


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 your organization may be able to assist you. Please contact riskmanagement@hiroc.com for assistance if required.

HOT OFF THE PRESS

PATIENT SAFETY/MISDIAGNOSIS

[Matt's story: learning from heartbreak](#)

Miller K, Dastoli A. *Int J Qual Health Care*. 2018 (online, April):1-4.

Article describing 19 year old "Matt", who passed away after a medical misdiagnosis. The story of "family heartbreak, the harsh reality of the second victim phenomenon and lessons learned in compassion, vigilance and transparency for the health care industry"(p.1) are outlined. Matt's cardiologist was shocked, distraught and overwhelmed with grief when learning the post-mortem examination outcome. The cardiologist never contacted the family, left his medical practice and relocated. Matt's parents interpreted the lack of communication as not caring. Legal proceedings were initiated. Authors noted Matt's father still needed to meet with his son's cardiologist face to face and never had the opportunity due to the cardiologist's suicide. Authors identified that subtle cognitive bias plays a role in many diagnostic errors.



QUALITY IMPROVEMENT/REGULATORY AGENCIES

[Assessing improvement capability in healthcare organisations: a qualitative study of healthcare regulatory agencies in the UK](#)

Furnival J, Boaden R, Walshe K. *Int J Qual Health Care*. 2018 (online, April):1-9.

Study to explore how improvement capability is conceptualized and assessed, and to predict future performance trajectory, by UK healthcare regulatory agencies who have responsibility for the oversight of hospital care. Results showed that of the eight dimensions of improvement capability, process improvement and learning, and strategy and governance, dominate regulatory assessment practices. Authors noted dimensions identified from the literature, such as employee commitment or organizational culture, are used less frequently during the assessment and with some variation across regulatory agencies. The dimension of service-user focus received the least frequency of use. Samples of quotations across data sources and eight dimensions on policy documents, interviews and assessment reports are provided.



MEDICATION MONITORING/ETHICS

[Medication adherence monitoring: implications for patients and providers](#)

Gheorghiu B, Nayani S. *Health Manage Forum*. 2018 (May);31(3):108-111.

Article highlighting two scenarios encountered in clinical practice that reflect medication adherence issues occurring regularly in the Canadian healthcare system. Challenges in taking medication as prescribed is described and due to multiple factors; however monitoring is essential to ensure a patient's condition does not deteriorate, or that adverse drug reactions are not experienced. Cited in the article is a World Health Organization report which states that medication non-adherence accounts for 5% of Canadian hospital admissions, 5% of physician visits and results in an additional 4 billion in healthcare costs annually. Authors concluded relevant stakeholders, including patient advocates, clinicians, regulators, and privacy experts, need to further collaborate to address ethical concerns so the full potential of "e-prescribing" may be realized.



SECOND VICTIM

[Psychological first aid: CPR for mental health crises in healthcare](#)

Gijspen F, Wu A. *J Patient Saf Risk Manage.* 2018 (April);23(2):51-53.

Article discussing psychological first aid (PFA) to assist second victims, the care providers involved in an adverse event. Authors stated PFA was developed in the 1950s and used in developing countries after crisis events, and can be adapted to healthcare settings. It is an evidence-informed approach with the goal of promoting an environment with five elements to restore social and behavioural functioning: 1) safety, 2) self- and community-efficacy, 3) calming, 4) connectedness, 5) hope. Authors liken PFA to a rapid response for mental health crises and advocate that all healthcare workers be trained in its core action principles. Coupling PFA with existing staff assistance programs may work to improve the work life of healthcare professionals, thereby reducing burnout.



MEDICATION ERRORS/CONSUMER HEALTH INFORMATION

[Consumer mobile apps for potential drug-drug interaction check: systematic review and content analysis using the Mobile App Rating Scale \(MARS\)](#)

Kim B, Sharafoddini A, Tran N, et al. *JMIR Mhealth UHealth.* 2018 (March);6(3):e74.

Study to review the characteristics and quality of mobile health (mHealth) apps that check for potential drug-drug interactions (PDDIs) using the Mobile App Rating Scale (MARS), a 23-item scale which assesses apps on user engagement, functionality, aesthetics and information. A total of 23 apps were reviewed (12 from Apple Store, 11 from Google Play); five of these (22%) were paid apps. Results showed that overall app quality did not differ between app stores (mean MARS score 3.23 out of 5). The information dimension was associated with the highest score (3.63), whereas the engagement dimension resulted in the lowest score (2.75). Authors stated the low average score in the information dimension indicates the apps deliver potentially unsafe information about PDDIs. Additionally, there was large variability in the accuracy of PDDIs among the tested apps with 48% of apps scoring 4 or higher on the MARS item related to quality of information, and 30% scoring less than 1. Authors concluded the need for oversight to eliminate low quality and potentially harmful apps and secondary features such as medication reminder, refill reminder, medication history tracking, and pill identification could help enhance the effectiveness of PDDI apps.



CARE/BIRTH TRAUMA

[Mode of delivery after a previous cesarean birth, and associated maternal and neonatal morbidity](#)

Young C, Liu S, Muraca G, et al. *CMAJ.* 2018 (May);190(18):E556-E564.

Study to compare maternal and infant outcomes after attempted vaginal birth after cesarean (VBAC) delivery versus elective repeat cesarean delivery across Canada (excluding Quebec) over a 12-year period. Results showed absolute rates of severe maternal morbidity and mortality (e.g. severe postpartum hemorrhage, uterine rupture) were low but significantly higher after attempted VBAC compared to elective repeat cesarean delivery (10.7 versus 5.65 per 1000 deliveries respectively). When adjusting for rate differences in severe maternal morbidity and mortality and serious neonatal morbidity and mortality (e.g. neonatal seizures, assisted ventilation), there were small differences (5.42 and 7.09 per 1000 deliveries respectively). There was a temporal worsening when examining VBAC and serious neonatal morbidity and mortality (twofold higher in 2012-2014). Authors identified the need to take greater care in selecting candidates for VBAC and more careful monitoring of labour and delivery.



CARE/MEDICATION

Errors and discrepancies in the administration of intravenous infusions: a mixed methods multihospital observational study

Lyons I, Furniss D, Blandford A, et al. *BMJ Qual Saf.* 2018 (online, April):1-8.

Study to explore the prevalence, types, and severity of errors and discrepancies in infusion administration in English hospitals, including the sources of variation and the contribution of smart pumps to this variation. Results showed 2008 infusions, of which errors were observed in 231 (12%) of them while discrepancies were observed in 1065 infusions (53%); smart pumps had little effect. The most common error types related to medication administration were rate deviations and unauthorized medications while the most common procedural and documentation errors related to medication labelling and administration sets. Of all infusions, 23 errors (1%) were considered potentially harmful though none resulted in prolonged hospital stay or long-term harm. There was wide variation with respect to types and prevalence of errors and discrepancies including local policies. Authors identified the need to better understand performance variability to strategically manage risk and improve safety.



REGULATORY/CREDENTIALING

The characteristics of physicians who are re-disciplined by medical boards: a retrospective cohort study

Jeyalingam T, Matelski J, Alam A, et al. *Jt Comm J Qual Patient Saf.* 2018 (online April):1-5.

Study to compare the characteristics of Canadian physicians who have been re-disciplined compared to those who have been disciplined for the first-time over a 15-year period. Results showed 810 physicians were disciplined with 938 disciplinary events; 1 in 8 were re-disciplined. Of the re-disciplined physicians, they had up to six disciplinary events and 4 (4%) had events in more than one jurisdiction. Regarding demographics of those re-disciplined, 93% were male, 34% were international medical graduates, and 87% practiced either family medicine (58%), psychiatry (11%), surgery (9%), or obstetrics/gynaecology (9%). Standard of care and unprofessional conduct were the most common transgressions (28% and 25% respectively) while the most common penalties were fines (74%) and license suspension (57%). Authors identified the need for better identification of at-risk individuals and optimization of remediation and penalties.

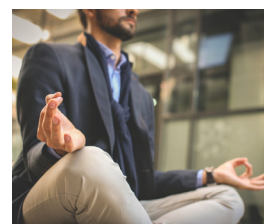


HEALTHY WORKPLACES

A three-step model of stress management for health leaders

Hartney E. *Healthc Manage Forum.* 2018 (May);31(3):81-86.

Article describing the effects of work-related stress on the cognitive system of health leaders and its impact on organizational climate. Author proposes that instead of eliminating stress in the work environment, health leaders should strive to manage it in order to achieve optimal performance and maintain mental focus. A three-step model of stress management, drawn on evidence from literature, focuses on the individual, team/organizational, and system levels and includes: 1) personal stress management (e.g. practice mindfulness, counselling is required), 2) leading stress management in teams and organizations (e.g. facilitate work-life balance, tackle workplace harassment), 3) stress management in system transformation (e.g. disseminate evaluations of trauma-informed practice, promote values-based leadership). Author concluded that change begins with the individual leader; this can progress to supporting teams more effectively and wider advocacy to create psychologically healthy workplaces.



 **Other Resources of Interest (all )**

[**A guide to having conversations about what matters**](#) (May 2018). BC Patient Safety & Quality Council guide with tools for healthcare providers, patients, family members and caregivers to make conversations easier.

[**A milestone for the Canadian Incident Analysis Framework**](#) (April 2018). Canadian Patient Safety Institute article highlighting achievements made since the introduction of the framework in 2012.

[**Care for adults with a progressive, life-limiting illness**](#) (April 2018). Health Quality Ontario tools and resources on palliative care for patients, clinicians, and organizations.

[**“Do you know if this is real?”: after countless drills, Sunnybrook Hospital was about to respond to one of the nation’s deadliest attacks**](#) (April 2018). Globe and Mail (CDN) article on hospitals code orange response.

[**Hospitals see growing number of kids and teens at risk for suicide**](#) (May 2018). NPR (US) article describing research about the increase in young people who have suicidal thoughts or attempts and possible influences.

[**New provisions to protect patients from sexual abuse in force on May 1, 2018**](#) (April 2018). Borden Ladner Gervais LLP (CDN) article on the changes to the regulation of health professions in Ontario with the Protecting Patients Act, 2017.

[**Resources to support the safe adoption of the revised National Early Warning Score \(NEWS2\)**](#) (April 2018). NHS (UK) patient safety alert for improving recognition and response to patient deterioration.

[**Vaginal birth after caesarean quality standard**](#) (April 2018). Provincial Council for Maternal and Child Health (Ontario) and Health Quality Ontario quality standard to provide evidence-based recommendations.

HIROC Healthcare Risk Management

HIROC Monthly Risk Management Webinars – 2018 Upcoming Topics – Save the dates!

Jun 19

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