The challenge of explaining why quality improvement has not done better

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Keywords: health care organizations, health care safety, quality improvement

Success has many fathers, but failure is an orphan.

(John F. Kennedy)

It is always easier to suggest reasons why something failed than succeeded. The frequently expressed concerns about quality of health care make it a fitting topic for examination [1–3]. Many preach the doctrine of continuous improvement, arguing that the system is at fault not the individual [4–7]. Whereas some bemoan the lack of a business case for quality in health care [8], others propose creating environments that will encourage and reward better quality [9–11]. There is a litany of problems in introducing quality improvement in health care [12–15]. Report cards and pay for performance can certainly yield perverse results [16].

The analysis by T. Katz-Navon et al. in this issue puts forth three reasons why efforts to improve quality have not gone as well as might be hoped: (i) They challenge the frequently used “clinicians as pilots” metaphor. (ii) They raise the risk of sending mixed messages to clinicians. (iii) They cite the need for organizations to be willing to disclose their errors as the basis for improving.

Physicians as pilots

The authors suggest that the physician pilot analogy does not hold because physicians too frequently face non-routine situations, which are complex and varied. Moreover, physicians have more autonomy than pilots.

The rejection of this comparison is all the more surprising because at least some of the authors began their work in systems developing information systems for fighter pilots. The pilot analogy is compelling for many because both professions make decisions that could affect lives and both are highly trained. Both rely on complex information systems to make decisions that must combine information with instinct. To see how well the analogy holds, the question to be asked is: Which doctors and which pilots?

Much of routine flying is routine. So is much of medicine. Indeed, routine may be the enemy of good care. In circumstances such as screening and preventive care, monitoring chronic disease without a current crisis, and even various kinds of commonly performed surgery, the clinician may not attend to an important finding or systematically collect necessary data. Pilots are required by outside agencies to complete checklists on topics that are second nature. Physicians are not so constrained. Information systems use warning lights to alert pilots to atypical situations. Physicians have few alert systems to draw their attention to unexpected findings, although they might profit from some device that suggests that all is not routine. The advent of automated medical records and computerized physician order entry is creating many new opportunities for physician reminders and advice. Neither profession is asked to submit to some higher automated authority. The information is there to raise warnings not to take over. Computerized flight plans help pilots land their planes safely by staying in the prescribed pathway. Similar approaches could be used to help physicians manage chronic conditions by giving them regular feedback on the patient’s status and alerting them to when the course is deviating [17]. It is far better in both cases to make small, early mid-course adjustments than major corrections.

Other pilots must deal with emergency life-or-death situations. Both fighter pilots and crisis clinicians need a supportive information environment. Fighter pilots in combat (or perhaps even flying a plane at supersonic speeds) need an information system that will focus their attention on the most salient information in real time. The design of cockpit screens offers many insights into how to continuously rearrange information to keep the most pertinent data in the center of one’s visual field. So too do emergency room physicians and surgeons, and intensivists, need information support that focuses their attention on the most salient information.

Environmental design can improve quality in the cockpit and the emergency room. Work done by the authors has shown how environmental design (e.g. changing the shape and color of injection vials and instruments) can improve performance and avoid accidents.

The physician as pilot analogy is not perfect; few are. But it does suggest some ways we can think more creatively about
how to establish systems that can support better care, and it adds power to the argument that physicians might improve their performances if they were willing to behave a little more systematically. The need for physicians to be able to exercise judgment in many situations does not mean that they—and their patients—cannot benefit from reminders, alerts, and even constraints in some situations. At their best, clinical practice guidelines are syntheses of the available evidence that still leave room for departure from the guidelines when the patients’ circumstances warrant departures. At their best, automated prompts in electronic medical records provide welcome reminders. In neither case does the innovation mean that physicians are being turned into robots.

Mixed messages

The goals of the individual clinician and the organization may not always be in sync. Organizations do give mixed messages about the relative value of productivity and safety. In many instances, clinicians may be working against the interests of the hospital, particularly the economic interests. Hospitals are paid a fixed amount for a given admission. Clinicians laboring to apply sophisticated technology may be working at cross purposes with the hospital that is seeking to minimize the use of resources and the length of stay. In an ideal world, decisions would be based on solid information. Cost-effectiveness would determine actions. But the current information base to support actual evidence-based practice is much thinner than advocates might admit [18–23].

But even where the evidence is adequate, there is commonly too little financial incentive to follow it. Pay for performance may help in this regard if it is instituted carefully [24]. At present, there is also little risk to one’s reputation from neglecting efforts to improve performance. Public reporting of performance promises to help in this respect.

In other instances, different parties may interpret the evidence differently. For example, some surgical procedures pay surgeons more for one approach than for another. The better paying technique may involve a more expensive prosthesis for which the hospital receives no more money. Thus, the clinician faces when the specified performance that generates rewards changes? If the clinicians and the institution face opposing incentives. In another instance, hospitals have every incentive to discharge patients early to some type of follow-up care, but they are not responsible for the outcomes once the patient is discharged. Clinicians, on the contrary, may continue to treat the patient in the second setting and hence maintain their responsibility for outcomes.

A more important effect may be the danger of continuously changing targets. What happens in a pay-for-performance system when the specified performance that generates rewards changes? If the clinicians and the institution devote extra efforts to one set of targeted activities, presumably they must do less somewhere else. Then the target is revised. Do they now redirect their attention and allow the former target to lapse?

Moreover, it is likely that there are more reasons for mismatch between the organization’s stated goals and its internal incentives than financial reasons. In many organizations, safety and improved patient outcomes are espoused goals, and yet senior leaders do not make time available for physicians, nurses, and others to work on the processes that need to be improved. Some leaders have little confidence that such work will succeed and thus perceive time spent on these activities as likely to be wasteful. Other leaders subscribe to a command-and-control management approach and are reluctant to have employees devise potential solutions that may be difficult to manage or derail once plans for changes have been devised.

Open organizations

Most experts who study safety support the need for organizations to create a culture of safety that includes not only admitting mistakes but looking for them. Disclosure works best when people believe that systemic error is the dominant paradigm rather than individual incompetence, but this paradigmatic pendulum swings regularly, much the same as the root causes of juvenile delinquency, characterized in the ‘Officer Krupke’ song in Westside Story, which kept redefining whether the fault lay with the individual or society. American health care with its strong fear of malpractice is a long way from feeling comfortable admitting error. The authors cite the protections under the Patient Safety and Quality Improvement Act but correctly question whether such a law is sufficient.

Many fear that there are too few rather than too many malpractice claims [25–27]. The concerns about malpractice claims are matched by the level of ignorance around the causes. Most clinicians still believe that defensive medicine will ward off malpractice suits and fail to appreciate the importance of establishing good relations with their patients. Many believe that disclosure increases their risks of being used when it may do just the opposite, if managed well.

Part of the culture of openness is being willing to admit that you are to blame. Physicians seem hard-pressed to accept responsibility for poor outcomes. Some insist that they care for the sickest patients. Others transfer the blame to the patients, accusing them of failure to comply with the prescribed regimen and simply lacking the will to survive. Physicians face a paradox. One cannot sustain a belief in omnipotence and at the same time blame a system for the errors.

Several shifts are needed in the culture of health care organizations. The authors characterize high-reliability organizations as ones that make use of ‘managerial practices of control’. As argued above, some control is likely to be helpful, but this is only part of the shift that is needed. High-reliability organizations are also characterized by preoccupation with failure and sensitivity to operations [28]. Health care is characterized by optimistic reliance on the excellence of individual performers, an attitude that tends to underestimate the possibility of failure and fails to think of operational changes as protective against poor outcomes. High reliability will not be achieved until health organizations become preoccupied with the possibility that things might go wrong and are willing to think about changes in health care processes that are devised to avoid or mitigate failures. The traditions of medicine make
these changes difficult to contemplate. The heroic practitioner—admirably willing to accept responsibility and work ever harder—is not likely to welcome reminders that he or she might make mistakes or assertions that these mistakes might be avoided not by more intensive individual effort but by changes in the environment in which the practitioner works. A practitioner who is both fallible and dependent on his or her circumstances is, for many, a diminished practitioner.

In sum, the three explanations the authors’ posit for the failure of continuous quality improvement make some sense but do not point to a solution. Perhaps, however, we should not be so fast to dismiss them out of hand. At least some elements seem essential to better chronic care. Many issues that threaten contemporary health care today could be addressed by the strategies being questioned here. Making practice more systematic, even if limited to the more routine aspects of care, would go a long way toward reducing oversights and errors. Creating a climate that admits fault may be harder in a litigious society, but getting clinicians to appreciate that being sued is more related to their relationships with patients should not be impossible and may offer a first step toward a more open policy about recognizing error. We do not yet have a strong business case for quality. Despite all the talk about its averred importance, it is not the most salient criterion for selecting a source of care. Nonetheless, the marketplace for most goods and services works pretty well, although most consumers do not shop on the basis of quality. It may not drive the system, but its importance to at least some customers may be enough to keep it pertinent.

References


Accepted for publication 12 October 2006