TRUST: The 5 Rights of the Second Victim

Charles R. Denham, MD

istorically, we have referred to "The Five Rights" when we consider medication safety. We deliver treatment to the right patient, with the right drug, at the right time, with the right dose, and use the right route.¹

The purpose of this article is to propose 5 rights of our caregivers—5 human rights that our health care leaders must consider as an integral part of a fair and just culture when patients are harmed during the process of care. They may be remembered by the acronym, TRUST (Treatment that is just, Respect, Understanding and compassion, Supportive Care, and Transparency and the opportunity to contribute to learning). Not only must we bear in mind the sacred trust of our patients but we also must honor the sacred trust of our caregivers who serve in our hospitals and health care organizations.

Unintentional human error and systems failures account for most preventable harm to patients.^{2–13} Intentional negligence and harm because of malice is extremely rare; however, we treat our caregivers who are involved in human error and system failures with blame, shame, and, what may be most harmful, abandonment.^{3,6,9,12–32}

We will explore systems issues of caregiver fatigue, technology adoption without proper validation in the clinical setting, and unintentional impact of workflow reengineering that can contribute to systems vulnerability, thus increasing the risk of human error.

We address the impact on caregivers of unintentional human error and systems failures that result in patient harm, an impact that can cause a very real medical emergency for the caregiver—the second victim. If the first victims are the patients and their families who are harmed, then second victims are the caregivers and staff who sustain psychological harm when they have been involved in harming patients while trying to help them. Furthermore, we submit that a third victim is our health care organization that sustains a wound that can be worsened or lessoned by the behavior of our leaders.

OUR CURRENT PERFORMANCE GAP

The following story illustrates our current performance gap in caring for our own caregivers when systems failures and fatigue predispose them to human error. This story is intended to provide learning points for senior administrative leaders, nurses, pharmacists, and physicians.

Julie Thao is a nurse who served for 15 years with distinction in a midwestern hospital high-volume obstetrics unit. She had never been involved in any medical error or harmful event and was greatly respected by her peers and physicians. The following systems problems occurred all at once with devastating results:^{33–35}

During a holiday season, Julie's unit put out a "please help" request to all available nurses to cover open shifts because of a coworker's family medical leave. Julie responded affirmatively.

A formalized workaround had been developed and put into place, by the unit's practice council, to have patients prepare for an epidural before the anesthesiologist arrived. The goal of this "to-do" task list was to decrease the amount of time anesthesia needed to be in the unit and to increase the anesthesiologist's satisfaction. This to-do list

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guided nurses to obtain the epidural medications, insert and prime tubing, and place medications on the infusion pump ahead of time before the anesthesiologist had actually arrived and written the order for these medications.

A new bar code technology was in the process of being adopted for all medications in the unit. The technology had been in place only 2 weeks before the incident. Julie had been out for 1 of the 2 weeks on a family medical leave. The new scanner was unreliable in its ability to scan clear plastic infusion bags. If a bag was left unscanned, its information would need to be manually entered into the system.

The packaging for the epidural and antibiotic infusions was very similar: clear infusion bags with identical ports, making them both compatible with intravenous tubing.

After an intense double shift, (16.75 hours) and less than 6 hours of sleep before starting a third shift, Julie was very fatigued. Although appropriately labeled, the infusion bags were identical in size, shape, and connectors. She did not try to use the bar code scanning device on the clear bags because of difficulties she had encountered during the prior 2 shifts with the same type of infusion bags. She inadvertently mixed up the antibiotic and epidural bags and delivered the epidural medication through the patient's intravenous route meant for the antibiotic. When it was discovered that the wrong medication was delivered through the wrong route resulting in the death of a young mother, Julie collapsed and was admitted to the hospital as a psychiatric patient.

In the weeks that followed, she was terminated from her post with no severance compensation and criminally charged by the state attorney general; when she returned to her hospital for pastoral care, she was instructed by an administrative director not to return to the property. During the darkest hours that followed, she felt entirely abandoned, facing the possibility of jail time, a large fine, and loss of her license.

Ultimately, because of the cost of continuing to trial, she plea-bargained to accept a conviction of 2 misdemeanors. Thus, she did not have to serve a jail sentence. The board of nursing also concluded their investigation and opted not to revoke Julie's license and to allow her to practice again within a year. However, her life will never be the same after having made a fatal human error that was predisposed by systems failures and human factors. Subsequently, she has been embraced by leaders of the patient safety community to help make her story a learning case that can prevent harm to patients, caregivers, and our hospitals.

Although the feature of criminalization is unique, many of the other facets of this story are only too common at the front line. We often automatically fall into a pattern of name-blame-shame behaviors and deny our own caregivers the rights to the presumption of innocence of negligence, compassion and caring, and respect and privacy, and the right to participate in performance improvement and institutional learning as we instinctively and blindly seek a path of self-preservation.

Few organizations provide a systematic approach to care for those involved in unintentional events that harm patients. Fewer still are national organizations offering help to caregivers who are involved in harming patients.

KEY QUESTIONS

- Should hospital leaders be aware of and seek to reduce the risks of caregiver fatigue, untested technology adoption, and performance improvement changes that could instill untended risks into a system?
- Should we consider caregivers involved in unintentional human error and systems failures "second victims?" Are such second victims entitled to any rights? When caregivers are involved in unintentional human error and system failure, would the physical and psychological breakdown they experience be considered a personal medical emergency?
- Does it diminish the accountability of caregivers, who have made a human error that causes harm when we consider them as second victims, and treat them accordingly?
- Is there a third victim? Are there preventable consequences to a health care organization as a whole that hinge on how they handle the aftermath of a catastrophic event?

INTERVIEWS

The following interviews were undertaken with national experts in quality, safety, teamwork, and medication management to address the issues our senior leaders and caregivers face.

Interviewer: Charles Denham, MD, Chairman of Texas Medical Institute of Technology; Chair, Leapfrog Safe Practices Program; Cochair, National Quality Forum Safe Practice Consensus Committee.

Interview: Donald Berwick, MD, MPP, President and CEO, Institute for Healthcare Improvement (Video Interview, March 12, 2007)

Dr. Denham: How important is fatigue to caregiver performance?

Dr. Berwick: Human factors which affect safety and performance are human. So, whatever we know about ourselves as human beings is going to play out at work. Fatigue is a good example. When I'm tired, I forget things, I lose things, I drop things. That's going to happen at work too. It would be great if we could create a health system based on heroes, but we can't. People are going to get tired and when they get tired, the system becomes vulnerable.

Dr. Denham: Should our leaders be cognizant of the risks we run when our nurses and frontline staff are fatigued?

Dr. Berwick: Senior leaders will have to help protect their caregivers and their organizations from the impact of fatigue by building, into our systems, safeguards to prevent exceeding their performance envelopes. I think the health care workforce is so dedicated to their work in general that they're just going to try hard almost all the time and sometimes beyond their capability. For leaders, I think there are 2 challenges. One is to do what we can to keep from having to ask health care workforce—nurses, doctors, and others—to be heroes, to go beyond the envelope of their own capability or their own endurance. Second is that we have to recognize there will be times when nurses and doctors and others in the health care system are going to be very, very tired no matter what we do. They will have worked extra hard

and, due to the nature of their jobs, they, at times, can be put under added severe stress. That's just a fact of life in health care. I think we have to build dikes around that fact and not just help them not get that tired, but when they do, protect the system against the inevitable effects of that fatigue. Both of those jobs lie at the senior leadership level.

Dr. Denham: Can new technologies help or hurt our current complexity?

Dr. Berwick: Although technologies can enable best practices, there are also risks that must be kept in mind as we drive adoption, even when they are intended to improve patient safety.

Dr. Denham: Should this be factored into senior leader thinking and strategies?

Dr. Berwick: We're technophiles in health care. You know, we like the machines and the bells and the whistles and the novelty. In some instances, that is really good. That's how we make major advances, by having great inventions. Sometimes, we add complexity with inventions that don't add value, and we need to stop that because the inventions carry with them certain hazards. But the important thing to know is that even the technology that helps always also may hurt. Every single technology has a double edge, whether it's a computer system or a new device. A smart organization doesn't just introduce new technologies; it anticipates and deals with the inevitable other edge of the benefit. If there's a downside, we have got to address it.

Even if technologies or care process improvements work in the laboratory, they may work differently in the field. So the job of making health care better is always a job of local adaptation, local learning. We can bring in the new technology—the bar coding systems, the new device, or new workflow method into the process of care—but then, there has to be cycle after cycle in a local unit to make it work right and to discover the hazards and blunt the negative sides of the very thing that we're introducing to help people.

Dr. Denham: Is it reasonable to consider those caregivers who have been involved in preventable unintended harm due to systems failures or human error to be "second victims." Do we owe them compassion and care?

Dr. Berwick: Health care workers' egos can be big. But believe me, their superegos are a lot bigger. You carry into work—as a nurse, or doctor, or a technician or pharmacist—the intent to do well. And when something goes wrong, almost always you feel guilty, terribly guilty. The very thing you didn't want to happen is exactly what happened. And if you don't understand how things work, you feel like you caused it. That creates a victim. My heart goes out to the injured patient and family, of course. That's the first and most important victim. But health care workers who get wrapped up in error and injury, as almost all someday will, get seriously hurt too. And if we're really healers, then we have a job of healing them too. That's part of the job. It's not an elective issue, it's an ethical issue.

I think, in the moment of injury to a patient, there's an urgent emergent injury to the health care worker involved in that as well. We have to get in and help them. And I think they have a right to that. I think patients have a right to safety and protection and healing, and I think health care workers have a

right to be supported when they get involved in an injury that they did not mean to cause, but which, nonetheless, has become part of their experience.

Dr. Denham: Are these second victims entitled to be considered innocent of negligence or intentional harm and be treated with respect immediately after an event? We so often shun them or treat them with less respect than many believe they deserve.

Dr. Berwick: I think the vast, vast majority of health care workers—doctors, nurses, pharmacists, clinicians, managers—are trying hard to do the right thing. They go to work with good will and good intent. When a patient gets injured, it's not a result of their intention. It's a result of something around that set them up for the defect to occur. I think they deserve the right of a presumption that their intentions were good, and there's a heavy, heavy burden on the leadership to be accountable to the health care workforce. It doesn't mean something didn't go wrong. What's wrong is that the health care worker may have been as trapped in a set of systems failures as the patient was.

Dr. Denham: Often, we isolate caregivers involved in an event from the learning that can be harvested from the follow-up analysis. In some cases, they are even terminated from their employment. Do you believe that they have a right to be involved in the learning that can come from the analysis of events, and do you believe it is part of helping them heal?

Dr. Berwick: If you think about the injury that's occurred to the second victim, the health care worker who's involved in the injury of a patient and did not mean to be, you'd ask how would they heal. I can't think of a more healing opportunity than for them to be able to contribute to learning that prevents injury in the future. That's healing. I think they have a right to participate in that. They came to their jobs to heal. They can help heal the system too.

Interview: Allan Frankel, MD, Director of Patient Safety for Partners Healthcare, Boston, MA (Video Interview, March 10, 2007)

Dr. Denham: How do you define a "Just Culture" to someone who has not been introduced to the concept?

Dr. Frankel: David Marx^{20,33} really should get a great deal of the credit for thinking about a Just Culture. But there are many who have been developing this area of Just Culture and our ability to make changes in the health care industry. A Just Culture is an environment in which individuals are evaluated in their actions, based on whether or not they take unjustifiable risk or not. No one can unjustifiably increase risk. However, if you do increase risk in delivering care to a patient because you're balancing 2 problems and you decide to go down one direction or another...that's allowed if justified. If, in this circumstance, you make an error and hurt a patient, it would never be an issue of unjustifiable risk-taking...it would be human error. A Just Culture is one that differentiates between error and unjustifiable risk taking. A Just Culture is capable of looking carefully in the gray areas in such a way that any reasonable person would be able to say, "You know, this person is being treated fairly."

Dr. Denham: We have incorporated Just Culture into the NQF Safe Practices that have been updated and released in March of 2007, to which, you were a major contributor.³⁶ Is there an opportunity for real improvement in developing more just cultures in hospitals?

Dr. Frankel: Oh, we have enormous opportunity. With just the smallest change in the way we think, we can begin to support our frontline care providers much more effectively than we currently are now. We have such antiquated ways of thinking about how we deal with providers if they break a rule, even though the rule might be ineffective or not useful... or how we deal with people when they just make errors. And we act in a punitive manner towards them as a result. We can be much more effective in separating out blameless error and justifiable risk from unjustifiable risk taking, and it wouldn't take a great deal of work to do so. It just takes the will...and the commitment of our leaders.

Dr. Denham: How important is fatigue as a human factor addressing performance? Should we consider this as we define optimal shifts for nurses working on the frontline?

Dr. Frankel: We know that fatigue in frontline employees increases the likelihood that they're going to make errors. I mean, that's incontrovertible. Not only do we know it in the health industry, but there's good data elsewhere in terms of driving and, obviously, in aviation. There are strict rules in that regard. The issue with fatigue in health care workers is that we both have to take it into account and then begin to learn how to balance the issue of fatigue with the issue of handoffs because handoffs have a set of risks also. And we don't know enough in that area. When we do, we'll be able to sort out what length of time people can work, the degree of risk which increases over time, what risk handoffs engender, and then begin to balance the length of time that's reasonable for folks to work. What we do know is that if you take nurses and start having them work double shifts, as they get into hours—12 and 13 and 14, the error rates begin to go up significantly, and that's absolutely measurable. They begin to increase two-fold, three-fold, four-fold as each consecutive hour works into the second shift. When you get to a certain number of hours of lack of sleep, you begin to function at the same level as if you'd been drinking to a point of being drunk.

Dr. Denham: Technology adoption carries with it certain risks along with the benefits. Could you comment on your experience seeing many organizations across the country who are dealing with this issue?

Dr. Frankel: It's clear that, as new technologies come in, we perturb the environment and make it more complicated. That leads to more errors during that period of time. So you know, all you have to do is look at what happens when a new physician order entry system goes into a hospital. The amount of support that clinicians need when physician order entry comes in is enormous because it's a whole new way of doing things. It's no great surprise in real life when you get a new device, a new instrument, a new car, a new toy...your ability to use it initially is poor and as you get more facile with it, you get better. What we tend to do is bring in these new technologies and ramp them up sometimes at a rate that's faster than we should. Or we have expectations of providers that are unrealistic, and they are struggling. Nurses at the

front line and at hospitals today always feel on the edge of becoming incapable because there are new pieces of technology coming in on a constant basis. It's a real challenge for them.

Dr. Denham: What key issues should be considered as we pursue adoption of certain technologies?

Dr. Frankel: Education is clearly very important. Appropriate education of individuals prior to the technologies going live is essential. We become much more effective in our simulation labs when we reproduce the real experience on the floor. But then, the other component of it is intelligent deployment when the new technologies actually go into the units. You don't want to bring too many technologies or features on at once because providers just can't take on too many new ideas at one time. They've got busy schedules. But intelligent deployment is a component of process improvement. So it's not only education, it's also that by using process improvement intelligently, you can bring new ideas into an environment at a rate at which your frontline providers can manage them.

Dr. Denham: Are there specific tools we can use to assist in adoption of technologies, and are our frontline nurses and staff entitled to the right to learn how technologies might fail?

Dr. Frankel: Not only should we be careful but we have a mechanism now to help evaluate where and how to be careful. The whole concept of failure modes and effects analysis incorporates this idea of "Before we bring a new technology into the environment, let's sit down and think what are the steps that it's going to affect. What steps are the ones that are going to be most likely to increase risk, and what can we do in those steps to mitigate that risk?" So, this is a method we can use to make the process safer...looking at these interventions as they come in. Certainly, the high-reliability industries already understand that because they are at a level of higher liability where there are very few errors being made. They always have to do failure modes and effects analysis before they bring something new into their environment. We need to begin doing that in the health care setting, for sure.

Dr. Denham: What about the law of unintended consequences? When we change a workflow to improve efficiency or speed up our work, should we be cognizant of the potential impact of such changes? Is it important for leaders to be accountable for such issues?

Dr. Frankel: Prior to making changes in workflow, a group that really understands the environment that these changes are going to happen in has to sit down beforehand and say, "Where are the places that this is going to fail, and what are the things that we need to do to avoid the failures from occurring?" It's just a process of mapping out the steps and looking for the pitfalls.

Dr. Denham: We have discussed proposed rights of the second victim of a systems failure. How would you communicate those rights to a nonclinical trustee or community leader?

Dr. Frankel: When an adverse event occurs to a patient, there are always clinicians who are victims of that event. They're the ones who feel responsible. In many cases, their lives fall apart because of the sense of responsibility that they have. They are the second victims. It is our

responsibility, in the health care industry, to support those individuals as much as and as strongly as we support the patients and their families. They have the right to be treated with respect. They have the right to participate in the learning that occurs and to help generate the learning from those events...because that's a healing process for them. They have a right to be held accountable appropriately, where there are systems thinkers in the organizations that can differentiate between system accountability and individual accountability. They have a right not to be abandoned by the health care system that they work in and work for. They have a right to be cared for by their peers and to be held as closely to that organization as the patients and the patients' families have a right to be cared for and held closely by those organizations.

Dr. Denham: We are proposing a systems failure or human error that is truly harmful to the patient and family, which subsequently creates a psychological emergency for the second victim—the caregiver. Do you believe that this is truly a medical emergency for our caregivers, and do they deserve the right to compassion and care?

Dr. Frankel: Absolutely. If you talk to the psychiatrists and the social workers and the employee assistant plans for hospitals, they can describe the trauma that clinicians, who come to do good work, find themselves in when they discover they've hurt a patient. It's devastating for them. It's absolutely just as much an emergency for them as it is often for the patients. First and foremost, we have to take care of the patients and families. There's no question about that. But we have to take care of our own, especially when we have good people who mean to do well and then find themselves in situations where they're devastated by having hurt someone else. We have to take care of them. Yes, that is a medical trauma requiring emergency care. We under resource this area and, in many cases, ignore it.

Interview: J. David Moorhead, MD, Chief Medical Officer, Florida Hospital, Orlando, FL (Video Interview, March 12, 2007)

Dr. Denham: Do you find it contradictory that we limit the work time for house officers and residents, yet we know fatigue impacts nurses to the same degree, and we treat them differently?

Dr. Moorhead: We now are mandated to control the hours of our house staff and how they get to their 80-hour work week. But we give incentives to nurses to work fatigued. We pay nurses extra. We plead with nurses to work shifts when we know they're tired. We do that because we're trying to cover the units. But then, when they make a mistake, when the system allows them to make a mistake, sometimes we cast them off. We should be ashamed of ourselves.

Dr. Denham: As a former hospital CEO, a surgeon, and now a patient safety expert, address the issues of technology adoption and care process changes.

Dr. Moorhead: Whenever you implement a new technology, the law of unattended consequences is in effect. We really have to think this through carefully. The new technology may make one part of our life easier, but it may open up a whole Pandora's box on the other side. There is always collateral impact when we change care processes. We

have to take a systematic approach to ensure our team members, our employers, and our nurses have help as they deal with those collateral issues.

Dr. Denham: Please address the commitment we must make to our employees and caregivers. Do we owe them the right to support after catastrophic events?

Dr. Moorhead: In any health care institution, your most precious resources are your employees. Your employees are going to make mistakes because they're human, and they're operating in imperfect systems. Mistakes are going to be made, and it's our moral obligation to support our employees and support our team members when mistakes are made. They need our help, and we must be able to be there for them when they need us.

Dr. Denham: Do you believe that the trust of our employees is at risk when we don't take care of our caregivers after a harmful event?

Dr. Moorhead: If, indeed, we don't support our people, we'll lose all trust, we'll lose their respect, and in the long term, we will harm the culture of our organizations.

Interview: Carol Haraden, PhD, Vice President, Institute for Healthcare Improvement (Video Interview, March 12, 2007)

Dr. Denham: Please address the issue of fatigue and its dangers as we consider self-assessment of our performance.

Dr. Haraden: Fatigue can influence rational thinking, and we can have a self-delusion that we are performing well. One of the things you lose when you're very fatigued is critical assessment skills. Your ability to assess your own performance is gone, and so you are even more dangerous because you have little idea how it's affecting your performance. So, to ask nurses, "How are you doing? Can you handle a second shift?" and for them to say "yes" doesn't necessarily make me feel better because a fatigued nurse has lost critical appraisal of the real complexity of the situation.

Dr. Denham: What can we do when we are short-staffed and forced to push the human performance envelope of our nurses and staff?

Dr. Haraden: If we are in a situation where we must do a double shift, there are ways we can address the issue. We can coassign people so that you've got a fresh person backing up a person who's tired. To assume, after 12 hours, that someone is going to be just as good as they were at hour one is just ridiculous. It is up to us to safeguard our patients because people will rise to the occasion. When we ask them "Could you please take an extra shift? Your patients and we need you..... There is nobody else to cover." Well, it's almost impossible to say "no." We put nurses in a terrible situation. We must not put them in that situation. If we do because we have exhausted all contingencies, we must make them safer by thinking through the complexity of tasks they are asked to do that shift. We must remove that complexity or coassign tasks. We just can't expect that they're going to perform. It's really unfair and unsafe for everybody.

Dr. Denham: What are the training issues that need to be kept in mind as we adopt new technologies?

Dr. Haraden: There are 2 issues that are important regarding training with and for adoption of technologies: First,

the decrement of actual ability to use the technology as time passes after training. We just forget how to use it. When we are trained once a year on a technology we rarely use, we are at risk for failure. The second issue is the appropriateness of training. When training does not reflect or simulate real-life conditions, we risk success at the front line. If training happens in a classroom where it is quiet and students have time to think, that does not really simulate the situation on the floor. On the floor, we are stressed, the patient's looking and maybe the patient's husband or family are watching you as you are working with a piece of machinery or technology. Alarms may be ringing, it might be dark, and you are tired. Now, we have a whole different machineperson interface situation. We're rarely trained on new technologies in real-life conditions.

Dr. Denham: Do you resonate with the concept of a second victim of systems failure and human error, and do you believe we let them down in typical practice of medicine and nursing?

Dr. Haraden: Our systems are so fragile. They break all the time. It really is just a question of who's at the sharp end that day. There is definitely a second victim. Those people suffer enormously. Anyone who has talked to these people find that they have recurrent nightmares. It's really posttraumatic stress disorder. They have been through a horrible event. If the patient is harmed, it's particularly terrible. If the patient dies, it's years and years of reparation, if they ever recover. So we often lose a wonderful caregiver from the profession. We often lose the lessons that could be learned because they're fired or they're asked to be quiet, certainly, by their attorney or by the hospital's attorney. Although, there is often whispering about what's going on, there is no full disclosure and discussion. The second victim rarely gets to begin to understand how we're caught up in systems failures and rarely have the opportunity to help others, so that they don't get caught as well. It's just a terrible, terrible tragedy in every way.

Dr. Denham: Do you believe that a psychological emergency occurs to caregivers involved in catastrophic harm to patients?

Dr. Haraden: It is absolutely a psychological emergency. I think about policemen whenever they are involved in a fatal shooting. Even if it's justified, they have to go through full psychological counseling before they're allowed back on the street. We think about nurses and doctors and pharmacists in that similar situation. Typically, they're swept to the sidelines. Naturally, a lot of our focus is on the patient and family. But there's no second system to sweep them up into the loving arms of that organization and help them to manage what has got to be just a terrible, terrible unprecedented tragedy in their life.

Interview: Lucian Leape, MD, Adjunct Professor of Health Policy, Department of Health Policy and Management, Harvard School of Public Health (Verbal Communication, March 12, 2007)

Dr. Denham: Is it fair to patients and their families involved in systems failures and human error to consider their caregivers as second victims?

Dr. Leape: Absolutely. Of course this is fair, and it helps them begin to understand that any accident is the result of many factors and that the caregivers are the last ones caught in systems that are unsound.

Dr. Denham: Do you believe that it is a psychological emergency for caregivers when they are involved in catastrophic unintentional harmful events? Are they entitled to compassion and care by their institution?

Dr. Leape: Absolutely. They are as much a patient needing care as the first victim. Most physicians and nurses are very conscientious, and when they realize they have harmed someone during care, they are devastated. Clearly, both the first victim and the caregivers have sustained an emotional wound. We need to provide care for both.

Dr. Denham: You have been a leader in developing disclosure as a best practice in the Boston medical community and were involved in helping us develop the disclosure practice that became a national standard in the *Safe Practices for Better Healthcare*—2006 Update, ³⁶ recently published by the National Quality Forum. Should we consider developing a national best practice that could become a national standard for treatment of our caregivers after a serious event causes significant harm to patients?

Dr. Leape: We should. This issue is important to patient safety, and such a practice should be thoughtfully considered and submitted through the process.

Interview: Michael Leonard, MD, Physician Leader, Kaiser Permanente (Video Interview, March 10, 2007)

Dr. Denham: As a national teamwork and communications expert, how important is fatigue as a contributor to systems failures and human error?

Dr. Leonard: We know fatigue is a huge issue in health care. We know the longer people work, the more mistakes they make. We know that nurses, after 12 hours at work, are 3 times more likely to make mistakes. Yet we have this relentless operational pressure to deliver care 24 hours a day. It's a very significant issue in medicine, one that we're really just starting to take seriously. Fatigue, as an institutional or organizational issue, is huge. There is abundant literature from other high-risk industries that people who are fatigued clearly make more mistakes. We put patients at risk. I think it's our ethical responsibility to really learn and pay attention to it and manage it.

Dr. Denham: From your perspective, what are the key issues regarding technology adoption for nurses and patient safety?

Dr. Leonard: I think there are 2 issues with technology adoption. If we look at the basic job description of what it is to be a nurse today, we find that it's very task oriented, and we very frequently do not give nurses the big picture as to what the care of the patient is. If you follow nurses around, you find they spend about 30% of their time on direct patient care, about half their time on paper work, and probably 10% or 15% on just wasteful activity. So what we need to do is 2 things: we need to understand the basic job description and performance, and we need to be very careful and methodical about implementing technology. Technology will solve 1 set

of problems, but it invariably opens the door to creating other problems.

Dr. Denham: Please address the issue of distractions and degradation of human performance.

Dr. Leonard: Human beings do not do well when interrupted, and they are not natural multitaskers. We know that when people drive cars and talk on cell phones, they are 50% more likely to wreck their cars. They have an accident rate equivalent to being legally drunk. There's a recent article by Steve Spear and Anita Tucker, who, while at the Harvard Business School, observed surgical nurses. They found that in 8 hours, we ask nurses to do at least 100 different tasks that last an average of 3 minutes each. They are formally interrupted at least once an hour. That type of systems function, or lack thereof, makes our nurses very error-prone. These factors are basically additive. So, if you're tired and you're distracted and you're interrupted and you're trying to do 12 things at once, you're far more likely to make a mistake.

Dr. Denham: Do changes in workflow and technologies often cause systems failures that result in preventable patient harm?

Dr. Leonard: Well, I think as we introduce technology, or change the way we take care of patients and do work, we need to be very methodical and examine the independent consequences. There are many examples where well-intended technology adoption has resulted in disastrous consequences. I'll give you a simple example. Ten years ago, at a hospital in the Rockies, temperature probes intended to monitor a patient's temperature were changed. Wiring for the replacement probe did not work, and a patient's temperature rose to 107° without this being recognized. That was a simple change that was not accounted for. They didn't undertake training, they didn't maintain awareness, they didn't have education, and they didn't have "Plan B" when something did not work. They ended up with a disastrous result.

Dr. Denham: Are most of the human errors that result in catastrophic disasters related to unintended systems failures?

Dr. Leonard: We know that for 95% to 98% of the adverse events in medicine, we have skilled competent people trying hard but set up to fail by things they never saw coming. These are very fundamental issues around safety. I mean, how do you engineer so that 1 tubing intended for a specific purpose cannot be connected to the wrong tubing? Think about look-alike medications. I mean, there's a terrible example from Indianapolis in the newborn intensive care unit, where the wrong concentration of heparin was placed in the storage cabinet. It was a hundred times too concentrated. Nine people took the wrong medication out of that machine and inadvertently administered it to children. Now, those were not bad people. Those are highly skilled competent individuals trying very hard to do the right thing, but they never saw the hand grenade coming.

Dr. Denham: Do leaders have a moral obligation to take care of our caregivers after a systems failure or human error resulting in patient harm? As we have been discussing, do our caregivers have rights to fair treatment, compassion, and care?

Dr. Leonard: You know, we have a fundamental ethical responsibility to take care of our people. Now, when somebody gets inadvertently hurt, it's devastating for the care providers. There is an abundant amount of literature on this that we do not do an adequate job. And you can go back some years to Albert Wu's⁹ article on the second victim and disclosure, and you will find that two thirds of internal medicine residents who had been involved in a mistake that inadvertently killed a patient...two thirds of them...said they were not able to share it, even with a close personal friend. There's huge psychological damage in this. If leaders are going to model the values of an organization—job one: take care of the patient; job two: take care of your people.

Dr. Denham: Should caregivers have a right to participate in the learning after a catastrophic event? Should they be given the right to transparency of the facts, rather than such information being hidden from view, as it often is to reduce malpractice risk?

Dr. Leonard: When something goes wrong, who has the most knowledge? Who has the greatest investment in fixing it? It is the person who was involved in the problem. And if we don't take the expertise of the people who are on the sharp end closest to the work and incorporate it into our learning, we're just not going to get to the right place. I think, in the aftermath of an adverse event, we have a fundamental responsibility to be honest, respectful, and transparent with both patients and their families and the people who provide care in our systems. I think that's just nonnegotiable.

Dr. Denham: Should hospital leaders be personally engaged in making sure that their staff and physicians are cared for after a serious event harming a patient?

Dr. Leonard: This is what leadership's all about. If you can't model the values of compassion and healing and you can't treat people in the way you would want to be treated, or your family to be treated, then you're not going to be an effective leader. Caregivers who are capable, conscientious, and have greatly sacrificed to learn to be this skilled to take care of patients...we entrust with people's lives. When something goes wrong, there's nothing more devastating. If we don't take care of our people, both physically and psychologically, we have abandoned our responsibilities as leaders.

Interview: Michael R. Cohen, RPh, MS, ScD, President, Institute for Safe Medication Practices (Written Communication, March 20, 2007)

Dr. Denham: What should caregivers be concerned about after their involvement in a serious sentinel event?

Dr. Cohen: It's obviously devastating to know that you've been involved in an event that resulted in serious harm or death of a patient. Your initial reaction, of course, is a feeling of intense remorse but also responsibility to the patient, the hospital, and your colleagues to do anything and everything possible to help the situation in the immediate aftermath. That includes offering your complete cooperation and assistance with the postincident internal investigation. Keep in mind that if the event led to a death, it is also likely that an outside investigation will take place, including by a medical examiner or coroner's office, investigators from state

professional boards and, as we seem to be seeing more and more often, even the district attorney or attorney general's office. Considering that statements made to outside investigators (e.g., legal authorities) or state board investigators have, in fact, made their way to prosecutors who are intent in using the information against you, I'd suggest that practitioners might want to consider, in advance, the steps they need to take to protect themselves legally. Unless there was obvious criminal intent, an arrest isn't being contemplated, so there is no "Mirandizing" of health professionals prior to the interview, and therefore, many practitioners will not recognize the legal threat. It is important to consider the need for immediate representation by counsel, separate from the organization's legal counsel.

Another issue is liability insurance. Employers often imply that, in the event of a serious incident, employees are covered by the organization's liability insurance which offers blanket protection for all employed staff. While that statement about coverage would be true, there are times when it is in the employee's best interest to have their own liability protection. For example, attorneys for the hospital's liability carrier may be faced with situations where both the hospital and practitioner are sued. In these cases, they may face a dilemma. Who do they defend, the hospital that wants to focus blame on the practitioner or the practitioner who wants to blame a failed system? We've even heard about situations where a hospital was successfully sued and later turned around and sued their own employee to recover their loss.

Dr. Denham: What is available for health professionals? **Dr. Cohen:** It appears that there are few, if any, programs that offer support for health professionals in the wake of a serious sentinel event. Both psychological support and legal assistance are important. It should not be that difficult to set up a network of psychologists and attorneys who would agree to offer an hour's worth of free advice and help in contacting local consulting professionals.

Dr. Denham: Is it more common these days to see medical errors become criminal cases?

Dr. Cohen: The recent article in the *ISMP Medication-SafetyAlert* entitled "Criminal Prosecution of Human Error Will Likely Have Dangerous Long-term Consequences" outlines concern about the fact that there has been a recent wave of criminal investigations into errors made by health care practitioners. According to this article, "Escalating application of criminal error laws also serves as a reminder that a harmful error—often similar in form to minor mistakes we all make on a daily basis—could also strip away a hard-earned and cherished livelihood, the ability to help others, and personal freedoms once taken for granted." ¹⁷

CORE CONCEPTS

Certain core concepts are important to developing a working model for discussion of the rights of caregivers involved in preventable harm to patients.

• **Just Culture.** A Just Culture is both fair to workers who make errors and effective in reducing safety risks. In a Just Culture, all workers know that safety is valued in the

organization, and they continually look for risks that pose a threat. They are thoughtful about their behavioral choices and always thinking about the most reliable ways to get the job done right. Managers are constantly looking for system design features that would give the workforce the best opportunity to perform well. Although it is recognized that every endeavor carries the risk of human error, workers are held accountable for the things that are under their control: system design, particularly for the management and administrative team, and behavioral choices for the entire workforce. ^{2,16,20}

- **Systems Fault.** The totality of active and latent errors within a system may be considered as systems fault. The terms *active* and *latent* as applied to errors were coined by James Reason. Active errors occur at the point of contact between a human and some aspect of a larger system (e.g., a human-machine interface). They are generally readily apparent (e.g., pushing an incorrect button, ignoring a warning light) and almost always involve someone at the front line. Latent errors (or latent conditions), in contrast, refer to less apparent failures of organization or design that contribute to the occurrence of errors or allowed them to cause harm to patients.³⁹
- Sharp End Blunt End Model. This model provides a conceptual framework that allows us to examine predisposing factors to harmful events that occur at the point of care. Health care demonstrates the same properties of risk, complexity, uncertainty, dynamic change, and time-pressure as other high-hazard sectors including aviation, nuclear power generation, the military, and transportation. Unlike those sectors, health care has particular traits that make it unique such as wide variability, ad hoc configuration, evanescence, resource constraints, and governmental and professional regulation. 40 Sharp End—the sharp end refers to the personnel or parts of the health care system in direct contact with patients. Personnel operating at the sharp end may literally be holding a scalpel (e.g., an orthopedist who operates on the wrong leg) or figuratively be administering any kind of therapy (e.g., a nurse programming an intravenous pump) or performing any aspect of care. Blunt End—the blunt end refers to the many layers of the health care system not in direct contact with patients but which influence the personnel and equipment at the "sharp end" who do contact patients. The blunt end thus consists of those who set policy, manage health care institutions, design medical devices, and other people and forces, which, although removed in time and space from direct patient care, nonetheless affect how care is delivered. Thus, an error in programming an intravenous pump would represent a problem at the sharp end, although the institution's decision to use multiple types of infusion pumps (making programming errors more likely) would represent a problem at the blunt end. The terminology of "sharp" and "blunt" ends corresponds roughly to "active failures" and "latent conditions."39
- **Trust.** Covey and Merrill, ⁴¹ the authors of *Speed of Trust*, say that trust in any system is vital and that it can be considered as a kind of confidence that can be broken down into competency and integrity. When a preventable error or

system failure occurs, caregivers lose confidence in themselves, and their colleagues lose trust in them, and if leaders of organizations act without integrity or fairness, they can erode the trust of the workforce in the values of the organization. From a business standpoint, Covey and Merrill⁴¹ submit and successfully argue that, when trust goes up, speed goes up, quality goes up, and cost goes down. When trust goes down, speed goes down, quality goes down, and cost goes up, It is clear that when trust goes up, reliability goes up. Therefore, even to our most jaded leaders, engendering trust is good business.

- Grief. Both organizations and individuals go through the stages of grief that Kübler-Ross⁴² has defined when they grieve their losses—denial, anger, bargaining, depression, and acceptance. Caregivers grieve for their patients and families as well as grieve the loss of their self-esteem and confidence as a high-performance caregiver. Organizations, as a collective body of individuals, go through these stages as well when they realize that they may not be the great organizations they once believed they were. Many organizations lay mired in denial. When they settle out of court and suppress the facts regarding an event, they paralyze healing.
- The Second Victim. Wu⁹ defines and describes the circumstances around the second victim. "Many errors are built into existing routines and devices, setting up the unwitting physician and patient for disaster. And, although patients are the first and obvious victims of medical mistakes, doctors are wounded by the same errors: they are the second victims." Other caregivers are included in the definition. "Nurses, pharmacists, and other members of the health care team are also susceptible to error and vulnerable to its fallout. Given the hospital hierarchy, they have less latitude to deal with their mistakes: they often bear silent witness to mistakes and agonize over conflicting loyalties to patient, institution, and team. They too are victims." We are only now starting to recognize that unintentional errors and systems failures are like a blind-sided attack out of nowhere. Not only are our caregivers involved in a public tragedy, the support systems they count on are knocked out from under them, and their personal defenses are down.
- The Second Victim, Medical Emergency. It is clear that when caregivers are involved in a harmful event to a patient, it can become a medical emergency for them, equivalent to posttraumatic stress disorder. Rassin et al, ¹³ in a study of nurses who had been involved in a preventable medical error, divided the situation into 3 chronological periods. (1) The day the error occurred, the workplace is usually characterized by preexisting conditions of stress, pressure, and inattention. (2) After the error, the caregiver typically takes responsibility for their error and experiences stress-related psychological and physical reactions of fear, anger, and shame. (3) Within the first weeks, because of the negative treatment by colleagues and their organizations, the caregivers experience fears of "Getting Fired," anger at "He Who Works, Errs," and depression of "Waiting for the Inquiry"—"Every Day Is Like Eternity." The months that follow are characteristic of posttraumatic stress disorder, an inability to process the feeling of fear, sadness,

- guilt, and shame. The traumatic event damages their perception of themselves and their inner security. The instant when harm occurs, the caregiver needs to become a patient of their organization. They need compassion, caring, and respect.
- The Third Victim. We propose, in this article, the concept of the third victim. Even if we care for our individual staff and clinicians, our hospitals are social organisms that sustain collective harm in self-esteem and confidence. They need the healing salve of transparency and dedication to humble performance improvement. When we hide our systems failures and cover up the details of our fallibility and culpability, we infect the wound to our culture with distrust that may prove to be an overwhelming sepsis to our organization. This is a moral issue that can either build the character of an organization or irreparably damage it by our actions. The outcome must be shouldered by our leaders.
- The Third Victim, Corporate Emergency. A hospital or health care facility is like a living organism. When a catastrophic event occurs, it really is an emergency. The values of the organization are put to the test, and the workforce watches the leaders with a collective fear and anticipation. When such an event occurs and the organization retreats to self-preservation behaviors and abandons their staff, the organization can lose its inspiration. Terms such as honor, trust, loyalty, respect, and compassion become tangible and concrete when crisis occurs. They seem soft density and less palpable until we have a burning platform. When we harm a patient and family, our collective detachment is penetrated. When we abandon our teammates, the collective consciousness of the workforce and esprit de corps are penetrated, threatened, and perhaps even mortally wounded.
- The 4A Impact Model. A model has been developed to assist those who are adopting best practices and those who are attempting to accelerate adoption of new technologies or best practices. Awareness, accountability, ability, and action are critical for transformation and change. To accelerate adoption of best practices, we need to be aware of our performance gaps. Leaders and key effectors need to be accountable for closing those gaps; we need to invest in our ability to close those gaps; and most of all, we need to take the appropriate actions. Leaders can leverage these principles to launch a systematic approach to improve or attack the status quo. 43

TRUST: The 5 Rights for the Second Victim. In a just culture, those caregivers involved in preventable events that harm patients because of systems failure and/or unintentional human error are entitled to rights currently not routinely afforded them by U.S. health care. This proposed list will be studied further to develop core concepts, tools, and resources; however, it is respectfully submitted to hospital leaders for consideration now to help prevent what happened to Julie Thao from happening again.

• Treatment that is just. We cannot presume the guilt of negligence or assign 100% accountability to caregivers in the face of systems failures that predispose caregivers to human error. Social Darwinism is triggered when a

catastrophic event occurs, driving behaviors in our hospital leaders more likely to be found on a television episode of *Survivor* or *The Apprentice*, rather than in healing organizations that have values of compassion and caring often displayed on the walls of their great physical plants. We often treat our caregivers involved in systems failures as guilty of the worst of sins. In a "Just Culture," a nonpunitive approach of just treatment is adopted that can lead to improving the system that allowed the error to occur. It also can address the collateral damage both to the caregiver and organization.

- Respect. Nurses, pharmacists, and all members of the health care team are susceptible to error and vulnerable to its fallout. In the immediate period after an event, it is second nature to fall into a name-blame-shame cycle, often denying our colleagues even the most basic elements of respect and common decency. We must practice "the golden rule" and treat our colleagues with the same respect we would expect. Our colleagues often bear silent witness to mistakes and agonize over conflicting loyalties to patient, institution, and team. Leaders must encourage their organizations to respect those involved in an event. They must lead by example. To delegate interaction with caregivers involved in catastrophic events is not leadership by example.
- Understanding and Compassion. In the words of Julie Thao, "the very instant preventable and unintentional harm occurs to a patient, their caregivers become patients." The caregiver needs time and compassionate help to be able to grieve-to go through the stages articulated by Kübler-Ross:⁴² denial, anger, bargaining, depression, and acceptance. To help their teammates, leaders of an organization and frontline caregivers must have an understanding of the knowledge of systems failures and realize that the great majority of harmful events are because of a cascade of contributing factors; most of all, they must understand the pathophysiology of psychological emergency that occurs when a caregiver unintentionally harms a patient. They must reach out to the second victims with the very compassion that they espouse or seek to deliver to their own patients.
- Supportive Care. Our caregivers are entitled to psychological and support services. The literature is full of instances showing that the healers are subject to trauma after such events and can be considered the second victims. We must take a systematic approach to delivering this care in as professional and organized way as we would in treating any other patient.
- Transparency and the Opportunity to Contribute. Patient safety will be well served if we can be more honest and transparent about our mistakes to our patients, our colleagues, and ourselves. A more thorough understanding of the ethical and social contract between caregivers and their patients, and the professional milieu surrounding an error, may improve the likelihood of its disclosure. Key among these is the identification of institutional factors that support disclosure and recognize error as an unavoidable part of the practice of medicine. In Improving patient safety hinges on the ability of health care providers to accurately

identify, disclose, and report medical errors. 44 At the basis of risk management lies the perception that error prevention is linked to learning from errors. Learning from errors can occur only when the errors are reported. It is likely that an erring worker who experienced support instead of guilt will be inclined to cooperate with the organization in preventing recurring errors. 13 The persons closest to the action around a catastrophic event are those involved in it. Rather than just taking a statement, maintaining information in silos, and suppressing discussion with a single-minded focus on a potential lawsuit, our organizations need to learn from every dimension of an event. We owe it to those involved to be part of that learning, not only to gain the most knowledge but also to provide them with an opportunity to heal by contributing to the prevention of future events. Instead, we often shut them off and take away one of the most important opportunities to "make things right" when their behavior has contributed to unintentional harm.

ACTIONS OF OUR FORMAL LEADERS, STAFF, AND QUALITY LEADERS

Trustee Actions. To quote Dr. Dennis O'Leary, president of the Joint Commission, "Trustees don't have to know the answers; they just need to know the right questions." What have we done for those involved in our serious adverse events? The canaries in our coal mines are the last caregivers involved in preventable catastrophic events. Ask how we treated them. Was the behavior of the organization more focused on capital preservation than treating them justly? Do we have policies and procedures to take care of them when such events occur? Make no mistake, these events are going to occur and occur much more frequently than we want to admit. Governance leaders set the course for the organization. They are the keepers of the values. They can no longer "rubber-stamp" what they hear from administrators. They must ask for the details and make sure that they are getting entirely honest, complete, and thorough briefings. More than 100 years ago, Sinclair 45 said, "It is difficult to get a man to understand something when his salary depends upon his not understanding it." It is most important that trustees make sure that all players up and down the command chain do not have incentives to hide information or protect the capital of the organization to protect bonuses and advancement. They have to be responsible for maintaining the resource flow and guidance to preserve the blunt end. It does not take a clinically trained person to understand and defend the 5 Rights of the Second Victim proposed above.

CEO Actions. The single most important person in an organization who can mean everything to the caregiver who has been blind-sided by a systems failure is the CEO. It takes real bravery and character to keep from hiding behind the advice of legal counsel when a catastrophic event occurs. Situational ethics and moral relativism are the levers of cowardice in business today. Great leaders go to bat for their caregivers. They develop strategies, tactics, outcomes, and structures that enhance the ability to learn from catastrophic events to protect future patients and the rights of staff. Chief

executive officers must have a long view and realize that their treasure lies in their workforce. When they betray one, they betray all. Collins and Porras, 46 the authors of Built to Last, tell us that great leaders are "clock builders" who build systems that sustain their organizations. They are not just celebrity "time tellers" who always have the right answers when crises occur. Our greatest leaders build the systems that, when a crisis occurs, protect patients and families, individual caregivers, and those in the organization who watch the drama of a celebrated event play out and are inspired to be better people. A CEO is successful when, in the face of a preventable event that harms patients and caregivers, the behavior of the organization provides a healing experience that stimulates everyone to become better and more dedicated toward high performance patient care. The CEO is the most important person to ensure that the 5 Rights of the Second Victim are respected.

Senior Leaders and Officers. Senior leaders must reinforce the values, expectations, and behaviors that are expected by the trustees and highest management. They have to have the intestinal fortitude to step up when CEOs don't, demand honesty from those who report to them, and resist the temptations of moral relativism, situational ethics, and selfpreservation behaviors that can rob them of self-esteem, rob their patients of great care, and rob their workforce of leadership. Leading, like winning, is a habit. Collectively, we have developed bad habits of passive management, abandoning active leadership that requires risk taking and energy. Our senior executives are put in a terrible position when trustees and CEOs prioritize capital preservation over moral imperatives. However, it is surprising what happens when someone on a team declares a "stop the line" moment and asks the right questions. In the words of business leader Warren Buffet, "The chains of habit are too light to be felt until they are too heavy to be broken." Senior leaders and officers must help an organization recognize these chains before they are too heavy to break.

Physicians. Staff physicians are in a much different position than independent clinicians, with separate malpractice insurance carriers. However, in both cases, they must call on courage and integrity to avoid drifting toward blame and self-preservation. Staff physicians have a simpler charge than independent physicians do because they are working within the system. They also have the unique perspective of having a better understanding of the circumstances surrounding a catastrophic event than nonclinical administrators that they typically serve. More importantly, they may be more likely to appreciate the psychological damage and stress that their colleagues may be under when involved in an event harming a patient. They must step up to help the organization respect the rights of such caregivers. Independent physicians who may be remotely involved in an event covered by their own malpractice insurance may be in a more difficult position in that they may be at odds with the hospital. Those not involved in an event can support frontline caregivers who are involved by putting real leverage on hospital leaders to take care of their nurses and staff.

Midlevel Managers and Directors. Our managers and midlevel executives must learn to lead and act as the

neurosensory apparatus for the organization, providing honest and clear information to senior leaders. Too often, they are put into a position of compromising their own ethics to cover up details that might threaten an organization in a lawsuit. Often, their behaviors may have contributed to the system's "latent error" and circumstances that predispose caregivers to human errors that ultimately cause harm. Again, they must have the courage to tell the truth about the circumstances and recognize the rights of those who have become second victims.

Frontline Nurses and Caregivers. Our frontline caregivers need to be cognizant of the risks involved in fatigue, technology adoption, and workarounds that can have unintended consequences. They are put in a difficult position every day and have little power to change risky predisposing factors at the blunt end. Nurses may handle as many as 50 drugs per shift, mathematically putting them at great risk for error. 12 They must be vigilant and express formal concern when they know they are being put in a situation that can predispose them to human error. They must speak up for the rights of their colleagues and encourage transparency and ethics at the frontline. There is a real risk to avoid reporting errors and near misses, especially now that more and more caregivers are criminally prosecuted. An admission of near misses can draw attention, and when one is then involved in a catastrophic event, blame is much more easily assigned.³ However, we must encourage them to push through this fear, although we recognize that they hold the least power in an organization and bear the most risk. This is why the engagement of leaders described above is so important.

National Quality Leaders. Although our quality leaders informally jump to action to help caregivers who are trapped by systems failures and human error, there are no national programs to support the second victim, nor are there any formalized clear guidelines immediately available to our hospital leaders or caregivers for the treatment of the second victim. We must consider undertaking the research and study of these issues so that best practices can be vetted and even submitted for consideration for addition to national standards. These "best practices" for the second victims could be added to programs such as future updates of the National Quality Forum Safe Practices for Better Healthcare—2006 Update. We must consider funding and developing programs that can be available for nurses and caregivers who find themselves in situations like that of Julie Thao.

Our leaders at all levels might consider applying the 4A Impact Model of awareness, accountability, ability, and action, previously mentioned, to make key changes in our approach to caregivers who have been involved in preventable patient errors or who have reported near misses. We must take a systematic approach to make everyone aware of our performance gaps related to how we treat our caregivers immediately after and throughout the course of time after the event. We need to establish accountability to leaders within our organizations for identifying and mitigating latent system faults and prevent single-minded blame of caregivers. We need to provide ability, through clear direction from our leaders, with support programs that emphasize taking care of

the caregiver as well as the patient, the family, and the system; we need to establish a plan of action not only to correct the latent system problems but also to correct our current lack of support for the problems the caregiver may have to face. Although studies that examine how we have treated caregivers in the past are few, it does not take an academic exercise to see that we need to improve.

CONCLUSIONS

It is mission critical that our leaders' address of the rights of caregivers involved in unintentional harm to patients through systems failures and human error must be formalized. At the time of an event and in the early aftermath, there is chaos. The development of simple checklists and accountabilities to minister to caregivers directly involved and the organization collectively must be established with clear guidelines regarding who will be accountable for what and when and how they will act. Otherwise, it is easy to slide down the slippery slope of self-preservation, covering tracks and abandoning our own who have, in an instant, become a patient.

We can be aware of our performance gaps regarding the second victim and make individuals accountable for addressing key issues; however, if we have not invested in the systems to be able to act when events happen, we are likely to be disappointed in the outcomes. We must invest in basic policies and training and just-in-time response systems of checklists and action plans and provide compensated staff time to have the ability to respond when crises arise.

At the end of the day, everything revolves around action. We, in health care, are prone to turning everything into a huge analytical science project. Great leaders tell us that the most important thing we can do is act. Establishment of a systematic approach to ensuring the rights of our second victims does not have to be perfect. Having something, anything, in place as a guide to caring for our caregivers provides a platform we can build on. Having nothing puts the organization at risk for becoming a third victim and sustaining irreparable harm as an institution.

On November 12, 1936, Winston Churchill referred to the rising storm of Germany and its threat to the global society. His words have value to our circumstances regarding patient safety.

"The era of procrastination, of half measures, of soothing, and baffling expedients, of delays, is coming to its close. In its place we are entering a period of consequences."

We are entering an era of transparency which will be a period of consequences for our hospitals and health care institutions. This will also be a period of personal consequences for our leaders who will no longer be able to hide behind a curtain of secrecy to protect the organization's assets at the risk of the very culture of its workforce.

We have ignored our social infrastructure for too long. The rights of our patients to safe, reliable, and patient-centered care are critical and most important. The rights of treatment that is just, respect, understanding and compassion, supportive care, and transparency that we owe our caregivers involved in unintentional and preventable harm are also important. They must be studied, articulated, and defended. The governance and administrative leaders of our hospital and health care organizations must step up and lead. This will require bravery, creativity, and execution.

The only thing necessary for the triumph of evil is for good men to do nothing. Edmund Burke⁴⁷

REFERENCES

- Institute for Safe Medication Practices. The Five Rights. ISMP Medication Safety Alert. In: Smetzer J, Cohen M, Jenkins R, eds. Huntingdon Valley, PA. April 7, 1999 issue. Available at: http://www.ismp.org/Newsletters/acutecare/articles/19990407.asp. Accessed March 18, 2007.
- Institute for Safe Medication Practices. Our long journey towards a safety-minded Just Culture. Part I: Where we've been. ISMP MedicationSafetyAlert. In: Smetzer J, Cohen M, Jenkins R, eds. Huntingdon Valley, PA. September 7, 2006 issue. Available at: Available at: http://www.ismp.org/newsletters/acutecare/articles/ 20060907.asp?ptr=y. Accessed March 18, 2007.
- Parker D, Lawton R. Psychological contribution to the understanding of adverse events in health care. *Qual Saf Health Care*. 2003;12: 453–457
- Shojania KG, Fletcher KE, Saint S. Graduate medical education and patient safety: a busy—and occasionally hazardous—intersection. *Ann Intern Med.* 2006;145:592–598.
- Tucker AL, Spear SJ. Operational failures and interruptions in hospital nursing. Health Serve Res. 2006;41(3(pt 1)):643–662.
- Wolf ZR, Zuzelo PR. "Never again" stories of nurses: dilemmas in nursing practice. Qual Health Res. 2006;16:1191–1206.
- Woolf SH, Kuzel AJ, Dovey SM, et al. A string of mistakes: the importance of cascade analysis in describing, counting, and preventing medical errors. *Ann Fam Med.* 2004;2:317–326.
- Wu AW, Folkman S, McPhee SJ, et al. Do house officers learn from their mistakes? *Qual Saf Health Care*. 2003;12:221–226. discussion 227–8
- 9. Wu A. Medical error: the second victim. The doctor who makes mistakes needs help too. *BMJ*. 2000;320:726–727.
- Forster AJ, Fung I, Caughey S, et al. Adverse events detected by clinical surveillance on an obstetric service. *Obstet Gynecol*. 2006;108: 1073–1083.
- 11. Hobgood C, Hevia A, Hinchey P. Profiles in patient safety: when an error occurs. *Acad Emerg Med.* 2004;11:766–770.
- Mayo AM, Duncan D. Nurse perceptions of medication errors: What we need to know for patient safety. J Nurs Care Qual. 2004;19: 209–217.
- Rassin M, Kanti T, Silner D. Chronology of medication errors by nurses: accumulation of stresses and PTSD symptoms. *Issues Ment Health Nurs*. 2005;26:873–886. C42.
- 14. Arndt M. Nurses' medication errors. J Adv Nurs. 1994;19:519-526.
- 15. Christensen JF, Levinson W, Dunn PM. The heart of darkness: the

- impact of perceived mistakes on physicians. *J Gen Intern Med*. 1992;7:424–431.
- 16. Institute for Safe Medication Practices. Our Long Journey Towards a Safety-Minded Just Culture. Part II: Where We're Going. ISMP MedicationSafetyAlert. In: Smetzer J, Cohen M, Jenkins R, eds. Huntingdon Valley, PA. September 26, 2006. Available at: http://www.ismp.org/newsletters/acutecare/articles/20060921.asp. Accessed March 18, 2007.
- 17. Institute for Safe Medication Practices. Criminal prosecution of human error will likely have dangerous long-term consequences. ISMP MedicationSafetyAlert. In: Smetzer J, Cohen M, Jenkins R, eds. Huntingdon Valley, PA. March 8, 2007;12(5). Available at: http://www.ismp.org/Newsletters/acutecare/articles/20070308.asp. Accessed: March 19, 2007.
- Johnstone MJ, Kanitsaki O. The ethics and practical importance of defining, distinguishing and disclosing nursing errors: a discussion paper. *Int J Nurs Stud.* 2006;43:367–376.
- Leape LL, Berwick DM. Safe health care: are we up to it? BMJ. 2000;320:725–726.
- Marx D. Patient safety and the "just culture": a primer for health care
 executives. April 17, 2001. Prepared for Columbia University under a
 grant provided by the National Heart, Lung, and Blood Institute.
 Available at: www.mers-tm.net/support/marx_primer.pdf. Accessed
 April 23, 2001.
- Meurier CE, Vincent CA, Parmar DG. Nurses' responses to severity dependent errors: a study of the causal attributions made by nurses following an error. J Adv Nurs. 1998;27:349–354.
- Milligan F, Bird D. Adverse health-care events: part 4. Challenge of a blame-free culture. *Prof Nurse*. 2003;18:705–709.
- Newman MC. The emotional impact of mistakes on family physicians. *Arch Fam Med.* 1996;5:71–75.
- 24. Robinson-Wolf Z, Serembus JF. Medication errors: ending the blame game. *Nurs Manage*. 2004;35:41–48.
- Rosenthal MM. The Incompetent Doctor. Behind Closed Doors. Buckingham: Open University Press, 1995.
- Shaw R. Patient Safety: the need for an open and fair culture. Clin Med. 2004;4:128–131.
- Stewart-Amidei C. Changing the culture of blame. J Neurosci Nurs. 2004;35:297.
- 28. Terry JS, Fricchione GL. Facing limitation and failure. *Pharos Alpha Omega Alpha Honor Med Soc.* 1985; Fall;48(4):13–18.
- Tipton DJ, Giannetti VJ, Kristofik JM. Managing the aftermath of medication errors: managed care's role. J Am Pharm Assoc (Wash DC). 2003;43:622–628.
- West C, Mashele P, Huschka M, et al. Association of perceived medical errors with resident distress and empathy: a prospective longitudinal study. *JAMA*. 2006;296:1071–1078.

- 31. Wolf ZR, Serembus JF. Medication errors: ending the blame game. *Nurs Manage*. 2004;35:41–42, 44, 47–8.
- Wolf ZR, Serembus JF, Smetzer J, et al. Responses and concerns of healthcare providers to medication errors. *Clin Nurse Spec*. 2000;14: 278–287.
- The Just Culture Community. News and Views. The Criminal Edition. Professionals Facing Criminal Charges—A Threat to System Safety? In: Marx Df. Jan./Feb. 2007. Available at: http://www.justculture.org/downloads/newsletter_janfeb07.pdf. Accessed March 16, 2007.
- Institute for Safe Medication Practices. Since when is it a crime to be human. Available at: http://www.ismp.org/pressroom/viewpoints/julie. asp. Accessed March 25, 2007.
- Capital Times. Hospitals made less safe when individuals blamed. The Capital Times Editorial. Nov. 15, 2006. Available at: http://www. madison.com/archives/read.php?ref=/tct/2006/11/15/0611150341.php. Accessed March 26, 2007.
- The National Quality Forum Safe Practices for Better Healthcare: 2006 update. A Consensus Report. Washington, DC: The National Quality Forum; 2007.
- Reason JT. Human Error. New York, NY: Cambridge University Press, 1990.
- 38. Reason J. Human error: models and management. *BMJ*. 2000;320:768–770. Available at: http://www.bmj.com/cgi/content/full/320/7237/768?ijkey=1a1d832ac88bc82d2695ea5f3ab3722e8f277117& keytype2=tf_ipsecsha. Accessed March 12, 2007.
- PSNet Glossary. Available at: http://psnet.ahrq.gov/glossary.aspx Accessed March 12, 2007.
- Nemeth C, Nunnally M, O'Connor M, et al. Getting to the point: developing IT for the sharp end of healthcare. *J Biomed Inform*. 2005;38:18–25. Available at: http://www.ctlab.org/documents/ Getting%20to%20the%20Point.pdf. Accessed October 31, 2006.
- 41. Covey SMR, Merrill RR. *The Speed of Trust: The One Thing that Changes Everything*. NY, New York: Free Press, 2006.
- Kübler-Ross E. On Death and Dying. New York, NY: Touchstone Press, 1969
- 43. Denham CR. Patient safety practices: leaders can turn barriers into accelerators. *J Patient Saf.* 2005;1:41–55.
- Hobgood C, Weiner B, Tamayo-Sarver JH. Medical error identification, disclosure, and reporting: do emergency medicine provider groups differ? *Acad Emerg Med.* 2006;13:443–451.
- Sinclair U. The Jungle. Ed. Unknown. Available at: http://sunsite.berkeley.edu/Literature/Sinclair/TheJungle/. Accessed March 18, 2007.
- Collins J, Porras J. Built to Last: Successful Habits of Visionary Companies. New York, NY: HarperCollins Publishers; 1997.
- Burke Quote Web site. Available at: http://www.tartarus.org/~martin/ essays/burkequote.html. Accessed March 26, 2007.

ERRATUM

Patient Harm in General Surgery—A Prospective Study. Kaul AK, McCulloch PG. *J Patient Saf.* 2007;3:22–26.

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