EMS Field Supervision for Citizens Memorial Hospital

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Certification Statement

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

Signed: Becker

Abstract

The problem is that Citizens Memorial Hospital (CMH) does not have adequate Emergency Medical Services (EMS) field supervision. The purpose of this applied research project is to identify successful EMS field supervision elements used by other hospital-based EMS agencies and recommended by literature and national associations. Action research will be used to solve the problem above.

Four research questions were used in this study:

- 1. What are the effects on CMH EMS by not having adequate field supervision?
- 2. What are EMS field supervision elements used by other hospital-based EMS agencies?
- 3. What are EMS field supervision elements recommended by industry literature and national associations?
- 4. How should the identified EMS field supervision elements be implemented at CMH?

A survey was developed and sent to both non-employees and CMH-employees. These online surveys using Google Forms were developed to obtain opinions of those working in other EMS agencies on best practices for field supervision and to obtain the opinions of employees on what field supervision elements should be added to CMH EMS. Distribution of these surveys were to state-wide EMS email groups and Facebook groups in addition to official employee email.

The results of the literature review and survey were analyzed and compiled into a list of suggestions, and then an EMS field supervisor policy was created. These suggestions include two EMS field supervisors on-duty 24-hours a day / seven-days a week. These supervisors

should be driving SUVs fully equipped with ALS equipment and supplies and specialty equipment. Duties of these supervisors should include managing daily operations, responding to critical scenes and multiple patient scenes, and performing quality improvement tasks. A draft field supervisor job description and a draft field supervision policy has been created from this research and is included in appendices.

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Introduction

The problem is that Citizens Memorial Hospital (CMH) does not have adequate Emergency Medical Services (EMS) field supervision. The purpose of this applied research project is to identify successful EMS field supervision elements used by other hospital-based EMS agencies and recommended by literature and national associations. Action research will be used to solve the problem above. Once solutions have been identified, a proposal to CMH administration will be developed and will include these EMS field supervision elements.

Research questions used in this study include the following:

- 1. What are the effects on CMH EMS by not having adequate field supervision?
- 2. What are EMS field supervision elements used by other hospital-based EMS agencies?
- 3. What are EMS field supervision elements recommended by industry literature and national associations?
- 4. How should the identified EMS field supervision elements be implemented at CMH?

Background and Significance

Citizens Memorial Hospital (CMH) operates a department of the hospital for Emergency Medical Services (EMS). CMH EMS responds to about 10,000 ambulance calls per year in a four-county jurisdiction. CMH EMS employs about 70 EMTs and Paramedics with nine ambulances (18 staff) on duty at a time. Currently, no field supervision is available. Supervisors and managers work ambulance shifts without regard to ensuring at least one leader is on duty all the time. These on-duty leaders are also in the same call rotation with the rest of the ambulances and are often out of the area or busy with calls and unable to supervise or provide oversight of ambulance operations or personnel. These 70 personnel have training needs, and the 10,000 ambulance calls require quality review. These two needs (education and quality) are minimally met by office staff and volunteer educators and peer review staff.

The background of this problem is increasing call volume and staffing of Basic Life Support (BLS) ambulances has highlighted inefficiencies and safety concerns. Field supervision typically reduces these inefficiencies and safety concerns. CMH EMS does not have any form of field supervision currently. Supervisors and managers are scheduled on ambulances like the rest of the staff without concern for having a supervisor on duty 24/7. Additionally, there is no consideration for supervisors to remain available to manage operations, so the on-duty supervisor may be on a long distance transfer hours away from the response area and unable to maintain situational awareness.

Ambulance operations cannot be managed by a dispatch agency because CMH EMS covers four counties and each county has independent dispatch centers. These dispatch centers vary in capabilities from high-functioning Emergency Medical Dispatch (EMD) down to the Sheriff Department Jailer answering the phone and dispatching the ambulance between

managing inmates and office work. These dispatch centers are not connected so there is no way for one dispatch center to know what is happening in areas outside their county.

The significance of this problem is inefficient ambulance operations. It is a routine occurrence for an ambulance be sent from Bolivar to Eldorado with a transfer that could have waited. Just a few minutes later, the Eldorado ambulance arrives in Bolivar with a patient only to turn around and drive back to Eldorado empty following a Bolivar ambulance that will then have to turn around and return to Bolivar empty. Two ambulances being taken out of service when one could have done the job. Similar inefficiencies occur with regard to staffing, equipment management, and ambulance positioning. When ambulances are inefficient, there are geographic and chronologic gaps in coverage for 9-1-1 calls.

The course goal for Executive Analysis of Fire Service Operations in Emergency

Management states that students will be able to prepare their communities for large-scale,

multiagency, all-hazard incidents. This research to address the problem of EMS field supervision
is critical to maintaining the ability for CMH EMS ambulances to be prepared for disasters and
large-scale incidents. If there is no available EMS supervisor, on-duty ambulances are not as
available due to daily operation inefficiencies in addition to freelancing of available ambulances
and crews returning to work to help with the disaster. Crew safety and community response will
be affected.

This research also ties into goal number three of the United States Fire Administration (USFA). Goal number three is to enhance the fire and emergency services' capability for response to and recovery from all hazards. A more efficient ambulance service will have more capability to respond to daily emergency requests in addition to all hazard disaster situations.

The impact of field supervision on ambulance efficiency is the question this paper aims to answer.

Literature Review

There are several articles and books on personal elements to make a successful EMS supervisor. Research for the questions posed in this paper was looking at system approaches to make an EMS field supervision program successful. Only a small number of articles were found that address these needs.

"No role in EMS management is as crucial to the support of rescuers - or to the care of their patients - as that of the field supervisor" (Dick, 1989, p. 107). That statement is echoed in many sources. "Supervision is the bedrock of how the fire and rescue service ensures assigned tasks, regardless of whether they are operating on an emergency incident or administratively at the station, are completed" (Heindrichs, 2015, p. 32). EMS crews make decisions on every call based on policies and protocols, but "other decisions need to be based from the education and experience of a supervisor, manager, or leader operating in a formal chain of command" (Andrews, 2014, p. 6). "It has become quite clear that the development of a rank or command structure similar to that of traditional fire department rank structure may be necessary to ensure the quality operation of the EMS division" (Andrews, 2014, p. 12).

Several sources also agree with Culley (What makes a good EMS supervisor?, 1996, p. 16) when he says that "supervision in EMS takes on a much larger role and responsibility than it does in the traditional workplace." "A lack of defined EMS management structure leads to a crisis-oriented approach that leaves the department without guidance in dealing with the day-to-day ebb and flow of interrelationships" (Andrews, 2014, p. 11).

John Brophy (2010, p. 73) lists ten reasons why employees do not perform as expected in his textbook Leadership Essentials for Emergency Medical Services. Several of those top-ten

reasons can be eliminated and reduced with the use of EMS field supervision. The reasons and effects of field supervision are listed below.

- Communication failures. More availability of supervisors with face-to-face time
 and increased communication will significantly reduce this number one reason for
 employee failure.
- 2. Timely performance feedback. Without field supervision, the ability to give employee feedback is significantly reduced and the ability for *timely* feedback is completely eliminated. "An EMS field supervisor can be beneficial to a department because he gives the paramedics immediate feedback about their performance on calls" (Heath, 2003, p. 11).
- 3. Lack of individual employee acknowledgments. Managers without daily operational knowledge of employee activities are not able to acknowledge many of the situations that should be praised. Field supervisors will have more ability to track and acknowledge accomplishments.
- 4. Physical or organizational performance obstacles. As obstacles are encountered, a second set of hands on scenes and leadership support in the moment to remove those obstacles is priceless.
- 5. Poor documentation sources. Field supervisors working with poor documentation sources (such as protocols and policies) can effect positive changes in those documents as they occur instead of waiting for staff to complain or other lengthy update processes.
- 6. Lack of necessary job aids. Tools and equipment available to field crews are vital to patient care success. Many of these resources are costly and having a fleet of

- fully equipped ambulances is not feasible, whereas a supervisor vehicle equipped with costly items such as a ventilator, chest compressor, specific antidote medications, and similar specialty equipment might be more attainable.
- 7. Unclear performance expectations. Performance expectations are presented to all staff, but interpretation and answers to questions will be much more available with a field supervisor employees can interact with.
- 8. Lack of authority. Field staff has limited authority to make system decisions such as holding transfers or increasing efficiency by moving staff and crews. Field supervisors will have that ability.
- 9. Good performance is punished or ignored. Field supervisors will have more insight into the motivations of staff to make decisions. Motivations usually involve what is best for the patient, and the system and policies may be violated in those interests. Field supervisors can support an employee making good decisions and run interference with administration that may be reacting to partial information that a policy has been violated without knowing why.
- 10. Lack of education. Field supervisors can answer the question "why" rules are in place and "why" protocols are written the way they are. This kind of background education assists employees in making future decisions and providing better patient care.

Many articles give suggestions on what duties an EMS supervisor should be expected to perform. As far back as 1982, William Jaillet (Personnel management skills for the EMS supervisor, p. 36) reviewed several agencies' structures and found common duties that include

"getting the work out, training and developing subordinates, developing and maintaining cooperation, and developing and maintaining morale."

Culley performed an informal survey for his article (What makes a good EMS supervisor?, 1996, p. 16) asking what skills EMS supervisors should have. Some terms resulting from that survey included "motivators," "being a coach," "being supportive," "leading by example," "rewarding effort," and "commitment to field staff." Culley went on to say that EMS supervisors should be a resource to the crew when they show up on the scene instead of trying to control the scene. "EMS practitioners are trained to work independently and be self-directed" (Culley, 1996, p. 17). Without EMS field supervisors, that resource is not available to crews when it is most needed.

Kurt Heindrichs's applied research paper identified some specific duties EMS field supervisors perform. These duties include performing "core functions of their organization" (Heindrichs, 2015, p. 11), "ensuring department policy and procedures are followed, the well-being of their personnel, immediate safety, [and] developing their knowledge, skills, and abilities" (Heindrichs, 2015, p. 16). He goes on to say EMS field supervisors "are responsible for taking command of the incident, review patient care reports, [and] implement quality assurance program" (Heindrichs, 2015, pp. 17-18).

Ninette Heath identified functions EMS field supervisors should perform which include "oversight of medical personnel, supervising preceptor programs, serving as liaison between the department and hospital staff, assisting in education, oversee[ing] quality programs, assur[ing] protocol and policy compliance, prepar[ing] supply and equipment orders, equipment maintenance, and more" (Heath, 2003, p. 9). Heath goes on to focus on the benefit of EMS field supervision to address complaints. "Complaints that are given immediate attention tend to

require three to four times less paperwork and time to resolve" (Heath, 2003, p. 10). Health also states "the EMS field supervisor functions as a safety officer" (Heath, 2003, p. 20).

It is easy to find lists of traits and attributes good EMS supervisors need to possess. There is an undertone of competence and the ability to make critical decisions on limited information. "Supervisors must be able to make sound decisions based on their knowledge and experience in areas where there may not always be a concise policy to follow" (Culley, 1996, p. 16).

Only a couple resources discussed how many EMS field supervisors are needed. Kurt Heindrichs discusses both military command and control and fire service span of control in his research paper. "A military commander can effectively command and control two to five subordinate elements" (Heindrichs, 2015, p. 20). "A textbook for chief fire officers establishes the span of control for the fire and rescue service as three to seven [and] five personnel [is] the optimal number" (Heindrichs, 2015, p. 21).

Because EMS is a 24-hours-a-day service, it is most commonly assumed that EMS supervision would also be 24-hours-a-day. However, one research article reviewed 24-hour shifts in relation to a weekday / office-style shift. That research concluded that 73% of agencies surveyed "had their EMS supervisors working a 24-hr shift" (Heindrichs, 2015, p. 28). A survey of Virginia EMS departments "showed a benefit in having an EMS manager on duty 24-hours a day, seven days a week" (Heath, 2003, p. 10). Ninette Heath recommends "providing 24-hour daily supervision to advanced life support and transport units serving the community" (Heath, 2003, p. 25). Jason Andrews conducted research to identify the best EMS management structure for Cedar Rapids, IA and identified "paramedic EMS coordinator working a 24[-hour] shift schedule, dedicated EMS supervisor working a 24-hour shift schedule, and EMS program manager working an 8-hour shift schedule" (Andrews, 2014, p. 3). Andrews goes on to say, "it is

critical that EMS response be conducted efficiently and effectively at all hours of the day and night" (Andrews, 2014, p. 7).

In summary, the literature review made the following observations:

- 1. EMS field supervision is critical.
- 2. There is an established list of duties to be performed by EMS field supervisors.
- 3. Best practice is one EMS field supervisor for every five on-duty ambulances.
- 4. EMS field supervision should be provided 24-hours a day, seven days a week.

Procedures

To address the problem of a lack of field supervision, research questions were developed and built into a survey. The survey tool used was Google Forms, and two separate surveys were developed with parallel questions. The first survey had a target audience of non-CMH employees and the second had a target audience of CMH EMS employees. The first survey was sent to various state-wide and national email and Facebook groups. The second survey was sent to CMH EMS employees via official work email.

The total number of individuals sent the link to the first survey is difficult to calculate due to forwarding and duplicates in the various groups used, but it is estimated to include about 6,000 people. EMS professionals in southwest Missouri were targeted, but all of Missouri was also included. The total number of individuals sent the link to the second survey included only current employees of CMH EMS and totaled 67 people. Twenty-two completed surveys were returned from the non-CMH employee group. Margin of error for the non-employee group is 21. Thirty completed surveys were returned from the CMH EMS employee group. Those 30 represent 45% of the department. Margin of error for the employee group is 13.

The majority of the questions used in the surveys utilized answers limited to a scale of one to five. One being a negative impact and five being a positive impact. Table 1 on the next page includes the questions used in both surveys as a comparison between survey tools. Refer to Appendix 1 - Survey tool used for non-CMH employees (page 27) and Appendix 2 - Survey tool used for CMH EMS employees (page 30) for copies of the survey tools utilized.

Limitations of the survey include personal bias on the part of the persons taking the survey. Also, the first survey sent to non-employees might not have been completed by individuals representing organizations without field supervision.

Non-CMH Employee Survey Questions	CMH EMS Employee Survey Questions
How does having an on-duty supervisor with	How would having an on-duty supervisor
a chase vehicle effect crew safety? (Consider	with a chase vehicle effect crew safety?
situations like violent or bariatric patients)	(Consider situations like violent or bariatric
	patients)
How does having an on-duty supervisor with	How would having an on-duty supervisor
a chase vehicle effect ambulance efficiency?	with a chase vehicle effect ambulance
(Consider situations like low staffing or BLS	efficiency? (Consider situations like low
ambulances)	staffing or BLS ambulances)
How does having an on-duty supervisor with	How would having an on-duty supervisor
a chase vehicle effect patient care? (Consider	with a chase vehicle effect patient care?
situations like RSI)	(Consider situations like RSI)
How does having an on-duty supervisor with	How would having an on-duty supervisor
a chase vehicle effect the ability to handle	with a chase vehicle effect the ability to
disasters? (Consider situations like mass	handle disasters? (Consider situations like
casualties)	mass casualties)
How does having an on-duty supervisor with	How would having an on-duty supervisor
a chase vehicle effect employee retention?	with a chase vehicle effect employee
(Consider promotion possibilities)	retention? (Consider promotion possibilities)
How many simultaneous ambulances are on	[Not asked, CMH EMS has nine on-duty
duty at a time (maximum) that are not	ambulances at a time.]
considered "supervisor vehicles" in your	
system?	***
How many simultaneous on-duty supervisors	How many simultaneous on-duty supervisors
with a chase vehicle do you currently deploy?	with a chase vehicle do we need?
Describe the shifts at least one (1) on-duty	Describe the shifts you think at least one (1)
supervisor with a chase vehicle is operated.	on-duty supervisor with a chase vehicle
Wile at lained a Communication of the state	should be operated.
What kind of emergency calls is the on-duty	What kind of emergency calls should the on-
supervisor vehicle expected to respond to?	duty supervisor vehicle be expected to
What againment is stocked on the on deter	respond to?
What equipment is stocked on the on-duty	What equipment should be stocked on the on-
supervisor vehicle?	duty supervisor vehicle?
What kind of vehicle is used for the on-duty	What kind of vehicle do you think is most
supervisor?	appropriate for the on-duty supervisor?
What is the minimum staffing of the on-duty	What should be the minimum staffing of the
supervisor vehicle?	on-duty supervisor vehicle?
When not running calls, describe some other	When not running calls, describe some other
duties the staff of the on-duty supervisor	duties the staff of the on-duty supervisor
vehicle is expected to perform.	vehicle should be expected to perform.

Table 1 - Survey questions comparison.

Results

Research question number one (What are the effects on CMH EMS by not having adequate field supervision?) was addressed by the survey to CMH EMS employees. The responses from that survey indicated the following effects would be felt if adequate field supervision were implemented (A complete list of survey results can be found in Appendix 3 - Survey results - page 33):

- Crew safety would be improved (87% respondents). This was supported by 71% of non-employee responses. Range of results accounting for margin of error is 50%-100% of EMS personnel believe crew safety would be improved.
- Ambulance efficiency would be improved (90% of respondents). This was supported by 81% of non-employee responses. Range of results accounting for margin of error is 60%-100% of EMS personnel believe ambulance efficiency would be improved.
- Patient care would be improved (90% of respondents). This was supported by
 71% of non-employee responses. Range of results accounting for margin of error is 50%-100% of EMS personnel believe patient care would be improved.
- Ability to handle disasters would be improved (83% of respondents). This was supported by 81% of non-employee responses. Range of results accounting for margin of error is 60%-100% of EMS personnel believe the ability to handle disasters would be improved.
- Employee retention would be improved (60% of respondents). This was supported by 81% of non-employee responses. Range of results accounting for

margin of error is 47%-100% of EMS personnel believe employee retention would be improved.

Research question number two (What EMS field supervision elements are used by other hospital-based EMS agencies?) was addressed by the survey to non-employees. The responses from that survey indicated the following elements are used (A complete list of survey results can be found in Appendix 3 - Survey results - page 33):

- One on-duty field supervisor for every seven on-duty ambulances. This is similar
 to one on-duty field supervisor for every six on-duty ambulances as indicated by
 CMH-employee responses.
- Field supervisors should be on duty 24-hours per day and seven days per week.

 (82% of respondents). This was supported by 83% of CMH-employee responses.

 Range of results accounting for margin of error is 61%-100% of EMS personnel believe supervisors should be on duty 24/7.
- Field supervisors should travel in an SUV-style vehicle (59% of respondents).

 This was supported by 93% of CMH-employee responses. Range of results accounting for margin of error is 38%-100% of EMS personnel believe supervisors should have SUVs.
- Field supervisor units should be comprised of one paramedic (100% of respondents). This was supported by 83% of CMH-employee responses. Range of results accounting for margin of error is 70%-100% of EMS personnel believe supervisor units should be one paramedic.
- Field supervisors should respond to critical calls, severe patient conditions,
 multiple patients, and multiple response agencies.

- Field supervisor vehicles should be equipped with the same supplies as an ambulance (except for a cot) and specialty equipment such as chest compressor, incident command equipment, tactical equipment, and personnel rehab supplies.
- Field supervisors should perform the following duties:
 - o Manage daily operations and
 - o Perform quality improvement tasks.

Research question number three (What EMS field supervision elements are recommended by industry literature and national associations?) was addressed by the literature review. The following elements are recommended:

- One field supervisor is needed for every five on-duty ambulances. "The span of control for the fire and rescue service as three to seven [and] five personnel [is] the optimal number" (Heindrichs, 2015, p. 21).
- Field supervisors should be on duty 24-hours a day and seven days a week. There is "a benefit in having an EMS manager on duty 24-hours a day, seven days a week" (Heath, 2003, p. 10).
- Field supervisors should perform the following duties:
 - o "Getting the work out" (Jaillet, 1982, p. 36) or "core functions of their organization" (Heindrichs, 2015, p. 11)
 - o Ensuring "the wellbeing of their personnel" (Heindrichs, 2015, p. 16) and ensuring personnel "immediate safety" (Heindrichs, 2015, p. 16)
 - o "Training and developing subordinates," (Jaillet, 1982, p. 36) or "developing [personnel] knowledge, skills, and abilities" (Heindrichs, 2015, p. 16)

Research question number four (How should the identified EMS field supervision elements be implemented at CMH?) flows from the interpretation of the previous research questions. A summary of these elements include:

- Two field supervisors in SUVs should be implements at CMH.
- Theses field supervisors should be available 24-hours a day and seven days a week.
- Their vehicles should be equipped with all the equipment found on an ambulance in addition to specialty equipment such as chest compressor, incident command equipment, tactical equipment, and personnel rehab supplies.
- These field supervisors should perform the following duties:
 - o Manage daily operations,
 - o Respond to critical scenes and multiple patient scenes, and
 - o Perform quality improvement tasks.

Discussion

Both the literature review and the survey results show a profound need for EMS field supervision. Specifically, the field supervisor is the most important role in EMS supervision because it is "crucial to the support of rescuers [and] to the care of their patients" (Dick, 1989, p. 107). It has also been found that "supervision is the bedrock" (Heindrichs, 2015, p. 32) and is "necessary to ensure quality operation of the EMS division" (Andrews, 2014, p. 12).

One of the most important benefits of EMS field supervisors is an improvement in crew safety. Survey results indicate crews working in a system with field supervisors and CMH EMS crews both feel field supervisors improve crew safety. Curiously, there was little literature to support this opinion except a few statements by Heath (EMS field supervisors, 2003, p. 20) and Heindrichs (Is it time for EMS supervisors? The case for EMS supervisors for Prince William County Department of Fire and Rescue, 2015, pp. 17-18) stating the EMS field supervisor often acts as the incident safety officer.

Ambulances and daily operations will be more efficient being managed by field supervisors. The highest percentage of positive survey responses were in the category of efficiency. Literature also strongly indicate improved efficiency. Andrews (2014, p. 11) says it well when he says, "a lack of defined EMS management structure leads to a crisis-oriented approach that leaves the department without guidance".

The reason for ambulances and EMS agencies is to provide patient care and transport of the sick and injured. Everything we do should be evaluated by "Will this improve patient care and/or transport?" Ninty percent of the surveys returned from EMS agencies with field supervision and 71% of the surveys returned from CMH EMS employees indicate patient care improves with field supervisors. Literature supported these opinions. One example from Culley

(1996, p. 16) is the "sound decisions based on knowledge and experience in areas where there may not always be a concise policy to follow" provided by EMS field supervisors.

The survey responses indicate range of one field supervisor for every six or seven onduty ambulances. This is similar to Heindrichs (2015, p. 21) indication of one field supervisor for every three to seven (with five being "the optimal number") on duty ambulances.

These supervisor shifts should be filled 24-hours per day and seven days per week. Both the survey results and literature agree and neither indicate serious alternatives to this "always on duty" requirement. Multiple references are made to 24/7 supervision by Andrews (2014, p. 3), Health (2003, p. 10), Heindrichs (2015, p. 28). In fact, it was stated that "it is CRITICAL that EMS response be conducted efficiently and effectively at all hours of the day and night" (Andrews, 2014, p. 7).

The organizational implications of these recommendations include benefits that are difficult to measure and costs that are easy to measure. Benefits are those listed above such as improved safety of staff, higher efficiency in ambulance utilization, improved patient care, better ability to manage disasters, and higher employee retention. Inherently, those are difficult to quantify and track. Conversely, the costs are more easily documented such as equipment, vehicle, and personnel budgetary items. Also, ambulance staffing will immediately be affected due to moving senior paramedics and officers from on-duty ambulance shifts to supervisor shifts. It is the opinion of this author after review of other systems, literature, and survey results, the benefits will outweigh the costs and CMH EMS should deploy field supervisors.

Recommendations

The problem is that Citizens Memorial Hospital (CMH) does not have adequate Emergency Medical Services (EMS) field supervision. Recommendations to improve EMS field supervision flow easily from research question number four: How should the identified EMS field supervision elements be implemented at CMH.

Two field supervisors in SUVs should be implements at CMH EMS. This is based on supervisor-to-ambulance ratios provided in the literature, the non-employee survey, and the CMH-employee survey. Factoring in the number of ambulances on duty at CMH, two field supervisors are needed to provide the required span of control. A schedule should be developed to provide supervisor coverage 24-hours a day and seven days a week.

Two SUV-style vehicles should be provided for use by these supervisors with the ability to manage rough terrain and inclement weather. Equipment should also be stocked on these vehicles to include all equipment found on an ALS ambulance with the exception of a cot. Additionally, specialty items such as a ventilator, chest compressor, incident command equipment, tactical equipment, and personnel rehab supplies should be added to these vehicles. Most of this specialty equipment is already owned by CMH but is currently being stored in stations, at headquarters, or in mass casualty trailers.

A draft job description and draft policy with an assignment list have been created to include the duties listed here: Manage daily operations, respond to critical scenes and multiple patient scenes, and perform quality improvement tasks. Some of these duties have been identified as always needing to be completed on all supervisor shift while others can be at the discretion of the supervisor based on other assignments and workload due to other positions they

hold. Refer to Appendix 5 - Draft EMS Field Supervisor Job Description (page 49) and Appendix 6 - Draft EMS Field Supervision Policy (page 52) for details of those documents.

Appendix 1 - Survey tool used for non-CMH employees

EMS Supervisor Vehicle Questions

As part of a research paper assignment, I would like your opinions as they relate to a EMS supervisor chase vehicle (or fly car). Please take a few minutes to answer these brief questions. Your responses will be used as part of a research paper on the benefits and deployment models of EMS supervisor vehicles. Feel free to contact me with questions or requests for results.

Thank you, Theron Becker. < theron.becker@citizensmemorial.com>

How does having an on-duty su situations like violent or bariatri Mark only one oval.	perviso ic patien	r with a its) *	chase	vehicle	effect c	rew safety? (Consider
	1	2	3	4	5	
Supervisor would DECREASE safety	\bigcirc					Supervisor would INCREASE safety
How does having an on-duty su (Consider situations like low sta Mark only one oval.	pervisor affing or	r with a BLS ar	chase v	vehicle ces) *	effect a	mbulance efficiency?
	1	2	3	4	5	
Supervisor would DECREASE efficiency		\bigcirc			\bigcirc	Supervisor would INCREASE efficiency
How does having an on-duty su situations like RSI) * Mark only one oval.	perviso	r with a	chase	vehicle	effect p	atient care? (Consider
	1	2	3	4	5	
Supervisor would DECREASE patient care					\bigcirc	Supervisor would INCREASE patient care
How does having an on-duty su disasters? (Consider situations Mark only one oval.					effect th	ne ability to handle
	1	2	3	4	5	
Supervisor would DECREASE disaster ability						Supervisor would INCREASE disaster ability

			1	2	3	4	5	
	would DECF employee re							Supervisor would INCREASE employer retention
. Comments abo	out the effec	ts of ha	iving ai	n on-du	ty supe	rvisor w	rith a cha	se vehicle:
upervisor o	hase ve	hicle	den	lovm	ent			
nsider your entire					ent			
. How many sim duty at at time considered "si system? *	(maximum)	that are	e not					
B. How many sim with a chase v								
	hifts at loas	t one (1) on-du	ty supe	rvisor (with a ch	nase veh	icle is operated.*
Describe the s Mark only one of	STREET, STATE OF STREET							
	STREET, STATE OF STREET	1	2	3	4	5		
	oval.	1	2	3	4	5	24-hou	rs a day / 7-days a wee
Mark only one o	t any time		0		0			rs a day / 7-days a wee
Mark only one o	t any time		0		0			23/2 3/3/2 3/3/2

at kind of vehicle is used for the on-duty superv	isor?*
None	
Passenger car	
Pickup truck	
suv	
Ambulance	
Other:	
at is the minimum staffing of the on-duty super	risor vehicle? *
One paramedic	
One paramedic and one EMT	
Other:	
en not running calls, describe some other dutie xpected to perform. *	s the staff of the on-duty supervisor vehicle
at k	only one oval. None Passenger car Pickup truck SUV Ambulance Other: is the minimum staffing of the on-duty supervious only one oval. One paramedic One paramedic and one EMT Other:

Appendix 2 - Survey tool used for CMH EMS employees

EMS Supervisor Vehicle Questions for CMH Staff

As part of a research paper assignment, I would like your opinions as they relate to a EMS supervisor chase vehicle (or fly car). Please take a few minutes to answer these brief questions. Your answers will be used not only in a research paper but, if an EMS supervisor vehicle is found to be feasible and worthwhile, also in a proposal to add this vehicle and staff to our deployment model here at CMH EMS.

Thank you, Theron Becker. * Required 1. How would having an on-duty supervisor with a chase vehicle effect crew safety? (Consider situations like violent or bariatric patients) * Mark only one oval. 1 2 3 5 Supervisor would DECREASE Supervisor would **INCREASE** safety 2. How would having an on-duty supervisor with a chase vehicle effect ambulance efficiency? (Consider situations like low staffing or BLS ambulances) * Mark only one oval. 2 3 5 Supervisor would DECREASE Supervisor would efficiency INCREASE efficiency 3. How would having an on-duty supervisor with a chase vehicle effect patient care? (Consider situations like RSI) * Mark only one oval. 2 5 1 3 Supervisor would DECREASE Supervisor would patient care INCREASE patient care 4. How would having an on-duty supervisor with a chase vehicle effect the ability to handle disasters? (Consider situations like mass casualties)* Mark only one oval. 3 4 5 1 2 Supervisor would Supervisor would DECREASE **INCREASE** disaster disaster ability ability

		1	2	3	4	5	
Supervisor would DECRI employee rete		0					Supervisor would INCREASE employer retention
Comments about the effects	s of ha	ving an	on-dut	/ super	visor w	ith a cha	se vehicle:
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Describe the shifts you thin be operated. * Mark only one oval.	n-duty : need?	S (all	sors (1) on-c	COUI	pervisor	r with a o	chase vehicle should rs a day / 7-days a wee

	hat equipment should be stocked on the on-duty supervisor veh	
	_	
	hat kind of vehicle do you think is most appropriate for the on-d	uty supervisor? *
Mark	ark only one oval.	
	None	
	Passenger car	
	Pickup truck	
	SUV	
Ŏ	Ambulance	
	Other:	
12. What	hat should be the minimum staffing of the on-duty supervisor ve	ehicle?*
Mark	ark only one oval.	
	One paramedic	
	One paramedic and one EMT	
	Other:	
13. When	hen not running calls, describe some other duties the staff of th ould be expected to perform. *	e on-duty supervisor vehicle

Appendix 3 - Survey results

Survey question number one asked if having an on-duty supervisor effects crew safety.

71% of the non-CMH respondents indicated it improves safety and 87% of CMH EMS employee respondents indicated it would improve safety. Both groups indicate having an on-duty supervisor improves crew safety.

Survey questions number two asked if having an on-duty supervisor effects ambulance efficiency. 81% of the non-CMH respondents indicated it improves efficiency and 90% of CMH EMS employee respondents indicated it would improve efficiency. Both groups indicate having an on-duty supervisor improves ambulance efficiency.

Survey question number three asked if having an on-duty supervisor effects patient care.

71% of non-CMH respondents indicated it improves patient care and 90% of CMH EMS employee respondents indicated it would improve patient care. Both groups indicate having an on-duty supervisor improves patient care.

Survey question number four asked if having an on-duty supervisor effects the ability to handle disasters. 81% of non-CMH respondents indicated it improves the ability to handle disasters and 83% of CMH EMS employee respondents indicated it would improve the ability to handle disasters. Both groups indicate having an on-duty supervisor improves the ability to handle disasters.

Survey question number five asked if having an on-duty supervisor effects employee retention. 81% of non-CMH respondents indicated it improves employee retention and 60% of CMH EMS employee respondents indicated it would improve employee retention. Both groups indicate having an on-duty supervisor improves employee retention.

Survey question number six asked how many on-duty supervisors are needed. Non-CMH respondents indicated an average of one on-duty supervisor for every 7.6 on-duty ambulances (median of one on-duty supervisor for every 6.5 on-duty ambulances). CMH EMS respondents indicated a need for an average of one on-duty supervisor for every 6.2 ambulances (median of one on-duty supervisor for every 4.5 on-duty ambulances). The effect for CMH EMS with nine on-duty ambulances is the non-CMH employee group thinks 1.1 to 1.7 on-duty supervisors are required, and the CMH EMS employee group thinks 1.0 to 1.7 on-duty supervisors are required.

Survey question number seven asked what shifts should a supervisor be on-duty. 82% of non-CMH respondents indicated 24-hours per day / 7-days per week. 83% of CMH EMS respondents indicated 24-hours per day / 7-days per week. Both groups indicate the supervisor should be on duty 24-hours per day / 7-days per week.

Survey question number eight asked what kind of vehicle should be used as a supervisor vehicle. The non-CMH respondent group was split between SUV, pickup truck, and passenger car with 59% of the responses indicating SUV. The CMH EMS respondent group was overwhelming in the SUV category at 93% of the responses.

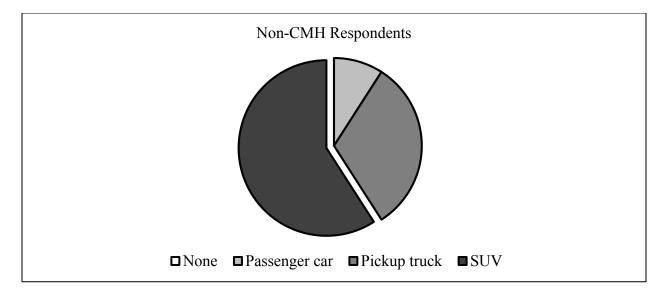


Figure 1 - Non-CMH responses to EMS supervisor vehicle type question.

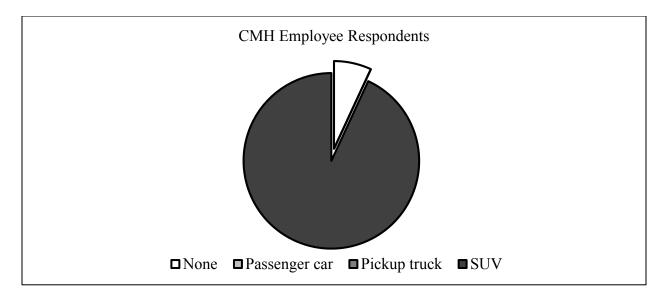


Figure 2 - CMH Employee responses to EMS supervisor vehicle type question.

Survey question number nine asked what staffing the EMS supervisor vehicle should have. The non-CMH respondent group overwhelmingly indicated that the EMS supervisor vehicle should be staffed with one paramedic with 100% of the responses. The CMH respondent group also indicated one paramedic with 83% of responses.

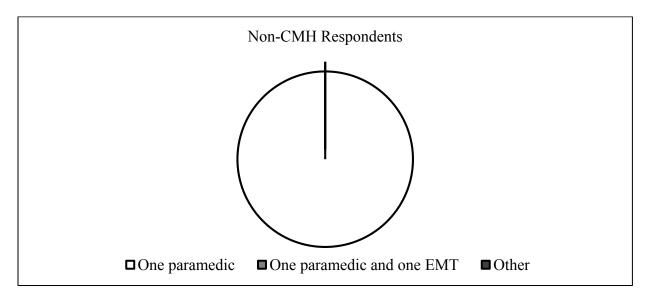


Figure 3 - Non-CMH responses to EMS vehicle staffing question.

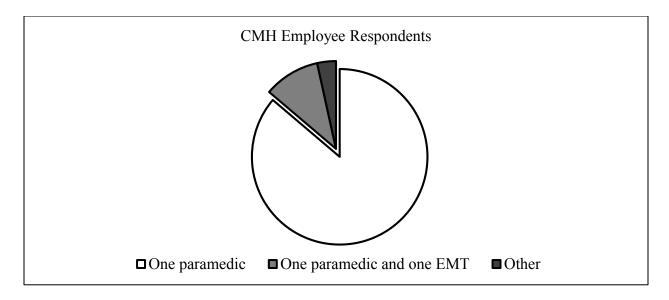


Figure 4 - CMH Employee responses to EMS vehicle staffing question.

The remaining survey questions were open-ended asking for narratives or short answers.

The full transcript of all responses can be found in Appendix 4 - Survey response comments (page 41).

Survey question number ten asked for comments about the effects of having an on-duty supervisor with a chase vehicle. Only a few negative effects were mentioned relating to staffing of ambulances being used for supervisor vehicle and the personnel friction caused by being supervised. A large number of positive effects were mentioned relating to assistance on critical calls, assisting staff to improve retention, and improving patient care. The following word clouds illustrate most commonly used words in those responses.



Figure 5 - Effects of supervisor vehicle (all responses).

Survey question number 11 asked for comments about what kind of emergency calls the on-duty supervisor vehicle should be expected to respond to. The vast majority of the responses included references to critical calls and severe patient conditions. The next most common theme of the responses involved support at the scene where there was more than one patient and supervisor assistance is needed. There were also a number of responses citing the need for field management of personnel from coordination of agencies to requesting resources to observe and monitor staff. Both groups of respondents had several responses that included the need for a supervisor vehicle to support BLS ambulances. The following word clouds illustrate most commonly used words in those responses.



Figure 6 - Emergency call types (all responses).

Survey question number 12 asked for comments about what equipment should be stocked on the on-duty supervisor vehicle. Almost every response indicated something similar to the same supplies should be carried on the supervisor vehicle as what is carried on an ambulance minus the cot. Additionally, many responses included specialty equipment should be added such as chest compressor, incident command equipment, tactical equipment, and personnel rehab supplies. Only a couple responses indicated minimal equipment such as just first response supplies and an AED. The following word clouds illustrate most commonly used words in those responses.



Figure 7 - Supervisor vehicle equipment (all responses).

Survey question number 13 asked for comments about what duties the staff on the onduty supervisor vehicle should be expected to perform when not running calls. The number one
response included in almost all comments to this question involved managing daily operations
which includes, as one respondent put it, everything that is needed to keep ambulances available
to run calls. The next most common response included statements about quality improvement
duties. In the responses from CMH employees, there were multiple comments that the current
operations managers and leadership team have "enough to do" and should not be asked to do
anything extra when they are staffing the supervisor vehicle. The following word clouds
illustrate most commonly used words in those responses.



Figure 8 - Supervisor duties (all responses).

Appendix 4 - Survey response comments

Comments about the effects of having an on-duty supervisor with a chase vehicle (non-

CMH respondents):

- On-duty supervisors are completely different from having a chase vehicle/fly car. Honestly I feel that it creates "white shirt syndrome" and overall has a negative effect. It takes a very special and talented supervisor or director to make these units work in smaller settings.
- An on-duty EMS supervisor provides several opportunities to serve as a barrier between the crew and bystanders, and available to perform specific skills due to more experience
- Status system management, and dealing with any issue on the spot reduces stress to the system as well as improves patient care
- It's nice
- If using ssm, the fly car can also fill in time gaps and respond to scenes and start patient care, while waiting on an ambulance during high call volume times.
- We have used an intermittent quasi supervisor vehicle that responds when the Director is available for 8 years and I firmly believe it meets all of the criteria you surveyed.
- Supervisor rolls on all cardiac arrest, RSI, MVC pin-in or subject trapped, bariatric and whatever else they deem extra help is needed.
- An on Duty supervisor who responds to calls in only truly needed in instances where the NIMS is being put into place or where additional hand is needed and no other unit i available.
- It can help your system when needed if properly supervised by the higher beings. Not all supervisors should be supervisors if you ask me. Some times supervisors are not up to date with current standards as the grunts. Can cause friction.



Figure 9 - Non-CMH responses to effects of supervisor vehicle.



Figure 10 - CMH employee responses to effects of supervisor vehicle.

Comments about the effects of having an on-duty supervisor with a chase vehicle (CMH employee respondents):

- I think it would help RSI more if we had two vehicles for the service area, lot of miles to cover with one vehicle. Retention would be better if were able to allow some of the paramedics to rotate in and out of that vehicle
- It's hard enough to staff the ambulances let alone losing a supervisor for a chase vehicle
- It works in some cases but if you get a sup chase car on codes or rsi then the chase car is left onscene while the sup rides along then you have to worry about vandalism. Plus sups work the truck currently so would they come off the truck to work the chase car and now have to increase already short staff issues?
- Many of the things discussed above increases safety and efficiency in continuity of patient care. Main caveat would be the Supervisor in that position would need the authority to make decisions based on the situations.
- I believe that having an on-duty supervisor would be good in many situations, especially for younger or newer Paramedics in helping make sound decisions for patients. There may be some friction caused with more experienced Paramedics in that having too many opinions can cause problems on a scene. However being able to call for assistance when needed would certainly enhance patient care even in situations where we had to wait for them to arrive from distance.
- I believe having an on duty supervisor with a chase vehicle improve employee burnout rates.
- I think it would most likely be used for aiding in high risk procedures and events.
- in my opinion it only increases the quality and availability of patient care. It is a needed necessity
- helps with critical calls where a extra person could help
- Utilizing a Supervisor Chase vehicle will allow the service to use the BLS truck on many more calls (such as falls w/o loss of consciousness) and assist with keeping an ALS truck in service/available in the county more often. In addition, having a Supervisor vehicle, paramedics who have critical/intubation/RSI calls to have an extra set of ALS trained hands to be available. This could help our patients mortality rate as well.
- If we had a sufficient staffing of EMTs for BLS trucks, I feel like it would help with the shortage/overworking of Paramedics, while still providing support needed for the overall outcome of our patients.. which is why we are here.
- Several EMS organizations in our area have this and yes we don't want to do it cause THEY have it, but because its the right thing to do to help with patient care, giving that crew an extra set of hands on those time critical patients.
- I feel some medics think they are Para gods would not like this due to they don't want someone looking over there shoulders, but it would be a great idea due to some of those medics really need someone looking over there shoulder.
- It would be nice to have the extra help when needed.
- I like the idea of having an on duty supervisor, someone to maintain balance esp. during the night shifts when crews tend to take advantage of the lack of supervision. Also, having a night supervisor with a chase car would be beneficial with helping with big calls such as a MVA with multiple and /or critical patients as well as diffusing situations with nursing home staff or answering questions on legalities, etc. Having an on duty fly car would be ideal in dealing with MCIs as that fly car should be stocked in such a manner in which the ambulances can restock or draw from the supplies. Also, the supervisor on that fly car should have at least 10 years experience in EMS as well as being a CMH employee for at least 5 years. This position should be a position awarded to employees who have put in their time and know the answers to questions and patient care situations without having to consult a manager or administration. I feel that during the day the Polk County Manager should have the fly car while at night we have a supervisor in that car.
- with the low amounts of first responders, it would be helpful to have someone to be able to respond in the event that we are working a cardiac arrest, major trauma, or other event that two people are inadequate to handle.

Comments about what kind of emergency calls should the supervisor vehicle be expected

to respond to (non-CMH respondents):

- All types of calls dependent upon the location of the call vs the supervisor's location
- Violent incidents, i.e., gunshot, stabbing, etc.; ; MCI; cardiac arrests; etc.
- Varied
- Multi casualty, multi agency, or acute emergency
- Interstate calls, shootings, violent patients
- Motor Vehicle Incidents cardiac arrest MCI
- Supervisor choice
- Life threats
- Alk but minor calls
- Some Delta responses and all Echo responses
- High risk, MVC, Multi-patient, cardiac arrest, RSI, industrial, imminent delivery, unconscious, TCD patients, anytime closer than ambulance for emergent calls.
- Cardiac arrest, overdoses, traffic accidents, any bls calls that could need als intervention if to far away from the nearest hospital
- When requested
- Critical calls
- Cardiac arrest, pediatric, some delta calls
- Codes, MVA, lifting, when requesting mutual aid, when an executive decision is needed, drownings, any call needing air medical support, safety issues, multiple patients, field observation of personnel when needed. No set protocol since the supervisor vehicle is an as available option.
- Cardiac arrest, RSI, pin-in / entrapment, bariatric, lack of ALS units and BLS is dispatched.
- Codes, burns, GSW, all trauma, chest pain/diff breathing that comes in as ""high acuity""
- Discretion of supervisor. Mostly cat1 calls
- Anything they feel like
- Any thing they wish. Not required to respond.

Comments about what kind of emergency calls should the supervisor vehicle be expected

to respond to (CMH employee respondents):

- All RSI and echo-level calls
- I think they should run to echo, start to most traumas, and mass casualty... or when a crew requests
- None
- Codes rsi behavioral mass casualty
- All priority 1 and 2 ecalls
- All Priority 1, and as needed for lesser calls.
- Codes, MCI, Disaster, Multi-vehicle MVA, Any younger child or infant injury or code.
- any echo level call. any charlie and above call that the BLS car is dispatched to. Any call where an Incident Command is activated. Last but not least, any call where an extra set of medically trained hands on a call would be beneficial.
- All cardiac arrest, all major trauma
- Dont need one
- ALS intercept
- All critical calls (9Echos, severe resp, CVAs, etc), BLS and lift support, all MVA's, and just as importantly
 any calls he/she wants to respond to. It's difficult to evaluate co-workers on an annual basis without seeing
 how the they work and interact other than at the station or from the perspective of usually just one partner
- All echo calls. MVC with multiple patients. Any scene where ambulance response will be delayed. Any shooting or stabbing call where scene security could use another set of eyes.
- any priority 1 and all MVA, MCI and Codes
- all high priority calls
- cardiac, trauma, strokes, rsi
- MCI, MVA, Falls, Cardiac Arrest
- Unresponsive, Trauma, Violence, Possible Cardiac, etc.
- Codes, rsi, mass casualty, resp. distress any als call that a bls crew is responding to that indicates an ALS provider is needed
- Some Delta calls but all Eco calls for sure, but it would be up to the Mgr on duty to evaluate this and use their years of experience to decide.
- some Delta and all Echo calls and MCI's and Hazmat
- all e calls
- All MVA's with injuries, high profile incidents, cardiac arrests, priority response by BLS
- Car Wreck Roll over with entrapment, all codes, any calls the BLS truck takes as ALS is not available.
- Any life or limb threats
- During the day the fly car should respond to calls with the BLS car when all other cars are out on calls. During the night that car should only be utilitized as a back up (i.e. both trucks are out on calls and the fly car is 1st responding and waiting for a county truck to arrive to transport.) This car should not be in the call rotation.
- Any call where additional manpower or specialized equipment is needed
- Those call determined by the Supervisor that have the potential to need back up. Also to respond to observe for QI purpose.
- All MVC Chest pain difficulty/shortness of breath possible lower extremities fractures hip/pelvis fractures - Obstetrics -
- major wrecks

Comments about what equipment should be stocked on the on-duty supervisor vehicle

(non-CMH respondents):

- Monitor, first in bag, mechanical compression, extra restocking supplies
- Same ALS equipment as on the ambulances
- Cardiac monitor, as bag and oxygen. Trauma bag
- Full ALS gear, some supplies for replenishment, multi hazard response gear
- Same as ambulance
- Full Advanced Life Support ""jump"" bags minor extrication tools, MCI gear w/communications, incident rehab
- ALS
- first line drugs and aed capable of displaying a rhythm
- Same as ambo
- Full ALS equipment with limited narcotics
- Full ALS bag w/meds, IO, intubation, RSI, LP15, MCI supplies, ICS supplies, PPE w/helmet and extrication jacket, Binder Lift, restocking supplies.
- Narcs, first line drugs, lifepak autopulse, pretty much everything that is on the truck
- Jump bag/O2 Monitor
- ALS
- Handtevy pediatric system, lifepack, med bag, rope bag, med/trauma bag, bariatric wings, extra supplies to restock units.
- Everything that is in the ambulance sans narcotics.
- Full trauma bag, peiatric bag, full array of medications, controlled meds, Zoll X, Lucas 2, suction, MCI IC, CAD laptop, digital camera.
- Everything that's on an ambulance minus the stretcher
- Identical to ambulance bags
- Jump bag, Hazmat clean up, traffic control
- LifePak, ALS equipment, Narcs, suctions. Most everything minus a cot.

Comments about what equipment should be stocked on the on-duty supervisor vehicle

(CMH employee respondents):

- Same as ambulance but less quantity in addition to specialty items like ventilator and chest compressor.
- really do not need any moving the patient type equipment, but monitor, bags, oxygen, narcs and RSI bag
- None
- Als gear
- Full als minus stretcher possibly a lucas
- BLS/ALS
- Back-up medications, scoop stretcher, extra equipment as necessary
- Incident Command Materials so that supervisor could function as EMS Branch officer or even Incident commander. as much ALS and First response equipment as could be fit into a vehicle, up to transport of a patient.
- All equipment expect backboard
- Dont need one
- Lucas device
- STAT pack same set up as ambulances, minimal critical restock supplies, O2, monitor
- ALS bag, Narcs, RSI drugs, some meds from extra Medication box deamed necessary by Dr. Carter. Suction, vent, Ped bag, triage equipment,
- same equipment as the ambulance so if there is a delayed response time the supervisor can initiate the best care with the proper equipment
- Red Bag, RSI Kit, O2, SMR Bag and possibly a Backboard
- monitor, jump bag,
- Monitor, IV starts, SMR, Pediatric, RSI/Intubation
- IV supplies, monitors with all accessories, restraints, medications, RSI/Airway, OB, smaller amounts of normal supplies, Triage supplies
- Scale down version of supplies on ambulance, lp15, suction, Thomas pack fully stocked
- Monitor, O2 bag, Trauma Bag, Suction Unit, C-Collar Bag, Radio (mobile, portable) Flashlight (rechargeable), Map Book, First line drug box. (NO NARCS),
- Garmin, IV bag.
- monitor, airway bag, large red bag, blue bag, iv bag, drug bag but no narcs.
- should be stocked similar to a ambulance
- Large bag, pediatric bag, airway bag, trauma bag, cardiac monitor, RSI kit, narc box
- lifepack,red bag, code drugs, narcs and rsi drugs
- Narcs, RSI drugs, Monitor ICS equipment
- everything except a stair chair and stretcher. As well as 1 extra fully stocked/sealed red bag and narcs, RSI kit so that crew can swap out and not go out of service.
- jump bag, RSI kit, Lucas 2, ventilator
- LP-15, ALS and BLS pack. portable suction. SMR equipment, MCI supplies, EMS Command post supplies.
 EMS tactical protective equipment
- Narcotics for pain control. h20 for long term scenes. extra O2 portable tank.
- This vehicle should travel lightly. all other ALS equipment should remain on ambulances.
- every thing als do be able to RSI and CPR

Comments about what other duties the on-duty supervisor should be expected to perform

when not running calls (non-CMH respondents):

- Everything that keeps units posted and available
- Percepting; QA/QI; training, etc.
- Do ermine what crew goes on what transfer, going over reports, doing employee performance reviews
- Handles system management, all administrative duties
- Paperwork
- Deliver supplies, collect paperwork from outlying stations, QI,
- Staffing and admin
- resources for the crew
- Paperwork staffing day to day ops
- PCR review, stock management, QI review, crew training.
- Employee supervision, operational supervision, restocking, special projects
- Staffing, stocking narcs of the trucks, anything else that needs addressed during the shift
- Miscellaneous
- Incident investigation, crew moral, visiting with crews, training crews, inventory and other administrative objectives
- Administrative
- Vehicle maintenance tracking, special-teams management, operational IT management, equipment, supply tracking & ordering, Personnel management, personnel evaluations and reprimands, decisions on specially transports, Maintenance requests, substation inspection and resupply.
- Supervision
- Errands and restock
- chart review, supply ordering, employee evaluation, agency interoperation
- Day to day management of company needs. Narcotic count, Complaints/atta boys, filling open shifts and managing call ins. Truck maintenance.... Sleeping, matching TV

Comments about what other duties the on-duty supervisor should be expected to perform

when not running calls (CMH employee respondents):

- quality improvement, vehicle maintenance
- manager office work, inventory, ordering supplies, rounding, meet for huddles just to name a few
- None lets staff the ambulance shifts we have before we get a chase vehicle !!!!!!
- General office duties
- Operations Manager/overall system management
- Supplies/Equipment movements
- Checking stations for maintenance issues. Helping maintain quality issues such as report writing, pt care issues, developing community relations. assuring staffing issues are being addressed. Any necessary administrative duties assigned are being handled efficiently and promptly.
- rounding, supervision in the station, going on low priorty calls for observation of crews. QI/QA. other administrative duties as assigned.
- Employee evaluations, rounding, equipment, and drug ordering.
- The easy answer is QA, stock ordering, office duties....but having a supervisor on 24/7 would decrease crews not taking care of station or ambulance duties. This is/has become a large problem
- Any duties they would normally perform; each person in leadership would still focus on their area (Health and Safety, technology, etc.) and monitor all county radio traffic. Chart review.
- visiting stations in each county, helping with everyday duties.
- there normal duty's at base station
- station duties, office, interviews, rounding.
- Chart Reviews, Medication Stock Levels, Daily Chores (ensuring they are getting done), Truck Maintenance (keeping track of what needs to be taken care of/repaired), Staffing for upcoming open shifts
- Review of factors involving quality improvement.. training?
- Fill shifts, cleaning of ambulances, anything else that an Ops managers assigns.
- If its the Ops Mgr they have enough to do to fill there day, if its someone else QA trips tickets. due to missing the boat in this area.
- QA ePCR
- Making sure all staff have all equipment and supplies they need
- Ordering supplies, rounding with employees, OI reports
- Public relations events, making runs for medications, office work
- Supervisor roles (office work) PR events
- I believe the Polk County Manager has enough on his plate that he can tend to his other duties. As far as the overnight supervisor this person should be responsible for cleaning all the ambulances weekly, ensuring the cleaniness of the station, etc.
- they should be available to handle the duties that are currently being taken care of by the on duty manager, fill in shifts when a staff member has to leave, etc.
- supervise operations, supervise the base, approve PCS forms, QI Charts, be a liaisons between PHS and billing and coding. Assist Director, and education coordinator with clerical work.
- "operation Managers" do not need any more to do.
- Supervisors/Staff Paramedics while not operating the vehicle can, QA trip tickets, Research new equipment, review policies & protocols with new hires.
- performance reviews with staff EMT-P.
- The use of Staff EMT as on duty supervisor can be used as an incident commander/communications on any multi casualty scenario. They can be used if a family emergency arises & an EMT needs to leave shift. An EMT supervisor can field the EMT questions concerns performance reviews protocols pertaining to staff BLS. QA trip tickets. Help with researching new equipment.
- The Basics of EMS is working as a team to provide not only Advanced services to a patient but also to provide basic EMS practices. In this adrenaline filled career you need the a Strong ground floor & commitment to every ems provider basic/intermediate/ advanced.
- Making sure everthing is being taking care of at the station and with personal

Appendix 5 - Draft EMS Field Supervisor Job Description

Reports to: EMS County Manager

Supervises: Paramedics, RNs, and EMTs

Education and training required: Same as Paramedic plus the following:

• NIMS 300

• Preferred National Fire Academy (course 147) EMS Operations

<u>Licensure and certification required</u>: Same as Paramedic

<u>Life support certifications required</u>: Same as Paramedic

Experience required: Same as Paramedic plus the following:

- Three years ambulance-based paramedic experience
- Two years CMH EMS experience

Job summary: Percent of schedule time on ambulance: 90%. Serves as the supervisor of equipment and personnel of the assigned station(s) and/or shift(s). Primarily responsible for managing daily operations, responding to critical scenes and multiple patient scenes, and performing quality improvement tasks. Also responsible for maintaining facilities, vehicles, and equipment at the assigned station(s) and/or shift(s). A supervisor's primary role is to provide first-line supervision to on-duty paramedics, RNs, and EMTs and manage small projects around his/her assigned station(s). The supervisor responds to routine emergencies (i.e., multiple patient incidents or echo-level calls) and serves as the initial incident commander or EMS branch director. In a disaster, the supervisor responds to staging or assigned station(s) to supervise operational activities. Serves as a role model displaying an approachable, nonjudgmental attitude. Maintains a professional behavior and behaves in a manner consistent with the mission, vision, and values of CMH. Performs other duties as requested.

Job specifics/responsibilities:

- Budget: Implement and adhere to department budget.
- Buildings: Clean buildings according to policy while on duty.
- Buildings: Maintain buildings and grounds according to policy while on duty.
- Communicate with dispatchers via radio and telephone while responding, on scene, and transporting.
- Communicate with first responders via radio and in person while responding, on scene, and transporting.
- Communicate with on-coming and off-going crews to provide and receive information about station, vehicle, and community status.
- Communicate with patients to perform a thorough assessment, inform them of treatment options, and alleviate their fears.
- Communicate with peers and partners.
- Communicate with students to facilitate their learning.
- Communicate with subordinates through email, messaging, phone, radio, and in person.
- Communicate with supervisors through email, messaging, phone, radio, and in person.
- Documentation EPCR: Complete patient care reports on provided computer equipment for each run number issued to you. EPCRs are to be completed before the end of your shift.
- Documentation EPCR: Learn how to successfully utilize patient care reports.

- Documentation Miscellaneous forms: Complete forms as necessary and required by supervisors, policies, and/or procedures. Forms may be paper, electronic, or another format.
- Documentation Miscellaneous forms: Develop forms as necessary to track actions or events
- Documentation Miscellaneous forms: Implement and support department form completion through staff education and enforcement.
- Documentation Miscellaneous forms: Learn how to utilize department forms successfully.
- Documentation Training: Implement and support training records collection and maintenance.
- Documentation Training: Learn how to utilize training records successfully.
- Education CEUs: Assist in instructing CEU classes.
- Education CEUs: Attend CEU classes as required to maintain your licensure.
- Education Competencies: Assist in delivering competencies at your assigned station to ensure all personnel has the opportunity to attend.
- Education Competencies: Successfully complete at least 90% of required competencies each year (usually five competencies per year).
- Education EMS Academy: Assist in instructing modules for EMS Academy.
- Education FTO class: Successfully complete FTO class annually.
- Education Hazmat class: Assist in instructing annual hazmat operations class as needed.
- Education Hazmat class: Successfully complete hazmat operations class annually.
- Education New hire orientation: Assist in instructing new hires according to the current orientation packet to ensure their success as an employee.
- Education On-ambulance students: Ensure the success of students riding with you. Teach them tricks of the trade and encourage their growth and love of the job.
- Education Paramedic class: Assist in instructing modules of paramedic class, as needed.
- Education Refresher class: Assist in instructing modules of refresher class, as needed.
- Education Safety class: Assist in instructing a safety class for employees.
- Education Technical rescue class: Assist in instructing technical rescue classes as needed.
- Education Technology classes: Assist in instructing technology classes to employees as needed.
- Equipment: Clean all ambulance and station equipment according to policy.
- Equipment: Ensure the proper operation of equipment at the beginning of each shift.
- Equipment: Learn the locations of equipment and how to operate equipment safely, properly, and efficiently.
- Equipment: Maintain equipment as needed. Maintenance may include preventative measures according to manufacturer recommendations and policies or may include contacting other departments for maintenance or repair.
- Equipment: Operate all equipment in a safe and proper manner.
- Leadership: Assist with employee coaching.
- Leadership: Be a role model.
- Leadership: In the absence of employee's direct supervisor, take a leadership role over paramedics, RNs, and EMTs.

- Leadership: When the situation and circumstances arise, be prepared to successfully serve as a member of the command or general staff on emergency scenes. This may include incident commander or other role assigned by the incident commander.
- Leadership: "I expect you to lead at the upper levels of your knowledge, skill, and authority. Be a teammate. What's good for the team has priority over what is good for you. Demonstrate professionalism in all that you do. Be sharp, look sharp. Teach coach, guide, and mentor your force, but do not claim experience you don't have. Never sacrifice what you know is right for what is convenient or expedient. Live the life of a leader one of value, charter, courage, and commitment. What you do and what you tolerate in your presence best demonstrates your standard. Empower your subordinate's leaders to work at the full level of their authority. Encourage your subordinate's leaders: train them, trust them, and hold them to standard. Remember the prime measure of your performance is the performance of your men." --Rear Admiral Eric Olson NSWC
- Meetings: Assist in facilitating EMS staff meetings.
- Meetings: Attend EMS staff meetings as available.
- Meetings: Attend the monthly quality review meetings.
- Patient care: Function as a team leader on the scene and during transport of ill and injured patients.
- Patient care: Provide safe, exceptional, and compassionate care following ALS protocols and medical direction.
- Patient care: Provide safe, exceptional, and compassionate care following BLS protocols.
- Policies and procedures: Follow applicable EMS department and hospital policies and procedures.
- Policies and procedures: Implement and enforce EMS department and hospital policies and procedures.
- Policies and procedures: Learn all applicable EMS department and hospital policies and procedures.
- Policies and procedures: Maintain EMS department policies and procedure documents.
- Program FTO: Assist in implementing the field training officer program for the EMS department to facilitate educating new hires, students, and job shadows.
- Program Hazmat: Assist in implementing the hazardous materials education and response program for the EMS department.
- Program Quality: Participate in the quality improvement, quality assurance, and performance improvement program as applicable.
- Protocols: Learn the EMS department medical and trauma protocols.
- Protocols: Utilize EMS protocols appropriately and effectively.
- Vehicles: Clean the vehicle you are assigned according to policy at the end of every shift or as needed.
- Vehicles: Ensure the proper operation of the vehicle you are assigned for your shift.
- Vehicles: Operate vehicles in a safe and legal manner at all times.
- In the absence of your supervisor, performs your supervisor's duties as needed.
- Performs other duties as assigned.

Appendix 6 - Draft EMS Field Supervision Policy

Policy: EMS Field Supervision

<u>Purpose</u>: To establish standards and procedures for EMS field supervisors.

Procedure:

- 1. At least one EMS field supervisor should be on duty 24-hours a day and seven days a week.
 - a. Preferred to have two EMS field supervisors on duty 24-hours a day and seven days a week.
 - b. Twelve-hour shifts are preferred. Shifts should be developed to avoid more than 14 hours of continuous work without five hours of uninterrupted sleep.
- 2. Field supervisors should maintain situational awareness of the entire service area and neighboring jurisdictions as best as possible.
 - a. If only one field supervisor is on duty, all applicable radio channels should be scanned, EMResource should be monitored, and fleet tracking software should be monitored.
 - b. All appropriate dispatch centers shall be notified of the field supervisor currently on duty and best method of contact.
 - c. If two field supervisors are on duty, the jurisdiction and neighboring jurisdictions should be divided into Northern and Southern areas.
 - i. The northern area is comprised of Hickory and St Clair counties with neighboring counties of Bates, Henry, Benton, and Camden.
 - ii. The southern area is comprised of Polk and Cedar counties with neighboring counties of Dallas, Greene, Dade, Barton, and Vernon.
- 3. Field supervisors should be issued a supervisor vehicle while on duty. This vehicle should be equipped to fulfill the requirements of responding to critical incidents and mass casualty incidents during all weather conditions.
 - a. The field supervisor shall use his/her judgment to decide which calls require supervisor assistance. In general, all calls with multiple patients and all echo-level calls should be responded to, if able. Additional calls may include (but not limited to) BLS calls requesting ALS assistance, patients requiring RSI, ...
- 4. Field supervisors that do not have other assignments according to their other positions shall complete the following assignments as available:
 - a. Respond to emergencies in the community as described above. When responding as a resource to crews on scene, do not take control of the scene unless requested or obviously needed. EMTs and paramedics are trained to work independently, and the supervisor should be a resource available to them.
 - b. Ensure the well-being and safety of personnel.
 - c. Ensure policies and procedures are followed.
 - d. Train and develop paramedics, RNs, and EMTs.
 - e. Review patient care reports and directly observe patient care to ensure quality.
 - f. Serve as the liaison between CMH EMS and other agencies and departments of the hospital.
 - g. Resolve conflicts and complaints at the lowest organizational level applicable.

5. Employees eligible to fill field supervisor positions include all paramedics that meet the job description minimum qualifications and those specifically identified by the team of managers and the director of the department.

References

- Andrews, J. N. (2014). *EMS management strategy*. Cedar Rapids Fire Department. Emmitsburg, MD: National Fire Academy.
- Brophy, J. R. (2010). *Leadership essentials for emergency medical services*. Sudbury, MA: Jones and Bartlett Publishers, LLC.
- Culley, D. R. (1996, October-November). What makes a good EMS supervisor? *Canadian Emergency News*, 16-17.
- Dick, T. (1989, September). EMS field supervisors' survey. JEMS, 107-108.
- Heath, N. (2003). *EMS field supervisors*. Lynchburg Fire and EMS. Emmitsburg, MD: National Fire Academy.
- Heindrichs, K. (2015). *Is it time for EMS supervisors? The case for EMS supervisors for Prince William County Department of Fire and Rescue.* Prince William County Department of Fire and Rescue. Emmitsburg, MD: National Fire Academy.
- Jaillet, W. J. (1982, November). Personnel management skills for the EMS supervisor. *Fire Engineering*, 35-39.