RISK WATCH

November 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

Dan Altenberg

The November issue of Risk Watch includes evaluation of quality improvement and innovative interventions in healthcare, focusing on maternal - neonatal care, virtual care, paediatrics, and adverse events. Liberati et al. reviews a novel framework in maternity services, with a focus on culture and behavioural changes. Methods proposed are aligned with Safety II and high reliability systems. Similarly, Toma et al. describes a new method to evaluate quality improvement programs looking at sustainability and spread. Sasangohar et al. describes an innovation in communication utilizing a virtual platform, and Bos et al. provides a user friendly validated method to prioritise recommendations following an adverse event. These studies are original research further supporting the need to scientifically validate mechanisms to support a culture of safety, and the challenge of continuous quality improvement in the face of an increasingly challenging landscape in healthcare.

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

HOT OFF THE PRESS

QUALITY IMPROVEMENT/MATERNAL NEONATAL

Seven features of safety in maternity units: a framework based on multisite ethnography and stakeholder consultation

Liberati EG, Tarrant C, Willars J, et al. *BMJ Qual Saf*. 2020 (online, September):1-13.

Study in the U.K. identifying seven features of safety in maternity units to generate a plain language framework that could be used to guide learning and improvement. The framework focuses mainly on culture, behaviours and processes as important targets for intervention that contribute to improvement.

QUALITY IMPROVEMENT/ADVERSE EVENTS

Prioritising recommendations following analyses of adverse events in healthcare: a systematic review

Bos K, van der Laan M, Dongelmans D. *BMJ Open Qual*. 2020 (online, October):1-7.

Systematic review from the Netherlands to identify user friendly and validated methods which prioritize recommendations following analyses of adverse events (AE). Authors defined user-friendly as easy to understand, not time consuming and with simple calculations. Validation was defined to include being reproducible when used different times by the same user or by different users. Authors provide reviews of eleven different methods for prioritizing AE recommendations.

SAFETY/EVENT REPORTING

A multilevel analysis of U.S. hospital patient safety culture relationships with perceptions of voluntary event reporting

Burlison J, Quillivan R, Kath L, et al. *J Patient Saf.* 2020 (September);16(3):187-193.

Study in the US to explore associations between dimensions of patient safety culture and patient safety event reporting practices which analysed survey data from 223,412 individuals from 967 hospitals. Results were provided on variables impacting safety event reporting.

INNOVATION/VIRTUAL CARE

Use of telecritical care for family visitation to ICU during the COVID-19 pandemic: an interview study and sentiment analysis

Sasangohar F, Dhala A, Zheng F, et al. *BMJ Qual Saf*. 2020 (online, October):1-7.

Study in the U.S. reviewing patient and family experiences utilizing the virtual intensive care unit (vICU) at one large tertiary hospital. Suggested improvements and barriers are described in detail.

QUALITY IMPROVEMENT/VIRTUAL CARE

Multi-method evaluation of a national clinical fellowship programme to build leadership capacity for quality improvement

Toma M, Blamey A, Mahal D, et al. *BMJ Open Qual*. 2020 (online, October):1-10.

Study in Scotland reporting on the results of the evaluation of the Scottish Quality and Safety Fellowship (SQSF). A 10-month educational programme aimed at developing clinicians with advanced quality improvement knowledge, technical ability and essential leadership skills. Recommendations are made regarding models providing theoretical basis for assessing factors to evaluate quality improvement training.

QUALITY IMPROVEMENT/MATERNAL NEONATAL

Severe Maternal Morbidity and Infant Mortality in Canada

Aoyama K, Park AL, Davidson AJF, et al. Pediatrics. 2020 Sep; 146(3).

This article provides insights into severe maternal morbidity and mortality (SMM) from a population based cohort in Ontario, and the relationship between SMM and fetal well-being. The analysis revealed some key risks factors for neonatal morbidity that provide an opportunity to examine preventable SMM and improve perinatal care.

QUALITY IMPROVEMENT/MATERNAL NEONATAL

Effect of individualized learning plans on nurse learning outcomes and risk mitigation

Cusanza S, Gabel Speroni K, Curran C et al *J Healthc Risk Manage* 2020 Sep 14.

This pilot study examines a computerized process to help RNs improve knowledge and skills in electronic fetal monitoring (EFM). This approach was customized to the individualized learner and was demonstrated to enhance their competencies and increase consistency between providers. Strategies to enhance EFM knowledge and skills help mitigate poor maternal and fetal outcomes.

QUALITY IMPROVEMENT/EVALUATION

Development and evaluation of a quality improvement framework for healthcare

Hamilton S, Jennings A, Forster A. *Int J Qual Health Care.* 2020 (August);32(7):456-463.

Article from a tertiary care hospital in Canada describing the development and evaluation of a quality improvement (QI) framework, to provide a common approach, terminology, and greater likelihood of success in achieving sustained improvements for their institution. Key strengths of four commonly applied QI methods were incorporated as components into the framework, and formal check-in steps between the project sponsors and leads were added to determine if QI projects could move forward and to ensure constant communication and buy-in from stakeholders. "The positioning of targeted PDSAs only after a comprehensive understanding of the causes of the overarching problem results in fewer test cycles… a deeper understanding and framing of the problem prior to commencing use of PDSAs is essential" (p. 406).

SAFETY/SYSTEMS CHANGE

Beyond the corrective action hierarchy: a systems approach to organizational change

Wood L, Wiegmann D. *Int J Qual Health Care*. 2020 (August);32(7):438-444.

Article from the U.S. discussing the need to address broader systems issues and apply both Safety I and II approaches when addressing organizational safety issues, versus focusing singularly on implementing corrective actions based on the action hierarchy (AH) (a tool that divides recommendations into stronger, intermediate, and weaker action categories). Authors propose a rubric for determining whether a corrective action is a major, moderate, or nominal systems change. "Many systems changes would likely be considered 'weaker' actions using the AH's standards and discarded for stronger local fixes. This conundrum is grounded in a misunderstanding of systems safety principles that distinguish between the prevention of single-point failures and improvements in overall systems safety" (p. 439).

Other Resources of Interest (all 🔓)

A guide to patient safety improvement: integrating knowledge translation & quality improvement approaches (September 2020). Canadian Patient Safety Institute guide to support teams in using an integrated approach to improvement.

Cyber security awareness month: top 10 cyber frauds (October 2020). Canadian Anti-Fraud Centre collection of resources focusing on common types of cyber-related fraud.

Hospital preparedness for a COVID-19 surge: assessment tool (October 2020). Institute for Healthcare Improvement tool to help identify current organizational capabilities and gaps to improve preparedness (requires free registration to download).

Learning from surgical burn adverse events (October 2020). CRICO Strategies (US) blog post highlighting top contributing factors by responsible services for 275 malpractice cases.

System governance towards improved patient safety (September 2020). Organization for Economic Co-operation and Development report on patient safety governance based on survey results from 25 countries.

The bigger picture: Learning from two decades of changing NHS care in England (October 2020). The Health Foundation (UK) report on understanding drivers of health care activity over two decades for future lessons.

The Canadian Quality and Patient Safety Framework for Health Services (October 2020). Health Standards Organization and the Canadian Patient Safety Institute framework defines five goals for safety and quality improvement that aim to improve patient experiences, outcomes and reduce unwarranted care variation.

Video consultations in primary and specialist care during the covid-19 pandemic and beyond (October 2020). BMJ Review of evidence for virtual consultations patient outcomes, cost effectiveness, safety, and technical issues. Offers considerations for use of video consultations, patient education, and remote physical examination.