Sustaining and Implementing HRO

Michael Harrison, Sr Research Scientist – Organization and Systems, Agency for Healthcare Research and Quality (AHRQ)

Christopher Hart, JD, Deputy Director Air Traffic Safety Oversight Service, Federal Aviation Administration

Michael Rosenblatt, MD, General Surgeon, Director of Trauma Service, Vice Chair, Division of Surgery, Lahey Clinic

Bert Slagmolen, PhD, Managing Partner, IME Consultants (Netherlands)

- Michael Harrison suggests that creating and sustaining change toward reliability requires:
    - Stable operating environment
    - Marshalling of major resources and expertise
    - Treating transformation as a learning journey rather than a one-time shift.
    - Need a lot of feedback.
    - Very few systems have the capability to handle this
    - The exec team is often reshuffled to support the transformation
    - Leadership is mobilized at multiple levels (not just the top or bottom, but middle)
    - Reward systems are redesigned to reinforce the transformation
    - Processes and culture of safety are changed and reinforced
    - Finally, information systems are used to support rather than drive the transformation process

- Mr. Harrison suggests that a series of challenges are currently facing us in creating change, and require a level of pressure that we are not experiencing at the moment. Incremental quality movements can be valuable and life-sustaining; but the true shifts come about through major transformations and radical shifts. We need to think about not just the ‘what’ it would look like, but the ‘how’ we would get there.

- Christopher Hart of the FAA discusses three aspects of HRO: removing obstacles that discourage data collection, analyzing the data, and benefits.

- Historically, much blame is placed on individuals after accidents. However, the system should be examined. Following accidents and catastrophes, it is very difficult to avoid blaming individuals and instead focus on systems.

- They are trying to analyze systems through systematic data collection.

- Systems should be designed to acknowledge that some errors will arise despite the best efforts of the people involved.

- Unreported occurrences and minor events, if gone unnoticed, become the building blocks for future accidents. How does this information get discovered rather than unnoticed?

    - The front-line worker often knows about the problem, and knew it would hurt someone sooner or later.

    - Barriers to voluntary information sharing include the possibility of civil litigation, criminal sanctions, job sanctions or enforcement, and other risks of public disclosure.

    - The FAA, for example, enacted rules to look at flight data recorders after successful flights, not just accidents. This was helpful to learn about near misses as well as actions that led to success rather than failure. To encourage disclosure of this information, the FAA agreed to not use any information collected against airlines unless particularly egregious or negligent actions were brought to light.

- While progress has been made against legal barriers to information sharing, cultural barriers still exist and are very difficult to change. Organizations routinely create incentives for production and safety is often overlooked.

- It is very difficult according to Mr. Hart to change cultures to embrace reliability programs because their potential benefits are very difficult to communicate. Whether mishaps are prevented may be difficult to prove, and it may be several years before benefits are seen since deeply latent problems take time, effort, and resources to fix.

- The main benefit, and the most attractive benefit, is the cost and productivity savings from more reliable performance. This should be the focus of implementation efforts.

- Dr Rosenblatt discusses his interest in patient safety. Prior to the Institute of Medicine Report in 1999, there was no integrated approach to patient safety. The concept of project management was relatively foreign. The IOM report emphasized the need for a learning environment and organizational models to proactively engineer a climate of safety.

- According to Dr Rosenblatt, at the Lahey Clinic prior to 1999, quality appeared to be due to random acts by physicians, nurses, and other staff. There were limited resources for patient safety and there lacked an integrated focus or approach to mobilize these resources.

- The HRO framework was ultimately adopted by the Lahey Clinic as their number one non-financial goal. The reporting process was redesigned to emulate the FAA's system (web-based system to allow quicker response). Analyses of data and root causes were improved. Organizational response and learning were improved. They made a shift away from reactive response and risk management toward a more proactive approach. They attempted to enact a flexible culture and structure by integrating nursing colleagues and physicians into joint committees. Leadership began conducting safety walk-throughs. Communication efforts were established, including presentations and training, to emphasize HRO culture and safety awareness.

- They developed a preoccupation with failure and safety, by encouraging the communication of critical information, resolving chain of command issues, addressing patient transportation issues and infusion pump safety. They built a simulation program to build teamwork.

- To accomplish these ends, they needed to restructure their committee and build leadership.

- The results included a reduction in incidents and patient complaints between 2002 and 2005.

    - They have been recognized for patient safety outcomes for three years in a row.

- A variety of challenges arose in maintaining and sustaining these changes

    - Cross cultural problems arose (communication among non-english speakers)

    - It was difficult to persuade other organizations to adopt these models, and much of this had to happen through personal contacts.

    - Dr Rosenblatt suggested that despite their efforts, there was much more improvement that is always needed in HROs.

- Bert Slagmolen discussed the advocation of HRO concepts in public domain areas. Many of these areas/industries are not high-risk, as typically discussed in this conference, but are similarly trying to accomplish their goals in the best and most reliable way.

    - For instance, they are active in the Dutch rail infrastructure, the Dutch network of labour offices, and the ICT service centre for all Police organizations.

    - Common characteristics of these organizations: they are fragmented; they have a history of reorganizations and group multiple parties with various diverse experiences. These organizations act in complex political environments. Management often focuses on

technology as the main driver for success – unexpected problems are blamed on bad planning and weak technology.

  - In all organizations, some managers acknowledge that:

    - High performance is a moral duty to better serve the public
    - Investments in mindful organizing are necessary but not very sexy
    - Mission statements and management development programs will not be adequate
    - A blind spot exists for valuing organizational grammars and behavioral dynamics; they recognize that they do not understand how these processes work.

- As consultants, Dr Slagmolen suggests that they do not have recipes for 'better' organizations and instead develop interventions that help members of organizations become aware of their situation, their hidden assumptions, and dysfunctional patterns.

- To aim for reliability, they have discovered that organizations should reflexively facilitate the process of creating conditions for 'mindful organizing' through creating:

  1) Informed culture (reporting, story telling, not blaming)
  2) Shared references (similar vocabulary, symbols, and standards)
  3) Redundancy of assembly rules and cycles (competencies, simulation)
  4) Feedback loops (manage, act, reflect)

- There are several phases to provocate people and develop HRO, including:

  1) Pathological: organizations and people don't think, even in response to problems
  2) Reactive: people react as soon as an accident happens
  3) Calculative: people and organizations measure and make explicit how to react
  4) Proactive: an interactive phase; people in organizations respond before hazards

- Questions from the audience:

  - Dr Rosenblatt fielded a question regarding how involved middle management should be in implementing change. They are very involved and serve on committees, and are probably more involved than CEOs and COOs in some activities.

- A comment arose regarding middle management; one of the audience members thinks we have forgotten middle management in the discussion of the patient safety issue. The audience member wondered if others on the panel have developed curriculum or training materials regarding the role of middle management in change. One observation by Michael Harrison was that an incentive system was established such that regional managers in one organization were evaluated with respect to quality goals. The regional managers were responsible for cascading these quality changes down through the organization, but the organization was incredibly change resistant and the intervention was not thorough.

- A question for Dr Rosenblatt involved an organization in which the CEO was very reluctant to embrace HRO concepts although other levels of the organization were interested. Dr Rosenblatt suggested that while leadership buy-in is essential, 90% of what they did required no additional resources and just involved redesign to harness inefficiencies… so much of what happened initially in his case, the CEO wasn't even aware of. Once results were present and quality as well as costs improved, the CEO became interested.

- An audience member asked whether the regulatory model in the airline industry should be replicated in the health system. Christopher Hart replied that a non-adversarial investigation system exists in aviation but that no such system exists in healthcare and should be replicated.