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Virtual Mentor

FROM THE EDITOR
Keeping Ethics Alive in the ED

Say "emergency room," and many Americans imagine (handsome) doctors treating gunshot wounds, doing chest compressions and fixing broken bones, or—increasingly—they associate emergency care with long waits. Ask medical providers about work in the emergency department (ED), and another set of labels may surface: triage, chaos, overcrowding, and "frequent fliers." Diverse perceptions of the ED are matched by the myriad contexts in which services are provided. The practice of emergency medicine is shaped by the needs of the community; depending on their location, patients may seek care in freestanding urgent care centers, suburban settings, county hospitals, and large academic centers. Even within the same facility, emergency practitioners make decisions in varied contexts, ranging from the sudden commotion in the trauma bay surrounding an unconscious car crash victim or the encounter during the wee hours of the morning when domestic abuse is discovered masked as unspecified abdominal pain. Patients from all ethnicities, incomes, and neighborhoods appear with any imaginable illness and have all manner of expectations. No matter the setting, on any given shift, the most emergency physicians can expect is the unexpected.

Few will deny that the clinical environment of the ED demands quick decisions based on incomplete or inaccurate information. In addition, much of the stress associated with emergency care is derived from the intense social and emotional situations that roll through the door and inevitably center on the physician. Whereas the initial paucity of information can be addressed with lab tests and imaging studies as the medical workup unfolds, information relevant to legal decisions or patients' wishes is noticeably absent in many emergent cases. In quickly unfolding situations, decision making must be almost automatic. Just as clinical scenarios are frequently practiced in the ED (think back to the mega-code training exercise for your ACLS course), developing strategies for ethics reasoning in advance of encountering tough situations is important for students and trainees. For any clinician, but emergency practitioners in particular, an important part of this skill set is recognizing patterns of dilemmas. In our medical education article, Kelly A. Edwards and I draw on our experiences teaching ethics for the intense ED environment to help trainees become as nimble in resolving human conflicts as they are skilled at evaluating a differential diagnosis for chest pain.

Situations where it is impossible for a physician to deduce what the patient would have wanted are often the easiest ethically: the most aggressive care is applied until it is clear that further intervention is futile. The conversation becomes more difficult when family insist on treatment even after futility is determined. In her case

commentary, Caroline Pace broadens our conception of futility in the emergency department, concluding that spending a few minutes more on a resuscitation for the family's benefit may not impact other patients at all. But as Douglas Bernstein reminds us in the journal discussion, there were hours of seemingly futile care provided in the wake of Hurricane Katrina that upended common standards of distributive justice.

Sometimes, emergency providers are on the other side of requests at the end of life. Refusal of life-sustaining medical care is frequent in the ED, especially as powers of attorney are made known in the midst of resuscitation. Stephanie Cooper comments on a case in which a patient with a low, but still present, chance of survival refuses lifesaving intervention, illuminating the complexities of determining decision-making capacity.

Frequently, it is not time that is limited in the ED, but resources. The most common context of resource limitation is in disaster situations. Damon Allen Darsey and Robert Galli help us understand the physician responder's mindset in the midst of a large urban health emergency. Their case commentary illustrates not only the importance of rehearsed plans, but also how dependent disaster responders are on the principles of triage. As foundation for managing disaster response, Christopher H. Lee's clinical pearl walks us through the necessity of organized triage—why in times of scarce resources, physicians may be ethically obligated to let the sickest patients go untreated to save others. Sometimes, however, physicians may question whether to respond to a disaster at all. Douglas Bernstein's review of two articles in the emergency literature highlights clinicians' internal conflict related to both individual and corporate disaster response.

Comments on disaster ethics in 2010 are not complete without reference to the enormous tumult experienced in the January earthquake in Haiti. Gregory Luke Larkin takes the concepts described in the journal articles to the next level in his op-ed, "The Ethics of Teamwork in Disaster Management." He reflects on his own experiences in the wake of the Haitian earthquake and reminds emergency providers and their professional societies of their obligations to organize cooperative, effective, and sustainable responses to health care disasters.

After considering the situation in Haiti, it is difficult to call the health care situation in the United States a disaster. Listening to the rhetoric in the lead-up to the health system reform bill this year might convince you to believe otherwise. But the early history of the emergency medicine field, as Brian J. Zink reminds us, was characterized by a culture of social justice—the willingness to see anyone, with anything and at any time—that continues to shape the American conception of medicine. No physician in the American health care system besides the ER doc is obligated by law to see any patient who walks through the door with a medical condition that could be serious. The 25-year-old Emergency Medical Treatment and Active Labor Act (EMTALA) requires just that, and is cited by some physicians and policymakers as a chief reason that medical care is so expensive. In the health law

section, Edward Monico interrogates that notion and advocates for a more nuanced view of the law.

The fact that the emergency department affords every patient the required-by-law medical screening exam—and usually a diagnosis and treatment as well—has led to nonurgent ED visits, which are blamed for cost overruns and for clogging the system with patients who cannot pay for the services provided them. John C. Moskop debunks this belief with data that suggests several other causes for crowding in the ED. Coupled with Laura Burke's review of the 2009 Massachusetts statute banning ambulance diversion, and the nearly seamless response hospitals made to prevent overcrowding, we are forced to examine other causes of crowding.

As more patients arrive in the emergency department each year, the teams of nurses, physician assistants, mental health professionals, physicians, and social workers assembled to help them have carved out an enduring niche for the ED as the American health care system's safety net. Jay Baruch reflects on the social role of the emergency room and notices that, in the process of offering reliably comprehensive services, emergency medicine has raised the traditional expectations of the health safety net. Even in the midst of the chaos of a crowded space, Baruch's ED provides comfort not only to the individual, but to a society continuing to long for health security.

The American honeymoon with the ER is over. It is expected that the challenges of time, space, and resource limitations facing emergency medicine today will only increase when more patients have health insurance. The doors are still open around the clock, and all patients are guaranteed at least a medical exam, but wait times are increasing and emergency departments more crowded. When a medical decision in the ED is accompanied by an ethical dilemma, the latter is often overlooked to the detriment of the patient's well-being. I hope this issue of *Virtual Mentor* prepares emergency providers for that next ethical dilemma. Chances are good it will occur on your next shift.

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CLINICAL CASE 1
Make It OK That This Life Is Ending
Commentary by Caroline Pace, MD

During Dr. Shen's shift at the cardiac intensive care unit in his regional hospital, airlift brought in an intubated middle-aged woman in respiratory distress from a rural hospital 150 miles away. Ms. Danforth, previously in good health, had had a massive inferior myocardial infarction earlier that day.

"She was fighting the ventilator so much that we needed to sedate her for transport," the flight nurse reported. "The patient's daughter and brother left Orchard Hospital about 15 minutes before we did. They wanted to be with Ms. Danforth at all times." The ED social worker confirmed at the time of the transfer that the patient's brother had called from his cell phone to say they were on their way but would have spotty reception for an hour or so as they crossed the mountains.

The patient arrived clammy, with cool and mottled extremities. Monitors showed hypoxia and hypotension. Her heart stopped, at which point, Dr. Shen directed CPR and placed a femoral central line to begin pressors. Over the next half hour, the patient coded several times, requiring stretches of CPR every 5 minutes.

At one point when her heartbeat had resumed, Ms. Danforth's brother called again. "My sister is a single mom and she's all that Casey has. Save her at all costs, Doc. You need to keep her alive. We're only a half hour away."

The patient slipped back into PEA arrest. After 20 minutes of sustained CPR, Dr. Shen asked if anyone else objected to calling the code—just as the social worker burst into the resuscitation bay to say that the family was 10 minutes away.

Commentary
Ms. Danforth's case highlights the difficulties in making end-of-life decisions in an ED setting. Often, patients are transferred to tertiary care centers where physicians are faced with advanced disease states and sometimes little opportunity to establish a patient-physician relationship. In this case, Dr. Shen must operate with only physiologic knowledge of Ms. Danforth's unstable condition because she is decisionally incapacitated, a situation frequently encountered in in-hospital deaths. Smedira and colleagues looked at a sample of almost 2,000 ICU patients for whom treatments were withheld or withdrawn and found that only 5 percent of patients had decisional capacity or participated in discussions about treatment [1]. Family members, if available, serve as surrogate decision makers, a role supported by longstanding social custom and, in many states, by law. Dr. Shen must make critical

decisions in this patient's best interest when all he knows about Ms. Danforth is that she is a single mother whose family wants him to save her at all costs. He must do this at the point in Ms. Danforth's resuscitation where he has decided that to continue would be futile.

Dr. Shen must weigh the benefits of continuing resuscitative efforts against those of discontinuing intervention. We are told that Ms. Danforth is a previously healthy woman who had a massive inferior wall MI, and, despite heroic interventions, her immediate prognosis is grim. We can assume that all causes for pulseless electrical activity (PEA) arrest have been investigated and appropriately managed (e.g., bedside echocardiography to rule out pericardial tamponade, roentgenogram to rule out pneumothorax, fingerstick to evaluate for hypoglycemia, pulse oximetry to ensure adequate oxygenation). Dr. Shen has looked for and intervened in all reversible causes of PEA arrest and is left with an essentially irreversible disease process. He has done everything.

Should Dr. Shen continue to perform CPR on his patient until her family arrives? The overwhelming urgency in this case is a confounding factor often encountered in the emergency department. Physicians must act in the patient's best interest with little data while continuing to care for the rest of the ED. Resuscitative efforts require a large proportion of available resources. Dr. Shen must weigh the benefits of continuing CPR or reallocating those resources to other patients in the department.

Few would argue that Ms. Danforth will survive after CPR has been performed intermittently over 30 minutes and then sustained for another 20 minutes, let alone that she will survive with any meaningful neurologic function. It has been well documented that survival to discharge of patients who experience in-hospital PEA arrest in the absence of an initial shockable rhythm (VF or pulseless VT) is 12 percent [2]. In a small case series evaluating the efficacy of repeated cycles of CPR in ICU patients, the likelihood of survival to discharge was found to be zero [3].

The emergency department setting is often the place where the need to clarify and contextualize is most important—and also the place where it is the most difficult. This case raises three important issues—what is futility, when does one make the futility assessment and how do we apply futility to particular circumstances?

The concept of futility is an ancient one. Hippocrates is credited with saying that physicians should "refuse to treat those who are overmastered by their disease, realizing that in such cases medicine is powerless" [4]. In their 1995 article "Is Futility a Futile Concept?" Baruch Brody and Amir Halevy describe four sets of circumstances in which intervention is commonly categorized as futile—(1) physiologic futility, in which an intervention is considered futile if it does not lead to its intended physiologic effect; (2) imminent demise, in which the intervention will not affect the fact that the patient will die within a short amount of time and the intervention has no effect on the underlying disease state; (3) lethal condition, which is similar to imminent demise but excludes the requirement that the treatment cannot

effect the underlying condition; and (4) qualitative futility, which essentially states that regardless of the intervention in question, there is no improvement in the quality of life [5]. This framework encompasses most cases of futility, including those not centered on end-of-life care.

A second definition of futility that bears mentioning is Eric Chwang's framing in "Futility Clarified" [6]. Chwang, unlike previous commentators, argues that futility cannot be given a general or multipurpose definition. It must be determined individually in each situation; hence, medical futility is defined as a clinical action serving no useful purpose in attaining a specified goal for a given patient. In this case, Ms. Danforth is being resuscitated—the intervention is cardiopulmonary resuscitation and the intended effect is the return of spontaneous circulation (ROSC). Despite multiple continuing interventions, the physiologic outcome remains the same—given the outcomes data associated with PEA arrest and repeated cycles of CPR, Ms. Danforth will not survive. If we apply Chwang's framework to this case, we find that to continue CPR for any amount of time would be considered futile.

However, the futility assessment is an ongoing and dynamic process based on discrete clinical outcomes. With the family about to arrive at the hospital, ED staff may reframe the goals of continuing to resuscitate this patient. The context shifts from "save this life" to "make it OK that life is ending." With this new understanding, everyone's approach to the care of this patient changes—not necessarily in physical action (chest compressions remain chest compressions), but in psychological standing; the futility assessment will change as the goal of treatment and the anticipated endpoint change. While this shift in focus may seem merely conceptual, making the death of this patient more manageable for the family is a component of resuscitation that cannot be ignored. Studies have shown that family decision making is a process that unfolds sequentially, beginning with the recognition of futility and ending with coming to terms and letting go [7, 8].

Thus, despite varying definitions of medical futility, the application of the concept tests ethical ideas of appropriate patient care. We must recognize the disproportionate amount of resources consumed by the care of this patient, and, though the aim has shifted from a futile goal (ROSC) to an achievable though not strictly medical goal, the ethical question of how much longer to actively work on this patient remains. By working on this patient, is the physician usurping resources from other patients?

The imminent arrival of the family members in this case makes answering these questions somewhat more straightforward—10 more minutes of CPR will not likely be detrimental to patient flow or resource allocation in the department and, at the end of this case, providing this opportunity for closure may make the death of this patient more manageable for the family. The futility assessment is a dynamic process that must involve both the care of this patient and the care of other patients in the department. Physicians must use their best judgment to make these difficult

decisions, utilizing the framework of fiduciary responsibility and professional knowledge coupled with the ethics of medical decision making.

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Virtual Mentor

CLINICAL CASES
Taking No for an Answer: Refusal of Life-Sustaining Treatment
Stephanie Cooper, MD, MS

Dr. Sachem, an emergency physician at a regional burns center, had kept the waiting room relatively empty for most of Memorial Day weekend, despite the recent warm weather. At 3:00 AM on Monday, a patch came over the radio. Injured firefighters from a two-alarm house fire were being brought in by ambulance. Five minutes later, the trauma bay was enveloped with the acidic smell of soot and burnt flesh.

A badly burned 41-year-old fireman named Worther complained only of leg pain. "Hey Doc! You gotta fix my leg. We were on the first story trying to get back to the master bedroom when I realized that the fire had started in the cellar. Before I knew it, I was trapped downstairs under a beam." The medic, who was at the blaze, reported that Mr. Worther was in the flames for 3 minutes before he was extracted. The first responder's look at Dr. Sachem told her that there was something else that couldn't be spoken.

The medics had removed much of Mr. Worther's scorched clothing en route; when the trauma team opened the blankets, skin peeled off with the cloth and much of his body had a white sheen to it. The fireman's right leg had a compound fracture of the femur and was scorched black. His left hand, shoulders and face were spared, but his mouth and beard were full of soot. Dr. Sachem calculated that full-thickness burns covered 85 percent of Mr. Worther's body and suspected significant smoke inhalation. She recalled a tragic case in her residency when the ICU team couldn't keep up with a badly burned patient's fluid losses and the patient died after 3 weeks on a ventilator. This was what the medic had been saying with his eyes. But recent efforts at her burn center suggested the patient might have a 10 percent chance of survival.

After she told him of the burns' extent, the firefighter asked earnestly, "Am I going to make it, Doc?" Dr. Sachem responded, "We're going to put in a central line to give you fluids and will get ready to intubate you because you'll soon have trouble breathing on your own." As she set up her equipment, the patient asked his colleagues to leave the room. He looked Dr. Sachem in the eye and clearly told her, "I've seen my share of burn deaths and I know where this is heading. Please let me die. Just give me something so I don't feel anything, but don't let me live."

Commentary

One of the greatest dilemmas for emergency physicians occurs when a patient refuses medical treatment that is necessary to sustain life and health. When patients in need explicitly refuse life-sustaining emergency treatment, the physician must choose between the undesirable options of forgoing beneficial treatment and forcing treatment on a competent but unwilling patient [1], both of which have potential ethical and legal consequences. The "emergency privilege" does not permit physicians to treat competent patients with emergency conditions who refuse treatment; but how does one assess an injured patient's decision-making capacity?

In the case presented above, Mr. Worther has sustained full-thickness burns over 85 percent of his total body surface, inhalational injury, and a fractured femur. Most physicians would argue that these injuries are not compatible with life. Yet in the emergency setting, we can certainly prolong his life, thwart imminent death, and increase the likelihood of survival by initiating immediate treatment with IV fluids and ventilatory support. This will at least allow time for full evaluation and, perhaps, a more accurate prognosis. But Mr. Worther is refusing this life-sustaining treatment. Based on these facts, we need to determine whether or not he has decision-making capacity and, if so, whether he understands the consequences of treatment refusal.

Decision-making capacity (DMC) exists along a continuum, referring to the ability of a patient to make a specific decision at a specific time; it is not a global determination. "Medical decision making capacity is present when the patient is able to understand information about the medical condition and its consequences, to reason and deliberate about the various choices, to make a choice consistent with his or her values and goals, to communicate this choice to the physician, and to maintain this choice consistently over time" [2].

The right of competent, non-terminally ill people to refuse lifesaving medical treatment was widely publicized in the case of Dax Cowart, a 25-year-old who was severely burned. Mr. Cowart, who is now a lawyer, argues that, as a person with intact decision-making capacity, he had the right to refuse treatment and die and that this right was violated [3]. Two psychologists found Cowart competent to refuse care on the grounds of his excruciating pain and his view that his future would be incompatible with his desired quality of life. His physicians, who argued that he lacked decision-making capacity and thus could not reject treatment, overrode Cowart's refusal of care. In other legal cases, lifesaving treatment against a competent patient's wishes has resulted in suits for battery, medical negligence, and lack of informed consent [2].

Determining capacity to consent to or refuse treatment is a clinical judgment based on the patient's cognitive and physical functioning and the complexity, risks, and possible repercussions of the medical treatment at hand [1]. It is an essential skill for emergency physicians, who frequently must delicately and accurately walk the tightrope between medical urgency and ethical imperative. Assessing decision-making capacity is central to providing medical care that respects patient autonomy,

since patients' consent to or refusal of medical treatment is not valid unless they are capable of making medical decisions [1].

Informed consent and informed refusal allow competent patients to choose among treatments in accordance with their values, goals, and priorities for their future. When patients refuse recommended life-sustaining medical treatment, the duty rests with the physician to discern whether the patient has the decision-making capacity to reject treatment. Refusal of care in the ED setting creates tension between beneficence and patient autonomy, with the critical determination of decision-making capacity in the balance.

There are multiple models that can be utilized to evaluate DMC. One model encourages physicians to assess the following: absence of any gross deficits in cognition, patient judgment, understanding, ability to choose between different options, ability to express a choice, and stability of the choice over time [4]. Another model, the MacArthur Competence Assessment Tool for Treatment, is a structured interview tailored to the patient's specific situation, which takes 20 minutes to administer and score [5]. Currently, there are no formal practical guidelines issued by professional societies for assessing a patient's DMC. This is most likely due to the uniqueness of each patient's scenario and the fact that DMC must be evaluated on a case-by-case basis.

In general, if a patient with decision-making capacity refuses the recommended medical treatment, his or her refusal must be honored and accepted [7]. If the patient refuses a lifesaving treatment, however, should the decision be held to a different standard?

In a "sliding scale" model of decision-making capacity, as the risks and consequences increase, patients may need to demonstrate higher levels of decisional capacity than under less critical circumstances [6]. This model is calibrated to reflect the risks associated with the patient's choice by increasing the stringency of the capacity standard required [7]. To use it, physicians must navigate between respecting patient autonomy and protecting patients from the possibly mortal consequences of a bad decision [2]. In the end, what must be proven is that a patient made an autonomous decision based on maximizing self-interest as he or she defines it, even though the choice was not the expected or physician-recommended choice for the majority of patients facing the same decision [8].

Decision-making capacity can be altered or obscured by pathophysiological conditions, such as acute physical or mental illness, traumatic brain injury, severe pain, pain medications, substance use (withdrawal or overdose), and emotional factors, including stress, denial, and suicidal ideation. Certainly, a comatose patient, a severely demented patient, or an intubated, head-injured patient lacks decisional capacity. Under the "emergency exception," immediate intervention can proceed without informed consent in order to prevent death or serious disability. The

emergency exception is based on the presumption that a reasonable person would consent to treatment to preserve life and health if he or she were able.

Conversely, the patient who is alert, communicative, and comprehends the situation has the ability to direct his or her health care. The grey areas lie in between. In actuality, decision-making capacity is more often questioned when the patient refuses recommended medical treatment [7]. While the factors mentioned above may limit the patient's decisional capacity, it is essential that the emergency physician not equate presence of an impairing condition with the lack of decision-making capacity [9]. Similarly, disagreement with the physician's recommendation is not grounds for determining that the patient lacks decision-making capacity.

In the emergency setting, there are limitations on determining DMC. When faced with medical emergencies requiring urgent action and decision making, the emergency practitioner does not have the luxury of time to consult psychiatric professionals, an ethics committee, or hospital legal counsel. Truly emergent situations are by definition time-limited, and the practitioner must assess DMC as best as he or she can. The culture of emergency medicine is to preserve life at all costs. In the immediacy of illness and injury, survivability and outcome cannot be predicted. Consequently, emergency physicians typically "err on the side of life" [10].

But how does the medical response change if treatment of the life-threatening illness might be futile? As a firefighter who has witnessed other burn victims' injuries and deaths, Mr. Worther may understand better than most the significance of his injuries. Currently he is coherent and able to state the reasons for his refusal of care. There is no evidence that his sensorium is clouded by pain medications, pain (because the burns are full-thickness, Mr. Worther is insensate), or other pathophysiologic process. Additionally, he has dismissed his coworkers from the room, so it does not appear that he is under any emotional or psychological duress. In other words, Mr. Worther appears to be a competent patient acting volitionally, expressing a choice that is consistent with his values and wishes. Should Dr. Sachem honor Mr. Worther's right to refuse treatment?

Honoring the severely burned firefighter's request to withhold treatment allows him to die from his underlying disease and injury. From a clinical perspective, one could argue that providing medical treatment in this case simply prolongs death rather than preserves life. Mr. Worther is seeking pain medication only, not prescription of a lethal medication. By honoring his request to withhold life-sustaining treatment, we are honoring the autonomy of a patient with decisional capacity who understands the risks of treatment refusal. Providing some patients a dignified death may be just as critical as saving the lives of others [11].

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Further Reading

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Virtual Mentor

CLINICAL CASES
Resource Allocation Shake-Up
Commentary by Damon Allen Darsey, MD, and Robert Galli, MD

Dr. Newell's first thought was that a delivery truck had slammed into the hospital. The subsequent rolling and shaking clued her into her own need to secure shelter in a doorway to ride out what ended up being a magnitude 7.8 earthquake. The hospital's generators quickly kicked in, and the lights came on to reveal a physical plant largely intact. The eerie radio silence terminated with widespread reports of collapsed buildings and associated prospects of mass casualty. Before anyone could do anything about it, patients with lacerations and broken bones began streaming into Dr. Newell's urban ED.

Thirty minutes later, EMS started delivering more critically ill patients. As the trauma team placed chest tubes for crush injuries and Dr. Newell was deciding which patients needed to be sent to the CT scanner, she and two fellow ED docs were joined by other hospital staff to help determine which patients would get immediate attention and which would have to wait.

When a group of paramedics who had been trapped in rubble arrived with sprains and lacerations, they were triaged to the ambulance bay outside, away from the treatment area and supplies.

Soon, the entire first floor of the hospital had stretchers full of patients. The critical care areas were full, but crush injuries continued to show up. A technician in the ED expressed his frustration that the newest patients were sicker than the initial walking wounded, but that treatment of the first comers was still in progress. Meanwhile, Dr Newell saw the medics waiting in the ambulance bay and asked, "Why can't they get cleaned up and be put to work here?"

Commentary
Dr. Newell has an evolving and catastrophic situation on her hands. Limited resources, overwhelming patient population, damage to critical infrastructure, and impending extended rescue and medical operations have the makings for the perfect storm of disaster medical care. Furthermore, the clinical decisions she makes will be accompanied by difficult ethical dilemmas needing resolution in minutes. Is her primary role that of doctor, incident commander, triage officer, or a combination of all three? At what point will help arrive? When will the massive federal assistance show up? When should disaster or battlefield medicine replace traditional medicine? What ethical and moral constraints are associated with disaster triage? Will staff be able to pass over some patients because of the mortal nature of their injuries?

These ethical dilemmas are not often faced in daily medical operations. Placing tags on people who are living but will be passed over for care due to a triage decision designed to provide the most good for the most people flies in the face of traditional medical ethics principles of respect for patient autonomy and putting patients' interest first [1]. Triage officers violate both principles in managing scarce resources and overwhelming patient populations during disasters.

Joined in the ED by other physicians, Dr. Newell is faced with delegating tasks and roles to them that they may not be comfortable performing. It may be the case that a paramedic with military or disaster field training would be the best triage officer. It is possible that a retired fire department district chief working now, let's say, as a hospital electrician could better orchestrate the disaster response, freeing her to attend to acute medical problems. Such information should be part of the emergency staffing section of the institution's disaster plan. Recalling the advantages of performing prehospital triage outside of the hospital, Dr. Newell can recruit the paramedics with minor injuries who were out in the ambulance bay to sort and treat patients, including directing the walking wounded to an alternative safe location away from the concentrated lifesaving resources in the hospital. The stock cart from the wound care center can be moved to this area and the paramedics can encourage patients to help each other.

It is not long before the traditional emergency department triage system is discarded in favor of a simple, rapid system of classifying patients into four categories that identify what treatment they will receive. The four categories are: red triage tag, for immediate acute or lifesaving care; yellow triage tag for urgent care; green triage tag for nonurgent care of minor injuries; and black triage tag for no care—the patient is either already dead or cannot be saved with the limited resources available.

The most difficult decision for the triage officer is labeling as "black" or "expectant" patients who are still breathing but have injuries incompatible with life, given the available resources. On any other day, such a patient might have dozens of people dedicated to providing state-of-the-art care for very low chance of survival. But today, the personnel, diagnostics, blood, and equipment are already in use or are needed for patients with better prognoses. The importance of understanding and practicing disaster triage—often—cannot be overstated; once mastered, the decision making is logical and consistent, but it demands setting aside one's personal feelings, relationships, and opinions about the "survivability" of certain patients.

The hospital's public affairs division has been notified of the disaster, according to the reporting system established prior to the annual hospital drills. The roles of operations chief, logistic officer, and liaison officer are assigned to the clinical staff and a few nonclinical staff who are assisting in patient care. But few of the administrators, clinical directors, and other hospital personnel who are always around during the annual drills can be found. Reports are coming in of massive infrastructure destruction and overwhelming building damage. Dr. Newell and her

staff realize that additional help is hours away. Some staff trickle in to assume their normal roles.

Searching through operations and procedures manuals for the policies that apply takes time that no one has. Why isn't there a simple plan, a checklist in which every key task is outlined? The four-inch-thick disaster plan should be shortened to a few pages of checklists. Dr. Newell swears she will see that this is done as soon as this particular disaster comes to an end.

Dr. Newell stands on the back of an ambulance using the public address system and announces that the hospital is overwhelmed and that she needs everyone to help. She provides basic first aid tips and asks that triage paramedics be notified of any patient who is unresponsive or has uncontrolled bleeding. But how does Dr. Newell give decision-making roles to those who have never been in management positions? What are the ethical implications of nurses temporarily operating outside of their scope of practice? There are state-specific provisions about the protection of medical professionals working in emergencies that Dr. Newell wishes she remembered. The off-duty charge nurse arrives and continues the grim report of what is happening just outside the emergency department doors.

The operations chief, a lab tech only hours before, has now made it to the "discharge as many inpatients as possible" section of the operations manual. After identifying about 10 patients that do not need ED care, she realizes that there is no place to send them. The emergency department flow is gridlocked. There are no beds upstairs, no beds in the ED. The next section refers to a number of proposed "alternative care locations" which, when the operations manual was drafted, were available for use. But those spaces are now filled with office cubicles. Her attempts to find a place to put the walking wounded and those with injuries that need pain control and stabilization for future operations lead to the auxiliary dining room and classrooms, where casts are applied, minor injuries seen to, and discharges handled. Staffed with a nurse and technician each, these rooms fill quickly.

The in-house mechanic become the liaison officer, a job, it turns out, that is the most critical and the one that proves to be the lifeline for Dr. Newell and her staff. After he reads the first few pages of the disaster manual, it is clear that his role is to determine what services and supplies the hospital has and what they need to sustain operations. How many patients? How much food? Is the water safe to drink? The liaison officer needs to ask for everything, and, using his cell phone, begins to call the numbers that are in the disaster plan. Most of the lines are busy and others are unanswered. When someone answers, he must be prepared to relay information and ask for what he needs before the cell service drops his call. After many failed or busy numbers, he gets through to the county's emergency operations center. He rolls off the current capacity, the status of utilities, the overwhelming patient population, the need for mass evacuation of hundreds of patients and the concern of the structural stability of some of the hospital buildings. Due to his preparation, he is able to relay the information in less than 2 minutes.

By 7-1/2 hours after the quake, three times the normal number of patients have been seen in the emergency department. The emergency operations center has recognized that Dr. Newell's institution was the hardest hit and most greatly affected of all the metro hospitals. As they prepare to send additional staff, her own hospital personnel have finally been able to negotiate the damaged roads and make it to work. She now has reinforcements in triage, emergency, and inpatient areas, and the hospital's official disaster coordination team is assessing the current situation. After one of her most hectic 19-hour shifts, Dr. Newell can finally stand down.

Most disaster planning centers on a typical external scenario—two school buses collide, a plane crashes. An earthquake is both an external and internal disaster; the hospital is inundated with patients, while its own physical plant is possibly broken and overwhelmed with insufficient staff. All hospital administration, chiefs, and heads should rethink their institutions' disaster plans if they are in an earthquake or hurricane zone. If you consider the consequences, being unprepared is unprofessional and unethical.

Dr. Newell and her staff faced many of the ethical questions and issues in the course of a 20-hour day, but the consequences of her decisions are far from over. The decisions that are made in seconds resonate throughout the bioethics and medical communities. How does one person have the power to make decisions about the life of patients and utilization of resources? Those that are tagged with a "red" tag get treatment and those with "black" get nothing, or at the best supportive care as they are dying. How does Dr. Newell care for staff who, themselves, may be traumatized by the decisions they recently made? What happens when families of those who died—and the media—begin to challenge the teams' decisions. This disaster is far from over.

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Virtual Mentor

MEDICAL EDUCATION
Preparing for the Unexpected: Teaching ER Ethics
Kelly A. Edwards, PhD, and Thomas Robey, MD, PhD

It should go without saying that the fast-paced environment of the emergency department (ED) requires a different kind of deliberative approach to ethical dilemmas. As the cases in this issue of *Virtual Mentor* demonstrate, clinicians in the ED are presented with dire situations and little information, yet need to act quickly. This is truly a catch-22. Precisely when you need the time to call a team or family meeting or gather more data, as you would on the medicine floor, you do not have that luxury. So what can an ethical ED clinician do? In this report from two ethics educators, we offer three possibilities for emergency medicine training clinicians to build ethics reasoning skills suited for the ED.

Strategy 1: Anticipating and Practicing

This first strategy underlies most undergraduate ethics education. That is, if you can present medical students with case scenarios they are likely to encounter in their clinical rotations, they can (a) begin to recognize and anticipate the kinds of issues that will come up, (b) learn relevant rules, laws, policies, expert opinions, and guidelines that have professional consensus about the kinds of cases they will see, (c) learn from their classmates and role models, and (d) begin to test and practice their own responses. By thinking cases through in advance of being confronted with the actual situation, trainees have the time to work through difficult scenarios that are likely to be quite new, and sometimes disturbing, to most students. The rationale behind this strategy is that "chance favors the prepared mind." If the student has wrestled with a case or has heard how various people would respond to a specific situation, he or she can more quickly act in the moment.

Opportunities for slotting case discussions into the curriculum are almost unlimited. They can be included in noon conferences, journal clubs, required ethics courses, or in electives aimed at those going into emergency medicine. Having facilitators on hand who have both ethics and clinical expertise can be especially useful for grounding the cases.

Strategy 2: Using Ethical Frameworks for the ED Setting

As common as the above rationale is for most ethics education, and as essential a first step as it is in the professional development of a trainee, it is not sufficient. Students who have not yet been in the clinic may consider the scenarios abstractions, and the real crux of the case will not be clear until they are in the moment and have more clinical experience to bring to bear. An alternative or additional strategy is to have a quick-and-dirty decision making tool to help the trainee in the moment.

Most ethical decision-making frameworks and tools are intended for longer clinical ethics consultation settings [1]. These are excellent, but, unless the user is familiar with the frameworks, they can bog down the process rather than facilitate it. Emergency medicine professor Kenneth Iserson has proposed a decision-making tool that can be used in the chaos of the ED. He has written about this extensively elsewhere [2], so we will just summarize his basic approach here. In brief, when confronted with a dilemma the clinician should employ the following decision tree:

1. If there is a rule (law, policy, precedent) that is close enough to apply to the dilemma at hand, follow it.
2. If no rule clearly applies, is there an option that can buy time and does not pose additional risk to the patient? If so, take it and use that time (as much as you have) to pursue other data gathering or consultation.
3. If action cannot be delayed, use a practiced reasoning technique to arrive at an outcome [2].

Iserson suggests further that asking three questions as part of step 3 can help you decide what to do next. These are: a golden rule test (What would you want if you were the patient?), a universality test (Would your decision work in every other instance?) and a liability test (Could you justify your actions to others?). These questions can be helpful as trainees work to gain additional experience with clinical and ethical situations that help them effectively work through the primary steps of Iserson's process.

Strategy 3: Building Scaffolding for ED Ethical Decision Making
Dr. Iserson's model is most useful for experienced clinicians who can very quickly comprehend a situation, appraise available options, and make an assessment about best course of action. Many trainees will default to the decision-making step if they are not familiar with case precedent or medical techniques that buy time. A simple framework we have used in some of our ethics teaching asks the trainee or clinician to respond (quickly) to a series of questions. At the University of Washington, we have loosely adapted moral psychologist James Rest's four dimensions of moral life [3], and created the Four Skills of Ethics, which we use in our Ethics and Professionalism Benchmarks and as a guide in curriculum planning and teaching. These questions can be taught in conjunction with Iserson's, and can stand alone once they have been internalized.

1. *Recognition: What is the ethics issue in this case?* Before you can figure out whether there is a relevant rule (Step 1 in Iserson above) you have to recognize what kind of case this is, e.g., treatment refusal, withholding life-sustaining treatment, questionable decisional capacity, inappropriate surrogate, triage, etc.
2. *Reasoning: What options are there, and what are the potential harms and benefits of each? What is at stake in this decision?* This stage can be expanded or contracted depending on time, but would supplement Iserson's steps 2 and 3 above.

3. *Responsibility: What are my professional obligations?* This question can get at professional guidelines and standards, as well as eliciting more interpretive questions such as: *What kind of clinician do I want to be?* Responses could include reference to some of the professional virtues identified by leaders in the field [4].
4. *Respond: What will I do, and why?* Justifying one's course of action should be a combination of considering the rules, consequences of actions, professional standards, and one's own professional moral compass.

The goal for future emergency physicians is to charge through these questions quickly when in the throes of decision making. The ED environment by its nature imposes limits on time and information; whether it be a clinical or ethical dilemma, the clinician must make a decision, and quickly. In the case of most ethical dilemmas, reasonable people will disagree about the best course of action. In the end, emergency practitioners must become competent in quickly recognizing and justifying choices amidst competing values. Clinicians who have anticipated the issues, used a coherent approach to decision making, then documented the justification, will be able to defend their positions well against anyone who may challenge it.

Conclusion
The added challenges of working in the emergency department reinforce the need for an accessible and easy-to-remember approach to ethical decision making. We have offered three strategies here which can be used separately, together, or in combinations, as is useful to the trainee, teacher, or clinician. The goal of ethics education is to prepare trainees to be efficient and ethical decision makers and to provide the right kind of scaffolding to help facilitate decision making that will lead to better outcomes for patients, family, and care team members.

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THE CODE SAYS
AMA *Code of Medical Ethics*' Opinion on Physician Duty to Treat

Opinion 9.067 - Physician Obligation in Disaster Preparedness and Response

National, regional, and local responses to epidemics, terrorist attacks, and other disasters require extensive involvement of physicians. Because of their commitment to care for the sick and injured, individual physicians have an obligation to provide urgent medical care during disasters. This ethical obligation holds even in the face of greater than usual risks to their own safety, health or life. The physician workforce, however, is not an unlimited resource; therefore, when participating in disaster responses, physicians should balance immediate benefits to individual patients with ability to care for patients in the future.

In preparing for epidemics, terrorist attacks, and other disasters, physicians as a profession must provide medical expertise and work with others to develop public health policies that are designed to improve the effectiveness and availability of medical care during such events. These policies must be based on sound science and respect for patients. Physicians also must advocate for and, when appropriate, participate in the conduct of ethically sound biomedical research to inform these policy decisions. Moreover, individual physicians should take appropriate advance measures to ensure their ability to provide medical services at the time of disasters, including the acquisition and maintenance of relevant knowledge.

Based on the report Physician Obligation in Disaster Preparedness and Response, adopted June 2004.

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Virtual Mentor

JOURNAL DISCUSSION
Rethinking the Physician's Duty in Disaster Care
Douglas Bernstein, MD

Iserson KV, Heine CE, Larkin GL, Moskop JC, Baruch J, Aswegan AL. Fight or flight: the ethics of emergency physician disaster response. *Ann Emerg Med*. **2008;51(4):345-353.**

Moskop JC, Iserson KV. Triage in medicine, part II: underlying values and principles. *Ann Emerg Med*. **2007;49(3):282-287.**

Government plans for natural and man-made disasters generally presume the full-fledged participation of the medical community, but that presumption may not be reasonable or reflect the real-life decisions and actions of emergency personnel in a crisis [1]. Two notable articles by Iserson, Moskop, and colleagues present commonly used ethical principles and give specific examples to lead readers to reflect on their own values regarding the balance of personal safety and the duty to care for patients.

"Fight or Flight: The Ethics of Emergency Physician Disaster Response," by Iserson et al., examines both the theoretical and the practical behaviors of medical staff during epidemics and natural and man-made disasters. The piece considers two related questions: *should* health care professionals stay during a disaster, and *are they likely to*? The authors consider recent events in the context of fundamental ethical principles and advocate that medical personnel familiarize themselves with these principles *before* they are called upon to respond to a disaster.

The article begins with a historical perspective, suggesting that although individual doctors can be fickle in the face of danger, physicians in general tend to stay and treat patients despite personal risks. The reasons for this selfless behavior are many; the authors specifically mention "the great needs of patients, the special expertise of health care professionals, the professional duty of beneficence, the special societal support given to health care professionals, and the duty to accept a fair share of workplace risks" [2].

They give two main reasons why health care workers might not report for duty: the understandable conflict of interest between treating patients and caring for one's family, and the right to protect oneself from grave risks. If a virulent epidemic were both highly lethal and easily transmissible, for instance, might the situation justify fleeing? For health workers to find a reasonable balance between risk and duty requires effective communication about the nature of the crisis, and the authors move

beyond hypothetical premises by suggesting specific communication strategies to minimize panic and to encourage worker participation during the initial fear and confusion. In the end, of course, the decision to stay and work is deeply personal, and the authors concede that "there appears to be no uncontroversial way to establish a threshold at which risk acceptance becomes a duty" [2].

The paper neglects some justifiable reasons that health workers may avoid disaster duty. The utilitarian appeal for doctors to do the "greatest good" should be considered. An emergency physician can be expected to treat far fewer patients during the crisis (even assuming herculean efforts for a weeklong disaster) than in a normal working year, let alone an entire career. If a physician is disabled or killed in the line of duty, the loss to society—measured in terms of total patients treated—may not be justified.

There is a more fundamental question here, one that is glossed over by the assumption that the doctor's goal will be to maximize his or her contribution, that needs asking: are doctors necessarily obligated to contribute at all? The assertion that "physicians may fear the shame or social ostracism that results from abandoning patients" [2] implies that a patient-doctor relationship has been established. This implication is subtle but important: are all *people* in a disaster situation automatically *patients*? The answer by necessity is no; a pre-emptive establishment of duty on behalf of a group of people cannot simply be imposed or assumed, and the duty to care must be recognized voluntarily by the physician.

Certain emergency situations preclude the physician's free choice [3]. As a hypothetical example, a lone physician on a remote island is ethically obligated to care for a patient with a true medical emergency. The obligation in this example is derived from four factors, which include the patient's *degree of need*, the physician's *proximity* to the patient, the physician's *capabilities*, and the *absence of other sources of aid* [4]. An 80-year-old retired dermatologist is not as obligated to respond to a crisis as a 35-year-old emergency medicine specialist. Similarly, a doctor in Manhattan does not have the same ethical obligation to respond to an earthquake in Haiti as to one in Brooklyn. The paper by Iserson et al. fails to explicitly identify any of these factors, which may leave readers confused about where duty begins and ends. The authors also neglect to make the distinction between current and future patients; certainly, a physician is not equally obligated to respond to a situation in which a patient is *likely* to appear as in a situation in which a patient has *already* appeared [5].

Concerns about duty are not merely theoretical. The establishment of duty features prominently in medical malpractice law. The authors assert that fear of legal repercussions are "unfounded or highly exaggerated" and that "health care professionals who are asked to assume new tasks during a disaster will not be required to demonstrate the same level of expertise as would be expected in normal circumstances" [6]. The medical and legal literature on this issue, however, do not necessarily support this conclusion. An article in *Public Health Reports* finds that in

"extraordinary circumstances, the provider is exposed to greater liability simply because his or her care may have to be greater as the situation demands. Understandably, before undertaking to aid a victim during a public emergency, the responder may want greater assurance of liability protection" [7]. These authors conclude that only one-third of U.S. states have enacted prospective immunity protections for emergency workers, and even those are based on Good Samaritan statutes that likely would not apply to paid physicians working in a hospital setting [7-9].

A telling example of a responder incurring liability during a disaster is the case of Dr. Anna Pou, a surgeon who stayed to treat patients during Hurricane Katrina. Unable to evacuate a group of patients too sick or large to move, Pou injected some of them with a potentially lethal combination of sedatives and painkillers, and they died. She was later charged with four counts of second-degree murder, and, though a grand jury did not indict her, Dr. Pou is still battling multiple wrongful death civil suits for her actions [10]. Although legal concerns in emergency situation may be exaggerated, having reached the point at which a doctor responding during an epic natural disaster can be tried for *murder*, such concerns are certainly reasonable and should be considered an element of the "risk equation" for emergency responders.

Another case from Hurricane Katrina highlights the complex moral considerations of patient care during disasters. Althea LaCoste was a 73-year-old woman dependent on a mechanical ventilator at the time of the hurricane. When the hospital's back-up electricity failed, nurses manually ventilated her for 15 hours, in sweltering darkness, before she succumbed to her multiple illnesses. Her family subsequently sued the hospital for negligence. Though the hospital's lawyer argued that in the LaCoste family's "moment of most desperate need, we did not turn our backs on them when the hurricane had them and us in its sights," the case was settled for an undisclosed sum of money [11, 12].

While this case raises the question of how much care for the individual patient is *enough* (to avoid liability or to fulfill one's putative duty), it also informs the opposite—public health—perspective: should Ms. LaCoste have received *less* care? During those initial 15 hours, how else could that precious resource—nursing expertise—have been utilized? What if the nurses' attention to other more salvageable patients had saved a life? What about ten other lives? And more fundamentally, what is the moral significance of even asking such questions?

Such thorny issues are the topic of another article by Dr. Iserson and John Moskop, titled "Triage in Medicine, Part II: Underlying Values and Principles" [13]. The authors analyze various justifications for triage systems through the lens of distributive justice, a philosophical concept that addresses the fair allocation of benefits and burdens within society. Various ethical principles are examined, each of which validates triage systems from a different perspective. The issues that arise about the moral consequence of triage are powerful, even disturbing. Readers may begin to question how the Hippocratic Oath changes in the setting of scarce

resources, and how health workers can honor and respect patients while withholding treatment from them.

Utility is one of the fundamental principles of distributive justice. Often summarized as the "greatest good for the most people," it emphasizes the *net* effect on a population. According to this principle, it is acceptable that medical resources be deliberately withheld from some patients (risking a bad outcome for these individuals) if the overall net benefit to society (the number of other lives that can be saved with those resources) is greater. This principle is central to many disaster triage plans. Because utilitarianism directs that the outcomes for future patients be considered, an interesting (and controversial) consequence of this principle is the idea that, during a disaster response, emergency health workers and government officials may receive priority treatment, since they theoretically act as "multipliers" of societal benefit during and after the crisis [14].

In direct contrast, the principle of *equal chances* begins with the belief that every human life is equally valuable. The logical triage system that arises from this principle is first-come, first-serve, and does not assign priority to patients based on severity of injury, likelihood of survival, projected resource use, or the patient's possible future value and utility. A triage system based on the principle of equal chances is more "fair" to any given individual, but such a system can be expected to save fewer overall numbers of patients, and is not commonly found in modern disaster triage plans such as the widely-known Simple Triage And Rapid Treatment (START) protocol [15]. Finally, the article calls upon implicit and explicit social values to identify a variety of traits that define an effective triage officer, including decisiveness, knowledge about anticipated casualties, and creative problem-solving ability [16].

Of course, such traits are meaningless if health workers, who will be among those at highest risk during a mass disaster, do not show up to treat the wounded. Reading these two articles in tandem can empower emergency personnel with the ethical and social insights to make an informed assessment of their personal values. Because choosing to respond is deeply personal, and influenced by internal and external factors, such insights will be invaluable when future events force the decision: will I flee, or will I fight?

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Virtual Mentor

CLINICAL PEARL
Disaster and Mass Casualty Triage
Christopher H. Lee, MD

The World Health Organization defines an event as a disaster when "normal conditions of existence are disrupted and the level of suffering exceeds the capacity of the hazard-affected community to respond to it." In any given year, more than 100,000 people are killed in natural disasters around the globe, and millions more are injured or disabled [1]. The catastrophic earthquake that struck Haiti in 2010 and the destructive tsunami in the Indian Ocean in 2004 are recent examples that show the difficulties in providing medical care in the wake of such devastation.

While a disaster by definition overwhelms response capabilities, a mass casualty incident (MCI) occurs more commonly and is defined as a situation that places a significant demand on medical resources and personnel [2]. Local response capabilities are not overwhelmed, but there are still a large number of patients requiring triage. A commonly occurring example of an MCI in the United States is a multiple vehicle or bus collision.

Regardless of whether a situation is classified as a medical disaster or MCI, it requires rapid and effective triage methods. In order to optimize overall patient outcomes in a catastrophic situation, there is a shift from doing what is best for the individual patient to doing the greatest good for the largest number of people [3, 4]. A system of triage must be utilized to determine who will receive treatment and who will not, and the ethical considerations of allocating limited medical resources warrant in-depth discussion.

There is some overlap in the basic principles of the roughly dozen or so mass casualty and disaster triage systems currently in use around the world, but data regarding their true efficacies is limited in the literature [5]. Since it is inherently difficult to investigate and compare disaster protocols by using an evidence-based approach, there is no definitive data on which disaster triage technique would save the largest number of victims. Currently, two of the most commonly accepted triage protocols are START (Simple Triage and Rapid Treatment) and SALT (Sort-Assess-Lifesaving Interventions-Treatment/Transport).

Origins of Triage
Although used today in reference to the "sorting" of patients, the French origin for the term "triage" initially referred to the sorting of agricultural products [6]. Current triage strategies arose from advances in military medicine in times of war, and the French military surgeon Baron Dominique-Jean Larrey is generally credited with

developing the first battlefield triage system [7]. In his 1812 memoirs, Larrey explained his then-novel method of immediately treating the most severely wounded first without waiting for the battle to end, as was previously customary.

Differing triage principles emerged in subsequent decades, and in 1846, British surgeon John Wilson proposed that treatment be deferred for both those with minor wounds and those with severe injury, instead offering therapy first to those patients who were most likely to benefit from immediate treatment [8]. During World War I, the United States adopted a triage approach that maximized the number of soldiers who could return to service. Those who could return to combat quickly were treated first in order to maintain the numbers of the fighting force [9]. During the Korean and Vietnam Wars, and most recently in conflicts in the Middle East, the ability to rapidly transport wounded soldiers by ground and air to well-equipped medical facilities changed the strategy of modern battlefield triage from on-scene treatment to rapid evacuation [10, 11].

While military medicine furthered our understanding of combat triage, recent catastrophic global disasters have exposed deficiencies in civilian emergency preparedness. The frequent drill training in the military allows an operational expertise with disaster triage that is not present in civilian society. It is also practically impossible to conduct the randomized clinical trials in disaster medicine that other specialties rely on. We attempt to learn and amend our protocols based on past performances, simulation training, virtual reality, and multi-disciplinary mock disaster drills. Due to this relative lack of evidence in the disaster literature, the optimal application of military-derived triage protocols to civilian populations remains unproven.

Triage Levels and Color Coding
A color-coded tagging method to categorize disaster victims in the field has been almost universally adopted and incorporated into existing triage systems [12].
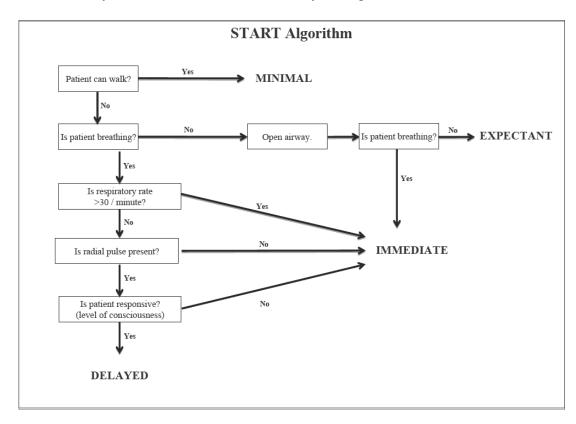1. Red Triage Tag ("Immediate" or T1 or Priority 1): Patients whose lives are in immediate danger and who require immediate treatment;
2. Yellow Triage Tag ("Delayed" or T2 or Priority 2): Patients whose lives are not in immediate danger and who will require urgent, not immediate, medical care;
3. Green Triage Tag ("Minimal" or T3 or Priority 3): Patients with minor injuries who will eventually require treatment;
4. Black Triage Tag ("Expectant" or No Priority): Patients who are either dead or who have such extensive injuries that they can not be saved with the limited resources available.

The "expectant" category can be the most challenging for caregivers from an ethical and emotional standpoint. While it is logical to help the greatest number of victims in a disaster, it is difficult to walk away from a person who is on the verge of succumbing to severe injuries. As the World Medical Association reminds us, "It is unethical for a physician to persist, at all costs, at maintaining the life of a patient

beyond hope, thereby wasting to no avail scarce resources needed elsewhere" [13]. It is also important to note that patients need to be reassessed repeatedly, and initial color-coded triage designations can change over time.
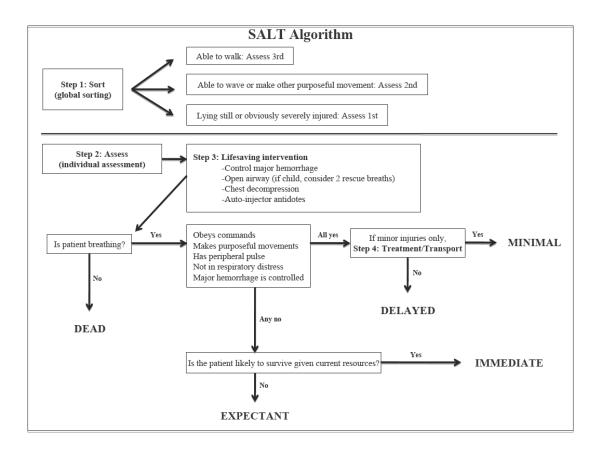
START (Simple Triage and Rapid Transport)
START was developed in the 1980s in Orange County, California as one of the first civilian triage systems and was subsequently adopted as the de facto disaster triage standard by the Domestic Preparedness Program of the Department of Defense [14]. However, little data regarding its efficacy existed in the literature prior to its adoption, and today there is some evidence that START can lead to the overtriage of patients (for example, tagging a patient as "immediate" who in reality should be labeled "delayed") in a real-time mass casualty setting [14].

START Algorithm

SALT (Sort-Assess-Lifesaving Interventions-Treatment/Transport)
More recently, in response to the lack of scientific data regarding the efficacy of mass casualty triage systems, the Centers for Disease Control and Prevention (CDC) formed an advisory committee to analyze the existing systems and recommend a national standard for disaster triage [5, 15]. Because the literature did not conclusively identify any existing triage system as optimal, the expert panel developed SALT by combining the best features of the existing systems [16]. SALT is endorsed by several national organizations, including the American College of Emergency Physicians, the American College of Surgeons Committee on Trauma, the American Trauma Society, and the National Association of EMS Physicians [17].

SALT Algorithm

Step 1: Sort (global sorting)
- Able to walk: Assess 3rd
- Able to wave or make other purposeful movement: Assess 2nd
- Lying still or obviously severely injured: Assess 1st

Step 2: Assess (individual assessment) →

Step 3: Lifesaving intervention
- Control major hemorrhage
- Open airway (if child, consider 2 rescue breaths)
- Chest decompression
- Auto-injector antidotes

Is patient breathing? — Yes → Obeys commands / Makes purposeful movements / Has peripheral pulse / Not in respiratory distress / Major hemorrhage is controlled — All yes → If minor injuries only, **Step 4: Treatment/Transport** — Yes → **MINIMAL**

Is patient breathing? — No → **DEAD**

Step 4 — No → **DELAYED**

Obeys commands... — Any no → Is the patient likely to survive given current resources? — Yes → **IMMEDIATE**

Is the patient likely to survive given current resources? — No → **EXPECTANT**

Conclusion

Further research is needed to establish the optimal protocol for mass-casualty triage, but, because of the comprehensive examination of the evidence leading to the recent recommendations of the CDC advisory committee, the SALT triage system seems a promising direction for the future of disaster triage. Although both SALT and START have been found to have unanticipated rates of overtriage [5, 14], the application of a more scientific and data-driven approach in the development of SALT is encouraging. Undoubtedly, these protocols will continue to be refined as we gain a deeper understanding of mass casualty management and as further evidence is collected to identify an optimal disaster triage method.

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Virtual Mentor

HEALTH LAW
Is EMTALA That Bad?
Edward Monico, MD, JD

The Emergency Medical Treatment and Active Labor Act (EMTALA) is a
controversial statute. Numerous commentators have pointed to EMTALA as a major
contributor to hospital emergency department overcrowding and cost. Others,
however, view changes in health care delivery and finance and their effects on the
provision of charity care as root causes of the crisis that prompted EMTALA's
enactment in 1986.

After an overview of EMTALA's history and basic requirements, this article
examines the act from two opposing perspectives. One perspective looks at
EMTALA as an unfunded congressional mandate for universal access to all that
shifts the cost of this access to the hospitals. The other views EMTALA as one more
victim of a broken health care delivery system and a scapegoat for the nation's health
care woes.

EMTALA History
Two factors significantly contributed to patients' use of hospital emergency
departments (EDs) for medical care and motivated the federal government to
regulate that care. First, by the mid-1950s, many Americans had private,
employment-based health insurance to cover hospital and physician care, including
emergency treatment, and didn't have to pay for those services out of pocket [1].
Second, the number of patients whose ED charges would be reimbursed increased
greatly after 1965 when Medicare and Medicaid provided coverage to the elderly and
the "deserving poor" [2].

Public hospitals are funded by the local government for the purpose of providing
health care for impoverished and underserved county residents [3], and, over the last
century, have delivered the lion's share of care to indigent and, in more recent
decades, uninsured patients [4]. Earlier this decade, 60 percent of patients who
received care at public hospitals nationwide were either uninsured or had Medicaid
as their source of insurance, and 43 percent of net public hospital revenues came
from these two sources [5].

Before the 1980s, private hospitals charged patients according to their ability to pay,
and this "cost shifting" allowed them to deliver a small amount of charity care. [6].
Over the years, this amount dwindled. Recent Internal Revenue Service reports
found that 45 percent of private hospitals spend 4.8 percent or less of their revenues

on uncompensated care. In contrast, public hospitals spend more than four times that amount (18.1 percent) on uncompensated care [7].

In 1983 the federal government established through Medicare a system that placed caps on how much hospitals could charge for treating patients with given diagnoses. This system, with charges tied to diagnosis-related groups (DRGs), made cost-shifting impossible, and, after its implementation, hospitals lost financial support for charity care. As changes in the economic climate made it more difficult for hospital EDs to care for indigent patients, reports surfaced that uninsured and publicly insured patients were either unable to access emergency care or were redirected from private EDs to public EDs [8]. In the face of these pressures for greater hospital efficiency, Congress felt compelled to act to assure the public that seriously ill patients would not be left outside hospital doorsteps with no access to care. EMTALA was the result.

Provisions of EMTALA
To comply with the provisions of the act, any hospital that receives Medicare dollars must: (a) screen all patients who come to the ED to determine whether a medical emergency exists, (b) stabilize patients who have emergent conditions, and (c) restrict transfer of nonstabilized patients to cases in which a physician certifies that the benefits of the transfer outweigh the risks or the patient (or surrogate) requests a transfer in writing after knowing the risks involved.

"Medical emergency" is broadly defined as the presence of symptoms of such severity that the absence of immediate medical attention could place the individual's health in jeopardy or result in serious impairment of bodily organs or function. In the case of pregnant women who are having contractions, a medical emergency exists when there is inadequate time for transfer before delivery or when transfer might threaten the health or safety of the woman or the unborn child.

Arguments against EMTALA
Two schools of thought exist regarding EMTALA's effect on emergency care. Some regard the statute as a stopgap measure, a way of ensuring that the growing millions of uninsured and publicly insured Americans are able to obtain care in a genuine medical emergency [9]. Others allege that EMTALA has led to a sharp increase in inappropriate ED use by the uninsured and others that has crippled the nation's emergency health care safety net [10].

Commentators who imply a causal relationship between EMTALA's enactment and the nation's health care crisis cite the surge in ED use from 85 million to almost 115 million visits per year, the closing of more than 560 hospitals and 1,200 EDs, and the shuttering of many trauma centers, maternity wards, and tertiary referral centers [11-13]. In 90 percent of larger hospitals, the capacity to treat patients is saturated, primarily because of the lack of money to support inpatient critical care beds and nurses to staff them [14]. The emergency care capability that does exist is plagued by rampant emergency medical services diversion and ED overcrowding, which alone

accounts for 33 percent increases in wait times and has tripled the number of individuals who leave the ED before being seen [15].

Contrary views
Not everyone subscribes to the notion that EMTALA is another wrench stuck in the cogs of American health care, pointing out that some of EMTALA's alleged ill effects predate its enactment. For instance, while it is true that the volume of ED visits has increased at a higher rate than has the U.S. population, this trend is not new. According to at least one study, per capita ED visit rates rose 550 percent between 1955 and 1980, compared with a 30 percent per capita increase in hospital inpatient use during the same time period and no appreciable per capita increase in physician office visits [16].

The assertion that EMTALA is behind hospital closures is undercut by research showing that hospital and ED closures in the 1990s were part of efforts to cut costs and "improve efficiency" by promoting a high census or hospital occupancy rate [18]. Because hospitals endeavored to maintain high occupancy *rates* (rather than high *occupancy*), the number of inpatient beds in the U.S. declined in this period as they have, in fact, since 1965 when they peaked at 1.7 million [4].

The premise that the uninsured and publicly insured account for the surge in ED visits may also be incorrect. One study found that patients with private health insurance or Medicare accounted for nearly 66 percent of the increase in ED visits between the study years of 1996 through 1997 and 2001 through 2002, while visits by uninsured accounted for only about 11 percent of the increase [17]. Nor are the increases in ED patient encounters in recent years necessarily due to the uninsured turning to EDs as their last alternative to health care access for nonemergent conditions. Actually, more insured patients are using the ED in this way. Insured patients often seek nonemergent care at the ED because they cannot take time away from work during regular business hours to see their regular doctor or because they wish to see a doctor on shorter notice than they could if they scheduled an appointment with their regular provider [19].

Conclusion
The controversy surrounding EMTALA is easy to appreciate. It is an unfunded mandate, and complying with the act has placed a severe financial burden on hospitals. (According to the American College of Emergency Physicians, 55 percent of emergency care goes uncompensated [20].) Whether the act functions to deliver the final nudge to a health care system on the precipice of financial disaster or serves as a scapegoat for years of faulty health care fiscal planning and oversight remains to be seen. In medicine it is not uncommon to experience pain while striving for wellness. Viewed this way, EMTALA may resemble actual medicine more than its drafters ever imagined.

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Virtual Mentor

POLICY FORUM
Nonurgent Care in the Emergency Department—Bane or Boon?
John C. Moskop, PhD

With more than 100 million patient visits annually, hospital emergency departments (EDs) are a major source of health care in the United States [1]. As their name indicates, the ostensible purpose of EDs is to provide prompt and expert medical treatment for urgent and emergent medical problems. In fact, however, patients seek care at EDs for a wide variety of illnesses and injuries, ranging in severity from catastrophic to minor. Of the 119.2 million ED patient visits reported to the National Ambulatory Medical Care Survey in 2006, for example, 5.1 percent were triaged as needing immediate attention, 10.8 percent as emergent, 36.6 percent as urgent, 22 percent as semi-urgent, and 12.1 percent as nonurgent [1]. (Triage status was not reported in the remaining 13.4 percent.)

Commentators over the years have decried the provision of nonurgent medical care in the ED, describing this practice as a "misuse" of hospital EDs and attributing several negative consequences to it, including crowding, increases in the cost of medical care, and reduction in its quality. I don't think the situation is that simple. Some of the purported disadvantages of ED care for nonurgent conditions are not well documented, and this care provides clear benefits for several groups of patients, including those who lack ready access to care in other settings and those whose treatment preferences coincide with standard ED practices. ED care for routine conditions may not measure up to the ideal of a long-term relationship with a primary care provider, but given the present and probable future constraints on the U.S. health care system, ED care for patients with nonurgent medical conditions is likely to continue and in fact to increase. We would do well, therefore, to encourage and support hospitals in their efforts to provide high quality, cost-effective ED care for patients with a wide variety of medical conditions.

Nonurgent Care: Bane of the ED?
Major problems purportedly associated with nonurgent ER visits are ED crowding, high-cost care, and reduced quality of care. Let us consider each of these three problems in turn.

ED crowding. Over the past two decades, frequent crowding in hospital EDs has resulted in longer patient waiting times, decreased protection of patient privacy and confidentiality, and impaired patient evaluation and treatment [2-4]. The number of patients in an ED at any given time is a function of three variables: input (the number and types of patients seeking ED care), throughput (the process of care in the ED), and output (the movement of patients out of the ED) [5]. Early investigators blamed ED crowding on patients who were seeking care for nonemergent conditions [6].

More recent research, however, has identified *output,* not input factors, as the major cause of ED crowding. American College of Emergency Physicians President John McCabe summarized the current consensus in these words:

> It should be noted that one of the "whipping boys" of the 1980s for emergency department overcrowding was the "unnecessary emergency department patient visit." It was thought that patients arriving in the emergency department with simple complaints (e.g., ankle sprain, cold, medication prescription, refill, etc.) were clogging up the system and were the cause of emergency department overcrowding. This was not true then and it is not true now. Emergency department overcrowding occurs primarily when sick patients, evaluated by the emergency physician and admitted to the hospital, have no place to go and remain in the emergency department. It is mainly a symptom of an overcrowded hospital, not the result of "inappropriate" emergency department use [7].

Patients with minor conditions may wait longer for care in a crowded ED than in an uncrowded ED, but their actual evaluation and treatment is typically uncomplicated and brief. Instead, another group of patients, namely, patients waiting many hours in the ED for an inpatient hospital bed to become available, are the primary reason for ED crowding.

High-cost care. In a recent "Narrative Matters" article in the journal *Health Affairs*, physician-writer Jack Coulehan describes what he calls "the Great ER Caper," his visit to the local ED to confirm a self-diagnosis of shingles that resulted in a $9,000 bill [8, 9]. Coulehan's report is just one illustration of the strong reputation EDs have as expensive providers of health care.

High ED charges can be attributed to several factors [10]. EDs have high fixed costs associated with 24-hour staffing and the need for a wide array of medical equipment to diagnose and treat all types of injuries and illness. Many ED patients are uninsured or covered by Medicaid, and ED charges may therefore reflect cost shifting to recoup the uncompensated costs of care for these patients. Further, insurance payment for patients admitted to the hospital after initial treatment in the ED usually takes the form of a "bundled" payment based on the patient's diagnosis-related group (DRG), and that revenue may be credited entirely to inpatient units, thereby shortchanging the contribution to the ED for these patients' care. Each of these factors may make treatment of nonurgent problems more costly for either the patient, the provider, or both, in an ED than in a primary care physician's office.

Despite the widely held belief that ED care is too expensive, especially for nonurgent conditions, studies examining the cost of care in the ED are few and far between. A widely cited 1996 *New England Journal of Medicine* article by Robert M. Williams challenged the belief that ED visits for nonurgent conditions is not a cost-effective use of health care resources [11]. Williams estimated average charges, average costs, and marginal costs (defined as the extra cost for treating one additional patient) of

ED visits for urgent, semiurgent, and nonurgent conditions over a two-year period in six Michigan hospitals. For nonurgent visits, he reported that the average charge, adjusted to 2010 dollars [12], was $186.76, the average cost was $93.38, and the marginal cost was $36.15. Williams argues that these costs are reasonable, especially for services provided at night and on weekends and holidays, when other care settings are generally unavailable. As long as the treatment capacity of the ED is not fully used (when, for example, there are available beds and waiting staff) the marginal cost, or the extra cost of treating an additional patient, will be low; caring for additional patients in that circumstance will produce economies of scale and reduce the average cost of an ED visit. Williams concludes that the additional revenue generated by nonurgent visits will help to defray the ED's significant fixed costs and therefore contribute to the social good of keeping EDs open and available for care at all times for all comers.

In articles published in 2005 and 2006, however, RAND corporation economists Anil Bamezai and Glenn Melnick challenged Williams' claim that the marginal cost of nonurgent care in the ED is relatively low [13,14]. Using data from 246 California hospitals for care provided from 1990 through 1998 and a complex statistical method for estimating average and marginal ED costs, Bamezai and Melnick estimated the "long run marginal cost" (allowing for changes in staffing and equipment levels over time in response to demand) of an ED outpatient visit, adjusted to 2010 dollars [12], at $419.24, more than double the estimated $192.26 marginal cost of visits to other outpatient units in these hospitals [13], and more than 12 times higher that Williams' estimate of the marginal cost $36.15 for a nonurgent ED visit.

Bamezai and Melnick's analysis suggests a high cost for nonurgent ED care. Commentators Kellermann and Showstack, however, point out a "fundamental flaw" in this analysis [15, 16]. Bamezai and Melnick rely on public data reported by California hospitals for "outpatient ED visits," in other words, all ED visits that did not result in a patient's admission to the hospital. Equating this data with nonurgent ED visits incorrectly assumes that all patients not admitted from the ED into the hospital did not have urgent conditions and could have received adequate care in another outpatient setting. According to the most recent national survey data, only 12.8 percent of ED visits resulted in admission to the hospital and another 1.9 percent in transfer to another hospital, but at least 52.5 percent of ED visits were triaged as immediate, emergent, or urgent, and another 22 percent as semi-urgent [1]. As Kellerman points out, patients with more severe conditions are more costly to evaluate and treat, but most of these patients can still be discharged home from the ED.

Bamezai and Melnick may, therefore, offer an inflated estimate for the costs of nonurgent ED visits, but, as Showstack observes, the situation facing EDs today is significantly different from that of the 1990s [16]. ED crowding is a far more common occurrence, and so there is less "unused capacity" in EDs to "fill" by caring for patients with nonurgent conditions. Accommodating patients with minor conditions in a generally crowded ED may require additional staff and space at

additional expense. A more definitive answer to the complex question of the cost of nonurgent care in the ED awaits further study.

Reduced quality of care. According to Houston emergency physician Tim Seay, "the ER's a bad place to get your primary care" [17]. Several common features of ED care may contribute to lower-quality care for nonurgent conditions. Perhaps most prominent among these features is the episodic nature of ED treatment. Because patients and physicians in the ED are typically strangers to one another and treatment is provided on a one-time basis with little or no follow-up, there is essentially no continuity of care and no opportunity to develop an ongoing therapeutic relationship. Neither is there an opportunity to gather detailed information about the patient's medical history, values, and goals, to monitor chronic medical conditions over time, or to adjust treatments accordingly. An ongoing therapeutic relationship can make important contributions to the quality of medical care, but it is also worth noting that many patients have a need or preference for care that they can access without an appointment and at a time and place convenient to them. The continuing growth of "doc-in-the-box" walk-in urgent care centers is one obvious response to this preference.

Overtreatment may pose another threat to the quality of ED care for nonurgent conditions. Because they are expected to make an accurate diagnosis and provide effective treatment based on a single visit, emergency physicians may err on the side of doing too much rather than too little, for the benefit of the patient, for defensive reasons, or in response to patients' explicit requests. Coulehan's $9,000 visit to the ED for a case of shingles, for example, included examinations by two specialist consultants (an ophthalmologist and a neurologist), two MRIs, and a CT study with contrast dye [8]. In addition to their costs, multiple diagnostic studies and more invasive treatments pose some additional risk of iatrogenic illness or injury. Some patients, however, clearly prefer a more aggressive approach to treatment and may request expensive diagnostic studies to reassure themselves that their symptoms are not early signs of a serious illness. Better provider and patient communication about the benefits and risks of treatment, malpractice reforms, and new reimbursement systems may help to reverse the ED tendency toward overtreatment.

Finally, the inconvenience of long waiting times for treatment also erodes the perceived quality of ED care for nonurgent conditions [18]. Depending on the number of incoming patients and the severity of their conditions, patients with minor problems may wait hours for treatment, as clinicians treat patients with emergent and urgent conditions first. In order to improve "front-end" processing of patients and decrease wait times, EDs are experimenting with a number of new strategies, including immediate assignment to a treatment bed, implementation of care protocols at the patient triage stage, a separate fast-track service line for nonurgent conditions, and electronic patient tracking systems [19]. Although outcomes data are still sparse, these strategies may help to decrease time spent in the ED and improve patient satisfaction.

Nonurgent Care: Boon to Some Patients
Even though caring for patients with nonurgent conditions does not appear to be the major contributor to the problem of ED crowding, it may be both more costly and of lesser quality than caring for these patients in other settings. For whom, then, can the care of a minor medical problem in the ED be considered a boon? The most obvious answer is that health care in the ED will be a boon for all those who have no other ready access to care. This has, for many years, been a very large number of people, including those who lack health insurance and those Medicaid patients who are unable to find a regular source of primary care. Only in the ED can these patients be assured that they will receive a screening exam, and, in most cases, treatment for their condition, regardless of their ability to pay.

It would be faint praise to claim that ED care for nonurgent conditions will be a boon *only* for those who have no other ready source of care. In fact, however, as noted above, at least some patients with health insurance appear to prefer the ED as a source of routine medical care. A meta-analysis of studies of frequent users of EDs (defined as those who make 4 or more ED visits per year), for example, found that these patients, who account for as many as 28 percent of all ED visits, are predominantly white and insured, most often by Medicare or Medicaid [20]. Some of these frequent users of EDs may not have ready access to primary care physicians. Some may value the availability of high-tech diagnostic and therapeutic services in the ED. Some may value the convenience of obtaining care during evening or weekend hours and be willing to accept longer wait times or may prefer a more anonymous encounter with caregivers for their minor medical problems. Still others may seek care in an ED because they are unable to determine whether an illness or injury requires prompt medical attention. Just because these ED users are insured and their conditions nonurgent, however, it does not necessarily follow that they don't belong in the ED. One study of children's nonurgent visits to EDs concluded that fully half of those visits were "highly appropriate" [21].

Conclusion
One might be tempted to predict that, with the gradual expansion of health insurance coverage under recently enacted federal health care reform legislation, newly insured patients will secure primary care "medical homes" and no longer need to rely on the ED for their routine medical care. In fact, however, ED visits for nonurgent conditions are likely to increase in the reformed health care system. Recall that the legislation provides no insurance benefits for the roughly 12 million undocumented immigrants who will continue to rely heavily on EDs for their health care. Moreover, more than half of the 31 million Americans who are expected to gain insurance under health reform will do so through a major expansion of federal-state Medicaid programs [22]. Given low levels of reimbursement for ED care under Medicaid, and the prospect of additional future cuts to control health care spending, primary care practices may become even less willing to accept new Medicaid patients than they now are. Early data suggest that, in the first year of Massachusetts' experiment with near-universal health insurance, the number of emergency department visits increased [23].

The 2010 health care reforms will, over the next several years, provide health insurance for the first time to millions of Americans. The legislation did not, however, mandate major changes in reimbursement or in delivery systems to increase reliance on primary care. For better or worse, therefore, EDs will remain the preferred or sole source of care for many, both citizens and noncitizens, both insured and uninsured. With anticipated increases in their overall number of patients and in the number of patients with health insurance, EDs should have a strong incentive to examine new strategies to provide timely and appropriate care for ED patients with nonurgent conditions.

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POLICY FORUM
Ending Ambulance Diversion in Massachusetts
Laura Burke, MD

Ambulance diversion is the practice of temporarily closing a facility, typically an emergency department, to incoming ambulances. Since the 1990s, emergency departments nationwide have relied on ambulance diversion more and more to address emergency department crowding [1, 2]. While there is little data to document adverse effects of ambulance diversion, this practice is thought to reduce the availability of EMS personnel, interfere with patient choice of hospital and continuity of care, increase ambulance transport time, and promote crowding at neighboring hospitals [3, 4]. Organizations such as the American College of Emergency Physicians (ACEP) and the Institute of Medicine have discouraged the routine use of ambulance diversion [5]. In its 2006 report on emergency care in the United States, the Institute of Medicine urged that diversion be "eliminated except in the most extreme circumstances, such as a community mass-casualty event" [6]. Yet diversion is hardly a rare occurrence. One study based on data from the National Hospital Ambulatory Medical Care Survey concluded that approximately 45 percent of emergency departments diverted ambulances in 2003. An estimated 501,000 ambulances were diverted that year, or approximately one ambulance per minute [7].

On January 1, 2009, Massachusetts became the first state in the U.S. to successfully ban ambulance diversion. The state Department of Public Health (DPH) directive prohibited ambulance diversion except in cases of internal hospital disasters that rendered the emergency department unusable (known as a "code black") [4]. This policy was enacted after a decade of efforts by Massachusetts DPH to encourage hospitals to voluntarily limit ambulance diversion.

Failure of the Voluntary Approach
In 1999, Massachusetts DPH convened a multidisciplinary team of physicians, nurses, administrators, and EMS personnel to form the Statewide Boarding and Diversion Task Force. The agency sought to phase out ambulance diversion on a voluntary basis by encouraging hospitals to address the causes of emergency department crowding [8].

Emergency department crowding is thought to increase the risk of harm to patients and interfere with timely care of emergency patients, threatening the principle of nonmaleficence [9]. Some sources have suggested that visits by the uninsured or patients with minor complaints are to blame for emergency department crowding [10-12]. There is a growing consensus, however, that ED crowding results from lack of inpatient resources and hospital-wide operational inefficiencies [13-16]. Hospital

crowding and lack of inpatient beds lead to prolonged boarding of admitted patients in the emergency department. This undermines the principle of justice, which necessitates the just distribution of health care resources [9]. When emergency departments become filled with admitted patients awaiting an inpatient bed, their ability to care for new patients is limited. One study suggested that periods of ambulance diversion may be associated with higher hospital revenues, thus providing a financial disincentive for hospitals to limit ambulance diversion. The authors note that in such situations, the case for limiting or ending ambulance diversion must be made on moral and ethical grounds, such as patient safety and quality of care [17].

The Massachusetts DPH boarding and diversion task force distributed a set of "Best Practice Guidelines" designed to help hospitals improve patient flow and develop alternatives to ambulance diversion [18]. The agency noted that some Massachusetts hospitals and entire regions had successfully done away with diversion through deliberate operational measures designed to improve patient flow. But despite such efforts by the task force over the ensuing decade, ambulance diversion continued to be a common practice among Massachusetts hospitals [19], perhaps because of insufficient financial motivation for hospitals to alter their practices and possibly because of lack of understanding of the hospital-wide causes of ED crowding.

Why Mandatory Prohibition Succeeded
On July 3, 2008, Massachusetts DPH announced that it was forgoing its prior strategy and pursuing the mandatory elimination of the routine use of ambulance diversion [4]. One predicted consequence of prohibiting ambulance diversion was severe crowding of overwhelmed emergency departments forced to accept all those who sought care, as mandated by EMTALA. Another concern was that ambulances would spend more time at hospitals waiting to transfer the patient to ED personnel, delaying their response to the next emergency. In anticipation, the task force held conference calls for the agency and hospital administrators to address concerns related to the landmark policy.

The agency is monitoring emergency department crowding to evaluate the effects of the policy on hospitals across the state. Preliminary reports have suggested that the end of ambulance diversion has been a relative success due to operational changes made at individual hospitals in anticipation of the diversion ban [20, 21]. The changes made have varied among hospitals, but a common theme has been improving efficiency on the inpatient units to promote earlier hospital discharge when possible. Examples include drawing labs earlier in the morning so that results are available earlier and physicians can make treatment decisions and hiring nurse practitioners to assist with inpatient discharges. One Boston hospital developed a "surge pod" for ED patients awaiting inpatient beds, making more ED beds available for new patient [3, 21].

Initial reports from Boston EMS, the municipal EMS provider for the city of Boston, suggest that there have not been long waits before patients can be transferred from EMS to hospital staff. The apparent success of the policy supports the idea that

ambulance diversion can be eliminated when hospitals optimize efficiency and patient flow. Perhaps this landmark Massachusetts policy will serve as a model for changes in emergency care nationwide.

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Virtual Mentor

MEDICINE AND SOCIETY
Gaps in the Safety Net Metaphor
Jay Baruch, MD

Imagine this. A hospital space dedicated to treating anyone, with anything, at anytime [1]. Fill the space with the sickest patients, medical and surgical emergencies, kids and pregnant women in labor. Intoxicants? Sure. Severe mental illness? Absolutely. Add elderly people unable to care for themselves, homeless men and women who sleep in public view, souls overwhelmed by the circumstances of their lives, and people who can't tell you what's wrong, only that they don't feel right. Now let's limit the number of beds. Pile patients up in the waiting room until they resemble stranded airport passengers during a snowstorm. Long waits, overburdened staff, frightened and possibly sick patients. What twisted mind would dream up a story such as this?

Kurt Vonnegut offered this advice to writers: "Be a sadist. No matter how sweet and innocent your leading characters, make awful things happen to them—in order that the reader may see what they are made of" [2]. But would Vonnegut, master satirist, stress characters in his fiction to the degrees patients and physicians experience in emergency departments (EDs) on a regular basis?

A 2006 IOM report pronounced a developing crisis in emergency care, characterized by overcrowding, ambulance diversion, a scarcity of inpatient beds resulting in the boarding of admitted patients in hallways, unavailability of specialists, and a fragmented EMS system of inconsistent quality [3]. There were 90.3 million ED visits in 1993; 113.9 million in 2003; and 119 million in 2006 [4]. Meanwhile, hospitals are closing; availability of hospital beds, pinched [3]. These challenges are particularly daunting when we remember that this nation's EDs serve as the health care system's "safety net." The safety net metaphor has created perceptions and expectations that are not being met, leading to frustration and dissatisfaction.

Viewing the challenges inherent in emergency medicine through the lens of narrative may help us understand and respond to them. Delivering excellent, efficient and compassionate health care requires both sensitive and sophisticated narrative attention to patients' stories [5]. Sociologist Arthur Frank wrote "One of our most difficult duties as human beings is to listen to the voices of those who suffer." Listening is a hard but fundamentally moral act [6].

The emergency physician's fiduciary responsibility derives from the social function of the ED [7]. A quasi-public space that links the community with the hospital itself, the ED represents the hospital's social conscience and serves as the public

Samaritan, entrusted with certain moral and legal duties that don't apply to physicians in other settings. The Emergency Medical Treatment and Active Labor Act (EMTALA) mandates nondiscriminatory access to emergency medical care for anyone with an emergency medical condition [8]. Essentially, EMTALA promises unconditional rescue.

But the ED is more than a medical space freighted with moral responsibilities. It's a circumstance where narrative arcs converge. Vonnegut's advice for writers, I believe, works as a helpful device for reconceptualizing the ED encounter. Desire drives every compelling story. A character wants something. But obstacles—internal, interpersonal, or vast social or environmental forces—present themselves. How will this character respond to the conflicts? What motivates her actions, shapes her beliefs? Will she get what she wants? Why? Why not? How do other characters respond to her?

Doctors and patients are real-life characters constructing a drama, active agents shaping a story. Whether the emotion and energy in the scene turns positive or negative depends in part upon the degree to which the characters interpret the situation, understand their expectations and appreciate its limits. The doctor-patient relationship isn't a balanced encounter. The knowledge and skills possessed by physicians impart great power. Patients are vulnerable; weakened or thrown off balance by illness or injury, they are now dependent on the ED physician, who is often a stranger.

Patients exert their wills, too. They bring more than their symptoms. Along with expectations that may or may not match the realities of ED care, patients carry worries and fears, backstories and hopes for the future. Most of all, they are driven by the fuel of all drama—necessity. To be an ED physician is to regularly encounter patients facing terrific challenges—lives pebbled with questionable choices or bad luck or socioeconomic conditions beyond their control—all before entering the safety net in crises.

Patients as Characters
The word patient is derived from the Latin *patiens*, which means to suffer. Suffering is a deeply personal matter. Pain doesn't necessarily cause suffering, which has much to do with perception of pain, its meaning, its impact on one's life, and how it colors one's idea of a future [9]. Suffering isn't measured with pain scales.

Many ED patients suffer terribly, but the source of their suffering often falls outside the domain of expertise of emergency physicians. Straightforward medical problems may be complicated by socioeconomic issues, family ordeals, literacy and education impediments, cross cultural divides, to name only a few.

How can considering patients as characters alleviate their suffering? The "character in room three" sounds glib and admittedly disrespectful. But the idea of character might be a richer and more pragmatic way to consider the seemingly infinite range of

challenges. Ethics has the same root as *ethos*, the Greek word for character. Character in Greek drama is a moral concept. Who you are is reflected by what you do. Aristotle said, "Character is that which reveals moral purpose, showing what kind of things a man chooses or avoids" [10, 11]. Vonnegut urges writers to be sadists because true character is revealed through conflict, by the choices we make when the stakes are high.

Consider, for example, the physician and the asthmatic on his third visit to the ED in the past week. The ED physician becomes upset because the patient hasn't filled the multiple prescriptions, or followed up with the clinic. The patient gets defensive. It's not his fault the earliest clinic appointment is in two weeks, and all those inhalers critical to his health costs hundreds of dollars without insurance. So the patient improves with treatment, then returns to his apartment building with leaky pipes, wet carpets, cats and cockroaches, and the disinterested landlord.

Chronically inebriated homeless patients are also a common presence in EDs. Numerous attempts at treatment unsuccessful, frequently plagued by untreated mental illness or chronic medical problems, the homeless can present several times in a 24-hour period. They need beds, nursing, and monitoring until they're sober enough to be discharged, which can be many hours. They can stress the physical and emotional limits of ED staff, but they're also socially and medically vulnerable, often taken to the ED against their will. I appreciate my chronic inebriates as characters, well-rounded characters, with a past, family, personal interests. It's important to discover the person behind the alcohol level. Curiosity is the road to empathy.

I'm encouraged by isolated non-ED referral programs where this population may be better served, providing more than a bed and a sandwich, but addiction, medical and social services [12]. So-called "wet house" partnerships between housing authorities and health departments have saved municipalities millions of dollars simply by providing homeless alcoholic high health care utilizers in urban centers a safe place to live [13].

What about the "revolving-door" asthmatic whose apartment is unhealthy? New medical-legal collaboratives flourishing throughout the United States might be able to redress socioeconomic factors that impact medical problems, as well as train physicians and lawyers in this multidimensional approach to care [14, 15].

From Safety Net to a Clean Well-Lighted Place
Metaphor works by "understanding and experiencing one kind of thing in terms of another" [16]. The metaphor of the ED as a safety net works on many levels. It's visual. It has heroic dimensions. Many physicians and nurses I know were drawn, and find great purpose, in this ideal. But does it make promises that it can't deliver? Does it stoke expectations that can't be met? Does this net catch people and break their fall, or simply suspend their descent temporarily?

Is there a metaphor that can satisfy the expectations of those who come to the ED in the way that the safety net metaphor satisfies what society as a whole expects of the ED? Can the narratives of society's ED story and the individual patient's story be more compatible? When working overnight shifts, I'm often reminded of the Ernest Hemingway short story, "A Clean, Well-Lighted Place" [17]. Two waiters, one young and eager to return home to his wife, the other old and lonely, argue about staying to serve another brandy to their only patron, an elderly, deaf man, a "frequent flyer" well known to them who had tried to hang himself, only to be cut down by his niece.

> "Each night I am reluctant to close up because there may be someone who needs the café…."

> "Hombre, there are bodegas open all night long."

> "You do not understand. This is a clean and pleasant café. It is well lighted. The light is very good and also, now, there are shadows of the leaves" [17].

A lighted place provides respite from the darkness, where lonely people can be lonely without being alone. It promises light and dignity.

There are few places in the hospital that respond to a dizzying range of immediate needs with such flexibility and compassion. Whether it fulfills its promise as a safety net and serves nobly as a clean well-lighted place depends upon one's expectations, desires, and relationship to it. But this is certain. I wouldn't want to imagine a society without EDs and the expertise and character of the people who staff them.

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Related in VM
Social Justice, Egalitarianism, and the History of Emergency Medicine, June 2010

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HISTORY OF MEDICINE
Social Justice, Egalitarianism, and the History of Emergency Medicine
Brian J. Zink, MD

Unlike other fields of medicine, emergency medicine (EM) arose out of a progressive social demand for services that was tied to the moral and ethical aspects of providing care for poor and uninsured people. Threads of egalitarianism, social justice, and compassion for the poor and underserved are woven into the brief history of full time emergency practice and the development of EM residency programs [1].

Many factors contributed to a tripling of emergency department (ED) visits in America between 1940 and 1960. By the mid-1950s, hospitals had become the technology-rich, always-available sites for diagnosis and treatment of acute conditions. Both the absence and presence of health insurance coverage drove people to EDs for care. Standard health insurance of the post-World War II era paid for hospital and ED visits, but not outpatient office visits, and those without health insurance found that most hospital EDs would provide care regardless of their ability to pay. At the same time, an acute shortage of primary care physicians and the rise of specialist physicians contributed to major access problems for many people—especially the poor. Fifty years later, many of these factors continue to contribute to ED use and have been central to the debate surrounding recent U.S. health care reform efforts.

Until 1961, emergency care was not the purview of any particular group of medical professionals. Large, urban teaching hospitals used house staff to work in EDs, usually with no senior physician supervision. Community hospitals patched together ED coverage by conscripting attending physicians, moonlighters, and sometimes medical students. Private physicians often met their paying patients in the ED and provided care, but poor and uninsured patients had to settle for the inconsistent and sometimes substandard emergency care provided by a ragtag collection of physicians.

In July of 1961, James Mills Jr., MD, along with three fellow internists, gave up private medical practice and entered into a contract with Alexandria Hospital in Alexandria, Virginia, to provide ED coverage. The reasons for their decision were partly pragmatic—Mills, the hospital's chief of staff in 1960-1961, had been charged with coming up with a solution to problems in his ED. Visits had increased markedly, and other methods for staffing the ED were not providing sufficient coverage. Mills and his colleagues found that they could make at least as much money in this new arrangement as in their private practices and actually work fewer hours per week.

At the same time, Mills was pursuing a humanitarian agenda. When he had previously been assigned to cover the ED, he found that many poor and minority patients used the ED for their health care. As a volunteer in organizations that served the poor and disadvantaged of Washington, D.C., Mills realized how lack of access to health care contributed to poverty. Part of the attraction for Mills in serving as a full-time emergency physician was that he could have more of an impact on improving health care for at least some of the poor and uninsured in his city. Mills died in 1989, and when other early leaders in the field were asked to describe him, they invariably emphasized his immense compassion and caring for others. That the first emergency physician in America was so concerned about the health care of the poor and disadvantaged had a strong influence on many of those who followed him.

The advent of Medicare and Medicaid in 1965 greatly increased the number of Americans who had health insurance. When doctors' offices and clinics became overwhelmed, people turned to EDs for care, causing a dramatic increase in ED visits between 1965 and 1970—from 29 million to 43 million per year [2]. Across the country, groups like the one at Alexandria were providing emergency care in many community hospitals, but in the inner cities an increasingly poor population turned, out of necessity, to urban teaching hospitals. The EDs in these hospitals became the proverbial safety net for both emergency and routine care. However, almost no full-time emergency physicians practiced in urban teaching hospitals, and care was often provided by unsupervised interns or resident physicians with little or no attending physician back-up.

In the late 1960s in Cincinnati, the poor, primarily African American residents of the neighborhoods near Cincinnati General marched on the hospital, protesting the long waits and substandard care in the ED and hospital. This demonstration, in part, led administrators and physicians at the University of Cincinnati to start the first emergency medicine residency training program in 1970. More EM residencies soon followed, associated with other teaching hospitals that cared for poor and uninsured patients in their cities, such as the Los Angeles County/University of Southern California Medical Center, Medical College of Pennsylvania in Philadelphia, Louisville General Hospital, and the University of Chicago. These physicians developed a clear understanding of the plight of those who were on the bottom of the ladder in U.S. health care, and they were mainly teaching themselves emergency medicine.

It was not until the late 1970s that EM became a board-certified specialty within the American Board of Medical Specialties. Until this happened, those who trained in EM were in some ways viewed as outcasts; many became fierce in the defense of their budding field and the key role it played in providing care for the poor and disadvantaged. Like their patients, those in EM felt like they were on the outside looking in, without a voice in American medicine. Emergency physicians were proud of the egalitarian nature of ED triage—a poor man in shock would be evaluated and treated in the ED before a rich man who had a less serious problem. The fact that

EM, unlike some other specialties, did not do a "wallet biopsy" before care was rendered was a source of pride. The social justice of good emergency care became a central theme for early leaders of the field. For example, Lewis Goldfrank, MD, who developed EDs and an EM training program in New York City that primarily served the poor, describes himself as a public servant who has confronted social and political issues through his ED work.

The egalitarian, "take anyone, with anything, at any time" mentality of emergency medicine went beyond philosophy and became U.S. law in 1986 with passage of the Emergency Medical Treatment and Labor Act (EMTALA)—in essence creating a federal right to emergency care for all people in the U.S.

In its short history, EM has also seen its share of profit-seeking, "corporate" medicine and unethical practice by some emergency physicians. But, from its inception, the field has derived its strength from an egalitarian, compassionate view of health care. From James Mills Jr., MD, to the ED physicians of today, emergency medicine has been unwavering in its commitment to focusing on and serving people who were ignored for so many years by the health care system.

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Related in VM
Gaps in the Safety Net Metaphor, June 2010

OP-ED
Unwitting Partners in Death: The Ethics of Teamwork in Disaster Management
Gregory Luke Larkin, MD, MSPH

From all one, and from one, all.
Heraclitus

In the aftermath of the Haitian earthquake of January 12, 2010, volunteers from every continent rushed to the shores of Haiti to lend a hand. While this outpouring of human empathy was both laudable and unprecedented in modern times, it was this writer's direct observation as an emergency team leader that both convergent volunteerism (freelancing) and the lack of a coordinated disaster response caused serious operational and ethical challenges on the ground. At the individual and organizational levels, turf wars ensued; acronyms flew across the satellite phone airways—"PIH, ICRC, UN, PAHO, ESF-8, DMAT, IMC, MSF, NPH, HAS"—reminding us that this was a cluster of volunteer organizations and generating a new moniker for Western Hispanola: "The Nation of NGOs."

What unfolded was a massive mismatch and duplication of services, expertise, and resources. For example, bringing expensive hardware such as $70,000 scoliosis surgical sets to poor Haitian hospitals made no more sense than the USNS Comfort saving ventilator-dependent quadraparetics in a nation that seldom has 24 hours of electricity—let alone chronic ventilator capacity. Many, if not most, volunteer organizations sent boxes of nephrotoxic gentamicin to a population afflicted by rhabdomyolysis and renal failure. In a population where simple penicillin is still sufficient to smother most infections, one wondered how many flights of fluoroquinolones were truly needed. Not to mention the mismatch between the number of transplants done in Haiti and the transport costs of sending super-sized cartons of cyclosporine. Some teams came equipped with yoga instructors, naturopaths, and Reiki masters. Indeed, Haiti became a sort of Bedlam peep show for voyeuristic volunteers who, having little legitimate reason to be there, used, as their visa, gifts they wanted to give, not necessarily gifts that Haiti needed. Coupled with a crippling corporate chaos, this gross mismatch of motives and medical need revealed an obvious lack of orchestration. It is not overstating the case to observe that, by their diversion of food, water, fuel, and other resources—including time—volunteers with nothing to contribute unwittingly increased morbidity and mortality among the earthquake's victims.

There were rumblings at local hospitals as well, where teams took license to practice without being vetted by the local population, government, or even hospital staff. One could not help but wince to hear distinctly American-English-accented academics proclaim, "This is my OR" or "We are in charge here." This lack of professionalism, common courtesy, and respect for both the host country and fellow volunteers raises questions about responders' collective ability to work in catastrophe situations with others.

One solution to the problem of convergent corporate volunteerism and the companion "road to hell" problem with disconnected or freelancing volunteers is a more proactive and nuanced understanding of the ethics of effective teamwork in emergency and disaster settings. Harnessing the power of good intentions and goodwill toward humanity and channeling it in positive ways that respect local norms, give deference to host nation stakeholders, and accord respect to other volunteers who fulfill complementary roles can help meet these multifaceted and unpredictable disaster management challenges long before they arise in clinical practice. Disaster situations entail serious time exigencies that do not allow for protracted moral reflection and ethical deliberation; thus, preventive measures and policies that amplify virtue and ensure ethical corporate practice are warranted.

Optimal moral action in a disaster requires more than an understanding of utility, rationing, and triage. Beyond standard bioethical principles, codes of ethics and conduct can help provide a moral framework that addresses at least some of the many micro-, meso- and macro-level disaster challenges. Organizational codes of conduct are useful for disaster preparedness and planning at the meso level. Many national and local disaster response organizations, such as Disaster Medical Assistance Teams, Medical Reserve Corps, The Centers for Disease Control and Prevention, and other governmental organizations and NGOs within the U.S., lack codes of ethics or conduct to guide their organizational response to disasters. The International Committee of the Red Cross (ICRC), however, does promulgate the following "Principles of Conduct for the International Red Cross and Red Crescent Movement and NGOs in Disaster Response Programmes" [1]:

1. The humanitarian imperative comes first.
2. Aid is given regardless of the race, creed or nationality of the recipients and without adverse distinction of any kind. Aid priorities are calculated on the basis of need alone.
3. Aid will not be used to further a particular political or religious standpoint.
4. We shall endeavor not to act as instruments of government foreign policy.
5. We shall respect culture and custom.
6. We shall attempt to build disaster response on local capacities.
7. Ways shall be found to involve program beneficiaries in the management of relief aid.
8. Relief aid must strive to reduce future vulnerabilities to disaster as well as meeting basic needs.

9. We hold ourselves accountable to both those we seek to assist and those from whom we accept resources.
10. In our information, publicity and advertising activities, we shall recognize disaster victims as dignified humans, not hopeless objects.

The organizational model provided by the 10 Principles in the ICRC Code of Conduct addresses the critical need for objective, apolitical, culturally competent, dignified, humane, and sustainable disaster responses at both the macro and meso levels. Although the ICRC suggests an important corporate ethical posture, it does not address the specifics of disaster response. For this, virtues in general and teamwork in particular, are still needed.

From *Me* to *We*: The Ethics of Teamwork
Teamwork can be defined generally as a cooperative or coordinated effort by a group of associated persons acting together for a common cause [2]. Analogously, a *disaster health care team* may be defined as: *an intimate group of interpersonally associated providers that works toward the common goal of seeing that disaster victims receive quality disaster care*. As I have asserted for some time [3], quality emergency and disaster care requires a holistic team approach involving interdisciplinary collaboration not only among physicians, nurses, and paramedics alone but also among NGOs, governments, ministries of health, policymakers, and administrators. For everyone involved, the most important members of the team should be the population of victims, whose need should always set the moral compass for the mission.

Team-based approaches to disaster optimize extant resources, enhance efficiency, and promote collaboration instead of a sort of medical imperialism. When it ceases to matter who gets the credit and the focus on patients takes precedence, other positive benefits accrue from the team-based model: greater understanding of population problems, access to a wider range of expertise, the support of colleagues, reduced stress due to sharing of responsibility, enhanced care for victims. The gestalt concept—that the total outcome of the team's larger enterprise will exceed the sum of the individual members' efforts—takes effect.

Multiple empirical studies provide evidence that supports the true effectiveness of the team approach. Studies by Gregory Jay and colleagues have demonstrated both significant error-reduction and enhanced patient satisfaction employing MedTeams, a novel teamwork strategy [4, 5]. The cost of not embracing teamwork are also significant. A study by Wessen found that "in a hierarchical hospital organization, hospital personnel tended to interact only with members of their own group...[leading to] limited intergroup communication and the disruption of professional relationships" [6]. A study by Knauss et al. comparing the various organizational characteristics and patient outcomes of 13 intensive care units, discovered a direct correlation between patient outcomes and interprofessional communication; the better the communication, the better the outcomes [7]. These

studies highlight that a multifaceted team approach is needed to facilitate effective relationships among health care professionals and to patient care.

Barriers to Teamwork
There are many obstacles to productive interprofessional interaction and to the effective promotion of teamwork. Health care teams may have difficulties with leadership, role delineation and negotiation, goal setting, problem solving, conflict, power, authority, trust, and support.

One obstacle is the lack of training of health care personnel to behave like teams rather than individuals who only coincidentally work in the same place at the same time.

> Health care teams are expected to work together, ignoring real or imagined differences and egos, for altruistic goals. However, years of academic training, social and cultural factors, and perceptions of statuses assigned to the health-care professions cannot be ignored....Most have been trained to work independently, not interdependently. They often become team members with no advance communication training or skills in group dynamics and find it difficult to cross traditional professional or gender hierarchies [8].

As one author noted,
> It is naive to bring together a highly diverse group of people and expect that, by calling them a team, they will in fact behave as a team. It is ironic indeed to realize that a football team spends forty hours a week practicing teamwork for the two hours on Sunday afternoon when their team really counts. Teams in organizations seldom spend two hours per year practicing when their ability to function as a team counts 40 hours per week [9].

Other obstacles to successful teamwork such as role stress, lack of interprofessional understanding, and autonomy struggles [10], are particularly formidable in disaster situations. "Role stress" refers not only to the stresses of caseload and time constraints, but also to the demands of performing many tasks unrelated to one's profession. Role stresses may transform typically minor disagreements into major clashes. In addition, disaster stress often causes professionals to focus more on tasks and less on relationships. Confusion of roles and responsibilities creates the potential for task overlap, scope-of-practice transgressions, and untenable demands. Similarly, autonomy struggles arise from confusion about job assignment, authority, and control. When a justifiable pride in one's profession devolves into egocentricity or competitiveness, conflicts may arise, turf wars are declared, and interdisciplinary team efforts are seen as threats to professional identity and integrity [7, 10-12].

Conclusion

Teamwork within and between teams is an ethical imperative in disaster situations. How, then, does a disparate group of health professionals lumped together overcome obstacles to become a health care team? First and foremost, the members of the group must learn about each other. Encouraging informal group interaction and educational services to teach about various professional roles and responsibilities is essential, as is a virtue-based ethic of magnanimity and teamwork. Homer used the Greek word *arete* to describe not only virtue, but excellence of every kind [13]; arete has been described as those excellences or virtues that enable an individual to properly do *what his or her role requires*—in other words, to excel in usefulness. The extension of *arete* to disaster care could provide needed protection against the widespread egocentricity and moral malaise in the field.

While one must resist the temptation to legislate what makes emergency professionals good people or good citizens, it is equally important that we do not resist the temptation to describe what makes them good disaster responders. Highly functional disaster team members should be strong and secure in themselves and their ability, but hit the golden Aristotelian mean between self-assuredness and humility; prepared to stand alone yet deeply invested in the team mission and needs of the population served.

Many individual and corporate virtues are necessary for successful teamwork to be possible. Beyond team-centeredness, an ideal emergency medicine team must have friendliness, humility, intelligence, vigilance, cultural sensitivity, and tact. The virtues do not live in isolation, and persons with strong moral character must be actively recruited to grow virtue in other team members. Excellent communicators, for example, foster team-based virtues and individual traits of prudence, justice, nonjudgment, self-effacement/charity, compassion, and resilience in the supporting cast. These moral excellences or virtues do not suggest that team workers should be doormats, nor do they suggest that strong leaders are not required. On the contrary, strong leaders and loyal staff are neither dependent on nor independent of each other; rather they are interdependent. The closer we come to this ideal, the more successful we will be in developing useful, skilled, and truly excellent disaster teams that measurably improve the quality of care for victims and patients, enrich the environment and relationships in which we work, and bring honor and integrity to the forefront of this noble and heroic service.

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Virtual Mentor

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