

# Ensuring Patient Safety and Quality: How Internal Audit Fits In

By Stephen Harden

## Why Should an Auditor Focus on Patient Safety and Quality Programs?

Preventable medical errors account for more deaths each year than drowning, automobile accidents, or breast cancer. Poor communication among healthcare workers is the most common cause of these errors. Poor communication in part is caused by patient care which is provided by medical professionals compartmentalized into their separate disciplines or specialties, often referred to as silos.

The impact of preventable medical errors was recognized by the Institute of Medicine (IOM) in its 1999 landmark report on patient safety, *To Err is Human*. The report estimated that up to 98,000 Americans die annually from errors and that these preventable deaths cost the nation about \$29 billion. These errors are often made by highly skilled professionals and are generally the result of system failures, not poor individual performance.

Unfortunately, despite the best human intentions, errors occur. No humans are perfect. Healthcare needs more error-tolerant systems in order to provide safer care. Such systems equip the humans operating within the system to use teamwork, communication, and coordination skills to detect one another's small slips, trips, and lapses before those errors become significant and cause serious incident or accident. With this type of system in place, the inevitable errors of the human care provider are detected, trapped, and corrected before they harm the patient. These kinds of systems are commonly used in high reliability organizations such as the commercial airline industry and in nuclear power plants.

Urging healthcare to adopt the best practices of high reliability organizations, the IOM in its second report in 2001, *Crossing the Quality Chasm*, recommended that healthcare organizations establish interdisciplinary team training programs for clinicians to incorporate the proven team training strategies used in the aviation industry.

Other healthcare organizations have made similar recommendations. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) noted in a *Sentinel Alert* issued in July 2004 that most cases of death and injury are caused by flawed organizational culture and by poor or ineffective communication among caregivers. JCAHO recommended that organizations conduct team training to teach staff to work together and communicate more effectively.

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Additionally, communication is one of the six core competencies of Accreditation Council for Graduate Medical Education (ACGME) that requires residents to "demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients... and professional associates."

The system of teamwork skills and training has been studied in the U.S. military and commercial aviation

for the past 20 years. Crew Resource Management (CRM), as the teamwork and communication skills safety system is known in aviation, was developed in the 1970s after the Military Inspector General identified that 70 percent of aircraft-related fatalities were a result of human error and poor teamwork. The aviation industry's success in reducing critical errors with this system has had a dramatic effect on the number of deadly aircraft accidents. Most recently, from 2002 to 2004, no passenger lives were lost on commercial jet aircraft in the U.S.

As a commercial airline captain with almost 29 years of accident-free professional flying experience, I am well versed in the CRM methodology. I personally use CRM on the flight deck, and have for almost 16 years been responsible for designing, implementing, and training CRM programs for commercial, government, and military aviation organizations. For the past six years, I have been part of the advance guard of a movement to adapt the best practices of CRM for use in healthcare.

Despite the recommendations of the IOM, JCAHO, ACGME, and others, relatively few of the nation's over 5000 hospitals have begun to adopt these strategies to improve their level of patient safety and quality. In fact, in its 2005 report, the IOM said little significant progress or meaningful improvements had been made to prevent the preventable.

Internal auditors can join this growing movement to reduce preventable errors and improve the quality of care in their client hospitals. When conducting an internal audit, auditors can significantly benefit their clients by including safety and quality issues in their audit program. A compelling argument can be made that

patient safety and quality issues must be included in internal audits for these four reasons:

### 1. Public Awareness of the Dangerous Error Rates in Hospitals is Increasing and can Affect the Market Share of Hospitals with Poor Records of Safety.

The IOM reports have received wide publicity in all of the major media. Stories of amputating the wrong leg or operating on the wrong person are considered very newsworthy and receive front page headlines.

Additionally, healthcare consumers have increasing access to publicly reported healthcare data. The informed and determined consumer can discover observed to expected mortality ratios, and other key quality and safety indicators for almost any hospital in the country. A quick investigative tour of the Internet will reveal websites such as *www.healthgrades.com*. Poor data will soon affect the public perception of the hospital and begin to affect its market share.

### 2. Preventable Medical Errors Impact Hospital Profitability.

The IOM estimates that up to \$18 billion per year are wasted on errors. Malpractice awards, the time and energy invested to investigate and defend against claims, and insurance costs are just a few of the profit draining products of errors. Most of this cost comes directly off the bottom line and dramatically increases the amount of revenue that must be generated by the hospital to pay these costs. The increased emphasis on velocity and efficiency, doing more with less, only increases the number of errors that are made.

Additionally, as medical malpractice costs increase, physicians have been forced to work longer hours and care for more patients just to pay premiums, which in some states exceed \$150,000 per year. Research indicates that physicians working longer hours make more errors. A Danish government study showed that approximately one-seventh of all hospital days resulted from preventable medical errors. For every error a CRM-based patient safety program detects and corrects before it harms a patient, dollars are saved.

### 3. Errors Drain Morale and Impact Turnover.

When errors occur, the medical professional involved with the error often becomes the second victim. Focus, efficiency, and productivity suffer. Both the organizations and the individual are affected. Also, in my work with hospitals, I often see a direct correlation between the level of communication effectiveness among the physicians and staff and the level of staff turnover. Poor communication and its resulting errors tend to cause staff to seek employment elsewhere.

**Healthcare needs more error-tolerant systems in order to provide safer care.**

### 4. Safety is the Right Thing to do.

Safety and quality are consistent with the principle of "First, do no harm." This is the core tenet in healthcare. This is both a personal and an institutional obligation. Healthcare leaders must encourage, support, and sponsor programs that make safety the absolute prerequisite and cornerstone of quality care. Organizations and their employees must assure patients that they will be safe from medical errors and accidents.

Healthcare workers, at all levels, are professionally and personally committed, and work hard to provide the best possible care to their patients, but medical errors and mishaps continue to occur at unacceptably high rates. Working harder or paying closer attention will not prevent the majority of medical errors; new tools and skills are clearly needed, and a CRM-based patient safety system can provide them.

An auditor can help the hospital clearly understand if it has the systems and elements in place to improve the safety and quality of the care it provides. As internal audits are conducted, the auditor can provide the organization a valuable report card if the following 12 items are assessed.

These items represent what I have learned in helping more than 40 hospitals and other healthcare organizations

implement CRM-based safety and quality systems. Where the CRM implementation succeeds and safety and quality have measurable improvements, most, if not all, of these items are in place, or put into place if not already existing. An auditor's assessment of these items can provide a scorecard for the institution and provide critical feedback to the organization that it is on the right track, or that more emphasis on safety is needed.

### 1. Is Safety and Quality Part of the Corporate Mission or Annual Goals?

Auditors should check to see that the written corporate mission statements, yearly goals, and other organizational commitments include an emphasis on safety. Why? Executive performance assessment and their compensation tend to follow the corporate goals. Additionally, institutions have no chance of convincing their medical staff and employees of their serious commitment to safety without the willingness to put their commitment to safety in writing.

**Auditors can significantly benefit their clients by including safety and quality issues in their audit program**

### 2. Are Safety and Quality Metrics Part of the Dashboard Used to Measure Performance?

Many hospitals today use a dashboard system of metrics to gauge their financial and clinical health. If hospital leadership is not daily checking a dashboard that includes safety and quality issues, any stated desire to be more safe or provide better quality care is just lip service. In most hospitals if it isn't measured, it won't happen.

As we began our work with one large hospital in the South, not one dashboard metric covered safety or quality issues. Every single one focused on efficiency, throughput, or profitability. It came as no surprise when we discovered the hospital had one wrong surgery every 60 days. The staff was merely responding to what was important to leadership.

Leadership wanted more throughput to compensate for the reduction in reimbursement rates. By driving the staff to see more cases, the hospital generated more revenue on the front end, but it was losing much of that revenue on the back end in errors and claims. Realizing this, the leadership changed its dashboard to include safety and quality metrics.

### 3. Are Executive Assessment and Reward Systems Aligned with Safety/Quality?

This item goes hand in hand with items 1 and 2. Yes, the hospital has included safety and quality in its mission statement and yearly goals, and yes, the corporate dashboard includes safety and quality metrics. But are executives and managers held accountable and rewarded for meeting those goals and ensuring the dashboard metrics reflect success in their effort to improve? Without alignment between organizational goals and individual performance assessment and reward, management attention becomes devoted to what is assessed and rewarded. The simple principle at play here? Behavior that gets rewarded gets repeated.

**Working harder or paying closer attention will not prevent the majority of medical errors.**

### 4. Are Physician Credentialing Systems Designed to Consider Patient Safety Issues and Physician Support of the Safety and Quality Program?

The most common question I am asked as we begin work with a hospital is, "How do we get the docs to play?" The answer is simple to provide but difficult to do:

- Show them the data proving this is a better way to do business
- Make crystal clear what your behavioral expectations are
- Don't admit anyone to your medical staff that won't agree to those behavioral standards

- Don't offer to re-credential anyone who will not abide by the behavioral guidelines

When these actions are taken, the message sent to the medical staff is unmistakable in its clarity, "This is the way we intend to do business here. If you agree, please join us."

### 5. Does the Policy & Procedures Manual Include Teamwork and Behavioral Guidelines?

If the hospital wants physicians and staff to act and communicate in a manner consistent with CRM principles, they must put it in writing. P&P manuals should contain behavioral guidelines for teamwork, communication, coordination, decision-making, and performance feedback. These written policies will drive procedures and practices on a daily basis. Including these performance guidelines creates alignment between the organization's philosophy, as expressed in its mission statement, its written policies, and the daily practices of the staff. Employees are keen to discern any disconnects between the philosophy and policy.

### 6. Are Teamwork and Communication Skills Training Provided to all Clinicians and Staff Involved in Providing Care?

If the P&P manual contains explicit performance guidelines, it is the hospital's responsibility to train its caregivers to be able to meet those behavioral expectations. Every caregiver expected to meet those expectations must be equipped to meet them by receiving skills-based CRM training. This training should include a comprehensive skills-based workshop that introduces participants to CRM and how it is applied to healthcare, teaches participants about patient safety breakdowns and how to avoid them, team-building, the recognition of impending adverse situations, cross-checking and effective communication techniques, team decision-making strategies, and effective debriefing methods. Knowledge-based training is insufficient to satisfy this responsibility. The staff must be taught actual skills and given the opportunity to practice those skills during the training sessions.

Training should be provided to intact teams, including physicians, nurses, and other staff. Training nurses with physicians, or vice versa, is ineffective and counter-productive.

**Up to 66 percent of patient harming errors are caused by CRM related issues, primarily poor communication and coordination.**

### 7. Are Safety Tools, Adapted from High Reliability Industries, Used in Providing Care?

Classroom training is only the first step and, in most cases, will not permanently change behavior. Safety tools, such as checklists, standard operating procedures, and standard communication protocols are needed to ensure the behaviors learned in the training are actually used on a daily basis. Creating the tools are not enough either. The tools must actually be used.

My experience has been that very few, if any, of the hospitals I have worked with have any sort of user-friendly checklist that follows tried and true checklist conventions as practiced in aviation or nuclear power. The whole concept of 'read and do' checklists versus 'read and verify' checklists completely escapes most in healthcare, and those that have tried to create them on their own usually give up in frustration as the checklists they create cause more work rather than less.

Auditors should check to see that data collection schemes document and track compliance and usage of the safety tools. This is one of the most important items an auditor can investigate. Safety tools are the engine producing real and measurable change. In my work with hospitals, I have seen immediate improvements in process measures and outcomes once tools are implemented. Pre-procedure antibiotic administration rates have increased from 66 percent to 96 percent. Post-surgical infection rates have dramatically decreased. OR turnaround times have improved by

50 percent. These are just a few of the dramatic improvements that safety tools can produce. Any hospital not using safety tools adapted from high reliability organizations has an incomplete safety and quality initiative.

**8. Do Nursing and Staff Evaluation Systems Include Teamwork and Communication Behavior Metrics?**

Most of the assessment systems in use in hospitals have a heavy emphasis on clinical performance and procedure. However, JCAHO research indicates that up to 66 percent of patient harming errors are caused by CRM-related issues, primarily poor communication and coordination among caregivers. Yet few assessment systems analyze these types of behaviors. True change in support for CRM programs in aviation organizations did not occur until flight crews were assessed on their CRM skills. What is assessed becomes important to those being evaluated. Additionally, the assessment program can feed valuable data back to the training program so that CRM training targets areas of need.

**9. Is There a System to Capture Safety Program Successes and Publicize Those to the Organization?**

The culture of silence is so pervasive in many healthcare organizations that most departments have no idea of their safety record. For instance, many of the surgical departments with which I have worked are shocked to find out that their department has had a record of wrong surgeries. That culture of silence also prevents many institutions from documenting and publicizing those instances where a staff member did assertively speak up and prevent an impending adverse outcome. Without knowing the state they are in, many staff will see no reason to do anything differently. As well, if the staff never sees the results of the effort they have invested in the new safety initiatives, they see no reason to continue that effort. In short, success breeds success. The institution must absolutely capture, document, and publicize the improvements in safety and quality to sustain their safety program.

**10. Do Managers and Administrators Round for Patient Safety?**

Rounding is a version of management by walking around. Managers should have a mandatory program of spending up to two hours per week making the rounds of their direct reports and asking these questions about the organization's safety initiatives:

- What works?
- What needs to be fixed?
- Who should I thank for doing a good job?
- Do you have everything you need to meet our safety objectives?

Auditors should make sure there is a formal feedback program for the information obtained during these rounds. Managers must fix what needs to be fixed and thank the staff that needed to be thanked.

**11. Does the Data Collection and Assessment System Include Teamwork and Communication Metrics?**

It seems as if hospitals measure everything. Most are very adept at measuring processes and clinical outcomes. Teamwork and communication processes should be measured as well. For example, are surgical teams conducting JCAHO mandated time-out briefings? Are team leaders asking team members to speak up if they see something unsafe? Are standard patient turnover communication protocols being used? This type of data is critical for the institution to know if the behavioral guidelines are being met. The data is also a valuable input to the design of annual refresher training; it ensures training time is devoted to areas of known need.

Figure 1: An example of a Cath Lab Pre-Procedure Briefing Checklist.

<b>CATH LAB PRE-PROCEDURE BRIEFING</b>	
Names of Team on White Board _____	Checked (RN)
Patient Name _____	State (MD)
_____	Confirm (RN)
Procedure _____	State (MD)
_____	Confirm from Consent (RN)
Adverse Patient Hx/Allergies _____	Request (MD)
_____	Respond from Chart
Single or Double Glove _____	Request (MD)
_____	Respond (RN)
Equipment _____	Available and Checked (RN)
_____	Available and Checked (Scrub)
Invitation to Speak _____	(from script – MD)
<b>“If any member of the team sees anything that is unsafe, I expect you to speak up.”</b>	
Is Everyone Ready? _____	Respond (“nurse”, “scrub” etc.)
Briefing _____	Complete (MD)

**12. Does the Hospital Conduct Annual Refresher Training in its Patient Safety Skills and Programs?**

The skills utilized in a CRM-based patient safety program are just like technical skills and knowledge. If not used and refreshed, they decay over time. Every organization must identify which skills are decaying most rapidly through the analysis of its performance data. Those skills then become the focus of annual refresher training.

**Conclusion**

An auditor can provide a quick check up on the health of a hospital's patient safety and quality program by seeking answers to these 12 questions. In doing so, the auditor will provide critical assistance to the hospital in meeting its mission for the market it serves, help the hospital protect its market share, improve its profitability, provide a better place for its medical staff to practice medicine, improve the job satisfaction of its employees, and most importantly, provide better and safer care to its patients. **NP**

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