

A 62-Year-Old Woman With Skin Cancer Who Experienced Wrong-Site Surgery

Review of Medical Error

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DR DELBANCO: Ms W is a 62-year-old woman who experienced wrong-site surgery when a lesion was removed from her face.

Several months ago, a pink, scaly plaque on her face was biopsied and diagnosed as a 0.5-cm² squamous cell carcinoma. Three months later, Ms W entered an operating room in a Boston, Massachusetts, hospital for surgery to remove the skin cancer.

The morning after her surgery, Ms W removed her bandages and discovered that the surgery had been performed on an area to the right of the lesion. Ms W feels that the surgery team marked an area of skin incorrectly before the surgery was performed and believes she would have identified the mistake if she had been given a mirror in the operating room to check where the lesion was marked.

After the initial surgery, Ms W began to experience shooting pain that spread from her nose to the left side of her forehead. The pain would surface 5 to 6 times per day, and she gained some relief by rubbing the area. She tried gabapentin but did not find it helpful. In addition, Ms W experienced significant swelling and bruising around her eyes and felt unable to work for a period of several weeks.

Several weeks later, Ms W underwent a second procedure to remove the correct lesion.

This was the second time Ms W experienced an untoward event following an elective procedure. Ten years earlier, Ms W had a pneumothorax after a trigger point injection into the trapezius muscle. Initially unrecognized by her surgeon, this led to a 2-week hospital stay, eventually requiring thoracic surgery. Ms W contacted an attorney at the time, and she was compensated by the hospital for the event. No formal legal proceedings were required.

Ms W is generally healthy. She drinks socially, exercises regularly, and does not smoke. She has private health insurance. With respect to medical history, Ms W reports having viral meningitis followed by what was termed postmeningitic fibromyalgia and tinnitus. She has had a hysterectomy and breast biopsies for benign disease and is thought by a

After a life-threatening complication of an injection for neck pain several years ago, Ms W experienced a wrong-site surgery to remove a squamous cell lesion from her nose, followed by pain, distress, and shaken trust in clinicians. Her experience highlights the challenges of communicating with patients after errors. Harmful medical errors occur relatively frequently. Gaps exist between patients' expectations for disclosure and apology and physicians' ability to deliver disclosures well. This discrepancy reflects clinicians' fear of litigation, concern that disclosure might harm patients, and lack of confidence in disclosure skills. Many institutions are developing disclosure programs, and some are reporting success in coupling disclosures with early offers of compensation to patients. However, much has yet to be learned about effective disclosure strategies. Important future developments include increased emphasis on institutions' responsibility for disclosure, involving trainees and other team members in disclosure, and strengthening the relationship between disclosure and quality improvement.

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neurologist to have cervical radiculopathy, with tingling in both forearms and hands and, occasionally, in her feet.

On physical examination, she looks well and has tanned skin from sun exposure. Physical findings are otherwise unremarkable. The surgical scars on her face are not readily visible.

Laboratory findings are unremarkable. Medications include an estradiol patch, alprazolam as needed for anxiety, multivitamins, calcium supplements, and daily aspirin.

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Ms W is seeking compensation for pain, suffering, and time away from work.

MS W: HER VIEW

The night before my surgery, I dreamt that the surgeon was a sumo wrestler and that she was throwing knives at my nose. In fact, I told her that when she came. I recall saying, "I am obviously very nervous about having this surgery." I really didn't think I was, but my dream told me that I was. My doctor and I laughed about that.

After the surgery, I took the bandages off and looked in the mirror. At first, I couldn't believe it. I saw that they had operated on the wrong spot and I just . . . I started to scream. Because this was the second time that I experienced a medical error, the first emotion I felt was anger. I was furious! Incredulous and furious . . .

The apology was very clear. The doctor said, "I'm very sorry that this happened. This is my worst nightmare." When things went wrong the first time as a result of the injection, it took a while before people were able to acknowledge what had happened and the mistake that had been made. This time it was an immediate recognition and apology, and that was reassuring to me.

I had a meeting set up with the coordinator of the unit, and she asked me to go through what had happened: what I remembered of it, what I had experienced, and what it was like for me. She explained that they had changed the protocols already because I had told them that I was never given a mirror to see where the spot had been marked. If I had been, I certainly would have known right away that it was the wrong spot. I knew there was supposed to be a "time out" where there is some coordination between the staff. They are supposed to make sure that everything is all set before they actually go in and make an incision. I only remembered after the fact that that never actually happened.

I also knew that the hospital was making a great effort to be transparent about these things. There had been a lot of public acknowledgment that the hospital wanted to make it safer for patients. So having met with the head of risk management and quality assurance, I then made an appointment to meet with the director of the hospital. He gave me a meeting time, and we had a very good discussion. From each of these people, I received a very clear apology. They also all asked what they could do for me, which was another thing that was really very helpful.

I did know that I wanted some kind of compensation for this. I was unclear how it should be done or what I wanted, but I did know that it was something that I felt I wanted. I had lost time from work, and the experience was traumatic for me. I discussed this option with the head of the hospital, and he said that this was something they would absolutely consider.

One of the major regrets that I have had since this happened is that I never had an opportunity to talk with the fellow who marked the spot—who mismarked the spot. That person never appeared again. When I asked if I could have a chance to speak

with the fellow, I was told that the person had already left the hospital and was not around any longer. I thought that was a real missed opportunity, both for the fellow and for me.

AT THE CROSSROADS: QUESTIONS FOR DR GALLAGHER

What is a medical error? How does it differ from an adverse event? How common are medical errors? What proportion of medical errors cause harm? What are patient expectations for communication following medical errors? Are they being met? What barriers inhibit disclosure of errors? How can they be overcome? How do disclosure and litigation relate? What role does communication play in responding to medical errors? What does the future hold with respect to open disclosure? What do you suggest to Ms W's physicians and the hospital? What would you suggest to Ms W?

DR GALLAGHER: Few events in health care are as upsetting for all involved as when a patient is harmed by medical care, especially when the harm is due to a medical error.¹ The moment Ms W realized that her surgery was on the wrong site—representing the second major unexpected complication in her health care—she felt overwhelming incredulity, anger, and fractured trust. Even during the procedure she sensed that something was amiss: "*There just seemed to be a lot of pressure on people to get it over with, get it done. And I think I was picking up on that, but again I was trusting what they were doing. And I didn't think that I needed to do anything other than just be a good patient and lie there and let them take care of me.*"

Widespread consensus exists that patients like Ms W should receive prompt, full disclosure of the error and a sincere apology, a marked departure from the profession's historical "deny and defend" response.²⁻⁹ Yet the development of effective disclosure is at an early stage.¹⁰⁻¹² Clinicians' commitment to disclosure is strong, but they struggle to turn this principle into practice.¹³ According to published surveys in the United States, most hospital policies endorse disclosure,¹⁴⁻¹⁶ but few clinicians have had disclosure training.¹⁷ Even fewer institutions track whether disclosures have occurred or evaluate their quality. Sparse prospective data exist regarding effective disclosure strategies or how disclosure affects important outcomes such as patient trust and satisfaction or malpractice claims.^{18,19}

Ms W's experiences highlight key crossroads for the participants in this error and the medical profession at large. Ms W must decide the best path to heal from her physical and emotional trauma and resolve whether she can trust not only the clinicians responsible for this error but also future health care professionals with whom she may interact. Her clinicians must choose both what to say to Ms W and whether institutional resources might facilitate disclosure. All clinicians must decide whether and how to improve their disclosure skills. Health care institutions face difficult choices regarding creating effective disclosure programs. Finally, the medical profession needs to determine how to establish accountability that will ensure that effective disclosure becomes the norm rather than the exception.

What Is a Medical Error? How Does It Differ From an Adverse Event?

Ms W's wrong-site surgery clearly constitutes a medical error. However, a concise, comprehensible definition of medical error has proven elusive.²⁰ The most common definition is from the Institute of Medicine: "Failure of a planned action to be completed as intended, or the use of a wrong plan to achieve an aim."²¹ This definition emphasizes 2 important principles: (1) a bad outcome does not mean a medical error has happened and (2) medical errors are unintentional and generally preventable.^{22,23}

It is important to distinguish between medical error and the related concept of an adverse event. An adverse event is "harm that is the result of the process of healthcare rather than the patient's underlying disease."²¹ Thus, while *medical error* focuses on the process of care, *adverse event* addresses the outcome. The overlap between medical error and adverse event is small: most medical errors are not associated with harm, and most adverse events are not due to medical errors. However, Ms W experienced both: a medical error that caused an adverse event.

How Common Are Medical Errors? What Proportion of Medical Errors Cause Harm?

Medical errors are relatively common. A 2005 survey of 1527 randomly selected US patients who were active users of health care (affirmative response to ≥ 1 of following: self-rated health fair or poor; having serious or chronic illness, injury, or disability; hospitalized in the last 2 years; major surgery in the last 2 years) found that 34% reported having experienced a medical error in the past 2 years.²⁴ The epidemiology of medical error is best understood for medication errors. One study found 3.13 medication errors per 1000 orders in a large teaching hospital.²⁵ Medication error rates are higher in intensive care units and pediatric settings.^{26,27} Adverse drug events are also common, with 6.5 occurrences per 100 nonobstetrical admissions.²⁸ Among these adverse drug events, 28% were preventable; ie, due to error. Studies of adverse events in general have found that they occur in approximately 4% to 14% of hospitalizations and that 50% to 70% are due to error.^{21,29} Recent studies suggest that some types of adverse events, such as central-line infections, can be reduced to nearly zero,³⁰ leading patient safety expert Lucian Leape to assert that "it is now apparent that we can use perfection as a benchmark."³¹

Wrong-site surgeries, as experienced by Ms W, are rare. One study of 2 826 367 US operations found 25 wrong-site surgeries, a rate of 1 per 112 994 nonspine operations.³² Contrary to the portrayal of these events in the media, only 1 of the wrong-site surgeries in this study was associated with permanent injury. Interestingly, the rate of wrong-site surgery appears unchanged despite the Joint Commission undertaking a major initiative in 2004 to reduce these errors.^{33,34} This inability to reduce the rate of wrong-site surgery suggests that it may be exceedingly difficult to achieve the benchmark of "perfection," at least for some types of adverse events.

What Are Patient Expectations for Communication Following Medical Errors? Are They Being Met?

Ms W's expressed needs after this error are consistent with most patients' preferences for disclosure. They reflect 3 key elements: information; emotional support, including an apology; and follow-up.^{3,35-37}

Following a medical error, patients are eager to understand what happened to them. Information sharing therefore is a cornerstone of disclosure. Patients expect harmful errors to be disclosed to them, even when the harm is minor. Ms W noted: "*I wanted to have an opportunity to go through what happened . . . then why did this happen? And the other piece of it for me was I don't want this to happen to anybody else, so what can be done to change the way it happened to me?*" Patients expect that physicians will share this information with them; patients want to be informed so that they can make better clinical decisions, and they want their physicians to demonstrate respect for them as individuals.³⁸⁻⁴⁰

Clinicians tend to focus on the information-sharing aspect of disclosure but often neglect patients' emotional distress.⁴¹ Patients feel vulnerable in health care encounters, and harmful errors compound that vulnerability. Because of her prior experience, Ms W was especially nervous about facing her physicians again: "*After this side healed, then I had to have another biopsy and undergo another procedure.*" To remedy the mistake, could (or should) she trust the same physicians who caused her problem?

Apologizing to patients is an integral aspect of the disclosure process and constitutes a vital first step toward soothing the emotional distress and loss of dignity that accompanies medical errors. Ms W reported that the sincere apologies she received were instrumental in beginning to rebuild her trust. Although the apology after her first experience was somewhat delayed, she noted that "*the next day when he came in, he said 'I owe you an apology' . . . and so that was one of the best things. And it really established a sense of trust between me and that doctor who actually did have to operate on me.*" Ms W noted similar relief after the disclosure and apology following the recent error: "*This time it was an immediate recognition and apology, and that was reassuring to me.*"

The medical, legal, and health policy literature reflects different approaches to what constitutes an apology. At a minimum, it is an expression of sympathy, while some argue that an authentic apology includes admitting responsibility, showing remorse, offering an explanation, and making reparations.^{42,43} Perhaps most important to the patient is whether the apology is sincere.^{8,44} Simply saying "I am sorry that this happened" or "I am sorry to have to tell you about what's happened" does not, in most cases, constitute an effective apology. How patients determine and define an apology's sincerity is not well understood and likely depends on both verbal and nonverbal aspects of clinicians' communication and actions. For Ms W, the apology's sincerity appeared to hinge not on specific words exchanged but rather on whether the clinicians' and institution's subse-

Table 1. Disclosure Barriers and Potential Solutions

Barriers	Potential Solutions
Clinician barriers ^{3,11,12,37,52,54}	
Fear that disclosure will prompt litigation	Learn about relationship between disclosure and litigation
Concern that disclosure will not benefit patient	Understand patients' preferences for disclosure, consequences of failed disclosure on patient-physician relationship
Lack of confidence in communication skills	Seek disclosure skills training Use disclosure coaches
Shame/embarrassment about error	Use institutional support resources
Institutional barriers ^{9,15,58}	
Concern that clinicians are not skilled in disclosure	Institute a disclosure support system, including training, coaching, and emotional support
Lack of awareness about deficiencies in current disclosure practices	Measure quality of actual disclosures
Perception that disclosure is a risk management rather than patient safety activity ⁴⁷	Engage patients in safety and quality activities, including event analysis

quent actions demonstrated to her that they were truly sorry about what happened.^{45,46}

Ms W did not consider the disclosure finished after her initial discussion with the physician. Ms W sought multiple follow-up conversations with clinicians and administrators, suggesting that disclosure is a process rather than an event.⁴⁷ Follow-up conversations provide opportunities to share results of error analyses with patients and to respond to their questions. Continuing communication can also assuage patients' fears of abandonment after errors. Innovative disclosure programs, such as those at the University of Illinois Medical Center at Chicago, emphasize ongoing, proactive contact with patients after harmful errors, contacts that can extend for a year or more.⁴⁸ While the program's outcomes have not been studied in detail, preliminary results reported by the institution show that clinicians actively use the program and that 189 system improvements have been implemented in the last 2 years as a result of event reporting and analyses.⁴⁹

A sizable gap exists between patients' expectations for disclosure and current practice. In surveys, only one-third of patients who report experiencing a harmful medical error say that the involved health care worker disclosed the error and apologized.^{50,51} Moreover, disclosures that do take place may not meet patient expectations.^{11,52-54} For example, physicians often fail to disclose why an error happened or how to prevent recurrences.^{11,12,41}

The nature of the error seems to influence disclosure. Physicians' willingness to disclose is higher for obvious errors, as was Ms W's, compared with those unapparent to the patient.^{11,55} Disclosure also varies by specialty, with surgeons disclosing less information than internists or pediatricians.^{11,56} Recent studies of actual disclosures reveal considerable room for improvement. Evaluation of the Australia

Open Disclosure program highlighted patient support for the overall open disclosure process but dissatisfaction with multiple aspects of their experience, such as the disclosure not being timely, that no change in practice followed the disclosure, the lack of an apology, and not being able to speak directly with involved staff.⁵⁷

What Barriers Inhibit Disclosure of Errors? How Can They Be Overcome?

Multiple barriers, at both the individual clinician and institutional levels, can inhibit disclosure. TABLE 1 lists key disclosure barriers and potential strategies to overcome them.

Historically, the most frequently cited barrier to disclosure has been concern that disclosure could prompt litigation,⁵⁹ but this belief may have obscured the medical profession's awareness of more significant disclosure barriers. Many physicians worry that disclosure could do more harm than good to the patient and consider a decision not to disclose as "patient-centered care."³ For other physicians, embarrassment and emotional distress after errors make it difficult to talk with the patient.⁵⁹ Still others lack the confidence to conduct these difficult conversations. Yet Ms W would not consider these reasons persuasive; why should her physicians not speak frankly with her?

As described below, overcoming such barriers requires a multifactorial approach, one that may hinge on institutional support for clinicians throughout the disclosure process.

How Do Disclosure and Litigation Relate?

The relationship between disclosure and litigation has generated considerable controversy.⁶⁰ For decades, disclosure decisions were dominated by concern that disclosure could trigger litigation, partly reflecting a handful of malpractice cases in which disclosure was taken in court as de facto admission of liability.⁶¹ A fuller picture of the disclosure-litigation relationship emerged when research indicated that the absence of disclosure motivates many medical malpractice lawsuits.^{62,63} Subsequent research goes further: disclosure may actually reduce litigation. Surveys using hypothetical cases suggest that full disclosure is associated with lower intention to sue, and mock jury studies suggest that jury verdicts may be lower when errors have been disclosed.^{36,45,64,65} Moreover, individual institutions report that their policies of full disclosure lead to fewer lawsuits and lower legal expenses.^{2,49,66}

Growing physician and institutional awareness of disclosure's potential to mitigate litigation have likely tempered exaggerated fear of disclosure's legal implications.⁶⁷ However, while disclosure may have an overall positive effect on litigation, it is far from a magic bullet. In some circumstances, disclosure will trigger litigation, especially if the disclosure conversation brings the error to the patient's attention.^{68,69} Many states have adopted laws that protect disclosure and apology statements from being used as evidence of liability, but such laws do not mean that a disclosure or apology could not be the stimulus for patients to sue.⁷⁰⁻⁷² Evidence-based understanding of the disclosure-litigation relationship emphasizes

that disclosure's primary goal is patient-centered care, not risk management.

What Role Does Compensation Play in Responding to Medical Errors?

As she reflected on what happened to her, Ms W believed compensation was important. Ms W valued the disclosure and apology but also wanted financial compensation: "*I did know I wanted some kind of compensation for this. I was unclear how . . . or what I wanted [but] . . . I had lost time from work, and the experience was traumatic for me.*" Even the best disclosure practice may not extinguish some patients' desire or need to have the financial consequences of an error addressed.

Traditionally, the primary way to receive financial compensation following a medical injury was to file a malpractice claim, a process that was slow, adversarial, and often resulted in injured patients remaining uncompensated.⁶⁸ Several health care institutions and malpractice insurers have developed "disclosure-and-offer" programs that combine full disclosure with early offers of financial compensation.⁴⁸ These programs have emerged at large academic health care institutions (University of Michigan, University of Illinois Medical Center at Chicago, Stanford University) and at malpractice insurers (COPIC Insurance, West Virginia Mutual, ProMutual Group). Preliminary evidence reported by the programs suggests a reduction in the number of claims, lawsuits, and overall legal expenses, as well as high levels of satisfaction among participating patients and physicians.^{2,73,74} Compared with traditional claims mechanisms, these programs report also that the time to resolution of cases and defense costs are generally much lower for their disclosure-and-offer programs.⁶⁶ For example, Stanford University notes that the percentage of reported claims that have been closed in the same year they were opened increased to a 7-year high, and average claim costs for cases closed within the same year as reported decreased to a 7-year record low since it launched its disclosure-and-offer program (J. Driver, JD; Stanford University Medical Indemnity and Trust, written communication, June 2009).

Important questions about compensation and medical error remain, and the new approaches vary widely. Similar to national compensation strategies in New Zealand and Sweden,⁷⁵ COPIC's 3Rs program uses a no-fault approach to compensate certain unanticipated outcomes. Dealing with a small subset of unanticipated outcomes (excluding patient death, written demand for payment, written complaint, or gross negligence), it caps payments at \$30 000 and prohibits attorney involvement. However, it does not ask patients to waive their right to file a subsequent lawsuit.^{2,74} In contrast, Michigan's program applies to harm caused by inappropriate care. This effort permits negotiation with patients regardless of whether they have legal counsel representation and sets no payment limits but requests that patients waive their right to future litigation following settlement.⁷⁶ Finally, no national standards exist regarding how much compensation is reasonable for a given medical injury. Who

should decide whether current disclosure-and-offer programs provide "fair compensation" to patients?

What Does the Future Hold With Respect to Open Disclosure?

The field of disclosure has seen rapid developments over the last decade. TABLE 2 summarizes some of the noteworthy developments and their implications.

Several developments hold potential for enhancing the disclosure process significantly. While the first disclosure standards made the physician the locus of control, new standards recognize that disclosure is essentially an institutional responsibility that begins at the board of trustees/chief executive officer level and extends throughout the organization.^{7,47} This places institutions at an important crossroads: Will they invest the resources needed to create effective disclosure programs? As part of their disclosure program, will they commit to developing a culture in which open, empathic communication with patients following harmful medical errors is the norm?

The shift toward disclosure as an institutional responsibility does not mean that physicians will not play a central role in disclosures. New approaches to enhance physician-institutional collaboration around disclosure are needed, especially at hospitals with private medical staffs. Physicians face a related crossroads: Will they seek out resources to enhance their disclosure abilities, including basic disclosure training and just-in-time support from institutional disclosure experts?

While Ms W's disclosure conversation was just with her physician, in the future, additional members of the health care team may participate in disclosures. Institutions are increasingly recognizing that disclosure is a "team sport." Many errors occur in the context of team-based delivery of health care, yet it is rare that nonphysician members of the health care team are involved in planning or implementing disclosure discussions.⁸⁰ The disclosure process should seek input from all team members about what went wrong and how the event should be disclosed to the patient. But such interprofessional conversations can be complicated by the power differential that exists between physicians and nonphysicians. Having a few key team members accompany the physician to the disclosure can ensure that the patient's need for emotional support and information about the event is met; it also allows each team member to accept responsibility. Future research should seek to clarify when a team-based approach enhances or detracts from disclosure.

Performance improvement tools are also being applied to the disclosure process itself. In the future, Ms W may be asked to provide feedback on the quality of the disclosure conversations, much as patients currently are asked to report their health care experience through surveys and interviews. COPIC routinely measures patient and physician assessment of the quality of actual disclosures, finding that both parties provide valuable feedback about the disclosure process. It also found that instruments to assess disclosure do not have the ceiling effect common to many used to measure patients' assessment of their care (D. Boyle,

MD, COPIC Insurance, written communication, June 2009). Routinely measuring the quality of actual disclosures would help target disclosure improvement efforts.

The health care profession faces the most significant crossroads: whether to develop a stronger culture of accountability around disclosure by all health care professionals. Will curricula and training ensure that clinicians enter practice proficient in disclosing harmful errors to patients? Will remediation be required when proficiency has not been achieved? Will state boards and specialty-certifying bodies ensure that disclosure is recognized and evaluated as a core competency? Will institutions make disclosure proficiency a condition of providing health care at their organization? Will insurers and purchasers insist that the quality of disclosures be tracked and publicly reported?

RECOMMENDATIONS FOR MS W

The National Quality Forum Safe Practice offers a model that institutions can use to develop their disclosure programs.⁴⁷ It calls for disclosure training of clinicians and having “disclosure coaches” available around the clock to provide just-in-time support for clinicians immediately prior to a disclosure. The coaching model recognizes that these conversations can be very challenging, that most clinicians have little experience with disclosure, and that careful planning and consultation with experts benefit the disclosure process. Whether these National Quality Forum recommendations are effective remains an open question for research.

After the first error, Ms W noted, “I lost a lot of confidence in being able to trust my doctors. And I actually became quite fright-

ened of things like any invasive procedure or getting an injection.” The elephant in the room in many disclosure conversations is trust. Providers worry that disclosing too much about the error will diminish the patient’s confidence in their clinical skills and damage the therapeutic relationship. Trainees may be particularly concerned about disclosure’s effect on patient trust, as they may not fully trust their own emerging clinical skills.^{54,81,82} Patients are also concerned about whether they can trust the professional’s clinical competence, as well as their honesty and integrity. Yet patients may worry that voicing these concerns might offend the clinicians. Above all, fearing what they may hear, clinicians may hesitate to open Pandora’s box of trust with patients.

Given trust’s central role in the patient-physician relationship,^{83,84} physicians should consider discussing trust explicitly with patients during disclosures. Ms W’s physician might have said, “I know how important it is that patients trust their surgeon. I am confident I can safely remove the correct lesion on your nose but would understand if you would like another doctor to perform the second operation.” When clinicians address trust directly, it demonstrates their awareness of the issue’s importance and their commitment to repairing the patient-physician relationship to the extent possible.

Ms W’s physician considered this error her “worst nightmare.” Clinicians experience substantial emotional distress following errors, and institutional programs to support this distress are underdeveloped.^{17,85,86} Clinicians may hesitate to access existing support programs because of em-

Table 2. Recent Developments in Disclosure

Institution/Organization	Development	Additional Comments
Veterans Health Administration	Lexington, Kentucky, Veterans Administration adopts policy of “extreme honesty” in 1987 ⁷⁷ ; disclosure policy disseminated throughout Veterans Health Administration (VHA) in 2003	Policy updated January 18, 2008: VHA Directive 2008-002
COPIC	Develops “3Rs” program in 2000 to couple disclosure with no-fault compensation for selected patients ²	COPIC is a private, physician-directed, Colorado malpractice insurer; West Virginia Mutual and ProMutual Group have adopted similar programs
The Joint Commission	Adds requirement to disclose “unanticipated outcomes” in 2001 to its accreditation standards for hospitals and health care organizations ⁷⁸	
University of Michigan Health System	Creates program in 2001 promoting disclosure and early offers of financial settlement ⁷⁶	Large academic health system; program available to all patients harmed by error regardless of severity
Australia	Disseminates “Open Disclosure” policy across Australia in 2003	Pilot data on effectiveness of program available ⁵⁷
Harvard University/CRICO	Develops, disseminates “When Things Go Wrong” disclosure policy (2006), providing disclosure coach training throughout Harvard system	http://www.rmfm.harvard.edu/education-interventions/films/when-things-go-wrong/index.aspx
National Quality Forum	Releases “Safe Practice” on disclosure in 2006 ⁴⁷	Updated practice published 2009. ⁷⁹ Hospital-specific performance on safe practices available at http://www.leapfroggroup.org/cp
University of Illinois Medical Center at Chicago	Adopts Michigan-style disclosure-and-offer program in 2006 ^{46,48}	“Patient Communication Consult Service” assists clinicians with disclosure, and “Care for the Care Giver” program supports clinicians following events
Stanford University	Launches “Process for the Early Assessment and Resolution of Loss” (PEARL) disclosure-and-offer program in 2007	Stanford’s captive insurer has adjusted its claim review process to provide guidance on compensatory offers within 7 days of receiving the notice of event (J. Driver, JD; written communication, June 2009)

barrassment, guilt, fear about confidentiality, denial of their distress, or unwillingness to take time away from work. It is important to address clinicians' emotions in advance of disclosures; distraught clinicians are poorly positioned to conduct a patient-centered discussion. Disclosures that are successful promote healing of the clinicians' and patients' emotions, while ineffective disclosures can do the opposite. Institutions should develop and strengthen systems for supporting clinicians after errors.¹⁰

For Ms W, not being able to talk with the trainee was "... a real lost opportunity for both of us." While most trainees report having been involved in errors, only a minority say they have disclosed errors to patients or received disclosure training.^{53,81,87} Disclosure is the attending physician's responsibility; the attending physician is legally responsible for the patient's care and likely has more experience conducting difficult conversations with patients. However, removing trainees entirely from the disclosure process leaves them unprepared for this challenging task and, as in this example, deprives both trainees and patients of disclosure's healing potential. Training programs should ensure that their trainees have observed at least 1 error disclosure led by an attending physician and have practiced disclosure in a simulated setting.⁸⁸⁻⁹⁰ Similarly, the trainee should understand the importance of incorporating the process of disclosure and continuing dialogue with the patient into the patient's ongoing care.

Patients like Ms W have an important role to play in the prevention and resolution of medical errors. National organizations encourage patients to take active steps to prevent medical errors in their care.⁹¹ Patients are willing to undertake many of the recommended error prevention behaviors, such as asking what their medications are for, but are less comfortable with other recommendations, such as asking clinicians if they have washed their hands.⁹² After errors, patients can also try to be as explicit as possible with their clinicians about their concerns, questions, and needs following the error.

Just as Ms W was a valuable source of information about the error, institutions should routinely seek patient (and family) input after errors. "I was never given a mirror to see where the spot had been marked. If I had been, I certainly would have known right away that it was the wrong spot . . . I knew there was supposed to be a 'time out' where there is some coordination between the staff . . . and there was not coordination at the point to step back and say, 'Is this the spot? Does it look the same as in the record?'" Some institutions are experimenting with involving patients in error analysis sessions, a development that should be encouraged.⁹³ By considering disclosure a quality improvement rather than a risk management activity, institutions strengthen their culture of transparency and patient safety.^{47,58}

Ms W noted, "Once you have something like this happen, you just see your health care through a different lens. And now that I'm getting older . . . I really have anxiety about what hap-

pens when I have another thing happen to me . . . I hope that people will realize that since this has happened to me, I'm going to need special handling." The developing momentum toward open disclosure in health care is admirable, but when will patients like Ms W routinely receive open and empathic disclosure when harmed by their medical care?

QUESTIONS AND DISCUSSION

QUESTION: How do you handle the word "mistake?"

DR GALLAGHER: We know that physicians (and lawyers) are split on whether and when to use the words "mistake" or "error." I think the prime concern is that the term "mistake" or "error" is provocative, and once patients hear it they will stop listening to the disclosure. But when they accurately reflect on what happened, I believe that using these words is an important part of transparency. Otherwise, the patient wonders, "Why won't the doctor just come right out and say what happened?" But I will acknowledge that many physicians and risk managers strongly believe that these terms are not helpful in disclosures.^{3,11} It is a key issue we need to resolve.

QUESTION: What is the best way to teach the communication skills necessary for effective disclosures? Specifically, how might we use the simulation centers that are coming up all across the country to develop those skills?

DR GALLAGHER: Simulation is a very effective way to teach communication skills generally and disclosure in particular.⁹⁴⁻⁹⁷ As with any communication skill, you need the opportunity to practice. The most common approach to disclosure training appears to be providing background lectures to medical students and more intensive training, such as simulation, to residents and attendings. One key dimension of disclosure simulation training is providing high-quality feedback to the participants. Without expert feedback, learners simply practice the wrong approach and don't improve. Therefore, the simulations should include an experienced disclosure coach who can watch learners, give them targeted feedback, and let them try again. That's the best way to learn these skills.

QUESTION: We took the patient's word that she had never been shown a mirror after the spot was circled. How do you proceed in a situation where a member of the team says, "No, I did it right. The patient might have been anxious."

DR GALLAGHER: It is very tricky. Disclosure is being increasingly recognized as an institutional responsibility, which includes conducting a thorough analysis to determine what took place. Sometimes the individuals directly involved in the case may not be the best persons to actually give the disclosure. Patients really want disclosures to come from their clinicians, and 95% of the time, that's appropriate. But sometimes it's not, either because the clinician does not agree with the results of the event analysis or the clinician's communication skills or emotional distress are such that you know that they're not going to do an effective job. In those circumstances, the harm caused by having that health care

worker in the room outweighs any benefits, and it's better to have the medical director or someone else give the disclosure.

QUESTION: Often I've had difficulty understanding what the family or patient expects prior to a disclosure. What do you suggest doing to prepare for understanding those expectations prior to a disclosure meeting?

DR GALLAGHER: Sometimes it isn't possible to get a sense of the patient's expectations in advance of the initial disclosure conversation. Research does show what, in general, patients' expectations are, and this can help start disclosure conversations.⁹⁸ Moreover, using good communication skills to discern whether the patient understands what is being said can help in the moment.

For follow-up conversations, it's easier to figure out the patient's issues. One option when follow-up meetings are being scheduled is to have an administrative assistant ask the patient, "Can you tell me all the things you want to make sure Dr X addresses?" The patient can brainstorm about what's on his or her mind in a less threatening situation because the patient is not talking directly with the physician. Frequently, the patient's concerns are different from what you thought they would be. The only way to really find out is to ask.

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