STATE OF MICHIGAN

IN THE SUPREME COURT

CALEB GRIFFIN,

Plaintiff-Appellant

Supreme Court No: 159205
COA No.: 340480
CC No.: 14-103977-NI

v.

SWARTZ AMBULANCE SERVICE,

Defendant-Appellee,

and

SARAH ELIZABETH AURAND

Defendant.

BRIEF AMICUS CURIAE OF MICHIGAN ASSOCIATION OF AMBULANCE SERVICES

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STATEMENT OF QUESTION PRESENTED

Does the Emergency Medical Services Act—which protects emergency medical services providers from liability for all but gross negligence or willful misconduct when engaging in the treatment of a patient—apply when an EMT or ambulance company is engaging in their core societal function: rapid transport of patients with serious medical conditions to the hospital where they can receive necessary, and even life-saving, medical care?

STATEMENT OF INTEREST OF AMICUS CURIAE[1]

Amicus Curiae Michigan Association of Ambulance Services ("MAAS") is an association of Michigan ambulance and emergency medical services providers created to develop and promote a code of ethics for ambulance services, develop and promote high standards of patient care and assurance of quality in pre-hospital care and to initiate, sponsor, and promote educational programs and research in the ambulance industry, as well as health care and safety in the state of Michigan, among other purposes.[2]

Additionally, as a statutorily recognized member of the State of Michigan Emergency Medical Services Committee ("EMSCC"),[3] MAAS's three voting members

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[1] Pursuant to MCR 7.312(H)(4), Amicus Curiae state that neither party's counsel authored this brief in whole or in part, nor contributed money that was intended to fund the preparation or submission of the brief. Further, no person other than the amicus curiae has contributed money intended to fund the preparation and submission of this brief.

[2] https://cdn.ymaws.com/www.miambulance.org/resource/resmgr/Current_Bylaws_With_December.pdf

[3] The EMSCC was created in the department to provide for the coordination and exchange of information on emergency medical services programs and services, make recommendations to the department in the development of a comprehensive statewide emergency medical services program, advise the legislature and the department on matters concerning emergency medical services throughout the state. MCL 333.20915 & MCL 333.20916.

make recommendations to the Michigan Department of Health and Human Services ("MDHHS" or "the department") and advise the legislature on matters concerning emergency medical services throughout the state, including advising the department concerning vehicle standards for ambulances. MCL 333.20916(h).

STATEMENT OF FACTS

Introduction

Plaintiff is correct when he notes that "[t]his suit arises out of a motor vehicle collision," but he begins with the wrong accident (Plt.'s Supp. Br. at 1). Plaintiff was a passenger in a car on US-23 at 1:00 in the morning, when the car rolled over. As a result, one of defendant Swartz Ambulance Service's ambulances and two EMTs raced to the scene with lights and sirens to provide emergency aid. Plaintiff presented with a serious knee deformity requiring prompt medical attention. In other words, Plaintiff had a medical emergency and needed the specific help ambulances are designed to provide. So, off the three went to the hospital in an ambulance without lights and siren, but at a good pace to get plaintiff the care he so desperately needed. Unfortunately, while *en route* to the hospital, the ambulance and another vehicle collided. A second ambulance arrived and finished transporting plaintiff to the hospital. Plaintiff then sued Swartz Ambulance Service for the alleged negligence of its EMT who was driving the ambulance.

Under a plain reading of the Emergency Medical Services Act as a whole, defendant Swartz Ambulance Service is not liable for the regular negligence plaintiff alleges—negligent driving while transporting a patient to the hospital. That Act gives broad immunity to emergency medical services providers for all but gross negligence or willful misconduct while they are providing services to a patient outside of a hospital, or "in the treatment of a patient." Patient transport is a core function of ambulances and it is

integral in the treatment of a patient—indeed, in many cases, the expeditious transport of a patient to the hospital is absolutely essential to that patient's chances of survival.

In addition to the plain statutory text, defendant's position (and that of the Court of Appeals majority below) finds support in the public policy of this state. Ambulance providers serve vital societal interests when providing both treatment and ambulance transports to and from the hospital—roles that they are uniquely trained and certified to do, and which come with inherent risks that the Legislature has chosen to protect them against. It is not an exaggeration to say that expeditious transport of patients to the hospital saves thousands of lives a year, and losing even a moment or two on each run because the emergency medical services professionals now need to worry about increased threats of liability and lawsuit will lead to additional deaths. Furthermore, the EMS industry already notes very high levels of job stress among its professionals, leading to high rates of dropout. An increase in litigation and liability will surely only exacerbate these problems. This Court should affirm the Legislature's intent and longstanding precedent protecting EMS professionals from the unnecessary risk of liability while performing their inherently risky profession. Such a decision would neither exacerbate the problems the industry currently faces nor risk distracting EMS professionals from their frenzied and important medical functions.

Background

Although the factual record in this case is well developed, from the perspective of this Amicus, the party briefing fails to adequately focus on the first accident. Therefore, in an attempt to remedy that failing, MAAS would bring the following facts to this Court's attention.

In the first accident on October 7, 2012, a significant roll-over, plaintiff Caleb Griffin ("Griffin") sustained a dislocated knee with an obvious deformity that those on the scene recognized as requiring "*immediate medical attention*," because the injury was the type which could affect blood supply to the lower extremity (Pltf First Amd Compl, ¶8, Lower Court Record (emphasis added)). Swartz Ambulance Service ("Swartz Ambulance") dispatched an Advanced Life Support ("ALS") unit on a "Tier 1"[4] basis and responded with lights and sirens to the scene of the accident.

Swartz Ambulance EMT-Paramedic Gregory LaPointe and EMT-Basic Mary Shifter placed Griffin on a back board, administered a cervical collar for spinal-injury precaution, and then secured their patient on the stretcher for ambulance transport by applying a five-point restraint system consisting of three straps across the patient and two shoulder straps on the cot. The patient's leg was then "Pillow Splinted" in a position of comfort for transport to the hospital. (Apx F, Patient Care Record, p 1; see also, Apx H, pp 34-49, Paramedic LaPointe Deposition.)[5] The Advanced Life Support crew performed several medical procedures both at the scene and during transport, including an ALS Assessment, Spinal Immobilization, Vital Sign Assessment, cardiac monitoring, Pulse Oximetry, IV Access with Intravenous administration of medications (Normal Saline,

[4] A "Tier 1" dispatch is also at times referred to in the record as a "Priority 1" response with lights and siren. It is considered the highest level of emergency medical response, reserved for life-threatening medical emergencies (Apx F).

[5] We reference Defendant's Appendices A–I throughout. All new Appendices, referred to for the first time in this Amicus Brief, start at Appendix 1 and continue through Appendix 8.

Morphine & Zofran), and a neurological assessment (Apx F, PCR, pp 3-6; Apx H, LaPointe Dep, pp 34-49).[6]

The ambulance departed the scene of the accident at 2:31 a.m., with Paramedic LaPointe attending to the patient in the back of the ambulance and EMT Shifter driving to the hospital. The guidelines and procedures the crew followed during transport, including which hospital to transport the patient to, were governed by the State of Michigan-approved Genesee County Medical Control Authority EMS Protocols. (Apx H, LaPointe Dep, pp 15-17.)[7] Pursuant to those Protocols, the mode of transport to the hospital was designated "Priority 2": no lights and sirens because the patient was stable and was not considered to have a life-threatening condition. However, Priority 2 is still considered a medical emergency transport. (Apx B, Shifter Dep, pp 44-47; Apx H, LaPointe Dep, pp 51-52, 65-66; Apx 4, GCMCA System Protocol on "Use of Emergency Lights and Sirens during Transport.") On the way to the hospital, the ambulance driven by EMT Shifter collided with a vehicle driven by a third-party, and Griffin was transported to the hospital by a second ambulance of which the Court is intimately familiar, having read the parties' briefs.

STANDARD OF REVIEW

Appellate courts review *de novo* issues of statutory interpretation. *Wigfall v City of Detroit*, 504 Mich 330, 337; 934 NW2d 760 (2019). When engaging in such interpretation,

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[6] The Swartz Ambulance PCR lists all events and procedures in chronological timeline order. The PCR reflects that the ambulance departed the scene of the accident at 2:31 a.m. (See Apx F, PCR, p 4 of 7, "2:31:00, Sunday, October 07, 2012-Event *Leave Scene Time*"; see also Apx H, LaPointe Dep, p 50.) All procedures listed *after* 2:31AM were done en route to the hospital (See Apx F, PCR, p 4-6 of 7; see also, Apx H, LaPointe Dep, p 58.)

[7] For a full copy of the GCMCA Protocols, see https://www.gcmca.org/protocol.

the goal "is to ascertain the legislative intent that may reasonably be inferred from the words in a statute." *Mich Ass'n of Home Builders v City of Troy*, 504 Mich 204, 212; 934 NW2d 713 (2019). Where the language of the statute is unambiguous, the statute must be applied as written. *Velez v Tuma*, 492 Mich 1, 16-17; 821 NW2d 432 (2012). The statutory definition of a word, if given, controls its meaning. *Tryc v Michigan Veterans' Facility*, 451 Mich 129, 136; 545 NW2d 641 (1996).

Furthermore, when interpreting a statute, Courts must "consider the entire text, in view of its structure and of the physical and logical relation of its many parts," and "[t]he provisions of a text should be interpreted in a way that renders them compatible, not contradictory." Antonin Scalia & Bryan A. Garner, *Reading Law: The Interpretation of Legal Texts* 167, 180 (2012).

ARGUMENT

I. THE IMMUNITY GRANTED UNDER THE EMSA APPLIES TO GRIFFIN'S CLAIMS BECAUSE DEFENDANT SWARTZ AMBULANCE WAS IN THE TREATMENT OF A PATIENT.

A. EMSA Background.

While this Court has instructed the briefing in this case to discuss the phrase "in the treatment of a patient," that phrase can only be understood by considering the immunity extended by the EMSA within the broader context and legislative intent of the Act, MCL 333.20901, *et seq*. Accordingly, before addressing the phrase "in the treatment of a patient" head-on, it is important to consider the historical context and interrelated parts of the EMSA, to understand the broad immunity it provides in the delivery of emergency medical services.

Importantly, the EMSA was amended in 1990 as part of a legislative overhaul of emergency medical services. As part of those efforts, local Medical Control Authorities

became mandatory entities as opposed to permissive ones; a new 29-member "Emergency Medical Services Coordinating Committee" replaced the existing nine-member advisory council; and the previous nine categories of EMS services providers were reduced to four. (Apx 1, Emergency Medical Services Act analysis).

With respect to the immunity provisions provided by the EMSA, the intent of the Legislature was to change immunity from:

> Immunity from liability when giving care consistent with their training, unless there is gross negligence or willful misconduct; to
>
> Immunity to medical first responders, EMTs, EMT specialists, paramedics, and medical directors of a medical control authority while providing services to a patient either outside a hospital or in a hospital before transferring patient care to hospital personnel, providing that the act or omission was (a) consistent with the individual's licensure and training and (b) was not the result of gross negligence or willful misconduct. [Apx 1, highlighted.[8]]

Notably, the analysis of the 1990 bill emphasizes that, if passed, "immunity provisions would be *expanded*." (Apx 1.)

As a result of this overhaul, the EMSA currently regulates emergency medical services and limits the exposure to liability of certain persons and entities. See *Jennings v Southwood*, 446 Mich 125, 133, 135; 521 NW2d 230 (1994). The Act immunizes emergency medical personnel from liability for providing services to patients, except for acts or omissions amounting to gross negligence or willful misconduct. *Id*., citing MCL 333.20965(1). The part of the EMSA which extends immunity states, in pertinent part:

> (1) Unless an act or omission is the result of gross negligence or willful misconduct, the acts or omissions of a[n] . . . emergency medical technician

[8] See also *Neves v Jackson Emergency Med Servs, PC*, unpublished per curiam opinion of the Court of Appeals, issued Feb. 27, 1996 (Docket No. 165885) (addressing, for the first time in an appellate decision, the revamped EMSA provisions and noting that an "emergency" was no longer required for the EMSA protections to apply), attached as Apx 2.

> . . . while providing services to a patient outside a hospital, in a hospital before transferring patient care to hospital personnel, or in a clinical setting . . . consistent with the individual's licensure or additional training . . . do not impose liability in the treatment of a patient on those individuals or. . . any of the following persons:
>
> . . .
>
> (d)The life support agency or an officer, member of the staff, or other employee of the life support agency. [MCL 333.20965(1)(d).]

Accordingly, tort liability has been limited to situations in which an EMS professional's actions rise to the level of gross negligence or willful misconduct.

This Court, in *Jennings*, noted the wide-ranging intent of the EMSA's immunity provision:

> Before the statutory immunity, emergency personnel were liable for their ordinary negligence. The Legislature, dissatisfied with this situation, enacted the EMSA limiting liability to situations of gross negligence or willful misconduct. Undoubtedly, by providing this limited immunity, the Legislature intended to shield emergency medical personnel from the very liability they were previously exposed to—liability for ordinary negligence. [446 Mich at 134.]

Thus, based on the statutory language and this Court's own construction of the EMSA, it is clear that the immunity provision is intended to be applied broadly to protect emergency medical personnel from liability for regular negligence.

The EMSA also broadly defines *emergency medical services*:

> (4) 'Emergency Medical Services' means the emergency medical services personnel, *ambulances*, non-transport pre-hospital life support vehicles, aircraft transport vehicles, *medical first response vehicles* and *equipment required for transport* or treatment of an individual requiring medical first response life support, basic life support, limited advanced life support or advanced life support. [MCL 333.20904(4) (emphasis added).]

As a result, an ambulance transport fits squarely within the definition of "emergency medical services." Likewise, MCL 333.20906(1) defines the term "life support agency" broadly to include patient transport:

> (1) 'Life Support Agency' means an ambulance operation, non-transport pre-hospital life support operation, aircraft transport operation, or medical first response service. [9]

And, per MCL 333.20902(5), *ambulance operation* expressly includes not just emergency medical services, but patient transports:

> "Ambulance operation" means a person licensed under this part to provide emergency medical services and *patient transport*, for profit or otherwise. [Emphasis added.]

Furthermore, EMSA immunity applies whenever EMS licensed personnel provide services consistent with their licensure and training to both emergency *and* nonemergency patients. The plain language of the EMSA immunity provision makes no distinction between the two. Indeed, the plain language of the statute extends immunity to all licensed EMS personnel, "while providing services to a patient." MCL 333.20965(1).[10] And "patient" is statutorily defined to include *either* "an emergency or a nonemergency patient." MCL 333.20908(6). An "emergency patient" is defined as

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[9] Indeed, the juxtaposition of "ambulance operation" with "*nontransport* prehospital life support operation" shows the Legislature's clear intent to include ambulance transport (read: driving) within the protections of the EMSA. MCL 333.20906(1) (emphasis added). But if that weren't enough, the Legislature hammered the point home in its definition of "ambulance operation" in MCL 333.20902(5).

[10] It is also significant to note that the immunity under MCL 333.20965(1) applies to every level of EMS licensure, including medical first responders, EMTs, EMT specialists, paramedics, and medical directors of a medical control authority, some of whom would never be providing the type of "medical care" in the field that plaintiff insists should define "*in the treatment of a patient*" here. For instance, the scope of practice of a "Medical First Responder" is statutorily limited to the provision of "Medical first response life support" which includes responding to the scene of an emergency "with "*equipment required* by the department before the arrival of an ambulance", or "*as a driver of an ambulance that provides basic life support services only*." See MCL 333.20906(7), (8) and (9). In addition, the immunity provision also expressly includes a medical director of a medical control authority, defined as an organization designated by the department under § 20910(1)(g) to provide medical control. See MCL 333.20906(4), (5) and (6). If the Legislature really intended to limit the immunity only to those instances in which a licensed EMS professional is providing medical care, why would it expressly extend this

> an individual with a physical or mental condition that manifests itself by acute symptoms of sufficient severity, including, but not limited to, pain such that a prudent layperson, possessing average knowledge of health and medicine, could reasonably expect to result in 1 or all of the following:
>
> (a) Placing the health of the individual or, in the case of a pregnant woman, the health of the patient or the unborn child, or both, in serious jeopardy.
>
> (b) Serious impairment of bodily function.
>
> (c) Serious dysfunction of a body organ or part. [MCL 333.20904(9).]

And a "nonemergency patient" is

> an individual who is transported by stretcher, isolette, cot, or litter but whose physical or mental condition is such that the individual may reasonably be suspected of not being in imminent danger of loss of life or of significant health impairment. [MCL 333.20908(1).]

Consequently, every time the word "patient" appears in the EMSA and it is not immediately preceded by either the modifier "emergency" or the modifier "nonemergency," the word "patient" includes *both*. As a result, for purposes of immunity, the EMSA does not make a distinction between an emergency and a nonemergency patient. See e.g., MCL 333.20965(1).

Finally, the EMSA expressly defines "basic life support" as:

> [P]atient care that may include *any care an emergency medical technician is qualified to provide* by emergency medical technician education that meets the educational requirements established by the department under section 20912 or is authorized to provide by the protocols established by the local medical control authority under section 20919 for an emergency medical technician. [MCL 333.20902(6).]

Taking these statutory provisions together, the picture becomes much clearer. The EMSA broadly defines "emergency medical services" to include every function performed by a licensed ambulance operation and its licensed personnel within the scope of their

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immunity to those individuals whose functions are precisely limited to something other than medical care, including "*as a driver of an ambulance*" and/or a medical director whose role is limited to "*supervising and coordinating*" EMS?

licensure and training. MCL 333.20904(4). This includes driving ambulances, non-transport pre-hospital life support vehicles, aircraft transport vehicles, and medical first response vehicles, as well as the use of equipment required for *transport or treatment* of an individual requiring medical first response life support, basic life support, limited advanced life support, or advanced life support. *Id.*

In fact, the licensing of a life support agency expressly authorizes an ambulance operation to provide emergency medical services and *patient transport*. MCL 333.20906(1). Then the EMSA applies immunity whenever EMS licensed personnel provide services consistent with their licensure and training to *both* emergency and nonemergency patients. MCL 333.20965(1); MCL 333.20908(6). In other words, the plain language of the EMSA immunity provision makes no distinction between emergency or nonemergency patients and, instead, extends immunity to all licensed EMS personnel, "*while providing services to a patient*." See MCL 333.20965(1) (emphasis added). Thus, the best reading of the EMSA immunity expressly afforded under MCL 333.20965(1)(d), extends to a patient transport and the use of equipment required for transport, i.e. a stretcher or ambulance. See MCL 333.20904(4); MCL 333.20906(1).

B. The Transfer and Transport of Patients Has Been Considered in the Treatment of a Patient.

With that background of the many moving parts of this statutory regime, we can turn to the particular issue at hand. Over the years, the EMSA has been applied broadly in the context of stretcher transfers and ambulance transports. Though this Court has not previously considered the question in full, the Court of Appeals has provided some helpful (though unpublished) decisions on the topic that can serve to guide this Court's

decision. In *Lee v Dowagiac Volunteer Fire Department Ambulance Service, Inc.*,[11] the Michigan Court of Appeals applied immunity under the EMSA to a stretcher-drop case. In *Lee*, the plaintiff argued that the EMSA did not apply to the "mere transport" of a patient. The trial court concluded, however, that "transportation and transfer of a patient in need of emergency medical services" is "'*part and parcel*' of the 'treatment' of that patient," as contemplated and shielded from liability by EMSA. *Id*. at 2 (emphasis added). The Court of Appeals affirmed the lower court's grant of summary disposition and found that this was "not a case of merely transporting a patient from one location to another; rather, the emergency responders transported plaintiff to the hospital because of a complained of medical condition." *Id*. Thus, the Court held that EMSA immunity applied on those facts. See *Id*. at 2–4.

EMSA immunity has also been applied to emergency vehicle operation in the case of an emergency transport. In *Castle v Battle Creek Area Ambulance*,[12] the Michigan Court of Appeals held that EMSA immunity applies in an emergency transport situation. In *Castle*, the patient had a tracheostomy tube in his throat, to which a ventilator was attached, as well as a feeding tube for nutritional sustenance. *Id*. at 1. Prior to boarding the ambulance, the sending hospital staff paralyzed the patient with Pavulon, which rendered him completely unable to breath on his own. *Id*.at 2. The Pavulon was expected to last one hour, whereafter the patient might recommence occasional spontaneous respirations, a situation that was not compatible with the transport ventilator. *Id*. The

[11] *Lee v Dowagiac Volunteer Fire Dep't Ambulance Serv, Inc.*, unpublished per curiam opinion of the Court of Appeals, issued June 10, 2010, 2010 WL 2332391 (Docket No. 289605), pp 1-2 (Apx 6).

[12] *Castle v Battle Creek Area Ambulance*, unpublished per curiam opinion of the Court of Appeals, issued March 19, 2009, 2009 WL 725924 (Docket No. 277068), pp 7-9 (Apx 7).

plaintiffs alleged that during the transport, the patient's tracheostomy attached to the ventilator became dislodged due to "jarring from the ambulance," which cut off oxygen and led the patient to become unresponsive and without a pulse. *Id.* at 2–3. The defendants diverted the transfer to a closer hospital where it was determined that the patient suffered brain damage due to lack of oxygen to the brain before arriving at the emergency room. *Id.* at 4. The patient died four days later and his estate then sued. *Id.* at 4–5.

When the defendants raised as a defense the immunity provision of the EMSA, the plaintiffs explicitly argued that no such immunity applied to the mere transportation of the patient. *Id.* at 5. The Court of Appeals held that EMSA immunity applied to the transport because the transport involved an emergency situation. *Id.* at 7–8. In support of this conclusion, the Court of Appeals noted that at the time of his transfer the patient was stabilized, but he remained ventilator dependent in the Intensive Care Unit, and his diagnosis included bilateral pneumonia, acute respiratory failure, lymphoma, hypothyroidism, heart rhythm disorder, and anemia. *Id.* at 1, 8. He had a tracheostomy tube in his throat, to which the ventilator was attached, and a feeding tube for nutritional sustenance. *Id.* And, prior to boarding the ambulance, the sending hospital staff paralyzed the patient with Pavulon, which rendered him completely unable to breath on his own. *Id.*

Accordingly, the court found that, given the patient's own respiratory compromise, compounded by a medically induced total paralysis of his breathing capacity at the time of transfer, he had a serious impairment of a bodily function under MCL 333.20904(9)(b), and alternatively, a serious dysfunction of a body organ or part under MCL 333.20904(9)(c). *Id.* at 8. "He was, therefore, an emergency patient as defined by

the EMSA." *Id.* The Court held that, given its findings, it need not consider whether the patient was a "nonemergency patient" and held that the EMSA's immunity applied. *Id.* at 7–8.

Finally, this Court has had the opportunity to consider this issue at least once, albeit in an order, and came down on the side of immunity. In *Bauer v Lorencz*,[13] a pregnant mother was driving a car when she was struck by an oncoming motorist who had crossed into her lane. One of the defendants, Phil Jones, was a paramedic called to the scene. *Id.* Jones "transported [the pregnant mother] to the hospital," where her child was born by caesarean section with significant neurological problems and died two-and-a-half years later. *Id.* The plaintiff sued Jones and others, but the trial court directed a verdict in Jones's favor, concluding that the plaintiff failed to demonstrate that Jones committed gross negligence to overcome the immunity granted by the EMSA. *Id.* The Court of Appeals reversed and remanded for a new trial, determining that there were factual issues regarding Jones's alleged gross negligence in several ways, including failing to place the patient in the correct position for transport and failing to transport her rapidly to the hospital. *Id.* at 3.

This Court reversed the Court of Appeals and reinstated the trial court's order granting Jones's motion for directed verdict. *Bauer v Lorencz*, 454 Mich 874; 560 NW2d 638 (1997). In pertinent part, this Court held that the "[p]laintiff has failed to prove that defendant Jones was grossly negligent in his care of [the pregnant mother]." *Id.* By applying the gross-negligence standard, the Court necessarily accepted that Jones's

[13] *Bauer v Lorencz*, unpublished per curiam opinion of the Court of Appeals, issued October 13, 1995 (Docket No. 160778), p 1 (Apx 8).

transport of the pregnant mother to the hospital was conduct falling within the EMSA's immunity provision.

As these opinions show, the transport of a patient has long been held to fall within the immunity provision of the EMSA as part and parcel of a patient's treatment. These longstanding interpretations of the EMSA are sensibly and practically attuned to the work of EMTs and other emergency medical professionals. The treatment of a patient in emergency circumstances is at least two-fold: providing relatively short-term medical care and stabilization, while transporting the patient to a hospital where they can receive the (often lifesaving) care they need.

C. The Court of Appeals Correctly Determined that Defendant Swartz Ambulance was "In the Treatment of" Griffin.

The *Griffin* panel properly continued this longstanding jurisprudential thread in EMSA transport cases. The only arguable extension of the prior cases was the Court of Appeals' acknowledgment of the plain import of the statutory definition of "patient" to include both emergency patients *and* nonemergency patients. In holding that the transport of a patient by licensed EMTs was considered "treatment" pursuant to the EMSA, the *Griffin* Court dispensed with any distinction between emergency and nonemergency situations based upon the statutory text—noting that the EMSA "does not distinguish between emergency and nonemergency situations." *Griffin*, unpub op at 4. The Court also correctly observed that MCL 333.20908(6) defines a "patient" as "an emergency patient *or* a nonemergency patient." *Id.* (emphasis added), quoting MCL 333.20908(6).

The Court then concluded that the dictionary definition of "treatment"—"handling" or "usage"—applies, holding that the term "treatment" includes "the handling

of a patient in an ambulance or techniques customarily applied when caring for ambulance patients, consistent with the training of first responders." *Id.* The Court noted that "treatment" is "not limited to actual medical services rendered to patients being transported by ambulance but would include activities by first responders acting within the scope of their duties and training as first responders." *Id.* Consequently, consideration of the degree of any "injury," or whether the transport is an emergency or non-emergency transport, is misplaced.

And, beyond the express reasoning of the Court of Appeals, its approach is consistent with numerous other provisions of the EMSA, including its definition of "basis life support":

> "Basic life support" means patient care that may include *any care an emergency medical technician is qualified to provide* by emergency medical technician education that meets the educational requirements established by the department under section 20912 *or is authorized to provide* by the protocols established by the local medical control authority under section 20919 for an emergency medical technician. [MCL 333.20902(6).]

In fact, the transport provided by EMT Shifter is consistent with the State of Michigan Department of Community Health-approved Emergency Medical Technician Program, which establishes the curriculum for an EMT-Basic providing pre-hospital care and transport of patients in Michigan (See Apx 3, highlighted). Based on the record, that State EMT Curriculum specifically includes doing the very things that Shifter's partner was doing for Griffin, such as taking "Baseline Vitals," "Lifting and Moving Patients," "Scene Size Up," "Initial Assessment," "History and Physical Exam," "Detailed Physical Exam," "On Going Assessment," and "Documentation." (Apx 3.)

In other words, because of his medical condition, and the fact that he had to be transported by a licensed individual, Griffin could not simply be driven to the hospital by

anyone. He needed the assistance of a state-licensed EMT, which included the transport from the accident scene to the hospital. No one, other than Shifter or a higher-licensed EMS employee, could have transported Griffin.

D. Application.

Plaintiff would like this Court to hold that driving an ambulance does not involve the dispensing of health care to a patient and that paramedics, EMTs, and other licensed pre-hospital care providers should not receive the benefit of the EMSA immunity. This is based in part on the argument that an accident involving an ambulance is "just driving" and not the immediate dispensing of medical care. That view, however, is contrary to the clear language of the EMSA itself, which expressly defines "emergency medical services" to include ambulance transportation of both emergency and nonemergency patients. Indeed, the Legislature has already determined that transportation of patients via ambulance is covered by the EMSA.

As is true across the State, Genesee County's Medical Control Authority has enacted a set of protocols for the delivery of pre-hospital care in Genesee County, Michigan, consistent with Michigan law. MCL 333.20918; MCL 333.20919. Section 8 of those protocols, the "System" Protocols, is of particular importance to the issue of whether driving the ambulance from the scene to the hospital is considered "in the treatment" of Griffin.

Like the activity in *Lee*, *supra*, the driving of the ambulance, after the emergency system has been activated by the dispatch to the scene of the accident, is "*part and parcel*" of the treatment of the patient, even if the treatment is on a nonemergency basis and the ambulance was being operated without lights and sirens. Section 8-2 of the Protocols governs the use of lights and sirens and sets forth the policies for when an emergency

medical professional may use lights, as well as the training that is required for operating an emergency vehicle. (Apx 4). And Section 8-4 of the Protocols also contains specific directives regarding transportation and transfer of patients, including detailed instructions pertaining to the handling of patients before and during transport. (Apx 4).

In other words, ambulance transport, whether in an emergency or nonemergency situation, is highly regulated, with oversight being provided by the local medical authority. See MCL 333.20919. This is so because ambulance transport is a large (even the central) part of the work of an ambulance company. It is always more than a "taxi service," even in a nonemergency situation, and it is certainly more than "just driving." More to the point, all licensed EMS professionals are governed by, and must adhere to, the protocols outlined above, or similar ones based upon their geographic area. Consequently, once they are providing services consistent with their licensure (that is, once the emergency system has been activated, such as in this case), they are "in the treatment" of a patient, even if they are not actively "working on" that patient.

Unlike other limiting statutes, such as Michigan's No-Fault Act, which limits liability unless the *victim* of an accident meets a certain threshold ("[s]erious impairment of an important body function," MCL 500.3135(1)) the EMSA operates in the inverse. Under the EMSA, the Courts' measure for whether tort liability is permissible is based on the *conduct of the alleged tortfeasor*. That is to say, a court is to assess whether the alleged tortfeasor/EMS worker committed gross negligence or willful misconduct.

Plaintiff's position on this issue is ironic considering that it had been standard practice within the personal injury community to file lawsuits against EMS providers alleging a "delay in arrival" at an accident scene or a "delay in transport" in "transport" and "diagnosis" cases. In other words, it had been past practice, during a time in which

medical malpractice cases were filed against EMS professionals, to allege that EMT's and paramedics acted "too slow" in responding to scenes in which they were needed. The argument was that a delay in transport was a delay in treatment. Now, the wheel has turned and the allegation is that EMS professionals are driving too fast. The Court can only imagine the hue and cry that would have come from the Plaintiff if the transport to the hospital was too slow and Griffin would have suffered damage to his leg. EMS providers have been put into a proverbial Gordian knot – drive just a little too slow and be accused of a delay in treatment, but drive too fast and be accused of negligence. Applying the immunity provision of the EMSA to driving cases such as these avoids this conundrum.

With the conduct involved viewed through the lens of the tortfeasor, and not the victim of the alleged tort, the only conclusion which can be reached is that "in the treatment" involves *all* conduct of the EMS employee, within the scope of that person's licensure, after the person is "activated" to respond to a scene. This includes all acts of the EMS professional, including the driving of an ambulance, once treatment of "a patient" has begun. There is nothing limiting about the language of MCL 333.20965(1)—it does not limit the immunity protection to "this patient." Rather, it applies whenever treatment is given to "a patient"—and it applies broadly, keeping with the public policy of immunizing EMS professionals, as discussed *infra* § II.

E. Plaintiff's Comparison to "Other Features of Michigan Law" Is Not Applicable to EMS Personnel.

In his supplemental brief on appeal, plaintiff argues that his narrow interpretation of the phrase "in the treatment of a patient" is consistent with the Owner's Liability Statute, MCL 257.401(1), and the so-called motor-vehicle exception to the Governmental

Tort Liability Act, MCL 691.1405, because both of those statutes allow for liability for motor-vehicle related negligence. But after even cursory review, it is evident that plaintiff's comparison to those statutes is flawed.

The Owner's Liability Statute is an *exception* to the general rule that an individual is not liable for the acts of others. The Owner's Liability Statute does not establish liability—rather, it is merely the establishment of the relationship between the owner and the driver which makes the owner vicariously liable for the conduct of the driver. *See Spectrum Health Hosps v Farm Bureau Mut Ins Co of Mich*, 492 Mich 503, 521–522; 821 NW2d 117 (2012). That is, it is a conduit by which the owner may be negligent for the acts of the driver. Generally, in owner's liability cases, the owner has done nothing wrong—liability is based on the premise of ownership and nothing more.

Likewise, MCL 691.1405, the motor vehicle exception to the Governmental Tort Liability Act's immunity provision for government employees is precisely that—an *exception* to the general rule of immunity. In fact, the motor vehicle exception means that government employees are *never* immune from tort liability when they are operating a motor vehicle. The mere fact that one may be a government employee does not mean that the individual is immune from a tort lawsuit.

Had the Legislature intended on an exception to EMSA immunity applying for the operation of an ambulance, it surely would have included it in the EMSA when it overhauled the Act in 1990 and expanded immunity. The fact that it did not, along with all of the EMSA provisions expressly considering ambulance operation, lends credence to the inclusion of the operation of an ambulance in the EMSA immunity. The Legislature favored action over an abundance of caution in the EMS community by not creating exceptions to the immunity provision of the EMSA.

In short, plaintiff's comparisons to (and attempted incorporations of) other laws into the EMSA regime violate numerous rules of statutory interpretation. First, his attempt violates a corollary to the general rule of statutory construction that the inclusion of a thing by specific mention excludes that which is not mentioned. *City of Coldwater v Consumers Energy Co*, 500 Mich 158, 170 & n 2; 895 NW2d 154 (2017). Had the Legislature intended on excluding the driving of an ambulance, done within the licensure of EMTs, it would have done so.

Second, plaintiff's argument essentially asks for a judicial rewrite to add the exception to immunity that he wants. Despite plaintiff's contrary wishes, "absent provision[s] cannot be supplied by the courts." Antonin Scalia & Bryan A. Garner, *Reading Law: The Interpretation of Legal Texts* 94 (2012). Even if plaintiff could show the Legislature may have wanted such an exception—which he cannot—that is not enough: "What the Legislature 'would have wanted' it did not provide, and that is the end of the matter." *Id*. Finally, this Court has already rejected statutory interpretation methods that attempt to interpret one statutory scheme by looking to another, especially when the relevant phrase at issue does not appear in the other statutory scheme. *Spectrum Health Hosps*, 492 Mich at 521 ("[T]he first step of statutory interpretation is to review the language of the statute at issue, not that of another statute. Indeed, the relevant phrase . . . that we must interpret, 'taken unlawfully,' does not appear in the owner's liability statute that *Bronson* considered analogous.").

II. PUBLIC POLICY MANDATES A BROAD READING OF THE PHRASE "IN THE TREATMENT OF A PATIENT."

In defining "public policy," this Court has stated that the term must be more than a different nomenclature for describing the personal preferences of individual judges,

noting that the proper exercise of the judicial power is to determine from objective legal sources what public policy is, and not to simply assert what such policy ought to be on the basis of the subjective views of individual judges. *Terrien v Zwit*, 467 Mich 56, 66-67; 648 NW2d 602 (2002). The Court noted that this view is grounded in Chief Justice Marshall's famous injunction to the bench in *Marbury v Madison*, 5 US (1 Cranch) 137, 177; 2 L Ed 60 (1803), "that the duty of the judiciary is to assert what the law 'is,' not what it 'ought' to be." *Terrien*, 467 Mich at 66.

In identifying the boundaries of public policy, this Court believes that the focus of the judiciary must ultimately be upon the policies that, in fact, have been adopted by the public through our various legal processes, and are reflected in our state and federal constitutions, our statutes, and the common law. *Id*., citing, *Twin City Pipe Line Co v Harding Glass Co*, 283 US 353, 357; 51 S Ct 476; 75 L Ed 1112 (1931). As this Court has said previously:

> As a general rule, making social policy is a job for the Legislature, not the courts. This is especially true when the determination or resolution requires placing a premium on one societal interest at the expense of another: "The responsibility for drawing lines in a society as complex as ours—of identifying priorities, weighing the relevant considerations and choosing between competing alternatives—is the Legislature's, not the judiciary's." [*Van v Zahorik*, 460 Mich 320, 327; 597 NW2d 15 (1999) (citations omitted).]

And in *W R Grace & Co v Local Union 759*, 461 US 757, 766; 103 S Ct 2177; 76 L Ed 2d 298 (1983), the United States Supreme Court said that for a public policy to be relevant, it must not only be "explicit," but it also "must be well defined and dominant."

Public policy, as evidenced by the Legislature's own policy determinations encapsulated in the statutory text, mandates that this Court read the immunity provision of the EMSA, and in particular the phrase "in the treatment of a patient," broadly, to

include the driving of an ambulance whether in an emergency or nonemergency, situation. The Analysis of the rewriting of the EMSA in 1990 is a good starting point. As noted above, that rewriting codified a change in the immunity granted to emergency medical professionals from:

> Immunity from liability when *giving care consistent with their training*, unless there is gross negligence or willful misconduct; to
>
> Immunity to medical first responders, EMTs, EMT specialists, paramedics, and medical directors of a medical control authority *while providing services to a patient* either outside a hospital or in a hospital before transferring patient care to hospital personnel, providing that the act or omission was (a) consistent with the individual's licensure and training and (b) was not the result of gross negligence of willful misconduct.
>
> (Apx 1, highlighted, emphasis added.)

The analysis of the EMSA in 1990 clearly established that immunity was to be broadly applied, and in fact, *expanded*—when the EMS professional was providing services to a patient. The analysis does not contain any further limitations. And the services provided by EMS professionals, as has been discussed at length, substantially involves patient transport to and from hospitals or other medical centers. This broad, *expanded*, immunity is consistent with the immunity granted under the Governmental Tort Liability Act, MCL 691.1401, *et seq*., which this Court has described to be "broad," with an exception for liability in cases of gross negligence that is comparatively "narrow." *Ray v Swager*, 501 Mich 52, 81-82; 903 NW2d 366 (2017).

And that consistency has not been lost on this Court, as noted in this Court's initial decision interpreting the EMSA after the its overhaul in 1990. In *Jennings,* the Michigan Supreme Court adopted the definition of gross negligence from the Governmental Tort Liability Act ("GTLA"), MCL 691.1407, and applied it to the EMSA. The *Jennings* Court held that the showing of gross negligence to avoid immunity under the EMSA requires

evidence of: "*conduct so reckless as to demonstrate a substantial lack of concern for whether an injury results*." 446 Mich at 136–137.

In adopting the GTLA definition of gross negligence, the Supreme Court recognized that the common law definition of gross negligence did not go far enough to satisfy the Legislature's intent to limit emergency personnel's exposure to liability. The *Jennings* Court highlighted the intent of the Michigan Legislature in extending immunity from negligence suits to the EMS profession:

> [B]y providing limited immunity, the Legislature sought to diminish an impediment that discouraged citizens from joining the EMS profession:
>
> > It is a comfort to current EMS field personnel that they at least have a statement of legislative support recognizing the difficulty inherent in their jobs. Removing the exemption could affect the morale of EMS workers or make them reluctant to perform certain parts of their jobs for fear of being sued, and could discourage persons from entering EMS occupations. [*Jennings,* 446 Mich at 134, quoting Senate Analysis Section, SB 159, First Analysis Apr. 14, 1981.]

Accordingly, the Court adopted a stricter standard, consistent with the expansion of the immunity provision, for establishing liability against pre-hospital care providers in Michigan. *Id.* at 133–134.

If the Court accepted Griffin's constrained interpretation of the phrase "in the treatment of a patient," it would be running away from the intent of the 1990 overhaul, and the expansion, as well as this Court's own adoption of the GTLA standard, and not toward the broader intent of the immunity provision of the EMSA. EMSA immunity is intended to be broad, and a broad interpretation is consistent with the larger concept of immunity in Michigan. It is not intended to be read narrowly, as Griffin would have this Court believe.

To be sure, a narrow reading of the EMSA immunity (not just the immunity provision of MCL 333.20965(1), but the concept of immunity itself being extended to EMS personnel) is contrary to public policy in that it creates a negative environment within the EMS community and a disincentive for people to enter, work, or volunteer in that community.[14] This is the exact problem that the Legislature intended to remedy with its adoption of the amended EMSA, as this Court has acknowledged. *Jennings*, 446 Mich at 134. And the Legislature's concern about morale and job stress in EMS professions was not unwarranted. The burnout rate among EMS personnel is significant still today. A 2016 study by Remle Patricia Crowe at Ohio State University examined this phenomenon among nationally certified EMTs and paramedics, which it defined as "a state of physical, emotional and mental exhaustion that results from long-term involvement in work situations that are emotionally demanding."[15]

Crowe's study noted that absence due to sickness, as well as turnover, are prominent in the EMS industry, with job-related stress and dissatisfaction being contributors to a lack of retention among EMS professionals. (Apx 5, at 6). The study also found that 21% of EMS professionals said they would likely leave the workforce within the next twelve months. (Apx 5, at 25). And, relevant to this case, professionals at

[14] Indeed, many persons in the EMS community operate on a volunteer basis, serving their communities. Increasing the liability EMS personnel face is not merely a business cost for for-profit companies. It will also discourage future volunteers from engaging in the altruistic practice of volunteer emergency services, for fear of increased liability.

[15] Apx 4, An Assessment of Burnout among Nationally-Certified Emergency Medical Services Professionals, at 3 and 6. This study also went beyond just fatigue and exhaustion in defining "burnout," and included the "depletion of energetic resources," as well as the relation of this depletion to a person's life, including their work. *Id*.

private EMS agencies, such as Swartz Ambulance, had a 35% increase in stress (and corresponding burnout) compared to those at fire-based agencies. (Apx 5, at 24).

EMS work, or pre-hospital care, is an important part of the delivery of health care in Michigan. This industry has expanded from its original roots—when hearses used to deliver bodies to the morgue doubled as ambulances—into a vital, and life-saving, concern. Advances in the delivery of pre-hospital care, and technology, have helped immensely. Recently, findings were presented at the 2018 Society for Academic Emergency Medicine, which estimated an additional 10,000 cardiac arrest patients would be saved each year with the introduction of a new laryngeal tube that can be used in EMS treatment of cardiac emergencies.[16] Similar advances in the industry are continually lauded, with their concomitant improvements in medical care benefiting all of society. The cost, however, to EMS companies to defend suits, or pay skyrocketing insurance premiums, will necessarily be impacted, and patient care will be hurt, if EMS personnel may be sued for negligent driving related to their vital work.

Consequently, from a public-policy standpoint, it is indispensable that the law blankets EMS personnel with a broad level of protection to lessen (or at least level) work-related stress. As this Court can appreciate, participating in litigation is an unpleasant experience. And it is admittedly necessary in cases of true wrongdoing. But EMS personnel must be able to take action to deliver patient care and not exercise an over-abundance of caution. In many instances, speed—in getting patients to the hospital—is the name of the life-saving game. To the extent that the EMSA's immunity provision can

[16] See ChicagoTribune.com, *EMS providers could save an additional 10,000 lives per year* https://www.chicagotribune.com/lifestyles/health/sns-201909261311--tms--premhnstr--k-e20190926-20190926-story.html> (posted Sept 26, 2019) (accessed Dec 11, 2019).

be broadly applied to driving, it can further public policy objectives by easing the burden on EMTs, paramedics, and other EMS personnel, while still protecting patients involved in accidents which were the result of willful misconduct or gross negligence.

CONCLUSION

The Court of Appeals' decision properly concluded the immunity provision of the EMSA covers the transportation of a patient, in an ambulance, to the hospital. This conclusion relied on a fair reading of the plain language of the EMSA and respects the policy aims the Legislature intended when passing this statute. A contrary decision would imperil the provision of emergency medical services in this state—a business already affected by increased job stress among medical services providers and difficulty keeping such professionals from leaving for other work. While the work of emergency medical services providers is already inherently stressful, this Court need not add to that stress by increasing the odds that such individuals face the risk of suit and damages when they make the split-second decisions required by the job.

MAAS agrees with defendant Swartz Ambulance and respectfully requests that this Court affirm the decision of the Court of Appeals, or, in the alternative, deny Plaintiff's application for leave to appeal.

Respectfully submitted,

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Dated: December 20, 2019

PROOF OF SERVICE

The undersigned certifies that the foregoing Amended was served upon counsel of record at their respective addresses disclosed in the above caption on December 20, 2019.

By: _____U.S. Mail _____Hand Delivered _____Facsimile

Express Mail_____ MIFile E-Service__xx___

I declare that the statements above are true to the best of my information, knowledge, and belief.

_____/s/Derek S. Wilczynski_____
Derek S. Wilczynski

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House Legislative Analysis Section

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EMERGENCY MEDICAL SERVICES ACT

House Bill 4952 (Substitute H-6)
First Analysis (12-11-89)

Sponsor: Rep. Michael J. Bennane
Committee: Public Health

THE APPARENT PROBLEM:

The Comprehensive Emergency Medical Services Act (Public Act 79 of 1981) became Part 207 ("Emergency Medical Services") of the Public Health Code. The act was adopted in 1981 and was scheduled to lapse on September 30, 1989. It replaced the Emergency Personnel Act (Public Act 290 of 1976), which was repealed in 1978 when the revised public health code (Public Act 368 of 1978) was adopted.

At the request of the Department of Public Health, legislation has been introduced which would reenact, with some changes, the emergency medical services section of the Public Health Code.

THE CONTENT OF THE BILL:

The bill would re-enact, with some changes, the Comprehensive Emergency Medical Services Act (Public Act 79 of 1981), which became Part 207 (Emergency Medical Services) of the Public Health Code, and would amend a number of other sections of the health code to bring them into accord with the newly re-written part.

The following are some of the major changes that the bill would make:

- Medical control authorities would be mandatory for all areas rather than permissive (though hospital participation would remain voluntary);
- a new 29-member "Emergency Medical Services Coordinating Committee" (with four non-voting members) would replace the existing nine-member statewide emergency medical services advisory council;
- license fees would be increased and late fees would be added;
- the present nine categories of EMS service providers would be reduced to four types of EMS service providers, capable of providing four levels of life support;
- two kinds of agencies that could provide on-the-scene life support only would be authorized, along with ambulance operations (which could provide all levels of life support on the scene and transport the patient to a health facility) and aircraft transport operations (which could transport patients between facilities);
- immunity provisions would be expanded;
- the emergency medical needs of rural areas would be studied.

Emergency medical service workers. Presently, the law defines nine kinds of workers involved in providing emergency medical services, some of whom are licensed, some of whom are certified, some of whom are "authorized," and some of whom merely operate licensed communications facilities.

The bill would replace these nine kinds of EMS workers with four kinds of licensed emergency medical services personnel. It would:

- delete four of the existing kinds of workers ("advanced emergency medical technician," "certified advanced cardiac life support provider," "communications personnel," "driver," and "emergency department registered nurse");
- replace two kinds of workers ("ambulance attendant" and "advanced emergency medical technician") with the new (and roughly corresponding) categories of "medical first responder" and "paramedic;"
- retain two kinds of workers ("emergency medical technician" and "emergency medical technician specialist"), and
- change "emergency medical technician instructor-coordinators" (who now must be certified) to "emergency medical services instructor-coordinators" (who would have to be licensed).

In order to get a license as an EMS worker, an individual would have to be at least 18 years old, have successfully completed the appropriate education program approved by the DPH, have attained a passing score on the DPH written and practical examinations, and met any other requirements of the bill. A medical first responders who had not successfully completed an education program would be "grandparented" in until December 31, 1992, if the department determined that he or she was performing the functions of a medical first responder on the effective date of the bill and met the other requirements. The DPH could issue a 120-day temporary nonrenewable license to someone who had successfully completed all the requirements except for the required examinations, but someone holding a temporary license could practice only under the direct supervision of someone holding a comparable or higher regular license (i.e. a temporarily licensed paramedic could practice only under the direct supervision of a regularly licensed paramedic, a temporarily licensed EMT specialist could practice only under the supervision of a regularly licensed EMT specialist or a paramedic, and so forth). Finally, the DPH could issue licenses to individuals licensed in other states with comparable standards if they met the bill's requirements, there were no disciplinary actions pending against them, and any sanctions that had been imposed were no longer in force.

EMS service operations. Presently there also are three levels of emergency medical services that can operate outside of a hospital: ambulance operations, advanced mobile emergency care services, and limited advanced mobile emergency care services, with the latter two services defined primarily in terms of emergency techniques that they are allowed to provide (such as endotrachial intubation, defibrillation, drug administration and intravenous lifelines, etc.).

The bill would authorize four kinds of "life support agencies," three of which would be roughly comparable to existing EMS service operations and a new, fourth category, "aircraft transport operation." The bill would basically define life support agencies by the levels of life

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support that would be allowed and by whether or not patients could be transported from the scene of an emergency to a health care facility. Two kinds of EMS operations ("medical first responders" and "nontransport prehospital life support operations") could treat patients at the scene of an emergency but could not transport them, one ("aircraft transport operations") could only transport patients from one health facility to another. Only ambulance operations could both treat patients at the scene of an emergency and transport them to a health facility. Medical first responders (which would include police and firefighters) could provide "medical first response" at the scene of an emergency prior to the arrival of an ambulance; nontransport prehospital life support operations could provide basic life support, limited advanced life support, and advanced life support at the scene of the emergency (but not move the patient to a health facility for further treatment); and ambulance operations would be able to transport a patient from the scene of an emergency to a health facility for further treatment and could be licensed to provide all levels of life support, from medical first response through advanced life support.

Generally, EMS agencies would be prohibited from operating without a license, from operating above their approved life support levels, and from doing certain kinds of advertising. They would be required to have at least one appropriately staffed and equipped vehicle available at all times. Ambulances and nontransport prehospital operations would be required to respond to all requests originating in their service areas (or ensure that there was a response) and to operate only under the direction of their medical control authorities. Only licensed ambulances and aircraft transport operations could transport patients, the latter upon written orders from a physician and between health facilities. If a police or firefighting agency was sent out to provide medical first response life support, it would be subject to provisions governing medical first response services.

If the DPH decided that grounds existed for taking action on (denying, suspending, or revoking) an agency's license but that such action might be detrimental to residents in the agency's service area, it could issue a one year nonrenewable conditional license and set conditions to protect the public health, safety, and welfare.

Local governments could operate ambulance operations or nontransport prehospital life support operations (or contract for such services) and pay for the costs of the service through available funds, including federal or private funds, fees for the services, or special assessments.

Duties of the Department of Public Health. The bill would retain many of the present duties of the Department of Public Health, change or delete others, and add some new duties.

The department would continue to be responsible for a number of functions with regard to emergency medical services such as:

- developing, coordinating, and administering a statewide EMS system;
- promoting public education on EMS;
- developing and coordinating a statewide EMS communication system;
- helping develop the EMS parts of the state health plan;
- collecting any data necessary to assess the quality and need for EMS services throughout the state;
- developing and maintaining standards for licensing EMS services and personnel (including annual inspections of ambulance operations and nontransport prehospital life support operations).

With some changes from present law, the department would continue to be required to:

- license all emergency medical services personnel and agencies;
- provide EMS resources for disasters and disaster drills;
- develop a program to inventory hospitals that have special care capabilities or that meet trauma center standards, including developing criteria for categorizing hospital emergency department capabilities every three years;
- develop and implement field studies on emergency medical services after review by the state EMS services committee;
- promulgate (with comment from the state EMS services committee) various rules to implement the bill, including rules to establish and maintain minimum standards for ambulances and for EMS vehicle patient care equipment and safety equipment (instead of publishing recommended equipment lists for emergency medical services vehicles) and the advertising of EMS services;
- designate medical control authorities — usually on a countywide basis — and develop recommendations for appropriate territorial boundaries for medical control authorities (rather than simply approving organizations as medical control authorities); and
- review and approve education programs for EMS personnel, as well as programs for relicensure.

The bill would no longer require the department to:

- annually inventory the emergency medical services available in the state;
- provide a way for hospitals to appeal the categorization of their emergency departments;
- report to the legislature and the governor at least every three years on the extent to which the state health plan has been implemented on emergency medical services;
- carry out certain functions with regard to health systems agencies;
- approve and license nurses qualified in emergency medical services;
- register nonemergency transportation vehicles.

A new charge to the DPH would be to conduct a study of rural EMS health care needs, actively involving rural communities and rural EMS services providers. The study would have to be completed within 18 months after the bill took effect and submitted to the House and Senate committees dealing with public health.

Finally, the bill would allow (but not require) the department to promulgate rules (a) requiring EMS agencies to submit their records and data for periodic evaluation and (b) establishing a grant program (or contracting with outside agencies) to provide training, public information, and help to medical control authorities and emergency medical services systems.

State Emergency Medical Services Coordination Committee. Presently, the chairperson of the Health Facilities and Agencies Advisory Commission appoints four task forces to advise the commission, one of which is a nine-member statewide emergency medical services advisory council, whose members are appointed by the governor. The advisory council is charged with generally advising the governor, legislature, and department on

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issues concerning emergency medical services and with promoting voluntary provision of first response capability throughout the state. It also advises the DPH on developing state standards for ambulances and for minimum patient care equipment, serves as the appeal body for hospitals appealing the categorization of their emergency departments by the DPH, establishes and appoints technical advisory committees composed of providers, and reviewed the development of EMS services in health systems agencies.

The bill would do away with this council and replace it with a 29 member "state emergency medical coordination committee," four of whose members would be non-voting ex officio members. The 25 voting members would be appointed by the director of the DPH, with a set number of members representing various provider groups, labor, and consumers. Two of the ex officio members would be from the legislature (a representative appointed by the Speaker of the House and a senator appointed by the Senate Majority Leader), one would represent the DPH, and one would be appointed by the Department of Management and Budget to represent the Office of Health and Medical Affairs. Representation from counties with smaller populations would be ensured by requiring that at least eight of the voting members be from (or do business in) a county with a population of not more than 100,000, while at least one voting member would have to be from a county with a population of not more than 35,000. At least one member would have to be from Detroit.

The committee would have to meet at least twice a year, with its meetings subject to the Open Meetings Act. Reimbursement for committee members would be set by the legislature.

The committee would continue to serve as advisory task force to the Health Facilities and Agencies Advisory Commission, and would carry out a number of other functions, including:

- helping coordinate and provide information on EMS programs and services, as well as serving as a liaison between groups and individuals involved in the EMS system;
- advising the legislature and the DPH on EMS matters throughout the state and making recommendations to the DPH on developing a comprehensive statewide EMS program,
- advising the DPH on appeals of local medical control decisions, on vehicle standards for ambulances, on minimum patient care equipment lists, and on standards for advertising EMS services;
- appointing, with the DPH's advice and consent, a statewide quality assurance subcommittee, which, at the request of the director of the DPH, would be responsible for any quality control activities, including making recommendations to the DPH concerning approval of medical control authority applications, revisions concerning medical control authority protocols, and EMS field studies;
- at the request of the director of the DPH, participating in educational activities, special studies, and the evaluation of emergency medical services.

Medical Control Authorities. The Department of Public Health would be required to designate a medical control authority (MCA) for each county (though, if appropriate, it could designate an MCA for part of a county or for two or more counties), assuring that there was a "reasonable relationship" between the existing EMS capacity and the estimated demand for EMS services in that area.

Hospitals would be able to participate or not in their locally designated medical control authorities. Participating hospitals would administer the authority, appointing an advisory body for the authority and, with its advice, a physician as the medical director of the authority. The advisory body would, at a minimum, have to include representatives from each kind of EMS provider and worker in the authority's boundaries, though no more than ten percent of the membership could be employed by the medical director. The medical director would have to either be board certified in emergency medicine or practice emergency medicine and be nationally certified in both advanced cardiac life support and advanced trauma life support.

Local medical control authorities would be required to establish, with the DPH's approval, written protocols for life support agencies and licensed EMS personnel practicing in the authority's area. The protocols would specify what each kind of licensed EMS practitioner could do and would ensure that life support agencies dispatched their services appropriately based upon medical need and the EMS system's capabilities. With the approval of the DPH, the protocols could be more stringent in their standards for equipment and personnel (except for medical first responders), but would have to provide an appeals process and consider whether negative medical or economic impacts outweighed the benefits of those additional standards.

Fees. Presently, license fees for ambulance attendants, emergency medical technicians (EMTs), advanced EMTs, and EMT specialists are $5 every three years. EMT instructor-coordinators must be licensed, but pay no fees. Ambulance operations must pay an annual vehicle license fee of $10 for each ambulance in operation. The bill would exempt from having to pay fees both medical first responders and volunteers who worked for agencies that did not charge for their services. The bill would set new fees as follows:

	Annual fee/renewal	Late fee
Ambulance operation	$100/year + $25/ vehicle	$300/$100 per vehicle
Nontransport prehospital life support operation	$100/year + $25/ vehicle	$300/$100 per vehicle
Aircraft transport operation	$100/year + $100/ airplane	$300/$100 per vehicle
Medical first response service	no fee	no fee

	3-year license fee	Renewal	Late fee
Emergency medical technician	$40	$25	$50
EMS specialist	$60	$25	$50
Paramedic	$80	$25	$50
EMS instructor-coordinator	$100	$50	$100

License actions. Presently, the DPH may deny, revoke, or suspend an individual's EMS license (certification, or authorization) on a number of grounds, including if the individual got his or her license fraudulently, illegally used (or distributed) drugs, practiced with an expired or suspended license, violated (or helped others violate) Part 207 of the code, didn't perform up to his or her training,

OVER

or was physically or mentally incapable of carrying out his or her duties The bill would keep these grounds and add to the list conviction of a crime that adversely affected the indiv dual's ability to practice safely and competently

Immunity provisions Under present law, ambulance attendants, EMTs, EMT specialists, and advanced EMTs (as well as their backup staff) are immune from liability when giving care consistent with their training, unless there is gross negligence or willful misconduct

The bill would give immunity to medical first responders, EMTs, EMT specialists paramedics, and medical directors of a medical control authority while providing services to a patient e ther outside a hospital or in a hospital before transferring patient care to hospital personnel, providing that the act or omission was (a) consistent with the indiv dual s l censure and training and (b) was not the result of gross negl gence or willful misconduct Backup staff (the author zing phys cian the medical director, commun cations personnel the life support agency and staff, the hospital and staff the governmental unit, or emergency personnel from outs de the state) also would be given immunity under these conditions The bill specifically would not limit immun ty fr m liability otherwise provided by law for anyone covered by this section

Repeal The bill would repeal Part 207 of the Public Health Code

FISCAL IMPLICATIONS:

A Depa tm ent of Public Health analysis of an earlier version of the bill reported that without the additional revenues that would be raised by the increased license fees the state would have to supplement general funding the amount ($210 000) tha the fee increases are expected to generate, and that he fiscal ear 1989-90 appropriation passed by the legislature anticipates these fee increases (9-7-89)

ARGUMENTS:

For:

The part of the health code governing emergency medical serv ces was enacted in 1981 Since then a number of changes have taken p ace in the provis on of emergency med cal services ("prehospita car-") and this part of the health code s now o da ed in a number of respects The bill would update his part of the code, taking into considera on the advances made over the last several years in the provision of emergency medical services

Against:

The bill would replace the existing nine member statewide EMS advisory counci , wh ch has four consume members, with a 29-member state EMS coord natio comm ttee on y tw of whose voting members would be consumers Not only would this proposed committee be too unwieldy and unable to function effectively, it also would be composed overwhelmingly of provider representatives (only two of the voting members would represent consumers, while only three wo ld rep esen labo) For the sake of efficiency and to maintain strong consumer representation, the committee s composition should be changed

Response: Since the committee will be dealing with h ghly tech nical matters involved in the provision of EMS servi es, t is only sensible to make sure that the expertise of p oviders in emergency medical services is adequately represented

Against:

While some increase in fees may be necessary, the amounts proposed in the bill seem rather steep Such significant fee increases, moreover, might discourage people who volunteer their services from getting involved in emergency medical services, and rather than discourage volunteers, the fees ought to encourage their participation

Response: The fee increases, while substantial compared to the existing fees, are not unreasonable EMS worker licenses are for three years, so, for example, the EMT annual fee costs would average out to less than $15 a year — hardly an undue burden for this profession What is more, EMS operations usually pay their staff's license fees anyway, so the increased fees should not constitute a hardship for anyone Finally, the bill exempts from fees volunteers who work for EMS operations that do not charge for their services, so the fee increase should not affect the level of participat on by volunteers in these operations

POSITIONS:

The Department of Public Health supports the bill (12-11-89)

The Michigan Hospital Association supports the bill (12-11-89)

The Society of Michigan Emergency Medical Technician (EMT)

Instructor-Coordinators supports the bill (12-11-89)

The Michigan Association of Ambulance Services supports the bill (12 11-89)

The Michigan Association of Aeromedical Services supports the bill (1-11-89)

The International Union of Operating Engineers (representing the Firefighters Union EMTs and the City of Detroit EMTs) supports the bill (12-11-89)

The Michigan Fire Chiefs Association supports the bill (12-11-89)

The Michigan Association of Emergency Medical Service (EMS)

Systems supports the bill (12-11-89)

The Michigan Trial Lawyers Association does not oppose the bill 12-11-89)

House Legislative Analysis Section

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EMERGENCY MEDICAL SERVICES ACT

House Bill 4952 as passed by the House
Second Analysis (1-11-90)

Sponsor: Rep. Michael J. Bennane
Committee: Public Health

THE APPARENT PROBLEM:

The Comprehensive Emergency Medical Services Act (Public Act 79 of 1981) became Part 207 ("Emergency Medical Services") of the Public Health Code. The act was adopted in 1981 and was scheduled to lapse on September 30, 1989. It replaced the Emergency Personnel Act (Public Act 290 of 1976), which was repealed in 1978 when the revised public health code (Public Act 368 of 1978) was adopted.

At the request of the Department of Public Health, legislation has been introduced which would reenact, with some changes, the emergency medical services section of the Public Health Code.

THE CONTENT OF THE BILL:

The bill would re-enact, with some changes, the Comprehensive Emergency Medical Services Act (Public Act 79 of 1981), which became Part 207 (Emergency Medical Services) of the Public Health Code, and would amend a number of other sections of the health code to bring them into accord with the newly re-written part.

The following are some of the major changes that the bill would make:

- Medical control authorities would be mandatory for all areas rather than permissive (though hospital participation would remain voluntary);
- a new 29-member "Emergency Medical Services Coordinating Committee" (with four non-voting members) would replace the existing nine-member statewide emergency medical services advisory council;
- license fees would be increased and late fees would be added;
- the present nine categories of EMS service providers would be reduced to four types of EMS service providers, capable of providing four levels of life support;
- two kinds of agencies that could provide on-the-scene life support only would be authorized, along with ambulance operations (which could provide all levels of life support on the scene and transport the patient to a health facility) and aircraft transport operations (which could transport patients between facilities);
- immunity provisions would be expanded;
- the emergency medical needs of rural areas would be studied.

Emergency medical service workers. Presently, the law defines nine kinds of workers involved in providing emergency medical services, some of whom are licensed, some of whom are certified, some of whom are "authorized," and some of whom merely operate licensed communications facilities.

The bill would replace these nine kinds of EMS workers with four kinds of licensed emergency medical services personnel. It would:

- delete four of the existing kinds of workers ("advanced emergency medical technician," "certified advanced cardiac life support provider," "communications personnel," "driver," and "emergency department registered nurse");
- replace two kinds of workers ("ambulance attendant" and "advanced emergency medical technician") with the new (and roughly corresponding) categories of "medical first responder" and "paramedic;'
- retain two kinds of workers ("emergency medical technician" and "emergency medical technician specialist"); and
- change "emergency medical technician instructor-coordinators" (who now must be certified) to "emergency medical services instructor-coordinators" (who would have to be licensed).

In order to get a license as an EMS worker, an individual would have to be at least 18 years old, have successfully completed the appropriate education program approved by the DPH, have attained a passing score on the DPH written and practical examinations, and met any other requirements of the bill. A medical first responders who had not successfully completed an education program would be "grandparented" in until December 31, 1992, if the department determined that he or she was performing the functions of a medical first responder on the effective date of the bill and met the other requirements. The DPH could issue a 120-day temporary nonrenewable license to someone who had successfully completed all the requirements except for the required examinations, but someone holding a temporary license could practice only under the direct supervision of someone holding a comparable or higher regular license (i.e. a temporarily licensed paramedic could practice only under the direct supervision of a regularly licensed paramedic, a temporarily licensed EMT specialist could practice only under the supervision of a regularly licensed EMT specialist or a paramedic, and so forth). Finally, the DPH could issue licenses to individuals licensed in other states with comparable standards if they met the bill's requirements, there were no disciplinary actions pending against them, and any sanctions that had been imposed were no longer in force.

EMS service operations. Presently there also are three levels of emergency medical services that can operate outside of a hospital: ambulance operations, advanced mobile emergency care services, and limited advanced mobile emergency care services, with the latter two services defined primarily in terms of emergency techniques that they are allowed to provide (such as endotrachial intubation, defibrillation, drug administration and intravenous lifelines, etc.).

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The bill would authorize four kinds of "life support agencies," three of which would be roughly comparable to existing EMS service operations and a new, fourth category, "aircraft transport operation." The bill would basically define life support agencies by the levels of life support that would be allowed and by whether or not patients could be transported from the scene of an emergency to a health care facility. Two kinds of EMS operations ("medical first responders" and "nontransport prehospital life support operations") could treat patients at the scene of an emergency but could not transport them, one ("aircraft transport operations") could only transport patients from one health facility to another. Only ambulance operations could both treat patients at the scene of an emergency and transport them to a health facility. Medical first responders (which would include police and firefighters) could provide "medical first response" at the scene of an emergency prior to the arrival of an ambulance; nontransport prehospital life support operations could provide basic life support, limited advanced life support, and advanced life support at the scene of the emergency (but not move the patient to a health facility for further treatment); and ambulance operations would be able to transport a patient from the scene of an emergency to a health facility for further treatment and could be licensed to provide all levels of life support, from medical first response through advanced life support.

Generally, EMS agencies would be prohibited from operating without a license, from operating above their approved life support levels, and from doing certain kinds of advertising. They would be required to have at least one appropriately staffed and equipped vehicle available at all times. Ambulances and nontransport prehospital operations would be required to respond to all requests originating in their service areas (or ensure that there was a response) and to operate only under the direction of their medical control authorities. Only licensed ambulances and aircraft transport operations could transport patients, the latter upon written orders from a physician and between health facilities. If a police or firefighting agency was sent out to provide medical first response life support, it would be subject to provisions governing medical first response services.

If the DPH decided that grounds existed for taking action on (denying, suspending, or revoking) an agency's license but that such action might be detrimental to residents in the agency's service area, it could issue a one year nonrenewable conditional license and set conditions to protect the public health, safety, and welfare.

Local governments could operate ambulance operations or nontransport prehospital life support operations (or contract for such services) and pay for the costs of the service through available funds, including federal or private funds, fees for the services, or special assessments.

Duties of the Department of Public Health. The bill would retain many of the present duties of the Department of Public Health, change or delete others, and add some new duties.

The department would continue to be responsible for a number of functions with regard to emergency medical services such as:

- developing, coordinating, and administering a statewide EMS system;
- promoting public education on EMS;
- developing and coordinating a statewide EMS communication system;
- helping develop the EMS parts of the state health plan;
- collecting any data necessary to assess the quality and need for EMS services throughout the state;
- developing and maintaining standards for licensing EMS services and personnel (including annual inspections of ambulance operations and nontransport prehospital life support operations).

With some changes from present law, the department would continue to be required to:

- license all emergency medical services personnel and agencies;
- provide EMS resources for disasters and disaster drills;
- develop a program to inventory hospitals that have special care capabilities or that meet trauma center standards, including developing criteria for categorizing hospital emergency department capabilities every three years;
- develop and implement field studies on emergency medical services after review by the state EMS services committee;
- promulgate (with comment from the state EMS services committee) various rules to implement the bill, including rules to establish and maintain minimum standards for ambulances and for EMS vehicle patient care equipment and safety equipment (instead of publishing recommended equipment lists for emergency medical services vehicles) and the advertising of EMS services;
- designate medical control authorities — usually on a countywide basis — and develop recommendations for appropriate territorial boundaries for medical control authorities (rather than simply approving organizations as medical control authorities); and
- review and approve education programs for EMS personnel, as well as programs for relicensure.

The bill would no longer require the department to:

- annually inventory the emergency medical services available in the state;
- provide a way for hospitals to appeal the categorization of their emergency departments;
- report to the legislature and the governor at least every three years on the extent to which the state health plan has been implemented on emergency medical services;
- carry out certain functions with regard to health systems agencies;
- approve and license nurses qualified in emergency medical services;
- register nonemergency transportation vehicles.

A new charge to the DPH would be to conduct a study of rural EMS health care needs, actively involving rural communities and rural EMS services providers. The study would have to be completed within 18 months after the bill took effect and submitted to the House and Senate committees dealing with public health.

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Finally, the bill would allow (but not require) the department to promulgate rules (a) requiring EMS agencies to submit their records and data for periodic evaluation and (b) establishing a grant program (or contracting with outside agencies) to provide training, public information, and help to medical control authorities and emergency medical services systems.

State Emergency Medical Services Coordination Committee. Presently, the chairperson of the Health Facilities and Agencies Advisory Commission appoints four task forces to advise the commission, one of which is a nine-member statewide emergency medical services advisory council, whose members are appointed by the governor. The advisory council is charged with generally advising the governor, legislature, and department on issues concerning emergency medical services and with promoting voluntary provision of first response capability throughout the state. It also advises the DPH on developing state standards for ambulances and for minimum patient care equipment, serves as the appeal body for hospitals appealing the categorization of their emergency departments by the DPH, establishes and appoints technical advisory committees composed of providers, and reviewed the development of EMS services in health systems agencies.

The bill would do away with this council and replace it with a 29 member "state emergency medical coordination committee," four of whose members would be non-voting ex officio members. The 25 voting members would be appointed by the director of the DPH, with a set number of members representing various provider groups, labor, and consumers. Two of the ex officio members would be from the legislature (a representative appointed by the Speaker of the House and a senator appointed by the Senate Majority Leader), one would represent the DPH, and one would be appointed by the Department of Management and Budget to represent the Office of Health and Medical Affairs. Representation from counties with smaller populations would be ensured by requiring that at least eight of the voting members be from (or do business in) a county with a population of not more than 100,000, while at least one voting member would have to be from a county with a population of not more than 35,000. At least one member would have to be from Detroit.

The committee would have to meet at least twice a year, with its meetings subject to the Open Meetings Act. Reimbursement for committee members would be set by the legislature.

The committee would continue to serve as advisory task force to the Health Facilities and Agencies Advisory Commission, and would carry out a number of other functions, including:

- helping coordinate and provide information on EMS programs and services, as well as serving as a liaison between groups and individuals involved in the EMS system;

- advising the legislature and the DPH on EMS matters throughout the state and making recommendations to the DPH on developing a comprehensive statewide EMS program;

- advising the DPH on appeals of local medical control decisions, on vehicle standards for ambulances, on minimum patient care equipment lists, and on standards for advertising EMS services;

- appointing, with the DPH's advice and consent, a statewide quality assurance subcommittee, which, at the request of the director of the DPH, would be responsible for any quality control activities, including making recommendations to the DPH concerning approval of medical control authority applications, revisions concerning medical control authority protocols, and EMS field studies;

- at the request of the director of the DPH, participating in educational activities, special studies, and the evaluation of emergency medical services.

Medical Control Authorities. The Department of Public Health would be required to designate a medical control authority (MCA) for each county (though, if appropriate, it could designate an MCA for part of a county or for two or more counties), assuring that there was a "reasonable relationship" between the existing EMS capacity and the estimated demand for EMS services in that area.

Hospitals would be able to participate or not in their locally designated medical control authorities. Participating hospitals would administer the authority, appointing an advisory body for the authority and, with its advice, a physician as the medical director of the authority. The advisory body would, at a minimum, have to include representatives from each kind of EMS provider and worker in the authority's boundaries, though no more than ten percent of the membership could be employed by the medical director. The medical director would have to either be board certified in emergency medicine or practice emergency medicine and be nationally certified in both advanced cardiac life support and advanced trauma life support.

Local medical control authorities would be required to establish, with the DPH's approval, written protocols for life support agencies and licensed EMS personnel practicing in the authority's area. The protocols would specify what each kind of licensed EMS practitioner could do and would ensure that life support agencies dispatched their services appropriately based upon medical need and the EMS system's capabilities. With the approval of the DPH, the protocols could be more stringent in their standards for equipment and personnel (except for medical first responders), but would have to provide an appeals process and consider whether negative medical or economic impacts outweighed the benefits of those additional standards.

Fees. Presently, license fees for ambulance attendants, emergency medical technicians (EMTs), advanced EMTs, and EMT specialists are $5 every three years. EMT instructor-coordinators must be licensed, but pay no fees. Ambulance operations must pay an annual vehicle license fee of $10 for each ambulance in operation. The bill would exempt from having to pay fees both medical first responders and volunteers who worked for agencies that did not charge for their services. The bill would set new fees as follows:

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	Annual fee renewal	Late fee
Ambulance operation	$100/year + $25/vehicle	$300/$100 per vehicle
Nontransport prehospital life support operation	$100/year + $25/vehicle	$300/$100 per vehicle
Aircraft transport operation	$100/year + $100/airplane	$300/$100 per vehicle
Medical first response service	no fee	no fee

	3-yr license fee	Renewal	Late fee
Emergency medical technician	$ 40	$25	$ 50
EMS specialist	$ 60	$25	$50
Paramedic	$ 80	$25	$ 50
EMS instructor-coordinator	$100	$50	$100

License actions. Presently, the DPH may deny, revoke, or suspend an individual's EMS license (certification, or authorization) on a number of grounds, including if the individual got his or her license fraudulently, illegally used (or distributed) drugs, practiced with an expired or suspended license, violated (or helped others violate) Part 207 of the code, didn't perform up to his or her training, or was physically or mentally incapable of carrying out his or her duties. The bill would keep these grounds and add to the list conviction of a crime that adversely affected the individual's ability to practice safely and competently.

HIV notification. The bill would amend the section of the health code (added by Public Act 490 of 1988) that requires notification of emergency services workers, under certain circumstances, when the worker helps or transports an emergency patient that later tests positive for human immunodeficiency virus (HIV) or other infectious agent. Presently, the code requires health facilities to notify emergency services workers (police officers, fire fighters, ambulance attendants, emergency medical technicians, emergency medical technician specialists, and advanced emergency medical technicians) when the worker is exposed to an emergency patient who later tests positive for an infectious agent. Only if the emergency worker submits a written request, however, does the health facility have to tell the worker when an emergency patient is HIV infected. "Notification" can mean that the health facility notifies the chief elected official of the local governmental unit employing (or otherwise having "jurisdiction over") the worker, and must take place within two days after the facility gets the test results (or receives a written request).

The bill would amend this section of the code to appropriately reference the new kinds of emergency workers and to require that workers "demonstrate" to the health facility that they did participate in providing treatment or transportation to the emergency patient in question. The bill also would give civil and criminal immunity to health facilities (or their agents) that complied in good faith with the notification requirements in this section of the code.

Immunity provisions. Under present law, ambulance attendants, EMTs, EMT specialists, and advanced EMTs (as well as their backup staff) are immune from liability when giving care consistent with their training, unless there is gross negligence or willful misconduct.

The bill would give immunity to medical first responders, EMTs, EMT specialists, paramedics, and medical directors of a medical control authority while providing services to a patient either outside a hospital or in a hospital before transferring patient care to hospital personnel, providing that the act or omission was (a) consistent with the individual's licensure and training and (b) was not the result of gross negligence or willful misconduct. Backup staff (the authorizing physician, the medical director, communications personnel, the life support agency and staff, the hospital and staff, the governmental unit, or emergency personnel from outside the state) also would be given immunity under these conditions. The bill specifically would not limit immunity from liability otherwise provided by law for anyone covered by this section.

Repeal. The bill would repeal Part 207 of the Public Health Code.

FISCAL IMPLICATIONS:

A Department of Public Health analysis of an earlier version of the bill reported that without the additional revenues that would be raised by the increased license fees, the state would have to supplement general funding to the amount ($210,000) that the fee increases are expected to generate, and that the fiscal year 1989-90 appropriation passed by the legislature anticipates these fee increases. (9-7-89)

ARGUMENTS:

For:

The part of the health code governing emergency medical services was enacted in 1981. Since then, a number of changes have taken place in the provision of emergency medical services ("prehospital care") and this part of the health code is now outdated in a number of respects. The bill would update this part of the code, taking into consideration the advances made over the last several years in the provision of emergency medical services.

Against:

The bill would replace the existing nine-member statewide EMS advisory council, which has four consumer members, with a 29-member state EMS coordination committee, only two of whose voting members would be consumers. Not only would this proposed committee be too unwieldy and unable to function effectively, it also would be composed overwhelmingly of provider representatives (only two of the voting members would represent consumers, while only three would represent labor). For the sake of efficiency and to maintain strong consumer representation, the committee's composition should be changed.

Response: Since the committee will be dealing with highly technical matters involved in the provision of EMS services, it is only sensible to make sure that the expertise of providers in emergency medical services is adequately represented.

Against:

While some increase in fees may be necessary, the amounts proposed in the bill seem rather steep. Such significant fee increases, moreover, might discourage people who volunteer their services from getting involved in emergency medical services, and rather than discourage volunteers, the fees ought to encourage their participation.

Response: The fee increases, while substantial compared to the existing fees, are not unreasonable. EMS worker licenses are for three years, so, for example, the EMT annual fee costs would average out to less than $15 a year — hardly an undue burden for this profession. What

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is more, EMS operations usually pay their staff's license fees anyway, so the increased fees should not constitute a hardship for anyone. Finally, the bill exempts from fees volunteers who work for EMS operations that do not charge for their services, so the fee increase should not affect the level of participation by volunteers in these operations.

POSITIONS:

The Department of Public Health supports the bill. (1-11-90)

The Michigan Hospital Association supports the bill. (1-11-90)

The Society of Michigan Emergency Medical Technician (EMT) Instructor-Coordinators supports the bill. (1-11-90)

The Michigan Association of Ambulance Services supports the bill. (1-11-90)

The Michigan Association of Aeromedical Services supports the bill. (1-11-90)

The International Union of Operating Engineers (representing the Michigan State Firefighters Union EMTs and the City of Detroit EMTs) supports the bill. (1-11-90)

The Michigan Fire Chiefs Association supports the bill. (1-11-90)

The Michigan Association of Emergency Medical Service (EMS) Systems supports the bill. (1-11-90)

The Michigan Trial Lawyers Association has no position on the bill. (1-11-90)

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House Legislative Analysis Section

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EMERGENCY MEDICAL SERVICES ACT

House Bill 4952 as enrolled
Third Analysis (7-3-90)

Sponsor: Rep. Michael J. Bennane
House Committee: Public Health
Senate Committee: Health Policy

THE APPARENT PROBLEM:

The Comprehensive Emergency Medical Services Act (Public Act 79 of 1981) became Part 207 ("Emergency Medical Services") of the Public Health Code. The act was adopted in 1981 and was scheduled to lapse on September 30, 1989. It replaced the Emergency Personnel Act (Public Act 290 of 1976), which was repealed in 1978 when the revised public health code (Public Act 368 of 1978) was adopted.

At the request of the Department of Public Health, legislation has been introduced which would reenact, with some changes, the emergency medical services section of the Public Health Code.

THE CONTENT OF THE BILL:

The bill would repeal — and then re-enact, with some changes — the Comprehensive Emergency Medical Services Act (Public Act 79 of 1981), which became Part 207 (Emergency Medical Services) of the Public Health Code. It also would amend a number of other sections of the health code to bring them into accord with the newly re-written part and would specify that references in any laws to earlier acts governing emergency medical services would be considered to be references to the bill.

The following are some of the major changes that the bill would make:

- Medical control authorities would be mandatory for all areas rather than permissive (though hospital participation would remain voluntary);
- a new 29-member "Emergency Medical Services Coordinating Committee" (with four non-voting members) would replace the existing nine-member statewide emergency medical services advisory council;
- license fees would be increased and late fees would be added;
- the present nine categories of EMS service providers would be reduced to four types of EMS service providers, capable of providing four levels of life support;
- two kinds of agencies that could provide on-the-scene life support only would be authorized, along with ambulance operations (which could provide all levels of life support on the scene and transport the patient to a health facility) and aircraft transport operations (which could transport patients between facilities);
- immunity provisions would be expanded;
- the emergency medical needs of rural areas would be studied.

Emergency medical service workers. Presently, the law defines nine kinds of workers involved in providing emergency medical services, some of whom are licensed, some of whom are certified, some of whom are "authorized," and some of whom merely operate licensed communications facilities.

The bill would replace these nine kinds of EMS workers with four kinds oflicensed emergency medical services personnel. It would:

- delete four of the existing kinds of workers ("advanced emergency medical technician," "certified advanced cardiac life support provider," "communications personnel," "driver," and "emergency department registered nurse");
- replace two kinds of workers ("ambulance attendant" and "advanced emergency medical technician") with the new (and roughly corresponding) categories of "medical first responder" and "paramedic;"
- retain two kinds of workers ("emergency medical technician" and "emergency medical technician specialist"); and
- change "emergency medical technician instructor-coordinators" (who now must be certified) to "emergency medical services instructor-coordinators" (who would have to be licensed).

In order to get a license as an EMS worker, an individual would have to be at least 18 years old, have successfully completed the appropriate education program approved by the DPH, have attained a passing score on the DPH written and practical examinations, and met any other requirements of the bill. A medical first responder who had not successfully completed an education program would be "grandparented" in until December 31, 1992, if the department determined that he or she was performing the functions of a medical first responder on the effective date of the bill and met the other requirements. The DPH could issue a 120-day temporary nonrenewable license to someone who had successfully completed all the requirements except for the required examinations, but someone holding a temporary license could practice only under the direct supervision of someone holding a comparable or higher regular license (i.e. a temporarily licensed paramedic could practice only under the direct supervision of a regularly licensed paramedic, a temporarily licensed EMT specialist could practice only under the supervision of a regularly licensed EMT specialist or a paramedic, and so forth). Finally, the DPH could issue licenses to individuals licensed in other states with comparable standards if they met the bill's requirements, there were no disciplinary actions pending against them, and any sanctions that may have been imposed were no longer in force.

EMS service operations. Presently there are three levels of emergency medical services that can operate outside of a hospital: ambulance operations, advanced mobile emergency care services, and limited advanced mobile emergency care services, with the latter two services defined primarily in terms of emergency techniques that they are allowed to provide (such as endotrachial intubation, defibrillation, drug administration and intravenous lifelines, etc.).

OVER

The bill would authorize four kinds of "life support agencies," three of which would be roughly comparable to existing EMS service operations and a new, fourth category, "aircraft transport operation." The bill would basically define life support agencies by the levels of life support that would be allowed and by whether or not patients could be transported from the scene of an emergency to a health care facility. Two kinds of EMS operations ("medical first responders" and "nontransport prehospital life support operations") could treat patients at the scene of an emergency but could not transport them, one ("aircraft transport operations") could only transport patients from one health facility to another. Only ambulance operations could both treat patients at the scene of an emergency and transport them to a health facility. Medical first responders (which would include police and firefighters only when dispatched for medical first response life support) could provide "medical first response" at the scene of an emergency prior to the arrival of an ambulance; nontransport prehospital life support operations could provide basic life support, limited advanced life support, and advanced life support at the scene of the emergency (but not move the patient to a health facility for further treatment); and ambulance operations would be able to transport a patient from the scene of an emergency to a health facility for further treatment and could be licensed to provide all levels of life support, from medical first response through advanced life support.

Generally, EMS agencies would be prohibited from operating without a license, from operating above their approved life support levels, and from doing certain kinds of advertising. They would be required to have at least one appropriately staffed and equipped vehicle available at all times. Ambulances and nontransport prehospital operations would be required to respond to all requests originating in their service areas (or ensure that there was a response) and to operate only under the direction of their medical control authorities. Only licensed ambulances and aircraft transport operations could transport patients, the latter only upon written orders from a physician and only between health facilities. If a police or firefighting agency was sent out to provide medical first response life support, it would be subject to provisions governing medical first response services.

If the DPH decided that grounds existed for taking action on (denying, suspending, or revoking) an agency's license but that such action might be detrimental to residents in the agency's service area, it could issue a one year nonrenewable conditional license and set conditions to protect the public health, safety, and welfare.

Local governments could operate ambulance operations or nontransport prehospital life support operations (or contract for such services) and pay for the costs of the service through available funds, including federal or private funds, fees for the services, or special assessments.

Duties of the Department of Public Health. The bill would retain many of the present duties of the Department of Public Health, change or delete others, and add some new duties.

The department would continue to be responsible for a number of functions with regard to emergency medical services such as:

- developing, coordinating, and administering a statewide EMS system;
- promoting public education on EMS;
- developing and coordinating a statewide EMS communication system;
- helping develop the EMS parts of the state health plan;
- collecting any data necessary to assess the quality and need for EMS services throughout the state;
- developing and maintaining standards for licensing EMS services and personnel (including annual inspections of ambulance operations and nontransport prehospital life support operations).

With some changes from present law, the department would continue to be required to:

- license all emergency medical services personnel and agencies;
- provide EMS resources for disasters and disaster drills;
- develop a program to inventory hospitals that have special care capabilities or that meet trauma center standards, including developing criteria for categorizing hospital emergency department capabilities every three years;
- develop and implement field studies on emergency medical services after review by the state EMS services committee;
- promulgate (with comment from the state EMS services committee) various rules to implement the bill, including rules to establish and maintain minimum standards for ambulances and for EMS vehicle patient care equipment and safety equipment (instead of publishing recommended equipment lists for emergency medical services vehicles) and the advertising of EMS services;
- designate medical control authorities — usually on a countywide basis — and develop recommendations for appropriate territorial boundaries for medical control authorities (rather than simply approving organizations as medical control authorities); and
- review and approve education programs for EMS personnel, as well as programs for relicensure.

The bill would no longer require the department to:

- annually inventory the emergency medical services available in the state;
- provide a way for hospitals to appeal the categorization of their emergency departments;
- report to the legislature and the governor at least every three years on the extent to which the state health plan has been implemented on emergency medical services;
- carry out certain functions with regard to health systems agencies;
- approve and license nurses qualified in emergency medical services;
- register nonemergency transportation vehicles.

A new charge to the DPH would be to conduct a study of rural EMS health care needs, actively involving rural communities and rural EMS services providers. The study would have to be completed within 18 months after the bill took effect and submitted to the House and Senate committees dealing with public health.

Finally, the bill would allow (but not require) the department to promulgate rules (a) requiring EMS agencies to submit their records and data for periodic evaluation and (b) establishing a grant program (or contracting with outside agencies) to provide training, public information, and help to medical control authorities and emergency medical services systems.

MORE

State Emergency Medical Services Coordination Committee. Presently, the chairperson of the Health Facilities and Agencies Advisory Commission appoints four task forces to advise the commission, one of which is a nine-member statewide emergency medical services advisory council, whose members are appointed by the governor. The advisory council is charged with generally advising the governor, legislature, and department on issues concerning emergency medical services and with promoting voluntary provision of first response capability throughout the state. It also advises the DPH on developing state standards for ambulances and for minimum patient care equipment, serves as the appeal body for hospitals appealing the categorization of their emergency departments by the DPH, establishes and appoints technical advisory committees composed of providers, and reviewed the development of EMS services in health systems agencies.

The bill would do away with this council and replace it with a 29 member "state emergency medical coordination committee," four of whose members would be non-voting ex officio members. The 25 voting members would be appointed by the director of the DPH, with a set number of members representing various provider groups, labor, and consumers. Two of the ex officio members would be from the legislature (a representative appointed by the Speaker of the House and a senator appointed by the Senate Majority Leader), one would represent the DPH, and one would be appointed by the Department of Management and Budget to represent the Office of Health and Medical Affairs. Representation from counties with smaller populations would be ensured by requiring that at least eight of the voting members be from (or do business in) a county with a population of not more than 100,000, while at least one voting member would have to be from a county with a population of not more than 35,000. At least one member would have to be from Detroit.

The committee would have to meet at least twice a year, with its meetings subject to the Open Meetings Act. Reimbursement for committee members would be set by the legislature.

The committee would continue to serve as advisory task force to the Health Facilities and Agencies Advisory Commission, and would carry out a number of other functions, including:

- helping coordinate and provide information on EMS programs and services, as well as serving as a liaison between groups and individuals involved in the EMS system;
- advising the legislature and the DPH on EMS matters throughout the state and making recommendations to the DPH on developing a comprehensive statewide EMS program;
- advising the DPH on appeals of local medical control decisions, on vehicle standards for ambulances, on minimum patient care equipment lists, and on standards for advertising EMS services;
- appointing, with the DPH's advice and consent, a statewide quality assurance task force, which would be responsible for making recommendations to the DPH concerning approval of medical control authority applications, revisions concerning medical control authority protocols, and EMS field studies, and which would conduct any other quality assurance activities requested by the director of the DPH;
- at the request of the director of the DPH, participating in educational activities, special studies, and the evaluation of emergency medical services.

Medical Control Authorities. The Department of Public Health would be required to designate a medical control authority (MCA) for each county (though, if appropriate, it could designate an MCA for part of a county or for two or more counties), assuring that there was a "reasonable relationship" between the existing EMS capacity and the estimated demand for EMS services in that area.

Hospitals would be able to participate or not in their locally designated medical control authorities. Participating hospitals would administer the authority, appointing an advisory body for the authority and, with its advice, a physician as the medical director of the authority. The advisory body would, at a minimum, have to include representatives from each kind of EMS provider and worker in the authority's boundaries, though no more than ten percent of the membership could be employed by the medical director. The medical director would have to either be board certified in emergency medicine or practice emergency medicine and be nationally certified in both advanced cardiac life support and advanced trauma life support.

Local medical control authorities would be required to establish, with the DPH's approval, written protocols for life support agencies and licensed EMS personnel practicing in the authority's area. (The bill would specify a number of requirements for the development and adoption of written protocols, including circulation of written drafts, comparison with established protocols, and allowing emergency protocols.) The protocols would specify what each kind of licensed EMS practitioner could do and would ensure that life support agencies dispatched their services appropriately based upon medical need and the EMS system's capabilities. With the approval of the DPH, the protocols could be more stringent in their standards for equipment and personnel (except for medical first responders), but would have to provide an appeals process and consider whether negative medical or economic impacts outweighed the benefits of those additional standards.

Fees. Presently, license fees for ambulance attendants, emergency medical technicians (EMTs), advanced EMTs, and EMT specialists are $5 every three years. EMT instructor-coordinators must be licensed, but pay no fees. Ambulance operations must pay an annual vehicle license fee of $10 for each ambulance in operation.

The bill would exempt from having to pay fees both medical first responders and volunteers who worked for agencies that did not charge for their services. The bill would set new fees as follows:

	Annual fee/renewal	Late fee
Ambulance operation	$100/year + $25/vehicle	$300/$100 per vehicle
Nontransport prehospital life support operation	$100/year + $25/vehicle	$300/$100 per vehicle
Aircraft transport operation	$100/year + $100/airplane	$300/$100 per vehicle
Medical first response service	no fee	no fee

OVER

	3-year license fee	Renewal	Late fee
Emergency medical technician	$ 40	$25	$ 50
EMS specialist	$ 60	$25	$ 50
Paramedic	$ 80	$25	$ 50
EMS instructor-coordinator	$100	$50	$100

The bill would specifically prohibit the legislature from using the fee increases as a basis for reducing the amount of general fund money appropriated to the DPH.

License actions. Currently, the DPH may deny, revoke, or suspend an individual's EMS license (certification, or authorization) for a number of reasons, including when an individual got his or her license fraudulently, illegally used (or distributed) drugs, practiced with an expired or suspended license, violated (or helped others violate) Part 207 of the code, didn't perform up to his or her training, or was physically or mentally incapable of carrying out his or her duties. The bill would add to this list of grounds for license action conviction of a crime that adversely affected the individual's ability to practice safely and competently.

HIV notification. The bill would amend the section of the health code (added by Public Act 490 of 1988) that requires notification of emergency services workers, under certain circumstances, when the worker helps or transports an emergency patient that later tests positive for human immunodeficiency virus (HIV) or other infectious agent. Presently, the code requires health facilities to notify emergency services workers (police officers, fire fighters, ambulance attendants, emergency medical technicians, emergency medical technician specialists, and advanced emergency medical technicians) when the worker is exposed to an emergency patient who later tests positive for an infectious agent and, at a minimum, of the appropriate infection control measures to take. Only if the emergency worker submits a written request, however, does the health facility have to tell the worker when an emergency patient is HIV infected. "Notification" can mean that the health facility notifies the chief elected official of the local governmental unit employing (or otherwise having "jurisdiction over") the worker, and must take place within two days after the facility gets the test results (or receives a written request).

The bill would amend this section of the code to appropriately reference the new kinds of emergency workers and to require that workers "demonstrate" in writing to the health facility that they were exposed to "the blood, body fluids, or airborne agents" of the emergency patient or that they did participate in providing treatment or transportation to the emergency patient in question. The bill would strike existing provisions that say that a health facility is in compliance with the notification requirements if it notifies the chief elected official of the appropriate local governmental unit. Instead, the bill would require that the facility attempt to notify the potentially exposed worker directly, or, failing that, notify the workers' employer. If the employer cannot be identified, the facility would be required to notify the medical control authority or chief elected official. If the medical control authority or chief elected official cannot notify the potentially exposed worker, they would be required to document in writing their attempts to notify the worker and the reasons why they were unable to do so. For purposes of this section on notification, "emergency patient" would be defined as someone who was transported to an organized emergency department in a licensed hospital (or other facility routinely available for the general care of medical patients). (The new Part 209, "Emergency Medical Services," defines "emergency patient" to mean "an individual whose physical or mental condition is such that the individual is, or may reasonably be suspected or known to be, in imminent danger of loss of life or of significant health impairment.")

The bill also would give civil and criminal immunity to health facilities (or their agents) that complied in good faith with the notification requirements in this section of the code.

Immunity provisions. Under present law, ambulance attendants, EMTs, EMT specialists, and advanced EMTs (as well as their backup staff) are immune from liability when giving care consistent with their training, unless there is gross negligence or willful misconduct.

The bill would give immunity to medical first responders, EMTs, EMT specialists, paramedics, and medical directors of a medical control authority while providing services to a patient either outside a hospital or in a hospital before transferring patient care to hospital personnel, providing that the act or omission was (a) consistent with the individual's licensure and training and (b) was not the result of gross negligence or willful misconduct. Backup staff (the authorizing physician, the medical director, communications personnel, the life support agency and staff, the hospital and staff, the governmental unit, or emergency personnel from outside the state) also would be given immunity under these conditions. The bill specifically would not limit immunity from liability otherwise provided by law for anyone covered by this section.

Repeal. The bill would repeal Part 207 of the Public Health Code.

Note: The enrolled bill makes reference, in Section 20191(1), to paramedics licensed under "section 30950." This apparently, is a typographical error, since paramedics are licensed under the new Part 209, section 20950.

FISCAL IMPLICATIONS:

According to the House Fiscal Agency, the fiscal year 1989-90 appropriation passed by the legislature included $150,000 for the emergency medical services program contingent upon the fee increase proposed in the bill. The $200,000 generated by the fee increases would mean that no additional general fund money would be needed by the Department of Public Health for the program. The 2.2 percent budget reduction (which in this case would amount to $15,700) should not cause major problems for the program. (7-3-90)

ARGUMENTS:

For:

The part of the health code governing emergency medical services was enacted in 1981. Since then, a number of changes have taken place in the provision of emergency medical services ("prehospital care") and this part of the health code is now outdated in a number of respects. The bill would update this part of the code, taking into consideration the advances made over the last several years in the provision of emergency medical services.

MORE

Against:

The bill would replace the existing nine-member statewide EMS advisory council, which has four consumer members, with a 29-member state EMS coordination committee, only two of whose voting members would be consumers. Not only would this proposed committee be too unwieldy and unable to function effectively, it also would be composed overwhelmingly of provider representatives (only two of the voting members would represent consumers, while only three would represent labor). For the sake of efficiency and to maintain strong consumer representation, the committee's composition should be changed.

Response: Since the committee will be dealing with highly technical matters involved in the provision of EMS services, it is only sensible to make sure that the expertise of providers in emergency medical services is adequately represented.

Against:

While some increase in fees may be necessary, the amounts proposed in the bill seem rather steep. Such significant fee increases, moreover, might discourage people who volunteer their services from getting involved in emergency medical services, and rather than discourage volunteers, the fees ought to encourage their participation.

Response: The fee increases, while substantial compared to the existing fees, are not unreasonable. EMS worker licenses are for three years, so, for example, the EMT annual fee costs would average out to less than $15 a year — hardly an undue burden for this profession. What is more, EMS operations usually pay their staff's license fees anyway, so the increased fees should not constitute a hardship for anyone. Finally, the bill exempts from fees volunteers who work for EMS operations that do not charge for their services, so the fee increase should not affect the level of participation by volunteers in these operations.

STATE OF MICHIGAN

COURT OF APPEALS

THELMA NEVES,

Plaintiff-Appellant,

v

JACKSON EMERGENCY MEDICAL SERVICES, P.C., BRIAN LEDFORD and MARK WILKINSON, jointly and severally,

Defendants-Appellees.

UNPUBLISHED
February 27, 1996

No. 165885
LC No. 91-59856-NH

Before: Saad, P.J., and Taylor and P.J. Conlin,* JJ.

PER CURIAM.

In this personal injury action, plaintiff appeals the trial court's grant of summary disposition in favor of all defendants, Jackson Emergency Medical Services, P.C. (JEMS), and Ledford and Wilkinson, an emergency medical services corporation and its technicians, respectively. We affirm.

On July 24, 1991, plaintiff ate food causing increased blood pressure and breathing difficulty. Plaintiff's grandchild dialed "911" and JEMS was dispatched. Two advanced emergency medical technicians (EMT) employed by JEMS, Wilkinson and Ledford, responded to plaintiff's home. First, EMT Wilkinson gave epinephrine to plaintiff and soon plaintiff's blood pressure and breathing returned to near normal levels. Then, on orders from Foote Hospital, Wilkinson administered benadryl by inserting the needle into plaintiff's arm two inches above her elbow. At that point, plaintiff screamed and told Wilkinson he hit a nerve, but Wilkinson continued to inject the benadryl. Plaintiff contends that this was an improper injection site because a benadryl shot should be administered two inches below the shoulder. Plaintiff contends defendant's improper injection caused a wrist drop, an inability to flex dorsally her right wrist, permanent damage to her right arm muscles and radial nerve damage.

Plaintiff's original complaint alleged that defendants were negligent, and defendants moved for summary disposition under the immunity provision of the Emergency Medical Services Act (EMSA). In her amended complaint, plaintiff alleged gross negligence. Defendants again moved for summary disposition under the EMSA. Finally, plaintiff once again moved to amend her complaint to include allegations that the emergency passed at the time Wilkinson administered benadryl and his conduct constituted willful misconduct.

The trial court held a hearing on both motions, denied plaintiff's last motion to amend and granted defendants' motion for summary disposition. The trial court ruled that the entire course of treatment by defendants, including the benadryl injection, occurred during an emergency setting. The trial court concluded that Ledford should be dismissed from the case because he did not administer any medication. Further, with respect to the benadryl injection, the trial court found that plaintiff had alleged only ordinary negligence, not gross negligence or willful misconduct. Nonetheless, the court ruled on these theories and rejected plaintiff's gross negligence theory because there was no antecedent

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*Circuit judge, sitting on the Court of Appeals by assignment.

and subsequent negligence and similarly rejected plaintiff's willful misconduct theory because there was no intent to harm plaintiff.

Plaintiff contends EMSA does not apply here because the emergency ceased prior to Wilkinson injecting her with benadryl. Indeed, both parties in this case base their arguments upon the assumption that the EMSA only applies to continuing emergency situations.

Prior to the amendment of the EMSA in 1990, which was effective July 2, 1990, the statute gave protection -- immunity from ordinary negligence -- for emergency medical technicians, but that protection ended when the emergency ceased. However, after the amendment, the provision with regard to immunity, found at MCL 333.20904(1); MSA 14.15(20904)(1), stated:

> Unless an act or omission is the result of gross negligence or willful misconduct, the acts or omissions of a medical first responder, emergency medical technician, emergency medical technician specialist, paramedic, or medical director of a medical control authority or his or her designee while providing services to a patient outside a hospital, or in a hospital before transferring patient care to hospital personnel, that are consistent with the individual's licensure or additional training required by the local medical control authority do not impose liability in the treatment of a patient on those individuals. . . .

Thus, the version of EMSA in effect at the time of this incident immunizes emergency personnel while working in the field, or in a hospital prior to transfer of patient care to hospital personnel. As that was, by stipulation of the parties, the situation here, the technicians have the protection the statute grants. As the trial court reached the correct conclusion in this matter, albeit for different reasons, we affirm that decision.

Next, plaintiff argues that all questions regarding the existence of an emergency situation must be presented to a jury. This argument must fail considering plaintiff's acknowledgment that defendants responded to an emergency call. Further, our holding that it is not necessary to prove the existence of a continuing emergency takes this question from the realm of the jury.

Plaintiff also asserts the trial court erred in finding defendants were not grossly negligent because the trial court incorrectly used the definition of gross negligence found in *Gibbard v Cursan*, 225 Mich 311; 196 NW 398 (1923). Plaintiff argues the trial court should have used, and urges this Court to adopt, the definition of gross negligence contained in the Governmental Tort Liability Act (GTLA), MCL 691.1407(2)(c); MSA 3.996(107)(2)(c). Plaintiff's position has merit as this issue was dispositively handled, subsequent to the motion here being decided, in *Jennings v Southwood*, 446 Mich 125; 521 NW2d 230 (1994). In interpreting the gross negligence provision of the EMSA, the *Jennings* Court abandoned the definition used in *Gibbard, supra*, and instead adopted the definition set forth in the GTLA.

Because *Jennings* postdated the trial court's decision, the trial court here did not have the benefit of our Supreme Court's decision in *Jennings*. This raises the separate question of whether we should apply *Jennings* retroactively to define gross negligence to these facts and the lower court's ruling. We apply the *Jennings* definition of gross negligence retrospectively because retroactive application of judicial decisions is generally favored, *Hyde v University of Michigan Board of Regents*, 426 Mich 223, 240; 393 NW2d 847 (1986), and because the court in *Jennings* did not limit the retroactive effect of its decision. Also, we give *Jennings* retroactive application because *Jennings* did not overrule clear and uncontradicted case law, *Hyde, supra*, at 240, as prior decisions on the subject noted the possibility of a change in the gross negligence definition due to Michigan's rejection of contributory negligence. *Pavlov*

v Community Emergency Medical Service, Inc, 195 Mich App 711, 715, 719; 491 NW2d 874 (1992); *Malcolm v East Detroit*, 437 Mich 132, 147; 468 NW2d 479 (1991).

Further, we concur with the trial court's finding that defendants were not grossly negligent. Defendants' conduct was *not* "so reckless as to demonstrate a substantial lack of concern for whether an injury results." MCL 691.1407(2)(c); MSA 3.996(107)(2)(c). Plaintiff contends that Wilkinson showed a lack of concern for her by ignoring her complaints. However, the record reveals that Wilkinson did respond to plaintiff's protestations by informing her that some pain is normal, and that he had aspirated the needle. Wilkinson's response reveals a genuine concern for his patient, rather than a "lack of concern for whether injury resulted".[1] If plaintiff is correct that Wilkinson chose an improper site for the injection, this would demonstrate, at most, ordinary, not gross, negligence.

Therefore, while the definition of gross negligence applied by the trial court was incorrect as it has since been superceded by *Jennings*, summary disposition was appropriate because defendants were not grossly negligent under EMSA as defined by *Jennings*.

Finally, we reject plaintiff's claim that defendants are not immune from liability under the EMSA because defendants' actions constituted "willful misconduct."

To constitute willful misconduct under the EMSA, defendant must have intended to harm the plaintiff. *Jennings, supra,* at 142. Here, plaintiff's allegations were clearly insufficient to demonstrate Wilkinson intended to harm plaintiff. Because plaintiff's allegations were insufficient to show that Wilkinson acted with "a substantial lack of concern for whether injury resulted," *a fortiori*, they were insufficient to demonstrate the requisite "intent to injure." Therefore, we find the trial court correctly ruled, as a matter of law, that defendants' conduct did not constitute willful misconduct.

Accordingly, we affirm the trial court's grant of summary disposition in favor of defendants.[2]

/s/ Henry William Saad
/s/ Clifford W. Taylor
/s/ Patrick J. Conlin

[1] This is not to imply that mere words of comfort are sufficient to defeat a claim of gross negligence. The focus of the inquiry should be the defendant's conduct, and each case should be adjudged on its unique set of facts.

[2] Plaintiff argues that the trial court erred when it granted summary disposition for defendants without permitting her to amend her complaint. We find no error. Plaintiff's proposed second amended complaint only sought to add allegations that the emergency had passed at the time the benadryl was administered, and that defendants' conduct constituted willful misconduct. As discussed, the trial court did not err when it granted defendants' motion for summary disposition on these issues. Accordingly, the trial court did not abuse its discretion when it refused to allow plaintiff to amend her complaint to add these allegations because the amendments would have been futile. *Formall, Inc v Community National Bank*, 166 Mich App 772, 782-783; 421 NW2d 289 (1988).

APPENDIX 3 TO MAAS' AMICUS BRIEF

EMERGENCY MEDICAL TECHNICIAN EDUCATION PROGRAM
INITIAL COURSE CONTENT AREAS

TOPIC	RECOMMENDED COURSE HOURS
PREPARATORY	**26 hours**
Introduction to Emergency Medical Care	1 hour
The Well-Being of the EMT-Basic	5 hours
Medical / Legal and Ethical Issues	2 hours
The Human Body	10 hours
Baseline Vitals and SAMPLE History	4 hours
Lifting and Moving Patients	4 hours
General Pharmacology	4 hours
AIRWAY	**16 hours**
Airway. Oxygenation, Ventilation	12 hours
EDTLA	4 hours
PATIENT ASSESSMENT	**17 hours**
Scene Size-up	1 hour
Initial Assessment	2 hours
Focused History and Physical Exam: Medical	4 hours
Focused History and Physical Exam: Trauma	5 hours
Detailed Physical Exam	2 hours
On-Going Assessment	1 hour
Communications	1 hour
Documentation	1 hour
MEDICAL	**43 hours**
Respiratory Emergencies	6 hours
Cardiovascular Emergencies	16 hours
Diabetic Emergencies	2 hours
Allergic Reactions	1 hour
Poisoning/Overdose Emergencies	3 hours
Environmental Emergencies	2 hours
Behavioral Emergencies	3 hours
Obstetrics	4 hours
Abdominal Illness	1 hour
CNS Illness	1 hour
TRAUMA	**38 hours**
Bleeding and Shock (PASG and IV Maintenance)	12 hours
Soft Tissue Injuries	10 hours
Musculoskeletal Care	8 hours
Injuries to the Head and Spine	8 hours
SPECIAL CONSIDERATIONS	**10 hours**
Geriatrics	2 hours
Pediatrics	8 hours

OPERATIONS	**12 hours**
Ambulance Operations	2 hours
Gaining Access	5 hours
Overview Topics (Triage, Disaster, HazMat)	5 hours

Recommended Classroom Hours	162
Total Required Clinical Hours	32
Total Course Hours	**194**

Use of Emergency Lights and Sirens during Transport

Procedure

A. **Michigan Motor Vehicle Code** *(§257.603 and 257.653)*
The Michigan Motor Vehicle Code governs the driving of emergency vehicles. All licensed life support vehicles will abide by the Michigan Motor Vehicle Code.

B. **Transporting a Patient**
1. EMS units may transport patients using lights and sirens when:
   2. The patient's condition meets Priority One prioritization level **AND** the condition is unstable or deteriorating **AND** there is a need to circumvent significant traffic delays and obstructions
   OR
   3. The patient's condition requires immediate lifesaving intervention which cannot be accomplished by EMS personnel, with approved equipment **AND** there is a need to circumvent traffic delays or obstruction

2. Non-emergency patients will **NOT** be transported with the use of lights and siren.

C. **Authority to Require Lights and Siren Use**
Neither the patient's sending nor receiving physician has the authority to require the use of lights and siren during transport; this policy shall be followed at all times.

D. **Prudent Use of Lights and Siren During Transport**
Lights and sirens may be used to clear traffic and then shut down, if prudent, where no obstruction or delay is present, provided both lights and siren are activated at least 500 feet before any intersection or obstruction to be cleared. When lights and siren are not in use, the vehicle must be operated as a typical non-emergency vehicle, per the Motor Vehicle Code.

E. **Returning from the transport, returning to a service area**
1. EMS units may ONLY utilize lights and sirens to return to their area IF THEY ARE RESPONDING TO AN EMERGENCY CALL.
2. Lights and sirens will **NOT** be used to return to an area when the unit is not responding to another emergency call.

F. **Education**
Transporting Life Support Agencies shall ensure annual training surrounding the Michigan Motor Vehicle Code, safe use of lights and siren, this policy and related agency polices.

G. **Agency Specific Policies**
This policy does not preclude individual agencies from developing internal policies on this subject, as long as the policy includes the contents of this policy as a minimum.

Agency Vehicle Inventory

Each EMS agency in Genesee County (MFR, BLS, LALS or ALS) must submit a list of current vehicles as part of the annual relicensure process. This list should include vehicle I.D. number, year, make, level of licensure of each vehicle and current license plate for each vehicle operating in the fleet. Also submitted should be the GCMCA-issued vehicle number as it corresponds to the vehicle I.D. number. This requirement can be met by submitting Part 2 of the license (if the agency adds the GCMCA-issued vehicle number) or written communication containing the required information.

Any vehicle changes made throughout the year must be submitted to the Genesee County Medical Control Authority. Notification may be completed by either submitting Part 2 of the license (with the addition of the GCMCA-issued vehicle number) or written communication containing the required information. The agency must submit state license changes to the GCMCA at least 7 days prior to the change, as changes to the 911 system could take up to this length of time.

In addition, all vehicles licensed by an agency will be considered to be mechanically fit if they comply with the state's Ambulance Safety Inspection checklist. All units must be in compliance with this check list at all times. As part of an agency's annual Letter of Compliance submitted with their annual relicensure, an agency must submit signed documentation from a licensed certified mechanic that all vehicles are in compliance with this checklist. All new agencies will also be required to submit documentation as outlined above regarding the mechanical fitness of their vehicles.

Ambulance Diversion Policy

Genesee County operates under a no hospital diversion policy. If emergency department resources become overloaded, the hospital must continue to accept ambulance traffic based upon the current GCMCA Transportation Protocol. The only instance where a hospital would divert patients would be if the emergency department is non-functional (e.g. explosion, fire, power failure).

Inter-facility Patient Transfers and Critical Care Patient Transports (Optional)

Purpose: The purpose of this policy is to establish a uniform procedure for inter-facility transfers.

1. Responsibility:
    A. Patient transfer is a physician-to-physician referral. The transferring physician is responsible for securing the acceptance of the patient by an appropriate physician at the receiving facility prior to the transportation. The name of the accepting physician must be included with the transfer orders.
    B. It is the responsibility of the transferring facility to:
        a. Perform a screening examination.
        b. Determine if transfer to another facility is in the patient's best interest.
        c. Initiate appropriate stabilization measures prior to transfer.

    C. During transport, the transferring physician is responsible for patient care until arrival of the patient at the receiving facility.
    D. If unanticipated events occur during patient transport, and contact with the transferring physician is not possible, then on-line Medical Control will serve as a safety net.
    E. It is the transferring physician's responsibility to know and understand the training and capabilities of the transporting EMS personnel.

2. Transportation
    A. Pre-transport
        a. Care initiated by the transferring facility may need to be continued during transport. The transferring physician will determine the method and level of transport and any additional treatment(s), if any, that will be provided during the course of transport.
        b. Orders for treatment, including medications for ALS transfers, or other orders shall be provided in writing to the EMS personnel prior to initiation of the transport by the transferring Physician.
        c. For ALS transfers, ordered medications not contained within the EMS System Medication Box/Bag must be supplied by the transferring hospital.
        d. EMS personnel must be trained in all the equipment being used in the patient's care or appropriately trained staff must accompany the patient.
        e. Should the patient require care and/or equipment above and beyond the normal scope of practice and training of the EMS personnel, the transferring facility shall provide appropriate staff or consider other appropriate means of medical transportation.
        f. The paramedic has the right to decline transport if he/she is convinced patient care is outside their scope of practice and training or, alternatively, to insist a hospital staff member accompany them on the transfer or consider other appropriate means of medical transportation.
        g. If additional staff accompanies the patient, the transferring physician is responsible for ensuring their qualifications. This staff will render care to the patient under the orders of the transferring physician. It will be the

responsibility of the transferring facility to provide arrangements for the return of staff, equipment, and medications.

h. The following information should accompany the patient (but not delay the transfer in acute situations):
    1. Copies of pertinent hospital records
    2. Written orders during transport
    3. Any other pertinent information including appropriate transfer documents.

B. During Transport
    a. Hospital supplied medications not used during transport must be appropriately tracked, wasted and documented. All controlled substances and Propofol must have a documented chain of custody.
    b. The concentration and administration rates of all medications being administered will be documented on the patient care record.
    c. Interventions performed en route, and who performed them, will be documented on the patient care record.
    d. In the event that a patient's condition warrants intervention beyond the written Physician orders provided by the transferring Physician, the EMS personnel will contact the transferring Physician. If that is not possible, the EMS personnel will follow local Medical Control Protocols and initiate contact with the on-line Medical Control Physician from either the sending or receiving facility or, if not able to contact those facilities, the closest appropriate on-line Medical Control facility.

Medication Custody Form

Patient Name _____

EMS Staff Receiving Medication _____ (**Name**) _____ (**Signature**)

Hospital Staff Sending Medication _____ (**Name**) _____ (**Signature**)

Medication	Amount Received From Hospital	Administered	Wasted

EMS Staff Wasting Medication _____ (**Name**) _____ (**Signature**)

Hospital Staff Witnessing Waste _____ (**Name**) _____ (**Signature**)

Critical Care Patient Inter-Facility Transport (OPTIONAL) Additional Requirements

Purpose: To provide hospital facilities, physicians, and medical transport personnel with guidelines to facilitate inter-facility transportation of critically sick and injured patients within Advanced Life Support vehicles.

1. Vehicle and Staffing Policy
    A. MDHHS Vehicle License. All vehicles conducting Critical Care Inter-Facility Patient Transports must be licensed as transporting Advanced Life Support (ALS) vehicles.
    B. Equipment. The following is the minimum equipment that will be carried by an ALS vehicle while it is providing Critical Care Inter-Facility Patient Transport, in addition to the equipment required by Part 209, P.A. 368 of 1978, as amended, and local medical control authority protocols:
        a. Waveform Capnography
        b. Portable Ventilator or staff capable of providing ventilatory support
        c. Portable Infusion Pump(s)
        d. Pressure infusion bag(s)

    C. Staffing
        e. All ALS vehicles that conduct Critical Care Inter-Facility Patient Transports will be staffed in accordance with local medical control requirements with at least one (1) paramedic trained in the Critical Care Inter-Facility Patient Transport curriculum. The trained paramedic must be in the patient compartment while transporting the patient.
        f. The above requirement for staffing does not apply to the transportation of a patient by an ambulance if the patient is accompanied in the patient compartment of the ambulance by an appropriately licensed health professional designated by a physician and after a physician-patient relationship has been established as prescribed. (PA 368, Section 20921(5)).

2. Critical Care Inter-Facility Patient Transport Physician Director/Quality Improvement
    A. Ambulance services that utilize this protocol must designate a Critical Care Inter-Facility Patient Transport Physician Director.
    B. The Critical Care Inter-Facility Patient Transport Physician Director will be responsible for:
        a. Oversight of a quality improvement program for Critical Care Inter-Facility Patient Transports
        b. Oversight of the training curriculum for EMS personnel trained under this protocol.
3. Critical Care Inter-Facility Patient Transport Curriculum

CRITICAL CARE PATIENT INTER-FACILITY TRANSPORT CURRICULUM

COURSE OUTLINE

1. Ventilator patient concerns (4 hours total)
    A. Types of ventilators
    B. IPPB, SIMV, PEEP, CPAP
    C. Use of transport ventilators
    D. Complications
    E. Use of Pulse Oximeter/Capnography
2. Chest Tubes and Pleurovac (1 hour)

    A. Principles of pleural cavity evacuation
    B. Maintaining chest tubes
    C. Review various systems
    D. Pleurovac Practical Lab
3. Maintenance of invasive lines (2 hours)
    A. Types of hemodynamic monitoring
        a. Various equipment
        b. Insertion sites
        c. Maintaining infusions
        d. Complications
4. Equipment Training Videos (1 hour)
    A. IV Pumps
    B. Ventilator
    C. 12 Lead Monitoring
5. Thrombolytics (1 hour)
    A. Indications, contraindications, adverse effects, and administration
        a. Streptokinase
        b. tPA
        c. Retavase
        d. TNKase
        e. Heparin
        f. Lovenox
6. Interpreting blood gases (1 hour)
    A. The use of ABGs in ventilator managements
7. Blood products (1 hour)
    A. Whole blood/Packed RBCs/Plasma
8. Cardiac Enzymes (1 hour)
    A. Cardiac physiology and the meaning of enzyme abnormalities
9. Vasoactive drugs (2 hours)
    A. Indications, contraindications, adverse effects, and administration
        a. Dopamine
        b. Epinephrine
        c. Dobutamine
        d. Levophed
        e. Amrinone/Milrinone
        f. Nitroglycerin
        g. Nitroprusside

h. Esmolol
i. Labetalol

10. Critical Care Patient Transport Protocol Review (1 hour)
    A. Protocol review and miscellaneous drugs
        a. Indications, contraindications, adverse effects, and administration
            1. Aminophylline
            2. Mannitol
            3. Phenytoin
            4. Insulin
            5. Propofol
            6. Oxytocin and related drugs
11. Paralytics (1 hour)
    A. Indications, contraindications, adverse effects, and administration
        a. Non-depolarizing neuromuscular blockers
        b. Sedatives during paralytic maintenance
        c. RSI indications during critical care patient transport
    B. Administer with Medical Control
12. Practical Lab (1 hour)
    A. IV Pumps
        a. Various tubing
        b. Maintaining a drip while changing to the pump
    B. Ventilator
    C. 12 Lead
    D. CO2 detector
13. Cardiac Physiology/12-Lead ECG (4 hours)
    A. Cardiac physiology and cardiac drug review
        a. Indications, contraindications, adverse effects, and administration
            1. Lidocaine/Procainamide
            2. Potassium
            3. Morphine
            4. Cardizem
            5. Amiodarone
14. 12-Lead AMI Recognition (2 hours)
15. High Risk Pregnancy (1 hour)
    A. Indications, contraindications, adverse effects, and administration
        a. Magnesium Sulfate
        b. Pitocin
16. Antibiotics (1 hour)
17. Pediatrics (4 hours)
    A. Pediatric Airway and Ventilation management including Ventilator Dynamics and Chest Tube Monitoring and pneumothorax recognition and treatment (1 hour)
    B. Pediatric fluid requirements including maintenance and bolus therapies (1 hour)
    C. Pain management (1 hour)
    D. Case studies, trauma specific (1 hour)
18. Critical Care Patient Transport Charting (1 hour)
19. Critical Care Patient Transport Call: Start to Finish (1 hour)
    A. General considerations
    B. Staffing and quality management considerations
    C. When to refuse a call

20. Critical Care Patient Transport Case Presentations (1 hour)
21. Daily Quizzes
    A. Ventilators, chest tubes, invasive lines
    B. Thrombolytics, ABGs, blood, enzymes, pressers, paralytics
22. Written and Practical Exam (4 hours)

Dispatch

Upon receiving information that an apparent medical or trauma problem exists, the appropriate 911 dispatch center shall attempt to quickly ascertain the severity of the medical or trauma problem. The 911 dispatch center will follow the instructions of a GCMCA Advisory Committee approved EMD system to identify the appropriate Tier level of a call. At that point, the 911 dispatch center will notify the closest most appropriate EMS vehicle(s) for that call and dispatch according to their EMD system. In order to be dispatched to an emergency call, the vehicle must be equipped with automatic vehicle locator (AVL) equipment that is compatible with the 911 center, and that equipment must be on and properly functioning to allow 911 to see the physical location of the unit. AVL equipment must be set with a refresh rate that is every ten (10) seconds or 1/8 of a mile. The vehicle must also have the necessary equipment to have voice contact with the 911 dispatcher. The vehicle must have CAD capability with the Single Medical Dispatch Center (Genesee County 911). A crew will not accept a dispatched call if they are unable to respond (vehicle moving) within 60 seconds of dispatch.

Each EMS agency with a dispatch center must use a GCMCA Advisory Committee approved EMD system and be able to verify that dispatchers are certified in that system. If a dispatcher has been hired by an agency but their training has not been completed or certification has not been received, then the dispatcher can work in this capacity under direct, on site supervision for up to six months until the training and certification can be completed. The 911 center and EMS agency must ensure that all communications by the dispatcher be recorded.

There are currently two approved EMD systems for Genesee County – Medical Priority Dispatch System (MPDS) and the Association of Public-Safety Communications Officials (APCO). Because these two systems use different terminologies, the following chart outlines what terminology is used by each system and its response type when GCMCA protocols reference Tier I and II calls:

Response Type	Best County "Tier" Comparison	MPDS (Clawson)	APCO
ALS emergency plus additional resources for respiratory / cardiac arrest	No designator uses Tier One	ECHO	No specific designator uses Medic Emergency
ALS emergency	Tier One	DELTA	Medic Emergency

ALS non-emergency	No designation uses Tier One	CHARLIE	No designation uses ALS emergency
BLS emergency	No designator uses Tier Two	BRAVO	Basic emergency
BLS non-emergency	Tier Two	ALPHA	Basic Non-emergency
Referred to other agencies or very low response such as public assist or detox (in some EMS systems patients are referred to pre-arranged wheelchair or taxi cab services)	No specific designation uses Tier Two	OMEGA	No specific designation uses Basic Non-emergency

911 dispatch center personnel can opt to alter the status of a call at any time based upon additional information received from the caller or other personnel on scene.

If 911 cancels any EMS unit, that unit must cancel and not respond to the call. The dispatched unit will not run lights and sirens to Tier II calls.

If an EMS unit is dispatched to a Tier II call and they determine that their services are needed for a second purpose enroute to that call (e.g. MVA), they must stop to determine the nature of the second request for assistance and notify 911 of the delay. If an EMS unit is dispatched to a Tier I call and they determine that their services are needed for a second purpose enroute to that call (e.g. MVA), they must continue to their originally dispatched location and notify 911 of the second request for assistance.

An EMS unit can only respond when properly dispatched.

Non-transporting units will be dispatched based upon the individual 911 center policies developed.

If a unit is on a Tier 2 call and they need a lift assist, they will first attempt to secure the resources of their own agency first before requesting assistance from a different agency through the 911 system. For lift assists on Tier 1 calls, the 911 center should be contacted to dispatch the closest available unit.

A non-law enforcement EMS unit will not be dispatched to a call where a weapon is known to be on scene unless they are instructed to stage and law enforcement has been dispatched.

An EMS unit will not be dispatched to calls for the sole purpose of recovery and disposal of hazardous waste, including found needles, unless those items were produced by the responding unit.

Transportation

Prehospital patients shall be transported to an in-hospital emergency facility or a GCMCA recognized free standing outpatient surgical facility (FSOF) as follows:

I. General Transport Criteria:

1. Facility of patient's choice.
2. Patient's medical home (i.e. the facility of past use and/or affiliated with the patient's primary care physician – if known).
3. If patient is a minor, or incompetent, facility of family or guardian choice.
4. In matters of life and death or loss of limb, the closest appropriate facility as determined by the medical control physician and the pre-hospital provider.
5. EMS Personnel must consider when a patient's/patient's relative choice would endanger the patient due to:
   A. increased transport time;
   B. lack of appropriate facilities capable of addressing patient's specific problems;
   C. over-burdening of facilities for any reason(s) (i.e., ambulance hold, disaster).
6. If facility of choice is out of the county or an extreme distance away, the EMS provider should use their best judgment if this would be appropriate for the patient, and can occur without online medical control approval as long as it does not contradict other sections of this protocol. If a patient requests transport to an out of county facility and is an ALS patient, there can be no downgrading of the patient to BLS.
7. No other individuals (police, fire, other physician) shall be allowed to determine the destination of a patient without prior approval from online medical direction.
8. GCMCA recognized Freestanding Surgical Outpatient Facilities (FSOFs) may receive patients via ambulance with the following exceptions:
   Patients With:
   A. Multi-system trauma
   B. Blunt torso trauma
   C. Penetrating torso trauma
   D. Patients in active labor
   E. High risk obstetrics
   F. Critical care pediatrics
   G. Reimplantation above the ankle or wrist
   H. Burns per Burn Protocol
   I. Head injury with GCS < 13
   J. Priority I patients whose condition could be expected to deteriorate or patients who would be better served by a more specialized medical facility.

The following criteria must be met in order for a facility to be considered a GCMCA recognized FSOF:

A. Must maintain appropriate Joint Commission and/or AOA accreditation.

B. Must be operational 24 hours a day.

C. Must be licensed by the Michigan Department of Community Health as a free standing outpatient surgical facility (FSOF).

Patients requesting a FSOF, who do not meet criteria to go to that facility, shall be diverted by the usual Genesee County Medical Control Authority Advisory Committee protocols (i.e. patient preference if stable, or closest, most appropriate facility if unstable).

9. In the event that a BLS or LALS transporting rig is more than 5 minutes from an in-hospital emergency facility and is in need of an ALS provider for appropriate patient treatment, the BLS/LALS agency will contact the appropriate 911 agency to request an ALS intercept. The intercept should not cause more than a brief delay in transport. Intercepts are to take place at a fixed meeting location. The responding ALS unit will maintain communication with the intended intercept vehicle. Upon meeting with due care and caution, members of the ALS vehicle should board the intercept vehicle bringing appropriate equipment. All units operating in the Genesee County Medical Control region shall cooperate and provide all necessary verbal information to coordinate an intercept. In the event that the LALS/BLS unit is in route to the hospital and is less than 5 minutes from the hospital, a request for ALS intercept will not be made.

II. Pediatric Destination Criteria:

Pediatric patients (ages 14 and under) can be transported to any of the three Genesee County hospitals with the following exceptions:

1. Unstable trauma patients meeting any of the following criteria, but not in cardiac arrest, should be transported to Hurley Medical Center:

ABSOLUTE CRITERIA

Vital signs & level of consciousness
- Glasgow Coma Scale <14
- Systolic Blood Pressure <90
- Respiratory Rate <10 or >29 (<20 in infant less than 1 year)

Anatomy of injury

- All penetrating injuries to head, neck, torso and extremities proximal to elbow or knee.
- Flail Chest
- Two (2) or more proximal long bone fractures (femur and or humerus).
- Crush, degloved or mangled extremity
- Amputation proximal to wrist or ankle
- Pelvic fracture
- Open or depressed skull fracture
- Paralysis

Mechanism and evidence of high-energy impact
- Falls >10 feet or 2 to 3 times the height of the child
- High-risk auto crash
  - Intrusion > 12 in. occupant site, 18 in any site
  - Ejection (partial or complete) from automobile
- Death in same passenger compartment
- Auto v. pedestrian/bicyclist thrown, run over, or with significant (>20 mph) impact
- Motorcycle crash > 20 mph

RELATIVE CRITERIA

Special patient or system considerations
- Anticoagulation and bleeding disorders (patient on coumadin or plavix)
- Burns
  - Without other trauma mechanism
  - With trauma mechanism
- Time sensitive extremity injury
- End-stage renal disease requiring dialysis
- Any other injuries felt by EMS personnel to require specialized trauma care.

2. All non-traumatic **Priority 1** medical patients should not be transported to McLaren Regional Medical Center. **Priority 1** patients per protocol are "critically ill or injured patients, which include those unstable patients with abnormal vital signs, or those with a suspected disease process or mechanism of injury which posses immediate threat to life."

3. If based upon the above criteria the unit will bypass a closer facility and, in the opinion of EMS personnel or on-line medical control, this decision would result in an adverse effect on the patient's outcome, then the closer facility may be selected as the final destination.

III. Adult Trauma Destination Criteria:

1. Cases meeting the following criteria will be transported to Hurley Medical Center unless communication between field personnel and receiving hospital determines otherwise:
   A. Burns - Patients with greater than 5 percent 3rd degree; or greater than 15 percent 2nd degree; or respiratory burns; or burns involving hands, feet, face, perineum.
   B. Pregnancy - Trauma patients in 2nd or 3rd trimester.

IV. Acute ST Elevation Myocardial Infarction:

Currently all Genesee County hospitals have the capability to adequately care for stable and unstable ST Elevation Myocardial Infarction (STEMI) patients.

Unstable STEMI patients should be transported to the closest hospital.

V. CVA/Stroke:

Currently all Genesee County hospitals have the capability to adequately care for CVA/stroke patients and these patients should be transported to the closest hospital.

An Assessment of Burnout among Nationally-Certified Emergency Medical Services Professionals

THESIS

Presented in Partial Fulfillment of the Requirements for the Degree Master of Science in the Graduate School of The Ohio State University

By

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Abstract

The high-risk, high-stress setting of prehospital care may lead to burnout among emergency medical services (EMS) professionals. Burnout is described as a depletion of physical and emotional resources resulting in exhaustion that can be attributed to an area of one's life such as work. In addition to being associated with a number of serious mental and physical health conditions, burnout has been linked with factors that can negatively impact the workforce. The objectives of this study were to describe the prevalence of burnout among nationally-certified Emergency Medical Technicians (EMTs) and paramedics, identify characteristics associated with burnout and assess the association between burnout and factors that could impact the EMS workforce, namely anticipated turnover and sickness absence.

This was a cross-sectional analysis of a random sample of nationally-certified EMTs and paramedics. The validated 19-item Copenhagen Burnout Inventory (CBI) was used to measure three dimensions of burnout: personal, work-related and patient-related. Multivariable logistic regression modelling was used to identify variables significantly associated with burnout. Lastly, multivariable logistic regression was used to assess the association between each dimension of burnout and anticipated turnover and sickness absence.

A total of 2,650 (12.5%) responses were received. More paramedics experienced personal (38.5%), work-related (30.3%), and patient-related (14.2%) than EMTs (25.6%, 19.1%, and 5.2%). Paramedics (OR: 1.58, 95%CI: 1.25-2.00) and females (OR: 1.38, 95%CI: 1.11-1.71) had increased odds of personal burnout. Race/ethnicity and weekly call volume were also associated with personal burnout. EMS professionals with 5 to 15 years of experience had greater odds of work-related burnout than those with less than 5 years of experience (OR: 1.43, 95%CI: 1.07-1.90). Those working at private services demonstrated greater odds of work-related burnout than those at fire-based services (OR: 1.39, 95%CI: 1.08-1.80). Call volume and annual EMS income were also associated with work-related burnout. Paramedics had significantly greater odds of patient-related burnout (OR: 2.14, 95%CI: 1.34-3.43). Females had reduced odds of patient-related burnout (OR: 0.60, 95%CI: 0.41-0.89). Call volume and education were also associated with patient-related burnout.

Controlling for other covariates, personal (OR: 2.46, 95%CI: 1.96-3.10), work-related (OR: 3.34, 95%CI: 2.64-4.22), and patient-related (OR: 2.47, 95%CI: 1.79-3.43) burnout were associated with greater odds of being likely to leave an EMS job within the next 12 months. Similarly, increased odds of being likely to leave the EMS profession were seen for personal (OR: 2.63, 95%CI: 1.87-3.69), work-related (OR: 3.32, 95%CI: 2.39-4.63), and patient-related (OR: 3.88, 95%CI: 2.57-5.86) burnout. Odds of having missed 10 or more days of work due to illness were increased for those with personal (OR: 2.01, 95%CI: 1.18-3.43) or work-related (OR: 2.17, 95%CI: 1.29-3.67) burnout.

This study is the first to assess prevalence of burnout among EMTs and paramedics on a national level. Further, demographic and employment characteristics associated with burnout were identified. Finally, burnout was associated with greater odds of anticipated turnover and sickness absence. As burnout has the potential to negatively impact the EMS workforce, future research is needed to understand the causes of burnout and design interventions aimed to reduce burnout among EMS professionals.

Dedicated to the EMS professionals of the Mexican Red Cross.

Tutti Fratelli

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Fields of Study

Major Field: Public Health

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Chapter 1: Background and Introduction

Emergency Medical Services and National EMS Certification

Emergency medical services (EMS) professionals serve as an important link in the healthcare continuum, providing life-saving interventions in the prehospital setting and delivering patients to definitive care. EMS is often a physically and mentally demanding profession as providers are required to function in unpredictable, high-risk and high-stress environments.

While the scope of practice and levels of EMS certifications and licenses vary greatly from state to state, there are four nationally recognized EMS provider levels: Emergency Medical Responder (EMR), Emergency Medical Technician (EMT), Advanced Emergency Medical Technician (AEMT), and Paramedic.[1] In order to practice as an EMS professional at any level in the United States, individuals are required to obtain a state license or certification. National EMS Certification, provided by the National Registry of EMTs (NREMT), is required as part of the process for obtaining licensure to practice EMS at one or more levels in 46 states and the District of Columbia.[2]

The NREMT was created in 1970 in response to a call set forth by Lyndon B. Johnson's Commission on Highway Traffic Safety.[3] The NREMT serves as the National EMS Certification organization by providing a valid, uniform process for assessing the knowledge of EMS professionals at the four nationally-recognized provider levels in addition to maintaining a registry of certification status.[4] Currently, there is no registry of

every state-licensed EMS provider in the United States. However, as of 2014, the NREMT database contained records for over 300,000 EMS professionals who held current National EMS Certification.[2]

Definition of Burnout

First introduced in the 1970s, the term "burnout" was used to describe a number of important psychosocial problems primarily among individuals who work with people.[5] In 1974, Freudenberger used the term to describe the concerning physical and behavioral effects he observed among workers at a free clinic in New York including fatigue, exhaustion, transformation into the "house cynic", and spending more and more hours at work while accomplishing less.[6] Shortly afterwards in 1976, Maslach and her colleagues independently defined burnout as "a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do 'people work' of some kind".[7]

The number of burnout studies grew quickly and varying definitions of burnout were used. Perlman and Hartman summarized definitions of burnout published in 48 investigations between 1974 and 1980 as, "a response to chronic emotional stress with three components: (a) emotional and/or physical exhaustion, (b) lowered job productivity, and (c) overdepersonalization".[8] During this time the concept of burnout also began to be extended to professions outside of the human services sector.[9] Accordingly, Maslach refined the definition of burnout in a more general sense that could be applied to a wider range of professions as "a state of exhaustion in which one is cynical about the value of one's occupation and doubtful of one's capacity to perform".[7]

While the concept of burnout and its definitions have evolved over time, the focus of the construct has remained centered on a depletion of energetic resources resulting in fatigue and exhaustion.[10] In 2001, Schaufeli and Greenglass defined burnout as "a state of physical, emotional and mental exhaustion that results from long-term involvement in work situations that are emotionally demanding".[11] Nevertheless, it is important to note that the construct of burnout is multidimensional and extends beyond fatigue and exhaustion.[12] A key distinction of burnout made by Kristensen is the attribution of fatigue and exhaustion to specific domains of a person's life, such as work.[5] Another distinct characteristic of burnout is the loss of interest in one's work or personal life and the accompanying feeling of "just going through the motions".[13]

Measurement of Burnout

Since its conceptualization, many tools have been developed and used to measure burnout. In a 1993 review of the measurement of burnout, Shaufeli et al. discussed over 20 instruments for evaluating burnout, the vast majority of which relied on self-report.[14]

Maslach Burnout Inventory

The most widely employed tool for measuring burnout is the Maslach Burnout Inventory (MBI), which by some estimates has been used in more than 90% of empirical burnout studies worldwide.[15] The MBI measures burnout in three domains: emotional exhaustion (a drained or depleted feeling arising because of excessive psychological and emotional demands), depersonalization (a tendency to view others in an excessively detached, impersonal manner), and lack of personal accomplishment (a sense of incompetence and lack of achievement).[7] The original MBI-Human Services Survey

(MBI-HSS) consisted of 22 items.[16] Afterwards, the 16-item MBI-General Survey (MBI-GS) was introduced in 1996 to measure burnout in occupational groups other than public human service providers.[7] The emotional exhaustion component was modified to exhaustion, depersonalization was replaced by cynicism (indifference or a distant attitude towards work), and personal accomplishment was changed to professional efficacy to encompass both social and nonsocial aspects of occupational accomplishments.[7]

The three subscales of the MBI have been shown to have acceptable internal consistency across a number of professions across the globe with Cronbach's α values ranging from 0.71 to 0.90.[14] Further, confirmatory factor analysis of the MBI has supported the three subscale model and external validity.[17,18]

Despite its wide use, the MBI has important disadvantages, the first being that the instrument has been commercialized and licenses for each administration of the tool are distributed by a private company.[19] As such, items from the MBI cannot be published in scientific journals and shared freely to foment further research. Further, some have posited that the depersonalization scale of the MBI is actually a coping strategy while loss of professional efficacy is an effect of burnout syndrome.[5]

Copenhagen Burnout Inventory

The 19-item Copenhagen Burnout Inventory (CBI) was created as an alternative to the MBI. The CBI consists of three dimensions: personal burnout (the degree of physical and psychological fatigue and exhaustion experienced by the person), work-related burnout (the degree of physical and psychological fatigue and exhaustion that is perceived by the person as related to his/her work), and client-related burnout (the degree

of physical and psychological fatigue and exhaustion that is perceived by the person as related to his/her work with clients).[5] Each of the three dimensions is scored separately, with an average score of 50 or higher representing a positive indicator of burnout in the domain.[20]

The CBI has been demonstrated to have high internal reliability as well as test-retest reliability.[5,21] In a study directly comparing the two instruments, it was demonstrated that the psychometric properties of the CBI were equivalent to those of the MBI.[22]

Impact of Burnout on Public Health

Burnout has large potential negative consequences for the individual, the patient, and the healthcare workforce. For the individual, burnout has been shown to be associated with other clinically significant mental health problems including psychological well-being[23] and depression.[24,25] Among physicians, burnout has been linked to a number of other negative health effects including headaches, sleep disturbances, hypertension, anxiety, alcoholism and myocardial infarction.[26] Among emergency nurses burnout has also been linked to musculoskeletal disorders.[27]

With regards to the impact of burnout on the patient, previous research has suggested that burnout may affect healthcare providers' performance and quality of medical services provided.[28] Shanafelt et al. found that burnout was strongly associated with self-reported suboptimal patient care in a group of internal medical residents.[29] A link between high levels of burnout and decreased ratings of quality of patient care has also been demonstrated in nurses in several countries.[30,31]

Finally, burnout has been associated with two major factors that negatively impact the workforce: sickness absence from the workplace and intent to leave the profession.[5,32] For example, a prospective study of industrial workers in Finland found that burnout increased the risk of absence due to mental disorders, diseases of the circulatory system, diseases of the respiratory system, and diseases of the musculoskeletal system.[33] Meanwhile, Campbell et al. found a strong correlation between burnout and intent to retire early among surgeons.[34] Additionally, previous studies have demonstrated a link between burnout and anticipated turnover in nurses.[21,35]

Sickness Absence and Turnover in Emergency Medical Services

Scant research exists regarding sickness absence among EMS professionals in the U.S. However, in the United Kingdom it has been reported that absenteeism among paramedics quadrupled between 2011 and 2014.[36] With regards to turnover, reports of shortages of EMS professionals are commonly reported in the media.[37-39] Recruiting and retaining EMS personnel has been listed as one of the most important issues for rural EMS agencies by the National Association of EMS Directors.[40] A longitudinal study of 40 EMS agencies estimated the median cost of EMS turnover per agency at over $71,000.[41] A qualitative study has suggested that job-related stress and dissatisfaction may be contributors to difficulty with retention of EMS professionals.[42]

Burnout in Emergency Medical Services

Scant literature exists regarding the prevalence of burnout in EMS. A 1988 study by Grigsby and Mc Knew found substantially higher rates of burnout among a group of paramedics in South Carolina compared to nurses.[43] Stassen et al. surveyed a group of

ALS paramedics in Johannesburg, South Africa and found that 63% exhibited some degree of burnout.[44] Another study based on a convenience sample of volunteer EMS personnel in New York found that nearly all participants scored 'high' on the MBI depersonalization (99.3%) and emotional exhaustion (92.0%) components.[45] Currently, no national estimates of the prevalence of burnout and its impact among EMS professionals in the US exist.

Study Objectives

This study had three primary research aims. The first research aim was to describe the prevalence of burnout among nationally-certified EMTs and Paramedics. The next research aim was to identify characteristics related to the three dimensions of burnout among EMS professionals. The final research aim was to assess the association between burnout and factors that impact the EMS workforce, namely anticipated turnover and sickness absence.

Chapter 2: Methods

Data Source

The source population for this study consisted of all nationally-certified EMTs and paramedics. Only EMTs and paramedics were selected as these provider levels have the most consistent scopes of practice across the United States. Assuming a 3% margin of error and a conservative 50/50 split, it was determined that a random sample of 1,063 nationally-certified EMTs and 1,054 nationally-certified paramedics would be needed to make estimations with 95% confidence. Using a conservative 10% response rate based on historical electronic questionnaire data from the field of EMS, the total sample was inflated to include 10,630 EMTs and 10,540 paramedics.

A survey instrument was developed to assess burnout using the CBI, as well as days absent due to sickness and intent to leave the EMS profession. Demographic and employment variables were also included. The questionnaire was cognitively tested with 10 practicing EMTs and paramedics. Based on the results of the cognitive debrief it was determined that using a single behavioral frequency scale for the CBI items (Always, Often, Sometimes, Seldom, Never or Almost Never) would be appropriate and would in turn reduce the cognitive burden of the participants.

Data were collected between October and November of 2015. Questionnaires were distributed electronically via e-mail. The e-mail contained a link to the questionnaire and explained an individual's rights as a participant. Participation in this study was completely voluntary and had no bearing on an individual's National EMS

Certification status. Data were collected using Snap 10 survey software (Snap Surveys Ltd, Portsmouth, NH). The Institutional Review Board at The Ohio State University ceded oversight (2015X0027) to the Institutional Review Board at American Institutes for Research that approved this project (EX00363).

Outcome Measures

The CBI was used to measure personal, work-related and patient-related burnout. Participants were asked to indicate how often each of the CBI items applied to them over the past 4 weeks. Points were assigned for each item within each burnout dimension (Always=100, Often=75, Sometimes=50, Seldom=25, Never or almost never=0). Following recommendations from the CBI authors and previous studies, burnout was dichotomized using a cut-point of an average of 50 points for each dimension.[20]

Anticipated turnover was measured using two separate items. The first asked about an individual's intent to leave his or her main EMS job within the next 12 months. This variable was then dichotomized to those who were likely to leave their main EMS jobs (Definitely will leave and Probably will leave) and those who were unlikely to leave their main EMS jobs (Probably will not leave and Definitely will not leave) within the next 12 months. The second item asked about an individual's intent to leave the EMS profession in the next 12 months and was dichotomized using the same methods. Sickness absence was measured through an item that asked individuals to enter the number of full and half days of work missed due to sickness in the past 12 months. As the average number of sick days allotted to employees ranges from 8 to 11 days per year according to the U.S. Bureau of Labor Statistics, we elected a cut point of 10 days.[46]

Thus, sickness absence was dichotomized to those who had 10 more days of work missed due to sickness in the past 12 months compared to those who had fewer than 10 days of work missed due to sickness.

Independent Variables

Independent variables were selected based on prior research and plausibility. Employment characteristics assessed included: current practicing provider level (EMT or paramedic), years of EMS experience (less than 5 years, 5 to 15 years, or 15 or more years), agency type (fire-based, private, hospital, government, military, or tribal), primary service provided (911 response with transport capability, 911 response without transport capability, medical transport, air medical, specialty care transport, paramedic intercept, rescue, hazmat, or other), work shifts (yes or no), community size (dichotomized to: rural [less than 25,000 residents] or urban [at least 25,000 residents], weekly call volume (collapsed to: less than 5 calls, 5 to 9 calls, 10 to 19 calls, or 20 or more calls), primary role (patient care provider, supervisor, administrator/manager, educator, preceptor, or other), satisfaction at main EMS job (dichotomized to: satisfied or dissatisfied) and annual EMS income (collapsed to: less than $10,000, $10,000 to $39,999, $40,000 to 69,999, or $70,000 or more). Demographic variables assessed were sex (male or female), race/ethnicity (white, non-Hispanic or minority), education level (high school/GED or less, some college, Associate's degree, or Bachelor's degree or higher) and marital status (married or member of an unmarried couple, divorced/widowed/separated, or never been married).

Previous research has suggested that females are more prone to burnout than males.[47] Another study showed differences with regards to sex and burnout as males tended to be more prone to depersonalization while females tended to suffer more from emotional exhaustion.[11] Marital status has also been shown to be associated with burnout with married individuals experiencing less burnout.[16] Reduced job satisfaction has also been shown to have a strong association with burnout.[43,48]

Statistical Analysis

Only currently practicing EMTs and paramedics who worked for one or more EMS organizations were included in these analyses. For analyses involving patient-related burnout, only those who had provided patient care in the past 30 days were included.

To address the first research aim, the prevalence of each domain of burnout among nationally-certified EMTs and paramedics was examined descriptively. To evaluate the second research aim, first comparative statistics were calculated comparing those who were classified as having burnout for each of the three dimensions versus those who were not. Next, multivariable logistic regression models were created to identify predictors of each of the three dimensions of burnout. Model selection was undertaken using an investigator-controlled purposeful selection approach.[49] First, univariable logistic regression models were created for each potential predictor. Odds ratios (ORs) and 95% confidence intervals (95% CIs) were calculated. Variables with p-values less than 0.20 were placed into the preliminary multivariable model. Variables with p-values less than 0.05 in the multivariable model were removed one-by-one and likelihood ratio

tests were used to examine impact on the model. After the removal of each variable, confounding was assessed. A variable was deemed a significant confounder if through its removal the coefficient of any of the remaining variables changed by more than 20%. Any variable deemed a confounder was included in the model regardless of statistical significance. Next, variables not originally selected during the univariable analysis were individually added into the multivariable model to assess for significance. After the creation of the preliminary main effects model, plausible interactions were assessed and retained if $p<0.05$. Model calibration was evaluated using the Hosmer-Lemeshow goodness-of-fit test.

To investigate the third research aim, univariable and multivariable logistic regression models were created for each of the three burnout dimensions and intent to leave one's EMS job, intent to leave the EMS profession and 10 or more sickness absence days. Variables found to be significantly associated with each dimension of burnout were included as confounders in these multivariable models. Goodness-of-fit was evaluated using the Hosmer-Lemeshow test. All analyses were performed using STATA IC version 12.1 (StataCorp LP; College Station, TX).

Chapter 3: Results

Psychometric Properties of the CBI for EMS

Table 1 displays the response frequencies and scores for each of the items in the CBI as applied to this population of EMS professionals. Cronbach's alphas for each of the three burnout dimensions were satisfactory (0.70 or higher). The correlations between dimensions were 0.85 for personal and work-related burnout, 0.56 for personal and patient-related burnout and 0.65 for work-related and patient-related burnout (Table 2). The highest average burnout score was seen for the personal burnout dimension (39.7, SD=21.0), followed by work-related burnout (35.0, SD=20.8) and patient-related burnout (21.4, SD=19.7).

Descriptive Analysis

A total of 2,650 (12.5%) responses were received and 2,252 met inclusion criteria. Table 3 shows the demographic and employment characteristics of those included in the analyses. The vast majority of respondents had provided patient care in the last 30 days (92.1%). Most respondents were practicing as paramedics (63.5%). About one-third (31.9%) had practiced EMS for less than 5 years while another third (33.5%) had more than 15 years of EMS experience. The majority of participants were male (73.8%) and white, non-Hispanic (86.8%). The most common agency type was fire-based (36.9%) followed by private (31.9%) and then hospital (16.0%). The majority worked at agencies where 911 services were the primary service provided (80.0%) and most worked shifts (83.9%). More than half (64.2%) worked in urban communities. Over three-fourths of

respondents reported their primary role as patient care providers (78.9%) and a total of 13.5% reported having worked as a Mobile Integrated Healthcare Provider (MIHP) within the last 30 days. Most (87.8%) respondents reported being satisfied with their main EMS jobs.

About one-third (33.8%) of EMTs and paramedics were classified as having personal burnout. Over one-quarter (26.3%) met the criteria for work-related burnout and 11.1% had patient-related burnout. Slightly less than a quarter (21.1%) of EMTs and paramedics said that they would likely leave their current main EMS jobs within the next 12 months. Meanwhile, 8.1% said that they would likely leave the EMS profession within the next 12 months. Finally, a total of 3.4% of EMTs and paramedics reported missing 10 or more days of work due to sickness in the past 12 months.

Table 4 displays the proportion of EMS professionals who reported that they would be likely to leave their main EMS jobs or the EMS profession within the next 12 months by quartiles of each dimension of burnout. An increasing trend was observed for the proportion of EMS professionals who said they would likely leave their main EMS jobs in the next 12 months as quartile of burnout increased for each of the three dimensions ($p<0.001$). For example, 9.7% of those in the lowest quartile of work-related burnout reported that they would be likely to leave their main EMS jobs in the next 12 months compared to 38.1% of those in the highest quartile of work-related burnout. A similar increasing trend was noted across quartiles of burnout for the proportion of EMTs and paramedics who said they would likely leave the EMS profession in the next 12 months for each dimension of burnout ($p<0.001$). Table 5 displays the average and

median number of reported sick days by quartiles of each dimension of burnout. An increasing trend was observed for days of sickness absence across quartiles of burnout for each of the three burnout dimensions ($p<0.001$).

Comparative Analysis

Personal Burnout

For personal burnout comparative differences were observed for providing patient care in the last 30 days, provider level, years of EMS experience, sex, agency type, primary service provided, working shifts, community size, weekly call volume, satisfaction with main EMS job, education level, and annual EMS income (Table 3).

More of those who provided patient care in the last 30 days demonstrated personal burnout (34.3% vs. 26.6%, $p=0.041$). A larger proportion of paramedics exhibited personal burnout compared to EMTs (38.5% vs. 25.6%, $p<0.001$). More of those with between 5 and 15 years of EMS experience had personal burnout (39.2%) compared to those with less than 5 years (27.9%) and those with more than 15 years of experience (33.7%). More females were classified as having personal burnout (37.7% vs. 32.4%, $p=0.018$). A larger proportion of individuals working at government EMS agencies (41.0%) demonstrated personal burnout, followed by private (36.6%) and hospital-based (34.0%) agencies. With regards to primary service provided, more of those providing specialty care transport (44.3%) experienced personal burnout, followed by medical transport (38.2%) and then 911 response with transport capability (35.6%). A total of 27.3% of those who worked shifts experienced personal burnout compared to 20.8% of those who did not ($p=0.008$). More EMS professionals working in urban

communities (37.9%) and those working shifts (34.9%) demonstrated personal burnout. The proportion of EMS professionals with personal burnout increased with weekly call volume ($p<0.001$). More than twice as many EMS professionals who were dissatisfied with their main EMS jobs experienced personal burnout (72.0% vs. 28.5%, $p<0.001$). Over one-third (36.2%) of those with a Bachelor's degree or higher exhibited personal burnout, while 23% of those with high school or less experienced personal burnout. Finally, less than one-fourth (21.9%) of those who earned less than $10,000 annually from EMS exhibited personal burnout while 39.2% of those who earned between $40,000 and $69,999 annually demonstrated personal burnout.

Work-Related Burnout

Significant differences in the presence of work-related burnout were seen for provider level, years of EMS experience, agency type, primary service provided, working shifts, community size, weekly call volume, satisfaction with EMS job, and EMS income (Table 3).

As was the case for personal burnout, more paramedics exhibited work-related burnout compared to EMTs (30.3% vs. 19.1%, $p<0.001$). More of those with between 5 and 15 years of EMS experience (30.7%) demonstrated work-related burnout, followed by those with more than 15 years of experience (27.8%) and then those with less than 5 years of experience (20.3%). With regards to agency type, more of those working for government agencies (32.2%) experienced work-related burnout followed by those at hospital-based agencies (31.4%) and individuals at private agencies (28.1%). More of those who primarily provided specialty care transport (41.0%) demonstrated work-related

burnout, followed by those providing medical transport (32.1%) and then 911 response with transport capability (27.9%). A larger proportion of those working shifts experienced work-related burnout (27.3% vs. 20.8%, p=0.010). More of those who worked in urban settings exhibited work-related burnout (29.7% vs. 20.1%, p<0.001). The proportion of EMS professionals who exhibited work-related burnout increased across categories of weekly call volume (p<0.001). More than three times as many EMS professionals who reported being dissatisfied with their main EMS job experienced work-related burnout compared to those who were satisfied (69.5% vs. 20.2%, p<0.001). Finally, about half as many EMS professionals earning less than $10,000 from EMS annually (12.8%) exhibited work-related burnout as to those who earned between $10,000 and less than $40,000 per year (31.9%).

Patient-Related Burnout

There were significant comparative differences in the proportion of EMS professionals who experienced patient-related burnout for provider level, years of EMS experience, sex, working shifts, community size, weekly call volume, satisfaction with EMS job, education level, and annual EMS income (Table 3).

Nearly three times as many paramedics (14.2%) experienced patient-related burnout compared to EMTs (14.2% vs. 5.2%, p<0.001). About twice as many EMS professionals with between 5 and 15 years of experience (13.1%) or more than 15 years of EMS experience (13.7%) showed signs of patient-related burnout, compared to those with less than 5 years of EMS experience (6.3%, p<0.001). More males experienced patient-related burnout than females (12.5% vs. 7.2%, p=0.001). More of those who

worked shifts exhibited patient-related burnout (11.8% vs. 6.8%, p=0.017). Nearly twice as many EMS professionals working in urban settings experienced patient-related burnout compared to those practicing in rural settings (13.3% vs. 7.3%, p<0.001). Patient-related burnout also increased across categories of weekly call volume (p<0.001). Three times as many of those who were dissatisfied with their main EMS jobs experienced patient-related burnout compared to those who reported being satisfied (27.1% vs. 8.8%, p<0.001). Nearly 15% of those who had a bachelor's degree or higher experienced patient-related burnout while this figure was 5% for those who had a high school education or less. Lastly, fewer than 5% of those who earned less than $10,000 annually from EMS exhibited patient-related burnout while 13.8% of those who earned $70,000 or more annually showed signs of patient-related burnout.

Demographic and Employment Characteristics Associated with Burnout

Factors Associated with Personal Burnout

The final multivariable logistic regression model for personal burnout included provider level, sex, race/ethnicity, working shifts, community size, weekly call volume, and annual EMS income (Table 6). This model exhibited good calibration with a Hosmer-Lemeshow goodness-of-fit statistic of χ^2=5.98 (p=0.6490). While community size, working shifts, and annual EMS income were not statistically significant, these covariates were retained in the model for their role as confounders. Paramedics had greater odds of exhibiting personal burnout compared to EMTs (OR: 1.58, 95% CI 1.25-2.00). Females also had increased odds of experiencing personal burnout (OR: 1.38, 95% CI: 1.11-1.71). Meanwhile, EMS professionals who were not white, non-Hispanic (OR:

0.73, 95% CI: 0.54-0.99) had reduced odds of experiencing personal burnout. Compared to those who ran fewer than 5 calls per week, the odds of personal burnout were 41% greater for EMS professionals who had between 10 and 19 calls per week (OR: 1.41, 95% CI: 1.01-1.97) and 148% greater for those who went on 20 or more calls per week (OR: 2.48, 95% CI: 1.79-3.45).

Factors Associated with Work-Related Burnout

The final model for work-related burnout consisted of provider level, years of EMS experience, agency type, working shifts, community size, weekly call volume, and annual EMS income (Table 7). The model exhibited good fit with a Hosmer-Lemeshow test statistic of χ^2=7.00 (p=0.5372). Provider level, working shifts, and community size were not statistically significant; however, these covariates were retained as important confounders. EMS professionals with between 5 and 15 years of experience had increased odds of work-related burnout compared to those with less than 5 years in the profession (OR: 1.43, 95% CI:1.07-1.90). Compared to those working at fire-based services, EMTs and paramedics working at private services had 39% higher odds of experiencing work-related burnout (OR: 1.39, 95% CI: 1.08-1.80). Those who ran more than 20 calls per week had two-and-one-half times the odds of experiencing work-related burnout as those who ran fewer than 5 calls per week (OR: 2.50, 95% CI: 1.76-3.55) and this figure was 1.64 for those who ran between 10 and 19 calls weekly (OR: 1.64, 95% CI: 1.15-2.35). Compared to those earning less than $10,000 annually from EMS, EMTs and paramedics who earned between $10,000 and $69,999 had 56% greater odds of work-related burnout (OR: 1.56, 95% CI: 1.15-2.35).

Factors Associated with Patient-Related Burnout

The following covariates were included in the final multivariable logistic regression model for patient-related burnout: provider level, years of EMS experience, sex, weekly call volume, and education level (Table 8). The model exhibited good calibration with a Hosmer-Lemeshow test statistic of χ^2=0.8550. While years of EMS was not statistically significant in this model, the variable was retained as an important confounder. Paramedics had more than twice the odds of experiencing patient-related burnout as EMTs (OR: 2.14, 95% CI: 1.34-3.43). Meanwhile, females had 40% lower odds of experiencing patient-related burnout as males (OR: 0.60, 95% CI: 0.41-0.89). EMTs and paramedics who had more than 20 calls weekly had twice the odds of patient-related burnout as those who ran fewer than 5 calls per week (OR: 2.08, 95% CI: 1.27-3.39). Finally, EMS professionals who had a Bachelor's degree or higher had nearly three-and-one-half times the odds of experiencing burnout as those with a high school education or less (OR: 3.48, 95% CI: 1.23-9.82).

Burnout as a Predictor of Anticipated Turnover and Sickness Absence

Anticipated Turnover

Table 9 displays the results for the multivariable logistic regression models for each dimension of burnout and being likely to leave an EMS job or the EMS profession within the next 12 months. After controlling for covariates significantly associated with personal burnout, those who experienced personal burnout had nearly two-and-one-half times the odds of being likely to leave their current main EMS job as those who did not experience personal burnout (OR: 2.46, 95% CI: 1.96-3.10). Similarly, the odds of being

likely to leave the EMS profession were significantly greater for those who demonstrated personal burnout (OR: 2.63, 95% CI: 1.87-3.69).

There was a more than three-fold increase in odds of being likely to leave a current EMS job or those who had work-related burnout (OR: 3.34, 95% CI: 2.64-4.22). Further, those with work-related burnout had higher odds of being likely to leave the EMS profession (OR: 3.32, 95% CI: 2.39-4.63). Finally, those who were classified as having patient-related burnout also had increased odds of being likely to leave their main EMS jobs (OR: 2.47, 95% CI: 1.79-3.43) and the EMS profession (OR: 3.88, 95% CI: 2.57-5.86).

Sickness Absence

Table 9 displays the results of the multivariable logistic regression models for sickness absence and burnout after controlling for covariates significantly associated with each dimension of burnout. Those with personal burnout had a two-fold increase in odds of reporting more than 10 days of sickness absence in the past 12 months (OR: 2.01, 95% CI: 1.18-3.43). Similarly, those with work-related burnout had a slightly more than two-fold increase in odds of reporting having missed more than 10 days of work due to sickness in the past 12 months (OR: 2.17, 95% CI: 1.29-3.67). The odds ratio for reporting 10 or more days of sickness absence for those with patient-related burnout did not reach statistical significance at the $\alpha=0.05$ level; however, there was a trend toward significance (OR: 1.99, 95% CI: 0.98-4.05).

Chapter 4: Discussion

The results of this study are among the first to assess the prevalence of burnout among EMTs and paramedics in the United States. By using a validated instrument, the three dimensions of burnout were assessed among a sample of nationally-certified EMTs and paramedics. While the CBI has not yet been used to assess burnout among EMS professionals in the U.S., the proportions of paramedics who experienced personal (38.5%), work-related (30.3%), and patient-related (14.2%) burnout in our study were lower than those found among a convenience sample of paramedics in South Africa (53%, 38%, and 23%, respectively).[44] Further, the proportions of nationally-certified EMTs who experienced personal (25.6%), work-related (19.1%), and patient-related (5.2%) burnout were even lower.

With regards to the prevalence of burnout in other potentially similar professions, the prevalence proportions of burnout found among EMTs and paramedics in this study also tended to be lower. The prevalence of burnout among paramedics in our study was similar to that found in a study of travel nurses in the U.S. found the prevalence of burnout to be 39.2% in the personal dimension, 32.6% for work-related, and 16.0% for patient-related.[50] Meanwhile the prevalence of burnout among EMTs and paramedics in our study were lower than those found among other healthcare professions in the Danish population where the prevalence of work-related burnout among hospital physicians was around 39% and the prevalence patient-related burnout was near 26%.[51] Among Danish

nurses, the prevalence of work-related and patient-related burnout was 37% and 30%, respectively.[51]

This study was the first to identify demographic and employment characteristics associated with each of the dimensions of burnout among EMS professionals. Table 10 summarizes the findings from the unadjusted comparative analyses.

Table 11 displays a summary of the predictors and confounders of each dimension of burnout identified through the multivariable logistic regression analyses. After controlling for other covariates, paramedics had greater odds of both personal and patient-related burnout than EMTs. A previous study found that paramedics have greater odds of being stressed, anxious and depressed compared to EMTs.[52] With regards to years of EMS experience, compared to those with fewer than 5 years of experience, those in the middle range of between 5 and 15 years of EMS experience had greater odds of work-related burnout. Meanwhile, there was not a significant increase in odds of work-related burnout for those with more than 15 years of EMS experience. A possible explanation for these findings is that EMS professionals who experience burnout are more likely to leave the profession early and that those who are able to avoid burnout are more likely to stay in the profession for 15 or more years. Previous research has suggested that EMS professionals staying within an organization longer are those who possess more 'stress-resistant' traits.[53]

Sex was a predictor of personal and patient-related burnout. While females had greater odds of personal burnout, they had significantly lower odds of patient-related burnout. These findings are supported by a meta-analysis of studies that used the Maslach

Burnout Inventory.[54] Females scored higher on the emotional exhaustion component, which shares some common ground with the personal burnout dimension of the CBI. Females also scored lower on the depersonalization scale, which may be seen as coping mechanism for patient-related burnout.

Agency type was associated with work-related burnout only. Those at private agencies had greater odds of work-related burnout compared to those at fire-based agencies. These results are supported by a study that found that those working at private agencies had a 35% increase in odds of stress compared to those at fire-based agencies. One possible explanation is that fire-based services may have better benefits when compared to private services. One survey that included fire-based and non-fire based EMS personnel found that far more of those working for fire-based agencies had pensions and union representation.[55] Further investigation is needed to understand the causes of the increased odds of burnout among those at private agencies compared to fire-based agencies.

Weekly call volume was the only significant predictor of all three dimensions of burnout. The odds of burnout in each dimension were greatest for those who reported having more than 20 calls per week. This finding makes intuitive sense as running more calls and seeing more patients could reasonably result in higher levels of emotional and physical exhaustion. Future research is needed to determine whether reducing call volume per provider impacts burnout.

Annual EMS income was a predictor of personal and work-related burnout. Those earning more than $10,000 per year had greater odds of personal and work-related

burnout; however the impact among those in the highest income category (greater than $70,000) was less than that among those who earned between $10,000 and $60,000. Likely, those who earn less than $10,000 per year are volunteers or part-time EMS providers. Previous research has suggested that volunteer EMS providers experience less burnout that paid-full time EMS providers.[56]

In addition to identifying key predictors of burnout, this study was also the first to examine the potential impact of burnout on the EMS workforce in the United States. In this study about 21% of EMS professionals said that they would likely leave their main EMS jobs within the next 12 months, which is higher than the 10.7% turnover rate found in a 2010 study of 40 EMS agencies.[41] The finding that EMTs and paramedics who met the criteria for burnout in any of the three dimensions had greater odds of being likely to leave an EMS job or the EMS profession warrants further study.

Further, the findings of this study showed a significant association between two dimensions of burnout, personal and work-related, and missing 10 or more days due to sickness in 12 months, while there was a trend toward significance for the association between patient-related burnout and sickness absence. Similar findings relating the dimensions of burnout to sickness absence of two weeks or more were found among human services workers in Denmark.[57] As burnout has the potential to negatively impact the EMS workforce in the U.S., future research should seek to identify causes of burnout among EMTs and paramedics so that initiatives to reduce burnout in this population may be developed and implemented.

Strengths and Limitations

This was the first study to use a large, nationally-representative, random sample of EMTs and paramedics to assess burnout. With regards to internal validity, our sample appears to be geographically representative of the nationally-certified population as a whole. Figure 1 displays a map of the states where respondents in our study perform most of their EMS work and Figure 2 displays the geographic distribution of the entire nationally-certified EMS population from 2014. The distributions of the densities in Figures 1 and 2 appear similar.

As only nationally-certified EMTs and paramedics were included in this study, there may be concerns about external generalizability to the population of EMTs and paramedics in the U.S. who do not possess National EMS Certification. Nevertheless, the majority of states require National EMS Certification for initial licensure at one or more levels and there are nationally-certified EMS professionals in every state.

Another limitation of this study stems from the stratified sample selection procedure based on provider level that was used. As expected, this stratified sampling strategy resulted in a larger proportion of paramedics in the sample population than exists in the general target population (49.8% vs. 28.4%). Since a greater proportion of paramedics experienced burnout, this would shift the bias in crude estimates up and away from the null. However, the logistic regression analyses controlled for provider level and allowed assessments of the independent effects of other covariates of interest.

While a sufficient number of EMTs and paramedics responded to the questionnaire to be able to detect meaningful differences, there is a potential for non-

response bias as the response rate was low. Nevertheless, it is plausible that those who did not respond would be more likely to experience burnout, which would shift the bias down and towards the null.

This investigation relied on self-report data. For the measures of burnout, using self-report is common practice as there is not an objective or clinical method to assess burnout. For measure of sick days, there is the potential for recall bias as an individual may have underreported or overreported the actual number of days missed due to illness in the past 12 months. Similarly, this study was only able to measure anticipated turnover by asking the participant how likely they are to leave an EMS job or the profession rather than capture actual turnover.

Chapter 5: Concluding Remarks

This study assessed the prevalence of burnout among a randomly selected sample of nationally-certified EMTs and paramedics in the U.S. A greater proportion of paramedics experienced burnout in each of the three dimensions compared to EMTs. Next, multivariable logistic regression modelling was used to identify important predictors of each dimension of burnout. Lastly, this study assessed the association between each dimension of burnout and factors that negatively impact the workforce, namely anticipated turnover and sickness absence. Burnout in each of the three dimensions was associated with significantly greater odds of being likely to leave an EMS job or the profession. Similarly, personal and work-related burnout were significantly associated with greater odds of sickness absence while there was a trend toward significance for patient-related burnout and sickness absence. As burnout has the potential to have a negative impact on the EMS workforce in the U.S., future research should focus on the underlying causes of burnout so that initiatives to identify and prevent or reduce burnout among EMS professionals may be developed.

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Appendix A: Questionnaire

EMS Work-Life Questionnaire

Thank you for agreeing to participate in this study! The survey will take 5-10 minutes. Your participation in this research project is entirely voluntary. The NREMT does not mandate/require participation in this project, and as such there are no penalties associated with not participating or discontinuing participation at any time. Further, there are no foreseeable risks in participation.

Your privacy is important to us, and your responses will be kept absolutely confidential. Only data summarizing groups of participants will be reported. If you have any questions, or want to obtain more information about this very important project, please contact the NREMT Research Department at 614-888-4484 or via email at research@nremt.org. If you have concerns or questions about your rights as a participant, you can contact the Chair of AIR's Institutional Review Board at 1-800-634-0797 or via email at IRBChair@air.org.

Please click "Next" to continue.

1. To go back to a previous question, use the back arrow *at the bottom of the page. Do NOT use your browser's* back arrow.

2. If you want to take a break, you can log out. If you leave the survey for more than 30 minutes, you will automatically be logged out. In either case, you can return by clicking on the URL in the email inviting you to take this survey. Your responses will be saved.

1. How many years have you worked as an EMS professional?

- ❍ *I have never worked as an EMS professional (Skip to Q29)*
- ❍ *Less than 1 year*
- ❍ *1 to 2 years*
- ❍ *3 to 4 years*
- ❍ *5 to 7 years*
- ❍ *8 to 10 years*
- ❍ *11 to 15 years*
- ❍ *16 to 20 years*
- ❍ *21 or more years*

2. At what level are you currently practicing as an EMS provider?

- ❍ *I am **not** currently practicing as an EMS provider (Skip to Q29)*
- ❍ *Emergency Medical Responder*
- ❍ *Emergency Medical Technician (Basic)*
- ❍ *Emergency Medical Technician - Intermediate*
- ❍ *Advanced Emergency Medical Technician*
- ❍ *Paramedic*

3. **In the past 30 days, have you worked as a Mobile Integrated Healthcare Provider (e.g., Community Paramedic)?**

- ❍ *Yes*
- ❍ *No*

4. **For how many different agencies/organizations do you currently perform EMS work? (Please include agencies/organizations where you work as a volunteer.)**

- ❍ *0 (Skip to Q29)*
- ❍ *1*
- ❍ *2 or more*

5. **In the past 30 days, have you provided any patient care at your EMS job(s)?**

- ❍ *Yes*
- ❍ *No*

(Show if Q4=2 or more) **Please answer the following items about your current EMS job. If you have more than one current EMS job, answer these questions about the EMS job where you perform the most patient transports per week. If you did not perform any patient transports, answer these questions about the EMS job where you spend the greatest number of hours per week.**

6. **Volunteers are licensed EMS workers who receive nominal or no compensation for their provision of EMS services at the agency. At <u>your main EMS job</u>, are you a volunteer EMS provider?**

- ❍ *Yes*
- ❍ *No*

7. **Which of the following best describes your <u>primary role</u> at your main EMS job?**

- ❍ ***Patient Care Provider*** - A person whose primary role is the provision of EMS services to patients.
- ❍ ***Educator*** - A person whose primary role is <u>instructing</u> individuals enrolled in an approved or accredited EMS training course or providing continuing education required for maintenance of licensure.
- ❍ ***Preceptor*** - A person whose primary role is <u>training</u> individuals enrolled in an approved or accredited EMS training course in a clinical setting.
- ❍ ***Administrator/Manager*** - A person whose primary role is the management and direction of an organization providing EMS services.
- ❍ ***First-line Supervisor*** - A person whose primary role is the direct supervision of individuals providing EMS services.
- ❍ ***Other*** - A person whose primary EMS role at their main job is not listed above (please specify).

8. **Which of the following best describes your <u>main EMS agency/organization</u>?**

- ❍ ***Hospital*** - refers to EMS agencies that are under the direct control of a hospital, regardless of the type of organization that runs the hospital.
- ❍ ***Fire Department*** - an organization from which fire and EMS services are provided, regardless of the type of organization that runs the Fire Department. <u>Volunteer fire departments</u> should be included here.
- ❍ ***Tribal*** - are operated by a federally recognized Indian or Alaska Native Tribe.
- ❍ ***Military*** - are operated by one of the U.S. Armed Forces and staffed by active duty personnel.
- ❍ ***Government, Non-Fire Department*** - are operated directly by a federal, state, county, or local government entity other than the U.S. Armed Forces.
- ❍ ***Private*** - are operated under the direct control of a for-profit or not-for-profit organization other than a hospital. <u>Volunteer rescue squads</u> that are operated independently of a fire department should be included here.

9. **Which of the following best describes the <u>primary</u> type of service provided by your <u>main EMS agency/organization</u>?** *If more than one type of service is provided, pick the service with the greatest number of calls in the past 12 months.*

- ❍ ***911 response <u>with</u> transport capability*** - Immediate response to an incident location, regardless of method of notification (for example, 911, direct dial, walk-in, flagging down), with the ability to transport patients.
- ❍ ***911 response <u>without</u> transport capability*** - Immediate response to an incident location, regardless of method of notification (for example, 911, direct dial, walk-in, flagging down), without the ability to transport patients.
- ❍ ***Hazmat*** - Response to situations in which hazardous materials are present or are believed to be present.
- ❍ ***Medical Transport (Convalescent)*** - Transport of a patient from one health facility to another.
- ❍ ***Specialty Care Transport*** - Transport of a critically injured or ill patient from one health care facility to another, with the ability to provide services above the paramedic level.
- ❍ ***Rescue*** - Services involving the extrication of individuals, most typically from vehicles.
- ❍ ***Paramedic Intercept*** - Advanced Life Support Services provided by paramedics in response to a request for emergency services by Basic Life Support responders.
- ❍ ***Air Medical*** - Transportation by an air ambulance.
- ❍ ***Other*** (please specify)

10. **On average, how many <u>calls do you respond to</u> in a typical week at your main EMS job?**

- ❍ *0*
- ❍ *1*
- ❍ *2 to 4*
- ❍ *5 to 9*
- ❍ *10 to 19*
- ❍ *20 to 29*
- ❍ *30 to 39*
- ❍ *40 to 49*
- ❍ *50 or more*

11. **In which state do you perform most of your EMS work?**

[Select State from Drop-Down Menu]

12. **Which of the following best describes the community in which you do most of your EMS work?**

- ❍ *Rural area (less than 2,500 people)*
- ❍ *Small town (2,500 - 24,999 people)*
- ❍ *Medium town (25,000 - 74,999 people)*
- ❍ *Large town (75,000 - 149,000 people)*
- ❍ *Mid-sized city (150,000 - 500,000 people)*
- ❍ *Suburb/fringe of a mid-sized city*
- ❍ *Large city (500,000 or more people)*
- ❍ *Suburb/fringe of a large city*

13. **Do you work shifts at your main EMS job?**

- ❍ *Yes*
- ❍ *No*

14. **Which of the following best describes the length of the shifts you typically work at your main EMS job?**

- ❍ *8 hours*
- ❍ *10 hours*
- ❍ *12 hours*
- ❍ *24 hours*
- ❍ *36 hours*
- ❍ *48 hours*
- ❍ *Other (please specify)*

15. **How many shifts do you work in a typical 14-day (2 week) period at your main EMS job?** *(Please enter a whole number between 0 - 14. Decimals are not allowed.)*

_____ shifts

16. **During the past 12 months, how many days have you been absent from your EMS job(s) due to illness? If none, please enter "0".** (Please do not include days you missed due to work-related illness or the illness of a child or family member.)

Full Days _____

Half Days _____

17. **During the past 12 months, how many days have you been absent from your EMS job(s) due to work-related illness, injury or exposure? If none, please enter "0".**

Full Days _____

Half Days _____

18. **How satisfied are you with your main EMS job?**

- ❍ *Very Satisfied*
- ❍ *Satisfied*
- ❍ *Dissatisfied*
- ❍ *Very Dissatisfied*

19. **How satisfied are you with the EMS profession?**

- ❍ *Very Satisfied*
- ❍ *Satisfied*
- ❍ *Dissatisfied*
- ❍ *Very Dissatisfied*

20. **At your main EMS job, how satisfied are you with your direct supervisor?**

- ❍ *Very Satisfied*
- ❍ *Satisfied*
- ❍ *Dissatisfied*
- ❍ *Very Dissatisfied*

21. **How likely is it that you'll leave your current main EMS job within the next 12 months?**

- ❍ *Definitely will not leave*
- ❍ *Probably will not leave*
- ❍ *Probably will leave*
- ❍ *Definitely will leave*

22. **How likely is it that you'll <u>leave EMS</u> within the next 12 months?**

- ❍ *Definitely will not leave*
- ❍ *Probably will not leave*
- ❍ *Probably will leave*
- ❍ *Definitely will leave*

23. **Please read over each of the next statements and indicate how often the statement applied to you <u>over the past 4 weeks.</u>**

	Always	*Often*	*Sometimes*	*Seldom*	*Never or almost never*
I felt tired.	❍	❍	❍	❍	❍
I was physically exhausted.	❍	❍	❍	❍	❍
I was emotionally exhausted.	❍	❍	❍	❍	❍

24. **Please read over each of the next statements and indicate how often the statement applied to you <u>over the past 4 weeks.</u>**

	Always	*Often*	*Sometimes*	*Seldom*	*Never or almost never*
I felt worn out.	❍	❍	❍	❍	❍
I thought "I can't take it anymore."	❍	❍	❍	❍	❍
I felt weak and susceptible to illness.	❍	❍	❍	❍	❍

25. **Please read over each of the next statements and indicate how often the statement applied to you <u>over the past 4 weeks.</u>**

	Always	*Often*	*Sometimes*	*Seldom*	*Never or almost never*
I was exhausted at the beginning of my shift at the thought of another day of work.	❍	❍	❍	❍	❍
I felt that every working hour was tiring.	❍	❍	❍	❍	❍
I felt worn out at the end of my work day.	❍	❍	❍	❍	❍
I had enough energy for family or friends during leisure time.	❍	❍	❍	❍	❍

26. **Please read over each of the next statements and indicate how often the statement applied to you <u>over the past 4 weeks.</u>**

	Always	*Often*	*Sometimes*	*Seldom*	*Never or almost never*
My work frustrated me.	❍	❍	❍	❍	❍
My work was emotionally exhausting.	❍	❍	❍	❍	❍
I felt burned out because of my work.	❍	❍	❍	❍	❍

27. **Please read over each of the next statements and indicate how often the statement applied to you <u>over the past 4 weeks.</u>** (Show if Q5=Yes)

	Always	*Often*	*Sometimes*	*Seldom*	*Never or almost never*
I was tired of working with patients.	❍	❍	❍	❍	❍
It drained my energy to work with patients.	❍	❍	❍	❍	❍
I wondered how long I will be able to continue working with patients.	❍	❍	❍	❍	❍

28. **Please read over each of the next statements and indicate how often the statement applied to you <u>over the past 4 weeks.</u>** (Show if Q5=Yes)

	Always	*Often*	*Sometimes*	*Seldom*	*Never or almost never*
I found it hard to work with patients.	❍	❍	❍	❍	❍
I found it frustrating to work with patients.	❍	❍	❍	❍	❍
I felt that I give more than I get back when I work with patients.	❍	❍	❍	❍	❍

29. **Are you Hispanic or Latino?**

❍ *Yes*
❍ *No*
❍ *Refuse*

30. **Which of the following best describes you? You may choose more than one.**

☐ *American Indian or Alaskan Native*
☐ *Asian*
☐ *Black or African American*
☐ *Native Hawaiian or other Pacific Islander*
☐ *White*
☐ *Refuse*

31. **What is your sex?**

❍ *Male*
❍ *Female*

32. **What is the highest level of education you have completed?**

❍ *Didn't complete high school*
❍ *High school graduate/GED*
❍ *Some college*
❍ *Associate's Degree (AS, AA)*
❍ *Bachelor's Degree (BS, BA)*
❍ *Master's Degree*
❍ *Doctoral Degree (Including M.D., Ph.D., J.D., DDS)*

33. **Which of the following best describes your current marital status?**

- ❍ *Married*
- ❍ *Divorced*
- ❍ *Widowed*
- ❍ *Separated*
- ❍ *Never been married*
- ❍ *A member of an unmarried couple*

34. **About how much money did you earn before taxes from <u>EMS-related jobs</u> in the past 12 months?** *Do NOT include volunteer EMS compensation***.**

- ❍ *$0*
- ❍ *$1 to $999*
- ❍ *$1,000 to $9,999*
- ❍ *$10,000 to $19,999*
- ❍ *$20,000 to $29,999*
- ❍ *$30,000 to $39,999*
- ❍ *$40,000 to $49,999*
- ❍ *$50,000 to $59,999*
- ❍ *$60,000 to $69,999*
- ❍ *$70,000 to $79,999*
- ❍ *$80,000 to $89,999*
- ❍ *$90,000 to $99,999*
- ❍ *$100,000 to $124,999*
- ❍ *$125,000 to $149,999*
- ❍ *$150,000 or more*
- ❍ *Refuse*

Appendix B: Tables

Table 1. CBI: Items, Scales and Response Frequencies among Nationally-Certified EMTs and Paramedics

	Scale and Scoring						
	Always	Often	Sometimes	Seldom	Never or almost never	Missing	Score Mean (SD)
	100	75	50	25	0		
CBI Dimension and Item	n (%)	n (%)	n (%)	n (%)	n (%)	n	
Personal Burnout (Cronbach α=0.87)							
I felt tired	288 (12.8)	838 (37.3)	828 (36.9)	213 (9.5)	79 (3.5)	6	61.6 (23.8)
I felt physically exhausted	120 (5.4)	477 (21.3)	804 (35.8)	580 (25.9)	263 (11.7)	8	45.7 (26.5)
I felt emotionally exhausted	101 (4.5)	408 (18.2)	658 (29.3)	664 (29.6)	414 (18.4)	7	40.2 (27.9)
I thought: “I can’t take it anymore.”	29 (1.3)	132 (5.9)	311 (13.9)	547 (24.5)	1,214 (54.4)	19	18.8 (24.7)
I felt worn out	154 (6.9)	602 (26.9)	776 (34.7)	468 (20.9)	236 (10.6)	16	49.7 (27.1)
I felt weak and susceptible to illness	31 (1.4)	102 (4.6)	412 (18.5)	690 (30.9)	998 (44.7)	19	21.8 (24.0)
Total Score							39.7 (21.0)
Work-Related Burnout (Cronbach α=0.89)							
I felt worn out at the end of the working day.	45 (2.0)	275 (12.3)	703 (31.3)	723 (32.2)	499 (22.2)	7	34.9 (25.6)
I was exhausted at the beginning of my shift at the thought of another day at work.	68 (3.0)	227 (10.1)	499 (22.2)	656 (29.2)	797 (35.5)	5	29.0 (27.7)
I felt that every working hour was tiring.	72 (3.2)	329 (14.6)	859 (38.2)	618 (27.5)	369 (16.4)	5	40.2 (25.6)
I had enough energy for family and friends during leisure time. (reverse scoring)	185 (8.2)	531 (23.7)	770 (34.3)	468 (20.9)	290 (12.9)	8	48.4 (28.4)
My work is emotionally exhausting	68 (3.0)	227 (10.1)	505 (22.5)	689 (30.7)	757 (33.7)	6	29.5 (27.5)
My work frustrated me	36 (1.6)	146 (6.5)	407 (18.2)	745 (33.3)	906 (40.5)	12	23.9 (24.9)
I felt burned out because of my work	100 (4.5)	297 (13.2)	646 (28.8)	875 (39.0)	328 (14.6)	6	38.5 (25.9)
Total Score							35.0 (20.8)

Continued

Table 1. Continued

	Scale and Scoring						
	Always	Often	Sometimes	Seldom	Never or almost never	Missing	Score Mean (SD)
	100	75	50	25	0		
CBI Dimension and Item	n(%)	n(%)	n(%)	n(%)	n(%)	n	
Patient-Related Burnout (Cronbach α=0.91)							
It was hard to work with patients.	4 (0.2)	42 (2.0)	270 (13.0)	695 (33.6)	1,060 (51.2)	4	16.6 (19.8)
It drained my energy to work with patients	8 (0.4)	73 (3.5)	404 (19.6)	690 (33.4)	892 (43.2)	8	21.2 (22.1)
I felt that I give more than I get back with patients	12 (0.6)	73 (3.5)	319 (15.4)	699 (33.8)	963 (46.6)	9	19.4 (21.9)
I was tired of working with patients	98 (4.7)	283 (13.7)	462 (22.4)	484 (23.4)	740 (35.8)	8	32.0 (30.4)
I wondered how long I will be able to continue working with patients.	13 (0.6)	82 (4.0)	340 (16.4)	676 (32.7)	959 (46.3)	5	20.0 (22.4)
Total Score							21.4 (19.7)

Table 2. Correlation Coefficients for Personal, Work-Related, and Patient-Related Burnout

	Personal	Work-Related	Patient-Related
Personal	1.00		
Work-Related	0.85	1.00	
Patient-Related	0.56	0.65	1.00

Table 3. Respondent Characteristics by Burnout Dimension for Nationally-Certified EMTs and Paramedics

	Total Sample	Personal Burnout		Work-Related Burnout		Patient-Related Burnout	
	n (%)	n (%)	p-value	n (%)	p-value	n (%)	p-value
Overall		748 (33.8)		584 (26.3)		228 (11.1)	
Missing (n)		36		27		26	
Provided Patient Care Last 30 Days			0.041		0.353		
Yes	2,075 (92.1)	703 (34.3)		544 (26.5)		-	
No	177 (7.9)	45 (26.6)		40 (23.3)		-	
Missing (n)	0						
Provider Level			<0.001		<0.001		<0.001
EMT	823 (36.6)	207 (25.6)		155 (19.1)		37 (5.2)	
Paramedic	1,429 (63.5)	541 (38.5)		429 (30.3)		191 (14.2)	
Missing (n)	0						
Years of EMS Experience			<0.001		<0.001		<0.001
Less than 5 years	718 (31.9)	198 (27.9)		144 (20.3)		41 (6.3)	
5 to 15 years	780 (34.6)	303 (39.2)		237 (30.7)		95 (13.1)	
More than 15 years	754 (33.5)	247 (33.7)		203 (27.8)		92 (13.7)	
Missing (n)	0						
Sex			0.018		0.542		0.001
Male	1,660 (73.8)	527 (32.4)		426 (25.9)		190 (12.5)	
Female	588 (26.2)	220 (37.7)		158 (27.2)		38 (7.2)	
Missing (n)	4						
Race/Ethnicity			0.089		0.272		0.054
White, non-Hispanic	1,869 (86.8)	627 (34.0)		490 (26.5)		193 (11.2)	
Minority	284 (13.2)	79 (28.8)		65 (23.4)		17 (7.1)	
Missing (n)	99						

Continued

Table 3. Continued

	Total Sample	Personal Burnout		Work-Related Burnout		Patient-Related Burnout	
	n (%)	n (%)	p-value	n (%)	p-value	n (%)	p-value
Agency Type			0.003		<0.001		0.476
Fire	829 (36.9)	239 (29.4)		173 (21.1)		90 (11.7)	
Private	716 (31.9)	257 (36.6)		198 (28.1)		67 (10.2)	
Hospital	358 (16.0)	121 (34.0)		111 (31.4)		36 (10.7)	
Government	269 (12.0)	110 (41.0)		86 (32.2)		33 (13.8)	
Military	60 (2.7)	14 (24.6)		11 (18.6)		2 (6.7)	
Tribal	13 (0.6)	4 (33.3)		3 (23.1)		0 (0.0)	
Missing (n)	7						
Primary Service Provided			0.001		<0.001		0.182
911 response with transport capability	1,535 (68.2)	538 (35.6)		424 (27.9)		173 (12.1)	
911 response without transport capability	266 (11.8)	66 (25.2)		41 (15.6)		16 (6.7)	
Medical transport	111 (4.9)	42 (38.2)		35 (32.1)		8 (8.1)	
Air medical	86 (3.8)	23 (27.4)		18 (20.9)		7 (9.1)	
Specialty care transport	61 (2.7)	27 (44.3)		25 (41.0)		7 (12.7)	
Paramedic intercept	31 (1.4)	6 (19.4)		5 (16.1)		5 (17.2)	
Rescue	30 (1.3)	3 (10.3)		3 (10.0)		1 (3.9)	
Hazmat	3 (0.1)	1 (50.0)		1 (33.3)		0 (0.0)	
Other	128 (5.7)	41 (33.3)		31 (25.2)		10 (10.2)	
Missing (n)	1						
Work Shifts			0.008		0.010		0.017
Yes	1,886 (83.9)	649 (34.9)		510 (27.3)		210 (11.8)	
No	363 (16.1)	98 (27.7)		74 (20.8)		18 (6.8)	
Missing (n)	3						
Community Size			<0.001		<0.001		<0.001
Rural (< 25,000 residents)	803 (35.8)	208 (26.4)		160 (20.1)		53 (7.3)	
Urban (≥ 25,000 residents)	1,441 (64.2)	538 (37.9)		423 (29.7)		175 (13.3)	
Missing (n)	8						

Continued

Table 3. Continued

	Total Sample	Personal Burnout		Work-Related Burnout		Patient-Related Burnout	
	n (%)	n (%)	p-value	n (%)	p-value	n (%)	p-value
Weekly Call Volume			<0.001		<0.001		<0.001
Less than 5 calls	550 (24.5)	117 (21.9)		87 (16.1)		23 (5.5)	
5 to 9 calls	386 (17.2)	102 (26.8)		69 (18.0)		21 (5.8)	
10 to 19 calls	548 (24.4)	170 (31.6)		146 (26.7)		67 (12.7)	
20 or more calls	765 (34.0)	356 (46.9)		280 (37.1)		117 (15.9)	
Missing (n)	3						
Primary Role			0.713		0.143		0.305
Patient care provider	1,774 (78.9)	581 (33.2)		451 (25.7)		184 (11.1)	
Supervisor	178 (7.9)	60 (33.9)		44 (25.3)		22 (13.7)	
Administrator/manager	129 (5.7)	45 (36.6)		36 (28.6)		12 (12.5)	
Educator	68 (3.0)	25 (37.9)		19 (28.8)		7 (14.3)	
Preceptor	29 (1.3)	13 (44.8)		14 (48.3)		1 (3.9)	
Other	71 (3.2)	22 (31.4)		18 (25.7)		2 (3.8)	
Missing (n)	3						
Mobile Integrated Healthcare Provider			0.186		0.834		0.558
Yes	303 (13.5)	88 (30.3)		80 (26.8)		36 (12.1)	
No	1,948 (86.5)	660 (34.3)		504 (26.2)		192 (11.0)	
Missing (n)	1						
Satisfied with Main EMS Job			<0.001		<0.001		<0.001
Satisfied	1,972 (87.8)	554 (28.5)		189 (69.5)		70 (27.1)	
Dissatisfied	273 (12.2)	193 (72.0)		394 (20.2)		157 (8.8)	
Missing (n)	7						

Continued

Table 3. Continued

	Total Sample	Personal Burnout		Work-Related Burnout		Patient-Related Burnout	
	n (%)	n (%)	p-value	n (%)	p-value	n (%)	p-value
Marital Status			0.600		0.466		0.347
Married or member of unmarried couple	1,509 (67.5)	489 (33.0)		383 (25.6)		161 (11.8)	
Divorced/widowed/separated	253 (11.3)	87 (35.2)		73 (29.2)		21 (9.3)	
Never been married	474 (21.2)	165 (35.1)		125 (26.8)		43 (9.8)	
Missing (n)	16						
Education Level			0.029		0.272		0.001
High school or less	136 (6.0)	31 (23.0)		29 (21.3)		6 (5.0)	
Some college	833 (37.0)	276 (33.8)		205 (24.9)		75 (9.9)	
Associate's degree	573 (25.5)	187 (33.1)		155 (27.4)		53 (9.9)	
Bachelor's degree or higher	709 (31.5)	253 (36.2)		195 (27.9)		94 (14.9)	
Missing (n)	1						
Annual EMS Income			<0.001		<0.001		<0.001
Less than $10,000	362 (17.0)	78 (21.9)		46 (12.8)		11 (3.6)	
$10,000 to $39,999	600 (28.2)	223 (37.5)		189 (31.9)		60 (10.8)	
$40,000 to $69,999	747 (35.1)	288 (39.2)		224 (30.2)		93 (13.2)	
$70,000 or more	421 (19.8)	128 (30.8)		102 (24.7)		52 (13.8)	
Missing (n)	122						

Continued

Table 3. Continued

	Total Sample	Personal Burnout		Work-Related Burnout		Patient-Related Burnout	
	n (%)	n (%)	p-value	n (%)	p-value	n (%)	p-value
Intent to leave EMS job within 12 months			<0.001		<0.001		<0.001
Likely	474 (21.1)	240 (51.5)		222 (47.2)		146 (9.0)	
Unlikely	1,772 (78.9)	507 (29.1)		361 (20.6)		82 (19.2)	
Missing (n)	6						
Intent to leave EMS profession within 12 months			<0.001		<0.001		<0.001
Likely	182 (8.1)	102 (57.6)		97 (53.9)		183 (9.7)	
Unlikely	2,065 (91.9)	643 (31.6)		486 (23.8)		45 (28.9)	
Missing (n)	5						
Sickness Absence			<0.001		0.001		0.001
Less than 10 days	2,082 (96.6)	675 (32.9)		524 (25.4)		199 (10.5)	
10 or more days	73 (3.4)	38 (52.8)		31 (43.1)		15 (23.8)	
Missing	97						

Table 4. Proportion of Nationally-Certified EMTs and Paramedics Who are Likely to Leave an EMS Job or the EMS Profession by Quartiles of Burnout

	Quartiles					
	Lowest			Highest		
	1	2	3	4	Overall	p-trend value*
Personal Burnout						
Intent to leave main EMS job (% Likely to leave)	11.7%	18.8%	19.4%	37.9%	32.1%	<0.001
Intent to leave EMS profession (% Likely to leave)	4.0%	5.8%	6.9%	17.0%	13.7%	<0.001
Work-Related Burnout						
Intent to leave main EMS job (% Likely to leave)	9.7%	15.6%	20.8%	40.8%	38.1%	<0.001
Intent to leave EMS profession (% Likely to leave)	3.9%	5.2%	5.8%	19.1%	16.6%	<0.001
Patient-Related Burnout						
Intent to leave main EMS job (% Likely to leave)	16.0%	19.0%	19.6%	29.0%	36.0%	<0.001
Intent to leave EMS profession (% Likely to leave)	3.7%	6.9%	6.7%	13.5%	19.7%	<0.001

*Cuzick's test for trend

Table 5. Average and Median Number of Days of Sickness Absence over Past 12 Months by Quartiles of Burnout

	Quartiles					
	Lowest			Highest		
	1	2	3	4	Overall	p-trend value*
Personal Burnout						<0.001
Sickness Absence (days)						
Average (SD)	0.6 (2.9)	2.0 (9.6)	2.2 (9.3)	2.7 (10.7)	2.3 (9.3)	
Median (IQR)	0 (0-0)	0 (0-1)	0 (0-1)	0 (0-2)	0 (0-2)	
Work-Related Burnout						<0.001
Sickness Absence (days)						
Average (SD)	0.7 (3.3)	1.4 (7.5)	2.3 (10.0)	2.6 (10.5)	2.6 (10.4)	
Median (IQR)	0 (0-0)	0 (0-1)	0 (0-1)	0 (0-2)	0 (0-2)	
Patient-Related Burnout						<0.001
Sickness Absence (days)						
Average (SD)	1.4 (6.0)	1.2 (4.6)	1.5 (7.3)	2.2 (8.3)	2.7 (8.4)	
Median (IQR)	0 (0-1)	0 (0-1)	0 (0-1)	0 (0-2)	0 (0-2)	

*Cuzick's test for trend

Table 6. Factors Associated with Personal Burnout among Nationally-Certified EMTs and Paramedics

	Univariable OR (95% CI)	p-value	Multivariable OR (95% CI)	p-value
Provider Level				
EMT	Referent		Referent	
Paramedic	1.82 (1.50-2.20)	<0.001	1.58 (1.25-2.00)	<0.001
Gender				
Male	Referent		Referent	
Female	1.27 (1.04-1.54)	0.018	1.38 (1.11-1.71)	0.004
Race/Ethnicity				
White, non-Hispanic	Referent		Referent	
Other	0.79 (0.59-1.03)	0.090	0.73 (0.54-0.99)	0.042
Work Shifts				
No	Referent		Referent	
Yes	1.40 (1.09-1.80)	0.009	0.77 (0.56-1.07)	0.117
Community Size				
Rural (< 25,000 residents)	Referent		Referent	
Urban (≥ 25,000 residents)	0.59 (0.48-0.71)	<0.001	0.80 (0.64-1.00)	0.053
Weekly Call Volume				
Less than 5 calls	Referent		Referent	
5 to 9 calls	1.31 (0.96-1.77)	0.087	1.19 (0.84-1.69)	0.333
10 to 19 calls	1.65 (1.25-2.17)	<0.001	1.41 (1.01-1.97)	0.046
20 or more calls	3.16 (2.46-4.05)	<0.001	2.48 (1.79-3.45)	<0.001
Annual EMS Income				
Less than $10,000	Referent		Referent	
$10,000 to $69,999	2.22 (1.69-2.93)	<0.001	1.34 (0.96-1.87)	0.088
$70,000 or more	1.59 (1.15-2.20)	0.005	0.92 (0.62-1.38)	0.702

Table 7. Factors Associated with Work-Related Burnout among Nationally-Certified EMTs and Paramedics

	Univariable OR (95% CI)	p-value	Multivariable OR (95% CI)	p-value
Provider Level				
EMT	Referent		Referent	
Paramedic	1.84 (1.49-2.26)	<0.001	1.25 (0.94-1.65)	0.122
Years of EMS Experience				
Less than 5 years	Referent		Referent	
5 to 15 years	1.73 (1.36-2.20)	<0.001	1.43 (1.07-1.90)	0.015
More than 15 years	1.47 (1.15-1.88)	0.002	1.29 (0.93-1.77)	0.124
Agency Type				
Fire-based	Referent		Referent	
Private	1.46 (1.15-1.84)	0.002	1.39 (1.08-1.80)	0.011
Other	1.64 (1.30-2.07)	<0.001	1.60 (1.25-2.06)	<0.001
Work Shifts				
No	Referent		Referent	
Yes	1.43 (1.09-1.89)	0.011	1.31 (0.93-1.84)	0.129
Community Size				
Rural (< 25,000 residents)	Referent		Referent	
Urban (≥ 25,000 residents)	0.60 (0.48-0.73)	<0.001	0.86 (0.68-1.10)	0.228
Weekly Call Volume				
Less than 5 calls	Referent		Referent	
5 to 9 calls	1.14 (0.81-1.62)	0.455	1.03 (0.70-1.52)	0.875
10 to 19 calls	1.89 (1.41-2.55)	<0.001	1.64 (1.15-2.35)	0.006
20 or more calls	3.07 (2.34-4.03)	<0.001	2.50 (1.76-3.55)	<0.001
Annual EMS Income				
Less than $10,000	Referent		Referent	
$10,000 to $69,999	3.05 (2.19-4.24)	<0.001	1.56 (1.06-2.28)	0.024
$70,000 or more	2.23 (1.52-3.27)	<0.001	1.13 (0.71-1.77)	0.611

Table 8. Factors Associated with Patient-Related Burnout among Nationally-Certified EMTs and Paramedics

	Univariable OR (95% CI)	p-value	Multivariable OR (95% CI)	p-value
Provider Level				
EMT	Referent		Referent	
Paramedic	3.00 (2.09-4.33)	<0.001	2.14 (1.34-3.43)	0.002
Years of EMS Experience				
Less than 5 years	Referent		Referent	
5 to 15 years	2.26 (1.54-3.32)	<0.001	1.46 (0.92-2.30)	0.105
More than 15 years	2.37 (1.61-3.49)	<0.001	1.40 (0.87-2.26)	0.165
Sex				
Male	Referent		Referent	
Female	0.55 (0.38-0.79)	0.001	0.60 (0.41-0.89)	0.011
Weekly Call Volume				
Less than 5 calls	Referent		Referent	
5 to 9 calls	1.05 (0.57-1.92)	0.886	0.75 (0.40-1.41)	0.369
10 to 19 calls	2.48 (1.52-4.06)	<0.001	1.63 (0.97-2.73)	0.064
20 or more calls	3.24 (2.04-4.06)	<0.001	2.08 (1.27-3.39)	0.003
Education Level				
High school or less	Referent		Referent	
Some college	2.10 (0.89-4.93)	0.090	2.18 (0.77-6.17)	0.143
Associate's degree	2.10 (0.89-5.01)	0.093	1.82 (0.63-5.26)	0.266
Bachelor's degree or higher	3.36 (1.44-7.86)	0.005	3.48 (1.23-9.82)	0.018

Table 9. Odds Ratios for Anticipated Turnover and Sickness Absence by Personal, Work-Related, and Patient-Related Burnout among Nationally-Certified EMTs and Paramedics

	Univariable OR (95% CI)	p-Value	Multivariable OR (95% CI)	p-value
Likely to Leave EMS Job within Next 12 Months				
Personal burnout	2.59(2.10-3.19)	<0.001	2.46 (1.96-3.10)*	<0.001
Work-related burnout	3.44 (2.78-4.27)	<0.001	3.34 (2.64-4.22)**	<0.001
Patient-related burnout	2.39 (1.78-3.21)	<0.001	2.47 (1.79-3.43)***	<0.001
Likely to Leave EMS Profession within Next 12 Months				
Personal burnout	2.94 (2.15-4.02)	<0.001	2.63 (1.87-3.69)*	<0.001
Work-related burnout	3.74 (2.74-5.10)	<0.001	3.32 (2.39-4.63)**	<0.001
Patient-related burnout	3.78 (2.59-5.51)	<0.001	3.88 (2.57-5.86)***	<0.001
10 or More Sickness Absence Days in Last 12 Months				
Personal burnout	2.28 (1.42-3.65)	0.001	2.01 (1.18-3.43)*	0.011
Work-related burnout	2.22 (1.38-3.58)	0.001	2.17 (1.29-3.67)**	0.004
Patient-related burnout	2.67 (1.47-4.86)	0.001	1.99 (0.98-4.05)***	0.058

*Adjusted for: provider level, sex, race/ethnicity, community size, weekly call volume, work shifts, and annual EMS income

**Adjusted for: provider level, agency type, years of EMS experience, community size, weekly call volume, work shifts, and annual EMS income

***Adjusted for: provider level, sex, years of EMS experience, weekly call volume, and education level.

Table 10. Summary of Comparative Analyses for Characteristics of Nationally-Certified EMTs and Paramedics and Burnout Dimensions

	Burnout Dimension		
	Personal	**Work-Related**	**Patient-Related**
Provider Level	*	*	*
Years of EMS Experience	*	*	*
Sex	*		*
Race/Ethnicity			
Agency Type	*	*	
Primary Service Provided	*	*	
Work Shifts	*	*	*
Community Size	*	*	*
Weekly Call Volume	*	*	*
Primary Role			
Mobile Integrated Healthcare Provider			
Marital Status			
Education Level	*		*
Annual EMS Income	*	*	*

*p<0.05

Table 11. Summary of Predictors and Confounders from Multivariable Logistic Regression Models of Dimensions of Burnout among Nationally-Certified EMTs and Paramedics

	Burnout Dimension		
	Personal	**Work-Related**	**Patient-Related**
Provider Level	P	C	P
Years of EMS Experience		P	C
Sex	P		P
Race/Ethnicity	P		
Agency Type		P	
Primary Service Provided			
Work Shifts	C	C	
Community Size	C	C	
Weekly Call Volume	P	P	P
Primary Role			
Mobile Integrated Healthcare Provider			
Marital Status			
Education Level			P
Annual EMS Income	P	P	

P=Predictor, C=Confounder

Appendix C: Figures

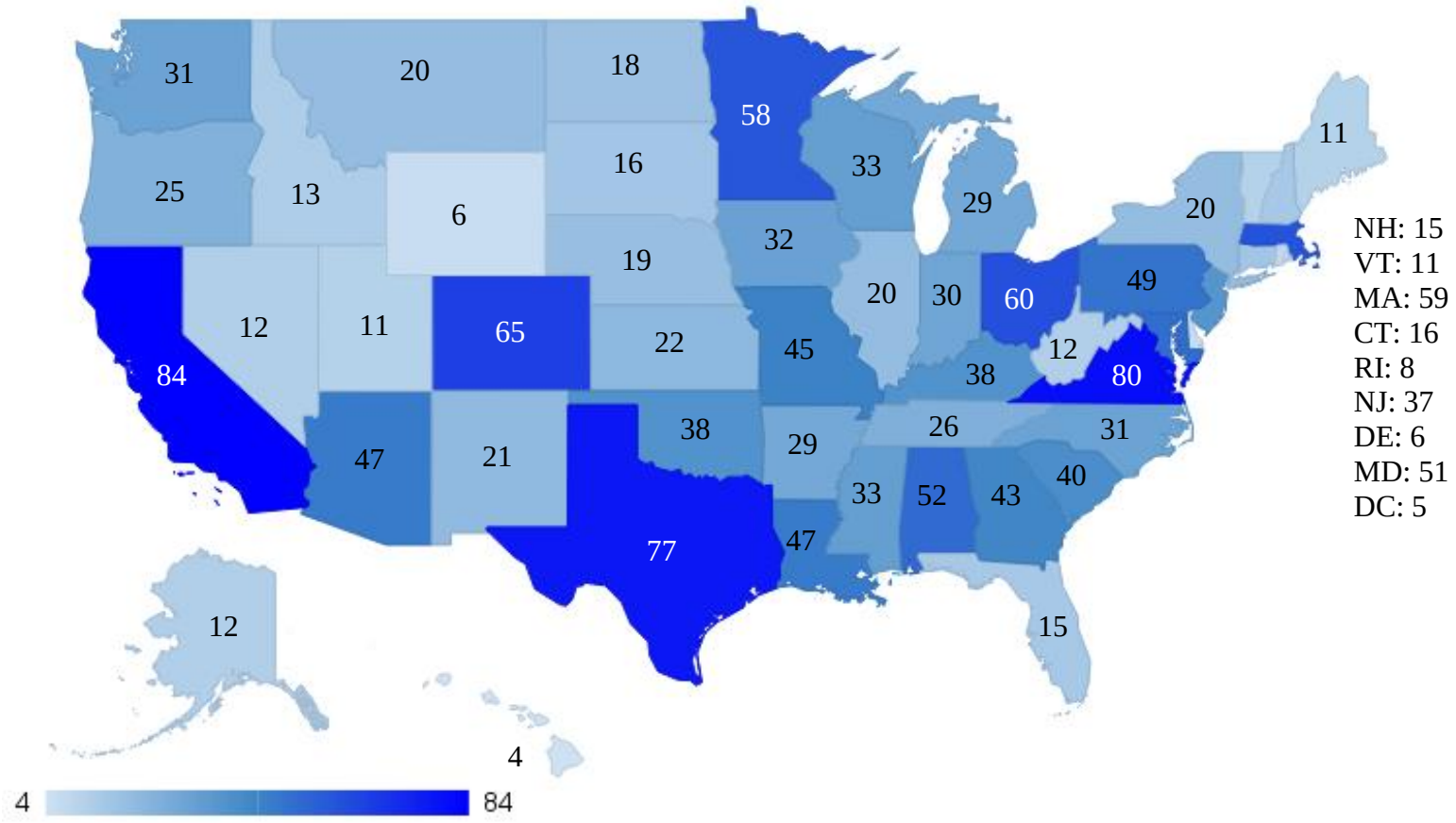

Figure 1. Geographic Distribution of Respondents

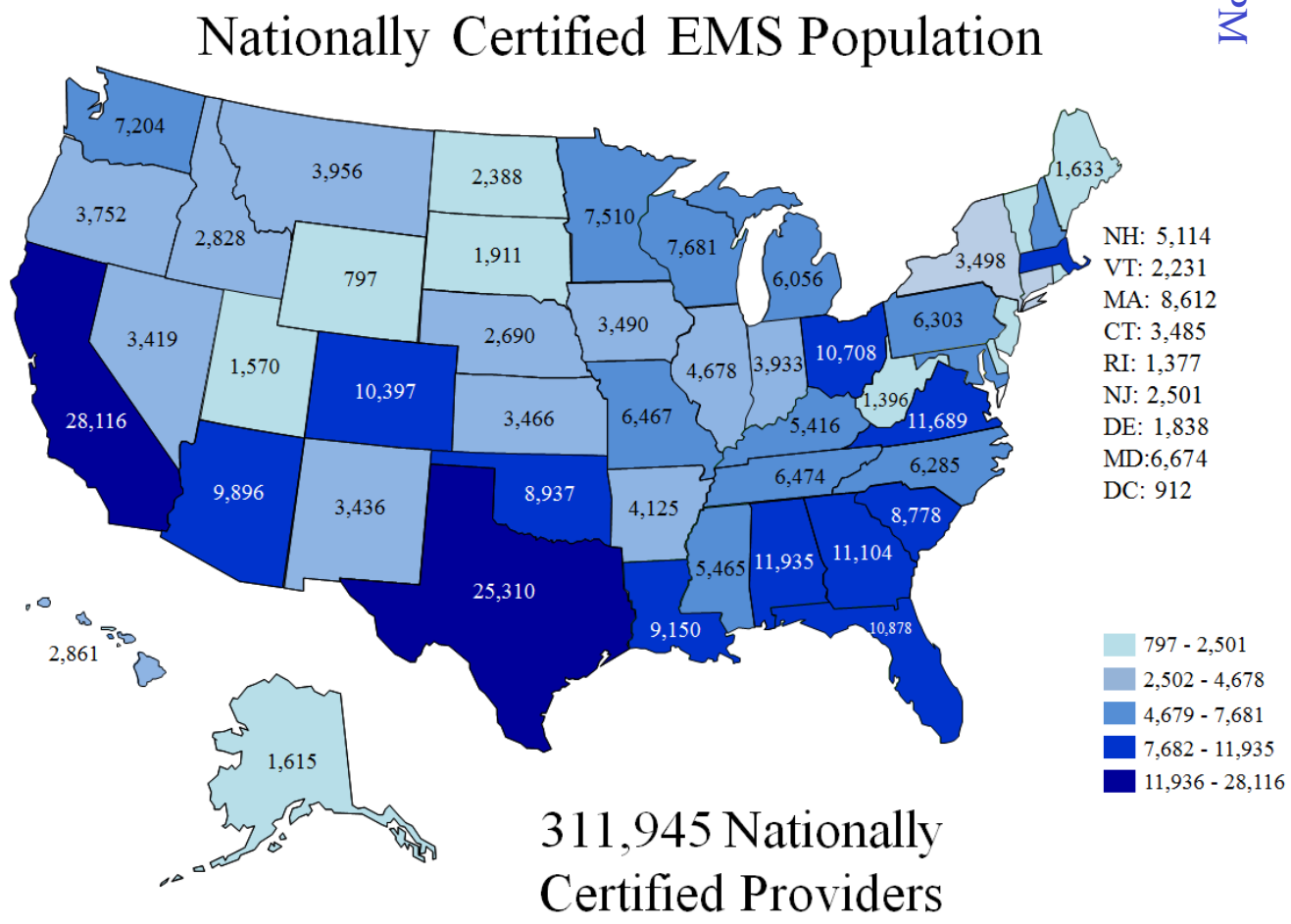

Figure 2. 2014 Nationally-Certified EMS Population Geographic Distribution[2]

Lee v. Dowagiac Volunteer Fire Dep't Ambulance Serv.

Court of Appeals of Michigan

June 10, 2010, Decided

No. 289605

Reporter

2010 Mich. App. LEXIS 1059; 2010 WL 2332391

EDDIE LEE, Plaintiff-Appellant, v DOWAGIAC VOLUNTEER FIRE DEPARTMENT AMBULANCE SERVICE, INC., and KATHY MCFADDEN, Defendants-Appellees.

Notice: THIS IS AN UNPUBLISHED OPINION. IN ACCORDANCE WITH MICHIGAN COURT OF APPEALS RULES, UNPUBLISHED OPINIONS ARE NOT PRECEDENTIALLY BINDING UNDER THE RULES OF STARE DECISIS.

Prior History: [*1] Cass Circuit Court. LC No. 08-000148-NO.

Core Terms

cot, gross negligence, patient, services, life support, summary disposition, transporting, provides

Judges: Before: OWENS, P.J., and O'CONNELL and TALBOT, JJ.

Opinion

PER CURIAM.

Plaintiff appeals as of right from the trial court's order, which granted defendants' motion for summary disposition pursuant to *MCR 2.116(C)(7)* and *(10)*. We affirm.

I. APPLICATION OF EMSA

Plaintiff first argues that the trial court's grant of summary disposition was improper, claiming that immunity under the emergency medical services act (EMSA), *MCL 333.20901 et seq.*, does not apply in this case, because defendants were merely transporting a patient, and not providing treatment for the patient at the time of injury. We review de novo a trial court's grant of summary disposition, *Amburgey v Sauder, 238 Mich App 228, 231; 605 NW2d 84 (1999)*, and also review de novo the proper interpretation and application of a statute. *Ford Motor Co v Woodhaven, 475 Mich 425, 438; 716 NW2d 247 (2006)*.

MCL 333.20965(1) provides in relevant part:

> Unless an act or omission is the result of gross negligence or willful misconduct, the acts or omissions of a medical first responder, emergency medical technician, emergency medical technician specialist, paramedic, medical director of a medical control authority [*2] or his or her designee, or, subject to subsection (5), an individual acting as a clinical preceptor of a department- approved education program sponsor while providing services to a patient outside a hospital, in a hospital before transferring patient care to hospital personnel, or in a clinical setting that are consistent with the individual's licensure or additional training required by the medical control authority including, but not limited to, services described in subsection (2), or consistent with an approved procedure for that particular education program do not impose liability in the treatment of a patient on those individuals or any of the following persons:
>
> ***
>
> (d) The life support agency [1] or an officer, member of the staff, or other employee of the life support agency.

Under MCL 333.20965(1), individuals are shielded from liability "in the treatment of a patient." The primary goal of statutory construction is to ascertain and give effect to the intent of the Legislature. Frankenmuth Mut Ins Co v Marlette Homes, Inc, 456 Mich 511, 515; 573 NW2d 611 (1998). The statute does not define the term [*3] "treatment"; thus, we look to the dictionary to discern the term's ordinary meaning. See Haynes v Neshewat, 477 Mich 29, 36; 729 NW2d 488 (2007). The relevant definition of "treatment" is "the application of medicines, surgery, therapy, etc., in treating a disease or disorder." *Random House Webster's College Dictionary* (1997). The trial court essentially concluded that transportation and transfer of a patient in need of emergency medical services, such as plaintiff in this case, "is part and parcel" of the "treatment" of that patient which is shielded from liability in the EMSA immunity provision. On this record, we agree that the incident falls within the treatment of the plaintiff, where the emergency providers were called to plaintiff's home, assessed his situation and administered medical treatment to him at his residence, decided he should go to the hospital, moved him to an ambulance and continued to provide care en route to the hospital. This is not a case of merely transporting a patient from one

[1] MCL 333.20906(1) defines "life support agency" in part as "an ambulance operation."

location to another; rather, the emergency responders transported plaintiff to the hospital because of a complained of medical condition. Notably, the record reflects that defendant [*4] Kathy McFadden was licensed to provide advanced life support as a paramedic, and that she provided such treatment for plaintiff at the scene and en route to the hospital in this emergency situation. Thus, the immunity provided for pursuant to MCL 333.20965 is applicable in the instant case, except upon a showing of gross negligence or willful misconduct, because defendants were engaged "in the treatment of a patient" where they were "providing services to a patient outside a hospital . . . that are consistent with [their] licensure or additional training required by the medical control authority." The EMSA provided immunity to defendants for ordinary negligence. Plaintiff therefore had to demonstrate the existence of a question of material fact related to gross negligence in order to prevail. See Costa v Community Medical Services, 263 Mich App 572, 580; 689 NW2d 712 (2004), aff'd in part and remanded 475 Mich 403 (2006).

II. GROSS NEGLIGENCE

Plaintiff next asserts that a question of fact exists in this case as to whether defendants' conduct amounted to gross negligence. Under EMSA, "emergency medical technicians and paramedics are not liable for services they provide absent gross negligence [*5] or willful misconduct." MCL 333.20965. There is no record support that defendants' conduct constituted willful misconduct, which required a showing of intentional harm. Jennings v Southwood, 446 Mich 125, 142; 521 NW2d 230 (1994), superseded in part on other grounds by MCL 333.20965(2). Thus, we must decide whether factual questions exist regarding gross negligence. For claims implicating gross negligence, "[s]ummary disposition is appropriate only where reasonable minds could not have reached different conclusions with regard to whether the defendant's conduct amounted to gross negligence." Haberl v Rose, 225 Mich App 254, 265; 570 NW2d 664 (1997). Generally, once a standard of conduct is established, the reasonableness of conduct under that standard is a question for the factfinder. Jackson v Saginaw Co, 458 Mich 141, 146; 580 NW2d 870 (1998) (quotation omitted). "However, if, on the basis of the evidence presented, reasonable minds could not differ, then the motion for summary disposition should be granted." *Id.* (quotation omitted).

The EMSA's "gross negligence" language requires evidence of "conduct so reckless as to demonstrate a substantial lack of concern for whether an injury [*6] results." Jennings, 446 Mich at 136-137. Thus,

"a plaintiff must adduce proof of conduct 'so reckless as to demonstrate a substantial lack of concern for whether an injury results.'" *Maiden v Rozwood, 461 Mich 109, 123; 597 NW2d 817 (1999)*. Significantly, "the content or substance of the evidence proffered must be admissible in evidence." *Id.* "[E]vidence of ordinary negligence does not create a material question of fact concerning gross negligence." *Id. at 122-123*.

The admissible evidence and testimony in this case demonstrated that McFadden and Emergency Medical Technician (EMT) Sandra McGuire [2] could not get the ambulance cot into plaintiff's residence, but left it on the front porch while they assessed plaintiff inside. Next, they placed plaintiff onto the cot on the porch, and secured three straps over plaintiff's chest, hips, and legs, and raised the side rails. The cot was "a little bit less than halfway" raised in terms of its height. McFadden provided a plausible explanation at her deposition as to why the cot was set in such position. Next, she proceeded down the single irregularly sized step to the driveway at the "foot end" of the cot. The wheels of the foot end of the cot [*7] were on the driveway as McGuire moved onto the step. At this point, the cot began to tip or shift towards the residence. McFadden told McGuire to "hold on," but they could not return the cot to an upright position with plaintiff on it.

It is unclear why the cot tipped. Nevertheless, the evidence indicated that the emergency responders did not drop plaintiff or let him fall; rather, they lowered the cot to the ground sideways and plaintiff was released from the straps. There is no indication that plaintiff's weight, 268 pounds at the time of the incident, was the cause of the tipping. Further, there is no indication that the cot could not be used to transport a patient in the position described by McFadden. According to the cot's manual, even in its highest position, the cot can be used for patient transfer or cot rolling.

This case is akin to *Costa, 263 Mich App at 580*, where plaintiff's allegations sounded only in ordinary negligence and did not allege the gross negligence needed to overcome EMSA immunity. Viewing the evidence in the light [*8] most favorable to plaintiff, we conclude that reasonable minds could not differ as to whether defendants engaged in conduct "so reckless as to demonstrate a substantial lack of concern for whether injury resulted." *Jennings, 446 Mich at 136-137*. Even if the emergency responders were negligent in conveying plaintiffs from the porch to the driveway, evidence of ordinary negligence does

[2] The EMSA provides that an EMT provides basic life support, while a paramedic provides advanced life support. MCL 333.20904(7); MCL 333.20908(5).

not create a question of fact regarding gross negligence. *Maiden, 461 Mich at 122*. The trial court properly granted summary disposition in favor of defendants.

Affirmed.

/s/ Donald S. Owens

/s/ Peter D. O'Connell

/s/ Michael J. Talbot

John H Castle v. Battle Creek Area Ambulance

Court of Appeals of Michigan

March 19, 2009, Decided

No. 277068

Reporter

2009 Mich. App. LEXIS 628; 2009 WL 725924

JOHN H CASTLE, Personal Representative of the Estate of ALVIN F PROVOT, THERESE PROVOT, HELYN CASTLE, JOHN H CASTLE, MARIE LIPPINCOTT, KEITH LIPPINCOTT, and LISA GWISDALLA, Plaintiffs-Appellants, v BATTLE CREEK AREA AMBULANCE, d/b/a LIFECARE AMBULANCE SERVICE, SHANDY M PARTEE, and KEVIN L BROCKWAY, Defendants-Appellees.

Notice: THIS IS AN UNPUBLISHED OPINION. IN ACCORDANCE WITH MICHIGAN COURT OF APPEALS RULES, UNPUBLISHED OPINIONS ARE NOT PRECEDENTIALLY BINDING UNDER THE RULES OF STARE DECISIS.

Prior History: [*1] Branch Circuit Court. LC No. 05-012800-NI.

Core Terms

ventilator, patient, gross negligence, transport, ambulance, paramedics, defendants', deposition, immunity, summary disposition, plaintiffs', emergency, chest, breathing, arrest, trial court, compressions, manually, staff, passenger compartment, emergency room, respiratory, mechanical, bystander, reckless, arrived, tube, bag, negligent infliction of emotional distress, wilful misconduct

Judges: Before: Murphy, P.J., and Bandstra and Beckering, JJ.

Opinion

PER CURIAM.

In this wrongful death action, plaintiffs appeal as of right the trial court order granting defendants' motion for summary disposition under *MCR 2.116(C)(7)* and *(10)*. We affirm.

I. Basic Facts and Procedural History

On July 18, 2004, 74-year old Alvin Provot was admitted to the Intensive Care Unit at Community Health Center of Branch County (CHC) for treatment of acute bilateral pneumonia with respiratory failure. Provot's other health complications included a history of nonHodgkin's lymphoma with treatment and subsequent recurrence, hypothyroidism, heart rhythm disorder, and anemia. Provot was intubated and placed on a mechanical ventilator. A lung biopsy revealed scar tissue and advanced lung disease. Provot remained ventilator dependant, and on July 26, 2004, he underwent a tracheostomy and received a feeding tube.

On July 27, 2004, Provot's physicians arranged to transfer him to Select Care in Battle Creek, Michigan, a facility that cares for chronic ventilator and critically ill patients. The goal of the rehabilitation was to wean Provot from the ventilator and eventually send [*2] him home. An "Authorization for Acute Hospital to Hospital Transfer" form for emergency transfers was signed by Provot's physician. It indicated Provot was stable enough such that, "within reasonable medical probability, no material deterioration of the patient's condition is likely to result from the transfer."

CHC hospital staff arranged for Provot to be transferred to Select Care by ambulance through defendant Battle Creek Area Ambulance (d/b/a "LifeCare"). CHC staff advised LifeCare to bring a ventilator, insulin drip, and cardiac monitor. LifeCare dispatched defendants Kevin L. Brockway and Shandy M. Partee, licensed paramedics, to transport Provot. Brockway and Partee inspected the ambulance's equipment, including the ventilator, and concluded that everything was operating properly.

Upon arriving at the hospital, Brockway and Partee discussed Provot's respiratory status with a CHC registered nurse. Brockway indicated that LifeCare could not complete the transport because Provot had spontaneous respirations, and LifeCare's ventilator could not accommodate a patient with spontaneous respirations. The registered nurse then left to contact the receiving physician to discuss their options. [*3] When she returned, she informed the paramedics that, by order of the receiving physician, to facilitate transport Provot would be sedated and paralyzed to temporarily discontinue his spontaneous respirations.

CHC staff prepared Provot for transport by administering a sedative and Pavulon, a medication designed to paralyze him. Provot was then removed from the hospital ventilator and connected to the LifeCare ventilator. Partee "hear[d] [the ventilator] cycling to know it was working there [and] [b]reath

sounds were taken and you could see the [patient's] chest rise." Brockway also indicated that Provot was evaluated before being taken to the ambulance. He testified:

> The ventilator settings were verified by either an RN or respiratory tech, I do not recall which one, with my partner to verify the vent settings. The patient was hooked up to an EKG monitor, pulse oximetry, lung sounds were auscultated, and we left for the ambulance . . . .
>
> The settings were dictated by the physician. There's three knobs on an Auto-Vent; one adult/pediatric setting, verify it was adult, verify the respiratory rate was appropriate, and verify that the title volume was set correctly.

The paramedics left CHC [*4] at approximately 3:20 p.m. They had a one-hour window from the time the Pavulon was administered until it would no longer be effective. Several members of Provot's family followed behind the ambulance in two vehicles. Brockway drove the ambulance while Partee attended to Provot in the passenger compartment.

Partee testified in his deposition that en route to Select Care, the ventilator was working properly because he assessed Provot's lung sounds and observed his chest rise and fall. However, at some point, Partee told Brockway to pull the ambulance over. Provot was without a pulse and unresponsive. [1] Brockway pulled the vehicle over to the side of the road at approximately 3:46 p.m. and turned on the emergency lights. He exited the ambulance and joined Partee in the passenger compartment. In the passenger compartment, Brockway observed Partee performing chest compressions on Provot. Partee told Brockway to look at the "Lifepak 12 monitor" while he ceased compressions, and Brockway observed that the patient had flat lined. Brockway gave the patient's "drug bag" to Partee because he believed that Provot might be in need of his cardiac medication. Brockway decided to divert his destination [*5] to Oaklawn Hospital, located nearby in Marshall, Michigan. The Oaklawn Hospital emergency room received notice that the paramedics were on their way at 3:51 p.m.

The Provot family-member vehicles had pulled over to the side of the road behind the ambulance. Provot's daughter, plaintiff Helyn Castle, approached Brockway as he left the passenger compartment and was returning to the driver's seat. Brockway told

[1] Dr. Ginger Williams, who treated Provot upon his arrival to Oaklawn Hospital, testified at her deposition that after reviewing the EKG reports, she learned that "[a]t [3:45 p.m.] [Provot] had a tremendously bradycardic rhythm and there was nothing that transpired that would have caused that other than the ineffective ventilation given the fact that effective ventilation reversed it." Dr. Williams noted, however, that Provot was probably properly ventilated when the transport began.

Castle that the patient had "coded" or "was in full arrest," and that they were now en route to Oaklawn Hospital. Castle told Brockway that she was a registered nurse and asked if she could get into the passenger compartment. Brockway testified at his deposition that he declined Castle's request and returned [*6] to the driver's seat, but Castle testified at her deposition that Brockway had consented. Brockway claims he did not realize Castle had entered the passenger compartment until after he turned off the exit ramp of Interstate 69. The other family members followed behind the ambulance en route to Oaklawn Hospital.

Castle testified that when she entered the passenger compartment of the ambulance and asked what happened, Partee informed her that Provot's "trach is dislodged, we can't ventilate him," which he surmised had occurred due to jarring from the ambulance. [2] He told her that he noticed Provot's heart rate going down, and that it flat lined after they pulled over. Castle never saw whether the trach was dislodged. Partee testified that he asked Castle about Provot's "do not resuscitate" ("DNR") status, and Castle equivocated. [3] She told Partee that she wanted her father to be treated if the paramedic could guarantee a good outcome; however, she changed her mind and stated that she "want[ed] everything done." Castle testified that she responded to the DNR inquiry by saying it "depends on what it is," but then she told him to do everything.

Partee contends that he started to perform CPR on Provot, but that Castle disrupted him and took over compressions, obstructing his access to the patient and instruments. Castle contends that Partee performed "two chest compressions" before reaching for medication, and then she started to perform compressions. She maintains that she was trying to assist Partee without interfering with his treatment. Castle also contends that at some point en route to the hospital she told Partee, "it doesn't do any good to do these compressions if he's not being ventilated." Partee testified that he does not recall this comment.

Brockway estimated that it took three to five minutes to reach Oaklawn Hospital, and they arrived at 3:55 p.m. Dr. Ginger Williams was the attending physician. At the emergency room, Partee provided a brief report to the emergency room staff. Dr. Williams testified that she recalls a paramedic telling her the tracheostomy tube must be dislodged because the transport ventilator was not [*8] ventilating Provot.

[2] The ventilator was connected to the tracheostomy [*7] tube.

[3] At her deposition, Castle testified that Provot "really didn't have a DNR order," but "he had a living will . . . if something were to happen so that we could have judgment in the thing."

Dr. Williams recalls that Provot had no pulse, no chest wall movement, and he was not breathing.

Oaklawn Hospital emergency room staff successfully resuscitated Provot by disconnecting the mechanical ventilator and manually ventilating him through the use of an ambu bag. At her deposition, Dr. Williams described her recollection of the incident:

> [Provot] arrived in [full] arrest [with no pulse and no respirations], and standard practice in an arrest is ABC [airway, breathing, circulation]. You assess the airway. He had a tracheostomy tube. You assess the breathing, he was hooked up to a transport ventilator which we disconnect and we hooked him to an ambu bag and he ventilated easily. And then we assessed the circulation, and he didn't have any, so we started chest compressions which would be standard.
>
> I **[*9]** remember that shortly after starting to ventilate him, he started to get a rhythm back. I would have to refer to the record to see exactly what it was. We gave him [Epinephrine], I don't remember if we gave him anything else without referring to the record, and he did get pulses back after we ventilated him, did the chest compressions, and gave him the [Epinephrine].

Brockway recalls Dr. Williams returning the LifeCare ventilator and telling him, "[t]his does not work." Dr. Williams admitted at her deposition, however, that she did not actually test the ventilator. Partee maintains that Provot was "ventilated the entire time with a functioning ventilator," and that "[t]here was chest wall movement while the patient was with me." Castle indicated that she did not see Provot's chest rise and fall, and she believes the ventilator was not working.

Dr. Williams concluded that Provot had suffered anoxic encephalopathy (brain damage due to lack of oxygen to the brain) before arriving at the emergency room. A CT scan performed on July 28, 2004, revealed the following:

> Large right posterior cerebral artery distribution infarct. Since this is not within a watershed distribution, it is not typical **[*10]** for a post cardiac arrest infarct. Consider possibility that the posterior cerebral artery stroke contributed to arrest rather than resulting from arrest.

A second CT scan performed on July 30, 2004 confirmed the above results.

At some point, Oaklawn Hospital staff discussed Provot's condition with his family, and "they opted for comfort measures." Provot was taken off of the ventilator and died on July 31, 2004. Dr. Alcides Gil-Acosta prepared the Oaklawn Hospital discharge summary and provided the following final diagnosis:

"severe posterior cerebral stroke, anoxic brain injury, acute respiratory distress syndrome, and status post cardiopulmonary arrest." The discharge summary further states:

> Mr. Provot was admitted under conditions dictated in the admission history and physical. As stated he had a cardiopulmonary arrest en route between Coldwater and Select Specialty Hospital in Battle Creek. The ambulance brought him to Oaklawn Hospital, which was the closest hospital. By the time they arrived, they had been able to resuscitate him with reinstitution of pulse and blood pressure and ventilation. He was admitted to the Intensive Care Unit. Throughout his hospital stay his mental status [*11] did not improve, in fact it was consistent with extreme neurological deficits. A head CT scan was done which surprisingly showed presence of a posterior cerebral stroke, which probably cannot be accounted for by simple anoxic brain injury. More than likely, the patient had suffered a stroke prior to transfer or during transfer, as the prime etiology was cardiopulmonary arrest.

On December 27, 2005, plaintiffs filed a seven-count complaint against defendants, alleging the following: negligence against all defendants; gross negligence against all defendants; negligence against LifeCare; and four individual claims of negligent infliction of emotional distress filed by several of Provot's family members who followed behind the ambulance at the time of the transport, including Castle.

Defendants moved for summary disposition pursuant to MCR 2.116(C)(7), (8), and (10). Defendants argued that they were entitled to immunity pursuant to MCL 333.20965(1) of the Emergency Medical Services Act ("EMSA"), and that plaintiffs had failed to establish proximate cause or that Provot had a greater than 50 percent opportunity to survive as required by MCL 600.2912a(2). Defendants also claimed that plaintiffs [*12] failed to demonstrate the elements of negligent infliction of emotional distress.

Plaintiffs responded that qualified immunity under MCL 333.20965(1) did not apply to the transportation of Provot. Further, even if the statute did apply, the paramedics' conduct rose to the level of gross negligence. Plaintiffs further asserted that they had established proximate cause and the elements of negligent infliction of emotional distress.

The trial court denied defendants' motion with respect to MCR 2.116(C)(8), but granted the motion pursuant to MCR 2.116(C)(7) and (10). The trial court ruled:

First, that brought under [*MCR 2.116*](C)(8), the court finds no merit in the suggestion that the plaintiffs have failed to state a claim upon which relief can be granted. Looking at the pleadings on their face and in the light most favorable to the plaintiffs, clearly the court would find that under [*MCR 2.116*](C)(8), that motion must fail.

Turning to the question of immunity as is heard under [MCR] 2.116(C)(7), as I suggested in trying to save [defendants' counsel] some breath, the fact is that the language within [*MCR 2.116*](C)(7) itself does not require simply governmental immunity as often as we might **[*13]** presume. But again the language of the court rule simply indicates it may be brought-or one of the grounds under [*MCR 2.116*](C)(7) is that it may be barred by immunity granted by law and I'm sure that's what we're referring to. Here the law in question is *MCL 333.20965(1)(d)*. The question is whether the circumstances of this case are such that immunity can apply. The assertion by the plaintiffs is that . . . if it applies at all, it only applies in emergency circumstances.

In this case, the fact is that while the representation had been made that this was, in essence, a transfer for rehabilitation, as I read the supporting documentation, this by no means was the sort of transportation intended for some sort of rehabilitation after knee surgery or the like. Indeed the transfer of Mr. Provot was in great part because the care he needed was not available here and he had to be transferred to a facility where such care could be provided. Whether we view it as emergency or urgent, clearly it was not a routine rehabilitation. And if that care were not of an emergency nature when he left the hospital here, it certainly became such when his circumstances changed dramatically during the transport **[*14]** and the court can find no case citations that suggest that such a designation is improper or impermissible when it may have been due to the alleged negligent acts of the defendants that may have caused the later emergency.

Therefore the court would determine that the standard that must be applied would be that of gross negligence. And the court would determine in looking at that standard and the allegations made by the plaintiffs that there was a failure to act and, in this case, that the court would determine was, in fact, a deviation of a standard of care and in all of the pertinent citations, the court has found that would rise at most to a

> standard of ordinary negligence, not gross negligence.
>
> The court would further parenthetically indicate that, as I reviewed the plaintiffs' expert deposition testimony, that it fails to establish a breach of the standard of care. There was some argument that perhaps there may have been an equipment failure. That would not rise to the level of gross negligence either. As a consequence, the court would determine that whether it be under [*MCR 2.116*](C)(7) or (C)(10), there is no genuine issue of material fact.
>
> As far as the claims of the bystanders, [***15**] the court would indicate inasmuch as they are derivative of the underlying claim, they would require a standard of gross negligence as well. If that were not the . . . standard, the court would determine that while each of them was a close family relative, only one of them immediately saw the deceased at the time of distress and the court would determine that even that relative did not establish, and could not before reasonable prior effect, the standard necessary to make a bystander claim.

The trial court affected its oral ruling in a subsequent written order, and this appeal followed.

II. Applicability of the EMSA Immunity Provision

This Court reviews de novo a trial court's grant of summary disposition. *Amburgey v Sauder, 238 Mich App 228, 231; 605 NW2d 84 (1999)*. "'*MCR 2.116(C)(7)* tests whether a claim is barred because of immunity granted by law, and requires consideration of all documentary evidence filed or submitted by the parties.'" *Grahovac v Munising Twp, 263 Mich App 589, 591; 689 NW2d 498 (2004)*, quoting *Wade v Dep't of Corrections, 439 Mich 158, 162; 483 NW2d 26 (1992)*. In ruling on a motion under *MCR 2.116(C)(7)*, this Court considers all well-pleaded allegations as true, [***16**] construing them in favor of the nonmoving party. *Id.* "If the facts are not in dispute and reasonable minds could not differ concerning the legal effect of those facts, whether a claim is barred by immunity is a question for the court to decide as a matter of law." *Poppen v Tovey, 256 Mich App 351, 354; 664 NW2d 269 (2003)*. This Court reviews de novo questions of statutory interpretation. *Ford Motor Co v Woodhaven, 475 Mich 425, 438; 716 NW2d 247 (2006)*.

We first address whether defendants are entitled to qualified immunity under *MCL 333.20965(1)*. *MCL 333.20965(1)* states in pertinent part:

> (1) Unless an act or omission is the result of gross negligence or willful misconduct, the acts or omissions of a medical first responder, emergency

> medical technician, emergency medical technician specialist, paramedic, medical director of a medical control authority or his or her designee, or, subject to subsection (5), an individual acting as a clinical preceptor of a department-approved education program sponsor while providing services to a patient outside a hospital, in a hospital before transferring patient care to hospital personnel, or in a clinical setting that are consistent with the individual's [*17] licensure or additional training required by the medical control authority including, but not limited to, services described in subsection (2), or consistent with an approved procedure for that particular education program do not impose liability in the treatment of a patient on those individuals or any of the following persons:
>
> * * *
>
> (d) The life support agency or an officer, member of the staff, or other employee of the life support agency.

"Life support agency" is defined as "an ambulance operation, nontransport prehospital life support operation, aircraft transport operation, or medical first response service." MCL 333.20906(1).

The parties do not dispute that MCL 333.20965(1) provides qualified immunity to ambulance companies and paramedics during emergency transport situations. While the parties contest whether the statute applies in non-emergency transport situations, our first task is to ascertain whether Provot's July 27, 2004 transfer was an emergency or a non-emergency situation.

MCL 333.20904(2) defines "[e]mergency" as, "a condition or situation in which an individual declares a need for immediate medical attention for any individual, or where that need is declared by emergency [*18] medical services personnel or a public safety official." MCL 333.20904(9) defines an "[e]mergency patient" as:

> (9) "Emergency patient" means an individual with a physical or mental condition that manifests itself by acute symptoms of sufficient severity, including, but not limited to, pain such that a prudent layperson, possessing average knowledge of health and medicine, could reasonably expect to result in 1 or all of the following:
>
> (a) Placing the health of the individual or, in the case of a pregnant woman, the health of the patient or the unborn child, or both, in serious jeopardy.
>
> (b) Serious impairment of bodily function.
>
> (c) Serious dysfunction of a body organ or part.

MCL 333.20908(1) defines a "[N]onemergency

patient" as:

> "Nonemergency patient" means an individual who is transported by stretcher, isolette, cot, or litter but whose physical or mental condition is such that the individual may reasonably be suspected of not being in imminent danger of loss of life or of significant health impairment.

In the instant case, we agree with the trial court that, in taking the facts in a light most favorable to the plaintiffs, reasonable minds could not dispute that Provot's transfer involved [*19] an emergency situation. At the time of his transfer Provot was stabilized, but he remained ventilator dependent in the Intensive Care Unit. His diagnosis included bilateral pneumonia, acute respiratory failure, lymphoma, hypothyroidism, heart rhythm disorder, and anemia. He had a tracheostomy tube in his throat, to which the ventilator was attached, and a feeding tube for nutritional sustenance. Prior to boarding the ambulance, CHC staff paralyzed Provot with Pavulon, which rendered him completely unable to breath on his own. The Pavulon was expected to last one hour, whereafter Provot might recommence occasional spontaneous respirations, a situation that was not compatible with the transport ventilator. As such, defendants were acting under a strict time deadline. Given Provot's own respiratory compromise, compounded by a medically induced total paralysis of his breathing capacity at the time of transfer, we find that he had a serious impairment of a bodily function under *MCL 333.20904(9)(b)*, and alternatively, a serious dysfunction of a body organ or part under *MCL 333.20904(9)(c)*. He was, therefore, an emergency patient as defined by the EMSA. Further, Provot was in need of immediate [*20] medical attention to ensure that he was receiving adequate ventilation at the time of transport from one hospital to the other. Under the particular circumstances of this case, Provot's transfer satisfied the EMSA's definition of an emergency under *MCL 333.20904(2)*.

As the trial court pointed out, "this by no means was the sort of transportation intended for some sort of rehabilitation after knee surgery or the like. Indeed the transfer of Mr. Provot was in great part because the care he needed was not available here and he had to be transferred to a facility where such care could be provided. Whether we view it as emergency or urgent, clearly it was not a routine rehabilitation." Because we find defendants were engaged in an emergency transport situation, we hold that *MCL 333.20965(1)* applies, entitling defendants to qualified immunity. Given our finding in this regard, we need not address whether *MCL 333.20965(1)* applies in non-emergency situations.

III. Gross Negligence

We next address plaintiffs' contention that the trial court improperly found that defendants' conduct did not constitute gross negligence. Under MCL 333.20965(1), defendants are immune from liability so long as their [*21] conduct did not amount to "gross negligence or willful misconduct." Plaintiffs admit that defendants did not engage in willful misconduct, but allege that they were grossly negligent. The trial court concluded that defendants' conduct "[rose] at most to a standard of ordinary negligence, not gross negligence," and granted summary disposition.

This Court reviews de novo a trial court's grant of summary disposition. Amburgey, supra at 231. Our Supreme Court provided the following standard for motions pursuant to MCR 2.116(C)(10):

> A motion under MCR 2.116(C)(10) tests the factual sufficiency of the complaint. In evaluating a motion for summary disposition brought under this subsection, a trial court considers affidavits, pleadings, depositions, admissions, and other evidence submitted by the parties, MCR 2.116(G)(5), in the light most favorable to the party opposing the motion. Where the proffered evidence fails to establish a genuine issue regarding any material fact, the moving party is entitled to judgment as a matter of law. MCR 2.116(C)(10), (G)(4). [Maiden v Rozwood, 461 Mich 109, 119-120; 597 NW2d 817 (1999).]

For claims implicating gross negligence, "[s]ummary disposition is appropriate [*22] only where reasonable minds could not have reached different conclusions with regard to whether the defendant's conduct amounted to gross negligence." Haberl v Rose, 225 Mich App 254, 265; 570 NW2d 664 (1997). Generally, once a standard of conduct is established, the reasonableness of conduct under that standard is a question for the factfinder. Jackson v Saginaw Co, 458 Mich 141, 146; 580 NW2d 870 (1998) (quotation omitted). "However, if, on the basis of the evidence presented, reasonable minds could not differ, then the motion for summary disposition should be granted." *Id.* (quotation marks and citation omitted).

In Jennings v Southwood, 446 Mich 125, 128; 521 NW2d 230 (1994), superseded in part on other grounds by MCL 333.20965(2), our Supreme Court addressed "whether the common-law definitions of gross negligence and willful and wanton misconduct remain viable against the backdrop of the [EMSA]." The Court concluded that the EMSA's "gross negligence" language required evidence of "conduct so reckless as to demonstrate a substantial lack of concern for whether an injury results." Id. at 136-137.

Essentially, our Supreme Court borrowed the gross negligence standard from the Government [*23] Tort Liability Act ("GTLA"), MCL 691.1401 et seq. In doing so, the Court recognized that "the GTLA and the EMSA share the common purpose of immunizing certain agents from ordinary negligence and permitting liability for gross negligence." Id. at 136. The Court concluded that "[b]ecause the provisions have a common purpose, the terms of the provisions should be read *in pari materia*." *Id.* (emphasis added). Additionally, "evidence of ordinary negligence does not create a material question of fact concerning gross negligence." Maiden, supra at 122. "[A] plaintiff must adduce proof of conduct 'so reckless as to demonstrate a substantial lack of concern for whether an injury results.'" *Id.* Significantly, "the content or substance of the evidence proffered must be admissible in evidence." Id. at 123.

In the instant case, plaintiffs allege that the paramedics' conduct constituted gross negligence, or at least a question of fact remains on the matter, based on defendants' "[a]ccepting the transfer from CHC to Battle Creek without being properly trained to transport a ventilator patient"; "[a]ccepting the transfer of Provot from CHC to Battle Creek without having the proper equipment in the LifeCare [*24] ambulance"; "[f]ailing to make any attempt to manually ventilate Provot after determining that he was not being properly ventilated by the portable ventilator located within the LifeCare ambulance"; and "[m]istakenly determining that the tracheotomy tube of Provot had become dislodged and could not be utilized for ventilation."

Plaintiffs seek to prove that defendants' conduct amounted to gross negligence based on the medical evidence, applicable protocols, and deposition testimony, including medical experts. Plaintiffs' expert witness Bruce Wheeler, a Michigan licensed emergency medical service provider, provided an affidavit purportedly stating the applicable standard of care for transferring a ventilator patient. Wheeler averred that defendants breached the applicable standard of care by failing to do the following:

> (a) Test and utilize an appropriate ventilator for the transfer from Coldwater to Battle Creek.
>
> (b) Recognize and appreciate the effect of lack of oxygen being experienced by Mr. Provot during the transfer and respond accordingly.
>
> (c) Proceed directly to the closest emergency care hospital upon an apparent malfunction of the ventilator.
>
> (d) Properly ventilate Mr. Provot manually [*25] with an ambu bag after determination that the ventilator had malfunctioned and Mr. Provot was not being ventilated mechanically.

(e) Properly administer CPR to Mr. Provot.

(f) Comply with Medical Control Authority protocol General Control Procedures # 1-Airway/Oxygenation, with respect to the transfer of Mr. Provot and managing his airway and ventilation during the transfer.

Wheeler further averred that "the failure of [defendants] to attempt any manual ventilation of Mr. Provot after determining that the ventilator had malfunctioned was so reckless as to demonstrate a substantial lack of concern for the care and well-being of Mr. Provot."

At his deposition, Wheeler testified regarding his qualification as an expert witness:

> My training . . . I know that critical care paramedic goes into . . . more in-depth patient care . . . I feel that there is a lot of basics to EMS . . . . There is not a lot of variation in the way you can treat someone that is . . . ventilation dependent.

With respect to defendants' alleged failure to use an appropriate ventilator, Wheeler indicated that he had no training in the use of ventilators, and he had never managed the transfer of a patient on a ventilator. [*26] He had no basic knowledge of how a ventilator works, the operation of a ventilator, how one turns it on, or how it is hooked up. Additionally, Wheeler admitted that he had no experience with paralytic medications. Wheeler also admitted that he did not know if the portable ventilator used in this case was tested, or if that ventilator was appropriate to transfer Provot. Further, he admitted that the CHC was responsible for selecting and verifying the ventilator settings, not the paramedics. He was also unfamiliar with the Auto Vent 3000.

With respect to Provot's oxygenation status, although Wheeler indicated that defendants should have recognized something was wrong with Provot based on his skin colorization, he acknowledged that there was no evidence indicating that defendants did not recognize and appreciate the effect of any lack of oxygen to the patient.

With respect to the need to proceed to the closest emergency care hospital upon the occurrence of an apparent ventilator malfunction, Wheeler admitted that it was appropriate to divert to the nearest emergency facility under the circumstances of this case, and defendants did so.

With respect to how to properly ventilate Provot, Wheeler [*27] acknowledged that conditions dictate whether a patient should be removed from a mechanical ventilator. He noted that it would be difficult to assess breath sounds in a moving

ambulance, and that under such circumstances, the only way to determine if the ventilator was working was if the patient's chest was rising. He indicated that if the ventilator is working, then there would be no need for manual ventilation.

Wheeler contended that "the ABC's of patient care were neglected" in that airway and breathing were neglected. He indicated that Partee breached the ABC protocol by failing to assess the patient's airway, which was evidenced by Partee's report that stated he was unable to assess the airway. He opined that Partee was "neglectful" because the patient developed problems en route, and that Partee was not breathing for the patient. Wheeler explained that a paramedic can "breath for a patient" by ventilating, intubating, or "crichingt" he patient.

In the instant case, Provot was attached to a ventilator, although we will accept as true plaintiffs' contention that it was not working. With respect to intubation, Wheeler stated that a patient with a tracheostomy would not have been intubated. **[*28]** Further, he admitted that a crichothyrotomy was an extraordinary procedure, and that he had not performed one in more than ten years as a paramedic.

Finally, Wheeler claimed that Provot should have been manually ventilated in the ambulance through the use of a hand-held ambu bag. This contention is corroborated by the fact that the emergency room staff at Oaklawn Hospital was able to successfully "bag" Provot without resistance and restore his vital signs. Without engaging in expert witness qualifications analyses, Dr. Williams and Castle also agree on this point, as does defendants' expert if indeed the mechanical ventilation was not working. Although such failure to attempt manual ventilation on Provot may have constituted medical negligence, neither Wheeler nor anyone else was able to point out any conduct by defendants that was so reckless as to demonstrate a substantial lack of concern for whether an injury results. The following colloquy ensued on this point during Wheeler's deposition:

> *Defendants' counsel*: Do you know of any reckless conduct on the part of the paramedics in this case? As opposed to neglectful conduct?
>
> *Wheeler*: I don't know that it would be--I don't know that it **[*29]** would be reckless versus neglectful.

The admissible medical evidence and testimony in this case demonstrates that the ventilator used on Provot was tested and operable when the transport commenced. Although the exact time is unclear, approximately twenty-five minutes into the transport Provot became bradycardic and then astystolic, and Partee asked Brockway to pull over. Apparently, this

was done to better assess the patient's situation, and thereafter the paramedics decided to divert to the nearest medical facility. Provot remained on a mechanical ventilator during transport, which may not have been working, and Castle took over chest compression from Partee. The ambulance arrived at the emergency room three to five minutes later. For purposes of this motion, we accept as true plaintiffs' contention that had Provot been manually ventilated, he would not have arrested. Although defendants may have been negligent in failing to detach Provot from the mechanical ventilator and to manually ventilate him with an ambu bag, plaintiffs' allegations essentially amount to second guessing defendants' judgment when deciding how to treat the complication that arose during transport. Viewing the [*30] evidence in a light most favorable to plaintiffs, we find that reasonable minds could not differ as to whether defendants engaged in conduct "so reckless as to demonstrate a substantial lack of concern for whether injury resulted." *Jennings, supra at 136-137*. Evidence of ordinary negligence does not create a question of fact regarding gross negligence. *Maiden, supra at 122*. Summary disposition was properly granted to defendants.

IV. Bystander Claims

The final issue we must address is whether plaintiffs' "bystander" claims survive despite dismissal of the wrongful death action. The trial court granted defendants' motion for summary disposition with respect to plaintiffs' bystander claims without expressly specifying the grounds:

> As far as the claims of the bystanders, the court would indicate inasmuch as they are derivative of the underlying claim, they would require a standard of gross negligence as well. If that were not the . . . standard, the court would determine that while each of them was a close family relative, only one of them immediately saw the deceased at the time of distress and the court would determine that even that relative did not establish, and could not before reasonable [*31] prior effect, the standard necessary to make a bystander claim.

This Court reviews de novo a trial court's grant of summary disposition. *Amburgey, supra at 231*. This Court also reviews de novo the proper interpretation and application of a statute. *Ford Motor Co, supra at 438*.

We hold that because defendants' conduct did not amount to gross negligence, they are immune from liability pursuant to *MCL 333.20965(1)* and entitled to summary disposition under *MCR 2.116(C)(7)*

with respect to plaintiffs' claims for negligent infliction of emotional distress. MCL 333.20965(1) provides that the acts or omissions of paramedics, while providing services consistent with their licensure to a patient outside a hospital, do not impose liability on those individuals in the treatment of the patient unless such acts or omissions are the result of gross negligence or willful misconduct. "Liability" means "the state or quality of being liable," and "liable" means "legally responsible." Bailey v Oakwood Hosp & Medical Ctr, 472 Mich 685, 696; 698 NW2d 374 (2005), quoting *Random House Webster's College Dictionary* (2001). The statute limits liability in this case for defendants' conduct absent the presence of [*32] gross negligence or willful misconduct.

Plaintiffs have not cited any authority to support their implicit argument that the EMSA immunity provision does not bar their claims of negligent infliction of emotional distress. Moreover, plaintiffs also fail to cite any authority to support their assertion that they "only need to prove 'simple negligence'" to support those claims. An appellant may not merely announce a position and leave it to this Court to discover and rationalize the basis for the claim; nor may an appellant give issues cursory treatment with little or no citation to supporting authority. Peterson Novelties, Inc v City of Berkley, 259 Mich App 1, 14; 672 NW2d 351 (2003).

Plaintiffs' unsupported assertion that they only need to prove "simple negligence" to sustain their claims arising out of the treatment of a patient by paramedics lacks merit. Given that plaintiffs are unable to demonstrate that defendants' conduct constituted gross negligence or willful misconduct, all of plaintiffs' claims are barred, including the claims for negligent infliction of emotional distress.

Affirmed.

/s/ William B. Murphy

/s/ Richard A. Bandstra

/s/ Jane M. Beckering

STATE OF MICHIGAN

COURT OF APPEALS

MICHAEL BAUER, personal representative of the estate of THAD BAUER, deceased,

Plaintiff-Appellant/ Cross-Appellee,

v

TERRY LEE LORENCZ, WILLIAMSTON COMMUNITY FIRE BOARD and INGHAM COUNTY SHERIFF,

Defendants,

and

PHIL JONES,

Defendant-Appellee/ Cross-Appellant.

UNPUBLISHED
October 13, 1995

No. 160778
LC No. 89064141 NI

Before: Sawyer, P.J., and Marilyn Kelly and R.C. Anderson,* JJ.

PER CURIAM.

Plaintiff appeals as of right from an order granting a directed verdict for defendant Jones in this action brought under the Emergency Medical Services Act (EMSA). MCL 333.20701 et seq.; MSA 14.15(20701) et seq.[1] Defendant Jones cross-appeals from an order denying his motion for summary disposition. We reverse the order granting the directed verdict and remand for further proceedings consistent with this opinion.

I

In the early morning hours of December 19, 1987, defendant Terry Lorencz was travelling by automobile on a highway near Williamston. His vehicle crossed the center line and collided with an automobile driven by Lisa Bauer, who was eight months pregnant. Defendant, Phil Jones, was a paramedic called to the scene. After being transported to the hospital, Lisa underwent caesarean section surgery. Her son, Thad, was born with significant neurological deficits, including blindness, and died at the age of 2 1/2 years. Plaintiff argued at trial that Jones' gross negligence at the scene of the accident contributed to Thad's brain damage and eventual death.

The trial judge directed a verdict for Jones, holding that plaintiff failed to demonstrate gross negligence as required by the EMSA. MCL 333.20965; MSA 14.15(20965). The jury returned a verdict of $150,000 against Lorencz.

On appeal, plaintiff argues that the trial court erred in applying the definition of gross negligence which requires precedent negligence by the plaintiff, found in Gibbard v Cursan, 225 Mich 311, 319;

*Circuit judge, sitting on the Court of Appeals by assignment.

196 NW 398 (1923). He asserts that the trial court erroneously directed a verdict for Jones. He alleges that it was error for the judge to permit defendant to testify about hearsay statements made by an unknown hospital worker. Jones cross-appealed, claiming the judge erred in denying his motion for summary disposition.

II

Plaintiff first argues that the trial judge improperly used the Gibbard definition of gross negligence in deciding Jones' directed verdict motion. A defendant is entitled to a directed verdict where a plaintiff has failed to establish a prima facie case. Morrow v Boldt, 203 Mich App 324, 327; 512 NW2d 83 (1994). This Court must review all the evidence in a light most favorable to the nonmoving party to determine whether there was sufficient evidence to create an issue for the jury. We will not disturb a trial judge's decision unless there was a clear abuse of discretion. Cleary v The Turning Point, 203 Mich App 208, 210-211; 512 NW2d 9 (1994).

In Jennings v Southwood,[2] the Michigan Supreme Court rejected application of the Gibbard definition of gross negligence as found in the EMSA. Gibbard said gross negligence occurs when a plaintiff, having negligently put himself in a position of danger, is injured by the defendant's subsequent negligence. Gibbard, pp 319-320. The definition was designed to avoid the harsh consequences that resulted from application of the doctrine of contributory negligence. Jennings, supra, p 130. Because of the advent of comparative negligence, there is no longer a need for the Gibbard definition of gross negligence. Jennings, p 130. In its place, the Jennings Court adopted the definition found at § 7 of the Government Tort Liability Act, which defines gross negligence as "conduct so reckless as to demonstrate a substantial lack of concern for whether an injury results." MCL 691.1407; MSA 3.996(107).

Although the instant action arose before Jennings, we feel that the Jennings definition should be given retroactive effect. Several cases decided before Jennings were harbingers of a change in the gross negligence definition applicable to the EMSA. Pavlov v Community Medical Services, Inc, 195 Mich App 711, 720; 491 NW2d 874 (1992); Malcolm v East Detroit, 437 Mich 132, 147; 468 NW2d 479 (1991). Not only was the Jennings decision anticipated, it is not one wherein the Court overruled clear and uncontradicted case law. Hyde v University of Michigan Board of Regents, 426 Mich 223, 240; 393 NW2d 847 (1986). Therefore, we apply Jennings retroactively and rule that the trial judge erred in directing a verdict based on the Gibbard definition of gross negligence.

III

Alternatively, the trial judge granted Jones' directed verdict motion based on his finding that the evidence did not raise factual issues with respect to gross negligence under the Jennings' definition. Plaintiff's expert testified that Jones breached the standard of care at the scene of the accident by failing (1) to place Lisa in a left lateral recumbent position, (2) to provide sufficient oxygen and IV fluids and (3) to transport her rapidly to the hospital.

Although Jones testified that he did perform each of those procedures, there was conflicting, credible evidence as to whether they were done. Where the evidence raises genuine issues on which reasonable minds could differ, a trial judge should deny a motion for a directed verdict. Holland v Liedel, 197 Mich App 60, 64; 494 NW2d 772 (1992). It was error to grant a directed verdict on the court's alternative theory.

IV

Plaintiff also argues that the trial judge erred in permitting Jones to testify about medical care instructions provided to him by an unknown hospital worker. This Court reviews trial court decisions on the admissibility of evidence for an abuse of discretion. Cleary, supra, p 210.

Defendant Jones did not testify with regard to statements made by a hospital staff person. Rather, he explained that he took certain actions in response to instructions from the hospital. His explanation did not constitute hearsay. MRE 801(c). Isagholian v Transamerica Ins Corp, 208 Mich App 9, 14; 527 NW2d 13 (1994).

V

In his cross-appeal, Jones asserts that the trial judge erred in denying his motion for summary disposition. A summary disposition is reviewed de novo. We review the record to determine whether the moving party was entitled to judgment as a matter of law. Stehlik v Johnson (On Rehearing), 206 Mich App 83, 85; 520 NW2d 633 (1994).

As discussed above, there were factual issues as to whether Jones' treatment of Lisa constituted gross negligence. Plaintiff's expert did not testify that Jones' actions or omissions caused Thad's injuries. However, the expert testimony did not foreclose the issue whether Jones' conduct contributed to or exacerbated Thad's injuries. Therefore, the trial judge did not err in denying Jones' summary disposition motion.

Reversed. We remand to the trial court for a new trial.

/s/ David H. Sawyer
/s/ Marilyn Kelly
/s/ Robert C. Anderson

[1] Applicable here is the former Emergency Medical Service Act which was repealed in 1990 and replaced with 1990 PA 179, codified at MCL 333.20901 through 20979; MSA 14.15(20901) through (20979).

[2] 446 Mich 125, 135; 521 NW2d 230 (1994).