



Prehospital Resuscitation Decisions in Cases of Traumatic Cardiopulmonary Arrest: Assessing the Risk of Legal Liability & the Impact of TOR Guidelines

Karen A. Jordan & Mary E. Fallat

To cite this article: Karen A. Jordan & Mary E. Fallat (2015) Prehospital Resuscitation Decisions in Cases of Traumatic Cardiopulmonary Arrest: Assessing the Risk of Legal Liability & the Impact of TOR Guidelines, Journal of Legal Medicine, 36:2, 159-213, DOI: [10.1080/01947648.2015.1121073](https://doi.org/10.1080/01947648.2015.1121073)

To link to this article: <http://dx.doi.org/10.1080/01947648.2015.1121073>



Published online: 29 Apr 2016.



Submit your article to this journal [↗](#)



Article views: 149



View related articles [↗](#)



View Crossmark data [↗](#)

PREHOSPITAL RESUSCITATION DECISIONS IN CASES OF TRAUMATIC CARDIOPULMONARY ARREST: ASSESSING THE RISK OF LEGAL LIABILITY & THE IMPACT OF TOR GUIDELINES

Karen A. Jordan and Mary E. Fallat*

INTRODUCTION

This article addresses the extent to which professional providers of emergency medical services (EMS providers) could be held liable for civil damages when, due to apparent futility, resuscitation efforts are withheld or terminated for a person suffering out-of-hospital traumatic cardiopulmonary arrest.¹ The question arises most immediately from concerns expressed by EMS providers questioned about pediatric death in the field. Many EMS providers report feeling compelled to initiate and/or continue resuscitation efforts for children for a variety of nonmedical reasons, including concern about legal liability, even though they believe that the efforts will provide no medical benefit.² The situation merits attention. Trauma is the leading cause of death for children,

*Karen A. Jordan, Professor of Law, University of Louisville School of Law (legal research, analysis, and writing); Mary E. Fallat, M.D., Division of Pediatric Surgery, Department of Surgery, University of Louisville School of Medicine (study conception, consultation, and critical review).

¹ The phrase EMS providers is here used to encompass any level of certification that allows the provider to assess a patient's condition and monitor vital signs at the site of the emergency and engage in prehospital cardiopulmonary resuscitation. The National Registry of Emergency Medical Technicians provides four different levels of EMS providers. The registry is accessible at www.nremt.org (last visited May 21, 2014). State statutes or regulations generally detail permissible services that can be provided at each level. *See, e.g.*, 210 ILL. COM. STAT. ANN. §3.10 (defining advanced life support services, intermediate life support services, basic life support services, and first responder services and defining prehospital care as those EMS rendered to emergency patients "precedent to and during transportation of such patients to hospitals).

² *See* Mary E. Fallat et al., *Withholding or Termination of Resuscitation in Pediatric Out-of-Hospital Traumatic Cardiopulmonary Arrest*, (2014) 4 ANN. EMERG. MED. 6 (Joint Position Statement of the American College of Surgeons, American College of Emergency Physicians, National Association of Physicians, American Academy of Pediatrics) (reasons include the presence of acutely grieving

and the medical outcome for pediatric traumatic out-of-hospital cardiac arrest is poor.³ In a recent rigorous study, researchers found an overall survival rate of only 5.4% for pediatric victims sustaining out-of-hospital traumatic cardiopulmonary arrest (TCPA) and, further, found that virtually all survivors requiring resuscitation for greater than 20 minutes were neurologically devastated.⁴ At the same time, significant costs—emotional and financial—are associated with continued resuscitation efforts during transport to a hospital for a person who is already dead or will inevitably die prior to arrival to the hospital.⁵ Researchers interested in optimal management of pediatric out-of-hospital TCPA thus formulated, and published in 2014, a set of recommendations directing EMS providers to consider withholding or terminating resuscitation for pediatric victims of TCPA in certain specific circumstances (the 2014 Pediatric TOR Guidelines).⁶ The Guidelines are very similar to guidelines published in 2003 addressing out-of-hospital resuscitation for adult victims of TCPA (the 2003 Adult TOR Guidelines).⁷ Both Guidelines are designed to help EMS providers achieve optimal outcomes for patients by identifying best practices based on the best available evidence and information.

Successful implementation of the 2014 Pediatric TOR Guidelines will depend in part on addressing nonmedical concerns of the EMS community relating to termination of resuscitation in the field. Researchers recognize the greater emotional toll associated with withholding or terminating resuscitation for a child, as opposed to an adult, and are advocating for education regarding how to communicate with and assist families and observers at the scene and for

caregivers who expect all measures to be taken to save the life of the child and thus the difficulty of communicating to them a decision to terminate resuscitation, a difficulty compounded due to misinformation about the likelihood of a good outcome from continued resuscitation; a belief that the family will be better able to cope with the loss in a hospital than in the out-of-hospital setting; a concern that child abuse might have caused trauma leading to the cardiopulmonary arrest and the belief that personnel at the hospital are better equipped to address the situation; and concerns regarding legal liability for a child's death that occurs in the field).

³ See *id.* at 5. Unintentional injury is the leading cause of death for persons ages 1–44. Information about leading causes of death and injury is accessible from the website of the Centers for Disease Control and Prevention. See <http://www.cdc.gov/injury/wisqars/leadingcauses.html> (2011 data) (last visited Jul. 31, 2014).

⁴ See *id.* at 7. These findings were based on a literature review of 27 studies and involving 1,114 patients suffering an out-of-hospital TCPA. Sixty of the 1,114 survived to hospital discharge (5.4%). Outcome data were available in 23 studies for 51 of the survivors. See *id.* at 3.

⁵ See *id.* at 6 (discussing effects such as, e.g., reducing emergency department resources available for persons more likely to benefit; the significant potential for injury to EMS personnel associated with a “lights and siren” run; the costs of medical supplies, including precious blood products; and the emotional toll on emergency department providers associated with being exposed to death).

⁶ See *id.* at 7. In developing the guidelines, researchers collaborated with and have the endorsement of the American College of Surgeons, the American College of Emergency Physicians, the National Association of EMS Physician, and the American Academy of Pediatrics. See *id.* at 8–9.

⁷ See Laura R. Hopson et al., *Guidelines for Withholding or Termination of Resuscitation in Prehospital Cardiac Arrest* (2003) 196 J. AM. COLL. SURG. 106-107 (Joint Position Statement of the National Association of EMS Physicians and the American College of Surgeons Committee on Trauma).

resources to help EMS providers personally deal with the emotional demands.⁸ The assessment of the risk of legal liability in this article is an important piece of the larger effort to address EMS provider concerns.

Notably, the relevant legal principles and application of those principles generally do not differ between adults and children. As such, although prompted by concerns expressed in the context of pediatric patients and the publication of the 2014 Pediatric TOR Guidelines, the analysis of legal issues in this article should be equally relevant to liability concerns arising from the termination or withholding of resuscitation for adult victims of TCPA.

EMS providers who believe that resuscitation efforts for a victim of TCPA will provide no medical benefit face a challenging situation. They have been called to the scene where a person has suffered a major traumatic injury, and the expectation of those relying on their services is that they will try to save the injured person's life. To the EMS provider, a decision to withhold or terminate resuscitation means that the person's life simply is not salvageable—due to the combination effect of the trauma and cardiopulmonary arrest. Yet a decision to withhold resuscitation, or to initiate and terminate resuscitation efforts, may strike observers as a failure to properly provide emergency medical services and may seem to be the cause of the person's death. For family members and observers, then, the situation likely prompts questions about malpractice and, although relatively rare, lawsuits have been filed as a result of decisions to terminate resuscitation.⁹ Concern about legal liability is thus understandable.

Analysis of relevant issues, however, should help temper that concern. Part I of the article explains various immunities existing at the state level that will insulate many EMS providers from liability for negligence. Admittedly, some EMS providers may remain vulnerable to negligence claims, and even those protected may face litigation expenses, but analysis of relevant negligence principles suggests that the risks are low. Part II of the article demonstrates that, in a medical malpractice action arising from the circumstances being explored in this article, certain factors very likely would work in favor of an EMS provider to help head off liability and minimize litigation expenses. Additionally, analysis of the 2003 and 2014 TOR Guidelines suggests that the existence of and compliance with carefully formulated state- or system-level resuscitation protocols based on the Guidelines should provide additional significant protection against tort liability for EMS providers and

⁸ See Fallat, *supra* note 2, at 8.

⁹ See, e.g., *Short v. Appalachian OH-9, Inc.*, 507 S.E.2d 124 (W. Va. 1998) (involving EMS providers); *Wicker v. City of Ord*, 447 N.W.2d 628 (Neb. 1989) (involving EMS providers). See also *Hall v. Anwar*, 774 So. 2d 41 (Fla. Dist. Ct. App. 2000) (involving in-hospital decision by physician); *Velez v. Bethune*, 466 S.E.2d 627 (Ga. Ct. App. 1995) (involving out-of-hospital decision by physician).

also serve as a significant deterrent to lawsuits.¹⁰ Part III presents important legislative considerations relevant to successful implementation of the TOR Guidelines.

I. LEGISLATIVE IMMUNITY PROVISIONS

Assessing the potential for liability stemming from prehospital resuscitation decisions involves study of a complex interplay between common law and statutory principles. Because the injury giving rise to potential liability is the death of a person, wrongful death statutes provide the basic cause of action.¹¹ Wrongful death statutes typically impose liability for deaths resulting from tortious acts or omissions and thus hinge on application of a state's common law of negligence.¹² Although many aspects of negligence law vary from state to state, medical negligence claims in every jurisdiction ordinarily will require proof that the defendant provider owed a duty of care to the injured person, that the defendant breached this duty, and that the breach was the proximate cause of injury and damages.¹³ In most states, however, statutory initiatives of two types impact use of negligence law to obtain remedies stemming from the provision of medical care, namely, tort reform initiatives¹⁴ and legislative provisions designed to encourage provision of emergency medical care by maintaining or creating various immunities.

¹⁰ In this article, the phrase "practice guideline" will be used to refer to systematically developed, evidence-based consensus statements designed to assist and influence treatment decisions of health care practitioners. See *infra* note 90 and accompanying text. The word "protocol" will be used to refer to implementation of practice guidelines in the form of a governing rule established at a state, regional, or local level by the appropriate authorities and designed to operate at the level of the actual provision of emergency medical services in the field.

¹¹ At common law, a tortfeasor was not liable to any dependents of an individual he tortuously killed because a cause of action for injuries died with the injured individual. The main purpose of early wrongful death statutes was to compensate the survivors for the lost economic benefits they would have received if the deceased was still alive. Nonetheless, wrongful death statutes tend to include compensation to a parent seeking recovery for the death of a child, often allowing recovery for loss of companionship or lost contribution to family life. Over time, states have expanded the types of injuries for which damages may be recouped. See W. PAGE KEETON ET AL., PROSSER AND KEETON ON TORTS (5th ed., St. Paul, Minn: West Pub. Co., 1984), §125A-127.

¹² *Id.*

¹³ See DAVID W. LOUISELL AND HAROLD WILLIAMS, MEDICAL MALPRACTICE (Matthew Bender, 2012), Vol. 1, ch. 8, §8.01(1).

¹⁴ Tort reform initiatives often are focused on limiting the type or amount of damages that can be recouped via medical malpractice actions or on channeling actions through a prior administrative process to weed out frivolous claims. See generally MICHELLE M. MELLO, MEDICAL MALPRACTICE: IMPACT OF THE CRISIS AND EFFECT OF STATE TORT REFORMS (a Robert Wood Johnson Foundation Research Synthesis Report, 2006), 7. Tort reform legislation may impact health care provided by EMS providers. See, e.g., *Short v. Appalachian OH-9, Inc.*, 507 S.E. 2d 124, 128-129 (W.Va. 1998) (holding that the medical professional liability act applied to an action brought against EMS providers arising out of alleged negligent termination of cardiopulmonary resuscitation).

The analysis in this article focuses primarily on the interplay between applicable common law negligence principles and relevant legislative immunity provisions.

The relevant immunity provisions tend to fall into three categories. The first category includes statutes specifying the availability and scope of governmental immunity. Governmental immunity may be triggered because emergency medical services often are provided through government entities—for example, cities or counties—and some EMS providers are employed by hospitals, which often are controlled by state or local governments. Many other EMS providers are employees of privately run ambulance services or emergency medical services entities.¹⁵ For these providers, protection from liability might be found in immunity laws broadly designed to encourage assistance with emergencies generally—for example, Good Samaritan laws—or through immunity laws more specifically tailored to provision of medical care by EMS providers.¹⁶ Although all states have laws of this type, great variability exists from state to state in terms of the scope and application of the laws. This part of the article aims only to provide a coherent snapshot of how the immunity laws may impact the potential for liability, in order to help EMS providers understand the role the laws play and empower them to assess the laws existing in their state. Existing immunity provisions will insulate many EMS providers from liability for negligence, but some EMS providers will remain vulnerable.

A. Governmental Immunity

Data suggest that over 30% of EMS providers are sponsored by, employed by, or have some association with public entities and thus could be protected by some form of governmental immunity.¹⁷ The extent to which governmental immunity will shield EMS providers from tort liability will vary from state to state. The immunity might consist of common law sovereign immunity (a doctrine barring suits against the government) or depend on an express legislative retention of governmental immunity.¹⁸ There has been a

¹⁵ See BUREAU OF LABOR STATISTICS, U.S. DEPT. OF LABOR, OCCUPATIONAL OUTLOOK HANDBOOK, EMERGENCY MEDICAL TECHNICIANS AND PARAMEDICS, available at <http://www.bls.gov/ooh/healthcare/emts-and-paramedics.htm#tab-3> (noting that approximately 48% of EMS providers are employees of private entities) (last visited May 13, 2014).

¹⁶ At times, how emergency services provisions interact with governmental immunity provisions raises complicated interpretive issues. See, e.g., *Omelenchuk v. City of Warren*, 647 N.W. 2d 493 (Mich. 2002) (reconciling application of Michigan's Governmental Tort Liability Act and its Emergency Medical Services Act).

¹⁷ See BUREAU OF LABOR STATISTICS, U.S. DEPARTMENT OF LABOR, *supra* note 14.

¹⁸ See, e.g., OKLA. STAT. ANN. tit. 51, § 152.1 (West 2008): "The [state] does hereby adopt the doctrine of sovereign immunity. The state, its political subdivisions, and all of their employees acting within the scope of their employment, whether performing governmental or proprietary functions, shall be immune from liability for torts." See also *Smyser v. City of Peoria*, 160 P.3d 1186 (Ariz. Ct. App.

trend away from use of governmental immunities but, when available, the immunity shields the government entity from liability (e.g., the city or county) and also often extends to employees sued in their official and individual capacities.¹⁹ Governmental immunity generally extends only to discretionary and nonproprietary action; that is, tasks taken for the public benefit.²⁰ Though most courts have held that publicly sponsored provision of emergency medical services satisfies these criteria,²¹ sometimes the protection may not be available. For example, in one case, public EMS providers lost the protection because they were deemed to be “health care practitioners” exempted from the immunity provision as to cases of medical malpractice.²²

When governmental immunity is available it is typically qualified; that is, it often extends only to acts or omissions constituting ordinary negligence (i.e., a failure to act reasonably) and not to gross negligence or intentional misconduct (i.e., conduct exhibiting a greater degree of fault).²³ But protection from ordinary negligence is significant. As explained in more depth *infra*, a

2007) (explaining the history in Arizona of judicial abolition of common law sovereign immunity and the subsequent legislative crafting of immunity statutes addressing when public entities and employees could be held liable and applying a statute conferring on cities and towns and their employees [and ambulance companies contracting with cities or towns or their employees] immunity against suits for damages arising from emergency medical aid provided by an emergency medical technician or paramedic, unless the person providing the aid was guilty of gross negligence or intentional misconduct).

¹⁹ See, e.g., *Polk County v. Ellington*, 702 S.E. 2d 17 (Ga. Ct. App. 2010) (upholding application of sovereign and official immunity to shield the county and county commissions, as well as the director of the county emergency medical services system and the particular EMS provider whose actions in rendering emergency services were alleged to be negligent). Though many states have adopted torts claims acts that waive sovereign immunity with certain exceptions, the doctrine of governmental immunity remains entrenched in some states. See JAMES W. SMITH, *HOSPITAL LIABILITY* (New York: Law Journal Press, 2013), §2.02(1) & 2.04(1)(a).

²⁰ See, e.g., *Smyser*, 160 P.3d at 1193. See also OHIO REV. CODE ANN. §2744.02(A)(1) & (B)(2) (West 2006 & Supp. 2013) (conferring immunity as to governmental and propriety functions, unless specifically withdrawn, and withdrawing immunity as to negligent performance of propriety functions).

²¹ See, e.g., *Polk County*, 702 S.E. 2d at 23–24 (finding the decisions involved in providing emergency services, including a decision that the protocol for cardiac arrest was not applicable, were discretionary); *Smyser*, 160 P.3d at 1193–1196 (finding the provision of emergency medical services to be an undertaking for the public benefit and thus not a proprietary function—even if the city charges a fee—because providing the services is a means to protect public safety and welfare, the city made the services available to everyone who calls for assistance, and the services were not a profit-making venture). See also *Richardson v. City of St. Louis*, 293 S.W. 3d 133 (Mo. Ct. App. 2009) (applying Mo. Ann. Stat. § 537.600 and finding a city-owned emergency medical service to be a governmental function); *Dimeo v. Rotterdam Emergency Medical Services, Inc.*, 974 N.Y.S.2d 178 (N.Y. App. Div. 2013) (holding that the emergency services were discretionary because the paramedic exercised his discretion in making a medical determination concerning the patient’s health).

²² See, e.g., *Mooney v. Sneed*, 30 S.W. 3d 304, 308 (Tenn. 2000) (holding that EMS providers are “health care practitioners” and thus ineligible for immunity provided by the state’s Governmental Tort Liability Act).

²³ See, e.g., *Polk County*, 702 S.E. 2d at 23 (explaining that official immunity does not extend to acts that are willful, wanton, or outside the scope of the official’s authority). See also *Smyser*, 160 P.3d 1186 (applying Ariz. Rev. Stat. § 9-500.02(A)). However, some states have retained immunity for intentional torts. See Smith, *supra* note 19, §2.04(1)(d).

decision to act in compliance with carefully formulated resuscitation protocols likely would provide a solid defense when a plaintiff's case must pass the higher evidentiary hurdle required to prove gross negligence.²⁴

In sum, the extent to which governmental immunity exists for EMS providers associated with public agencies will vary from state to state and, within a state, may vary depending on the particular arrangement for the provision of services.²⁵ But, it very often will be available and, if so, very likely will protect EMS providers from civil liability—at least as to ordinary negligence. Further, when it is not available, EMS providers may nonetheless be shielded to some extent by the immunity provisions next discussed: those designed to encourage assistance with emergencies.

B. Good Samaritan Laws

Most states have enacted Good Samaritan laws. These statutes typically provide partial immunity from liability to persons who are health care providers who voluntarily provide assistance with medical emergencies.²⁶ For example, a Kansas statute provides partial immunity to health care providers who in good faith render emergency care or assistance at the scene of an emergency or accident (including treatment of a minor without first obtaining the consent of the parent or guardian of the minor),²⁷ and a Kentucky statute provides partial immunity to licensed physicians and variety of other designated registered or certified health care providers for acts performed while administering emergency care or treatment at the scene of an emergency (outside hospitals or places having proper medical equipment but excluding house calls).²⁸

²⁴ See *infra* Part I(D) (notes 48 to 55 and accompanying text).

²⁵ See, e.g., *Regester v. Longwood Ambulance Co.*, 751 A.2d 694, 697 (Pa. Commw. Ct. 2000), *aff'd* 797 A.2d 898 (Pa. 2002) (holding that a volunteer rescue squad company using paramedics was immune as a local agency under the state tort claims act because the company was under contract with the township to provide protection).

²⁶ Many Good Samaritan Laws do not protect persons who are not health care providers. See, e.g., IND. CODE ANN. §§ 16-31-6-1 to 16-31-6-4 (LexisNexis 2011) (describing those protected as members of the medical profession); LA. REV. STAT. ANN. § 37:1731 (2007) (designating certain medical professionals as being protected); MO. ANN. STAT. § 537.037 (West 2008 & Supp. 2014) (describing training required to qualify for protection). *But see* OHIO REV. CODE ANN. § 2305.23 (West 2004) (specifying that “[n]o person shall be liable in civil damages for administering emergency care or treatment at the scene of an emergency outside of a hospital [or] doctor’s office . . . unless such acts constitute willful or wanton misconduct”).

²⁷ See, e.g., KAN. STAT. ANN. § 65-2891(a) (West 2008). A “health care provider” is defined to mean “any person licensed to practice any branch of the healing arts,” plus other designated licensed providers, including nurses, pharmacists, physical therapists, and athletic trainers, as well as persons certified by first aid courses approved by the American Red Cross or the American Heart Association. See *id.* § 65-2891(e).

²⁸ See KY. REV. STAT. ANN. § 411.148 (West 2006) (also protecting persons “certified by the American Heart Association or the American Red Cross to perform cardiopulmonary resuscitation”).

As with governmental immunity, the protection provided by Good Samaritan laws is only partial, shielding persons who provide emergency assistance from liability only for acts or omissions constituting ordinary negligence and typically expressly not extending the protection to damages occasioned by gross negligence or by willful or wanton acts or omissions in rendering emergency care.²⁹ Yet, as noted, shielding health care providers from liability for negligence is significant and thus for those protected the laws can be an incentive to provide emergency assistance.

However, many EMS providers should be hesitant to assume that they will be protected by Good Samaritan laws. As noted, the statutes often limit the protection to designated types of health care providers. Although most Good Samaritan laws likely would encompass most EMS providers, in some cases the protection may not extend to some particular providers. The laws also often limit immunity to emergency care provided at the scene of an accident.³⁰ Although most resuscitation efforts probably are provided “at the scene,” some may not be; for example, when the efforts are continued during transport.

Additionally, a more widespread and significant shortcoming exists. Many Good Samaritan laws would not protect EMS providers in the circumstances being explored in this article because the laws limit the protection to situations where the provider receives no remuneration.³¹ Alabama requires that the care be provided “gratuitously and in good faith.”³² Illinois requires that the care be provided “without fee or compensation.”³³ Kentucky provides that the immunity will not reach “care or treatment where the same is rendered for remuneration or with the expectation of remuneration.”³⁴ Some

²⁹ See, e.g., KAN. STAT. ANN. § 65-2891(a) (West 2008) (no immunity for damages caused by gross negligence or by willful or wanton acts or omissions); KY. REV. STAT. ANN. §411.148 (West 2006) (no immunity for damages for willful or wanton misconduct); OHIO REV. CODE ANN. §2305.23 (West 2004) (no immunity for damages for willful or wanton misconduct).

³⁰ See KAN. STAT. ANN. § 65-2891(a) (West 2008); KY. REV. STAT. ANN. §411.148 (West 2006); ALA. CODE § 6-5-332(a) (Lexis Nexis 2005 & Supp. 2013) (limiting protection to “emergency care at the scene of an accident” but not similarly limiting the immunity to care “at the scene” as to “emergency care or treatment to a person suffering or appearing to suffer from cardiac arrest”; see *id.* at § 6-5-332(e).

³¹ See, e.g., CAL. HEALTH AND SAFETY CODE §1799.102 (West 2007) (providing in part that “[n]o person who in good faith, and not for compensation, renders emergency care at the scene of an emergency shall be liable for any civil damages resulting from an act or omission”); OHIO REV. CODE ANN. §2305.23 (West 2004) (although also clarifying that law enforcement officers or firefighters who provide emergency care as part of their paid duties remain protected). But see Victoria Sutton, *Is There a Doctor (and a Lawyer) in the House? Why our Good Samaritans Laws Are Doing More Harm than Good for a National Public Health Security Strategy: A Fifty-State Survey* (2010) 4 J. HEALTH BIOMED. LAW 277-280 (identifying statutes that do not bar remuneration for the immunity protection).

³² See ALA. CODE §6-5-332(a) (LexisNexis 2005 & Supp. 2013). See also *id.* § 6-5-332(e) (requiring that the care to a person suffering cardiac arrest be “without compensation”).

³³ See 745 ILL. COMP. STAT. 49/70 (2010) (a Good Samaritan statute specifically reaching EMS providers and first responders).

³⁴ See KY. REV. STAT. ANN. § 411.148 (West 2006). See also *Cook v. Taylor*, 2008 WL 3896694 (Ky. Ct. App., 2008) (rejecting an attorney general opinion extending the immunity to salaried EMS providers), review denied, Aug. 9, 2009 (noting that opinion is not to be published).

jurisdictions may interpret the restriction narrowly; for example, precluding immunity only if the person aided is specifically charged for the provision of service.³⁵ But if not, the limitation to gratuitously provided care, which is fairly widespread, may preclude immunity for actions taken by professional, salaried EMS providers while on duty. For the type of situation being explored in this article, then, EMS providers may find more reliable protection in immunity provisions designed specifically for EMS providers. However, even these laws may leave some EMS providers with limited protection.

C. Immunity Crafted for EMS Providers

Many states have immunity shields designed with more particularity to insulate EMS providers from civil liability. Typically, more specific statutes will override general statutes that otherwise may seem to apply. Thus, if immunity provisions more particularly designed to protect EMS providers exist, they likely will govern rather than an otherwise applicable general Good Samaritan law.³⁶ Although these laws are designed with EMS providers in mind, a review of many such laws shows that variability exists from state to state, and significant limitations remain in some states, in terms of the reach and scope of immunity.

For example, some states have simply extended their Good Samaritan laws to EMS providers and thus restrictions as to remuneration for the provision of care may remain.³⁷ This may be true even if the statute specifically applies to ambulance or rescue squads and includes medical care provided in transit to a medical facility or through communications with personnel providing emergency assistance.³⁸ As noted, a law precluding remuneration may not provide immunity for actions taken by professional and salaried EMS providers while on duty.

Further, it is possible that, even if an immunity provision encompasses on-duty and salaried EMS providers, the particular language of the statute may render the immunity of little value. At least a few states provide immunity only if the acts are not negligent. For example, Indiana and Mississippi have laws specifically governing provision of emergency medical services that, in essence, impose or leave in place the ordinary negligence standard of care.

³⁵ See, e.g., *Thomas v. DeKalb Co.*, 489 S.E. 2d 58 (Ga. Ct. App. 1997) (although county charged fees to defray portion of costs of ambulance services provided, those fees did not constitute remuneration for purposes of statute providing immunity from civil liability on claims arising out of emergency care). *But see* *Martin v. Fulton-DeKalb Hosp. Auth.*, 551 S.E. 2d 415 (Ga. Ct. App. 2001) (disallowing immunity, holding that accepted Medicaid payment for services, although not providing full reimbursement, constituted remuneration).

³⁶ See, e.g., *James v. Rowe*, 674 F. Supp. 332 (D. Kan. 1987) (applying Kansas law).

³⁷ See, e.g., 745 ILL. COMP. STAT. 49/70 (2010) (a Good Samaritan statute specifically reaching EMS providers and first responders); KY. REV. STAT. ANN. § 411.148 (West 2006).

³⁸ See MD. CODE ANN., CTS. & JUD. PROC. §5-603(a)(2) (LexisNexis 2013) (specifying that the care must be provided without fee or other compensation).

Indiana’s statutory provisions direct that

[a] certified emergency medical technician . . . who provides emergency medical services to an emergency patient is not liable for an act or omission in providing those services unless the act or omission constitutes negligence or willful misconduct[; and]³⁹

[a]n act or omission of a paramedic or an emergency medical technician done or omitted in good faith while providing advanced life support to a patient or trauma victim does not impose liability upon the paramedic or emergency medical technician . . . if the advanced life support is provided: (1) in connection with an emergency; (2) in good faith; and (3) under the written or oral direction of a licensed physician; unless the act or omission was a result of negligence or willful misconduct.⁴⁰

In both provisions, the immunity expressly does not extend to acts found to be “negligence or willful misconduct”—meaning that ordinary negligence can be a basis for liability. A Mississippi statute provides that

[n]o duly licensed, practicing physician, . . . certified registered emergency medical technician, or any other person who, in good faith and in the exercise of reasonable care, renders emergency care to any injured person at the scene of an emergency, or in transporting the injured person to a point where medical assistance can be reasonably expected, shall be liable for any civil damages to the injured person as a result of any acts committed in good faith and in the exercise of reasonable care or omissions in good faith and in the exercise of reasonable care by such persons in rendering the emergency care to the injured person.⁴¹

Like the Indiana statute, this language significantly limits the scope of its protection: providers are not liable for damages only if their actions measure up to a standard of reasonable care—which means, in essence, that they are shielded only if their actions are *not* negligent.⁴² Provisions such as these have not modified tort law principles in any meaningful way.

However, many states do provide valuable immunity for EMS providers who provide emergency care or treatment as part of their job—protection that extends to negligent acts. For example, an Ohio statute provides as follows:

A first responder, emergency medical technician–basic, emergency medical technician–intermediate, or emergency medical technician–paramedic is not liable in damages in a civil action for injury, death, or loss to a person or property resulting from the individual’s administration of emergency medical services, unless the services are administered in a manner that constitutes willful or wanton misconduct.⁴³

³⁹ See IND. CODE ANN. § 16-31-6-1(a) (LexisNexis 2011).

⁴⁰ See IND. CODE ANN. § 16-31-6-3 (LexisNexis 2011).

⁴¹ See MISS. CODE ANN. § 73-25-37(1) (West 2010 & Supp. 2013).

⁴² See *infra* Part II(B) for a discussion of the standard of care in a medical malpractice lawsuit.

⁴³ See OHIO REV. CODE ANN. § 4765.49(A) (West 2013).

Similarly, a Nebraska statute provides:

No out-of-hospital emergency care provider . . . who provides public emergency care shall be liable in any civil action to respond in damages as a result of his or her acts of commission or omission arising out of and in the course of his or her rendering in good faith any such care. [Provided, however, that the immunity shall not] apply to any person causing damage or injury by his or her willful, wanton, or grossly negligent act of commission or omission.⁴⁴

If a governing statutory provision exists, using language comparable to these examples, professional and salaried EMS providers can feel confident that they are protected against civil tort liability for ordinary negligence that may occur while on duty. Further, a few states extend the protection to any good faith provision of emergency care—thereby insulating a provider from liability for even grossly negligent conduct, as long as the provider subjectively believes that the act or omission is appropriate.⁴⁵

D. Implications

Overall, a very important point is that whether and upon what circumstances an EMS provider is protected by immunities will vary considerably from state to state and, within a state, may depend on the public or private employment status of the provider. As a generality, however, it probably is fair to say that many EMS providers will qualify for some level of immunity from civil tort liability for injuries or death allegedly arising from their on-duty provision of emergency medical services.

Uncertainty about the level of immunity protection available likely is one factor fueling concern about legal liability within the EMS community. But that uncertainty can be tempered by study of particular governing laws.

⁴⁴ See NEB. REV. STAT. §38-1232(1) (2008). See also LA. REV. STAT. § 40:1233 (2008) (providing immunity to a licensed EMS provider who renders emergency care “while in the performance of his medical duties and following the instructions of a physician” but not extending to acts or omissions intentionally designed to harm or grossly negligent); WASH. REV. CODE ANN. § 18.71.210 (West 2009) (providing immunity to EMS providers for acts or omissions done or omitted in good faith “while rendering emergency medical service under the responsible supervision and control of a licensed physician or an approved medical program director or delegate” but not extending to gross negligence or willful or wanton misconduct).

⁴⁵ Good faith is the lowest, or easiest, standard of care to meet, because it turns primarily on a person’s subjective opinion as to the reasonableness of his or her actions. See Sutton, *supra* note 31, 282 (noting that nine states require only good faith action to avoid liability for injury arising from provision of emergency services). See, e.g., MASS. ANN. LAWS, ch. 111C, § 21 (LexisNexis 2013) (providing immunity to EMS providers who “in the performance of their duties and in good faith render emergency first aid, cardiopulmonary resuscitation, transportation, or other [emergency medical service]”); GA. CODE ANN. § 31-11-8(a) (West 2012) (providing that “[a]ny person, including agents and employees, who is licensed to furnish ambulance service and who in good faith renders emergency care to a person who is a victim of an accident or emergency shall not be liable for any civil damages to such victim as a result of any act or omission by such person in rendering such emergency care to such victim”).

Within a particular state, a fairly definitive answer about the availability and scope of immunity could be found. EMS providers should be knowledgeable about the specifics of the immunity laws existing in their state and governing their work and strive to understand how the laws apply to them given the context of their work. Key questions to ask are the following:

- Given my particular circumstances (public vs. private entity; volunteer vs. employee; level of training, or type of license or certification, etc.), are my actions in providing emergency medical services while on duty covered by a law limiting civil liability arising from those actions?
- If so, are there limitations, such as the services needing to be provided “on the scene” or provided gratuitously or without remuneration?
- How far does the protection extend: To reasonable acts or omissions? To acts or omissions falling below a standard of reasonable care? To any good faith provision of services (including, e.g., acts or omissions considered faultier than ordinary negligence)?

It would be very helpful if state associations representing EMS providers would secure accurate and detailed legal advice about governing immunity laws and disseminate the information to the EMS community.

EMS providers also should understand that even if immunity exists, it is not immunity from suit but only immunity from liability. This means that lawsuits can be filed and, if so, that providers will need to mount a defense. The immunity statutes typically are considered to provide an affirmative defense, which means that providers bear the burden of proving that the provisions protect them given the particular facts of the case.⁴⁶ Nonetheless, the litigation expenses for a defendant EMS provider facing a lawsuit arising from the circumstances explored in this article likely would be relatively modest. In most states, immunities will protect EMS providers unless the allegedly wrongful acts or omissions rise to a level beyond ordinary negligence (such as gross negligence) and, as noted, a decision to act in compliance with carefully formulated state or system-level resuscitation protocols very likely would provide a solid defense when a plaintiff’s case is judged by a gross or aggravated negligence standard.⁴⁷

⁴⁶ See Louisell & Williams, *supra* note 13, ch. 9, §9.06; see also Mia I. Frieder, *Can You Lift the Good Samaritan Shield?* (2010) 46 TRIAL 48.

⁴⁷ At the same time, it is possible that the limitation may preclude pretrial summary resolution of lawsuits by a judge; that is, the issue of whether the specific act or omission constitutes negligence versus gross negligence may be treated as a question for a jury. In a civil lawsuit, the presence of disputed questions of material fact preclude a grant of summary judgment. See FED. R. CIV. P. 56. The ability of a defendant to obtain summary judgment in a typical medical malpractice case on issues of negligence or causation is rare. See Louisell & Williams, *supra* note 13, ch. 12, § 12.06. Despite the applicability of an immunity provision, then, it is possible that EMS providers may find themselves incurring significant

A useful example is provided by *Wicker v. City of Ord*.⁴⁸ In *Wicker*, a man collapsed on a job site and fellow employees began cardiopulmonary resuscitation (CPR). First responders arrived approximately 20 minutes after being summoned, including voluntary emergency medical technicians (EMTs) with limited training. The EMTs had the employees stop resuscitation, checked the victim's vital signs, and determined that the man was dead. Resuscitation was not resumed. The volunteer EMTs acted improperly because, according to then-applicable standards promulgated by the American Heart Association (AHA) and the American Medical Association (AMA), efforts should have been resumed immediately after the responders had checked the vital signs and the victim should have been transported to a hospital, with resuscitation efforts continuing during transportation.⁴⁹ Nonetheless, the lawsuit was resolved without the need for a trial, in large part because of the applicability of an immunity provision.

The governing immunity law shielded EMS providers from liability for negligence, but the immunity would not extend "to any person causing damage or injury by his willful, wanton, or grossly negligent act of commission or omission."⁵⁰ In the particular jurisdiction, those terms were defined as follows: willful negligence involves an intentional act or omission or involves such reckless disregard as to imply bad faith; wanton negligence involves doing or failing to do an act with reckless indifference to the consequences and with consciousness that the act or omission would probably cause serious injury; gross negligence involves great and excessive negligence or absence of even slight care.⁵¹

The evidence showed that, when the EMTs arrived at the scene, they examined the victim in the manner in which they had been trained and determined that he had died. The EMTs thus intentionally did not resume resuscitation. But evidence also showed that they did not remember that applicable guidelines required resumption of resuscitation efforts. It thus could not reasonably be said that their conduct implied bad faith.⁵² The court also noted that, even if the EMTs did remember the guidelines, the danger to be avoided was the possibility that the victim would lose his chance of survival. Because the EMTs were convinced that the victim was dead, it could not reasonably be said that they had knowledge that the resuscitation decision could result in the loss of the victim's chance of survival. Because the attendants were not aware of that danger, they did not have the requisite actual knowledge required by

litigation-related expenses when poor outcomes result in a lawsuit against them. However, the analysis of negligence principles in this article suggests that the risk is low.

⁴⁸ 447 N.W. 2d 628 (Neb. 1989).

⁴⁹ See *id.* at 631.

⁵⁰ See *id.* at 630–631 (quoting Neb. Rev. Stat. § 71-5111 & § 71-5102(2)).

⁵¹ See *id.* at 633–634 (citing cases).

⁵² See *id.* at 634.

law.⁵³ As to gross negligence, the court concluded that, though the EMTs may have been negligent in failing to remember recognized protocol or in failing to follow the proper procedure if they did remember it, no reasonable person could conclude that the volunteer EMTs acted without slight care.⁵⁴ The court thus held that the evidence clearly did not show the type of aggravated negligence required to impose liability under the immunity law and the suit was dismissed without a trial.⁵⁵

Wicker thus confirms that, in a case where a resuscitation decision is consistent with TOR guidelines, EMS providers will be protected. First, remembering and following carefully formulated TOR protocols is reasonable care. Second, careful assessment of the victim's symptoms and conditions and a finding by the provider that the circumstances dictate withholding or terminating resuscitation would preclude a finding of willful or wanton conduct or gross negligence. As is discussed in greater depth *infra*, the 2003 and 2014 TOR Guidelines represent an evidence-based consensus that continued resuscitation would not prevent a grave and dismal outcome (i.e., even with continued resuscitation survival is rare, and survivors incur significant neurological disability). A provider using and following protocols based on the Guidelines will be aware of that consensus and agree with it as applied to the particular case. Thus, if the circumstances point to withholding or terminating resuscitation, the actual (subjective) knowledge of the EMS provider is that resuscitation would not prevent a harm likely to occur (death or a devastating neurological condition). A plaintiff therefore would have great difficulty proving reckless disregard or excessive negligence.

Tort law varies from state to state, meaning that some variability will exist as to standards used for deciding whether acts or omissions constitute willful or wanton conduct, gross negligence, reckless disregard, etc. Nonetheless, it is reasonable to conclude that, generally, EMS providers subject only to aggravated standards of negligence will be protected from tort liability if they make a good faith attempt to follow existing and applicable protocols regarding use of resuscitation efforts. Furthermore, if a lawsuit is filed, a defendant EMS provider very likely could obtain a summary judgment; that is, resolution without trial. The likelihood of resolution without trial means that legal expenses stemming from a lawsuit would be minimized and also very likely means that a trial attorney would be deterred from taking a case and filing a lawsuit. Indeed, it is fair to say that this is the most significant benefit of an immunity provision for EMS providers. The provisions are not a license to act negligently. Rather, they represent a recognition that emergency medical services are provided in very challenging settings and very often

⁵³ *See id.*

⁵⁴ *See id.* at 634–635.

⁵⁵ *See id.* at 635.

patients or their family members may believe that better services could have been provided and may be tempted to sue. Immunity provisions raise the bar in terms of proof justifying an award of damages and thereby serve as a deterrent to lawsuits.

Thus, EMS providers shielded against liability for negligent acts should not allow concern about liability prevent appropriate reliance on carefully formulated TOR guidelines. In addition, the following discussion of negligence principles clarifies that even EMS providers not insulated from claims of ordinary negligence should feel comfortable adhering to TOR guidelines because, at least in a case of a malpractice action arising from the circumstances being explored in this article, certain factors likely would work in favor of the EMS provider to head off liability. The difficulty a plaintiff would face means that summary resolution of a lawsuit would be possible in a negligence-based case as well, which similarly would tend to discourage the initiation of lawsuits—albeit to a lesser degree than in a case with an applicable immunity provision.

II. BASIC NEGLIGENCE PRINCIPLES

Because immunity provisions may not be available and, even if available, because laws in at least a few states do not in reality modify applicable tort principles, it is understandable that concerns remain in the EMS community about the possibility that a plaintiff could succeed in a lawsuit alleging negligent resuscitation efforts.⁵⁶ However, analysis of negligence principles shows that plaintiffs likely would face significant difficulties proving a claim of negligence in a case arising from the withholding or termination of resuscitation consistent with carefully formulated protocols.

At the outset, it may be helpful to note that existing case law supports this conclusion in at least two ways. First, few published judicial decisions exist involving claims against EMS providers arising from withholding or termination of resuscitation.⁵⁷ This is not a definitive benchmark about the risk of being sued because most lawsuits filed in state courts settle, and most that do not settle are not likely to generate a published judicial opinion. But it remains a useful indicator. Second, existing judicial decisions show that EMS

⁵⁶ Lawsuits have been filed as a result of decisions to terminate resuscitation. *See, e.g.*, *Short v. Appalachian OH-9, Inc.*, 507 S.E. 2d 124 (W. Va. 1998) (involving EMS providers); *Wicker v. City of Ord*, 447 N.W. 2d 628 (Neb. 1989) (involving EMS providers); *see also* *Hall v. Anwar*, 774 So. 2d 41 (Fla. Dist. Ct. App. 2000) (involving in-hospital decision by physician); *Velez v. Bethune*, 466 S.E.2d 627 (Ga. Ct. App. 1995) (involving out-of-hospital decision by physician).

⁵⁷ *See, e.g.*, *Short v. Appalachian OH-9, Inc.*, 507 S.E. 2d 124 (W. Va. 1998) (involving EMS providers); *Wicker v. City of Ord*, 447 N.W. 2d 628 (Neb. 1989) (involving EMS providers); *see also* *Hall v. Anwar*, 774 So. 2d 41 (Fla. Dist. Ct. App. 2000) (involving in-hospital decision by physician); *Velez v. Bethune*, 466 S.E. 2d 627 (Ga. Ct. App. 1995) (involving out-of-hospital decision by physician).

providers have successfully defended the cases.⁵⁸ This also is useful to know. What is more useful, however, is a fuller explanation of why concern about legal liability should not undermine use of carefully formulated resuscitation protocols based on the 2003 and 2014 TOR Guidelines. It is the fuller explanation that more clearly drives home the point that the existence of carefully formulated resuscitation protocols likely serves as a significant deterrent to lawsuits.

As noted, medical negligence claims require the plaintiff to prove four key elements: (1) that the defendant provider owed a duty of care to the person injured, (2) that the defendant breached this duty, (3) that the breach was the proximate cause of the injuries, and (4) that the plaintiff actually incurred damages as a result of the provider's conduct.⁵⁹ In a case arising as a result of a resuscitation decision by a professional, salaried, and on-duty EMS provider, it is reasonable to assume the existence of two of these elements: a child's death will support damages in a successful lawsuit brought by a parent or guardian, as will an adult victim's death in a lawsuit brought by spouses or dependents,⁶⁰ and on-duty EMS providers who respond to a request for emergency assistance as part of their job will be found to owe a duty of care.⁶¹

In contrast, however, the other two required elements likely would present challenges for a plaintiff in a case targeting a treatment decision about resuscitation, especially if the decision by the EMS provider was consistent with carefully developed and formulated TOR protocols. This part of the article analyzes the challenges a plaintiff faces in proving (1) that a decision to withhold or terminate resuscitation was a proximate cause of the death of a TCPA victim and (2) that the decision fell below the required standard of care, which involves an analysis of whether and why existing TOR guidelines and protocols would be considered weighty evidence of the standard of care—meaning that evidence of compliance with the protocols would substantially weaken a plaintiff's case.

⁵⁸ The defendant EMS providers were successful in the following cases: *Short v. Appalachian OH-9, Inc.*, 507 S.E. 2d 124 (W. Va. 1998) (summary judgment in favor of EMS providers); *Wicker v. City of Ord*, 447 N.W. 2d 628 (Neb. 1989) (summary judgment in favor of EMS providers). The defendant physician also was successful in *Hall v. Anwar*, 774 So. 2d 41 (Fla. Dist. Ct. App. 2000) (jury verdict for the defendant in a case involving an in-hospital decision by physician). The defendant physician was not successful in *Velez v. Bethune*, 466 S.E. 2d 627 (Ga. Ct. App. 1995) (summary judgment precluded in case involving out-of-hospital decision by physician).

⁵⁹ See *Louisell & Williams*, *supra* note 13, ch. 8, § 8.01(1) and §8.04(1)(a).

⁶⁰ See *Keeton et al.*, *supra* note 11, § 127 (discussing damages under wrongful death statutes).

⁶¹ Duty is triggered if the defendant is under any obligation for the benefit of the particular plaintiff. See *id.* § 53 (discussing duty). In a case against a professional on-duty EMS provider, an obligation would exist to render services to the TCPA victim for whom the EMS provider has been summoned to help. Cf. KENTUCKY BOARD OF EMERGENCY SERVICES, ADVISORY OPINION 2013-001 (July 15, 2013) (explaining that all ambulance providers must answer any emergency call within their service area if a unit is available—even as to indigent patients when there is no guarantee of payment), available at http://kbems.kctcs.edu/en/legal/kbems_advisory_opinions.aspx (last accessed June 25, 2014).

A. Proving Causation in a Case of Traumatic Cardiopulmonary Arrest

The element of causation in a negligence claim is typically referred to as proximate cause.⁶² Proximate cause encompasses two concepts: causation in fact and legal causation.⁶³ In a case arising from a decision to withhold or terminate resuscitation for a TCPA victim, the requirement of causation in fact may provide a way to effectively defend against the claim.⁶⁴ As typically applied, causation in fact requires a plaintiff to show that the defendant health care provider's allegedly negligent act or omission was a "substantial factor" in producing the plaintiff's injuries.⁶⁵ Stated differently, the plaintiff must show that the act or omission "in all probability" caused the injury, using the term "probability" to mean more likely than not.⁶⁶

In a case involving the death of a victim of out-of-hospital TCPA, it may be difficult to prove that the cause of the death was the resuscitation decision—as opposed to the preexisting traumatic injury and lack of cardiac function. That is, in a case of TCPA where continued resuscitation appears futile, the defendant provider likely will be able to produce evidence that the death likely would have occurred regardless of the EMS provider's allegedly negligent act or omission. For example, the research supporting the 2104 Pediatric TOR Guidelines provides strong evidence that the likelihood for a successful or good outcome for pediatric traumatic out-of-hospital cardiopulmonary arrests is poor.⁶⁷ The review of the literature included 27 studies involving 1,114 pediatric patients who suffered an out-of-hospital TCPA. Of the 1,114 patients, only 60 survived to hospital discharge (5.4%).⁶⁸ The researchers concluded that "virtually all survivors who require resuscitation for >20 minutes are neurologically devastated," meaning that the survivor was either severely disabled or in a vegetative state.⁶⁹ The research supporting the 2003 Adult TOR Guidelines similarly provides strong evidence that the death

⁶² See Louisell & Williams, *supra* note 13, ch. 8, § 8.04(1)(a) & § 8.07(5).

⁶³ See *id.* §8.07(2) (discussing causation in fact) & §8.07(3) (discussing legal causation).

⁶⁴ The idea of legal causation allows the judiciary to help ensure that tort liability serves public policy and is appropriately limited to situations where the harm incurred was reasonably foreseeable. See *id.* § 8.07(3). The basic idea is similar to the concern prompting legislative provisions that shield EMS providers from liability for ordinary negligence: in some situations, shielding an actor from liability is appropriate as a matter of policy. Given that legislatures have enacted immunity laws for the specific context of the provision of emergency medical services, a court is not likely, through the concept of legal causation, to provide a shield for EMS providers where the legislature has not.

⁶⁵ See *id.* § 8.07(2) (citing cases, e.g., *Kunz v. Little Co. of Mary Hosp. & Health Care Ctrs.*, 869 N.E. 2d 328 (Ill. App. Ct. 2007)).

⁶⁶ See *id.* § 8.07(2) (citing cases, e.g., *Samaan v. St. Joseph Hosp.*, 670 F.3d 21 (1st Cir. 2012) (by showing a better than even chance of avoiding harm in the absence of medical negligence, a plaintiff proves that the negligence played a substantial part in causing the harm). See also *Smith, supra* note 19, § 4.02(1) (citing *Hollywood Medical Center v. Alfred*, 82 So. 3d 122 (Fla. Ct. App. 2012)).

⁶⁷ See *Fallat, supra* note 2, at 7.

⁶⁸ See *id.* at 3, 7.

⁶⁹ See *id.* at 3, 7.

of an adult victim of TCPA likely would have occurred regardless of the EMS provider's act or omission. That research found survival rates ranging from zero to less than 4%⁷⁰; the researchers also concluded that, collectively, the data "suggest that a patient with TCPA and more than a 15-minute transport time while in arrest will not survive, regardless of the aggressiveness of the care delivered."⁷¹

Confronted with evidence of this nature, courts in some jurisdictions likely would find that a plaintiff simply could not make the requisite showing. For example, an appellate court in Texas explained it this way:

[W]here pre-existing illnesses or injuries have made a patient's chance of avoiding the ultimate harm improbable even before the allegedly negligent conduct occurs—i.e., the patient would die or suffer impairment anyway—the application of traditional causation principles will totally bar recovery, even if such negligence has deprived the patient of a *chance* of avoiding the harm.⁷²

Under this approach, given the very low probability of survival for a victim of TCPA, a court may even be willing to resolve a case involving termination of futile resuscitation as a matter of summary adjudication⁷³ and, if not, a jury properly instructed likely would find for the defendant.⁷⁴

However, some jurisdictions have substantially relaxed the plaintiff's burden of proof on the issue of causation in situations where the plaintiff can argue that the defendant's acts or omissions at least resulted in a "loss of a chance of survival."⁷⁵ This theory changes the manner of proof in the following way. When traditional causation principles apply, a plaintiff must show that the defendant's negligence was, more probably than not, the cause of death, meaning that the plaintiff with a preexisting illness or injury would need to show that his or her chance for survival—absent the defendant's act or

⁷⁰ See Hopson, *supra* note 7, at 107 (a 4% survival rate was reported in one study for a subgroup of victims with an arrest due to penetrating trauma; the survival rate for the subgroup of victims with blunt trauma was 2.3%). See also *id.* at 111 ("Survival after TCPA is rare, even with maximal resuscitative efforts.")

⁷¹ See *id.* at 108.

⁷² See *Arredondo v. Rodriguez*, 198 S.W. 3d 236 (Tex. App. 2006) (citation omitted) (emphasis in original).

⁷³ See, e.g., *Short v. Appalachian OH-9, Inc.*, 507 S.E. 2d 124 (W. Va. 1998) (in action alleging an EMS provider's negligent failure to perform resuscitation, appellate court held that, given the trial court's decision that the plaintiff parents could prove proximate cause only via testimony of a physician expert, which the plaintiffs were not able to secure, trial court properly entered summary judgment for defendant EMS provider).

⁷⁴ See, e.g., *Hall v. Anwar*, 774 So.2d 41 (Fla. Dist. Ct. App. 2000) (in a case involving allegedly negligent termination of resuscitation of newborn infant, jury verdict for defendant in light of expert testimony that internal conditions during the pregnancy caused infant's injuries and that terminating the resuscitation did little or nothing to increase the damage the infant had already suffered).

⁷⁵ See *Louisell & Williams*, *supra* note 13, ch. 8, § 8.07(2).

omission—was greater than 50%.⁷⁶ In contrast, where the theory is allowed, the same plaintiff need only prove that, as a result of the negligent act or omission, the defendant has destroyed a substantial possibility of survival.⁷⁷ The theory thus permits recovery when a person with a preexisting illness or injury has died at least in part as a result of the defendant's negligent act or omission—even if the plaintiff had less than a 50% chance of survival notwithstanding the defendant's act or omission.⁷⁸ The key aspect of proof under the theory, then, is that the defendant's negligence deprived the plaintiff of "some chance" for survival. Ample support exists for both adopting and rejecting the theory and the jurisdictions remain substantially split.⁷⁹

Admittedly, even in states that have adopted the theory, its application may nonetheless remain limited in the type of case at issue if courts give effect to the language that the defendant must have destroyed a "substantial possibility" of survival. That is, given the research just cited showing the very low survival rates for out-of-hospital TCPA victims, even where the loss of chance theory is recognized an EMS provider may be able to successfully argue that the theory does not (or should not) apply in a case involving TCPA and a resuscitation decision consistent with TOR protocols.⁸⁰ However, research confirms that outliers occur, and anecdotal reports exist of children

⁷⁶ See *id.* ch. 9, § 9.04(4) (p. 9-30-9-31) (citing cases rejecting the loss of chance theory and following traditional tort standards).

⁷⁷ See *id.* § 9.04(4) (p. 9-34) (explaining that some courts that adopt the loss of chance theory rely on the Restatement of Torts (Second) § 323(a)).

⁷⁸ See *id.* § 9.04(4) (p. 9-32-9-33) (citing cases permitting use of the theory; e.g., *Thomas v. Univ. Hosps. of Cleveland*, 2008 Ohio 6471, 2008 WL 5191340 (Ohio Ct. App. 2008) (noting that once a plaintiff proves that the defendant has increased the risk of harm by depriving the patient of a chance to recover, the case can go to the jury on the issue of causation regardless of whether the plaintiff could prove to a degree of medical probability that the defendant caused the plaintiff's injury or death); *Perez v. Las Vegas Medical Ctr.*, 805 P.2d 589 (Nev. 1991) (allowing the theory but also explaining that a person cannot recover merely on the basis of a decreased chance of survival or of avoiding a debilitating illness or injury but, rather, the person must in fact suffer death or debilitating injury)).

⁷⁹ See *id.* ch. 8, §§ 8.07(2) & § 9.04(4) (collecting cases). See also Steven R. Koch, *Whose Loss Is It Anyway? Effects of the "Lost-Chance" Doctrine on Civil Litigation and Medical Malpractice Insurance* (2010) 88 NORTH CAROLINA L. REV. 606-609 (collecting cases and reporting that 22 states have adopted the doctrine, 16 have disavowed it, and 6 have deferred on deciding and that in 6 states the highest court has not yet addressed the issue). Based in part on a review of court docket congestion and malpractice insurance costs in states that have adopted the lost-chance doctrine, Koch concluded that it has not had a noticeable impact on civil litigation.

⁸⁰ See, e.g., *Perez v. Las Vegas Medical Center*, 805 P.2d 589, 592 (Nev. 1991) (noting that it was doubtful that a 10% chance of survival would be actionable and noting also that in cases where chances of survival were modest, plaintiffs may lack the monetary incentive to bring a case to trial because damages would be reduced to account for the preexisting condition). Whether courts will limit the doctrine is difficult to predict, however, because the pertinent provision of the restatement suggests that the loss of chance theory need not be limited to cases where the lost chance was a "substantial possibility" of survival. See RESTATEMENT (THIRD) OF TORTS: APPOINTMENT LIAB. § 4 (2000).

who survive after prolonged resuscitation efforts.⁸¹ Although outliers reasonably should not drive treatment decisions, their existence makes it unclear whether a court would be (or should be) willing to reject the loss of chance theory for cases involving termination of resuscitation for victims of TCPA.

Given the divergent judicial approaches, therefore, although most plaintiffs would face significant challenges, it cannot be stated definitely that all EMS providers could successfully cut off a plaintiff's case on the issue of causation. Accordingly, for purposes of this article, it is reasonable to assume that a case might exist in which a jury could find that withholding or termination of resuscitation efforts was the proximate cause of death. As such, the determinative issue in a malpractice case against an EMS provider would be whether the resuscitation decision was a breach of the duty of care. Given existing immunities, the question of breach more often would be judged by a standard of care such as gross negligence but sometimes may be judged by the ordinary negligence standard—even if an immunity provision is triggered. The very high likelihood of summary adjudication in favor of a defendant EMS provider when the gross negligence standard applies was discussed in Part I(D). The question becomes, then, under what circumstances it might be likely that a resuscitation decision would be considered ordinary negligence and how the existence of carefully developed and formulated resuscitation protocols might bear on the issue.

B. Proving Breach of Duty: Customary Practice vs. Reasonable Practice

Whether a breach of duty exists turns on the applicable standard of care. Although the law of negligence varies from state to state, the typical standard of care is that of reasonable and ordinary care. As applied in a case alleging professional medical malpractice liability, a health care provider typically is expected to exercise that degree of care that would be exercised by a provider in good standing (i.e., using such reasonable diligence, skill, competence, and prudence as are practiced by minimally competent providers), in the same specialty, in a similar community, and in like circumstances (i.e., considering available facilities, equipment, options, etc.).⁸² More so than in other

⁸¹ See Fallat, *supra* note 2, 5. See also *Hall v. Anwar*, 774 So. 2d 41 (Fla. Dist. Ct. App. 2000) (15 minutes after resuscitation efforts terminated due to failure of the infant victim to respond, infant noticed to be breathing and trying to cry and resuscitation efforts again resumed).

⁸² See *Louisell & Williams*, *supra* note 13, ch. 8, §8.04(1) (noting that the standard recognizes that opportunities may differ as between urban and rural areas); see *id.* ch. 9, §9.05(1) (detailing reasons for a move to a national standard). See also *Smith*, *supra* note 19, § 4.02(4) (noting the trend toward rejection of the locality rule and toward adoption of “same or similar community rule” and citing numerous cases). See, e.g., *Hall v. Hilbun*, 466 So. 2d 856, 873 (Miss. 1985) (overruled on other grounds). The “similar community” standard reflects a move away from a focus on “locality,” which tended to make it difficult for plaintiffs to find experts willing to testify in their favor.

contexts, application of the standard in the medical context relies on professional custom, meaning that a provider's conduct will be measured against the customary practices of similarly trained and similarly situated providers—as opposed to being measured against a reasonableness standard determined by judges and juries.⁸³ Notably, however, several states have retreated from use of the customary standard, adopting in medical malpractice cases the more traditional “reasonable physician/practitioner” standard.⁸⁴

The difference between these standards can be illustrated using the type of case at issue, a case involving the death of a victim of out-of-hospital TCPA in conjunction with a decision to withhold or terminate resuscitation. As noted, researchers have found that EMS providers may believe that resuscitation efforts are futile but nonetheless feel compelled to continue efforts for a variety of nonmedical reasons (perhaps especially when the victim is a child).⁸⁵ As such, in a jurisdiction using a standard of care heavily influenced by custom, a plaintiff is more likely to be able to find a qualified expert medical witness who would testify that the customary practice for EMS providers is to continue resuscitation efforts until the victim is transferred into the care of medical personnel at a hospital. If so, and the jury finds the expert credible, a decision to terminate resuscitation in the field will appear to fall below the standard of care.

In contrast, in a jurisdiction using a standard of care where the focus is not on customary practice but on what is “reasonable care under the circumstances,” a plaintiff likely would face greater challenges in trying to prove negligence. Success would depend on finding an expert medical witness to testify that, under the particular set of circumstances, a reasonably diligent, skilled, competent, and prudent EMS provider would not have judged continued resuscitation to be futile and would have continued. Because medical reasons are not the driving force for continued use of resuscitation in the field, a plaintiff may come up short on the issue of negligence.⁸⁶ However, even

⁸³ See *Louisell & Williams*, *supra* note 13, ch. 8, § 8.04(1)(a). See, e.g., *Quintana v. United Blood Servs.*, 811 P.2d 424, 427 (Colo. App. 1991), *aff'd*, 827 P.2d 509 (Colo. 1992).

⁸⁴ See Philip G. Peters, *The Role of the Jury in Modern Malpractice Law* (2002) 87 IOWA L. REV. 914 (noting that 11 states and the District of Columbia had expressly abandoned the standard of custom and that 9 states had done so implicitly by endorsing the “reasonable physician” standard).

⁸⁵ For example, the presence of acutely grieving caregivers who expect all measures to be taken to save the life of the child and thus the difficulty of communicating to them a decision to terminate resuscitation, a difficulty compounded due to misinformation about the likelihood of a good outcome from continued resuscitation; or a belief that the family will be better able to cope with the loss in a hospital than in the out-of-hospital setting; or a concern that child abuse might have caused trauma leading to the cardiopulmonary arrest and the belief that personnel at the hospital are better equipped to address the situation. In addition, EMS providers report having concerns regarding legal liability for a child's death that occurs in the field. See *Fallat*, *supra* note 2, 6.

⁸⁶ See, e.g., *Short v. Appalachian OH-9, Inc.*, 507 S.E. 2d 124 (W. Va. 1998) (in case involving allegedly negligent failure to perform resuscitation, summary judgment for defendant EMS provider because plaintiff parents were unable to find a qualified expert witness).

in a jurisdiction applying the “reasonable practitioner” standard, evidence of custom may be found sufficiently relevant to be admissible,⁸⁷ meaning that a plaintiff could present the evidence about custom and a jury might well give some weight to the evidence in deciding whether the resuscitation decision fell below the required standard of care. Thus, regardless of the applicable standard of care, the current practice of EMS providers to continue resuscitation efforts (again perhaps especially for pediatric victims)—even if futile—may render any decision to withhold or terminate susceptible to a charge of negligence.⁸⁸

However, the existence of guidelines or protocols bearing on an allegedly negligent treatment decision becomes very relevant and may have a significant impact in a particular case. It is appropriate, then, to analyze the likely impact on liability of the 2003 and 2014 TOR Guidelines. Regardless of the approach to the issue of the standard of care, the TOR Guidelines—and governing protocols implementing them—likely would be admissible at trial and also likely would be considered weighty evidence of the standard of care.

C. Proving Breach of Duty: The Impact of TOR Guidelines

1. *The Use of Practice Guidelines Generally in Malpractice Litigation*

The use of practice guidelines as a shield against liability in malpractice actions has been explored fairly extensively.⁸⁹ Practice guidelines can be described as systematically developed, evidence-based consensus statements about what constitutes appropriate medical treatment for a specific condition or set of symptoms.⁹⁰ When professional medical societies or specialty boards issue guidelines, the motivation ordinarily is to improve the quality of

⁸⁷ Under typical rules of evidence, proffered evidence is relevant if it has some relation to the matter to be proved. *See, e.g.*, FED. R. EVID. 401.

⁸⁸ It is recognized that this reality is one factor leading to defensive medicine. Clark C. Havighurst, *Practice Guidelines as Legal Standards Governing Physician Liability* (1991) 54 LAW CONTEMP. PROBL. 98 (noting that the phrase “defensive medicine” is recognized as including practices of the professional community that have become customary despite their inappropriateness in terms of medical benefit).

⁸⁹ *See* Maxwell J. Mehlman, *Professional Power and the Standard of Care in Medicine* (2012) 44 ARIZ. STATE L. REV. 1165 (describing the extensive interest in clinical practice guidelines in the 1990s and the unsuccessful attempts to use the guidelines to improve the quality of care and rationalize medical malpractice litigation). *See also* Michelle M. Mello, *Of Swords and Shields: The Role of Clinical Practice Guidelines in Medical Malpractice Litigation* (2001) 149 U. PENN. L. REV. 645 (analyzing various approaches to use of clinical guidelines in malpractice litigation); Jodi M. Finder, *The Future of Practice Guidelines: Should They Constitute Conclusive Evidence of the Standard of Care* (2000) 10 HEALTH MATRIX 67–117; Mark A. Hall, *The Defensive Effect of Medical Practice Policies in Malpractice Litigation* (1991) 54 LAW CONTEMP. PROBL. 119–145; *see also* Havighurst, *supra* note 88, at 87–117.

⁹⁰ The Institute of Medicine has defined such guidelines as “systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances.” *See* COMMITTEE ON CLINICAL PRACTICE GUIDELINES, INSTITUTE OF MEDICINE, *GUIDELINES FOR CLINICAL PRACTICE* (Marilyn J. Field & Kathleen N. Lohr eds., Washington DC: National Academy Press, 1992), 2.

care.⁹¹ In the 1990s, a few states legislatively authorized the development of practice guidelines and their use in a variety of ways in malpractice lawsuits; for example, as evidence of the standard of care that could be used by both plaintiffs and defendants or as evidence that could be used only by defendants as rebuttable evidence of meeting the standard of care—or even as an absolute defense; that is, as irrebuttable evidence of meeting the standard of care.⁹² For a variety of reasons, the initiatives did not produce significant results.⁹³ A key reason, however, was the inadequacy of the guidelines themselves.⁹⁴

Two key deficiencies are particularly relevant. First, the perceived importance of allowing state-level modifications (e.g., the fear that national standards would be too burdensome) and preserving flexibility (and thus provider discretion) resulted in qualifications that rendered the guidelines too equivocal to be meaningful.⁹⁵ Second, a lack of supporting scientific evidence undermined the credibility of the guidelines as indicators of optimal practice.⁹⁶ Both shortcomings meant that the guidelines likely did not reflect custom and, more important, likely prevented the guidelines from operating to create custom by encouraging more uniformity in care.⁹⁷

To date, therefore, practice guidelines have played a fairly insignificant role in malpractice litigation. Mehlman points to a 1996 study of cases in which parties sought to use practice guidelines (the only previously published study), to show that they were used successfully in only 28 cases between 1980 and

⁹¹ See Mello, *supra* note 89, 650-652 (distinguishing practice guidelines promulgated by government bodies or health care payers whose motivations may be different). For example, the American Medical Association has stated that it generally is expected that practice guidelines “will help physicians reduce the amount of unnecessary or inappropriate care for patients [and] reduce the incidence of avoidable injuries caused by substandard care and the amount of defensive medicine. . . .” See Edward B. Hirshfeld, *From the Office of the General Counsel: Should Practice Parameters Be the Standard of Care in Malpractice Litigation?* (1991) 266 JAMA 2887 (citations omitted).

⁹² See Mehlman, *supra* note 89, 1193-1198 (describing initiatives in Maine, Vermont, Florida, and Minnesota).

⁹³ See *id.* at 1199-1202.

⁹⁴ See *id.* at 1206 (noting that the AMA had documented in 1995-1996 1,600 guidelines issued by more than 60 entities and that experts who were familiar with the guidelines “generally were not impressed”).

⁹⁵ See *id.* at 1206-1207 (quoting Hall’s critique that, due to the “snowflake” theory that no two patients or conditions are exactly alike, otherwise sufficiently precise guidelines are rendered “entirely advisory or equivocal by waffling phrases and general disclaimers”—thereby also rendering it infeasible to use the guidelines as the standard of care in malpractice litigation).

⁹⁶ See *id.* at 1208-1210 (quoting Terrence M. Shaneyfelt, Michael R. Mayo-Smith, & Jonathan Rothwangl, *Are Guidelines Following Guidelines? The Methodological Quality of Clinical Practice Guidelines in the Peer-Reviewed Medical Literature* (1999) 281 JAMA 1904 (noting that less than 10% of 279 guidelines used described formal methods of combining scientific evidence or expert opinion; that less than 20% specified how evidence was identified; and that more than 25% did not even cite any references)).

⁹⁷ See Mello, *supra* note 89, at 680-684 (discussing compliance gaps and explaining that only a slim majority of physicians comply with well-publicized guidelines).

1994.⁹⁸ Mehlman updated the study by examining cases published between 1995 and 2011 and found 24 cases in which guidelines were used as evidence of the standard of care.⁹⁹ The small number of cases is one telling finding. Another is that, although used more frequently by plaintiffs, guidelines were used successfully by defendants in nine of the cases, in six of which the guidelines were treated as “some evidence” of meeting the standard of care and in two of which following them was treated as a rebuttable presumption of meeting the standard of care.¹⁰⁰ A key point here is that the courts allowed the guidelines to be used only as some evidence (and not conclusive evidence) of the standard of care. Other less empirical analyses of use of practice guidelines in malpractice litigation tend to agree that courts do not allow the evidence to be considered conclusive proof.¹⁰¹

To be admissible in a trial, practice guidelines must be relevant and reliable. In a case where a plaintiff is asserting that a decision to withhold or terminate resuscitation was negligent, TOR guidelines and protocols followed by the EMS community will be relevant.¹⁰² Further, guidelines that are evidence based and developed using rigorous methodology very likely would be regarded as sufficiently reliable to be admissible.¹⁰³ Thus, for reasons more fully set out *infra*, the 2003 and 2014 TOR Guidelines—and implementing protocols—very likely would be found sufficiently reliable to be admissible. However, in a typical malpractice trial, evidence of the existence of practice

⁹⁸ See Mehlman, *supra* note 89, at 1220 (citing Andrew L. Hyams, David W. Shapiro, & Troyen A. Brennan, *Medical Practice Guidelines in Malpractice Litigation: An Early Retrospective* (1996) 21 J. HEALTH POL. POL'Y & L. 295).

⁹⁹ See *id.* at 1220 (also listing cases in an appendix).

¹⁰⁰ See *id.* at 1220 (also finding successful use by plaintiffs as inculpatory evidence in 11 cases).

¹⁰¹ See, e.g., Mello, *supra* note 89, at 660-666. See also *id.* at 668-677 (describing various approaches to use of guidelines in malpractice litigation). See also Valerie Gutmann Koch, & Beth E. Roxland, *Unique Proposals for Limiting Legal Liability and Encouraging Adherence to Ventilator Allocation Guidelines in an Influenza Pandemic* (2013) 14.3 DEPAUL J. HEALTHCARE L. 484 (noting that nonbinding guidelines based on ethical and clinical principles might constitute evidence of the legal standard and provide a defense to a negligence claim); Havighurst, *supra* note 88, at 101-104; Hall, *supra* note 89, at 131.

¹⁰² Evidence is relevant if it has any tendency to make the fact to be proved more or less probable. See FED. R. EVID. 401. Practice guidelines, then, are relevant if they assist the trier of fact in deciding whether a particular treatment decision meets the standard of care. Havighurst explains that, because guidelines are meant to be prescriptive rather than descriptive, they are not necessarily evidence of professional custom and, as such, in a jurisdiction adhering to the traditional customary practice standard the guidelines would be relevant and thus admissible only if an expert could testify that practitioners in the community in fact follow the guidelines. In a jurisdiction using a reasonable practitioner standard, the guidelines would be relevant, but their weight would turn on a number of factors and the extent to which a jury thinks they actually do reflect a reasonable standard of care. See Havighurst, *supra* note 88, at 101, 104.

¹⁰³ See Finder, *supra* note 89, at 80-92 (analyzing admissibility of practice guidelines under the *Daubert* framework, which asks judges to assess scientific validity by considering the following factors: testable theory, peer review, known or potential rate of error, the existence of controlling standards, and general acceptance by the relevant community).

guidelines becomes just one piece of evidence the jury hears—and their significance might well be overshadowed. Expert witnesses continue to have a dominant role. Defendant practitioners must rely on medical experts to lay the foundation for admissibility of guidelines and use the guidelines only to bolster the expert's testimony about the standard of care.¹⁰⁴ Plaintiffs typically will counter with expert testimony challenging the probative value of the guidelines, focusing on their reliability or applicability to the particular case.¹⁰⁵ Further, evidentiary rules often will allow guidelines only to be read into evidence by the defendant's expert witness, as opposed to being treated as an independent exhibit.¹⁰⁶ To a juror, then, evidence of practice guidelines may not seem to be the genuinely important evidence.

Yet, Mehlman's research points to cases in which defendant practitioners successfully used practice guidelines. In some of the cases, evidence of guidelines supporting the defendant practitioner's treatment decision was sufficient to allow summary resolution of the case in the defendant's favor (e.g., when the plaintiff was not able to produce a countering expert witness)¹⁰⁷; in others, the evidence triggered use of a jury instruction favorable to the defendant regarding existence of alternative acceptable methods of treating the plaintiff's condition.¹⁰⁸ Further, in some cases it is clear that the guidelines influenced the decision of the trier of fact that the defendant practitioner was not negligent (e.g., in bench trials that resulted in a written opinion).¹⁰⁹ All of these consequences of the use of practice guidelines as evidence suggest that carefully developed and formulated guidelines that support the practitioner's

¹⁰⁴ See *id.* at 80-92, 96-97 (analyzing admissibility under the *Daubert* standard and admissibility via expert testimony).

¹⁰⁵ See, e.g., *Woods v. United States*, 200 Fed. Appx. 848, 2006 WL 2613718 (11 Cir. 2006) (not error for the trial court to credit the defendant's expert witness who relied on guidelines issued by the American Society of Anesthesiologists); *Bond v. United States*, 2008 WL 655609 (D. Or. 2008) (giving weight to the defendant's expert witness whose testimony included an explanation of ACC/AHA practice guidelines).

¹⁰⁶ See *Finder*, *supra* note 89, at 96.

¹⁰⁷ See, e.g., *Cashwell v. United States*, 2009 WL 2929444 (M.D. Penn.) (defendant's compliance with Centers for Disease Control guidelines justified summary judgment when the plaintiff did not produce a testifying expert); *Becerra v. Contra Costa County*, 2008 WL 2546175 (Cal. Ct. App. (1 Dist.)) (same, involving guidelines issued by the American College of Obstetricians and Gynecologists).

¹⁰⁸ See, e.g., *Woldruff v. Banta*, 2006 WL 2054344 (Cal. Ct. App. (4th Dist.)) (holding that, because the defendant's treatment decision was in accord with guidelines issued by the U.S. Health Services Prevention Task Force and the American Academy of Family Practice, the trial court should use a jury instruction clarifying that negligence does not necessarily exist when a practitioner "chooses one medically accepted method of treatment . . . and it turns out that another medically accepted method would have been a better choice").

¹⁰⁹ Cases involving a bench trial typically involved claims governed by the Federal Torts Claim Act. See, e.g., *Woods v. United States*, 200 Fed. Appx. 848, 2006 WL 2613718 (11 Cir. 2006) (not error for the trial court to credit the defendant's expert witness who relied on guidelines issued by the American Society of Anesthesiologists); *Bond v. United States*, 2008 WL 655609 (D. Or. 2008) (giving weight to the defendant's expert witness whose testimony included an explanation of ACC/AHA practice guidelines).

treatment decision can significantly lessen concerns about malpractice liability. Indeed, research suggests that the existence of applicable guidelines is a factor used by attorneys to weed out frivolous claims of malpractice from meritorious ones,¹¹⁰ reinforcing the idea that a key consideration in assessing the risk of liability is the ability to deter the initiation of lawsuits.

Moreover, scholars tend to agree on the characteristics that will bolster the evidentiary significance or probative value of practice guidelines. That is, agreement exists that certain factors would tend to prompt jurors to decide that a particular practice guideline should be found to represent the standard of care—meaning that a defendant’s evidence of compliance with the guidelines would lead a jury to find in favor of the defendant practitioner. Consideration of those factors, discussed in the next subsection, will thus allow practitioners to predict with some confidence whether compliance with particular guidelines will help insulate them from claims of negligence. For purposes of this article, then, the central question becomes whether the 2003 and 2014 TOR Guidelines—and implementing protocols—exhibit the characteristics that would tend to convince jurors to treat them as weighty evidence of the standard of care.

2. Assessment of the TOR Guidelines & Protocols

The factors that will help persuade jurors that particular guidelines represent the applicable standard of care are the source and basis of the guidelines, their degree of specificity and definitiveness, and the scope of dissemination and use. More specifically, jurors likely would give substantial weight to practice guidelines

- developed by respected entities or organizations with appropriate medical expertise; for example, national organizations or state-level agencies representing the relevant medical specialty;
- based on sound, peer-reviewed, and up-to-date research demonstrating medical effectiveness of the recommended treatment decisions;
- sufficiently specific and consistent to provide a clear standard against which to measure a practitioner’s conduct, as to the appropriate treatment and the clinical situations calling for the treatment;
- sufficiently prescriptive or mandatory, rather than merely providing a range of options or diluting the force of the recommendation with qualifications or disclaimers; and

¹¹⁰ See Mello, *supra* note 89, 667 (citing Andrew L. Hyams et al., *Practice Guidelines and Malpractice Litigation: A Two-Way Street* (1995) 122 ANN. INTERN. MED. 453 (finding that 27% of attorneys surveyed indicated that practice guidelines had influenced their decision to settle a case; that 22% believed that a guideline had influenced a trier of fact in a case in the past year; and, further, that 26% of plaintiffs’ attorneys reported that guidelines had influenced a prior decision to not take a case (although 31% reported that the guidelines influence a decision to bring a case)).

- widely distributed and adopted for use.¹¹¹

Applying these factors to the 2003 and 2014 TOR Guidelines suggests that their use should lessen concerns in the EMS community about legal liability arising from prehospital resuscitation decisions. This conclusion rests on both experience with the 2003 Adult TOR Guidelines and scrutiny of the 2014 Pediatric TOR Guidelines. In essence, both sets of Guidelines can help prompt development of governing protocols that escape the deficiencies of many other types of practice guidelines.

a. The 2003 Adult TOR Guidelines and Implementing Protocols

In the case of adults, there is a growing acceptance of termination of presumed futile resuscitation efforts when the arrest is due to trauma, and the acceptance can be tied to the promulgation of the 2003 Adult TOR Guidelines. Scrutiny of the 2003 Guidelines suggests that jurors would treat them as weighty evidence of the standard of care. The Guidelines were the result of a joint effort of the National Association of EMS Physicians and the Committee on Trauma of the American College of Surgeons.¹¹² The Guidelines also are evidence based, because they were developed based on a review of the literature demonstrating the generally poor prognosis associated with prehospital TCPA but also showing that a small subset of patients may be salvaged with timely interventions.¹¹³ The research supporting the Guidelines found survival rates ranging from zero to less than 4%,¹¹⁴ and the researchers concluded that, collectively, the data “suggest that a patient with TCPA and more than a 15-minute transport time while in arrest will not survive, regardless of the aggressiveness of the care delivered.”¹¹⁵

The 2003 Guidelines also are reasonably specific. They apply only to situations where the arrest arises from blunt or penetrating trauma. As to cases where the arrest may be due to a medically caused event such as a myocardial infarction, standard resuscitation is recommended, and cases involving drowning, lightning strikes, or hypothermia are distinguished.¹¹⁶ When the Guidelines apply, they distinguish between situations where the EMS provider

¹¹¹ These factors were gleaned primarily from the following sources: Ash Samanta et al., *The Role of Clinical Guidelines in Medical Negligence Litigation: A Shift from the Bolam Standard* (2006) 14 MED. L. REV. 344, 349-351, 353, 355-356; James F. Blumstein, *Medical Malpractice Standard Setting: Developing Malpractice ‘Safe Harbors’ as a New Role for QIOs?* (2006) 59 VANDERBILT L. REV. 1032-1034; see also Finder, *supra* note 89, at 108-111.

¹¹² See Hopson, *supra* note 7, at 106-112.

¹¹³ See *id.* at 107.

¹¹⁴ See *id.* at 107 (a 4% survival rate was reported in one study for a subgroup of victims with an arrest due to penetrating trauma; the survival rate for the subgroup of victims with blunt trauma was 2.3%). See also *id.*, at 111 (noting: “Survival after TCPA is rare, even with maximal resuscitative efforts.”).

¹¹⁵ See *id.* at 108.

¹¹⁶ See Guidelines 5 & 9, *id.* at 106. See also *id.* at 111.

has and has not witnessed the arrest.¹¹⁷ When the provider has not witnessed the arrest, the Guidelines specify that resuscitation “should be withheld” in the following situations:

- when the trauma is associated with injuries “obviously incompatible with life, such as decapitation or hemicorporectomy” or
- when there is evidence of a “significant time lapse since pulselessness, including dependent lividity, rigor, mortis, and decomposition.”¹¹⁸

When the trauma is not associated with these specific conditions, the Guidelines thereafter differentiate to some extent between blunt and penetrating trauma.

- When the EMS provider arrives and finds an “apneic and pulseless” victim but who has incurred a *penetrating* trauma, the provider should rapidly examine for some sign of life such as “pupillary reflexes, spontaneous movement, or organized ECG activity” and, if signs are found, resuscitation “should” be performed and the victim transported to the nearest emergency department.¹¹⁹ However, if the signs are absent, resuscitation “may be withheld.”¹²⁰
- When a victim of any *blunt* trauma is found “apneic, pulseless, and without organized ECG activity upon arrival of the EMS provider at the scene,” resuscitation efforts “may be withheld.”¹²¹

The distinction is made because the evidence shows that victims of blunt trauma often have poorer outcomes, likely due to the multisystem nature of the injury.¹²² In reality, however, for both types of traumatic injury, if there are no signs of life, the Guidelines specify that resuscitative efforts “may be withheld.”

When the provider has witnessed the trauma causing the arrest, the Guidelines provide as follows:

- Resuscitation should be initiated, but termination “should be considered” after 15 minutes of unsuccessful resuscitation and cardiopulmonary resuscitation.¹²³

¹¹⁷ Guideline 6 directs that, as to an EMS-witnessed arrest, termination should be considered only after 15 minutes of unsuccessful resuscitation and cardiopulmonary resuscitation. *See id.* at 106.

¹¹⁸ *See* Guidelines 3 & 4, *id.* at 106.

¹¹⁹ *See* Guideline 2, *id.* at 106.

¹²⁰ *See* Guideline 2, *id.* at 106.

¹²¹ *See* Guideline 1, *id.* at 106.

¹²² *See id.* at 111.

¹²³ *See* Guideline 6, *id.* at 106.

- TCPA victims with a transport time of more than 15 minutes after the arrest is identified “may be considered nonsalvageable, and termination of resuscitation should be considered.”¹²⁴

The Guidelines thus provide substantial specificity as to concrete clinical circumstances that warrant withholding or termination of resuscitation efforts.

The 2003 Guidelines also are relatively prescriptive. The Guidelines never use the word “must”—but they strongly indicate what the provider “should” do. Further, when the Guidelines say that resuscitative efforts “may” be withheld, it is reasonably clear that the Guidelines mean that withholding efforts is a medically reasonable and preferred decision. The use of a more flexible phrase, however, recognizes that other factors may be relevant, likely often including nonmedical factors. The same can be said of the statement that termination “should be considered.” The phrase allows use of provider discretion, but it is reasonably clear that withholding efforts is a medically reasonable and preferred decision. The Guidelines are not neutral as to a decision to withhold or terminate resuscitation but, instead, indicate with reasonable precision the medically preferred practice.¹²⁵

Recent empirical findings also suggest that the 2003 Adult TOR Guidelines have been widely disseminated and that EMS providers are incorporating them into their provision of care. At present, approximately half of the states have formalized, in statutes or protocols, guidelines for in-the-field termination of resuscitation of adults.¹²⁶ Further, in a recent national survey of highly experienced EMS providers, 83.3% of the 1,264 survey respondents reported having access to adult termination of resuscitation protocols¹²⁷ and also reported that, when available, the protocols are actuated in 95% of applicable cases.¹²⁸

Examples of TOR protocols developed at the state level show reliance on the 2003 Guidelines. Education materials developed by the Vermont Department of Health, relating to the Statewide Emergency Medical Services

¹²⁴ See Guideline 7, *id.* at 106.

¹²⁵ As such, the guidelines are closer to Eddy’s perspective of “guidelines” as opposed to mere “options.” See David Eddy, *Designing a Practice Policy: Standards, Guidelines, and Options* (1990) 263 JAMA 3077 (explaining that “guidelines” should be followed in most cases but that “options,” in contrast, “are neutral with respect to recommending the use of an intervention” and “leave practitioners free to choose any course”). Further, the TOR Guidelines are not as flexible as many practice guidelines. Many practice guidelines present information to help physicians choose among a range of possible treatment decisions and, thus, Eddy states that “[d]eviations from guidelines will be fairly common and can be justified by differences in individual circumstances.” *Id.* In contrast, the TOR Guidelines address a single treatment decision, and that decision is presented as the medically preferred decision when specific clinical circumstances exist.

¹²⁶ See Fallat, *supra* note 2, 6.

¹²⁷ See Taylor Levetown & Mary E. Fallat, *EMS Provider Perspectives on the Management of Pediatric Death in the Field* (currently unpublished data) (available from the author).

¹²⁸ *Id.*

Protocols, provide a useful example. The Vermont Protocol can be broken into two parts. First, the Protocol specifies that resuscitation efforts “should be withheld” for persons who are “dead on arrival”—that is, those who exhibit both (i) classic symptoms of death and (ii) at least one factor of death—and includes as a factor of death a major blunt or penetrating trauma.

Vermont EMS Protocol 8.15 for Resuscitation Initiation & Termination
RESUSCITATION EFFORTS SHOULD BE WITHHELD UNDER THE
FOLLOWING CIRCUMSTANCES¹²⁹:

- **Valid Do Not Resuscitate:** See Do Not Resuscitate (DNR) & Clinician Order (COLST) Protocol 8.8.
- **Scene Safety:** The physical environment is not safe for providers.
- **Dead on Arrival (DOA):** A person is presumed dead on arrival when all five “Signs of Death” are present **AND** at least one associated “Factor of Death” is present.
- **Signs of Death (All five signs of death must be present)**
 - Unresponsiveness.
 - Apnea.
 - Absence of palpable pulses at carotid, radial, and femoral sites.
 - Unresponsive pupils.
 - Absence of heart sounds.
- **Factors of Death (At least one associated factor of death must be present)**
 - Damage or destruction of the body incompatible with life, such as:
 - Decapitation.
 - Decomposition.
 - Deforming brain injury.
 - Incineration or extensive full thickness burns.
 - Lividity/rigor mortis of any degree.
 - Major blunt or penetrating trauma.¹³⁰

In the second part, the protocol specifies that EMS providers should contact medical control and “consider termination of resuscitation”—as to both witnessed and nonwitnessed arrests—if there has been no return of spontaneous circulation after 20 minutes of basic life support (or combined basic and advanced life support, excluding situations involving hypothermia).

¹²⁹ The Vermont EMS protocols can be accessed at http://healthvermont.gov/hc/ems/documents/FinalProtocolsfor2013Oct81600LOCKED_000.pdf (last visited June 17, 2014). The protocols on the website were issued/revised Oct. 2013.

¹³⁰ The protocol includes additional instructions for “sudden infant death and neonate” and for persons with ventricular assist devices. *See* Appendix C.

Vermont EMS Protocol 8.15 for Resuscitation Initiation & Termination¹³¹**RESUSCITATION MAY BE STOPPED UNDER THE FOLLOWING CIRCUMSTANCES:**

- When the patient regains pulse/respirations. See Post Resuscitative Care Protocol—Adult 3.5A, Post Resuscitative Care Protocol—Pediatric 3.5P, Cardiac Arrest Protocol—Adult 3.2A or Cardiac Arrest Protocol—Pediatric 3.2P.
- The physical environment becomes unsafe for providers.
- The exhaustion of EMS providers.

TERMINATION OF RESUSCITATION (TOR) RULE (ADULTS ONLY):

- Arrest not witnessed by emergency medical services personnel. NO return of spontaneous circulation after 20 minutes of either BLS alone or combined BLS and ALS in the absence of hypothermia. No shock was delivered or advised by the AED.
- If **ALL** criteria are present, contact Medical Control and consider termination of resuscitation. Notify law enforcement. If **ANY** criteria are missing, continue resuscitation and transport.

Contact **Medical Control** to consider Termination of Resuscitation for any of the following:

- Arrest witnessed by EMS personnel, if patient has NO return of spontaneous circulation after 20 minutes of either BLS alone or combined BLS and ALS in the absence of hypothermia **AND** no shocks were delivered or advised; or
- Extrication is prolonged (>20 minutes) with no resuscitation possible during extrication (hypothermia is an exception); or
- If the patient is hypothermic and there is no return of spontaneous circulation after 30 minutes of either BLS alone or combined BLS and ALS.
- Cardiac arrests should generally be managed on scene until return of spontaneous circulation, decision to cease resuscitation, or criteria is met for transport to hospital as indicated by Termination of Resuscitation (TOR) Rule. If transport is initiated, resuscitation must be

¹³¹The Vermont EMS protocols can be accessed at <http://healthvermont.gov/hc/ems/documents/FinalProtocolsfor2013Oct81600LOCKED.000.pdf> (last visited June 17, 2014). The protocols on the website were issued/ revised Oct. 2013.

continued until arrival at the receiving hospital.

- May continue resuscitation and transport if conditions on scene are NOT amenable to cessation of resuscitation.

Paramedics: Contact **Medical Control** to consider Termination of Resuscitation for any of the following:

- Criteria present for Termination of Resuscitation (TOR) Rule.
- Patient is in asystole for greater than 20 minutes OR unresponsive to advanced cardiac life support with a non-shockable rhythm after 20 minutes of resuscitation and ET_{CO}2 level ≤ 10 mmHg.¹³²

Prolonging resuscitation efforts, beyond 15–20 minutes, without a return of spontaneous circulation is usually futile, unless cardiac arrest is compounded by hypothermia or submersion in cold water.

EMS providers are not required to transport every victim of cardiac arrest to a hospital. Unless special circumstances are present, it is expected that most resuscitations will be performed on-scene until the return of spontaneous circulation or a decision to cease resuscitation efforts is made based on the criteria listed. Transportation with continuing CPR is justified if hypothermia is present or suspected. Current AHA guidelines state: “cessation of efforts in the out-of-hospital setting . . . should be standard practice.”

An ET_{CO}2 level of 10 mmHg or less measured 20 minutes after the initiation of advanced cardiac life support accurately predicts death in patients with cardiac arrest.

The Vermont protocol (set out in full in Appendix C) adheres closely to the 2003 Adult TOR Guidelines. Although the protocol is framed in terms of when resuscitation “should be withheld” and when termination is an option “to consider,” it is clear that the protocol is pointing to the medically reasonable and preferred decision. Prescriptive intent also can be inferred from the decision to label part of the protocol a “TOR Rule” and the fact that the only reference to continued resuscitation and transport hinges on nonmedical circumstances, namely, when “conditions on scene are NOT amenable to cessation of resuscitation.” That the Vermont “TOR Rule” does not appear to be limited to persons who have sustained a traumatic injury, and thus is broader than the 2003 Guidelines, would not undermine its probative value in a case

¹³² The protocol includes instructions for determining death in the field and documentation. See Appendix C.

involving TCPA.

In an actual malpractice case arising from a resuscitation decision, the specific protocol relied on by the defendant EMS provider is the most relevant guideline that would be admitted into evidence, with the testifying expert also explaining that the protocol was based on the 2003 Adult TOR Guidelines. In deciding whether a decision to withhold or terminate resuscitation was negligence, a protocol similar to Vermont's and similarly based on the 2003 Guidelines likely would be considered weighty evidence of the standard of care. The Vermont protocol is reasonably concrete and specific and sufficiently prescriptive. It also is based on guidelines issued by reputable entities and grounded in empirical evidence and have been in place and influencing EMS decision making since 2003. These factors or characteristics of the Vermont protocol (or a similar specific and governing protocol) would be understandable to lay jurors, who thus likely would consider the protocol as weighty evidence of the standard of care. If so, a decision to withhold or terminate resuscitation when the EMS provider has adhered to the protocol would not be negligent.

b. The 2014 Pediatric TOR Guidelines

Analysis of the 2014 Pediatric Guidelines similarly suggests that state protocols implementing the Guidelines likely would be considered weighty evidence of the standard of care. The Guidelines were formulated by researchers in collaboration with, and have the endorsement of, the American College of Surgeons, the American College of Emergency Physicians, the National Association of EMS Physicians, and the American Academy of Pediatrics.¹³³ The Guidelines also are evidence based, because the researchers conducted a rigorous literature review and analysis, including 27 peer-reviewed studies involving 1,114 pediatric patients who had suffered out-of-hospital TCPA.¹³⁴ The research provides strong evidence that the likelihood for a successful or good outcome for pediatric traumatic out-of-hospital cardiopulmonary arrest is poor.¹³⁵ Of the 1,114 patients, only 60 survived to hospital discharge (5.4%).¹³⁶ The researchers also concluded that "virtually all survivors who require resuscitation for >20 minutes are neurologically devastated," meaning that the survivor was either severely disabled or in a vegetative state.¹³⁷

The 2014 Pediatric Guidelines provide greater insight as to the strength of their evidentiary support than do the 2003 Adult Guidelines. The

¹³³ See Fallat, *supra* note 2, at 8–9.

¹³⁴ See *id.* at 3.

¹³⁵ See *id.* at 7.

¹³⁶ See *id.* at 3, 7.

¹³⁷ See *id.* at 3, 7.

methodology used in developing the 2014 Pediatric Guidelines allowed researchers to designate the recommendations according to the following levels:

- Level 1: The recommendation is convincingly justified based on the available scientific information alone.
- Level 2: The recommendation is reasonably justifiable by available scientific evidence and strongly supported by expert opinion.
- Level 3: The recommendation is supported by available data but adequate scientific evidence is lacking. This type of recommendation is useful for educational purposes and in guiding future clinical research.¹³⁸

As detailed below, researchers classified most recommendations as Level 2 recommendations. A Level 2 recommendation would be at least comparable to expert opinion testimony presented during a malpractice trial, thereby bolstering the likelihood a jury would consider the Guidelines or implementing protocols as weighty evidence.

The 2014 Pediatric Guidelines also provide a similar degree of specificity. They similarly exclude instances where the arrest is not due to traumatic injury and call for standard resuscitation procedure where drowning, lightning strikes, and hypothermia are involved.¹³⁹ They also similarly recognize that withholding resuscitation is appropriate when a victim has injuries obviously incompatible with life or when there is evidence of a significant time lapse since arrest.¹⁴⁰ As to situations when those signs associated with death are not present, the key recommendations specific for pediatric victims are as follows:

Guideline #5—Immediate transportation to an emergency department (ED) should be considered for children who exhibit witnessed signs of life before traumatic cardiopulmonary resuscitation and have CPR ongoing or initiated within 5 minutes in the field (Level 2).

Guideline #8—States should consider including children in TOR protocols and, for pediatric victims of blunt and penetrating trauma when there has been an EMS-witnessed cardiopulmonary arrest, resuscitation efforts should be initiated, but termination of resuscitation should be considered after at least 30 minutes of unsuccessful resuscitative efforts, including CPR (Level 2).

Guidelines #6—For pediatric victims of blunt and penetrating trauma when there has been an unwitnessed T CPA, and thus where a longer

¹³⁸ See *id.* at 2 (describing use of the 2000 Eastern Association for Surgery of Trauma guideline, *Utilizing Evidence-Based Outcome Measures to Develop Practice Management Guidelines: A Primer*).

¹³⁹ See Guidelines 3 & 4, *id.* at 7.

¹⁴⁰ See Guidelines 1 & 2, *id.* at 7.

period of hypoxia may be presumed to have occurred, resuscitation should be initiated, and an acceptable duration of CPR (including bystander CPR) of less than 30 minutes may be considered with medical director input (Level 3).¹⁴¹

These recommendations are similar to those for adults victims but with two key differences: (i) the omission of a recommendation to withhold resuscitation when a patient is found with classic signs of death accompanied by the presence of major penetrating or blunt trauma and (ii) a longer period of time is recommended prior to considering termination of resuscitation efforts. More important for purposes of their persuasiveness to jurors, the 2014 Pediatric Guidelines are similar to the guidelines for adults in that they provide substantial specificity as to concrete circumstances that warrant withholding or termination of resuscitation.

However, two aspects of the Guidelines merit comment. First, overall, the 2014 Pediatric Guidelines are written less prescriptively than those for adult patients. For example, as to the recommendation to withhold resuscitation efforts for victims with injuries incompatible with life or when evidence suggests a significant time lapse, the 2014 Guidelines merely say that withholding efforts “should be considered” (in contrast to the phrase “should be withheld” used for the comparable recommendation in the 2003 Guidelines”).¹⁴² The “should be considered” phrase is used even as to the important Guideline #5, regarding immediate transport to an emergency department, and also as to the key recommendation in Guideline #8 that children be included in state TOR protocols.¹⁴³ Because the phrase is used for these important recommendations with Level 2 support, the phrase should not be understood as undermining the prescriptive nature of the Guidelines. Like the guidelines for adults, the 2014 Pediatric Guidelines indicate with reasonably clarity the practice deemed medically appropriate and preferred given the evidence.

Second, the 2014 Pediatric Guidelines include two recommendations that could be considered a qualification or inconsistency that dilutes their probative value. Guideline #7 provides:

If there is any doubt as to the circumstances or timing of the TCPA, under the current status of limiting termination of resuscitation in the field to persons older than 18 years in most states, resuscitation should be initiated and continued until arrival to the appropriate facility (Level 3).¹⁴⁴

This recommendation is somewhat problematic for two reasons. First, it is

¹⁴¹ See *id.* at 7.

¹⁴² See Guidelines 1 & 2, *id.* at 7.

¹⁴³ See *id.* at 7.

¹⁴⁴ See *id.* at 7.

not clear why the current practice of not extending TOR protocols to children is relevant to guidelines intended to prompt a change in practice. Second, if there is doubt as to the *timing* of the TCPA, it is not clear why Guideline #6 is not applicable, which points to termination of resuscitation after less than 30 minutes. Inconsistencies in practice guidelines often will significantly undermine their probative value.

The recommendation, however, can be explained as creating an exception due to nonmedical considerations. The researchers explain the recommendation as stemming from the potential for ambiguity and miscommunication and caution that, in situations posing potential ambiguity or doubt, a decision about termination “should not be left to EMS providers with differing levels and variety of training, expertise, experience, and communication skills (even with remote input from the medical director, who is not on-site) to ensure a consistent message is delivered to parents and families of these children.”¹⁴⁵ The explanation continues by stating that “[i]f the patient has arrested and resuscitation has already exceeded 30 minutes and the distance to the nearest facility is more than 30 minutes away, involvement of the parents and family . . . in the decision making process with assistance from medical professionals should be considered . . . because evidence suggests that either death or a poor outcome is inevitable.”¹⁴⁶ Given this explanation, a reasonable interpretation of Guideline #7 is that, in essence, Guideline #6 *is* being triggered to the extent that resuscitation efforts are initiated but that the Guideline #6’s recommendation that less than 30 minutes of CPR may be acceptable is not triggered (and the recommendation in Guideline #8 as to termination after 30 minutes of unsuccessful CPR also is inapplicable). Instead, resuscitation is initiated as in Guideline #6, and Guideline #7 is recommending transport—but leaving open the possibility of a prehospital termination decision made in consultation with parents and/or family. Because the recommendation is grounded in concerns about misunderstandings on the part of family members, it does not present an inconsistency of the type that would diminish the probative value of the Guidelines as applied to other situations.¹⁴⁷

¹⁴⁵ See *id.* at 7.

¹⁴⁶ See *id.* at 7. This last recommendation is not included in Guideline #7. See *id.* at 7.

¹⁴⁷ The recommendation also reflects consistency if there is doubt as to the *circumstances* of the TCPA. Doubt as to circumstances likely would include doubt as to whether the arrest is actually caused from the traumatic injury—in which case the Guidelines are not applicable—or doubt as to whether the victim actually experienced cardiopulmonary arrest. In explaining the recommendations generally, the researchers note that it is difficult to recognize pulselessness in children and, as such, CPR on children in the field sometimes is provided when it was not necessary. See *id.* at 5-6. When this occurs, there often appears to be a rapid response—a fact that may skew research results in terms of suggesting a better likelihood of a good outcome for pediatric TCPA victims than exists in reality. If an EMS provider is in doubt as to pulselessness, assuming the child is salvageable is the appropriate course of conduct. In both possible scenarios of doubt as to circumstances, the evidence supports initiation of resuscitation

The other qualification in the Guidelines is somewhat harder to discount. In discussing considerations for implementing the Guidelines via governing state- or system-level protocols, the researchers caution that “[o]n-line medical control may be needed to determine the appropriateness of termination of resuscitation in individual children.”¹⁴⁸ This statement appears to be precisely the type of qualifier that, in an effort to preserve room for a physician’s medical judgment, undermines practice guidelines generally from the perspective of malpractice litigation. In part, the statement likely is intended to preserve the discretion appropriate in medical decision making. In the context of emergency medical services, discretion is exercised by medical control, which very often is provided by a physician.¹⁴⁹ And, indeed, medical control is an important aspect of the provision of all types of emergency medical services because the supervision by medical control allows “medical judgment” to enter into the picture when appropriate.

Nonetheless, the distinct nature of the context involved operates to largely safeguard the evidentiary value of the TOR Guidelines. TOR guidelines are readily distinguishable from other practice guidelines. Practice guidelines often present information to help physicians choose amongst a range of possible treatment decisions and, thus, as Eddy notes, “[d]eviations from guidelines will be fairly common and can be justified by differences in individual circumstances.”¹⁵⁰ In contrast, TOR guidelines and protocols address a single treatment decision, namely, cessation of resuscitation efforts. Further, the purpose of TOR guidelines is to clarify the specific clinical circumstances for which the evidence strongly points to dismal outcomes associated with continued resuscitation efforts and thus when cessation of resuscitation is the medically preferred decision. The presence of specific clinical circumstances as detailed in TOR guidelines means that, ordinarily, “medical judgment” will provide little added value to the decision making process. Nonetheless, a decision to withhold or terminate resuscitation remains significant: the decision

and transport and, in these situations, the recommendation also does not create an inconsistency with or constitute a diluting qualification of the other recommendations in the Guidelines.

¹⁴⁸ See *id.* at 8. The statement is similar to a statement included in the 2003 Adult TOR Guidelines. See Hopson, *supra* note 7, at 107. The statement in the 2014 Guidelines is more problematic because it includes the phrase “in individual children.”

¹⁴⁹ See, e.g., 16 DEL. CODE ANN. § 9807(a) (authorizing a paramedic to provide paramedic services “if such services are provided under the supervision of a physician, or in any context where voice contact by radio or telephone is monitored by a physician” and to provide advanced life support “where authorized to do so by a physician”). Medical control can be defined as “supervising and coordinating emergency medical services through a medical control authority, as prescribed, adopted, and enforced through . . . approved protocols, within an emergency medical services system.” See, e.g., MICH. COM. LAWS ANN. § 333.20906 (5) & (6) (also defining “medical control authority” as an “organization designated by the department . . . to provide medical control). Maine defines “online medical control” as “the online physician, physician assistant or nurse practitioner . . . authorized by a hospital to supervise and direct the actions of [EMS] persons.” See 32 MAINE REV. STAT. ANN. § 83(17-A).

¹⁵⁰ See Eddy, *supra* note 125, at 3077.

results in an act which signals death, even if the patient already is dead. In addition, children are considered more resilient than adults, and the pediatric research showed the possibility of outlier survivors.¹⁵¹ Because of the significance of the decision and challenges that may exist when the patient is a child, on-line medical control may remain important—at least in some cases. Given the context, however, inclusion of the statement does not substantially diminish the probative value of TOR Guidelines.

Overall, then, existence of and compliance with the 2014 Pediatric TOR Guidelines should serve to protect EMS providers from claims of negligence. That protection depends on implementation, of course. The Guidelines must be widely disseminated and promoted and also implemented via TOR protocols that retain their intended prescriptiveness and that are followed in the EMS community. But, if properly implemented, the Guidelines and protocols should result in weighty evidence of the appropriate standard of care.

Once it is fair to characterize the Guidelines and subsequently developed state-level protocols as weighty evidence of customary practice, they would substantially strengthen an EMS provider's defense against a claim of negligence. If EMS providers can show that they properly adhered to the Guidelines—for example, making the requisite assessments and terminating resuscitation only based on findings that, per the Guidelines, point toward cessation of resuscitation as being the medically appropriate course—they should have a strong case against allegations of negligence. The protection would not be absolute, of course, meaning that in a particular case a plaintiff might have some evidence suggesting that adherence to the Guidelines in that particular case should be considered negligent. But, realistically, once the Guidelines rise to the level of weighty evidence, EMS providers should feel confident that they could successfully defend against a claim of negligence. Existence of the Guidelines and protocols also very likely would make it much more difficult for a plaintiff to find an expert willing to testify that a resuscitation decision consistent with the Guidelines and protocols fell below the standard of care, thereby increasing the likelihood of summary resolution of a lawsuit without the need for a trial. Again, as a practical matter, both consequences make it much less likely that a trial attorney would be willing to take the case and initiate a lawsuit. The existence of the 2003 and 2014 TOR Guidelines and implementing protocols should thus significantly lessen concerns about the risk of legal liability associated with prehospital withholding or termination of resuscitation for victims of TCPA.

¹⁵¹ See Fallat, *supra* note 2, at 3 (noting that an “outlier survivor in terms of resuscitation time had a good outcome with a combined 42 minutes of out-of-hospital and ED resuscitation”).

III. IMPLEMENTATION CONSIDERATIONS

The foregoing analysis of the risk of legal liability and the impact of TOR Guidelines points to a variety of matters to keep in mind during the implementation process. The provision of emergency medical services by EMS providers is heavily regulated. There is general regulation by state agencies and often also by regional or local agencies. There also is more direct control over the day-to-day provision of services in the field by some type of medical personnel. Successful implementation of the TOR Guidelines for out-of-hospital TCPA requires attention to both aspects of the regulation of EMS providers.

A. Developing Governing Protocols

Both the 2003 and 2014 TOR Guidelines recognize the need for implementation via protocols governing the day-to-day provision of services in the field. For example, the 2014 Pediatric TOR Guidelines include the following recommendations:

- The inclusion of children in state termination-of-resuscitation protocols should be considered, including children who are victims of blunt and penetrating trauma who have or in whom there is EMS-witnessed cardiopulmonary arrest and at least 30 minutes of unsuccessful resuscitative efforts, including CPR (Level 2).¹⁵²
- Termination-of-resuscitation protocols for children based on the evidence should be developed and implemented under the guidance of the EMS system or state EMS medical director (no “evidence level” specified as this recommendation is policy guidance only).¹⁵³

In developing the governing protocols, striving for clarity and effectiveness in terms of ensuring optimal in-the-field management of patients is of primary importance, of course. But it also will be important to keep in mind the factors that would bolster their evidentiary value in litigation, namely, the source and basis of the protocols, their degree of specificity and definitiveness, and the scope of dissemination and use.

The source and basis of TOR protocols would be the 2003 and 2014 TOR Guidelines, and adhering closely to the recommendations in those Guidelines will help ensure the presence of several of the characteristics bearing on the evidentiary value of the protocols. Most significant, it is reliance on the 2003 and 2014 TOR Guidelines that allows state- or system-level protocols to be characterized as being based on sound, peer-reviewed, and up-to-date research demonstrating medical effectiveness of the recommended treatment

¹⁵² See Fallat, *supra* note 2, at 7 (Guideline #8).

¹⁵³ See *id.* at 8 (recommendation #1 for “future policy and protocol guidance”).

decisions.¹⁵⁴ Reliance on the 2003 and 2014 TOR Guidelines also allows EMS providers to point to development by high-level, reputable organizations with appropriate medical expertise.¹⁵⁵ Of course, promulgation of governing protocols also should be by agencies or organizations in the state with appropriate medical expertise; for example, state departments of health or a distinct state agency devoted to emergency medical services, which very often is headed or advised by a physician medical director with expertise in EMS.¹⁵⁶ Because *source* of the protocols matters, states that currently allow development of governing EMS protocols at the “system level”—or even at a regional level—should consider amending the EMS regulatory scheme. Protocols developed by a state-level agency likely would be considered more weighty evidence of the standard of care than those developed at the level of individual EMS systems. Additionally, because protocols that may appear outdated would be less influential in a trial, the development process should include a means to update the protocols as new research sheds light on optimal management of TCPA by EMS providers in the field.

Additional factors to keep in mind relate to degree of specificity and definitiveness and the scope of dissemination and use. Regarding specificity and definitiveness, the protocols should be

- sufficiently specific and consistent to provide a clear standard against which to measure decisions made in providing emergency medical services, as to both the appropriate treatment decisions and the clinical situations calling for the decisions; and
- sufficiently prescriptive, rather than merely providing a range of options or diluting the force of the instruction with qualifications or disclaimers.¹⁵⁷

Again, adhering closely to the 2003 and 2014 TOR Guidelines will go a long way toward achieving these characteristics, but groups developing specific state-level protocols will be faced with drafting choices and should remain aware of the importance of these factors. Though directions to act in consultation with medical control should not significantly undermine the

¹⁵⁴ See *supra* Part II(C)(2)(a) (notes 112 to 115 and accompanying text) & Part II(C)(2)(b) (notes 133 to 137 and accompanying text).

¹⁵⁵ For example, the 2014 Guidelines were formulated by researchers in collaboration with and have the endorsement of the American College of Surgeons, the American College of Emergency Physicians, the National Association of Physicians, and the American Academy of Pediatrics. See Fallat, *supra* note 2, at 1, 8–9.

¹⁵⁶ See, e.g., KY. REV. STAT. ANN. § 311A (West 2011) (establishing a state Board of Emergency Medical Services, consisting primarily of persons with expertise in the arena of emergency medical services, and authorizing the board to employ a licensed physician who is board certified in emergency medicine who will serve as the medical advisor to the board).

¹⁵⁷ See *supra* note 111 and accompanying text.

evidentiary value of the protocols, the protocols nonetheless should clearly indicate that certain clinical circumstances point to withholding or terminating resuscitation as being the medically preferred treatment decision. The Vermont Protocol discussed in Part II(C)(2) provides a useful example and good starting point for development of protocols.

Evidentiary value of the protocols also will be enhanced if the protocols are widely distributed and adopted for use. This factor also points to the importance of states striving for state-wide dissemination and use, as opposed to allowing individual EMS entities or local EMS systems to develop or decide whether to use TOR protocols for victims of TCPA. To the extent to which custom drives or is relevant to the applicable standard of care, statewide uniformity will be very important. Additionally, uniformity will be an important aspect of helping EMS providers feel more comfortable with carrying out a resuscitation decision, as well as in helping avoid misunderstandings on the part of family or observers present at the scene of EMS treatment of a victim of TCPA.

B. Important Legislative Components

Consideration of the factors that would bolster their evidentiary value in litigation has highlighted some important legislative elements that should be in place in a state to maximize the effectiveness of TOR protocols—whether for children or adults—in terms of both prompting effective incorporation of the protocols into the regular provision of services by EMS providers and helping to ensure that concerns about legal liability arising from compliance with the protocols does not undermine their use. Certain legislative elements should be considered core or essential, whereas others may be less essential.

1. Core Legislative Components

Two important legislative elements relate to the source and binding nature of the governing protocol. As explained, formulation at the state level—as opposed to a more local or system level—will lend weight to protocols and will foster consistency and uniformity. Additionally, because actual use of a protocol is important, the state-level TOR protocol should be mandatory. The primary objective should be to limit the ability of regional, local, or system-level medical directors to alter the protocol.¹⁵⁸ A key aspect of making the protocol mandatory is legislation requiring EMS providers to follow the state-level protocol.¹⁵⁹ Further, although it is appropriate to generally require

¹⁵⁸ Some states direct a state agency to formulate “model protocols” but also expressly allow the model protocols to be modified. *See, e.g.*, NEB. REV. STAT. § 38-1217 (8) (2008) (allowing modification of model protocols “by the physician medical director for use by any out-of-hospital emergency care provider or emergency medical service before or after adoption).

¹⁵⁹ *See, e.g.*, ALA. CODE § 22-18-41 (c) (Supp. 2013) (“[EMS providers] may perform services only pursuant to the protocols approved by the board”); LA. REV. STAT. § 40:1234(A)(1)(a) (West Supp. 2014) (“A

provision of emergency medical services in consultation with medical control, states can also prompt routine use of TOR protocols by authorizing EMS providers to act without medical control in certain situations—as long as they adhere to state-authorized TOR protocols.¹⁶⁰

The structure of state regulation of emergency medical services varies considerably from state to state and thus precisely how a statewide TOR protocol can be achieved will vary. An ideal regulatory scheme would simply authorize the appropriate state agency to formulate statewide binding protocols for emergency medical services.¹⁶¹ It would suffice if a state allows system-level protocols as long as they are approved by a state agency, but this approach is not optimal to the extent it consumes considerable time and effort on the part of state officials and results in delays in implementation or some variability in the protocols.¹⁶² If a state lacks a regulatory scheme that would allow agency initiation of the formulation of a statewide protocol, a legislature could focus on the TOR situation and direct the development of

licensed [EMS] practitioner may perform . . . [s]ervices, treatment, and procedures consistent with national EMS education standards that have been approved and adopted by the bureau, and to the extent that he has been trained to perform such services”); ME. REV. STAT. tit. 32, § 86(2-A) (Supp. 2013) (directing that, when EMS providers are attending persons requiring emergency medical treatment, treatment must be carried out in accordance with state-level protocols).

¹⁶⁰ See, e.g., DEL. CODE ANN. tit. 16, § 9807(b) (2003) (authorizing paramedics—in the event that direct voice communication between a physician and a paramedic fails—to perform any emergency medical service for which the paramedic is certified, “in compliance with treatment protocols set forth by the Board, . . .”); LA. REV. STAT. ANN. § 40:1234(C) (Supp. 2014) (authorizing a licensed EMS provider to render services, in accordance with a properly established protocol, when voice contact with a physician is delayed or not possible); OHIO REV. CODE ANN. (West 2013) § 4765.37 (D)(2) (providing that, if communications fail, “an EMT–basic may perform [EMS] services . . . [and that such services] shall be performed in accordance with the [state approved] protocols for the triage of adult and pediatric trauma victims . . . and any applicable protocols adopted by the [EMS] organization with which the EMT–basic is affiliated”).

¹⁶¹ See, e.g., DEL. CODE ANN. tit. 16, § 9706(g)(1)(a) (2003) (directing the Director of Public Health to establish a plan for implementation and maintenance of Delaware’s Inclusive Statewide Trauma Care System, specifically including a directive to address “[s]tandardized and statewide policies, procedure and protocols to be used by all [EMS] providers and licensed personnel for the identification, treatment and transport of trauma patients”); LA. REV. STAT. ANN. § 40:1234(F) (Supp. 2014) (authorizing the department to promulgate rules and regulations establishing “basic guidelines for statewide emergency medical service protocols”); N.H. REV. STAT. ANN. § 153-A:4(VI) (LexisNexis 2010 & Supp. 2013) (directing the state board to “[a]pprove statewide trauma policies, procedures, and protocols of the statewide trauma system and the establishment of minimum standards for system performance and patient care proposed by the commissioner . . .”).

¹⁶² See, e.g., KY. REV. STAT. ANN. § 311A.180(1) (West 2011) (requiring “[e]ach medical services medical director for an ambulance service, or other [EMS] provider, [to] submit his or her protocols, standing orders, and similar medical control documents to the board for approval prior to placing the document in use”). *But see* 14 RS BR 229 (unofficial copy as of June 25, 2014) (House Bill amending the Emergency Medical Services Act to require the board to promulgate administrative regulations to carry out its functions, including “[a]doption of the board-approved Kentucky State EMS Protocols by all emergency medical services providers”), available at <http://www.lrc.ky.gov/record/14rs/HB229.htm> (last accessed June 25, 2014).

a statewide TOR protocol, similar to how some states have mandated development of protocols for do-not-resuscitate orders or stroke assessment and treatment protocols.¹⁶³ As a practical matter, the TOR protocol should include instructions for declaration of death and for notifying, when appropriate, law enforcement agencies and the medical examiner or coroner—all of which are governed by state law.¹⁶⁴ Guidance for dealing with family members and other non-treatment-related concerns also should be included,¹⁶⁵ but these could be promulgated at a more local level to reflect available resources. The process for development of the protocol should be appropriately inclusive, perhaps including public notice which could serve as public education, but additional administrative rulemaking procedures likely would add little value.¹⁶⁶

Another important legislative element relates to the immunity provided to EMS providers. If EMS providers are required to follow a statewide TOR protocol, they should be shielded to the extent reasonable from lawsuits arising from a resuscitation decision made in compliance with that TOR protocol. As discussed in Part I, most states have in place immunity provisions for EMS providers, however, a state may want to address specifically the situation of EMS providers who act in conformity with state-level developed or approved EMS treatment protocols. Especially for a state that has not already provided immunity to EMS providers for ordinary negligence, the state could choose to do so for the particular situation of TOR protocols in the way some states address immunity for the specific situation of do-not-resuscitate orders.¹⁶⁷

A useful example of an effective legislative framework, in terms of maximizing the implementation of TOR protocols, is provided by a variety of statutory provisions found in Pennsylvania's Emergency Medical Services Act.¹⁶⁸

- The Act ensures state-level formulation of protocols, but through an inclusive process:
§ 8105 Duties of department:
“(c) EMS protocols—The [Department of Health] shall establish criteria and protocols, including bypass protocols, for evaluation, triage,

¹⁶³ See, e.g., TEX. HEALTH & SAFETY CODE ANN. § 166-101 (West 2010) (requiring the board to adopt reasonable and necessary rules relating to out-of-hospital DNR orders) & § 166.089 (directing compliance with out-of-hospital DNR orders); 35 PA. CONS. STAT. ANN. § 6944.1-6944.5 (West 2012) (the Primary Stroke Center Recognition Act, which directs the Department of Health to establish protocols related to prehospital assessment, treatment, and transport of stroke patients by licensed EMS providers).

¹⁶⁴ See Fallat, *supra* note 2, at 8 (recommendation #2 for “future policy and protocol guidance”).

¹⁶⁵ See *id.* at 8 (recommendations #3 & #4 for “future policy and protocol guidance”).

¹⁶⁶ Some states specify that treatment protocols for emergency medical services may be formulated without resort to administrative rulemaking procedures. See, e.g., 35 PA. CONS. STAT. ANN. § 8105(c) (West 2012).

¹⁶⁷ See, e.g., MD. CODE ANN., HEALTH-GEN. § 5-608(d)(1) (LexisNexis 2009 & Supp 2013) (providing qualified immunity from liability specific to the situation of an out-of-hospital DNR order).

¹⁶⁸ See 35 PA. CONS. STAT. ANN. § 8101-§ 8157 (West 2012).

treatment, transport, transfer, and referral of patients to ensure that they receive appropriate EMS . . .”

§8108 State Advisory Board:

“(a) Designation and composition—The board shall be composed of volunteer, professional and paraprofessional organizations involved in EMS . . .”

“(b) Duties—The duties of the board shall be to . . . (2) advise the department concerning . . . EMS agencies, content of regulations, standards and policies promulgated by the department under this chapter . . .”

§ 8109 Regional emergency medical services councils:

“(c) Duties—Each regional EMS council shall, if directed by the department: . . . (8) Establish, subject to department approval, regional EMS triage, treatment, and transportation protocols consistent with Statewide protocols adopted by the department.”

“(d) Regional EMS medical directors—The department shall consult with the regional EMS medical directors in developing and adopting EMS protocols . . .”

- The Act requires EMS providers to follow the state-level protocols and addresses responsibility for training EMS providers:

§ 8113 Emergency medical services providers:

“(h) Medical command orders and protocols—

(1) An EMS provider, other than a prehospital EMS physician, shall provide EMS pursuant to department-approved protocols and medical command orders.

(2) The protocols shall identify circumstances in which an EMS provider shall seek direction from a medical command physician . . . and shall address the responsibilities of an EMS provider when medical command cannot be secured or is disrupted.”

§ 8125 Medical director of emergency medical services agency:

“(b) Roles and responsibilities—An EMS agency medical director is responsible for . . . (1) Reviewing department-approved EMS protocols that are applicable to the EMS agency and ensuring that its EMS providers and other relevant personnel are familiar with the protocols applicable to them.”

- The Act provides qualified immunity from liability when EMS providers have adhered to state-level protocols:

§8151 Limitations on liability:

“(2) No EMS agency, EMS agency medical director or EMS provider who in good faith attempts to render or facilitate emergency medical care authorized by this chapter shall be liable for civil damages as a result of an act or omission, absent a showing of gross negligence or willful misconduct . . .”

“(8) No EMS providers or EMS agency may be subject to civil liability based solely on refusal to provide treatment or services requested by the patient or person responsible for making medical care decisions for the patient if the treatment or services requested are not prescribed or authorized by Statewide or regional protocols established under this chapter and the EMS provider has (i) contacted a medical command physician who refused to authorize the requested treatment or service; or (ii) made a good faith effort to contact a medical command physician and was unable to do so.”

Legislative provisions such as these, when combined with carefully developed and formulated TOR protocols, would help ensure that EMS providers in the state consistently and uniformly make optimal resuscitation treatment decisions for TCPA victims—and would also help address concern about risk of legal liability.

2. *Statutory Authorization to Declare Death in the Field*

An additional legislative component to consider is authorization for EMS providers to make a declaration of death in the field. Though this piece of the legislative framework is perhaps not as crucial as the other legislative components, it could be helpful. If EMS providers are not authorized to make a declaration of death, they can be placed in a difficult situation. The *Wicker* case discussed in Part I again provides a useful example. When the EMTs in *Wicker* arrived at the scene they assessed the victim’s vital signs and condition, determined that he was dead, and, for that reason, decided not to resume resuscitation. However, they had to summon a deputy sheriff to the scene to pronounce the victim dead.¹⁶⁹ In contrast, if an official declaration of death is made at the same time as the resuscitation decision is made, it becomes more difficult for observers to perceive the resuscitation decision as a failure to properly provide emergency medical services. Generally, states authorize declaration of death by licensed physicians or certain other health care providers, such as a physician assistant or a registered nurse who practices under the supervision of a physician.¹⁷⁰ These personnel often are accessible

¹⁶⁹ See *Wicker v. City of Ord*, 447 N.W. 2d 628, 631 (Neb. 1989).

¹⁷⁰ In authorizing a declaration of death, virtually all states follow § 1 of the Uniform Declaration of Death Act, which provides as follows: “An individual who has sustained either (1) irreversible cessation of circulatory and respiratory functions, or (2) irreversible cessation of all functions of the entire brain, including the brain stem, is dead. A determination of death must be made in accordance with accepted medical standards.” See, e.g., OKLA. STAT. ANN. tit. 63, § 3122 (West 2004). Many states do not specify, in the basic declaration of death statute, who may make the official declaration. See, e.g., *id.*; KY. REV. STAT. ANN. § 311A.185 (West 2011). However, many states do limit the authority, if not in the basic declaration of death statute, via other statutory provisions. See, e.g., ALA. CODE § 22-31-1 (LexisNexis 2006) (requiring the determination of death to be via the “opinion of a medical doctor”); DEL. CODE ANN. tit. 24, § 1760 (requiring the determination of death to be made by a “person certified to practice

to EMS providers in the field via on-line medical control, but at times medical control may not be available. In some states, TOR protocols used by EMS providers may address the declaration of death issue,¹⁷¹ but at least two states have statutory provisions specifically extending the authorization to declare death to EMS providers, and a key aspect of the authorization is compliance with existing and applicable resuscitation protocols.

In Kentucky, paramedics may make a determination of death in the field and terminate resuscitation.¹⁷² Paramedics must have completed a course of instruction on the determination of death and preservation of evidence and, upon completion of the course, may make a determination in the field.¹⁷³ The statute authorizes a declaration of death in the field if a person appears dead and, unless protocol indicates that the patient is not capable of being resuscitated, resuscitation is attempted “by the paramedic or an emergency medical technician who has responded with or after the paramedic.”¹⁷⁴ If such a patient is not successfully resuscitated according to the protocol, “the paramedic may discontinue further resuscitation efforts and proceed to determine whether the patient is dead and whether to declare the patient dead.”¹⁷⁵ In making the determination of death, the paramedic must follow the protocol specified by the board through administrative regulation.¹⁷⁶

Alaska similarly authorizes a determination of death in the field by paramedics, a registered or licensed physician assistant, or an emergency medical technician.¹⁷⁷ The Alaska statute places greater restrictions on when these non-physician personnel may make a determination of death. There must be no physician immediately available for consultation by radio or telephone communications,¹⁷⁸ and the non-physician must be a member of a

medicine”); GA. CODE ANN. § 31-10-16 (2012) (requiring the determination to be made by a qualified physician or an authorized registered professional nurse or physician assistant); HAW. REV. STAT. § 327C-1 (West 2008 & Supp. 2014) (requiring the decision to be made by a physician or osteopathic physician, a physician assistant, or a registered nurse); IOWA CODE ANN. §702.8 (West 2003 & Supp. 2014) (requiring the decision to be made by a physician, a physician assistant, or a registered or licensed practical nurse).

¹⁷¹ A survey of EMS medical directors asked: “Does your state have Protocols/Guidelines for EMS providers in place regarding Adult Declaration of Death in the Field or Do Not Attempt Resuscitation?” Of 38 responders, 29 or 76.3% responded “Yes.” Because the question asked about two distinct steps, it is difficult to know the extent to which responders have in place protocols for making a formal declaration of death in the field (survey currently unpublished) (available from author).

¹⁷² See KY. REV. STAT. ANN. § 311A.185 (West 2011).

¹⁷³ See *id.* § (1) & (3)-(4).

¹⁷⁴ *Id.* § (1).

¹⁷⁵ *Id.*

¹⁷⁶ *Id.* (also specifying compliance with KY. REV. STAT. ANN § 446.400 (West 2006) (re: death) and KY. REV. STAT. ANN § 72.020 (West 2006 & Supp. 2013) (re: notifications and protective actions)).

¹⁷⁷ See ALASKA STAT. ANN. § 18.08.089(a) (2012).

¹⁷⁸ *Id.* § 18.08.089(a)(2) (2012).

certified emergency medical service.¹⁷⁹ They must also document the clinical criteria for the determination and pronouncement, notify the appropriate medical director as soon as communication can be established, and a physician must certify the death within 24 hours after the in-the-field pronouncement.¹⁸⁰

The Alaska statute provides more detail than the Kentucky statute. The key substantive trigger in the Alaska statute is the finding of irreversible cessation of circulatory and respiratory functions.¹⁸¹ This finding must be based on “acceptable medical standards,” which the statute specifies is some detail. For purposes of the declaration of death in the field, “acceptable medical standards” means cardiac arrest accompanied by

- (A) the presence of injuries incompatible with life, including incineration, decapitation, open head injury with loss of brain matter, or detrucation;
- (B) the presence of rigor mortis;
- (C) the presence of postmortem lividity; or
- (D) failure of the patient to respond to properly administered resuscitation efforts.¹⁸²

The “failure of the patient to respond” means without restoration of spontaneous pulse or respiratory effort by the patient; and “properly administered resuscitation efforts” means

- (A) when a person authorized to perform advanced cardiac life support techniques is not available and the patient is not hypothermic, at least 30 minutes of properly performed cardiopulmonary resuscitation;
- (B) when a person authorized to perform advanced cardiac life support techniques is not available and the patient is hypothermic, at least 60 minutes of cardiopulmonary resuscitation properly performed in conjunction with rewarming techniques as described in the current State of Alaska Hypothermia and Cold Water Near-Drowning Guidelines published by the division of public health, Department of Health and Social Services; or
- (C) at least 30 minutes of cardiopulmonary resuscitation and advanced cardiac life support techniques properly performed by a person authorized to perform advanced life support services.¹⁸³

In essence, then, the Alaska statute has expressly integrated basic declaration of death criteria and key aspects of TOR protocols. The Kentucky statute

¹⁷⁹ *Id.* § 18.08.089(a) (1) (2012).

¹⁸⁰ *Id.* § 18.08.089(b) & (c) (2012).

¹⁸¹ *Id.* § 18.08.089(a) (1) & (2) (2012).

¹⁸² *Id.* § 18.08.089(d)(1) (2012).

¹⁸³ *See id.* § 18.08.089(d)(2) & (3) (2012).

does not specify the resuscitation protocol but is premised on the existence of protocols.

Statutory authority to make a declaration of death in the field could be one additional aspect of shielding EMS providers from lawsuits arising from resuscitation decisions in the field. For that reason, states should consider expressly extending authorization—to at least some EMS providers and in some situations. The authorization could be incorporated into the overall regulatory scheme governing EMS providers and tied to state-approved TOR protocols. The approach used by Kentucky would ensure that the authority remains linked to the most up-to-date version of the governing TOR protocols.

In summary, careful formulation and implementation of governing TOR protocols and attention to the overall legislative framework governing provision of emergency medical services will help ensure successful implementation of the TOR Guidelines for pediatric and adult victims of TCPA. Carefully formulated TOR protocols will clarify the appropriate treatment decisions for victims of TCPA and lead to more consistent resort to the medically preferred decision. A thoughtful legislative framework will prompt incorporation of the protocols into the regular provision of services by EMS providers across the state. Attention to both the formulation of TOR protocols and the legislative backdrop will better insulate EMS providers from lawsuits arising from prehospital resuscitation decisions.

APPENDIX A

2014 Resuscitation Guidelines & Policy Guidance for Pediatric Victims of TCPA¹⁸⁴

A. 2014 Pediatric TOR Guidelines

1. The withholding of resuscitative efforts should be considered in pediatric victims of penetrating or blunt trauma with injuries obviously incompatible with life, such as decapitation or hemicorporectomy (Level 2).
2. The withholding of resuscitative efforts should be considered in pediatric victims of penetrating victims of penetrating or blunt trauma with evidence of a significant time lapse following pulselessness, including dependent lividity, rigor mortis, and decomposition (Level 2).
3. Initiation of standard resuscitation should be considered for a cardiopulmonary arrest patients in whom the mechanism of injury does not correlate

¹⁸⁴ Fallat et al., *supra* note 2, 6 (Joint Position Statement of the American College of Surgeons, American College of Emergency Physicians, National Association of Physicians, American Academy of Pediatrics).

- with a traumatic cause of arrest unless (1) or (2) above applies (Level 2).
4. Initiation of standard resuscitation should be considered for cardiopulmonary arrest victims of lightning strike or drowning in whom there is significant hypothermia unless (1) or (2) applies (Level 2).
 5. Immediate transportation to an ED should be considered for children who exhibit witnessed signs of life before traumatic cardiopulmonary resuscitation and have CPR ongoing or initiated within 5 minutes in the field, with resuscitation maneuvers including airway management and intravenous or intraosseous line placement planned during transport (Level 2).
 6. Following blunt and penetrating trauma in victims in whom there is an unwitnessed traumatic cardiopulmonary arrest, a longer period of hypoxia may be presumed to have occurred and an acceptable duration of CPR (including bystander CPR) of less than 30 minutes may be considered with medical director input (Level 3).
 7. If there is any doubt as to the circumstances or timing of the traumatic cardiopulmonary arrest, under the current status of limiting termination of resuscitation in the field to persons older than 18 years in most states, resuscitation should be initiated and continued until arrival to the appropriate facility (Level 3).
 8. The inclusion of children in state termination of resuscitation protocols should be considered, including children who are victims of blunt and penetrating trauma who have or in whom there is EMS-witnessed cardiopulmonary arrest and at least 30 minutes of unsuccessful resuscitative efforts, including CPR (Level 2).

B. Future Policy and Protocol Guidance

1. Termination-of-resuscitation protocols for children based on the evidence should have developed and implemented under the guidance of the EMS system or state EMS medical director. Online medical control may be needed to determine the appropriateness of termination of resuscitation in individual children.
2. Policies and procedures for termination of resuscitation protocols must include notification of the appropriate law enforcement agencies and notification of the medical examiner or coroner for final disposition of the body.
3. EMS providers should receive education regarding communication with families to community and grief resources. EMS providers should have immediate access to resources for their own debriefing and counseling. Families of the deceased should have immediate access to culturally and linguistically appropriate care, counseling, and resources, including access to clergy, social workers, and other counseling personnel.

4. EMS, medical control, and ED providers should have access to resources for their own debriefing and counseling after the death of a child.
5. Adherence to policies and protocols governing termination of resuscitation should be monitored through a quality of review system.
6. A more formal study evaluating out-of-hospital traumatic cardiopulmonary arrest that includes long-term neurologic and functional outcome should be performed to clarify expectation for intact survival in children and legitimize the inclusion of children in termination-of-resuscitation protocols.
7. Research is vitally needed regarding the acceptance of termination-of-resuscitation protocols by families of children sustaining out-of-hospital traumatic cardiopulmonary arrest to determine the potential emotional effects of both termination-of-resuscitation and failure to initiate resuscitative efforts when futility of such efforts is apparent.
8. There is a need for more research/study of infants/children/adolescents from diverse racial, ethnic, cultural, and socioeconomic populations to determine whether disparities in resuscitative care or outcomes exist.
9. Engagement of, partnership with, and collaboration with local communities and advocacy groups, perhaps through a community-based participatory research concept, may prove helpful in developing protocols and providing community health education programs about this subject.

APPENDIX B

2003 Resuscitation Guidelines for Adult Victims of TCPA¹⁸⁵

1. Resuscitation efforts may be withheld in any blunt trauma patient who, based on out-of-hospital personnel's thorough primary patient assessment, is found apneic pulseless and without organized electrocardiograph (ECG) activity upon the arrival of EMS at the scene.
2. Victims of penetrating trauma found apneic and pulseless by EMS, based on their patient assessment, should be rapidly assessed for the presence of the other signs in life, such as pupillary reflexes, spontaneous movement, or organized ECG activity. If any of these signs are present, the patient should have resuscitation performed and be transported to the nearest emergency department or trauma center. If these signs of life are absent, resuscitation efforts may be withheld.
3. Resuscitation efforts should be withheld in victims of penetrating or blunt trauma with injuries obviously incompatible with life, such as decapitation or hemicorporectomy.

¹⁸⁵ Laura R. Hopson et al., *Guidelines for Withholding or Termination of Resuscitation in Prehospital Cardiac Arrest* (2003) 196(1) J. AM. COLL. SURG. 106-107 (Joint Position Statement of the National Association of EMS Physicians and the American College of Surgeons Committee on Trauma).

4. Resuscitation efforts should be withheld in victims if penetrating or blunt trauma with evidence of a significance time lapse since pulselessness, including dependent lividity, rigor mortis, and decomposition.
5. Cardiopulmonary arrest patients in whom the mechanism of injury does not correlate with clinical condition suggesting a nontraumatic cause of the arrest should have standard resuscitation initiated.
6. Termination of resuscitation efforts should be considered in trauma patients with EMS-witnessed cardiopulmonary arrest and 15 minutes of unsuccessful resuscitation and CPR.
7. Traumatic cardiopulmonary arrest patients with a transport time to an emergency department or trauma center of more than 15 minutes after the arrest is identified may be considered nonsalvageable, and termination of resuscitation should be considered.
8. Guidelines and protocols for TCPA patients who should be transported must be individualized for each EMS system. Consideration should be given to factors such as the average transport time within the system, the scope of practice of the various EMS providers within the system, and the definitive care capabilities (that is, trauma centers) within the system. Airway management and intravenous line placement should be accomplished during transport when possible.
9. Special consideration must be given to victims of drowning and lightning strike and in situations where significant hypothermia may alter the prognosis.
10. EMS providers should be thoroughly familiar with the guidelines and protocols affecting the decision to withhold or terminate resuscitative efforts.
11. All termination protocols should be developed and implemented under the guidance of the system EMS medical director. On-line medical control may be necessary to determine the appropriateness of termination of resuscitation.
12. Policies and protocols for termination of resuscitation efforts must include notification of the appropriate law enforcement agencies and notification of the medical examiner or coroner for final disposition of the body.
13. Families of the deceased should have access to resources including clergy, social workers, and other counseling personnel, as needed. EMS providers should have access to resources for debriefing and counseling as needed.
14. Adherence to policies and protocols governing termination of resuscitation should be monitored through a quality review system.

APPENDIX C

Vermont EMS Protocol 8.15 for Resuscitation Initiation & Termination¹⁸⁶

RESUSCITATION EFFORTS SHOULD BE WITHHELD UNDER THE FOLLOWING CIRCUMSTANCES:

- **Valid Do Not Resuscitate:** Refer to Do Not Resuscitate (DNR) & Clinician Order (COLST) Protocol 8.8.
- **Scene Safety:** The physical environment is not safe for providers.
- **Dead on Arrival (DOA):** A person is presumed dead on arrival when all five “Signs of Death” are present **AND** at least one associated “Factor of Death” is present.
- **Signs of Death (All five signs of death must be present)**
 - Unresponsiveness.
 - Apnea.
 - Absence of palpable pulses at carotid, radial, and femoral sites.
 - Unresponsive pupils.
 - Absence of heart sounds.
- **Factors of Death (At least one associated factor of death must be present)**
 - Damage or destruction of the body incompatible with life, such as:
 - Decapitation.
 - Decomposition.
 - Deforming brain injury.
 - Incineration or extensive full thickness burns.
 - Lividity/rigor mortis of any degree.
 - Major blunt or penetrating trauma.

RESUSCITATION MAY BE STOPPED UNDER THE FOLLOWING CIRCUMSTANCES:

- When the patient regains pulse/inspirations. **See** Post Resuscitative Care Protocol—Adult 3.5A Post Resuscitative Care Protocol—Pediatric 3.5P, Cardiac Arrest Protocol—Adult 3.2A **or** Cardiac Arrest Protocol—Pediatric 3.2P.
- The physical environment becomes unsafe for providers.
- The exhaustion of EMS providers.

¹⁸⁶The Vermont EMS protocols can be accessed at <http://healthvermont.gov/hc/ems/documents/FinalProtocolsfor2013Oct81600LOCKED.000.pdf> (last visited June 17, 2014). The protocols on the website were issued/revise Oct. 2013.

TERMINATION OF RESUSCITATION (TOR) RULE (ADULTS ONLY):

Arrest not witnessed by emergency medical services personnel.

NO return of spontaneous circulation after 20 minutes of either BLS alone or combined BLS and ALS in the absence of hypothermia.

No shock was delivered or advised by the AED.

If ALL criteria are present, contact **Medical Control** and consider termination of resuscitation. Notify law enforcement.

If ANY criteria are missing, continue resuscitation and transport.

Contact Medical Control to consider Termination of Resuscitation for any of the following:

- Arrest witnessed by EMS personnel, if patient has NO return of spontaneous circulation after 20 minutes of either BLS alone or combined BLS and ALS in the absence of hypothermia AND no shocks were delivered or advised; or
- Extrication is prolonged (>20 minutes) with no resuscitation possible during extrication (hypothermia is an exception); or
- If the patient is hypothermic and there is no return of spontaneous circulation after 30 minutes of either BLS alone or combined BLS and ALS.
- Cardiac arrests should generally be managed on scene until return of spontaneous circulation, decision to cease resuscitation, or criteria is met for transport to hospital as indicated by Termination of Resuscitation (TOR) Rule. If transport is initiated, resuscitation must be continued until arrival of the receiving hospital.
- May continue resuscitation and transport if conditions on scene are NOT amenable to cessation of resuscitation.

Paramedics:

Contact **Medical Control** to consider Termination of Resuscitation for any of the following:

- Criteria present for Termination of Resuscitation (TOR) Rule.
- Patient is in asystole for greater than 20 minutes OR unresponsive to advanced cardiac life support with a non-shockable rhythm after 20 minutes of resuscitation and ETCO₂ level \leq 10 mmHg.

DETERMINING DEATH IN THE FIELD

When efforts to resuscitate are not initiated or are terminated under the above provisions, EMS providers shall:

- Document time that death is pronounced.
- Notify law enforcement, who will alert medical examiner.
- Consider possibility of a crime scene and restrict access.
- Any decision to move the body must be made in collaboration with law enforcement and the medical examiner.
- Leave any resuscitation adjuncts such as advanced airway devices, intravenous/IO access devices, electrode pads, etc., in place.
- Inform family on scene of patient's death and offer to contact family, friends, clergy, or other support systems.

The above requirements apply to situations in which law enforcement or the medical examiner may take jurisdiction. Law enforcement and the medical examiner are not required to take jurisdiction of hospice or other patients who are known to have been terminally ill from natural causes or congenital anomaly and death was imminent and expected. Where law enforcement is not involved, EMS providers may provide appropriate assistance to families or other caregivers.

DOCUMENTATION

- Complete a patient care record (SIREN) in all cases. If available, include ECG rhythm strips and code summary with the patient care report.
- Document special orders including DNR, on-line medical control, etc.
- MCI conditions may require a triage tag in addition to an abbreviated PCR.
- Record any special circumstances or events that might impact patient care or forensic issues.

Prolonging resuscitation efforts, beyond 15–20 minutes, without a return of spontaneous circulation is usually futile, unless cardiac arrest is compounded by hypothermia or submersion in cold water.

EMS providers are not required to transport every victim of cardiac arrest to a hospital. Unless special circumstances are present, it is expected that most resuscitations will be performed on-scene until the return of spontaneous circulation or a decision to cease resuscitation efforts is made based on the criteria listed. Transportation with continuing CPR is justified if hypothermia is present or suspected. Current AHA guidelines state: “cessation of efforts in the out-of-hospital setting . . . should be standard practice.”

An ETCO₂ level of 10 mmHg or less measured 20 minutes after the initiation of advanced cardiac life support accurately predicts death in patients with cardiac arrest.