Patient and Family Involvement

Disclosing Errors to Patients: Perspectives of Registered Nurses

Sarah E. Shannon, Ph.D., R.N.; Mary Beth Foglia, Ph.D., M.N., M.A., R.N.; Mary Hardy, M.A., R.N.; Thomas H. Gallagher, M.D.

Disclosure of medical errors has been conceptualized as a sensitive interaction that occurs between the physician and patient, with most research to date focusing on this dyad.[1,2] Yet, health care is a complex enterprise delivered by interprofessional teams, in which nurses share in the culpability for errors but also potentially play a vital role in promoting effective communication with patients about errors. Disclosure of harmful medical errors to patients is strongly endorsed by patients and is advocated by the codes of ethics for all health care professionals and the organizations they work within.[3–12] Yet, recent studies indicate that disclosure occurs for only about 30% of patients who experience a harmful error.[13–15] The consequences of failed disclosure include decreased patient trust and satisfaction, lower patient perceptions of the quality of care,[7,8,12,16] and for professionals, a dissonance between one's actual clinical practice and one's spoken professional values.[17]

Registered nurses (R.N.s), like other staff, are profoundly influenced by the organizations in which they are employed. As employees that account for 35% of the wage and salary positions in health care organizations nationally,[18] nurses have a contractual obligation to follow the rules and mores of these organizations. Problems arise, however, when professional values conflict with formal or informal organizational policies or practices. The report *Keeping Patients Safe: Transforming the Work Environment of Nurses*[19] and others have emphasized the critical importance of the organizational environment on transparency surrounding medical errors, including disclosure.[20–24]

This gap between expectations that errors be disclosed to patients and current clinical practice may stem partly from the near-total lack of information about how nurses approach and experience disclosure. In this study we explored staff nurses' perspectives on disclosure of medical errors to patients and characterized their perceptions of the formal and informal organizational factors that influence disclosure of medical errors.

Article-at-a-Glance

Background: Disclosure of medical errors has been conceptualized as occurring primarily in the physician-patient dyad. Yet, health care is delivered by interprofessional teams, in which nurses share in the culpability for errors, and hence, in responsibility for disclosure. This study explored nurses' perspectives on disclosure of errors to patients and the organizational factors that influence disclosure.

Methods: Between October 2004 and December 2005, 11 focus groups were conducted with 96 registered nurses practicing in one of four health care organizations in the Puget Sound region of Washington State. Focus groups were analyzed using qualitative content analysis.

Findings: Nurses reported routinely independently disclosing nursing errors that did not involve serious harm, but felt the attending physician should lead disclosures when patient harm had occurred or when errors involved the team. Nurses usually were not involved in the error disclosure discussion among the team to plan for the disclosure or in the actual disclosure, leading to ethically compromising situations in nurses' communication with patients and families. Awareness of existing error disclosure policies was low. Nonetheless, these nurses felt that hospital policies that fostered a collaborative process would be helpful. Nurse managers played a key role in creating a culture of transparency and in being a resource for error disclosures.

Discussion: Nurses conceived of the disclosure process as a team event occurring in the context of a complex health care system rather than as a physician-patient conversation. Nurses felt excluded from these discussions, resulting in their use of ethically questionable communication strategies. The findings underscore the need for organizations to adopt a team disclosure process. Health care organizations that integrate the entire health care team into the disclosure process will likely improve the quality of error disclosure.

Table 1. Characteristics of the 11 Focus Groups by Setting*			
Setting	**No. of R.N. Participants**	**Focus Group**	**Type of Nursing Practice**
A	31 (Range, 9–12)	1	Perioperative service
		2	Medical-surgical services
		3	Intensive care service and emergency services
B	15 (Range, 7–8)	4	Mixed, including day surgery, procedures, inpatient telemetry, and step-down intensive care
		5	Outpatient, including day surgery, home health, and primary care clinics
C	28 (Range, 9–10)	6	Mixed, including medical-surgical, intensive care, and primary and specialty care clinics
		7	Mixed, including medical-surgical, intensive care, inpatient mental health, and primary and specialty care clinics
		8	Mixed, including medical-surgical, intensive care, and skilled nursing
D	22 (Range, 4–10)	9	Medical-surgical, including telemetry
		10	Hematology and oncology inpatient
		11	Intensive care services

* R.N., registered nurse.

Methods

Design and Sample

We conducted 11 focus groups with R.N.s currently practicing in one of four organizational settings in the greater Puget Sound area of the northwestern United States between October 2004 and December 2005. The purpose of the focus groups was to explore staff nurses' experiences with disclosure of medical errors to patients and/or their families. Two of the four participating organizational settings are large, urban, university-affiliated teaching hospitals. One also has a university affiliation and teaching mission and is part of an integrated health care network with facilities throughout the United States. The fourth facility is a consumer-governed health care cooperative. Two settings provide tertiary care services, and one is a regional trauma provider. All of the participating organizations had a formal policy related to disclosure of medical errors consistent with Joint Commission standards at the time of data collection.[25]

Focus groups were recruited to broadly represent the different types of care offered by these organizations (Table 1, above). Whenever possible, participants for a particular focus group were recruited from the same or similar nursing care units, such as outpatient services, perioperative areas, intensive care areas, or general medical and surgical care floors, to maximize similarities in the care delivered. Of the 11 focus groups, 7 were successfully stratified, whereas 4 had participants from mixed-care delivery areas. Supervisors were excluded from participating, except for 1 group, in which a mid-level supervisor was inadvertently included. Three focus groups were completed in each hospital, except for one, in which two groups were conducted.

Focus group participants were recruited using a variety of methods. At each site, nursing leadership provided entrée to unit nurse managers or key personnel (that is, nurse recruiter or patient safety officer) who distributed electronic or hard-copy study flyers to staff inviting participation, announced the study at staff meetings, or allowed study personnel to make announcements. Finally, some participants were referred to study personnel by other participants. All focus groups were provided with food and beverages. Nurses who participated during their regular work hours did not receive an honorarium; those who participated during non-paid time received a $40 honorarium. The University of Washington's Human Subjects

Division and each of the study sites approved all study procedures before data collection.

DATA COLLECTION AND ANALYSIS

Focus groups were moderated by study personnel who were R.N.s with academic training in bioethics and were skilled in qualitative interview techniques [M.H., M.B.F., S.E.S]. We used a semistructured interview with three segments. We developed the interview guide on the basis of previous research with physicians, patients, and risk managers.[7,21] First, open-ended queries focused on participants' personal experiences, such as, "We'd like you to reflect on what you remember about a serious error that occurred. What was communicated about the error among the team? To the patient?" Participants were provided with the Institute of Medicine's definition of medical error: "The failure of a planned action to be completed as intended or the use of a wrong plan to achieve an aim."[26(p. 4)] The second interview segment involved discussion of a standardized vignette on insulin overdose, as provided elsewhere[27]. In the final segment, focus groups were asked to reflect on the professional and organizational culture and communication surrounding error disclosure in their organization with queries such as, "Do you know if there is a current policy at this institution on the disclosure of errors to patients?" "What is the general attitude about the occurrence of errors at this institution?" "Some people have described a culture of silence in health care. What do you think about this?" Data from the first and third segments were included in the analysis.

Focus groups, which lasted 90 minutes, were tape-recorded and transcribed verbatim. Two of the investigators [S.E.S., M.H.] used a conventional approach to content analysis to create a unique coding scheme.[28] A third investigator [M.B.F.] reviewed a subset of data to clarify and refine codes. Two of the investigators [M.H., S.E.S.] then separately coded all data and resolved all coding differences to achieve 100% consensus. Final codes were entered into a qualitative data analysis software package (Atlas-Ti, Berlin). The sampling plan was successful in achieving thematic saturation.

Findings

DESCRIPTION OF SAMPLE

Ninety-six R.N.s participated in one of the 11 focus groups (Table 2, right). The majority were women, with an average of nearly 16 years of nursing experience. The ethnicity of participants reflected the geographic region. A little more than one third practiced in medical-surgical acute care settings (37.5%), and more than one fourth practiced in emergency or intensive

Table 2. Characteristics of Registered Nurse Focus Group Participants ($N = 96$)*		
Characteristic	**Mean (S.D.)**	**% (*n*)**
Age, years	41.5 (10.9)	
Nursing Experience, years	15.5 (11.4)	
Female		86.5% (83)
Ethnicity		
Caucasian		72.3 (68)
Asian/Pacific Islander		18.1 (17)
African-American		6.4 (6)
Hispanic		2.1 (2)
Native American		1.1 (1)
Practice Setting		
Med-Surg		37.5 (36)
ICU/ER		28.1 (27)
Perioperative		16.7 (16)
Outpatient/Home Care		12.5 (12)
Mental Health		3.1 (3)
Long Term Care		2.1 (2)
Highest Nursing Education		
Diploma		3.1 (3)
Associate		16.7 (16)
Baccalaureate		70.8 (68)
Masters and Above		9.3 (9)

* S.D., standard deviation; ICU, intensive care unit; ER, emergency room.

care settings (28.1%). The majority had baccalaureate nursing degrees (70.8%), in part reflecting the university affiliation of several of the sites.

Nurses' Perspectives on Disclosure of Errors to Patients and Families

WHO SHOULD TELL THE PATIENT?

Nurses reported routinely disclosing nursing errors, which they defined as errors that were within the control or accountability of the nurse, to their patients. Examples included late or missed medications or treatments (for example, dressing changes), failures in coordination of care (patient admitted without the receiving nurse being notified), or communication failures in nurse-to-nurse handoffs: "If I made a mistake, then it would be my responsibility to tell them [patient and/or family]."

Nurses were reticent, however, to independently disclose errors that involved serious harm or actions of other members of the health care team. In these situations, participants agreed that the disclosure responsibility fell primarily to the patient's attending physician. Yet, even though the nurses expected the

physician to lead the disclosure process for these events, they envisioned a shared approach to error disclosure. Nurses' desire to participate in the disclosure process partly represented a desire to communicate directly with the patient about nursing's role in the event but also reflected concern that if they were not present with the physician during the disclosure they might be blamed for the event:

> And the physician is the person who went in and spoke with the patient but presented in such a way that it was the nurse's fault all the way—all the way. Nursing really didn't have an opportunity to go in and kind of set the tone or explain, or in any way try and take accountability. . .

Nurses acknowledged that in reality they might not always be present for disclosures because of the nature of their work schedules. They identified their nurse managers and other supervisors as appropriate substitutes for their presence.

IT'S LIKE WALKING ON EGGSHELLS

For many participants, the vision of a process where the team collaborated to plan and implement a disclosure was far removed from current reality. More common was a near total lack of communication among the health care team following harmful errors:

> Suppose that a mistake was done yesterday and we work together again today? They [the physician team] wouldn't say what happened. And you'll be working tomorrow— never brought up again.

This lack of team communication around errors and the resulting disclosure breakdowns led to an awkward time between when an error happened and when disclosure occurred that nurses described as "walking on eggshells." Nurses reported wanting to be involved in discussions among the team during this predisclosure period partly "as a professional courtesy" and partly to allow them to communicate more honestly with patients before and after the disclosure occurred.

During the predisclosure period, the medical team could avoid the patient and family until they had made a decision about whether, and what, to disclose. Nurses, however, continued to provide hands-on care, with patients and families asking difficult questions, which could not be avoided. Nurses reported being put in ethically compromising situations when they were not informed about what would be, had been, or had not been disclosed to patients. These nurses advised, "You don't put yourself in a place where you have to lie to the patient." They recommended neutral but evasive comments such as, "I wasn't

there." They suggested stalling strategies such as encouraging families to write down their questions or offering to set up a meeting with the physician team. One nurse discovered that the wrong patient had been taken for a procedure involving barium. She quickly called the lab and stopped the procedure. However, when the patient returned to the floor she resorted to silence:

> I don't know what they told him down in the lab and it was kind of awkward and uncomfortable when he returned because I didn't know if I should be apologizing that that had happened, or if I should be just pretending like, 'Well, the doctors decided not to do that [procedure].' I just wasn't going to lie to him, but I didn't know what he had been told and there was no communication between us [the health care team] of what he knew. . .

When nurses became concerned that others seemed reluctant to disclose errors, they used multiple strategies to encourage disclosure, including direct confrontation in the form of questioning the physician, or indirect approaches, such as coaching patients or families to confront team members about an error:

> I would have a very difficult time and I'd confront the physicians and go to the family and say, 'You need to go to them (about) what happened. Ask questions.' But I'd really confront the team and say, 'I'm aware this happened, at least the way it's charted, that's what happened. What are we going to do about it?'"

When disclosure still was not forthcoming, nurses turned to multiple different resources, including attending physicians, nurse managers, nursing or hospital administrators, quality assurance officers, or the hospital's ethics committee.

POLICIES MIGHT HELP

Although each of the four organizations in which study participants worked had formal policies related to disclosure of medical errors, many nurses in these 11 focus groups were unaware of the existence or contents of these policies. Nurses observed that their organizations had innumerable policies and that it was impractical for them to know the specific content of each. Other nurses were skeptical about the influence of formal policies on disclosure practices, in part because the issue of whether to disclose was perceived as dependent on contextual factors and therefore was not amenable to clarification through a detailed procedure. Finally, nurses noted that the simple existence of a policy did not ensure that appropriate disclosure

practices would follow: "If staff want to hide an error, the nuances of policy will allow them to justify it in their minds and they just won't tell anybody."

In spite of a general lack of knowledge of their sites' disclosure policy, some nurses thought that organizational policies could promote more transparent practices if they provide a framework and guidelines for error disclosure (that is, as opposed to a detailed, step-by-step procedure) that include a process that promotes direct communication between nurses and physicians involved in a specific event. Disclosure policies that articulate a role for nurses were perceived by participants to provide them with the authority to proactively initiate a team process for planning and conducting the disclosure. They suggested that this authority was particularly important in situations where disclosure to the patient was contested (for example, disagreement among members of the health care team) or in the predisclosure period, when the patient or family were asking the nurse probing questions:

> I think we need a process of how to address concerns amongst the team…Like say there was something funny going on in the OR and your patient comes out. If you had a policy of saying, 'I would like to call a meeting with the team, including the doctors, because the family is asking me a lot of uncomfortable questions.'

It All Depends on Your Nurse Manager

Participants across all focus groups emphasized the pivotal role of the unit's nurse manager on disclosure practices among nursing staff. These nurses often discussed reporting and disclosing as components of a single integrated process rather than as separate or discrete practices. Transparency began with revealing the error to one's supervisor, nursing colleagues, and the patient's physician, often involving formal reporting followed by disclosure to the patient. When frontline managers approached errors from a systems perspective rather than as an individual failure, these focus group participants were not reticent to reveal their errors:

> I wouldn't have trouble going to my charge nurse and saying that [an error] has happened because anytime I've seen that happen [to someone else] or it's happened to me…they've been very supportive. They have an attitude of this has already happened so now we just need to follow up and figure out where to go from here. It's never, 'This is your fault and you should have known better', and that kind of thing. It's more like, 'This could happen to anybody. We've all made errors'. . ."

Conversely, nurses who believed that their nurse managers had unfairly blamed or shamed individual staff nurses regarding errors were ambivalent about revealing future errors. In one focus group, participants recounted a situation in which a nurse was admonished for disclosing an error to a patient, leaving the participants with the belief that nurses were being discouraged from acting on their moral duty to tell patients the truth:

> She actually got a big lecture saying, 'You always run it by somebody before you disclose it to the families, because bedside nurses are not trained to discern litigiousness.' . . . She felt like she did the right thing but was being told, 'Don't do that again.'

Nurse managers provided instrumental support for disclosure, including accompanying staff nurses when they reported errors to their physician colleagues or disclosed errors to patients or families. Nurse managers also mentored staff nurses in the process of error disclosure, often by taking the lead and allowing the nurse to observe a skillful disclosure. Participants noted that nurse managers can positively influence disclosure practices by linking practice with explicit professional values and ethical standards: "Reporting and disclosing to patients is an integrity thing, and that's communicated by our nurse manager."

Discussion

Closing the gap between expectations for disclosure and current practice requires understanding how all members of the health care team approach the disclosure process. Studies have shown that physicians endorse the concept of disclosing harmful errors to patients yet struggle to turn this principle into practice.[7,12–14,29] However, little is known about nurses' attitudes toward and experience with disclosure. Research on the related topic of reporting adverse events and errors to health care organizations showed that physicians and nurses believe that errors should be reported but describe numerous barriers, including time, lack of knowledge, and not being sure of what to report.[21] Our study, the first to systematically explore nurses' attitudes toward and experiences with error disclosure to patients, highlights that nurses routinely independently disclose nursing errors that result in no or minor harm but face challenges in interprofessional communication around more serious or team errors and error disclosure.

Nurses across the four organizations were not integrated into the routine communication that occurred among the medical team surrounding error disclosure. These nurses reported not knowing if an error had been disclosed and what had been

explained to the patient about the error. Breakdowns in disclosure planning led to nurses sharing inaccurate, incomplete, or ill-timed information with patients and families or relying on ethically problematic strategies such as avoidance, indirect answers, or occasionally deception to negotiate patients' and families' valid questions about errors. Thus, excluding nurses from the disclosure process can severely diminish the quality of disclosure experienced by patients and families.

This failure to integrate nurses into the disclosure planning and execution also creates conditions for moral distress among nurses or the emotional or physical suffering that is experienced when constraints prevent one from a course of action one believes is morally right.[30] These constraints are often external, such as lacking the professional or organizational power or authority to act in the preferred ethical manner.[31] Hamric and Blackhall found that nurses reported higher levels of moral distress and lower perceptions of collaboration around the ethical environment of the intensive care environment than their physician colleagues.[32] Nurses in our study also reported low levels of collaboration and communication around error disclosure with the physician team. High levels of moral distress among nurses not only are worrisome in their own right but also are associated with increased job dissatisfaction and job turnover among nurses.[33,34]

Although The Joint Commission requires health care organizations to have policies for disclosing unanticipated outcomes to patients,[35] our findings suggest that such policies may be having little impact on the actual disclosure process. A limited effect from a formal policy aligns with findings that error prevention depends on both cultural as well as structural (for example, policy) changes in the organization of care delivery.[36] Organizational culture is a reflection of collective values and the unwritten code of conduct about what is permissible and what is forbidden.[37,38] Although there is near unanimity that culture change around transparency is critical to patient safety,[39] the challenges of effecting culture change may lead some organizations to rely too heavily on policy to achieve new or innovative disclosure practices.

In this study, nurses perceived that a disclosure policy could be useful if it addressed aspects of the underlying organizational culture that curtail open communication, such as hierarchical relationships between physicians and other health care professionals. A disclosure policy can provide nurses and other nonphysicians with the formal organizational authority to ensure a more collaborative and transparent approach to error disclosure, analogous to the role ethics consultation policies now play within organizations. National standards recommend policies that ensure open access to clinical ethics consultation by nurses and other nonphysicians, for example, by avoiding the unintendedly chilling effect of a requirement to notify the attending physician of the ethics consult.[40-42] In a study of nurses' use of ethics consultation, Gordon and Hamric concluded that to be effective policies must address the power structure within the organizational environment.[42] Therefore, organizations' error disclosure policies should seek to foster an environment of psychological safety in which active questioning and participation is encouraged irrespective of one's status within the organizational hierarchy.[43]

Another important finding is that nurse managers play a pivotal role in error disclosure, as underscored in the Institute of Medicine report *Keeping Patients Safe.*[19] When nurse managers responded to errors from a systems perspective, staff nurses were willing to report their errors, thus beginning a cascade of transparency that culminated with disclosure.[44] Nurse managers frequently coordinated the organizational response to the error, including contacting risk management, meeting with the patient and family, and assuring adherence to policy. Nurse managers also provided just-in-time coaching for clinicians involved in errors, helping them navigate both the emotional and practical aspects of error disclosure. Yet, readily available training in error disclosure skills specifically, and patient safety generally, is lacking for nurse managers, as it is for physicians.[17,45] Our findings point to the importance of providing nurse managers with formal training as disclosure coaches to ensure they are knowledgeable resources.

This study has several important limitations. We used a convenience sample of R.N.s in a single geographical region, which may have resulted in a bias toward nurses who were more interested in disclosure of errors to patients. Second, the focus groups did not include the perspectives of senior or middle managers. Excluding managers may have encouraged more open communication about the role of the nurse manager and organizational culture on disclosure practices than if management representatives had been present. Third, the organizational settings of the focus groups were all urban settings with some teaching affiliation, making it difficult to generalize to community hospitals. However, comparability across settings within this study was consistent with the goal of developing an understanding of nurses' perspectives regarding error disclosure in complex care settings.

Recommendations

We have two key recommendations based on this study's findings. First, organizations should create error disclosure policies

that address aspects of the organizational culture that curtail sound disclosure practices. Specifically, disclosure policies should create a mechanism by which nurses and others can participate in and raise concerns about the disclosure process similar to how ethics consultation policies enable clinicians to raise questions about ethical issues. These policies must be unambiguously supported by all levels of the organization's management to ensure that members with less power within a health care team are able to openly and safely raise concerns about disclosure issues.

Our second recommendation addresses the key finding that nurse managers are currently acting as de facto disclosure coaches for staff nurses and possibly others. Senior management should formally support this role by providing nurse managers with the training necessary to facilitate competent, team-based error disclosure to patients. Ample evidence suggests that acquiring these skills requires the hands-on practice that occurs in simulation training.[46,47] Ideally, this training could occur as part of an interdisciplinary experience to foster a team approach to error disclosure.[48] Given the pivotal role played by nurse managers in fostering a culture of transparency around error disclosure, the organizational return on an investment in training them to be skilled disclosure coaches is likely to be significant and enduring.

Conclusion

Our findings underscore the need for organizations to adopt a team disclosure process. The concept of team disclosure of medical errors is relatively new and presents challenges but also opportunities. An effective team error disclosure process can be an honest exchange of information that promotes emotional healing for both the patient and members of the health care team.[1,17] A model of team disclosure needs to focus on reducing miscommunications in both the predisclosure and disclosure phases by making sure that all members of the team have been informed about what occurred, what patients have been told, and when patients will receive further information and have been provided assistance with handling patients' emotional reactions during and after the actual disclosure. Our study suggests that organizations that develop a cadre of nurse managers with expertise in disclosure and that create organizational policies encouraging interprofessional collaboration in the disclosure process are likely to be in the vanguard of closing the gap between patients' expectations that harmful errors will be disclosed to them and current clinical practice. **J**

Sarah E. Shannon, Ph.D., R.N., is Vice Associate Dean for Academic Services, School of Nursing; and Associate Professor, Biobehavioral Nursing and Health Systems, University of Washington, Seattle. **Mary Beth Foglia, Ph.D., M.N., M.A., R.N.,** is Health Systems Specialist, Preventive Ethics, and Health Care Ethics Consultant, National Center for Ethics in Health Care, Veterans Health Administration; and Affiliate, Departments of Bioethics and Humanities and School of Public Health and Community Medicine, University of Washington. **Mary Hardy, M.A., R.N.,** is Clinician II, Porter Medical Intensive Care Unit, University of Virginia Health System, Charlottesville. **Thomas H. Gallagher, M.D.,** is Associate Professor of Medicine, Department of Bioethics and Humanities, University of Washington. Please address correspondence to Sarah E. Shannon, sshannon@ u.washington.edu.

References

1. Boyle D., et al.: Disclosing errors and adverse events in the intensive care unit. *Crit Care Med* 34:1532–1537, May 2006.
2. Luce J.M.: Acknowledging our mistakes. *Crit Care Med* 34:1575–1576, May 2006.
3. American College of Healthcare Executives: *ACHE Code of Ethics.* http://www.ache.org/ABT_ACHE/code.cfm (last accessed Nov. 19, 2008).
4. American Medical Association: *Code of Medical Ethics.* http://www.ama-assn.org/ama/pub/category/2498.html (last accessed Nov. 19, 2008).
5. American Nurses Association: *Code of Ethics for Nurses with Interpretive Statements.* http://nursingworld.org/ethics/code/protected_nwcoe813.htm (last accessed Nov. 19, 2008).
6. American Hospital Association: *The Patient Care Partnership.* http://www.aha.org/aha/issues/Communicating-With-Patients/ pt-care-partnership.html (last accessed Nov. 19, 2008).
7. Gallagher T.H.: Patients' and physicians' attitudes regarding the disclosure of medical errors. *JAMA* 289:1001–1007, Feb. 2003.
8. Vincent C.A., Pincus T., Scurr J.H.: Patients' experience of surgical accidents. *Quality in Health Care* 2:77–82, Jun. 1993.
9. Gallagher T.H.: Medical errors in the outpatient setting: Ethics in practice. *J Clin Ethics* 13:291–300, Winter 2002.
10. Hingorani M., Wong T., Vafidis G.: Patients' and doctors' attitudes to amount of information given after unintended injury during treatment: Cross sectional, questionnaire survey. *BMJ* 318:640–641, Mar. 1999.
11. Hobgood C., et al.: Medical errors—What and when: What do patients want to know? *Acad Emerg Med* 9:1156–1161, Nov. 2002.
12. Witman A.B., Park D.M., Hardin S.B.: How do patients want physicians to handle mistakes? A survey of internal medicine patients in an academic setting. *Arch Intern Med* 156:2565–2569, Dec. 1996.
13. The Kaiser Family Foundation/Agency for Healthcare Research & Quality/Harvard School of Public Health: *National Survey on Consumers' Experiences with Patient Safety and Quality Information.* Nov. 2004. http://www.kff.org/kaiserpolls/upload/National-Survey-on-Consumers-Experiences-With-Patient-Safety-and-Quality-Information-Survey-Summary-and-Chartpack.pdf (last accessed Nov. 19, 2008).
14. Blendon R.J., et al.: Views of practicing physicians and the public on medical errors. *N Engl J Med* 347:1933–1940, Dec. 12, 2002.
15. Schoen C., et al.: Taking the pulse of health care systems: Experiences of patients with health problems in six countries. *Health Aff (Millwood)* Suppl

Web Exclusives:W5-509–W5-525, Nov. 3, 2005.

16. Mazor K.M., Simon S.R., Gurwitz J.H.: Communicating with patients about medical errors: A review of the literature. *Arch Intern Med* 164:1690–1697, Aug. 9–23, 2004.

17. Waterman A.D., et al.: The emotional impact of medical errors on practicing physicians in the United States and Canada. *Jt Comm J Qual Patient Saf* 33:467-476, Aug. 2007.

18. Bureau of Labor Statistics, U.S. Department of Labor: *Career Guide to Industries* Mar. 12, 2008. http://www.bls.gov/oco/cg/cgs035.htm (last accessed Nov. 19, 2008).

19. Institute of Medicine: *Keeping Patients Safe: Transforming the Work Environment of Nurses.* Washington, DC: National Academy Press, 2003.

20. Deming W.E.: *Out of the Crisis.* Cambridge, MA: MIT Press, 1986.

21. Jeffe D.B., et al.: Using focus groups to understand physicians' and nurses' perspectives on error reporting in hospitals. *Jt Comm J Qual Saf* 30:471–479, Sep. 2004.

22. Reason J., Carthey J., de Leval M.R.: Diagnosing "vulnerable system syndrome": An essential prerequisite to effective risk management. *Quality in Health Care* 10:21–25, Dec. 2001.

23. Rubin S.B., Zolath L.: *Margin of Error: The Ethics of Mistakes in the Practice of Medicine.* Hagerstown, MD: University Publishing Group, 2000.

24. Sharpe V.A: *Accountability, Patient Safety and Policy Reform.* Washington, DC: Georgetown University Press, 2004.

25. Lamb R.M., et al.: Hospital disclosure practices: Results of a national survey. *Health Aff (Millwood)* 22:73–83, Mar.–Apr. 2003.

26. Institute of Medicine: *To Err Is Human: Building a Safer Health System.* Washington, DC: National Academy Press, 1999.

27. Gallagher T.H., et al.: Choosing your words carefully: How physicians would disclose harmful medical errors to patients. *Arch Intern Med* 166:1585–1593, Aug. 14–28, 2006.

28. Hsieh H.F., Shannon S.E.: Three approaches to qualitative content analysis. *Qual Health Res* 15:1277–1288, Nov. 2005.

29. Mazor K.M., et al.: Health plan members' views about disclosure of medical errors. *Ann Intern Med* 140:409–418, Mar. 16, 2004.

30. Corley M.C.: Nurse moral distress: A proposed theory and research agenda. *Nurs Ethics* 9:636–650, Nov. 2002.

31. Jameton A.: *Nursing Practice: The Ethical Issues.* Englewood Cliffs, NJ: Prentice-Hall, 1984.

32. Hamric A.B., Blackhall L.J.: Nurse-physician perspectives on the care of dying patients in intensive care units: Collaboration, moral distress, and ethi-cal climate. *Crit Care Med* 35:422–429, Feb. 2007.

33. Pendry P.S.: Moral distress: Recognizing it to retain nurses. *Nurs Econ* 25:217–221, Jul.–Aug. 2007.

34. Elpern E.H., Covert B., Kleinpell R.: Moral distress of staff nurses in a medical intensive care unit. *Am J Crit Care* 14:523–530, Nov. 2005.

35. Joint Commission: *2008 Comprehensive Hospital Accreditation Manual: The Official Handbook.* Oakbrook Terrace, IL: Joint Commission Resources, 2007.

36. Walshe K., Shortell S.M.: When things go wrong: How health care organizations deal with major failures. *Health Aff (Millwood)* 23:103–111, May–Jun. 2004.

37. Huse E., Cummings T.: *Organizational Development and Change,* 4th ed. Los Angeles: West Publishing Company, 1990.

38. Spencer F.C.: Human error in hospitals and industrial accidents: Current concepts. *J Am Coll Surg* 191:410–418, Oct. 2000.

39. McCarthy D., Blumenthal D.: Stories from the sharp end: Case studies in safety improvement. *Milbank* 84(1):165–200, 2006.

40. Aulisio M.P, Arnold R.M., Youngner S.J.: Health care ethics consultation: Nature, goals, and competencies. A position paper from the Society for Health and Human Values–Society for Bioethics Consultation Task Force on Standards for Bioethics Consultation. *Ann Intern Med* 133:59–69, Jul. 4, 2000.

41. Fry-Revere S.: Some suggestions for holding bioethics committees and consultants accountable. *Camb Q Healthc Ethics* 2:449–455, Fall 1993.

42. Gordon E.J., Hamric A.B.: The courage to stand up: The cultural politics of nurses' access to ethics consultation. *J Clin Ethics* 17:231–254, Fall 2006.

43. Edmondson A.: Learning from mistakes is easier said than done: Group and organizational influences on the detection and correction of human error. *Journal of Applied Behavioral Science* 40:66–90, Mar. 2004.

44. Reason J.: Human error: Models and management. *BMJ* 320:768–770, Mar. 18, 2000.

45. White A.A., et al.: The attitudes and experiences of trainees regarding disclosing medical errors to patients. *Acad Med* 83:250–256, Mar. 2008.

46. Institute of Medicine: *Crossing the Quality Chasm: A New Health Care System for the 21st Century.* Washington, DC: National Academy Press, 2001.

47. Morgan P.J., et al.: Evaluating teamwork in a simulated obstetric environment. *Anesthesiology* 106:907–915, May 2007.

48. Amori G.: *Pearls on Disclosure of Adverse Events.* Chicago: American Society for Healthcare Risk Management, 2006.