RISK WATCH

September 2020

Selected research, publications, and resources to promote evidence-informed safety and 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.

COVID-19 Updates on HIROC.com

For information and resources related to COVID-19, please visit HIROC.com to access our *COVID-19 Updates page*. For a Q&A of Subscriber questions, log in and select *COVID-19: Your Questions Answered* from the Member Portal Links dropdown.

EDITOR'S NOTE

Sara Chow

Two themes in the September issue of Risk Watch include medication safety and electronic health records (EHR). Westbrook et al. found no association between double-checks of medication doses and administration errors. Further, in over 90% of cases, nurses who were doing the independent double-check received information that may have influenced the checking. Instead of calling for more training and education, "an alternative response is to question whether independent double-checking on a large scale is practically possible in busy clinical environments", alluding to the 'work as imagined versus work as done' concept.

This concept dovetails with the findings of a literature review by Fraczkowski et al. of nurse workarounds in the EHR. In looking at the probable causes for workarounds, they found that 75% of the studies reported poor usability, which includes problems such as difficult to use hardware, information located in several screens, and font size or screens too small. They noted these problems make the case for investments and innovative solutions that promote more useable health information technologies. "The widespread use of workarounds by the largest group of healthcare providers subverts quality health care at every level of the healthcare system."

If you have feedback about this month's articles or Risk Watch, please send them to me at schow@hiroc.com.

PALLIATIVE CARE/END OF LIFE

Barriers and facilitators to optimal supportive end-of-life palliative care in long term care facilities: a qualitative descriptive study of community-based and specialist palliative care physicians' experiences, perceptions and perspectives

Harasym P, Brisbin S, Afzaal M, et al. *BMJ Open*. 2020 (online, August):1-7.

Study from Canada to identify barriers and facilitators to optimal supportive end-of-life care for adults from the perspective of community-based and specialist physicians in the residential long term care setting. Authors stated the study adds to the knowledge of how the physicians modify their care practices in the face of organisational barriers to optimal care, and recommended that long term care facilities focus on the specific communication strategies that strengthen relationships, the development and use of assessment tools, palliative care training and mentorship, and physical and cultural re-design.

SAFETY/CULTURE CHANGE

Changing hospital organisational culture for improved patient outcomes: developing and implementing the leadership saves lives intervention

Linnander E, McNatt Z, Boehmer K, et.al. *BMJ Qual Saf.* 2020 (online, July):1-9.

Article from the US describing in detail three components of an intervention designed to equip organizations to identify and address root causes of acute myocardial infarction mortality and improve organisational culture. Authors noted the intervention is the first successful longitudinal intervention to prospectively change aspects of hospital organisational culture associated with patient outcomes.

QUALITY IMPROVEMENT/SURGICAL

Responding to the COVID-19 pandemic: a new surgical patient flow utilizing the preoperative evaluation clinic

Pai S, Irizarry-Alvarado J, Pitruzzello N, et al. *Am J Med Qual*. 2020 (online, August):1-6.

Quality improvement initiative in the US to streamline the surgical patient flow process and increased the percentage of COVID-19 testing results to be returned before surgery from 10% to 100%. “The POE [preoperative evaluation] clinic served as an important centralized location to alert surgical staff to potentially infected patients before they arrive at the institution for evaluation, thus avoiding further contagion” (p. 3). A process map of the redesigned patient flow is provided.

MEDICATION SAFETY/HUMAN FACTORS

Associations between double-checking and medication administration errors: a direct observational study of paedicatric inpatients

Westbrook J, Li L, Raban M, et al. *BMJ Qual Saf*. 2020 (online, August):1-9.

Study in Australia to measure the association between double-checking, and the occurrence and potential severity of medication administration errors. Authors found no significant association between mandatory double-checking and occurrence of errors or potential severity or errors, and noted, “nurses will use their clinical judgement as to when a double-check may be warranted, and in such situations the process may be more likely to confer a benefit” (p. 7).

MEDICATION SAFETY/ELECTRONIC HEALTH RECORDS

The tradeoffs between safety and alert fatigue: data from a national evaluation of hospital medication-related clinical decision support

Co Z, Holmgren AJ, Classen D, et al. *J Am Med Inform Assoc*. 2020 (online, July):1-7.

Study in the US to evaluate the performance of 1599 hospitals that used the Computerized Physician Order Entry (CPOE) Evaluation Tool, a timed online assessment to evaluate the safety of electronic health records (EHR) and CPOE systems, as well as their performance against fatal orders (medication orders that have killed a patient previously) and nuisance orders (medication combinations that should not trigger an alert). Authors concluded, “It is evident that how an EHR is implemented and used, is crucial to how hospitals perform on the test... simply having an EHR is not enough, and that implementation is far more important” (p. 6).

SAFETY/ELECTRONIC HEALTH RECORDS

Nurse workarounds in the electronic health record: an integrative review

Fraczkowski D, Matson J, Dunn Lopez K. *J Am Med Inform Assoc.* 2020 (July);27(7):1149-1165.

Study to synthesize literature on direct care nurses' use of workarounds related to electronic health records (EHR). Thirty-three studies identified eight workaround strategies: 1) paper as a cognitive tool, 2) bypassing patient identification checks, 3) data entry strategies, 4) bypassing EHR medication safety measures, 5) workarounds to the ordering process, 6) assisting physician's workflow, 7) bypassing information in the EHR, 8) scanning violations. The most frequent cause of nurses' workarounds was usability.

SAFETY/HEALTHCARE QUALITY

"The doctor was rude, the toilets are dirty. Utilizing 'soft signals' in the regulation of patient safety"

Kok J, Wallenburg I, Leistikow I, et al. *Saf Sci.* 2020 (online, July):1-9.

Article from the Netherlands using qualitative interviews, observations and document analyses in a multi-year research project to show that soft signals, indicators "that something might be wrong within an organization with the possible consequence of inflicting harm", are vital to everyday regulatory practices as they provide context to 'hard' signals and help to make sense of and weigh risks. Authors identified that signals are not by themselves hard or soft, but their hardness is a consequence of sensemaking practices. "As 'tin-openers', soft signals can point to safety risks or fallibilities in a healthcare organization but they may also function as 'tin-closers', instilling an inspector with a sense of trust and confidence that the organizational leaders are competent and in control" (p. 8).

Other Resources of Interest (all 🔓)

Above and beyond: simply signing a waiver may not be enough (August 2020). Borden Ladner Gervais LLP (CDN) article summarizing recent Superior Court of Ontario decision relating to challenges of waiver enforceability.

Focused cyber security advice and guidance during COVID-19 (August 2020). Canadian Centre for Cyber Security collection of advice and guidance products, organized by area of interest.

Intravenous medication safety: a multi-incident analysis (July 2020). Institute for Safe Medication Practices Canada safety bulletin highlighting findings of a multi-incident analysis conducted to inform the future direction of medication safety efforts specifically targeting administration by the IV route.

Rapid adoption of resilience strategies during the COVID-19 pandemic (June 2020). *Journal of Patient Safety and Risk Management* (US) article on how Medical Association of Georgia is using diffusion of innovation science to formulate their guidelines and implement evidence-based practices during pandemic.

Simulation: a key tool for refining guidelines and demonstrating they produce the desired behavioural change (July 2020). BMJ Quality and Safety editorial on using simulation for understanding content in guidelines and behaviour response.