

national meeting

Toronto, ON | May 25 & 26, 2026

Abstract Book



In collaboration with:

ASSOCIATION
MÉDICALE
CANADIENNE



CANADIAN
MEDICAL
ASSOCIATION

Message from the Chair

Dear Choosing Wisely Canada community,

Welcome to Choosing Wisely Canada's National Meeting, held in collaboration with the Canadian Medical Association. We continue to promote the theme of Less but Better— for patients, the health care system, and the planet we all share.

Less but better is more than a theme. It's our guiding principle as we enter a new chapter, moving from awareness to impact. In the years to come, our shared goal remains clear: to reduce overuse and commit to more lasting change across Canadian health systems.

Much of this work is already underway. Using Blood Wisely celebrated its fifth-year anniversary with over 300 Canadian hospitals participating and evidence of impact on multiple outcomes—blood transfused, adverse events prevented, human resources saved, carbon footprint and cost reduced. We continue to offer Using Labs Wisely and celebrate leadership through our Hospital Designation Program. We continue to develop ways to support primary care clinicians, including in combatting misinformation about tests and treatments.

Through strengthened partnerships with system organizations, we are also advancing medication appropriateness. As one of the members of the Appropriate Use Coalition, we are proud to support the launch of Canada's new national target to reduce the inappropriate use of antipsychotics – a major step toward safer care in long-term care homes. We celebrate the 32 long-term care homes that have met the benchmark of no more than 15% of residents on antipsychotic medications without a clear indication.

We remain dedicated to championing Choosing Wisely principles as clinicians respond to a rapidly changing healthcare system. In partnership with over 25 clinician societies, we have developed more than 75 climate-conscious recommendations, offering practical, everyday actions that reduce harm and protect our planet.

All of this is possible thanks to the engaged Choosing Wisely community. The work featured in this abstract book captures the energy and innovation happening across the country. Covering topics such as quality improvement, appropriate medication use, climate initiatives and measurement, these projects highlight the diversity of approaches taking place across our community to strengthen the quality and safety of care. I hope these leave you inspired, connected and motivated to continue advancing meaningful change in healthcare.

Thank you for your leadership and your ongoing commitment to this work. I am eager to see what we accomplish together in the next chapter.

Yours,

A handwritten signature in black ink, reading "Wendy Levinson". The signature is fluid and cursive, with the first name "Wendy" written in a larger, more prominent script than the last name "Levinson".

Dr. Wendy Levinson
Chair, Choosing Wisely Canada

Message de la présidente

À tous les membres de la communauté Choisir avec soin,

Bienvenue au Congrès annuel de Choisir avec soin, organisé en partenariat avec l'Association médicale canadienne. Nous continuons de promouvoir le thème moins, mais mieux – pour les patients, le système de santé et la planète que nous partageons tous.

Moins, mais mieux, c'est bien plus qu'un thème. Il s'agit de notre principe directeur alors que nous opérons une transition de la sensibilisation vers les retombées. Notre objectif commun pour les années à venir reste clair : endiguer la surutilisation et prôner des changements durables dans les systèmes de santé du Canada.

Beaucoup de chantiers sont déjà en cours. Transfuser avec soin a célébré son 5e anniversaire avec la participation de plus de 300 hôpitaux canadiens et la preuve de son impact sur de multiples résultats : transfusions sanguines, événements indésirables évités, ressources humaines économisées, empreinte carbone et coûts réduits. Nous poursuivons nos programmes d'amélioration nationaux. Nous continuons l'utilisation judicieuse des laboratoires et célébrons le leadership avec notre Programme de désignation Hôpital Choisir avec soin. En parallèle, nous approfondissons nos efforts en soins primaires notamment pour lutter contre la désinformation concernant les tests et les traitements.

Grâce à nos partenariats renforcés avec des organisations du système de santé, nous appuyons également l'usage approprié des médicaments. En tant que membre de la Coalition pour l'utilisation appropriée, nous sommes fiers d'appuyer le lancement de la nouvelle cible canadienne de réduction de l'utilisation inappropriée des antipsychotiques – un pas de géant vers des soins plus sûrs dans les établissements de soins de longue durée. Nous félicitons les 32 établissements de soins de longue durée qui ont atteint le seuil de référence de moins de 15 % de résidents sous médicaments antipsychotiques sans indication claire.

Alors que les médecins s'attaquent aux grands défis d'aujourd'hui, notre engagement à faire progresser les principes de Choisir avec soin reste inchangé. En partenariat avec plus de 25 sociétés de médecins, nous avons élaboré plus de 75 recommandations axées sur le climat afin de proposer des mesures pratiques à appliquer au quotidien pour réduire les méfaits et protéger la planète.

Ce recueil de résumés brosse le portrait de ce mouvement national, avec des projets portant sur des domaines comme l'amélioration de la qualité, l'usage approprié des médicaments, l'action climatique et la mesure de paramètres, qui reflètent les façons uniques dont notre communauté améliore la qualité et la sécurité des soins. J'espère que ce recueil sera pour vous une source d'inspiration, de créativité et d'énergie pour mener vos propres efforts de transformation.

Merci pour votre leadership et votre adhésion soutenue à ce travail. Je me réjouis de voir les progrès que nous ferons ensemble dans ce prochain chapitre.

Cordialement,

A handwritten signature in black ink, appearing to read 'Wendy Levinson'.

Wendy Levinson, M.D., OC
Présidente, Choisir avec soin

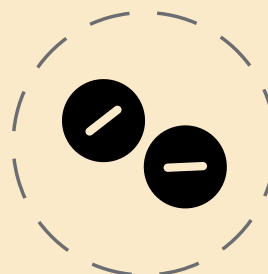
Contents

Appropriate Prescribing	7
Calm and Clear without Sedatives: Reducing Delirium Risks at SHN	8
“Needing rest? Quetiapine May Not be Best”. Leveraging Internal Communication Channels to Drive Awareness and Practice Change	9
The Appropriate Use of Antipsychotics Innovator Network in Ontario Long-Term Care	10
CANBuild-AMR: A National Collaborative Advancing Antibiotic Audit and Feedback for Primary Care	11
Canada’s National Antibiotic Treatment Guidance: An Opportunity to Optimize Antibiotic Prescribing	12
Bridging Sectors for Appropriate Medication Use: Data and Priorities	13
Assessing the Adherence to Guidelines for the Treatment of Inpatients with Complicated Urinary Tract Infections	14
One of These Things is a lot Like the Other. Is the Use of Enantiomers Versus Racemic Drugs Rational in BC?	15
Reducing Inappropriate Piperacillin-Tazobactam Prescribing: A Stewardship Initiative at Cambridge Memorial Hospital	16
Working Toward More Appropriate Antibiotic Use in LTC	17
Trends in Proton Pump Inhibitor Use in Three Canadian Provinces	18
Be Comfortable Calling it Viral: Over-Diagnosis of AOM in Children	19
Reducing Low-Value Knee MRIs Through a Primary Care Checklist	20
Environmental Sustainability	21
Green Teams for Planetary Health: A Driver to Reduce Medication Waste	22
Adding Antidote to the Fire: Building Climate Resilience in Rheumatology	23
Emergency Medicine for People and Planet: Recommendations for Choosing Wisely	24
Educating Emergency Medicine Providers on the Environmental Co-Benefits of Choosing Wisely	25
Advancing Environmental Sustainability and Patient Safety through Standards and Assessments	26
Driving Sustainable Change in Ophthalmology: A National Sustainability Toolkit	27
Lower Dialysate Flow: A Win for Patients and the Planet	28
Choosing Wisely for the Environment: Reducing Single-Use Plastics in Endoscopy	29
Aligning Environmental Stewardship with Choosing Wisely in Newfoundland and Labrador	30
A Conversation Aid for Climate-Conscious Prescribing of Inhalers	31
Mobilizing Pharmacist-Led MDI-to-DPI Therapeutic Interchange	32
Launching and Spreading an Organization-Wide Inhaler Recycling Project	33
Redefining High-Quality Care: Why Environmental Sustainability Matters	34
Impact of Phlebotomy on the Environment and Clinical Efficiency	35

Measurement & Evaluation	36
Contributors to Primary Care Guidelines in Canada : A Systematic Review	37
Does AI Choose Wisely? Evaluating AI Alignment with Choosing Wisely	38
Overtesting in MASLD: How Guidelines Can Drive Low-Value Care	39
HbA1c Testing Patterns in British Columbia in 2023	40
Towards Better Stewardship: National Data Support Raising Single-Unit Transfusion Benchmark	41
Medical Education	42
Unfreezing the Frozen Shoulder: Too Much Care for Too Little Clinical Relevance	43
RxFiles Academic Detailing: Supporting Clinicians in Menopause Management	44
Ensuring Medically Appropriate Treatment for all Patients: How is this Possible?	45
Women's Health: How the Reappropriation of Feminist Ideals Can Drive Overuse	46
Evaluating a Novel Way of Teaching Choosing Wisely Canada Recommendations to Medical Students	47
Considerations in Integrating Deprescribing Competences into Health Professional Education	48
Opioid Wisely: Mapping the Journey from Accreditation to Action	49
Integrating Choosing Wisely into Pre-Clerkship Training	50
SUPADOC: Beacons of Renewal in Clinical Practice	51
From Curriculum to Culture: Implementing and Expanding Choosing Wisely Stewardship and Sustainability at Queen's School of Medicine	52
Prescribing Wisely: Launch of the Choosing Wisely Canada STARS Pharmacy Program	53
Impact of the Choosing Wisely Canada STARS Program	54
Use of Summer Student Research Projects to Improve Antimicrobial Stewardship	55
Bridging the Knowing-Doing Gap: Case-Based Learning for Dermatology Stewardship	56
Implementing a National Resource Stewardship Certificate for Health Profession Learners	57
"Escaping" Low-Value Care: Choosing Wisely Education Through an Escape Room	58
Teaching Imaging Appropriateness Through a Visual Algorithmic Framework	59
Patient Engagement	60
Building Respectful Partnerships with Indigenous Communities to Promote Wise, Culturally Safe Care	61
Comparing Website Navigation for International Choosing Wisely Recommendations	62
Quality Improvement	63
Promoting Early Palliative Care: HOMR in Electronic Medical Record	64
Fixing the System We Built (Oops): A Medical Imaging Stewardship Strategy for Choosing Wisely	65
Deprescribing Together: Transforming Polypharmacy Management in Private Practice	66
Leveraging Data and Collaboration to Optimize IVIG Stewardship in Saskatchewan	67
Becoming a Hospital Choosing Carefully Even in Times of Turmoil	68
Designing Feedback With, Not For: A Co-Design Approach to Improving Audit and Feedback	69
Unearthing Environmental Co-Benefits in Choosing Wisely Quality Improvement Efforts	70
Bringing Safety Back to the Front Burner: Evolving and Aligning RSPs and Standards	71
Quality Improvement Study to Optimize UTI management in Long-Term Care	72

Improving referral systems in outpatient Physical Medicine and Rehabilitation	73
Improving Patient Non-Attendance Rates in Orthotics Clinic	74
Choosing Wisely Czech	75
Beyond the Target: Codesigning an Approach to Incorporating Outcome Scales to Improve A&F	76
Reducing Urinary Tract Infections in Long-Term Care at Lakeshore Lodge, City of Toronto	77
Quality Unlocked: A Practical Primer for Laboratory Medicine	78
Evaluating the Effectiveness of the “Ditch the Dipstick” Campaign in Long-Term Care	79
A QI Initiative to Reduce Inappropriate Disposal of Non-Hazardous Waste	80
Empowering Excellence: The Choosing Wisely Hospital Pharmacy Champions Initiative	81
Scaling Choosing Wisely Through Quality Improvement in Primary Care	82
Turning Awareness into Action: Virtual Engagement for Choosing Wisely Success	83
RITE PACS: Reducing Inappropriate TElemetry for Patients Admitted to non-Cardiology Services	84
The CWC / CAG Dyspepsia Toolkit: When it is OK to say “Nope to the Gastroscope”	85
Optimization of Laboratory Testing to Advance Sustainable Healthcare in NL	86
Education and audit-and-feedback for appropriate HbA1c testing in British Columbia	87
Implementing Evidence-Based Dementia Tools in Long-Term and Primary Care	88
Building a Culture of High Value Care at CMH: Governance, Engagement and Sustaining Choosing Wisely	89
It Starts With Asking Why – Rethinking the Appropriate Use of Antipsychotics in LTC: Tools, Transformations and Discoveries	90
Sparkling Change in AUA: Person-Centred Quality Improvement in LTC	91
Reducing Low-value Abdominal X-rays: Preliminary Results from a Quality Improvement Initiative	92
Is that Bloodwork Necessary?	93
RED MED: Reducing Utilization of Dimenhydrinate Among Older Surgical Patients	94
ReACH-LTC: REAssessing CHolinesterase Inhibitors and Memantine in Long-Term Care	95
Wise Decisions, Judicious Selections: A Value-Based Approach to ICU Investigations	96
Delirium Aware Safer Healthcare - A Provincial Improvement Campaign to Prevent Hospital-Acquired Delirium	97
Optimizing Intervention Sequences to Reduce Physician Blood Urea Nitrogen Test Overuse: A Multi-Hospital Analysis	98
Choosing Wisely: Blood Cultures in the Emergency Department	99
Reducing Low-Value Serum Folate Testing in Medical Inpatients	100
Exploring AST Reflex Test Ordering, Utilization, and Reducing Unnecessary Testing	101
Pilot of the Quebec Choosing Wisely Clinic Designation	102
Montreal Declaration on High Value Care : Engaging Partners For Better Care	103
Wake up and Breathe	104
Case-Based Videos for Dermatology Resource Stewardship	105
Lab Wisely Widget - Estimating Savings Across Parameters	106
Improving Knowledge Translation of Environmental Sustainability in the Intensive Care Unit	107
Finally, Chez Nous: The First EMR Deprescribing Software Integration in Québec	108
Less Plasma, Less Drama: A Quality Improvement Initiative to Reduce Inappropriate Plasma Transfusions Across Community Hospitals in the Niagara Region	109

Appropriate Prescribing



Swasti Bhajan, Scarborough Health Network (SHN)
Loretta Lee, SHN
Briar DeFinney, SHN
Nancy Veloso, SHN
Laura Kane, SHN
Dr. Alexis Gordon, SHN
Dr. Susan John, SHN
Dr. Thomas Bodley, SHN
Claudia Ho, SHN
Minette MacNeil, SHN
Meredith de Paulsen, SHN
Elizabeth Ross, SHN
Glyn Boatswain, SHN

Abstract

Appropriate Prescribing

Calm and clear without sedatives: reducing delirium risks at SHN

Hospital-acquired delirium is a significant source of harm for hospitalized patients, particularly older adults. In 2024, SHN implemented a multimodal delirium screening and prevention strategy. As inappropriate sedative use is a key contributor, a dedicated Prescribing Working Group was formed that focuses on reducing Benzodiazepines (BHZ) as first-line treatment for insomnia, agitation, and delirium in patients 65 and over.

Guided by Ontario Health and Choosing Wisely standards, the initiative implemented key interventions: 1) revision of order sets to remove BHZ for routine sleep and anxiety, 2) provider education on BHZ tapering and development of an insomnia algorithm to promote alternatives such as melatonin and non-pharmacologic interventions, and 3) development of patient resources addressing safe sleep strategies. Outcome measures include 1) 5% reduction in newly prescribed BHZ by March 2026 2) rate of BHZ prescriptions on discharge, and 3) rate of hospital-acquired delirium. Balancing measures include 1) Restraint Use and 2) New Prescriptions for Quetiapine.

Since June 2024, the rate of newly prescribed BHZ for inpatients aged 65+ has decreased from 6.9% to 6.5%. Post intervention data demonstrate a shift with multiple consecutive points below the historical mean rate for hospital-acquired delirium, consistent with special-cause improvement. SHN continues to advance a multimodal prospective continuous improvement initiative to address hospital-acquired delirium.

Future directions include further interventions to optimize the use of sedatives and hypnotics, partnering with outside organizations in the Delirium Artificial Intelligence (AI) Research study at Unity Health / GEMINI, and continuing to focus on sleep optimization and appropriate BHZ Prescribing.

Abstract

“Needing rest? Quetiapine may not be best”. Leveraging internal communication channels to drive awareness and practice change

Goal:

To address rising inpatient antipsychotic prescribing for seniors with dementia without a mental health diagnosis by promoting evidence-based resources and highlighting associated harms to encourage practice change.

Activities:

Over four weeks in summer 2025, we launched a four-part internal news series targeting physicians and clinical staff to build awareness, share data, and promote tools supporting appropriate antipsychotic prescribing. Each article included supporting data addressing common misconceptions and areas of concern. Topics covered: antipsychotics are not indicated for insomnia; new-starts data challenging the belief that most seniors arrive already on antipsychotics; alignment between acute care prescribing and national long-term care deprescribing targets; and environmental impacts of routine prescribing.

Impact:

- 27 views of the Medical Staff Website Choosing Wisely Antipsychotics page
- 50 clicks on the virtual simulation (23 engaged; 1 completed all scenarios)
- 177 unique visits to our Decision Tree and Infographic
- 50 REDCap quiz responses (21 completed)
- 73 visits to the Choosing Wisely Interactive Report, with traffic spikes during distribution

Following publication, partnerships expanded with Community Health Services and Research to advance this work.

Challenges:

Sustaining engagement and translating awareness into measurable prescribing changes remain difficult, compounded by staffing and resource limitations.

Lessons Learned:

Strategic use of internal communication channels, leadership endorsement, and success stories are critical for culture change. Accessible platforms and ongoing engagement build momentum for sustained improvement.

Andrea Moser, ISMP Canada
Ali Shazada, ISMP Canada
Anurag Pandey, ISMP Canada
Michael Hamilton, ISMP Canada
Christina Jeong, ISMP Canada
Alice Wong, ISMP Canada
Melissa Sheldrick, ISMP Canada
Rajiv Rampersaud, ISMP Canada

Appropriate Prescribing

Abstract

The Appropriate Use of Antipsychotics Innovator Network in Ontario Long-Term Care

Goal:

Drawing on the expertise gained during 4+ years of ISMP Canada's Strengthening Medication Safety in Long Term Care initiative, funded by the Ontario Ministry of Long-Term Care, the Appropriate use of Antipsychotic Innovator Network was launched in Fall of 2025. This initiative reflects ISMP Canada's commitment to the CDA-led Appropriate Use Coalition, including working with Choosing Wisely Canada and other partners.

Adopting a formal Quality Improvement approach, Homes were supported towards the goal of assessing the prescribing and use of antipsychotics, and where possible, making reductions.

Activities:

Activities included the development of an AUA handbook that integrates practical step-by-step approaches to assessment and improvement. Expert collaborative coaching and facilitation has assisted Homes in articulating problem statements, developing process maps, formulating SMART goals, undertaking PDSA cycles, and managing change.

The session will present selected data and stories from participating Homes, exemplifying the progress towards appropriate use and demonstrating the building of capacity and expertise in the Ontario long-term care sector.

Challenges:

Challenges included frequent key staff turnover, and the other clinical demands of providing care. Prescriber engagement was also cited as a common impediment. Strategies will be presented in the session for overcoming these challenges.

Successes:

Successes included the usefulness of the AUA Handbook, the ability to connect with expert coaches, the methodical approach to improvement, and the monthly Network Webinars that created a peer-to-peer community with shared goals and ideas.

Abstract

CANBuild-AMR: A National Collaborative Advancing Antibiotic Audit and Feedback for Primary Care

Rising antimicrobial resistance (AMR) is an urgent public health threat responsible for 1 million deaths globally. In Canada, 26% of infections are currently resistant to first line antibiotics, and this is estimated to rise to 40% by 2050 without action. Overuse of antibiotics helps fuel this rise; with primary care physicians prescribing two-thirds of all antibiotics in Canada. Approximately 25-50% of these prescriptions are inappropriate as prescribed for conditions that never or rarely require antibiotics, or prescribed for longer durations than necessary.

Antibiotic audit and feedback can be effective at improving prescribing in primary care, but has been inconsistently implemented. The goal of CANBuild-AMR is to build capacity for antibiotic prescribing feedback in primary care nation-wide, and add to the evidence base on the impact and scalability of this quality improvement initiative. CANBuild-AMR has assembled representation from national organizations, all provinces, and the territory of Nunavut to work towards implementing antibiotic feedback programs to all primary care physicians in Canada. Seven provinces will be implementing antibiotic audit and feedback interventions by 2026. Ontario has embedded a randomized trial as part of a population-wide intervention to optimize the delivery of actionable data to family physicians. A knowledge mobilization event is being planned for the upcoming year to translate evidence into sustainable policy across Canada in alignment with the Pan Canadian Action Plan to combat antimicrobial resistance.

Deborah Yamamura, McMaster University
Dena Zeraratkar, McMaster University
Kevin Afra, University of British Columbia
Peter Daley, Memorial University
Bradley Langford, Public Health Ontario and McMaster University
Tim Lau, University of British Columbia
Nicole LeSaux, University of Ottawa
Mark Loeb, McMaster University
Philippe Morency-Potvin, Centre hospitalier de l'Université de Montréal
Alyssa Ness, University of Calgary
Alena Tse-Chang, University of Alberta
René Wittmer, University of Montreal

Appropriate Prescribing

Abstract

Canada's National Antibiotic Treatment Guidance: An Opportunity to Optimize Antibiotic Prescribing

Goal:

Develop national, evidence-based guidance on when to prescribe antibiotics and on first- and second-line empiric antibiotic regimens for syndromes prioritized according to their incidence, impact, and share of antibiotic prescriptions.

Activities:

We convened a national panel of stakeholders, including infectious disease physicians, medical microbiologists, pharmacists, family physicians, pediatricians, public health physicians, and methodologists, all free of financial conflicts of interest.

The panel applies the GRADE 'Adoption' approach—a structured approach to adopt or adapt existing recommendations or develop new recommendations when sufficiently trustworthy guidance does not exist. The WHO AWaRe Antibiotic Guidelines serve as our primary source for Adoption.

To formulate recommendations, we work through the GRADE Evidence-to-Decision framework, a framework for moving from evidence to recommendations that ensures that all factors that may bear on the direction and strength of recommendations—health benefits and harms, patient values and preferences, resources, acceptability, feasibility, and equity—are systematically and transparently considered.

Impact:

The Canadian Antibiotic Treatment Guidance will be released in phases, in both French and English, with each phase producing recommendations for a set of five to ten syndromes. Firstline, a Canadian digital antimicrobial stewardship platform, will host and disseminate guideline recommendations. We have already released recommendations on bronchitis, sinusitis, COPD exacerbations, pneumonia, pharyngitis, and conjunctivitis (<https://app.firstline.org/en/clients/738-catg>).

Lessons Learned:

This guidance represents a key activity of the Pan Canadian Action Plan on Antimicrobial Resistance. Early feedback suggests that evidence-based antibiotic guidance, delivered through a digital platform and contextualized for Canada, may optimize prescribing and promote stewardship.

Jonathan Lam, CDA-AMC
Amol Verna, GEMINI
Lisa McCarthy, deprescribing.org
Fahad Razak, GEMINI
Wade Thompson, deprescribing.org

Appropriate Prescribing

Workshop

Bridging Sectors for Appropriate Medication Use: Data and Priorities

Appropriate medication use is a complex area that spans multiple medication classes, prescriber types, healthcare sectors, and regional contexts, making it challenging to mobilize and achieve progress in key areas. To support the implementation of the Appropriate Use Strategy, Canada's Drug Agency has pursued the identification of high-priority appropriate use topics in primary and long-term care (through a project led by deprescribing.org) and in acute care (through a project led by GEMINI).

This interactive session will present findings from these two complementary projects. First, we will share results from a Delphi consensus process through a multi-disciplinary expert panel, identifying top appropriate use priorities in primary care/long-term care, including qualitative insights. Second, we will present a first-of-its-kind analysis examining hospital-level variation data in the prescribing rates of high-priority medication classes across Ontario and Alberta. Interactive facilitated discussion will focus on how to leverage these learnings for concrete action. Participants will be invited to share promising interventions, discuss implementation challenges, and provide suggestions for building momentum across sectors.

Impact:

- Advance understanding of priority appropriate use issues across primary care, long-term care and acute care
- Explore actionable interventions to reduce low-value care/inappropriate use through knowledge exchange and collaborative problem-solving
- Provide actionable insights into priority appropriate use issues, access new hospital-level variation data, and identify transferable intervention strategies applicable to their contexts.

Anique Le Roux, The Ottawa Hospital, University of Ottawa
Andrew Neitzel, The Ottawa Hospital Research Institute
Salmaan Kanji, The Ottawa Hospital, The Ottawa Hospital Research Institute
Derek McFadden, The Ottawa Hospital, The Ottawa Hospital Research Institute
Fahad Chowdhury, The Ottawa Hospital, The Ottawa Hospital Research Institute
Caroline Nott, The Ottawa Hospital, The Ottawa Hospital Research Institute
Lacey Devrees, The Ottawa Hospital, The Ottawa Hospital Research Institute
Mathilde Gaudreau-Simard, The Ottawa Hospital, The Ottawa Hospital Research Institute

Appropriate Prescribing

Abstract

Assessing the Adherence to Guidelines for the Treatment of Inpatients with Complicated Urinary Tract Infections (cUTIs)

Background:

Adherence to therapeutic guidelines for the treatment of complicated urinary tract infections (cUTIs) in inpatients is poor, with studies showing adherence to be as low as 30%. The IDSA updated guidelines on cUTIs, recommending 5-7 days of therapy with fluoroquinolones and 7 days for non-fluoroquinolone, with early transition to oral therapy when clinically appropriate. Additionally, the BALANCE trial demonstrates that 7 days of therapy is non-inferior to longer courses of antibiotics for gram negative bacteremia, further supporting shorter treatment duration. We hypothesized that patients with cUTI at our institution receive longer than recommended IV antibiotics.

Goal:

To characterize local antibiotic prescribing for cUTIs and identify opportunities for improving adherence to evidence-based recommendations.

Methods:

A retrospective chart review included adults admitted with cUTI to Internal Medicine or Family Medicine at The Ottawa Hospital from September to December 2024. Patients meeting IDSA cUTI criteria were included. Exclusion criteria included transition to comfort measures, indwelling catheter or obstructive/structural urinary pathology. Descriptive statistics characterized the cohort and multivariable regression evaluated factors associated with prolonged therapy.

Impact:

Of 183 patients reviewed, 121 were included in the analysis. Median antibiotic therapy was 8 days (IQR 7-10). Over half (54.5%) of patients received antibiotic courses beyond 7 days, with 47% of patients remaining on IV therapy for their entire hospital stay. A subset of patients had gram-negative bacteremia (21.5%) and 77% received antibiotics beyond 7 days. Bacteremia and male sex were predictors of extended antibiotic treatment. These results highlight clear targets for antibiotic stewardship program.

Dr. Aaron M Tejani, UBC Therapeutics Initiative
Kiarash Nikkhah, UBC Therapeutics Initiative
Mrinmayi Thorat, UBC Therapeutics Initiative
Dionzie Ong, UBC
Simroop Ladhar, UBC
Alison Martin, UBC Therapeutics Initiative

Appropriate Prescribing

Abstract

One of These Things is a Lot Like the Other. Is the Use of Enantiomers Versus Racemic Drugs Rational in BC?

This presentation examines whether single-enantiomer drugs truly offer clinically meaningful advantages over their racemic counterparts in routine practice. Using the top 200 drugs prescribed in British Columbia as our sampling frame, we systematically identified all available head-to-head randomized controlled trials, both published and unpublished, comparing single-enantiomer agents with their racemic mixtures. Searches included MEDLINE, EMBASE, CENTRAL, regulatory submissions, product monographs, manufacturer data, and relevant systematic reviews.

Each study underwent detailed critical appraisal using the Cochrane Risk of Bias tool, alongside additional quantitative assessments such as the fragility index to explore how missing data or small event counts might influence the stability of reported treatment effects. We also compared the clinical claims made by manufacturers with the totality of evidence to determine whether purported benefits, such as improved efficacy, fewer adverse events, or better tolerability, were supported by rigorous data.

The session concludes with an examination of BC-specific cost comparisons between single-enantiomer drugs and their racemic alternatives, along with a discussion of how these insights can inform prescribing and medication management decisions both within and beyond BC. Participants will gain practical insights into whether the higher costs of single-enantiomer drugs are justified, and how to apply this knowledge in prescribing and medication management decisions.

Dr. Khuloud Nuri, Cambridge Memorial Hospital
Jennifer Visocchi, Cambridge Memorial Hospital
Daniel Pereira, Cambridge Memorial Hospital
Christine Lau, Cambridge Memorial Hospital
Belinda Lo, Cambridge Memorial Hospital

Appropriate Prescribing

Abstract

Reducing Inappropriate Piperacillin-Tazobactam Prescribing: A Stewardship Initiative at Cambridge Memorial Hospital

Background:

Piperacillin-tazobactam is commonly prescribed for empiric or targeted therapy requiring broad-spectrum coverage, such as complicated urinary tract infections or severe infections with suspected *Pseudomonas*. However, it should not be used for mild community-onset infections or when narrower-spectrum agents are appropriate. It is also ineffective against ESBL- or AmpC-producing organisms.

Objective:

To reduce unnecessary piperacillin-tazobactam prescribing at Cambridge Memorial Hospital by 20%.

Methods:

Prescribing methods were monitored over six months (May 1 – Oct 31, 2025) and compared to the previous six-month baseline. Infectious Diseases (ID) physicians audited appropriateness based on current guidelines and local antibiotic resistance rates, intervening when necessary to promote de-escalation to narrower-spectrum agents.

Results:

Data collected from May 1 - Oct 31, 2025 was compared to the previous 6-month baseline. The absolute number of piperacillin-tazobactam dispensed from Nov 1, 2024 - April 30, 2025 was 6617. During the following 6-month study period, May 1 - Oct 31, 2025 the number of doses dispensed decreased to 3195, a 52% reduction. The average number of patients/month decreased from 89.5 to 66.2 patients/month. The number of doses/patient decreased from 12.4 to 8.3 doses/patient.

Pneumonia accounted for 33% of prescriptions, followed by intra-abdominal infections (20%). ID specialists recommended de-escalation in 57% of cases, and 19% were advised to discontinue therapy.

Challenges:

Physicians' reliance on broad-spectrum therapy and variable comfort with de-escalation necessitate ongoing education and audit-and-feedback cycles.

Conclusion:

This initiative significantly reduced inappropriate piperacillin-tazobactam use and improved prescribing practices. Regular ID review, targeted feedback, and clinician education proved effective in promoting antimicrobial stewardship and optimizing patient care.

Kristin Schmidt, Saskatchewan Health Authority
Kriya Patel, Saskatchewan Health Authority
Jason Vanstone, Saskatchewan Health Authority
Carla Danielson, Saskatchewan Health Authority
Alyssa Baade, Saskatchewan Health Authority
Carina Folgering, Saskatchewan Health Authority
Robin Johnson, Saskatchewan Health Authority

Appropriate Prescribing

Abstract

Working Toward More Appropriate Antibiotic Use in LTC

Over the last five years, the Saskatchewan Health Authority Antimicrobial Stewardship Program (ASP) has been working to improve awareness about antimicrobial resistance (AMR) among long-term care facilities (LTCFs) in our province. This multi-faceted initiative has included awareness and education efforts, along with limited, focused interventions. Education sessions have specifically focused on awareness of AMR, appropriate management of suspected urinary tract infections (UTIs), and reducing antibiotic use for asymptomatic bacteriuria. Education sessions have targeted both clinical and administrative LTCF staff, residents and resident families, nursing students, and infection prevention and control (IPAC) staff.

The ASP has also collaborated with LTCF staff and IPAC practitioners on targeted interventions to reduce unnecessary urine cultures, including a provincial UTI surveillance project, a national research project aimed at a facility-level, and a focused, unit-level intervention. Our current work includes the development of an online learning module geared toward LTCF clinical staff to provide education on appropriate UTI management.

We will present an overview of our activities and discuss challenges and lessons learned in our five years of work at the intersection of nursing, long-term care, and antimicrobial stewardship.

Appropriate Prescribing

Abstract

Trends in Proton Pump Inhibitor Use in Three Canadian Provinces

Background:

Long-term use of proton pump inhibitors (PPIs) has been linked to increased risks to adverse events and the appropriate use of PPIs have been identified as an area of intervention for Choosing Wisely Canada. In this study, we examined population-level PPI utilization patterns among adults in three Canadian provinces from 2017 to 2023, highlighting trends across demographic and geographic groups.

Methods:

Dispensation records for PPIs (ATC A02BC) were extracted from CIHI's National Prescription Drug Utilization Information System (NPDUIS) for adults aged 18 and older in British Columbia, Manitoba, and Saskatchewan. Annual prevalence and incidence rates were calculated by age, sex, and geography. Treatment persistence and concomitant use of ulcerogenic drugs (e.g., NSAIDs) were also assessed.

Results:

Almost 2 million adults filled at least one PPI prescription between 2017 and 2023, with over 200 million defined daily doses dispensed in 2023. Prevalence increased slightly, with higher rates among females, older adults, and rural residents. Incidence decreased slightly, with higher rates among females and older adults, but less variation between rural and urban residents. A small proportion of incident users remained on continuous treatment three years after initiation and NSAIDs represented the drug class with the highest concomitance.

Conclusions:

Analyses of real-world administrative data reveal sustained PPI use among existing patients despite reduced initiation rates. These findings suggest that increased awareness of potential overutilization may have influenced usage patterns, but there are still opportunities for ongoing deprescribing initiatives.

Appropriate Prescribing

Abstract

Be Comfortable Calling it Viral: Over-Diagnosis of AOM in Children

Many clinicians recognize the immediate effects of overprescribing: side effects, cost, and for antibiotics, evolving resistance. But most of us underappreciate an even more important long-term consequence: when reassurance could have been provided but wasn't, families learn to seek care more urgently the next time similar symptoms arise, adding to already long wait lines in offices, emergency departments, and urgent care settings. This is especially true for children.

This presentation will examine patterns of overdiagnosis and overprescribing in common pediatric conditions, with a particular focus on acute otitis media (AOM). We will present findings from a recently published Canadian Paediatric Society study using a simple chart-review methodology, demonstrating that only about two-thirds of diagnosed AOM cases meet established diagnostic criteria. For the remaining third, unnecessary antibiotic prescriptions may contribute to avoidable side effects, increased health-care utilization, and in some cases, inappropriate referrals or surgical decisions regarding tympanostomy tubes.

Attendees will explore practical approaches for identifying and mitigating overdiagnosis in AOM and other high-volume pediatric presentations, including strategies for quantifying overdiagnosis and understanding its underlying drivers. In addition, guideline developers will gain insight into how guideline complexity may hinder uptake and influence diagnostic behaviour, a factor that clearly contributed to overdiagnosis in our study cohort.

Ultimately, this presentation will highlight how improving diagnostic precision can meaningfully reduce low-value care and strengthen the sustainability of pediatric practice.

Appropriate Prescribing

Abstract

Reducing Low-Value Knee MRIs Through a Primary Care Checklist

In response to increasing demand and significant wait times for MRIs in Manitoba, Shared Health Diagnostic Services launched a clinical practice change to enhance the appropriateness of knee MRI referrals. An internal audit in 2024 revealed that 77% of 1,264 knee MRI requisitions in Manitoba did not meet established criteria for appropriate imaging, highlighting a need to reduce low-value testing. Another main driver for this initiative is the year over year increase of MRI requisitions seen in Manitoba.

Effective March 1, 2025, all knee MRI requisitions from primary care providers must include the new “Knee MRI Appropriateness Checklist.” This initiative, is designed to standardize the diagnostic workup for conditions such as knee osteoarthritis before orthopedic consultation. The checklist’s methodology is endorsed by prominent bodies, including the Arthroscopy Association of Canada and the European Alliance of Associations for Rheumatology (EULAR).

The checklist was integrated directly into the EMR system, it is then faxed, along with the standard MRI requisition to Diagnostic Imaging’s Central Intake and replaces the need for a separate clinical history. Submissions lacking the completed checklist will be returned to the referring provider. This streamlined process aims to optimize resource allocation, decrease wait times for medically necessary examinations, and improve patient outcomes by ensuring that those most in need receive timely and appropriate diagnostic care. This policy represents a crucial step toward standardizing care and improving the efficiency of diagnostic services across the province.

Environmental Sustainability



Dominique Duquette, Victoria Hospice
Kara Schneider, Victoria Hospice
Spencer Graham, Island Health

Environmental Sustainability

Workshop

Green Teams for Planetary Health: A Driver to Reduce Medication Waste

Goal:

Participants will have the opportunity to draw from the Victoria Hospice Green Team's lessons learned to develop an elevator pitch proposing a Green Team, and an environmental sustainability initiative, in their clinical setting.

Activities:

The first 10 minutes for the workshop will be a presentation by Spencer Graham, Green Team coordinator with the Environmental Sustainability Program at Island Health. He will share information about the Green Team Program. Dominique Duquette and Kara Schneider, palliative care professionals at Victoria Hospice, will then present the lessons learned from the Victoria Hospice Green Team's medication waste project for 15 minutes.

Participants will have a 10-minute break and return into small groups to apply the lessons learned to develop an elevator pitch/proposal for a Green Team, and environmental sustainability initiative, for their clinical setting.

During the 30-minute workshop, the presenters will circulate between the small groups to facilitate critical thinking and offer insights to address challenges.

Phase one: Develop an elevator pitch for justifying a Green Team in your clinical setting to your organizational leadership team.

Phase two: Develop a proposal for an environmental sustainability initiative that includes anticipated challenges and strategies to overcome them. Participants can bring their own ideas or choose from the suggested case studies.

Wrap-up: Return to the large group to share examples of elevator pitches and environmental sustainability initiatives.

Impact:

Participants will leave the workshop with a working knowledge about creating a Green Team in their clinical setting.

Environmental Sustainability

Abstract

Adding Antidote to the Fire: Building Climate Resilience in Rheumatology

The Canadian Rheumatology Association has created a series of planetary health initiatives to promote actionable steps to reduce the carbon footprint of clinics and hospitals with emphasis on high yield patient care actions, reducing unnecessary testing, and streamlining service delivery.

We created a bilingual implementation toolkit to summarize current literature and featuring tangible steps that clinicians can take to integrate environmental sustainability into their practices. To ensure knowledge translation, we conducted an interactive in-person workshop at our national annual scientific meeting and presented virtual national pediatric rheumatology rounds, created a resource hub on our national website and social media channels, and provided association-wide membership email updates.

Our “Around the Rheum” podcast series has an international audience and we produced distinct episodes, in English and French, about planetary health and rheumatology. After launching “Sustainable Health Care: An Implementation Guide for Rheumatology” in May 2025, we have measured 536 toolkit website views, 579 podcast downloads, 53 participants at workshops, 1755 impressions on X and 2938 impression on LinkedIn. We are also launching a national-wide RheumBingo campaign in early 2026 leading up to our annual scientific conference. In this way, we will track how many rheumatologists and their offices complete the top recommendations from the toolkit. These tools provide implementable steps to help healthcare workers raise awareness, reduce carbon footprint, build local healthcare resilience, improve patient care, and reduce costs.

Julia Sawatzky,, University of Alberta
Lucas B. Chartier, University of Toronto
Mary-Lynn Watson, Dalhousie University
Bernard Mathieu, Université de Montréal
Katie Gardner, Dalhousie University
Samuel Campbell, Dalhousie University

Environmental Sustainability

Abstract

Emergency Medicine for People and Planet: Recommendations for Choosing Wisely

Goal:

To create the first set of Choosing Wisely climate-conscious recommendations for Emergency Physicians in Canada.

Activities:

We conducted a literature review to explore sustainable emergency medicine practices that are supported by quality improvement studies, peer-reviewed research, expert consensus, and/or clinical guidelines. We also reviewed the existing Choosing Wisely Canada (CWC) climate-conscious recommendations that are relevant to emergency care. A list of recommendations with evidence-based rationales was created by the authors and reviewed by the Canadian Association of Emergency Physicians (CAEP) CWC Committee.

Impact:

We created a list of five climate-conscious Choosing Wisely recommendations for Emergency Physicians:

Don't use sterile gloves when non-sterile gloves are sufficient, and don't use non-sterile gloves when hand hygiene is sufficient;

- Don't use sterile saline to irrigate non-surgical wounds when tap water can be used instead;
- Don't insert 'just-in-case' intravenous cannulas in patients in whom IV medications have not yet been ordered;
- Don't prescribe greenhouse gas-intensive metered-dose inhalers for asthma and/or Chronic Obstructive Pulmonary Disease where an alternative inhaler with a lower carbon footprint containing medications with comparable efficacy is available and patient-appropriate;
- Don't dispose of general medical waste in a biohazardous waste container.

Challenges:

Because sustainable healthcare is a rapidly growing field, it was challenging to synthesize the high volume of recent literature and identify practical and feasible point-of-care decisions that are relevant to Emergency Physicians.

Lessons Learned:

We identified five specific opportunities where Emergency Physicians can engage in climate-conscious decision-making.

Katie Gardner, Dalhousie University
Sam Campbell, Dalhousie University
Gillian Sheppard, Memorial University
Kavish Chandra, Dalhousie University
Aaron Sibley, University of PEI

Environmental Sustainability

Abstract

Educating Emergency Medicine Providers on the Environmental Co-Benefits of Choosing Wisely

Over two days, emergency medicine clinicians, researchers, and administrators convened in person and online at the Centre for Climate Change and Adaptability in P.E.I. to explore Choosing Wisely in emergency medicine with a particular focus on planetary health. Through presentations and interactive breakout sessions, participants examined how health systems—especially emergency departments—contribute to the climate crisis and discussed opportunities to leverage Choosing Wisely to advance both high-quality care and environmental stewardship. Facilitated discussions centered on the emergency medicine and pediatric emergency medicine

Choosing Wisely recommendations, including strategies for local implementation and anticipated barriers. National experts shared insights on the science of de-implementation and the development of climate focused Choosing Wisely recommendations from the Canadian Critical Care Society. Participants left with a commitment to educate their local teams and identify opportunities to integrate Choosing Wisely into practice. AERO also committed to building a research agenda to better understand barriers to Choosing Wisely in emergency medicine and to study de-implementation strategies within the ED. This work will be complemented by the forthcoming Canadian Association of Emergency Medicine Choosing Wisely Climate recommendations.

Dr. John McGraw, University of Toronto
Dr. Myles Sergeant, Canadian Coalition for Green Health Care
Dr. Bhavini Gohel, University of Calgary

Environmental Sustainability

Workshop

Advancing Environmental Sustainability and Patient Safety through Standards and Assessments

In 2025, Health Standards Organization (HSO) announced its Climate Action Strategy, committing to support low-carbon, climate-resilient, and sustainable health care through standards, accreditation, and education.

To advance this work, HSO partnered with the Canadian Coalition for Green Health Care (CCGHC) to develop a new Climate Action benchmarking assessment, based on the CCGHC Green Hospital Scorecard.

The assessment was piloted in summer 2025 by 44 organizations representing 63 hospitals across Canada and Belgium. Designed as a baseline tool to support all hospitals and streamlined to reduce administrative burden, the first iteration was well received. Participants appreciated that the assessment supported their short- and long-term climate roadmaps, enabled organization-wide conversations on climate, and helped position climate as a strategic priority that benefits patient care.

This assessment is aligned with the work that HSO is doing to integrate environmental sustainability across Required Safety Practices (RSPs) and Standards, including the newly released National Standard for Medication Management and Infection Prevention & Control.

As HSO and CCGHC prepare to launch the next iteration, this workshop offers participants an opportunity to:

- Learn what the baseline assessment provides
- Understand linkages to standards and RSPs
- How to efficiently identify, choose and implement projects to help organization become more resilient with better patient care along with reductions in resources and waste

Kyobin Hwang, Temerty Faculty of Medicine, University of Toronto
Zorana Lynton, Cumming School of Medicine, University of Calgary
Brooklyn Rawlyk, Section of Ophthalmology, Department of Surgery, University of Calgary
Loukman Ghouti, Faculty of Medicine, Dalhousie University
Milli Roy, Temerty Faculty of Medicine, University of Toronto

Environmental Sustainability

Abstract

Driving Sustainable Change in Ophthalmology: A National Sustainability Toolkit

Goal:

This initiative develops a national sustainability toolkit with the aim of decarbonizing Canadian eye care. Ophthalmology-focused Choosing Wisely Canada (CWC) guidelines will also be developed, as these have not existed to date.

Activities:

A pan-Canadian working group developed a practical evidence-based resource to decarbonize ophthalmic practice by addressing buildings and energy, food/water/waste, transportation, supply chain and procurement, diagnostics and drugs/devices, and sustainability in the operating room. The toolkit will be formally launched by the Canadian Ophthalmological Society in 2026.

Impact:

Implementing these practices will directly address ophthalmology's disproportionately high contribution to greenhouse gas emissions arising from the health care sector as a whole. To ensure optimal impact, the project was developed from earliest proposal stages to include multiple strategies including plans to:

- Develop CWC ophthalmology recommendations
- Develop self-serve materials for amplification of the toolkit
- Publish a related article in the Canadian Journal of Ophthalmology
- Develop an ophthalmology specific planetary health resident education curriculum for the Royal College of Physicians & Surgeons of Canada (RCPSC)
- Outreach to industry and the pharmacy sector

The toolkit has already been featured at the Canadian Ophthalmological Society annual national conference.

Challenges:

Achieving a high degree of penetration in dissemination, translating knowledge into actual practice, and keeping the living document up to date will be challenges. Barriers to implementation may include reluctance to change "eminence-based" rather than evidence-based practices, medicolegal, and cost concerns.

Lessons Learned:

This work requires early inter-professional engagement, but the level of interest across Canada exceeded all expectations

Environmental Sustainability

Abstract

Lower Dialysate Flow: A Win for Patients and the Planet

Nephrology services are among the most resource-intensive areas in healthcare. Hemodialysis, while lifesaving for patients with chronic kidney disease, requires substantial water and energy and generates significant wastewater. It is widely assumed within the nephrology community that increasing dialysate flow from 500 mL/min to 800 mL/min improves solute clearance. However, emerging evidence suggests the clinical benefits of higher dialysate flow are limited in vivo, while the environmental impact is substantial.

By standardizing dialysate flow at 500 mL/min across our program, approximately 45,600 L of water are saved per month, translating to an annual reduction of 23.4 kg CO₂e. Additional environmental benefits include lower energy consumption from dialysis machines and water purification systems, as well as reduced wastewater output.

Some patients expressed concern about this change, questioning whether their treatment effectiveness would be affected. Earlier and more robust patient education would likely have eased this transition. Ongoing laboratory monitoring is being performed to ensure treatment adequacy and patient outcomes remain unchanged.

Implementing a lower dialysate flow rate demonstrates that high-quality patient care can be maintained while significantly reducing the environmental footprint of hemodialysis

Environmental Sustainability

Abstract

Choosing Wisely for the Environment: Reducing Single-Use Plastics in Endoscopy

Goal:

The objective of this initiative is to reduce single-use plastics through systematic procedural improvements. By evaluating current practices and implementing targeted interventions, the CMH Endoscopy Department aims to promote more sustainable resource utilization while maintaining high standards of patient care and operational efficiency.

Activities:

A comprehensive review of departmental workflows identified several opportunities to decrease reliance on single-use plastics. One key improvement involved replacing individual large plastic bags, traditionally used to store patients' personal belongings, with durable and reusable wheeled plastic bins. This transition not only reduces plastic consumption but also streamlines the handling and organization of patient items. Additionally, the department eliminated the frequent use of small disposable water bottles by introducing larger water containers, significantly minimizing plastic bottle waste. A further advancement was the adoption of Stryker suction canister technology, enabled the complete discontinuation of single-use suction liners. Collectively, these changes represent a strategic shift toward reusable systems and environmentally responsible operational practices.

Impact:

With an average daily volume of roughly 38 procedures (each previously requiring one plastic bag, one suction liner, and an estimated 1.5 small water bottles), the department's sustainability efforts are projected to divert roughly 2,326 kilograms of plastic waste from landfill annually. This substantial reduction demonstrates the tangible environmental value of adopting reusable alternatives. It highlights the potential for similar interventions to be replicated across other clinical settings seeking to advance environmentally conscious healthcare delivery.

Challenges: & Lessons Learned:

Successful implementation required careful planning, staff engagement, and clear communication, notably as workflows shifted from long-standing disposable practices. Ongoing training and reinforcement supported consistent adoption. Overall, the initiative showed that proactive sustainability efforts can be integrated into clinical operations without compromising efficiency or patient care, highlighting the value of small, consistent changes in high-volume environments.

Environmental Sustainability

Abstract

Aligning Environmental Stewardship with Choosing Wisely in Newfoundland and Labrador

The planetary health crisis necessitates the decarbonization of our healthcare systems. In Newfoundland and Labrador (NL), several recent coordinated initiatives are driving progress toward a more climate-resilient health system. By reducing emissions, waste, and resource use, NL's efforts align with Choosing Wisely principles and demonstrate the co-beneficial impact of environmental stewardship.

In 2024, desflurane, an anesthetic gas with high global warming potential, was phased out across all facilities. Nitrous oxide is similarly associated with high global warming and plans are now underway to decommission centralized piped systems, which typically report leakage rates >90%, in favour of portable tanks. In 2025, the Government of NL launched a Climate Change Health Vulnerability and Adaptation Assessment to evaluate risks and guide responsive strategies, laying the foundation for long-term resilience.

Sustainable infrastructure is also a priority. The new Western Memorial Hospital features the largest geothermal heating and cooling system in Canada, earning LEED Silver Certification, and setting a national benchmark for green healthcare design. Additionally, a four-year (2019-2022) provincial government grant supported upgrades to lighting, heating, and cooling systems across 21 Eastern Zone facilities, yielding annual reductions of 14 million pounds of CO₂ emissions and \$2M in annual operating costs.

In 2025, NL Health Services developed an Environmental Sustainability Strategic Plan, including the establishment of an Environmental Sustainability Office, aligning with a key goal of the National Roadmap for Planetary Health and Sustainable Health Systems. Implementation is scheduled to begin in 2026. These actions reflect a provincial commitment to embedding climate resilience and sustainability into healthcare.

Stacey Butler, Unity Health Toronto
Tony Ning, Unity Health Toronto
George Alexander Balaci, Unity Health Toronto
Terry Li, Unity Health Toronto
Sze Man Tse, Centre Hospitalier Universitaire Sainte-Justine
Geneviève Digby, Queen's University
Ivy Lam, University of Toronto
Jill Hubick, Lung Saskatchewan
Erika Penz, University of Saskatchewan

Alexander Singer, University of Manitoba
Alan Kaplan, Family Physicians Airways Group of Canada
Andrew O'Keefe, Memorial University
Sakina Walji, Sinai Health System
Samantha Green, University of Toronto
Celia Culley, Island Health
Valeria Stoyanova, University of British Columbia
Andrew Kouri, Women's College Hospital
Samir Gupta, Unity Health Toronto

Environmental Sustainability

Abstract

A Conversation Aid for Climate-Conscious Prescribing of Inhalers

Goal:

We aimed to develop a conversation aid that promotes climate-conscious prescribing of inhalers for asthma and COPD via a shared decision-making approach at the point-of-care. This tool would facilitate implementation of the Canadian Thoracic Society/Choosing Wisely Canada recommendation to not prescribe greenhouse-gas intensive metered-dose inhalers (MDIs) when a suitable alternative with a lower carbon footprint is available, with the caveat that patient ability and preference must be considered.

Activities:

Using a rapid-cycle, iterative development process, our interdisciplinary committee first designed a prototype conversation aid using a web-based interface. We then conducted serial focus groups with patients with asthma and/or COPD (n=25) and interviews with family physicians (n=5) to optimize the tool's content, format, and usability, and identify considerations for implementation.

Impact:

We created a simple web-based tool that can be used at the point-of-care to engage patients and providers in considering environmental impact when selecting an inhaler. By engaging stakeholders in the development process, we gained new insights into their priorities and preferences (summarized through qualitative analysis), leading to an innovative approach that has the potential to significantly reduce inhaler emissions when implemented widely.

Challenges:

Challenges included creating a tool that contains sufficient information for patients and providers to discuss treatment options without significantly prolonging the clinical encounter.

Lessons Learned:

Balancing personal and financial health with the health of the planet is nuanced, but tools that are co-developed with end-users have the potential to be impactful in promoting sustainability and increasing awareness of the carbon footprint of healthcare

Caitlin Roy, Canadian Association of Pharmacists for the Environment
Tarek Hussein, University of Toronto
Kirsten Tangedal, Saskatchewan Health Authority
Shellyza Sajwani, University of Toronto
Sadaf Faisal, Canadian Pharmacists Association
Emma Lim
Arshpreet Randhawa, University of Saskatchewan
Aasha Jawad, University of Toronto

Environmental Sustainability

Abstract

Mobilizing Pharmacist-Led MDI-to-DPI Therapeutic Interchange

Goal:

To develop and pilot pharmacy-led tools and processes that support therapeutic substitution of Metered Dose Inhalers (MDIs) to lower-carbon alternatives such as Dry Powder Inhalers (DPIs), aligned with Choosing Wisely Canada's recommendation to avoid prescribing greenhouse gas-intensive MDIs when clinically appropriate alternatives exist.

Activities:

We will conduct a mixed-methods implementation study over 9 months (3 months pre-implementation baseline; 3 months implementation; 3 months post-implementation). Participating community pharmacies (1-2 sites across 1-2 provinces with pharmacist prescriptive authority) will apply a standardized therapeutic interchange protocol supported by pharmacist training, patient education resources, assessment tools, and substitution documentation processes.

Impact:

Outcomes include: (1) change in inhaler dispensing patterns over the implementation period, (2) patient acceptance and satisfaction, (3) pharmacist confidence and workload impact, and (4) identification of operational barriers and facilitators to adoption of low-carbon inhaler practice. This initiative has high potential scalability through national pharmacy networks and contributes to sustainable prescribing practices.

Challenges:

Potential challenges include pharmacist workload burden, variability in provincial prescriptive authority, patient resistance due to habit or technique limitations, and inconsistent payer coverage for DPI alternatives.

Lessons Learned:

Findings will inform development of replicable pharmacist-led implementation models, nationally applicable educational tools, and broader approaches to reducing low-value and environmentally harmful prescribing. This project strengthens alignment between medication appropriateness, climate stewardship, and pharmacist-driven practice change.

Geneviève Digby, Kingston Health Sciences Centre
Nicole de Smidt, Kingston Health Sciences Centre
Christine D'Arsigny, Kingston Health Sciences Centre
Amelia Wilkinson, Kingston Health Sciences Centre
Samantha Calder-Sprackman, Kingston Health Sciences Centre
Amy Vandewouw, Kingston Health Sciences Centre

Environmental Sustainability

Abstract

Launching and Spreading an Organization-Wide Inhaler Recycling Project

Goal:

Inhalers and respiratory devices are essential for treating respiratory diseases but have significant environmental impacts. Kingston Health Sciences Centre (KHSC) launched a hospital-wide inhaler recycling program using Go Zero boxes across two sites, including inpatient and outpatient units. This report outlines our quality improvement methodology and program impact.

Activities:

We procured Go Zero inhaler recycling boxes and placed them in high-use areas such as inpatient wards and ambulatory clinics. Appointment reminders from Respiriology clinic included prompts for patients to bring used or expired inhalers. Physician and allied health champions led an educational and awareness campaign with posters, presentations, internal news articles, and social media messaging. Academic evaluation included tracking the number, type, and weight of recycled materials.

Impact:

There are 15 participating hospital units as of October 2025, with a total of 19 Go Zero boxes across both sites. In the 22 weeks post-Go Zero launch (May 2025), 46.58kg of recyclable material were collected. The Asthma Injection Clinic collected the most inhalers overall, while the Internal Medicine wards led amongst inpatient units.

Challenges:

Challenges include maintaining consistency in the laborious data collection as the project expands and limiting the non-recyclable waste that is disposed in the boxes (3.6% of total weight).

Lessons Learned:

Project success was attributed to having designated QI champions, commitment to an academic evaluation, frequent and widely circulated internal and external media communications, and a growing organizational culture of environmental sustainability. Next steps are to estimate carbon emissions saved from the recycled materials.

Abstract

Redefining High-Quality Care: Why Environmental Sustainability Matters

The health care system is a large contributor to carbon emissions and environmental waste. Climate change has continued to impact the health and wellness of people and communities, and it is essential to consider environmental sustainability when delivering high-quality care. Now, more than ever, our relationship with the environment matters. As quality and patient safety leaders, we have a unique opportunity to model environmental stewardship by rethinking how clinical services use energy and resources. By considering environmental sustainability as a key component of high-quality care, one that is foundational to both individuals receiving health and wellness services and to the systems that support care, we can act to preserve the conditions for human and ecological health for current and future generations.

In British Columbia, we identified a need to strengthen the definition of quality to better center the importance of environmental sustainability in achieving a high-quality care. With the strong commitment across the health system to support environmentally sustainable, climate-resilient, high-quality care, we have incorporated environmental sustainability into the definition of quality. The strengthened definition of quality highlights the many co-benefits of supporting environmentally sustainable clinical services, such as improving efficiency, patient outcomes and safety. We'll walk through our newly updated BC Health Quality Matrix, which provides common language and understanding about quality through seven dimensions. We'll explore examples which showcase how you can consider environmental sustainability while supporting and leading high-quality care in the health system.

Abstract

Impact of Phlebotomy on the Environment and Clinical Efficiency

Background:

The healthcare system is responsible for up to 9.8% of global greenhouse gas emissions, particularly from single-use products and medical waste. The objective of this study was to assess the environmental and systemic impact of the use of 3.5 ml tubes recently introduced for phlebotomy in the Vitalité healthcare network.

Materials/Methods:

A retrospective study was conducted in New Brunswick health zones 4 and 5 from January to June 2025 on the changes that had been made: the association of BNP, PCT, and TROPi test requests (zone 5) with other tests; the association of TSH, Vitamin B12, and Ferritin with other tests (zone 4); and the replacement of 5.5 ml tubes with 3.5 ml tubes (zones 4 and 5). The environmental impact of plastic tubes was measured using the life cycle assessment method.

Results:

Before the switch, 828 liters of blood were collected annually in both areas using 151,990 tubes, representing 135 full-time work weeks. The resulting waste generated 17,629 kg of CO₂ (equivalent to 152,388 car kilometers). Following the switch, 388 liters of blood were collected using 113,326 tubes, representing 100 work weeks. The resulting waste generated 13,135 kg of CO₂ (113,278 km). In terms of direct savings, 53% (440 liters) of blood volume, 25.5% (4,494 kg) of CO₂, 25% (38,664 units) of tubes, and 34 work weeks (phlebotomist/nurse) were achieved.

Conclusion:

This initiative has shown very significant positive impacts on resources and the environment. Therefore, it is necessary to support these changes and encourage their deployment elsewhere.

Measurement & Evaluation



Samuel Boudreault, Université Laval
René Wittmer, Université de Montréal
Guylène Thériault, McGill University
Lisa Hannane, Université Laval
Julie Laurence, Hôpital Notre-Dame
Amanda Try, Collège québécois des médecins de famille
Frantz-Daniel Lafortune, Université Laval
Marc-Antoine Turgeon, Université Laval
Alexandra Dessureault, Université de Montréal
Pascale Breault, Université de Montréal
Geneviève Bois, Collège québécois des médecins de famille

Measurement and Evaluation

Abstract

Contributors to Primary Care Guidelines in Canada : A Systematic Review

Background:

In 2015, Allan et al. published a review highlighting the underrepresentation of family physicians among authors of Canadian clinical guidelines intended for primary care. Their findings showed that non-family physician specialists were disproportionately represented and more likely to disclose conflicts of interest.

Methods:

We conducted a systematic review following PRISMA 2020 guidelines. Eligible documents were clinical guidelines or guidance documents published within the past five years, intended for use by primary care clinicians in Canada, and applicable to all age groups and populations. We excluded hospital-based, specialty-specific, and provincial guidelines. Two independent reviewers assessed each document. Extracted variables included author specialty, conflicts of interest, and additional quality indicators adapted from the simplified G-TRUST tool.

Results:

Among 82 included guidelines, 40% involved at least one primary care physician. Overall, family physicians accounted for 14% of authors. Time needed to treat (TNT) considerations were reported in only 4% of guidelines, and visual decision aids were present in 11%. Conflicts of interest were more frequent among specialists (40%) compared with primary care physicians (10.5%). Only 27% of guidelines were supported by a dedicated systematic review, and 29% applied the GRADE methodology for recommendations.

Interpretation:

This updated review confirms that primary care physician participation in the development of Canadian clinical practice guidelines remains limited. Future guideline development should prioritize stronger representation from primary care clinicians and systematically integrate elements that reflect the realities of primary care practice.

Matthew Ahn, University of Toronto
Bilal Shakir, University of Toronto
Brianna Cheng, University of Toronto
Anika Garg, University of Toronto
Amna Zafar, University of Toronto
Jasrita Singh, University of Toronto
Tai Huynh, Choosing Wisely Canada

Measurement and Evaluation

Abstract

Does AI Choose Wisely? Evaluating AI Alignment with Choosing Wisely

Background:

Generative AI is increasingly being used to access medical advice by patients and providers, potentially influencing care decisions. It remains unclear whether AI guidance aligns with Choosing Wisely Canada's (CWC) recommendations for high value care. Assessing AI response quality is essential to inform better integration of high-value care principles into public-facing health information.

Goals:

To evaluate the accuracy, clarity, and completeness of AI-generated medical advice relative to CWC recommendations.

Methods:

Seven high-volume CWC recommendations were selected, and patient- and clinician-oriented prompts were developed through iterative consensus. Two AI tools (ChatGPT 4.0 and Google Gemini 2.5) were queried using the finalized prompts. Two raters assessed accuracy, clarity, risk communication, and reference of CWC recommendations using a standardized rubric. Descriptive statistics summarized findings.

Impact:

Across 88 queries, Google AI responses demonstrated excellent accuracy in 19.2%, good in 55.1% and poor in 25.6%. Clarity was strong with 68.1% rated excellent, yet risk communication was weak with 65.3% rated poor. Google AI referenced CWC recommendations in 18.1% of responses. ChatGPT demonstrated excellent accuracy in 34.7% of outputs, good accuracy in 48.6%, and poor in 16.7%. Clarity was strong at 62.8% excellent but risk communication was poor in 78.2% of outputs. ChatGPT did not reference CWC in any output. Performance varied across clinical topics.

Lessons Learned:

AI tools occasionally aligned with CWC guidance but were inconsistent, failed to explain the risks of over-use and rarely referenced CWC guidelines. These findings highlight the need for better integration of Choosing Wisely principles in AI-generated information.

Measurement and Evaluation

Workshop

Overtesting in MASLD: How Guidelines Can Drive Low-Value Care

Metabolic Associated Steatotic Liver Disease (MASLD) has recently emerged as a common clinical entity and is a source of overdiagnosis. Recent international guidelines are inciting Canadian primary care practitioners to undergo screening, active case finding and follow-ups of this condition. Benefits of these extensive workups are often not evidence based and roll out is quickly redirecting scarce frontline resources to low value care. Few studies show any positive impact of screening on morbidity or mortality and no treatment is readily available in Canada.

A panel of primary care experts decided to tackle the repercussions of widespread adoption of MASLD guidelines on the Canadian primary care landscape. Their review of literature led to the production of primary care recommendations for such screening in Quebec, available on the CQMF website (<https://www.cqmf.qc.ca/2025/12/02/steatose-hepatique-et-donnees-probantes-une-cuisine-compatible/>). These findings were presented at Preventing Overdiagnosis World Conference in September 2025 in Oxford, and multiple local workshops were organised in Quebec the same year.

This interactive workshop aims to describe the panel's publication and engage clinicians to think critically about the impacts of low-value screening in their practice. We use the concept of time needed to treat and a clinical decision making 1000-person-tool to highlight the resource-consuming impact the guidelines can have on primary care workloads, particularly in the context of questionable patient-important outcomes. The seminar will conclude with four recommendations and two algorithms to assist primary care clinicians in dealing with case-findings of liver steatosis and abnormal hepatic enzymes.

Yanrong Maggie Yang, University of British Columbia
Wade Thompson, University of British Columbia
Greg Carney, University of British Columbia
Colin Dormuth, University of British Columbia
Malcolm Maclure, University of British Columbia
Ellen Reynolds, University of British Columbia
Anshula Ambasta, University of British Columbia

Measurement and Evaluation

Abstract

HbA1c testing patterns in British Columbia in 2023

Background:

Choosing Wisely Canada recommends a minimum 3-month interval for HbA1c testing in people with diabetes, and a 6-month interval for individuals with stable glycemic control. Over-testing or under-testing can burden patients, create healthcare costs, and lead to overtreatment or unmanaged disease. There is no recent study on HbA1c testing patterns in British Columbia (BC).

Methods:

We examined HbA1c testing in adults eligible for BC Medical Service Plan in 2023 using health administrative data from BC Ministry of Health's databases. We calculated the median number of tests, total number of tests in 2023, and the proportion of repeated tests within 3 months, to identify potential over-testing and under-testing.

Results:

We identified 3 groups: diabetes (n=324,490), prediabetes (n=255,792), and no diabetes (n=3,876,461). The diabetes group had a median of 2 tests, but 25% (n=79,820) had 0 tests and 3% (n=9214) had >4 tests. Most of the prediabetes and no diabetes group had 0 tests, and 0.4% (n=1081) in the prediabetes and 0.1% (n=2189) in the no diabetes group had >4 tests. About 21% of all tests were repeated within 3 months in the diabetes group, compared to 9% in prediabetes, and 4% in the no diabetes group, suggesting potential over-testing.

Conclusion:

Our results demonstrate that both over-testing and under-testing with HbA1c is prevalent in BC. Future studies are needed to unearth the contributing reasons and design tailored interventions to improve the utilization of HbA1c in BC.

Matthew Ahn, University of Toronto
Doreen Day, Choosing Wisely Canada
Wendy Levinson, Choosing Wisely Canada
Tai Huynh, Choosing Wisely Canada
Yulia Lin, Sunnybrook Health Sciences Centre

Measurement and Evaluation

Abstract

Towards Better Stewardship: National Data Support Raising Single-Unit Transfusion Benchmark

Background:

Unnecessary RBC transfusions in stable, non-bleeding patients are associated with preventable harm, waste of a public resource, and expense to the healthcare system. To improve transfusion practices, Using Blood Wisely (UBW) established national benchmarks for hospitals in 2020, including a target of $\geq 65\%$ of single-unit RBC transfusions in adult inpatients.

Methods:

We conducted a retrospective analysis of inpatient audit data submitted by 169 hospitals participating in UBW from January 1 to December 31, 2024. Quartiles of single-unit transfusion rates were determined.

Goal:

We designed this study to assess whether using a benchmark higher than 65% was feasible to drive quality improvement.

Activities:/Impact:

The median single-unit transfusion rate among UBW-participating hospitals was 80%. The 25th, 50th, and 75th percentile thresholds were 70%, 80%, and 85%, respectively, placing the original 65% benchmark below the 25th percentile. We identified institutions achieving a higher benchmark of $\geq 80\%$ single-unit transfusions (50th percentile) for four or more consecutive months. Overall, 33% of hospitals participating in UBW would have met the proposed higher benchmark based on 2024 audit submissions.

Challenges:

Limitations include restriction of data to adult inpatients, variability in audit frequency, lack of clinical complexity adjustment and the program was not a controlled interventional study.

Lessons Learned:

These findings suggest that a higher benchmark of 80% reflects current high-performing practice and is achievable for a substantial subset of hospitals already engaged in transfusion stewardship. A higher level benchmark may help sustain momentum, encourage adoption of best practices, and further reduce unnecessary transfusions.

Medical Education



Medical Education

Workshop

Unfreezing the Frozen Shoulder: Too Much Care for Too Little Clinical Relevance

Objective:

To challenge current management of primary frozen shoulder (adhesive capsulitis) as an example of overdiagnosis and overtreatment, and to promote a value-based, interprofessional approach that prioritizes clinical relevance and patient-centered care.

Activities:

This session will examine the natural, often self-limiting course of primary frozen shoulder, contrasting it with common low-value practices: early imaging, repeated injections, excessive and prolonged physiotherapy and even surgery in selected cases. The presentation will emphasize interprofessional collaboration: patients, physiotherapists, physicians, nurse practitioners, radiologists, and sports medicine specialists working together to support clinical diagnosis, shared decision-making, progressive exercise programs, and judicious use of injections.

Outcomes:

By “unfreezing” our approach, teams can reduce unnecessary interventions, minimize risk and anxiety, optimize resource use, and improve patient knowledge, experience and autonomy.

Challenges:

Misdiagnosis, persistent outdated beliefs, entrenched habits, patient expectations, and system incentives favoring procedures remain key barriers. Effective collaboration requires clear role definition, strong communication, and a shared commitment to evidence-based practice.

Lessons Learned:

Doing less and achieving more for people disabled by a frozen shoulder. Interprofessional teamwork that emphasizes education, reassurance, and guided self-management often leads to superior outcomes while avoiding unnecessary interventions and resource use. This approach exemplifies how clinicians can choose wisely by putting patient-centered value and evidence-aligned care above habitual practice.

Medical Education

Abstract

RxFiles Academic Detailing: Supporting Clinicians in Menopause Management

We identified managing patients in menopause as a significant clinical practice and knowledge gap, and primary care providers are increasingly having to navigate widespread misinformation. To help address these challenges, we used academic detailing (educational outreach) to support evidence-based prescribing and strengthen provider education in this area.

From October 2023 to February 2025, 1,154 primary care clinicians in SK requested an academic detailing session (466 physicians, 206 nurse practitioners or nurses, 252 pharmacists, 139 medical residents, and 91 other providers). 14% of clinicians completed our post-session survey. All respondents agreed that the session content improved their knowledge, and 99% reported feeling more confident in managing drug therapy.

Among the key messages delivered, 59% of respondents reported that “subgroup analysis suggests less harm with MHT if <60 years old” would change their practice. More than half confirmed that “low-dose estrogen can be considered to treat VMS” aligned with their current practice. The message “levonorgestrel IUD provides 5 years of endometrial protection when used with any estrogen dose” will change the practice of 66% respondents. Additionally, 55% reported that “routinely asking about GSM promotes early recognition and treatment” would change their practice. 98% of respondents perceived no bias in the session.

Using the practical insights and practice-changing pearls gathered from these detailing sessions, we developed and delivered case-based conference presentations and workshops over the past year. These sessions reached primary care clinicians across multiple provinces and underscored both the need for menopause education and the meaningful impact it can have on clinical practice.

Medical Education

Workshop

Ensuring Medically Appropriate Treatment for All Patients: How is This Possible?

Every day, we are committed to providing the best possible care to our patients. In a context where clinical complexity, medical uncertainty and relational challenges are increasingly present, it is essential to equip ourselves with concrete tools to continue delivering care that is truly beneficial.

In Québec, and in other Canadian provinces, the medical, normative and ethical frameworks governing consent to care have been clarified in recent years and now promote a shared decision-making model that better supports medical appropriateness.

It is now clear that patient autonomy is not absolute and that any treatment, including CPR, must be both medically appropriate and desired by the patient. The concepts of “medical necessity,” “benefit,” and “patient’s interest” are essential and must guide the provision of pertinent care, to which patients may consent to or refuse.

Practices related to advance care planning, particularly the determination of goals of care (GoC) and levels of intervention (LoI), must follow the parameters of this model to prevent the delivery of disproportionate care—even in complex situations, such as requests based on religious beliefs.

Ethical analysis can also support reflection and decision-making in particularly complex issues, such as disagreements between the medical team and the patient or their representative regarding the withdrawal of life-prolonging treatments.

This workshop aims to achieve the following objectives:

- Recognize the importance of medically appropriate care
- Become aware of obstacles to medically appropriate care
- Learn about approaches and tools that promote medically appropriate care
- Know where to obtain additional support

Medical Education

Workshop

Women's Health: How the Reappropriation of Feminist Ideals Can Drive Overuse

Women's health has long suffered from systemic neglect, underfunding, and a lack of high-quality evidence. This historical inequity, however, is increasingly being exploited through the strategic reuse of feminist ideals – such as autonomy, empowerment, etc. – to promote diagnostic or screening tests, and diagnostic labels, medical treatments that are not supported by robust science.

Commercial actors can benefit from this and frequently use persuasive language (e.g., “You have the right to know,” “Be proactive,” “Take control of your health”) to amplify perceived benefits while obscuring or minimizing risks. This encourages overmedicalization, overdiagnosis, and the expansion of disease definitions or even the creation of new “diseases”.

Drawing on concrete examples across the reproductive life course – breast cancer screening add-ons for dense breasts, hormonal interventions for menopause, direct-to-consumer fertility and AMH testing, pharmaceutical marketing around “female sexual dysfunction,” and the broadening of diagnostic criteria for polycystic ovary syndrome – this presentation illustrates how commercial messaging can generate confusion, anxiety, and pressure to pursue unnecessary investigations or treatments. These trends risk delaying appropriate care, pathologizing normal physiology, and deepening inequities rather than correcting them.

The session will highlight what is required to support informed choices: transparency, balanced information, and a commitment to scientific rigour equal to that expected in other fields of medicine. Ultimately, improving equity in women's health cannot be achieved by lowering evidentiary standards or by promoting unproven interventions. Instead, it requires resisting commercial narratives that appropriate feminist language and ensuring that women receive accurate, contextualized, and meaningful information to guide decisions about their health.

Shangi Vijenthira, Queen's University
Dr. Samantha Calder-Sprackman, Queen's University
Dr. Amelia Wilkinson, Queen's University
Dr. Andrea Winthrop, Queen's University
Dr. Genevieve Digby, Queen's University

Medical Education

Abstract

Evaluating a Novel Way of Teaching Choosing Wisely Canada Recommendations to Medical Students

Goal:

Education around Choosing Wisely (CW) recommendations in medical school may help teach future physicians to incorporate these recommendations into their clinical practice. Since 2019, Queen's University medical students have submitted a reflective CW assignment as part of their QIPS Curriculum. Students pick one recommendation that they observed during a clinical rotation and explain how they witnessed it being followed/not followed and the contributing factors that led to the outcome. We examined the content of the answers to this assignment to understand how students are learning CW recommendations during clerkship, and to identify opportunities for improvement for teaching of this content.

Activities:

We reviewed 401 student assignments submitted from 2022-2025.

Impact:

Students described observing 133 different CW recommendations during clerkship while rotating through 25 different disciplines. Students were able to outline factors that contributed/did not contribute to the recommendations being followed or not.

Challenges:

The majority of students did not discuss or document if they discussed the recommendation with their preceptor during the clinical encounter.

Lessons Learned:

Students observed a variety of CW recommendations throughout clerkship. Students would benefit from more explicit instruction to discuss recommendations with their preceptors as this would be a valuable opportunity to gain further insight into factors that contribute to whether recommendations are followed or not. We plan to analyze factors that contributed to whether CW recommendations were followed or not and survey current clerkship students that completed this assignment to understand how the assignment and teaching CW recommendations can be improved in the curriculum.

Aylin Mansimova, Canadian Medication Appropriateness and Deprescribing Network
Lalitha Raman-Wilms, University of British Columbia
Brenda Schuster, Canadian Medication Appropriateness and Deprescribing Network
Louise Papillon-Ferland, University of Montreal
Jennifer E. Isenor, Dalhousie University
Natalie Kennie-Kaulbach, Dalhousie University
Jimmy Lee, Karolinska Institute
Tiphaine Pierson, Canadian Medication Appropriateness and Deprescribing Network
Camille Gagnon, Canadian Medication Appropriateness and Deprescribing Network
Nicole Schönenberger, University of Bern
Emily G. McDonald, McGill University Health Centre

Medical Education

Abstract

Considerations in Integrating Deprescribing Competences into Health Professional Education

Background:

Polypharmacy leads to adverse drug events and increases healthcare burden. Deprescribing can help reduce polypharmacy, however, deprescribing education is inconsistently included in pre-licensure curricula. To address this, the Canadian Medication Appropriateness and Deprescribing Network (CAdEN) developed a framework to integrate deprescribing competencies into healthcare curricula. This study aims to investigate the barriers and enablers to the integration of deprescribing competencies within pharmacy, medical and nursing curricula.

Methods:

This qualitative study utilizes semi-structured interviews with curriculum developers in medicine, pharmacy, or nursing programs. An interview guide, developed using the COM-B model, examines factors impacting framework use. Faculty and senior leadership from undergraduate programs were selected through convenience sampling, targeting individuals experienced in curriculum development and/or framework implementation. Interview data is analyzed with the Theoretical Domains Framework (TDF) to systematically identify and categorize barriers and facilitators related to implementing the deprescribing curriculum.

Results:

Eleven interviews have been conducted (4 medicine, 5 pharmacy, and 2 nursing programs). The analysis is still underway. Preliminary analysis indicates that limited curricular space and a lack of emphasis from faculty leadership on deprescribing are primary barriers to incorporating the framework. Despite these challenges, educators' recognition of the clinical issues posed by polypharmacy and pressures from accreditation agencies are likely to support its inclusion.

Conclusion:

Identifying barriers and enablers to these processes, which will be shared, will be crucial formulating strategies to optimize framework uptake, enhance deprescribing education, and build future health care professionals' capacity for managing polypharmacy in clinical practice.

Kelsey Dumont, Saskatchewan Health Authority
Oluwaferanmi Adigun, Saskatchewan Health Authority
Katherine Neil, Saskatchewan Health Authority
Casey Phillips, Saskatchewan Health Authority
Leland Sommer, Saskatchewan Health Authority

Medical Education

Workshop

Opioid Wisely: Mapping the Journey from Accreditation to Action

Background:

Canada's opioid crisis is complex, requiring coordinated solutions across healthcare systems. Choosing Wisely Canada's Opioid Wisely initiative (2018) encourages thoughtful clinician-patient conversations to reduce opioid-related harms. Saskatchewan's provincial Opioid Stewardship program (2019) supports appropriate prescribing to promote individual and community health. Now, Accreditation Canada's January 2027 implementation of the Opioid Stewardship Required Safety Practice will actuate quality improvement activities nationally, establishing standards across all health systems. This pivotal moment creates opportunity for clinicians and leaders to strengthen opioid stewardship practices, align with national requirements, and demonstrate measurable impact on patient outcomes.

Workshop Overview:

Join this dynamic 70-minute interprofessional workshop designed to transform opioid stewardship into organizational action. Through engaging clinical and implementation vignettes, explore the eight Opioid Stewardship Required Safety Practice themes while discovering evidence-based resources, proven strategies, and real-world lessons from Saskatchewan Health Authority's award-recognized program.

This highly interactive session combines expert-led presentation with collaborative problem-solving. Guided group discussions empower clinicians and leaders to analyze your organization's resources, policies, procedures, and team capabilities—identifying concrete implementation opportunities. Leave with actionable quality improvement initiatives ready for deployment.

Attend as regional, network, or provincial groups to amplify learning, strengthen cross-sector relationships, and create immediate accountability for implementation.

What You Will Gain:

- Identify and operationalize Opioid Stewardship Required Safety Practice criteria within your organization
- Implement Opioid Wisely recommendations as part of strategic quality improvement activities
- Discover high-impact, low-effort measures aligned with national benchmarks using local data sources
- Connect with a national community of practice committed to safe and appropriate opioid prescribing

Medical Education

Abstract

Integrating Choosing Wisely into Pre-Clerkship Training

Goal:

Our goal was to strengthen students' ability to apply Choosing Wisely (CW) principles in clerkship through longitudinal, curriculum-aligned educational workshops. We intentionally built on existing curriculum integration by working closely with the outgoing CW STARS lead to ensure continuity and avoid duplication.

Activities:

We implemented a year-long series of educational workshops aligned with concurrent coursework. This included large-group awareness events on diagnostic and resource stewardship in liver disease, environmental sustainability and overuse in primary care and antimicrobial stewardship in clerkship, all using real-world clinical scenarios to anchor discussions. We also delivered an interactive workshop on having difficult conversations featuring live demonstrations, standardized patients and small-group facilitated breakouts focused on goals-of-care communication and avoidance of low-value care in palliative contexts. Post-event surveys were used to assess perceived learning. To reinforce learning longitudinally, bi-weekly CW recommendations were embedded in the pre-clerkship class newsletter and linked to current curricular content.

Impact:

Across activities, approximately 100 students participated. Learners reported increased awareness of CW principles, improved confidence navigating difficult conversations and greater understanding of appropriate prescribing, deprescribing, and diagnostic stewardship. Engagement was strongest when sessions were explicitly tied to curriculum content and clerkship preparation.

Challenges:

Facilitator scheduling posed logistical challenges and post-event survey completion was low when no participation incentive was offered.

Lessons Learned:

Embedding CW education longitudinally and in direct connection to clinical training enhances relevance and engagement. Combining case-based learning with experiential communication training is an effective strategy for preparing students to apply high-value care principles in clerkship.

Medical Education

Workshop

SUPADOC: Beacons of Renewal in Clinical Practice

Goal:

To give clinicians space to pause, reflect, and recognise their own “beacons of renewal.” The session encourages participants to reconnect with purpose, notice small signs of possibility in their work, and use their own creativity to support more sustainable and high-value practice. The aim is to strengthen resilience in a way that feels honest and practical.

Activities:

Participants begin with a short purpose-finding exercise inspired by Ikigai. This helps them name what matters to them, what their community needs, and what gives their work meaning. A second activity focuses on creative potential, inviting clinicians to notice where curiosity, problem-solving, or small innovations already show up in their day. These reflections are paired with five areas where renewal often appears in healthcare: cultural, ecological, social, professional, and responsible innovation. Through brief stories, quiet writing, and small-group conversations, participants explore where unnecessary tests, treatments, or routines may be creeping into their own practice and identify realistic opportunities to shift those patterns.

Impact:

The intention is for each participant to leave with a clearer sense of what sustains them, a renewed connection to their own creative capacity, and one small, concrete idea for reducing low-value care.

Challenges:

Many clinicians feel stretched thin and disconnected from the meaning that once guided them. In this environment, even small practice changes can feel out of reach.

Lessons Learned:

When clinicians have protected time to reflect, they often rediscover purpose and see new possibilities in their work. This grounding makes it easier to practise in ways that support Choosing Wisely, reduce overuse, and sustain themselves for the long term.

Alexandra Hauser, Queen's University
Maria Medeleanu, Queen's University
Hannah Brown, Queen's University
Victoria Chechulina, Queen's University
Clara Schott, Queen's University
Mary Arakelyan, Queen's University
Amelia Wilkinson, Queen's University
Samantha Calder-Sprackman, Queen's University

Medical Education

Abstract

From Curriculum to Culture: Implementing and Expanding Choosing Wisely Stewardship and Sustainability at Queen's School of Medicine

Rationale:

Climate change, biodiversity loss, and pollution are increasingly impacting human health, with global incidence of respiratory, cardio-metabolic, and infectious diseases rising as a result. Planetary health, a field at the intersection of environmental change and human health, highlights the health sector's responsibility to the climate crisis. Healthcare contributes approximately 5% of global emissions due to medical overuse, without improving patient care, and yet, is underrepresented in policy discussions. Choosing Wisely Canada (CWC) is a national organization that develops evidence-based recommendations to reduce unnecessary healthcare tests and treatments aiming to decrease emissions, waste, and iatrogenic harms, while maintaining quality care. There is a growing recognition of the need to integrate planetary health into CanMEDS 2025 and undergraduate medical education (UGME), as CanMEDS 2015 only recognizes environmental determinants of health under Medical Expert 5.2. Current Queen's University UGME curriculum includes this within Health Advocacy competency 1.1, only in regard to determinants of health.

Objective:

To evaluate planetary health education in UGME at Queen's University.

Methods:

Through a curriculum review of all pre-clerkship course content, we will identify learning events explicitly or indirectly linked to CWC recommendations and planetary health, and examine their mode of content delivery. Pre-clerkship students' understanding of CWC concepts will be evaluated through a survey administered at baseline, after an event to increase understanding of CWC concepts at the Kingston Campus, and at the end of the curricular year, regardless of event attendance. Results will be compared between time points and groups.

Impact:

This review and assessment of student understanding, will strengthen planetary health education within UGME at Queen's University to equip future physicians to practise as evidence-informed resource stewards.

Medical Education

Abstract

Prescribing Wisely: Launch of the Choosing Wisely Canada STARS Pharmacy Program

Goal:

STARS supports and empowers trainees to lead grassroots initiatives that raise awareness of Choosing Wisely activities, and advocate for integration of content related to Resource Stewardship into medical school curriculum. Given deprescribing is a strategic priority for CWC, coupled with the crucial role that pharmacists play in delivering high-value care and emerging interest from student pharmacists, CWC expanded STARS to include student pharmacists beginning in September 2025.

Activities:

STARS Pharmacy runs in parallel to the medical student program, from September to April. All students first participate in a virtual Fall leadership summit, then take learnings back to their local schools to implement changes under the guidance of a local faculty advisor. Students also participate in three roundtables from October to March, to discuss initiatives and facilitate collaboration between sites. Two of these roundtables is a joint session with medical and pharmacy students, whereas the other one is separate. A year-end leadership summit is then held in the Spring.

Impact:

CWC liaised with the Association of Faculties of Pharmacy of Canada to identify a Pharmacy lead, who in turn recruited local faculty advisors from each pharmacy school. Faculty advisors facilitated student recruitment with guidance from CWC. Seventeen students from 10 of 11 pharmacy schools were enrolled in STARS.

Challenges:

Identifying an invested faculty lead to meaningfully co-lead efforts. Securing funding to support this program longitudinally.

Lessons Learned:

Value in working with partners to develop mutually agreeable solutions that promote program development.

Medical Education

Abstract

Impact of the Choosing Wisely Canada STARS Program

Goal:

Choosing Wisely Canada launched STARS (Students and Trainees Advocating for Resource Stewardship) in 2015 to support and empower medical students to lead grassroots initiatives that raise awareness of Choosing Wisely activities, and advocate for integration of content related to RS into medical school curriculum. While previous evaluations assessed STARS' early impact on curriculum change and awareness-building activities, little is known about the long-term impact of the STARS program.

Activities:

STARS runs from September to April, mirroring the academic year. Students participate in a virtual Fall leadership summit and then take lessons learnt back to their schools and implement changes under the guidance of a local faculty advisor. Students also participate in bimonthly evening roundtables, to discuss initiatives and facilitate collaboration between schools. A year-end leadership summit is then held in the Spring. Students then submit a year-end report, which summarizes their output. CWC shares these reports with funders and medical school leadership. Reports were available starting from the 2019-2020 academic year. We reviewed annual reports from 2019 until 2023 to summarize the impact that STARS students have had on Canadian medical education.

Impact:

From 2019-2023, approximately 70 students led 297 activities at all Canadian medical schools. Common activities included awareness building activities (107), curriculum changes (45), resource stewardship conferences/campaigns (40), social media campaigns (12), and publication of peer reviewed research (3). Students often collaborated between institutes to plan activities. They generally targeted undergraduate MD students. Initiatives reach varied from local to national. Barriers and enablers to success were also identified.

Abstract

Use of Summer Student Research Projects to Improve Antimicrobial Stewardship

Although hospital antibiograms are widely available in public domains, they may overcall resistance when extrapolated to common community acquired infections, such as meningitis, pneumonia, cystitis, and skin and soft tissue infections. Clinical & Laboratory Standards Institute (CLSI) has called for the need for enhanced community antibiograms, but acknowledges the challenges due to lack of centralized laboratories to take on this responsibility. LifeLabs BC, a regional laboratory network with 129 collection centres in rural and urban BC communities, is uniquely positioned to address this challenge. In summer 2025, we recruited 10 university undergraduate students from various disciplines (medicine, pharmacy, and neuroscience) to create enhanced antibiograms to address community needs. Using the data collected at LifeLabs regional microbiology laboratories, we generated and statistically analyzed reports for the benefit of community healthcare, public health, and antimicrobial stewardship teams.

These antibiogram topics range from blood culture, bacterial meningitis pathogens, pediatric urine culture, sexually transmitted infections, carbapenem resistant organisms, ear pathogens, and doxycycline baseline resistance rates in various communities. We acknowledge that many of the published infectious disease guidelines are based on American data which are not always applicable to the British Columbia (BC) population. An evaluation is required to determine whether these clinical guidelines are still within the Canadian context based on local BC community data. This presentation will share our successes and challenges in this journey and hope to influence colleagues in academia and clinical laboratories to start the same initiative.

Ou Jia (Emilie) Wang, University of British Columbia
Chaocheng Liu, University of British Columbia
Seungwon (Sara) Choi, Queen's University
Harman Toor, University of British Columbia
Bei Yuan (Ethan) Zhang, University of Toronto
Sabrina Nurmohamed, University of British Columbia

Medical Education

Workshop

Bridging the Knowing-Doing Gap: Case-Based Learning for Dermatology Stewardship

Goal:

To share a case-based educational intervention that embeds CWC dermatology recommendations into medical education, and facilitates translation of resource stewardship into clinical practice.

Activities:

With our recently published evaluation of five 10-min case-based CWC dermatology videos co-created by medical students, dermatology residents, and a community dermatologist, this workshop session introduces new materials to support learners in applying stewardship knowledge. Survey data from 62 medical students across 10 institutions identified notable relational barriers to implementing CWC principles, specifically citing supervisor disagreement (72.9%) and a fear of damaging professional relationships (61.0%). This greatly limits advocacy and application, despite increments in knowledge retention and enthusiasm for stewardship principles. Building on that work, we created communication toolkits and reflective exercises to help learners navigate these conversational and hierarchical challenges. The workshop will include (1) interactive activities based on the video curriculum, and (2) small-group discussions using the toolkits to explore clinical scenarios. Scenario-based guides will help participants practice advocacy within hierarchies, accompanied by a take-home reflection exercise on power dynamics and allyship opportunities.

Impact:

Educational interventions have historically focused on awareness of Choosing Wisely recommendations, yet a significant gap exists, as resource stewardship cannot occur without the language and confidence to question inefficient practices respectfully. This workshop positions communication skill-building as an important bridge between learning and implementation.

Lessons Learned:

This educational innovation models how evidence-informed, case-based learning can support learners to practice Choosing Wisely in clinical contexts.

Medical Education

Abstract

Implementing a National Resource Stewardship Certificate for Health Profession Learners

Goal:

This project aims to improve knowledge and application of Choosing Wisely guidelines and principles of resource stewardship, including environmental stewardship, among health profession students across Canada through a national, certificate-based course.

Activities:

The course consists of four sessions, two of which require synchronous attendance to encourage live engagement. Each session begins with speaker introductions, followed by expert presentations, and concludes with case-based discussions led by Dalhousie Choosing Wisely STARS student leaders. Formative quizzes are included to reinforce learning. The course was offered nationally for the first time in 2025, with over 300 students registered.

Impact:

While this year's course is ongoing, a planned quality improvement study will collect survey data to assess knowledge acquisition, engagement, and application of Choosing Wisely principles. Last year, a pilot version of the course at Dalhousie demonstrated improved knowledge and student engagement, with findings currently submitted for publication.

Challenges:

Scheduling synchronous sessions posed challenges for students across multiple time zones, potentially limiting live engagement despite efforts to encourage interaction.

Lessons Learned:

Early experience suggests that national collaboration and student leadership can successfully scale Choosing Wisely education. Live session attendance increases student engagement but poses accessibility challenges for participants in distant time zones. This project demonstrates a feasible, innovative approach to interprofessional resource stewardship education, combining guideline-based content, environmental sustainability, and interactive learning to promote evidence-informed, responsible clinical practice among future health professionals.

Medical Education

Abstract

“Escaping” Low-Value Care: Choosing Wisely Education Through an Escape Room

Goal:

To promote awareness and practical application of Choosing Wisely Canada recommendations in family medicine through an engaging educational experience using a gamified escape room format. The workshop aimed to increase confidence in identifying and addressing low-value practices related to prescribing, diagnostic testing, and routine screening.

Activities:

Medical student participants will form teams and complete a series of challenges formatted as an “escape room,” based on real-world primary care scenarios. Each puzzle corresponds to a Choosing Wisely recommendation, such as avoiding unnecessary imaging for low back pain. Teams interpret clinical clues and lab results from patient cases to “unlock” the optimal evidence-based management plan before time runs out. The workshop concludes with a structured debrief linking each puzzle to Choosing Wisely recommendations and resources.

Impact:

A pilot workshop with five participants demonstrated high engagement, and the gamified format fostered teamwork and reflection on resource stewardship. As ethics approval for formal evaluation was not yet obtained, only informal feedback was collected. A larger evaluation of the first official workshop involving approximately 30 students is planned following ethics approval.

Challenges:

Designing puzzles that balanced educational depth with playability required multiple iterations. Facilitator preparation and physical setup were time- and resource-intensive.

Lessons Learned:

Gamification created a highly engaging and memorable approach to teaching Choosing Wisely principles. Framing resource stewardship as a collaborative “escape” from low-value care can foster a culture of curiosity, teamwork, and commitment to safer, evidence-based, and patient-centered decision-making in family medicine.

U Yeong (Steven) Choi, McMaster University
Stefanie Yan Lee, McMaster University
Victoria Tan, McMaster University
Zonia Ghumman, McMaster University
Ahmed Taha, McMaster University

Medical Education

Abstract

Teaching Imaging Appropriateness Through a Visual Algorithmic Framework

Imaging appropriateness and indications are critical yet underrepresented components of undergraduate medical education. Learners often encounter imaging requisitions with limited guidance or prior teaching, resulting in a gap between guideline knowledge and clinical application. The Imaging Algorithm Handbook is developed at McMaster University to bridge this gap through a novel visual and algorithmic framework. Each section presents a concise flowchart that synthesizes Canadian Association of Radiologists (CAR), American College of Radiology (ACR), and Choosing Wisely imaging indication guidelines, applied to common clinical scenarios (e.g., right lower quadrant pain, pulmonary embolism, minor head trauma). By introducing this framework early in medical training within clinical settings, learners can develop practice patterns that reinforce evidence-based, resource-conscious, and sustainable imaging from the outset. Furthermore, it fosters interdisciplinary learning, highlighting radiology as an integral component of other medical disciplines

Patient Engagement



Amber Ruben, University of Alberta
Verna Arcand, Alexander First Nation Education
Robin Guyer, Kateri Memorial Hospital Centre
Jennie Herbin, Canadian Medication Appropriateness and Deprescribing Network
Amy Lamb, Indigenous Pharmacy Professionals of Canada
Larry Leung, University of British Columbia
Emily McDonald, McGill University
Jason Min, University of British Columbia
Inès Paschos, Canadian Medication Appropriateness and Deprescribing Network
Cheryl Sadowski, University of Alberta
Wade Thompson, University of British Columbia

Patient Engagement

Workshop

Building Respectful Partnerships with Indigenous Communities to Promote Wise, Culturally Safe Care

Impact:

Indigenous Peoples in Canada experience profound health inequities rooted in colonial policies. Addressing these inequities requires a holistic approach involving Indigenous-led initiatives that advance culturally safe and appropriate care grounded in Indigenous worldviews and priorities. The Canadian Medication Appropriateness and Deprescribing Network (CADeN) has taken a relational, decolonizing approach to this work by prioritizing respectful relationships with communities and co-creating initiatives based on Indigenous-identified needs. These experiences offer guidance for clinicians, researchers, and quality improvement (QI) teams seeking to advance Indigenous health equity.

Goal:

To equip participants with knowledge and relational tools needed to build ethical partnerships with Indigenous communities and co-develop meaningful initiatives (e.g., QI, research). The workshop will explore community engagement approaches rooted in the Four Rs—respect, relevance, reciprocity, and responsibility. This includes prioritizing principles of Indigenous data sovereignty, knowledge translation and community capacity-building through an Indigenous lens, and utilizing a framework of Ethical Space to embed Indigenous worldviews in work promoting culturally safe and appropriate care.

Activities:

Facilitators will share reflections from CADeN's journey and guide participants through small and large-group discussions using reflective questions centred around each of the Four Rs.

Challenges:

Building relationships with Indigenous communities requires deep trust, time, and a relational approach grounded in the Four Rs. Western clinicians and health teams may find engagement daunting and may lack clarity on how to begin respectfully.

Lessons Learned:

Strengths-based approaches, humility, intentional relationship-building, and a commitment to reciprocity and data sovereignty are essential for fostering ethical, impactful partnerships with Indigenous communities.

Patient Engagement

Abstract

Comparing Website Navigation for International Choosing Wisely Recommendations

Choosing Wisely is an international initiative with over 25 countries actively participating. It is unclear what the best user interface is to allow patients and physicians to search for and access relevant Choosing Wisely recommendations. The objective of this review is to compare the website navigation and search strategies of each country.

Each country's main Choosing Wisely website was visited, and information about their search tool and filters were extracted. All websites were translated to English by Google Translate.

17 countries were analyzed, and 14 Choosing Wisely websites (3 inaccessible) were visited. Most websites (n=11, 79%) had a filter to organize recommendations. The most common filter was medical specialty (n=9), followed by the organization who wrote the recommendation (n=3) and specific medical test involved (n=3). Many sites also had a keyword search tool (n=8, 57%), with some having more advanced search tools (n=3, 21%) allowing for searches using multiple keywords or complete phrases/questions. 3 sites provided a method to download their complete list of recommendations. There was a lack of more advanced technologies with only one site including a phone app.

Despite the challenges with navigating unique websites in different languages, the variability in the user interface and navigation for Choosing Wisely websites is illustrated. Further efforts are required to determine the optimal method for organizing and accessing recommendations. Additionally, there is room for developing new, more advanced search algorithms, potentially by incorporating artificial intelligence in the form of a chatbot.

Quality Improvement



Aynharan Sinnarajah, Lakeridge Health
Vincent Ho, Lakeridge Health
Caitlin Tumey, Lakeridge Health
Connie Stamp, Lakeridge Health
Karen Law, Enhance Ontario
Rachel Howe, Lakeridge Health
Colleen Wilkinson, Lakeridge Health
Hasan Zaidi, Lakeridge Health
Julie Lapenskie, Bruyere Health
Pete Wegier, Humber River Health
Sara Subramaniam, Humber River Health
James Downar, Bruyere Health

Quality Improvement

Abstract

Promoting Early Palliative Care: HOMR in Electronic Medical Record

Background:

Timely palliative care (PC) improves quality of life and system outcomes for patients and is a Choosing Wisely Canada recommendation. The Hospital One-year Mortality Risk (HOMR) tool is a validated, highly accurate tool that uses electronic medical record (EMR) data. It proactively screens patients with higher mortality risk and PC needs and can influence clinician behaviour at point of care.

Goal:

To locally adapt, implement and evaluate an EMR-embedded flagging system to promote earlier palliative approach to care in hospitalised patients.

Methods:

This quality improvement project used the Knowledge To Action framework and Kotter's Leading Change model to engage stakeholders and modify the build for the local context. Key change management steps were stakeholder meetings, pre-go-live education sessions, comprehensive implementation support, and iterative Plan Do Study Act cycles. Primary outcomes: Proportion of patients with nursing PC assessment within 72 hours of admission; Proportion of patients with documented advance care planning (ACP) notes.

Results:

The HOMR threshold was set at 44% (one-year risk of mortality) corresponding to approximately 10% of all admissions. Post-implementation, 7.0% of medical admissions were identified as HOMR positive. Amongst these, 28.1% received nursing PC assessments within 72 hours, identifying unmet PC needs in 32.2%. ACP was documented in 19.1% of patients. The most common severe symptom was tiredness and drowsiness.

Discussion:

A HOMR EMR tool quality improvement project led to meaningful increases in PC needs assessments and increased ACP documentation. Digital EMR innovations hold great promise in improving timely palliative care for seriously ill hospitalized patients. Background: Timely palliative care (PC) improves quality of life and system outcomes for patients. The Hospital One-year Mortality Risk (HOMR) tool is a validated, highly accurate tool that uses electronic medical record (EMR) data. It proactively screens patients with higher mortality risk and PC needs and can influence clinician behaviour at point of care.

Quality Improvement

Workshop

Fixing the System We Built (Oops): A Medical Imaging Stewardship Strategy for Choosing Wisely

Demand for diagnostic imaging (DI) services continues to grow, cases are becoming more complex, and patient wait times remain unacceptably long. Meeting Canadian Association of Radiologists' wait-time targets is increasingly difficult, in large part because a substantial proportion of referrals do not change management or improve outcomes. Evidence suggests that 35–50% of imaging may be low-value, consuming limited capacity and delaying care for those who need it most.

The Nova Scotia Medical Imaging Stewardship Collaborative brings together radiologists, non-DI clinicians, technologists, and patient/family advisors to design a smarter, more accountable system. Through co-design of evidence-informed imaging pathways, the Collaborative aims to support consistent, province-wide decision making and ensure access to high value tests. Initial priorities, aligned with Choosing Wisely recommendations, include lumbar spine imaging and knee and hip MRI—areas with high variation and high demand. Multidisciplinary engagement clarifies shared clinical goals, supports practice change, and strengthens system performance.

A single-entry model for referrals creates one equitable front door for outpatient requests. Applying stewardship principles at intake enables standardized triage, better prioritization, and ensures that every patient receives the right test at the right time. Analytics derived from this model will provide meaningful insight into wait times, support de-implementation of low value care, and inform future resource planning.

Long waitlists and the ongoing delivery of care that does not benefit patients contribute to moral distress for all DI professionals. Improving referral quality and focusing on 'meaningful' work has been linked to enhanced provider wellness, engagement, and retention.

Building a Medical Imaging Stewardship Framework is challenging, but the goal is simple and essential: improved patient care. This is noble work—and it cannot wait.

Quality Improvement

Abstract

Deprescribing Together: Transforming Polypharmacy Management in Private Practice

Polypharmacy, defined as the use of 10 or more medications, is associated with increased risks of adverse drug events, hospitalizations, and diminished quality of life. In private practice, solo nurse practitioners managing large patient volumes with limited resources and supports, often face challenges in systematically addressing medication appropriateness. To improve safety and reduce unnecessary prescribing, a solo nurse practitioner enrolled in a provincial quality improvement (QI) collaborative and implemented a structured care delivery model focused on medication reviews for patients prescribed 10 or more medications. Supported by a QI coach and a national network, iterative tests of change were conducted through chart reviews to identify eligible patients, collaboration with community pharmacies to reconcile medication lists and identify deprescribing opportunities, and patient education sessions to enhance medication literacy and shared decision-making.

Early results demonstrated improved identification of patients at risk, strengthened communication with pharmacists, and increased patient engagement in discussions about their medications. Participation in the QI collaborative enabled the practitioner to embed Choosing Wisely principles into routine workflows, demonstrating that frontline providers in resource-limited settings can leverage collaborative networks to implement sustainable, patient-centered approaches to polypharmacy management.

Quality Improvement

Abstract

Leveraging Data and Collaboration to Optimize IVIG Stewardship in Saskatchewan

Background:

Intravenous immunoglobulin (IVIG) is a high-cost, high-impact therapy. In November 2021, Saskatchewan launched the provincial IG Stewardship Program (IGSP) to ensure appropriate and safe utilization.

Goal:

To improve IVIG use across Saskatchewan by implementing standardized dosing processes, data transparency, and multidisciplinary intervention.

Methods:

IGSP clinical staff collaborate to review IGCP orders. Nurse navigators screen IVIG orders, document dosing interventions and physician consultation summaries, and provide targeted education to infusion staff and prescribers. Research and data support staff develop reports capturing metrics such as IVIG use and appropriateness based on patient demographics and diagnosis (e.g., adjusted body weight (ABW) calculations).

Impact:

The IGSP adopted a phased approach with an initial focus on IVIG prescription for evidence-based indications and ABW dosing compliance, which a more recent shift to assisting with optimization of diagnosis-specific weaning protocols. From November 2021 to September 2025, total provincial IVIG utilization was 694,661g; without ABW dosing, usage may have been 1,030,429g (335,768g IVIG avoided). Provincial utilization reached 143g/1,000 population (FY2023-24) and 155.2g/1,000 population (FY2024-25), achieving the lowest Canadian provincial per capita rate.

Challenges & Lessons Learned:

Data representation must remain adaptive to clinical needs. Ongoing education is essential as best practices standardize. Documenting interventions beyond ABW dose revisions demonstrates the IGSP team's broader value.

Conclusion:

Saskatchewan's IGSP model demonstrates how robust data and collaboration deliver measurable improvements in appropriateness, safety, and resource optimization, fully aligning with Choosing Wisely recommendations.

Quality Improvement

Abstract

Becoming a Hospital Choosing Carefully Even in Times of Turmoil

The idea of becoming a Choose with Care hospital dates back several years. This idea slowly took root, and over the past two years, concrete actions have gradually been implemented in our community, which includes five hospitals and various other healthcare settings. We will share our experience and how we managed to motivate the various stakeholders in different settings to obtain this designation. We will also talk about how this project has sparked discussions about other relevant ideas within the institution. What started as a small committee of three people has now grown into a very active committee dedicated to relevance.

We will recount the evolution of this committee, its actions, and its achievements. We will explain how teams are involved and how we also incorporate medical students into various projects. Even though we do not yet have the designation, we will share what we have learned and our plans for the future.

In a difficult political context, we have found that Choosing Wisely is a motivating factor for both managers and healthcare professionals.

We hope that this presentation will motivate other institutions to put relevance on their agenda.

.

Kelly Burak, Physician Learning Program
Douglas Woodhouse, Physician Learning Program
Diane Duncan, Physician Learning Program
Indra Budiyo, Physician Learning Program
Sampson Law, Physician Learning Program

Quality Improvement

Workshop

Designing Feedback With, Not For: A Co-Design Approach to Improving Audit and Feedback

The Calgary Audit and Feedback Framework (CAFF) is a pragmatic, evidence-informed approach to design and implement social learning interventions with Audit and Group Feedback (AGF). CAFF has been used in both in-person and virtual environments to successfully engage physicians and other healthcare providers in group learning environments with review of individual and group practice data, identification of improvement opportunities, and planning for personal practice change.

Co-design and authentic engagement of partners is critical to ensure feedback is designed with, not for, physicians and other healthcare providers. Co-design plays a crucial role in ensuring that audit and feedback interventions reflect clinicians' real needs and priorities, leading to change ideas that are practical, context-specific and personally relevant. When users contribute to shaping the structure and content of feedback, engagement improves, and change efforts are likely to sustain beyond the intervention period.

We will review best practices and practical lessons from our experiences, and participants will be engaged in interactive discussions with opportunities to share personal experiences and ideas, and to plan co-design interventions.

At the end of this workshop participants will be able to:

- Describe the components of the CAFF
- identify which partners should be included in a co-design approach and how to engage them
- Apply principles of human centered design to co-design of CAFF-based AGF interventions

Quality Improvement

Workshop

Unearthing Environmental Co-Benefits in Choosing Wisely Quality Improvement Efforts

Low-value care not only harms patients and wastes limited health care resources; unnecessary tests and treatments produce upstream and downstream environmental impacts, thereby contributing to the health sector's sizable environmental footprint. There is increasing awareness of the environmental co-benefits of reducing low-value care through the implementation of Choosing Wisely campaign recommendations. However, quality improvement (QI) teams engaged in implementation are typically not familiar with environmental sustainability dimensions and metrics, or the levers to enhance sustainability in health care, making it challenging to meaningfully integrate environmental considerations into their work.

This interactive workshop is aimed at equipping participants engaged in Choosing Wisely QI projects to better understand the ways in which their work intersects with environmental sustainability. An overview of the climate co-benefits of reducing low-value care and the intrinsic relationship between sustainability and quality will be provided. Participants will then be guided in the application of new tools that support the identification, measurement, and reporting of environmental co-benefits of implementing Choosing Wisely recommendations or resource stewardship QI. These include the Sustainability-Embedded Quality Improvement Toolkit, developed by CASCADES Canada and partners, which facilitates the identification of relevant sustainability principles and metrics for all QI projects; and the draft SQUIRE (Standards for Quality Improvement Reporting Excellence) Extension for Environmental Sustainability, which informs the reporting and dissemination of QI work with a sustainability co-benefit.

Examples drawn from participants' own QI work will be leveraged to demonstrate how these tools can be used to align environmental sustainability with the implementation of Choosing Wisely recommendations.

Quality Improvement

Abstract

Bringing Safety Back to the Front Burner: Evolving and Aligning RSPs and Standards

In 2025, Health Standards Organization (HSO) evolved the Required Organizational Practices (ROPs) to Required Safety Practices (RSPs). This intentional shift reflected the need for patient safety to be brought back to the front-burner of care.

As part of this evolution, HSO engaged a Patient Safety Advisory Group of national experts in quality and safety to refocus RSPs on evidence-informed safety imperatives. This exercise resulted in a consolidation from 38 ROPs to 24 RSPs.

The structure of the RSPs shifted from compliance to continuous quality improvement. A standardized structure of requirements was implemented for organizations to demonstrate 1) continuous learning activities; 2) measuring and monitoring; 3) benchmarking; 4) continuous quality improvement, and; 5) demonstrating quality and safety outcomes.

As a key pillar of patient safety, patient engagement was woven throughout the RSPs and highlighted within the Partnering with Clients to Improve Safety, Client Safety, and Health Equity RSPs.

In addition, HSO standards and RSPs also address Choosing Wisely themes of environmental sustainability and appropriate prescribing through the new Opioid Stewardship RSP, revised Antimicrobial Stewardship RSP, and the newly revised Medication Management standard. Choosing Wisely recommendations on appropriate use, patient engagement, and safe prescribing and deprescribing for antimicrobials, opioids, and other medications are called out as requirements, as criteria, or within supportive guidelines.

As patient safety and other evidence evolves to guide the effective and efficient delivery of care, HSO will continue to keep pace in reflecting these learnings through the development of standards and assessment programs for health and social services.

Tyler Good, Public Health Agency of Canada
Jorida Cila, Public Health Agency of Canada
Rhiannon Mosher, Public Health Agency of Canada
Catherine Guo, Public Health Agency of Canada
Mark Morrissey, Public Health Agency of Canada
Barbara Catt, Public Health Agency of Canada

Quality Improvement

Abstract

Quality Improvement Study to Optimize UTI management in Long-Term Care

Antimicrobial resistance significantly affects vulnerable populations like older adults in long-term care homes (LTCHs). Among this population, urinary tract infection (UTI) is the leading indication for antibiotics, with up to 70% of these prescriptions considered avoidable. This study tested novel behavioural science-informed quality improvement (QI) strategies in Canadian LTCHs, aiming to decrease unnecessary testing and treatment for residents who lack the minimum clinical signs and symptoms of UTI.

The two-pronged QI approach included: 1) targeted education for family and friends of LTCH residents; and 2) monthly feedback on urine culture rate and alignment with guidelines for staff. The QI strategies were implemented in eight LTCHs using an eight-month stepped wedge randomized cluster design. The mixed-methods evaluation included questionnaires, interviews, and focus groups.

The interventions were not associated with a statistically significant reduction in rate of urine culture orders, antibiotic prescribing for UTI, or increased alignment to guidelines. Greater improvement in alignment was associated with longer interventions and a smaller proportion of residents with dementia. Qualitative data highlighted the need for continual education and the challenge of adhering to guidelines when assessing residents with dementia.

Published literature identifies pressure from family caregivers as an important barrier to judicious UTI management, making it a focus of this study. However, this did not result in a detectable improvement in UTI testing or treatment. To meaningfully shift practice, culture change may be needed. Successful interventions will inclusively empower clinicians, non-regulated providers, residents and their caregivers to improve health outcomes as antibiotic stewards.

Quality Improvement

Abstract

Improving Referral Systems in Outpatient Physical Medicine and Rehabilitation

This quality improvement initiative aims to reduce the percentage of rejected/redirected outpatient referrals to rehabilitation physicians at the Regional Rehabilitation Centre in Hamilton, Ontario from a baseline of 10.5% to 5% within a 6-month period. This is essential because patient care can be delayed by up to 14 days per inappropriate referral, and creates non-value-added workload ("Extra or Over Processing") for clinical and administrative staff. A root cause analysis concluded that referring providers lack clear outlines of rehabilitation physician scope and subspecialty interests, exacerbated by frequent administrative staff turnover, time constraints in updating information, and lack of centralized referral systems.

Based on the root causes and supported by literature, the first proposed change idea in a series of Plan-Do-Study-Act (PDSA) cycles is the creation and dissemination of a repository outlining each physician's practice scope and patient population to administrative staff and referring providers (via website, email, and printed versions). Initial PDSA cycles will focus on a subset of physicians and scopes (prosthetics and orthotics), where this issue was first identified. The intention is to reduce inappropriate referrals by over 50%, thereby decreasing patient wait times and reducing the burden of redirecting misdirected referrals. Subsequent PDSA cycles will involve sustaining this repository to remain easily accessible, accurate and up-to-date, and appropriately scaling to other departments.

Lessons learned will inform a broader initiative to streamline referral systems across disciplines, regions and institutions in a sustainable and coordinated fashion.

Quality Improvement

Abstract

Improving Patient Non-Attendance Rates in Orthotics Clinic

Orthotic clinics are multidisciplinary clinics where physiatrists (Physical Medicine and Rehabilitation physicians) and orthotists collaborate to help patients achieve their functional goals with the use of orthoses (braces) for a variety of musculoskeletal, neuromuscular, and congenital conditions. High non-attendance rates at the outpatient orthotics clinics at the Regional Rehabilitation Centre in Hamilton, Ontario create an environment of suboptimal patient care and generate sources of waste including delays in time to provide care, non-utilized human potential from the physician and orthotist, and overprocessing due to scheduling burden from the administrative team. Gap analysis was performed using electronic medical records showing up to 30% of non-attendance. Root cause analysis of the current workflow with stakeholder input identified patient (eg. no longer needs services), provider (eg. unclear delineation of physician vs. orthotist roles), and institutional (eg. complex appointment reminder system) factors that lead to non-attendance. The aim of this Quality Improvement project is to reduce non-attendance rates for orthotics clinics from 30% to 15% within 18 months. Plan-Do-Study-Act (PDSA) cycles to implement new change ideas are in progress to reduce non-attendance, streamline the scheduling process and decision making, and establish sustainability of the changes. The first PDSA cycle is focused on changing the current manual reminder process to reduce the high rate of no-shows for new consults.

The local results aim to inform workflow approaches which may contribute to scalable solutions for other clinics within or across institutions to maximize provider utilization and decrease delays to time-sensitive patient care.

Petr Grenar, University Hospital Hradec Kralove
Jiri Novy, University Hospital Hradec Kralove
Dan Rakusan, Thomayer University Hospital Prague
Jiri Cyrany, University Hospital Hradec Kralove,
Radovan Maly, University Hospital Hradec Kralove

Quality Improvement

Abstract

Choosing Wisely Czech

Choosing Wisely Czech was established in 2023 as a Working Group of the Czech Society of Internal Medicine, building on earlier national efforts to promote high-value, evidence-based care. The aim of this presentation is to introduce the key activities of the initiative and highlight its rapid development within Czech clinical practice. Our work focuses on educational outreach, including hospital seminars, congress lectures, and structured teaching for medical students. We have developed the national Top Ten List for emergency medicine and collaborated with clinical pharmacologists on implementing Sick Day Rules to reduce medication-related harm. Choosing Wisely Czech has also contributed to international professional events, including the WCIM 2024 session. These activities underscore our commitment to reducing low-value care and strengthening patient-centred decision-making.

Douglas Woodhouse, Physician Learning Program
Kelly Burak, Physician Learning Program
Diane Duncan, Physician Learning Program
Sampson Law, Physician Learning Program
Laurel Collier, Health Shared Services
Zahra Rangipour, Physician Learning Program
Jacqueline Rainsbury, Physician Learning Program

Quality Improvement

Abstract

Beyond the target: Codesigning an Approach to Incorporating Outcome Scales to Improve A&F

Background:

Prescribing of antipsychotics to seniors living in Canadian long-term care (LTC) facilities is a growing concern. Nationally, potentially inappropriate antipsychotic use in this vulnerable population exceeds 24%, and with significant variation by facility. A target of 15% or less has been established; however, there are no agreed definitions for appropriateness of prescribing or intended outcomes.

Objective:

To identify and align patient outcome data with best practice recommendations, guidelines and expert opinion to improve the appropriateness of prescribing of antipsychotics and other sedating medications (including antidepressants and anxiolytics) to seniors in LTC.

Methods:

A co-design approach will be used to engage patients and family members, academics, and frontline staff and providers. Review and validation of RAI-MDS 2.0 assessment data will inform the definition of a target patient cohort and inform incorporation of outcome scales for issues such as depression, aggressive behaviour, medical instability, and cognitive status. A review of best practice evidence including the Canadian clinical practice guidelines for Assessing and Managing Behavioural and Psychological Symptoms of Dementia (BPSD) will inform appropriateness reporting on the use of antipsychotics, antidepressants and anxiolytics.

Outcome:

Development of an LTC prescribing report providing individualized, clinically relevant insight into prescribing of sedating medications with relevant peer comparators. Facilitated Audit and Group Feedback will be offered to clinicians on the basis of these reports, which will support participants to develop and implement practical and context-specific personal practice improvements and that will inform iterative updates to the LTC prescribing report format and metrics. The impact of the intervention on patient outcomes will be assessed.

Quality Improvement

Abstract

Reducing Urinary Tract Infections in Long-Term Care at Lakeshore Lodge, City of Toronto

Urinary tract infections (UTIs) are a major cause of morbidity, antimicrobial use, and hospitalization among long-term care (LTC) residents. CIHI data showed that Lakeshore Lodge's UTI rate exceeded both Ontario and City of Toronto Divisional averages, prompting a quality improvement initiative aimed at reducing inappropriate testing and antibiotic use.

Root cause analysis identified key drivers aligned with the Choosing Wisely Canada Practice Change Recommendations: inconsistent diagnostic practices, communication challenges between nurses and physicians (particularly after hours), lab result delays, and knowledge gaps among staff and families. Interventions included Choosing Wisely Canada provider resources, implementing the Public Health Ontario UTI assessment algorithm, removing "rule out UTI" from BSO referral criteria, introducing a UTI-specific SBAR communication tool, streamlining lab processes, and delivering multidisciplinary and family education.

Following implementation, the CIHI UTI indicator decreased from 4.2% to 1.9% from January 2023 to the end of December 2024, representing a substantial reduction in our UTI rates. Early 2025 data demonstrate sustained improvement, with our CIHI UTI indicator further decreasing to 1.1%. Sustainability has been supported by monthly monitoring, ongoing staff education, and the continued integration of standardized tools into routine clinical workflows. This project demonstrates that standardized assessment, improved communication, and targeted education can meaningfully reduce UTI rates in LTC settings while supporting antimicrobial stewardship.

Mary Kathryn Bohn, University of Toronto
Roy Augustin, Mount Sinai Hospital
Lucas B Chartier, University of Toronto
Luke Devine, Mount Sinai Hospital
Samik Doshi, Mount Sinai Hospital
Leanne Ginty, Mount Sinai Hospital
Elliot Lass, Mount Sinai Hospital
Felix Leung, Mount Sinai Hospital
William Mundle, Mount Sinai Hospital

Graeme Nimmo, University of Toronto
Alyson Sandy, Mount Sinai Hospital
Kelly Shillington, Mount Sinai Hospital
Amanda Simon, Mount Sinai Hospital
Amanda Steiman, University of Toronto
Ahmed Taher, University of Toronto
Cindy Tang Friesner, Mount Sinai Hospital
Cristina Zanchetta, Mount Sinai Hospital
Jennifer Taher, University of Toronto

Quality Improvement

Abstract

Quality Unlocked: A Practical Primer for Laboratory Medicine

Goal:

There are a lack of resources on how to prepare, execute, and sustain quality improvement (QI) initiatives in laboratory medicine. The project goal was to bridge this gap with the creation of a novel primer series.

Activities:

To outline QI framework concepts, we undertook a QI project aimed to reduce unnecessary serum protein electrophoresis (SPE) testing at a tertiary care hospital. Based on root cause analysis, two SMART aims were developed: 1) reduce SPE repeat testing within 75 days by 90% within 3 months and 2) reduce SPE testing in patients <50 years by 10% within 3 months. Systems-based change ideas were implemented including hard-stop rules in the laboratory and hospital information system, and modification of pre-printed requisitions in two specialty clinics.

Impact:

The impact of interventions were evaluated over one year. Data analysis showed there was a >99% reduction in repeat SPE testing less than 75 days. This change is in alignment with current guidelines that recommend a minimum of 3 months between consecutive SPE testing.

Challenges:

The secondary 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 the root cause analysis.

Lessons Learned:

Through a real-life clinical vignette, this primer describes key concepts of the QI framework, including change ideas, hierarchy of effectiveness, family of measures, and implementation cycles. This primer series is the first of its kind in laboratory medicine and aims to support engagement of clinical laboratory leaders in QI initiatives.

Quality Improvement

Abstract

Evaluating the Effectiveness of the “Ditch the Dipstick” Campaign in Long-Term Care

Background:

Choosing Wisely Canada’s Ditch the Dipstick campaign aims to reduce unnecessary urine testing in long-term care (LTC) settings with an educational poster, FAQs, and an informational sheet. While these resources have been widely distributed, there is limited information on their use and impact.

Goal:

To evaluate how Ditch the Dipstick material use, assess their usefulness, and identify opportunities for improvement to enhance effectiveness.

Methods:

A mixed-methods evaluation was conducted using online survey and semi-structured interviews. Personalized email invitations were sent to users who provided their contact upon downloading the resources. Survey data (n=35; 31% response rate) captured user experience and perceived practice change. Five interviews further explored implementation barriers, contextual factors, and recommendations for future iterations identified in the surveys. Responses were examined using descriptive statistics and thematic analysis.

Impact:

Respondents represented diverse clinical roles and settings across Canada. Materials were used to educate staff, explain care decisions, and guide clinical decision making. Most found the resources clear, practical, and comprehensive; 38% reported reduced unnecessary dipstick use, and 71% reported less time spent justifying decisions to avoid testing.

Challenges included unclear intended audience, variable physician engagement, difficulty assessing symptoms in older adults, and communication barriers with families. Participants recommended revisions to better address urinalysis overuse and adapt them for additional care settings.

Lessons Learned:

The Ditch the Dipstick campaign is contributing to practice changes. Findings informed a potential pilot study to collect baseline national urine testing data. Understanding perceptions and current practices will guide targeted interventions to improve care.

Quality Improvement

Abstract

A QI Initiative to Reduce Inappropriate Disposal of Non-Hazardous Waste

Background:

Canada's healthcare system is a major producer of greenhouse gases (GHGs). Among the major sources of healthcare GHG emissions is incineration of medical waste, including hazardous medications. At Parkwood Institute's outpatient physiatry clinic, a large amount of non-hazardous waste was being disposed of in hazardous waste bins, namely empty vials for non-hazardous medications. When full, these hazardous waste bins are incinerated, directly contributing to GHG emissions.

Goal:

Reduce the amount of medication vials inappropriately disposed of in hazardous waste bins, as measured by reducing the frequency of hazardous waste bin disposal from every 4 weeks to every 8 weeks.

Methods:

Fishbone framework, process map, Gemba walk, spaghetti map, and stakeholder interviews yielded 3 key root causes: lack of awareness of the environmental impact of inappropriate disposal, lack of alternative options for disposal of non-hazardous medication vial waste, and habit of those disposing of medication vials. Iterative PDSA cycles for three change ideas were introduced: 1) education about the environmental impact; 2) medication room re-design; and 3) introduction of new waste bin to divert non-hazardous waste. Process and balancing measures assessed fidelity of PDSA cycles and measured unintended harms, respectively.

Impact:

We successfully diverted >2.5kg/month of non-hazardous waste from incineration; by November 2025, the frequency of hazardous waste bin replacement decreased from every 4 weeks to every 10 weeks.

Lessons Learned:

In settings with high volume non-hazardous waste, evaluating disposal practices to ensure waste is not inappropriately sent for incineration can reduce healthcare costs and benefit the planet.

Rita Dharni, Canadian Society of Healthcare-systems Pharmacy
Angel Bhathal, Canadian Society of Healthcare-systems Pharmacy
Faith Norris, Canadian Society of Healthcare-systems Pharmacy
Rebecca Romanishen, Canadian Society of Healthcare-systems Pharmacy

Quality Improvement

Abstract

Empowering Excellence: The Choosing Wisely Hospital Pharmacy Champions Initiative

Goal:

To increase awareness and uptake of the updated Choosing Wisely Canada (CWC) Climate Change Recommendations for Hospital Pharmacy by engaging and showcasing sustainable practices across Canada.

Activities:

The Canadian Society of Healthcare-systems Pharmacy (CSHP) developed climate-related CWC recommendations and prepared a national promotional campaign to identify early adopters who could lead others. Key activities include sharing the recommendations with CSHP's Board and Provincial Branch Councils, launching a communications campaign, and initiating a "Choosing Wisely Champions in Hospital Pharmacy" contest. The contest invited pharmacy professionals to submit initiatives related to the CWC recommendations, which were evaluated by an expert panel. All submissions were highlighted through CSHP's website, newsletters, and social media.

Impact:

In total, seven submissions were received and two were selected for presentation at the CSHP National Conference. This project strengthened member engagement, encourage the adoption of sustainable and low-waste practices, and fostered innovative approaches to reducing the environmental impact of hospital pharmacy operations. Most importantly, it fostered the creation of a community of practice around planetary health.

Challenges:

Timeline adjustments were required to align contest development with internal review processes and the release of the updated recommendations.

Lessons Learned:

Clear communication, early involvement, and dedicated platforms for visibility and recognition were essential to supporting engagement and sustaining momentum for climate-conscious practice. Through broad communication and recognition, the awareness of climate action recommendations reinforced the role of pharmacy professionals in advancing Choosing Wisely principles.

Quality Improvement

Workshop

Scaling Choosing Wisely Through Quality Improvement in Primary Care

How do we move Choosing Wisely Canada's recommendations from awareness to sustained practice change? The Calgary Foothills Primary Care Network (CFPCN) has taken a proactive approach by embedding Choosing Wisely principles into quality improvement (QI) initiatives across multidisciplinary teams within the PCN and the 103 Patient Medical Homes it supports.

Senior leadership, managers, practice facilitators, patients, communications and evaluation team members were actively engaged and provided critical support for this initiative. Guided by input from our Citizen Advisory Board, three recommendations were prioritized. Toolkits were developed for each recommendation, including guidance, step-by-step instructions for launching QI projects, EMR optimization strategies, and supplementary tools and guidelines.

Practice Facilitators have introduced these resources to approximately 350 physicians and nurse practitioners, sparking engagement in CWC-themed QI projects supported by multidisciplinary teams. Practice Facilitators utilized QI tools such as fishbone diagrams and the 5 Whys to guide reflection and root cause analysis.

To amplify impact, the CFPCN will host a QI World Café in January 2026 where physicians will share innovative QI projects, including those implementing Choosing Wisely recommendations. These peer-led conversations aim to catalyze broader adoption and sustainable change across medical homes.

This workshop will showcase our approach, lessons learned, and practical strategies for scaling Choosing Wisely initiatives through collaborative QI. Attendees will engage in interactive small-group activities, such as exploring drivers and barriers within their own organizations. Participants will leave with actionable ideas to foster awareness, engagement, and measurable improvement in reducing low-value care.

Quality Improvement

Abstract

Turning Awareness into Action: Virtual Engagement for Choosing Wisely Success

Goal:

Advance Choosing Wisely at Island Health by fostering clinician engagement and identifying physician champions to guide meaningful practice change.

Activities:

We implemented a multi-pronged communication strategy to raise awareness of Choosing Wisely Canada (CWC) and highlight internal efforts to embed recommendations into practice. Central to this effort is an annual virtual symposium bringing together physicians, clinicians, and operational leaders to share best practices, highlight local initiatives, and explore implementation strategies. Since 2020 we have hosted five virtual symposiums and partnered in one in-person sustainability event, engaging over 350 participants, including close to 200 physicians island-wide. Attendance at each event ranges from 50-80 and informs Oversight Committee strategies, including identifying physician champions and priority areas for improvement.

Impact:

Participation growth: Attendance at six events over five years shows steady engagement across diverse specialties and disciplines with a mix of returning and new registrations.

Awareness: Post-event evaluations indicate increased awareness of CWC and desire to adopt CWC into individual practice.

Practice change: In 2024, Island Health were designated as a CWC Hospital at Quality Improvement status, demonstrating success in reducing unnecessary tests and interventions.

Challenges:

Sustaining engagement beyond symposium participants and translating awareness into measurable practice change remain ongoing challenges. Competing priorities and limited clinician time require adaptive strategies.

Lessons Learned:

Continuous communication, leadership endorsement, and peer-to-peer engagement are critical. Virtual platforms have proven effective for broad engagement, but embedding CWC into organizational quality structures is essential for long-term impact.

Quality Improvement

Abstract

RITE PACS: Reducing Inappropriate TElemetry for Patients Admitted to non-Cardiology Services

Background:

There are several guideline-based indications that support appropriate telemetry use, including acute coronary syndromes, syncope, or severe electrolyte abnormalities. However, telemetry is often utilized without an appropriate indication or continued beyond recommended durations. Inappropriate telemetry use has deleterious impacts on patients, clinicians, and the health system broadly. The current rate of appropriate telemetry utilization at our hospital is unknown.

Goal:

Characterize rates of appropriate telemetry utilization at Sunnybrook Health Sciences Centre and if there is a significant burden of inappropriate use, implement a quality improvement initiative to reduce inappropriate telemetry use by 30%.

Methods:

We are conducting a single centre retrospective cohort study to determine the baseline rate of inappropriate telemetry use among ward patients admitted to non-cardiology services at Sunnybrook Health Sciences Centre. If inappropriate use is prevalent, we will develop a quality improvement initiative to reduce low-value telemetry use.

Results:

Our initial findings of baseline non-indicated telemetry use are in keeping with other institutions. Of the 310 patients admitted to non-cardiology ward beds, 158 (51.0%) telemetry orders were overall inappropriate; 85 (53.8%) of these were ordered for non-guideline-based indications and 73 (46.2%) were continued for longer than indicated.

Given, telemetry is overused at our hospital, we will conduct a quality improvement initiative to decrease inappropriate utilization. This will involve a medical directive that will enable CICU nurses to discontinue telemetry without physician co-sign if certain evidence-based criteria are met. Anticipated challenges include integrating this work into CCU nurses' standard workflows and developing consensus on discontinuation criteria.

Quality Improvement

Abstract

The CWC / CAG Dyspepsia Toolkit: When it is OK to say “Nope to the Gastroscope”

Background:

Dyspepsia affects roughly 20% of adults, but serious disease is rare in patients under age 60. Therefore, CWC/CAG first recommends a trial of proton pump inhibitors and testing for *H. pylori* before gastroscopy, unless younger patients have alarm symptoms. Although a primary care pathway exists in Alberta, audits in Calgary and Edmonton found one third of gastroscopies for this indication were low value. Facilitated audit and group feedback resulted in 300 fewer low value gastroscopies per year in Calgary. Additional resources were developed to support clinicians and patients. A CWC toolkit will allow for broader dissemination of these resources.

Goal:

Provide practical tools to reduce low value gastroscopies.

Activities:

The toolkit expands upon the Alberta Dyspepsia Primary Care Clinical Pathway to assist family physicians in the diagnosis/management of dyspepsia, including when to refer for gastroscopy. Patient resources provide education and a tool to support understanding of how symptoms can be influenced by diet, sleep and stress. An implementation toolkit will support gastroenterologists/administrators in using the Calgary Audit & Feedback Framework (CAFF) to reduce low value endoscopies in their own regions.

Anticipated Impacts:

Equip target audiences with tools to support appropriate gastroscopy for dyspepsia.
Improve adherence to CWC/CAG recommendation.
Improve resource utilization ensuring timely gastroscopies for those who need it.
Advance environmental sustainability by reducing unnecessary procedures.

Lessons Learned:

Provincially developed pathways can be successfully modified for national use.
Toolkits strengthen provider-patient partnerships and appropriate referrals to specialists.
CAFF supports implementation of CWC recommendations

Quality Improvement

Abstract

Optimization of Laboratory Testing to Advance Sustainable Healthcare in NL

In preparation for the rollout of a new health information system (Epic/“CorCare”) in Newfoundland and Labrador (NL), NL Health Services (NLHS) and Quality of Care NL are working together to address over-use of laboratory testing. The overarching goal is to foster resource stewardship with reduction of laboratory waste as a co-benefit. Quality of Care NL is collaborating with NLHS executives and laboratory directors to guide implementation efforts and provide data analytics in support of potential solutions, embedding forced functions and evidence-based rules in CorCare. The components of our approach are as follows: 1) study the effectiveness of an existing project aimed at reducing plastic tube consumption by merging complete blood count (CBC) and Hemoglobin A1c (HbA1c) tests into a single tube each time, 2) investigate retesting intervals for commonly repeated tests (HbA1c, Ferritin, Lipase, and Vitamins D and B12) to prevent unnecessary testing by targeting system changes in CorCare, and 3) analyze inpatient tests to identify ordering patterns to reduce low-value testing such as historically bundled tests.

Preliminary results show that merging two blood tests into a single tube is performed approximately 70% of the time, saving thousands of plastic tubes each year. Further, there has been a considerable increase in blood test requests in recent years, although the proportion of potentially unnecessary repeat testing has not changed. Future work will involve tracking the impacts of CorCare-based interventions on test volume and frequency and seeking feedback from interest-holders to inform a learning health cycle.

Yanrong Maggie Yang, University of British Columbia
Wade Thompson, University of British Columbia
Greg Carney, University of British Columbia
Colin Dormuth, University of British Columbia
Malcolm Maclure, University of British Columbia
Ellen Reynolds, University of British Columbia
Anshula Ambasta, University of British Columbia

Quality Improvement

Abstract

Education and audit-and-feedback for appropriate HbA1c testing in British Columbia

Background:

Choosing Wisely recommends a minimal re-testing interval of 3 months for monitoring HbA1c in diabetes, and a 6-month interval for those with stable glycemic control. Unnecessary HbA1c tests can cause patient harm and increased healthcare costs. Opportunity was identified in British Columbia (BC) to promote appropriate HbA1c testing.

Goal:

To evaluate the impact of audit-and-feedback report (Portrait) combined with education (Therapeutic Letter) to promote appropriate HbA1c testing amongst primary care providers (PCPs) in BC in a randomized controlled trial from March 2025 to March 2026.

Methods:

The Portrait is a graphical summary of the participant's HbA1c testing patterns for their diabetes patients in 2023 compared to recommended targets, and the Therapeutic Letter provides background and evidence-based recommendations. The intervention is delivered electronically and offers two metrics for self-assessment of testing frequency: repeated tests within 3 months and the number of tests per patient in 12 months. Participants are randomized 1:1 into early or delayed release of intervention, and the primary outcome is the difference in the change from baseline in the mean number of tests per patient between the two groups.

Impact:

We estimate that about 900 participants will receive the intervention. Our intervention offers personalized assessment and feedback for individual PCPs to address over-testing in diabetes. We expect the intervention to have a positive impact on appropriate testing by PCPs. The results from this trial will help inform future design and implementation of interventions that target unnecessary laboratory tests.

Quality Improvement

Abstract

Implementing Evidence-Based Dementia Tools in Long-Term and Primary Care

With over 750,000 Canadians living with dementia and more than 400 new cases identified each day, clinicians play a critical role in ensuring accurate diagnosis, timely management, and appropriate use of pharmacologic and non-pharmacologic interventions. To support high-quality, evidence-based dementia care, the Centre for Effective Practice (CEP) with leadership from Drs. Andrea Moser and Sid Feldman, have developed two clinical tools: the Dementia Diagnosis tool and the Behavioural and Psychological Symptoms of Dementia (BPSD) tool.

Developed through extensive literature review, expert clinical leadership, workflow interviews, and usability testing with frontline clinicians across long-term and primary care, these tools support Choosing Wisely recommendations by promoting judicious use of diagnostic testing, optimizing non-pharmacologic strategies, and reducing unnecessary antipsychotic use.

This presentation will demonstrate how these tools can be implemented to strengthen dementia care processes across settings. The Dementia Diagnosis tool guides clinicians through dementia assessment, recognition of common subtypes, when to refer, and best practices for communicating a diagnosis. The BPSD tool outlines a structured approach to assessment, identification of symptom clusters, and evidence-informed management pathways emphasizing non-pharmacologic interventions, deprescribing when appropriate, and appropriate follow-up and monitoring.

Attendees will gain practical strategies to implement these tools into routine workflows and support consistent, evidence-based care. By embedding these resources into practice, clinicians can standardize assessments, reduce unnecessary interventions, and improve outcomes for individuals living with dementia.

Kenneth Abogadil, Cambridge Memorial Hospital
Hayley Hamilton, Cambridge Memorial Hospital
Stephanie Pearsall, Cambridge Memorial Hospital
Dr. Winnie Lee, Cambridge Memorial Hospital
Dr. Jacqueline Bourgeois, Cambridge Memorial Hospital

Quality Improvement

Abstract

Building a Culture of High Value Care at CMH: Governance, Engagement and Sustaining Choosing Wisely

Cambridge Memorial Hospital (CMH), a medium-sized community hospital, has embarked on a multi-year journey to integrate Choosing Wisely principles across the organization, aiming to promote high-value care, reduce low-value practices, and achieve the Choosing Wisely Canada Quality Improvement (QI) Hospital Designation. Early successes, such as attaining the Using Blood Wisely status and decreasing unnecessary laboratory tests, demonstrated strong potential but also highlighted the need for coordinated governance and ongoing engagement.

To support this effort, CMH established the Choosing Wisely Oversight Committee, a multidisciplinary group responsible for guiding implementation, reviewing evidence-based recommendations, monitoring compliance, and providing leadership oversight. The committee includes executives, clinical chiefs, program directors, quality leaders, and frontline managers to ensure organization-wide alignment and to champion responsible resource stewardship. This governance structure fostered consistent communication, accountability, and a data-driven decision-making platform.

Building on this foundation, CMH developed a formal, multi-stream strategy to attain the Choosing Wisely QI Designation. The plan involves:

- Maintaining performance in Using Blood Wisely and Using Labs Wisely;
- Implementing the corporate Choosing Wisely quality improvement projects;
- Expanding staff and physician education;
- Strengthening audit-and-feedback mechanisms;
- Embedding sustainability through regular committee reviews, dashboards, and program-level monitoring; and
- Anchoring Choosing Wisely Initiatives to the pillars of CMH's Strategic Plan

This coordinated approach has led to meaningful improvements in stewardship, standardized clinical practices, and supported cultural change. Key lessons include the significance of early executive sponsorship, collaborative clinical engagement, consistent monitoring, and a structured strategy to sustain progress. CMH's experience illustrates that embedding Choosing Wisely requires not only strong clinical leadership but also deliberate organizational governance and long-term dedication.

Quality Improvement

Abstract

It Starts With Asking Why – Rethinking the Appropriate Use of Antipsychotics in LTC: Tools, Transformations and Discoveries

The long-term care (LTC) sector has been dedicating efforts towards the appropriate use of antipsychotics for decades and it remains a priority in BC. We can make a difference in the lives of our loved ones living in LTC homes by rethinking the role of antipsychotics used to manage behaviours and psychological symptoms of dementia. When we stop to ask the question “why?”, why are we giving this resident antipsychotic medication and what behaviours are we trying to change, we can transform the experience of residents, families and staff. When staff feel they have the tools and resources to manage behaviours without medications, it can improve the quality of life of residents significantly.

We used an Action Series format, a learning technique used to support improvements in a specific area of focus through interactive learning sessions, action periods, and coaching supports. LTC homes were provided resources and tools, such as a self-assessment, AUA in LTC Improvement Guide and a Measurement Tracker to measure data over time. Over the course of the 8-month Action Series, of the LTC homes who participated, preliminary data shows a reduction in the use of potentially inappropriate antipsychotics by almost 2%. We are launching a second cohort of the AUA in LTC Action series in January 2026. We'll share learnings, discoveries and impacts that we have seen in during our improvement efforts, along with sharing practical tools and resources with the audience.

Neil Drimer, Healthcare Excellence Canada
Joanna Burke, Healthcare Excellence Canada
Nicole Pollack, Healthcare Excellence Canada
Kirby Kirvan, Healthcare Excellence Canada
Efe Aigbede, Healthcare Excellence Canada

Quality Improvement

Abstract

Sparking Change in AUA: Person-Centred Quality Improvement in LTC

Goal:

The Sparking Change in Appropriate Use of Antipsychotics (AUA) Program supported 341 long-term care (LTC) homes across Canada between January 2025 to February 2026 with the goal of reducing the potentially inappropriate use of antipsychotics through person-centred care approaches and guiding homes toward the new national targets for AUA set by the Appropriate Use Coalition.

Activities:

Participating LTC homes were offered optional, flexible supports along their quality improvement journey including educational webinars, coaching calls, peer-to-peer learning opportunities, curated tools and resources, and the chance to win awards of up to \$10,000 per home.

Impact:

Mid-point reflections from award submissions indicated team improvements in AUA measures as well as resident quality of life and the experience of care for residents, families and care partners, and the LTC workforce. The final evaluation results of the program will be available to share by May 2026.

Challenges:

Some challenges faced by participating homes when developing deprescribing initiatives included staff training needs, support for education and engagement with families and care partners, lack of equipment for non-pharmacological interventions, and general time, funding, and staffing constraints due to ongoing limitations in the healthcare system.

Lessons Learned:

Through the analysis of the final evaluation results of the program, we intend to share key barriers and facilitators related to supporting the appropriate use of antipsychotics in LTC homes through flexible quality improvement education and awards-based recognition. Key activities and person-centred care strategies of homes with the highest improvement in outcome measures will be highlighted.

Isabel Shore, The Ottawa Hospital
Andrew Neitzel, The Ottawa Hospital
Delvina Hasimja, The Ottawa Hospital
Stephen Kravcik, The Ottawa Hospital
Christopher Goy, The Ottawa Hospital
Cynthia Walsh, The Ottawa Hospital
Krista Wooller, The Ottawa Hospital
Mathilde Gaudreau-Simard, The Ottawa Hospital

Quality Improvement

Abstract

Reducing Low-value Abdominal X-rays: Preliminary Results from a Quality Improvement Initiative

Background:

Constipation is a common problem that affects up to 67% of hospitalized patients. Constipation is frequently investigated with abdominal x-rays (AXRs) despite their poor inter- and intra-observer reliability and the limited correlation between radiographic fecal loading and clinical symptoms. A baseline audit at The Ottawa Hospital (TOH) identified 990 AXRs performed over 6 months; a random 10% sample (n=121) was reviewed in detail. Half were ordered for constipation (50%), followed by suspected bowel obstruction/ileus (13%) and fecaloma (12%). Only 19 scans yielded clinically significant findings, most commonly marked fecal loading/fecaloma (53%) and ileus (26%). Clinical management changed in 12 of those cases (63%), mainly resulting in an escalation of bowel protocol (8 cases, 66%), indicating limited clinical impact.

Goal:

To reduce the number of AXRs ordered to assess constipation in medical inpatients (internal medicine, hospitalist, and geriatrics) by 50% in one year.

Methods:

We will implement three PDSA cycles: (1) clinician education on evidence and local data, (2) audit and feedback reports with benchmarking, and (3) exploration of an EMR pop-up advisory. At the time of submission, the first PDSA cycle has started, with plans for auditing in February 2026.

Impact:

Clinician education began in October 2025, and preliminary analysis found a decrease to 213 AXRs ordered in November, from an average of 371 AXRs per month in the three months prior. This represents a 43% decrease and suggests a receptive audience for change.

Challenges:

Decreasing AXR use for constipation requires intervention across multiple levels of training and specialties.

Quality Improvement

Abstract

Is That Bloodwork Necessary?

The use of laboratory testing has increased significantly over recent years. Therefore, it is susceptible to inappropriate usage leading to increasing financial cost and a detrimental environmental impact. There have been no studies to measure these parameters in our Queen Elizabeth II hospital in Halifax, Nova Scotia. Therefore, our objective was to take an initial observational approach to address patterns of inappropriate bloodwork being ordered in patients admitted under internal medicine.

30 charts were reviewed from patients admitted to our internal medicine unit. EMRs and patient charts were used to acquire patterns of bloodwork ordered from 24 hours after admission. Bloodwork ordered from day 2 of admission until discharge was compared against the admitting diagnosis and extraneous bloodwork that had continued to be ordered despite being normal or not relevant to the admitting diagnosis was documented.

Out of 30 charts reviewed, CBC, electrolytes, urea and creatinine was ordered for 3 days irrespective of their admitting diagnosis. Of those, a third of patients had normal CBC values from day 2 of admission. Daily CRP's were ordered in 50% of the patients, all of which was unnecessary except for one patient that had osteomyelitis. 20% of patients had q48 blood cultures drawn for gram negative bacteremia that were otherwise stable. Liver function tests were done repeatedly in 40% of the patients despite normal values.

We are currently developing an educational module and combining this with our emission data to further reduce our footprint and our healthcare costs.

Gabriella Jacob, Mount Sinai Hospital
Rebecca Lemieux, Mount Sinai Hospital
Hamsa Krishnapillai, Mount Sinai Hospital
Katie Mok, Mount Sinai Hospital
Jennifer Korman, Mount Sinai Hospital
Nisha Sanwalka, Mount Sinai Hospital
Amira Benaini, Mount Sinai Hospital
Erin Kennedy, Mount Sinai Hospital
Richard Norman, Mount Sinai Hospital

Quality Improvement

Abstract

RED MED: Reducing Utilization of Dimenhydrinate Among Older Surgical Patients

Background:

Potentially inappropriate medications (PIMs) are frequently prescribed in hospital settings and are associated with adverse outcomes among the older adult population. At Mount Sinai Hospital, dimenhydrinate was identified as a commonly prescribed PIM on the Acute Care Surgery service.

Objectives:

Our aim was to reduce the percentage of patients age 65 and up on the Acute Care Surgery service who are prescribed scheduled or as needed (PRN) dimenhydrinate by 20%.

Methods:

We conducted a single-centre quality improvement initiative following the Model for Improvement using an uninterrupted time series design. Baseline data was obtained from January 2024 to February 2025 and implementation data was tracked from March 2025 to October 2025 using statistical process control charts. A multicomponent intervention was introduced, including staff and patient education, a standardized nausea/vomiting protocol, and removal of dimenhydrinate from the General Surgery Admission Order Set.

Results:

Following implementation, the percentage of patients prescribed dimenhydrinate decreased from a baseline of 47% (n=161/341) to 27% (n=45/168), meeting our target. The total number of monthly prescriptions decreased from an average of 18 to 5.5. The percentage of patients who were administered at least one dose of dimenhydrinate decreased from 14% (n=48/341) to 5% (n=8/168). There was no change in the total number of alternative medications administered for nausea.

Conclusion:

A multicomponent intervention led to a significant decrease in dimenhydrinate prescribing and administration among older surgical patients. Future initiatives will explore spread to additional clinical areas within our institution to further reduce inappropriate prescribing.

Quality Improvement

Abstract

ReACH-LTC: REAssessing CHolinesterase inhibitors and memantine in Long-Term Care

Choosing Wisely Canada recommends regular reassessment of cholinesterase inhibitors and memantine and consideration of deprescribing if risks outweigh benefits. This is not routinely occurring in Ontario long-term care (LTC) homes where 54% of older adults are still taking ChEIs at time of death.

Our QI goals are to:

- Improve rates of ChEI and memantine reassessment at Sunnybrook and Baycrest's Long-Term Care homes from their baseline of 19% to 50% by June 2026
- Increase deprescription from 36% to 50% in appropriate candidates.
- Develop a model for implementation of ChEI/memantine deprescribing guidelines that can be adapted in other LTC settings.

A baseline chart review, direct observation of medication reviews, and semi-structured stakeholder interviews with leadership, physicians, registered nurses, pharmacy, social work, and patient caregivers were completed.

A diagnostic analysis revealed several root causes contributing to low reassessment and deprescription rates in LTC. Using a co-design model we developed a toolkit for drug reassessment and deprescription; this included a deprescribing algorithm development, clinician evidence summary, patient and family support package, critical conversation guide, and electronic integration into quarterly medication reviews.

Results of our study demonstrate an improvement in drug reassessment rates from 19% to 50% which has been sustained, and an improvement in drug deprescription in appropriate candidates from 36% to 60%.

Our QI study is the first to implement these recommendations in LTC, where the risks of ChEIs/memantine are more likely to outweigh benefits compared to community settings. This model for implementation was successful and has received an AFP Innovation grant, and has been invited to spread to Baycrest, another large academic LTC. Subsequently it can then be scaled and spread to other LTC centres across Canada.

Sui An Lie, Singapore General Hospital
Wen Jia Tan, Singapore General Hospital
Jia Xuan Yeo, Singapore General Hospital
Chloe Yeo, SingHealth Anaesthesiology Residency Program
Renci Zeng, SingHealth Anaesthesiology Residency Program
Jasper Goh, SingHealth Anaesthesiology Residency Program
Siting Goh, SingHealth Anaesthesiology Residency Program

Quality Improvement

Abstract

Wise decisions, judicious selections: A Value-Based Approach to ICU Investigations

Background:

Daily laboratory investigations are frequently performed in intensive care units (ICUs) for monitoring critically ill patients. However, overuse remains common, often driven by habit, defensive practice, and default order sets rather than clear clinical indication. Excessive testing contributes to patient harm, healthcare costs, and environmental waste. Baseline data at Singapore General Hospital's Surgical ICU (Dec 2022 – Nov 2023) showed a median of 12.9 investigations per patient-day, with renal panels and complete blood counts being most frequent.

Goals:

To reduce the median number of laboratory investigations ordered per patient-day by 10% (from 12.9 to 11.6) over two years through a multi-pronged, value-based intervention.

Methods:

Using a Plan-Do-Study-Act (PDSA) framework, PDSA 1 involved department-level education, visual reminders, and on-the-ground reinforcement to promote judicious test ordering. Following PDSA 1, the median number of investigations decreased modestly to 12.7 per patient-day. Recognising limited impact, PDSA 2 integrates the initiative into new-staff orientation, introduces a daily "Rationalise Investigations" checklist within the electronic medical record to prompt shared decision-making, and partners with the hospital's Office of Value-Based Healthcare for analytics and communication support. PDSA 2 will complete in December 2025.

Impact and Lessons Learned:

Initial implementation demonstrated the challenges of sustaining behavioural change in high-turnover teams. Embedding the project within onboarding and clinical workflows, coupled with institutional alignment and data transparency, is key to achieving durable improvement. This initiative exemplifies how Choosing Wisely and value-based care principles can drive smarter, safer, and more sustainable ICU practices.

Maggie Ford, Ontario Health
Kerri Bennett, Ontario Health
Tracy Lee, Ontario Health
Lia Stenyk Jackson, Ontario Health
Jessica Ostrega, Ontario Health
Lynn Dionne, Ontario Health
Pierrette Price-Arsenault, Ontario Health

Quality Improvement

Abstract

Delirium Aware Safer Healthcare - A Provincial Improvement Campaign to Prevent Hospital-Acquired Delirium

Goal:

The purpose of Ontario Health's (Ohs) DASH campaign is to unite hospital teams across Ontario in raising awareness and enhancing their capacity to prevent, identify, and manage hospital-acquired delirium, thereby reducing preventable harm in hospitals.

Activities:

Participating hospitals join the DASH Community of Practice (CoP), an online platform for sharing resources and collaborating on delirium prevention. The CoP features discussion forums, webinars, and live events, providing access to evidence-based tools, including the DASH Implementation Toolkit and change bundles like Choosing Wisely Canada's "Less Sedatives for Your Relatives" and "Opioid Wisely" for safer prescribing. Hospitals are encouraged to formally enrol by creating an improvement plan that incorporates a recommended change bundle.

Impact:

In its inaugural year, the DASH campaign saw 33 hospitals take active steps through a formal improvement plan to prevent hospital-acquired delirium including General Medicine Improvement Network (GeMQIN) hospitals focused on reducing use of sedative hypnotic medications and Ontario Surgical Improvement Network (ONSOIN), reducing opioid use in orthopaedic patients at risk of delirium and use of hospital Quality Improvement Plan to improve reporting and documentation of delirium. Engagement in the DASH CoP significantly increased delirium awareness, with 573 members and strong metrics, making it one of Quorum's largest and most interactive group - second highest in pageviews and downloads, and top 4 for posts/comments.

Challenges:

Hospitals face many competing priorities, and while hospital-acquired delirium significantly impacts patient safety, and outcomes, one challenge is demonstrating impact of delirium and increases healthcare resources and costs.

Lessons Learned:

Future focus is on sustaining improvement efforts among participating hospitals and aligning & integrating efforts with senior-friendly care standards.

Quality Improvement

Abstract

Optimizing Intervention Sequences to Reduce Physician Blood Urea Nitrogen Test Overuse: A Multi-Hospital Analysis

A multifaceted province-wide initiative aimed to reduce blood urea nitrogen (BUN) ordering through system-focused (SF) interventions [electronic medical record (EMR)], person-focused (PF) [performance audit and education], or no intervention.

Goal:

To assess the impact of sequencing and combining interventions on physician BUN-test ordering practice across multiple hospitals.

Activities:

An interrupted time series with segmented regression analyzed monthly BUN test counts over 6–7 years for six hospitals in three Alberta health zones, grouped by EMR implementation (n=3) versus non-EMR (n=3) post QI-initiative participation.

Impact:

All hospitals demonstrated sustained reductions (51%–95%) in BUN ordering. The greatest reduction (95%, slope $p < 0.001$) occurred when PF preceded SF with EMR implementation. Similar results (93%, slope $p = 0.095$) were observed when PF and SF were applied concurrently, followed by an additional PF intervention. EMR hospitals exhibited less month-to-month variability compared to non-EMR sites. Lower reductions occurred with repeated PF interventions (57%, slope $p = 0.33$) or a single PF intervention (51%, slope $p = 0.62$).

Challenges:

Pandemic-related disruptions complicated analysis.

Lessons Learned:

No intervention sequence or combination was similar; however, all hospitals had continued reductions over the years. An intervention applying the sequence of PF followed by SF with EMR support achieved the most significant and consistent reductions. Broader adaptability requires integrating influential factors such as workflow, practitioner norms, costs, and policy changes.

Zhenghong Liu, Singapore General Hospital
Xuan Yun Fong, Singapore General Hospital
Jia Xuan Yeo, Singapore General Hospital
Chjia How Teo, Singapore General Hospital
Julia Li Yan Jaffar, Singapore General Hospital
Xiang Yin Tan, Singapore General Hospital,
Maehanyi Rajendram, Singapore General Hospital
Ismail Bin Sazali, Singapore General Hospital
Yinli Juliana Kan, Singapore General Hospital
Tse Hua Nicholas Wong, Singapore General Hospital
Siew Yee Thien, Singapore General Hospital

Quality Improvement

Abstract

Choosing Wisely: Blood Cultures in the Emergency Department

Blood cultures are crucial for patients with suspected blood stream infections. However, time pressures of treating patients with possible bloodstream infections have led to over-ordering of blood cultures, with many done with improper technique and inadequate sample volume.

At baseline, our department blood culture event (BCE) rate per 100 ED attendances was 8.4, compared to 3-4 in some other centers. Our mean blood culture volume was 3.6ml, despite guidelines recommending 8-10ml.

We developed and implemented a Choosing Wisely campaign in our hospital's Emergency Department (ED), aiming to reduce unnecessary blood cultures, and to increase mean volume of blood collected per bottle. As balancing measures, we tracked unplanned ICU transfers within 24h of admission, the length of stay of the commonest conditions for which blood cultures were drawn (cellulitis, pneumonia, urinary tract infection), reattendances, and cultures done within 6 hours of admission to the inpatient ward.

We formed a multidisciplinary team to agree upon a decision-making flow that accounted for existing evidence and local practices. This was implemented in the department and propagated with multiple methods.

Compared to the pre-phase (March-May 2025), the post phase (June- September 2025) had a lower BCE rate of 6.1/ 100 attendance (pre 8.1), a reduction of roughly 1007 blood culture bottles sent over 5 months. There was also higher blood culture sample volume of 5.1ml (pre 3.6ml). None of the balancing measures were impacted.

In our presentation we would share the best practices that shaped our Choosing Wisely campaign and lessons learnt from the project.

Zoe R O'Neill, University of Ottawa
Andrew Neitzel, The Ottawa Hospital
Krista Wooller, University of Ottawa
Roy Khalife, University of Ottawa
Christopher McCudden, The Ottawa Hospital
Mathilde Gaudreau-Simard, University of Ottawa

Quality Improvement

Abstract

Reducing Low-Value Serum Folate Testing in Medical Inpatients

Goal:

Serum folate testing offers little clinical value in settings with mandatory folic acid fortification, yet it continues to be ordered frequently. A baseline audit at The Ottawa Hospital found 691 folate tests over three months; only 3% were low-normal, and 1.4% represented true deficiency, all in patients with identifiable risk factors. Our goal was to decrease serum folate orders among medical inpatients by 50% within one year.

Methods:

From May to December 2025, we implemented a multifaceted educational intervention involving targeted teaching, peer-to-peer engagement, and regular audit and feedback. Ordering patterns were reviewed monthly to guide iterative improvements.

Impact:

Following the intervention, monthly serum folate orders dropped by 71%, exceeding our 50% reduction target, from roughly 140 in May to 40 in August, with sustained reductions thereafter. Testing became more appropriately aligned with clinical risk factors, and although overall testing volume fell, the proportion of abnormal results increased from a baseline positivity rate of approximately 4% to 11% post-intervention.

Challenges:

A temporary pause in educational reminders—intended to limit message fatigue, resulted in a brief increase in test ordering. Once identified, the team resumed regular educational touchpoints, restoring the downward trend.

Lessons Learned:

This initiative directly supports Choosing Wisely Canada's recommendation to avoid serum folate testing in the absence of anemia, alcohol use disorder, or malabsorption. Education combined with audit and feedback was highly effective in reducing low-value testing in a tertiary center. However, sustained practice change requires continuous engagement. This low-cost intervention is easily scalable to other inpatient units or hospitals.

Quality Improvement

Abstract

Exploring AST Reflex Test Ordering, Utilization, and Reducing Unnecessary Testing

Background:

Unnecessary laboratory testing drives costs and strains resources. A resource stewardship initiative aimed to reduce unnecessary Aspartate Aminotransferase (AST) testing by modifying order sets and panels. Short-term success was followed by increase in testing volume.

Goal:

Identify ordering behavior leading to an increase in AST testing.

Methods:

AST orders were queried from the EMR to identify the scope and ordering patterns. A hospital-wide survey was distributed to clinicians (medical, nursing, nurse practitioners, and trainees) across all medical/surgical disciplines.

Results:

AST orders increased by 11% over 5 years, 90% ordered outside order sets generally through manual orders and automated reflex testing. Reflex testing accounted for 25% (range 4-67% across specialties) and a yearly estimated \$14.5K and 12 additional technician days.

The hospital survey (n=60) was completed by 23 physicians, 14 nurse practitioners, 22 trainees and 1 pharmacist, 57% with >10 years experience. Over half (52%) of respondents ordered AST outside order sets; 46% felt that AST rarely aided in reaching a diagnosis. Nearly 75% were unaware of reflex testing, and 86% did not think or were unsure if its benefits or appropriate utilization of laboratory resources. Ongoing medical education was considered beneficial by 85% of respondents.

Impact/Challenges:

These findings illustrated important limitations of real-world application of resource stewardship initiatives. Removing AST from order sets and implementing AST reflex testing may have shown to reduce test volumes, structured interventions are limited when ordering restrictions are bypassed. This underscores the need for ongoing resource stewardship education to maintain awareness and engagement.

Quality Improvement

Abstract

Pilot of the Quebec Choosing Wisely Clinic Designation

While Choosing Wisely Canada previously offered hospital-level designations, primary care practitioners in Quebec have been early adopters and leaders in implementing high value care. Many family medicine clinics expressed interest in formalizing their commitment to reducing low-value care, operationalizing recommendations, and publicly demonstrating their engagement. In response, we developed and launched the Montreal Choosing Wisely Clinic designation, a structured recognition program tailored to primary care realities.

The pilot project, initiated in 2025, aimed to provide clinics with a practical and motivating framework for implementing Choosing Wisely recommendations, strengthening quality improvement processes, and fostering a culture of evidence-based, patient-centred care. The designation focuses on achievable criteria across four domains: clinician engagement, patient-facing education, data-driven quality improvement, and integration of shared decision-making tools.

This presentation will describe the creation and piloting process, including the environmental scan, stakeholder engagement, criteria development, and feedback cycles with early adopter clinics. We will outline examples of clinic-led initiatives, preliminary impacts observed during the pilot phase, and how the designation encouraged sustainable practice changes.

Quality Improvement

Abstract

Montreal Declaration on High Value Care : Engaging Partners For Better Care

In 2023, during the Quebec College of Family Physicians Annual Scientific Assembly, we drafted the Montreal Declaration on High Value Care as a collective call to action to mobilize clinicians, professional associations, and stakeholders around the reduction of low-value care in Quebec. Our goal was to create a coherent provincial voice promoting evidence-informed, patient-centred practices aligned with Choosing Wisely principles.

Officially launched in 2024, the initiative rapidly gained momentum: the Declaration received media coverage, stimulated public discussion on overuse, and attracted the formal support of more than 30 professional associations and organizations across disciplines. This broad coalition now serves as a cohesive provincial network committed to advancing high value care.

Since its launch, the group has met twice annually and has demonstrated strong member engagement, generating shared priorities, coordinated messaging, and collaborative strategies to improve appropriateness of care. Through these meetings, partners have discussed barriers and facilitators to reducing low-value practices, identified areas for targeted action, and co-developed materials and communication strategies to strengthen public and clinician-facing messages.

This presentation will describe the development and implementation process of the Declaration, including the key enabling conditions that led to broad mobilization, the governance and engagement mechanisms that sustain participation, and lessons learned from building a province-wide coalition focused on Choosing Wisely principles. We will share examples of actions taken, tools developed, and ways this approach can support other jurisdictions seeking to create unified, system-level momentum for high value care.

Christine D'Arsigny, Kingston Health Sciences Centre
Jessica Wiseman, Kingston Health Sciences Centre
Jennifer Belec, Kingston Health Sciences Centre
Lindsay Fitzgerald, Kingston Health Sciences Centre
Stephanie Sorensen, Kingston Health Sciences Centre
Connie Herrington, Kingston Health Sciences Centre
Hilary Latiu, Kingston Health Sciences Centre

Quality Improvement

Abstract

Wake up and Breathe

Intubated patients are at risk of developing secondary complications related to prolonged deep sedation. These include longer ventilation times, increased delirium, prolonged hospital stays, and higher mortality rates. Spontaneous Awakening Trials (SATs) are recommended to decrease levels of sedation in intubated patients and improve patient outcomes. Our intensive care unit (ICU) presently does not have such a protocol.

During an assessment of our ICU's compliance with spontaneous breathing trials (SBT), it was found that patients had deeper sedation (Richmond Agitation Sedation Scale (RASS) scores) than ordered and 36% of failed SBT were due to oversedation. Questionnaires sent to the ICU's bedside nurses showed that 81% felt sedation was deeper due to safety concerns, 57% due to staffing and 16% due to lack of protocol.

We then established a daily awakening protocol in our ICU and decided to break the implementation into 2 sections. PDSA 1 will include a protocol to stop propofol and any continuous benzodiazepam medication. PDSA 2 will include stopping propofol, continuous benzodiazepam and continuous narcotic medications. At 6 weeks into each cycle, we will retrospectively assess documentation around performing the daily sedation awakening protocol, including why it was not done or stopped. We will monitor median RASS, time to passing an SBT, time to a successful SBT and median RASS when SBT was passed. We will also assess duration of mechanical ventilation, need for a tracheostomy, delirium scores and ICU length of stay. As balancing measures, we will follow for adverse outcome to patients and staff.

Ou Jia (Emilie) Wang, University of British Columbia
Chaocheng Liu, University of British Columbia
Seungwon (Sara) Choi, Queen's University
Harman Toor, University of British Columbia
Bei Yuan (Ethan) Zhang, University of Toronto
Sabrina Nurmohamed, University of British Columbia

Quality Improvement

Abstract

Case-Based Videos for Dermatology Resource Stewardship

Goal:

To evaluate an online, case-based video series embedding Choosing Wisely Canada (CWC) dermatology recommendations into undergraduate medical curricula, developed by learners and faculty.

Activities:

Five 10-min animated videos were co-created by medical students, residents, and faculty based on five CWC dermatology recommendations. The videos explained common dermatologic scenarios explaining evidence-based CWC principles. Sixty-two medical students from 10 North American institutions viewed the videos and completed a 23-item survey assessing awareness, perceived barriers, and attitudes toward resource stewardship. Findings revealed significant challenges to implementation, indicating the need for communication toolkits and reflective exercises to support learners in navigating hierarchical and conversational barriers when applying stewardship principles.

Impact:

Students reported strong endorsement for curricular integration (mean 3.97/5, CI [3.76, 4.18]) and high interest in expanding to other specialties (mean 4.28, CI [4.13, 4.45]). Nearly half (49.2%) gained awareness of dermatology-specific CWC recommendations upon participating, with no previous knowledge.

Challenges:

The most common barriers to practicing stewardship were supervisor disagreement (72.9%) and concern about professional relationships (61.0%), revealing a persistent knowing-doing gap.

Lessons Learned:

Case-based, co-created educational tools effectively promote resource stewardship awareness. Institutional supports present a barrier for students to adopt behavioural change. Communication-focused toolkits and faculty leadership can strengthen learners' ability to advocate for Choosing Wisely principles in clinical contexts.

Quality Improvement

Abstract

Lab Wisely Widget - Estimating Savings Across Parameters

Taking into consideration the depth and breadth of savings a health care system or facility could achieve if lab ordering changed; we constructed a simulator to allow for real world estimating. Following a year in the field, it was further refined and made customizable.

Learn how we created a unique tool, that is both bilingual and customizable, that allow for simulating savings in blood volume, reagents and supplies, HR and environmental impact.

Prior to making a change, decision makers often want to know the scope of impact. This tool can help in the evaluation of change impacts. We will discuss challenges in creation and deployment, and unexpected challenges validating the tool in Phase 2 (revision).

Quality Improvement

Abstract

Improving Knowledge Translation of Environmental Sustainability In The Intensive Care Unit

Environmental sustainability in healthcare is increasingly important due to the high generation of waste and resource utilization in acute care settings. Preliminary work at Burnaby Hospital identified variable awareness among ICU staff regarding sustainability practices, highlighting an opportunity for knowledge translation (KT) and broader program implementation.

An educational initiative was developed to improve awareness of environmental sustainability in the ICU and to introduce practical strategies for waste reduction and recycling. Core elements included providing education to ICU staff at St. Paul's hospital.

Staff were engaged through interactive educational sessions and surveys. Surveys assessed baseline and post-session awareness, willingness to change practice, and perceived barriers to implementation. Collaboration between pharmacy, nursing, and stewardship teams facilitated program design and roll-out.

Post-session surveys demonstrated increased awareness of sustainability practices and greater willingness among ICU staff to adopt environmentally conscious behaviors. Future initiatives in the works include recycling of personal protective equipment (PPE), intravenous (IV) tubing and bags, return of unused medications for reuse, and implementation of AstraZeneca GoZero inhaler recycling program. Ongoing evaluation at both sites is planned to measure long-term uptake and effectiveness of recycling initiatives.

This project demonstrates that structured knowledge translation can improve environmental sustainability awareness and adoption of greener practices in the ICU. Broader implementation of similar initiatives, including medication, inhaler, PPE, and IV supply recycling, may reduce healthcare's environmental footprint and promote sustainable practice across institutions.

Émilie Bortolussi-Courval, Université de Sherbrooke
Catherine Drouin-Audet, Omnimed
Xavier Boilard, Omnimed
Camille Gagnon, Université de Sherbrooke
Benoît Cossette, McGill University
Lucien Coulibaly, McGill University
Todd C. Lee, McGill University
Emily G. McDonald, McGill University

Quality Improvement

Abstract

Finally, Chez Nous: The First EMR Deprescribing Software Integration in Québec

Goal:

To reduce medication-related harm from ten commonly prescribed potentially inappropriate medications (PIMs) among older adults with polypharmacy (≥ 5 medications) in seven family medicine groups (FMGs) in Quebec, by integrating the MedSafer deprescribing clinical decision support tool into the Omnimed electronic medical record (EMR).

Activities:

Patient EMR data flows into MedSafer to generate personalized deprescribing reports identifying potentially inappropriate medications (PIMs). The EMR generates a list of patients taking each PIM identified by MedSafer. Each list triggers an interdisciplinary deprescribing protocol, predeveloped with each FMG. Adoption will be reinforced through daily dashboard updates, training sessions, and patient information materials from the Canadian Medication Appropriateness and Deprescribing Network (CADeN). Evaluation will capture clinical, organizational, and economic outcomes following deprescribing.

Impact:

Organizing and initiating interdisciplinary deprescribing workflows has remained a challenge in primary care. By aligning deprescribing opportunities with the right clinician at the right time, the project is expected to reduce the burden of operationalizing a deprescribing trial. This project is also expected to increase the proportion of patients with one or more PIMs deprescribed.

Challenges:

Challenges include clinician adherence to recommendations and maintaining a streamlined user interface. Mitigation strategies include linking evidence supporting deprescribing, and a webpage within the EMR for clinicians to submit interface recommendations.

Lessons Learned:

By integrating MedSafer within the main workspace of clinicians, deprescribing has the potential to be seamlessly integrated in a clinician's practice. Success requires aligning digital innovation with inter-professional practice change, ensuring that deprescribing becomes a routine, sustainable element of primary care.

Abstract

Less Plasma, Less Drama: A Quality Improvement Initiative to Reduce Inappropriate Plasma Transfusions Across Community Hospitals in the Niagara Region

Background:

Plasma transfusion has limited clinical indications, primarily for patients with coagulopathy and active bleeding or those undergoing major surgery. Appropriate use is defined by an international normalized ratio (INR) >1.7 and a transfusion dose of 3–4 units in adults. However, audits in tertiary care settings have consistently revealed high rates of inappropriate plasma use.

Local Problem:

At Niagara Health, recent audits across three community hospitals identified that 42% of plasma transfusions in hospitalized adults were inappropriate. This is contributed to by a lack of understanding of appropriate indications of plasma transfusions. This misuse contributes to resource wastage, increased healthcare costs, and unnecessary patient exposure to transfusion-related risks.

Aim:

This study aimed to improve the rates of appropriate plasma transfusions (as set by appropriate metrics of INR and dose) amongst hospitalized adult patients of three major community hospitals in the Niagara Region by 25% by June 30, 2025.

Methods:

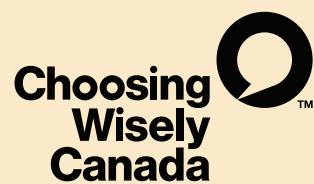
This is a nonrandomized, interrupted time series quality improvement project (QIP) following the Model for Improvement framework (MFI). The QIP is designed to develop, test, and implement change ideas following sequential Plan-Do-Study-Act cycles starting July 2024, monitoring rates of plasma transfusions monthly. This will be achieved through awareness campaign, enhanced audit and feedback, as well as incorporation of electronic Transfusion Medicine order set in hospitals EMR.

Results:

Over the study period, 253 plasma units were transfused. Median monthly rates of appropriate transfusions were 90% (INR >1.7), 89% (dose >2 units), and 78% (meeting both criteria). A positive trend in appropriateness was observed, particularly in dosing. Additionally, the proportion of out-of-guideline plasma requests screened by transfusion medicine technologists decreased by 15%. Importantly, there were no significant changes in the overall use of plasma or red cell products.

Conclusions:

The implementation of an electronic order set, supported by technologist screening, targeted education, and audit-feedback loops, led to improved adherence to plasma transfusion guidelines without increasing laboratory workload or affecting the use of other blood products. These interventions demonstrate potential for broader application to other blood components. Ongoing evaluation will assess the sustainability of these improvements.



 www.choosingwiselycanada.org

 info@choosingwiselycanada.org

 [ChoosingWiselyCanada](https://www.facebook.com/ChoosingWiselyCanada)

 [@ChoosingWiselyCA](https://twitter.com/ChoosingWiselyCA)

 [ChoosingWiselyCA](https://www.instagram.com/ChoosingWiselyCA)

 [Choosing-Wisely-Canada](https://www.linkedin.com/company/Choosing-Wisely-Canada)