CQuIPS

Centre for
Quality Improvement
& Patient Safety

Abstract Book

Annual CQuIPS Symposium 2025

Oral
Research

1. Advancing Equity in Diagnosis: A Rapid Review of Interventions Addressing Diagnostic Delays in Indigenous and Marginalized Populations

Authors: Sahith Rajkumar (McMaster University, Faculty of Health Science) & Arun Nadarajah (McMaster University, Faculty of Science)

Background

Diagnostic delays persist across healthcare, disproportionately affecting women from marginalized backgrounds. Indigenous women remain understudied despite facing distinct barriers. Challenges are amplified in chronic pain conditions, where diagnostics can differ with biases affecting perceptions of reported symptoms, and over 40% of adults with chronic pain experience diagnostic uncertainty linked to provider bias. This rapid review examines diagnostic delay in chronic pain among Indigenous women, with attention to population-specific barriers and systemic shortcomings.

Methods

A rapid review was conducted using PubMed and EMBASE for studies published in the past five years. Reviewers independently screened records. Eligible studies were original research on quality improvement interventions addressing diagnostic delays in marginalized populations. Reviews, protocols without results, non-English studies, and those not focused on diagnostic delay or equity were excluded. Data were extracted in duplicate and synthesized narratively, with thematic analysis of barriers, facilitators, and equity impacts.

Engagement

Studies involved patients and communities via interviews, co-production, or feedback, improving relevance and sustainability of interventions.

Results

Fifteen studies were included, spanning randomized trials, multi-site quality improvement pilots, collaborative networks, and qualitative research across diverse healthcare settings. Marginalized populations, with a primary focus on Indigenous women, as well as racial and ethnic minorities, rural communities, low-income groups, women, and children with chronic illness, consistently experienced diagnostic delays and worse outcomes. Effective strategies included task shifting, clinical decision support tools, collaborative learning, and education targeting diagnostic bias. Quality improvement interventions, especially those tailored to Indigenous women, improved diagnostic accuracy, timeliness, and equity.

Conclusion Diagnostic delays correlate with sociocultural factors, with stigma, gender roles, poor health literacy, and logistical barriers compounding individual hesitancy and systemic inaction. In chronic pain conditions, disparities arise from provider misinterpretation and inconsistent patient reporting. These findings underscore the need for equity-informed strategies incorporating Indigenous perspectives. Implemented approaches must inform research priorities, clinical practice, and policy design to ensure responsive and inclusive care.

Equity Considerations This review focuses on Indigenous women: an underrepresented and uniquely impacted population, by exploring how diagnostic delays reflect patient hesitancy and systemic bias. Findings support the need for equitable care that acknowledges Indigenous perspectives.

2. Exploring Barriers to Cancer Care Among Patients at an Inner-City, Public-Payer Cancer Clinic in Ontario, Canada – Cross-sectional Survey Results from the Care for All Health Equity Pilot at St. Michael's Hospital

*Authors: Clarissa Skorupski1, Vidushi Swarup2, Varsha Nigi Vadassery2, Jood Ahmed Essa Al Aghawani*2 , Sarah Bahreinian*2, Mohab Husien*2, Sam Sipos*2, Logan Verlaque*2, Sherilyn Wen*2, Nazik Hammad1,3, Ronita Lee1,3, Lisa K. Hicks1,3,4*

1 - Department of Medicine, University of Toronto, Toronto, ON, CAN
2 - Department of Hematology/Oncology, St. Michael's Hospital, Toronto, ON, CAN
3 - Department of Hematology/Oncology, St. Michael's Hospital, Toronto, ON, CAN
4 - Li Ka Shing Knowledge Institute, Toronto, ON, CAN
** - listed in alphabetical order due to equal contributions"*

Background
Novel cancer therapeutics have improved patient outcomes, while also increasing care complexity and treatment related economic burdens. The St. Michael's Hospital cancer clinics serve a diverse inner-city population facing intersectional vulnerabilities that can adversely impact their care quality and outcomes. The Care for All Health Equity Pilot aims to explore patient barriers to engaging with cancer treatment to inform quality improvement efforts in this space..

Methods, Engagement, and Equity Considerations
This is a multi-phase, mixed methods QI study. A pilot cross-sectional survey was implemented between July 17 – August 30, 2024 collecting data on demographics, financial and transportation stressors, and a validated health equity tool. A retrospective chart review was completed for consenting participants to evaluate data on demographics, cancer diagnosis and treatment, and the proportion of missed oncology visits in a 6 month window prior to implementation. The overarching focus of this work is to improve care for equity deserving groups.

Results

289 patients completed the survey. 72.7% reported English as their preferred language. 30% of patients reported transportation accessibility stress with 57% having no personal vehicle. Finances were the highest stressor amongst our population with 65% reporting some degree of financial stress and 71% being worried about the financial problems they will have in the future due to their illness or treatment.

211 patients (73%) consented to chart review and had complete information. 64% were female, and the median age was 66. The most common diagnoses were breast cancer (35.2%), lymphoma (13.2%), and multiple myeloma (8.7%). 21% missed at least one oncology appointment in the 6 month look back window. In a univariate exploratory analysis to identify factors associated with missed appointments, self-identifying with a disability, employment status, and transportation stress were identified as significant.

Conclusion

Delivery of a health equity focused questionnaire was feasible and welcomed by patients. We observed high rates of transportation and financial toxicity related to cancer care. Next steps include expanding the survey to other GTA sites, multivariate analysis of factors associated with missed appointments, and implementation of targeted strategies to assist with identified patient stressors.

3. Investigating Embedded Inequities in Clinical Systems

Author: Myrtede Alfred, University of Toronto

Racial inequities in health and health outcomes have been reported in countries across the world, including Canada [1-3]. These inequities are associated with billions of dollars in excess medical costs, premature death and disability, and lost productivity [4]. Emerging evidence suggests that health systems are plagued by systemic biases that contribute to variation in care, outcomes, and experience [5, 6, 7]. While alleviating health inequities requires a multilevel approach, it is critical to uncover and address all the factors embedded within clinical systems that hinder safe and equitable care [8, 9].

The proposed research seeks to identify sociotechnical factors which contribute to racial inequities in healthcare delivery. The first stage involved compiling and classifying factors according to the sociotechnical dimensions outlined by the Systems Engineering Initiative for Patient Safety (SEIPS) model [10]. Our initial review identified 17 factors influencing equity: person (n=4), tools and technology (n=3), task (n=2), physical environment (n=1), organization (n=4), and external environment (n=3). Issues included inaccurate beliefs about biological differences among races, inadequate assessment processes, use of race corrections and unfair algorithms, and reduced reliability of medical devices. Additionally, lack of diverse healthcare professionals and healthcare financing models were also key factors.
We are currently in the process of conducting reviews to more systematically identify equity impacting factors. The next stage of the work involves engaging 18 - 20 participants including clinicians, health equity experts and researchers, and community members to elucidate a broad range of equity related challenges impacting access and quality of care using an equity workshop and modified Delphi approach. These issues identified will then be refined and categorized based on their sociotechnical dimension.

Focusing on hospital level contributors to inequities using a sociotechnical lens is a novel underlying thread of this research. The examples from our preliminary synthesis illustrate how different sociotechnical factors contribute to health inequities for racialized individuals. Our planned research will expand on these findings providing a comprehensive assessment of equity issues that will support hospitals in investigating and, and ultimately addressing, all of biases that will need to be resolved to improve equity in the delivery of care.

4. Spotlight on the Patient Experience: Evaluating Processes for Identifying Non-Physical Patient Harm in the Emergency Department

Authors: Jane Ballantyne, Bhate, T, Fox, J, Tatangelo K, Drews, S, Pozzobon, LD, UHN

Background

With significant institutional resources invested in avoiding preventable patient harm, there is emerging recognition that emotional harm, defined in literature as harms to a patient's dignity caused by failure to demonstrate adequate respect for the patient as a person, is an important and underrecognized form of preventable patient harm. At our multi-site academic health centre, following extensive consultation (including with patient partners), and the development of an implementation toolkit, we introduced the concept of 'Non-Physical Harm' (NPH), which includes emotional, psychological, cultural, social and spiritual harms. Implementation included a screening tool for systematic identification of NPH, which included criteria based on protected grounds under the Ontario Human Rights Code. This tool included processes for identifying events meeting a pre-determined threshold to proceed to event debriefing ('Critical NPH'), which employed the same frameworks for learning as in 'traditional' serious patient safety events.

Since deployment of the screening tool in April 2024, over 1200 cases received through normal operational channels were reviewed, with < 1% meeting the threshold for critical NPH and subsequent review process. We sought to evaluate the performance of this screening tool, piloting our methodology in the Emergency Department, with plans for iterative improvement and re-evaluation as needed.

Methods

All cases received between April 2024 and April 2025 involving the Emergency Department, including patient reported, were reviewed. Using broad inclusion criteria, all events with suspected NPH are undergoing qualitative review to identify common themes. Results will be compared against the existing screening tool with the goal of identifying any recurrent themes not currently captured. We will also conduct focus groups with frontline clinical Emergency Department staff to assess for understanding of, and barriers and facilitators to reporting NPH

Results and Conclusion

Work is currently underway to complete primary review and focus groups by the end of summer 2025. We anticipate that this work, as part of the ongoing implementation and evaluation of an institution-wide framework for NPH, will have a significant impact on the quality and safety of care delivered in partnership with patients.

5. Using a machine-learning early warning system to predict deterioration in acute mental health settings.

Authors: Andrea E. Waddell (Waypoint Centre for Mental Health Care; Temerty Faculty of Medicine, University of Toronto), Valentina Tamayo Velasquez (Waypoint, U of T), Jennifer Crawford (Waypoint, Ontario Tech), Christo El Morr (York University), Elham Dolatabadi (York University, Vector Institute), Helen Bolshaw-Walker (PCFC Connect)

Background

Mental health patients have unique safety risks associated with their diagnoses or admission including the risk of physical aggression, violence, self-injury, suicidal behaviour and restraint or seclusion. In most psychiatric settings, the risk of one of these events exceeds 15%. Despite this high risk of hospital acquired harm, there are no validated tools that identify patients at risk of these outcomes, thus preventing the health care team from intervening to prevent avoidable harm.

Methods

Through expert consultation and literature review, more than 80 potential variables that could predict deterioration were identified. Using four years of patient data, a machine learning model was developed to predict an elevated risk of deterioration in the next 24 hours. This model was validated via silent testing and preliminary deployment was piloted in 2 mental health units with two psychiatrists.

Engagement

People with lived experience were collaborators on all elements of the project including identifying potential variables, reviewing the model build and reviewing results from preliminary deployment.

Results

The Mental Health Adverse event Prediction (MAP) tool was built. This is a long short-term memory model, a time-series forecasting model. For a prediction window of 24 hours, the AUC ROC is 0.83 and the precision in 30% indicating a sensitive tool with a low false-negative rate – suitable for the intended purpose. The MAP tool was compared to the most commonly used violence risk prediction tool – the Dynamic Appraisal of Situational Aggression (DASA) – and was found to have a higher predictive performance (AUC 0.81 versus 0.61). Preliminary deployment demonstrates feasibility and acceptability for psychiatrists.

Conclusion

The MAP tool is a feasible and sufficiently accurate tool to predict deterioration in acute mental health settings. The next step is a pragmatic clinical trial using a cluster cross-over design to determine if the model can improve patient outcomes.

Equity Considerations

The model was designed to support patients in equity deserving populations including acutely ill patients, those with intellectual disability and those in the forensic mental health system. Our research team includes experts on equity informed AI and equity and bias analyses of the model are ongoing.

Oral
Projects

6. Improving Emergency Department Timeliness and Equity of Care for Patients with Sickle Cell Disease

Authors: Michelle O’Connor, Ramanja Pakirathan, Laura Kane, Morgan McNeil, Dr. Lana Grigoriou, Kamani Abdul, Glyn Boatswain (Scarborough Health Network)

Background/Aim:

In May 2023, recognizing opportunities for enhanced quality of care, Scarborough Health Network (SHN) launched targeted efforts to improve emergency department (ED) care for individuals with Sickle Cell Disease (SCD). The primary aim was to reduce average ED wait time to Physician Initial Assessment (PIA) for high-acuity (CTAS 1 or 2) SCD patients from a baseline of 66.7 minutes to 15 minutes by March 2025. This metric was selected as a key equity indicator aligned with Ontario Health’s 2024/25 Quality Improvement Plan and provincial SCD Quality Standards. The initiative acknowledged the role of anti-Black racism in driving health inequities and aimed to improve both access to and quality of care.

Measures/Improvement:

SHN applied a multipronged approach involving education, technology, and patient/staff engagement. Two community-led SCD Town Halls (November 2023, February 2025) engaged over 100 individuals including patients and families with lived experiences, community leaders, healthcare providers, and SCAGO representatives to gather input on care experiences and priorities for improvement. A Patient and Family Advisor was also engaged in the co-design of services. Five Plan-Do-Study-Act (PDSA) cycles were implemented:

- PDSA 1: Staff education on SCD and anti-Black racism
- PDSA 2: Physician-led case reviews and feedback
- PDSA 3–5: Epic optimizations including FYI flags, self-registration kiosks, and Secure Chat for nurse-physician communication

Process measures included staff training completion and Epic feature utilization. The primary outcome measure was average ED wait time to PIA. Staff confidence and perceived workload served as balance measures. Biweekly chart audits were conducted and immediate feedback was provided to staff by leadership in order to improve and sustain performance.

Impact/Results:

SHN achieved a 46% reduction in average ED wait time to PIA, reaching the 15-minute target ahead of schedule. Improvements were observed across all three sites and among both adult and pediatric populations.

Discussion:

This initiative demonstrates how equity-focused design, meaningful patient engagement, and data-driven change can lead to sustainable improvements in care. Next steps include reducing time to pain management in the ED and implementing personalized care plans for SCD patients.

7. Leading a Data-Driven Quality Improvement Project to Enhance Care Transition for Orthopaedic Patients

Authors: Silvi Groe (Clinical Director, Schroeder Arthritis Institute, University Health Network, Toronto, Ontario, Canada), Indira Gobin (Clinical Manager, Inpatient Orthopaedic Unit, University Health Network, Toronto, Ontario, Canada), Kimberly Mak (Project Coordinator, Schroeder Arthritis Institute, University Health Network, Toronto, Ontario, Canada), Halima Mohidin (Educational Resource Nurse, Inpatient Orthopaedic Unit, University Health Network, Toronto, Ontario, Canada), Eric Johnson (Clinical Coordinator, Inpatient Orthopaedic Unit, University Health Network, Toronto, Ontario, Canada)

Effective communication during care transitions is essential for patient safety and experience. To foster high quality care transitions for orthopaedic surgical patients, the inpatient clinical team at University Health Network (UHN) sought to enhance Transfer of Accountability and Information (TOA/I) practices across nursing staff. We aim to achieve ≥90% TOA/I attestation completion of nursing staff to enable safer care transitions for orthopedic surgical patients. Outcome measures included TOA/I attestation rate (percentage of TOA/I documents completed at shift change), TOA/I-related safety events, and staff perception of time and quality of information exchange. Process measures tracked accurate completion of six required fields on the attestation form (i.e. date and time, receiver details, communication method, TOA/I reason). Balance measures assessed handover delays and whether TOA/I interfered with urgent patient care priorities (e.g. code responses). Improvement refers to a sustained increase in attestation, reduced safety events, and improved staff perception of handover communication. An interprofessional team consisting of a clinical manager, educational resource nurse, project coordinator, clinical coordinator, and clinical director implemented a data-driven Plan, Do, Study, Act (PDSA) to improve TOA/I practices among nursing staff. The charge nurse, personal support worker (PSW), and broader inpatient staff were also engaged. Interventions included real-time compliance audits, safety incident monitoring, safety culture assessments, and data literacy education. The work inspired a PSW–led innovation to create a dedicated TOA/I board supporting patient and family communication building a culture of shared accountability and frontline engagement in daily handover practice. The team achieved a 70% improvement in compliance rates after implementation of PDSAs, sustaining rates above 90% over 12 months. The unit has become the top-performing inpatient unit at UHN. Strengthened TOA/I practices contributed to fewer safety incidents and improved safety culture, with 93% of staff reporting they felt they had adequate time for handover during their shift change. The initiative underscored the value of interdisciplinary leadership and unit-wide engagement in cultural transformation. System-wide dissemination of learnings through UHN committees supported the spread and sustainability of best practices. Future steps include enhancing the quality of handover information through simulation-based training and solidifying staff competence in effective clinical communication.

8. Mobilizing measurement: Harnessing digital pre-appointment reminders to increase completion rates of patient-reported symptom scales across a large multidisciplinary medical psychiatry clinic

Authors: David Wiercigroch,University of Toronto; Leonet Reid, University Health Network Toronto Health Economics and Technology Assessment Collaborative; Shannon Wright, University Health Network Centre for Mental Health; Nicole Bangloy, University Health Network Centre for Mental Health; Sarah Bush, University Health Network Centre for Mental Health & University of Toronto; Lauren Thomson, University Health Network Centre for Mental Health & University of Toronto; Dilip Koshy, University Health Network Centre for Mental Health & University of Toronto; Noha Abdel-Gawad, University Health Network Centre for Mental Health & University of Toronto; Alan Wai, University Health Network Centre for Mental Health & University of Toronto; Adrienne Tan, University Health Network Centre for Mental Health & University of Toronto; Susan Abbey, University Health Network Centre for Mental Health & University of Toronto; Charlotte Fowlow, University Health Network Centre for Mental Health; Nima Nahiddi, University Health Network Centre for Mental Health & University of Toronto; Christian Schulz-Quach, University Health Network Centre for Mental Health & University of Toronto; Jim Bowen, University Health Network Toronto Health Economics and Technology Assessment Collaborative; Valeria Rac, University Health Network Toronto Health Economics and Technology Assessment Collaborative; Justin Delwo, University Health Network Centre for Mental Health & University of Toronto; Kathleen Sheehan, University Health Network Centre for Mental Health & University of Toronto

Measurement-based care (MBC) uses validated scales for symptom assessment and care planning. MBC remains under-utilized despite identified benefits. A multidisciplinary medical psychiatry clinic at an academic, multi-site healthcare institution in Toronto is using a quality improvement approach to implement two validated scales, the Patient Health Questionnaire (PHQ-9) and the General Anxiety Disorder scale (GAD-7) to assess depressive and anxiety symptoms respectively. Our aim was to achieve a 50% completion rate among all new patients assessed in the clinic within eighteen months.

We completed semi-structured interviews with psychiatrists, allied health (nursing, social work) and administrative staff (n=11), seeking to understand current practices, and facilitators and barriers to clinic-wide implementation of measurement-based scales. Interviews were analyzed thematically. These data drove two Plan, Do, Study, Act (PDSA) cycles focusing on clinician education and alignment with the project team (PDSA 1), and automated pre-appointment distribution of scales digitally (PDSA 2).

The primary outcome was the monthly completion rate of GAD-7 and PHQ-9 scales. Process measures were the monthly proportion of new patients who received GAD-7 and PHQ-9 scales to complete, and new patients who completed at least one scale during the clinical encounter. Balancing measures were the monthly percentage of first appointment no-show visits and cancellations, and administrative staff workload assessed qualitatively. Statistical analysis was performed using QI Macros software.

The monthly completion rate of GAD-7 and PHQ-9 scales pre-intervention (June – December 2023) was 5% (8/152) and 4% (6/152) respectively. Staff-directed educational interventions (PDSA 1, January to November 2024) increased completion rates to 20% (74/368) for the GAD-7 and 21% (76/368) for the PHQ-9. After implementing digital distribution of the GAD-7 (PDSA 2, December 2024 to May 2025), completion increased to 51% (104/202). Notably, digital distribution of the PHQ-9 was delayed due to institutional legal issues and completion rates decreased slightly to 17% (34/202) during this same period. There was no impact on balancing measures.

GAD-7 completion rates increased substantially with digital dissemination. Next steps include assessment of digital dissemination of the PHQ-9 scale which has recently been launched, broadening available scales, and repeating measures for longitudinal assessment of symptoms and impact of care.

9. Utilizing BORN KPIs to drive quality improvement initiatives in Humber River Health's Birthing Unit

Authors: Mayura Kandasamy, RN, BScN, MSc, Dr. Andre LaRoche, MD, FRCSC, Valerie Quartarone RN, MScN, PNC, Vishnave Maheswaran, Kelly Da Cruz, Paula Reynolds, RN, Humber River Health

Elective repeat C-sections performed prior to 39 weeks gestation in low-risk pregnancies are associated with increased maternal and neonatal morbidity. In Ontario, Better Outcomes Registry and Network (BORN) identified this as a Key Performance Indicator (KPI), with a recommended target rate of 11%. The Birthing Unit had a baseline rate of 48.1%, significantly exceeding the provincial comparator rate of 26.8% (Figure 1), highlighting an urgent need for improvement. The aim is to reduce the rate of low-risk repeat C-sections occurring before 39 weeks gestation by ensuring alignment with evidence-based guidelines and BORN KPI targets. A KPI Data Analysis of unit level data from BORN was extracted to establish baseline rates, assess trends and determine the scope of the issue. An interdisciplinary approach was taken by engaging obstetricians, midwives and unit leaders to align practices with clinical guidelines, leverage data for improvement and drive accountability through structured feedback loops. Change Strategy was to create a formalized audit system of C-sections bookings. Dedicated Nurse Lead reviewed C-section bookings 4 weeks in advance, to be respectful to patient experience, and flagged all low-risk C-sections prior to 39 weeks. The MRP received a templated letter from the Chief of OB, Program Director and BU Leadership team advising them to update the medical indication for C-section or to reschedule C/S after 39 weeks. Audit system influenced system changes in ensuring accurate documentation of primary reason for C-section and for appropriate booking of elective C/S after 39 weeks gestation. The rate of low-risk repeat C-sections less than 39 weeks gestation decreased from 48.1% to 21.2%, representing a 55.9% relative reduction (Figure 2, Table 1). While the target of 11% has not yet been reached, this significant improvement demonstrates early success in changing clinical practice and supporting safer maternal and neonatal outcomes. Sustained progress will involve on going chart audits, real-time performance monitoring, and expanding education on timing of delivery. BORN KPIs provide a strong foundation for focused QI efforts, enabling objective performance tracking and benchmarking.

10. “Wake Up and Breath” Scarborough Health Network ICU Quality Improvement Program.

Authors: Hailin Qiu RN (1) and Karon Wong RN (1), Briar DeFinney MHI PMP (1), Anne Montgomery RN (1), Courtney Morandin RN (1), Grace Reyes RN (1), Vanessa Hill RN (1), Kingsley Kowk RRT (1), Wol Chung MBA MHSc (1), Amer Syed RRT (1), Amanda Firth RN (1), Laura Kane RN MN (1), Ariella Pratzer MD (1), Martin Betts MD MBA (1,2,3), Christopher Yarnell MD PhD (1,2,3), Thomas Bodley MD MSc (1,2,3)

1. *Scarborough Health Network*
2. *Scarborough Health Network Research Institute*
3. *Department of Medicine, University of Toronto*

Background

Intensive care unit (ICU) best practices such as spontaneous breathing trials (SBTs) shorten the time patients require life support and improve outcomes. In January 2025 Scarborough Health Network (SHN) initiated a program to improve SBTs across 3 hospitals.

Aim

To increase the rate of SBTs among patients meeting SBT criteria by 50% by December 2025.

Measures

The primary outcome is the rate of SBTs among patients meeting SBT eligibility criteria. Secondary outcomes include the proportion of patients-days meeting SBT criteria, patients-days with a Richmond Agitation Sedation Scale (RASS) within wakefulness target, and mean duration of mechanical ventilation. Balancing measures include SBT pass/fail rates and 72-hour re-intubation rates.

Equity considerations

SHN services a culturally and linguistically diverse community. We included a sensitivity analysis to evaluate the association between preferred language and study outcomes.

Engagement

Intervention development included the multidisciplinary clinical team and patient and family advisors. Efforts to engage family and caregivers during weaning protocols is ongoing.

Interventions

Four plan-do-study-act cycles have been implemented: 1) education/awareness, 2) SBT documentation, 3) SBT protocol, and 4) audit and feedback. Future interventions include both protocolization and family/caregiver engagement in sedation weaning.

Results

7313 patient-days with invasive ventilation were included (4974 pre-intervention Mar-Dec 2024, and 2339 post-intervention Jan-May 2025). Pre-intervention, criteria for doing an SBT were met on 897 patient-days, and an SBT was performed on 252/897 (28.1%). Post-intervention, SBT criteria were met 468 days with SBTs on 225/468 (48.1%, absolute increase +20%). Special cause variation was met May 2025 (U-chart Figure 1). Baseline SBT rates were not different for patients preferring English vs. non-English (27.2% vs. 34.3%, chi-squared p=0.07) and showed similar intervention effects (Figure 1). Baseline RASS scores were below target (i.e. more sedated than desired) for English and non-English preference (mean RASS score -3.13 vs -3.03, p=0.07). There has been no change in re-intubation rates (14.5% vs 14.1%, chi-squared p=0.90). Evaluation and interventions are ongoing.

Discussion

The SHN “Wake Up and Breath” program has demonstrated success increasing SBT rates. Implementing sedation weaning best practices is expected to be challenging and may benefit from direct family and caregiver involvement at the bedside.

Physical Posters

1. Advancement of intra-operative best practice in quantitative neuromuscular blockade monitoring using a multi-tier interdisciplinary change bundle.

Authors: Maggie Chen, University Health Network; Tariq Esmail, MD, FRCPC, MSc, BCh, BAO, MSc (he/him/his) – Anesthesiologist, Anesthesia Quality Lead of Sprott Centre for Quality and Safety, University Health Network; Ana Lopez Filici, RRT, CCAA MHSc(HA), HBSc, FCSRT – Manager, Perioperative services, Discipline Head, Anesthesia Assistants, University Health Network; Mikha Alegria, RN, BScN, MScHQ (she/her/hers) – Quality Improvement Specialist, Interdepartmental Centre for Critical Care, University Health Network; Alexandra Boasie, MSc, MBA – Senior Manager, Transformation and Quality, University Health Network; Carlos Ibarra, MD, PhD, DESAIC – Anesthesiologist, Department of Anesthesia and Pain Management, University Health Network; Sheila Riazi, MD, FRCPC, MSc. Clinician Scientist-Site Head, Department of Anesthesia and Pain Management, University Health Network; Keyvan Karkouti, MD, FRCPC, MSc – Anesthesiologist in Chief, Department of Anesthesia and Pain Management, University Health Network

Introduction

Postoperative pneumonia is an avoidable hospital acquired condition and significant outcome for patients. Intraoperative neuromuscular blockade (NMB) monitoring to enhance complete reversal of paralysis is an evidence-based practices to improve patient safety. Despite compelling evidence and endorsement by the Canadian Anesthesiologists' Society (CAS) as a required monitor when nondepolarizing NMB agents are administered, NMB monitoring lacks compliance at our institution with baseline data showing 42% use at site 1 and 10% at site 2 in June 2024. This quality improvement project emphasized a multi-tier, data driven approach with an interdisciplinary team framework to advance this best practice. The aim of our first change bundle is to increase quantitative NMB rate by at least 50% at both sites in general surgery patients.

Methods

Root cause analysis identified equipment reliability and OR culture as key barriers. We implemented a change bundle that covered all tiers of the hierarchy of intervention effectiveness. Targeted education sessions for multidisciplinary teams were implemented. An online resource hub was created to support accessibility and onboarding. Automatic NMB practice reminders were embedded into the electronic charting system. Finally, a departmental directive formally endorsed quantitative NMB monitoring as standard practice. Clinician specific Multicenter Perioperative Outcome Group (MPOG) performance reports will be leveraged to sustain improvements.

Results

NMB monitoring rate increased by 83% at site 1 and 230% at site 2 in 6 months. By Jan 2025, NMB monitoring rate increased to 77% (from 42% baseline) at site 1 and 33% (from 10% baseline) at site 2. Process measures showed a 53% increase in monitor application by nurses and improved staff confidence. Balancing measures showed a 42% reduction in Sugammadex use and a decrease in overall paralytic dosing. Furthermore, this improvement was sustained. Most recent data in June 2025 showed 81% NMB monitoring rate at site 1 (93% increase from baseline) and 56% at site 2 (460% increase from baseline).

Conclusion

A multi-tier, data-driven and interdisciplinary approach significantly improved quantitative NMB monitoring rates across UHN. Embedding education, automatic reminders and practice standardization while breaking down silos across disciplines were key to sustaining this project’s success.

2. Advancing Trauma Informed and Culturally Safe Care Through Community-Led Interactive Workshops in an Acute Community Hospital

Authors: Arany Sivasubramaniam & Yasir Khalid, William Osler Health System

Canadian hospitals continue to fall short in delivering culturally safe care, particularly for Indigenous, Black, racialized, newcomer, and 2SLGBTQIA+ populations. These groups experience disproportionate health disparities, in part due to persistent systemic racism, colonial legacies, and medical mistrust (Allan & Smylie, 2015; Truth and Reconciliation Commission of Canada, 2015). While many organizations offer equity, diversity, and inclusion (EDI) training, such interventions often fail to shift clinical behaviours or transform organizational culture in a meaningful way. This initiative aimed to improve cultural safety in clinical settings through the co-development and delivery of community-led, hybrid workshops. These workshops centred lived experience, fostered critical reflection, and addressed organizational and structural inequities embedded in healthcare delivery. A mixed-methods evaluation assessed impact using post-workshop surveys to measure changes in knowledge, confidence, and attitudes for staff about culturally safe care. Additional metrics included qualitative and informal verbal feedback from staff and community partners.Workshops were co-designed and facilitated by individuals with lived and living experience. Community partners were equitably compensated and held decision-making power throughout the process, supporting a shift from tokenistic involvement to authentic co-leadership. This reciprocal model aligns with evidence showing that community-led engagement improves health system responsiveness and trust. Workshop methods included narrative storytelling, facilitated dialogue, and scenario-based problem-solving grounded in local health system realities. These sessions have since been integrated into staff onboarding, professional development, and leadership education, marking a departure from one-time training toward embedded, continuous learning. Preliminary findings show statistically significant increases in self-reported confidence and understanding of cultural safety principles. Participants described heightened empathy, greater readiness to adopt trauma-informed practices, and a deeper awareness of how racism and systemic inequities manifest in clinical interactions. Feedback also highlighted the value of hearing directly from community voices.

References:

Allan, B., & Smylie, J. (2015). First peoples, second class treatment: The role of racism in the health and well-being of Indigenous peoples in Canada. Wellesley Institute.
Truth and Reconciliation Commission of Canada. (2015). Calls to action.

3. AI-Driven Imaging for Early and Equitable Detection of Pressure Injuries

Authors: Stephanie Rintoul1, Stephanie Furtado1, John Gregory2, Ari Collerman1, Danielle Petruccelli1, Leanne Tremain1, Denise Johnson1, Linda Chan1, Nagham Azzam Iqbal1, Kamaldip Babrah1, Hiya Shah1, Kim Hornby1, Ted Scott1, Leslie Gillies1

1Hamilton Health Sciences, Hamilton, Canada. 2 Opencity Inc., Kitchener, Canada.

Background/context

Pressure injuries (PIs) contribute to preventable morbidity and mortality in Canada (CPIAP, 2024). Traditional PI risk assessment tools rely on visual indicators and are less effective for patients with dark skin tones, contributing to disparities in care. Objective imaging modalities can help address these disparities by providing skin tone–independent, physiologic data with high diagnostic accuracy (Black, 2018; Lee & Chen, 2022).

Aim

We aim to detect PIs earlier in patients with dark skin tones at Hamilton Health Sciences through the implementation of the MIMOSA Pro imaging tool—a handheld device that captures tissue oxygenation, skin surface temperature, and digital images—while also assessing its impact on detection accuracy and health equity.

Measures

Imaging data in adult and pediatric inpatient units with diverse skin tones were collected using the MIMOSA Pro. Skin tone was evaluated using a color scale. Image-related data were compared with Braden Scale assessments to evaluate detection capability. Outcomes were assessed through chart reviews, provider feedback, chi-square tests, Cohen's kappa, and pediatric specificity.

Equity considerations

This initiative aims to address disparities in pressure injury (PI) detection for patients with dark skin tones. The imaging solution uses oximetry to detect subdermal changes and thermography, rather than relying on visual indicators linked to skin tone (Bates-Jensen et al., 2024; Black, 2018). This approach improves early detection in patients with dark skin tones and promotes more equitable care.

Engagement Patients were engaged both before and during imaging assessments to ensure comfort with device use. Imaging protocols were adjusted based on patient feedback—for example, the heel area was imaged more frequently than the coccyx in response to patient preferences.

Impact/results

Over 2,500 images were collected over four months. Chi-square tests revealed a strong association between Braden and imaging assessments (pediatric: $\chi^2 = 63.9$; adult: $\chi^2 = 255.5$; both $p = 0.001$). Kappa results indicated fair agreement in pediatrics ($\kappa = 0.299$) but poor agreement in adults ($\kappa = 0.053$), suggesting that the tools detect risk in different ways. Pediatric specificity remained high across both tools (Braden: 93.32%; imaging: 90.23%). A limited sample size constrained the ability to stratify the effectiveness of MIMOSA for early detection across all skin tones.

Discussion/lessons learned

Early results indicate that objective physiological imaging can enhance PI prevention and inform clinical decision-making. MIMOSA Pro shows promise in reducing care disparities for patients with dark skin tones. However, the limited sample size constrained the ability to conduct deeper analyses and draw conclusive results. Quality improvement initiatives will continue to ensure appropriate use of MIMOSA Pro technology and help reduce care disparities.

References

1. Huang C, Ma Y, Wang C, Jiang M, Yuet Foon L, Lv L, Han L. Predictive validity of the Braden scale for pressure injury risk assessment in adults: a systematic review and meta-analysis. Nurs Open. 2021 Sep;8(5):2194-207. http://doi.org/10.1002/nop2.792
2. Black J. Using thermography to assess pressure injuries in patients with dark skin. Nursing. 2018;48(9):60–1.
3. Bates-Jensen BM, Jordan K, Jewell W, Sonenblum SE. Thermal measurement of erythema across skin tones: implications for clinical identification of early pressure injury. J Tissue Viability. 2024;33(4):745–52. https://doi.org/10.1016/j.jtv.2024.08.002

4. Bridging the Gap: A quality improvement project to enhance the transition from pediatric to adult healthcare for adolescents and young adults with cancer (AYA)

Authors: Chana Korenblum & Daphne Cockwell – SickKids Hospital

Background/Context

AYA with cancer face unique challenges during the transition from pediatric to adult care. At Canada's largest pediatric oncology program, no formal transition process exists for AYA, leading to gaps in care continuity and patient and caregiver preparedness.

Aim

To enhance the transition process for AYA by identifying barriers and facilitators, co-designing a formalized transition pathway incorporating evidence-based tools, and refining it using Plan-Do-Study-Act (PDSA) cycles.

Measures

This initial information-gathering phase aimed to understand the current state of AYA oncology transitions. A literature review and an environmental scan of existing processes were conducted. Qualitative interviews with 22 staff across pediatric and adult oncology centres in Toronto were completed. Balancing measures included navigating staff availabilities and applicability across roles. These findings will inform the future co-design of a formal pathway.

Equity Considerations

To ensure a comprehensive understanding of the transition process, perspectives from social workers, nurses, physicians, and coordinators across multiple disciplines were included, incorporating a diversity of expertise and viewpoints.

Engagement

In this first phase, healthcare providers supporting transitioning AYA patients were involved in project design, including developing the interview guide and analyzing data. In the next phase, interviewing patients and caregivers, two patient–parent dyads with lived experience will engage in data analysis and knowledge sharing.

Improvement/Innovation/Change Concepts

Outcomes include a summary of tools from other centres and emerging themes from interviews. Qualitative data illuminated four key themes—patient, provider, family, and system-level factors (see figure).

Impact/Results

These themes will guide development of targeted interventions within a formal pathway. Alongside upcoming interviews with patients and caregivers, findings will inform a comprehensive, patient-centered transition model. Preliminary outcomes suggest strong potential to improve patient readiness, provider confidence, and continuity of care. Findings may improve integration of transition discussions into routine care, avoid extensions of care beyond age 18, and improve adherence to treatment and surveillance of long-term effects.

Discussion/Lessons Learned

Challenges included variability in transition practices across providers. Lessons learned highlighted the need to individualize care, even when implementing a standardized transition tool. Next steps include co-designing, evaluating and refining a formalized transition pathway through iterative PDSA cycles.

5. Bridging the QI Gap in Laboratory Medicine: A Practical Guide Through a Real-World SPE Testing Initiative

Authors: Jennifer Taher (Department of Laboratory Medicine and Pathobiology, University of Toronto; Department of Pathology and Laboratory Medicine, Mount Sinai Hospital), Mary Kathryn Bohn (Department of Laboratory Medicine and Pathobiology, University of Toronto; Department of Pathology and Laboratory Medicine, Mount Sinai Hospital), Roy Augustin (Department of Pathology and Laboratory Medicine, Mount Sinai Hospital), Lucas Chartier (Emergency Department, University Health Network; Department of Medicine, University of Toronto), Luke Devine (Department of Medicine, University of Toronto; Division of General Internal Medicine, Mount Sinai Hospital), Samik Doshi (Department of Medicine, University of Toronto; Division of General Internal Medicine, Mount Sinai Hospital), Leanne Ginty (Department of Nursing, Mount Sinai Hospital), Elliot Lass (Division of Family Medicine, Mount Sinai Hospital; Department of Family and Community Medicine, University of Toronto), Felix Leung (Department of Laboratory Medicine and Pathobiology, University of Toronto; Department of Pathology and Laboratory Medicine, Mount Sinai Hospital), Graeme Nimmo (Department of Medicine, University of Toronto; Division of Genetics, Mount Sinai Hospital), Alyson Sandy (Department of Pathology and Laboratory Medicine, Mount Sinai Hospital), Kelly Shillington (Department of Nursing, Mount Sinai Hospital), Amanda Simon (Division of Clinical Informatics, Mount Sinai Hospital), Amanda Steiman (Department of Medicine, University of Toronto; Division of Rheumatology, Mount Sinai Hospital), Ahmed Taher (Department of Medicine, University of Toronto; Mackenzie Health, Richmond Hill), Cindy Tang Friesner (Department of Pathology and Laboratory Medicine, Mount Sinai Hospital), Cristina Zanchetta (Division of Clinical Informatics, Mount Sinai Hospital), William Mundle (Department of Nursing, Mount Sinai Hospital)

There is a lack of guidance on preparing, executing, and sustaining quality improvement (QI) initiatives in the field of laboratory medicine. The aim of our project was to bridge this knowledge gap and create a novel primer series on how to implement a QI project that is successful and sustainable in a clinical laboratory. To outline key concepts related to the QI framework, we undertook a QI project aimed to reduce unnecessary serum protein electrophoresis (SPE) testing at a tertiary care hospital. SPE is used in the diagnosis and monitoring of multiple myeloma; a disease with an average age onset of 70 years. Current guidelines recommend a minimum of 3 months between consecutive SPE testing. Data analysis at our institution revealed that SPE over-testing was a significant problem. Based on root case analysis, a two-part SMART aim was developed: 1) reduce repeat testing within 75 days by 90% within 3 months and 2) reduce testing in patients <50 years by 10% within 3 months. Systems-based change ideas were implemented following formation of a multi-disciplinary stakeholder team. This included hard-stop rules at the level of the laboratory and hospital information system, and unchecking of pre-printed requisitions in two speciality clinics. Family of measures were defined, including outcome (% repeat orders within 75 days, % orders in patients <50 years), process (results cancelled based on hard-stop rule, number of requisitions changed), and structural (frequency of calls to the laboratory to request testing). The impact of interventions were evaluated over a one-year period wherein >99% reduction was observed in repeat testing less than 75 days. However, our SMART aim to reduce testing in patients <50 years was not met. Future work will involve a second Plan-Do-Study-Act cycle after re-evaluating our root cause analysis. Through this real-life clinical vignette, we describe fundamental concepts relevant to the QI framework, including change ideas, hierarchy of effectiveness, family of measures, and implementation cycles to a laboratory medicine audience. This primer series is the first of its kind in laboratory medicine and will serve as a useful resource for future engagement of clinical laboratory leaders in QI initiatives.

6. Building a Palliative-Rehabilitation Collaborative Model in a High-Intensity Inpatient Rehab Setting: A Quality Improvement Initiative

Authors: Danielle Jepson (Toronto Rehab, University Health Network), Dr. Eugene Chang (University of Toronto; Toronto Rehab, University Health Network), Dr. Maxwell Charles (Department of Supportive Care, Division of Palliative Care, University Health Network), Yolande Geba (Toronto Rehab, University Health Network), Ian Alagadan (Toronto Rehab, University Health Network), Dr. Warren Lewin (Department of Supportive Care, Division of Palliative Care, University Health Network)

Background

At a large Canadian hospital network, the cancer rehabilitation (rehab) program has nearly doubled its inpatient volumes over the past decade, serving an increasing number of seriously ill patients. Despite philosophical alignment between palliative care (PC) and rehab, and an observed increase in unmet PC patient needs, no formal PC integration existed in inpatient rehab, and no national standards guide such collaboration.

Aim

Our aim was to improve the quality of care for seriously ill patients in inpatient rehab by embedding PC principles through staff education, standardized outcome measures, and on-site PC consultation.

Measures

Primary outcomes included documentation rates of Advance Care Planning (ACP), Palliative Performance Scale

(PPS), and Edmonton Symptom Assessment System (ESAS-R+). Process measures included staff confidence (via a PC confidence tool) and referral volumes. Balancing measures, such as perceived workload, were assessed through structured interviews and inductive thematic analysis. Improvements were tracked across three PDSA cycles.

Improvement/Innovation/Change Concepts

The model prioritized timely, specialized support for patients with advanced serious illness—often underserved in rehab—and expanded to include non-cancer diagnoses, ensuring continuity for those followed by PC elsewhere. Staff co-designed interventions through a mixed-methods needs assessment, integrating patient and caregiver feedback throughout.

Education was co-developed with acute care PC clinicians and delivered via in-person and self-directed modules. An on-site PC consultation model was implemented, with referrals embedded in the electronic health system and guided by evidence-informed triggers to ensure timely, consistent access.

Results

72 patients received PC specialist consultation. ACP and PPS documentation improved from 42% and 37% pre-consult to 95% and 99% post-consult. ESAS-R+ completion increased from 10% (avg. 5.5 days) in PDSA 1 to 86% (avg. 2.2 days) in PDSA 3. Staff confidence applying PC principles improved across all domains. While workload remained stable, staff reported care felt more manageable. Thematic analysis revealed five key themes: enhanced emotional well-being, staff resilience, smoother transitions, improved communication, and strong support for the integrated model.

Conclusion

Embedding PC through education and on-site consultation improved identification and management of PC needs of seriously ill patients in high-intensity rehab. Next steps include a retrospective chart review and key informant interviews to guide broader implementation.

7. Building Frontline QI Leadership Capacity Through a Multi-Cohort QI Academy

Authors: Krishna Jain, Komal Mazhar & Nimrah Kiyani, William Osler Health System

Frontline healthcare staff are well-positioned to identify quality and safety gaps but often lack formal training, confidence, and protected time to lead improvement initiatives. Despite increased emphasis on quality improvement (QI) in healthcare, practical QI education remains limited. William Osler Health System (Osler) developed the QI Academy, an applied educational program grounded in adult learning principles and calibrated QI dosing to build frontline capability and confidence. Aligned with the Kirkpatrick Evaluation Framework, the Academy assessed learning and impact across four levels. Level 1 post-module surveys showed high satisfaction, with average scores of 4.22 (Cohort 1) and 4.30 (Cohort 2) for learning experience, and 4.38 and 4.52 respectively for value to professional development (5 point scale). For Level 2, outcomes showed average knowledge scores increased from 64.5% (n=25) to 92.6% (n=21). For Levels 3 and 4, 54 projects were completed across two cohorts (n=61), spanning clinical and non-clinical areas, and led by nurses, physicians, operational leaders, allied health professionals and Patient and Family Advisory Council (PFAC) members. Projects demonstrated tangible system impact, including corporate implementation of IDDSI, creation of sensory rooms within Mental Health, and elevating ambulance offload time reduction to Osler's Quality Improvement Plan. Participants were encouraged to identify disparities and engage diverse perspectives; future cohorts may deepen equity-focused curriculum content. The Academy engaged diverse participants who collaborated with patients and frontline colleagues to identify problems, shape project aims, and co-design solutions. In-house faculty from various disciplines played a central role in curriculum delivery and strengthened internal capacity as QI educators and mentors. The curriculum incorporated experiential activities, peer learning, immediate application, and coaching support to reinforce learning. QI dosing principles balanced knowledge delivery, practical application, and real time coaching to build confidence and capability. Evaluation data confirmed the Academy's positive impact on learner development. Participants demonstrated increased confidence, competence, and readiness to lead QI work. Feedback highlighted improved clarity in using QI tools and appreciation for coaching and peer support. Key success factors included executive sponsorship, structured coaching, and a supportive learning environment. Future plans include expanding cohort size and outreaching and strengthening patient partnerships in project work.

8. Contextualizing Harm in Cancer Care: A Systems Lens on Nurses' Narratives of Safety and Harm

Authors: Michelle Tam1, Chantelle Recsky1,2, Charlene E. Ronquillo3, Sandra B. Lauck2, Leah K. Lambert1,2

1-BC Cancer, Vancouver, BC
2-University of British Columbia, Vancouver, BC
3-University of British Columbia Okanagan, Kelowna, BC

Background

Harm in oncology care is complex, extending beyond clinical errors to include psychological, digital, and systemic risks. Traditional definitions often overlook these dimensions, especially in oncology's specialized environment. Oncology nurses, as primary points of patient contact, provide essential insight into everyday safety challenges often missed in formal reporting systems. This study examined nurses' perceptions of harm, safety, quality, and barriers to reporting safety events, using multiple safety frameworks to guide improvement efforts.

Methods

A two-phase qualitative study was conducted with 28 oncology nurses at an urban cancer center. Interviews explored perceptions of quality, safety, harm, and event reporting barriers. Narrative examples of harm were inductively coded and mapped onto three frameworks: the WHO International Classification for Patient Safety (ICPS), the Sittig and Singh Sociotechnical Model, and the Health Data Harm Framework (HDHF), supporting a multidimensional analysis of harm and the contributing factors.

Results

Nurses defined quality care as timely, relational, and evidence-based. Safety was recognized as a core component of quality, often linked to protocol adherence and the prevention of harm across physical, psychological, and systemic domains. Harm sources included administrative failures, communication breakdowns, digital errors, care delays, and emotional distress. Despite valuing safety reporting, nurses underreported due to unclear reporting thresholds, administrative burden, fear of repercussions, and lack of feedback.
Framework mapping revealed conventional taxonomies only partially captured nurses' experiences. The sociotechnical model emphasized system-level contributors like workflow misalignments, while the HDHF exposed digital-era harms such as documentation fatigue and system-driven delays. Illustrative findings are

included in Table 1, and the full dataset will be presented at the session.

Conclusion

Nurses’ knowledge and experience are vital in revealing and addressing safety risks embedded in clinical, organizational, and digital systems. Applying multiple frameworks helps uncover these layered contributors and supports the development of more resilient care environments.

Equity and Engagement Considerations

Though not the primary focus, digital-related care delays and communication gaps identified by the HDHF highlight equity issues needing further exploration. Nurses were engaged as knowledge holders throughout the study, as both study participants and research team members, informing both interpretation and application of frameworks.

9. Driving Equity Through Quality Improvement - Insights from a Scoping Review

Authors: Nagham Azzam Iqbal, Jenna Azzam, Rylan Egan, Bryan Herechuk, Ameil Joseph, Haadia Memon, Stephanie Nixon- Hamilton Health Sciences

Background

Quality Improvement (QI) frameworks, tools and education offer a practical approach to address the challenges of incorporating Equity, Diversity and Inclusion (EDI) and Health Equity (HE) into healthcare systems (Feeley, 2020). Although some studies highlight the utilisation of QI to support equity-focused culture change (Kryzanowski et al., 2019), gaps remain in understanding the role of QI to support EDI and HE initiatives (Scott & Rawal, 2018).

Methods

Using the Joanna Briggs Institute (JBI) methodology for scoping reviews, a search was conducted across six databases (MedLine, EMBASE, CINAHL, ERIC, Web of Science and Business Source Premier). English language publications after 2001 were included if they involved patients, healthcare staff, organisational leaders, and community members, and integrated concepts of EDI or HE with QI or Quality Management Systems (QMS). The study included tools, recommendations, and approaches within healthcare contexts like hospitals and clinics, focusing on various levels of interventions.

Results

The review identified 97 papers, outlining the increasing use of QI approaches to advance HE. However, most studies were perspectives, opinions, and editorials, revealing a gap in the literature. Sustainability and spread were also inconsistently discussed, with fewer than one-third of the studies showing evidence of internal or external dissemination. Leadership support and commitment, patient and community engagement and using QI tools to advance equity deliverables emerged as key themes. Educational and system-level strategies were most prevalent, reflecting an emphasis on structural change and highlighting a gap in tangible tools to implement recommendations.

Conclusion

QI work is increasingly leveraged to advance EDI and HE, but implementation and evaluation remain inconsistent. The study highlights the need for committed leadership, equity integration into routine QI work, and engagement of diverse interested parties. Future research is needed to evaluate effectiveness and scalability.

.

10. Ending Pajama Paralysis at the Scarborough Health Network

Authors: Victoria Antoniu, Natalie Warrick, Meredith de Paulsen, Laura Kane, Nancy Veloso- Scarborough Health Network

The purpose of the End PJ Paralysis initiative at Scarborough Health Network (SHN) is to improve the quality and safety of care delivered on inpatient units by increasing the number of patients mobilized out of bed and dressed in their own clothes. This helps reduce patient deconditioning and strengthens patient sense of agency over their care.

Piloted on a medicine inpatient unit in Spring 2024, the initiative has since spread to all Medicine and Seniors' Health inpatient units and is currently being spread to other programs. Key interventions included the creation of patient-facing posters and brochures used for patient education at admission and throughout the care continuum. In collaboration with professional practice, an education plan was developed including tools and resources for safe patient handling and equipment use. Equity considerations included translation of patient education materials in Tamil, Mandarin and Cantonese and securing clothing donations for patients without family or community supports. The plan was rolled out through weekly inpatient huddles, where staff discussed achievements, challenges, and improvement ideas.

A robust measurement plan supported the iterative testing of change ideas. Data collection sheets were developed and weekly audits performed. Electronic Health Record flowsheets were created for automated data capture. Proxies were developed to account for the realities of acute care with some patients unable to be mobilized or dressed in their own clothing due to clinical reasons.

Implementation led to a 19%–53% increase in patients mobilized out of bed and a 13%–17% increase in those dressed in their own clothes. Falls decreased by 3%–50%, average length of stay (LOS) dropped by 4%–25%, and hospital-acquired pressure injuries remained at 0%. Staff engagement in patient mobilization also improved significantly.

Key lessons learned

(1) A team-based interprofessional approach to mobilization evolves over time

(2) Early and routine engagement with physicians, nurses and allied health staff concerning perceptions of the effectiveness of dressing patients and patient mobility is foundational to supporting effective education and culture change

(3) Weekly review of mobilization and dressed performance data is critical to maintaining momentum and project success

11. Enhancing Medication Safety through Bedside Medication Verification (BMV): A Multi-Phase Quality Improvement Initiative

Authors: Manju (Myra) Trehan, Rosemary Frketich, Sarah Peloso; Denise Weir; Shelby Howard, Jo Anne Quanbury, Mishka Danchuk-Lauzon

Background/Context

Medication administration errors are a leading source of preventable harm. Bedside Medication Verification (BMV) requires scanning the patient's armband, medication, and electronic order. It is a best practice that is designed to ensure accuracy and safety. An internal review revealed inconsistent BMV compliance, prompting a multi-year quality improvement effort.

Aim

To improve BMV compliance across inpatient units and reduce medication-related safety events through system upgrades, workflow redesign, and stakeholder engagement.

Measures

- Primary outcome: BMV scanning compliance (%).
- Process measures: staff participation in feedback and recognition activities.
- Balance measure: staff-reported workflow burden.
- Secondary Outcome: Patient safety incidents related to BMV.

Equity Considerations

All inpatient units received the same tools and support, with targeted drop-in sessions offered in high-error areas.

Engagement

Staff input via incident reports, huddles, and emails shaped challenge identification and solution design. Patient and family advisors on our Quality & Patient Safety, Risk, and Board of Quality committees receive regular BMV updates; their perspectives are discussed at each meeting to inform ongoing improvement efforts.

Improvement/Innovation/Change Concepts

Year 1:

- Identified safety incidents and system gaps such as unreliable scanners, connectivity issues, and charging limitations.
- Solutions: equipment upgrades, additional scanners, and infrastructure fixes.

Year 2: Emphasized sustaining improvement through:

- Weekly BMV compliance and incident reports shared in huddles and emails.
- Recognition of BMV champions in CEO updates and departmental huddle boards.
- A forced documentation "reason bypass scanning" protocol to target education.

Impact/Results

BMV compliance improved significantly from 30.1% to 73.9% from January 2023 to January 2025. Staff reported greater awareness and accountability around safe medication practices.

Discussion/Lessons Learned

Key challenges included hardware limitations and change fatigue. Transparent communication, stakeholder recognition, and responsive technical support overcame resistance. Next steps: deeper incident-trend analysis and expansion of interventions to other care areas.

12. Equitable Attachment to Primary Care Toolkit: Primary care attachment based on equitable access, team-based care and optimization of patient and physician/nurse practitioner experience

Authors: Shikha Duggal MD MSc, St. Michael's Hospital Academic Family Health Team (SMHAFHT) Noor Ramji MSc MD CCFP/SMHAFHT, Curtis Handford MD CCFP FCFP MHSc/SMHAFHT, Nassim Vahidi-Williams MPH/SMHAFHT, Chantal Sorhaindo NP/SMHAFHT, Lauren Brouhard-Chuck SW/SMHAFHT, NEWR Strategic Working Group/SMHAFHT

Background

In 2022, Inspire PHC reported that 19% of people in Downtown East Toronto lacked primary care, disproportionately affecting equity-deserving groups. In response, the St. Michael's Hospital Academic Family Health Team (SMHAFHT) launched the NEWR pathway, a quality improvement initiative designed to improve access through team-based onboarding, social determinants screening, community partnerships, and equity-focused data tracking. A scalable toolkit was also created to support broader adoption across Ontario.

Aim

To increase the percentage of newly rostered patients identifying as African, Caribbean, Black, Indigenous, homeless, and/or are living in poverty or under housed by 10% annually, with the aim of reaching 50% by 2027 at the SMHAFHT.

Measures

Outcome: Percent of patients from equity deserving groups enrolled in the family health team.
Process: Number of new patient requests through the NEWR/IPCT pathway.
Balancing: Patient and provider experiences with the new patient attachment process.

Equity Considerations

The NEWR pathway reserves capacity for unattached patients from equity-deserving groups, connecting them to team-based care and resources that might not be available to them otherwise. An outreach social worker, nurse and Nurse Practitioner engage with patients before assigning a primary provider. The FHT team also collaborates with referring hospital or community partners to support care navigation.

Engagement

Patient perspectives were gathered through anonymous phone/email surveys and the Patient Family Advisory Committee experience survey. A focus group is planned for equity-deserving patients attached through the pathway.

Impact/Results

Equity-deserving patient attachment increased from 19% (PDSA #1) to 20% (PDSA #2) within six months. Early data from PDSA #3 shows 22% of patients now come from equity-deserving groups.

Discussion/Lessons Learned

1. Equity-Focused Scan: Use data and team insight to identify opportunities for equitable attachment
2. Patient and Community Engagement: Partner with communities and patients to co-design flexible, culturally safe attachment processes that empower self-identification and support patient experience.
3. Clinician Engagement: Address clinician barriers, offer flexibility, share data, and protect time.
4. Team-Based Approach: Distribute onboarding tasks to improve efficiency and enhance patient experience.
5. Continuous Feedback: Collect and act on meaningful patient data and team input to evaluate and improve equitable attachment.

13. From Fragmentation to Flow: Optimizing the SickKids' Spine Program to Improve Safety, Access, and Experience

Authors: Kimie Soriano and Katherine Cheung, Hospital for Sick Children

Background/Context

The Spine Program at SickKids, established in 1956, manages approximately 900 new referrals and over 2,500 clinic visits annually. Despite its legacy, the program faced rising safety concerns, family complaints, and team morale issues, culminating in a Serious Safety Event and an external review. Care was described as fragmented and unsafe, prompting a need for optimization.

Aim

To streamline care across all phases of the spine patient journey and improve patient, caregiver, and provider experience by March 2025.

Measures

Outcome measures included:

- Wait 2 Time Reduction
- Average Length of Stay (LOS)
- Waitlist volume
- Patient and family satisfaction

Process measures included:

- Percentage of patients with standardized pathways documented and followed
- Percentage of tasks with clearly assigned owner

Balance measures included:

- Nursing satisfaction with new care model
- Incidents of care delays or missed steps due to the standardized pathway

Equity Considerations

While not explicitly targeted, the redesign improved access and consistency of care, particularly benefiting patients with complex needs who previously experienced delays and fragmented navigation.

Engagement

Patients and families were central to the redesign, with their feedback informing the need for change. Staff across disciplines co-led working groups, embedding lived experience into every phase of improvement.

Improvement/Innovation/Change Concepts

The initiative introduced:

- Standardized pre-op pathways and proactive readiness checks
- Defined nursing scopes and introduction of an RN Coordinator role
- Implementation of Standard Spine and Complex Spine ERAS Pathways
- Strategic partnerships to reduce waitlists and surgical delays

Impact/Results

The program achieved measurable improvements in access, efficiency, and experience.

- Wait 2 times reduced by 49% (from 410 to 210 days)
- Length of stay for idiopathic spine patients decreased by 24% (from 3.98 to 3.01 days)
- 67% increase in patient volume managed without compromising care quality
- Improved team collaboration, role clarity, and patient experience

Discussion/Lessons Learned

Challenges included change fatigue and aligning diverse workflows. Success was driven by early interprofessional collaboration, trust-building, and systems thinking. Sustainability planning and small, targeted interventions proved critical. Next steps include expanding prehabilitation and modernizing traction systems to further enhance outcomes and capacity.

14. From Mess to Success: Transforming Room 21 at the Urgent Care Centre with Lean 5S

Authors: Nikita Gajjar, BSc(Hons), MScOT, OT Reg. (Ont.), Trillium Health Partners, Mississauga, ON, Canada Navpreet Kamboj, RN, MSN, PhD, Melanie Pierson, RN, BScN, and Barb McGovern, RN, MN, ENC(c), Trillium Health Partners, Mississauga, ON, Canada

The Urgent Care Centre's Room 21, a storage and semi-private treatment area, located at Trillium Health Partners' Queensway Health Centre was a major bottleneck in urgent care delivery. This space was overcrowded, disorganized, and inefficient, resulting in a 29-minute setup time, reduced staff satisfaction, delayed patient care, and potential safety risks.

The project aimed to optimize space utilization, streamline workflows, reduce inventory, minimize waste, and improve safety. The goal was to improve the setup time of Room 21 by 40% to 18 minutes and staff satisfaction by 25%. Outcome measures included improved staff satisfaction. Process measures included reduced setup time and number of items removed from Room 21. Balancing measures included staff workload perception. Staff were central to this initiative and provided recommendations on optimizing the space for care provision and to enhance patient/family experience. Safety concerns including improper location of critical equipment, and clutter, which could impact accessibility were addressed. Lean principles and quality improvement tools, such as Gemba walks, voice of the customer, waste analysis, timed observation, spaghetti diagrams, staff satisfaction surveys, and Lean 5S were applied.

Results demonstrated a 42% improvement in setup time from over 29 minutes to 17 minutes and 10 seconds. Forty-seven unneeded items were removed, and critical equipment was relocated for easy accessibility. Post-implementation surveys showed an 89.8% staff satisfaction rate with the setup process (vs. 22.9% at baseline), and 95% satisfaction once Room 21 was ready for use (vs. 18.8%). Staff reported a decreased effort for setup. Introducing a clear setup process and an 'everything in its place' system improved operational efficiency including ease of accessing necessary equipment, reduced the risk of misplaced items, reduced the risk of injuries by ensuring clear entry and egress, enhanced patient safety by creating a clean, accessible, and safer environment, and enabled the ability to place patients early into Room 21 for treatment. Limitations included modifications to shared spaces, however, collaborative efforts led to optimized storage ability. Overall, staff involvement in co-design fostered a sense of joy in work leading to sustainment of the changes and desire to further improve their work environment.

15. Improving Documentation of Accessibility Accommodations in Primary Care

Authors: Jamal Tarrabain, MD1,2; Zinnia Al-Najjar, MD,1,2; Margaret Hess, MD, CCFP1,2; Laurie Green, MD, CCFP1,2; Valerie Sawyers1
1. Department of Family and Community Medicine, St. Michael’s Hospital
2. Department of Family and Community Medicine, Faculty of Medicine, University of Toronto

Background/Context

Patients with disabilities often experience unmet accommodation needs when these are not proactively captured in the electronic medical record (EMR). At the Saint Lawrence Health Centre, accommodation alerts were infrequently present, limiting clinicians’ ability to prepare for accessible care.

Aim

Develop and test a low-cost workflow that reliably identifies and documents accommodation needs, tracking the cumulative effect of three sequential PDSA cycles.

Measures

Outcome: count of active accommodation alerts in the EMR after each cycle. Process: patients screened, and charts reviewed. Balance: qualitative staff feedback on feasibility.

Equity Considerations

The project focused on disability-related access barriers and prioritized patients who signaled help needs on the clinic’s Health Equity Questionnaire.

Engagement

Clinic staff co-designed the workflow; patients were invited to self-identify needs via an accessibility-friendly poster and through MRP initiated conversations.

Improvement/Innovation/Change Concepts

PDSA 1: Waiting-room poster encouraged self-report; no new alerts were generated. PDSA 2: Most Responsible Providers (MRPs) discussed accommodation needs directly with patients during visits; 10 alerts were created. PDSA 3: Approved access to Health Equity Questionnaire data enabled identification of an additional 65 patients with flagged needs; 2 were deceased, and 63 new alerts were added after confirmation.

Impact/Results

Accommodation alerts increased from 0 after PDSA 1, to 10 after PDSA 2, and 73 after PDSA 3 (total of 73 active alerts). The step-wise approach demonstrated scalability without reported workflow burden.

Discussion/Lessons Learned

The three PDSA cycles revealed a hierarchy of yield in finding patients who need accessibility accommodations. PDSA 1 demonstrated that a purely passive, patient-initiated approach is insufficient as no new alerts were generated despite accessible design and staff readiness. PDSA 2 showed that embedding a brief accessibility conversation into routine visits immediately surfaced ten patients, underscoring that clinician-patient dialogue uncovers needs that posters miss. PDSA 3 produced the largest gain (63 additional alerts). Taken together, the cycles suggest an optimal strategy: start by activating existing equity datasets to create a high-volume list, then supplement with structured provider prompts at point of care, and finally maintain passive cues as a safety net.

16. Peer Pressure Done Right: HRO Coaches for a Culture of Zero Harm

Authors: Fozia Raja, Deema Nuseir, Bianca Sorbera, Zeeshan Ahmed, Maya Sinno & Eti Ayzenberg-Mackenzie Health

Since 2019, Mackenzie Health has been on a Zero Harm journey to become a High Reliability Organization (HRO). While HRO education was widely implemented across the organization, training alone did not yield sustained behavioral change. To embed HRO principles and foster a just culture, the organization launched the HRO Coaches Program in June 2024. This peer-led initiative empowers frontline staff to drive cultural transformation through shared governance, resiliency, and collaborative and no-blame problem solving.

The program aims to reinforce safety habits through peer coaching in clinical and non-clinical settings, supporting a culture of safety, accountability, and continuous improvement. Key measures include the percentage of departments with active coaches, positive trends in tool recall (>4 and >8 tools recalled by staff since June 2024), staff retention, and real-time feedback via Pulse Checks and Tableau dashboard reviews. After launch, the initiative exceeded its 6-month goal (59% vs. 30%) and surpassed its 12-month target (65% vs. 50%).

Equity was central to the program's design, ensuring inclusivity across all roles and departments. Coaches adapted strategies based on staff feedback, addressed unique barriers, and used accessible materials to ensure relevance for diverse teams. Engagement was strengthened by regular manager check-ins and a feedback-rich environment that encouraged staff to share lived experiences and influence care delivery.

Implementation was supported through monthly coaching meetings that included data review, feedback, targeted

training, peer learning opportunities, and staff recognition to maintain momentum. Results from December 2024 indicate a significant cultural shift: a 42% increase in patient safety event reporting, 53% rise in near miss reporting, and a 56% reduction in serious safety events since launching the HRO journey.
Initial challenges included bridging the gap between HRO knowledge and consistent practice. Peer coaching proved effective in translating theory into action by fostering mutual support and real-time problem solving. Lessons learned underscore the importance of habit formation, transparency, and celebrating incremental wins. With three cohorts of coaches now trained, Mackenzie Health is expanding the program to remaining departments and addressing gaps in tool adoption to further advance a culture of reliability and safety.

17. Increasing Skin to skin (SSC) in tertiary out-born NICU

Authors: Ahmed Senna & Abdulrahman Alanazi MD, University of Toronto, Kyong-Soon Lee, Marko Culjat (SickKids Hospital)

Background

Provision of skin-to-skin care (SSC) in the SickKids NICU which is an exclusively outborn children’s hospital is challenging due to the high acuity and complexity of patients with many perceived barriers. Rate of SSC in the SickKids NICU was 8% in 2024, which is lower than that in other children’s hospitals and there is room for improvement.

Aim

To increase the frequency of SSC from 8% to 15% over 6 months by May 2025

Methods

A multidisciplinary team was created including bedside nurses, nurse educators, respiratory therapists, occupational therapists, one parent, physicians and quality leaders. Quality improvement methods including a fishbone diagram were utilized to determine barriers. PDSA cycles were utilized. The main intervention was weekly SSC rounds implemented on Jan 21, 2025 which focused on 1. review of whether SSC was provided; 2. if SSC provided, was it documented as SSC in EMR; 3. if SSC not provided what were the barriers; 4. Suggested action items to address barriers; 5. reinforcement of tools and resources available to support SSC. Other interventions were parental education posters and modification of SSC guidelines to that focused on reducing the contraindications and increasing awareness of modified techniques for SSC for patients with perceived barriers to SSC e.g. umbilical lines, high frequency jet ventilation.
The outcome measure was proportion of NICU patients receiving SSC. Process measures were proportion of weeks where SSC rounds were conducted. Balancing measures were unplanned tube dislodgements during SSC or safety incidents during provision of SSC.

Results

Barriers to SSC identified during weekly SSC rounds included parental lack of knowledge/concern regarding ability to do SSC for their sick babies, lack of nursing resources to support parents for SSC due to high workload, space and privacy constraints in an open bed physical layout. Action items included increasing awareness of parents that SSC can be provided even if baby deemed “very sick”, changing the language to parents by nurses and physicians that SSC was an expectation rather than an option, utilization of occupational therapist to teach parents standing transfers during SSC to reduce nursing workload, education of modified SS techniques to nurses and parents for babies with restrictions, and reinforcing to nurses to document in the EMR as SSC rather than “holding” when SSC occurred. There was 100% compliance with weekly SSC rounds (process measure). SSC rates increased from a baseline of 8% (Dec 2024) to 22% (April 2025) (outcome measure). There was a safety report of a preterm infant with birthweight <800 g on high frequency jet ventilation who became hypothermic during prolonged SSC (balancing measure).

Conclusions

Implementation of weekly SSC rounds was successful in increasing SSC in a tertiary outborn NICU. The face to face discussion that often included parents, promoted an open dialogue to identify barriers and identify solutions to support parents and nursing to provide SSC. Next steps are to continue with weekly SSC rounds to promote SSC in daily care and making it a default practice.

18. Inducing Change: Achieving a 90% Reduction in Non-Medically Indicated Inductions Before 41 Weeks

Authors: Valerie Quartarone RN, BScN, MScN, PNC ©; Charriss Memita RN; Paula Reynolds RN; Mayura Kandasamy RN, BScN, M.Sc.; Dr. Andre LaRoche MD, FRCPC; Jhanvi Solanki RN, BScN, MN, MBA -Humber River Health

Background/Context

The Better Outcomes Registry and Network (BORN) in Ontario tracks perinatal quality indicators, including rates of induction before 41 weeks’ gestation for post-dates. The provincial Quality-Based Procedure (QBP) for low-risk birth recommends limiting inductions before 41 weeks unless medically indicated per Society of Obstetricians and Gynaecologists of Canada (SOGC) guidelines, to optimize maternal and neonatal outcomes. Humber River Hospital (HRH), operating as a High Reliability Organization (HRO), used these guidelines to inform a system-level improvement. The goal was to automate safety and quality through robust, standardized processes integrated into daily clinical operations, enhancing both effectiveness and resilience within the obstetric care model.

Aim

To reduce the rate of non-medically indicated inductions prior to 41 weeks’ gestation to below 5% by 2025.

Measures

Primary outcome: percentage of inductions before 41 weeks without a medical indication. Comparator benchmarks were drawn from BORN data across Ontario and Level 2C hospitals to assess relative performance and impact.

Equity Considerations (if any)

Induction decisions were reviewed during daily interdisciplinary huddles using standardized criteria. Equity in clinical decision-making was promoted by ensuring that all patients received consistent assessments, regardless of provider or background, based on evidence-based SOGC guidelines.

Engagement

Key stakeholders—including obstetricians, midwives, nurses, and clerical staff—co-designed and tested interventions through iterative PDSA cycles. Leadership support and real-time feedback loops strengthened

accountability and fostered a shared commitment to sustainable quality improvement.
Improvement/Innovation/Change Concepts (51 words)
A standardized induction of labour booking form was implemented and later digitized. A daily review of all induction requests ensured adherence to SOGC criteria and allowed rapid feedback to care providers. Continuous refinement through PDSA cycles enabled scalable, resilient improvements rooted in frontline engagement and system-wide alignment with provincial best practices.

Impact/Results

Between 2021 and 2025, HRH achieved a 90% reduction in non-medically indicated inductions—from 41.1% to 3.8%. This significantly outperformed Ontario's average (15%) and Level 2C hospital peers (22.6%), demonstrating robust, sustainable change.

Discussion/Lessons Learned

Embedding real-time audit and feedback within clinical workflows built operational resilience. Sustaining improvement depends on continued data monitoring via BORN and reinforcing high-reliability principles to ensure safe, equitable, and evidence-informed perinatal care.

19. Journey to Zero Harm: Medication Reconciliation within 24 Hours

Authors: Kavita Puri, Julie Lau, Dmitry Karasev, Lauren Datema-Sanchez, Deema Nuseir, Victoria Chan, Susan Simao- Mackenzie Health

Medication Reconciliation (MR) is a critical patient safety strategy that reduces adverse events due to discrepancies during transitions of care. Accreditation Canada and the World Health Organization recognize MR as essential to harm reduction. At Mackenzie Health, discrepancies between patients' home medications and hospital orders led to preventable adverse events and prolonged hospital stays. In alignment with our Zero Harm journey, MR was prioritized as a corporate Quality Aim to ensure every patient had access to this safeguard.

The aim was to improve the completion of MR for all admitted patients and specifically targeting 80% within 24 hours of admission to optimize the timeliness and effectiveness.

The project engaged patient partners with lived experience who contributed to identifying key barriers and validating proposed changes. Their insights helped refine patient-centered approaches. An interprofessional team of pharmacists, physicians, nurses, data analysts, and patient partners co-developed a four-year plan with short- and long-term strategies. Key initiatives included: validation of electronic medical record (EMR) workflows to ensure alignment with compliance capture, unit-level electronic dashboards for real-time monitoring by all staff; provider-specific patient list indicators flagging completion of MR to support prioritization, development of a medication adaptation policy to enable timely, comprehensive reconciliation by pharmacists, multidisciplinary education strategies for physicians, nurses, pharmacy technicians and pharmacists to standardize practices.

Barriers, such as unactioned pharmacist interventions and incomplete prescriber reconciliation were addressed with pharmacist prescribing and other solutions described previously. Admission MR compliance increased from 60% to 87% at any time during admission. MR within 24 hours of admission has been sustained at 70%. Length of stay was 1.3 days shorter for patients whose MR was completed within 24 hours, likely due to the reduced likelihood of experiencing an adverse drug event during hospitalization.

Success was driven by data visibility, workflow integration, and multidisciplinary collaboration. Embedding tools in EMR workflows improved standardization. Sustained change required persistence, prioritization, and monitoring on the corporate safety scorecard at hospital quality committees. Future work will focus on closing the remaining compliance gap and deepening physician engagement

20. Language Concordant Care

Authors: Wendy Kingsburgh,Talitha Brush, Carmen Chan, Anna Defina, Emily Grillo, Laurie Legere, Clarrissa Skorupski, Dr. B. Wong- Sunnybrook Health Sciences Centre

Background

Equitable access to high quality health care is a fundamental principle of the Canadian health care system however, it is well described that patients with language barriers and limited English proficiencies experience health inequities when accessing care. Language barriers have a major impact for the quality and safety of patient's experiences in hospitals. Patients who do not speak English as their preferred language may experience increased adverse events (ex. Medication errors), longer lengths of stay, increased hospital readmission rates, and decreased care satisfaction.

Aim

Improve patient access to Language Concordant Care (LCC).

Measures

Percentage of admitted patients with language preference documented in Patient Care System (PCS) by time of discharge

Percentage number of professional interpretation services use (in person including American Sign Language, phone and remote video) per month across all Sunnybrook clinical areas (inpatient and outpatient)

Percentage number of units/clinics/teams engaged in micro learning sessions

Equity Considerations: Two of the measures for this project are used as corporate indicators for addressing health equity.

Engagement

Stakeholders in this work include both patients and point-of-care staff.

Patient Engagement

Patient-partner included as key member of team who developed the updated policy and procedures. Ongoing collaboration with community advocacy groups for Deaf people (Silent Voice, Canadian Hearing Services) to improve delivery of care.

Staff Engagement QIP team to lead team based engagement on units to a) Provide unit-specific education on when and how to access an interpreter, b) confirm working hardware and downloading the Language Line App, c) implement a language identification tool

Improvement/Innovation/Change concepts staff education sessions framing and demonstrating patient access to LCC as a reduction in workload to staff; updating unit hardware with interpreter app; optimization and force-function of preferred language field in PCS.

Impact/Results

Changes implemented to date have increased usage significantly
Measure 1: Baseline (April 2023), 35%; Education-only improvement (Aug, 2024) 61%; Force-function improvement (Oct 2024) 86%.
Measure 2: Baseline (April 2023) 475 uses, Current (April 2025) 1018 uses

Discussions/Lessons Learned

Collaboration with information services will be essential to sustaining this success.

21. Barriers to Equity: Addressing barriers to embedding EDI and Health Equity in Improvement Work

Authors: Nagham Azzam Iqbal, Jenna Azzam, Rylan Egan, Bryan Herechuk, Ameil Joseph, Haadia Memon, Marlena Dang Nguyen, Stephanie Nixon

Background

Despite a growing imperative to address Equity, Diversity, and Inclusion (EDI) in healthcare, health systems often lack effective strategies to equip staff to meaningfully integrate EDI and Health Equity (HE) principles into practice. Quality improvement (QI) tools offer a powerful, underutilized mechanism to embed these values into day-to-day operations. This study seeks to bridge this gap by developing an educational module and equity-focused QI (EF-QI) tools grounded in critical consciousness and co-design.

Methods

Guided by critical pragmatism, this qualitative study engaged employees at Hamilton Health Sciences (HHS) in a multi-phased, user-based design process. The Double Diamond design framework guided the process. Phase 1 included semi-structured interviews with staff, QI specialists, and leaders. Interviews were thematically analyzed to identify gaps, inform curriculum development and implementation of EF-QI initiatives at HHS. Phase 2 will follow and involves design workshops to co-create education and EF-QI tools tailored to end-users at HHS. Key themes, barriers and facilitors from Phase 1 were validated in the first workshop of Phase 2.

Phase 1 Results

Thematic analysis identified key barriers and facilitators to integrating EDI and HE in QI practices at the individual, team, organizational, and structural levels. Barriers were analyzed and interventions mapped using the COM-B framework.

Conclusion

Findings highlight the barriers in capabilities, opportunities and motivation in creating change towards EF-QI. Understanding these barriers is essential to mapping interventions and supporting organizations and individuals in adopting an equity focus in QI work. EF-QI remains a novel concept requiring clearer guidance, practical tools, and leadership support for implementation in healthcare systems.

Engagement
Frontline staff, QI specialists, and leaders were active partners in the co-design process, ensuring that their perspectives helped shape outcomes. An operational leader and QI leader engaged with the team to ensure co-design of the project.

22. Rapid Access to Youth Mental Health Support for Primary Care Providers: The SCOPE-KIDS Model in North Toronto Ontario Health Team

Authors: Karen Wang , Rosalie Steinberg, Zeev Lewis, Kitty Liu, Kittie Pang - Sunnybrook Health Sciences Centre

Primary care providers (PCPs) in Ontario have reported challenges in recent years, including long wait times for services, inadequate knowledge of resources, and limited allied health support. SCOPE-KIDS is an urgent youth referral pathway aiming to implement a collaborative care model to bridge gaps and reduce wait times to mental health services, for North Toronto PCPs and their adolescent patients (ages 8-18). Primary outcome measures were the reduction of wait times to under a month for 70% of initial psychiatric consultations and the implementation of semi-structured qualitative interviews to assess satisfaction and incorporate iterative feedback from PCPs and patient families.

The team consists of three youth psychiatrists at Sunnybrook HSC and a social worker/mental health navigator, with supporting members of the North Toronto OHT and external consultants. Bi-weekly collaborative team meetings facilitate various PDSA and improvement cycles. These include rolling out an additional referral method (Ocean e-referral) to improve PCP accessibility and a staggered four-wave expansion design that reached 208 PCPs by February 2024. In early 2023, meetings with external stakeholder groups sought to identify key concerns around access to youth mental health services and barriers to existing referral processes in the community. A patient family survey was also constructed and their feedback incorporated into program design.

In its first two years (May 2023-2025), SCOPE-KIDS handled 132 referrals, including 78 direct psychiatric consultations. Wait times are significantly reduced, with a median of 22 days from referral to psychiatric consultation and 72% seen within a month. 41% of psychiatric consults are under the age of 14 and would therefore be excluded from youth psychiatric services at Sunnybrook. This project provides a unique opportunity to expedite care for high-needs patients and address inequities in access within the mental health system.

SCOPE-KIDS demonstrates the impact of collaborative, integrated care models in addressing local mental health needs in a timely fashion. Next steps include expanding the program model to additional regions and OHTs, applying interdisciplinary lessons learned from North Toronto. This initiative highlights the value of hospital-community partnerships, shared vision, and evidence-based QI practices in creating a responsive, population-centred approach to youth mental health.

23. Reducing Position-Related Injuries in the Operating Room

Authors: Chloe Prentice - SickKids Hospital

Background/Context

Perioperative position-related injuries (PPIs) are a concerning hospital-acquired condition (HAC). An operating room (OR) Serious Safety Event (SSE) prompted an urgent review of intraoperative positioning practices. Identified positioning gaps such as inconsistent assessments, unclear roles, and lack of standardized documentation highlighted the need for a locally developed solution to reduce harm and improve interdisciplinary collaboration.

Aim

The aim was to develop and implement a standardized, interdisciplinary guideline and pressure injury prevention (PIP) product bundle for intraoperative positioning that reduces the risk of position-related harm, clarifies team roles, and embeds consistent documentation into OR workflows.

Measures

Process measures included compliance with documented OR position checks and consistent use of the evidence-based PIP bundle in the patient's electronic health record (EHR). Outcome measures tracked the incidence of position-related injuries. Balance measures assessed unintended consequences, such as workflow disruption and documentation burden.

Equity Considerations

Equitable care was prioritized, including increased risk of patient harm due to age, complexity, or skin tone. Recognizing that PPIs are often underdiagnosed in patients with darker pigmented skin, the guideline recommends assessment beyond visual inspection, encouraging early wound care consultation when skin tone may make injury detection more difficult.

Engagement

Frontline staff were engaged throughout project development with surveys, direct observation, and real-time coaching. Multidisciplinary simulations tested and refined this guideline.

Improvement/Innovation/Change Concepts

Key innovations included developing the P.A.R.L.E.R. framework (Pause, Assess, Reposition, Lower Elevated limb(s), Reset Timer/Record), embedding it into the EHR to encourage positioning interventions during surgery. Implementation strategies included in-person education and dissemination of positioning compliance reports. These changes were designed to integrate seamlessly into existing workflows while elevating safety standards.

Impact/Results

This initiative led to measurable improvements in staff compliance with scheduled position checks. Preliminary 2025 safety report data revealed no reported PPIs where both the PIP bundle products were used and P.A.R.L.E.R. positioning checks were performed.

Discussion/Lessons learned

Completing position checks in complex cases is often difficult, prompting adaptations to balance safety with clinical feasibility. By addressing these barriers through case-based discussions and monthly compliance reports, the initiative has turned potential risks into major safety improvements, strengthening resilience in healthcare.

24. Reducing Use of Intravenous Medications When Oral/Enteral Alternatives are Safe and Effective

Authors: Loretta Lee, Denise McRiner, Dr. Thomas Bodley, Swasti Bhajan, Dr. Susan John, Dr. Elaine Yeung, Glyn Boatswain- Scarborough Health Network

Background

Unnecessary use of intravenous (IV) rather than enteral (PO) medications increases hospital length-of-stay, nursing administration time, drug cost, and environmental footprint. Oral or enteral formulations are recommended when they are equally safe and effective.

Aim

SHN targeted a 10% decrease in use of IV pantoprazole and levetiracetam, both of which are highly bioavailable when switched to oral therapy.

Change concepts

The project pre-intervention was January 2022 to March 2023 and post-intervention April 2023 to May 2025. Step-wise interventions to enhance appropriate IV to PO formulations included: 1) initial education of evidence-based practices through e-mail and medicine rounds, 2) development of prescribing criteria for IV use, 3) electronic decision support tools that recommend PO/enteral formulations, and 4) pharmacist intervention to recommend IV to PO stepdown.

Measures

The primary outcome measure was intravenous doses per 1000 patient days. Secondary outcome measure included the IV to PO/Enteral medication ratio. Cost-savings were assessed based on cost comparison of IV or PO drugs and supplies.

Engagement

A survey was distributed to evaluate provider awareness and satisfaction.

Results

Average pantoprazole IV dispenses decreased from 107.8 to 70.0 per 1000 patient days (35.1% reduction). Average levetiracetam IV dispenses decreased from 26.5 to 20.83 per 1000 patient days (21.25% reduction). There was a decrease in the IV/PO ratio by 36% for proton pump inhibitors and 26% for levetiracetam.

The total estimated annual cost savings of this initiative is $98,185.

The total estimated net average annual CO2e reduction is 3822.876 kgCO2e, which is equivalent to approximately 5 one-way flights from Vancouver to Halifax.
*Cost savings and C02e calculations are based on Jan 2022 – March 2025 data.

A total of 30 responses to the provider survey were received: 77% of respondents indicated they were aware of this initiative, and 100% indicated they were not aware of any negative effects on patient care.

Discussion/Lessons learned

Inter-disciplinary collaboration with prescribers and utilization of electronic decision support tools are both necessary to facilitate IV to PO stewardship. It is believed that the findings from this project can be applied to other IV drugs with similar PO efficacy and safety.

25. Scaling to Surgical Oncology: Expanding STOP the POP initiative to preventing post-operative pneumonia

Authors: Yahlikah Mahesuwaran, RN, BScN ; Mikha Alegria, RN, BScN, MScHQ; Alexandra Boasie, MSc, MBA; Tiffany Tram – HBSc, RRT, CHT, MSc ; Victoria Denbok, RPN, CHIM ; Jessica Cheng, RN, BScN, MN, CHE ; Timothy Jackson, BSc, MD, MPH, FRCSC, FACS ; Tariq Esmail, BMSc, MB BCh BAO, FRCPC, MSc - University Health Network

Context

Post-operative pneumonia (POP) remains a common surgical complication at University Health Network. To address this issue, the general surgery unit at Toronto General Hospital (TGH) was selected to pilot the STOP the POP project, which yielded significant improvements. Building on this success, the initiative was expanded to the surgical oncology unit at TGH, encompassing four surgical services: Urology, Gynecology, Otolaryngology, and Plastics. This unit was selected based on the National Surgical Quality Improvement Program (NSQIP) data, which showed high POP rates across all four services, placing them in the ‘needs improvement’ category on the January 2024 report.

Aim

The project aimed to reduce pneumonia on the surgical oncology unit by 50% by January 2025.

Measures

The outcome measures included the predicted observed rate of postoperative pneumonia in surgical oncology, as reported in the NSQIP SAR reports. Process measures tracked patient completion of bundled activities and staff documentation. Balancing measures assessed staff workload and satisfaction.

Change Concepts

An environmental scan and current state analysis were conducted using patient and provider surveys. An implementation plan was developed, focusing on a targeted set of strategies to reduce pneumonia. A multiphase implementation strategy was carried out, which included inventory optimization, utilization of visual aids, integration of the initiative into team culture, patient empowerment and engagement, and embedding data sharing into routine practices.

Results

The January 2025 NSQIP report, one year after project initiation, shows significant reductions in POP rates: 78% in Urology, 66% in Gynecology, 62% in Otolaryngology, and 45% in Plastics. These four services are now categorized as “as expected” in the report.

Discussion

The STOP the POP initiative has proven to be an effective quality improvement project, as demonstrated by the significant decrease in POP rates on the expansion unit. This success not only improved outcomes for more post-operative patients but also opens opportunities for broader expansion, further enhancing patient care on a larger scale.

26. Using Virtual Reality Mock-Ups as a Pre-Occupancy Evaluation tool for the Design of a Seniors Emergency Medicine Centre

Authors: Dr. Anna Nowacki- University Health Network & Ms. Jaspreet Sethi, OCADU

Background/Context

Designing senior-friendly emergency departments (EDs) is essential for optimizing care for older adults. Toronto Western Hospital planned the Seniors Emergency Medicine Centre (SEMC) using geriatric design guidelines. However, limited pre-occupancy evaluation (PrOE) data exists to confirm if such environments meet intended goals. This project addresses that gap by using virtual reality (VR) to simulate the SEMC for user-centered design feedback.

Aim

To improve the end-user experience in the proposed SEMC by integrating patient, caregiver, and staff feedback through VR-based pre-occupancy evaluation, while evaluating the utility of VR as a PrOE tool.

Measures

Quantitative measures included Likert-based surveys pre- and post-VR experience, assessing perceptions of privacy, safety, comfort, navigation, and workflow. Qualitative measures were derived from semi-structured interviews and thematic analysis. Improvement was indicated by increased post-VR survey scores and identified design refinements.

Equity Considerations

The project recruited diverse older adults and caregivers, some with mobility or sensory challenges, ensuring the design met a wide range of physical and cognitive needs. Special attention was given to accessibility, comfort, and culturally appropriate features.

Engagement

Nine older adults and nine ED nurses participated. Participants engaged in a guided VR simulation of the proposed SEMC, followed by structured surveys and interviews. Their lived experiences directly informed practical design recommendations, enhancing both patient and staff environments.

Improvement/Innovation/Change Concepts:

VR mock-ups allowed users to “walk through” the ED and identify design flaws in real time. Key changes implemented included widening doorways, enhancing signage, optimizing emergency equipment placement, and improving soundproofing and privacy features.

Impact/Results

Post-VR scores demonstrated improvements in navigation, patient privacy, therapeutic aesthetics, and workflow. Both groups reported higher satisfaction with the proposed SEMC versus their current experience, supporting the VR tool's value.

Discussion/Lessons Learned

Challenges included VR-related discomfort and time constraints in simulation development. Lessons included the importance of early integration of VR into architectural planning and iterative feedback loops. Future steps involve post-occupancy evaluation and scaling VR-based PrOE to other healthcare settings.

Virtual Posters

1. A Multidisciplinary Quality Initiative to Address Delays in Initiating Post-Operative Radiotherapy in Patients with Head and Neck Cancer

Authors: Madette Galapin(1), Antoine Eskander (1, 2), Danny Enepekides (1,2), Kevin Higgins (1,2), Irene Karam (1,3), Ian Poon (1,3), Andrew Bayley (1,3).

1. Odette Cancer Centre, Sunnybrook Health Sciences Centre
2. Department of Otolaryngology-Head & Neck Surgery, University of Toronto
3. Department of Radiation Oncology, University of Toronto

Background

The American College of Surgeons Commission on Cancer's (ACS/CoC) head and neck (HN) quality metric requires post-operative radiotherapy (PORT) to start ≤ 42 days from surgery. A 2021/2022 quality improvement (QI) audit revealed 43% of eligible cases met this. Root cause analysis suggested radiation oncologist (RO) consultation ≤ 21 days post-op supports timely PORT.

Aim

To increase compliance to the ACS/CoC metric from 43% to 70% by the end of 2024.

Measures

Percentage of patients: initiating PORT ≤ 42 days (outcome); consultation with RO ≤ 21 days post-op (process); initiating PORT ≤ 42 days with rushed radiation planning (< 14 days) to indicate changes in radiation therapy workload (balancing); and rationale for each delay was collected.

Equity considerations

Although literature is cited for those with a HN mucosal squamous cell carcinoma, all patients receiving PORT with a primary diagnosis in the HN region were included.

Change Concepts

This multidisciplinary QI initiative involved: 1) creation of a process to identify relevant patients and communicate PORT goal dates to RO and 2) upstream generation of an order for a 3-week post-op consultation with the RO by either the surgeon or RO.

Results

Table 1 displays the proportion of patients for each measure in 2024. Of the 135 patients, 62 (46%) began PORT ≤ 42, and 54 (40%) had a RO consultation ≤ 21 days post. Among patients with timely RO consultation, 38/54 (70%) achieved timely PORT. An increase in workload was noted from Q1 to Q3 but decreased in Q4. Of the 73 patients with delayed PORT, main causes were: care coordination (56%), post-op complications (32%), and other (12%). Analysis revealed 70% of delays were unavoidable, including post-op and wound healing issues, delayed referrals from external surgeons, and patient-requested delays.

Discussion/lessons learned

The QI initiative improved compliance to the ACS/CoC metric from 43% to 46%. This fell short of the 70% goal which can be attributed to 70% of delays being unavoidable. Physician champions, collecting feedback and addressing concerns during quarterly updates maintained project momentum. Future sustainable interventions include dedicated patient navigation, automated FU booking, and care pathway visualization.

2. ADAPT Model of Care: Universal Strategies for Preventing Delirium in Hospitalized Seniors

Authors: Peggy Richards, Raman Rai, Teresa Sitlani, Duff-Woskosky, Mackenzie Health

Background

At Mackenzie Health, where 70% of patients are seniors, preventing hospital-acquired delirium (HAD)—which affects 29–64% of hospitalized older adults—has become a clinical priority. In response, the organization developed a structured delirium prevention model to help nurses implement individualized, proactive care strategies targeting modifiable risk factors.

Aim

To reduce hospital-acquired delirium by implementing prevention-focused strategies that address specific, modifiable risk factors.

Methods and Measures

The ADAPT model of care was piloted on four inpatient units—two acute medicine and two post-acute care. ADAPT stands for: Acknowledge delirium risk, Assess for it, Prevent when possible, and Treat if it develops. The model includes eight focus categories: mind-engaging activities, sensory optimization, sleep hygiene, elimination, mobility, pain management, nutrition and hydration, and environmental strategies. Compliance was achieved when at least one strategy from each category was implemented per shift.

Equity and Engagement

Resources were co-developed with patient partners and translated into the top five languages spoken by seniors in York Region. A multidisciplinary team contributed clinical expertise and lived experience to ensure inclusivity and relevance.

Results and Impact

Education on hospital-acquired delirium was multipronged, covering delirium awareness, the screening process, and prevention techniques. Over four months, ADAPT was implemented for 848 discharged patients. Compliance improved steadily as nurses recognized the benefits of proactive over reactive care.

Discussion and Lessons Learned

Challenges included shifting staff mindset toward prevention and accurately identifying the onset of delirium. Ongoing education and engagement addressed these gaps, emphasizing delirium's impact on recovery and the importance of consistent documentation.

Next Steps

ADAPT will be integrated into the EPIC system as a scheduled task to prompt documentation of prevention strategies. The model has been expanded to all medicine and post-acute units. Discussions are underway with ICU, mental health, and emergency departments to explore its applicability in those settings.

3. Advancing High Reliability and Continuous Quality Improvement with an Innovative Digital Solution

Authors: Callista Liu, BScN, RN, Ahmed Ali, MD, TQM, Nimrah Kiyani, MHSc, MBBS, Komal Mazhar, BSc, MHM, MSc(HQ)- William Osler Health System

Background/Context

To strengthen organizational reliability and maintain continuous alignment with national and international standards of excellence, William Osler Health System developed a digitally integrated Continuous Quality Improvement (CQI) App and real-time dashboard. The solution was designed to streamline mock tracer processes, enhance data quality, and support high-reliability practices across care settings.

Aim

The initiative aimed to enhance adherence to standards of excellence by embedding CQI principles, high-reliability strategies, and compliance management into daily operations using an innovative digital platform.

Measures

Key outcomes include

1. Reducing the time to collect and analyze compliance data
2. Reducing the frequency of missing or incomplete entries to improve data quality
3. Increasing the number of mock tracers completed
4. Improving user satisfaction with the tracer process and app's functionality
5. Demonstrating measurable improvements in compliance with standards of excellence

Equity Considerations

The CQI App was co-designed with clinical and non-clinical Accreditation co-leads and Patient and Family Advisory Council (PFAC) members. Accessibility, digital literacy, and diverse learning needs were addressed in both app design and training delivery.

Engagement

50 clinical and non-clinical Accreditation co-leads from different programs across 3 hospital sites and PFAC members were involved throughout planning, implementation, and evaluation via user testing, training, and feedback sessions to ensure the platform met needs.

Improvement/Innovation/Change Concepts

Using CQI and change management methodologies, the initiative introduced a mobile-accessible digital compliance platform, automated real-time data analytics, and a centralized dashboard for visibility across the organization. A phased rollout using Plan-Do-Study-Act (PDSA) cycles allowed for iterative improvement and wider adoption.

Impact/Results

- Over 300 mock tracers being completed, demonstrating a 60% increase
- 80% reduction in missing or incomplete tracer entries
- Real-time data turnaround from an average of 7-10 days to < 1 day
- User satisfaction was increased from 3.2 to 4.5/5.0

Discussion/Lessons Learned

- Early resistance was mitigated by providing hands-on training and user support
- Reinforcement of tracer methodologies remains a priority for sustained improvement
- Digital tools combined with real-time feedback drive measurable quality outcomes

4. Building a High Reliability Organization with the Digital Quality Board: Integrating Data and Engagement for Sustainable QI

Authors: Komal Mazhar, Ahmed Ali, Andreea Popescu – William Osler Health

Background/Context

In large healthcare systems, the lack of standardized, real-time quality data can lead to fragmented communication, delayed decision-making, and inconsistent care outcomes. At William Osler Health System, this gap was especially evident in daily operations, where teams faced challenges accessing and acting on timely patient safety and quality information. In response, we co-developed the digital quality board "iHuddle Board"—a technology-enabled, organization-wide quality management system designed to enhance transparency, standardization, and team-based accountability.

Aim

The goal was to implement a dynamic, real-time quality and patient safety dashboard that standardizes data presentation across departments, supports informed decision-making, and fosters a culture of continuous improvement and staff engagement.

Measures

Key outcomes included improved visibility and accessibility of metrics, increased participation in daily huddles, and more structured action planning. Process measures tracked board usage and completion of quality discussions, while balance measures considered staff workload and system usability.

Equity Considerations

The iHuddle Board was designed to be standardized yet adaptable across units, promoting equitable access regardless of staffing or resource differences. Patient experience metrics and feedback were embedded to reflect diverse voices and ensure inclusive care planning.

Engagement

The platform was co-designed with frontline staff, leaders, and Patient and Family Advisory Committee (PFAC) members. Their lived experiences informed the design, ensuring that metrics and messaging were meaningful, relevant, and patient-centered.

Improvement/Innovation

The digital board integrates real-time data aligned with strategic priorities, prompting unit-level quality discussions and driving improvement. This initiative reflects large-scale collaboration across Quality & Patient Safety, Organizational Performance, Business Intelligence, Clinical Operations, and other enabling services.

Impact/Results

Since implementation, Osler has recorded over 8,500 iHuddles, shared more than 300 corporate spotlights and 1,500 unit-level messages, and generated over 1,000 quality improvement ideas. These efforts have led to increased staff engagement, faster responses to safety concerns, and consistent, real-time data use across teams.

Discussion/Lessons Learned

Challenges included metric standardization across diverse programs and managing change fatigue. Success was supported by strong leadership visibility, iterative co-design, and robust training. The iHuddle Board is now recognized as a Leading Practice by Accreditation Canada, exemplifying innovation in quality management and frontline engagement.

5. Breaking New Ground: Canada’s First Hospital Implements Bidirectional Smart Infusion Pump Interoperability to Improve Patient Safety

Authors: Susan Simao, Raman Rai, Andrea Shum, Jackie Samimi, Sanaz Riahi, Derek Lee, Sara Caruso, Angela Chan, Kavita Puri - Mackenzie Health

Despite Mackenzie Health’s full implementation of an electronic health record (EHR) with computerized provider order entry and 95% barcode medication administration compliance, medication incidents due to infusion pump programming errors continued. Bidirectional infusion pump interoperability is a highly effective medication safeguard that leverages dose error reduction software (DERS) through the automated transmission of information between infusion pumps and the EHR. As part of our high reliability journey, MH became first to implement pump interoperability in Canada to enhance patient safety.
The project aimed to reduce pump programming-related safety incidents and enhance documentation accuracy of infusion volumes delivered to patients.

Process measures were compliance with DERS usage and pump programming via interoperability. Outcome measures were reduction in pump programming errors, frequency of alerts on high-risk infusions, and improvements in intake/output documentation.

Multidisciplinary collaboration drove project success, engaging leaders, educators, and staff across clinical informatics, pharmacy, clinical operations, support services and vendor partners. Future workflows were mapped through process improvement workshops, Failure Modes Effects Analysis was used to plan mitigations with future workflows, and structured governance supported cross-program decision-making. A “day-in-the-life of interoperability” multidisciplinary simulation helped staff envision future state and identify further opportunities. A robust education and go-live support model ensured sustainability of this year-long implementation.
At MH, all infusions are administered using a smart pump with DERS. Half of these infusions qualify for pre-

programming of the pump with an electronic medication order. Compliance is monitored on the corporate safety scorecard at all hospital quality committees. Interoperability compliance is over 87%. A year after implementation, there is:

- 80% reduction in reported medication incidents
- 95% reduction in severe harm alerts requiring reprogramming
- 26% increase in intake/output documentation
- 36% improvement in rapid documentation providing timely access to support care decisions.

Significant consideration was given to patient movement scenarios to mitigate the need to disassociate an infusion from the EHR during transfer. A transfer of accountability practice was established at patient handover. Lastly, given the extent of this clinical transformation, 6 weeks of 24-hour support was provided at go-live and ongoing sustainability is supported by continuous monitoring through the Medication Safety Committee.

6. Chagas Disease: Quality Improvement at East Boston NeighborHealth Center

Authors: Maxime Billick- Division of Medicine, University of Toronto, Toronto, ON; Division of Infectious Diseases, University of Toronto, Toronto "Clyde Lanford Smith (Social and Behavioral Sciences, Harvard T.H. Chan School of Public Health, Boston, Massachusetts; Division of Medicine, Brigham and Women's Hospital, Boston Massachusetts), Ashley Maldonado (Division of Infectious Diseases, Department of Pediatrics, Boston Children's Hospital, Boston, Massachusetts), William K. Silverstein (Division of Medicine, University of Toronto, Toronto, ON; Division of General Internal Medicine, Sunnybrook Health Sciences Centre, Toronto), Juan Huanuco (East Boston Neighborhood Health Center, Boston, Massachusetts), Julia R. Köhler (Division of Infectious Diseases, Department of Pediatrics, Boston Children's Hospital, Boston, Massachusetts)

Background

Chagas disease (CD) is a parasitic infection endemic to Mexico, Central America, and South America. In 30-40% of cases, it may cause life-threatening cardiac and gastrointestinal manifestations. CD is significantly underdiagnosed in North America due to lack of screening. The Infectious Disease Society of America guidelines recommend screening first-degree relatives and women of childbearing age due to the risk of vertical transmission. This project examined whether appropriate fan-out screening occurred after a confirmed CD diagnosis in a community health centre in Boston, MA, which services a predominantly Latinx (75%) patient population and has pioneered Chagas screening in the US with >30,000 patients screened and >220 primary-care based Chagas diagnoses confirmed.

Methods

A preexisting database of confirmed CD cases was filtered to include only women between the ages of 18-50. Twenty charts were randomly selected and audited to ascertain whether NeighborHealth (formerly East Boston Neighborhood Health Center) was meeting a 90% target of documentation for recommending CD testing to 1) children and 2) siblings of diagnosed women. To be included, family members had to be mentioned in a note after a diagnosis of CD was made. The point estimates were compared against known confidence intervals to assess whether the 90% threshold was met.

Results

Recommendations to screen children of those with confirmed CD met the 90% threshold, but recommendations to screening siblings did not. This finding led to creation of a process map to identify inefficiencies and opportunities for improvement. Proposed improvements included Epic “smart phrases” and standardized documentation prompts for referral.

Conclusion

Implications of study findings include knowledge of NeighborHealth’s strengths in CD screening in children and areas for improvement among siblings. Future goals include implementation of the changes described above and subsequent small-scale chart audits to ensure ongoing and sustainable improvement.

Equity considerations

Screening for a neglected tropical disease in a largely immigrant and at times undocumented population addresses issues of equity and access to care.

Engagement

Barriers including appointment attendance, childcare, work conflicts, medication adherence, and mental health concerns documented in the patient charts were considered when developing interventions. Future work could include direct interviews with patients.

7. Empowering Unit-Led Change: Using Daily Environmental Audits to Improve Single-Use Ultrasound Gel Adherence in a Continuing Complex Care and Rehabilitation Hospital

Authors: Jannette Jew, Tavia Caplan,Linda Shi, Devaki Paalenthera, Krystal Lawley, Billexter Bonifacio, Andrea Morillo, Jennie Johnstone, Sharon Sukhdeo - Sinai Health

Background

Environmental audits help prevent healthcare-associated infections by assessing adherence to infection prevention and control (IPAC) best practices. At Hennick Bridgepoint Hospital (HBH), a rehabilitation and complex continuing care hospital, Infection Control Practitioners (ICPs) conduct daily audits. Monthly data between February and April 2024 identified gaps in two key areas: use of single-use ultrasound gel and adequate storage shelving within clean supply rooms.

Aim

The aim was to increase adherence to single-use gel and adequate storage shelving in clean supply rooms at HBH from 1.5% and 2.3%, respectively, to 75% by December 31, 2024.

Measures

Outcome measures were the percentage of (1) adherence to single-use gel and (2) adequate storage shelving within clean supply rooms per month.

Process measures were the percentage of clinical leaders receiving monthly audit reports and the number of clinical team-led interventions.

Balancing measure was the number of workflow disruptions attributed to unavailability of single-use gel.

Engagement

Clinical engagement was central to the initiative, empowering staff to lead unit-specific improvements supported by IPAC collaboration.

Change concepts

Knowledge of IPAC best practices and unit-specific baselines were primary drivers. To ensure access to information, audit reports were created and distributed to clinical leadership (change idea 1). ICPs also led education to clinical leadership, informing the unit/hospital-wide improvements (change idea 2).

Impact/results

Figure 1 displays control charts for the outcome measures. After monthly audit report distribution began in May 2024, single-use gel use rose from 1.5% to 30.2%. Prompt leadership engagement made the June 2024 education intervention successful, stimulating the switch to single-use gel in September 2024. Adherence rose to 82.6% by project end and maintained at an average of 79.9% in June 2025.

In contrast, shelving improvements were short-lived, with education and accreditation effecting temporary but non-sustained improvement (31.8% in June 2025).

Discussion/lessons learned

This initiative highlighted the power of robust data collection and distribution to identify gaps, engage clinical leadership, and enable relevant, attainable, and data-driven change. While education is a key starting point, systems-based forcing functions are more effective for sustainability. Next steps include improving shelving practices and sustaining single-use gel adherence.

8. Establishing a Standardized Discharge Process for Outpatients on Clozapine

Authors: Darlene Ginsberg, Donna Sansano, Shandeep Hayer, Anna Kryukova, Deverell Reid, M. Kinneret Fleiman

Background

Humber River Health (HRH) is a large community hospital whose Mental Health Department has over 20,000 outpatient visits annually. The department has over 140 Clozapine outpatients, an antipsychotic for treatment resistant schizophrenia. As the clinic continued accepting acute patients, lack of a standardized discharge process resulted in persistent accumulation of stable patients. Due to Clozapine’s prescribing restrictions and monitoring requirements, HRH consulted various key stakeholders and initiated a standardized discharge process to transition stable patients to care of Primary Care Providers (PCPs).

Aim

To create a standardized process facilitating the discharge of stable patients requiring continual Clozapine to community PCPs

Measures

Number of stable patient discharges and 'step down'
Patient and provider experiences upon discharge

Equity

Many Clozapine patients face socioeconomic barriers and come from marginalized communities. The project facilitated transitioning stable patients back to community-based care, which can reduce stigma and be logistically easier. It also improved equitable access to hospital-based psychiatric services for acutely ill individuals.

Engagement

We engaged Psychiatrists, Nurses, Pharmacists, other hospitals and PCPs in co-developing discharge criteria and workflows, enabling clinical feasibility and buy-in. Patients and their families were engaged through shared decision-making to ensure comfort and safety in transitioning care.

Improvement

Shared discharge criteria with an outflow process map supporting transfer of information and patient wellness/recovery were reviewed and refined by key stakeholders. For stable patients who could not be discharged due to regulatory restrictions, care transitioned to a departmental Nurse Practitioner, creating a ‘step down’ pathway.

Results

The clinic discharged four patients, with nine additional patients progressing through the step down’ pathway. All patients and PCPs reported high satisfaction with the information provided and support received from HRH staff, with no identified adverse outcomes in discharged patients (re-admission, lapse in bloodwork, and/or medication cessation).

Discussion

Creating and implementing a standardized process facilitated appropriate and streamlined care transitions from acute hospital-based care to community care. Standardization improved comprehensive transfer of information, enhancing patient safety and reducing risk. Given the significant influence of local Clozapine regulatory requirements on our pathway and criteria, expertise from Professional Practice and Pharmacy earlier in the project would have been beneficial.

9. Examining the Usability of a Machine Learning Enhanced Patient Safety Event Reporting System

Authors: Myrtede Alfred, Deenar Virani, Victoria Yeung - Department of Mechanical and Industrial Engineering, University of Toronto

Background

Patient safety events (PSEs) are instances of avoidable harm or hazardous conditions in healthcare settings. Despite the importance of reporting PSEs, it is estimated that between 50–96% of PSEs go unreported. One of the main barriers for healthcare workers reporting PSEs is a lack of time and competing priorities. Additionally, the classification of PSEs is prone to error due to subjective decision-making and complex taxonomies with over 20 event types. This study aims to assess the usability of a previously developed PSE reporting interface by Chen et al. (2023), which integrates a machine learning (ML) classifier and the LIME technique (Ribeiro et al., 2016) to automatically classify the event type of PSE reports. The objective is to evaluate the impact of human-AI collaboration with the ML classifier on users' efficiency, accuracy, decision-making, interpretation of classifications, reliance, and overall usability of the interface.

Methods

The study utilized a web-based PSE reporting interface developed in Gradio (Abid et al., 2019), integrated with a RoBERTa-base SVM classifier trained on 861 obstetric PSE reports from a large academic hospital (2019–2020), achieving 75.4% accuracy. The LIME explainability technique was used in the system evaluated in this study to provide the explanation for the ML classifier's top predictions by highlighting words that were influential to the prediction. Usability testing was conducted using the think-aloud method on Microsoft Teams with healthcare participants completing three rounds using different versions of the interface. Participants filled out a consent form and were asked to complete the System Usability Scale (SUS) (Brooke, 1995), perform classification tasks with and without ML assistance, and participate in a debriefing interview. See Table 1 for the data metrics analyzed from testing.

Engagement

Participants were individuals who work in healthcare settings and are familiar with PSE reporting systems. Their feedback during testing and interviews was used to identify usability issues and guide interpretation of the results.

Results

Thirteen participants completed the study. Mean SUS score was 88.41. A paired t-test showed a statistically significant difference in classification times with and without the classifier. Participants generally trusted the ML classifier, but noted issues with the training data quality. Majority of participants agreed with the event type classification suggested by the ML classifier. Many did refer to the probabilities provided by the ML classifier, however a few mentioned they did not use them to assist their decision-making and instead relied on their own judgement.

Conclusion

ML integration in PSE reporting can improve accuracy, reduce burden, and streamline processes. Although the LIME explainability technique helped users interpret the decision-making process of the ML classifier, it does not seem to be the most effective for supporting decision-making processes during classification, contradictory to some of the initial aims for its integration. Further improvements should address the effectiveness of explainability, data quality, and user interpretability.

Equity considerations

Concerns were raised regarding biases in PSE training data written by healthcare workers, which may affect the quality of the ML classifications.

10. Exploring Patient Safety Challenges and Opportunities in the Block Room

Authors: Jeneen Massad, Ioan Gronas , Mark Fan - Human Era, Research and Innovation, North York General Hospital; Patricia Trbovich - Institute of Health Policy, Management, and Evaluation, University of Toronto

Background

North York General Hospital (NYGH) uses a dedicated block room with four patient bays to perform pre-operative neuraxial and regional anesthesia (i.e., nerve blocks). However, five to eight patients may require a block at the same time, increasing time-pressure on staff. Blocks are performed by a mix of block room staff (nurses, team attendants, anesthesia assistants (AAs) and an anesthesiologist) and a case anesthesiologist (who will oversee the patient during surgery). While case anesthesiologists stay with their patient, block room staff are frequently interrupted to manage patient flow and may shift between patients as needed. This creates complex team and workflow dynamics that may compromise patient safety (e.g., missing safety checks, communication gaps). An exploratory observational study was conducted to assess factors affecting patient safety and efficiency in current block room workflows.

Methods

Contextual inquiry by two observers in the block room occurred 2 to 3 days a week over May and June 2025. Timestamps were recorded for key events in each procedure (e.g., patient arrival, timeout started, procedure started/completed). Observers recorded which staff were involved at each timestamp, block type, and qualitative workflow descriptions. Frequency of key events and descriptive statistics of task durations (e.g., mean, median) were calculated, and qualitative observations were thematically analyzed.

Engagement

Representatives from the anesthesiology department and post anesthesia care unit (PACU) were consulted throughout the study. Block room staff were encouraged to share their thoughts on workflow and patient safety during the observations.

Results

Preliminary dataset includes 155 patient cases, of which 118 were unilateral (left or right-sided). Seventy patients required regional block only, and 75 required a spinal and regional. Mean duration of patient visit (entry to exit) was 46.9min (median 48min). Three safety-related themes emerged that may impact site marking (Metrics described in Table 1).

Conclusion

Current workflow may be impeding the consistency of safety checks. No site marking was observed in 14.8% of unilateral blocks, and 9% of timeouts did not include patient verification of the surgical consent form. Future work is needed to reduce reliance on staff vigilance as the primary means of completing all needed checks.

11. Improving Adult Vaccination Rates in Long-stay Hospitalized Adults at a Complex Continuing Care Hospital

Authors: Sharon Sukhdeo1,2, Sara Sadooghi1, Jennie Johnstone1,2, Yannan Chen1, Angelo Panganiban1,2, Patrick Wong1,3, Stephen Tepper1,3, Dhondup Nangestsang, Krystal Lawley1, Kunal Goyal1, Rebecca Ramsden1, Meng Yun (Angela) Chen1, Jakob Goldschmied, Kim Sterling1, Jordan Pelc1,3

Affiliations:

1. *Sinai Health, Toronto, Ontario*
2. *Department of Medicine, Temerty Faculty of Medicine, University of Toronto, Toronto, Ontario*
3. *Department of Family and Community Medicine, Temerty Faculty of Medicine, University of Toronto, Toronto, Ontario*

Background

The National Advisory Committee on Immunizations (NACI) recommends routine pneumococcal (Prevnar 20), zoster (Shingrix), and tetanus (Td) vaccinations, to prevent serious infections, particularly in older adults and those with comorbidities. At Hennick Bridgepoint Hospital (HBH), a complex continuing care (CCC) hospital where patients can reside indefinitely, no framework existed to assess or provide such vaccinations, resulting in low vaccination rates.

Aim

The aim was to increase vaccination rates for Prevnar 20, Shingrix, and Td from 0%, 0%, and 1.4% respectively to 80% of eligible patients admitted to CCC by December 31, 2025.

Measures

Outcome measures included proportions of eligible CCC patients who received Prevnar 20, Shingrix, and Td vaccines, measured separately.

Process measures included proportions with completed vaccine records based on electronic medical record and patient forms, and the proportion who need not self-pay for their vaccines.

Balancing measure was the rate of vaccine administration errors.

Equity considerations

Discrepancies between NACI recommendations and Ontario’s public funding created economic health inequities, which this initiative prioritized for improvement. At project start, 100% of patients eligible for Prevnar 20 and 89.7% for Shingrix lacked public coverage. Institutional bridge funding ensured access to recommended vaccines for all patients.

Interventions

Initial interventions focused on completing comprehensive vaccine records. We engaged patients and families to share documentation from personal records or previous physicians, supplemented by electronic chart review, leveraging support from the infection control program.

By way of removing financial barriers, the third intervention focused on expanding access to Prevnar 20 and

Shingrix on the hospital formulary to increase willingness of patients to accept, and of physicians to prescribe, vaccines.

Results

By providing physicians with vaccine records and removing financial inequities, vaccination rates increased for all three vaccines, as seen in Figure 1. Further increases are expected.

Discussion

Removing financial barriers to vaccination were high-impact, resource-intensive, macro-level changes that also supported improved Td uptake. Patient and family engagement promoted patient-centered care and trust to mitigate vaccine hesitancy. Completing vaccine records streamlined the prescribing process for physicians. Next steps include a focus on the remaining unvaccinated and sustaining vaccination rates among new admissions.

12. Improving Patient Safety and Efficiency in ICU-GIM Transfers

Authors: Sayed Ibrahim- Sunnybrook

This Quality Improvement (QI) project focuses on optimizing ICU-GIM patient transfers at Sunnybrook Hospital by addressing delays in GIM admission order writing. Delays were caused by inconsistent order practices and communication between the ICU and GIM teams, impacting bed availability and patient flow. By assigning the Medical Consult team to receive the ICU pager, we streamlined the order-writing process. As a result, patient transfer times were reduced from 4.6 hours to 3.9 hours, demonstrating that a small change can yield significant improvements. The project highlights the importance of collaboration, continuous improvement, and process optimization in enhancing patient safety and operational efficiency.

13. Improving Screening Rates for Functional Decline and Delirium in Older Adults within the University Health Network Emergency Departments

Authors: Sylvia Quant[1,2], Linda Liu[1*], Alexa C. Boblitz[1], Linda Marques[1], Julia Tao[1], Michael De Wit[3], Janet Pilgrim[1,3], Berjae Officer[1,3], Licina Simoes[1,3], Henry Lin[3], Adam Webster[3], Ruth Appiah-Boateng[3,4], Sabrina Bennett[1,3], Lauren Lapointe-Shaw[1,5], Tessa Ringer[1,3,6], & Nazek Abdelmutti[1*]*

[1]Myrna Daniels Seniors Emergency Medicine Centre, Emergency Medicine, University Health Network (UHN)
[2]Department of Physical Therapy, University of Toronto (UofT);
[3]Emergency Medicine, UHN
[4]Social Medicine Program, UHN
[5]Department of Medicine & Institute of Health Policy, Management and Evaluation (IHPME), UofT
[6]Department of Family and Community Medicine, UofT

Background

Older adults at risk of functional decline or delirium exhibit higher Emergency Department (ED) utilization, increased morbidity, and extended hospital stays. The Identification of Seniors At Risk (ISAR)© tool and the

Confusion Assessment Method (CAM) are widely used to detect such risks, with the ISAR tool being provincially mandated across all EDs in Ontario. At the University Health Network (UHN), positive ISAR and CAM scores could trigger Seniors Emergency Medicine Centre (SEMC) consults and case finding involving Geriatric Emergency Medicine nurses, occupational therapists, social workers, and/or physiotherapists. As proactive SEMC involvement may improve many patient- and system-oriented outcomes, low ISAR and CAM completion rates were a barrier to referral. UHN undertook a project to improve these completion rates to ensure timely SEMC consults.

Aim

The aim is to shorten the time to a SEMC consult following positive screens by 15% by August 2025; this will be achieved by increasing ISAR and CAM completion rates by 30%.

Measures

- Outcome Measure: Average time from ED arrival to SEMC orders.
- Process Measures: Average ISAR and CAM completion rates and positive screening rates.
- Balancing Measure: Clinician feedback regarding workloads/experiences.

Equity Considerations

Seniors risk screening is universally completed for all ED patients 65+ to ensure equitable access to care.

Engagement

Feedback from structured meetings with patient/family partners was integrated into the planning to ensure meaningful outcomes for seniors within UHN EDs.

Improvement/Innovation/Change Concepts

- Embedding ISAR and CAM into nursing workflows.
- Visual management to flag positive screens.
- Supporting clinicians through Standard Work, education and ongoing audit and feedback.

Impact/Results

Based on preliminary results (25 weeks before and after process changes), average completion rates for ISAR and CAM exceeded the 30% target, with increases from 6.5% to 54.0% and 4.8% to 60.8%, respectively. The average time to consult the SEMC also surpassed the 15% target, with reductions of 27.0% (from 6.7 to 4.9 hours).

Discussion/Lessons Learned

Key enablers included leadership/champion support, integration of screening tools into nursing workflows, multimodal education, and ongoing audit and feedback. Ongoing work includes improving/sustaining improvements, and analyzing the timing and volume of SEMC consults and other outcomes following ED screening.

14. Optimizing Comfort Cart Utilization for Delirium Prevention and Management in Older Adults within University Health Network Emergency Departments

Authors: Camille Therese Bugo1, Andrea Hong1, Linda Liu1*, Inderjeet Singh1, Kristen Lee1, Keerit Kharpal2, Karuna Loftin2, Sabrina Bennett1,2, Lauren Lapointe-Shaw1,3, Tessa Ringer1,2,4, Nazek Abdelmutti1, & Sylvia Quant1,5**

1Myrna Daniels Seniors Emergency Medicine Centre, Emergency Medicine, University Health Network (UHN)
2Emergency Medicine, UHN
3Department of Medicine & Institute of Health Policy, Management and Evaluation (IHPME), University of Toronto (UofT)
4Department of Family and Community Medicine, UofT
5Department of Physical Therapy, U of T

Background

Older adults are at high risk for developing delirium, which is associated with increased morbidity, longer hospital stays, and higher healthcare costs. To prevent and manage delirium, Comfort Carts contain sensory/communication aids and other items that enhance comfort, engagement, communication, and sleep hygiene. However, based on a 2025 University Health Network (UHN) Emergency Department (ED) survey, only 46% of clinicians (n=57) used the carts within the past 3 months. As limited staff awareness and restocking delays may have contributed to low cart usage, a novel quality improvement project was implemented to increase cart utilization.

Aim

To increase the percentage of UHN ED clinicians who use the Comfort Carts within the past 3 months by 30% by August 2025.

Measures

Outcome Measure - Percentage of UHN ED clinicians who use the Comfort Carts.
Process Measures – Number of reorders submitted, and inspection/audit results using the 6S Method, which is a Lean management approach that focuses on creating a safe, efficient and organized workplace (Wang & Liu, 2023)
Balancing Measure – UHN ED clinician/volunteer feedback regarding workloads/experiences.

Equity Consideration

As the Comfort Cart enhances communication and engagement, this promotes equitable access to emergency care.

Engagement

Feedback from structured meetings with community, patient and family partners was integrated into the planning to ensure meaningful and relevant outcomes for seniors within UHN EDs.

Improvement/Innovation/Change Concepts

Applied Lean methodology (6S Method, Point of Use (POU), Kanban System, and Standard Work) to improve awareness and efficiency in cart maintenance and inventory reordering.

- Introduction of mobile carts to enhance POU.
- Daily inspection by volunteers to sustain 6S and prevent clinician overburden.
- Education/reminders during team meetings.

Impact/Results

- Increase in the percentage of active users (from 46% to 78%) who used the cart within the past 3 months.
- Improved 6S audit scores from 40% to 90%.
- Development of a Kanban card reordering process that has been integrated into staff and volunteer workflows.

Discussion/Lessons Learned

Lean methodology has significantly improved Comfort Cart utilization within UHN EDs. Planning is in progress to continuously improve cart utilization and share concepts/learnings with other programs/sites.

References

Wang, X & Liu, Y. (2023). Application of Lean visual and “6S” management concept in clinical nursing. Journal of Multidisciplinary Healthcare, 16, 3923–3931.

15. Optimizing Secure Chat Use by Nurses and Physicians to Improve Interprofessional Communication and Provider Experience

Authors: Julia Raffaghello, Evona Dindyal ,Raman Nijjar, Dr. Matthew Robinson (Trillium Health Partners, University of Toronto), Joel Pinto, Shari D’Souza, Rachel Ha- (Trillium Health Partners)

Epic’s Secure Chat (SC) was introduced at Trillium Health Partners (THP) in 2020 to support interprofessional communication within the electronic health information system (HIS). While staff received HIS training, the SC feature was launched without specific training or guidelines, resulting in inconsistent use, workflow interruptions, and provider dissatisfaction. Messages were often unstructured, inappropriately timed, or better suited to other modalities, negatively impacting communication, quality, and patient safety. Audits of secure chat messages revealed recurring issues with message clarity and appropriateness. With over 50% of THP’s nurses having fewer than five years of experience, the need for structured communication training was evident.

To address this, frontline nurses, physicians, clinical educators, and professional practice leaders co-designed interventions grounded in quality improvement methodology and lived experience. This included the creation of SC guidelines, educational strategies focused on reinforcement of SBAR communication, physician-nurse huddles, educational resources, and interactive training. The interventions were delivered over twelve weeks using a multi-modal approach.

By June 2025, this project aimed to improve the use of SC across two pilot inpatient medicine units targeting a

≥20% increase in: (1) the percentage of messages where chat content aligned with the guidelines, (2) the percentage of messages using a structured communication framework (e.g., SBAR), and (3) provider satisfaction with SC. Evaluation included pre/post audits with message structure and appropriateness scoring, and a provider experience survey. Balancing measures, such as tracking page volumes and SC usage were monitored to ensured communication flow was not adversely affected.

Health equity was a key consideration as communication gaps can disproportionately affect patients. The use of a structured communication framework such as SBAR supported consistent, equitable communication across roles and experience levels. Applying the ADKAR framework helped tailor strategies to build awareness and reinforce change.

Preliminary data suggests an improvement in the use of SC. Post-intervention data (currently undergoing analysis) will assess impact on message quality, adherence to SC guidelines and provider experience. Challenges included competing clinical priorities and varying engagement levels. Future plans include scaling to all inpatient medicine units and exploring integration of SBAR templates within Epic to support sustainability.

16. Optimization of Cancer Care Clinics to Reduce Patient Wait Time

Authors: Carmen Chung, Joan Myers-Harrison, Helen Hou, Lisa Lun, Francis Cacao, Suzi Laj - Humber River Health

Background

With resource shortage exacerbated by COVID pandemic, we identified high clinic volumes and prolonged patient wait time over 2 hours during cancer clinic visits resulting in negative patient and staff experience.

Aim and Outcome Measures

The aim of this project was to identify contributors to wait time and to implement interventions with the goal to reduce patient wait time. Our primary outcome measure examined total patient wait time from time of registration at clinic to departure. Data included all patients within my clinic practice gathered over a 4 year period from 2021 to 2025. Wait time was further categorized into “average wait time for nurse” and “average wait time for physician”.

Equity and Engagement

We surveyed and engaged stakeholders including patients, nurses, clerical staff, physicians, pharmacists, oncology manager, program director, laboratory, radiology and information technology department. We identified scheduling, systemic, procedural, process-related, people and patient factors prolonging patient wait time. To improve wait time, we implemented a primary nursing and clerical model to assist with patient triage and scheduling, automated treatment protocols to guide pharmacy and nursing care, redistributed excess patient volume from “Double Bookings” and “Urgent Drop-In” to assessment via symptom management nurse, “End-of-Day Virtual Consultations”, and “Overflow Clinic Days”.

Results and Next Steps

Post intervention, total patient wait time at cancer clinic was reduced by an average of 100 minutes from 149.1 minutes in year 2021-2022 to 53.2 minutes in year 2024-2025. Wait time for physician and nursing was reduced by an average of 60 minutes and 30 minutes respectively with sustained improvement over 18 months. We plan to optimize interventions across various cancer clinics at Humber River Health, to regularly monitor patient wait time and satisfaction and to recruit nursing, clerical and medical staff to enhance the new model of care.

17. Out of the Red, But Not in the Clear: Addressing Catheter-Associated Urinary Tract Infections in a Level 1 Trauma Centre

Authors: Darlene Khalil, Caitlin Cornish, Barb Duncan - Sunnybrook Health Sciences Centre

Background/Context

Catheter-associated urinary tract infections (CAUTIs) are a key quality indicator, significantly affecting patient length of stay, satisfaction, and outcomes. Despite a Medical Directive allowing nurses to initiate urinary catheter removal on wards since 2015, our trauma center was identified as a high outlier in CAUTI rates in the 2021 ACS Trauma Quality Improvement Program (TQIP) report (Odds Ratio = 2.14). Performance Improvement (PI) reviews revealed inconsistent compliance with the directive and its limited scope across care levels, necessitating targeted action.

Aim

The project aimed to reduce CAUTI rates and associated harm to patients across the trauma continuum by improving compliance with catheter removal protocols and expanding the scope of the medical directive to enhance early removal practices.

Measures

Impact was assessed through continuous unit-based audits and review of biannual TQIP reports. As compliance with the directive improved, we observed a reduction in urinary catheter utilization.

Engagement

Frontline nursing staff, physicians, and allied health professionals were actively involved through real-time audits and education sessions, fostering shared ownership of the initiative. While direct patient engagement was limited, efforts were made to improve patient-centered communication around catheter use and removal.

Improvement/Innovation/Change Concepts

Key interventions included expanding the Medical Directive to non-ventilated ICU patients, as well as targeted initiatives such as “Foley-Free February”, which featured daily catheter audits, and “Foley-Free Fridays” and daily automated ICU reports. These real-time audits provided opportunities for staff engagement, clarification, and learning. Additionally, efforts were made to raise interprofessional awareness and support for the Medical Directive to promote adherence.

Impact/Results

Notably, measurable improvements in CAUTI rates and corresponding TQIP performance metrics emerged by Spring 2025 (Odds Ratio reduced to 1.51), accompanied by decreased catheter utilization and better compliance with protocols. Although initial data shows progress, continued monitoring and engagement are essential for long-term sustainability.

Discussion/Lessons Learned

Challenges include initial and ongoing inconsistencies in medical directive compliance. However, continuous PI reviews and staff engagement helped promptly address this issue. Next steps involve strengthening data management with EMR automation and enhancing rotational staff training. Overall, frontline staff remain central to this initiative, driving change and contributing to long-term success.

18. Reducing Central Line Associated Bloodstream Infections (CLABSIs) within Interdepartmental Centre for Critical Care (ICCC) at University Health Network (UHN)

Authors: Mikha Alegria, RN, BScN, MScHQ, Matteo Parotto, MD, PhD, FRCPC, Sheryl Alexandre, RN, MScN, Rachel Boissonneault, BScN, MBA , Alon Vaisman, MD, MSc, FRCPC, Elisa Vicencio, MHSc, CIC, Olivia Zadjman, MSc, Meng, Meagan Eason, RN, MN, Clare Fielding, RN, MN, Stephen Casey, RN, MHSM, Vagia Tsiaousidis-Campbell, MSc (QIPS), BA, RRT, Andrew Steel, MSc, MBBS, MRCP, FRCA, FFICM, FRCPC, Niall Ferguson, MD, FRCPC, MSc, Jane Heggie, MD, FRCPC, Adriana Luk, MD, MSc, FRCPC, Carly O'brien, RN, MN, Maha Al Mandhari, MBChB, MSc. FRCPC - University Health Network, Toronto

Background

The use of central venous lines (CVL), an essential aspect of critical care carries a risk of infection, as indicated by the Central Line Associated Bloodstream Infections (CLABSIs) rate (Yuk et al., 2023). The Interdepartmental Centre for Critical Care (ICCC) has had a significant increase in CLABSI rates within the 4 intensive care units (ICUs) leading to significant efforts to address this issue. In 2017, a comprehensive approach to reduce CLABSIs led to a 37% decrease from the baseline rate; however, was not sustained long term. Efforts have now shifted to a targeted strategy that employs health human factors (HHF) and quality improvement methods.

Aim/Goal

The aim is to reduce ICU CLABSI rates from 3.12/1000 line days to the institutional target of 0.68/1000 line days over 12 months.

Measures

The outcome measure is the ICU CLABSI rate/1000 central line days. Process measures include adherence to hand hygiene compliance, Aseptic Non Touch Technique, and a maintenance bundle (line necessity, dressing integrity, tubing integrity, and swab cap usage) (Gorski et al., 2021). The balancing measure include premature CVL removal, increased use of peripheral IVs, and related complications like extravasation.

Improvement/innovation/change concepts

A partnership was formed among patient safety, HHF, infection prevention and control, and local units to address CLABSIs. Co-design sessions allowed physicians/nurses to create solutions for issues related to CVL insertion/maintenance, education and data access and promoting a cultural shift in the necessity of lines.

Impact/results

Key lessons learned emphasize the importance of data transparency, engaging local teams, and tailoring strategies to fit each unit's barriers. The target rate is 0.68/1000 line days, while the current mean is 2.77/1000-line days (preliminary findings). In Figure 1, the green dotted line indicates the baseline period demonstrating no notable special cause variations. The first change idea was implemented in January 2025, with the May rate being under target.

Discussion/lessons learned

Early phases of the project revealed two key challenges: limited awareness/adherence to best practices and inconsistent clinical documentation, compounded by post-pandemic recovery and the influx of a novice workforce. These findings emphasized the importance of micro-level engagement and institutional alignment. Targeted data-driven interventions with strong leadership support enabled accelerated adoption.

19. Restraints Minimization: Balancing Restrictive Practices with Safety

Authors: Satinder Kaur- Professional Practice Office, Centre for Addiction & Mental Health, Adjunct Lecturer, Lawrence S. Bloomberg Faculty of Nursing, University of Toronto, Visiting Research Fellow, Oxford Brookes University, UK & Amina Ali MD, DABPN, Forensic Psychiatrist, Centre for Addiction & Mental Health, Toronto, Canada, Assist. Professor, Division of Forensic Psychiatry, Department of Psychiatry, University of Toronto

Best practice guidelines emphasize using seclusion, only as a last resort and for the shortest time necessary, as their prolonged use can cause significant physical and psychological harm and is inconsistent with recovery-oriented care models focused on client autonomy and empowerment. Reducing seclusion events and duration remains a high priority in mental health settings. This quality improvement project aimed to reduce the median duration of seclusion incidents by 10% within 12 months on a medium secure forensic inpatient unit at the Centre for Addiction and Mental Health (CAMH), Canada.

The project measured outcomes by tracking reductions in median seclusion duration, completion of post-seclusion documentation (Safety and Comfort Plan, Client Debrief), and the frequency of seclusion incidents. Equity was a key consideration: the team analyzed the association of seclusion frequency and duration with patient demographics such as race, gender, and ethnicity, recognizing that certain groups may be disproportionately affected by restrictive practices. Staff discussions addressed the use of seclusion in the context of racism and institutional bias, aiming to promote culturally responsive care and prevent the reinforcement of inequities.

Engagement with the CAMH Patient and Family Experience team helped the clinical team reflect on staff attitudes towards clients with histories of aggression supporting a shift away from 'othering' and reliance on restrictive practices. The project occurred on a 28-bed, mixed-gender forensic unit with diverse legal statuses and diagnoses, mostly untreated prior to admission and subject to court-ordered treatments. Given this complexity, the focus was on reducing seclusion duration rather than eliminating incidents.

Through collaboration with interprofessional teams and clients, the project identified factors contributing to prolonged seclusion, including client characteristics, unit culture, and environmental factors. Interventions included enhanced communication, standardized nursing risk assessments, and a culture shift toward team-based planning. Results showed a 10% decrease in seclusion frequency, a doubling in median seclusion duration initially but a 20% decrease over the second half of the year with the latest monthly seclusion duration being 18.3 for September 2025.The improvement in best practice documentation was 30%. Key lessons included the impact of differing perceptions of safety and the need to further explore staff attitudes toward aggression and the use of seclusion in the context of racism. Future work will focus on clinical decision-making around seclusion discontinuation.

20. Rethinking Routine: Reducing Unnecessary Type & Screen Tests in Planned C-Sections

Authors: Erin Thompson ,Acute Care Alberta; Dr. Philippa Brain, Alberta Health Services; Dr. Rahim Janmohamed, Alberta Health Services; Dr. Susan Nahirniak, Alberta Precision Laboratories; Dr. Joshua Nicholas, Alberta Precision Laboratories; Olesya Barrett, Alberta Health Services; Dr. Eliana Castillo, Physician Learning Program; Aaron Peterson, Physician Learning Program

Background

Caesarean section (c-section) is a common obstetric procedure, with hemorrhage a frequent complication. Historically, preoperative type and screen testing has been standard practice due to transfusion risks. However, evidence indicates that restricting this testing to high-risk cases does not compromise safety. Success in reducing unnecessary testing locally prompted expansion across the province

Aim

Reduce the percentage of type and screen (T&S) testing completed for planned c-sections in 9 sites across the province to 20% by May 31, 2025.
Primary outcome is the rate of T&S testing for planned c-sections and a balancing measure tracked stat testing to ensure reductions did not lead to increased urgent testing.

Methods

To support equitable care, the initiative prioritized high-volume sites, ensuring more patients benefited from appropriate testing and helping reduce provincial variation.
While individuals with lived experience were not directly involved, patient benefits were emphasized when engaging clinicians particularly the value of avoiding unnecessary tests, time, and appointments for patients.
Criteria to guide testing decisions were developed using literature and expert consultation. Nine high-volume sites participated. Strategies included engaging site champions and conducting A&F sessions to share data, evidence, and address barriers. Progress data provided at regular intervals.

Results

A total of 14 interactive sessions were completed. Results since the launch indicate an absolute reduction of 19% (63% to 44%) in testing. Variation in practice also decreased from 63% to a 41% spread between the highest and lowest testing sites involved. Balancing measure of stat orders remains unchanged at 28%.

Accessing transfusion data proved difficult, requiring a manual chart review. Scheduling A&F sessions was also challenging, so materials were shared via email, supported by ongoing data updates.

Key lessons

- Sharing data and successes from other sites strengthened engagement.
- Some sites improved without formal A&F sessions.
- Dedicated project management and data analytics were critical to support clinicians.

Next Steps: developing a sustainment plan and exploring opportunities to expand type and screen reductions to other clinical areas.

21. Self-management in persons living with Ossesointegration

Authors: Amy Hallaran, St. Francis Xavier University & Kirsten Woodend, Trent University
Background

Background

Individuals living with chronic conditions go between phases of engaging in self-management practices and are often tasked with navigating health information. Those who have undergone limb osseointegration (IO) are constantly seeking and deciding what health information to use in supporting their healthcare needs. This study aimed to understand how persons with OI seek, process, decide to use and evaluate effectiveness of health information in managing their ongoing care needs.

Methods

A constructivist grounded theory approach was used to facilitate the construction of a theory grounded in interviews with persons with OI. Persons with OI at any level or of any limb were recruited through posts on various FacebookTM forums and by word of mouth. Data were collected through individual 60–90-minute virtual interviews.

Results

Ten persons with limb OI participated in the study, six females and four males with an average age of 55.5 years. Participants described four stages their journey at which self-management decisions were made; 1) the decision to have OI, 2) decisions about self-care in the initial phases of the journey; 3) dealing with challenges such as infection or pain, and finally 4) moving into a routine of ongoing day-to-day care, that aligned with maintenance of the OI. Factors motivating self-care decisions included participant attitude, desire to maintain mobility, and improved quality of life. The self-management process at each of the stages in the journey included: 1) seeking information, 2) deciding what information to use, 3) trying things out, 4) validating the information and then 5) sharing information with peers.

Conclusion

The voices of those living with OI were critical to understand their process of self-management. All participants engaged in a multifaceted decision-making process to meet their needs, avoid negative outcomes and engage in self-advocacy. Participants described the need for critical health literacy and critical evaluation; this was important due to the limited knowledge about OI of their healthcare providers.
Participants talked about the lack of information and resources available to help inform their decision to become ossesointegrated. Hence, a decision aid to support the first step of the journey is recommended.

22. Smarter Dosing, Safer Practice: Optimizing Hydromorphone Use at Humber River Health

Authors: Rima Dalou, Apoorva Kelkar, Dario Moscoso - Humber River Health

Background

Hydromorphone is a semi-synthetic opioid used in the management of moderate to severe acute pain. Due to the unavailability of a lower concentration, Humber River Health (HRH) historically utilized hydromorphone 2 mg/mL injection, despite internal data indicating that up to 97% of administered doses were 1 mg or less. To better align with actual dosing patterns, HRH introduced the 1 mg/mL formulation in November 2024.

Aim

The aim was to reduce hydromorphone injectable waste by 50% and waste transactions by 30% by May 2025.

Measures

Total hydromorphone injectable waste (mg) and number of waste transactions per 1,000 doses dispensed were measured over two 6-month periods: a pre-implementation phase (Dec 2023-May 2024) and post-implementation phase (Dec 2024-May 2025).

Change Concepts

Formulary Update: Added hydromorphone 1 mg/mL injection with structured implementation tracking and sign-off from stakeholders: including stepwise min/max purchasing adjustment, EMR item build and testing, and physical space assessment in each automated dispensing unit.
Meditech Enhancements: Updated order sets with integrated Clinical Decision Support (CDS).
Education: Targeted sessions for physicians, pharmacists, and nurses.
Audit: Two-week daily audit using Meditech reports

Results

Waste Reduction:
Cumulative hydromorphone injection waste dropped from 20,872.75 mg to 6,402.40 mg over six months – a 70% reduction (14,470.35 mg).
Operational Efficiency:
Waste transactions fell from 643 to 328 per 1,000 doses dispensed– a 49% decrease.

Discussion

As per standard hospital practice, a pre-emptive email communication to stakeholders regarding the change was disseminated. The 1 mg/mL format was successfully implemented, but adoption was initially inconsistent. To address this, a two-week daily audit was conducted post-implementation to monitor prescribing practices and encourage correct format selection. Tailored education sessions for pharmacists, pharmacy technicians, and nursing educators continued throughout the audit period to support consistent practice. System-level supports, including forcing functions and CDS tools in Meditech, reinforced compliance.

Reducing hydromorphone waste and removing excess drug from clinical areas potentially improved safety and enhanced nursing workflow by reducing waste documentation and witness coordination. Future efforts will assess workload and cost impacts.

This structured approach provides a model for other opioid stewardship initiatives focused on patient safety and resource optimization.

23. The impact of connecting Primary Care Physicians to General Internists in real-time on Emergency Department visits across Ontario

Authors: Alessandra Ceccacci, Division of Gastroenterology, Western University & Internal Medicine (Core), University of Toronto; `Mona Emam, Seamless Care Optimizing the Patient Experience, Women's College Hospital; Camryn Kabir-Bahk, Seamless Care Optimizing the Patient Experience, Women's College Hospital; Tara O'Brien, Seamless Care Optimizing the Patient Experience, Women's College Hospital & Division of General Internal Medicine, University of Toronto

Background

The role of the Primary Care Physician (PCP) has become more challenging with an aging and multimorbid patient population. Because of the increase in patient complexity and limited resources available to solo PCPs, there has been a year over year increase in ED visits and hospitalizations in Ontario [1-3]. SCOPE (Seamless Care Optimizing the Patient Experience) is a program founded in 2012 to connect PCPs to multiple services, including a General Internal Medicine (GIM) consultant on Call [4]. The program has expanded to 17 centers across Ontario.

Aims

This project aims to evaluate the impact of providing PCPs with direct access to a GIM consultant on healthcare utilization, including ED visits as well as subspecialty consults.

Methods

A survey was sent to each PCP post contact to the GIM consultant between December 4, 2023 and June 17, 2025. Data was collected in REDCap. PCPs were asked the following two questions: 1) what they would have done without the GIM support, and 2) what happened to the patient within a week of the GIM contact.
Results: 414 surveys were sent out after GIM contact, and we received 105 completed surveys. Of the 105 contacts, 41 would have otherwise been sent to the ED. 17% (7/41) of these cases subsequently presented to the ED in the week following their GIM visit. Overall, 32% (34/105) of total contacts prevented an ED visit. 29% (31/105) of cases would have initially been referred to a specialist. 3% (1/31) of these ultimately required a specialist referral. Just over one third (38/105) of cases required a follow up visit with the GIM specialist. There was insufficient data to compare across locations.

Conclusions

The SCOPE GIM consultant service was designed to support PCPs in the management of their patients. This study demonstrates that GIM support resulted in avoidance of ED visits as well as expedited patient care. Future work should focus on increasing uptake of the service to reduce healthcare utilization and streamline patient care.

Engagement

The study’s purpose and survey were conceptualized with the input of PCPs from both academic and community sites.

References
1. Osborn, R., Moulds, D., Schneider, E. C., Doty, M. M., Squires, D., & Sarnak, D. O. (2015). Primary Care Physicians in ten countries report challenges caring for patients with complex health needs. Health Affairs (Project Hope), 34(12), 2104–2112. https://doi.org/10.1377/hlthaff.2015.1018.
2. Friedman, B., Jiang, H. J., & Elixhauser, A. (2008). Costly hospital readmissions and complex chronic illness. Inquiry: A Journal of Medical Care Organization, Provision and Financing, 45(4), 408–421. https://doi.org/10.5034/inquiryjrnl_45.04.408.
3. Frandsen, B. R., Joynt, K. E., Rebitzer, J. B., & Jha, A. K. (2015). Care fragmentation, quality, and costs among chronically ill patients. The American Journal of Managed Care, 21(5), 355–362.
4. Pariser, P., Pus, L., Stanaitis, I., Abrams, H., Ivers, N., Baker, G. R., Lockhart, E., & Hawker, G. (2016). Improving system integration: The art and science of engaging small community practices in health system innovation. International Journal of Family Medicine, 5926303. https://doi.org/10.1155/2016/5926303.

24. The Pressure is Off: A Hospital-Wide Prevention Plan

Authors: Edith Koo and Shachi Christian - Mackenzie Health

Hospital-acquired pressure injuries (HAPIs) are a significant patient safety concern, often resulting in increased morbidity, mortality, and healthcare costs. Mackenzie Health set out a goal to achieve zero HAPI stage II and above in all inpatient populations since 2019. To support this goal, we established a Quality Aim Group composed of an interdisciplinary team, including nurse educators, professional practice leaders, patient care managers, directors, quality specialists and frontline staff across the organization. This group provides continues oversight of PI prevention and management efforts across the organization. Daily nurse educator-led validation process to accurately capture HAPI documentation. The data is captured in real time on Epic dashboards and local unit quality dashboards. On a monthly basis, the validated HAPI report is shared corporately. Our participation in the 2025 International Pressure Injury Prevalence Survey demonstrated our hospital's outstanding performance, surpassing the provincial benchmark for HAPI. Equity concerns were addressed by incorporating education on identifying HAPIs across different skin tones in our training sessions. The team collaborated with patient partners to develop educational materials and share their lived experience with frontline nursing staff. The quality aim is composed of 5 working groups, each with a different focus: increase capacity by developing wound care champions (WCC), offering education days, and champion workshops; Epic optimization: streamlining documentation by updating Epic features; patient and family engagement: official launch of HAPI video; creation of focused HAPI prevention working groups based on unit e.g., critical care. Key impacts include a total of 100 WCC across the organization, more than 300 frontline nursing staff received reinforced education on HAPI, improved HAPI documentation, goal to reduce HAPI below 1.3% was achieved. Challenges during the initial recruitment of WCC: Strategies utilizing different platforms to recruit and share information through e.g., meetings, education sessions, huddles, emails, and poster. Aligning engagement from WCC across all areas by creation of a shared tracker to document all initiatives by WCC to allow for shared learning, creation of a group email increase communication with and amongst WCCs and providing opportunity to lead education sessions. Targeted Higher HAPI occurrences areas by created focused working groups.