


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

OBSTETRICS/PATIENT SAFETY

[Ecological association between operative vaginal delivery and obstetric and birth trauma](#)

Muraca G, Lisonkova S, Skoll A, et al. *CMAJ*. 2018 (June);190(24):E734-E741.

Study to determine the association between rates of operative vaginal delivery (i.e. with forceps or vacuum) and severe obstetric trauma (e.g. third degree lacerations) and birth trauma (e.g. skull fracture) in Alberta, Saskatchewan, Manitoba, and Ontario. Data for 1,938,913 births between April 2004 and March 2015 were reviewed. Results showed that although rates of operative vaginal deliveries decreased 11% over the study period, the rate of obstetric trauma increased, particularly in forceps deliveries among women who had not given birth and among women with a previous caesarean section. Sequential vacuum and forceps instrumentation was associated with the largest increase in obstetric and birth trauma for these women. Authors concluded recommendations to lower caesarean rates should be tempered by the understanding that it may lead to higher rates of obstetric trauma.



INFECTION CONTROL

[The evolving epidemiology of Clostridium difficile infection in Canadian hospitals during a postepidemic period \(2009-2015\)](#)

Katz K, Golding G, Choi K, et al. *CMAJ*. 2018 (June);190(25):E758-E765.

Study to describe the evolving epidemiology of *C. difficile* in hospitals across 10 Canadian provinces. Health records of 20,623 adult patients admitted to hospital with healthcare-associated *C. difficile* were analyzed. Results showed most of the infections were detected in hospitals with 201-500 beds (53%) and 500+ beds (44%). The national rate of infection decreased from 5.9 to 4.3 per 10,000 patient days, although the rate peaked in 2011 at 6.7. The average age of patients and time to detection also decreased over the study period. The predominant strain, NAP1, was significantly associated with a higher rate of death; with every 10% increase in the proportion of NAP1, the rate of infection increased by 3.3%. This strain has significantly decreased over the seven years. Authors concluded infection control and prevention practices have positively affected rates of *C. difficile* infection.



HUMAN RESOURCES/INFECTION CONTROL

[Hospital staffing and health care-associated infections: a systematic review of the literature](#)

Mitchell B, Gardner A, Stone P, et al. *Jt Comm J Qual Saf*. 2018 (online June);1:1-10.

Study to understand and synthesize research over a 15-year period on the relationship between hospital staffing and risk of patients acquiring a healthcare-associated infection (HAI). Results identified 54 articles; bloodstream infection (55.6%), pneumonia (44.4%) and urinary tract infection (38.9%) were the most common HAIs studied. The majority of articles examined the relationship between nurse staffing and HAIs (92.6%). Nurse staffing variables were associated with an increase in HAI rates in 74.1% of the articles; variables included level of staffing, skill mix, use of float or nonpermanent staff, absenteeism and/or overtime, and workload. Authors concluded increased staffing is related to decreased risk of acquiring HAIs.



HUMAN RESOURCES/LONG-TERM CARE

[Individual and organizational predictors of allied healthcare providers' job satisfaction in residential long-term care](#)

Aloisio L, Gifford W, McGilton K, et al. *BMC Health Serv Res.* 2018 (online June):1-18.

Study to identify factors that predict job satisfaction among allied healthcare providers in residential long-term care in three Canadian provinces. Of 334 respondents to a web-based survey from 77 facilities, results showed individual and organizational context variables were predictors of job satisfaction. Predictors of higher job satisfaction at the individual level were meaning, self-determination and the impact subscale of psychological empowerment while burnout-cynicism and the competence subscale of psychological empowerment were predictive of lower job satisfaction levels. Social capital, organizational slack-time (ability to provide resident care) and adequate orientation were the organizational context variables predictive of high job satisfaction. Authors identified strategies for leaders to empower staff such as providing information about mission/vision and fostering communication.



PATIENT SAFETY/PAEDIATRICS

[We will not compete on safety: how children's hospitals have come together to hasten harm reduction](#)

Lyren A, Coffey M, Shepherd M, et al. *Jt Comm J Qual Saf.* 2018 (July);44(7):377-388.

Article describing the Children's Hospitals' Solutions for Patient Safety (SPS) learning network, made up of over 130 children's hospitals in the US and Canada, which share the long-term aim of zero harm in children's hospitals. Hospital CEOs and governance boards align organizational goals with SPS's harm reduction goals. Key drivers include: data transparency, leadership, mission focus, agreement not to compete on safety, an "all teach, all learn" approach, culture of safety, and common goals. Authors estimated that 9,000 children have been spared from serious harm and \$149M (US) saved since its launch in 2012. Components of the improvement program as well as the step-wise harm reduction phases for organizations are described in detail.



POPULATION HEALTH/PAEDIATRICS

[How U.S. children's hospitals define population health: a qualitative, interview-based study](#)

Skinner D, Franz B, Taylor M, et al. *BMC Health Serv Res.* 2018 (online June):1-10.

Study to understand how ten US children's hospitals define population health and how these organizations are adjusting to preventive healthcare models. Authors defined population health as improving health outcomes for broader populations whereas population health management refers to programs and services focused on existing patient populations for which the hospital stands to benefit. Results from semi-structured interviews showed that population health professionals use a variety of approaches that span both population health management and public health. The three main approaches were: exclusively using population health management strategies, describing the approach as population health when the real focus was population health management, and equating population health with public health. Authors found that participants are actively debating the definition and focus of population health and call for agreement on the meaning of population health. A table containing examples of hospital-led programs geared to population health or population health management is provided.



PATIENT SAFETY/RESPECT

[A road map for advancing the practice of respect in health care: the results of an interdisciplinary modified delphi consensus study](#)

Sokol-Hessner L, Henry Folcarelli P, Annas C, et al. *Jt Comm J Qual Saf.* 2018 (online June):1-14. Study to explore strategies that could be used by healthcare systems to focus on disrespect, a nonphysical harm. Based on the input and consensus of 14 predominantly US participants, results identified 25 strategies associated with six high level recommendations: leaders must champion a culture of respect and dignity; promote accountability; engage and support the healthcare workforce; partner with patients and families; establish systems to learn about and improve the practice of respect; and expand the research agenda and measurement tools, and disseminate what is learned. A table of strategies and examples of tactics associated with each recommendation is included.

“Harm from disrespect is the next frontier in preventable harm. Organizations should strive to eliminate disrespect to patients, to families, and among health care professionals.” (p. 13).



ETHICS/RISK MITIGATION

[Ethics review of projects \(ERoP\): A conceptual framework](#)

Flaming D, Pinard M, Mallett D. *Healthc Q.* 2018 (April);21(1):40-45.

Article describing a conceptual framework for developing comprehensive ethics review processes for risk mitigation related to non-research knowledge generating activities such as quality improvement initiatives, or program evaluation. Authors illustrated the framework application using two examples of health organizations operating in different contexts. One organization is in Ontario and described as Canada’s largest academic centre dedicated to improving children’s health while the other is in Alberta, and described as Canada’s first and largest province-wide, integrated health system. Authors noted that ethical risks are the “potential harms” (p.40) that can happen when someone decides to act or withhold an action, with the most common of physical, social, emotional, financial or reputational harm. The described conceptual framework provides risk mitigation strategies in three progressive domains of: differentiation, guidance, and independent ethics review. A listing of the strengths and opportunities of each domain for both organizations’ application of the conceptual framework is included.



PATIENT RELATIONS REPORTING

[Patient relations measurement and reporting to improve quality and safety: lessons learned from a pilot project](#)

Sullivan-Taylor P, Frohlich R, Greenberg A, et al. *Healthc Q.* 2018 (April);21(1):19-24.

Article describing a pilot project to support improved care by validating standardized measures of patient relations indicators. Indicators were developed based on consultation with experts including patients and caregivers, alignment to best practices and Ontario legislative requirements. Health Quality Ontario recruited participation and associated data of a one year period from 13 hospitals, four Community Care Access Centres and 12 long-term care homes. All sites mapped the complaint and action taken to the provincial standardized categories. Results are provided for the indicators based on health sector. Across the three sectors, care and treatment was the top complaint category. The pilot highlighted several lessons related to the process of patient relations, implementation of reporting, and engagement of patient and families. Authors noted the pilot sites and provincial advisory group recommended phased implementation to standardize data collection and align with provincial indicators and categories.



 **Other Resources of Interest (all )**

[A hospital's human touch: why taking care in discharging a patient matters](#) (July 2018). Kaiser Health News (US) article with tips on improving care transitions.

[Artificial intelligence will improve medical treatments](#) (June 2018). The Economist (UK) article describing how artificial intelligence will augment the capability of practitioners to identify high risk patients.

[Coping with physician stress and burnout](#) (June 2018). American Society for Healthcare Risk Management article highlighting the causes of and potential solutions for preventing burnout.

[Empowering patients and agents to help prevent errors with living wills, DNRs, and POLSTs](#) (June 2018). Pennsylvania Patient Safety Authority (US) advisory on factors that contribute to misunderstanding advance directives and recommendations to help patients articulate and share end-of-life preferences.

[How physician leaders can nurture teams that provide highly reliable healthcare](#) (June 2018). Canadian Medical Protective Association article on the importance of nurturing a culture and learning system for reliable care.

[Lessons from Changing CARE: the discovery phase of experience-based co-design](#) (June 2018). The Change Foundation (CDN) report on the experience of four teams who co-designed with family caregivers over one year.

[Medical assistance in dying: where do we stand two years later?](#) (June 2018). Canadian Medical Protective Association article highlighting impact of MAiD with a case example and medical-legal risks.

[Perils in diagnosing a stroke](#) (June 2018). Agency for Healthcare Research and Quality (US) WebM&M case involving an opioid medication overdose in a 75-year old patient.

[Reducing medical errors requires multifaceted approach, study finds](#) (July 2018). Healthcare Dive (US) synopsis of a study evaluating physician burnout and its association with safety.

[Strategically advancing patient and family advisory councils in New York State hospitals](#) (June 2018). Institute for Patient- and Family-Centered Care (US) report showing better safety outcomes for hospitals with patient and family advisory councils (PFACs); best practices for strengthening the involvement of PFACs are highlighted.

[Surgical site infections](#) (June 2018). AHRQ PS Net (US) new patient safety primer; includes prevalence, risk factors, and prevention strategies such as use of the comprehensive unit-based safety program.

[Testifying: what it involves and how to do it effectively](#) (June 2018). Canadian Medical Protective Association article providing tips on how to effectively testify in a legal, college or tribunal proceeding.

[Third interim report on medical assistance in dying in Canada](#) (June 2018). Health Canada report for July to December, 2017 showing a 29% increase in medically assisted deaths over the previous reporting period.

[Training algorithms to prevent death spirals in hospitals](#) (June 2018). Bloomberg Businessweek (US) article on using artificial intelligence to build early warning systems to detect patient deterioration.

HIROC Healthcare Risk Management

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