Less but better

Abstract Book

National Meeting
May 26 & 27, 2025

Choosing Wisely Canada™

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. This year's theme, *Less but Better*, invites us to think beyond simply doing less. It challenges us to do 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. We continue to offer national improvement programs like *Using Labs Wisely* and *Using Blood Wisely* and celebrate leadership through our *Hospital Designation Program*. At the same time, we are deepening our work in primary care to show how reducing low-value tests, treatments, and procedures can ease workload pressures while improving patient care.

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 remain committed to advancing Choosing Wisely principles as clinicians respond to today's wider challenges. In partnership with over 20 clinician societies, we have developed more than 50 climate-conscious recommendations, offering practical, everyday actions that reduce harm and protect our planet.

All of this is possible thanks to the enthusiastic Choosing Wisely community. The work featured in this abstract book provides a snapshot of this momentum across the country. With projects spanning quality improvement, medication appropriateness, climate action, and measurement, they reflect the unique ways our community is improving the quality and safety of care. I hope they inspire you, spark new ideas, and energize your own efforts to drive change.

Thank you for your leadership and your ongoing commitment to this work. I look forward to the progress we'll make together in this next chapter.

Yours,

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. Le thème de cette édition, Moins, mais mieux, nous invite à penser au-delà du simple fait de faire moins. Le défi? Faire mieux – pour la patientèle, pour le système de santé, pour notre planète.

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. Nous poursuivons nos programmes d'amélioration nationaux, dont Utilisation judicieuse des laboratoires et Transfuser avec soin, et célébrons le leadership avec notre Programme de désignation Hôpital Choisir avec soin. En parallèle, nous approfondissons nos efforts en soins primaires pour montrer que la réduction des tests de dépistage, des traitements et des interventions de faible valeur est à même d'alléger la charge de travail tout en améliorant les soins.

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.

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 20 sociétés de médecins, nous avons élaboré plus de 50 recommandations axées sur le climat afin de proposer des mesures pratiques à appliquer au quotidien pour réduire les méfaits et protéger la planète.

Tout cela est rendu possible grâce à la vibrante communauté Choisir avec soin. 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,

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

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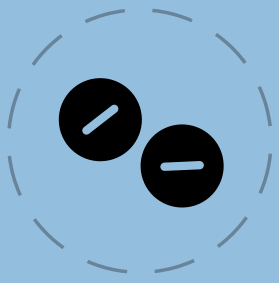

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Tom Perry, Therapeutics Initiative
Wade Thompson, Therapeutics Initiative
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Workshop

Appropriate Prescribing

Is the Preferential Use of Isomers Versus Racemic Mixtures Clinically Beneficial or a Triumph of Marketing?

Objective:
To evaluate whether the preferential use of single-isomer medications versus the racemic mixtures is warranted based on their potential to improve patient outcomes or safety.

Methods:
We conducted an assessment of five medication pairs, including citalopram/escitalopram, omeprazole/esomeprazole, lansoprazole/dexlansoprazole, zopiclone/eszopiclone and venlafaxine/desvenlafaxine. Evidence was drawn from head-to-head randomized controlled trials (RCTs), identified through systematic searches of product monographs, regulatory agency reports, and existing systematic reviews/meta-analyses.

Findings:
Utilization data from primary care prescriptions (Pharmanet) in British Columbia revealed a significant preference for single-isomer medications across all five pairs. This preferential use resulted in millions of dollars in additional expenditure annually, costs borne by governments, private insurance companies and patients. Despite this, evidence from head-to-head RCTs consistently showed that single-isomer formulations were no more likely to improve patient outcomes or reduce harm compared to their racemic mixture counterparts.

Conclusion:
The increased use and higher costs associated with single-isomer medications are not supported by evidence of superior efficacy or safety. This practice is neither rational nor evidence-based, particularly in an era of limited healthcare resources. Implementing funding policies such as reference-based pricing, which covers only the cost of the racemic mixture, could promote cost-effective prescribing and align with the best available evidence.

Jen Potter, PEER (Patients, Experience, Evidence, Research)
Jamie Falk, PEER
Allison Paige, PEER

Abstract

Appropriate Prescribing

The PEER 2023 Simplified Lipid Guideline

The 2015 original PEER Simplified Lipid Guideline transformed the landscape of dyslipidemia management in primary care and remained one of the most-accessed articles in Canadian Family Physician over its lifespan. In 2023, PEER re-imagined this guideline, updating it to include the most recent data - but still pushing boundaries to minimize patient and clinician burden. This guideline uses the best-available evidence to provide primary care providers with advice that is both patient-centered AND practical within the realities of primary care.

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Robin Guyer, Kateri Memorial Hospital Center
Jennie Herbin, McGill University
Amy Lamb, Indigenous Pharmacy Professionals of Canada
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Jason Min, University of British Columbiar
Inès Paschos, McGill University
Cheryl A. Sadowski, University of Alberta
Wade Thompson, University of British Columbia
Emily G. McDonald, McGill University

Abstract

Appropriate Prescribing

Collaborating with Indigenous Peoples to Address Priorities for Medication Appropriateness

Objective:
This session will share insights from the early implementation of the Canadian Medication Appropriateness and Deprescribing Network's (CADeN) 5-year action plan detailed in "Decolonizing and Indigenizing Medication Appropriateness in Canada: Recommendations for a Network Action Plan" (March 2024). The plan emphasizes humility, learning, and relationship building, outlining steps to contribute meaningfully to Reconciliation through Indigenous-led research, knowledge mobilization, and collaborative activities that support reciprocity and self-determination.

Methods:
In 2024, CADeN established a permanent committee to guide the plan's implementation, expanded its membership, and prioritized relationship building. Talking circles were conducted with specific Indigenous communities to explore needs, gaps and priorities regarding polypharmacy and appropriate prescribing. Staff participated in Indigenous cultural safety training, underscoring CADeN's commitment to ensuring a culturally safe approach. Committee members shared this work nationally and internationally, including at the Canada's Drug Agency Symposium 2024 and 2nd International Conference on Deprescribing.

Impact:
This initiative is creating an Indigenous-owned body of knowledge about medication appropriateness needs and priorities. The relationships and insights gained are laying the foundation for community-led initiatives to address these priorities in culturally safe and meaningful ways.

Challenges & Lessons Learned:
A key challenge has been navigating the Network's commitment to Indigenous data sovereignty, particularly adhering to the First Nations principles of ownership, control, access, and possession in the context of talking circles with diverse communities and individual perspectives. Building trust and fostering meaningful partnerships require a genuine commitment to learning, a willingness to prioritize relationships over timelines, and thoughtfulness when considering reciprocity.

Allison Paige Patients, Experience, Evidence, Research (PEER)
Allison Paige, PEER
Jen Potter, PEER

Abstract

Appropriate Prescribing

UTIs: Soothing Answers to Burning Questions

This presentation addresses the most straight forward yet potentially most perplexing common presentation that family physicians encounter – urinary tract infections. We attempt to simplify the diagnosis of uncomplicated UTIs and review the evidence for management addressing both antibiotic and non-antibiotic treatments. We will also discuss treatment of recurrent and complicated UTIs; and tease out what we know and don't know about "asymptomatic bacteriuria" and what to do when it presents in delirious elderly patients. For each topic, we will focus on the best available evidence, including a bottom-line summary and practical recommendations.

Alexander Singer, University of Manitoba
Leanne Kosowan, University of Manitoba
Lisa LaBine, University of Manitoba
Jerome Leis, Sunnybrook Research Institute
Justin Presseau, Ottawa Hospital Research Institute
Wendy Levinson, University of Toronto
Sabrina Wong, University of British Columbia

Abstract

Appropriate Prescribing

Decreasing Inappropriate Antibiotic Use in Primary Care Patients with Viral Respiratory Tract Infections

Goal:
This study will assess two strategies that aim to reduce antibiotic prescribing for viral respiratory tract infections. The two strategies to be tested are: (1) a low intensity audit and feedback intervention; (2) a high intensity quality improvement coaching targeting high prescribers designed to integrate CWC resources and tools into practice.

Activities:
Initially, all practices within participating networks received an audit and feedback report outlining how the practice compared to their peers in antibiotic prescribing for respiratory tract infections. The research team will engage with clinics and practices within the highest quartile of prescribing to offer quality improvement support and integrate CWC tools and resources. The Proctor et al. Implementation Science framework captures implementation and highlights areas to enhance resources, tools, and strategies.

Impact:
An assessment of available resources, tools and strategies that have the potential to reduce antibiotic prescribing for viral respiratory tract infections will inform and encourage uptake in other clinics and provinces across Canada.

Challenges:
High prescribing providers tend to be harder to engage. The research team will collaborate with practice-based research and learning networks to support meaningful engagement. High intensity coaching is not feasible for all providers, identifying high prescribers should facilitate scalability.

Lessons Learned:
Audit and feedback reports were accessed by 52.7% of providers with the majority (69.7%) opening the report upon first contact (email). Local practice-based research and learning networks can help bridge support and engagement with clinics to implement additional resources and tools to effectively reduce inappropriate antibiotic prescribing.

Jamie Falk, PEER and University of Manitoba
Allison Paige, PEER and University of Manitoba

Workshop

Appropriate Prescribing

Axe the Rx: Deprescribing Chronic Medications with PEER

Learning Objectives:

At the conclusion of this activity, participants will be able to:

- Identify low value medications for common chronic diseases
- Develop an approach to deprescribing within your practice
- Apply patient oriented approaches to deprescribing preventative and symptom-based medications.

Description:

We all have patients, particularly the elderly, whose pill bag is heavier than their lunch bag. Polypharmacy is inevitable as patients accumulate chronic diseases and yet not all medications are equally helpful for patient-oriented outcomes. In addition, while medications for symptoms ranging from chronic pain to insomnia to acid reflux or even bladder issues can lead to harms, reducing or stopping these medications can be challenging. Gaining practical approaches based on best evidence and patient-centred decision making has significant implications for provision of care that minimizes burden and enhances patient and clinician satisfaction. In this interactive, case-based session, the presenters will review approaches to deprescribing “low-hanging fruit”, less useful or no longer desired medications for common chronic illnesses, and reducing or simplifying challenging medications used for symptomatic conditions.

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Peter Daley, Eastern Health
Jason Vanstone, Saskatchewan Health Authority
Laura Burnes-Achtymichuk, Ministry of Health
Paul Bonnar, Nova Scotia Health
Catherine Truchon, INESSS
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Jerome Leis, Choosing Wisely Canada
Wendy Levinson, Choosing Wisely Canada
Jonathan Lam, CDA
Fiona Mitchell, One Island Health System
Daniel Landry, Vitalite Health Network
Timothy MacLaggan, Horizon Health Network

Abstract

Appropriate Prescribing

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 1.27 million deaths globally. Overuse of antibiotics helps fuel this rise; with primary care physicians prescribing two-thirds of all antibiotics in Canada. Approximately 25% of these prescriptions are likely unnecessary and prescribed for conditions that never or rarely require antibiotics. Antibiotic audit and feedback is 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.

Through this collaboration, feedback programs will likely be implemented, or updated, in 7 provinces and 1 territory in November 2025. Previous evidence has demonstrated antibiotic prescribing feedback in primary care to be effective at significantly reducing antibiotic use and cost savings. CANBuild-AMR has the potential to impact on antibiotic overuse and create a sustainable activity in line with the goals of the pan-Canadian AMR action plan released by the Public Health Agency of Canada in 2023. Challenges related to data access, audit and feedback best practices, and local resources have been identified at the provincial and territorial level as barriers to implementation.

Marlys LeBras, RxFiles Academic Detailing
Marlys LeBras, RxFiles Academic Detailing
Loren Regier, RxFiles Academic Detailing
Debbie Bunka, RxFiles Academic Detailing
Julia Bareham, RxFiles Academic Detailing
Derek Jorgenson, RxFiles Academic Detailing

Abstract

Appropriate Prescribing

Academic Detailing in Saskatchewan: Supporting Improvements in Antibiotic Prescribing

Antibiotics for common respiratory tract infections (i.e. acute otitis media [AOM], sinusitis, pharyngitis, bronchitis) are overprescribed in primary care. Academic detailing (educational outreach) is a strategy that supports improvement in prescribing practices.

Activities:
From May to November 2024, 755 primary care clinicians requested an academic detailing visit (338 physicians, 154 nurse practitioners/nurses, 150 pharmacists, 77 medical residents, 36 other providers). At the end of the visit, clinicians were surveyed.

Impact:
Survey response rate was 23%. 75% of respondents participated in a large group visit (>5 people). 99% of respondents agreed that the visit enhanced their knowledge and 97% agreed that they felt more confident managing drug therapy.

Of key messages, over 50% of respondents indicated, "infection-related complications are rare with common respiratory tract infections with or without an antibiotic" will change or confirmed their practice. "If required, amoxicillin is first-line for AOM or sinusitis; reserve amoxicillin-clavulanate" confirmed the practice of 69% of respondents. "Identify low allergy risk patients using Firstline or PENFAST for possible penicillin/amoxicillin allergy delabeling" changed the practice of 82% of respondents. 99% of respondents indicated no perceived bias.

Challenges:
Academic detailing visits were voluntary and may not have impacted clinicians who may benefit the most. Authors were unable to confirm if survey responses reflect actual practice change.

Barriers to reserving antibiotics go beyond addressing knowledge gaps (e.g. patient pressure to prescribe) and are difficult to address.

Lessons Learned:
Clinicians found tools provided to support antimicrobial stewardship practical. Academic detailing visits were well-received and supported appropriate antibiotic prescribing.

Liv Cento, University of Toronto
William Silverstein, University of Toronto

Abstract

Appropriate Prescribing

Rate of Inappropriate Benzodiazepine and Sedative-Hypnotic Prescribing in Hospitalized Older Adults

Background:
Benzodiazepines and sedative-hypnotics (BSH) are commonly prescribed to older adults for sleep and responsive behaviours in hospital. However, BSH should not be used for insomnia, agitation, or delirium, unless provoked by alcohol or benzodiazepine withdrawal. In older adults, these medications increase the risk of falls, fractures, cognitive impairment, and delirium. Proposed appropriate indications include alcohol and benzodiazepine withdrawal, short-term anxiety management until first-line treatments become effective, seizures, pre-procedural sedation, and end-of-life.

Objectives:
The goal of our study is to characterize the rate of inappropriate BSH prescribing to older adults at Sunnybrook Health Sciences Centre (SHSC).

Methods:
We conducted a retrospective chart review of patients aged 65 and older discharged from a medical-surgical ward at SHSC over a three-month period (May 1 to July 31, 2024). We identified BSH-naïve patients that received a new BSH prescription during admission. Patients were excluded if they received a BSH prescription with an appropriate indication, as defined above.

Results:
11.9% of all BSH-naïve patients (253) received a new BSH prescription without an appropriate indication. The rates by month were as follows: 10.5% in May 2024, 10% in June 2024, and 14.9% in July 2024. 10% of these BSH prescriptions were continued at discharge

Conclusion:
Rates of inappropriate BSH prescribing to older adult patients at our institution are high. We plan to conduct a quality improvement initiative with the goal of reducing inappropriate prescribing through implementing a bundle of evidence-based strategies including education initiatives, pharmacist-led medications reviews, and non-pharmacologic strategies to promote sleep.

Eugene Yeung, University of British Columbia

Workshop

Appropriate Prescribing

How to Prescribe Using an Antibiogram

Background:
Antibiograms are tables that show susceptibilities of microorganisms to different antimicrobials based on local population data. However, making an antibiogram is not as simple as copying laboratory data into spreadsheets; certain rules from Clinical & Laboratory Standards Institute rules must be followed to avoid presenting misleading information that can cause patient harm.

Goal:
To help clinicians to learn how to correctly read an antibiogram that can impact on their prescribing practices.

Activities:
Interactive exercises will be provided to attendants to obtain hands-on skills in making and interpreting an antibiogram. Through hands-on experience, attendants will understand the difficulty in making an informative antibiogram and careful interpretation of the local epidemiology data

Impact:
Attendants will become more competent in choosing and prescribing antimicrobials based on the information in an antibiogram.

Challenges:
Many clinicians may be unfamiliar with laboratory medicine and feel off guard by the wealth of information in medical microbiology.

Lessons Learned:
Correct interpretation of antibiogram information helps prescribing practice and choosing antimicrobials wisely.

Environmental Sustainability

Stephanie Tom, Canadian Rheumatology Association
Arielle Mendel, Canadian Rheumatology Association

Abstract

Environmental Sustainability

Advocating for Sustainable Healthcare within Medical Organizations: Lessons from Rheumatology

Goal:
The Canadian healthcare sector contributes 4-5% of greenhouse gas emissions nationally, and ranks in the top 5 per capita for healthcare emissions in the world. Building climate resilience can ensure that our system is able to provide medical services, particularly during major climate events.

The Canadian Rheumatology Association (CRA) is creating a series of planetary health initiatives for clinicians to facilitate adapting our clinics and hospitals to respond to current and ongoing climate risks. By building on Choosing Wisely principles, our approach emphasizes the triple bottom line, ensuring high-value patient care, cost savings, and environmental stewardship.

Activities:
The CRA is engaging members by 1) creating an implementation toolkit of how to practice rheumatology more sustainably and 2) disseminating these strategies through our national rheumatology podcast, a resource hub on our national website, and a communication campaign to our members through workshops and journal articles.

Impact:
We will measure toolkit and podcast downloads, website hub activity, amount of participation in our planetary health events.

Challenges:
Planetary health is a relatively new concept to healthcare. Post-pandemic burnout among healthcare workers may limit toolkit uptake.

Lessons Learned:
By framing climate change and efforts to build climate resilience in rheumatology as a health-related issue at its core, we have learned how to adapt our messaging and engagement with healthcare workers and patients.

Vishal Jain, Health Standards Organization
Myles Sergeant, Canadian Coalition for Green Health Care
Linda Varangu, Canadian Coalition for Green Health Care

Workshop

Environmental Sustainability

Advancing Climate Action Through Standards and Accreditation

This presentation will provide an overview of the impact of climate change on healthcare and how climate action can be advanced through standards and accreditation.

By the end of this presentation, participants will understand impacts of climate change on their organization and how they can address sustainable health care. Participants will be able to apply these learnings to advance climate action within their own organization. Participants will have the opportunity to share their understanding of the climate crisis and ask questions about the impact on healthcare.

There is a clear need for standardized requirements for health and social service organizations in Canada to address climate resiliency and sustainable health care. HSO is working to address this need in collaboration with partners by embedding requirements within standards, assessment programs, and survey instruments to address the growing impacts of climate change on human and planetary health.

The World Health Organization has called climate change the greatest global health threat facing the world in the 21st century. Between 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year. The direct damage costs to health are estimated to be between US $2-4 billion per year by 2030.

The Canadian Coalition for Green Health Care Green Hospital Scorecard has revealed that while some recognition of climate change has been undertaken in hospitals, including assigning climate-related responsibilities to health care providers, less than 30% of hospitals report that climate risks have been integrated into policies.

Roni Kraut, University of Alberta
Mathew Katz, Strathcona High School
Sonia Ning, South Boulevard Pharmacy
Kaylin Wilson, Medicine Shoppe Pharmacy
Rami Atari, South Boulevard Pharmacy
Omar Kamal, University of Alberta
Oksana Babenko, University of Alberta

Abstract

Environmental Sustainability

Comparing the Doses Remaining In Inhalers With and Without Dose Counters

Background:
Dose counters in inhalers allow individuals to know the number of doses remaining in their inhaler. Studies have found that dose counters help reduce the risk of adverse events and improve environmental stewardship. However, several commonly used inhalers such as Ventolin (salbutamol) lack dose counters.

Objective:
To determine if there is a difference in doses remaining in inhalers with and without dose counters.

Methods:
For inhalers collected from May-November 2024 during our pilot inhaler recycling program (3 pharmacies in Edmonton, Alberta), we recorded the type of inhaler and doses remaining. For inhalers with dose counters, doses remaining was taken from the dose counter; for inhalers without dose counters, doses remaining was calculated using published weight/dose relationships. We excluded inhalers with ≥80% of doses remaining and without a published weight/dose relationship. Chi-squared analysis was performed.

Results:
We collected 311 inhalers (37 different types), 220 met the inclusion criteria, and of these 152 (69%) had dose counters and 68 (31%) did not have dose counters. The distribution of doses remaining in inhalers with dose counters versus without dose counters was significantly different (P<.001):

- Negative 11-20% doses: 0% versus 31%
- Negative 1-10% doses: 0% versus 6%
- Nil doses: 83% versus 7%
- 1-10% doses: 6% versus 2%
- 11-80% doses: 11% versus 54%

Conclusion:
There is a significant difference in the distribution of doses remaining in inhalers with and without dose counters. Especially concerning is that 37% of inhalers have been used beyond the doses with active medication. These results reinforce previous literature and emphasize the need for all inhalers to have dose counters.

Caitlin Roy, Canadian Association of Pharmacy for the Environment
Kirsten Tangedal, Canadian Association of Pharmacy for the Environment
Shellyza Sajwani, Canadian Association of Pharmacy for the Environment
Trudy Huyghebaert, Canadian Association of Pharmacy for the Environment

Workshop

Environmental Sustainability

Development of a Hospital Department-Specific Environmental Sustainability Audit Tool

Goal:
To describe development and application of a hospital department-specific environmental audit tool to identify and prioritize planetary health opportunities and initiatives.

Activities:
Using a hospital pharmacy specific environmental audit tool locally developed in Regina, the presenters will review the process for its development and opportunities to develop other department-specific audit tools. See the following CJHP article by the proposed presenters for more details: Development of an environmental audit tool for hospital pharmacy: Roy C, Fox K, Tangedal K. Can J Hosp Pharm. 2024;77(4):e3591. doi: 10.4212/cjhp.3591

Impact:
Implementation of this audit tool in Regina resulted in identification of three priorities - reduce paper use, reduce plastic use, and review recycling practices. Processes were modified to discontinue unnecessary report printing, dispensing drugs in paper bags instead of plastic, and improving recycling to recycle more plastic and not contaminate batches of recycling. Other sites experiencing challenges identifying a starting place for their planetary health journey may find an audit tool useful for goal setting and benchmarking.

Challenges:
Challenges include generalizability of the audit tool outside of the Regina hospital pharmacy department. However, the general process for development may be applicable to other sites and departments. Additionally, there is a lack of evidence to support which interventions are the most impactful.

Lessons Learned:
An audit tool is a valuable first step in identifying planetary health initiative opportunities, prioritization, and benchmarking. However, other important steps are required to ensure sustainability and effectiveness of interventions.

Rosanne Thalakada, Vancouver General Hospital
Meghan MacLaren, University of British Columbia
Rosanne Thalakada, Vancouver General Hospital
Tim T Y Lau, Vancouver General Hospital
Salomeh Shajari, Vancouver General Hospital
Shaqil Peermohamed, Vancouver General Hospital

Abstract

Environmental Sustainability

Using a Planetary Health Lens to Quantify Our Intravenous Use of Bioequivalent Antimicrobials

Rationale:
4.6% of Canadian greenhouse gas (GHG) emissions come from healthcare, 25% of which come from medications. Identifying treatments with a lower carbon footprint while maintaining good clinical outcomes is critical. Preliminary data has shown the intravenous (IV) formulation has a significantly higher carbon footprint compared to the oral (PO) formulation. Antimicrobials with high bioavailability offer no added benefit when given intravenously, except in cases where oral administration is not feasible.

Objectives:
To quantify the proportion of patients receiving bioequivalent antimicrobials IV when they could have been administered orally, and the related GHG emissions and cost.

Design and Methods:
This was a retrospective chart review of inpatients who received IV azithromycin, ciprofloxacin, clindamycin, co-trimoxazole, fluconazole, levofloxacin, linezolid, metronidazole, moxifloxacin, and voriconazole at Vancouver General Hospital (VGH) on 5 dates.

Results:
A total of 128 patients were identified. 79 (62%) were eligible to receive at least one dose orally. The antimicrobials with the highest eligibility for IV to PO switch were azithromycin (73%) and metronidazole (71%). The most common infection types included intra-abdominal (33%) and respiratory (16%). Over the 5 dates, the potential GHG savings was ~82,000 g CO2-eq. This is the equivalent of driving ~400 km in a gasoline-powered car. The total potential antimicrobial cost savings over the study period was ~$835.

Conclusion:
62% of patients receiving IV bioequivalent antimicrobials were eligible to receive at least one dose orally. Education and antimicrobial stewardship opportunities exist to promote IV-to-PO switch of highly bioavailable antimicrobials in eligible patients.

Keith Parsons, Newfoundland and Labrador Health Services
Joanna King, Newfoundland and Labrador Health Services

Abstract

Environmental Sustainability

Building Climate Culture in the Healthcare System

Goal:
Newfoundland and Labrador Health Services is aiming to be a be a leading Canadian Health Care Organization in climate culture and environmental stewardship within 8-10 years.

In 2023, five legacy health organizations were amalgamated to form one provincial health authority – Newfoundland and Labrador Health Services (NLHS). With the amalgamation came an opportunity to build from sustainability initiatives throughout the province and construct a provincial, system-wide environmental sustainability strategy that embeds climate culture while addressing climate mitigation, adaptation and health and well-being.

With the approval of the NLHS Executive Management Council, and a strategic planning goal to have an environmental sustainability strategy in place by March 31, 2025, the NLHS Provincial Planning Team brought together a steering committee and commenced methodic planning to build a strategy that aligns with the tenets of a "Learning Health and Social System" (a health system in which science, education, informatics, incentives, and culture are aligned for continuous improvement, innovation, and equity), and the Quintuple Aim for Healthcare Improvement (Health Equity, Workplace Well-Being, Value for Money, Improved Outcomes, Pursuit of Better Health).

Based on a solid understanding of NLHS' current state, the strategy build leans heavily on best practice research, engagement of patient and community partners, government partners and partners internal to NLHS. All information gathered has been packaged in preparation for strategy visioning with key informants.

Jessica Cuppage, Baycrest Hospital
Myles Sergeant, Canadian Coalition for Green Health Care

Workshop

Environmental Sustainability

Planetary Health and Care of Older Adults

Goal:
This workshop aims to explore the intersection of planetary health and the aging population, highlighting strategies for sustainable and resilient care for older adults. Participants will gain insight into the health impacts of climate change and actionable steps to promote climate-conscious older adult care.

Activities:
The session will include a review of the effect of climate change on human health, with an emphasis on the unique vulnerabilities of older adults, as well as the unique opportunities for climate action in older adult care. Current and future clinical and health systems strategies for improving the sustainability of older adult care will be discussed. Through interactive discussions and case studies, participants will identify practical actions to enhance sustainability of older adult care in clinical and health systems settings.

Impact:
One of the greatest areas of opportunity to improve the sustainability of health care is by reducing unnecessary care, and there is no greater opportunity than within older adult care, since this population has the highest rates of polypharmacy, health care expenditures, and hospitalization. High quality, evidence-based care, and care that is more aligned with patients' preferences and goals, is also health care that is better for the planet. These important aims can be advanced simultaneously. By equipping healthcare professionals with foundational knowledge and tools for sustainable practice, this workshop seeks to drive climate-conscious decision-making in the care of older adults at the individual and systems level.

Michael Barrett, Quality of Care NL
Kathleen Mather, Quality of Care NL

Abstract

Environmental Sustainability

Supporting Climate Friendly Healthcare Menus in NL

Goal:
Support environmentally sustainable healthcare menus as part of broader initiatives to reduce environmental impact of the healthcare system

Background:
In 2022, Health Accord NL (HANL) made recommendations to government to 'reimagine the health and social care systems' in NL. Multiple HANL recommendations focus on addressing the climate emergency. Traditional food services metrics have not factored in environmental impact of menu items and waste.

Activities:
- Connected with food service leadership at Newfoundland and Labrador Health Services to determine work being done in this area and available data.
- Efforts to incorporate more plant-forward items on menu (in alignment with Auditor General recommendations and 2019 Canada's Food Guide recommendations).
- Focus on purchasing and using locally produced food on menu (in alignment with HANL recommendations).

Impact:
- Increase in amount of local food being used in LTC menus in Eastern zone
- Expanding plant forward meal options available, based on acceptability
- Measurement of GHG emissions related to menu changes

Challenges:
- Different standards and policies between provincial zones causing inability to roll out province-wide approaches
- Acceptability of plant forward items with NL population
- Difficulty with accessing local producers for foods - GAP certification requirement for suppliers

Lessons Learned:
- Identify champions in this area and support work
- Small steps valuable in moving towards goals (e.g. % increases of local food items)
- Collaborations with other organizations/government departments to better understand contextual factors (e.g. GAP certification barriers)
- Trial and error and feedback from patients/residents to help guide future efforts.

Krista Mahoney, Quality of Care NL

Abstract

Environmental Sustainability

A Province-Wide Approach to Discontinue Desflurane Purchasing in NL

Desflurane, a widely used anesthetic gas, has been identified as having a high global warming potential and significantly contributing to greenhouse gas emissions in healthcare. Recent efforts to phase out desflurane reflect a growing commitment within the anesthesia community to reduce environmental impacts. A global scan of desflurane use found that Scotland and England have banned desflurane (by 2023 and 2024, respectively) and that the European Union will have a complete ban by January 1, 2026. In Canada, the approach has been primarily site-specific, whereby hospitals have been eliminating desflurane via policy changes. In September 2024, during a virtual Choosing Wisely Half-Day Forum amongst NL health system leaders, decision makers, and quality improvement specialists, it was determined that under one provincial health authority, Newfoundland and Labrador Health Services, could take a provincial approach to eliminating desflurane. Choosing Wisely NL co-drafted a joint statement on behalf of the Clinical Chiefs of Anesthesiology (or equivalent) representing all five health system zones across the province. This statement notified NLHS staff of an operational decision to cease purchasing of desflurane as of December 1, 2024. The statement was released via NLHS Communications to all relevant NLHS members. Relevant NLHS leadership and pharmacy ordering teams were also notified of the change to mitigate supply chain issues. In March 2025, purchasing data will be re-examined at 3 months post-intervention to verify to successful elimination.

Rizwan Ahmed, Southern Health

Abstract

Environmental Sustainability

Putting Anesthetic Emissions of Desflurane into Bed

“One of the most commonly used anesthetic gases is desflurane, which also happens to be the most environmentally harmful. Desflurane remains in the atmosphere for 10 years, compared with 3.6 years for isoflurane and 1.2 years for sevoflurane.[1]

To illustrate further, one hour of use is equivalent to a 6.5km car journey for sevoflurane, 14km for isoflurane, and a shocking 320km to 370km for desflurane. What’s more shocking is that there is no clinical superiority of desflurane over the other anesthetics

When it comes to sustainability, not all anesthetic gases are created (healthprocanada.com)

Royal College of Anesthetists and the Association of Anesthetists, NHS England has announced the decommissioning of desflurane by early 2024.

We support the decommissioning of desflurane given the availability of clinically safe, more environmentally friendly, and cost-effective alternatives. We will continue to work with our members and NHS England to capture and accommodate exceptional clinical circumstances that might require a documented exemption.

In SHSS, we put a restriction on the use of desflurane and removed it from the wardstock. The utilization has already been reduced by 50%.

Measurement & Evaluation

Alison Bell, Shared Health Manitoba
Christine Peters, Shared Health
Miranda Radics, Shared Health
Mona Spencer, Shared Health
Lisa Kendrick, Shared Health

Abstract

Measurement and Evaluation

The Culture of Requesting Cultures - UTI Testing and Treatment Analysis in Long Term Care

In Manitoba, long-term care (LTC) pharmacy and hospital diagnostic services are provincially managed, allowing access to data for analysis (with some exceptions). We reviewed six months of data to assess adherence to UTI testing and treatment guidelines, as well as to identify excess testing and antibiotic prescribing. This baseline data will guide local intervention strategies.

Key findings include:

- The data covers 68% of licensed Manitoba LTC facilities.
- There was significant variation in urine culture testing and antibiotic prescribing across facilities, with 22% of cultures ordered by 4 clinicians and another 21% by 9 clinicians.
- 44.6% of urine cultures were negative.
- 27 personal care homes (PCHs) had higher volumes of negative cultures than peers.
- 33% of urine cultures grew organisms, with E. coli being most common (59.5%).
- Resistance rates were high for common UTI antibiotics: nitrofurantoin (43.4%), ciprofloxacin (36.8%), and TMP-SMX (30%).
- 54.8% of residents treated for UTI symptoms had negative cultures, with 60% receiving nitrofurantoin.
- Some symptomatic residents continued receiving treatments despite organisms being resistant.

We will discuss challenges in accessing and analyzing clinical data, as health records were unavailable for insights into prescriber and nursing decisions regarding testing and antibiotic use. This analysis is essential for improving UTI management in LTC settings.

Alexander Singer, University of Manitoba

Abstract

Measurement and Evaluation

Review of the 2024 Minimum Retesting Intervals for Lab Tests

Choosing Wisely Canada (CWC) and the Canadian Agency for Drugs and Technology in Health (CADTH) recently developed a guideline to identify minimum testing intervals of 5 tests. For each of the following tests; ANA, Lipase, SPEP, TSH and HbA1c a panel including family doctors, specialists and patient advisors developed recommendations aimed at reducing over-testing and promoting resource stewardship. The definition of a "minimum retest interval" is the minimum time before a test should be repeated.

The guideline panel's work is part of an ongoing collaboration between CADTH and CWC under the umbrella of the "Using Labs Wisely" initiative. The panel's work includes considerations for equity-deserving populations and will ideally be a key component of promoting ongoing stewardship efforts at the system level.

The recommendations of the multi-disciplinary advisory panels on the minimum re-testing intervals for lab tests will be presented with the aim of promoting further awareness and encouraging discussion regarding future directions of this important work.

Participants will learn about the specific recommendations as well as consider approaches to incorporate them into their current practice and/or health systems. A version of this presentation was recently presented at the 2024 Family Medicine Forum and was followed by a vibrant discussion regarding implementation challenges and potential drivers that could enhance the impact of the recommendations. Beyond discussing the content of these recommendations, this presentation will allow some time to continuing crucial conversations regarding their adoption and use.

Harsukh Benipal, University of Toronto
Abirami Kirubarajan, McMaster University
Sahra Nathoo, University of Toronto
Arthur Leader, University of Ottawa
Claire Jones, University of Toronto

Abstract

Measurement and Evaluation

A Systematic Assessment of Interventions Advertised on In Vitro Fertilization Clinic Websites in Ontario

Background:
The Choosing Wisely initiatives focus on identifying diagnostic and therapeutic interventions that lack strong evidence and may pose potential harm to patients. In Reproductive Endocrinology and Infertility, five such practices—referred to as "add-ons"—have been identified for clinical consideration.

Methods:
This cross-sectional study, conducted between November and December 2024, systematically assessed the websites of Ontario In Vitro Fertilization (IVF) clinics to determine the proportion of interventions not recommended by Choosing Wisely. Two reviewers independently evaluated each website in duplicate.

Results:
A total of 26 IVF clinics were identified, with 23 (88.5%) offering one or more add-on interventions. The cost of these add-ons ranged from CAD 200 to CAD 5,000, depending on whether the IVF cycle was government-funded or privately funded. Sixteen clinics (61.5%) offered preimplantation genetic testing for aneuploidy screening, though all presented it as optional. Ten clinics (38.5%) offered assisted hatching before transfer, though it was unclear whether this applied to fresh or frozen embryos. Twelve clinics (46.2%) advertised sperm DNA fragmentation testing, listed as optional in all cases. No clinics discussed prescribing high-dose gonadotropins for ovarian stimulation or lymphocyte immunization therapy. Only four clinic websites (15.4%) mentioned the potential harms of these interventions, and none cited studies on the associated benefits or risks.

Conclusion:
Clinic websites widely advertise add-on interventions for IVF patients, but do not routinely provide evidence of their effectiveness or potential harms. This highlights an opportunity to encourage patients and physicians to critically evaluate the utility of these interventions in fertility care.

Sampson Law, University of Calgary
Kelly Burak, University of Calgary
Doug Woodhouse, University of Calgary

Abstract

Measurement and Evaluation

Assessing Variation of Antipsychotic, Antidepressant, and Sedative Dispensations to Older Adults in Alberta Between 2021-2023

Background:
Inappropriate prescribing of psychotropic medications to older adults increases the risk of cognitive and function decline, falls, fractures, stroke, and death. Understanding variation in dispensing of sedating medications informs opportunities for improvement.

Goal:
Assess variation in dispensing of antidepressants, antipsychotics, and sedatives to seniors in Alberta between July 1, 2021, and June 30, 2023.

Methods:
A population-based cross-sectional study including all individuals 65 years or older in Alberta was conducted using data from the Pharmaceutical Information Network and Alberta Continuing Care Information System. The primary outcome was the prevalence of seniors dispensed antidepressants, antipsychotics or sedatives on the Beers list, assessing associations with age, sex, and location of residence using chi-square test and prevalence odds ratios (POR) with 95% confidence intervals (CI).

Results:
There were 2,640,427 dispensations (12.9% antidepressants, 35.5% antipsychotics, and 51.6% sedatives) given to 177,943 seniors (62.3% female). Females were dispensed these medications at 1.69 (95% CI:1.66-1.72) times higher rate compared to males ($p<0.00001$). Older individuals were also dispensed medications at significantly higher rates ($p<0.00001$), as were those in rural compared to urban communities (POR = 1.11, 95% CI:1.09-1.13). Geographic location of residence significantly affected the proportion that were dispensed psychoactive medications ($p<0.00001$).

Conclusions:
Medication dispensations vary significantly based on sex, age, location within Alberta, and residence in the community or a long-term care facility. Females, patients living in rural communities, and those in long-term care facilities were dispensed potentially inappropriate sedating medications at higher frequencies. These findings will be used to target improvement activities to populations with the greatest need.

Div Patel, NOSM University
Nathan Jeffery, NOSM University
Taylor Marshal, NOSM University
Roy Kirkpatrick, NOSM University
Lisa Allen, Huntsville Physicians Local Education Group
John Hogenbirk, Centre for Rural and Northern Research

Abstract

Measurement and Evaluation

Choosing Wisely in Post-Pandemic Canada: Perspectives on Resource Stewardship

The COVID-19 pandemic significantly disrupted primary care delivery, amplifying challenges in resource stewardship. Choosing Wisely Canada (CWC) guidelines aim to reduce unnecessary interventions. However, barriers to their implementation persist, particularly in rural settings where access to resources is limited and patient expectations often conflict with evidence-based care.

This study explored primary care physicians' awareness, utilization, and barriers to implementing CWC guidelines in a post-pandemic context, focusing on challenges, quality improvement opportunities, and innovative approaches to reduce low-value care.

An online survey of 127 primary care physicians across Canada collected demographic data, practice habits, and perspectives on CWC guidelines. Quantitative analysis measured trends, while qualitative analysis of open-ended responses identified recurring themes.

Findings revealed high awareness of CWC guidelines (97.6%) but low familiarity with post-pandemic adaptations (36.2%) and patient-facing materials (61.4%). Key barriers included time constraints, fear of missed diagnoses, and limited rural resources. Physicians highlighted the need for tailored approaches in rural settings, where deviations from guidelines are often necessary because of challenges related to healthcare access.

Participants identified several opportunities for improvement, including integrating guidelines into electronic medical records and developing mobile applications to support decision-making. Enhanced patient education emerged as critical for addressing demands for unnecessary tests, often fueled by misinformation from social media.

Targeted medical and patient education, interprofessional collaboration, and technology integration are essential for improving CWC adoption. Tailored solutions that address rural-specific challenges and systemic barriers are pivotal for achieving sustainable resource stewardship in primary care.

Andrea Nielsen, Blood Management Shared Health
Brittani Rainkie, Blood Management Service
Andrea Nielsen, Blood Management Service
Lindsay McCormac, Blood Management Service
Shana Chiborak, Blood Management Service
Arjuna Ponnampalam, Blood Management Service
Charles Musuka, Transfusion Medicine

Abstract

Measurement and Evaluation

Measurement & Evaluation of the New Transfusion Medicine Team on a Provincial Level

Objective:
In 2022, Blood Management Service (BMS) was integrated into the Diagnostic Service Transfusion Medicine Team. BMS brought clinical expertise to expand project development, improve policy, and enhance patient care, which now extended beyond the confines of one health authority. This project will be evaluated from a provincially focused lens to analyze the overall impact of this transfusion medicine team and the effectiveness on enhancing best practice.

Methods:
In order to evaluate a change of this magnitude, several audits have been completed, and others are ongoing. The goal is to evaluate the current state of transfusion practices within the regions, how this has impacted the utilization, and determine if practice changes are required. The new TM team will assess post audit findings for improved compliance, utilization, and patient outcomes. Various data tools will be used for the auditing process, based on the ability for effective data extraction at each region.

Results:
Several audits have been completed and have shown areas requiring improvement in both process and compliance. Of the audits completed, recommendations are being provided to leadership with the ultimate goal of improving patient safety. Several audits are ongoing. Outcomes of one audit identified significant areas in need of improvement which will require a post recommendation audit. Significant safety issues identified include missed transfusion reactions, improper documentation, and inappropriate transfusions. Several process changes have been initiated. Early data assessment has already shown a reduction of wastage and improved compliance in the Provincial Massive Hemorrhage Protocol. One area that the TM team has focused on was increased utilization of the current blood conservation program. This has been successful in filling IV iron clinic capacity for 8 months post consolidation. Success is being quantified with pre/post parenteral iron hemoglobin values.

Conclusion:
Utilizing a multidisciplinary team approach to identify areas in need of further development by means of assessment, auditing, and engagement, is important. It is not too early to say that the success that this team is seeing is only going to improve.

William K. Silverstein, Sunnybrook Health Sciences Centre
Jagadish Rangrej, Ontario Ministry of Health
Kamil Malikov, Ontario Ministry of Health
Sping Wang, Ontario Ministry of Health
Shengli Shi, Ontario Ministry of Health
Jonathan S. Zipursky, Sunnybrook Health Sciences Centre
Michael P. Hillmer, Ontario Ministry of Health

Abstract

Measurement and Evaluation

Long-Term Impact of Criteria-Based Serum 25-Hydroxyvitamin D Testing in Ontario

Introduction:
Approximately three quarters of serum 25-hydroxy vitamin D (vitamin D, hereinafter) tests may be ordered inappropriately. To curb unnecessary testing, Ontario implemented criteria-based testing on December 1, 2010, only funding vitamin D tests for certain conditions. The long-term impact of this policy is unknown.

Methods:
We performed a population-based, cross-sectional time series analysis at the Ontario Ministry of Health, from April 1, 2005 to March 31, 2024 to assess the longitudinal impact of criteria-based testing on vitamin D testing volumes. We included all persons eligible for OHIP. The primary outcome was the monthly rate of vitamin D tests ordered per 1000 patient visits. We aimed to determine if there were significant changes in testing after implementation of criteria-based testing.

Results:
In the year prior to implementation of criteria-based testing, the number of tests ordered peaked at 3.04 per 1000 monthly patient visits (730,813 tests). In the year following implementation of criteria-based testing, testing decreased by 77%, to 0.53 per 1000 monthly patient visits (166,723 total tests) ($p<0.0001$). Long-term testing increased in the years following the policy's implementation. From April 1, 2023 to March 31, 2024, there were 3.02 tests ordered per 1000 monthly patient visits (1,131,517 tests), representing 99% of the ordering volume seen in the peak year prior to implementation.

Discussion:
Although Ontario's policy reset baseline ordering rates to dramatically reduce testing, test volumes did eventually approach those observed pre-implementation. Future studies should examine drivers of this trend, to inform quality improvement initiatives aimed at sustainably decreasing vitamin D testing.

Jacob Carson, Queen's University
Natalie Urbach, Queen's University
Kirk Leifso, Queen's University

Abstract

Measurement and Evaluation

Overdiagnosis of Acute Otitis Media in Children

Introduction:
Acute otitis media (AOM) is a major contributor to pediatric healthcare resource utilization, but is frequently overdiagnosed. This may lead to unnecessary antibiotic prescriptions, unneeded healthcare visits, and potentially if occurs repeatedly, unnecessary surgery for myringotomy tubes. The myriad of findings observable during otoscopy, combined with difficulty performing this exam in children, likely contributes to overdiagnosis. To address this, the Canadian Pediatric Society (CPS) has published diagnostic criteria for AOM, emphasizing a bulging tympanic membrane as a key criterion. However, it is unknown which otoscopy findings on-the-ground physicians are using to diagnose AOM, and whether inconsistent application of guidelines is contributing to overdiagnosis.

Method:
This single-centre, multi-site retrospective chart review evaluated adherence to CPS AOM diagnostic guidelines at Kingston Health Sciences Centre from September 2021 to August 2022. We analyzed otoscopy findings documented in patient charts for 177 cases of non-perforated AOM treated with antibiotics. Only 109 cases (61.6%) had findings consistent with CPS criteria, and just 94 cases (53.1%) specifically documented a bulging tympanic membrane.

Results:
Our findings suggest that AOM is frequently overdiagnosed, possibly due to gaps in knowledge or inconsistent application of guidelines. To mitigate this, we propose a new Choosing Wisely recommendation emphasizing the diagnostic necessity of a bulging tympanic membrane. This study also demonstrates a practical methodology for identifying factors contributing to overdiagnosis in common pediatric conditions. This approach could be adapted to other high-burden conditions such as pneumonia, asthma, or strep throat, helping to optimize diagnostic accuracy and reduce unnecessary interventions.

Medical Education

Alexander Singer, University of Manitoba
Kirsten Hildahl, University of Manitoba

Workshop

Medical Education

Reducing Unnecessary Care While Teaching Family Medicine Learners

It is one thing to incorporate resource stewardship into one's own practice, but how do we teach these principles to those learning to be family doctors? Medical students and family medicine residents are frequently taught to be comprehensive and to consider a wide range of potential differential diagnoses. Additionally, they often lack the clinical experience or understanding of the evidence to determine specifically which tests are required to confirm or refute a diagnosis.

Concerning management, learners rarely have not yet seen large volumes of patients in follow-up, leading to an underappreciation the harms and over-treatment and over-diagnosis cause. Encouraging stewardship can be at odds with explicit teaching and the hidden curriculum. Nevertheless, given the harms of unnecessary care and limited health resources, the Choosing Wisely Canada campaign has successfully promoted stewardship for over 10 years.

Family medicine teachers have several opportunities to incorporate the concepts of reducing unnecessary care, which are well-aligned with the CanMedsFM roles. Many programs already include this as part of Quality Improvement and Patient Safety curricula. Going beyond these constructs, this workshop will encourage participants to consider areas in their existing curricula that incorporate these principles to share beyond their programs. We will then facilitate discussion through an exploratory exercise that encourages the development of new or revised approaches to teach this important topic. We will leverage the content discussed to initiate continue discussions initiated at FMF 2024 on the development of a Family Medicine faculty development guide for teaching avoidance of unnecessary care.

Emily McDonald, Canadian Medication Appropriateness and Deprescribing Network (CADeN)
Lalitha Raman-Wilms, University of British Columbia
Brenda Schuster, CADeN
Camille Gagnon, CADeN
Tiphaine Pierson, CADeN

Workshop

Medical Education

Deprescribing Competencies and How to Teach Them: An Interprofessional Workshop

Background:

Deprescribing, the process of reducing or stopping medications that are no longer necessary or that may be causing more harm, is essential in reducing low-value, potentially risky care. Yet, deprescribing is inconsistently integrated and taught in Canadian entry-to-practice health curricula such as medicine, pharmacy or nursing. Practicing clinicians have identified multiple barriers to its implementation, including a gap in the knowledge and skills required to deprescribe safely. To standardize deprescribing education and facilitate its integration and instruction in health curricula, an educational framework was developed.

Workshop Goal:

This workshop presents the essential competencies for deprescribing, and strategies to teach and assess these in educational contexts ranging from undergraduate courses to clinical practicums. Registrants will leave this workshop having identified opportunities to integrate deprescribing competencies into their precepting or teaching roles.

Activities:

This 70-min interprofessional interactive workshop will open with a presentation of the knowledge and skills for each deprescribing competency, followed by a World Café format. In small groups, registrants will participate in facilitated discussions about strategies to teach and assess each competency, and exchange ideas with the larger group at the end. Registrants will be encouraged to bring course outlines and relevant educational tools or resources to share with the group.

Impact:

After this session, registrants will be able to:

- Describe deprescribing competencies and related knowledge and skill requirements
- Identify gaps and opportunities to teach and assess deprescribing competencies
- Use tools and resources to develop a plan to integrate these competencies into teaching or precepting.

Eugene Yeung, University of British Columbia

Workshop

Medical Education

Current Change Of Stool Pathogen Identification Methods Impacts Ordering Practice

Background:
In 2022, the Government of British Columbia (BC) advised diagnostic laboratories in the province to replace stool culture and microscopy for ova and parasites (O&P) with the infectious diarrhea panel nucleic-acid amplification test (IDP-NAAT). It combines a multiple gene target (multiplex) that detects a minimum of 14 common viral, bacterial, and parasitic pathogens. LifeLabs BC implemented IDP-NAAT in September 2023. Prior to the implementation, LifeLabs BC, connected with 129 collection centres in communities in the province, 52221 stool specimens for microscopy each year.

Goal:
This workshop will discuss how this change of identification method may impact on clinicians' ordering practice and interpretation of test findings and local epidemiology.

Activities:
The workshop will involve visual aids such as the actual microbiology specimen containers and pictures of intestinal parasites to allow attendants to acknowledge the differences between traditional and future diagnostic testing of intestinal pathogens.

Impact:
This workshop will allow attendants to reflect on how this current change of methodology impacts their practice and interpretation of infectious diarrhea guidelines, including Choosing Wisely. Attendants will also be informed of the change of prevalence of Shiga toxin-producing Escherichia coli (STEC) and Clostridioides difficile since the implementation of IDP-NAAT.

Challenges:
Medical practitioners had always been taught to order stool culture and O&P for laboratory diagnosis of infectious diarrhea and will now need to change their practice.

Lessons Learned:
Change of test methodology impacts our practice and interpretation of guidelines and local epidemiology.

Patient Engagement

Sarah Porter, Island Health
Adele Harrison, Island Health

Abstract

Patient Engagement

Patient-Centred Public Awareness: Choosing Wisely Together to Reduce Low Value Care Through Conversation

Goal:
Recognizing patients as partners in care, to generate patient awareness of low-value tests and treatments promote conversation between patients and providers

Activities:
Between 2022 and 2024 Island Health developed a Choosing Wisely Patient-Centred Public Awareness campaign featuring 11 Choosing Wisely Canada (CWC) recommendations selected by a working group of equal patient and provider membership. The campaign has been initiated at 15 Island Health primary care sites and is expanding to 13 emergency department (ED) waiting rooms.

Impact:
Posters focused on specific CWC recommendations, generated locally, enhanced motivation for reducing low value care, prompting individual sites to consider individualized quality improvement. Posters are being leveraged as a tool to manage patient expectations around new provincial requirements for MRI ordering, identifying appropriate imaging. The expansion to ED aims to further increase patient awareness and understanding of low-value care - essential in a healthcare climate when balancing "more is always better" expectations against the realities of resource scarcity.

Challenges:
Concern around public perception of the campaign when faced with widespread primary care attachment challenges and increasing ED wait times delayed implementation. Extensive engagement with internal and external partners and continued connection with patient partners ensured the campaign moved forward while addressing concerns.

Lessons Learned:
Broad engagement focusing on diverse patient and provider perspectives is essential in the development of education tools. Aligning with strategic priorities, leveraging organizational structures and maintaining patient participation ensured this valuable initiative maintained momentum in the face of competing priorities.

Kim Giroux, University of Calgary
Madelyn Knaub, The University of Calgary
Santiago Leon, U Design Studios
Surakshya Pokharel, The University of Calgary
Veronika Kiryanova
Prachi Khanna, London School of Hygiene and Tropical Medicine
D'Arcy Duquette
Anna Rychtera
Nancy Verdin
Pamela Mathura, University of Alberta
Anshula Ambasta, University of British Columbia

Abstract

Patient Engagement

Co-designing Patient Engagement Tools Using Human-Centred Design with Patient Partners

Background:
The RePORT project aims to reduce unnecessary bloodwork in hospitalized patients. Human-Centred Design (HCD) is a problem-solving methodology commonly used in healthcare research. HCD complements patient engagement principles as HCD is centred on the users' voices and experiences.

Objective:
To co-design patient engagement tools to inform patients about the hospital-based bloodwork process.

Methods:
We developed patient engagement tools through a HCD working group, guided by patient engagement principles. The working group was comprised of a HCD specialist, patient engagement specialists, and nine patient research partners (PRPs). We utilized the HCD Double Diamond model (i.e. discover, define, develop, and deliver) to develop three patient engagement tools: i. an infographic, ii. a website (https://www.hospitalbloodwork.ca/), and iii. a video. Following tool development, a debrief session was conducted to review the co-design process and identify areas for improvement.

Impact:
PRPs indicated that the HCD approach facilitated their contributions and highlighted that the group's welcoming and diverse nature enriched project deliverables. Patient engagement bloodwork tools are posted in Alberta and British Columbia hospitals. Surveys and interviews are being conducted to determine how the tools can be improved.

Challenges:
Challenges with communication, language, and health literacy were identified. We identified that patient engagement training should be mandatory for everyone involved in patient-oriented research.

Lessons Learned:
The importance of project prioritization and management, and using consensus-based decision-making were some of the lessons learned. Additionally, frequent check-ins and debrief sessions were identified as valuable for resolving issues proactively.

Raha Eskandari, University of British Columbia
Wade Thompson, University of British Columbia
Dana Stanley, University of British Columbia
Jessica Otte, University of British Columbia
Zoe Hilton, Diabetes Action Canada
Sonia Butalia, University of Calgary
Fariba Aghajafari, University of Calgary
Anshula Ambasta, University of British Columbia

Abstract

Patient Engagement

Shaping Early-Stage Diabetes Care: Insights from Patient Experiences

Goal:
This project seeks to improve understanding of the experience of people who are given a diagnosis of prediabetes (6.0% ≤ A1c ≤ 6.4%) or mild diabetes (6.5% ≤ A1c ≤ 7.0%), and to use that knowledge to develop tools for patient-centered decision-making around testing and treatment. While these diagnostic categories may provide an early opportunity for intervention, they may also represent overdiagnoses and lead to sequelae of overtesting and overtreatment. Given the uncertain utility of these labels, it is essential to understand how they impact a patient's experience of care.

Activities:
This is a qualitative study engaging individuals recently diagnosed with pre/mild diabetes. Following the Canadian Institutes of Health Research (CIHR) Strategy for Patient-Oriented Research (SPOR) principles of patient engagement, we worked with three community research partners from British Columbia, Alberta, and Ontario. Together, we obtained funding, designed and conducted interviews, and analyzed data to understand patient experiences and priorities. We used thematic analysis to identify salient themes.

Lessons Learned:
In twelve interviews, the following themes emerged: (i) the diagnosis of pre/mild diabetes is emotionally complex, inciting feelings of both fear and gratitude for early detection, (ii) once diagnosed, people value information and education about the condition and its management, and (iii) successful management requires individualized multi-faceted treatment approaches considering individual priorities, and cultural and socio-economic context.

Impact:
The findings from this study will be used to design educational materials for clinicians and patients to support patient-centered and individualized decision-making in early-stage diabetes management.

Michelle Driedger, University of Manitoba
Alex Singer, University of Manitoba
Alan Katz, University of Manitoba
Ryan Maier, University of Manitoba

Abstract

Patient Engagement

Exploring Difficult Patient-Provider Conversations About COVID-19 Vaccination

Introduction:
Meaningful patient engagement was crucial for healthcare providers (HCPs) during their conversations about COVID-19 vaccines with patients. However, hesitancy about COVID-19 vaccines arose within sections of the public, and HCPs often faced resistance, opposition, and challenging clinical discussions.

Objectives:
This study aims to explore the difficult reported exchanges that HCPs had with hesitant/resistant patients about COVID-19 vaccines and the strategies HCPs used to navigate those interactions in a time of considerable public controversy.

Methods:
Data collection activities included individual interviews with HCPs (n=10) in the province of Manitoba. HCP participants included primary care providers, nurse practitioners and specialists from Winnipeg and surrounding communities in Manitoba, including regions with historically low vaccine uptake.

Results:
Participating HCPs reported that many conversations about COVID-19 vaccines exhibited new patterns of hesitancy/opposition compared to pre-pandemic discussions about long-established/routine vaccines. Patients frequently challenged HCPs with concerns about vaccine novelty, integrity (e.g., mRNA technology), and related policy (e.g., mandates). HCPs witnessed increasing hostility from patients and described experiences of moral injury and burnout. Consequently, HCPs tried to adapt ad hoc or established discursive strategies (e.g., shared decision-making, motivational interviewing, decision aids) to navigate delicate/thorny interactions, clarify values, preserve relationships, and respectfully share information.

Lessons Learned:
Lessons offered from this study show that HCPs strategies such as motivational interviewing/shared decision-making can be valuable in sensitive discussions. HCPs need to be better supported with training in these strategies and in coping with the moral/emotional/physical consequences in the clinical setting.

Quality Improvement

Alexander Singer, University of Manitoba

Abstract

Quality Improvement

Unnecessary Testing Due to Lack of interoperability – Can we Fix the Healthcare System's Broken Plumbing?

Everyday across Canada patients are harmed and unnecessary tests are ordered because of the lack of interoperability within the health system. The urgent need to adopt interoperable health data is described in no less than 10 reports published in Canada over the last several years. In 2024 the aptly titled, Health Canada's "The Time to Act is Now" and Canada Health Infoway's, "Digital Health Interoperability Task Force Report" both identify strategies based in part on lessons learnt during the COVID-19 pandemic which highlight the critical nature of this task. Innovations and concerted efforts by clinicians and administrators from all parts of healthcare delivery are needed to engage in this task.

We propose a workshop led by an expert and leader in laboratory medicine and another in primary to explore several facets of this important task. Given the ethos of Choosing Wisely, we will start by identifying some of the "low hanging fruit" in terms of exchanging health data that could be serve as stepping stones for fully interoperable system. We will then engage the participants to consider various use cases for adopting interoperable laboratory order and results systems in inpatient and outpatient settings. In particular, we will focus on how to articulate the benefits for funders to initiate efforts that will lead to interoperable systems. Finally, using a learning health system framework, we will engage participants to provide advice and content for an iterative evaluation of interoperable requisitioning systems to replace what is currently done with faxed pieces of paper.

Overuse, patient safety lapses and extraneous costs caused by disconnected and siloed health data transfers are as common as they are completely preventable. We have access to our banking, travel and retail records in real time. For other industries, the benefits of moving away from paper-based record keeping and communication clearly outweighed the costs. Yet despite the widespread adoption of electronic medical records, we continue to transmit information using paper-based technologies and our record systems are siloed and typically inaccessible within the circle of care during transfers across facilities or from community to hospital and vice versa.

We propose a workshop that will help us begin to solve this problem based on the input of those attending the Choosing Wisely conference.

Hedieh Molla Ghanbari, Sinai Health
Rachel Sheps, Sinai Health
Christine Soong, Sinai Health
Lily Yang, Sinai Health
Felix Leung, Sinai Health

Abstract

Quality Improvement

Leveraging A Regulatory College Partnership Program to Improve Laboratory Test Utilization

Background:
We implemented a multipronged approach including participation in the College of Physicians and Surgeons of Ontario Quality Improvement (CPSO QI) partnership program, requiring physicians to participate in a hospital-based QI project, to reduce unnecessary laboratory test utilization.

Methods:
From 2022-2024, we conducted a single-centered time series study to evaluate implementation of a bundled intervention to reduce unnecessary laboratory testing. The intervention comprised of: (1) participation in the CPSO QI program which required individual self-reflection and data review; (2) discontinuing low-value tests; (3) revisions of computerized order sets; and (4) audit-feedback scorecards. Outcome measure was monthly number of targeted tests completed per inpatient day. Balancing measures included monthly number of "stat" tests per inpatient day and median length of stay for select inpatient areas.

Results:
353 physicians registered for the CPSO QI program (85% of physicians at Sinai Health) with 118 (28.5%) withdrawing as they were exempt from participating. All eligible physicians completed the program. All computerized order sets were reviewed, leading to revisions in over 70 order sets. Testing for urea reduced by 81% and folate testing was eliminated and sustained throughout. Reductions for AST and aPTT were moderate - average monthly reductions of 32% and 27%, respectively – but sustained in the last year of the study period. No significant changes were observed with respect to balancing measures.

Conclusion:
Through a multipronged approach to improve laboratory utilization, we demonstrated active engagement of physicians through novel partnership with medical regulatory body with associated reductions in unnecessary laboratory testing.

Kristin Robertson, University of Calgary
Selena Au, University of Calgary
Dawn Opgenorth, University of Alberta
Tara Whitten, Alberta Health Services
Donovan Thorkelson, Alberta Health Services
Sheena Morton, University of Alberta

Abstract

Quality Improvement

Dialyzing Wisely: Improving the Performance and Delivery of Acute Dialysis to Critically Ill Patients in Alberta

Background:
Critically ill patients with acute renal failure may require renal replacement therapy (RRT). While RRT may be life-saving in some clinical scenarios, there is also strong evidence that premature initiation of therapy may be harmful to patient outcomes as well as utilize healthcare resources without patient benefit. Opportunity was identified in Alberta to standardize the timing of acute RRT initiation and improve the performance of RRT.

Methods:
Dialyzing Wisely implemented a stakeholder-informed, evidence-based acute RRT pathway in 20 Alberta ICUs using a stepped-wedged design. Local multi-professional champion teams conducted regular change cycles with implementation science principles and held audit and feedback meetings to assess for opportunities for improvement. After 2-7 cycles of aggregate data from the provincial electronic medical record, individual prescriber data on RRT initiation practices was added to reports based on user feedback. These metrics have now been translated to a Tableau dashboard for sustainable data provision.

Results:
To date there has been a 16.2% increase in acute RRT initiations meeting evidenced-based criteria. Given the 4% relative risk reduction in the flow through to chronic dialysis, this means that an estimated 2.62 chronic dialysis starts have been prevented so far. Quality metrics have also demonstrated improvements to the performance of RRT.

Challenges and Lessons Learned:
Challenges included hesitancy from external stakeholders and the complexity of the data. Individual prescriber reports yielded increased prescriber engagement with commitments to reflect further on practice. We anticipate increased adherence to evidenced based initiations and would recommend earlier availability of individual data when possible.

Lisa Miller, University of Manitoba
Tamara Glavinovic, University of Ottawa
Marisa Battistella, University of Toronto
Reem Mustafa, University of Kansas Medical Center
Caroline Stigant, University of British Columbia
Michelle Wong, University of British Columbia
Helen Tam-Tham, University of Calgary
Annie-Claire Nadeau-Fredette, Université de Montréal
Myriam Khalili, Université de Montréal
Tyrone Harrison, University of Calgary
Anna Mathew, McMaster University
Jay Hingwala, University of Manitoba

Abstract

Quality Improvement

Choosing Wisely Canada - Nephrology Recommendations Update 2024

Background:
Choosing Wisely Canada is aimed at reducing unnecessary tests, treatments, and procedures with the goal of minimizing harm and improving patient outcomes.

Objective:
To contribute to the Choosing Wisely campaign by updating the nephrology recommendations for health care professionals and patients.

Methods:
A survey was distributed to members of 5 nephrology societies asking for overuse, misused or potentially harmful tests, procedures, or therapies. Initially, 104 recommendations were generated, then refined iteratively by ranking and scoring each recommendation for importance, evidence for use, feasibility, potential for harm, frequency of use, and global importance. The highest scoring recommendations were adopted, followed by a comprehensive literature review to support the recommendations.

Results:
After considering the strength of evidence and its potential impact, the working group agreed upon 6 key recommendations that were all new compared to the previous recommendations established in 2014. These recommendations center on avoidance of pharmacologic agents that may not have clear benefits for people living with chronic kidney disease (CKD) and/or receiving dialysis. These recommendations include avoidance of warfarin and direct oral anticoagulants for treatment of atrial fibrillation in the dialysis population and not using opioids as first line therapy for treatment of pain in CKD dialysis. They also advise against prescribing additional medications in CKD without first addressing polypharmacy and how reduced kidney function might affect their safety profiles.

Conclusion:
Choosing Wisely updates ensure re-evaluation of treatments that may no longer be indicated, and/or may be harmful to people living with kidney disease.

Pooja Sindhuri, University of Alberta
Kantepalli Venkata, University of Alberta
Kaili Harvie, University of Alberta
Krystal Morton, Edmonton Southside Primary Care Network
Roni Kraut, University of Alberta

Workshop

Quality Improvement

Delabeling Penicillin Allergy in Low-Risk Patients in a Family Medicine Clinic

Description:

Penicillin allergy labels have been associated with increased health care costs and worse health outcomes. It is estimated 95% of patients labelled with a penicillin allergy, do not have a severe penicillin allergy and can be delabeled. Choosing Wisely allergy recommendations recommend patients with a penicillin allergy have their allergy evaluated prior to prescribing alternatives to penicillin. However, this is not common in practice as the standard for delabeling (a referral to a specialist for a specialist-administered pinprick test) is cumbersome and time consuming.

There is an alternative, less resource intensive approach, that can be done in family medicine clinics for low-risk patients. It is simply providing patients with one tablet of amoxicillin (250mg) and observing for one hour. This oral rechallenge approach has been found to be effective in studies and has been effective at our family medicine clinic (Shifa Medical Clinic, Edmonton, Canada).

Learning Objectives:

- Describe the importance of penicillin delabeling
- Understand when a penicillin allergy label is justified
- Use the PEN-FAST tool to assess for risk of a severe penicillin allergy
- Have a straightforward approach to use in your clinic for delabeling low-risk patients

Anshula Ambasta, University of Calgary
Jayna M. Holroyd-Leduc, University of Calgary
Surakshya Pokharel, University of Calgary
Pamela Mathura, University of Alberta
Henry T. Stelfox, University of Alberta
Irene Ma, University of Calgary
Braden Manns, University of Calgary
Tyler Williamson, University of Calgary
Caley Shukalek, University of Calgary
Maria Santana, University of Calgary
Deirdre McCaughey, University of Calgary
Narmin Kassam, University of Alberta
Christopher Naugler, University of Calgary
Douglas Woodhouse, Physician Learning Program
Diane Duncan, Physician Learning Program

Abstract

Quality Improvement

Re-Purposing the Ordering of Routine Laboratory Tests (RePORT)

Background:
Repetitive testing in hospitals has been recognized as an urgent systemic problem by Choosing Wisely Canada. Laboratory test overuse is associated with preventable patient harm through hospital-acquired anemia, which in turn is associated with increased blood transfusions, prolonged length of stay, and higher mortality.

Goal:
To reduce daily laboratory test ordering in hospitalized patients by 10%.

Methods:
From September 2022 to March 2024, we used the Knowledge to Action Cycle to develop and implement a multimodal intervention bundle in 14 Alberta hospitals, using a pragmatic stepped-wedge cluster randomized design. The bundle included an accredited online education module, a clinical decision support tool, design updates for order sets in the electronic medical record (EMR), audit and feedback sessions, and a patient infographic.

Impact:
To support implementation and sustainability, we established a network of 29 physicians and 6-unit staff. We conducted 11 audit and feedback sessions with 94 physicians, and 70 physicians reviewed our educational module. A 12.7% reduction in laboratory test ordering was achieved, and sustainability monitoring is ongoing.

Challenges:
Transition to a new provincial EMR was associated with disrupted data systems. Time constraints for physicians occurred, especially in smaller hospitals, leading to difficulties with timely implementation, dissemination, and sustainability planning.

Lessons Learned:
To distribute the project workload, multi-member implementation teams must be formed. Collaborating with EMR analysts is crucial for data extraction and order entry system changes. Integrating intervention elements into ongoing operational processes improves intervention uptake. Tailoring intervention materials to each hospital's local requirements helps with site engagement.

Douglas Woodhouse, Physician Learning Program
Anshula Ambasta, University of Calgary
Kelly Burak, Physician Learning Program
Diane Duncan, Physician Learning Program
Sampson Law, Physician Learning Program

Workshop

Quality Improvement

Best Practices for Virtual QI Workshops that Effectively Engage Clinicians

Background:
Audit and Feedback (AGF) for healthcare improvement has been shown to be effective, however there is substantial heterogeneity in methodologies and impact. There is limited evidence for efficacy of virtual delivery of AGF. We adapted the Calgary Audit and Feedback Framework (CAFF) based on in-person social learning, for virtual AGF as part of an intervention bundle to reduce daily laboratory testing in hospital by Family Physicians and Internists.

Goal:
To evaluate if virtual Audit and Group Feedback engages physicians in improvement planning leading to behaviour change.

Methods:
All physicians had access to an on-line, individual laboratory testing report with peer comparators. We developed a 1-hour, virtually facilitated AGF session based on CAFF that was delivered across four tertiary hospitals to 83 physicians during 12 AGF sessions between January to June 2021. We assessed fidelity to CAFF using session transcripts.

Impact:
Virtual facilitation effectively engaged physicians in group discussion leading to change planning. 98% of responding physicians (54/55) reported that they would recommend the program to a colleague. 46% completed a commitment to change form. There was a 14 percent overall reduction in ordering of routine tests and a 20 percent increase in test- free patient- days.

Lessons Learned:
Virtually delivered Audit and Group Feedback successfully engages physicians in group discussion and change planning leading to behaviour change.

The CAFF model is an effective framework for planning and delivering virtual AGF.

Virtual sessions are potentially more cost-effective than in-person AGF due to easier scheduling, higher participation rates, greater geographic access, and reduced travel time.

Amanda VanSpronsen, University of Alberta
Christine Nielsen, Canadian Society for Medical Laboratory Science
Brandon Djukic, Canadian Society for Medical Laboratory Science

Abstract

Quality Improvement

Barriers, Priorities, and Collaboration to Achieve Lab Wisely Goals

The Lab Wisely initiative, a partnership between the University of Alberta Medical Laboratory Science Program and the Canadian Society of Medical Laboratory Science, has recently developed seven new Choosing Wisely Canada recommendations, bringing the total to 14 since 2020. During the list-generation process, the development committee discussed potential challenges in implementing these recommendations at local institutions. One key issue was empowering medical laboratory professionals to act, as their scope of practice often limits independent decision-making.

To explore these challenges, we are surveying medical laboratory leaders across Canada in December 2024–January 2025. The survey will ask which recommendations are currently being addressed, and which are prioritized for future action. We are also asking respondents to rate the ease of engagement and implementation for each of the 14 recommendations for medical laboratory science. The survey will also gather perspectives on recommendations requiring significant external collaboration and the institutional readiness to support such efforts.

Our goal is to identify practical strategies to overcome barriers, highlight systemic enablers, and prioritize recommendations for action. We aim to support medical laboratory professionals in adopting evidence-based practices, fostering collaboration, and aligning institutional efforts with Choosing Wisely principles.

Colin Dormuth, The University of British Columbia
Anshula Ambasta, The University of British Columbia
Jessica Otte, The University of British Columbia
Wade Thompson, The University of British Columbia
Ellen Reynolds, The University of British Columbia
Dana Stanley, The University of British Columbia
Greg Carney, The University of British Columbia
Sean Burnett, The University of British Columbia
Ken Bassett, The University of British Columbia
Aaron Tejani, The University of British Columbia
Malcolm Maclure, The University of British Columbia

Abstract

Quality Improvement

Meta-Analysis of a Mailed Audit & Feedback Program in British Columbia

Background:
Audit and feedback can change prescribing practice towards more appropriate, evidence-based practice.

Goal:
To evaluate the impact of personalized prescribing portraits amongst family physicians and nurse practitioners in British Columbia.

Activities:
Seven confidential, secure, and individualized prescribing data portraits with peer comparison were put into a simple graphic form and paired with brief evidence-informed recommendations, often aligned with Choosing Wisely recommendations, to improve prescribing. The portraits covered a range of topics including new opioid prescriptions, proton pump inhibitors, urinary tract infections, inhaler choices for COPD, and statins in elders.

Methods:
We conducted a series of pragmatic randomized trials between 2019 and 2023. Portraits were created using administrative health claims data and provided by mail with a delayed control group (~9 months later). New starts of potentially inappropriate medication were compared between groups using Bayesian and conventional meta-analysis methods.

Impact:
Most portraits resulted in a significant improvement in prescribing. We estimate 1,740 patients received more appropriate treatment from the intervention clinicians compared to the delayed physicians during the study period. Assuming the same impact in the higher number of delayed physicians, the combined impact is estimated to be 4,440. To ensure lasting impact on prescribing patterns, repeated messaging will be employed and assessed.

Challenges:
Uncertainty in how many people open the mailed intervention; switching to digital delivery saw slow uptake given cumbersome sign up due to privacy/security requirements.

Lessons Learned:
Feedback of personal prescribing data with peer comparison, accompanied with evidence-based therapeutic recommendations, can significantly improve appropriate prescribing.

Loretta Lee, Scarborough Health Network
Denise McRiner, Scarborough Health Network
Thomas Bodley, Scarborough Health Network
Swasti Bhajan, Scarborough Health Network
Susan John, Scarborough Health Network
Elaine Yeung, Scarborough Health Network

Abstract

Quality Improvement

Reducing Use of Intravenous Medications when Oral/Enteral Alternatives are Safe and Effective

Background:
Unnecessary use of intravenous (IV) rather than enteral (PO) medications increases hospital length-of-stay, nursing administration time, drug cost, and environmental footprint. Choosing Wisely Canada recommends using enteral formulations when they are equally safe and effective.

Goal:
Scarborough Health Network (SHN) targeted an IV to PO stewardship program for levetiracetam and pantoprazole at three sites.

Methods:
The study spanned over pre-intervention June 2022 to February 2023 and intervention March 2023 to November 2024. Interventions to enhance stepdown to enteral formulations included 1) education of evidence-base practices through e-mail and medicine rounds, and 2) electronic decision support tools. The primary outcome measure was IV doses per 1000 patient days. Process control charts were used to establish statistical significance. Secondary measures included enteral formulation dispenses per 1000 patient days.

Impact:
A total of 701,155 patient-days were included; 229,475 pre- and 471,680 post-intervention. Levetiracetam IV dispenses decreased from 28.2 to 22.6 per 1000 patient days (20% reduction, special cause variation June 2024). Pantoprazole IV dispenses decreased from 101.8 to 78.7 per 1000 patient days (23% reduction, special cause variation December 2023). There was decrease in the IV/PO ratio by 18% for levetiracetam and 20% for proton pump inhibitors.

Lessons Learned:
Inter-disciplinary collaboration with prescribers and utilization of electronic decision support tools are both necessary to facilitate IV to PO stewardship. Future analysis of provider satisfaction, cost savings, and carbon footprint reduction are underway to evaluate economic and ecological impact.

Natalie Landry, Shared Health Diagnostic Services
Laurel Thorlacius, Shared Health Diagnostic Services
John Sokal, Shared Health Emergency Program
Paul Ratana Shared Health Emergency Program
Renu Thakur, WRHA Emergency Program
Abdulrazaq Sokoro, Shared Health Diagnostic Services

Abstract

Quality Improvement

Optimization of Emergency Department Laboratory Test Utilization by Patient Presentation

Background:
Inappropriate use of laboratory services presents a burden to patients, physicians and healthcare professionals who must respond to results. To improve patient flow in emergency departments in Winnipeg, standardized nurse-initiated order sets based on patient presentation were developed and implemented.

Methods:
A set of 24 patient presentations, along with the appropriate laboratory investigations, were agreed upon between Emergency & Laboratory Medicine. Nurse-initiated triage order sets were deployed at a single high-volume tertiary hospital first, followed by a phased adoption at other sites. Test utilization, laboratory labour costs, turnaround time, consumables consumption, and impact on care were evaluated.

Results:
The process limits unhelpful and unnecessary testing being variably ordered by nursing and providers. Requests from emergency departments for chemistry, urinalysis, urine drug screens, and coagulation tests were reduced by 29.6 ± 15.3%. Turnaround times for core chemistry improved by 4.4 minutes for the largest emergency department. The laboratory's carbon footprint reduced by approximately 106000 km equivalent driven, and approximately 10772 hours of laboratory staff time were cumulatively saved after standardized order sets were introduced. Readily available test results allow patients with actionable treatment needs to be moved more expeditiously to physician assessment.

Conclusions:
Standardized emergency department order sets yielded a significant reduction in unnecessary orders, which in turn improved turnaround time, optimized laboratory labour allocation, and significantly reduced waste. Improved safety for patients waiting to be seen for CTAS 2,3 complaints who require biochemical information for safe assessment, but who need to wait longer than recommended owing to system pressures.

Puchniak, Shared Health
Lori Mitchell, Shared Health
Mona Spencer, Shared Health

Abstract

Quality Improvement

Elimination of Diagnostic Testing in Manitoba's LTC Application Assessment Process

The work to modernize and provincially standardize the Pathway to Long Term Care in Manitoba started with the removal of diagnostic testing requirements in the application process, and these tests are now completed based only on the clinical indications of the individual. This is a large positive change that will result in thousands of unnecessary diagnostic tests (i.e. Chest X-rays, EKGs, bloodwork and urinalysis) being avoided every year across Manitoba. This change brings many benefits including: less burden on patients and families at a time in their lives when these unnecessary tests may be difficult to complete, reduction of financial cost to the system, and improved efficiency to reduce delays in Long Term Care application completion.

Hayley Hamilton, Cambridge Memorial Hospital

Abstract

Quality Improvement

Eliminating Unnecessary RBC Folate Testing at Cambridge Memorial Hospital

Goal:
To eliminate unnecessary RBC folate testing at Cambridge Memorial Hospital (CMH) by aligning practices with Choosing Wisely Canada guidelines, reducing waste, and improving patient care quality.

Activities:
Initial steps included auditing folic acid orders and results. In 2023, a memo was sent to all staff, including a rationale for reduced RBC folate testing. While this temporarily reduced testing, the improvements were not sustained. In early 2024, a comprehensive approach was implemented, including enhanced physician education through the Medical Advisory Committee (MAC), targeted memos, and emails. The new strategy required the Laboratory Director's approval for all requests and involved direct physician-to-physician discussions. Laboratory staff were trained to support the process, ensuring compliance.

Impact:
The 2024 intervention successfully eliminated all RBC folate testing at CMH, achieving a 100% reduction. Weekly and monthly monitoring confirmed sustained adherence and reported no adverse clinical outcomes. This initiative supported CMH's strategic goals of enhancing resource stewardship and patient satisfaction.

Challenges:
The 2023 memo alone did not achieve long-term engagement or adherence, highlighting the need for a more robust and interactive strategy. The 2024 intervention required efforts to clarify the clinical utility of RBC folate testing and streamline workflows for laboratory staff adjusting to the new process.

Lessons Learned:
Leadership support and physician buy-in were integral in driving and sustaining change, ensuring alignment with CMH's strategic priorities. A multi-faceted approach, combining education, robust monitoring, and stakeholder engagement, is essential for successful practice changes. Clear communication and early stakeholder involvement are critical to aligning clinical practices with evidence-based guidelines and achieving sustainable, high-value care.

Marie Chantal Leclerc, Université du Québec en Outaouais
Julie Weir, University of New-Brunswick
Jacquie Follis, Choosing Wisely Canada
Maryanne D'Arpino, Spectrum Health Care
Mikha Alegria, University Health Network

Workshop

Quality Improvement

Unlocking Nursing's Full Potential: Embracing Best Practices of Quality Improvement for Nursing Education

The implementation of best practices, including the recommendations from Choosing Wisely, has demonstrated improved outcomes for patients and empowering results for health care professionals. However, their use is complex, and the sustainability of these practices is still fragile.

The nursing profession provides an increasingly prominent presence in population health, spanning all levels of care. Nurses receive a comprehensive theoretical and practical education that enables them to implement interventions and provide care to the population on a daily basis. Despite this, numerous studies and observations highlight the underutilization of nursing expertise and the challenges of fully exercising the legalised authorized professional role.

In order to enhance nursing expertise and recognize the profession's empowerment in continuous quality and care improvement initiatives, it is evident that a critical examination of the academic training of nurses is required. This bilingual thematically guided session will foster pedagogical innovations that shape the nursing practice of the future.

Themes covered :

1. Identifying barriers and enablers to the full realization of nursing roles and leadership within continuous quality improvement initiatives.

2. Determining the essential competencies, knowledge, skills, and values needed to enhance the nursing profession and enable its full potential.

3. Proposing transformations to current nursing education curricula in Canada to support leadership development, highlight expertise, strengthen nurses' empowerment and foster mentorship programs.

4. Identifying strategies to ensure the sustainability and transferability of acquired knowledge during the transition to the workforce.

With participants' consent, a "white paper" report will be drafted by the workshop organizers, validated by participants, and made available. Participants interested in continuing discussions will have the opportunity to join Choosing Wisely's nursing Community of Practice.

Leland Sommer, Saskatchewan Health Authority,
Michelle Degelman, Saskatchewan Health Authority
Kelsey Dumont, Saskatchewan Health Authority
Casey Phillips, Saskatchewan Health Authority
Falguni Raj, Student University of Regina

Abstract

Quality Improvement

Impact of Order Set Redesign on Opioid Related Risk Factors

The intent of order set implementation within health care organizations is to standardize clinical processes grounded in evidence informed best practice. The Saskatchewan Health Authority Opioid Stewardship Program team observed utilization of opioids as primary analgesia in surgical patients, which was driven in part by postoperative order sets. This prescribing behaviour can contribute to accumulation of inpatient opioid related risk factors and development of persistent postoperative opioid use. The Program's internally developed algorithm tool (Pharmaceutical Automated Reporting Tool) identifies and analyzes the following inpatient opioid related risk factors: morphine equivalent dose available and taken, possible opioid agonist therapy, naloxone given, no naloxone prescription with opioid prescription, multiple opioids prescribed, intravenous opioid therapy greater than seven days, high frequency opioid dosing, and concurrent benzodiazepine and opioid prescribing. In April 2024 Saskatchewan orthopedic surgical services implemented one provincial order set for elective hip and knee arthroplasty. The order set revised analgesic section design incorporated optimal practices guided by stewardship, Opioid Wisely, and enhanced recovery principles such as scheduled non opioid options and formatting to reduce accumulation of opioid related risk factors. A retrospective quality improvement pre-post design analysis will test the hypothesis that implementation and use of the revised order set will improve prescribing behaviours resulting in a reduction in opioid related risk factors among patients. Primary outcome measures will include comparison of pre-post implementation of revised order set average MED available, average MED taken, and median opioid related risk factor count.

Dawn Curran, Memorial University of Newfoundland
Nadine Rockwood-McKay, Memorial University of Newfoundland
Nick Smith, Memorial University of Newfoundland

Abstract

Quality Improvement

How Much Does a Diabetic Foot Cost?

Purpose:
Diabetes Mellitus (DM) is a public health concern. Nationally, DM consumes approximately 6.6% of the healthcare budget. The prevalence of DM in Newfoundland and Labrador (NL) is the highest in Canada at 19%. Diabetic foot ulcer (DFU) is a costly complication of DM. The objective is to determine the total direct cost of DFU within a regional health authority.

Methods:
Patients with a medical care plan (MCP) seen at a regional facility between 2017 and 2019 for DFU were selected for a retrospective chart review-based study. NL Centre for Health Information dataset captured all admissions and procedures using International Classification of Diseases codes. Additional data was collected from medical charts and cost estimates were provided from Financial Services and MCP billing. Total direct costs were calculated.

Results:
The majority (75%) of patients were assessed in the emergency room (ER) at least once, with 50% presenting five or more times. Admissions accounted for 75% of total direct costs, averaging $32 thousand per person. The annual cost of ER, admissions, and procedures combined was approximately $17 million. The cumulative regional cost was nearly $54 million, with a per person cost of $43 thousand.

Conclusions:
Direct, per-incident cost of DFU is double of what has been estimated by national-level analysis. DFU in this region is using more than 27% of the provincial budget for DM, as predicted by Diabetes Canada. A local initiative to develop a standardized foot wound pathway will improve health system efficiency and have long-term cost-saving benefit.

Calli Safnuk, Alberta Health Services
Nikita Baker, Alberta Health Services

Abstract

Quality Improvement

Implementation of a Hospital Medicine Service-Based Pharmacist in Acute Care

Introduction:
Dedicating a pharmacist to a medical service enhances patient outcomes, reduces cost, decreases mortality, length of stay and readmission rates.

A project was undertaken that entailed a consult model and self-directed screening process was used to identify patients who may benefit from pharmacist involvement. Previously, the unit-based model provided 2 hospitalist-designated units with pharmacy services and partial coverage on 2 additional units. After implementation, the service-based pharmacist provided coverage to all units with hospitalist patients (19 units total).

The aim was a proof-of-concept project supporting access to clinical pharmacist services to all hospitalist patients from Nov 22, 2023, to March 30, 2024 by implementing a service-based pharmacist.

Methods:
Secondary measures included the number of drug therapy problems (DTP) resolved, seamless activity events, physician teaching moments, and time-saving events. Balancing measures included no change in morbidity or mortality (no changes were made to current structure).

Impact was measured through secondary measures and surveys conducted within the physician group and patient population.

Data was documented and retrospectively reviewed. Tracking occurred in a shared spreadsheet and through pharmacy documentation.

Results:
751/837 drug therapy problems were resolved by the pharmacist. Several cost-saving events were identified, to a maximum of $450/event; 46 physician teaching events occurred; and qualitative physician and patient surveys expressed appreciation.

Conclusions:
The model resulted in cost-saving events, DTP resolution, and seamless care activities. The change resulted in 3 full time pharmacists operating a unit-based model to service-based. The model is being adapted for another hospitalist service at Chinook Regional Hospital.

Abstract

Quality Improvement

Building Confidence in Healthcare Teams: Advancing Equity and Wise Practices for Patient-Centered Care

Confidence and inclusivity are vital components for empowering healthcare teams to adopt patient-centered practices effectively. In this session, Sheena Yap Chan draws from her expertise in leadership, diversity, and equity to explore how fostering a confident, inclusive culture can drive wise healthcare decision-making. Sheena will address challenges such as overcoming unconscious biases, integrating culturally responsive care, and building collaboration across diverse teams. By sharing actionable strategies and real-world examples, this session equips participants to confidently implement Choosing Wisely principles while creating equitable and impactful healthcare outcomes.

Learning Objectives:

1. Identify strategies to empower healthcare teams with confidence and inclusivity to enhance decision-making.
2. Explore the role of equity and diversity in fostering patient-centered care aligned with Choosing Wisely principles.
3. Learn practical tools for addressing unconscious bias and promoting collaboration within interdisciplinary teams.
4. Understand how confidence-building supports the implementation of sustainable and impactful healthcare initiatives.

Shirlee Ren, Alberta Health Services
Nikita Baker, Alberta Health Services
Nancy Egbogah, Alberta Health Services

Abstract

Quality Improvement

Improving Nurse to Physician Communication

Introduction:
Unnecessary pages lead to disruptions in care and increased errors.

Feedback from South Health Campus (SHC) colleagues suggest quality of pages have decreased since the pandemic with increased non-urgent pages, while not being paged for critical issues.

A project was undertaken to streamline nursing to physician communication. The aim was to decrease unnecessary pages to hospitalists by 15% by April 2024.

Methods:
The primary measure is number of clinically unnecessary pages. With a balancing measure of no adverse impact on hospitalist inpatient mortality.

Pre-implementation (March – April 2023) paging data was obtained and categorized into predetermined categories. A paging algorithm was developed to help nurses differentiate between urgent vs non-urgent issues. The algorithm was disseminated and education that ran from September 2023 – March 2024.

Nursing and physician feedback was obtained to continuously update the algorithm. Post-implementation (March – April 2024) data was also categorized.

Results:
There was a decrease in overall pages by 7.7%, a reduction of not required pages by 56.1%, a reduction of inconclusive pages by 45.4%, and a decrease of non-urgent pages by 38.7%. Mortality remained unchanged.

Conclusions:
The algorithm in conjunction with education reduced the volume of clinically unnecessary pages in the "not required" and "non-urgent" paging categories by 56.1% and 38.7% respectively. Quality improved as inconclusive pages lacking data also decreased by 45.4%.

This project has been adopted by SHC general internal and respirology and all other Calgary hospitalist sites. A video was recorded to support sustainment with ongoing presentations to share outcomes.

Norma Hall, CIHI
Mike Chislett, CIHI
Patricia Hanna, CIHI
Amy Vine, CIHI

Abstract

Quality Improvement

Increased Use of Antipsychotics in LTC Facilities in Canada

CIHI has been publicly reporting Potentially inappropriate use of antipsychotic medications in long-term care for over a decade. Risk-adjusted indicator rates were declining steadily until an increasing trend began in fiscal year 2020, with the onset of the COVID-19 Pandemic. This trend raises concerns regarding the quality of care in some LTC homes, particularly given the severe risks associated with these medications for the elderly and individuals with comorbidities. These increasing trends may reflect a change in the clinical needs of residents, preemptive prescriptions in anticipation of behavioral challenges during the Pandemic, and health human resource challenges, among others. This presentation will showcase CIHI's work in supporting stakeholders to improve coding, interpretation and reporting of Antipsychotic medication use in LTC. We will highlight the variability in antipsychotic use across the country as well explore changes observed in exclusion criteria for the indicator, and the opportunity this provides for LTC homes to learn from each other. We will also provide an update on our work with partner organizations as they work to develop a national target, support quality improvement plans and monitor this indicator going forward.

Vanessa Arciero, Sunnybrook Health Sciences Centre
Clarissa Skorupski, University of Toronto
Terefe Goro, Sunnybrook Health Sciences Centre
Matthew Lafreniere, Sunnybrook Health Sciences Centre
Paul Yip, Sunnybrook Health Sciences Centre
William K. Silverstein, Sunnybrook Health Sciences Centre
Evaluative Clinical Sciences Platform, Sunnybrook Health Sciences Centre

Abstract

Quality Improvement

Defining Clinically Appropriate Criteria for Repetitive Laboratory Testing

Goal:
Lipid panels (LP), thyroid-stimulating hormone (TSH), and serum protein electrophoresis (SPEP) are frequently ordered prior to guideline recommended minimal retesting intervals (MRI). In order to develop a quality improvement (QI) initiative to reduce unnecessary repetitive laboratory testing, clinically appropriate criteria for retesting that incorporates local context must be established.

Activities:
The proportion of LP, TSH, and SPEP repeated prior to the Canadian Agency for Drugs and Technology in Health (CADTH) Guidance on MRIs of 28-days (TSH) and 90-days (SPEP, LP), and median time to repeat order were identified at our tertiary care centre. Provider groups with the highest frequency of repeat testing were identified. From Aug/24-Oct/24, a root cause analysis was conducted through focus interviews with key provider groups and frequent users to understand local ordering practices.

Impact:
17.1% of LP were reordered within 90-days (median time to repeat: 7-days). 26.4% of TSH (median: 17.7-days) and 27.7% of SPEP (median: 28.3-days) were reordered within 28-days and 90-days, respectively. Criteria for retesting were defined: (1) LP at 90-days, with triglycerides repeated more frequently in select scenarios, (2) TSH at 28-days, allowing for flexibility for patients on immunotherapy, and (3) SPEP at 25-days for patients with plasma-cell dyscrasias, and 90-days in all other populations.

Conclusion:
Current repeat ordering practices of LP, TSH, and SPEP demonstrate overuse at our institute. Our root cause analysis informed the development of clinically appropriate retesting criteria that incorporated local factors and context. This will inform implementation of a QI initiative targeted at minimizing low-value laboratory testing.

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Abstract

Quality Improvement

Blood Conservation Quality Improvement Project in an Academic Multidisciplinary ICU

Background:
Latrogenic anemia due to frequent blood work is common in the ICU. We undertook a QI project to limit the volume of blood draws, and decrease the need for blood transfusions.

Goal:
To decrease blood transfusions by 25%

Activities:
We enacted 3 Plan-Do-Study-Act (PDSA) cycles over 18 months. During PDSA 1, we changed to lower volume blood collection tubes. PDSA 2 involved reviewing the types and frequency of ordered blood tests during morning bedside rounds. PDSA 3 involved the use of a blood conservation device attached to arterial and central lines.

Methods:
We obtained reports on monthly pRBC transfusions and monthly patient days. We calculated the median number of pRBC transfused per 1000 patient days during each PDSA cycle.

Impact:
During the 1 year prior to our QI study, we transfused a median of 105 pRBCs per 1000 patient days. PDSA 1 saw a drop in usage to a median of 90 pRBC per 1000 patient days. PDSA 2 had a median of 71 pRBC per 1000 patient days while PDSA cycle 3 had a median of 53 pRBC transfused per 1000 patient days. 18 months into the QI project, we had surpassed our goal and dropped our blood transfusions to 50% of our historic usage.

Challenges:
PDSA 2 blood-work reassessment was occasionally delayed due to patient volumes and acuity in the ICU.

Lessons Learned:
Forcing functions to decrease blood wastage resulted in a 50% drop in blood transfusions per month in our multidisciplinary academic ICU.

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Abstract

Quality Improvement

Evaluation of Pediatric Patients with Hydrocephalus Using Fast Sequence Nonsedated MRI

Objective:
To implement the Canadian recommendation for physicians treating pediatric patients with hydrocephalus.

Background Data:
A 12-month retrospective review was carried out for 2022, collecting baseline data on the number of CT scans performed at KHSC for hydrocephalus evaluation in pediatric patients (ages 0 to <18). This number was 135 patients.

Description:
Based on CWC guidelines, we want to replace all CT scans in pediatric patients for hydrocephalus with MRI (or US) where possible. A rapid sequence MRI can be obtained without sedation and in a few minutes. It is therefore recommended that ultrasound (in infants with open fontanelles), or rapid sequence MRI (in all other children) be used for surveillance imaging in hydrocephalus at minimum, and ideally in emergency assessments as well when available. In the emergent setting, or when MRI is not available, low-dose non-contrast CT is appropriate.

Results and Impact:
Fast sequence (3-plane T2 HASTE) nonsedated magnetic resonance imaging scans or ultrasounds will mostly replace CT for routine imaging of children with hydrocephalus in greater than 95% of the pediatric population referred for assessment of hydrocephalus. This will serve to reduce radiation exposure to pediatric patients presenting for hydrocephalus assessment.

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Abstract

Quality Improvement

A Shift in Geriatric Care using Choose Wisely Canada's Recommendations for Appropriate Use of Indwelling Urinary Catheters and Incontinent Products in the Winnipeg Regional Health Authority's Acute and Long-Term Care Facilities

Goal:
The Canadian Nurses Association (CNA) adopted 9 Choosing Wisely Canada recommendations as best practice. The goal of our Regional Project was to adopt 2 of these being, "Do not insert an indwelling urinary catheter or leave it in place without daily assessment and "Do not routinely use incontinence containment products (including briefs or pads) for older adults".

Description:
The project engaged 9 WRHA facilities to achieve a reduction in use for urinary catheters and incontinent products by 15%. The project utilized Financial Reports from supply purchases to attain objective data collection as well as creating a Portal on TEAMs which provided to access for participants to educational information, algorithms, financial reports, audit frameworks, project metrics, and action logs,

Impact:
The project did see a reduction in use of urinary catheter but only by 5% and a 3% reduction with for incontinent product use over 1 year.

Challenges:
Challenges for the project were conflicting regional projects post COVID Pandemic, and continual changing off staff, at the project level and participating facilities.

Results:
The results of the project were well received with the WRHA Executive and the following recommendations are being reviewed for implementation at many WRHA sites. To maintain and support the appropriate use of urinary catheter insertions and incontinent products, we identified a vital role with utilizing Financial and Materials Management Usage Reports. Finally, the Region will be assigning a Central Table to evaluate ongoing product use and collaborate with Best Practices associated with urinary catheter and incontinent products.

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Abstract

Quality Improvement

Should the HOMR Model be Used as Trigger Criteria for Goals of Care Conversations?

Objective:
Electronic health systems allow consistent tracking of goals of care documentation. Our Critical Care Response Team had noticed a number of patients who should have had an advanced care planning conversations on admission but this was deferred and patient was for full resuscitation. The objective of this quality improvement initiative is to improve the advanced care planning conversations and documentation at the Hamilton General Hospital to better align with patients wishes and the current College of Physician and Surgeons of Ontario (CPSO) End of Life Policy.

Method:
We used our hospital's continuous quality improvement methodology to generate a preliminary problem statement, survey the literature and describe the current state, including completing a root cause analysis. Current trigger criteria and order sets were reviewed. The internal medicine service at the Hamilton General was surveyed to assess for barriers to conducting serious illness and goals of care (GOC) conversations. Data was pulled from the electronic health system to quantify the pre-intervention status of patients who receive GOC conversations at time of admission, and those whose conversations were deferred. The HOMR model score was calculated for each of the patients whose GOC conversation was deferred at time of admission.

Results:
Our data shows that our internal medicine service does not routinely apply the current CPSO end of life policy when admitting patients and are not comfortable with the using the surprise question. The survey and use of HOMR data analysis suggests three potential interventions to be evaluated in PDSA cycles. The first would be increasing the knowledge base of residents and staff through the offering of the Serious Illness Conversation (SIC) course, education on application of the new CPSO end of life policy, and application of hospital-specific trigger criteria. The second intervention would be implementation of the HOMR score into admission order sets to reduce guess-work in terms of patient prognosis. The final potential intervention would be a GOC consult service of health professionals trained in SIC to guide a patient-centered care and lessen the time burden of services currently having the conversations.

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Workshop

Quality Improvement

UTIs or Something Else?: Standardizing the Approach to UTI Diagnosis

Background:
Due to poor performance characteristics, urine dipsticks are no longer recommended in older adults for diagnosis of urinary tract infection and have been de-adopted across the majority of Long Term Care homes (LTCH) across Canada. Despite this, LTC residents often undergo dipstick/urinalysis for 'screening' when they are transferred to Emergency Department. This testing in the ED has been shown to be associated with higher rates of urine culture and antibiotics for UTI, yet few EDs have attempted to de-adopt this test in this population.

Methods:
At our large hospital in Toronto, awareness about the low-value of dipsticks in this population, let to updating of a medical directive to remove this test for patients older than 65 or residing in LTCH. This intervention was implemented in July 2024 and a family of measures was tracked prospectively including use of urinalysis per patient visit (process measures), urine cultures per ED visits (outcome measure) and time from physician assessment to disposition as a measure of patient flow (balancing measure).

Results:
Statistical Control Charts are presented below. There has been a significant reduction in urinalysis use by over 40%, with an early trend in urine culture reduction and no difference in patient flow. The impact on use of antibiotics is currently being analyzed (will be available by early 2025).

Conclusions:
Standardizing the approach to diagnosis of UTI among older adults/LTC residents, across sectors of the health system is crucial to avoidance of unnecessary antibiotics in this population. Implementing this change required physician and nurse leadership within the Emergency Department with support from Infection Prevention and Control, and Antimicrobial Stewardship. Further assessment beyond 6-months is needed to determine the impact on outcome measures and lessons learned can be shared with other institutions.

Choosing Wisely Canada™

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