

Should We Disclose Harmful Medical Errors to Patients? If So, How?

Thomas H. Gallagher, MD, and Mary Hardy Lucas, RN, MA

Abstract

- **Objective:** To assess the strength of the evidence for disclosing errors to patients, focusing on patients' and physicians' attitudes toward disclosure and disclosure's effect on malpractice claims, and to present practical suggestions for disclosing medical errors.
- **Methods:** Review of the literature.
- **Results:** A gap exists between patients' preferences for disclosure and current clinical practice. Patients have consistently expressed a desire to be told about harmful medical errors, and want to know why the error happened, how recurrences will be prevented, and to receive an apology. However, current data suggests that as few as 30% of harmful errors are disclosed to patients. Physicians support the general principle of disclosure, but hesitate to share the information patients want about errors. Physicians identify fear of liability as one important barrier to error disclosure and experience significant emotional distress after a harmful medical error. Limited data suggests that some institutions have adopted policies of more open disclosure without adverse malpractice consequences. The current disclosure literature contains important but unanswered questions, such as how patients' preferences for disclosure vary along cultural and other dimensions, and whether recommended disclosure strategies improve patient trust and the likelihood of lawsuits. In the absence of definitive evidence about the outcomes of disclosure, practical suggestions for talking with patients about errors can be derived from the literature on doctor-patient communication, breaking bad news, and conflict resolution.
- **Conclusion:** Patients want to be told about harmful errors in their care, but at present such disclosure is uncommon. Closing gaps in the existing disclosure literature could help clinicians communicate more effectively with patients following harmful medical errors.

told when an error occurs in their care [1–5]. Disclosure of errors to patients has long been endorsed by professional organizations and bioethicists because it respects patient autonomy, enhances informed decision making, and upholds the physician's duty to tell the truth [6–11]. The last 5 years have seen a significant increase in calls to disclose errors to patients. This renewed focus on disclosure stems in part from the patient safety movement's emphasis on open communication following errors. In addition, disclosure of certain errors to patients is now required by hospital accreditation standards and some state laws. In 2001, the Joint Commission for the Accreditation of Healthcare Organizations adopted a standard stating that patients should be told about unanticipated outcome in their care [12,13]. In response, 80% of hospitals have adopted or are in the process of developing disclosure policies [14]. Pennsylvania, Florida, Minnesota, and Texas are among the states that have enacted laws requiring that patients be notified about unanticipated outcomes in their care [15].

While physicians endorse the principle of disclosing medical errors to patients, evidence indicates that such disclosure may be uncommon. Two recent national surveys highlight just how large this gap between principle and practice is and suggest that physicians may be disclosing as few as 30% of harmful errors to patients [1,16]. Even when physicians talk about errors with patients, other studies have found that physicians often avoid explicitly saying that an error occurred or apologizing, fearing such statements could be used as an admission of liability [2]. Multiple barriers prevent physicians from discussing errors with patients in addition to fear of legal liability, such as emotional distress following errors and lack of training in error disclosure [2,17–20]. In addition, physicians may be skeptical that disclosure will actually have the beneficial effects that advocates claim it will, such as increasing patient trust and decreasing the likelihood of litigation.

What does the evidence show about whether and how

Physicians face a dilemma when deciding whether and how to disclose harmful medical errors to patients. Patients have overwhelmingly indicated a desire to be

From the Departments of Medicine and Medical History & Ethics, University of Washington School of Medicine, Seattle, WA.

physicians should disclose harmful medical errors to patients? Do patients really desire disclosure, and if so, what information do they want to be told? Is there a gap between calls for disclosure and current clinical practice? What do we know about the impact of disclosure on important outcomes such as the likelihood of patients filing a malpractice claim? This article critically assesses the literature to gauge the strength of the evidence for error disclosure, focusing on patients' and physicians' attitudes toward disclosure and disclosure's effect on malpractice risk. We identify methodologic limitations of existing studies and gaps in what is known about error disclosure. We also discuss practical recommendations about how to disclose a medical error, including what words physicians should use and whether to apologize.

Patients' Preferences for Error Disclosure

Over the past 12 years, 7 studies have assessed patients' preferences for error disclosure and have found patients want to be told about virtually all medical errors in their care. Three surveys asked specifically about whether patients would want to know about an error. Recently, Mazor and colleagues surveyed 990 members of a New England health plan. Nearly all (99%) wanted to be told of an error that resulted in any degree of harm as soon as it was discovered [4]. The majority of patients report that they would even want to know about near misses in their care (ie, errors that could have caused harm but did not by chance or timely intervention). In the 2 surveys that have asked this question, between 88% and 92% of patients report wanting to be told about a near miss. [3,5].

Two studies investigated not only whether patients want to know about an error but also what information they want during the disclosure process. Despite using different methodologies, these studies reached similar conclusions regarding what patients want to know about medical errors. In the survey study by Mazor mentioned above, patients not only wanted the error disclosed, but 99% also wanted information about how recurrences would be prevented, 88% wanted an apology, and 80% thought fees for care related to the error should be waived and compensation offered if actual harm resulted [4].

In a second study, Gallagher and colleagues conducted focus groups about medical errors with 52 patients in the St. Louis area [2]. These patients all wanted to be told about harmful medical errors and were particularly interested in the details of why and how the error happened. In addition, these patients valued knowing how recurrences would be prevented, information that conveyed a lesson had been learned from the error. Patients also wanted an apology and information about how the consequences of the error would be mitigated through compensation, waiver of fees, and additional treatment. Other studies have also found that some patients want error disclosure conversations to include an

offer to refer the patient to another provider, especially if the error was serious [5,21].

Some patients in the above studies had not actually personally experienced an error. However, one study has examined the attitudes of patients who believed an error had occurred in their care. Vincent and colleagues conducted a series of interviews and surveys with 101 patients in the United Kingdom who believed that their "surgical treatment had fallen below the acceptable standard" [22]. This study revealed that how physicians communicate with patients following such an event can impact patients' emotional health. Patients who perceived explanations of their care as lacking information, unsympathetic, or inaccurate had a higher level of disturbing memories and poorer adjustment up to 1 year after their surgery.

While aspects of the literature on patients' attitudes toward error disclosure are quite robust, important gaps remain. Patients outside the acute care setting have clearly and consistently expressed their desire to have harmful errors disclosed to them, but it is not known whether such preferences would change if patients became acutely ill. The emotional stress and physiologic effects of acute illness may affect patient's desire to know about an error, particularly the timing of the discussion and level of detail provided. Only one of these studies interviewed patients who were acutely ill [3], and none of these studies interviewed hospitalized patients. Many of these studies also have methodologic limitations that may affect their generalizability, such as small sample size [3,5,22], samples from a single geographic area [2,4], or convenience samples [3,5]. Two of the 8 studies were conducted in European countries, where differences in physician-patient relationships may affect the information patients expect to receive from their physicians [21,22]. Furthermore, no studies have specifically investigated cultural differences in attitudes toward error disclosure. Previous research on the delivery of bad news has demonstrated that some cultures believe difficult information about prognosis or diagnosis should be shared with the family, not the ill patient [23]. It is not known whether similar cultural variations exist regarding the disclosure of medical errors to patients.

Physicians' Attitudes Regarding Error Disclosure

Six studies in the past 16 years have examined physicians' attitudes and practices regarding error disclosure. These studies demonstrate not only a gap between patients' expectations for disclosure and the frequency with which physicians actually disclose, but also between physicians' support for the principle of disclosure and their actual practice of disclosing errors to patients.

Only 2 studies have specifically investigated whether physicians have disclosed actual mistakes. In one of these surveys, 114 internal medicine residents at 3 academic medical centers

identified their most significant medical mistake in the past year. Only 27 (24%) of those residents reported that they had discussed the mistake with the patient or family [24]. In a second study, a survey of 540 intensive care unit physicians from Western European countries found that only 32% reported disclosing full information about errors to patients [25]. This low rate of disclosure is comparable to a recent national survey in which only 31% of physicians who had experienced an error in their own health care said the involved health care workers had disclosed the error to them and apologized [1].

Surveys that assessed disclosure using hypothetical vignettes found somewhat higher rates of disclosure. In a recent survey of 831 physicians, 90% believed a physician who missed allergy information resulting in patient's death should be required to disclose this error to the family [1]. In a survey of 106 physicians and medical students at a single medical center, 95% reported they would tell a patient about a medical error that led to a longer hospital stay, but only 79% would disclose the error to the family if it caused the patient's death [20]. However, in another survey only slightly more than half of physicians said they would disclose a hypothetical fatal medication error to a patient's family [19].

Even when physicians endorse disclosure in principle, they often do not disclose in practice, or "underdisclose." A survey of intensive care unit physicians highlights this difference: 70% of physicians thought they should give full details about an error to a patient or family, but only 32% reported they actually do so in practice [25]. Another study using focus groups with physicians further documented the gap between endorsing the principle of error disclosure and how disclosure is carried out in actual practice [2]. Physicians in this study agreed that patients should be told about any error that causes harm, and many thought such disclosure was ethically imperative. Yet while some physicians said they would always tell patients about a harmful medical error, many other physicians reported "choosing their words carefully" when talking with patients about errors. This careful choice of words included not explicitly stating that an adverse event had been caused by a medical error, or failing to tell patients an error's magnitude, why the error happened, or how recurrences would be prevented. In addition, physicians in this study were often hesitant to apologize for the error, fearing that an apology could be construed as an admission of liability.

This gap between endorsement of disclosure in theory and the low rate of disclosure in actual practice suggests that physicians experience barriers to carrying out disclosure. Four studies have specifically explored the reasons physicians would not disclose an error or found disclosure difficult. In all 4 studies, fear of liability was cited by physicians as a significant barrier to disclosure [2,17,19,20]. Physicians in 2 of these studies also worried that disclosing the mistake would cause the patient and family additional, unnecessary distress [2,20].

Physicians uniformly report emotional distress after a medical error, including guilt, shame, self-doubt, or anger at themselves [2,17,18,24]. In addition, many feared damage to their reputation or the anger of the patient or family [2,17].

While these studies convincingly demonstrate a gap between physicians' endorsing the principle of disclosure and their actual disclosure practices, this literature has important limitations. All of these studies assessed the frequency of disclosure through either self-report or response to hypothetical vignettes. Both of these approaches can be affected by social desirability bias, with physicians reporting disclosure more often than it actually occurs because they believe that disclosure is the desired response. Many of the studies also have other significant methodologic limitations, including small sample size [20,24], poor response rates [25], and use of convenience samples or samples from one geographic area [2,20]. Ideally, future research would observe and analyze actual disclosure conversations to understand more about how physicians disclose errors. However, such an approach may not be feasible due to medicolegal concerns about creating permanent records of disclosure conversations for research purposes.

Effect of Disclosure on Malpractice

Physicians consistently identify fear of liability as a major barrier to error disclosure [2,17,19,20]. Unfortunately, no definitive evidence exists on whether disclosure increases or decreases liability exposure. Some worry that making patients aware of an error may increase the likelihood of a suit being filed, citing the Harvard Medical Practice study's findings that only 3% to 5% of patients injured by negligent care actually sue [26]. Proponents of disclosure, however, point to research showing that patients often sue to get more information about their care or because they perceive a "cover-up" [27].

In reviewing the literature on how disclosure affects liability, 3 types of relevant studies were identified: (1) research that reviews claims or interviews claimants to understand their reasons for taking legal action; (2) studies that use hypothetical error vignettes to determine whether disclosure affects the decision to sue; and (3) retrospective analysis of the claims experience of health care institutions with programs supporting open disclosure of errors.

Studies of Claims and Claimants

Research reviewing claims or studying patients who decided to sue indicates that poor communication and nondisclosure are influential but not necessarily decisive factors in a patient's decision to take legal action. In a study of 227 patients or families pursuing malpractice claims in the United Kingdom, the decision to take legal action was primarily influenced by the nature of the original injury and the perception of insensitive handling of the error or poor communication after the event

[28]. While most patients desired a disclosure or apology, only 37% said it would have made a difference in their decision to pursue legal action. A U.S. study of 127 mothers whose infants had experienced permanent perinatal injuries or death found that nondisclosure was influential, but it was not the primary reason they filed malpractice claims [29]. Twenty-four percent of women said they sued because the physician was not completely honest or they perceived a cover-up. However, an equal or greater number identified needing money for long-term care or the advice of someone outside the family as the primary reasons for pursuing a malpractice claim. Even when physicians feel they are communicating openly about adverse events, patients may disagree, a mismatch that can also contribute to patients filing malpractice claims. A survey in Wisconsin found that two thirds of sued physicians believed they had been open and honest with the patient who sued them, while only one third of suing patients agreed that the physician had communicated honestly with them, a belief that influenced the patients' decision to sue [30].

Studies Using Hypothetical Vignettes

The 3 studies that used hypothetical vignettes to assess the effect of disclosure on intent to sue have produced mixed results. A survey of 149 patients in a single clinic found that patients were more likely to sue if the physician did not acknowledge the mistake [5]. This study also demonstrated that the decision to sue is typically multifactorial and primarily influenced by the severity of injury resulting from the error. Another survey conducted in Germany found that while severity of harm most strongly predicted whether respondents thought the physicians should face sanctions (including a lawsuit), the acknowledgment that an error occurred, comprehensive communication about the error, and an apology all decreased the odds that respondents would endorse sanctions [21].

In Mazor's study, 990 patients were presented with 8 hypothetical error vignettes in which the type of error, severity of outcome, and amount of disclosure varied [4]. In this study, disclosure had a statistically significant effect in reducing the likelihood of a patient seeking legal advice in only 1 of the 8 scenarios. The severity of the error's outcome was a much stronger predictor of the likelihood of respondents seeking legal advice than was the nature of the disclosure.

Evaluations of Existing Disclosure Programs

Research on the effectiveness of programs that support open disclosure of errors is sparse. In 1990, the Veterans Affairs (VA) Medical Center in Lexington, KY, instituted a policy of notifying the patient or next of kin if malpractice or substantial error was identified that caused significant harm [31]. This policy emphasized expressing the institution's regret for the harm experienced and providing assistance in filing

claims for compensation. Although this policy might appear to maximize the institution's exposure to malpractice claims, the Lexington VAMC's liability payments did not increase following institution of this policy and remained comparable to other VA facilities. Additional anecdotal evidence is beginning to accumulate from other health care facilities outside the VA, which suggests that enacting more liberal disclosure policies does not have negative consequences and may in fact be beneficial. The University of Michigan Health System recently reported that since adopting a policy of encouraging physicians to disclose errors and apologize, annual attorney fees and legal actions have been reduced by over 50% [32]. Mock jury studies also suggest that juries may award higher punitive damages in cases where they believe error disclosure was inadequate [15,33].

Malpractice insurers are also developing new approaches to disclosing error. COPIC, a large Colorado malpractice insurer, provides its member physicians with training and support in error disclosure. In addition, COPIC actively assists patients who have experienced an unanticipated adverse outcome, including compensation for economic losses. Since December 2001, 453 qualifying incidents have led to 153 patient reimbursements [34]. None of these cases have proceeded to litigation, and the average cost of cases handled through the program is significantly less than cases in which a malpractice claim is filed.

Although the above research suggests that disclosure may have a beneficial effect on the likelihood of litigation, these studies are far from definitive. The studies of factors that influenced litigants' decisions to sue are all retrospective and susceptible to recall biases. In addition, the studies that have used vignettes to measure the impact of disclosure on the likelihood of filing a malpractice claim all suffer from a subtle but potentially important flaw. In these studies, respondents are first told "the truth" about an error and then are presented with different levels of disclosure. In this setting, partial disclosure statements may seem especially troubling to respondents, as such statements stand in stark contrast to what the respondent knows "really happened." In reality, however, patients who have experienced a harmful error may know little or nothing about the events that took place, and therefore may be less troubled by disclosure statements that omniscient observers would know are incomplete.

Ideally, a randomized trial would be conducted to definitively determine whether full disclosure of errors makes patients more or less likely to file a malpractice claim. However, such a trial, which would require assigning patients known to have suffered a harmful error to a "nondisclosure" arm, would be ethically unacceptable. The next best alternative may be studies using historical controls to examine the frequency and outcomes of malpractice claims before and after the institution of disclosure programs.

Finally, while the impact of error disclosure on malpractice is certainly one important outcome, disclosure can also affect other equally important outcomes, such as preserving the patient-physician relationship; providing equitable, prompt compensation and care for those injured by medical error; enhancing public trust in the medical profession; and supporting the emotional health of both patients and physicians. Future research on the impact of disclosure should consider this broad range of outcomes before concluding whether disclosure has an overall positive or negative effect.

Should Disclosure Include an Apology?

Many physicians also wonder whether error disclosure should include an apology and whether apologizing heightens their legal liability. Error disclosure involves both communicating information to patients as well as addressing their upset emotions following errors. An apology can help convey empathy to patients and is desired by many patients in response to an error [35]. Offering an apology to a patient harmed by a medical error is considered by some to be an ethical responsibility of medical professionals [36]. Deciding how to word an apology can be complex, however, and physicians should be aware that the words "I'm sorry" may have many different meanings [37]. When a patient is harmed as a result of a medical error, an apology may be an expression of regret, such as "I'm sorry this happened." An apology of responsibility, by contrast, more explicitly acknowledges the health care provider's role in the patient's injury: "I'm sorry that I (or we) harmed you by our error." No evidence exists regarding whether patients prefer one type of apology over another. For most patients, the perceived sincerity of the apology is more important than the actual words used.

Regardless of whether an apology conveys responsibility or merely regret, physicians often worry that the words "I'm sorry" may be interpreted as an admission of liability [35,38]. Some states have adopted "apology laws" that exempt expressions of regret from being considered an admission of liability [39]. Physicians should be aware, however, that most of these laws (with the exception of Colorado) protect the apology itself but do not protect admissions of liability made elsewhere in the disclosure [35].

While little is known about the impact of apology in error disclosure, considerable research has examined the effect of an apology in other personal injury settings. Most of these studies confirm that apologies have a beneficial impact on the resolution of personal injury claims. In addition, this research highlights how different types of apologies can be more effective in promoting successful resolution of such cases. For example, in one study when a full apology (an apology that expresses regret and accepts responsibility) was offered, 73% of respondents indicated they were likely to accept a settlement offer,

Table. Practical Suggestions for Disclosing Medical Errors to Patients

- 1. Get help.** Physicians receive little training in disclosure and do it infrequently. They may also be dealing with emotional distress of their own following a harmful medical error. Seek assistance and advice from a trusted colleague and institutional risk managers in planning the conversation, communicating with the affected patient and family, and debriefing and evaluating the disclosure process. Many health care organizations now have policies in place to guide the disclosure of medical error and may offer just-in-time coaching to prepare for a potentially difficult communication.
- 2. Plan the disclosure conversation carefully.** A structured approach to discussing a difficult topic will result in better communication. Many of the principles for delivering bad news or discussing unanticipated outcomes of care may be helpful in planning the conversation and anticipating the needs of patients and families affected by medical error. Review what is known about the error and what is still being learned. Pay careful attention to holding the conversation in an appropriate, private setting. Before the conversation, establish who will be present and what their role in the disclosure will be. The attending physician should usually lead the initial disclosure conversation. It may be helpful to include other health care professionals who can share specific information about the error and how recurrences will be prevented [13].
- 3. Assess the patient's knowledge about the error.** Some patients may have witnessed the error, while others may be unaware that an error has occurred. Asking the patient what they already know is a useful starting point for these conversations.
- 4. Provide basic information about the error.** Most patients and families want to know about an error as soon as it is identified. Delaying a conversation may be perceived as "circling the wagons" or attempting to cover up the mistake. The initial conversation should include an objective, jargon-free review of the facts that are known about the error. If further details will be available following analysis of the error, assure the affected patient that this information will be communicated. Do not speculate about what is not known or attribute blame for the error.
- 5. Apologize.** Offer a sincere expression of sorrow and regret for the harm the patient experienced. An apology should not be worded as an attribution or acceptance of blame nor as an admission of liability until all the facts are known about the error. Be prepared for a variety of emotional reactions to an apology, including anger, sadness, or even gratitude and relief [41].
- 6. Plan follow-up.** Explain what is being done to learn more about how the error happened and how recurrences will be prevented. Plan for further communication as more information is available or as the patient or family has more questions. Designate and provide access to a contact person for further communication.
- 7. Offer support and referral as needed.** Some patients and families may wish to seek counseling, social work, or chaplain support following an error. In many cases, patients want to be offered referral to another physician for care or a second opinion following a serious error. This should be arranged as long as it does not compromise the patient's care. Although offers of compensation may be premature in an initial conversation, patients should be reassured that they will not be billed for extra care needed as a result of the error once the institution has agreed.

while only 52% of those who did not receive an apology were willing to. Partial apologies (expressions of regret only) had little effect on willingness to accept an offer, and actually had a negative impact when injury was severe or responsibility for the injury was relatively clear [40].

Practical Suggestions for Communicating About Medical Errors

Research on effective strategies for communicating with patients about harmful medical errors is in its infancy [41]. In addition, most physicians have received little training in the communication skills needed to disclose error to a patient [42]. In the absence of fully validated, evidence-based recommendation for disclosure, how should physicians proceed when deciding whether and how to disclose a harmful error to a patient? Practical suggestions for disclosing medical errors to patients, derived from the literature on "breaking bad news," conflict resolution, and existing disclosure guidelines, are presented in the **Table** [41,43–45]. Most importantly, physicians considering disclosing an error to a patient should seek help from a trusted colleague and from their risk manager to ensure that the disclosure conversation communicates accurate information to the patient in a way that meets the patient's needs without inadvertently creating undue legal liability for the physician.

Conclusions

Few conversations are as challenging for physicians as disclosing a harmful error to a patient. The existing evidence clearly indicates that patients want to be told about harmful errors in their care and suggests that at present such disclosure is uncommon. Less is known about the specific disclosure strategies that best meet patients' needs, whether these strategies are acceptable to physicians, and what impact these disclosure strategies have on important patient outcomes. At present, the public is skeptical that they would be told about harmful errors in their care. The medical profession should take a leading role in conducting research on best practices in disclosure, in developing clear guidelines for error disclosure, and in training its members to communicate effectively and compassionately with patients in the aftermath of harmful medical errors. Such actions would be an important step in restoring public trust in the integrity of the medical profession.

Corresponding author: Thomas H. Gallagher, MD, Univ. of Washington School of Medicine, 4311-11th Ave. NE, Suite 230, Seattle, WA 98105, thomasg@u.washington.edu.

Funding/support: This work was supported by grants from the Agency for Healthcare Research and Quality (#1U18HS1189801, 1K08HS01401201) and the Greenwall Foundation Faculty Scholars in Bioethics Program.

Financial disclosures: None.

Author contributions: conception and design, THG, MHL; analysis and interpretation of data, THG, MHL; drafting of the article, THG, MHL; critical revision of the article, THG, MHL; obtaining of funding, THG.

References

1. Blendon RJ, DesRoches CM, Brodie M, et al. Views of practicing physicians and the public on medical errors. *N Engl J Med* 2002;347:1933–40.
2. Gallagher TH, Waterman AD, Ebers AG, et al. Patients' and physicians' attitudes regarding the disclosure of medical errors. *JAMA* 2003;289:1001–7.
3. Hobgood C, Peck CR, Gilbert B, et al. Medical errors—what and when: what do patients want to know? *Acad Emerg Med* 2002;9:1156–61.
4. Mazor KM, Simon SR, Yood RA, et al. Health plan members' views about disclosure of medical errors. *Ann Intern Med* 2004;140:409–18.
5. Witman AB, Park DM, Hardin SB. How do patients want physicians to handle mistakes? A survey of internal medicine patients in an academic setting. *Arch Intern Med* 1996; 156:2565–9.
6. Ethics manual. Fourth edition. American College of Physicians. *Ann Intern Med* 1998;128:576–94.
7. AHA Management Advisory. Ethical conduct for health care institutions. American Hospital Association. Available at www.hospitalconnect.com/aha/resource_center/resource/resource_ethics.html. Accessed 21 Apr 2005.
8. Banja J. Moral courage in medicine—disclosing medical error. *Bioethics Forum* 2001;17:7–11.
9. Code of medical ethics, current opinions with annotations: including the principles of medical ethics, fundamental elements of the patient-physician relationship and rules of the Council on Ethical and Judicial Affairs. Chicago: American Medical Association; 2004.
10. Hebert PC, Levin AV, Robertson G. Bioethics for clinicians: 23. Disclosure of medical error. *CMAJ* 2001;164:509–13.
11. Smith ML, Forster HP. Morally managing medical mistakes. *Camb Q Healthc Ethics* 2000;9:38–53.
12. Joint Commission on Accreditation of Health Care Organizations. Revisions to joint commission standards in support of patient safety and medical/health care error reduction. Available at www.utmb.edu/patientsafety/JCAHOStandardsRev.PDF. Accessed 21 Apr 2005.
13. O'Connell D, White MK, Platt FW. Disclosing unanticipated outcomes and medical errors. *J Clin Outcomes Manage* 2003; 10:25–9.
14. Lamb RM, Studdert DM, Bohmer RM, et al. Hospital disclosure practices: results of a national survey. *Health Aff (Millwood)* 2003;22:73–83.
15. LeBlang TR, King JL. Tort liability for nondisclosure: the physician's legal obligations to disclose patient illness and injury. *Dick Law Rev* 1984;89:1–52.
16. Kaiser Family Foundation. National survey on consumers' experiences with patient safety and quality information.

- Available at www.kff.org/kaiserpolls/7210.cfm. Accessed 21 Apr 2005.
17. Christensen JF, Levinson W, Dunn PM. The heart of darkness: the impact of perceived mistakes on physicians. *J Gen Intern Med* 1992;7:424-31.
 18. Newman MC. The emotional impact of mistakes on family physicians. *Arch Fam Med* 1996;5:71-5.
 19. Novack DH, Detering BJ, Arnold R, et al. Physicians' attitudes toward using deception to resolve difficult ethical problems. *JAMA* 1989;261:2980-5.
 20. Sweet MP, Bernat JL. A study of the ethical duty of physicians to disclose errors. *J Clin Ethics* 1997;8:341-8.
 21. Schwappach DL, Koeck CM. What makes an error unacceptable? A factorial survey on the disclosure of medical errors. *Int J Qual Health Care* 2004;16:317-26.
 22. Vincent CA, Pincus T, Scurr JH. Patients' experience of surgical accidents. *Qual Health Care* 1993;2:77-82.
 23. Surbone A. Truth telling to the patient. *JAMA* 1992;268:1661-2.
 24. Wu AW, Folkman S, McPhee SJ, Lo B. Do house officers learn from their mistakes? *JAMA* 1991;265:2089-94.
 25. Vincent JL. Information in the ICU: are we being honest with our patients? The results of a European questionnaire. *Intensive Care Med* 1998;24:1251-6.
 26. Studdert DM, Mello MM, Brennan TA. Medical malpractice. *N Engl J Med* 2004;350:283-92.
 27. Kachalia A, Shojania KG, Hofer TP, et al. Does full disclosure of medical errors affect malpractice liability? The jury is still out. *Jt Comm J Qual Saf* 2003;29:503-11.
 28. Vincent C, Young M, Phillips A. Why do people sue doctors? A study of patients and relatives taking legal action. *Lancet* 1994;343:1609-13.
 29. Hickson GB, Clayton EW, Githens PB, Sloan FA. Factors that prompted families to file medical malpractice claims following perinatal injuries. *JAMA* 1992;267:1359-63.
 30. Shapiro RS, Simpson DE, Lawrence SL, et al. A survey of sued and nonsued physicians and suing patients. *Arch Intern Med* 1989;149:2190-6.
 31. Kraman SS, Hamm G. Risk management: extreme honesty may be the best policy. *Ann Intern Med* 1999;131:963-7.
 32. Tanner L. 'Sorry' seen as magic word to avoid suits. *Seattle Post-Intelligencer* 2002 Nov 11.
 33. Popp PL. How will disclosure affect future litigation? *J Health Risk Manag* 2003;23:5-9.
 34. COPIC Insurance Company. COPIC's 3Rs program. A success story. Available at www.callcopic.com/publications/3rs/march_2004.pdf. Accessed 21 Apr 2005.
 35. Cohen JR. Apology and organizations: exploring an example from medical practice. *Fordham Urban Law J* 2000;27:1447-82.
 36. Finkelstein D, Wu AW, Holtzman NA, Smith MK. When a physician harms a patient by a medical error: ethical, legal, and risk-management considerations. *J Clin Ethics* 1997;8:330-5.
 37. Quill TE, Arnold RM, Platt F. "I wish things were different": expressing wishes in response to loss, futility, and unrealistic hopes. *Ann Intern Med* 2001;135:551-5.
 38. Ness G, Cordess C. Promoting patient safety in primary care. Honesty and openness may not be the best policy [letter]. *BMJ* 2002;324:109.
 39. Zimmerman R. Doctors' new tool to fight lawsuits; saying 'I'm sorry.' Malpractice insurers find owning up to errors soothes patient anger. 'The risks are extraordinary'. *J Okla State Med Assoc* 2004;97:245-7.
 40. Robbenolt JK. Apologies and legal settlement: an empirical examination. *Mich Law Rev* 2003;102:460-516.
 41. Fallowfield L, Fleissig A. Communication with patients in the context of medical error. National Patient Safety Agency. Available at http://pcpoh.bham.ac.uk/publichealth/psrp/pdf/fallowfield_communication_final_report.pdf. Accessed 21 Apr 2005.
 42. Goldberg RM, Kuhn G, Andrew LB, Thomas HA Jr. Coping with medical mistakes and errors in judgment. *Ann Emerg Med* 2002;39:287-92.
 43. The Monographs Task Force of the American Society for Healthcare Risk Management. Monograph: disclosure of unanticipated events: the next step in better communication with patients. Chicago: American Society for Healthcare Risk Management of the American Hospital Association; 2003.
 44. Australian Council for Safety and Quality in Health Care. Draft open disclosure standard: a national standard for open communication following an adverse event in health care for public and private hospitals. Available at http://committees.standards.com.au/COMMITTEES/DD-002/R0001/OD_Standard_Version_5-2.pdf. Accessed 21 Apr 2005.
 45. Woods JR Jr, Rozovsky FA. What do I say?: communicating intended or unanticipated outcomes in obstetrics. San Francisco: Jossey-Bass; 2003.

Copyright 2005 by Turner White Communications Inc., Wayne, PA. All rights reserved.