



Innovation Series 2011

Respectful Management of Serious Clinical Adverse Events

Second Edition

The Institute for Healthcare Improvement (IHI) is a not-for-profit organization leading the improvement of health care throughout the world. IHI helps accelerate change by cultivating promising concepts for improving patient care and turning those ideas into action. Thousands of health care providers participate in IHI's groundbreaking work.

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How to cite this paper:

Conway J, Federico F, Stewart K, Campbell M. *Respectful Management of Serious Clinical Adverse Events (Second Edition)*. IHI Innovation Series white paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2011. (Available on www.IHI.org)

Acknowledgements:

Informing this white paper are the learning and courage of many patients, family members, health system leaders, and organizations, including the following: American Society for Healthcare Risk Management; Marie Bismark, Buddle Findlay; Richard Boothman, University of Michigan Medical Center; Michele Campbell, Christiana Care Health System; Jeanette Clough, Mount Auburn Hospital; Ilene Corina, PULSE; Beth Cushing, CRICO; Jana Deen, Catholic Health Partners; Charles Denham, TMIT; Jeff Driver, Stanford University Medical Institutions; Dan Ford, Furst Group; Sandra Fenwick, Children's Hospital Boston; Karen Frush, Duke University Health System; Thomas Gallagher, University of Washington; Rick Iedema, Center for Health Communications; Gary Kaplan, Virginia Mason Medical Center; Linda Kenney, MITSS; Steve Kraman, University of Kentucky; Gregory Kutcher, Immanuel St. Joseph Health System; Lucian Leape, Harvard School of Public Health; Paul Levy, Beth Israel Deaconess Medical Center; Timothy McDonald, University of Illinois; Dale Micalizzi, Justin's HOPE; Dennis O'Leary, Joint Commission; National Association for Healthcare Quality; Diane C. Pinakiewicz, National Patient Safety Foundation; Gina Pugliese, Premier Healthcare Alliance; Ram Raju, New York City Health and Hospitals Corporation; Nancy Ridley, Massachusetts Department of Public Health; Blair Sadler, Rady Children's Hospital; Susan Scott, University of Missouri; Sue Sheridan, WHO and CAPS; Steven Singer, Dana-Farber Cancer Institute; Mary Taylor, Washington University School of Medicine; Gordon Wallace, The Canadian Medical Protective Association; Paul Wiles, Novant Health; Doug Wojcieszak, Sorry Works; Albert Wu, Johns Hopkins Medical Center; the independent reviewers; those commenting on the first version; and so many more. The authors and IHI are enormously grateful for their contributions. The authors thank Don Goldmann, Jane Roessner, and Val Weber of IHI for their critical review and editorial assistance with this paper.

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Foreword

IHI first released this white paper in October 2010. The response has been exciting, affirming, and informative. As summarized below, the response indicates great interest and urgency, and highlights remaining challenges in moving forward with respectful management of serious clinical adverse events.

Response: In the first nine months after release of the white paper (October 1, 2010, to June 30, 2011), more than 34,000 people visited the white paper's web page on IHI.org to access the paper and associated resources, with more than 12,000 downloads of the paper from this site alone. An exact-match Google search ("Respectful Management of Serious Clinical Adverse Events") produces over 6,000 links to the paper from other websites. Content is featured on WIHI programs and at annual meetings of international organizations, including IHI, National Association for Healthcare Quality, American Society for Healthcare Risk Management, and High Reliability Organizing. The paper has also been included at multiple meetings and webinars from across the US to Ireland, Scotland, Singapore, and Belgium. An overview article has been featured in *Healthcare Executive*, the journal of the American College of Healthcare Executives, and a second article focused on the learning will be published in the journal in November 2011. Content has been integrated into IHI quality, safety, and patient and family experience training programs for boards, executive leaders, patient safety officers, and others. Specific appendices have been modified to meet the needs of countries and contexts. Reports of new organizational crisis management plans, written in response to the white paper, are being reported worldwide, within hospitals, large systems, and liability insurers. Organizations dealing with serious clinical events, in the absence of a plan, are using the white paper to guide response. Authors are increasingly citing the work.

Power of Collaboration: The paper was built on extensive international evidence and experience that continues with this second edition. It reflects collaboration and sharing by an amazing community of worldwide advocates, patients, family members, staff, leaders, researchers, and associations, noted in the Acknowledgements and References sections. The enthusiastic response to the integrated recommendations illustrates the power of the collaborative approach.

Continuous Improvement: A number of suggestions for improvement to the white paper were gratefully received. These fell into two major areas: an increased focus on compassion and empathy for everyone involved, and very strong recommendations for the inclusion of reimbursement and compensation in any discussion of disclosure and resolution. We don't have to wait for tort reform to do the right thing. Other suggestions included new citations and resources, as well as specific recommendations such as adding pastoral care and ethics to the crisis management team, detailing further the elements of an apology, the need for more responsive claims management, and ensuring that the patient's whole care team, and specifically the patient's primary care physician, is involved actively in the response to a serious clinical adverse event.

Challenges Highlighted: Concerns expressed when implementing the recommendations in the white paper included the large scope of the effort and the challenges of getting started without a "burning platform," poor discovery and knowledge of existing serious clinical adverse events, lack of organizational attention to the "second victim," disclosure of errors that happened at another location, absence of organizational alignment around approach and transparency, and an overemphasis on legal considerations and protections for the organization at the expense of everything else.

This second edition of the paper includes new content in response to the above. One contributor noted that the environment is fluid and the paper needs to be a "living document." We agree. Please continue to send Frank Federico at IHI (ffederico@ihi.org) your thoughts and ideas. In turn, we will continue to seek out your counsel so that, until we eliminate harm:

...in the aftermath of serious clinical adverse events, patients, families, staff, organizations, and communities will all say, "We were treated with respect."

Executive Summary

You just heard at this morning's CEO leadership meeting that a 40-year-old father of five children died in the Surgical ICU last night, hours after receiving medication intended for another patient. Everyone is upset. Questions are flying around the hospital: What does the family know? Who did it? What happened? What can we say? Would the patient have died anyway? (He was very sick.) Has anyone gone to the press?

Every day, clinical adverse events occur within our health care system, causing physical and psychological harm to one or more patients, their families, staff (including medical staff), the community, and the organization. In the crisis that often emerges, what differentiates organizations, positively or negatively, is their culture of safety; the role of the board of trustees and executive leadership; advance planning for such an event; the balanced prioritization of the needs of the patient and family, staff, and organization; and how actions immediately and over time address the integrated elements of empathy, disclosure, support (including reimbursement), assessment, resolution (including compensation), learning, and improvement. The risks of not responding to these adverse events in a timely and effective manner are significant, and include loss of trust, absence of healing, no learning and improvement, the sending of mixed messages about what is really important to the organization, increased likelihood of regulatory action or lawsuits, and challenges by the media.

From time to time, the Institute for Healthcare Improvement (IHI) receives urgent requests from organizations seeking help in the aftermath of a serious clinical adverse event, including: What should we do? Who should do it? What should we say, and to whom? Among the most striking attributes of

these requests is that, most often, the organization is building its response from the ground up, not from an existing clinical crisis management plan. In responding to such requests, IHI draws on the fields of patient- and family-centered care, patient safety, service recovery, crisis management, and disaster planning—as well as the learning assembled from many courageous organizations over the last 15 years that have tried to manage these crises, initially and over time, respectfully and effectively. IHI also has met many patients, family members, and health care staff (the so-called "second victims"), many of whom are rightfully angry and frustrated over the disrespectful treatment they received after clinical adverse events.

The development of this white paper was motivated by three objectives:

- Encourage and help every organization to develop a clinical crisis management plan before they need to use it;
- Provide an approach to integrating this plan into the organizational culture of quality and safety, with a particular focus on patient- and family-centered care and fair and just treatment for staff;
- Provide organizations with a concise, practical resource to inform their efforts when a serious
 adverse event occurs in the absence of a clinical crisis management plan and/or culture of quality
 and safety.

In furtherance of these objectives, this paper includes three tools for leaders—a Checklist, a Work Plan, and an Assessment Tool—and numerous resources to guide practice (see Appendices).

Definition of a Serious Clinical Adverse Event

In any health care clinical setting, adverse events occur frequently. This white paper focuses particularly on those clinical adverse events with an impact of permanent psychological and/or physical harm (or death) on one patient or many,² often referred to as sentinel events. These are events that are included in categories G, H, and I in the National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP) harm index.³ The National Quality Forum Serious Reportable Events⁴ provides another baseline list of serious clinical events. Healthcare Performance Improvement (HPI) has developed the Safety Event Classification and the Serious Safety Event Rate, with common definitions and an algorithm for the classification of safety events based on the degree of harm.⁵ For the purposes of this white paper, the type of harm on which we focus is usually, but not exclusively, preventable. Of note, many of the most challenging and poorly handled serious clinical adverse events occur when too much time is spent on determining preventability and not enough on empathy and support.

Although this white paper focuses on serious clinical adverse events, organizations can use many of the principles outlined here to manage all adverse events, not just the serious ones. Ongoing

communication, empathy, disclosure, support, assessment, resolution, learning, and improvement are important in the management of every event. These concepts are also easily extended to other breaches and non-clinical situations such as identity theft, behavioral issues, sexual assault, and other operating issues requiring respectful, effective crisis management.

Audience

This white paper is designed to help health care executives and other organizational leaders (CEOs, COOs, CMOs, CNOs, Legal Counsel, Public Relations/Communications and Quality/Safety/Risk Management professionals) develop a plan to deal with a serious clinical adverse event so that they are able to respond effectively and learn and improve safety as a result of it. Many organizations do not have a plan when a serious clinical adverse event occurs. In these cases, leaders can use this paper and the associated resources to guide their immediate and ongoing response.

This white paper is also designed to serve the US as well as the international health care community. Although the regulatory and legal infrastructures in the US may differ from those in other countries, the underlying principles remain the same. The principles described serve, respond to, and tap into basic human needs like the need to make sense of tragedies, the need to know and understand what has happened, and the need for a sense of acknowledgement, accountability, and justice. In the preparation of this paper, we worked with and benefited enormously from international experts. We believe this document will be equally relevant to our international partners, with perhaps minor adaptations to local culture, context, and approaches.

Introduction

For any health care leader, there is no telephone call, page, or email message more sobering than the one that says, "I'm sorry to disturb you. We had a terrible problem in the Surgical ICU last night. The patient is dead." Every day, serious clinical adverse events occur in our health care system, as a result of systems failures, human error, intentional damaging acts, rare complications, or other causes. In some cases they are tragic, leading to serious physical and psychological harm, or even death, to one or more patients, and related harm to their families, staff members (including medical staff), the community, and the organization.

For any organization, the fact that these events occur doesn't differentiate them. They can occur in any health care organization (including inpatient, outpatient, long-term, and home care). In the crisis that often emerges, what differentiates organizations, positively or negatively, is their culture of safety; the role of the board of trustees and executive leadership; advance planning for such an event; the balanced prioritization of the needs of the patient and family, staff, and organization; and how actions immediately and over time address the integrated elements of empathy, disclosure, support, assessment, resolution, learning, and improvement. The risks of not responding to a serious clinical event in a timely and effective manner include, but are not limited to, loss of trust among patients

(not only those directly impacted, but the overall patient population as well), sending of mixed messages to employees regarding the organization's commitment to safety and quality, absence of healing, absence of learning and improvement, increased likelihood of regulatory action or lawsuits, and media that are all too willing to play "gotcha" with an organization that is not prepared to publicly address a serious clinical event.

IHI and the authors of this white paper have taken emergency telephone calls for years from people in organizations around the world in which a serious clinical adverse event has occurred. They urgently seek counsel on what they should do in the aftermath. In many cases, the event has just occurred. In others, it occurred weeks, months, or years ago and is now exploding due to pressure from the patient, family, a staff member, the media, and/or regulatory and accrediting agencies. These are among the most striking attributes of these calls:

- The personal devastation of the event on the person calling;
- The similarities of the stories, no matter how different the details;
- An organizational response that is being built from scratch, not from a written and tested crisis management plan;
- An operating style that is highly reactive and an approach that is not balanced; and
- A response to date that has underestimated the potential harm to all.

Far too often, in framing their response, organizations are limited by their mental models (the things they believe to be true, such as "They will sue," "It wasn't our fault," "They will go to the media," etc.) or defensive routines (leaders' entrenched habits that protect them from the embarrassment and threat that come with exposing our thinking—"I'll look bad").

IHI has also met patients, family members, and health care staff who are rightfully angry and frustrated, often for many years, over a lack of resolution and healing and the disrespectful treatment they received in the aftermath of preventable harm or unanticipated outcomes. They have asked us, "Where is the outrage? I walked my son into the hospital and I brought him home dead. Why wouldn't anyone talk to me?"8

IHI sees the appropriate response as one of respectful management of serious clinical adverse events. A number of organizations have strived to manage such events sensitively and effectively. Further, some have shown great courage by taking the time to share transparently all their experiences so that others may learn from them and improve (see Appendix D). We also see the appropriate response anchored in the principles of crisis management, currently "a road less traveled" for health care. Organizations and their leaders have a choice: to continue to go into defensive, reactive, survival mode or to go into proactive, learning, developmental mode.

The field of crisis management is less than 30 years old. The 1982 poisoning of Tylenol capsules with cyanide in a suburb outside of Chicago is generally acknowledged as the beginning of the modern field. The fact that Johnson & Johnson (J&J), the makers of Tylenol, responded quickly by pulling

all bottles of the medication off the shelves nationwide, thus signaling that it was putting the safety of consumers ahead of profits, served to make J&J an early role model for effective crisis management. In health care, the Anesthesia Adverse Event Protocol introduced by Cooper and colleagues in 1993 was a pioneering effort in crisis management.

Since then, a great deal has been learned about how and why crises occur. Even more important, the components of an ideal or "best practice" crisis management program are much better understood. Kaufmann and his colleagues have reminded us, "Because all crisis situations are not the same, one piece of advice cannot hold for everyone." Every event is different, just as every caregiver, every patient, every family member is different. At the same time, there are very consistent elements and dimensions that should be considered in every case in the first hour, day, week, and month following an event, and in the journey moving forward to resolution.

After an adverse event, the organization's actions in response to the event—particularly in the first 24 hours—will often help determine whether or not the patient and family feel they are going to encounter truth and receive support. Societal expectation for, and realization of the power of, transparency grows. This paper introduces an overall approach and tools (see Appendices A, B, and C) designed to support two processes: the *proactive preparation of a plan* for managing serious clinical adverse events, and the *reactive emergency response* of an organization that has no such plan.

What to Do to Prepare for an Event

Augustine suggests that the key steps in crisis management include the following: avoid the crisis, prepare to manage the crisis, recognize the crisis, contain the crisis, resolve the crisis, and profit by learning from the crisis. (In crisis management planning, the ultimate strategy is avoiding the harm and the crisis.) These steps are consistent with current elements of the US Department of Homeland Security disaster preparedness approach (prevent, protect against, respond to, and recover from all hazards and compromises) and the US Federal Emergency Management Agency model (mitigation, preparedness, response, and recovery). Although IHI has chosen not to ground its recommendations in the Hospital Emergency Incident Command System, we recommend it for organizations already proficient in that approach. 17

In the worldwide patient safety movement, considerable attention is being given to the prevention of harm and that must continue. Yet, with the poor system we currently have in place, the defect rates previously referenced, and the level of serious harm resulting from safety events throughout health care, that strategy is insufficient. Every organization must anticipate and plan for serious adverse events.

Leadership and an Organizational Culture of Safety

Michael Leonard, Physician Leader for Patient Safety at Kaiser Permanente in Colorado, offers a simple definition of a culture of safety: "No one is ever hesitant to speak up regarding the well-being of a patient [psychological safety], and everyone has a high degree of confidence that their concern will be heard respectfully and be acted upon." During the past decade, an expanding evidence base in health care has demonstrated that safety culture plays an important role in patient care safety and quality outcomes. Organizations striving to establish a culture of patient safety are in a better position to deal respectfully and effectively with these tragic cases when they occur. Their organizational culture will enable them to eliminate these events; hear more quickly from patients, family members, and staff about incidents when they occur (speaking truth to power); and respond with the expectation of the elements of empathy, disclosure, support, assessment, resolution, learning, and improvement. Organizational accountability also grows. In their Safe Practice Statement, the National Quality Forum notes, "Healthcare organizations must systematically identify and mitigate patient safety risks and hazards with an integrated approach in order to continuously drive down preventable patient harm." ²¹

Edgar Schein, in his book *Organizational Culture and Leadership*,²² describes the five embedded mechanisms necessary to examine and understand organizational culture, including "how leaders react to critical events and crisis." The answers to the following four questions will have a huge impact on the effectiveness of the response to a crisis: 1) Is there constancy of purpose related to your desired future, or does your strategy change with each critical event or crisis? 2) Do crises cause leaders to lose focus? 3) What happens after that? 4) How well does the organization manage or drive change? Boards, CEOs, and other executive leaders in health care are far better positioned to establish a culture of safety and effectively respond to the most serious of events if there are already well-established practices of transparency, leadership WalkRounds,²³ and open and honest conversations with staff, patients and families, the public, and the media.

In the aftermath of a serious clinical adverse event, the questions come quickly:

- How should we respond?
- What should we say and to whom?
- Who should do it?
- Who is responsible and accountable?

Dealing with the last question first, the United States Business Roundtable explicitly recognizes the role of the board of directors and management in ensuring resiliency through business crisis and continuity management. The organization's board of trustees (or its equivalent) is ultimately responsible for the quality and safety of the organization.²⁴ As such, the board should be engaged in an ongoing manner to ensure assessment, system learning, and improvement after serious clinical adverse events to fulfill

its responsibility to the patient, family, staff, and community. The Board Quality Committee and all board members should be aware of the extent of all harm by severity, including actual patient counts, occurring in the organization (for example, asking "How many patients is that?"). For all serious clinical adverse events, the board should have mechanisms in place as part of the overall quality improvement plan to ensure that findings from all root cause analyses (RCAs) will be followed up with long-term systems improvement, thereby ensuring resolution, learning, and improvement.

The chief executive officer is accountable to the organizational governing board for the organization's response.²⁵ The CEO is the leader who responds to the crisis by turning fear into positive action; being vigilant (watching for new developments and recognizing the importance of new information); maintaining focus on the priorities; ensuring first that people are safe and then assessing the next most critical needs; and assessing and responding to what can be controlled and ignoring what cannot.²⁶ CEO attitudes, in the form of "willful blindness," can negatively affect crisis response and make matters worse—for example, "What crisis?," "No one will find out," "It will blow over," "I will handle it," "Our attorneys will handle it," "I'm unavailable," and "The media is out to get us."²⁷ In making their strong, thoughtful case for meta-leadership at times of crisis, Marcus and colleagues note that, in a stressful situation, the brain's response is activated by the amygdala—the emotional "basement," it is where the primal responses of "fight, flight, or freeze" originate. The meta-leader recognizes this and the need to move on through the practiced procedures, protocols, or patterns of past experiences that trigger constructive activity and then up to strategic thinking in the cortex.²⁸

In their Policy Statement on "The Healthcare Executive's Role in Ensuring Quality and Patient Safety," the American College of Healthcare Executives (ACHE) asserts that health care executives should lead a comprehensive approach to ensuring patient safety and quality, including developing a culture of improvement that includes an organization-wide commitment to continuous learning.²⁹ The Joint Commission's 2009 Sentinel Event Alert, "Leadership Committed to Safety," recommends actions of senior leadership, including that they regularly monitor and analyze adverse events and close calls quantitatively, and communicate findings and recommendations to leadership, the board, and staff. The alert further notes, "A thorough and appropriate evaluation of adverse events is necessary to help prevent future occurrences."30 Noting that crisis is the ultimate test of any leader and that "a smooth sea never made a skilled mariner," George, Denham, and colleagues provide strong evidence that a values-grounded focus on personal accountability for leading in crisis situations strongly resonates with those interested in or leading patient safety initiatives.³¹ In their Safe Practice Statement, the National Quality Forum notes, "Leadership structures and systems must be established to ensure that there is organization-wide awareness of patient safety performance gaps, direct accountability of leaders for those gaps, and adequate investment in performance improvement abilities, and that actions are taken to ensure safe care of every patient served."32

On June 11, 2010, Ralph Gabarro, CEO of Mayo Regional Hospital in Dover-Foxcroft, Maine, demonstrated this values-based response after a massive medication overdose leading to the death of a patient. His comments to the *Bangor Daily News* included the following:³³

It's nothing short of a tragedy... We take full responsibility for this situation.

At the time, we pledged to them that once we knew more we'd sit down with them and let them know what we found.

We're trying to be very transparent in disclosing what happened and express our sorrow and our apologies.

It's a nightmare for the entire medical community, but our feelings, what we're going through, pales in relationship to what the family is dealing with, and we understand that.

Paul Wiles, CEO of Novant Health in North Carolina, has courageously and bluntly shown the way with values-based leadership in the aftermath of MRSA-related neonatal intensive care unit (NICU) deaths in his hospital, saying at the IHI National Forum CEO Summit in 2008:

But, I am accountable for those unnecessary deaths in our NICU. It's my responsibility to establish a culture of safety. Up until the time I read the document about the young mother's loss of her newborn son, I had been unintentionally relinquishing that duty—in effect, delegating it to others without letting them know they had a responsibility to perform. I'm responsible, as CEO, for creating the environment in which every staff person prioritizes proper hand hygiene, and mourns the human consequences of failure. That's my job, more so than the clinical staff who provide the care.³⁴

In the article "Treating Organizational Wounds," 35 Kahn notes that the emotional fallout that blankets organization members in the wake of crises can do as much damage to the organization as the crisis itself—and is likely to last longer, given that many leaders do not attend to the fallout with interest, compassion, and skill. Leaders have a significant role in the response to serious clinical events. In the short term, leaders must manage the crises and contain the damage. In the long term, leaders must attend to their staff members who may be left reeling from what happened, and what it meant to and for them. Tending to staff members following an event is a collective process, for it is in the context of their relationships with one another that support, insight, and growth will occur. The leader's job is to create and maintain those contexts.

Policies, Guidelines, Procedures, and Practices

Considerable progress is being made in the areas of empathy, compassionate communication, and disclosure of harm to patients and families, yet much more needs to be done; it is not a switch we have flipped from "off" to "on." There is a significant journey between increased awareness and changed individual and organizational behaviors. As well illustrated in a recent Australian study, "The prominence of open disclosure policy and training in incident disclosure have not yet significantly improved incident disclosure outcomes for patients and family members: communication about serious incidents rarely met the expectations of 39 patients and 80 family members, compounding

their distress."³⁶ Further, patients, families, staff, and organizations often continue to struggle and lose their way after the disclosure. Respectful disclosure includes not only disclosure at the time of the event, but also ongoing empathy, support, assessment, resolution, learning, and improvement. To achieve this, a system must build in the above-noted culture of safety and an infrastructure of policies, guidelines, procedures, and practices. Key elements are included in Appendix C in the form of an organizational self-assessment tool. Resources in support of each element can be found on IHI's website.³⁷ Most organizations have some of these elements in place, but few have all. In a 2010 IHI web-based program, Effective Crisis Management of Serious Clinical Events,³⁸ organizations frequently commented that they had not previously appreciated the power of all these elements as part of an integrated approach.

The Crisis Management Team

In the spirit of "never worry alone," organizations should establish a standing Crisis Management Team (CMT) that can assemble immediately in response to a serious clinical event. The role of the CMT is to ensure that the priorities of the patients and families, staff, and organization are met, as well as to ensure enhanced communication, support, assessment, resolution, learning, and improvement following the event. These teams also can meet to test and revise clinical crisis management plans.

While multiple models exist for the structure and composition of Crisis Management Teams, they should be under the direction of the chief executive officer, with membership including the chief executive officer, chief operating officer, chief medical officer, chief nursing officer, chief public relations officer, legal counsel/legal advisor, ethicist, pastoral care counselor, patient representative, representatives from Risk Management/Quality Improvement/Patient Safety, the relevant service chief or clinical leader, and others as appropriate for the incident (such as physicians, nurses, pharmacists, mental health professionals, etc.). Depending on the system leadership structure and board structure, there may be other individuals, groups, and boards to consider participating in the process. The Chair of the CMT is most effectively the CEO or COO; the team should determine whether an objective facilitator is also needed. The manager for internal and external disaster preparedness can often provide useful internal consultation, given their knowledge of the organization's Incident Command System.

Activities of the Crisis Management Team in response to a serious clinical adverse event should include the following:

- Check in daily, even multiple times a day—these events rarely turn out to be as originally described;
- Maintain highly disciplined documentation and a daily log;
- Engage outside help through colleagues and consultants who have developed or helped develop effective crisis management plans;

- Listen and be prepared to hear things they don't want to hear, possibly seeking the advice of an objective facilitator;
- Embrace speed and flexibility;
- Stay close to conversations internally and externally;
- Consider implications for hospital and professional written communications to patients and families, mailings, and billing;
- Imagine the worst and mitigate as possible;
- Communicate internally and externally;
- Be prepared for inquiry from or the arrival of external accrediting and regulatory agencies; and
- Ensure knowledge management and improvement.

Serious clinical events occur 24 hours a day, 7 days a week, and the organizational response should be the same: 24/7. No matter when discovery occurs, the culture of the organization should be such that staff members know that leadership genuinely wants to be alerted at any time, and that staff are prepared to notify executives and activate the response. Organizations may need to have a "call schedule" for these key leaders, with appropriate coverage for absences. Organizations are encouraged to develop back-up response teams whose members are fully trained in crisis management, using table-top drills and practice exercises, simulations, and rehearsals. The competency of the response team should be consistent, with adequate coverage for all times of day and for team member absences. Note that one of the major failure modes in public disaster response is lack of competent and available back-ups, especially in resource-constrained environments. Patients, family members, and staff shouldn't be left to carry the burden and feel unsupported just because the adverse event happened at 3:00 AM on a Saturday morning.

The Crisis Management Plan

In a Harvard Business Essentials report,³⁹ the authors assert that the best way to manage a crisis is to have a plan. Key steps include the following:

- Create a team for planning;
- Determine each potential problem's likelihood;
- Create a plan;
- Simulate the plan; and
- Update the plan.

Health care leaders understand well the role crisis management plans can serve. Internal and external disaster plans are required by regulatory authorities and accrediting agencies such as The Joint Commission.⁴⁰ Effectively developed, deployed, and tested, these plans provide a reference (not a blueprint) for guidance through external disasters (e.g., fire, flood, pandemics, train wrecks) and internal disasters (e.g., fires, utility failures). Yet, although leaders understand that serious clinical

adverse events will occur, in all likelihood far more frequently than the aforementioned disasters, clinical crisis management plans are rare. Mitroff and Anagnos, in the 2005 book, *Managing Crises Before They Happen*, state that "the vast majority of organizations and institutions have not been designed to anticipate crises or to manage them effectively once they have occurred. Neither the mechanics nor the basic skills are in place for effective crisis management."⁴¹

Preliminary results from the Society for Healthcare Strategy and Market Development survey in 2008 found that only about one-third of respondents (health care public relations, communications, and marketing professionals) said their organizations had an "independent" crisis communication plan separate from the organization's disaster plan. Another 37 percent of respondents said the crisis communication plan was part of the disaster response plan. One in ten organizations had no crisis communication or disaster plan.⁴²

IHI findings are similar; at a 2010 IHI IMPACT Leadership meeting of 50 organizations with advanced levels of quality and safety practice, only 30 percent had clinical crisis management plans. In two IHI 2010 efforts (IMPACT Leadership Community Work Group with six organizations, and an IHI Web&ACTION program with 50), the overwhelming majority had no plans in place. Two other 2010 IHI presentations probing 150 mid-level leaders suggested that only 10 percent had plans to deal with serious clinical events. Of those who did, most reported their plans were not consulted or followed when an event occurred since the expectation wasn't set and the practice wasn't routinized. In other meetings attended in 2011, there are some reasons for optimism; more organizations report that integrated plans are under development.

Key steps in building a crisis management plan include the following:

- 1. Inventory plans that already exist within your organization, such as internal and external disaster plans, for a model to build on.
- 2. Assess the last two serious events that occurred in your organization:
 - a. What worked?
 - b. What didn't work?
 - c. What could have gone better?
 - d. What did you learn?
- 3. Prepare a high-level outline of your plan based on your learning (see Appendices A and B).
- 4. Test the outline with an actual or hypothetical case of a near miss, an adverse event with minor temporary harm, or an event that happened in another organization.
- 5. Refine and build your plan based on the learning.
- 6. Continue to test the plan through drills (including surprise ones), using cases noted above in Step 4.
- 7. Use the plan to respond to clinical crises, and review what worked and what could be improved.
- 8. Revise the plan.

Organizations have graciously begun to share their crisis management plans with IHI.⁴³ Catholic Health Partners in Cincinnati, Ohio, is one of those organizations. Jana Deen, Patient Safety Officer, notes, "Our event management guidelines, a basic framework, were created by representatives from across the system, including hospital CEOs, CMOs, CNOs, and Mission, Risk, Quality and Legal staff. They are a work in progress and have been revised several times. We expect our hospitals to integrate and build upon the guidelines. Regular phone calls with our hospital CEOs discussing how specific events have been handled have resulted in increased use of the guidelines and significant improvements and learning across our system. Most recently, one of our regions has implemented an Event Intervention Team triggered by an electronic notification system and requiring frequent and regular face-to-face meetings of leadership in the hours following the event."⁴⁴ Christiana Care Health System in Delaware is another example; Michele Campbell, Christiana Care's Corporate Director of Patient Safety and Accreditation Services, offers, "We are continuously learning from events which have contributed to or have the potential to harm our patients. Our proposed Event Management framework builds upon existing processes and is transforming the way we manage adverse events as well as our culture of patient safety."⁴⁵

The Prioritized Organizational Response

The four hallmarks of a strong crisis response are immediacy, transparency, apology, and accountability.⁴⁶ Three priorities of response are the patient and family; the staff, particularly those at the front lines of care and the harm; and the organization.

Priority 1: The Patient and Family

When the patient and family visit a health care setting, the last thing they expect is an unanticipated outcome that adds to the burden of illness or leads to death. Listed below are key considerations and questions arising from individual patient and organizational stories^{47,48} and comprehensive reviews.^{49,50,51,52,53,54,55,56}

- Has there been appropriate, honest communication to the patient and family, most often by a team of two staff persons (or, in some cases, more), including a clinician who has a pre-established relationship with them?
- Has the organization acknowledged their pain, made an empathetic statement ("I'm sorry this happened"), and issued an apology after an appropriate assessment?
- Has a full clinical assessment of the patient been performed?
- Have the patient and family been engaged immediately in the investigation and invited to
 participate in some way in the root cause analysis of the event? Most often, no one was closer
 to the patient than a family member or caregiver; they may have information no one else has.
 Inclusion of the patient and family in the analysis also increases its credibility.
- Is there ongoing support to the patient and family, including consideration of reimbursement for any out-of-pocket expenses?

- Has the organization stayed engaged to bring this case to a respectful resolution?
- Is the organization positioned to never lose sight of the patient and family?

Organizations have learned that adverse events don't necessarily erode trust. The way in which the organization responds after such events can and often does. ^{57,58} Health care professionals invest a lot of money and time in building relationships with patients; an adverse event doesn't mean that investment has to be lost. ^{59,60} The following elements are offered for organizations to consider to achieve the goal of never losing sight of the patient and family when responding to a clinical adverse event:

- Focus first and foremost on the patient's immediate clinical needs while assembling the facts.
- When communicating about the harm that the patient experienced, state what happened, why it happened, and what's being done to prevent it from happening again.
- Appoint an appropriate (determined case by case) staff member as a patient and family point of contact that is available 24 hours a day, 7 days a week.
- As soon as the organization has new information about the event, inform the patient and family.
- Engage with those members of the patient's extended care team who may not be directly engaged already, including the patient's primary care physician.
- Never let the patient and family encounter excuses, a dead end, emotional distance, or inappropriate body language.
- Ensure that all communications are culturally and linguistically appropriate.
- Address any concerns the patient and family have as soon as possible.

Although disclosure of medical errors is increasingly accepted and expected by caregivers, patients, and others with an interest in patient safety, and almost all agree disclosure is the right thing to do, ⁶¹ considerable barriers remain. ⁶² Questions persist about the definition and elements of an appropriate apology, and extensive resources now exist to answer those questions. At a minimum, Lazare believes the apology process has four components: acknowledgement of the offense; the explanation; various attitudes and behaviors including remorse, shame, humility, and sincerity; and reparations. The importance of each component, even the necessity of each, varies from apology to apology, depending on the situation. ⁶³ According to G.K. Chesterton, "A stiff apology is a second insult... the injured party does not want to be compensated because he was wronged; he wants to be healed because he has been hurt." ⁶⁴ Research demonstrates that disclosure of adverse events is often associated with higher ratings of quality by patients ⁶⁵ and a drop in malpractice suits (see the section below titled *Reimbursement and Compensation*). Organizations are finding that mediation/ombudsman programs can be exceedingly helpful in bringing a case through to resolution and learning through helping to manage the event, offering a compassionate organizational response in a respectful manner, and discovering what patients and families truly need. ^{66,67}

Priority 2: The Frontline Staff

Inclusion promotes learning and healing; exclusion promotes blame. Serious harm to a patient is the last thing that health care staff want to have happen in the delivery of care. There is significant anecdotal evidence and research on the short- and long-term toll these events can have on those involved.^{68,69,70,71,72} The following are key considerations and questions in the aftermath of an event and over time:

- At a time of rapidly evolving practice, are people and resources available to provide on-thespot coaching to the staff involved in the event as they prepare for empathetic communication, ultimately disclosure of the event, service recovery and reimbursement, and support through the process?
- Is there ongoing support to the clinicians and team at the front line of the harm? Are they at risk of personal harm? When are they safely able to return to providing care? Would it be helpful for the CEO to meet with the frontline staff?
- Have frontline staff been invited to participate in the root cause analysis (RCA) of the event? This should be decided on a case-by-case basis; frontline staff should preferably participate as full members of the team or, at a minimum, be interviewed as part of the RCA.
- Are staff members actively involved in bringing the case to resolution over time?
- Are there mechanisms to ensure learning and healing across the organization?
- Is the organization determined never to lose sight of the staff at the front line of the harm?

Many health care organizations have learned that, in the aftermath of a clinical adverse event, they could fire all the staff involved and it would do nothing to improve safety or prevent a similar event from happening again. Most harm from such events is the result of bad systems, not bad people. Elements to consider when responding to adverse events include the following:^{73,74,75,76}

- Accountability should be appropriate. Do not jump to conclusions; ask "What happened?" and not "Who did it?"
- Send clear messages of support to all staff involved: "We'll figure this out together."
- Establish and practice principles of a fair and just organizational culture.
- Appoint a trained staff member who staff involved in the event can contact 24 hours a day,
 7 days a week.
- Offer support through Employee Assistance Programs, peer support groups, and other professionals.
- Stay aware: Some colleagues can be supportive and others damaging.

Research has demonstrated that disclosure is met with approval and relief on the part of health professionals, as they can now discuss matters that in the past were often seen as too difficult to discuss. Staff members are eager to integrate open disclosure more consistently in everyday clinical practice.⁷⁷

Fighting off "shame and blame" is a huge challenge after serious events, as is the "complex sorrow" of health care professionals whose patients die as a result of error. Mitigation requires a fair and just organizational culture, with supporting policies and practices, and appropriate levels of individual and shared accountability. James Reason's Incident Decision Tree can be helpful in getting to this fair and just treatment, whether policies exist or not. MITSS Tool Kit is an exceptional resource for building clinician and staff support programs. The National Quality Forum offers this Safe Practice Statement: "Following serious unintentional harm due to systems failures and/or errors that resulted from human performance failures, the involved caregivers (clinical providers, staff, and administrators) should receive timely and systematic care to include: treatment that is just, respect, compassion, supportive medical care, and the opportunity to fully participate in event investigation and risk identification and mitigation activities that will prevent future events."

Priority 3: The Organization

Serious harm can place an organization in significant crisis and lead to either long-term business or reputational risk and degradation. On the other hand, it can also result in enhanced community positioning based on respectful, effective crisis management. The following are key considerations in the aftermath of an event and over time:

- There is a visible CEO ("I care," "I'm accountable").
- The organization has issued a call to action grounded in values, integrity, and doing the right thing.
- The Crisis Management Team is activated under a strong executive leader, with a clear chain of command.
- The board of trustees is notified, as are relevant regulatory agencies.
- A root cause analysis of the event has been activated immediately.
- Careful and rapid preparations of internal and external communications are underway immediately.
- There is a clear understanding of who can make what promises to patients, family members, and staff.

The organization and its leadership must never lose sight of the patient, family, staff, and community when responding to serious clinical adverse events. A recent refrain heard from a number of leaders and organizations is "please emphasize that respectful management demands time and attention over long periods of time, even years." Suggested actions include remembering the patient and family on major holidays or birthdays, or checking in with the patient and family when a case is seemingly lost in litigation. Hospital leaders should meet with staff involved in events as a case goes to trial or before professional board hearings, which may occur many months or years later. Often heard are stories of patients and/or families being traumatized by continued mailings from the hospital; no one remembers to remove the patient and family from the mailing list. In one case in 2011, the family

was devastated when they received a first-year birthday card from the hospital; the child had died of a medication error at birth at that hospital.

Risk Assessment and Root Cause Analysis

After addressing the patient's and family's immediate needs in a crisis situation, the very next set of essential questions every organization must be prepared to ask and respond to must include: How likely is this to happen again, and is there clear and present danger? Triaging the risk using tools such as the event debriefing in TeamSTEPPS⁸² should occur even before or as an organization commences a root cause analysis. Short-term precautions need to be taken in some situations, sometimes to alter a process in the short term or remove a potentially dangerous caregiver while the organization is more thoroughly investigating the incident. Often patients and families are most moved by a sense of their own responsibility to ensure that whatever happened to them should not happen to someone else. Letting them know in the early stages that precautions have already been taken, even before the full investigation has occurred, is comforting and satisfying to them. Keeping caregivers safe is also an organizational priority. Early actions to prevent recurrence serve their interests and affirm the leaders' responsibility to them, too.

Root cause analysis (RCA) is an essential tool of vigorous system investigation, assessment, learning, and improvement. ^{83,84} The RCA process should begin immediately after a serious event, under a skilled and trained facilitator. Nothing on the organizational schedule is more important than the patient. Ideally, the RCA should be completed within 30 days. Executive leadership should be included to ensure the RCA is a comprehensive, fair, and balanced process, to remove barriers, and to provide support. Using the "Five Whys Technique" helps provide accurate and complete statements of problems, complete honesty in answering the questions, and the determination to resolve the problems. ⁸⁵

Given that the RCA's focus is on learning and improvement, staff close to the front line of the event, as well as the patient and/or family, should be included in the process. The extent of inclusion will be determined on a case-by-case, individual-by-individual basis. Staff, patients, and families have all commented that, in addition to informing learning, inclusion supports healing. 86,87 The RCA should be fully integrated into the processes of the board and executive leadership to ensure follow-through on the plan of correction. The board should specifically decide how it wants to be involved in RCAs as a matter of policy.

IHI research emphasizes the importance of studying organizational resilience (predesigned defenses and adaptive capability) through structured conversations, in addition to conducting a root cause analysis of adverse events and near misses.⁸⁸ A growing number of evaluations of the RCA approach are available,⁸⁹ as are cross-industry alternate approaches to the investigation of failure.^{90,91}

Internal and External Communications

There should be a clear communication team leader, with mechanisms for checking in and coordinating with the Crisis Management Team. Internal and external communications around serious clinical events are essential. The questions that arise include: What can we say? How can we say it? To whom? Essential messages can, when appropriate, include the following:

- The hospital has apologized and regrets that the incident happened (see Table 1 below for language to use in such communication).
- We have disclosed to the patient and family everything we know, and keeping them informed and supported is a priority.
- The board of trustees and leadership are actively engaged in understanding why our systems
 failed this patient and family and what steps are needed to prevent a similar occurrence in the
 future.
- We are working with appropriate authorities.
- We are an excellent organization and staff, but not perfect, and we come to work every day
 to provide the best care we can and continuously seek ways to improve it.
- We will use this tragedy to make this organization a better and safer place for our patients, family, staff, and community.

Table 1. Communicating after a Serious Clinical Adverse Event: Words of Compassion, Concern, Empathy, and Remorse

Alarmed	Humiliated	Tragic
Appalled	Let you down	Unfortunate
Ashamed	Mortified	Unhappy
Concerned	Regret	Unintended
Disappointed	Sad / Saddened	Unnecessary
Embarrassed	Shocked	Unsatisfactory
Empathized	Sorrowful / Sorrow	
Failed / Failure	Sympathetic	

Source: Lukaszewski JE. Establishing individual and corporate crisis communication standards: The principles and protocols. *Public Relations Quarterly*. 1997;42(3):7-15.

In creating communication around any crisis, the organization must respect the privacy of the patient, family, and staff, while also taking organizational risks in support of them and their needs. While privacy rules frequently limit what can be said, an organization should be prepared to detail what went wrong and why, including speaking to policies (past and future) designed to minimize harm. Even when you can't specifically discuss a patient-care issue (which is growing less common, given how regularly state agencies make patient-name-redacted versions of incident reports available online), you can and should be willing to talk about how you typically address similar incidents.

A tried-and-true rule in public relations is, "Whoever informs the first story informs the overall story." Early information is often incorrect, and misinformation fills a vacuum and is very hard to correct later. Credibility is essential and the organization should never speculate. Public relations (PR) professionals advise that, in telling the story, you should define your essential messages as clearly and concisely as possible, centralize and narrow the flow of information, and determine who will speak on behalf of the institution. All spokespersons must be briefed and prepared. All staff should be reminded to direct outside inquiries to the PR department, which should review communications to all core audiences.

When serious clinical adverse events occur, communication priorities should include the following: those most directly affected; employees, as sometimes they can be victims, too; those indirectly affected—families, relatives, neighbors, friends; customers, suppliers, government, regulators, third parties; and the news media and other channels of external communications. Those with experience in these matters advise talking to patients, staff, trustees, regulators, supporters (donors, community leaders, and local officials), and interested parties (insurers, etc.). Core constituencies should never learn anything from the news media; they should receive the information directly. Email, Twitter, and other social media have changed everything—most obviously, the speed and content of communications—and the integration of social media into other crisis efforts is being found helpful. Many people want and need to believe in you; make that possible. Use all available tools to provide regular updates, including personal calls, email, fax, websites, letters, Q&As, and social media.

Internal communications are also critical. Health care staff often report that, in the aftermath of adverse events, "everyone is talking about it except the organization." All staff are devastated when these events happen, as staff and as members of the public. They want and need to understand what's going on. There is no question that patients and family members will be asking questions. The staff, including the patient's extended care team, need to be trained to answer them.

Engaging with the Media

One of the more complex issues to address with serious adverse events is how to effectively manage the media throughout the crisis. These efforts need to begin long before an event occurs and include at least four steps:

- 1. The organization should have an up-to-date, tested media plan as part of the overall crisis management plan, with an identified media consultant where appropriate.
- 2. Executive leadership must keep their own internal communications staff informed; if leaders are worried about something, their PR staff should be aware of it concurrently.
- 3. Engagement by PR and the organization with the media should begin long before any high-profile event. Health care organizations should be cultivating the media, building relationships, establishing credibility, being available for them both on background and for stories, and honoring their deadlines.

4. Organization spokespeople should be required to go through formal media training to support them in times of normal operations as well as during crisis events.

When a serious adverse event occurs, PR should be notified immediately as part of the core Crisis Management Team; time is of the essence. Calls from the media should be expected at any time—don't let people minimize the possibility that it will go public—and preparations should be made for these inquiries. Organizations can't hide and must engage in the process. Increasingly, organizations, along with the impacted patients and families, are seeking out one or more trusted media outlets to break the story with a focus on what happened, why it happened, and what's being done to prevent it from happening again, and to show empathy. Organizations must be honest and not stonewall; one reporter described "no comment" as a reporter's stimulant. As the crisis evolves, PR should provide updates to the media, telling as much as they can. For the long term, PR should stay engaged with the press and have a story of learning and improvement to tell.

These efforts, in parallel with the content covered in the section above titled *Internal and External Communications*, will help break the destructive cycle outlined below.

- A serious clinical adverse event occurs.
- The organization is not transparent, internally or externally.
- People close to the incident (patients, family members, staff, etc.), frustrated with how the event is being handled, contact the media.
- The media contacts the organization, gets "no comment," or incorrect or superficial information.
- The media go looking everywhere for any information they can find.
- Information is supplied by people who really don't know and is often incorrect.
- The patient, family, staff, organization, and community are further traumatized by the strident, inaccurate media attention.
- The organization's response to the event becomes as big a story as the story of the actual event,
 if not bigger.

Reimbursement and Compensation

Bishop Desmond Tutu said, "If you take my pen and say you are sorry, but don't give me the pen back, nothing has happened." Amends or damages are due. In approaching this essential and challenging area, key concepts for leaders are service recovery, reimbursement, and compensation (see Table 2 for definitions).

Table 2. Definitions for Compensation, Reimbursement, and Service Recovery

Compensation:

A financial remedy accorded to an individual who has sustained an arguably avoidable loss in order to replace the loss caused by the arguably inappropriate act, with the intention of making the injured party whole.

Reimbursement:

The act of paying someone for expenses with or without an admission of fault.

Service Recovery:

The process used to "recover" dissatisfied members or patients by identifying and fixing the problem or making amends for the failure in customer or clinical service.

Service recovery, ⁹⁷ including reimbursement, should be an immediate proactive response to all adverse events; patients and family members should not have to ask. Reimbursement can include out-of-pocket expenses (housing, parking, child care, transportation, meals, or lost wages) for the patient and/or family. COPIC's 3Rs program (recognize, respond, resolve) ⁹⁸ represents one of the earliest systematic approaches, demonstrating the value of service recovery, empathy, etc., to preserve relationships and prevent litigation. The Coverys (formerly ProMutual Group) comprehensive REACT (respond effectively and communicate timely) seven-state disclosure program also includes a reimbursement component. ⁹⁹

The offer of financial compensation to patients and families injured through medical error has historically been delegated to risk and claims managers, lawyers, and the courts. The decision-making process has occurred far from the organization's clinical and administrative leaders, playing out over long periods of time. The seminal 1991 Harvard Medical Practice Study¹⁰⁰ recommended the institution of no-fault compensation for all medical injuries. In the words of Lucian Leape, one of the study's authors, "The least we can do—the least—is to try to make up for our damage by financial compensation of our injured patients." In 2003 and 2004 monographs, 102 the American Society for Healthcare Risk Management wrote that effective and successful disclosure provides patients and families with opportunities to get information needed to make next-step decisions, including the possibility of seeking appropriate compensation. Richard Boothman of the University of Michigan notes, "Not every patient wants compensation and not all compensation is financial, but the inability or unwillingness to offer it signals insincerity and suggests that apologies are really affectations or strategies, not an integrated step borne of a commitment to honesty." 103

In the United States, a relatively few early, innovative, and promising developments are linking disclosure with resolution that includes compensation. Published examples of these programs include the early work of the VA Medical Center in Lexington, Kentucky, ¹⁰⁴ and the University of Michigan. ¹⁰⁵ While different in details, commonalities include the following: ¹⁰⁶

- All begin with an organizational policy of full disclosure of adverse events and training and support for clinicians to aid them in making disclosures.
- All share a general philosophy of risk management that holds that being candid about medical
 injuries, apologizing when appropriate, and providing for the patient's financial needs (in at least
 a limited way) through a quick, accessible process will eliminate the impetus for most patients or
 families to sue and will spur institutional learning and safety improvement.
- The models diverge in their specific approaches to compensation.

Other pacesetter organizations include the Veterans Health Administration System, ¹⁰⁷ Stanford University Medical Center (see Appendix E), the University of Illinois, ¹⁰⁸ CRICO medical malpractice company serving the Harvard medical community (see Appendix F), and the Kaiser Permanente Healthcare Ombudsman/Mediator program. ¹⁰⁹

Some early data indicate that disclosure will not increase liability costs, and may decrease costs, 110 yet significant thoughtful debate remains on the overall impact. 111

The international community, and specifically the work in Denmark, New Zealand, and Sweden, offers more timely compensation to a greater number of injured patients and more effective processes for complaint resolution and provider accountability. This experience, along with new and thoughtful considerations underway in a number of countries, including Scotland, can inform the needed redesign of the current US system.

According to Frank Testa, System Director for Risk Management at Cook Children's Health System, "Over the past five years we have had great success with this approach to respectful management of serious events. We have used this approach to settle claims and believe this approach has provided significant savings and is an effective litigation avoidance strategy. We believe it is our ethical and moral responsibility to disclose adverse events in a timely and compassionate manner, apologize for any harm, and provide appropriate accommodation to the child and parents." 117

A system that channels more resources to injured parties and fewer resources to litigation costs would be superior to the current malpractice system. There is no question that approaching reimbursement and compensation in the aftermath of a serious clinical event is challenging. Yet, the level of dissatisfaction with current approaches, coupled with the early results of these pioneers, underscores the need to proactively investigate and design new organizational approaches. In his comprehensive review of medical malpractice, Burkle notes, "Taking the moral and ethical highroad as a profession and continuing to do right by our patients perhaps is the best argument we can muster for needed tort reform."

Communicating Around Errors That Originally Occurred Elsewhere

Scenarios in which an adverse event occurred in one health care institution but the event is discovered or being managed in another institution occur routinely, in contexts ranging from diagnostic errors to sentinel events. Yet, there is little published guidance on how best to respond. While there has been some thoughtful commentary over more than 30 years, citations in the literature are rare. 120,121

In 2008, a multi-year grant was awarded by the Greenwall Foundation to the University of Washington (in Seattle), under the leadership of Thomas Gallagher, MD, to probe "Talking with Patients about Other Healthcare Workers' Errors: Ethical, Legal, and Practical Considerations." While awaiting the outcome of this high-level interdisciplinary effort, early work of the research team provides the following suggestions: 122

- Patients and families come first: When responding to situations where quality-of-care concerns exist involving other providers, staff should keep the patients' and families' needs for respectful, honest, and compassionate treatment at the forefront. Patients and families should not bear the burden of being fact finders and digging for information about potential problems in their care.
- Explore, don't ignore: When providers have serious concerns about a potential quality-of-care problem involving another provider or institution, a professional responsibility exists to proactively and thoughtfully explore the situation while avoiding a rush to judgment. Ideally, this exploration would include a professional-to-professional conversation with the involved colleague, under the guidance of an institutional coach. Communication skills training can help providers navigate these challenging discussions.
- Create institutional supports: Institutions should develop support mechanisms to assist providers
 in preparing for conversations with colleagues about quality-of-care concerns, and unbiased
 mechanisms for investigating concerns that involve multiple providers and institutions.
 Mechanisms also need to be developed to collaborate with other institutions to investigate
 and resolve quality-of-care concerns across the spectrum of care delivery.
- Promote learning for the future: The profession should work towards a culture of collective
 accountability, using quality-of-care concerns involving multiple providers and institutions
 as learning opportunities.

External Notifications and Unannounced Visits

As challenging as serious clinical adverse events are, they can become much more complex if important external notifications are not made. Although there are differences between regulatory and legal infrastructures internationally, the underlying principles remain the same. All requirements for mandatory or voluntary notifications of state and national law enforcement, and regulatory and accrediting agencies, in the aftermath of a serious clinical adverse event should be met or considered. For state reporting in the US, the 2007 National Academy of State Health Policy report¹²³ is helpful (note the addition of public reporting in New Hampshire since publication of the report). If there is

any question about whether an event should be reported, instead of spending endless time in discussions, it is far easier to just ask the agency if it is a reportable event or to err on the side of over-reporting. In the US, this could include reporting the event to The Joint Commission, ¹²⁴ FDA's Medical Product Safety Network (MedSun), ¹²⁵ and sponsored research agencies such as the National Institutes of Health. For international organizations, appropriate agencies should be considered. Before reporting, consider the agency's past history with your organization and their likely response, then report.

The risk insurer and legal counsel, when external, should be near the top of the list for notification when a serious clinical adverse event occurs. Many organizations, including the Institute for Safe Medication Practices, will ensure that others are informed of your event and will benefit from the subsequent learning. 126 Relationships with regulatory and accrediting agencies, as well as the media, can be very strained during these periods. Everyone benefits when these relationships stay constructive and focused on the same questions that are important to the patient and family: What happened? Why did it happen? What is being done to prevent it from happening again?

Organizations should also be prepared for unannounced visits from accrediting and regulatory agencies, which can be triggered not only by organization notifications but by the media, calls from the patient or family, or calls from concerned health care staff from the affected organization.

Guidelines for Disclosing Adverse Events Affecting Multiple Patients and/or Where Patients Not Yet Affected May Be at Risk

As complex as serious clinical events are, many special circumstances can make them dramatically more complicated. At the top are adverse events where tens, hundreds, or thousands of patients may have been affected—major failures of the health care system, including cases around poor sterilization practices or contamination of endoscopic devices, hepatitis outbreaks, interpretations of diagnostic studies, pseudomonas outbreaks, overdoses of radiation, and cases where it can't be determined how many patients were impacted. 127,128,129 In management of these cases, it's not just the patients who are affected, but others as well, and rules need to be set regarding when to warn and when to offer patients alternatives to specific patient care units, centers, programs, or even health care organizations.

While a detailed response is beyond the scope of this white paper, a few helpful articles are cited. Chafe, Levinson, and Sullivan have offered exceptional guidance in cases involving multiple patients. The Centers for Disease Control and Prevention and the World Health Organization's Outbreak Communication Guidelines are helpful in a wide range of settings. A comprehensive approach to the management of infection control breaches, including communications to patients, is offered by Patel and colleagues. Rutala and Weber have developed a 14-step protocol to aid infection control professionals in the evaluation of potential disinfection and sterilization failures. In addition, they present a model for helping determine how patients should be notified of the potential adverse event, and provide sample statements and letters for communicating with the public

and individual patients.¹³⁴ Dudzinski and colleagues, in a 2010 study supported by the Agency for Healthcare Research and Quality, offer a careful review of these events and their disclosures with recommendations. They note that disclosure should be the norm, even when the probability of harm is extremely low.¹³⁵ In some cases, recommendations co-sponsored by the Association of State and Territorial Health Officials, the National Association of County and City Health Officials, and the Association of Health Care Journalists are relevant, providing guidance on the release of information concerning deaths, epidemics, or emerging diseases.¹³⁶

What to Do When a Crisis Occurs and There Is No Plan

Many health care organizations have no crisis management plans in place for serious clinical adverse events. For those organizations, we recommend the following actions:

- 1. Notify the executive leadership and board.
- 2. Establish a sense of urgency.
- 3. Assemble an ad-hoc Crisis Management Team led by the CEO or another executive leader.
- 4. Use Appendices A and B in this white paper as a guide for what should be done overall and in the first hour, day, week, and month, then modify according to your unique needs and circumstances.
- 5. Review this white paper in full for overall context, references, contacts, and other resources.
- 6. Strongly consider bringing in outside crisis management help.
- 7. Contact executive leaders in your local community or nationally who have been through similar situations and are well respected for their response (see Appendix D).
- 8. Never lose sight of the patient and family, staff, and organization.

Responding to Serious Events in Other Organizations

Supporting Organizations Dealing with Serious Clinical Adverse Events

Organizations and individuals dealing with a serious clinical crisis routinely report not only how difficult a challenge it is, but often how lonely it can be. People outside the organization don't know what to say, so they don't say anything. Much like the patients, family members, and staff directly involved in the event, others in the affected organization may encounter distance when they could use support and help. Here are a few guiding principles:

- If a health care organization in your community is going through a serious crisis, show compassion by sending a note or email, or picking up the phone. Let them know you are thinking of them and offer help.
- If one of your friends is involved in responding to and managing a serious event at his or her organization, call and check in.

- Check in again, over time.
- When things settle down, call the organization and ask what they learned so you can ensure
 it doesn't happen in your organization. Invite principals from the organization to speak at
 meetings about their learning; this transfer of knowledge also helps healing.

Learning from Events in Other Organizations: Could It Happen Here?

The headline is all over the news: a tragic medication adverse event has killed a young child. Increasingly, high-profile tragedies are the fodder for newspapers and all manner of 24-hour electronic media. While the story is unfolding, other health care organizations should be asking themselves, "Could it happen here?" 137,138 As in the recent cases of serious harm to or deaths of infants due to heparin overdoses, the story, the question, and the action didn't spread immediately and reliably across the health care industry despite great transparency. Staying alert to serious clinical events in other organizations provides an additional powerful tool to inform learning in support of safe care for patients, families, and staff. The following are basic steps for learning from events in other organizations: 139

- Set an expectation that you want to know about outside events.
- Establish a system for learning about such events and agree on the focus of your inquiry.
- Develop reliable sources and get the facts straight.
- Ask yourself, "Could it happen here?" Ask again.
- Tell the story of how you used the event to drive learning and improvement within your organization.

After a 2009 sentinel event in a hospital in the Southwest United States that seriously harmed a number of children, a Midwest hospital system asked the question, "Could it happen here?" They quickly found that in 18 of their hospitals, yes it could, and were able to mitigate the risk quickly and effectively.

Conclusion

A serious clinical adverse event is a crisis for everyone involved. Governing bodies and executive leadership carry the **burden** of these events forever, but carrying the burden isn't enough. They also have a **responsibility** to ensure that everything possible is done to understand what happened and why it happened, and to prevent it from ever happening again. These crises have the **power** to be used to transform the organization to a dramatically better one. We have the responsibility to meet the patient, family, staff, organization, and community where they are with the elements of empathy, disclosure, support, assessment, resolution, learning, and improvement.

The individuals and organizations noted in Acknowledgements, Appendix D, and the references in this white paper help to show us the way. This is the values-based "true north" of respectful management of serious clinical adverse events—the healing response that leaders would want for themselves and those they love. Health care leaders owe their patients, family members, staff, and community nothing less. 141

Appendices

- Appendix A: Respectful Management of Serious Clinical Adverse Events Checklist
- Appendix B: Respectful Management of Serious Clinical Adverse Events Work Plan
- Appendix C: Respectful Management of Serious Clinical Adverse Events Disclosure Culture Assessment Tool
- Appendix D: Respectful Management of Serious Clinical Adverse Events: Organizations from Which to Draw Courage and Learning
- Appendix E: Stanford University Medical Center Process for Early Assessment and Resolution of Loss
- Appendix F: CRICO Statement of Disclosure of Medical Errors and Compensation

Appendix A:

Respectful Management of Serious Clinical Adverse Events Checklist

Element	Dimension	Started	Completed 🗸
Organiza- tional	Have expectations been set? Are board and leadership accountable?		
Culture of Safety	Are there established systems, policies, and a crisis management plan?		
Internal Notification	Have the CEO, Executive Leaders, Risk Management, QI and Patient Safety, PR, Legal Counsel, and other relevant leaders been notified of the event?		
	Has the board of trustees been notified?		
Crisis	Has the threshold been met for activation of the CMT?		
Management Team (CMT)	Is the team membership in place?		
	What executive leadership will chair the team?		
	Is there a need for an independent facilitator?		
Priority 1: The Patient	Who is the organizational 24/7 contact person for the patient and family?		
and Family	Has the organization acknowledged the pain, expressed empathy and regret?		
	Are the immediate needs of the patient and family met?		
	Has the patient had a full clinical assessment?		
	Has the organization assessed the personal safety of the patient and family?		
	Has the patient's primary care physician and extended care team been notified?		
	What is being heard from the patient and family?		
	Has the organization apologized, as appropriate?		
	Does the organization understand what the patient and family want said to others about the event?		
	Is the organization providing ongoing support to the patient and family, including reimbursement of out-of-pocket expenses?		
	Is the organization prepared to have open discussions about compensation, if deemed appropriate?		
	Has the family been engaged in the immediate investigation and then invited to participate in the root cause analysis (RCA) of the event?		
	Has the organization suppressed all normal PR and other communications to the patient or family that could inflict further pain?		

NOTE: This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

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Appendix A: Respectful Management of Serious Clinical Adverse Events Checklist (continued)

Element	Dimension	Started 🗸	Completed 🗸
Priority 2: The Frontline	Who is the organizational 24/7 contact person for staff involved in the event?		
Staff	Has the personal safety of frontline staff been assessed?		
	What is being heard from the frontline staff?		
	Has the organization expressed empathy and been visible?		
	Have frontline staff been invited to participate in any investigation and the RCA?		
Priority 3:	The Event		
The Organization	Has an overall organizational point person been established?		
o gamzation	What is known about what happened? What is the system for updates?		
	Is there clear and present danger to other patients, given what we know?		
	Has the root cause analysis been initiated? Is there an executive sponsor?		
	What about the event is known internally and externally?		
	What is being heard internally and externally in response?		
	What are the priorities to be addressed and who is the point person?		
	Are there materials that need to be sequestered?		
	What is the system to be used for urgent updates?		
	Has billing stopped per hospital-acquired condition policy?		
	Internal and External Communications		
	What is the organization prepared to say internally and externally?		
	Who is (are) on point for communications?		
	Is there clarity on what the patient and family want said to others? Have they had input into all communications materials?		
	Has a press release been prepared in case it is needed?		
	Have there been communications to trustees, patients, families, staff, and internal/external members of the patient's extended care team?		
	Have there been external communications to the media, the community?		
	Are there "friendly" experts available?		
	Should outside media help be obtained?		

NOTE: This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

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Appendix A: Respectful Management of Serious Clinical Adverse Events Checklist (continued)

Element	Dimension	Started	Completed
Priority 3:	External Notifications and Unannounced Visits		
The Organization	Are there required notifications to state public health, Centers for Medicare & Medicaid Services?		
(continued)	Is this event being reported to The Joint Commission, others?		
	Have risk insurers/outside legal counsel been notified?		
	Are there federal agencies to be notified (e.g., Health and Human Services, National Institutes of Health)? Does the Food and Drug Administration need to be contacted?		
	Do law enforcement agencies need to be notified?		
	Are there others that would benefit from learning from this event (e.g., Institute for Safe Medication Practices)?		

NOTE: This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

Appendix B:

Respectful Management of Serious Clinical Adverse Events Work Plan: Elements, Dimensions, and Milestones

Element	Dimension	Pre- Event	First Hour	First Day	First Week First Mon	First Month	Activities after First Month
Organizational	Board and Leadership	Trust, Resp	ect, Human	Trust, Respect, Human Rights, Forgiveness, Repentance	ess, Repentan)e	Learning and improvement
Culture of Safety	Systems, Policies, Procedures, Guidelines, Crisis Management Plan	Approve	Assemble	Annotate	Annotate	Annotate	Revise
Internal Notification	CEO, Executive Leaders, Risk Management, QI and Patient Safety, Counsel, Communication, etc.	Learning System	Activated	Engaged and Visible	Engaged and Visible	Engaged and Visible	Learning and improvement
	Board		Pending	Activated	Updated	Updated	Learning and improvement
Crisis	Threshold Met for Activation	Plan	Activated	Meeting	Schedule	Schedule	Stand down with plan
Management	Membership	Plan	Activated	Refine	Refine	Updated	Formal debrief
leam	Chair	Plan	Activated	Refine	Ongoing	Ongoing	Revise plan
	Facilitator	Plan	Activated	Ongoing	Ongoing	Ongoing	
Priority 1:	Who's on Point			Establish	Report	Report	To resolution and learning,
Ine Patient and Family	Acknowledged Pain, Expressed Regret			Acknowledged	Ongoing	Ongoing	including any external professional or judicial actions
	Patient/Family Needs Meet			Established	Ongoing	Ongoing	
	Patient Fully Assessed			Assessed	Update	Update	
	Personal Safety			Assess	Update	Update	
	Primary Physician Notified			Notified	Update	Update	
	Hearing What			Report	Report	Report	
	Apology Extended			Assessment	Assessment	Assessment	
	What Do They Want Said			Establish	Update	Update	
	Provide Ongoing Support, Reimbursements			Offer	Update	Update	
NOTE: This work plan is	NOTE: This work plan is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged	litions and mo	odifications to	fit local practice ar	e encouraged.		(continued on next page)

Appendix B: Respectful Management of Serious Clinical Adverse Events Work Plan (continued)

Element	Dimension	Pre- Event	First Hour	First Day	First Week	First Month	Activities after First Month
Priority 1:	Compensation Approach			Review	Review	Establish	To resolution and learning,
The Patient and Family (continued)	Mailings Suppressed			Activated	Updated	Updated	including any external professional or judicial
	Root Cause Analysis (RCA) Participant			Activated	Invited	Complete and Reported	actions
Priority 2:	Who's on Point			Establish	Report	Report	To resolution and learning,
The Frontline Staff	Personal Safety			Assess	Update	Update	including recognition of the efforts of staff, resolution of
	Hearing What			Report	Report	Report	any external professional
	Ongoing Support and Visibility			Offer	Report	Report	or judicial actions
	RCA Participants			Activated	Invited	Complete	
Priority 3:	The Event						
l rne Organization	Who's on Point			Establish	Update	Update	Revise plan
, ,	What Happened			Report	Report	Report	Learning and improvement
	Patient Clear and Present Danger			Assess and Report	Update	Update	Learning and improvement
	RCA and Executive Sponsor			Activated	Progress	Complete	Closed all risk reduction items
	Who Knows What			Report	Report	Report	Learning and improvement
	Hearing What			Report	Report	Report	Learning and improvement
	Priorities: What, Who Is on Point			Set	Update	Update	All items addressed
	Materials to Be Sequestered			Immediate	Update	Update	Ultimate disposition?
	System for Urgent News			Set	Update	Update	Revise plan
	Billing Stopped (Hospital- Acquired Condition Policy, etc.)			Stop	Update	Update	Per statute/Patient and family understanding
i i i i i i i i i i i i i i i i i i i							

NOTE: This work plan is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

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Appendix B: Respectful Management of Serious Clinical Adverse Events Work Plan (continued)

Element	Dimension	Pre- Event	First Hour	First Day	First Week	First Month	Activities after First Month
Priority 3:	Internal and External Communications	tions					
Ine Organization	What Prepared to Say			Establish	Update	Update	Learning and improvement
(continued)	Who Is (Are) on Point			Establish	Update	Update	Learning and improvement
	What Patient/Family Want Said			Establish	Update	Update	Learning and improvement
	Press Release/Talking Points			Prepare	Update	Update	Learning and improvement
	Internal Communications: Patients, Families, Staff			Prepare	Update	Update	Learning and improvement
	External Communications: Media, Community, etc.			Prepare	Update	Update	Learning and improvement
	"Friendly" Experts On Call			Consider	Update	Update	Learning and improvement
	Outside Media Help			Consider	Consider	Consider	Learning and improvement
	External Notifications and Unannounced Visits	unced Visit	9				
	State Public Health, CMS			Consider	Update	Update	All requirements and
	Joint Commission, Others			Consider	Update	Update	condinoris met
	Risk Insurer			Notify	Update	Update	Demonstrated learning and improvement
	Other Federal Agency (HHS, NIH, FDA)			Consider	Update	Update	
	Law Enforcement Agency			Consider	Update	Update	
	Other Associations (ISMP)			Consider	Update	Update	Learning shared externally

NOTE: This work plan is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

Appendix C:

Respectful Management of Serious Clinical Adverse Events: Disclosure Culture Assessment Tool

	Element**	Y	Y/N	N
Internal Culture of	ne organization, board, and leadership are grounded in the core values f compassion and respect, and the responsibility to always tell the truth.			
Safety	Harm is seen as the failure of systems and not people, and is considered in a fair and just culture with policies and practices.			
Malpractice	There is a commitment to rapid disclosure, compensation, and support.			
Carrier	There is a written understanding of how cases will be managed with carrier.			
	Mechanisms are in place for rapid, respectful resolution.			
Policies,	There is a policy on patient and family compassionate communications.			
Guidelines, Procedures,	Informed consent policies and practices are up-to-date and effective.			
Practices	There is a policy on patient and family partnerships.			
	There are policies on disclosure and documentation.			
	There are procedures in place for internal and external communication.			
	Guidelines/policies support a fair and just culture, and reporting of adverse events.			
	Root cause analyses commence immediately, are closely managed with an executive sponsor. Results are shared, including with the patient/family.			
	There is a written crisis management plan. This plan is centrally located.			
	Policies/guidelines exist for reimbursement of out-of-pocket expenses.			
Training	Training programs are in place for all staff on communication, expectations, policies, procedures, guidelines.			
	There is just-in-time coaching (training) for disclosures.			
Disclosure Processes	There is rapid notification of patient/family and activation of support—typically, the organization shares what is known about the event.			
	There is a team to support staff in preparing for disclosure.			
The	The organization is transparent and honest.			
Disclosure	Responsibility is taken.			
	We are empathetic, apologize and/or acknowledge.			
	There is a commitment to providing follow-up information.			
	The caregiver is supported throughout the process.			
	Ongoing support is provided for the patient and family.			

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Appendix C. Respectful Management of Serious Clinical Adverse Events: Disclosure Culture Assessment Tool (continued)

	Element**	Y	Y/N	N
Ongoing Support	Resources are available to assist families experiencing unanticipated outcomes—support is defined by the patient and family.			
	Resources are available to assist staff at the front line of unanticipated outcomes—support is defined by needs of the clinician.			
	Procedures are in place and are known to ensure ongoing communications with patients, families, and staff over months and possibly years.			
Resolution	Procedures are in place and are known to bring the case to closure respectfully, as viewed by the patient and family.			
Learning	Mechanisms are in place to ensure learning by the board, executive leadership, Medical Staff Executive Committee, and across the organization.			
	Measurement systems are in place to assess the impact of communication, disclosure, and support on premiums, claims, cases, and payments.			

^{**}Adapted from Medically Induced Trauma Support Services (MITSS)

For more information, the Institute for Healthcare Improvement Disclosure Toolkit and Disclosure Culture Assessment Tool is available at: http://www.ihi.org/knowledge/Pages/Tools/DisclosureToolkitandDisclosureCultureAssessmentTool.aspx.

Appendix D:

Respectful Management of Serious Clinical Adverse Events: Organizations from Which to Draw Courage and Learning

Organization	Contact	Incident
Advocate Lutheran General Hospital, Park Ridge, IL	Anthony Armada, CEO Mike McKenna, MD, Vice President of Medical Management	Medication error leading to fatal hypernatremia in a neonate
Beth Israel Deaconess Medical Center, Boston, MA	Kenneth Sands, Senior Vice President	Wrong-site surgery
Catholic Health Partners, Cincinnati, OH	Jana Deen, Patient Safety Officer	Preventable death of parent of health system executive
Cincinnati Children's Hospital Medical Center, Cincinnati, OH	Michael A. Fisher, President and CEO Uma R. Kotagal, Senior Vice President, Quality, Safety and Transformation	Preventable death: Flushing with alcohol instead of saline
Children's Hospital Boston, Boston, MA	Sandy Fenwick, President	Adverse events leading to death
Clarian Health System, Indianapolis, IN	Dan Evans, CEO	Heparin overdoses leading to death
Contra Costa Regional Medical Center, Martinez, CA	Anna Roth, CEO	Violence during care delivery leading to death of a nurse
Dana-Farber Cancer Institute, Boston, MA	Saul Weingart, Vice President, Quality and Patient Safety Steven R. Singer, Senior Vice President of Communications	Chemotherapy overdose; theft of patient information
Duke University Health System, Durham, NC	Karen Frush, Chief Patient Safety Officer	Adverse events leading to harm and death
Immanuel St. Joseph Health System, Mankato, MN	Greg Kutcher, CEO	Drug diversion from multiple patients
Johns Hopkins Medical Center, Baltimore, MD	Peter Pronovost, Director of the Quality and Safety Research Group	Preventable death of a child
Mt. Auburn Hospital, Cambridge, MA	Jeanette Clough, CEO	Aberrant physician behavior, credentialing
Novant Health, Winston-Salem, NC	Paul Wiles, CEO	MRSA infection in the NICU, leading to the death of children
New York City Health and Hospital Corporation, New York, NY	Alan D. Aviles, President and CEO	Unrecognized death in Psychiatric ED
Rady Children's Hospital, San Diego, CA	Blair Sadler, Past President	Sexual abuse of children by employees
Virginia Mason Medical Center, Seattle, WA	Gary Kaplan, CEO	Preventable death
Winchester and Eastleigh Healthcare NHS Trust, UK	Kevin Stewart, Medical Director	Two maternal deaths

Detailed information on each organization's story and other resources are available on IHI's website at: http://www.ihi.org/knowledge/pages/tools/LeadershipResponseSentinelEventEffectiveCrisisMgmt.aspx.

Additional stories are also included in:

[•] Johnson RL. Crisis Communication: Case Studies in Healthcare Image Restoration. HCPro, Inc.; 2006.

[•] Wojcieszak D, Saxton JW, Finkelstein MM. Sorry Works! Disclosure, Apology, and Relationships Prevent Medical Malpractice Claims. AuthorHouse; 2010. [See Chapter 9: The Realized Benefits of Disclosure Success Stories.]

Appendix E:

Stanford University Medical Center Process for Early Assessment and Resolution of Loss

Stanford University Medical Center (Stanford) implemented the Process for Early Assessment and Resolution of Loss (PEARL) on July 1, 2007. PEARL is a medical professional liability risk management tool for the Stanford University Medical Indemnity & Trust Insurance Company (SUMIT) and its policyholders consisting of the 613-bed Stanford Hospital & Clinics, the 311-bed Lucile Packard Children's Hospital at Stanford, the Stanford University School of Medicine and its 1,800 faculty physicians. PEARL is structured as a disclosure and offer program with similarities to other national model programs such as the programs at the University of Michigan and the Veterans Administration Hospital at Lexington, Kentucky.

SUMIT's independent actuary has reviewed the PEARL program's professional liability results excluding depositions-only) on a periodic basis and most recently based on data valued as of February 28, 2011, the first three-and-a-half years of experience since PEARL's inception. Five dimensions of PEARL results are monitored: (1) claim reporting patterns, (2) claim frequency, (3) claim closing pattern, (4) claim severity, and (5) overall claim costs.

Stanford utilizes a seven-day PEARL investigatory process to determine whether a care outcome is preventable or not and if the care outcome is deemed preventable, Stanford estimates compensation utilizing decision analysis methodologies. Soon thereafter, a patient and/or family members/ representatives are informed of the results of the PEARL investigation, along with an apology and compensation as prescribed by the individual case circumstances.

For purposes of studying PEARL results, Stanford identifies PEARL claims under two criteria: (1) the event is reported to SUMIT by internal staff, patients, families, or representatives outside of the legal process in California (no summons and complaint, no notice of intent, etc.), and (2) SUMIT was informed of the event within 90 days of its occurrence.

Early actuarial results on fifty (50) PEARL claims reported from September 1, 2007 through February 28, 2011 indicate the number of reported claims and the overall cost of claims is decreasing, reporting patterns are largely unchanged, while changes to closing pattern and claim severity are not conclusive at this time. Claim frequency over seven post-PEARL periods (six months each period) has dropped 36% in comparison with the prior four pre-PEARL periods. Furthermore, on average, SUMIT is achieving savings of \$3.2M per fiscal year on an expected average annual SUMIT funding requirement of \$10.1M since the inception of PEARL.* These results suggest that PEARL is having a positive impact on overall SUMIT results.

*FY 2008-09 is excluded from results due to a single very large claim incurred in this period.

Commentary submitted by Jeffrey F. Driver, Executive Vice President and Chief Risk Officer, The Stanford University Medical Indemnity & Trust, The Stanford University Medical Institutions, to Jim Conway, Institute for Healthcare Improvement, on July 27, 2011.

Appendix F:

CRICO Statement of Disclosure of Medical Errors and Compensation

CRICO, the patient safety and medical malpractice company owned by and serving the Harvard medical community, encourages honest and informed communications between clinicians and patients regarding all aspects of medical care, but particularly related to medical error that causes injury. The goal is to maintain trust and support patients as they manage through the difficult experience of coping with preventable loss. CRICO urges clinicians to undertake these difficult conversations not simply to avoid lawsuits, but because it is the right thing to do. To date, and surely as a result of institutional accountability in the first instance, CRICO has been able to resolve every such case without protracted litigation, although we sometimes have to pay a premium on the fair indemnity amount to do so.

What a patient or a family needs and wants in the wake of negligent error causing harm cannot be presumed or quickly understood. It takes a skilled and experienced professional to interpret the clinical, emotional, social, and legal aspects of these complex human experiences and present them in a way that allows for understanding, acceptance, accountability, forgiveness—whatever the truth compels. And it takes time and patience. People do not move easily or swiftly through the dark. They look for something or someone to guide them.

The average CRICO Claim Representative has spent thousands of hours listening to patients tell stories about their lives, their expectations, their confrontation with illness, and their disappointment with human imperfections and destinies. For most, this translates into an opportunity to confront their caretakers and demand explanation. For others, it is confrontation and a demand for a monetary payment—the socially-designated, ultimate recognition of pain and suffering—in an amount that serves as an objective measure of one's true loss. For still others, it is an apology coupled with a modest payment and perhaps the promise of ongoing education to prevent the error from occurring in the future. Each case is different.

CRICO takes the position that the best approach to compensation following disclosure of medical error is one that respects the need of patients to be self-directed and move at their own pace. Payment for immediate, consequential loss should be offered during this period of time, without question. Most of the CRICO institutions have programs in place to provide such financial support, and they are being utilized with greater frequency. Discussions of financial compensation beyond service recovery and out-of-pocket expenses—particularly before a patient has had time to process a loss—can be devastating, however, and cause motives to be questioned. Further, beyond waiving bills, providing free care and the like, no physician wants to engage in financial negotiations with his or her patient. Not only is it terribly awkward, but physicians have no frame of reference for what is fair and just compensation in any particular circumstance.

Accordingly, CRICO recommends that care providers simply acknowledge to injured patients that they should be fully compensated for whatever harm they experienced as a result of an error, and affirm that they support the patient in working with their partner, CRICO, to process through this aspect of their recovery.

On the whole, our experience with this model has been excellent: patients feel free to wait until the time is right for them to address painful topics without overwhelming emotions, allowing for a more direct and compassionate negotiation. Further, through our mediations, we have been able to bring clinicians together with patients in a process of healing that goes far beyond an agreement to an amount of money. Indeed, relationships have been repaired and preserved.

In some instances, though, the decision to be open and honest is taken advantage of by patients and their attorneys, resulting in great disappointment to clinicians, waste of time, fees, and the need to move the matter into the courts for controlled administration. Ultimately, though, even in these circumstances, CRICO has managed to resolve the cases without protracted discovery.

In 2009, CRICO participated in the Boston Bar Association's panel on Disclosure and Apology. The panel consisted of plaintiff attorneys, defense attorneys, physicians, and insurance professionals. CRICO encouraged the Massachusetts plaintiff bar to submit letters of claim prior to filing suit in order to allow the insured clinicians and hospitals the opportunity to resolve meritorious cases outside of the judicial system. With regard to cases of obvious fault and injury, CRICO experienced immediate reaction: letters of claim increased significantly in 2010 (and continue to grow in 2011). Of note, most of these claims have been resolved, without legal proceedings, but, again, many with a higher than expected indemnity payment due to the desire to avoid litigation and/or media coverage.

Abstracted from commentary by Elizabeth A. Cushing, Esq., Vice President, Claims, CRICO, submitted to Jim Conway, Institute for Healthcare Improvement, on August 19, 2011.

References

- ¹ Conway JB, Sadler BL, Stewart K. Planning for a clinical crisis. *Healthcare Executive*. 2010 Nov/Dec;25(6):78-81.
- ² Chang A, Schyve PM, Croteau RJ, O'Leary DS, Loeb JM. The JCAHO patient safety event taxonomy: A standardized terminology and classification schema for near misses and adverse events. *International Journal for Quality in Health Care.* 2005 Apr;17(2):95-105.
- ³ NCC MERP Taxonomy of Medication Errors. National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP); 1998. Available at: http://www.nccmerp.org/pdf/taxo2001-07-31.pdf.
- ⁴ Serious Reportable Events in Healthcare 2011 Update. National Quality Forum; June 2011. Available at: http://www.qualityforum.org/News_And_Resources/Press_Releases/2011/NQF_Releases_Updated_Serious_Reportable_Events.aspx.
- ⁵ Throop C, Stockmeier C. SEC & SSER Patient Safety Measurement System for Healthcare. HPI White Paper Series. Healthcare Performance Improvement (HPI); December 2009. Available at: http://hpiresults.com/docs/PatientSafetyMeasurementSystem.pdf.
- ⁶ Sadler B. How a children's hospital discovered child pornographers in its midst. *Health Affairs*. 2011;30(9):1795-1798.
- ⁷ Senge PM. The leader's new work: Building learning organizations. *MIT Sloan Management Review*. 1990;32(1):7-23.
- 8 Conway J. Patient advocacy in patient safety. In: Earp J, French E, Gilkey M. *Patient Advocacy: Patient-Centered Strategies for Improving Health Care Quality*. Sudbury, MA: Jones & Bartlett; 2007.
- ⁹ Cooper JB, Cullen DJ, Eichhorn H, Philip JH, Holzman RS. Administrative guidelines for response to an adverse anesthesia event. *Journal of Clinical Anesthesia*. 1993;5:79-84.
- ¹⁰ Mitroff I, Diamond M, Alpaslan CM. How prepared are America's colleges and universities for major crises? *Change*. 2006;38(1):60-67.
- ¹¹ Kaufmann JB, Kesner IF, Hazen TL. The myth of full disclosure: A look at organizational communications during crises. *Business Horizons*. 1994;37(4):29-39.
- ¹² Wojcieszak D, Saxton JW, Finkelstein MM. Sorry Works! Disclosure, Apology, and Relationships Prevent Medical Malpractice Claims. Bloomington, IN: AuthorHouse; 2010.
- ¹³ O'Toole J, Bennis W. What's needed next: A culture of candor. *Harvard Business Review*. 2009 Jun;87(6):54-61,113.

- ¹⁴ Augustine N. Managing the crisis you tried to prevent. *Harvard Business Review*. 1995;73(6):147-158.
- ¹⁵ National Infrastructure Protection Plan: Partnering to Enhance Protection and Resiliency. United States Department of Homeland Security; 2009. Available at: http://www.dhs.gov/xlibrary/assets/nipp_executive_summary_2009.pdf.
- ¹⁶ Shaw G. *Business Crisis and Continuity Management*. The George Washington University Institute for Crisis, Disaster, and Risk Management; 2005. Available at: http://www.gwu.edu/~icdrm/publications/ShawTextbook011105.pdf.
- ¹⁷ Zane RD, Prestipino AL. Implementing the Hospital Emergency Incident Command System: An integrated delivery system's experience. *Prehospital and Disaster Medicine*. 2004;19(4):311-317.
- ¹⁸ Personal communication with Michael Leonard, Physician Leader for Patient Safety at Kaiser Permanente in Colorado. July 13, 2010.
- ¹⁹ Hudson DW, Berenholtz SM, Thomas EJ, Sexton JB. A safety culture primer for the critical care clinician: The role of culture in patient safety and quality improvement. *Contemporary Critical Care*. 2009;7(5):1-12.
- ²⁰ Shapiro E. *Disclosing Medical Errors: Best Practices from the "Leading Edge.*" Unpublished manuscript; March 2008. Available at: http://www.ihi.org/knowledge/pages/publications/disclosing medicalerrorsbestpracticesleadingedge.aspx.
- ²¹ TMIT. NQF Safe Practice #4 Risks and Hazards. Available at: http://www.safetyleaders.org/pages/QuickStart.jsp?step=0&spnum=4.
- ²² Schein EH. *Organizational Culture and Leadership*. 2nd Edition. San Francisco: Jossey-Bass; 1992:231.
- ²³ Institute for Healthcare Improvement. Patient Safety Leadership WalkRounds. Available at: http://www.ihi.org/knowledge/pages/tools/patientsafetyleadershipwalkrounds.aspx.
- ²⁴ 2010 Principles of Corporate Governance. The Business Roundtable; April 2010. Available at: http://businessroundtable.org/studies-and-reports/2010-principles-of-corporate-governance/.
- ²⁵ Conway JB. Getting boards on board: Engaging governing boards in quality and safety. *Joint Commission Journal on Quality and Patient Safety.* 2008;34(4):214-220.
- ²⁶ Augustine N. Managing the crisis you tried to prevent. *Harvard Business Review*. 1995;73(6):147-158.
- ²⁷ Gladstone J. Executive decisions: Persuading CEOs to do the right thing during a crisis. *The Public Relations Strategist*. Summer 2009.

- ²⁸ Marcus LJ, Dorn BC, Ashkenazi I, et al. *Meta-Leadership: A Primer (A Working Paper)*. Cambridge, MA: National Preparedness Leadership Initiative, Harvard School of Public Health; 2009. Expressed written permission granted by authors for citation. Available at: http://www.hsph.harvard.edu/npli/files/meta-leadership_primer.pdf. See also: Marcus LJ, Dorn BC, McNulty EJ. Chapter 10: Meta-leadership. In: *Renegotiating Healthcare: Resolving Conflict to Build Collaboration*. Second Edition. San Francisco: Jossey-Bass; 2011.
- ²⁹ "The Healthcare Executive's Role in Ensuring Quality and Patient Safety." Policy Statement. American College of Healthcare Executives; November 2008. Available at: http://www.ache.org/policy/exec-ensure-patsafe.cfm.
- ³⁰ Leadership Committed to Safety. *The Joint Commission Sentinel Event Alert. Issue 43.* September 8, 2009 (revised). Available at: http://www.jointcommission.org/sentinel_event_alert_issue_43_leadership_committed_to_safety/.
- ³¹ George W, Denham CR, Burgess L, Angood P, Keohane C. Leading in crisis: Lessons for safety leaders. *Journal of Patient Safety*. 2010;6(1):24-30.
- ³² TMIT. NQF Safe Practice #1: Culture of Safety Leadership Structures and Systems. Available at: http://www.safetyleaders.org/pages/QuickStart.jsp?step=0&spnum=1.
- ³³ Bowley D. Man dies of overdose at hospital. *Bangor Daily News*. June 11, 2010 (updated June 14, 2010). Available at: http://www.bangordailynews.com/detail/145760.html.
- ³⁴ *CEO Accountability and ICU Deaths.* Case Study. VHA Foundation. Available at: https://www.vhafoundation.org/documents/ceo_accountability_and_icu_deaths.pdf.
- 35 Kahn WA. Treating organizational wounds. Organizational Dynamics. 2011;40(2):75-84.
- ³⁶ Iedema R, Allen S, Britton K, et al. Patients' and family members' experiences of open disclosure following adverse events. *International Journal for Quality in Health Care*. 2011;20(6):421-432.
- ³⁷ Institute for Healthcare Improvement. Disclosure Toolkit and Disclosure Culture Assessment Tool. Available at: http://www.ihi.org/knowledge/Pages/Tools/DisclosureToolkitandDisclosureCulture AssessmentTool.aspx.
- ³⁸ Institute for Healthcare Improvement. Web&ACTION: Effective Crisis Management of Serious Clinical Events. Available at: http://www.ihi.org/offerings/VirtualPrograms/Webinars/Web_Action/EffectiveCrisisManagement/Pages/default.aspx.
- ³⁹ Crisis Management: Master the Skills to Prevent Disasters. Boston: Harvard Business Publishing; 2004.
- ⁴⁰ The Joint Commission. Emergency Management. Available at: http://www.jointcommission.org/standards_information/jcfaqdetails.aspx?StandardsFaqId=70&ProgramId=1.

- ⁴¹ Mitroff II, Anagnos G. Managing Crises Before They Happen: What Every Executive and Manager Needs to Know About Crisis Management. New York: AMACOM; 2005.
- ⁴² Social media and crisis communication: Hospitals taking wait-and-see attitude. *Spectrum*. November/December 2008. Available at: http://www.noblis.org/MissionAreas/HI/ThoughtLeadership/Documents/SpectrumAvoidingImpasses.pdf.
- ⁴³ Institute for Healthcare Improvement. Leadership Response to a Sentinel Event: Respectful, Effective Crisis Management. Available at: http://www.ihi.org/knowledge/Pages/Tools/Leadership ResponseSentinelEventEffectiveCrisisMgmt.aspx.
- ⁴⁴ Personal communication with Jana Deen, Patient Safety Officer at Catholic Health Partners in Ohio. August 24, 2010.
- ⁴⁵ Personal communication with Michele Campbell, Corporate Director of Patient Safety and Accreditation Services at Christiana Care Health System in Delaware. August 25, 2010.
- ⁴⁶ Personal communication with Geri Denterlein of Denterlein Worldwide in Boston, MA. August 19, 2010.
- ⁴⁷ Sheridan S, Conrad N, King S, Dingman J, Denham C. Disclosure through our eyes. *Journal of Patient Safety.* 2008;4(1):18-26.
- ⁴⁸ Peto RR, Tenerowicz LM, Benjamin EM, Morsi DS, Burger PK. One system's journey in creating a disclosure and apology program. *Journal of Quality and Safety*. 2009;35(10):487-496.
- ⁴⁹ Disclosure: The next step in better communication with patients (part 1 of 3, May 2003); Disclosure: Creating an effective patient communication policy (part 2 of 3, November 2003); Disclosure: What works now and what can work even better (part 3 of 3, February 2004). American Society for Healthcare Risk Management of the American Hospital Association. Available at: http://www.ashrm.org/ashrm/education/development/monographs/.
- 50 Corina I, D'Angelo L. Critical Communication: Using Plain Language to Reduce Medical Errors. Wantaugh, NY: Pulse of New York, Inc.; March 2009. Available at: http://www.pulseofny.org/resources/PULSE_CCbook.pdf.
- ⁵¹ Being Open: Communicating Patient Safety Incidents with Patients, Their Families, and Carers. National Patient Safety Agency (UK), National Reporting and Learning Service. Available at: http://www.nrls.npsa.nhs.uk/resources/?entryid45=65077.
- ⁵² Bell SK, Moorman DW, Delbanco T. Improving the patient, family, and clinician experience after harmful events: The "When Things Go Wrong" curriculum. *Academic Medicine*. 2010;85(6):1010-1017.

- ⁵³ Communicating with Your Patient about Harm: Disclosure of Adverse Events. The Canadian Medical Protective Agency. Available at: http://www.cmpa-acpm.ca/cmpapd04/docs/resource_files/ml_guides/disclosure/introduction/index-e.html.
- ⁵⁴ Disclosure Working Group. *Canadian Disclosure Guidelines*. Canadian Patient Safety Institute; 2008. Available at: http://www.patientsafetyinstitute.ca/English/toolsResources/disclosure/Pages/default.aspx.
- 55 When Things Go Wrong: Responding to Adverse Events. A Consensus Statement of the Harvard Hospitals. Burlington, MA: Massachusetts Coalition for the Prevention of Medical Errors; March 2006. Available at: http://www.macoalition.org/documents/respondingToAdverseEvents.pdf.
- ⁵⁶ Brandom BW, Callahan P, Micalizzi DA. What happens when things go wrong. *Pediatric Anesthesia*. 2011;21(7):730-736.
- ⁵⁷ Conway J, Nathan DG, Benz EJ, et al. Key learning from the Dana-Farber Cancer Institute's 10-year patient safety journey. *American Society of Clinical Oncology 2006 Educational Book*, 42nd Annual Meeting, June 2-6, 2006, in Atlanta, GA. 2006:615-619. Available at: http://www.ihi.org/knowledge/Pages/Publications/KeylearningfromtheDanaFarberCancerInstitutes 10yearpatientsafetyjourney.aspx.
- ⁵⁸ McDonald TB, Helmchen LA, Smith KM, et al. Responding to patient safety incidents: The "seven pillars." *Quality and Safety in Health Care.* 2010;19:1-4.
- ⁵⁹ Wojcieszak D, Saxton JW, Finkelstein MM. Sorry Works! Disclosure, Apology, and Relationships Prevent Medical Malpractice Claims. Bloomington, IN: AuthorHouse; 2010.
- 60 Schyve P. "Expert Commentary: Hospitals Create a Culture of Safety and Trust by Being Transparent about Medical Errors." *Innovation Profile: Full Disclosure of Medical Errors Reduces Malpractice Claims and Claim Costs for Health System.* AHRQ Healthcare Innovations Exchange; June 23, 2010. Available at: http://www.innovations.ahrq.gov/content.aspx?id=2673&tab=2.
- ⁶¹ Lamo A. *Disclosure of Medical Errors: The Right Thing to Do But What Is the Cost?* Lockton; Winter 2011. Available at: http://www.lockton.com/Insights-And-Publications/White-Papers/Disclosure-of-Medical-Errors-The-Right-Thing-to-Do-But-What-is-the-Cost.
- ⁶² Iedema R, Allen S, et al. What prevents incident disclosure, and what can be done to promote it? *Joint Commission Journal on Quality and Patient Safety.* 2011;37(9):409-417.
- 63 Lazare A. On Apology. Oxford University Press. 2004:35.
- ⁶⁴ Chesterton GK. "A stiff apology is a second insult..." Available at: http://thinkexist.com/quotation/a_stiff_apology_is_a_second_insult-the_injured/207881.html.

- ⁶⁵ Lopez L, Weissman JS, Schneider EC, Weingart SN, Cohen AP, Epstein AM. Disclosure of hospital adverse events and its association with patients' ratings of the quality of care. *Archives of Internal Medicine*. 2009;169(20):1888-1894.
- ⁶⁶ Houk C, Edelstein L. Beyond apology to early non-judicial resolution: The MedicOm program as a patient safety-focused alternative to malpractice litigation. *Hamline Journal of Law and Public Policy, Fall 2007 Symposium on Advanced Issues in Dispute Resolution.* 2008;29(2):411-422.
- ⁶⁷ Hyman CS, Liebman CB, Schechter CB, Sage WM. Interest-based mediation of medical malpractice lawsuits: A route to improved patient safety? *Journal of Health Politics, Policy, and Law.* 2010 Oct;35(5):797-828.
- ⁶⁸ Conway JB, Weingart SN. Leadership: Assuring respect and compassion to clinicians involved in medical error. *Swiss Medical Weekly*. 2009;139(1-2):3.
- ⁶⁹ Wu A. Medical error: The second victim. The doctor who makes the mistake needs help too. *British Medical Journal.* 2000;320(7237):726-727.
- ⁷⁰ Wu AW, Sexton JD, Pham JC. Healthcare providers: The second victims of medical error in patient safety. In: *Patient Safety*. Philadelphia: Wolters Kluwer, Lippincott Williams & Wilkins; 2010.
- ⁷¹ Wolf ZR. Health care providers' experience with making medication errors resulting in the death of patients. In: Cohen M (ed.). *Medication Errors*. Washington, DC: American Pharmaceutical Association; 2007:43-51.
- ⁷² Edrees HH, Paine LA, Feroli ER, Wu AW. Health care workers as second victims of medical errors. *Polskie Archiwum Medycyny Wewnetrznej.* 2011 Apr;121(4):101-108.
- ⁷³ Carr S. *Disclosure and Apology: What's Missing*. Medically Induced Trauma Support Services; 2009. Available at: http://www.mitss.org/MITSS_WhatsMissing.pdf.
- ⁷⁴ Scott SD, Hirschinger LE, Cox KR, McCoig M, Brandt J, Hall LW. The natural history of recovery for the healthcare provider "second victim" after adverse patient events. *Quality and Safety in Health Care*. 2009;18(5):325-330.
- ⁷⁵ Roesler R. Supporting staff recovery and reintegration after a critical incident resulting in infant death. *Advances in Neonatal Care.* 2009;9(4):163-171.
- ⁷⁶ Effective support for patients, families, and staff after traumatic medical events. *AIG Viewpoint*. 2009;19(1):1.
- ⁷⁷ Iedema R, Mallock N, Sorensen R, et al. *Final Report: Evaluation of the Pilot of the National Open Disclosure Standard.* University of Technology, Sydney; 2007. Available at: http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/com-pubs_Eval-Pilot-NODstd.

- ⁷⁸ Wolf ZR. Health care providers' experience with making medication errors resulting in the death of patients. In: Cohen M (ed.). *Medication Errors*. Washington, DC: American Pharmaceutical Association; 2007:43-51.
- ⁷⁹ *The Incident Decision Tree: Information and Advice on Use.* National Health Service National Patient Safety Agency, UK; 2003. Available at: http://www.chpso.org/just/IDTadvice2003.pdf.
- ⁸⁰ Medically Induced Trauma Support Services. Tools for Building Clinician and Staff Support Programs. Available at: http://www.mitsstools.org/tool-kit-for-staff-support-for-healthcare-organizations1.html.
- 81 TMIT. NQF Safe Practice #8: Care of the Caregivers. Available at: http://www.safetyleaders.org/pages/QuickStart.jsp?step=0&spnum=8.
- 82 Agency for Healthcare Research and Quality. TeamSTEPPS Fundamentals Course: Module 3. Available at: http://www.ahrq.gov/teamsteppstools/instructor/fundamentals/module3/slleadership. htm.
- ⁸³ Andersen B, Fagerhaug T, Beltz M. *Root Cause Analysis and Improvement in the Healthcare Sector: A Step-by-Step Guide.* Milwaukee, WI: American Society for Quality; 2010.
- 84 The Joint Commission. Sentinel Event Forms and Tools. Available at: www.jointcommission.org/sentinel_event.aspx.
- 85 Serrat O. *The Five Whys Technique*. Available at: http://www.adb.org/documents/information/knowledge-solutions/the-five-whys-technique.pdf.
- ⁸⁶ Zimmerman T, Amori G. Including patients in root cause and system failure analysis: Legal and psychological implications. *Journal of Healthcare Risk Management*. 2007;27(2):27-33.
- ⁸⁷ Millman EA, Pronovost PJ, Makary MA, Wu AW. Patient-assisted incident reporting: Including the patient in patient safety. *Journal of Patient Safety*. 2011 Jun;7(2):106-108.
- 88 Resar R. IHI 90-Day R&D Project Final Report: System for Safety Considerations. Internal report. Institute for Healthcare Improvement; January 2008.
- **89** Nicolini D, Waring J, Mengis J. Policy and practice in the use of root cause analysis to investigate clinical adverse events: Mind the gap. *Social Science & Medicine*. 2011;73(2):217-225.
- **90** Edmondson AC. Strategies of learning from failure. *Harvard Business Review*. 2011;89(4): 48-55, 137.
- ⁹¹ Hughes C, Travaglia JF, Braithwaite J. Republished paper: Bad stars or guiding lights? Learning from disasters to improve patient safety. *Postgraduate Medical Journal*. 2010;86(1021):675-679.

- ⁹² The crisis issue. *The Public Relations Strategist*. Summer 2009. Available at: http://www.prsa.org/Intelligence/TheStrategist/Issues/view/15/3.
- 93 Dutton J. Leading in times of trauma. Harvard Business Review. 2002;80(1):54-61,125.
- ⁹⁴ Lukaszewski JE. Establishing individual and corporate crisis communication standards: The principles and protocols. *Public Relations Quarterly*.1997;42(3):7-15.
- ⁹⁵ Merchant RM, Elmer S, Lurie N. Integrating social media into emergency-preparedness efforts. *New England Journal of Medicine*. 2011;365:289-291.
- ⁹⁶ Pelletier E, Robson R. Giving back the pen: Disclosure, apology and early compensation discussions after harm in the healthcare setting. *Healthcare Quarterly*. 2008;11(3 Spec No.):85-90.
- ⁹⁷ Agency for Healthcare Research and Quality. *The CAHPS Improvement Guide*. Practical Strategies for Improving the Patient Care Experience. Service Recovery Programs. Available at: https://www.cahps.ahrq.gov/qiguide/content/interventions/ServiceRecoverySystems.aspx.
- ⁹⁸ Lembitz A. Litigation alternative: COPIC's 3Rs program. *AAOS Now*. September 2010. Available at: http://www6.aaos.org/news/PDFopen/PDFopen.cfm?page_url=http://www.aaos.org/news/aaos now/sep10/managing7.asp.
- ⁹⁹ Coverys REACT Program. Available at: http://coverys.com/portal/page/portal/Public%20Site/Solutions/REACT%20Program/REACT%20FAQ.
- ¹⁰⁰ Leape LL, Brennan TA, Laird N, et al. The nature of adverse events in hospitalized patients. Results of the Harvard Medical Practice Study II. *New England Journal of Medicine*. 1991;324(6): 377-384.
- ¹⁰¹Personal communication with Lucian Leape, Harvard School of Public Health. June 21, 2011.
- 102 Disclosure: The next step in better communication with patients (part 1 of 3, May 2003); Disclosure: Creating an effective patient communication policy (part 2 of 3, November 2003); Disclosure: What works now and what can work even better (part 3 of 3, February 2004). American Society for Healthcare Risk Management of the American Hospital Association. Available at: http://www.ashrm.org/ashrm/education/development/monographs/.
- 103 Personal communication with Richard Boothman, University of Michigan Medical Center. June 20, 2011.
- ¹⁰⁴Kraman SS, Hamm G. Risk management: Extreme honesty may be the best policy. *Annals of Internal Medicine*. 1999;131:963-967.
- ¹⁰⁵Kachalia L, Kaufman S, Boothman R, et al. Liability claims and costs before and after implementation of a medical error disclosure program. *Annals of Internal Medicine*. 2010;153:213-221.

- ¹⁰⁶Mello MM, Gallagher TH. Malpractice reform—opportunities for leadership by health care institutions and liability insurers. *New England Journal of Medicine*. 2010;362:1353-1356.
- 107Veterans Health Administration. Disclosure of Adverse Events to Patients. January 2008.
 Available at: http://www.ethics.va.gov/docs/policy/VHA_Directive_2008-002_Disclosure_of_Adverse_Events_20080118.pdf.
- ¹⁰⁸McDonald TB, Helmchen LA, Smith KM, et al. Responding to patient safety incidents: The "seven pillars." *Quality and Safety in Health Care.* 2010;19:1-4.
- ¹⁰⁹Houk C, Edelstein L. Beyond apology to early non-judicial resolution: The MedicOm program as a patient safety-focused alternative to malpractice litigation. *Hamline Journal of Law and Public Policy, Fall 2007 Symposium on Advanced Issues in Dispute Resolution*. 2008;29(2):411-422.
- ¹¹⁰Lamo A. Disclosure of Medical Errors: The Right Thing to Do But What Is the Cost? Lockton; Winter 2011. Available at: http://www.lockton.com/Insights-And-Publications/White-Papers/Disclosure-of-Medical-Errors-The-Right-Thing-to-Do-But-What-is-the-Cost.
- ¹¹¹Studdert D, Mello M, Gawande A, Brennan T, Wang YC. Disclosure of medical injury to patients: An improbable risk management strategy. *Health Affairs*. 2007;26(1):215-226, 222.
- ¹¹²Appelbaum PS. Law and psychiatry: Reforming malpractice—the prospects for change. *Psychiatric Services*. 2011;62:6-8.
- ¹¹³Localio AR. Patient compensation without litigation: A promising development. *Annals of Internal Medicine*. 2010;153(4):266-267.
- ¹¹⁴Bismark M, Paterson R. No-fault compensation in New Zealand: Harmonizing injury compensation, provider accountability, and patient safety. *Health Affairs*. 2006;25(1):278-283.
- ¹¹⁵Mello MM, Kachalia A, Studdert DM. Administrative compensation for medical injuries: Lessons from three foreign systems. *Issues in International Health Policy*. The Commonwealth Fund; July 2011. Available at: http://www.commonwealthfund.org/~/media/Files/Publications/Issue%20 Brief/2011/Jul/1517_Mello_admin_compensation_med_injuries.pdf.
- ¹¹⁶No Fault Compensation Review Group Report. The Scottish Government. NHS Report. February 20, 2011. Available at: http://www.scotland.gov.uk/Topics/Health/NHS-Scotland/No-fault Compensation/NFCGReport.
- 117Personal communication with Frank Testa, System Director for Risk Management, Cook Children's Health System in Texas. August 30, 2011.
- 118 Dresser R. The limits of apology laws. *Hastings Center Report*. 2008;38(3):6-7.
- ¹¹⁹Burkle CM. Medical malpractice: Can we rescue a decaying system? *Mayo Clinical Proceedings*. 2011 Apr;86(4):326-332.

- ¹²⁰Berlin L. Reporting the "missed" radiologic diagnosis: Medicolegal and ethical considerations. *Radiology*. 1994;192(1):183-187.
- ¹²¹Gallagher TH. Duty to disclose someone else's error. *AHRQ WebM&M* [online journal]. May 2011. Available at: http://www.webmm.ahrq.gov/case.aspx?caseID=239.
- ¹²²Personal correspondence with Thomas Gallagher, University of Washington in Seattle. August 8, 2011. For further information, contact thomasg@uw.edu.
- ¹²³Rosenthal J, Takach M. *2007 Guide to State Adverse Event Reporting Systems.* National Academy of State Health Policy; December 2007. Available at: http://nashp.org/sites/default/files/shpsurveyreport_adverse2007.pdf.
- ¹²⁴The Joint Commission. Sentinel Event Policy and Procedures. Available at: http://www.jointcommission.org/Sentinel_Event_Policy_and_Procedures/.
- 125 Med Sun Resources. Available at: http://www.medsun.net/.
- 126 Institute for Safe Medication Practices (ISMP) Resources. Available at: http://www.ismp.org/.
- ¹²⁷Walshe K, Shortell SM. When things go wrong: How health care organizations deal with major failures. *Health Affairs*. 2004;23(3):103-111.
- ¹²⁸Mundell EJ. VA faces questions over tainted colonoscopies. *US News and World Report Health*. June 16, 2009.
- ¹²⁹Galvin J. 58,000 x-rays not reviewed in Tallaght Hospital. *Politico*. March 9, 2010.
- ¹³⁰Chafe R, Levinson W, Sullivan T. Disclosing errors that affect multiple patients. *Canadian Medical Association Journal*. 2009;180(11):1125-1127.
- ¹³¹Centers for Disease Control and Prevention. Steps for Evaluating an Infection Control Breach. Available at: http://www.cdc.gov/HAI/surveillance/steps_for_eval_IC_breach.html.
- ¹³²WHO Outbreak Communication Guidelines. World Health Organization (WHO); 2005. Available at: http://www.who.int/infectious-disease-news/IDdocs/whocds200528/whocds200528en. pdf.
- ¹³³Patel PR, Srinivasan A, Perz J. Developing a broader approach to management of infection control breaches in health care settings. *American Journal of Infection Control*. 2008;36(10):685-690.
- ¹³⁴Rutala WA, Weber DJ. How to assess risk of disease transmission to patients when there is a failure to follow recommended disinfection and sterilization guidelines. *Infection Control and Hospital Epidemiology*. 2007 Feb;28(2):146-155. Epub 2007 Jan 24.

- ¹³⁵Dudzinski DM, Hebert PH, Foglia MB, Gallagher TH. The disclosure dilemma: Large-scale adverse events. *New England Journal of Medicine*. 2010;363:978-996.
- ¹³⁶ Guidance on the Release of Information Concerning Deaths, Epidemics or Emerging Diseases. Association of Health Care Journalists; 2010. Available at: http://www.healthjournalism.org/secondarypage-details.php?id=965.
- ¹³⁷Zipperer L, Sykes J. Engaging as partners in patient safety: The experience of librarians. *Patient Safety and Quality Healthcare*. 2009;6:28-30, 32-33.
- ¹³⁸Another Heparin Error: Learning from Mistakes So We Don't Repeat Them. ISMP Medication Safety Alert; November 27, 2009. Available at: http://www.ismp.org/Newsletters/acutecare/articles/20071129.asp.
- ¹³⁹Conway JB. Could it happen here? Learning from other organizations safety errors. *Healthcare Executive*. 2008;23(6):64, 66-67.
- ¹⁴⁰George B. Seven Lessons for Leading in Crisis. San Francisco: Jossey-Bass; 2009.
- ¹⁴¹Leape L, Berwick D, Clancy C, et al. Transforming health care: A safety imperative. *Quality and Safety in Health Care*. 2009;18(6):424-428.

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