

# Solving the Emergency Care Crisis in America: The Power of the Law and Storytelling

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## Abstract

An Emergency Department visit that ended tragically prompted my yearlong journey to Washington, DC, and emergency rooms across the country to search for solutions to the national crisis in emergency care. I reached the conclusion that the crisis is entirely solvable, and I developed a three-part solution that includes 1) nationally standardizing and coordinating care, 2) prioritizing resources and incentives in the delivery of emergency care, and 3) inspiring young clinicians to careers in emergency care. Physicians across America should now harness the power of storytelling to strengthen both the delivery of patient care and health care reform efforts on Capitol Hill.

## Meaning of the Music

Combining music with surgery is what many surgeons do routinely. In a concert lecture I attended years ago, San Francisco Symphony conductor Michael Tilson Thomas shared his strategy to draw out the best performance from the orchestra. He challenges each member with three questions as they prepare for a new composition. First, what was the political and social historic context that was the inspiration for the music's creation? Second, what was the composer trying to communicate? But these questions only serve as the foundation for the third most important question: what does the music mean to you? Perhaps we should all carefully reflect what strengthening the emergency care system means to us individually before we collectively attempt to define its future.

## A Patient's Story

My personal answer to Michael Tilson Thomas is revealed through the story of a patient. This particular patient was 69 years old, and in December of 2008 she woke with an irregular heart beat and mild shortness of breath. Her heart accelerated to 130 beats/minute on a home blood pressure cuff, but her blood pressure was stable later that day when she was seen in the Emergency Department (ED). She was diagnosed with rapid atrial fibrillation and admitted around 8 pm on a Thursday evening for anticoagulation therapy with heparin, and a plan for electrical cardioversion the next day after a transesophageal echocardiogram.

Because an inpatient bed was unavailable, she spent the entire night in the ED. She was not admitted to a hospital bed until late Friday morning, after other patients had been discharged. She had slept poorly in the ED hallways, and was hungry after having

fasted for the procedures that day. The cardiologist spoke with the patient and her family in the afternoon on Friday, and explained that because of the delays in her admission, the planned procedures had been cancelled, and she would remain on blood thinners over the weekend until the transesophageal echocardiogram and cardioversion could be performed on Monday.

Unexpectedly, on Saturday afternoon, the patient suffered a sudden and massive stroke with complete occlusion of the carotid artery from the arch of the aorta to the intracranial branches of the middle cerebral artery. She was rushed to the operating room where a neurosurgeon attempted to remove the blood clot, but the carotid artery tore, leading to massive intracranial bleeding and brain death. She was kept alive in the Intensive Care Unit until preparations for her funeral could be completed. She died at noon on the following Tuesday, 112 hours after she first stepped into the hospital. The patient was my mother.

Some of you may recognize this story from an article in the *New England Journal of Medicine* that was published on the 2½-year anniversary of my mother's passing "The Waits that Matter."<sup>1</sup> I was amazed by the response from around the nation, and even the world, to the coverage the story received in *The New York Times*<sup>2</sup> and *The Wall Street Journal*.<sup>3</sup>

Four months after the article was published, I received a surprise in the mail, a \$300 check—the honoraria granted to Perspectives authors by the Massachusetts Medical Society. I decided to use the money to pay for a copy of my mother's medical record. It was difficult to relive the final hours before my mother's devastating stroke, to hear her final words as recorded in the nurse's notes. After reviewing the 811 pages, it became clear that there was more to the story of my mother's death. The admission notes documented that she should have been started on heparin shortly after being admitted with a heart rate as fast as 160. However, the heparin was not started until 11 am the next day, almost 15 hours later. It is unclear whether the medication was unavailable from the pharmacy, an order was missed, or there was difficulty prescribing the anticoagulation. A transthoracic echocardiogram had been normal the evening of admission, and I believe the lethal thrombus propagated during a prolonged period without anticoagulation.

## A National Crisis

Tragedies like this are not uncommon in the US. An Institute of Medicine report detailed a national crisis in emergency care in 2006;<sup>4</sup> six years later, many of the challenges of overcrowding, ambulance diversion, and the boarding of admitted patients (like

my mother) in the ED have only become more dire. A national leader in researching this crisis is Renee Hsia, MD, from San Francisco General Hospital. In a landmark study in the *Journal of the American Medical Association*, she plotted the survival of hospital emergency rooms on Kaplan-Meier curves, identifying the financial characteristics predictive of the mortality of an ED, including for-profit status and safety-net status.<sup>5</sup>

At the University of California San Francisco (UCSF), my career has focused on strengthening emergency surgical care through the dedicated availability of a surgeon to see patients needing surgery in the ED and hospital. This surgical hospitalist model has been implemented at over 400 hospitals across the country since Hobart Harris, MD; Jessica Gosnell, MD; Jonathon Carter, MD; Robert Wachter, MD; and I introduced the program in 2005.<sup>6</sup> However, I was still unable to change the lethal outcome of delays in treatment as my mother received care at a different institution.

Unfortunately, the passage of the Affordable Care Act (ACA)<sup>7</sup> may only make stories like my mother's more common, if lack of access to primary care results in increased numbers of Americans seeking access to an already overwhelmed emergency system. The American College of Emergency Physicians (ACEP) has identified the passage of a law in 1986—Emergency Medical Treatment and Active Labor Act (EMTALA),<sup>8</sup> recorded as the Code of Federal Regulations 489.24,<sup>9</sup> as a key driver of this crisis because it mandates public access to emergency care regardless of one's ability to pay. ACEP has tirelessly worked to reform this well-intended but underfunded mandate that increases the burden of uncompensated care, forcing some EDs to close, negatively impacting quality of care. Maybe there is some comfort that similar challenges in emergency care are being reported worldwide.

### **A Journey to American Emergency Departments**

The untimely death of my mother inspired me to take almost a year off to work on Capitol Hill with our elected officials, the media, and leading medical organizations to better understand the challenges in emergency care. I was also inspired by Abraham Flexner, the champion of medical education reform, to visit over 50 EDs to take inventory and search for new solutions. I rode on planes and trains and drove over 7000 miles last summer to meet with and to hear the personal stories of the people who had written to me after the publication of my article in the *New England Journal of Medicine*.<sup>1</sup> What struck me was the recurring theme of personal loss they too had suffered from an overwhelmed emergency system. Yet we should also not forget the successful outcome for Congresswoman Gabrielle Giffords after the deadly rampage in Arizona in 2011; the story of her amazing recovery catalyzed a positive change in perception in Washington, DC, about the heroism and courage of emergency physicians and trauma surgeons.<sup>10</sup> Indeed it is a privilege and an honor to take emergency call, and the need for emergency care reflects the trust that society places in its emergency workforce. Ultimately, identifying ways to support those courageous physicians willing to place themselves on the front lines of clinical care will be key to solving the emergency care crisis.

As I traveled across our amazingly beautiful country, I noted several recurring themes. In some parts, one can drive through deserts for hundreds of miles and not see an ED, whereas in some cities one can walk out of one Level 1 Trauma center right into another one a few blocks away. I was amazed by the billboards advertising how short waiting times to be seen were in certain EDs, suggesting the delivery of ED care is becoming competitive. I noted a wide variability and lack of standardization not only in care, but also in organization. In some hospitals, the ED is part of the Department of Medicine, in others it is part of the Department of Surgery, and in yet others, it is its own stand-alone department, which I believe is superior. As a mystery shopper, I often visited EDs unannounced through the front door, to witness care delivery through the eyes of the patient. In some EDs I was greeted by a valet for parking or by a nurse with a cup of coffee, and at others by ominous and foreboding security personnel seated behind bulletproof glass and metal detectors. I marveled that the most glistening and magnificent parts of hospitals were the cancer centers, and hope one day that towers dedicated to emergency care will also arise. I was pleased to see the emergence of dedicated children's EDs similar to the new UCSF Benioff Children's Hospital in Mission Bay, highlighting that children are not simply small adults. One of the most impressive EDs was at UCSF Fresno, which I regard as a premier ED nationally. I would like to thank Greg Hendey, MD, for his enlightening tour of this amazing 70-bed, Level-1 Trauma ED, with state-of-the-art trauma resuscitation bays, a burn unit, and precise attention to efficiency and economy in patient flow and movement as it serves an annual ED census of over 110,000 patients.

### **Three-Part Solution**

On the basis of my experiences around the country, I've reached the conclusion that the emergency care crisis is entirely solvable, through better distribution and prioritization of resources and incentives, and by standardizing and coordinating care nationally. I believe the solution involves three things: 1) we must inspire young people to work in emergency care; 2) we need to rewrite the laws, the ACA,<sup>7</sup> and EMTALA;<sup>8</sup> and 3) we must tell powerful stories to attract the attention of the media and of Capitol Hill, as the pathway forward to changing the law.

### **Inspiring Young Physicians**

Regarding inspiring more young physicians to work in emergency care, Thomas C Ricketts, MD, and George F Sheldon, MD, at University of North Carolina Chapel Hill have prepared excellent maps highlighting areas with shortages of surgeons, documenting nearly 1200 counties in America without a general surgeon available.<sup>11</sup> A remarkable solution proposed in Washington, DC, is to create a General Surgery National Health Service Corps to deploy board-certified surgeons for 3- to 6-month rotations across rural America.<sup>12</sup> A visionary federal approach could be similarly applied to all specialties, and would require the creation of new maps for Capitol Hill and US Department of Health and Human Services to determine where which specialties are needed most. A starting point could be the current distribution of critical-access hospitals nationally, or alternatively,

the distribution of post offices. Equally important is to identify where to recruit physicians willing to relocate temporarily. I believe we have an opportunity to harness the altruism of American physicians who seek to address global disparities in health care (particularly at the UCSF School of Medicine through the visionary efforts of Haile Debas, MD), and to persuade them to travel to hospitals in our own beautiful country.

More than 25 years ago, a young surgeon arrived in Tucson, AZ, to solve the challenges of Arizona's emergency care system. The surgeon dedicated his career to implementing a trauma system in southern Arizona grounded in the concept of regionalization. The successful outcome for Congresswoman Giffords is a testament to the efforts of that surgeon—Richard Carmona, MD, a graduate of both the UCSF School of Medicine and the UCSF General Surgery Residency Program—who would later become the 17th Surgeon General of the US.<sup>13</sup> Our nation can and must do better to improve our emergency care delivery system. The time has arrived to focus time and energy to solve the challenges facing emergency rooms nationwide. I do believe that at institutions like Kaiser Permanente and UCSF, we have the special opportunity to redefine and transform emergency care nationally, by thinking differently. Perhaps further answers will come from one of the medical students or residents in training today, who will follow Dr Carmona's inspirational path and define their own personal answer to Michael Tilson Thomas's question.

### Rewriting the Law

Turning to the second proposed solution of rewriting the law, this is at the heart of activity in Washington, DC. Capitol Hill writes the laws, the Supreme Court reviews these laws and determines their constitutionality, and the President (often an attorney) prepares Executive Orders that carry the force of the law. A few months after I first arrived in Washington, a Congressional staffer shared with me the following: "You have a number of excellent ideas, but here is the next challenge for you. On the game show Jeopardy, one must phrase the answer in the form of a question. In Washington, one must phrase the proposed solution in the language of a law that can be presented to Congress for a vote."

We must recognize that market forces have led to the closure of EDs all across America in the past decade; leaving this problem to the business sector will not be the final answer. A single institution will be unable to solve this crisis on a larger scale, and hospitals will need to work together rather than compete against one another. Accountable care organizations should be charged to solve overcrowding and boarding. Weber et al wrote an excellent paper about the positive long-term results of a new policy in England mandating either patient admission or discharge home within four hours of arrival at an ED.<sup>14</sup> It may take rewriting the ACA and EMTALA to use the "law" to instill "order" in the ED. If this is unsuccessful, reforming Medicare Part A reimbursement to hospitals for boarded patients may become necessary. Reforming patient expectations is also essential. The ED has been described by Kate Heilpern, MD, the Chair of Emergency Medicine at Emory, as a mirror for society's problems—the overuse

of guns, underuse of seatbelts, and drinking and driving.<sup>15</sup> Perhaps the time has arrived to consider a 28th Amendment to decide whether access to basic medical care and emergency treatment is a constitutionally guaranteed right? Only after reaching agreement here can our nation then move to the equally important discussion of the responsibilities and expectations inherent in that right.

### The Power of Storytelling

In Washington, DC, two of the profound lessons I learned from attending Capitol Hill hearings are the power of the law, and the power of storytelling as the gateway to the media and television to convince Congress and State legislatures to enact new laws. I visited the R Adams Cowley Shock Trauma Center in Maryland and learned of R Adams Cowley, MD, who coined the term "the golden hour," and pioneered the concepts of advanced trauma life support and regionalized care to dedicated trauma facilities.<sup>16</sup> The tipping point came in 1975, when attorney Dutch Ruppertsberger was involved in a near fatal automobile accident and survived after being transported directly to Shock Trauma, bypassing other nontrauma EDs en route. Mr Ruppertsberger later ran for public office and championed both Shock Trauma and regionalized care by sharing his personal story.<sup>16</sup> Many of you are likely aware that Parkinson's disease was one of the highest-funded diseases by Congress for a number of years, as a result of the passionate testimony and eloquence of Michael J Fox on Capitol Hill.<sup>17</sup>

On hearing the words "Once upon a time ..." a child instantly recognizes that a story will follow, perhaps the fairy tale of a courageous hero that will capture their imagination and simultaneously enlighten, empower, and inspire hope in the young mind. The art of storytelling to educate continues throughout our lifetimes, as we share stories that reveal the valuable lessons we have learned from our successes and failures to create a deeper bond with others. Regardless of one's profession, the better a storyteller you are, the greater your chances of succeeding by fully engaging and inspiring your listeners.

In an article in the *Journal of Patient Safety* in 2010,<sup>18</sup> actor Dennis Quaid highlighted a secret weapon in the national efforts to improve patient safety—of the potential of "story power as an untapped vehicle to inform, equip, and challenge leaders to drive change that can save lives, save money, and build value in communities." He defined "story power" as the ability to change or reinforce the behavior of others by telling a story, as a call to action that harnesses the power of full engagement. Quaid highlighted the story of Josie King, an 18-month-old infant who died at one of America's most famous hospitals as a result of missed orders to start oral fluids, followed by a medication error. A 10-minute videotaped interview with her mother, Sorrel King, recounting the tragic story has now been used in over 2000 hospitals through the Josie King Patient Safety Initiative to transform the delivery of health care worldwide.

The power of storytelling is repeated in recounting the near-death experience of Quaid's newborn twins Zoe Grace and

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Thomas Boone Quaid, who received 1000 times the intended dosage of the blood thinner heparin, leading to a two-day battle between life and death. The larger tragedy for our nation is that the same medication error occurred 11 months earlier elsewhere, killing other children, and has also happened since, because of the look-alike packaging of 2 different concentrations of heparin. Quaid has been inspired to share his story publicly to become a champion for high-quality care.

“A slow cultural shift over the past 20 years, led by television (from *St Elsewhere* to *ER*) has been humanizing society’s view of the practice of medicine.”<sup>19</sup> This comment was an accolade to Atul Gawande, MD, MacArthur Genius award recipient and noted author. His writings in the *New Yorker* have influenced the political debate about health reform. But whereas singular medical voices like his are having an impact, overall the profession of medicine is failing to have an effect in Washington, DC, with elected officials. The impact of the Supreme Court decision in June upholding the ACA has been felt worldwide, and the war on Capitol Hill over health care reform has erupted once again. As physicians, we must now harness the power of storytelling to enlighten Capitol Hill to enact new laws to strengthen EMTALA and the ACA to support emergency health care personnel, who struggle courageously each day to meet the needs of society.

As the debate rages forward again, perhaps patients and physicians across America will succeed in infusing the discussion with the hopes, failures, and triumphs from their personal stories. Harold Goddard once said: “The destiny of the world is determined less by the battles that are lost and won than by the stories it loves and believes in.”<sup>20</sup> Whether one chooses to apply the power of storytelling to become a better patient, physician, health care advocate, or health policy leader, the time has clearly arrived to enlighten Capitol Hill to enact new laws grounded in the principles of fairness, equality, and justice to fulfill the overarching intent of quality, efficiency, and safety in health care in America. ❖

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#### True Tests

“One of the true tests of leadership is the ability to recognize a problem before it becomes an emergency.”

— Arnold H Glasgow, 1905-1998, American humorist