# RISK NOTE



## **High Reliability and Resiliency**

#### **OVERVIEW OF ISSUE**

A robust system for identifying, assessing and acting on key risks will help to drive an organization towards high reliability and resiliency – aspects of corporate performance not strictly related to the financial bottom line. Healthcare is a high-risk industry and healthcare organizations with their high numbers of employees, high degree of interdependence, complex technology, and extensive regulations are very complex. There is relentless public scrutiny and pressure to manage the unexpected well – to be resilient. Risk managers play a role in fostering resilience, anticipating significant risks, and adapting to problems as they emerge.

#### **KEY POINTS**

- HROs have five characteristics: preoccupation with failure; reluctance to simplify interpretations; sensitivity to operations; commitment to resilience; and deference to expertise.
- HROs create an environment in which potential problems are anticipated and detected early enough to prevent catastrophic consequences.



### THINGS TO CONSIDER

#### **Characteristics of High Reliability Organizations**

- Research into organizations in complex and highrisk industries (including healthcare) that experience less than their expected number of adverse events has yielded a common set of characteristics. These "high reliability organizations" (HROs) develop and maintain organizational "mindfulness" through:
  - Preoccupation with failure acting on small signals of failure and guarding against complacency and hubris; identifying problems in their early stages when they can be addressed inexpensively and without disruption instead of waiting until they grow into larger failures;
  - Reluctance to simplify interpretations –
    appreciating that their environments are complex,
    unstable, and unpredictable; positioning
    themselves to see as much as possible while
    recognizing that their understanding may be
    incomplete;
  - Sensitivity to operations being attentive to the front lines and the core work of the organization;
  - Commitment to resilience focusing on early reporting and communication of issues; keeping errors small before they evolve into more damaging situations;
  - Deference to expertise having established hierarchies but in times of stress seeking out and deferring to the individuals or teams with the most expertise (versus those with positional authority) (Weick & Sutcliffe, 2007).

 HROs are not error free and they do not let errors disable them; becoming an HRO is a journey (Weick & Sutcliffe, 2007).

#### **Mindfulness**

- HROs is a term used to describe organizations in high risk industries with disproportionately fewer catastrophes. A key feature of HROs is their heightened sense of mindfulness, their "preoccupation with failure" and their focus on both prevention and containment of risks (AHRQ, 2008). Staff are constantly on the lookout for things that went (or almost went) wrong; analyzing each event to identify opportunities to improve the system.
- HROs have a low threshold for initiating incident reviews; however different types of events would be dealt with differently. In healthcare, this could entail minor incidents being reviewed at a unit level, outcomes/complications reviewed at morbidity and mortality meetings, concise analysis for more serious incidents, and comprehensive analysis for critical incidents and multi-patient events (CPSI, 2012).
- HROs recognize that even in the best systems, incidents will occur. As a result, they exert considerable effort to contain incidents before the impact (e.g. patient or staff harm,





## **High Reliability and Resilience**

damage to equipment or reputation) worsens. For incident reviewers, this would mean that they would consider when and how the incident was detected and whether recommendations targeted at mitigating the effects of inevitable incidents would be indicated (e.g. mechanisms for early detection of patient deterioration).

#### **High Reliability in Healthcare**

- High reliability in health care is complicated by lack of overall system coordination, frequent healthcare team member changes, and variability with respect to information.
- High reliability has the potential to improve patient safety yet leaders need to recognize that it is impossible to get safety completely behind them (Sutcliffe, Paine, Pronovost, 2016).

- Nolan, et al. (2004) propose a three-step model for high reliability in healthcare including:
  - Prevent failure (a breakdown in operations or functions);
  - Identify and mitigate failure: Identify failure when it occurs and intercede before harm is caused, or mitigate the harm caused by failures that are not detected and intercepted;
  - Redesign the process based on the critical failures identified.

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Page 2 of 2