
WHITE PAPER:

Incident Reporting Systems and Future Strategies for Patient Safety Improvement

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Date: 2016/17

Driving down harm

How can healthcare providers most successfully pursue the goal of zero patient harm? A member of Datix's team gives an overview of incident reporting systems and future strategies for patient safety improvement.

Ever since the Institute of Medicine (IOM) released its landmark 1999 report *To Err is Human: Building a Safer Health System*, there has been a global focus on improving patient safety. Despite the efforts of an entire industry, however, progress has been slow—indeed, the situation may be getting worse.

While the IOM report estimated that as many as 98,000 US patients die annually from medical errors, a 2016 study published in the *British Medical Journal* shows that medical errors may now be the third leading cause of death in the US—claiming 251,000 lives every year.¹ If the study's findings are correct, then only heart disease and cancer kill more people each year than medical errors.

How can this be? How can healthcare organizations, despite all their efforts to improve patient safety, be sliding in the wrong direction? The answer is simple. Too often, healthcare organizations fail to learn from things that go wrong, meaning that the same mistakes are continually repeated.

Ending this cycle of futility is simple in theory, but difficult to achieve. To make sustainable improvements in patient safety, organizations must foster the right culture while maintaining effective risk management systems and well-designed processes. While risk management systems and process management can certainly be hardwired into most organizations—assuming sufficient resources exist—cultural transformation can be extremely elusive.

Culture and psychological safety

In the nearly two decades since the IOM's report, there have been numerous studies demonstrating the impact of culture on patient safety. So powerful is the correlation

between the two that, in 2004, the Agency for Healthcare Research and Quality released the Hospital Survey on Patient Safety Culture (HSOPS) in an effort to bridge the gap between theory and execution. Since then, hundreds of hospitals across the US and internationally have implemented the survey in hopes that comparative data will uncover not only the most important aspects of a patient safety culture, but also the most effective strategies for change.

While the HSOPS database has not yet revealed eye-popping discoveries, many patient safety experts already agree that the cornerstone of cultural transformation is the need for psychological safety: healthcare professionals must feel confident and secure in reporting errors and raising concerns knowing that they will be treated fairly.

Unfortunately, that isn't always the case. In July 2016, UK optometrist Honey Rose² was found guilty of gross negligence manslaughter because of failing to diagnose a fatal build-up of fluid in the brain of a young child. This tragic case sent shockwaves across the medical community, prompting an open letter and petition—with more than 4,000 signatures³—calling on the Department of Justice to review the use of gross negligence manslaughter charges against healthcare professionals.

This case highlights the difficulties in balancing the need for accountability for intentional or reckless acts—an essential component of a just culture—with the need to ensure that healthcare professionals are not punished for human error. Unfortunately, achieving that balance is easier said than done. In fact, in his 2009 Congressional testimony on healthcare quality improvement, Dr. Lucian Leape, a member of the Quality of Health Care in America Committee at the Institute of Medicine and adjunct professor of the Harvard School of Public Health, told members of Congress that the single-greatest impediment to error prevention in the medical industry is “that we punish people for making mistakes.”

Unless individual healthcare organizations embrace a just culture—which allows for open and honest disclosure—incident reporting will profusely suffer, root-cause investigations will languish, and opportunities for learning and improvement will be all but non-existent. However, for a just culture to work, the wider system, including professional regulation and the criminal justice system, must also pull in the same direction.

Why is a just culture so important to reducing preventable medical errors? Because punishing unintentional mistakes leads to a culture of fear that can result in even more harm to patients. As fear causes future mistakes to go unreported, the consequence is that organizational remedies are not identified and implemented.

Using data to drive improvement

In his book *Black Box Thinking*, Matthew Syed writes: “Many of the errors committed in hospitals have particular trajectories; subtle, but predictable patterns; what accident investigators call ‘signatures’. With open reporting and honest evaluation, these errors could be spotted and reforms put in place to stop them from happening again.”

Syed neatly describes why incident reporting systems play an important role in managing safety, not just in healthcare, but in all safety-critical sectors. Incident reporting systems provide organizations with essential information about hazards and risks that may otherwise remain hidden and provide important opportunities to improve and make changes to protect patients from future harm.

The effectiveness of incident reporting systems in supporting safer healthcare is influenced by several factors. These include:

- Ensuring that healthcare staff feel safe in reporting incidents and raising concerns (psychological safety).
- Systems and processes to assign and prioritize appropriate levels of investigation.
- The right resources, including experienced and appropriately trained incident investigators.
- Systems and processes to ensure contributory factors are recognized and data can be effectively analyzed to identify patterns and trends.
- Systems and processes to ensure recommendations, interventions, and improvement strategies are evidenced based, resource effective, and implemented in a controlled manner.
- Systems and processes to ensure improvement strategies and interventions are monitored and sustained.
- Keeping staff informed of improvements and providing staff with feedback relating to how incidents and patient safety concerns have been addressed.

If any of these components break down, the effectiveness of reporting systems is diminished and staff can become disengaged and cynical about the purpose and value of reporting incidents and raising concerns.

The healthcare landscape is riddled with examples of clinicians who are reluctant to report all but the most serious of incidents because they feel reporting less serious incidents creates an administrative burden without resulting in tangible improvements. While the process of reporting incidents must be as easy as possible, it is also vital that organizations have the right systems, processes, and resources in place to ensure incident data is used to identify hazards and risks for further investigation, ultimately leading to change and improvement.

What's more, organizations with good systems and processes should be able to play an important role in sharing their learning and experience with organizations that need to improve.

From competition to collaboration

In his 2015 book *Safer Healthcare—Strategies for the Real World*,⁵ Charles Vincent discusses the importance of collaboration and seeing safety through the patient's eyes. In the past, the view of what constitutes an incident has often been from the eyes of clinicians or healthcare professionals. However, a wider view of issues and opportunities to improve patient care can be gained by looking from the patient's perspective across the care pathway.

From this perspective, an incident could be harm caused by fundamental longer-term failures—for example, an avoidable hospitalization because of an undetected deterioration in a chronic condition. Closer integration of care services provides an opportunity to take this wider view and identify opportunities to improve patient care that could otherwise be missed.

In the UK, the National Health Service (NHS) has published some of the successes resulting from the work of the 15 Patient Safety Collaboratives⁶ that were established following Donald Berwick's 2013 critical review⁷ of that country's healthcare system. The achievements are many, including the development of care bundles that have reduced mortality following emergency laparotomies, establishment of safety

huddles that have significantly reduced inpatient falls, and work that has reduced inpatient medication errors.

Good work is also being done by the NHS's Sign Up to Safety campaign, 8 which launched in 2014 with the mission to make the NHS the safest healthcare system in the world. The campaign aims to help member organizations listen to patients, caregivers, and staff; learn from what they say when things go wrong; and take action to improve patient safety. The work being undertaken in the UK shows what can be achieved by working collaboratively across different organizations to share and spread learning, solutions, and examples of excellence.

Although collaboration is undeniably important, it is still too often the case that individual organizations are not sharing interventions and strategies they have developed locally. Vincent proposes that we need “to observe, identify, and collate safety-relevant strategies and interventions at all levels of healthcare organizations and the wider system” and “develop a more robust taxonomy of approaches and begin to assess which might be applicable in different contexts”. Future progress lies in this direction.

The changing landscape

In the US, UK and elsewhere, a wide range of tactics are being rolled out, all aimed at making further progress to support the development of a learning culture to reduce preventable harm. These include toolkits, data sharing, new approaches to healthcare safety investigations, more progressive approaches toward integrating patients and families into care pathways, and more. The common thread connecting all these initiatives is culture.

In March 2016, Imperial College London and Imperial College Healthcare NHS Trust launched their joint report, Patient Safety 20309. The report states: “Culture is often seen as a nebulous and non-quantifiable concept even though it can be defined—and thus measured and improved. Historically it has been under-researched and slow to emerge as a root cause of adverse events. This lack of attention to culture is problematic, given the role it plays in fostering safety.”

The levers that influence culture are system-wide, with lasting progress dependent on ensuring all parts of the system pull in the same direction. This must include not

only better support for patients involved in incidents, but also systems that ensure healthcare professionals are treated fairly when things go wrong.

Improving patient safety must also involve better use of the data we collect, moving from an understanding of “what” goes wrong toward an understanding of “why” and “how”. Collating effective improvement strategies and interventions that have been assessed in different contexts and sharing this information across the system could help organizations focus on the most effective solutions. The effectiveness of recommendations that arise from investigations needs to be measured and monitored and improvement sustained.

Technology will play an important role in the next steps of the patient safety revolution. The effective implementation of new technology will help the healthcare community use data intelligently to identify risks; gain a deeper understanding of why things go wrong; and implement, monitor, and share effective improvement solutions to help protect patients from harm.

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