Using Patient Complaints to Promote Patient Safety

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Abstract

Patients can help promote safety and reduce risk in several ways. One is to make known their concerns about their health care experiences because complaints might suggest unsafe systems and providers. Responsive health care organizations can benefit since patient complaints that are recorded, systematically analyzed, aggregated, and profiled by ombudsmen can accurately identify physicians at increased risk of a lawsuit. In this paper, we describe how patient complaint profiles have supported nonpunitive "awareness" feedback and, if needed, "authority" interventions designed to improve safety and reduce lawsuit risk. Experience since 1998 with several hundred such interventions at more than 20 community and academic medical centers shows fewer subsequent complaints associated with most of those receiving feedback. Strengths and limitations of the approach are discussed. We conclude that patient concerns can be an important force for promoting safety.

Introduction

Surveying the patient safety movement in 2002, Vincent and Coulter rightly decried "the lack of attention paid to the patient."[1] At about the same time, we demonstrated an association between unsolicited patient complaints and physicians' risk management profiles.[2] In an accompanying editorial, Sage noted, "It would help to forge stronger links between the 'customer satisfaction' side of health care and the 'clinical safety' side."[3] However, Hsieh and colleagues noted that many health care organizations do not appear to use patient complaints to promote higher standards of care.[4] In this paper, we report our experience with using patient/family complaints about their health care experiences to make medicine both kinder and safer.

Over the past few years, various authors and groups have suggested several ways that patients and family members might help promote patient safety and reduce risk. For example, Garbutt, et al., recommended that patient advocates ask hospitalized patients about any concerns they might have about their hospital stay,[5] and Burroughs, et al., suggested that advocates also inquire about patients' fears about medical errors.[6] In a review of studies about multidisciplinary rounding on patients, Gurses and Xiao found that health care team communications with patients uncovered unmet needs and improved clinical outcomes.[7] Levinson and Gallagher recently suggested that physicians' error disclosures might create opportunities for patients to help improve safety and quality.[8] In an overview of strategies for involving patients, Coulter and Ellins suggested several types of patient-focused interventions that could improve safety, including offering information to help patients choose safe providers, involving patients in handwashing and other infection

control processes, encouraging adherence to promotion programs, encouraging patients to check their own records and monitor their care processes, and advising patients to report adverse drug events.[9] In addition, impressive national and international efforts to solicit patient perceptions of their care have been initiated, particularly the Agency for Healthcare Research and Quality's (AHRQ) Consumer Assessment of Healthcare Providers and Systems (CAHPS™) survey program,[10] the Centers for Medicare & Medicaid Services' (CMS) Medicare Current Beneficiary Survey (MCBS),[11] and the World Health Organization's (WHO) Patients for Patient Safety,[12] one of 10 action areas of WHO's World Alliance for Patient Safety.

In the mid-1990s, we began asking whether there might be other avenues by which patients and their loved ones might contribute to safety and risk management improvement efforts. After all, given the large numbers of iatrogenic injuries worldwide,[13, 14, 15, 16] error-affected patients and those aware of near misses would certainly have many observations about their health care experiences that—if sought, recorded, and analyzed—might help promote positive changes in health care systems, teams, and individual providers. As Sage[3] put it, "…health care organizations need to elicit patients' stories, capture information relevant to safety, and feed that information back to the professionals who organize and deliver care." Others agree.[17] This article summarizes our experiences over the past decade profiling patient complaints and using the results to promote safety and reduce risk.

Patient Complaints Are Important

Why be concerned about the experiences of patients and their loved ones, when peer-review programs and safety committees already exist in most health care organizations? First, the substantial literature on patient-centered care and patient empowerment suggests that patients' involvement in their care can improve their medical outcomes. We hypothesized that patient/family concerns would just as likely point to recurring problems that increase risk.

Second, despite legal protections established by Federal and State legislatures to encourage medical peer review, many observers assert that outcomes of peer review fall short of expectations for a variety of reasons that have been reviewed elsewhere.[18] We simply suggest that patient concerns might supplement, not supplant, traditional peer review. We hypothesized that getting peer physicians to provide feedback about patient concerns would help address the malpractice claims risk of their high-complaint physician colleagues.

Finally, our hypotheses assumed that safety issues were embedded in patient complaints and risk management activity, at least in part. Our reviews of risk management files have consistently pointed to doctor-patient, doctor-doctor, and staff-doctor communication problems as disruptors of team function and drivers of risk management activity.[19, 20, 21] Good teams make for optimal outcomes and patients are integral members of the health care team. When patients are forgotten or not integrated into ongoing decisionmaking, outcomes suffer. Therefore, we believe patient complaints are often markers of dysfunctional teams, and addressing those physicians who are associated with the greatest expressions of patient dissatisfaction might create better teamwork and greater safety. We will return to this issue later.

Unsolicited Patient/Family Complaints as Indicators of Opportunities to Improve Safety

Many medical centers and medical groups employ patient advocates (ombudsmen) to assist families who express concerns about their care. Advocates attempt service recovery (i.e., the process of trying to make right what the patient thinks is wrong), and they document families' concerns. We wondered whether such complaints were randomly distributed, and if not, whether physician-related complaints were associated with one indicator of challenges to patient safety: risk management-related activity.

To assess the potential value of families' observations, our team created a reliable system for coding complaints by type (6 major categories and 34 subtypes), by person or people associated with the complaints, and by the locations—inpatient units or outpatient facilities—associated with the concerns.[22] The major categories included concerns about care and treatment, communication, concern for the patient, access, billing, and environment. (Note: Physicians are almost never associated with complaints about environment.) For example, access-related subtypes included such allegations as long waits to be seen, inability to get an appointment within a reasonable time span, failure of physicians to see patients/families after surgery or throughout a hospitalization, failure to return phone calls, and inadequate time spent with the patient. A description of the coding categories has been published previously.[22]

Application of the coding scheme to patient complaints recorded by one academic medical center revealed that 35 percent of its physicians were never named in an unsolicited complaint.[2] In addition, about as many physicians were only rarely associated with a patient concern. However, 9 percent of the group's physicians were associated with approximately 50 percent of all unsolicited physician-related complaints during the study period. This finding has since been replicated at a large regional (nonteaching) medical center.[23]

We next demonstrated that an academic medical group's physician-related patient complaints were associated with their malpractice risk.[2] Specifically, through a series of regression analyses, we identified several independent predictors of claims experience: sex, specialty, volume of service, and unsolicited patient/family complaints. However, complaints accounted for the greatest proportion of the variance in claims experience. Inserting values for each physician's sex, type of practice (medicine or surgery), service volume, and number of unsolicited patient complaints, we used the regression equation to calculate a predicted-risk index for each of the medical group's 644 physicians. We sorted every medical group member into one of five empirically determined predicted-risk categories. Next, we calculated the mean risk-management payouts (dollars and percentage of dollars paid out) for each of the five groups, and we then assessed each group's mean number of complaints per physician.

Our regression equation placed nearly half (49 percent) of the medical group risk in the lowest predicted risk category. Physicians in this lowest predicted-risk group averaged fewer than five unsolicited complaints during the 6-year study period. By contrast, the 8 percent of physicians with the highest predicted-risk scores averaged more than 10 times the number of complaints. With respect to risk management-related expenses (including court costs, attorneys' fees, and payments to claimants), the 49 percent in the lowest predicted-risk group were responsible for

4 percent of expenses, whereas the 8 percent in the highest risk group were responsible for fully 50 percent of expenses. Even more startling to us was the fact that physicians in the highest predicted-risk group had an average payout that was 73 times as high as that of their low-risk colleagues.[18]

These findings have been replicated with physicians in a Midwestern community medical center.[23] We concluded that the association between malpractice risk and patients' unsolicited complaints provided a strong foundation upon which to create a system for alerting physicians whose patients and patients' loved ones expressed a disproportionate numbers of complaints.

Patient Complaint Profiles

The literature about effectively changing physician practice behavior teaches that change-related messages must be evidence-based, contain data that compare a physician with peers, be delivered by a respected physician "messenger," and be repeated over time.[24, 25, 26] In other words, the messages must be delivered in a way that promotes sustained attention, deliberate action, and personal accountability.

Given the association between complaints and malpractice claim risk, the Vanderbilt group developed the Patient Advocacy Reporting System (PARS®) to investigate how complaint data might be used to reduce risk and promote quality care. Research using this program has been ongoing since 1997. In brief, patient complaints are reliably coded and analyzed, and a complaint index is generated for each physician and compared with that of other medical group members. A higher index reflects higher risk for medical malpractice claims. Physicians with an index greater than the 95th percentile are candidates for peer-to-peer intervention.[18, 27]

Small committees of physicians at Vanderbilt and more than 20 other hospitals and medical centers have been trained to deliver what we call "awareness feedback" (or a "Level 1" intervention). Each institution establishes a committee in compliance with its State's requirements for protected peer review. Committee members are nominated to be trained as "messenger peers" based on several criteria: they are distributed among practice types, currently or recently in active practice, respected by colleagues, committed to confidentiality, and willing to serve. Their own complaint scores are mostly satisfactory, but on occasion, some high-risk physicians have served as messengers.[18]

Peer physicians receive 6 to 8 hours of training to help them deliver the data and the essential messages to high-complaint colleagues. The training discusses the research background, support data, and feedback materials; essential steps in sharing the complaint data; and how to anticipate and address high-complaint physicians' common reactions, questions, and challenges. The training includes demonstrations, role-play exercises, and substantial time for questions and discussion.

Once messenger training is complete, "awareness intervention" materials are assembled and distributed. Each packet contains a letter from the messenger addressed to the high-complaint (at-risk) physician. The letter describes the process and provides the physician with his/her numerical ranking among all medical group physicians (e.g., "You are number 8 of 280 in your group, and you rank second within your general field of surgery."). The packet of feedback materials also contains a "you-are-here" figure (Figure 1), a table that portrays the types of
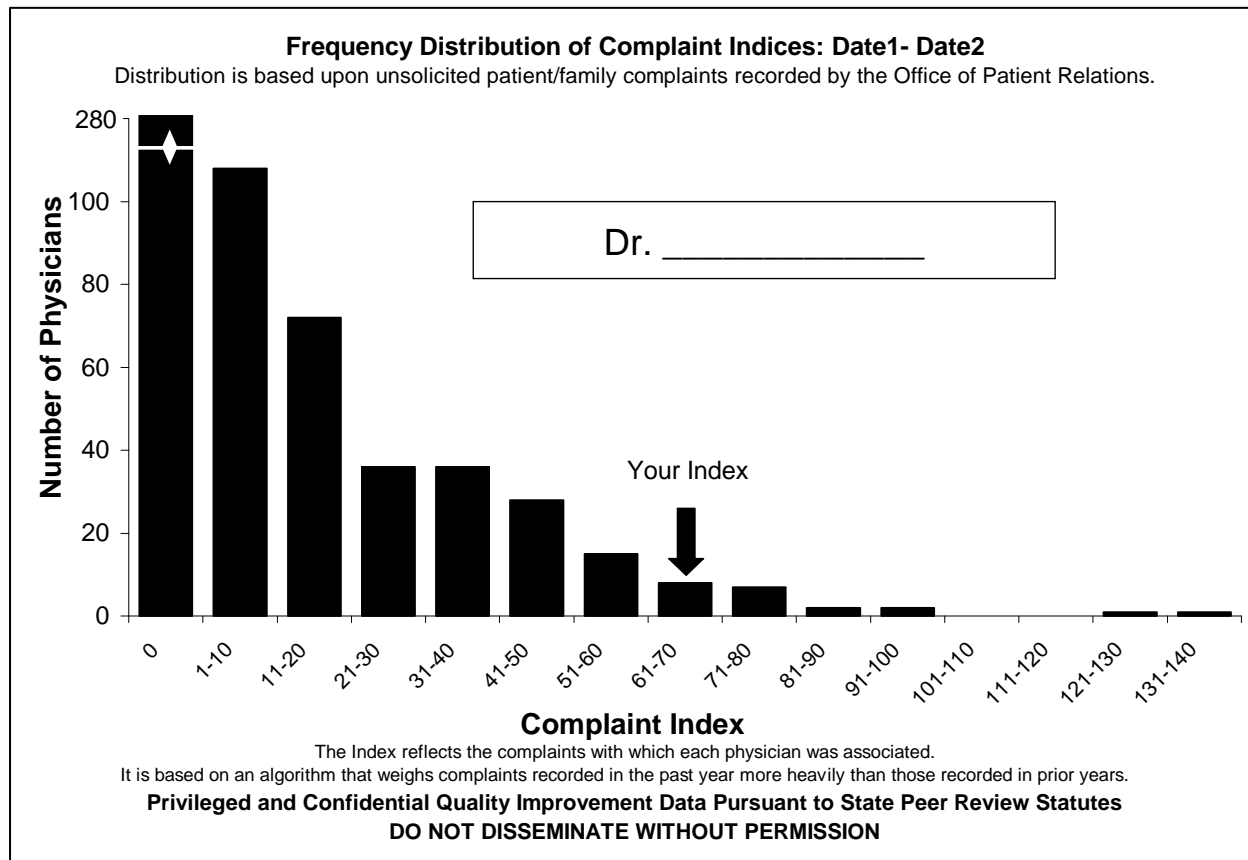
Frequency Distribution of Complaint Indices: Date1- Date2

Distribution is based upon unsolicited patient/family complaints recorded by the Office of Patient Relations.

Dr. _____

Your Index

Number of Physicians

Complaint Index

The Index reflects the complaints with which each physician was associated.

It is based on an algorithm that weighs complaints recorded in the past year more heavily than those recorded in prior years.

Privileged and Confidential Quality Improvement Data Pursuant to State Peer Review Statutes

DO NOT DISSEMINATE WITHOUT PERMISSION

Figure 1. Distribution of complaint scores at one medical center. The arrow identifies Dr. _____'s standing in the large group of physicians with privileges at that medical center.

complaints voiced by patients and families, and individual deidentified complaint narratives. Physicians are assured that the process is confidential and, if applicable, protected from discovery under appropriate peer review or quality statutes. They also are assured that none besides the one or two others named in the letter are or will become aware of the individual's status unless the risk pattern persists over time. Finally, messengers remind their high-risk colleagues that the process is ongoing, and that they will provide annual followup data.

Figure 1 illustrates calculated indexes for all of a physician group's members. The index is based on age of complaint (more recent complaints are given more weight) and the specific complaints contained within a complaint report. Physicians are shown where their index lies on the graph, which illustrates that the vast majority of other physicians practicing at the medical center are associated with fewer complaints. For followup visits, a line graph shows change in the physician's index over time relative to his/her area of practice and facility.

As of this writing, composite results are available for 14 medical centers, several of which are made up of multiple hospitals. To date, 405 initial Level 1 "awareness" visits and more than 600 followup feedback sessions with 336 of those physicians have occurred (69 followup visits are scheduled after this writing). The results have been quite promising (Table 1, previously unpublished data). Overall, after being made aware of their standing and given followup data 1

year later, the mean and median percentage of complaint reduction 2 years after the initial "awareness" intervention are 29 percent and 56 percent, respectively ($P <0.001$).

Not all improve, of course, but more than half have shown substantial improvement. Specifically, as of this writing, 58 percent

Table 1.   Followup data subsequent to "awareness feedback"[a]

Physician status at followup	N (%)
Complaint indexes improved	195 (58.0)
Complaint indexes unimproved or worse	70 (20.8)
Departed after Level 1 intervention(s)	71 (21.1)

a   Based on 336 high-complaint physicians associated with 14 health care systems.

of physicians receiving initial awareness level feedback and one followup have reduced their numbers of complaints by at least 40 percent. The mean and median improvements for these "responders" were 78 percent and 79 percent, respectively. Formerly high-complaint physicians continue to be tracked, but after 10 years of data collection, the "recidivism" rate is less than 3 percent. Most messengers have been well received; fewer than 2 percent reportedly met with overt hostility. Most high-complaint physicians self-identify and self-select issues to be addressed and then do such things as request to be shadowed to get suggestions for improvement, seek resources that will improve their service, reorganize their unit, or seek other assistance.

One unexpected finding has been that roughly 21 percent of the high-complaint physicians have departed their institutions or groups. Perhaps their intention to move or retire distracted them from fully caring for patients, or perhaps they left seeking a "geographic cure" for perceived shortcomings of their practice environments. Because very good doctors can be caught in and decide to leave unsupportive or unsafe environments, we make no judgments about their reasons for departure.

The final noteworthy group consists of approximately 21 percent of the high-complaint physicians whose poor followup results suggested they might be unable or unwilling to respond to "awareness-level" feedback. Such individuals require what we refer to as a "Level 2" or "authority-based" intervention. The persistently high-complaint physician's leader, however defined, is approached by messenger committee members to review the data and to develop a specific plan to address recurrent sources of dissatisfaction. The plan might include anything from CME courses to practice audits to comprehensive health evaluations. The number of "authority" interventions at this time has been small, but results to date suggest that fewer than half of these physicians remained associated with their medical center and subsequently reduced patient complaints. Unfortunately, failure to respond to the "authority-based" intervention raises the specter of voluntary relocation, nonrenewal, limitation of privileges, or dismissal from a group.

Finally, do feedback interventions change claims history and promote safety? Initiation of feedback sessions in two waves during late 1998 and early 2000 at an academic medical center was associated with reductions in claims and lawsuits adjusted for the medical center's volume of service.[18] Specifically, rates of the institution's general liability (e.g., premises liability) and professional liability claims, both adjusted per 10,000 relative value units (RVUs) of care

delivered each year, were analyzed to understand the institution's trends in risk management activity over time. The trends for general and professional liability claims differed significantly (year x type of liability interaction, t = 3.5, *P* = 0.006). The institution's professional liability data showed a significant downward slope (t = -3.39, *P* = 0.02), whereas the general liability data showed no significant change over time. In other words, the salutary effects seemed specific to professional liability actions, and the reduction did not appear to be an artifact.

Several factors besides the PARS[®] feedback program may have contributed to the trend, including changes in the risk management process, medical procedures, staff, patient/payer expectations, case mix, legal climate for malpractice claims, institutional marketing, and internal quality and safety programs. Therefore, we carried out a randomized controlled trial involving one institution's high-complaint physicians, who were randomly assigned to a control group (no messages of high-risk status) or an intervention group ("awareness" feedback). Complaints and risk management events for 6 years preceding and subsequent to initial interventions were tracked. The study was only recently closed to data collection, and analysis of the data will be the subject of another manuscript.

Impact of Patient Safety Initiatives Based on Patient/Family Concerns

Complaint-related feedback to physicians reduces patient complaints and may help address litigation-related risks. We believe such feedback also improves patient safety. We recognize, of course, that not all risk management events and not all patient complaints signal safety lapses. After all, many patient complaints might seem to reflect mere annoyances (e.g., "The doctor made me wait well past my appointment time." "The surgeon never visited with my family after my surgery.") rather than specific, valid observations of negligence or unsafe practices[6, 28] (e.g., "The doctor was rushed, so she didn't listen to us, skimped on her exam, failed to order appropriate tests, and made an error on my prescription."). Of relevance is that patients define medical errors more broadly than clinical mistakes, extending the concept to communication problems, lack of compassion, and responsiveness failures.[6] Such problems have been found to be associated with adverse patient outcomes.[29] Therefore, if patients and families can identify recurring problems, their observations can point out professionals whose practices might be made safer.

We recognize that an important limitation of this work is our reliance on patient complaints and risk management claims files as proxies for unsafe health care. Not all patients with valid concerns complain, so those who report represent only the "tip of an iceberg." Perhaps complainers more closely represent those who might be inclined to sue than the larger group of patients who respond to standardized patient satisfaction questionnaires. Despite the value of these questionnaires for other purposes, they have not been shown to date to efficiently identify the highest risk physicians.[30]

Another limitation is that we did not examine the specific factors and events underlying patients' or risk managers' concerns, nor did we determine the validity of either the complaints or the claims files. The "gold standard" for evaluating the validity of allegations requires exhaustive review beyond the resources available to us. Even if we could do such evaluations, professional reviewers do not always agree.[31] In spite of the "noise" in patients'/families' expressions of concern, complaint scores based on allegations of both clinical and interpersonal failures are

indeed associated with risk management activity.[2, 23] Although malpractice claims are not always associated with errors and unsafe practices,[32] recent reports suggest that a majority of claims do appear to involve patient injuries and evidence of medical error.[33, 34]

The bottom line is that many, perhaps most, malpractice claims are reasonably related to medical management injuries and patient concerns about errors and other practices they consider unsafe. While we certainly agree that "reducing lawsuits requires preventing errors and improving safety, not just placating patients,"[3] it appears from our experience that keeping patients from becoming dissatisfied in the first place—which, for many patients and families, translates into concerns about what they deem to be unsafe—may well reduce the lawsuit experience for high-risk physicians who act to reduce patient complaints.

Summary and Conclusion

We believe the vast majority of physicians at risk for a disproportionate share of malpractice claims are not aware that they stand out from their physician peers. If they are unaware, they are not likely to address risky or unsafe technical and interpersonal behaviors. Unsolicited patient complaints offer a powerful tool for identifying high-risk physicians. Most physicians respond positively if those complaints are captured, reliably processed, and regularly communicated through a physician-driven feedback process.

Like Vincent and Coulter,[1] Sage,[3] and many others who advocate patient "empowerment" or "activation" in health care, we conclude that patients can indeed play important roles in promoting safe medical care. One of those roles is to make concerns about their health care experiences known to appropriate medical center or medical group personnel. To be effective at identifying patterns, medical center and medical group personnel must solicit, value, and support patient input,[2, 3, 9] especially from populations who are culturally less likely to complain[35, 36]; centralize complaint reporting for systematic analysis; and institutionalize physician-driven processes for providing constructive feedback to those associated with high complaint scores.

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References

1. Vincent CA, Coulter A. Patient safety: What about the patient? Qual Saf Health Care 2002; 11: 76-80.

2. Hickson GB, Federspiel CF, Pichert JW, et al. Patient complaints and malpractice risk. JAMA 2002; 287: 2951-2957.

3. Sage WM. Putting the patient in patient safety: Linking patient complaints and malpractice risk. JAMA 2002; 287: 3003-3005.

4. Hsieh SY, Thomas D, Rotem A. The organizational response to patient complaints: A case study in Taiwan. Int J Health Care Qual Assur 2005; 18: 308-320.

5. Garbutt J, Bose D, McCawley BA, et al. Soliciting patient complaints to improve performance. Jt Comm J Qual Patient Saf 2003; 29: 103-112.

6. Burroughs TE, Waterman AD, Gallagher TH, et al. Patients' concerns about medical errors during hospitalization. Jt Comm J Qual Patient Saf 2007; 33: 5-14.

7. Gurses AP, Xiao Y. A systematic review of the literature on multidisciplinary rounds to design information technology. J Am Med Inform Assoc 2006; 13: 267-276.

8. Levinson W, Gallagher TH. Disclosing medical errors to patients: A status report in 2007. CMAJ 2007; 177: 265-267.

9. Coulter A, Ellins J. Effectiveness of strategies for informing, educating, and involving patients. BMJ 2007; 135: 24-27.

10. The CAHPS program overview. Consumer Assessment of Healthcare Providers and Systems program. Rockville, MD: Agency for Healthcare research and Quality; 2007. Available at: www.cahps.ahrq.gov/content/cahpsOverview/Over_Program.asp?p=101&s=12. Accessed March 22, 2008.

11. Medicare Current Beneficiary Survey (MCBS). Baltimore, MD: Centers for Medicare & Medicaid Services; 2005. Available at: www.cms.hhs.gov/MCBS/. Accessed March 22, 2008.

12. Patients for Patient Safety. Geneva, Switzerland: World Health Organization; 2008. Available at: www.who.int/patientsafety/patients_for_patient/en/. Accessed March 22, 2008.

13. Vincent CA. Risk, safety, and the dark side of quality. Br Med J 1997; 314: 1775.

14. Vincent C, Young M, Phillips A. Why do people sue doctors? A study of patients and relatives taking legal action. Lancet 1994; 343: 1609-1613.

15. May ML, Stengel DB. Who sues their doctors? How patients handle medical grievances. Law Soc Rev 1990; 24: 105-119.

16. Hickson GB, Clayton EW, Githens P, et al. Factors that prompted families to file medical malpractice claims following perinatal injuries. JAMA 1992; 267: 1359-1363.

17. Siyambalapitiya S, Caunt J, Harrison N, et al. A 22 month study of patient complaints at a National Health Service hospital. Int J Nurs Pract 2007; 13: 107-110.

18. Moore IN, Pichert JW, Hickson GB, et al. Rethinking peer review: Detecting and addressing medical malpractice claims risk. Vanderbilt Law Rev 2006; 59: 1175-1206.

19. Pichert JW, Hickson GB, Bledsoe S, et al. Understanding the etiology of serious medical events involving children: Implications for pediatricians and their risk managers. Pediatr Ann 1997; 26: 160-172.

20. White AA, Wright SW, Blanco R, et al. Cause-and-effect analysis of risk management files to assess patient care in the emergency department. Acad Emerg Med 2004; 11: 1035-1041.

21. White AA, Pichert JW, Bledsoe SH, et al. Cause and effect analysis of closed claims in obstetrics and gynecology. Obstet Gynecol 2005; 105: 1031-1038.

22. Hickson GB, Pichert JW, Federspiel CF, et al. Development of an early identification and response model of malpractice prevention. Law Contemp Probl 1997; 60: 7-29.

23. Hickson GB, Federspiel CF, Blackford JU, et al. Patient complaints and malpractice risk in a regional healthcare center. South Med J 2007; 100: 791-796.

24. Eisenberg J. The reasons for doctors' practice patterns and ways to change them. Ann Arbor, MI: Health Administration Press; 1986.

25. Soumerai S, Avorn J. Principals of educational outreach to improve clinical decision making. JAMA 1990; 263: 549-556.

26. Ray W, Schaffner W, Federspiel CF. Persistence of improvement in antibiotic prescribing in office practice. JAMA 1985; 253: 1774-1776.

27. Pichert JW, Blackford J, Federspiel CF, et al. Using patient complaints to communicate concerns to colleagues. Academic compensation and production survey for faculty & management. Englewood, CO: Medical Group Management Association; 2004: p. 16-20.

28. Kuzel AJ, Woolf SH, Gilchrist VJ, et al. Patient reports of preventable problems and harms in primary health care. Ann Fam Med 2004; 2: 333-340.

29. Taylor BB, marcantonio ER, Pagovich O, et al. do medical inpatients who report poor service quality experience more adverse events and medical errors? Med Care 2008; 46: 224-228.

30. Stelfox HT, Gandhi TK, Orav EJ, et al. the relation of patient satisfaction with complaints against physicians and malpractice lawsuits. Am J med 2005; 118: 1126-1133.

31. Entman SS, Glass CA, Hickson GB, et al. The relationship between malpractice claims history and subsequent obstetric care. JAMA 1994; 272: 1588-1591.

32. Brennan TA, Sox CM, Burstin HR. Relation between negligent adverse events and the outcomes of medical-malpractice litigation. New Engl J Med 1996; 335: 1963-1967.

33. Studdert DM, Mello MM, Gawande AA, et al. Claims, errors and compensation payments in medical malpractice litigation. N Engl J Med 2006; 354: 2024-2033.

34. Baker T. Reconsidering the Harvard Medical Practice Study: Conclusions about the validity of medical malpractice claims. J Law Med Ethics 2005; 33: 501-502.

35. Carroll KN, Cooper WO, Blackford JU, et al. Characteristics of families that complain following pediatric emergency visits. Ambul Pediatr 2005; 5: 326-331.

36. Bismark MM, Brennan TA, Paterson RJ, et al. Relationship between complaints and quality of care in New Zealand: A descriptive analysis of complainants and non-complainants following adverse events. Qual Saf Health Care 2006: 15: 17-22.