Problematic Medical Errors and Their Implications for Disclosure

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Introduction

For at least the last two decades, ethical commentaries have unanimously insisted upon the health professional's obligation to disclose harm-causing medical errors to the injured party (Smith and Forster, 2000; American Medical Association, 2004; American College of Physicians, 1998; Banja, 2001). A number of recent studies offer a mixed picture as to how well this aspiration towards transparency is succeeding.

On the positive side, various findings indicate widespread support for disclosing harm-causing error, with 81 percent of respondents in one study noting either the existence of an error disclosure policy at their hospital or one in the making (Gallagher et al., 2006a). Another study reported that four of five physician executives surveyed believed that the doctor and hospital owe an injured patient and family an apology (Weber, 2006). In another survey, 98 percent of physicians agreed that serious errors should be disclosed (Gallagher et al., 2006b).

On a less positive side, these data fail to report exactly what is being disclosed to patients or their families who have been harmed by error. None of the studies, for instance, actually observed and reported on real error disclosure conversations, but rather asked health professionals either what they would say if error occurred or recorded how they acted in a simulated situation. Not surprisingly, Lauris Kaldjian (2007) and his colleagues have questioned these self-reports as they ascertained that physicians' self-reported participation in such conversations is far less than one would expect based on the calculated incidence of harm-causing errors. Indeed, Kaldjian's suspicions that physicians do not disclose errors as often as they think they do is borne out by a number of empirical findings by Thomas Gallagher and his colleagues that appeared in 2006. For example, whereas error disclosure

policies commonly require an "explanation of what happened" to the injured party, Gallagher et al. (2006) reported that:

- approximately 25 percent of serious, harm-causing errors remain concealed;
- less than 50 percent of physicians use the word "error" in describing what happened unless they are pressed by the listener;
- only 33 percent of physicians explicitly apologize for a harm-causing error, as in "I am sorry that you were harmed by this error.";
- 60 percent of physicians would be inclined to conceal an error if they believed the listener would not understand the content of the disclosure;
- the less apparent or less obvious the error is to the patient, the more likely information about it will be omitted or concealed.

The objective of this article, however, is to consider a number of cognitive and affective variables that can compromise or obscure a health professional's management of his or her ethical obligation to disclose. What will be discussed is how the more obvious, emotionally-based barriers to physicians' disclosing errors—such as fear of a malpractice suit or professional sanction resulting from disclosure—can also be accompanied by certain *cognitively-based* factors that can exacerbate a physician's hesitation about admitting error, assigning responsibility for it, or managing the content of the subsequent communication. Indeed, certain of these factors will be shown as providing an arguably legitimate warrant for the physician or presumptive error discloser to hesitate over precisely what to say. Three examples of this phenomenon will be offered so as to illustrate how situational variables can obscure even the best intentioned communication aiming at truth and honesty. The paper will conclude with a list of communicational competencies for organizations to consider, so that difficult conversations with patients are factually, empathically, and ethically informed.

Problematic Error Scenarios

Defining Error

Because a health professional is ethically bound to disclose a harm-causing medical error, it is crucial that he or she be able to differentiate an error from a nonerror, such as when a complication or poor outcome uncaused by error occurs. Unfortunately, not only is that discrimination sometimes difficult to make clinically, but it is compounded by the fact that one of the most

familiar definitions of error presently circulating among patient safety personnel is inadequate.

This error definition was originally offered by Lucien Leape (1994, p. 1851) and was subsequently used by the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO). Its most familiar articulation defines error as:

an unintended act, either of omission or commission, or an act that does not achieve its intended outcome (Joint Commission, 2002, p. 339).

The definition emphasizes non-intentionality, either regarding the act itself or its outcome, but its flaws are easily exposed in the following scenario:

Dr. Smith is an excellent surgeon who prepares to do an abdominal operation on Mr. Jones. Mr. Jones has had numerous abdominal operations so Dr. Smith is anticipating a good deal of scarring along with anatomical rearrangement. Despite painstaking care during the surgery, Dr. Smith lacerates Mr. Jones's bowel, causing the need for additional surgery. Did Dr. Smith commit an error?

Notice, as an unintended act (i.e., the laceration) coupled with an unintended outcome (i.e., the need for additional surgery), this scenario would squarely fit the JCAHO's definition. Yet, if a group of veteran surgeons were observing the operation and claimed that Dr. Smith's surgical technique was impeccable despite the bowel laceration, it hardly makes sense or seems fair to call the incident an error.

The problem with a definition of error that focuses on intentionality is that certain acts might be unintended or have unintended consequences but because of factors beyond the actor's control are utterly unavoidable. A bicyclist competing in the Tour de France might not intend to steer his cycle into a pile-up just around the corner but does so because he cannot avoid it. His action is not an error but a mishap that no amount of technical skill could avoid. If the build-up of scar tissue in Mr. Jones's abdomen from previous surgeries dramatically increases the likelihood of a bowel laceration even among the most skillful surgeons, that possibility should be discussed with him prior to surgery. Its eventual occurrence, although lamentable, would then more easily be understood as a foreseeable, surgical complication rather than an unanticipated event that looks suspiciously like it was caused by error.

The importance of these considerations is that an inadequate definition of error can wreak organizational confusion. The risk manager or physician who follows the strictures of the JCAHO definition would understand the lacerated bowel as an error (as well as a punctured lung from the misplacement of a central line, or a lacerated bladder from a repeat C-section). But if the consensus of the medical staff is that error was not

necessarily present but that these outcomes are "foreseeable complications" that can occur even when the standard of care is immaculately followed, then it would be patently unfair for a physician to call a foul on him or herself. Moreover, it would be unprofessional to provide the patient with a false representation of what happened by calling the event an "error."

Did the error cause harm? Will the listener understand?

While the previous scenario raises conceptual questions over whether error actually occurred, other cases will pose different fact situations, such as when everyone agrees that error occurred but no harm resulted; or when harm or injury is obviously present but is not connected to error; or when the error trajectory is so complex that the professional believes the listener will not understand its description. Still other cases will present situations wherein both the determination of error and harm are controversial, such as this one:

We were completing a surgery and were told that the sponge count was correct. Although policy and procedure at our hospital dictates that an x-ray of the surgical site be taken to double check that no foreign bodies are left, our surgeons usually begin closing as soon as they hear the sponge count is correct and before the x-ray is taken. That's what happened here. The surgeon had completely closed, but when the x-ray was taken, it revealed a radio-opaque piece of gauze called a pledget that had mistakenly been left. The surgeon quickly removed the sutures, found and removed the pledget, and took another x-ray. It revealed nothing, so we closed again and the patient did fine. Should we tell the patient about the pledget?"

Situations that present ambiguous, innocuous or correctable errors like this one are common: the patient who receives his hypertensive medication after the nurse realizes that she had given him a vitamin in error, or the nurse who recognizes that the infusion bag she is getting ready to hang contains the wrong medicine. While it remains a matter of considerable debate whether these seemingly benign errors should be communicated to the patient, a much more troubling one is the following:

A delirious patient in great discomfort and in the terminal stages of her cancer is admitted to hospital. She is heavily sedated and has a do-not-attempt-resuscitation order entered on her chart although the family requests she continue to receive fluids. The day following her admission, the patient develops congestive heart failure and dies. It is discovered that a nurse disconnected the patient's IV tubing from the IV pump but forgot to reset the flow meter, resulting in the patient's receiving a massive

influx of fluids causing her heart failure. The error had no effect on the patient's ultimate outcome and, as more than one person involved in the case observed, may have been a "blessing in disguise."

Although I shall argue below that the family should be told about this error, it is easy to imagine a staff's arguing that the error not be mentioned in view of its 1) nil impact on the patient's outcome, 2) how the error might have even been "beneficial" by accelerating the patient's death, and 3) how disclosing the error could cause great emotional pain to the patient's family. Furthermore, some recent research indicates that a physician's belief that the listener(s) will not understand an error disclosure makes it less likely that the error will be disclosed (Gallagher et al., 2006b). Given the scenario immediately above, it is easy to imagine a health professional convincing him or herself that the family will not understand any of the mitigating circumstances surrounding the error but will only hear the word "error" and jump to troublesome conclusions about what happened.

Whose Fault?

For at least two decades, errorologists have recognized how catastrophic accidents such as Bhopal, Chernobyl, and the Challenger Space Shuttle reveal multiple errors being committed by multiple persons (Perrow, 1999)—just so in medicine. Hospitals have long recognized the multifaceted nature of harm-causing error and implemented numerous defense layers of checks and counter-checks, especially with medication orders, to insure that errors do not reach the patient (Winterstein, 2004). The phenomenon of multiple persons committing multiple mistakes that coalesce into a harm-causing error "trajectory" raises the possibility, however, that a physician might be physically or decisionally *removed* from much of that trajectory but nevertheless be *organizationally required* to disclose the error to the patient or family.

A 1997 study by Matthew Sweet and James Bernat found that physicians were more willing to discuss the errors they made than they were discussing errors made by their colleagues (Sweet & Bernat, 1997). A more recent study by David Chan (2005) and his colleagues posed the following scenario to surgeons:

You performed a splenectomy on Mr. Smith, a 60-year-old obese gentleman. On post-operative day one, Mr. Smith develops a low-grade fever and a dry cough. A chest x-ray is ordered and...shows a surgical sponge in the left upper quadrant of the abdomen. You remember that the sponge count was correct at the end of the operation. However, you also remember that you were significantly behind schedule that day, and do

not recall performing your usual final check of the surgical site for foreign bodies (p. 853).

The study's methodology had the surgeons "explain what happened" to a standardized patient. The conversations were either observed face-to-face or recorded on videotape. Forty-three percent would not say "error" in their initial communication but would rather use words like "complication" or "problem," or would say nothing to the patient suggesting that what happened was preventable. Only half the respondents took responsibility for this error, while a number of the remaining 50 percent *explicitly blamed the nursing staff* (Chan et al., 2005, pp. 854-855).

Taken together, these data suggest that a physician's perception of the prominence of his or her contribution to the error trajectory along with its ultimate harm can influence the scope and content of his or her error communication considerably. While any physician might be inhibited about disclosing error from fear of its triggering unpleasant consequences, the feeling of his or her "taking the rap" for another professional's mistake—or simply feeling uncomfortable in discussing a situation about which he or she lacks direct knowledge—can affect the physician's vocabulary and willingness to be forthcoming about what happened.

Error Disclosure Competencies

The above suggests that the occasional tendency of physicians to hesitate over frankly or fully disclosing medical error does not necessarily represent moral turpitude but may derive from an epistemology that is compromised by an inadequate lexicon, causal uncertainty, and an ill-defined role responsibility. What follows are some suggestions that professionals who are involved in error reporting and disclosure might consider.

#1: A better definition of error.

Because all healthcare organizations should evolve error disclosure policies, a robust definition of error is necessary. As noted above, error definitions that rely on the intentionality of the agent or the outcome of his or her conduct are problematic. A better definition of error is offered by Virginia Sharpe who notes that "if harm results from one's legitimately risky professional conduct, one's blameworthiness depends upon a number of factors related to the reasonable standard of care due or owed" and that "[w]hen a mistake in reasoning, judgment, or action does involve erring from standards of due care...it is a genuine error" (Sharpe, 2000, pp. 184-185). Albert Wu has offered a similar definition by way of "an act or an

omission with potentially negative consequences for the patient that would have been judged wrong by skilled and knowledgeable peers at the time it occurred" (Wu, 2004, p. 136).

Positioning the standard of care (or the determination of wrong by skilled and knowledgeable peers) at the definitional core of error replaces the vagaries of intentionality and the unpredictability of an act's outcome. Thus, a crucial question bearing on error in the lacerated bowel case discussed above was not the misfortune of the patient's bowel injury but whether or not the laceration was connected to the attending physician's having departed from the standard of care in a way no reasonably practicing physician should. Consequently, a fundamental competency in disclosing error requires organizations and their physicians to have mechanisms whereby the standard of care—assuming there is one—could be rapidly and decisively established and applied to the situation at hand.

Problematic instances as to whether error did or did not occur might most easily be settled by an expert consultation or convening a small group of specialists as soon as possible following the mishap. Bryan Liang, for instance, has argued for the implementation of an investigator/investigation team that, when error is suspected, would seal off the site and pathway of care to facilitate a detailed investigation (Liang, 2004, p. 75). In tandem with the investigation, Liang further recommends a disclosure team headed by a patient care liaison who communicates the findings of the investigation to the family. Importantly, the liaison should meet with the family or patient as soon as possible—even before the investigation team has turned up anything conclusive—and inform the patient/family that 1) an investigation is underway, 2) the patient/family will be kept informed, 3) they should feel free to contact the liaison at any time with questions or suggestions, and 4) any additional care access or support the family needs will be made reasonably available (Liang, 2004, pp. 77-78).

If the disclosure team is to be guided by those ethical standards and motives that derive from patient-focused care, the next suggestion might assist in optimally realizing that obligation.

#2. A deeper appreciation of what patients are owed in the event of error.

If the standard of care characterizes what the reasonably practicing professional ordinarily does in a given situation, then it seems entirely correct to assert that *all patients are owed that standard*. Health professionals explicitly recognize this. To hold that patients are owed less would be tantamount to saying that it is permissible to treat them without regard for their safety or welfare—a holding that, in addition to being

absurd, would render medical licenses obsolete and allow quacks to work alongside trained and competent practitioners.

Consequently, if health professionals traditionally extend a public promise that the care they provide patients will accord with the professional standard (and that error connotes a failure to accomplish just that), then health professionals who allow an error to reach a patient must admit they have committed a promissory breach and that they are therefore duty bound to provide a remedy (Banja, 2005, pp. 103-118). While that admission might be emotionally wrenching, a skillful execution of that duty can have decidedly favorable effects on the listener, as illustrated in the next consideration.

#3: Maintaining trust and integrity.

Among organizations that competently manage error and its disclosure, an understanding of error as a promissory breach should deeply affect their relational attitudes and feelings towards patients who have experienced error. Such an organization, for example, will be more rather than less inclined to encourage the attending surgeon to disclose incidents like the pledget mishap described above. Although this error was relatively innocuous, the organization would remind the physician that the case required a second x-ray, for which the patient might be billed a co-pay, and that the surgery lasted longer than it should have.

More importantly, however, the organization will have the surgeon consider the risk of the patient's learning about the pledget incident from someone not immediately involved in the event, such as the patient's specialty care or primary care physician. This individual might have access to the surgical record at some future date, read the documentation of the pledget incident, and represent the incident to the patient in a less than accurate or felicitous way. Rather than leave the possibility of the patient's learning about the pledget to chance, the thoughtful organization and its staff physicians will recommend that the attending surgeon explain what happened to the patient, note how adherence to standard procedure exposed the error, and emphasize that no harm occurred nor is any to be expected. It would also be worth considering whether to delete the charges for the second x-ray from the patient's bill.

The organization will be especially aware of how such a conversation, despite the innocuous nature of the alleged error, will still be difficult or uncomfortable for certain physicians. Nevertheless, organizations should make an effort to impress upon the staff how the story they tell, whether it involves a benign or catastrophic error, will be interpreted by the listener as a reflection of the integrity and trustworthiness of the storyteller and the

institution he or she represents. It is virtually impossible for a listener to think well of the physician whose error explanation comes across as obfuscatory, evasive, distant, or dismissive of the patient's suffering (Hickson et al., 1992). Still, it can be immensely difficult for anyone to be empathic when he or she fears that a virtuous act might be met with a severe penalty. The possibility that no good deed goes unpunished invites a fourth competency.

#4: Support and empathy for the physician and the patient.

A crucial organizational consideration in developing a patient-centered approach to disclosing errors is enabling the attending physician as error discloser to feel reasonably supported and assisted in these communications. Indeed, at least one commentator has argued that if the attending physician was considerably involved in the error, he or she should not initially disclose it in view of the risk of externalizing blame or failing to be empathic, owing to the psychological trauma resulting from the error (Liang, 2004, p. 75). Nevertheless, a recent study of risk managers found 98 percent of respondents favoring the presence of the attending physician (Gallagher et al, 2006a). Other studies have noted that the attending physician is usually most knowledgeable about what occurred, is best positioned to represent the integrity of the institution, and may also be continuing to take care of the patient in the aftermath of the error (Flynn, 2002). In any event, hospitals should always offer a resource to the error discloser by way of a chaplain, psychologist, counselor, or fellow physician who is adept at empathic communications, and who can help the primary discloser manage the conversation in a way that conveys the message truthfully and compassionately. Also, given the fact that most accidents are the result of multiple mistakes made by multiple people, the error disclosure should admit collective or institutional responsibility for the injury whenever appropriate rather than blame a single person (Leape, 1994; Flynn, 2002).

This kind of practical as well as ideological support can be invaluable in dreadful situations like disclosing the fluid influx error. Disclosure of this error might be a wrenching experience for all parties. Indeed, the possibility that the patient's family would never learn of it on their own or would have a difficult time understanding what happened is very real and perhaps increases the temptation to conceal it.

Nevertheless, the patient whose death was hastened by error sustained an injustice, and many clinicians might argue that death from congestive heart failure is hardly a blessing. Every organization, therefore, should take steps in ensuring that the physician's understanding of error includes an

appreciation of how patients or their families often feel enraged or betrayed upon finding out that error occurred but was minimized or concealed from them. Here the physician must especially be aware that his or her clinically driven understanding of what happened—whether it involves an error having no impact on the patient's outcome or a nonerror associated with an adverse outcome—can be quite different from the patient's or the family's interpretation, which will largely be affected by the existential experience of suffering (Halpern, 2001). Physicians should particularly monitor the temptation to rationalize, such as in thinking that the patient or family will not understand the content of the disclosure so that concealing the error seems warranted. Still, these arguments can remain a hard sell to the physician, who understands his or her liability to be particularly exposed in disclosing any kind of error—a point that allows a concluding remark.

Conclusion

This article was stimulated by the possibility that a healthcare organization's commitment to frank and honest disclosures of medical error can be compromised by a much more complex perception of medical mishaps among its physician staff—a perception that is marked by a mix of cognitive as well as highly emotional factors that often recommend a very conservative approach to the physician's error communications. Indeed, some commentators have predicted that the growing trend among states to pass legislation that mandates error reporting will have an adverse rather than positive effect on patient safety and that mandatory reporting will erode rather than enhance error disclosures (Weissman, 2005). The physician, for example, who knows that all errors reported to risk management at her hospital will then be reported to the State Department of Health, which can in turn decide to launch a formal investigation of what happened, might be doubly hesitant about reporting a mishap to risk management, much less disclose it to the patient.

If frankly truthful discussions involving error are ever going to occur consistently, it might well be that our current fault-based malpractice model, which usually targets physicians as principal defendants, should be overhauled. Much discussion has centered on enterprise liability or no-fault models wherein, respectively, the physician's employing organization would be the defendant in a malpractice action or where compensation would be made to the harmed party without an admission of fault (Abraham, 1994; Studdert & Brennan, 2001; Bovbjerg & Sloan, 1998). At least one malpractice carrier has instituted a program whereby injured patients receive reimbursement for economic loss such that the payment does not trigger a

report to the National Practitioner Data Bank, which chronicles a physician's experience with malpractice events resulting in a settlement or jury award, or with licensure sanctions (COPIC, 2008).

While no disclosure of medical error is currently without legal risk, it is important for organizations to recognize that physicians' perspectives on medical error are often penetrated and complicated by a host of cognitive and emotional variables that can affect their perception and articulation of what happened. The style and content of that articulation, however, will inevitably affect the listener who is ultimately owed a respectful and truthful account. A thoughtful, patient-centered approach to error disclosure (or to an unanticipated outcome not caused by error) should appreciate all of these epistemic variables and empathically support both the patients who are exposed to these uncomfortable communications and the physicians who are charged with their telling.

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