


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](mailto:riskmanagement@hiroc.com) for assistance if required.

## HOT OFF THE PRESS

### OBSTETRICS

#### [Use of a maternal newborn audit and feedback system in Ontario: a collective case study](#)

Reszel J, Dunn S, Sprague A, et al. *BMJ Qual Saf.* 2019 (online, February):1-10.

Study in Canada to identify factors to better understand the variability in performance following the implementation of an electronic audit and feedback tool designed to improve maternal-newborn care and outcomes. A total of 104 participants across 14 hospitals with maternal-newborn services participated in semistructured interviews and focus groups on change processes; on-site observation and document reviews were also conducted. Results showed four factors that facilitated or impeded use of the tool for clinical practice change: 1) interdisciplinary collaboration and accountability, 2) formal change strategies, 3) team trust and use of evidence and data, 4) alignment with organizational priorities. Authors discussed the four themes in detail and noted that trust in quality of data was a key influencing factor in the use of audit and feedback tools. A sample of the tool which targets six key performance indicators is provided.

### MEDICATION RECONCILIATION/AMBULATORY

#### [Increasing the use of home medication lists in an outpatient neurorehabilitation clinic](#)

Guo M, Tam A, Dey A, et al. *BMJ Open Qual.* 2019 (online, March):1-7.

Quality improvement project at a Canadian academic rehabilitation hospital to increase the percentage of patients that bring medications/lists to clinic visits from 48% to 80% and to reduce the number of clinic visits with missing medication information from 33% to 10%. Interventions included verbal and written reminders during appointment confirmation phone calls and on new patient appointment letters, and medication list templates. Results showed both aims were achieved, with 82% of patients bringing medications/lists to clinic visits and 9% of clinic visits had missing medication information. The improvement was likely due to written reminders, though results were not seen for 3-6 months because of wait times for the clinic. A key lesson learnt was the importance of prolonged data collection for interventions with long lag times.

### MEDICATION/PATIENT SAFETY

#### [Reducing inappropriately suspended VTE prophylaxis through a multidisciplinary shared learning programme and electronic prompting](#)

Brewer C, Ip D, Drasar E, et al. *BMJ Open Qual.* 2019 (online, March):1-5.

Quality improvement project at a large acute care hospital in the UK to explore reasons for and scale of inappropriate suspension of pharmacological venous thromboembolism (VTE) prophylaxis for medical inpatients. A baseline audit over a one month period showed 72 patients had their pharmacological prophylaxis suspended during admission; 28% of suspensions were inappropriate. The most common reason was a delay in restarting prophylaxis following a clinical procedure that had a risk of bleeding. Interventions included education and email prompting to alert prescribers of errors. A re-audit to assess their efficacy occurred. Results showed “there was a significant reduction in the proportion of patients who had their VTE prophylaxis suspended inappropriately ( $p < 0.001$ ). Length of delay and distribution of reasons for delay were roughly comparable” (p. 4).

## PATIENT SAFETY/TEAMWORK

### [A qualitative positive deviance study to explore exceptionally safe care on medical wards for older people](#)

Baxter R, Taylor N, Kellar I, et al. *BMJ Qual Saf.* 2019 (online, February): 1-9.

Study in the UK to explore characteristics of exceptionally performing teams (positive deviants) on wards for older people. Using a routinely collected 'harm-free care' composite measure, four positively deviant wards were identified and matched to four slightly above-average performing wards. Seventy participants took part in focus groups to provide their views on how their team delivers safe care. Of the 14 characteristics identified, the five most notable, which authors discussed in greater detail, were: 1) knowing each other, 2) a multidisciplinary approach, 3) integrated allied health professionals, 4) working together, 5) feeling able to ask questions or for help. Authors did not find specific tools or processes to be positively deviant; rather, positively deviant characteristics influenced how these tools were implemented and this was perceived to be the difference between good and exceptional performance. The list of 14 characteristics identified is included.

## ADVERSE EVENTS/EMERGENCY DEPARTMENT

### [Comparing the outcomes of reporting and trigger tool methods to capture adverse events in the emergency department](#)

Lee WH, Zhang E, Chiang CY, et al. *J Patient Saf.* 2019 (March):15(1):61-68.

Study at an academic medical centre in Taiwan to compare the ability of trigger tool and incident reporting methods to capture adverse events in the emergency department (ED). An adverse event was defined as a physical injury or potential harm arising from medical services or interventions. An error was defined as the failure of a planned action to be completed as intended or the use of an incorrect plan for a specific aim. Over the one year study period, there were 69,327 adult non-trauma ED visits. A total of 2,649 incidents were analyzed and results showed 285 adverse events and 365 errors were captured. Of the adverse events, 220 (77%) were captured using incident reporting methods, 74 (26%) by trigger tool methods and 9 (3%) using both methods. Approximately 0.9% of adult-trauma ED visits had associated adverse events or errors. The reporting methods captured greater numbers of adverse events, and the adverse events captured by trigger tools were more likely to be severe physical impacts. Authors noted the combined methods had synergistic benefits for monitoring adverse events in the ED.

## DISCHARGE PLANNING/EMERGENCY DEPARTMENT

### [The effect of a clinical decision support for pending laboratory results at emergency department discharge](#)

Driver B, Scharber S, Fagerstrom E, et al. *J Emerg Med.* 2019 (January);56(1):109-113.

Study in an urban academic emergency department (ED) in the US to assess the impact of a clinical decision support tool on the number of ED visits with laboratory results resulting after discharge. The organization instituted an alert in the electronic health record at the time of discharge requiring the healthcare provider to identify whether all laboratory results were reviewed prior to discharge. Results showed that healthcare providers incorrectly selected "yes" or "not applicable" in 92% of the cases where laboratory tests resulted after discharge, which suggests healthcare provider alarm fatigue. Authors recommended an alert that lists the pending laboratory results on the discharge screen may provide the necessary information without requiring the healthcare provider to take action.

## WORKPLACE VIOLENCE

### [Using a potentially aggressive/violent patient huddle to improve health care safety](#)

Larson L, Finley J, Gross T, et al. *Jt Comm J Qual Patient Saf.* 2019 (February);45(2):74-80.

Quality improvement (QI) project to assess the impact of an internally developed communication handoff tool on perceptions of safety during transitions of potentially violent patients at a 1,265 bed academic hospital in the US. The QI team, consisting of nurse managers, physicians, patient safety and security, developed the Potentially Aggressive/Violent Huddle Form intended to improve communication about specific patient behaviours to allow the receiving unit to better plan for arrival of the patient. Results showed improvements following implementation of the tool such as: both the medical unit and ED staff felt they received the information necessary to care for the patient (68% vs. 93% and 98% vs. 100%, respectively); medical staff felt safe during transfer (55% vs. 100%); ED staff satisfaction with the process (53% vs. 75%); ED staff satisfaction with the time of transfer (60% vs. 70%). Authors suggest the use of similar handoff communication tools could result in a decrease in the amount and severity of violence in the healthcare environment.

## PATIENT SAFETY/COGNITIVE BIAS

### [An IDEA: safety training to improve critical thinking by individuals and teams](#)

Browne AM, Deutsch E, Corwin K, et al. *Am J Med Qual.* 2019 (online, February):1-8.

Study to explore the development of training focused on recognizing and managing cognitive bias and resolving intra-team conflicts. The training program utilized two tools: the mnemonic aid “IDEA” which incorporated four de-biasing strategies, and “TLA” which presents strategies for resolving care team conflicts. Training occurred with 4,941 intra-professional care providers at a children’s academic hospital in the US. Results showed “learners rated effectiveness at 4.68 on a scale of 1 to 5 (5 as the optimum) and perceived improvement in recognizing or managing errors” (p. 1). Authors noted since being trained on the new error prevention tools, the frequency of serious events of harm has decreased and the frequency of serious events attributed to critical thinking and communication failures have been reduced by approximately 40% compared to the pre-intervention rate. The article identified the training approach has been now been in use for more than four years.

## ERROR MANAGEMENT THEORY/HIGH RELIABILITY

### [Rethinking high reliability in healthcare: the role of error management theory towards advancing high reliability organizing](#)

Guttman O, Keebler J, Lazzara E, et al. *J Patient Saf Risk Manage.* 2019 (online, January):1-7.

Article promoting error management theory (EMT) as an approach to high reliability organizing. The concept of EMT centers on the idea that when learners are encouraged to produce errors intentionally during learning and are given the opportunity to reflect on those errors they will have a greater understanding of how to prevent similar errors in the future. Authors summarize five ways healthcare organizations can implement EMT in operational learning: event-based simulation focused EMT; just in time drills focused on EMT; video-based performance improvement and expertise mentoring utilizing EMT; peer-to-peer safety coaching program with an EMT methodology; checklists and cognitive visual aids with an embedded EMT methodology. Authors suggest that only educating staff about the right way to complete a task is not as effective as using EMT to teach learners how to recognize errors before they occur in order to prevent them.

## Other Resources of Interest (all )

**[2019 Top 10 patient safety concerns executive brief](#)** (March 2019). ECRI (US) report identifying emerging patient safety challenges, including areas related to diagnostic errors, and health IT (free with registration).

**[Avoiding abandoned health records: guidance for health information custodians changing practice](#)** (February 2019). Information and Privacy Commissioner of Ontario report outlining scenarios and custodians' obligations.

**[De-escalation in health care](#)** (January 2019). The Joint Commission (US) article providing de-escalation techniques for managing violent and aggressive patients in the healthcare setting.

**[Gaps in interconnectivity of a hospital's electronic systems create vulnerabilities at transitions of care](#)** (February 2019). Institute for Safe Medication Practices Canada safety bulletin with recommendations.

**[Interim report from the Advisory Council on the Implementation of National Pharmacare](#)** (March 2019). Government of Canada article describing progress on implementation of national pharmacare.

**[Ontario Government's healthcare reform legislation, Bill 74, The Peoples Health Care Act, 2019](#)** (March 2019). Borden Ladner Gervais LLP (CDN) article describing Bill 74 and the proposed changes for Ontario.

**[Speak up to prevent Infection](#)** (February 2019). The Joint Commission (US) video resource on speaking up to prevent infection. Also provided is an infographic on steps for preventing infection.

**[The disposition of human remains/tissues – a short guidance for hospitals](#)** (February 2019). Borden Ladner Gervais LLP (CDN) article addressing three commonly asked questions.