April 2021

RISK WATCH

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.

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.

Dan Altenberg

Editor's Note

The April issue of Risk Watch includes twelve open articles with a focus on quality improvement and patient safety covering a wide range of topics. Quality improvement articles cover Lean methodology applied to ED triage (Elkoli et al.), patient access to electronic health records (Nøst et al.), and enhancing throughout of physician discharge summaries (Richmond et al.). Patient safety articles include topics such as mental health transitions in care (Tyler et al.), the effective identification of deteriorating patients (Ede, et al.), and physician factors affecting vaccination uptake (Arlt, et al.). Other articles take a novel approach to evaluating patient adverse event data such as a critical review of the concept of never events, exploring new uses correlating adverse events and patient complaints, and the impact of patient and family centred care on reducing adverse events. The last two articles look at adverse event identification in nursing home and home care sectors (Jachan, et al.) and in our lead article by Boussat et al. researchers describes a novel method to estimate true adverse event rates in acute care.

Our lead article by Boussat et al. explores an innovative methodology to overcome the challenges associated with imperfect data validity in Patient Safety Indicators (PSI). Public reporting of patient safety indicators has become an expectation for most healthcare organizations, along with this has been the ubiquitous recognition that reported rates typically fall short of accurate representation of the true measure of patient safety. Researchers propose that combining measures of PSI rates using existing, with a medical record review on a small random sample of charts to produce a measure of hospital-specific data validity and simple Bayesian calculation to derive estimated true PSI rates. Estimates of true hospital level adverse event rates were with a moderately good quality of coding, could be three times as high as the measured rate (for example, 1.4% rather than 0.5%); and for a theoretical hospital with relatively poor quality of coding, the difference could be 50-fold (for example, 5.0% rather than 0.1%).

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]

PATIENT SAFETY/ADVERSE EVENT ANALYSIS

Mitigating imperfect data validity in administrative data PSIs: a method for estimating true adverse event rates

Boussat B, Quan H, Labarere J, Southern D, Couris CM, Ghali WA. Int J Qual Health Care. 2021 Feb 20;33(1):mzab025. doi: 10.1093/intqhc/mzab025. PMID: 33544120.

Canadian study, designed to mitigate challenges of imperfect data reported by hospitals based on patient safety indicator (PSI) reported data. This study combines: a measure of PSI rates using existing algorithms; a medical record review on a small random sample of charts to produce a measure of hospital-specific data validity and a simple Bayesian calculation to derive estimated true PSI rates. The study demonstrated an approach to producing health system report cards with can estimate true hospital adverse event rates.

PATIENT SAFETY/INFLUENZA VACCINATION

Regional differences in general practitioners' behaviours regarding influenza vaccination: a cross-sectional study

Arlt J, Flaegel K, Goetz K, Steinhaeuser J. BMC Health Serv Res. 2021 Mar 4;21(1):197. doi: 10.1186/s12913-021-06177-x. PMID: 33663449.

This study aimed to compare the attitudes, personal characteristics and vaccination behaviours of general practitioners (GPs) in regions with high and low vaccination rates in Germany. GPs practising in regions with low vaccination rates reported their attitudes towards vaccinations in general ($p = 0.004$) and towards influenza vaccination ($p = 0.001$) more negatively than their colleagues from regions with high vaccination rates.

PATIENT SAFETY/NEVER EVENTS

Is the 'never event' concept a useful safety management strategy in complex primary healthcare systems?

Bowie P, Baylis D, Price J, et al. Int J Qual Health Care. 2021 Jan 12; 33(Supplement_1):25-30.

Study in UK exploring the validity of evidence correlating instances of preventable harm with never events. The study reports that despite the positive intentions behind the development of the 'never event' term it remains largely aspirational. The researchers conclude that specialist training for key workforce members is necessary to enable examination of the complex system interactions and design issues, which contribute to such events.

PATIENT SAFETY/PATIENT DETERIORATING

Human factors in escalating acute ward care: a qualitative evidence synthesis

Ede J, Petrinic T, Westgate V, Darbyshire J, Endacott R, Watkinson PJ. Human factors in escalating acute ward care: a qualitative evidence synthesis. BMJ Open Qual. 2021 Feb;10(1):e001145.

UK study identifying how human factors affect clinical staff recognition and management of deteriorating ward patients inform process improvements. Researchers conclude that while standardized tools have clinical benefits they can sometimes impede escalation in patients not meeting indicator threshold. Staff who make use of other factors, termed soft signals, which are not captured in Early Warning Scores are able to more effectively escalate care. The literature supports strategies that improve the escalation process such as good patient assessment skills.

QUALITY IMPROVEMENT/ED TRIAGE

NO WAIT: new organised well-adapted immediate triage: a lean improvement project

Elkholi A, Althobiti H, Al Nofeye J, Hasan M, Ibrahim A. BMJ Open Qual. 2021 Jan;10(1):e001179. doi: 10.1136/bmjoq-2020-001179. PMID: 33483302; PMCID: PMC7831741.

Study from Saudi Arabia to revise patient flow from the time of arrival at the ED to the time of triage. A Lean methodology, including use of spaghetti diagrams was used to identify redundancies and redesign the flow of patients through the ED. The acronym 'NO WAIT' was then given to the new triage model, where results showed significant improvement in patient waiting time, patient safety, patient experience and satisfaction, and staff satisfaction. Further work is underway with other departments in the hospital to apply and use lean methodology to enhance the use of space and resources.

PATIENT SAFETY/PATIENT & FAMILY INVOLVEMENT

Implementing Patient and Family Involvement Interventions for Promoting Patient Safety: A Systematic Review and Meta-Analysis

Giap TT, Park M. J Patient Saf. 2021 Mar 1;17(2):131-140. doi: 10.1097/PTS.0000000000000714. PMID: 33208637.

Study from Korea evaluating and quantifying the effects of patient and family involvement (PFI) interventions on patient safety by synthesizing the available global data. A systematic review and meta-analysis was used to assess the impact of PFI on patient safety up to March 2019, demonstrating that PFI interventions have positive impacts on promoting patient safety, especially in reducing adverse events. However, the authors caution that secondary data sources make it difficult to develop uniform guidelines.

PATIENT SAFETY/PATIENT COMPLAINTS

Use of patient complaints to identify diagnosis-related safety concerns: a mixed-method evaluation

Giardina TD, Korukonda S, Shahid U, Vaghani V, Upadhyay DK, Burke GF, Singh H. BMJ Qual Saf. 2021 Feb 17:bmjqs-2020-011593. doi: 10.1136/bmjqs-2020-011593. Epub ahead of print. PMID: 33597282.

Study from the US evaluating the use of patient complaint data to identify safety concerns related to diagnosis. Investigators reviewed all complaint summaries and identified cases as 'concerning' for diagnostic error using the National Academy of Medicine's definition of diagnostic error for a large US healthcare organization. The analysis revealed that health systems could systematically analyse available data on patient complaints to monitor diagnostic safety concerns. However, the authors caution that this approach requires considerable time investment from complaint information and medical record reviews.

PATIENT SAFETY/NURSING IN HOME CARE

Patient safety. Factors for and perceived consequences of nursing errors by nursing staff in home care services

Jachan DE, Müller-Werdan U, Lahmann NA. Patient safety. Nurs Open. 2021 Mar;8(2):755-765. doi: 10.1002/nop2.678.

Study from Germany identifying nursing errors in home care services in correlation with qualification, work experience, working hours and trainings. Analysis of survey data collected in 2016-2017 indicated that largest sources of error were associated with high workload, lack of knowledge and lack of information. Most errors arose in documentation, while insufficient hygiene and medication administration were identified as the highest error frequencies. The authors recognize the potential for recall bias when using self-reported instances of error (via survey) as a primary source of data.

QUALITY IMPROVEMENT/SHARED PATIENT PORTAL

Participants' views and experiences from setting up a shared patient portal for primary and specialist health services - a qualitative study

Nøst TH, Faxvaag A, Steinsbekk A. BMC Health Serv Res. 2021 Feb 24;21(1):171. doi: 10.1186/s12913-021-06188-8. PMID: 33627122; PMCID: PMC7903028

This article examines the processes involved in deciding the content and features of a shared patient portal for primary care and specialist providers in Norway. The authors interviewed a mix of informants to understand how to give access to medical records for patients in this setting. The discussion includes both positive and negative impacts of features to be considered for implementation. There were limited barriers to establishing the portal, however opinions varied on the content and features.

INNOVATION/IMPROVING DISCHARGE SUMMARIES

Reaching the summit of discharge summaries: a quality improvement project

Richmond, R, McFadzean, I. Vallabhaneni, P. BMJ Open Quality 2021;10:e001142. doi:10.1136/bmjoq-2020-001142).

This UK study utilized Kotter's 'eight-step model for change' to implement a QI project aimed at clearing the existing backlog of pending discharge summaries and improve the timeliness of discharge summary completion from the hospital's paediatric assessment unit. The minimum target of 10% improvement in the completion rate of discharge summaries was set as the primary goal of the project. Following the implementation of the QI processes, the backlog of discharge summaries was cleared within 9 months and the organization was able to sustain the new system and consistently improved discharge summary rates.

PATIENT SAFETY/MENTAL HEALTH TRANSITIONS

What does safety in mental healthcare transitions mean for service users and other stakeholder groups: An open-ended questionnaire study

Tyler N, Wright N, Panagioti M, Grundy A, Waring J. Health Expect. 2021 Jan 20.

This UK study examines the perspectives of five different stakeholder groups to understand their perspectives of safety in mental transitions from hospital to community. Safety themes included not only individual, clinical, services and systems but families and system users identified behavioural and social elements. The difference in perspectives should be used to inform mental health policy and planning to move beyond traditional or clinical outcome measures.

CLAIMS/MEDICAL MALPRACTICE

Emergency Department and Urgent Care Medical Malpractice Claims 2001–15

Wong, K. E, Parikh, P. D, Miller, K. C, & Zonfrillo, M. R. (2021). West. J. Emerg. Med.: Integrating Emergency Care with Population Health, 22(2).

This US study examines common factors resulting in medical malpractice claims from 2001-2015. Claims from adults over 18 years that were cared for in Emergency departments and urgent care centres. This retrospective review of closed claims examined whether claims were dropped, withdrawn or dismissed, average indemnity and the verdicts. This information helps providers in these practice environments to prepare for the high likelihood of being involved in a medical malpractice claim.

[OTHER RESOURCES OF INTEREST]

ALL OPEN ACCESS

NACI rapid response: Extended dose intervals for COVID-19 vaccines to optimize early vaccine rollout and population protection in Canada (March 2021).
The National Advisory Committee on Immunization (NACI) is an External Advisory Body that provides the Public Health Agency of Canada (PHAC) with independent, ongoing and timely medical, scientific, and public health advice in response to questions from PHAC relating to immunization.

The Science Behind Vaccine Dose Intervals (OHA) Videos (March 2021)
To assist healthcare providers to understand and explain the decision making and science of the COVID-19 vaccines.

Quarantine Still Needed for Fully Vaccinated Healthcare Workers, Residents in Healthcare Settings Following Exposure to COVID-19, CDC Says (ECRI, Feb 2021)
Quarantine guidance for US healthcare workers and residents in healthcare settings.

Approaches for Optimal Use of Different COVID-19 Vaccines: Issues of Viral Variants and Vaccine Efficacy (JAMA, March 2021)
Article from JAMA on a number of COVID-19 issues from vaccine efforts, variants and strategies for maximizing efficacy. A video of the author speaking of the article and variants is available here.

Traveling To Canada Gets Trickier - Canada Introduces Additional COVID-19 Travel,Testing And Quarantine Measure (Gowling, Feb 2021)
A summary of the travel, testing and quarantine requirements and restrictions affecting those travelling to Canada effective end of February 2021.

College cautions physician for 'irresponsible' social media posts regarding COVID-19 (Osler, March 2021)
Article from Osler, Hoskin & Harcourt LLP highlighted some of the risks and considerations for public comments (whether in news or social media) regarding pandemic-related issues.

Information to support Pregnant and Breastfeeding people in their decision on whether or not to get the COVID-19 vaccine (PCMCH, Feb 2021).
The linked site provides information sheets for both patients and healthcare professionals on this subject.

Privacy and security considerations for virtual health care visits (IPC, Feb 2021).
This report provides some practical steps healthcare information custodians should take to protect personal health information, particularly as they plan and deliver virtual health care.