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Forum

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Adverse Events

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Responding to an Adverse Event

by
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Definitions

Adverse events are generally defined as unexpected outcomes of patient care. However, that definition does not cover every situation that may require special attention and follow-up. Indeed, characterizing an event as adverse often depends on the situation.

Hospitals have several working definitions. For example, a hospital may have staff and employees report all unusual happenings, specific incidents, or potential adverse events. Clinical specialties and peer review committees define adverse events as deaths or complications. And many health care facilities track narrowly-defined sets of adverse events for quality improvement projects (e.g., medication-related injuries).

Clinicians may be able to improve their patient relationships by staying involved with their patients during difficult times.

The **Department of Public Health** and other state agencies define yet another set of adverse events related to patient health or safety.

Most **professional liability insurance providers** identify adverse events as occurrences which could result in claims or suits.

Other definitions are close at hand. The **Harvard Medical Practice Study** defines an adverse event as "an injury due to medical treatment...that prolong(s) a patient's hospitalization, cause(s) disability at the time of discharge, or both."[1] The **Adverse Drug Events Prevention Study** defines an adverse drug event as an "injury resulting from medical intervention related to a drug."[2] Both studies further differentiate between preventable and non-preventable adverse events.

For the most part, the articles in this issue refer to "adverse events" as those in which a patient's or family's trust in the provider may break down. All of the authors approach this set of adverse events with the idea that preserving or rebuilding the physician-patient relationship may be possible through communication.

Drs. Amy Witman and Steven Hardin (*Page 4*) suggest that a physician's disclosure of error to a patient can cause a patient to lose some confidence in him or her. Their findings *also* indicate that undisclosed physician error, if discovered by a patient, is even more likely to weaken a patient's trust in a physician. Patients felt they would be more litigious toward their physicians in this latter situation.

Not every physician mistake leads to an adverse event. Drs. Albert Wu and Stephen McPhee (*Page 6*) define a mistake as an act or omission "with potentially negative consequences for the patient...independent of whether or not the negative consequences transpire." They believe *intercepted* mistakes should be identified internally so system weaknesses can be corrected. They do not recommend disclosing this subset of mistakes to patients, as they would needlessly erode patient trust.

Adverse events can stem from a broad range of occurrences. Patient suicides, as described by Dr. Steve Stelovich (*Page 8*), often cause questions regarding care. Sudden deaths, in general, elicit intense emotions from survivors; mistrust and blame can emerge among these. Less obvious events may raise patient doubt as well. An unexpected diagnosis, a complication, a nosocomial infection, and even unanticipated pain can be precipitants.

Clinicians may be unable to prevent patient doubts. However, the approaches included here indicate they may be able to heal and even improve their patient relationships by staying involved with their patients during difficult times.

What To Do After An Event

The following checklist covers a range of actions to consider after an unexpected outcome. The seriousness of the event and the relationship between the parties involved will dictate which steps need to be carried out in full, and their sequence. Running through the list will help organize thorough, appropriate, and consistent responses.

Attend to the Patient's Medical Needs

- ❑ When appropriate, obtain medical consultation and arrange for consultants to forward necessary follow-up information.

Talk to the Patient or Family

- ❑ As soon as possible after an adverse event occurs, try to speak with the patient and family members to apprise them of the situation and to help them understand the implications.
- ❑ Answer questions factually and directly.
- ❑ Offer emotional support.
- ❑ Do not blame other clinicians.
- ❑ Do not speculate about what *might* have gone awry. While early speculation might restore trust, it will have a damaging effect if it proves incorrect later on.

Confer with Other Providers

- ❑ Meet with the rest of patient's health care team. Clarify the factual details and sequence of what occurred, as well as what needs to be done in response. A group discussion can resolve information gaps and dispel potential conflicts among providers.
- ❑ Identify which clinician will assume primary responsibility for communicating with the patient or family.

Contact the Risk Manager

- ❑ Contact your organization's risk manager. Complete other reports (e.g., potential claims to insurer, medical device failures to FDA) as needed.

Talk to the Patient or Family *Again*

- ❑ Organize a family meeting if several relatives are involved in the patient's care or if treatment decisions are complicated. Consider inviting the primary care or referring physician. A group meeting can help generate a common understanding of the situation among family members and facilitate coordinated decision making.
- ❑ Communicate the sequence of events, outcome, and care plan to the patient and family.
- ❑ Be accessible for follow-up questions or further explanations. As patients and family members begin to understand the significance of information previously communicated, they may think of new questions or ask providers to re-explain the event.
- ❑ Try not to be defensive when speaking with patients and families, even if their remarks are accusatory. If appropriate, acknowledge and apologize for the patient's distress.
- ❑ Accept responsibility for follow-up of serious complaints, but do not accept blame or assign blame to others. Do not criticize the care or responses of other providers.

Receiving a Summons & Complaint

On occasion, the first evidence a clinician receives of connection to an "adverse event" is delivery of legal papers known as a Summons & Complaint. Immediately upon receipt of these documents, the clinician should contact his or her institutional risk manager, who will contact the professional liability insurer. Failure to respond can result in serious penalties for the defaulting clinician.

The Medical Record

- ❑ Assign the most involved and knowledgeable member(s) of the health care team to record factual statements of the event in the patient's record. Also record any medical follow-up completed, planned, or needed.
- ❑ Avoid writing information in the medical record which is unrelated to the care of the patient (e.g., "incident report filed," "legal office notified").
- ❑ Avoid writing derisive comments about other providers. If you disagree with another clinician, document the basis for your treatment recommendations but do not use the medical record for peer performance evaluations.
- ❑ If you add information to the patient's record after an adverse event has occurred (particularly if your notation relates to treatment decisions made prior to the event):
  - Mark your entry with the actual date it is written; do not "backdate" any entries.
  - Beware of creating entries which appear self-serving, especially explanations intended solely to justify your actions. Taken out of context later, these entries can make you look defensive and can give the impression you thought you were at fault.

Writing off Bills

Disagreements about the patient's bill commonly arise in the same cases in which patients or family members seek legal advice. To address this dissatisfaction, the clinician or entity may want to consider "free servicing" all or a portion of a patient's bill on a case-by-case basis. Some patients will see this as a gesture of goodwill and will be satisfied to resolve the problem this way. Others, who may be inclined to sue, will do so regardless of any billing adjustments.

The National Practitioner Data Bank does not consider waivers of debt to be reportable and courts do not consider them admissions of liability. However, because billing issues can both identify and precipitate problems with patients, physicians should coordinate offers to write off care with individuals who would normally be involved in resolving a potential claim or suit (e.g., risk managers, billing departments, and professional liability insurers).

The Media

Media queries related to adverse events are best handled via institutional protocols for responding to press contacts. This will avert complications related to patient confidentiality, legal discovery, and heat-of-the-moment coverage.

Conclusion

This list is premised on the belief that clinicians should do what is best for their patients, after adverse events or otherwise. These actions will not prevent all claims and suits, but will prevent some, mitigate others, and ensure that risk management is aligned with good medicine. ■

References

1 Localio AR, et al. Relationship between malpractice claims and adverse events due to negligence. *New England Journal of Medicine.* 1991;325(4):245-51.

2 Bates DW, et al. Incidence of Adverse Drug Events and Potential Adverse Drug Events: implications for prevention. *Journal of the American Medical Association.* 1995;274(1):29-34.

Patients' Responses to Physicians' Mistakes

by
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Scenario #1: Minor Mistake

Imagine you are a patient with ankle swelling and your doctor decides to place you on a water pill. She writes you a prescription for the medicine and you take it according to the directions for one month until your next visit. You bring your prescription bottles to your next visit, and your doctor discovers that she has prescribed the wrong medicine. You have not had any side effects from this wrong medicine, but your ankles are still swollen.

The Survey

The body of medical literature on errors, truth-telling, and the cost of iatrogenic injuries is growing, but little information is available about what patients want or expect from their physicians when mistakes occur. To examine patient attitudes toward physician error, a sample of patients seen in the outpatient clinic of a university medical center were surveyed.

Participants were randomly chosen from a group of approximately 10,000 patients seen in one general internal medicine outpatient clinic during calendar year 1993. The clinic and its 16 general internists are affiliated with Loma Linda University School of Medicine. Nearly all patients seen in this practice have some form of private insurance or Medicare coverage.

Surveys were mailed to 400 patients, 149 were returned. The first part of the survey asked for patients' background information (*Figure 1*), the second part asked for patient responses to hypothetical scenarios involving physician error.

Scenario #2: Moderate Mistake

Imagine you had a stroke last year, and your doctor placed you on a blood thinning medicine to help prevent another stroke. A month ago you were admitted to the hospital for pneumonia. At your discharge, your doctor gave you prescriptions for all your regular medicines.

Three weeks after your discharge, you have another mild stroke. You get completely well from this second stroke. While treating you for the second stroke, your doctor discovers that he did not give you the prescription for the blood thinning medicine after your pneumonia. Having this medicine might have prevented the second stroke.

Figure 1

Characteristics of Respondents

N=149

Sex	
M	37%
F	63%
Age, years	
Mean (range)	60 (23-94)
Race	
White	83%
Hispanic	8%
African American	1%
Asian	2%
Other	6%
Education	
<College degree	23%
College degree	36%
Graduate	41%
Self-reported health	
Poor-fair	5%
Good-very good	68%
Excellent	27%
Able to identify their primary care physician	
Yes	88%
No	12%

The hypothetical situations range in severity of error. In the first, the physician makes a relatively harmless prescription error with no adverse outcome. In the second, the physician fails to continue anticoagulant therapy for a patient with clear indications, resulting in a minor stroke from which the patient fully recovers. In the final scenario, the physician overlooks an abnormal chest X-ray and the patient returns with widely metastatic cancer a year later.

Scenario #3: Severe Mistake

Imagine that you go to your doctor about a cough that has lasted for one month. The doctor orders a chest X-ray. She reassures you that the cough is probably not serious.

When you return one year later for your annual physical, you ask your doctor what more can be done about your cough, which has persisted. Your doctor reviews your chart and discovers that the chest X-ray she ordered last year showed lung cancer—a result she overlooked.

After further testing, your doctor also finds out that the cancer is now larger and has spread to your liver. Your doctor feels you have about six months to live. If the cancer had been treated at the time of the original X-ray, possibly it could have been cured.

Survey Questions

Each scenario is followed by an identical set of questions to determine the patient's response to the error.

What type of response do you expect from the physician?

With whom would you like to further discuss the incident?

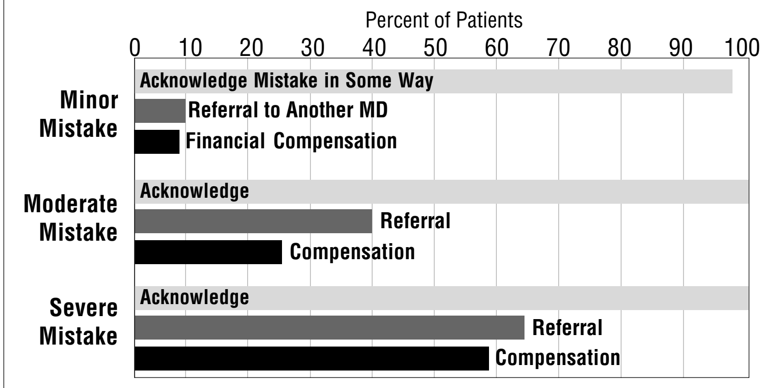
What would your response be?

How would your response differ if the physician did not tell you about the mistake but you discovered it some other way?

The Findings

Patients desire disclosure when a physician makes a mistake. Almost all patients want their physician to acknowledge an error in some way. This held true for all three scenarios, no matter what the severity of the error or ultimate harm (*Figure 2*). This suggests that patients value being kept informed, even if an error seems minor.

The survey also asked patients if their responses would change if they were not told of the error, but found out by some other means. The proportion of patients who would keep seeing their physician if they were not told of a mistake was substantially lower than if they were told (*Figure 3*). Patients were significantly more likely to either report or sue the physician when he or she failed to acknowledge the mistake. The risk of litigation nearly doubled (from 12 to 20 percent) in the moderate mistake scenario when the patient was not informed. These responses suggest physicians may be at increased risk for legal and professional sanctions if they fail to disclose even minor errors.



Conclusions

Patients now play a more substantive role in medical decision making. As a consequence, they desire more information. These findings illustrate that patients expect their physicians to communicate openly and honestly.

Any anonymous survey is a relatively crude instrument that cannot account for the more subtle nuances of the physician/patient relationship. Patients may, in fact, be less likely to sue physicians than the responses received from this small, relatively homogenous group of participants indicate.

Physicians have a number of reasons to acknowledge their mistakes. Besides a moral imperative for truth-telling are more practical reasons. These findings suggest that openness strengthens the physician/patient relationship: patients are more likely to stay with their physicians if told honestly of their mistakes. And, finally, telling the truth may reduce the risk of litigation and other punitive actions. ■

This article was adapted from: Witman A, Park D, Hardin S. How do patients want physicians to handle mistakes? A survey of internal medicine patients in an academic setting. *Archives of Internal Medicine.* 1996;156:2565-69. Copyright 1996, American Medical Association.

References

Brennan TA et al. Incidence of adverse events and negligence in hospitalized patients: results of the Harvard Medical Practice Study I. *New England Journal of Medicine.* 1991;324:370-76.

Hilfiker D. Facing our mistakes. *New England Journal of Medicine.* 1984;310;118-22.

Leape LL, et al. The nature of adverse events in hospitalized patients: results of the Harvard Medical Practice Study II. *New England Journal of Medicine.* 1991;324:377-84.

Wu AW, et al. Do house officers learn from their mistakes? *Journal of the American Medical Association.* 1991;265:2089-94.

Patients were significantly more likely to either report or sue the physician when he or she failed to acknowledge the mistake.

Figure 3

Patients' Responses to Physicians' Mistakes*

Patient Response	Minor Mistake (n=148)	Moderate Mistake (n=144)	Severe Mistake (n=146)
I would keep seeing my physician if			
Informed of mistake	103 (69%)	90 (41%)	11 (7%)
Not informed of mistake	**19 (13%)**	**11 (8%)**	**4 (3%)**
	(P<.001)	(P<.001)	(P<.001)
I would report my physician if			
Informed of mistake	12 (8%)	34 (23%)	102 (69%)
Not informed of mistake	**39 (26%)**	**75 (52%)**	**114 (78%)**
	(P<.001)	(P<.001)	(P<.001)
I would file a lawsuit if			
Informed of mistake	1 (<1%)	17 (12%)	88 (60%)
Not informed of mistake	**6 (4%)**	**29 (20%)**	**111 (76%)**
	(P>.99)	(P<.001)	(P<.001)

*Values differ because some surveys were incomplete.

The risk of litigation nearly doubled (from 12 to 20 percent) in the moderate mistake scenario when the patient was not informed.

Teaching Residents and Medical Students to Disclose Mistakes

An interview with Albert Wu, M.D. and Stephen McPhee, M.D.
by
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Catherine Keyes is a Loss Prevention Consultant for the Risk Management Foundation of the Harvard Medical Institutions. Tom Augello is Managing Editor for RMF's monthly audiotape,

Drs. Wu and McPhee are members of a team whose research revealed that many medical mistakes are never disclosed by house officers to their supervisors or patients.[1,2] *Concerned with the impact of non-disclosure on both patient care and physician morale, Wu and McPhee offer suggestions about teaching physicians in training to handle mistakes.*[3]

Forum
What do you say to your residents and medical students to encourage them to disclose mistakes?

Dr. McPhee
I try to mention that mistakes occur commonly, and the issue is not blame but taking responsibility and figuring out what went wrong so that it doesn't happen again. And I stress that it's very important (both from an interpersonal and an intrapersonal point of view) for the residents not to hide or deny the mistakes, but to acknowledge that they are painful. I tell them that, based on our study at least, admitting mistakes can cause some psychosocial distress but it can also lead to very good outcomes in terms of changes in behavior and practice.

Dr. Wu
It's important to set a tone which makes it clear that, while mistakes are not desirable, we realize they are inevitable given the setting. And the only thing which really falls outside the norm is failing to disclose a mistake, in particular to the supervisor. I also emphasize that disclosing mistakes to patients and their families is the right thing to do.

Forum
What reaction do you see from physicians in training?

Dr. Wu
Many are relieved. Residents fear being chastised by their attendings, especially if a mistake occurs, so they appreciate being told that won't happen.

Forum
How do you teach them to talk to patients about mistakes?

Dr. Wu
The way to do it is through role modeling. If a trainee makes a mistake, then both the attending and resident should go to the patient and have the discussion together. The attending can take the lead in the discussion or, if the two have had a chance to meet and practice ahead of time, the resident can present the situation as practiced. If the resident will need to explain events he or she was not party to, the attending would want to give the resident an example of how that discussion might go as well.

We realize mistakes are inevitable, given the setting. The only thing which really falls outside the norm is failing to disclose a mistake, in particular to the supervisor.

I also encourage residents to tell patients about minor mistakes; these discussions are relatively easy. While you don't want patients to completely lose faith in the medical profession, the more they realize that physicians are human beings and the more they participate in decision making and share responsibility for things that happen, the more realistic their expectations are.

Forum
What are the barriers to residents admitting mistakes?

Dr. Wu
Certainly there is fear of lawsuits which, in some situations, is a substantial factor. But that's not the biggest factor. For trainees in particular, it is the fear of being judged. Physicians in training are quite sensitive about their image and they want to be evaluated positively. And because the whole system sets up some unreasonable expectations, residents are fearful of not living up to those expectations.

In addition, it's just plain difficult to admit to anyone that you have done something wrong. Think how hard it is to explain to your parent or spouse that you banged up the car. When someone is actually harmed, it's terribly upsetting and it's threatening to one's self-image. Admitting a mistake requires accepting responsibility, and increases the focus on the very thing that is upsetting and uncomfortable.

Dr. McPhee
Everyone in the field feels that physicians are ethically required to inform the patient or the patient's family if there has been a mistake. But that has some negative consequences, too. Fear of lawsuits is a barrier to disclosure. Unfortunately, the way our society often deals with adverse outcomes is to pay money, sometimes large sums of money. If it were a risk-free environment, if the physician bore no financial responsibility, then disclosure might occur more often.

Forum
How do people react when you tell them about a mistake involving their family member?

Dr. McPhee
It very much depends on how you approach the family, the degree of honesty, forthrightness, and contrition that is evident. In general, families are disappointed to hear about mistakes. They come in trusting their loved one to you and when something goes wrong they're not happy.

However, families do not like to have a situation obfuscated or to have people trying to hide the fact that a mistake occurred. It is worse when they glean the error themselves and start getting more and more aggressive about figuring out what really went wrong.

Most people can understand that in the course of complicated decisions and treatments, things can go badly or other than the way you would like them to.

Dr. Wu
People are pretty understanding. People might be angry or upset that something bad happened but most people can understand that in the course of complicated decisions and treatments, things can go badly or other than the way you would like them to. And I think that good risk managers all over the country will tell you that you can defuse almost any situation by being prompt and forthright.

Forum
Is your approach to mistakes related to your idea of teaching residents to communicate with patients overall?

Dr. McPhee
Yes. I strongly believe that two people who are really connected, bonded, who can cry together and laugh together, have a real relationship—a kind of bonded resonance. It's the connection you establish with the patient that really counts and gets you through the good and the bad, whether the bad is visited upon the patient by you, or just happens to the patient in the natural course of the disease.

Forum
Does the medical culture support physicians accepting responsibility?

Dr. Wu
Often it does not. In general, the medical culture tends to treat mistakes as deviant, to scapegoat individuals rather than realizing that the system has, in most cases, set them up for a mistake.

Forum
What is the key to encouraging medical students, residents, and even more senior physicians to admit and discuss mistakes?

Dr. Wu
An enlightened risk management team and a clinical leadership that accepts mistakes as part of medical practice without conceding defeat. Good clinical leadership and risk management teams recognize that most errors are due to systems factors rather than individual fault.

Dr. McPhee
I agree. We have had success in terms of discovering errors and then making changes on a systemwide basis so they didn't recur. For example, we had an incident several years ago where, during a cardiac arrest situation, someone ordered a vial of lidocaine to be administered to the patient for an arrhythmia. There were two vials of lidocaine side-by-side on the crash cart, one was 100mg, and one was 1000mg to be used for making up a bag of solution that could be dripped in. Unfortunately, the physician reaching for the vial got the wrong one, administered it IV push, and the patient seized and died.

Afterward, we acknowledged that this was a preventable mistake, and then we took the 1000mg vials off the crash carts because we did not need them there. Since then, we have not had any more of that kind of error. We hope this kind of success identifying and resolving weaknesses in the system encourages physicians to identify other potential problems. ■

References

1 Wu AW, et al. Do house officers learn from their mistakes? *Journal of the American Medical Association.* 1991;265:2089-94.

2 Wu AW, et al. How house officers cope with their mistakes. *Western Journal of Medicine.* 1993;159:565-569.

3 In October, they presented a workshop on this topic at the Annenberg Conference, "Examining Errors in Health Care."

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Framework for Handling Adverse Events

by
Steve Stelovich, M.D.

Dr. Stelovich is the Associate Medical Director of the Medical Groups Division of Harvard Pilgrim Health Care.

As a psychiatrist who has worked with suicidal patients for more than 20 years, Dr. Stelovich has developed a model for dealing with the parties impacted by suicides and suicide attempts. Here, Dr. Stelovich describes the value of this model as a risk management tool and considers its potential applicability to the management of other serious adverse events.

Process

For clinical and risk management reasons, I have looked at many instances in which patients have attempted or committed suicide and have tried to apply the lessons learned from these cases to the treatment of others. In doing so, what has become increasingly clear is that a step-wise process affecting four distinct groups of people related to the individual involved usually takes place. From these observations, I devised a simple matrix to facilitate a more consistent clinical approach to handling completed suicides. I now use it both retrospectively, as a framework for gathering information for case reviews, and prospectively, as a checklist for keeping track of communications with individuals who are, or could be, affected by a suicide or attempted suicide.

	Anticipating	Announcing	Assisting	Assessing
Family				
Clinicians				
Patients				
Administration				

A successfully completed suicide exerts its major impact on four groups of people: 1) the immediate family, 2) the clinicians most directly involved with the patient's care, 3) other patients who may be associated with the caregivers or the now deceased patient (e.g., members of a psychiatric residence or hospital ward), and 4) administrative persons who are responsible for the setting in which the suicide has occurred. The impact on these others can be severe and, if unattended, can precipitate unpleasant reactions. A significant number of individuals affected by a suicide experience uncomfortable emotions, develop psychiatric symptoms, or commence legal actions.

Within each of these groups, four processes can be discerned. **Anticipating** involves planning for and discussing possible effects of a completed suicide. Although rarely done, anticipating leads to more rational handling of the emotional turmoil following suicide, and often adds significantly to the prevention planning. **Announcing** refers to the clear dissemination of information about an attempted or successful suicide as it becomes available. **Assisting** is the more clinically oriented process of evaluating and intervening among those who have been most directly impacted by the suicide. **Assessing** is the final stage in which the suicide's personal, administrative, and scientific meaning are reviewed and evaluated.

Perspective

In the past, suicides have been approached by focusing almost exclusively on prevention. Successful suicides have been, at best, reviewed after the fact. Indeed, I discovered a wide variety of opinions about when, how, and whether such evaluations should be undertaken as well as a lack of consensus about what to do with information gleaned from them when completed.

In the course of participating in such reviews, however, I became increasingly aware of the evolving stages and varying configurations of people being affected by completed suicides. When, shortly after a suicide, I directed my attention to the cells of the matrix—in order to manage the process rather than simply to review it—I noticed that folks became less angry, less accusatory, less argumentative. I think accusations fell away when we were able to see ourselves as common suicide survivors, people who all cared about someone's life.

From a risk management perspective, the process seems to allow people to understand and trust each other, two factors I suspect are normally missing when a lawsuit is filed. Moving from there to using components of the matrix in situations of high suicide risk or suicide attempts was a short step. Then the matrix surprisingly revealed itself to be useful not only as a means of organizing information from the past, but also as a means of reducing current and future risk factors.

Examples

The potential value of using such a matrix and formally reviewing cases of suicide is demonstrated by one case in which several caregivers blamed each other for a patient's suicide. One provider thought another's decisions in this case had been substandard, and considered reporting him to the Board of Medicine. A third provider worried that the acrimony would become apparent to the patient's family and trigger a malpractice suit.

The providers agreed, reluctantly, to maintain a truce for the purposes of the review. In discussing the case, they were surprised to learn that each had quite different pieces of information about their patient. They had, essentially, missed the *anticipating* and *announcing* stages. Their incomplete understanding of facts and decisions affected their impressions of the care. The review dispelled the litigiousness which had arisen, restored their respect for each other, and allowed them to identify areas for clinical improvement. Incredibly, two of the providers immediately began planning a joint project to address a difficult clinical issue seen in this case.

Another case illustrates how the matrix can prevent problems *prospectively*. It involved a team of mental health clinicians who were diligently trying to keep a patient alive from hour to hour. Preoccupied by that effort, they failed to *anticipate* and therefore failed to discuss the potential impact of suicide with the patient's husband. The patient later committed suicide, and left a note blaming her husband for her unhappiness. Isolated, and with the finger of blame pointed directly at him, the husband sued the clinicians for wrongful death. Perhaps a lawsuit could not have been prevented, but an *anticipatory* conversation with the husband would have warned him about his wife's anger, and might even have prepared him for his guilt. If he thought the staff were concerned about him, he might have had further conversations with them in the hospital instead of the courtroom.

The matrix surprisingly revealed itself to be useful not only as a means of organizing information from the past, but also as a means of reducing current and future risk factors.

In terms of risk management, *anticipation* is probably one of the most important considerations because asking the pertinent questions, "How big is the risk?" "What could happen?" and "Who should be involved (and how)?" helps providers avoid some significant errors. Clear thinking around *anticipation* actually helps prevention and reduces the likelihood of having to complete the other three steps in the grid.

Application to Other Adverse Events

This model might lend itself well to handling other bad outcomes or adverse events. In fact, bits and pieces are often employed in an ad-hoc fashion in such situations.

Consider a surgical procedure in which a certain percentage of patients is likely to have a bad outcome. **Anticipating**, thinking through the boxes, could remind the surgeon to discuss the possibilities and consequences of a bad outcome with the patient and family, and with other important people involved in the decision-making process. Anticipating in this sense would be more than reciting the risks and benefits of a procedure. It might involve discussing the patient's likely post-surgical symptoms with the patient's family and explaining which of these are not worrisome as well as which symptoms warrant urgent follow-up.

Announcing could prove useful for a surgeon whose patient experiences a bad outcome. It involves acting as a conduit for the flow of salient information to and from involved individuals. Announcing would allow the physician to take in a great deal of information and to correct the inevitable misunderstandings which arise when multiple providers deal with patients and families in emotional situations.

Assisting does not need to be the purview of psychiatry alone. In the case of a bad outcome, the surgeon might assist the patient and family by connecting them with social workers who can also be quite effective in helping staff deal with their own issues surrounding bad outcomes—a frequently overlooked process which, if unattended, can contribute significantly to impaired working relations.

Assessing could include a review of the bad outcome at a mortality and morbidity conference or in the context of an ongoing quality improvement process.

Conclusion

The matrix might be inapposite for some kinds of adverse events. *Anticipating* medication errors in some ways could lead to an absurd result: a discussion with a patient about the possibility of giving her the wrong pill surely would not inspire her confidence. However, general anticipation of medication errors, as framed by the matrix, might be beneficial. Education of both patients and families regarding ways they can participate in reducing the likelihood of dispensing errors could certainly be helpful; clear instructions regarding medication names, dosages, and frequency of use could improve outcomes. Beyond the anticipation stage, when a medication error occurs, physicians would want to communicate effectively, handle related issues, and evaluate the error in some kind of larger context.

The various elements of this matrix as discussed in relation to bad outcomes or medication errors are not new in themselves; they are central to many quality improvement projects and new disease management models, for example. What has been useful is to see them as an interrelated and recurring framework, a framework which provides both foresight and hindsight to spot potential problems and take corrective action. Prospectively, the model facilitates improving clinical care for individual patients. Retrospectively, it aids in identifying systems issues. It helps to see and treat patients within the context of a community of people who care about them. And, it has allowed me and my colleagues to see trends and to use that knowledge to focus clinical education on areas of importance. ■

Responding to an Adverse Event: A Case Study

by
Meghan McDermott

Meghan McDermott is a third-year student at Franklin Pierce Law School and a former intern at the Risk Management Foundation of the Harvard Medical Institutions.

Incident
A 35-year-old patient died while being treated for symptoms of alcohol withdrawal. No claim or suit was filed.

Background
A 35-year-old male with a 20-year history of alcohol abuse was brought by friends to an insured hospital's Emergency Department (ED), where he had not been seen before. The friends reported that the patient had been vomiting and unable to eat or drink for a couple of days. The physician examined the patient and ordered lab work. Three hours after arriving at the hospital, while receiving intravenous fluids and vitamins, the patient went into cardiac arrest and died. The medical examiner's office declined an autopsy. The ED physician asked the patient's family if they would permit hospital staff to conduct an autopsy, but the family refused.

Over the next several weeks, the parents spoke to several of their son's friends and developed suspicions their son might have been given (illegal) drugs the night he died. The parents called the ED physician to ask whether hospital staff had run any drug tests when their son was evaluated. Upon learning that a toxicology screen was not performed, they mentioned exhuming their son's body to determine if drugs had been a factor in his death.(1)

The physician believed the parents' search for answers in the unexpected death of their son was a normal part of their grieving process. However, alert to the possibility that the search for answers could become a search for someone to "blame," he contacted the hospital risk manager. They agreed to invite the patient's family to meet with appropriate hospital staff to discuss their concerns.(2) A patient representative called the family and offered to attend the meeting with them, an offer they gratefully accepted.(3) The ED physician prepared to explain the team's belief that the combination of long-term alcohol abuse and short-term alcohol withdrawal had caused the patient's death. A hospital pathologist agreed to answer questions the family might have about the autopsy process.

Conclusion
At the start of the meeting, various family members were sad, angry, or suspicious that the hospital was trying to cover up its failure to conduct sufficient tests. However, the willingness of the health care providers at the meeting to discuss the case, explain the clinical aspects, and weigh the pros and cons of conducting further tests allied the clinicians with the family in their search for answers.(4) The family left the meeting with a copy of the medical record, provided by the hospital, planning to discuss the matter further among themselves. Indeed, they called the pathologist on a later occasion to ask more questions, but initiated no further action.(5)

Loss Prevention Notes

1 *Most claims and suits related to autopsy arise from family members' surprise over post mortem procedures which significantly exceed their expectations. However, family members can also be upset when an autopsy is not performed, as in this instance. Physicians can avoid misunderstandings by clearly articulating the reasons for an autopsy request, the scope of the procedure, its costs, and potential benefits.*

2 *Many patients and families feel abandoned if a physician distances himself/herself after a bad outcome, or they begin to suspect a cover-up of some kind. Meetings which bring together family members and medical staff can provide information to everyone involved and quell conflicts.*

3 *Some patients and families may be intimidated by physicians and may be more intimidated by the prospect of meeting with several at once. A patient representative or social worker can restore patients' and families' sense of balance at this sort of meeting, and can help prevent them from being overwhelmed by medical terminology.*

4 *The physician's notes in the medical record reflected his reasoning for diagnostic and treatment decisions, including a brief summary of his conversation with the friends. These notes refreshed his memory in preparing to meet with the family and helped the family understand what had happened. When documenting care, remember that patients' medical records may have many readers. Including a differential diagnosis or treatment rationale not only assists current medical staff to render appropriate treatment, it also facilitates accurate understanding by payers, patients and families, and other non-medical reviewers.*

5 *People grieve at their own pace; some may leave this kind of meeting expressing gratitude and support for the care rendered, others may not. Physicians who leave the door open for further communication assist patients and family members in their healing process.*

Risk Management Representatives

As part of the formal loss prevention programs developed by medical institutions affiliated with the Risk Management Foundation, key individuals have been designated by each facility to serve as institutional risk management representatives. The following list is printed as a convenience to assist insured physicians and staff in contacting appropriate risk management personnel.

Beth Israel Deaconess Medical Center-East
Charles Conklin
Director of Quality Assurance and Risk Management
(617) 667-2624

Beth Israel Deaconess Medical Center-West
Kathleen Murray, Risk Manager
(617) 632-7013

Brigham and Women's Hospital
Neal Sullivan, J.D., Program Director, Risk Management
(617) 732-8394

Children's Hospital
Terry McCarthy, Paralegal
(617) 355-6800
Wendy Ludwig, Quality Improvement Coordinator
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Kathryn McKenna, Quality Improvement Coordinator
(617) 355-4982

Dana-Farber Cancer Institute
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(617) 632-3293

Deaconess-Glover Hospital
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Deaconess-Waltham Hospital
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Harvard Pilgrim Health Care
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Harvard Pilgrim Health Care of New England
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Harvard University
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Lee Ann Ross, Assistant Director of Insurance
(617) 495-8668

Harvard University Health Services
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Audrey Sallese, Director of Medical Records
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Patricia Eskander, Director of Medical Records, Quality Assurance, and Risk Management
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Judge Baker Children's Center
Jean Murphy, Business Manager
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Nancy M. Sullivan, Director, UM/QA
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Mount Auburn Hospital
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New England Baptist Hospital
Loretta Joy, Director of Quality Improvement
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North Shore Medical Center
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