Selected research, publications, and resources to promote evidence-informed risk management in Canadian healthcare organizations. Prepared by Healthcare Risk Management staff at the Healthcare Insurance Reciprocal of Canada (HIROC). Titles with an open lock icon indicate that a publication is open access. For all others a subscription or library access is required; the librarian at our organization may be able to assist you. Please contact riskmanagement@hiroc.com for assistance if required.

**HOT OFF THE PRESS**

**GOVERNANCE** From spotlight reports to time series: equipping boards and leadership teams to drive better decisions

Article discussing the question of how to get data to decision-makers in a form that drives useful decision-making. Two papers reviewed in the article contrast the critical need to ensure data does not misinform decision-makers and highlights the forms of data decision-making groups should see in order to focus attention on the most pressing areas. Authors suggest healthcare organizations need to move away from ‘red, amber, green’ spotlight reporting to time series data with control limits highlighting variation and trends. Healthcare executives and board members need analytical capabilities and sophistication to understand effective data use and associated advantages as well as limitations of different ‘big data’ representations.

**INCIDENTS/REGULATORY** Learning from incidents in healthcare: the journey, not the arrival, matters

Article describing how theories in evolving scientific literature on incident reporting apply to the Dutch Healthcare Inspectorate which mandates hospitals to report all sentinel events within three days of discovery. Authors believe their work since 2012 acts as an empirical example of how reporting systems could have an effect if they focus on the learning process. Authors note the definition of sentinel event has changed over time as have the standards for corrective actions which mean healthcare providers need to be able to “hit moving targets”. Results showed the quality of sentinel event analysis reports increased 14% over two years and multidisciplinary (including physicians) committees investigated incidents at all Dutch hospitals. Questions used to judge the quality of a sentinel event analysis are included.

**PATIENT SAFETY/PAEDIATRICS** Effect of surgical safety checklists on pediatric surgical complications in Ontario

Article describing a retrospective cohort study with the aim to: 1) evaluate the effect of surgical safety checklists on perioperative complications in children who undergo common types of paediatric surgery, and 2) to determine if the use of surgical safety checklists was associated with a reduction in measures of healthcare utilization (i.e. unplanned return to the OR, length of hospital stay). Results showed there is increasing evidence surgical safety checklists can improve perioperative outcomes in many healthcare settings; however, the mandated implementation of surgical safety checklist in Ontario was not associated with a reduction in the proportion of children who had perioperative complications.
PATIENT SAFETY **Patient safety and the problem of many hands**

Article suggesting the patient safety crisis in healthcare suffers from a pathology known in public administration literature as the problem of many hands. Specifically, it is a problem that arises in contexts where multiple actors (organizations, individuals, and groups) each contribute to the effects seen at the system level; however, it is difficult to hold any single actor responsible for these effects and the overall outcome. Healthcare is an example of the problem of many hands, even when individual actors are seeking to improve; the multiplicity of actors and their failure to act in a coordinated way may increase the risks in the system. When many hands are involved, individuals who may bear some responsibility for harm are less likely to see what they do and to be held responsible by others. Authors concluded that recognizing the problem of many hands may be the first step in fixing it which will enable new structures and accountabilities for collective system-level approaches for protecting patients.

DISCLOSURE **Medical errors: disclosure styles, interpersonal forgiveness, and outcomes**

Study investigating the intrapersonal and interpersonal factors and processes associated with patient forgiveness of a provider in the aftermath of a harmful medical error. Study examined what antecedents are most predictive of patient forgiveness and non-forgiveness, and the extent to which social-cognitive factors influence the forgiveness process. Figures illustrating the proximity model of forgiveness, as well as the indirect effects model of forgiveness are included. Authors concluded that patient empathy and reflection are the strongest predictors of both patient forgiveness and non-forgiveness and suggest that the way in which a physician communicates can have a substantial effect on the forgiveness process and relevant outcomes.

“Patients have concrete expectations for providers’ disclosures after a medical error has harmed them. Unfortunately providers generally fail to meet their expectations. Despite ethical obligations, errors are disclosed in less than a third of all cases, and in such disclosures, only about half of providers explain what happened, only a third offer apologies, and very few discuss the prevention of future recurrences of the event” (p. 29-30).

DISCLOSURE/MULTI-PATIENT EVENTS **Disclosing large scale adverse events in the US Veterans Health Administration: lessons from media responses**

Analysis of print, broadcast, and social media reports about healthcare systems’ disclosures of large scale adverse events (six disclosures of lapses in infection control practices) to develop future effective messaging. Authors identified 148 unique media reports; some valuable components of communication (i.e. discussion of cause, reassurance, and self-efficacy) were more present than others (i.e. apology, lessons learned). If the time from event discovery to patient notification was over 75 days, messages about promoting secrecy and slow response appeared. Hospital officials’ comments were predominantly neutral while elected officials’ quotes were often negative. Authors suggest healthcare administrators should develop clear messages including authentic apologies/remedial actions taken and state these soon after event identification.
PATIENT SAFETY/HANDOFFS  
**Half-life of a printed handoff document**


Study measuring the average time to potential inaccuracy or ‘half-life’ of printed handoff documents of 100 patients over 24 hours at a US academic medical centre. Half-life was defined as the time at which half of the patients would have had inaccurate information on a printed hand-off document, equivalent to the median time to inaccuracy. Results showed the half-life was six hours on the 12 hour night shift and 3.3 hours on the day shift. Authors identified at least one change within the 24 hour period for 92% of patients with most changes being medication-related; the overall distribution of order types was significantly different from day to night with more code-status orders written at night and more diet orders written during the day. Based the results of this study, a typical physician getting handoff on 20 patients overnight can safely assume the data for 10 of them will be inaccurate or outdated in 6 hours and it will be inaccurate on another two patients by the morning.

“By documenting the inaccuracies which can be expected on printed handoff documents, we hope to achieve a shift toward reliance on the EHR (on screen, real time) as the ‘source of truth’, with the ultimate desired result of improved patient safety” (p. 325).

PATIENT SAFETY/ORGANIZATIONAL LEARNING  
**An organizational learning framework for patient safety**


Article exploring organizational learning theory and how the concept can be used as a framework for thinking about patient safety. Article describes the four major sources of organizational learning and proposes that these modes can be set within a four-sided frame of governance oversight; leadership behaviours; the physical, technological and financial environment; and organizational culture, capabilities, and resilience. A brief self-assessment guide, as well as a table summarizing the requirements for high reliability, are included.

“Health care leaders who confront the basic requirements for achieving high reliability in quality and safety in light of the prevailing dysfunctional practices will open the door to transformation” (p. 7).

QUALITY IMPROVEMENT/OBSTETRICS  
**Use of maternal early warning trigger tool reduces maternal morbidity**


Article exploring whether maternal morbidity could be reduced with the implementation of a clinical pathway-specific Maternal Early Warning Trigger (MEWT) tool. Developed internally, the MEWT tool addresses the four most common areas of maternal morbidity: sepsis, cardiopulmonary dysfunction, preeclampsia-hypertension, and hemorrhage. During the course of a thirteen-month pilot project, which involved six hospitals within a large healthcare system in the US, significant reductions in severe maternal morbidity and composite morbidity were observed. Authors noted the most commonly triggered pathway during the course of the study was infection/sepsis and suggest further refinement of maternal sepsis screening will likely be the best way to improve the performance of any maternal early warning system. A flow diagram of the MEWT employed during the study is included.
Other Resources of Interest (all)


**National reporting and learning system (NRLS) research and development** (March 2016). National Health Service (UK) report on the findings of the NRLS; includes current state of affairs and areas of concern.


**Patient Safety 2030** (April 2016). National Institute for Health Research (UK) report calling for the need to shift patient safety attention to a system-based approach and collaborations.

**Quality and patient safety** (April 2016). AHRQ (US) webpage containing tips for preventing medical errors and promoting patient safety, measuring healthcare quality, and case studies.

**Rapid response teams improve outcomes – Part 1, 2, and 3** (February 2016). *Intensive Care Medicine* (Belgium) three-part commentary of contrasting viewpoints (link to first article will direct reader to other two articles).


**Surgical safety in Canada: a 10-year review of CMPA and HIROC medico-legal data** (April 2016). Retrospective analysis of Canadian surgical safety incident data.

**The most important leadership competencies, according to leaders around the world** (March 2016). Harvard Business Review (US) article exploring the top 10 leadership competencies.

**Top 10 patient safety concerns for healthcare organizations** (April 2016). ECRI (US) list and guidance to help healthcare organizations proactively identify problems and strategies.

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**HIROC Healthcare Risk Management**

**HIROC Monthly Risk Management Webinars – 2016 Upcoming Topics – Save the dates!**

- May 12  Palliative Home Care Safety: Perspectives from Clients, Caregivers & Providers
- June 8  Demystifying Cyber Risk
- June 15  Directors’ & Officers’ Liability Insurance
- June 23  Health Equity
- September 15  Boilers
- October 20  Surgical Safety in Canada
- November 17  Quality & Safety of Obstetrics in Canada
- December 8  Primary Care

For an up-to-date list of HIROC’s 2016 webinars please click here.