Medication**

**Dosage**

**Route**

Unable to Complete

**Medication Allergies**

**Medication Allergies**

Unable to Complete

**Environment Allergies**

**Environmental/Food Allergies**

**Medical History:** Unable to Complete  
**Medical History** Family  
**Obtained From:**

**Pregnancy:** No  
**Advance Directives:** None

**Assessment Exam**





Date/Time of Event (per Medical Device)	Medical Device Event Type	Medical Device ECG Lead	Medical Device ECG Interpretation	Shock or Pacing Energy	Total Number of Shocks Delivered	Pacing Rate	EKG Comments
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Time	Crew	Name	Location	Procedures		Response	Success
				Size of Equipment	Attempts		

### Patient Condition

Complaint Type	Complaint	Duration
Chief (Primary)	vomiting	1 Days
Primary Symptom: GI - Vomiting		Alcohol/Drug Use: None Reported
Other Symptoms: Not Applicable		

### Call Type/Location/Disposition

Call Type: Breathing Problem	Disposition: Treated & Transported
Resp. Mode: Emergent (Immediate Response)	Transport Mode: Emergent (Immediate Response)
Urgency:	Destination: Hospital
	Dest. Determ: Closest Facility
Response: 911 Response (Scene)	Response Delay: None/No Delay
Location: Residence - Single Family Home	Type of Scene Delay: None/No Delay
	Transport Delay: None/No Delay

### Patient Transport/Positioning

Patient Moved to Stairchair  
 Ambulance:  
 Patient's Position in Fowlers (Semi-Upright Sitting)  
 Transport:  
 Patient Moved From Stretcher  
 Ambulance:

### Response Times and Mileage

Unit Disp.: 06/07/2017 09:00:39	Incident Number:
Enroute: 06/07/2017 09:01:11	Call Sign: Mxx8
At Scene: 06/07/2017 09:05:08	
At Patient: 06/07/2017 09:06:12	
Depart: 06/07/2017 09:16:52	
Arrive Dest.: 06/07/2017 09:24:18	
In Service: 06/07/2017 09:44:00	

### Unit Personnel

Crew Member	Level of Certification	Role
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## **Case Study #21**

You are asked by the mayor of your community to critically evaluate and respond to him regarding the below incident. He is under substantial political pressure regarding the event and need an assessment of the situation.

EMS was called to the scene of a domestic dispute in which the victim was strangled by their partner. While caring for the victim in the ambulance, the assailant who had previously run away now returns and is attempting to enter the ambulance to get to the victim. Paramedics locked the ambulance and are now in fear as the suspect is angry and violently attempting to get into the ambulance. Emergency help call goes out for police who arrive about 60 seconds later and confront the suspect outside the ambulance.

The paramedic statements are that they then heard gunshots just outside their ambulance and they both attempted to cover the patient and hit the floor. At some point, one of the paramedics exits the truck and discovers the suspect down with a GSW to the head so he begins to render aid, kneels next to the suspect and starts CPR. The officers' statements are that the suspect became violent with them and as they attempted to take him to the ground, he fought with them and at one point was straddling one of them from the top while attempting to grab the officer's firearm from the holster. The other officer realized this and shot him to prevent him from getting the officer's firearm.

The agency's ambulances have a camera on the exterior pointing to the front and one to the back that are always recording so some of this is recorded when the suspect is at the back of the ambulance. It also sees the officers as they approach the rear of the ambulance to confront the suspect, but he then moves just off camera. You then see his feet at an upper corner of that video but that is about it.

This became a fairly high-profile incident, and there were some bystanders. The ensuing investigation had several of the bystanders stating that what they saw was our paramedic on top of the suspect holding him down while the officer executed him. This played up as EMS was as corrupt as law enforcement and in fact, they were cooperating because of the racial disparity to kill a black person. This is the story that got out into the community very quickly and incited several weeks of small riot activity with a lot of civil unrest, disorderly conduct, and damage to property. Because the incident occurred just off camera and all you could see were the suspect's feet at one point when the shooting was occurring, we could not immediately provide evidence that would refute what these bystanders were saying.

Had the incident on camera (if the paramedics were wearing body cameras and recording, it presumably would have clearly shown both of them in the ambulance with the victim at the time the gunshots occur), this would have been a complete non-issue.

### Items for Discussion

- Discuss the potential role of video on scene (both police and EMS body cameras), in routine and high-profile events.
- Discuss what processes EMS agencies should have in place for managing on scene electronic data (photo, audio, video).
- Discuss what strategies and barriers need to be considered in implementing these processes.
- Discuss strategies that should be employed to utilize these sorts of data in EMS systems.
- Discuss what circumstances audio and video might be routinely implemented to improve emergency patient care starting with care in the field.

### References

Reuters. Minneapolis police shooting video inconclusive : governor. <https://www.reuters.com/article/us-usa-race-minnesota/minneapolis-police-shooting-video-inconclusive-governor-idUSKBN0TC2HI20151124>

## **Ambulance Video Obtained in Minneapolis Police Shooting**

### **Man was reportedly interfering with paramedics helping a patient**

**Wed, Nov 18, 2015**

**AMY FORLITI, Associated Press**

MINNEAPOLIS (AP) — State investigators looking into the fatal shooting of a black Minneapolis man by police during a scuffle have several partial videos of the incident but won't release them at this time, despite demands from protesters, an official said Tuesday.

Demonstrators chanted at Minneapolis police officers at the side entrance to the 4th Precinct station on Morgan Ave. N. Sunday, Nov. 15, 2015, in Minneapolis, after a man was shot by Minneapolis police early Sunday morning, Black Lives Matters and others protested Sunday night. (Jeff Wheeler/Star Tribune via AP) Jamar O'Neal Clark, 24, died Monday evening, a day after he was shot by police during an early-morning dispute, the state Bureau of Criminal Apprehension said Tuesday.

Some witnesses said Clark was handcuffed when he was shot. Police initially said he was not handcuffed, but authorities later said handcuffs were at the scene and they were trying to determine whether Clark was restrained. His death sparked protests including one Monday night in which hundreds of people blocked traffic on an interstate highway, leading to 42 arrests.

The BCA is investigating the case, and federal agencies agreed Tuesday night to Mayor Betsy Hodges' request for a civil rights investigation. That satisfied one of the protesters' demands, but investigators haven't met two others: the release of any video and the identities of the officers involved.

The federal investigation will be conducted by the FBI and will be concurrent to the BCA's probe. In a statement, federal authorities asked for cooperation from any witnesses and urged calm during the investigation.

Police said the incident began when they were called to north Minneapolis around 12:45 a.m. Sunday following a report of an assault. When they arrived, a man was interfering with paramedics helping the victim, police said. Officers tried to calm him, but there was a struggle. At some point, an officer fired at least once, hitting the man, police said.

BCA Superintendent Drew Evans said at a news conference Tuesday that investigators have video from several sources, including an ambulance, a mobile police camera stationed in the area, public housing cameras and citizens' cellphones.

But he said none of the videos captured the entire incident and none will be released while the investigation is ongoing to avoid possibly tainting it.

Authorities have said the officers involved weren't wearing body cameras. Evans said there is no police dashboard camera video of the shooting. He declined to release any identifying information about the officers, including their race, pending interviews with them.

When asked if the video shows whether Clark was handcuffed, Department of Public Safety spokesman Bruce Gordon reiterated that the video captures a portion of the incident, but not everything, and said officials can't discuss specifics because it could potentially taint witness statements.

Evans said at the news conference that there were handcuffs at the scene and authorities were still investigating.

"We're still examining whether or not they were on Mr. Clark or whether or not they were just (fallen) at the scene. That's what we're trying to ascertain," he said.

Evans also confirmed that Clark was unarmed. Pressed on the timeline for results of the BCA investigation, Evans said two to four months is typical but that the Clark case "has been given top priority."

The Hennepin County Medical Examiner's Office ruled Tuesday that Clark died from a gunshot wound to the head. Clark's father previously told The Associated Press that his son suffered a single gunshot wound over his left eye.

Clark's brother, Jamine Robinson, 32, of Rochester, told the AP earlier Tuesday that family members had gone to the hospital Monday evening to take Clark off life support.

"I want the officer to be arrested, prosecuted and put in jail for eternity. Life without parole," said Robinson.

In seeking the civil rights investigation on Monday, Hodges said she was concerned about "transparency and community confidence." She expressed faith in the state investigation but said the city needs "all the tools we have available to us."

Protesters have set up tents around the 4th Precinct station near where the shooting occurred and said they won't leave until authorities release the video and officers' identities.

The protests are just the latest expression of tension between the department and minorities in the city.

The rocky relations have led to discussions between police and minorities and the creation of task forces designed to quell concerns. This spring, Minneapolis was selected for a federal Justice Department program to rebuild trust between police and the communities they patrol.

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This story has been corrected to reflect that there were 42 protesters arrested at Monday night's highway demonstration, not more than 50.

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## **Case Study #22**

One of your EMS agencies responded emergently to a patient with a self-inflicted GSW to the head. They arrived to find the patient in PEA, large caliber wound to his head, with no respiration and report of agonal breathing by bystanders. The patient shortly thereafter became asystolic, the crew pronounced the patient, as is consistent with local protocols. When reviewed by the local trauma QI committee, a question was raised regarding why a potentially viable organ donor didn't at least have some attempt at resuscitation and transport to a trauma center. A long discussion ensued regarding what should be done about this, which included representatives from local Gift of Life. GOL has also requested that EMS personnel notify them of sudden deaths within an hour of determination of death so that they can follow up and perhaps increase organ donation.

A suggestion was brought to you as the local medical director that EMS personnel should be encouraged through protocol to transport and resuscitate potential organ donors. How do you proceed with this issue?

### Items for Discussion:

- How would you respond initially to this request?
- Which stakeholders would you engage in a discussion regarding this issue?
- How would you address the ethical concerns raised by this issue?

### References

Joseph B, Aziz H, Pandit V, et al. Improving Survival Rates after Civilian Gunshot Wounds to the Brain. *Journal of the American College of Surgeons*. 2014;218(1):58-65. doi:10.1016/j.jamcollsurg.2013.08.018

Joseph B, Aziz H, Sadoun M, et al. Fatal gunshot wound to the head: the impact of aggressive management. *The American Journal of Surgery*. 2014;207(1):89-94. doi:10.1016/j.amjsurg.2013.06.014

Robinson LA, Turco LM, Robinson B, et al. Outcomes in patients with gunshot wounds to the brain. *Trauma Surg Acute Care Open*. 2019;4(1):e000351. doi:10.1136/tsaco-2019-000351

Zhao Z, Liang JJ, Wang Z, et al. Cardiac arrest after severe traumatic brain injury can be survivable with good outcomes. *Trauma Surg Acute Care Open*. 2021;6(1):e000638. doi:10.1136/tsaco-2020-000638

## **Case Study #23**

In response to complaints by the community regarding violent events and shootings involving people with substance abuse and behavioral health problems, the mayor has instructed the chief of police to improve police response to such incidents. The chief elects to develop alternative response units to respond to incidents involving a variety of psychosocial emergencies. She identifies a member of her staff to direct this program, develop protocols, hire social services personnel and implement a pilot program. EMS is identified as an important part of this program and will be advised that they will be dispatched to appropriate incidents to provide medical treatment and transport as needed.

Items for Discussion:

- What role should EMS and the EMS Medical Director play in program and protocol development
- How does the EMSMD and EMS system integrate themselves into this program in early stages. What political barriers might there be in this process and how would you address them.
- What legal and administrative barriers must be addressed when implementing such a program.
- What sort of alternative response programs exist in your communities, and how do they function?



# Appendix

## Incident Evaluation for the EMS Medical Director

A consistent, fair, legally defensible process must be ensconced in EMS system policy to allow all members of the system to know how to respond to “incidents”. Incidents may include characterized broadly as any unanticipated occurrence that occurs in the course of the business of the EMS system. Most are minor and some may be profound on their impact on patient and the system. The EMSMD must assure that certain key principles are applied to all reviews and placed in the proper context. Triage and judgment are key parts of the initial assessment of an event, so that they the lowest level of appropriate response is implemented.

The focus of any incident investigation is to learn the truth as best as it can be determined, and also should protect the rights of all parties and maintaining a focus on the provision of optimal patient care by the system and its members. The system also must embrace a “Just Culture” to assure that providers are encouraged to bring system issues forward without fear of punishment. Most EMS providers are well trained, well intentioned and their actions are almost without exception in their perceived best interests of the patients. Incidents are an important component of learning about a system. In the words of W. Edwards Deming, “Every defect is a treasure”, and offers the system an opportunity to learn about itself and improve.

An incident investigation process should include identification of the role of key personnel in the investigation, including management, medical leadership, and union representation as needed. Policy should also define the role of personnel in the investigative process including when and if the medical director should be an active participant in the review process. The medical director must be cognizant about the details of the review process, including details such as whether someone else needs to be a witness when he/she debriefs staff. The EMSMD must also be aware of conflicts of interest that may exist, especially for him/her self, including circumstances in which he/she may be employed by another entity in the system. In such circumstances the EMS system must provide for an alternate to provide the EMS MD functions.

The EMSMD must also address the following questions: 1) What will keep this from happening again; individual remediation; system(policy, protocol, training); What impact with the EMSMD actions have on the individual (i.e., withdrawal of medical command may lead to termination) and the organization (i.e., impair operations, morale, system cost associated with new equipment, training, protocols, employment issues). Most incidents will not require an exhaustive evaluation of all of the outlined elements and can be readily triaged by the EMSMD or designee,

depending the complexity of the event, patient outcome, and implications for the system as a whole and a number of other factors.

The phases of incident review, investigation and resolution should address the following phases.

### Phase 1 - Event

Incident occurs

Care rendered

Initial Patient care records are completed.

Knowledge of Untoward event becomes known

Supervisor Made Aware → EMS MD notified.

Personal in attendance asked to write incident reports including MFR, EMTP, and Police.

Is there a need to take immediate action (risk to public health, risk to provider wellbeing, political repercussion (which may mandate that the personnel be placed on administrative leave) or may provider continue to practice

### Phase 2 - Investigation

Review existing documents

Identify and obtain further documentation

Hospital providers, outcome data

Medical examiner

Dispatch tape, medical control tape, other

Police or other first personnel on scene.

Family/bystander/patient interviews when appropriate

Interviews/discussion with providers (who's involved?)

Some EMSMD's advocate evaluating a practice profile on involved providers

In more complex incidents.

Research

Existing policy, protocol

Expert opinion as needed

Legal opinion

Local/Regional/State Regulatory

### Phase 3- Evaluation

System Peer review process

Union hearing

Process evaluations

Root cause analysis

Gap analysis

Policy/process assessment  
Education/ practice deficiency

Summary recommendations to address process and policy issues, patient and provider safety activities, education and, if needed individual provider issues.

#### Phase 4 - After Action Activities

This phase of an incident requires a robust, learning organization that is able to implement necessary changes for system improvement.

Process and Policy change  
Capital needs-equipment;  
Systemwide education-  
If necessary:  
    Disciplinary actions  
    Legal proceedings

Also included below is a worksheet that may be used to guide evaluation.



## Privileged and Confidential Prehospital Quality Improvement Review

<b>Call Date Time</b>		<b>PRID</b>
<b>Patient Name</b>		
<b>Agencies /Personnel Involved</b>	<input type="checkbox"/> PGH EMS <input type="checkbox"/> PGH Fire <input type="checkbox"/> Medical Command <input type="checkbox"/> EOC <input type="checkbox"/> Other	
<b>Command MD</b>		
<b>Receiving Hospital</b>		
<b>Reviewer</b>		

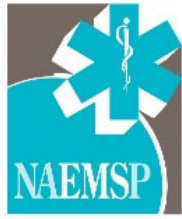
### Event Review

<b>Overview</b>	
<b>Dispatch/ EOC</b>	
<b>Medic Command</b>	
<b>EMS</b>	
<b>Hospital</b>	
<b>Review Recommendations</b>	
<b>Follow-up Provided</b>	

# Medical Director Issue Management Algorithm Worksheet

dd/mm/yy

Step	Stratum	Checklist	Investigation Tools	Comments/Action Items
Step One	<b>PATIENT OUTCOME</b> <i>Always begin issue management with the patient as the starting point. Determine which domain of patient care is of concern.</i>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Quality of Care Issue</li> <li><input type="checkbox"/> Patient Safety</li> <li><input type="checkbox"/> Patient Satisfaction</li> <li><input type="checkbox"/> Serious Adverse Event</li> <li><input type="checkbox"/> Minor Event</li> <li><input type="checkbox"/> Near Miss</li> <li><input type="checkbox"/> Other (describe below)</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> EMS PCR</li> <li><input type="checkbox"/> Dispatch Audio</li> <li><input type="checkbox"/> ED PCR</li> <li><input type="checkbox"/> Inquiry Source</li> <li><input type="checkbox"/> Other (describe below)</li> </ul> <small>Notes</small>	1. _____ <small>mm/dd/yyyy</small> 2. _____ <small>mm/dd/yyyy</small> 3. _____ <small>mm/dd/yyyy</small>
Step Two	<b>SYSTEM PERFORMANCE</b> <i>Determine if the issue is isolated to your EMS inclusively or also involves other systems of care SOC such as hospital or community SOC.</i>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Intrasystem Only</li> <li><input type="checkbox"/> Intersystem</li> <li><input type="checkbox"/> Hospital SOC</li> <li><input type="checkbox"/> Community SOC</li> <li><input type="checkbox"/> Other (describe below)</li> </ul>	<small>Notes</small>	1. _____ <small>mm/dd/yyyy</small> 2. _____ <small>mm/dd/yyyy</small> 3. _____ <small>mm/dd/yyyy</small>
Step Three	<b>PROCESS</b> <i>Is this a purely clinical or operational issue? or both? Is this a protocol, policy, or procedure issue?</i>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Clinical</li> <li><input type="checkbox"/> Operational</li> <li><input type="checkbox"/> Both Clinical &amp; Operational</li> <li><input type="checkbox"/> Protocol</li> <li><input type="checkbox"/> Policy</li> <li><input type="checkbox"/> Procedure</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Local Protocol Review</li> <li><input type="checkbox"/> Conduct Rapid Evidence Review</li> </ul> <small>Notes</small>	1. _____ <small>mm/dd/yyyy</small> 2. _____ <small>mm/dd/yyyy</small> 3. _____ <small>mm/dd/yyyy</small>
Step Four	<b>STRUCTURE</b> <i>Is this a people vs equipment vs organizational issue?</i>	<ul style="list-style-type: none"> <li><input type="checkbox"/> People</li> <li><input type="checkbox"/> Competency Concern</li> <li><input type="checkbox"/> Conduct Concern</li> <li><input type="checkbox"/> Equipment</li> <li><input type="checkbox"/> Patient Satisfaction</li> <li><input type="checkbox"/> Organizational</li> <li><input type="checkbox"/> Culture</li> <li><input type="checkbox"/> Governance</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Paramedic Narrative</li> <li><input type="checkbox"/> Paramedic Profile</li> </ul> <small>Notes</small>	4. _____ <small>mm/dd/yyyy</small> 5. _____ <small>mm/dd/yyyy</small> 6. _____ <small>mm/dd/yyyy</small>



# 2025 ANNUAL MEETING

Specialty  
Workshops,  
Scientific  
Assembly &  
Trade Show

# SAVE THE DATE



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