

Choosing Wisely Canada's

National Meeting

Abstract Book

Choisir avec soin présente le

Congrès annuel

Cahier des résumés



In collaboration with/en collaboration avec :

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CHAIR'S FOREWORD

Dear Choosing Wisely Canada attendees,

The pandemic has exposed the realities of a stretched and strained health care system. This has challenged us to create and adopt new ways of learning and working in a system that has been pushed to its limits.

This is why our work at Choosing Wisely Canada has never been more important. We continue efforts to address overuse issues that divert energy and resources from care that truly matters. With the incredible need to address backlogs and foregone procedures, the pandemic will have a profound and lasting effect to the health and wellbeing of Canadians. It will require our collective efforts to improve access to high-quality care and inspire innovations for the system of our future.

As I welcome you to our second virtual event, I am reminded that although we are physically apart, the National Meeting remains an opportunity to bring together the Choosing Wisely community. I am inspired by the unwavering commitment and dedication from clinicians, patients and public members, researchers, and health partners that have mobilized to address major overuse issues in Canada.

This abstract book is a snapshot of the Choosing Wisely efforts taking place across the country and beyond. I encourage you to browse its contents that includes initiatives related to quality improvement, measurement and evaluation, patient engagement, and medical education. We hope this will serve as inspiration for your own efforts to improve the quality and safety of care in Canada.

To end on a note of gratitude, thank you to our Choosing Wisely community for your leadership and continued pursuit of delivering high-quality care. Your adaptability and commitment despite the challenges faced along the way has not gone unnoticed. I extend my deepest appreciation for your efforts that will be paramount to building a strong post-pandemic health care system.

I hope you remain safe and healthy during this time. I look forward to seeing you (virtually) at the National Meeting.

Yours,

A handwritten signature in black ink, appearing to read 'Wendy Levinson', written in a cursive style.

Wendy Levinson, MD OC
Chair, Choosing Wisely Canada & International
Professor of Medicine, University of Toronto

MESSAGE DE LA PRÉSIDENTE

À tous les membres de la communauté Choisir avec soin,

La pandémie a révélé au grand jour les réalités d'un système de santé mis à rude épreuve, situation qui nous a obligés à créer et à adopter de nouvelles façons d'apprendre et de travailler dans un système déjà complètement surchargé.

C'est pourquoi le travail de Choisir avec soin n'a jamais été aussi important. Nous poursuivons nos efforts pour résoudre les problèmes de surutilisation des soins de santé qui détournent l'énergie et les ressources des soins qui comptent vraiment. Vu le besoin criant de nous attaquer aux retards et aux interventions annulées, la pandémie aura un effet profond et durable sur la santé et le bien être de la population canadienne. Nous devons déployer des efforts collectifs pour améliorer l'accès à des soins de grande qualité et inspirer des innovations pour notre système de santé de demain.

En vous souhaitant la bienvenue à notre deuxième événement virtuel, je prends à nouveau conscience de l'importance de cette réunion nationale qui rassemble la communauté Choisir avec soin, même si nous sommes physiquement séparés. Je me sens inspirée par l'engagement et le dévouement indéfectibles des médecins, des patients, du public, des chercheurs et des partenaires du secteur de la santé qui se sont mobilisés pour s'attaquer aux grands enjeux entourant la surutilisation des soins de santé au Canada.

Ce recueil de résumés donne un aperçu des efforts consentis dans le cadre de Choisir avec soin à l'échelle du pays et à l'étranger. Je vous invite à le parcourir : il présente des initiatives en lien avec l'amélioration de la qualité, la mesure et l'évaluation, la mobilisation des patients et l'enseignement de la médecine. Nous espérons qu'il sera pour vous une source d'inspiration dans votre travail d'amélioration de la qualité et de la sécurité des soins au Canada.

Pour terminer sur une note de gratitude, je tiens à remercier notre communauté Choisir avec soin pour son leadership et son engagement continu envers la prestation de soins de grande qualité. Malgré les obstacles qui ont jalonné votre parcours, votre capacité d'adaptation et votre engagement ne sont pas passés inaperçus. Je tiens à vous exprimer ma plus profonde gratitude pour les efforts que vous avez déployés et qui seront indispensables pour bâtir un système de soins de santé solide après la pandémie.

J'espère que vous demeurez en santé et en sécurité pendant cette période. J'ai hâte de vous rencontrer (virtuellement) lors de la réunion nationale.

Cordialement,

A handwritten signature in black ink, appearing to read 'Wendy Levinson', written in a cursive style.

Wendy Levinson, M.D., O.C.
Présidente, Choisir avec soin, Canada et international
Professeure de médecine, Université de Toronto

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Measurement and Evaluation



La mesure et l'évaluation

REDUCING UNNECESSARY COMPUTED TOMOGRAPHY SCAN UTILIZATION FOR INPATIENTS POST-FALL: THE REDUCE INITIATIVE PILOT TEST

Sameer Masood, University Health Network

Laura Danielle Pozzobon, University Health Network

Leanna Graham, University Health Network

Background:

Fall-related head injuries (FRHIs) have resulted in significant CT-scan over-utilization at our multi-centre academic institution. Our goal was to develop and test a standardized CT-scan ordering decision tool to minimize unnecessary FRHI CT-scans. We aimed to reduce FRHI CT-scans by 10% over 12-months.

With stakeholders, an Ishikawa diagram and Plan-Do-Study-Act cycles were developed, which included: improving provider knowledge on FRHIs CT-scan evidence; developing a tool informed by the Canadian CT-Head Rule, subject-matter experts and current evidence; piloting the tool in seven diverse acute in-patient units; tool refinement for special populations; and tool piloting in rehabilitation. A set of measures was used: percent of FRHI CT-scans performed (outcome measure), percent of decision tools completed (process measure) and percent mortality (balancing measure). Data was obtained via retrospective FRHI chart reviews, and associated incident reports, which was correlated with imaging data.

During the pilot, 22(52.4%) in-patient FRHIs received a CT-scan, of which, 6(14%) used the tool. No significant injury was missed by the decision tool. Overall, CT-scan utilization was reduced by 10.3% from baseline, however, given the small sample size, the results were not statistically significant. Following the pilot, the decision tool was adopted into our organization's post-fall guidelines. Data-collection is ongoing to monitor sustainability. Continuous leadership and subject-matter expert engagement was key in piloting and spreading the tool.

Reliance on retrospective chart review to determine tool use following a FRHI, likely underestimated uptake. Additionally, pilot testing during the COVID-19 pandemic prevented consistent in-person clinician engagement, which likely resulted in limited initiative awareness.

ASSOCIATIONS BETWEEN LOW-VALUE CARE TREATMENTS AND PATIENT-CENTERED OUTCOMES OF PEOPLE WITH DEMENTIA: A CROSS-SECTIONAL ANALYSIS

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Anika Raedke, German Center for Neurodegenerative Diseases
Diana Wucherer, German Center for Neurodegenerative Diseases
Jochen René Thyrian, German Center for Neurodegenerative Diseases
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Annelie Scharf, German Center for Neurodegenerative Diseases
Franka Mühlichen, German Center for Neurodegenerative Diseases
Wolfgang Hoffmann, German Center for Neurodegenerative Diseases
Bernhard Michalowsky, German Center for Neurodegenerative Diseases

Background:

Rapidly increasing healthcare expenditures are a global healthcare challenge. Parts of these costs are caused by an overtreatment of patients or low-value care (LvC), which is defined as care unlikely to provide a benefit to patients or likely to provide harm. However, there is currently a lack of evidence about the prevalence of LvC and its association with patient-reported outcomes in people living with dementia (PwD).

Goal:

This study aims to determine the associations between LvC and patient-centered outcomes of PwD.

Methods:

The analysis was based on the baseline data of the DelpHi-trial and included 516 PwD. LvC were identified by a systematic review of dementia-specific evidence-based guidelines, “do not do” recommendations of initiatives, like “Choosing Wisely”, and lists of inappropriate medication for the elderly. The association of LvC treatments with health-related quality of life (HRQoL), assessed by using the Quality of life in Alzheimer’s diseases, and hospitalization were analyzed using multiple regression models.

Impact:

The study revealed that 159 PwD (31 %) received at least one LvC treatment. They had, on average, less cognitive impairment and less functional impairment. PwD who received LvC had a lower HRQoL ($b=-0.08$; CI95% 0.14 – 0.02) and were more likely to be hospitalized (OR=2.11; CI95% 1.30 – 3.41).

Lessons Learned:

LvC could reduce patients’ HRQoL and increase the risk of hospitalization. More research is needed to evaluate if innovative approaches, like digital health applications, are useful to identify and reduce LvC within primary care and if this could improve PwD HRQoL and reduce hospitalizations.

ASSESSMENT AND INTERPRETATIVE IMPACT OF VITAMIN B12 LEVEL CHANGE ON REPEAT TESTING INTERVAL

Meagan McLavish, University of Toronto

Paul Yip, Sunnybrook Health Sciences Centre

Jeannie Callum, Sunnybrook Health Sciences Centre

Goal:

To assess change to interpretation of Vitamin B12 levels upon repeat testing and potentially reduce unnecessary tests by providing guidance to physicians on an appropriate window for repeating B12 orders.

Background:

In January 2020, Sunnybrook Hospital implemented a restriction on repeat B12 testing within 3 months. We sought to understand whether a meaningful change in categorization of B12 levels would impact clinical decision making to determine if the retesting interval could be extended to 12 months.

Methods:

Laboratory data from January 2018 to August 2020 was extracted and analyzed. Four categories were established for B12 levels (pmol/L): <145 (likely deficient), 145-179 (possibly deficient), 180-250 (unlikely deficient), >250 (sufficient). The first measurement for each patient was taken as the baseline and categorized accordingly. Repeat measurements were analyzed for a change in category and the elapsed time.

Results:

11313 patients had a B12 level, with 1792 (16%) patients with a repeat within 1 year (2471 repeat tests). Of repeated levels, 76% were repeated only once. For 123 patients who were likely or possibly deficient at baseline, 84% improved to a higher category (two dropped to a more deficient category). For 1445 patients sufficient at baseline, 0.6% changed to possibly deficient while none declined to a likely deficient level.

Conclusion:

Our findings suggest: (1) retesting of patients with low B12 levels usually confirms response to treatment and testing is unlikely to change patient management; (2) for patients with sufficient levels at baseline, repeat testing within 12 months gives low yield for deficiency.



**Medical
Education**



**La formation
médicale**

DEVELOPING AN ENVIRONMENTAL SUSTAINABILITY-FOCUSED, RESOURCE STEWARDSHIP QUALITY IMPROVEMENT CASE CHALLENGE FOR INTERPROFESSIONAL STUDENTS

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Anna Cooper Reed, University of Toronto

Victoria Haldane, University of Toronto

Danielle Toccalino, University of Toronto

Colin Sue-Chue-Lam, University of Toronto

Anson Cheung, University of Toronto

Karen Born, University of Toronto

Background:

A core tenet of Choosing Wisely Canada (CWC) is avoiding unnecessary resource use. While this principle is commonly associated with patient-safety and financial priorities, it can also be extended to environmental sustainability.

Goal:

To develop a mentorship-based case challenge, where teams designed quality improvement (QI) initiatives to address environmental waste in healthcare.

Activities:

Over one week, teams of interprofessional students from across Canada worked with graduate student mentors to develop plans to decrease consumption of single-use healthcare products. Teams submitted written QI proposals to an expert panel, and the top five teams pitched their presentations over Zoom. The winning team was awarded \$1000 to implement their vision.

Impact:

Our case challenge provided a space for 38 Canadian health professional students to develop their healthcare sustainability ideas. Proposed initiatives included mask recycling programs, refined laboratory waste disposal contracts, reusable pill vials, dissemination of reusable menstrual hygiene products, and more. Teams received expert feedback on their proposals and gained QI skills that will allow them to bring their ideas to fruition.

Challenges:

Recruitment of teams from non-academic centres in Canada was challenging. Provinces with fewer local QI and environmental sustainability champions had lower engagement. Ranking the “quality” of such diverse proposals was equally challenging.

Lessons Learned:

Canadian health professional students are passionate about environmentally sustainable healthcare, and have brainstormed an array of feasible and interesting ways to improve our practice. We look forward to expanding our event – including developing supports for project implementation – in the years to come!

STARS BRAZIL: ORGANIZING A LIST OF “THINGS STUDENTS SHOULD NOT DO” DURING MEDICAL EDUCATION

Mariana Laranjo Gonçalves, Universidade Federal do Rio Grande do Sul
Kaleb Pinto Spannenberger, Universidade Federal do Rio Grande do Sul
Larissa Andrade Stuermer, Universidade Federal do Rio Grande do Sul
Kassius Henrique Michels Beckhauser, Universidade Federal de Santa Maria
Tainá Silveira Alano, Universidade Federal de Ciências da Saúde de Porto Alegre
André Freitas Vargens, Universidade Federal de Ciências da Saúde de Porto Alegre
Alexandre Wilton Bissoli Júnior, Universidade Estadual de Londrina
Rafaela Ferreira dos Santos, Bahiana School of Medicine and Public Health
Guilherme Nassif Corrêa, UniEvangélica
Renato Gorga Bandeira de Mello, Universidade Federal do Rio Grande do Sul

Goal:

Enlightened by recommendation lists endorsed by the ABIM's Choosing Wisely Initiative, the STARS Brazil is structuring a list about “Things students should NOT do during medical education”. Considering the “less is more” motto, we planned to promote reflection about things we do excessively or for no reason in the medical graduation context that can, eventually, compromise our learning during medical school.

Activities:

Initially, we debated within our ten local groups to formulate assertions about the theme. Subsequently, we reframed some phrases at a national level over three meetings, avoiding double negative sentences and preserving the “less is more” mentality. Aiming to make a more representative list, we made a partnership with International Federation of Medical Students Associations Brazil, which will validate our propositions, putting the recommendations into a voting process across the country. Finally, at least five assertions will compose the definitive list.

Impact:

We expect that, inspired by the list, students nationwide can think about their academic choices, reflecting about the expenditure of time with extracurricular activities, methods of study, individual management of life and assistance activities, for example. Moreover, we believe that faculty members can observe students’ perceptions of themselves and, as a consequence, reconsider their role during medical education.

Challenges:

Self-criticism is arduous, although it can inspire changes. Beyond that, we have struggled to write specific recommendations about things we do excessively.

Lessons Learned:

Critical thinking is a central skill in contemporary medical training, allowing us to take less mechanistic approaches, even during our academic formation.

RELEVANCE OF CHOOSING WISELY CANADA SPECIALTY LISTS TO EMERGENCY MEDICINE PRACTICE

Suneel Upadhye, McMaster University
Corrine Davies-Schinkel, Niagara Health
Shira Brown, McMaster University
Shirin Pilakka, McMaster University

Goal:

The Choosing Wisely Canada (CWC) initiative is dedicated towards optimizing patient care and reduce unnecessary resource use. Different specialty organizations create recommendations lists towards these outcomes. The goal of this study was to examine the applicability of non- Emergency Medicine (EM) recommendations towards EM practice.

Methods:

The entire master recommendations listings spreadsheet was downloaded from the CWC website (March 2019; n=333). The EM- specific items from the CAEP checklist were deliberately excluded (n=10). Items were rated by Niagara community EM physicians (n=7) using the previously validated Best Evidence in Emergency Medicine (BEEM) rating scale (7 point Likert scale) to determine potential impact on EM practice. Items rated “6 or 7/7” were determine as “high relevance.” Redundant items were consolidated.

Results:

A total of 102 “highly relevant” recommendations were identified (41 items scored 6/7 [12%], 61 scored 7/7 [18%]; total 31%). Redundant items consolidated included antimicrobial avoidance (n=18), opioid avoidance for pain (n=11), reduction of unnecessary imaging (n=11), and avoidance of routine low back imaging (n=7).

Conclusion:

There are a large number of non-EM specialty recommendations highly relevant to EM practice in the CWC database (31%). Quality improvement initiatives looking to operationalize these CWC recommendations in Canadian Emergency Departments should be aware of these as a part of optimizing patient care.

ALTERNATIVE TO OPIOIDS: NON-PHARMACOLOGICAL OPTIONS FOR MANAGING CHRONIC PAIN

Sarah Garland, Canadian Agency for Drugs and Technologies in Health (CADTH)

Krista Kaminski, Canadian Agency for Drugs and Technologies in Health (CADTH)

Goal:

The opioid crisis in Canada has taken thousands of lives. As part of Health Canada's Joint Statement of Action to Address the Opioid Crisis, CADTH has created summaries of evidence in hopes to create system level changes that help end this crisis.

Activities:

Aligned with the Family Medicine Recommendation #13 from Opioid Wisely, to understand the current context, and the availability of, non-pharmacological methods for Canadians experiencing chronic pain, CADTH conducted an Environmental Scan in 2018.

The scan highlighted: Challenges with access to treatment; limited guidance for clinicians and patient in making evidence-informed decisions about non-pharmacological options for managing chronic pain.

From January 2019 to January 2021, CADTH produced more than 35 Rapid Response reports to support decision-making. Knowledge events and implementation resources expanded the reach of the evidence. A three-part webinar was delivered. More than 30 resources were developed, including summaries and quizzes, patient resources, and newsletters. A series of patient and clinician resources have been created, with input from patients and the Canadian Pain Task Force. Presentations have taken place in multiple jurisdictions across Canada.

Impact:

Implementation support was provided to healthcare providers and decision-makers to enhance the update of the findings. Clinicians who have attended CADTH's knowledge events or are using CADTH resources responded via survey that the information is being used in several ways, including:

- To change their clinical practice
- To benefit patients
- To inform planning
- To inform a policy decision
- To optimize resources
- For a purchasing decision

STARS BRAZIL: HIGH-VALUE HEALTHCARE STUDIES DURING MEDICAL SCHOOL IN A MIDDLE-INCOME COUNTRY

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Larissa Stuermer, Universidade Federal do Rio Grande do Sul - Hospital de Clínicas de Porto Alegre

Mariana Laranjo Gonçalves, Universidade Federal do Rio Grande do Sul - Hospital de Clínicas de Porto Alegre

Renato Gorga de Mello, Universidade Federal do Rio Grande do Sul - Hospital de Clínicas de Porto Alegre

Goal:

In low- and middle-income countries, decisions about resource stewardship are critical. Hence, the goal of STARS Brazil is to promote student-led initiatives to advance value-based healthcare (VBHC) studies at medical schools across a continental country.

Activities:

COVID-19 pandemic challenged us all to seek for effective alternatives to allow educational projects implementation. After identifying faculty members aligned to VBHC, ten medical schools were selected and undergraduate medical students were included in an online training program to promote learning regarding evidence-based medicine, VBHC, leadership and patient safety contents to empower them and to promote grassroots peer mentoring actions in their microcosmos. Thereafter, a qualitative research is being conducted to verify students' ideas about VBHC education and its relevance for medical graduation.

Furthermore, STARS's students are developing a list of recommendations named "Things students should not do during medical education" to encourage colleagues to choose wisely in a competitive environment.

Impact:

By empowering medical students to advocate for resource stewardship and to implement choosing wisely initiatives in medical schools across the country, our program seeks to promote a cultural change in medical education to, hopefully, raise awareness about the importance of a VBHC practice.

Challenges:

To implement curriculum changes towards VBHC and to promote local educational activities during COVID-19 pandemic.

Lessons Learned:

Despite adversities, students engaged and learned from an online training program and are able to implement peer mentoring using leadership skills inside their academic community to promote probabilistic reasoning and, moreover, to seek for curricular changes towards resource stewardship education.

RESOURCE STEWARDSHIP AS A FOUNDATIONAL CONCEPT IN PRECLINICAL EDUCATION

Stephanie Alexis, University of British Columbia

Parker Nann, University of British Columbia

Background:

The covid-19 pandemic will forever change the way we as a society work, study, travel and deliver healthcare. Throughout the pandemic, Students and Trainees Advocating for Resource Stewardship (STARS) have been given inspiration, encouragement and professional support to design, implement, and evaluate initiatives that capitalize on this unique time in history to promote high-value care, eliminate unnecessary waste and re-envision a better way forward.

Goal:

For maximal impact and career-long engagement, it is important for future physicians to participate in discussions about value and resource stewardship early. As STARS leaders, one of our goals is to draw attention to high-value initiatives that we would like to see integrated into our preclinical education.

Activities:

To reach a wide audience of students and medical educators, we are submitting several ideas to our provincial communication body to inspire thoughtful discussions on resource stewardship as a core foundational theme for clinical decision making. The topics include: embedding planetary health principles into clinical practice; integrating core tenants of prevention into the hospital setting; seizing opportunities to enhance community supports to keep patients out of the hospital; continuous quality improvement; and increased collaboration with allied health professionals.

Impact:

As society's most trusted messengers, physicians are expected to lead positive change. We aim to highlight the detrimental impacts of overuse so medical students can feel confident in their ability to critically evaluate care delivery, access intervention necessity and become change leaders as we transition into our medical careers.

BRINGING INTERPROFESSIONAL EDUCATION TO THE FOREFRONT OF THE CHOOSING WISELY CAMPAIGN

Emma McDermott, Dalhousie University

Bright Huo, Dalhousie University

Diane Ramsay, Dalhousie University

Yousef Bolous, Dalhousie University

Marihan Farid, Dalhousie University

Meriel Fitzgerald, Dalhousie University

Background:

All Canadian medical schools have student representation for the Choosing Wisely Canada (CWC) campaign, but the same is not true for students in other health professions. The STARS (Students and Trainees Advocating for Resource Stewardship) program was created in 2015 to engage two students from every Canadian medical school in the CWC campaign. A nationally coordinated equivalent has not been implemented for other programs, yet the future of healthcare and a culture shift away from unnecessary tests, treatments, and procedures will require a collective effort from healthcare workers from all professions. CWC has traditionally been a clinician-run campaign, but an important milestone was reached in 2016 when, in partnership with the Canadian Nurses Association, the first non-physician list of recommendations was released.

From there, numerous other professions have gotten involved as well. Studies have shown that interprofessional care, learned through interprofessional education (IPE), leads to better patient outcomes. As improving patient outcomes and preventing harm are core principles of the CWC campaign, moving forward, a stronger emphasis needs to be placed on educating all healthcare professionals about the critical importance of resource stewardship. In order to help address this gap, this interactive breakout session will provide an update on CWC's current interprofessional efforts, an example success story of a CWC IPE Mini-Course offered at Dalhousie University, and an opportunity for participants to discuss and reflect on how best to incorporate CWC into formal education and interprofessional collaboration into the CWC campaign as a whole through an interactive brainstorming session.

CASE-BASED EDUCATIONAL VIDEOS: TEACHING MEDICAL TRAINEES ABOUT CHOOSING WISELY CANADA (CWC) DERMATOLOGY RECOMMENDATIONS

Chaocheng (Harry) Liu, University of British Columbia

Seungwon (Sara) Choi, University of British Columbia

Bei Yuan (Ethan) Zhang, University of British Columbia

Sabrina Nurmohamed, West Dermatology

Background:

Skin conditions are a leading cause of disease burden worldwide in terms of prevalence and morbidity. While most skin conditions are managed by non-dermatologists, dermatology education is very limited in medical school curricula and most Canadian medical schools do not have a required clinical dermatology rotation. As the Top Five CWC Dermatology recommendations are highly relevant to non-dermatologists, medical trainees would greatly benefit from understanding these topics.

Goal:

The objective of the initiative is to create case-based educational videos and help medical trainees better understand and implement the CWC Dermatology recommendations in clinical settings.

Activities:

A total of five 10-minute educational videos on each of the five CWC Dermatology recommendations is being co-designed by our team of a dermatologist, a dermatology resident and two medical students. The videos utilize a case-based approach to explain clinical reasoning behind the recommendations, introduce evidence-based clinical decision-making tools, and share practical tips to help medical trainees better manage some of the most common skin conditions while minimizing unnecessary and even harmful interventions. Medical trainees will be recruited and surveyed to assess their exposure and understanding of the CWC Dermatology recommendations. After implementation of the videos, data will be gathered via surveys to assess the efficacy of video-based educational materials in enhancing medical trainees' understanding of CWC recommendations.

Impact:

This initiative would not only help medical trainees to increase their exposure to resource stewardship, but also enhance their dermatology knowledge and improve patient care when managing common skin conditions.

THE TOP POEMS OF THE YEAR CONSISTENT WITH THE PRINCIPLES OF THE CHOOSING WISELY CAMPAIGN

Roland Grad, McGill University

Background:

Since 2015, articles about the top POEM alerts of the year consistent with principles of the Choosing Wisely campaign are published in the journal 'American Family Physician'. Data for these articles comes from a certified Continuing Medical Education program that uses a crowdsourcing strategy over the daily POEM. In this program, physician members of the Canadian Medical Association systematically reflect on the daily POEM for the potential of this information to help them to avoid unnecessary interventions.

The top 20 recommendations from 2020 span musculoskeletal conditions (e.g., in acute low back pain, do not add a muscle relaxant to treatment with ibuprofen), respiratory disease (e.g., based on clinical decision rules, if the probability of community-acquired pneumonia is 25% or less, a C-reactive protein of less than 20 mg/L decreases the probability to less than 10%, making imaging unlikely to be clinically useful), and preventive care (e.g., in the primary prevention of cardiovascular disease, we should no longer recommend aspirin as there is a close balance of benefits and harms). Clinicians seeking a concise list of tips to change practice are encouraged to consult a summary list of all POEM recommendations consistent with principles of the Choosing Wisely campaign. This list describes interventions whose benefits are not superior to other options, are sometimes more expensive, or put patients at increased risk of harm. Knowing more about these POEMs and their connection with the Choosing Wisely campaign can help clinicians and patients engage in conversations better informed by high-quality evidence.

AN EDUCATIONAL INTERVENTION FOR REDUCING INAPPROPRIATE CARDIAC TESTING: A SUBSTUDY OF THE ECHO WISELY TRIAL

João Lopes, Bahiana School of Medicine and Public Health, Women's College Hospital

Cherry Chu, Women's College Hospital

Zachary Bouck, Women's College Hospital

Sacha Bhatia, Women's College Hospital

Luis Claudio Lemos Correia, Bahiana School of Medicine and Public Health

Introduction:

The Echo WISELY Trial is a controlled, randomized, multicenter study, blinded by the investigator, which evaluated an educational intervention based on the Adequacy Criteria to reduce the proportion of rarely appropriate echocardiograms performed on an outpatient basis.

Objective:

To describe the prevalence and identify predictors of responsiveness of "responder" physicians who underwent educational intervention in the Echo WISELY trial.

Methods:

Doctors in the intervention group received a multifaceted educational program. "Responding" physician was defined as one who showed a reduction of > 2.5% in the proportional average of rarely appropriate tests ordered between the first trimester (baseline) and any of the following trimesters (second to sixth). We compared the physician's characteristics (sex, time since graduation, and medical specialty), with the echocardiogram classifications based on the Adequacy Criteria (appropriate, perhaps appropriate, rarely appropriate) and clinical reasons for echocardiograms requested using the chi-square test.

Results:

We analyzed 4607 tests ordered at six participating Ontario hospitals and randomized to the intervention arm. Among 36 doctors included, 26 (72%) were classified as responders. Among the variables analyzed there was no significant difference between medical responders and non-responders. The number of rarely appropriate tests requested by the respondents was significantly less than that of non-responders [234 (8.67%) versus 261 (13.8%), $p < 0.0001$].

Conclusion:

There is a high prevalence of physicians responding, but predictive characteristics of responsiveness to educational intervention were not found. This may be due to individual aspects and not a professional category effect. Future studies should address analyzes of medical psychological aspects.

EDUCATIONAL INTERVENTION TO REDUCE INAPPROPRIATE REQUEST FOR ECHOCARDIOGRAM - A SYSTEMATIC REVIEW

João Lopes, Bahiana School of Medicine and Public Health, Women's College Hospital

Cherry Chu, Women's College Hospital

Zachary Bouck, Women's College Hospital

Sacha Bhatia, Women's College Hospital

Luis Claudio Lemos Correia, Bahiana School of Medicine and Public Health

Introduction:

The echocardiogram is an image exam frequently used for the diagnosis and monitoring of heart diseases. However, many tests are performed routinely and / or in patients at low cardiovascular risk. In light of this, the American College of Cardiology has published the Appropriate Use Criteria for Echocardiography.

Objective:

To describe the level of evidence regarding the effectiveness of educational interventions in reducing inappropriate use of echocardiography.

Methods:

Systematic review performed in the general databases: Pubmed, Cochrane, LILACS, Embase using descriptors. Intervention studies were included, which assessed the impact of educational measures based on the Criteria for Proper Use for Echocardiography proposed by the American Society of Echocardiography, in relation to the appropriate request for the echocardiogram examination.

Results:

232 articles were found crossing descriptors: 40 repeated, 171 excluded by title, 10 when reading abstracts and 1 excluded after reading the text. Thus, 10 articles were included in this systematic review. Of which, seven from observational cohorts (five with results favorable to educational intervention). Three clinical trials with individual randomization, sample size of 179, 112 and 65 doctors (totaling 177 in the intervention groups and 180 in the control groups), all showed a significant reduction in inappropriate exams in the intervention arm.

Conclusion:

The studies found in this systematic review were of good quality, low risk of bias, with a high level of evidence, which allows us to affirm that educational interventions directed to doctors who request echocardiograms have a positive impact in reducing inappropriate exams.



Patient Engagement

La mobilisation des patients

EXPLORING THE PATIENT'S PERCEPTION OF LOW-VALUE CARE: A MIXED METHODS STUDY IN THE NETHERLANDS

Eva Verkerk, Radboud University Medical Center

Julia Boekkooi, Radboud University Medical Center

Tijn Kool, Radboud University Medical Center

Goal:

A significant part of the barriers that clinicians experience revolves around patients. However, little is known about the patient's perception of low-value care. We aimed to explore what Dutch patients define as low-value care, what their experiences with low-value care are, and what they think is necessary to reduce it.

Methods:

We distributed a survey to 24,128 Dutch patients, followed by semi-structured interviews with 18 respondents to further explore their perception of low-value care.

Results:

A total of 10,224 patients completed the survey, of which 13.7% reported they had received low-value care at least once. Patients considered a variety of care to be of low-value, such as care that could have been prevented, care that they had already received earlier, care that does not match the patient's preferences, or care for symptoms that do not need treatment. Frequently mentioned causes of low-value care were lack of communication between the clinician and patient and unwillingness to deviate from care protocols. Patients suggested several solutions to prevent low-value care, such as informing and empowering patients to participate in shared decision making, giving clinicians more time to listen to their patient, and improving the cooperation between clinicians.

Conclusion:

Lack of communication between the clinician and patient, and organization and cooperation play an important role in the provision of low-value care, according to patients. Patients advocate that informing and involving them more can prevent low-value care. Future research should focus on how patients can best be informed about low-value care.

PARTNERSHIP WITH PATIENTS WITH LBP: DEVELOPMENT OF A CWC INTERVENTION TO REDUCE UNNECESSARY IMAGING

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Cindy Dumba, Choosing Wisely Canada

Heather Thiessen, Saskatchewan Patient & Family Leadership Council

Angie Palen, Choosing Wisely Saskatchewan

Tracey Carr, University of Saskatchewan

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Daryl Fourney, University of Saskatchewan

Collin Hartness, Saskatchewan Health Authority

Robert Parker, Saskatchewan Health Authority

Gary Groot, University of Saskatchewan

Goal:

Despite efforts of Choosing Wisely Canada (CWC) to reduce overuse of medical tests and treatments throughout the healthcare system, research shows CWC discussions on the harms and risks of unnecessary imaging tend to not resonate with patients with lower back pain (LBP): two out of three LBP patients expect to receive imaging tests, and up to 30% of LBP patients have at least one unnecessary imaging. We aim to develop a patient-oriented knowledge translation intervention to facilitate patient-physician communications about unnecessary imaging.

Activities:

To develop this intervention, we collaborated with a multidisciplinary advisory committee, including patient partners with LBP, researchers, clinicians, healthcare administrators, and the Choosing Wisely Canada lead for Saskatchewan. We used the CWC patient-oriented framework that prioritizes the impact of patient engagement in addressing overuse. To explore patient-identified key themes of the LBP prescription pad, data were collected through advisory team meetings, individual interviews with LBP patient partners, and focus groups with LBP patient participants.

Impact:

This study engaged patients to develop a LBP prescription pad that promotes shared decision-making and facilitates patient-centered discussions about the risks of overimaging. The developed LBP prescription pad will be trialed with LBP patients and family physicians/chiropractors within the province of Saskatchewan.

Challenges and Lessons Learned:

The main challenge was to coordinate data collection during the COVID-19 pandemic. Using the CWC patient-oriented framework to develop the LBP prescription pad created meaningful engagement opportunities with LBP patients. The CWC knowledge translation intervention will support shared decision-making and communication about unnecessary imaging.



**Quality
Improvement**

**L'amélioration
de la qualité**

REDUCING RESPIRATORY VIRUS TESTING IN PATIENTS ADMITTED FOR BRONCHIOLITIS AT THE MONTREAL CHILDREN'S HOSPITAL - A CHOOSING WISELY INITIATIVE

Jasmine Vafi, McGill University Health Centre

Nadine Korah, McGill University Health Centre

Akina Fay, McGill University Health Centre

Background:

Bronchiolitis is a clinical diagnosis for which management is primarily supportive. Several national bodies have released practice guidelines emphasizing the avoidance of unnecessary treatments and investigations. However, Quebec institutions have a high rate (84%) of virology testing in hospitalized bronchiolitis according to data collected in 2015. Given this provincial trend and local observations, a retrospective cohort study was conducted at the Montreal Children's Hospital (2014-2016), showing that 91.2% of children admitted for bronchiolitis had virus testing with a nasopharyngeal aspirate (NPA).

Goal:

Establishing a local quality improvement initiative to reduce respiratory virus testing in children aged 1-24 months admitted for bronchiolitis by 30% within a first viral season.

Methods:

A quality improvement research project using lean-six sigma methodology was planned in collaboration with the emergency and inpatient units. Improvement steps included education sessions, creation of visual management campaigns and elaboration of an ordering pathway to guide clinical decision-making. Retrospective chart review was then conducted to determine the rate of NPAs following the quality improvement steps.

Results:

Over a first viral season, in children aged 1 – 24 months admitted for bronchiolitis, the NPA rate was reduced by over 20% (from 91.2% at baseline to 70%).

Conclusion:

Establishing a quality improvement project in line with the Choosing Wisely campaign was successful in reducing respiratory virus testing in children admitted for bronchiolitis. Although the initial objective of a 30% reduction was not attained, this initiative has created the opportunity to encourage discussions around resource stewardship and reducing unnecessary testing.

ASSESSING THE PREVALENCE OF THREE LOW-VALUE PRACTICES AMONG GENERAL PRACTITIONERS IN THE NETHERLANDS: A RETROSPECTIVE COHORT STUDY

Joris Müskens, IQ Healthcare – Radboud

Background:

Bronchiolitis is a clinical diagnosis for which management is primarily supportive. Several national bodies have released practice guidelines emphasizing the avoidance of unnecessary treatments and investigations. However, Quebec institutions have a high rate (84%) of virology testing in hospitalized bronchiolitis according to data collected in 2015. Given this provincial trend and local observations, a retrospective cohort study was conducted at the Montreal Children's Hospital (2014-2016), showing that 91.2% of children admitted for bronchiolitis had virus testing with a nasopharyngeal aspirate (NPA).

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BEYOND CODE STATUS: IMPROVING SERIOUS ILLNESS CONVERSATIONS IN THE HOSPITAL SETTING

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John You, Trillium Health Partners

Marilyn Swinton, McMaster University

Peter Munene, University of Ottawa

Dan Kobewka, University of Toronto

Dev Jayaraman, McGill University

Andrew Lagrotteria, University of Toronto

Fiona Dunne, University of Calgary

Irene Ma, University of Calgary

Gwenn Boryski, iCAN-ACP

Background:

CWC recommends, “Don’t delay Advance Care Planning conversations” but busy hospital clinicians struggle to make time for these essential conversations.

Goal:

To improve the frequency and quality of goals of care conversations with hospitalized patients by adapting and implementing Ariadne Lab’s “Serious Illness Care Program” (SICP).

Methods:

Using a quality improvement framework we implemented the SICP on general internal medicine wards in Calgary, Alberta and Hamilton, Ontario. Mixed methods evaluation included process outcomes, patient reported experiences (survey) and clinician reported experiences (survey and qualitative interviews).

Impact:

SICP was readily adapted into ward workflow. Over 19 months clinicians held 334 conversations (29% of 1,158 eligible patients) with 82% documented in the designated location. Most patients (97%) rated the conversation as somewhat, mostly or extremely worthwhile and felt more heard and understood (+0.22 on 5-point scale, $P=0.04$). Most clinicians (95%) agreed (somewhat, mostly or completely) that conversations took an appropriate amount of time and 97% agreed they provided information that enhances care. Qualitatively, clinicians experienced a shift of conversation focus from an emphasis on code status to broader values-based conversations. Clinicians reported positive influences of this shift on themselves, patients, and clinical practice.

Challenges:

Even with cueing and team support to prioritize time for conversations, attending physicians sometimes struggled to meet their target of one conversation per week, particularly when in-patient numbers were high.

Lessons Learned:

Project funding of a nurse champion’s time on each unit facilitated implementation, without such resources creating and sustaining change would be challenging.

UNDERSTANDING ANTIBIOTIC PRESCRIBING AMONG FAMILY PHYSICIANS FOR PATIENTS PRESENTING WITH UPPER RESPIRATORY TRACT INFECTION (URTI) SYMPTOMS

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Noah Ivers, Women's College Hospital Institute for Health Systems Solutions and Virtual Care

Background:

The goal of this work was to understand what impacts antibiotic prescribing by family physicians for patients presenting with upper respiratory tract infection (URTI) symptoms in order to inform the design of future initiatives. Interviews were conducted with family physicians in Ontario identified as high (>80th percentile) or medium (40-60th percentile) antibiotic prescribers and early (>10 years since graduating medical school) or late-career stage (25+ years) as identified in the validated IQVIA Xponent database. Interviews were analyzed using the Theoretical Domains Framework, a comprehensive, theory-informed framework to classify determinants of specific behaviours. Using case examples, we explored how physicians decide to start an antibiotic (initiation), which one to choose (selection), and how long to prescribe (duration). Each decision was informed by balancing internal (knowledge, skills, belief about capabilities) and external (access to resources, social influence, belief about consequences) factors. For example, physicians believed they had adequate knowledge about initiation and selection of antibiotics, however, some physicians, particularly high prescribers and those practicing for 25+ years, had gaps in knowledge regarding new evidence for duration. Environmental context and resources also impacted prescribing decisions.

To address barriers, physicians suggested clinic and system level strategies that may help in practice. Choosing Wisely materials (posters and viral prescription pad) were described as trusted evidence that informed their communication strategies and helped to overcome some individual and clinic-level barriers. Results of this study are informing the design of antibiotic prescribing interventions, including an audit and feedback initiative being implemented across Ontario.

EFFORTS TO REDUCE LOW-VALUE TESTING BASED ON CHOOSING WISELY CANADA 'QUICK WINS': MULTI-HOSPITAL IMPLEMENTATION EVALUATION

Nicola McCleary, Ottawa Hospital Research Institute, University of Ottawa

Jamie Brehaut, Ottawa Hospital Research Institute, University of Ottawa

Chris McCudden, Eastern Ontario Regional Laboratory Association, University of Ottawa

Background:

The Eastern Ontario Regional Laboratory Association (EORLA: <https://www.eorla.ca/>) encompasses 18 laboratories which collectively conduct 13 million tests annually for 16 hospitals. EORLA is collaborating with member hospitals to implement Choosing Wisely Canada's four lab-related 'quick wins'.

Goal:

Catalogue implementation efforts and identify common experiences and challenges with the quick wins across EORLA sites.

Activities:

We used a mixed methods approach involving an Excel-based questionnaire to gather brief details about implementation efforts, which served as a precursor to focus groups with implementation teams at each of the sites. Questions were informed by published recommendations for specifying implementation stages, strategies, and outcomes. We explored the implementation process, details of any impact assessments, drivers of success, barriers faced, views on sustainability, and the impact of COVID-19. Focus group transcripts are being analysed using thematic analysis.

Results:

The 16 sites are at various stages of progress: most are either considering implementation, actively planning for implementation, or have implemented at least one quick win. Some have implemented all four quick wins, or evaluated impacts (finding reductions in ordering). Education, guidelines, and requisition/order set changes were the most frequently used implementation activities. Initial insights from ongoing focus groups indicate that sites with perceived success used local data for justification, and had visible senior leadership support, clinical champions, and adequate implementation resources. Role hierarchies, inadequate resources, and challenges maintaining momentum can pose barriers to progress.

Lessons Learned:

Final results will inform EORLA's assessment of implementation effectiveness and provide recommendations for optimization of implementation processes across sites.

STOPPING ROUTINE ADMISSION URINE TESTS FOR STROKE REHABILITATION INPATIENTS

Arjun Ghuman, University of Alberta

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Uma Chandran, Glenrose Rehabilitation Hospital - Alberta Health Services

Jaime C Yu, University of Alberta

Strategic Clinical Improvement Committee - Alberta Health Services

Goal:

To reduce standardized urine testing on patients admitted to stroke rehabilitation from 100% to 0%, unless clinically indicated.

Activities:

A baseline chart audit identified that 27 of 28 patients over two weeks had urine tests (urinalysis and culture) completed on admission; however, no patient required treatment for a urinary tract infection (UTI). Quality Improvement tools determined this order practice was facilitated by standardized admission form design with standing urine test orders. Our intervention consisted of education materials, clinicians crossing off standing urine orders unless the patient had urinary symptoms, and unit clerks flagging inappropriate orders for prompt clinician reassessment.

Impact:

After four weeks, a retrospective chart audit (n=23) revealed 1 patient had urine tests completed on admission that returned negative, 22 orders were crossed out, and the estimated cost of urine tests dropped from \$650 to \$25. However, 6 urine tests were completed after admission, and 2 patients required antibiotic treatment for a UTI.

Challenges:

Dissemination of education and key project messages during the COVID-19 pandemic, without compromising social distancing, required development of an online video and emailed pamphlet rather than initially planned in-person discussion.

Lessons Learned:

There is no clinical benefit in automatically screening all stroke survivors who are transferred to a tertiary stroke rehabilitation unit or facility. This is consistent with Choosing Wisely recommendations on collecting urine specimens. Inappropriate and expensive ordering behaviour can be improved by engaging clinicians and changing standardized admission order forms to investigate infections only when clinical features are present.

HOW THE CANADIAN MEDICAL IMAGING INVENTORY (CMII) CAN SUPPORT “IMAGING WISELY”

Brit Cooper-Jones, Canadian Agency for Drugs and Technologies in Health (CADTH)

Goal:

The goal of the Canadian Medical Imaging Inventory (CMII) is to offer a comprehensive national summary of medical imaging-related data that can help decision-makers in the medical imaging space.

Activities:

Examples of activities that relate specifically to the Choosing Wisely recommendations include (but are not limited to): providing data on access to medical imaging equipment across the country and offering insights to help with waitlist reduction strategies; providing data on appropriateness of use processes and the degree to which these have been implemented across provinces and territories; and providing data on trends in the adoption of enhanced radiation protection features.

Impact:

To further enhance the impact of the CMII database, we have also launched a CMII Service to respond directly to customers' inquiries. We hope that this CMII Service will improve the degree to which the insights offered by the database (e.g., on appropriateness processes, radiation safety, and more) are implemented across jurisdictions in a way that creates lasting and meaningful impact.

Challenges:

One challenge has been that stakeholders' priorities and resources have shifted during the COVID-19 global pandemic. However, we also see this as an opportunity to emphasize the importance of removing unnecessary or low-value medical imaging exams and instead focus on optimizing access, appropriateness, and radiation-related safety moving forward.

Lessons Learned:

The latest iteration of the CMII report and Service have just been launched; however, we intend to solicit ongoing stakeholder and customer feedback to identify “lessons learned” and to continue to improve our services.

MANITOBA RED CELL TRANSFUSION PROJECT CHANGE APPROACH

Christine Peters, Shared Health

Charles Musuka, Shared Health

Arjuna Ponnampalam, University of Manitoba

Darcy Heron, Shared Health

Jim Diakiw, Winnipeg Regional Health Authority

Hayley Johnson, Shared Health

Rationale:

Manitoba, historically, has been one of the highest users of red cell units per capita in Canada with the transfusion of two or more red cell units at a time being common practice among physicians. The province undertook the Choosing Wisely recommendations to encourage single unit transfusion with reassessment of the patient prior to the infusion of a second unit.

Methods:

An interdisciplinary project team developed a restrictive transfusion protocol to ensure patients are transfused appropriately. This protocol identified patients who may be transfused unnecessarily based on their clinical status and current hemoglobin value. The project employed change management and knowledge implementation strategies to encourage physicians to implement the new protocol for red cell transfusion. These strategies included:

- Approaching Laboratory and Hospital Leadership to outline the restrictive transfusion protocol and gain support of initiative
- Assuring physicians necessary transfusions would not be delayed with the new protocol
- Peer-to-peer discussion between Transfusion Medicine physician and ordering physician providing targeted transfusion practice education
- Posting educational sessions on the provincial resource website, www.bestbloodmanitoba.ca
- Providing targeted marketing to clinical areas using educational memo and postcards containing restrictive transfusion protocol prior to go-live date of protocol
- Development of communication tool between laboratory staff and Transfusion Medicine physicians – bloodydocs@sharedhealthmb.com

Results:

There was a 13% increase in single unit transfusions prior to the go live date through the use of the targeted marketing campaign. A provincial 38% increase in single unit transfusions occurred following the go-live date of the restrictive transfusion protocol in March 2021.

Conclusions:

Through engagement with physicians and collaboration between disciplines, the implementation of the restrictive transfusion protocol has had an impact on the transfusion practices of physicians in Manitoba. Utilization data continues to show an increase in single unit transfusions with the reduction in transfusing two units at a time without reassessing patients prior to transfusing a second unit.

AWARENESS AND BEYOND: INTRODUCING 'LAB WISELY'

Amanda VanSpronsen, University of Alberta

Christine Nielsen, Canadian Society for Medical Laboratory Science

Brandon Djukic, Canadian Society for Medical Laboratory Science

Valentin Villatoro, University of Alberta

Goal:

To create sustained laboratory professional engagement in Choosing Wisely Canada (CWC).

Activities:

The Canadian Society for Medical Laboratory Science (CSMLS) and the University of Alberta partnered to explore medical laboratory professional (MLP) roles in reducing waste and harm in healthcare. We identified and catalogued existing CWC recommendations relating to laboratory testing (>100). We then developed and submitted MLP-specific CWC recommendations. Finally, we surveyed CSMLS membership to understand barriers to their participation in implementing these recommendations. These activities culminated in the development of 'Lab Wisely', a multimodal initiative centred on a dual-language website that provides information, toolkits, success stories, and a searchable database of all laboratory-related CWC recommendations.

Challenges and Lessons:

The traditional MLP scope limits direct impact on test ordering practices, but opportunities exist to play supportive roles in reducing medical overuse. Our survey revealed low awareness of CWC, but respondents feel accountability for resource stewardship and patient safety. Our partnership is committed to regularly promoting Lab Wisely, updating the searchable database, collecting and sharing success stories, and developing new resources. Since launching in late 2020, there have been >2000 visits to LabWisely.ca with >700 unique visits to our database.

Impact:

We are the first to create an ecosystem where MLPs can interact with profession-specific recommendations as well as the wider CWC initiative, amplifying the impact of recommendations created by other groups. The survey revealed opportunities to enhance resource stewardship within our membership by providing tools and information tailored to their needs.

VALUE-BASED CARE FOR HEALTHY CHILDREN WITH FIRST EPISODE OF FEBRILE NEUTROPENIA

Charlotte Grandjean-Blanchet, The Hospital for Sick Children

Stephanie Villeneuve, IWK Health Centre

Carolyn E Beck, The Hospital for Sick Children

Michaela Cada, The Hospital for Sick Children

Daniel Rosenfield, The Hospital for Sick Children

Michelle Science, The Hospital for Sick Children

Michelle Fantauzzi, The Hospital for Sick Children

Sheila Butchart, The Hospital for Sick Children

Olivia Ostrow, The Hospital for Sick Children

Goal:

To decrease the number of unnecessary hospitalizations and empiric antibiotics prescribed by 50% over a 12-month period for otherwise healthy, well appearing patients presenting to the emergency department (ED) with a first episode of febrile neutropenia.

Activities:

A team of key stakeholders was assembled. A review of the literature, peer institutions and local practices on febrile neutropenia in healthy children was performed. Using the Model for Improvement, a guideline for the management of healthy children with first episode of febrile neutropenia was developed and refined using PDSA cycles. In January 2020, the guideline was launched for clinical use in the ED. Education, targeted audit and feedback, pathway modifications, and reminders were used to address knowledge gaps and staff turnover.

Impact:

Sixteen patients met low risk criteria. Hospitalization and/or antibiotics use for this population decreased from 84% to 25%. It was also uncovered that many patients were misdiagnosed with neutropenia by excluding bands from the absolute neutrophil count. This was addressed through education and pathway modifications. We improved resource stewardship and value-based care by reducing unnecessary hospitalizations and antibiotics in low risk patients with first episode of febrile neutropenia. This work can easily be adopted by other pediatric and community sites caring for children.

Challenges:

To continue engaging physicians to sustain the positive results obtained. Repeated reminders as well as targeted feedback are necessary as this is not a frequent event. We are currently working on incorporating automated reminders in the electronic medical record.

THE USABILITY OF CLAIMS DATA AS A SOURCE FOR LARGE-SCALE AUDIT & FEEDBACK INTERVENTIONS

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G. Hofstra, Talma Institute Vrije Universiteit/Amsterdam Medical Centre

H.C. Willems, Talma Institute Vrije Universiteit/Amsterdam Medical Centre

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E.J.E. van der Hijden, Talma Institute Vrije Universiteit/Amsterdam Medical Centre

Goal:

To analyse the possibilities and limitations of using claims data as a source for Audit & Feedback (A&F) interventions for six potential low-value care topics

Activities:

We developed A&F indicators for six potential low-value care topics with four Dutch data handlers and seven medical professionals of varying clinical specialties. We analysed possibilities and limitations of using claims data as the source for A&F interventions aiming to de-implement low-value care.

Impact:

Claims data has valuable benefits for large-scale A&F interventions, however a previous study found that only a small number of A&F indicators (17/824 Choosing Wisely Recommendations) could be based on claims data. Our analysis shows that it is possible to construct generic A&F indicators based on claims data for a variety of clinical topics and suggests that these can be used for A&F interventions. Results from this study will be used in a Dutch national program that uses A&F interventions to de-implement low-value care.

Challenges:

For none of the six low-value care topics, claims data provided sufficient detail to accurately describe the relevant patient population, the intervention (treatment/diagnostic) or both. However, in all cases it was possible to construct more generic A&F indicators, that presented slight overestimations of the sought-after groups.

Lessons Learned:

Our findings showed that although claims data does not provide sufficiently detailed information to construct ideal indicators, clinical professionals deem more generic A&F indicators clinically relevant for the use of A&F interventions. Therefore, claims data can provide a valuable and cost-efficient source for large-scale A&F interventions.

LOW VALUE INJURY CARE IN THE ADULT ORTHOPAEDIC TRAUMA POPULATION: A RAPID REVIEW

Melanie Berube, Laval University

Lynne Moore, Laval University

Pier-Alex Tardif, Laval University

Étienne Belzile, Laval University

Jérôme Paquet, Laval University

Purpose:

A previous scoping review and expert consultation survey identified 15 potential low value practices in the adult orthopaedic trauma population. The aim of this study was to synthesize the evidence on these practices.

Methods:

We used a rapid review approach to synthesize a large body of evidence in a timely and credible manner. We searched Medline, EMBASE, the Cochrane Central Register of Controlled Trials and Epistemonikos. We evaluated the methodological quality of systematic reviews using the Measurement Tool to Assess Systematic Reviews version 2 and of case series with the Critical Appraisal Checklist for Case Series. Risk of bias in original studies were evaluated with the Cochrane revised tool for RCTs and with the risk of bias in non-randomized studies of interventions tool.

Results:

A total of 70 studies were retained. We identified high-level evidence of low value care for initial imaging of ankle injury; orthosis for A0-A3 thoracolumbar burst fracture; immobilization for scaphoid and fifth metacarpal neck fractures, and follow-up imaging for distal radius and ankle fractures. We also found low-level evidence of low value care for initial imaging of the spine, pelvis and knee, preoperative blood tests in healthy patients; spine surgeon consultation for isolated thoracolumbar transverse process fracture; and follow-up imaging for clavicle and lower extremity fractures. Evidence was mostly based on studies of low methodological quality or high risk of bias.

Conclusion:

This review provides information on low value practices that could be targeted by de-implementation interventions in the adult orthopaedic trauma population.

COMMUNITY PHARMACISTS CAN HELP REDUCE MEDICATION HARM AND BURDEN BY IDENTIFYING OPPORTUNITIES FOR DEPRESCRIBING

Gloria (Tian Xia) Chu, Therapeutics Initiative

Goal:

Demonstrate the many opportunities community pharmacists have to initiate deprescribing conversations with patients and prescribers through medication reviews, patient counseling and observing patients in everyday interactions.

Activities:

During routine prescription verification and patient consults, community pharmacists should follow a systematic approach to assess all medications on four principles in order of (i) indication, (ii) effectiveness, (iii) safety and (iv) adherence potential. They should reassess drugs at each fill to identify those which no longer add patient value, and collaborate with the patient and prescriber to deprescribe.

Impact:

(i) Checking for indication-based prescribing can identify prescribing cascades on new and repeat prescriptions which can save the patient from suffering and unnecessary costs by preventing the addition of a new medication to treat the adverse effects of an existing medication. (ii) Asking each patient about their goals of treatment is the best indicator to guide shared decision-making. (iii) Observing patients during interactions and using specific descriptors to ask about a patient's symptoms can help pharmacists identify many symptoms of drug-induced adverse effects like tremor, nystagmus, anticholinergic adverse effects, and tardive dyskinesia to name a few. (iv) Adherence to useful drug therapy can be facilitated by decreasing pill, harm and cost burdens for patients. Medications which do not fulfill the first three criteria of indication, effectiveness and safety should always be considered for deprescribing.

LESSONS FROM CREATING A THRIVING CW PROGRAM AND CULTURE IN A COMMUNITY HOSPITAL

Charles Winegard, Bluewater Health

Renato Pasqualucci, Bluewater Health

Bluewater Health was a typical community hospital and over the last five years we have created a lively program of initiatives that embed evidence-based medicine practice into the entire culture.

Things we did right: Start!

Just start. Begin with some easy wins to introduce the principles and build momentum.

Get educated. We studied project implementation and sought mentorship, studied the Choosing Wisely education and collaborated with another active Choosing Wisely program.

Get the right people:

Choose enthusiastic people. We included:

- Physician champions
- Administration
- Patient experience partners,
- Directors of the Laboratory and Diagnostic Imaging
- Communications department,
- The medical director of each department and
- Non-physician care givers in the community.

Communicate:

- Gain consensus from the critical participants before implementing changes.
- Communicate the “Why” regularly and used varied media to constantly “drip” into the culture (internal and public) referencing the literature.
- Highlighted physician excellence that linked behavior to outcome.

Actions:

- Make it easy for the physicians to change e.g. excellent order sets.
- Any monetary savings were reinvested in clinical programs.
- We used every opportunity to highlight Choosing Wisely at every educational meeting and asked presenters to link to it.
- Included choosing wisely within the structure of the MAC and quality reporting mechanism.

Things we could do better:

- Measure outcomes and regular reporting
- Stronger links with the hospital quality improvement plan

Challenges:

- Maintaining momentum in some of the early wins
- Working with an older HIS without physician order entry
- Data collection in real time due to the older HIS

IMPROVING UNDERSTANDING OF LABORATORY STEWARDSHIP AT A PEDIATRIC HOSPITAL – A QUALITY IMPROVEMENT ASSESSMENT

Tejas Desai, University of Ottawa

Ken Tang, CHEO Research Institute

Ivan Blasutig, University of Ottawa

Melanie Buba, University of Ottawa

Background:

With tremendous growth in laboratory testing capabilities and volumes over recent decades, initiatives like Choosing Wisely have emphasized evidence based and judicious testing. However, the pediatric population presents many unique challenges and has been less studied with fewer clinical guidelines to dictate usage. This study aims to better understand perceptions of laboratory stewardship and testing patterns at a tertiary care pediatric hospital to assess for quality improvement opportunities.

A four-part electronic survey assessing understanding, behaviours and perceptions around laboratory stewardship was sent to all pediatric residents and Clinical Teaching Unit (CTU) physicians at our institution. Furthermore, laboratory billing reports and EMR records were reviewed to assess testing volumes, patterns and potential overuse.

Survey response rate was 55% (43/78). Results indicated good familiarity with stewardship (65%) and overwhelming agreement (98%) that testing overuse is a problem, but poor understanding (7-51%) of testing specifics (e.g. cost). EMR or mobile application-based quality improvement initiatives (60-63%) were most desired while paper or online module-based interventions were least preferred (9-12%). Billing and EMR data identified the top laboratory tests ordered on the CTU and additional data analysis is ongoing.

This study indicates familiarity with laboratory stewardship and Choosing Wisely initiatives, but widespread adoption and understanding remains poor at our institution. However, survey and testing data suggest that various quality improvement opportunities exist and should be the focus of subsequent projects.

THE BAG IS NOT ALWAYS BAD: IMPLEMENTING A TWO-STEP METHOD FOR URINE TESTING ON THE INPATIENT PAEDIATRIC WARDS

Chandandeep Bal, University of Toronto

Felicia Paluck: University of Toronto

Ting Ting Liu, The Hospital for Sick Children

Laila Premji, University of Toronto

Goal:

Reducing unnecessary investigations is critical given the overwhelming strain on laboratory services during the COVID-19 pandemic. A two-step approach for urine collection has been demonstrated to reduce unnecessary bladder catheterizations and cultures in young children with suspected urinary tract infections (UTIs). Our goal is to implement a two-step urine collection approach for children 6-24 months with suspected UTIs on the inpatient wards.

Activities:

Baseline data was collected for urine cultures sent from the wards in 2019. A 2-step approach has been adopted which includes first completing a urinalysis (UA) on a urine bag sample, and if positive, a bladder catheterization for UA and culture.

Impact:

Of the 40 urine cultures sent, only 5% (5/40) were positive. 45.0% (18/40) of patients had either a negative UA or no UA prior to a negative culture. UAs should be done prior to culture, and cultures only done on positive UAs. This may suggest that 45% of cultures sent were unnecessary. 65% (26/40) of cultures were from catheter samples, and 80% (20/26) either had a negative UA or no UA prior. This suggests that approximately 80% (20/26) of catheters may have been avoided with the two-step collection approach.

Challenges:

There is variability in practice for investigating UTIs on the wards. This is likely contributing to unnecessary bladder catheterizations and cultures.

Lessons Learned:

Bladder catheterizations are often used to investigate UTIs in children but are invasive. A two-step approach will contribute to providing high-value, patient-centered care during a period where resource stewardship is pivotal.

DECREASING UNUSED OPIOIDS IN THE HOME POST SUPRACONDYLAR FRACTURE: A QUALITY IMPROVEMENT INITIATIVE

Maha Al Mandhari, University of Toronto

Conor Mc Donnell, University of Toronto

Monica Caldeira-Kulbakas, The Hospital for Sick Children

Local Problem:

Up to 83% of opioids prescribed to supracondylar fractures postoperatively were left unused at home. A standardized electronic medical record opioid prescribing protocol was developed, aimed at >50% reduction in doses prescribed to children after supracondylar fracture repair over 12 months. And subsequently, the amount of unused opioids remaining in the home three weeks post-discharge, without compromising pain management.

Method:

This is a time-series study utilizing an iterative Plan-Do-Study-Act system based on the model for improvement and statistical process control methodology. The primary outcome measure was the amount of opioid Morphine Milligram Equivalency (MME) dispensed at discharge, limited to 8 doses at 0.2mg/kg per dose, and the percentage reduction in unused MME doses at 3-week follow-up. Process measures included the percentage uptake to the protocol, percentage rates of adjuvant analgesia use in patients requiring opioids, and the percent appropriate disposal of unused opioids by clinic follow-up. The balancing measure was the rate of inadequate pain management.

Results:

There was a 59% reduction in opioids dispensed at discharge compared to pre-intervention data. There was >80% sustained adherence to the protocol and >93% adherence to analgesia adjuncts' regular use. >80 % of MME prescribed and dispensed went unused, which supported a continuous culture of overprescribing, with 40% of doses returned and appropriately disposed of. No child required more than eight doses.

Conclusions:

A standardized protocol can safely reduce the amount of opioids dispensed postoperatively. This data will stratify prescriptions based on fracture type and inform a widespread surgical implementation template.

REDEFINING THE ROLE OF ROUTINE POSTOPERATIVE BLOODWORK FOLLOWING UNCOMPLICATED BARIATRIC SURGERY

Rajajee Selvam, The Ottawa Hospital

Amer Jarrar, The Ottawa Hospital

Nicole Kolozsvari, The Ottawa Hospital

Goal:

Patients are typically discharged after bariatric surgery on postoperative day 1 (POD1). While POD1 bloodwork is routinely performed, it is uncommon for the discharge plan to change due to unexpected laboratory abnormalities. A quality improvement opportunity was identified to reduce unnecessary bloodwork.

Activities:

Patients undergoing bariatric surgery only had POD1 bloodwork if there were perioperative clinical concerns, they had insulin-dependent diabetes (IDD), or they were therapeutically anticoagulated.

Impact:

57 patients were included from September – December 2020, 43 (75%) Roux-en-Y gastric bypasses and 14 (25%) sleeve gastrectomies. 46 (81%) patients did not have POD1 bloodwork. One patient had bloodwork for IDD, 3 for intraoperative concerns, and 2 for postoperative concerns. Five (9%) patients had bloodwork performed in violation of our protocol. Of patients who had appropriately ordered POD1 bloodwork, there were no changes to management. None of the patients who erroneously had bloodwork had a change in management based on the results.

Challenges:

Thirty-day Emergency Department (ED) visits and readmissions were monitored as a balancing measure. Nine (14%) patients had ED visits. Six (11%) were readmitted for port site hernias, abdominal pain, and dysphagia. Three (5%) patients required a second surgery (1 bowel obstruction, 2 port site hernias).

Lessons Learned:

Preliminary analysis suggests POD1 bloodwork can be safely avoided following routine bariatric surgery. None of the ED visits or readmissions were felt to be avoidable with earlier bloodwork. Eliminating unnecessary routine POD1 bloodwork decreases patient discomfort, hospital cost, environmental impact and may lead to earlier discharge.

THE IMPACT OF DE-IMPLEMENTING LOW-VALUE CARE ON PATIENTS, HEALTHCARE PROFESSIONALS AND ORGANIZATIONS

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S.B. Ybema, Talma Institute – VU Amsterdam

E.J.E. van der Hijden, Talma Institute – VU Amsterdam

Goal:

Previous research has reported that de-implementation of low-value care is difficult due to patients' and healthcare professionals' preferences, and cultural or financial barriers. Limited insights into the impact on patients, healthcare professionals and organizations hamper de-implementation. With this study, we aim to develop a tool that assesses the impact of de-implementing low-value care on patients, healthcare professionals and organizations.

Activities:

We conducted a literature review to explore the definition of impact within the context of de-implementing low-value care. We developed a conceptual framework for assessing the impact of de-implementation.

Impact:

This study is part of a Dutch program (Leading the Change) that focuses on developing effective strategies that contribute to de-implementation of low-value care. Results from this study will be used in national programs (Leading the Change and ZE&GG) that aim to de-implement low-value care in Dutch hospitals and specialty clinics.

Challenges and Lessons Learned:

Impact is a broad term that is often used, but has not yet been operationalized in the context of de-implementation. We defined impact of de-implementation as: all types of consequences on: 1) patients' expectations, 2) healthcare professionals' behavior, and 3) the healthcare organization.

To analyze impact of de-implementing low-value care, we recommend five steps: 1) describe the differences between the expected and alternative treatment; 2) describe the consequences of implementing the alternative treatment; 3) appraise the consequences of implementing the alternative treatment; 4) explore the benefits of the expected treatment; 5) explore the barriers for implementing the alternative treatment and de-implementing the expected treatment.

BRINGING CHOOSING WISELY TO RURAL CANADA

Margaret Tromp, Society of Rural Physicians of Canada

Kathleen Walsh, Northern Ontario School of Medicine

Alexandra Dozzi, NOS Northern Ontario School of Medicine

Background:

Rural communities in Canada have longstanding challenges with limited healthcare resources. Rural communities have limited human, diagnostic, therapeutic and financial resources, which present unique challenges for managing patient care, in addition to negatively impacting the health of physicians and other care providers. Until recently, rural medicine was an overlooked opportunity for resource stewardship. In 2020, the Society of Rural Physicians of Canada published the first internationally known Choosing Wisely list of recommendations for rural medicine. The list of five recommendations highlight many of the challenges in rural areas including transportation, screening tests, virtual care and healthcare personnel. The recommendations seek to more efficiently utilize the available resources, improve physician work satisfaction and provide guidance to appropriately manage patient care, in addition to providing a resource to enhance patient engagement in medical decisions. Now, several months after the list has been published, we would like to reflect on lessons learned during this process, and present a series of cases of how this list can be implemented in rural areas. The presentation will be targeted towards rural healthcare providers and urban providers who also contribute to serving rural patients.

As medicine continues to evolve, so will the list of recommendations. As part of the presentation, the authors would like to further solicit input from practicing physicians regarding other areas in rural medicine where resource stewardship can be better applied.

TOWARDS A NATIONWIDE DE-IMPLEMENTATION OF INAPPROPRIATE VITAMIN D AND B12 TESTING

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Tijn Kool, Radboud University Medical Center

Jeannemieke Schade, Erasmus Medical Center Rotterdam

Background:

In the last five years, the requests for vitamin D and B12 testing has been doubled in the Netherlands, despite limited indications for these tests. This led to start of a project to reduce inappropriate vitamin D and B12 requests from general practitioners (GP) in two regions in the Netherlands. The de-implementation strategy aimed to increase the knowledge of GPs by offering an online course, educational meetings and 3-monthly benchmark of their own requesting patterns. Additionally, patients were provided with information about these vitamins using a waiting room video, posters and leaflets. This intervention reduced the number of vitamin tests by 23% and 20%, for vitamin D and B12 respectively.

Goal:

To bring this intervention to a nationwide scale.

Activities and Challenges:

The patient materials needed revisions and had to be translated to other languages. Also, a new contract for the online course was required, in order to offer the course to all GPs for free. We needed to ask all laboratories individually for benchmark data for GPs. To organize educational meetings, we partnered with organizations that were already providing such training sessions.

Impact:

Almost 700 people have registered for the online course and 67 general practices requested other materials since the start of the dissemination in October 2020.

Lessons Learned:

It is important for this project to have a skilled, enthusiastic and practicing GP in your team and to partner with organizations such as national and regional GP cooperations; they can help to spread materials in their network.

ACUTE CORONARY SYNDROME CHOOSING WISELY

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Daniel Malebranche, Bern University Hospital

Marinda Fung, University of Calgary

Bryan Har, University of Calgary

Patrick Champagne, University of Calgary

Gregory Schnell, University of Calgary

Stephen B Wilton, University of Calgary

Todd J Anderson, University of Calgary

Background:

Many Acute Coronary Syndrome (ACS) patients undergo multiple assessments of left ventricular (LV) function at index event and post-discharge, the clinical value of which is unknown. While it is guideline-recommended to reassess cardiac function after an index assessment in patients presenting with moderate to severe LV dysfunction, recommendations regarding repeat in-hospital and post-discharge surveillance remain less clear in those with preserved function. The latter represents the majority of ACS patients and, therefore, an important group to study. The goal of our investigation was to assess the current practice of LV assessment in ACS patients and determine change in LV function over time. Our cohort consisted of 8327 ACS patients (76% males; mean age 62.4 ± 12.4 years) presenting to a Canadian cardiac catheterization centre between 2012 and 2016. Of those, 4600 (55%) had a follow-up assessment of LV function, with a total of 8888 LV assessments being done. Almost 50% of repeat in-hospital and 60% of outpatient assessments of LV function were performed in patients with preserved ejection fraction. Moreover, the majority of these patients did not undergo clinically significant deterioration in LV performance that would influence the course of care, with only 1% declining to an LV function of $< 35\%$. Additionally, we found no association between routine LV testing and adverse cardiovascular events. In conclusion, routine serial assessments of LV function in ACS patients with preserved ejection fraction may represent low-value care and an important area for quality improvement in the cardiac domain.

DECREASING INVASIVE URINARY TRACT INFECTION SCREENING IN A PAEDIATRIC EMERGENCY DEPARTMENT: A QUALITY IMPROVEMENT INITIATIVE

Felicia Paluck, The Hospital for Sick Children

Inbal Kestenbom, The Hospital for Sick Children

Gidon Test, The Hospital for Sick Children

Brooke Brimmer, The Hospital for Sick Children

Olivia Ostrow, The Hospital for Sick Children

Background:

Fever with a suspected Urinary Tract Infection (UTI) is a common presentation among children to the Emergency Department (ED). Sterile techniques, like catheterisation, are invasive, traumatising, time consuming and expensive to complete. A two-step approach, with urinalysis (UA) via bag sample, and only if positive, UA and urine culture via catheter sample, has been shown to reduce the catheterisation rate in febrile, young children without unintended consequences.

Goal:

Our aim was to implement a standardised 2-step approach for UTI screening in febrile, young children, in order to decrease unnecessary urine catheterisations and cultures without impacting ED length of stay (LOS) or return visits (RVs).

Measures and Design:

We implemented this 2-step approach for UTI screening in febrile children 6-24 months.

Impact:

Since project initiation in July 2019, the ED catheterisation rate decreased from 73% to 53%, thus saving approximately 30 patients from catheters per month. The number of urine cultures sent to Microbiology decreased by 23%, thus saving valuable lab time and resources during COVID-19 pandemic.

Challenges:

The COVID-19 pandemic has greatly impacted ED workflows leading to a slight increase in LOS. New optimisation strategies are being implemented to mitigate this.

Lessons Learned:

We have successfully decreased the number of children in our ED undergoing invasive catheterisations. Optimisation strategies were required to combat infection control challenges from COVID-19. This initiative will be spread to the paediatric wards and is now part of the hospital's Choosing Wisely Campaign.

EDUCATION AND ORDER SYSTEMS EFFECT ON REDUCTION OF UREA TEST ORDERING IN THE EMERGENCY DEPARTMENT

Cole Boettger, University of Alberta

Pam Mathura, Alberta Health Services, University of Alberta

Mona Gill, Alberta Health Services, University of Alberta

Colleen Sweeney, Covenant Health, University of Alberta

Introduction:

Laboratory tests make up a large portion of medical procedures and several previous reports show that instances of inappropriate laboratory testing is not uncommon. It has been shown that physician ordering behaviour can be influenced by education, lab order format and electronic systems, to reduce instances of inappropriate laboratory ordering and promote resource stewardship. Preliminary analysis found urea blood tests were being ordered in our hospital's emergency department at rates likely indicative of some inappropriate ordering based on population prevalence of indications for urea blood tests.

Aim/Method:

Educational presentations were conducted for staff physicians and unit clerks around the indications for urea blood tests and past lab test utilization data. Indications for urea testing was developed after literature review and consultation with local experts to help guide thoughtful urea ordering. The electronic ordering system was also updated to remove urea from a set including creatinine, sodium, potassium, chloride, glucose and bicarbonate and make urea a separate option that could be added when required.

Results:

Proportion of presenting patients receiving urea blood work in ER reduced to 0.255 in 2020/2021 from 0.461 in 2019/2020 in the first two months following intervention. Unfortunately, ED volume for the next two months is not yet available but total urea blood test ordering has decreased by ~73%.

Conclusions:

Successful reduction in urea blood tests in the emergency department reveal that even in the ER setting where diagnostic tests are a major focus these interventions are capable of influencing physician ordering behaviour toward resource stewardship.

ENDOMETRY BIOPSY IN PREMENOPAUS WOMEN AGED 41-49 WITH MENORRHAGIA AND WITHOUT RISK FACTORS FOR NEOPLASIA: IS IT AN OVERINVESTIGATION?

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Laurence Simard-Émond, Centre hospitalier de l'Université de Montréal

Objectives:

The most appropriate age for performing an endometrial biopsy in women with abnormal uterine bleeding (AUB) is controversial. This study aims to determine the prevalence of abnormal endometrial biopsies in 41 to 49-year-old women with AUB and without any risk factors for endometrial cancer.

Methods:

A retrospective study reviewed the records of all women who had an endometrial biopsy at the Centre hospitalier de l'Université de Montréal between 2014 and 2018. Records of pre-menopausal women between 41 and 49 years of age who underwent a biopsy for AUB at the CHUM Gynaecology clinic were included. Patients with risk factors other than nulliparity were excluded: obesity, polycystic ovary syndrome, chronic oligomenorrhea, unopposed estrogen intake, tamoxifen intake, diabetes, Lynch syndrome, arterial hypertension, and intermenstrual bleeding.

Results:

Of the 705 pre-menopausal women aged 41 to 49 who had undergone a biopsy for AUB, 30% had no risk factors. Review of the biopsy results from patients without risk factors did not reveal any cases of neoplasia and showed 2 (0.9%) cases of hyperplasia with atypia, 3 (1.4%) cases of hyperplasia without atypia, and 206 (97.6%) benign results. The two patients with hyperplasia with atypia had subsequent control biopsies that were normal.

Conclusion:

The risk of neoplastic or pre-neoplastic pathology is minimal in 41 to 49-year-old pre-menopausal women with DUB and no other risk factors.

IMPLEMENTING OPTIMAL TESTING PRACTICES FOR PRIMARY HYPOTHYROIDISM IN CANADIAN PRIMARY CARE

Laura Wu, University of Saskatchewan

Terra Arnason, University of Saskatchewan

Background:

Routine thyroid testing without suggestive symptoms has led to unnecessary testing being common across all practice settings. As thyroid testing is amongst the most commonly ordered lab tests in Canada, a \$3-60 FT3/FT4 test quickly culminates into a significant annual healthcare burden.

Current guidelines suggest screening and monitoring for primary hypothyroidism using a single serum TSH without accompanying FT3 and FT4, as recommended by Choosing Wisely Canada. This recommendation is based on evidence that TSH is a reliable indicator of thyroid function in most patients and, furthermore, measuring FT3/FT4 in the context of a normal TSH is generally non-contributory to both diagnosis and management.

One major factor contributing to FT3/FT4 over-testing includes overuse of the TFT option on preprinted laboratory requisitions, which encompasses TSH, FT4 and FT3 testing. Several studies have shown that FT3/FT4 testing can be reduced by 43-49% in Canadian tertiary care facilities by eliminating those which are unnecessary. This has primarily been achieved through the implementation of three strategies: removal of TFTs as a test option, addition of a TSH-only option on test requisitions, and implementation of a reflex testing algorithm.

While evidence of unnecessary FT3 and FT4 testing in tertiary care exists, there have been no formal investigations of similar quality improvement initiatives to address this issue in primary care. By employing strategies elucidated through these tertiary care predecessors, there is potential to reduce unnecessary testing and promote resource stewardship in the evaluation and management of primary hypothyroidism in a Canadian primary care setting.

Footnotes:

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IMPROVING ANTIBIOTIC STEWARDSHIP FOR RESPIRATORY TRACT INFECTIONS AT THE MARKHAM FAMILY MEDICINE TEACHING UNIT

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Susy Lam, University of Toronto

Karuna Gupta, University of Toronto

Goal:

Improve the rate of appropriate antibiotic prescriptions for respiratory tract infections (RTI's) by 25% in resident & staff physician practices at the Health For All–Markham FMTU (MFMTU), between the months of January–March 2020.

Activities:

Antibiotic stewardship interventions were implemented at the MFMTU from January 1-March 15, 2020. Interventions at the MFMTU included: (1)implementation of Choosing Wisely viral prescriptions, (2) circulation of appropriate respiratory tract infection antimicrobial stewardship reports (3)and Choosing Wisely RTI educational seminars for residents & staff.

Primary outcome measure: percent change of appropriate vs. inappropriate antibiotic prescriptions for RTIs in staff and resident practices between January-March 2020 (baseline) vs. January-March 2019 (post-intervention).

Process measures: number of viral prescriptions and number of delayed prescriptions used by providers.

Balancing measures: number of return visits within 10 days after the initial encounter.

Impact:

(1)Overall, appropriate antibiotic prescriptions improved by 13% at the MFMTU in 2020 versus 2019. (2) Raised awareness of stewardship for RTI's & identified specific strengths & weaknesses in our antibiotic prescribing behaviours for various RTIs at MFMTU. (3)Implemented Viral Prescription within the MFMTU EMR.

Challenges:

The COVID-19 pandemic hindered our in-office interventions and diverted management of respiratory tract infections to other settings outside of family practice, which cut our quality improvement project short.

Lessons Learned:

Improvements in stewardship were not uniform across RTI diagnoses. Smaller improvements were seen with pneumonia and sinusitis. We anticipate that the lessons learned through this initiative will allow us to evolve our approach, particularly to target sinusitis and pneumonia in the future.

DO'S AND DON'TS DURING COVID-19: MITIGATING HARMS OF REDUCED ACCESS IN THE NORTHWEST TERRITORIES

Shireen Mansouri, Northwest Territories Health and Social Services Authority/ Choosing Wisely NWT

Sarah Cook, Northwest Territories Health and Social Services Authority/ Choosing Wisely NWT

Suraiya Naidoo, Northwest Territories Health and Social Services Authority/ Choosing Wisely NWT

Pooja Chugh, Choosing Wisely NWT

Background:

In March 2020, the Northwest Territories Health and Social Services Authority reduced non-essential healthcare services in order to reduce potential exposure to the COVID-19 virus. This was recognized as an opportunity to reinforce Choosing Wisely recommendations to reduce low value care, but also to ensure that high value care was not delayed or discontinued.

A list of suggested “do’s and don’ts” was distributed to providers in the NWT. The goals were to ensure effective utilization of resources, reduce unnecessary travel and reduce contact with the health care system, while maintaining evidence based care.

Selected Choosing Wisely “Don’t” recommendations were used to remind providers to discontinue interventions that are low value. A list of “Do’s” was compiled to limit adverse health impacts of restricting resources and access.

Initial data comparing March 2020- January 2021 and the previous year, showed:

- Maintenance of cervical cancer screening rates
- Reduction of mammography (further analysis required to understand whether this reduction was in unnecessary testing)
- Increased FIT testing (further analysis required to understand if this was also associated with a reduction in appropriate colonoscopy referrals)

Subjective findings were an ability to maintain and even strengthen a system-wide lens on the importance of continuing evidence-based primary care, while limiting unnecessary tests, treatment and patient movement. Radio interviews and social media were used to educate patients about the importance of accessing primary care for evidence-based care.

We recognize the need for more robust data collection to better evaluate impact.

DEVELOPING AN INTERPROFESSIONAL PAIN MANAGEMENT PROGRAM THAT SUPPORTS PATIENTS IN THE MEDICAL HOME

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Linh Tran, South Calgary Primary Care Network

Melina Dharma-Wardene, South Calgary Primary Care Network

Lori Montgomery, South Calgary Primary Care Network

Background:

In Calgary, chronic pain intervention is typically initiated at the primary care level where healthcare providers are faced with few treatment options and long wait times for chronic pain specialty programs. The SCPCN Pain Program is being developed to increase patient access to interprofessional pain related services and to ensure that the overall healthcare needs of chronic pain patients are being met at the right time, in the right place. It will build on existing evidence-based resources and will mirror the service delivery model of the Chronic Pain Centre in Calgary. Program activities will include: an admission process, various patient assessments, treatment planning, program support and post-program support. We will be adopting a patient-centered care model to allow patients, Medical Home providers, and the interprofessional team to collaborate and develop a treatment plan tailored to each individual patient's needs. Educational tools will be made available to both patients and healthcare professionals alike. We will also facilitate educational workshops to equip patients with the tools required to better cope with and self-manage pain.

The Choosing Wisely recommendations are embedded into the success indicators of this program, namely routine evaluation of the following outcomes: improved pain tolerance, functionality, self-management, and quality of life. Our primary focus will be on improving patient outcomes by building capacity to treat patients experiencing pain at the primary care level. Supporting this project will help us meet the rising level of demand for more immediate, effective, and affordable treatment options for patients experiencing chronic pain.

FIRST TRY NON-OPIOIDS! MANAGING PAIN AFTER WISDOM TEETH REMOVAL: AN INTER-PROFESSIONAL COLLABORATION

Amy Ma, Choosing Wisely Canada

Susan Sutherland, Canadian Association of Hospital Dentists

Alice Watt, Institute for Safe Medication Practices Canada

Background:

Canadian dentists are responsible for a significant proportion of first exposure to opioids, especially in teens after wisdom teeth surgery. Since adolescence is a critical time in the life span for risk of opioid use disorder, our goals were to raise awareness of the risks associated with opioids for adolescents managing pain after wisdom teeth removal and to identify best practices for pain management following this procedure.

Through an inter-professional collaboration between dentistry and pharmacy, guided by the voice of a parent, we developed a patient/family handout “Managing pain after wisdom teeth removal: Your questions answered”. This resource encourages patients and parents to ask questions, assists dentists and pharmacists in providing evidence-informed information, and supports inter-professional dialogue. With the support of three organizations – the Institute for Safe Medication Practices (ISMP) Canada, the Canadian Association of Hospital Dentists (CAHD) and Choosing Wisely Canada, and assistance of Patients for Patient Safety Canada and Canadian Patient Safety Institute, a number of other health care organizations endorsed this work.

We learned that co-designing the handout with patients and families who have lived experience is the best way to create a compelling message that resonates with patients. Having support from credible organizations was critical to gaining endorsements from other key groups. With the onset of the pandemic, it has been challenging to disseminate the patient handout to patients, dentists, and pharmacists. We hope to continue and accelerate our efforts to raise awareness of appropriate opioid stewardship after wisdom teeth removal.

CHOOSING WISELY: THE CANADIAN RHEUMATOLOGY ASSOCIATION PEDIATRIC COMMITTEE'S LIST OF ITEMS PHYSICIANS AND PATIENTS SHOULD QUESTION

Nadia Luca, Alberta Children's Hospital
Gaelle Chedeville, Montreal Children's Hospital
Liane Heale, McMaster Children's Hospital
Jennifer Lee, The Hospital For Sick Children
Tara McGrath, Stollery Children's Hospital
Marie-Paule Morin, Ste Justine Hospital
Elizabeth Stringer, IWK Hospital
Tara McMillan, Stollery Children's Hospital
Andrea Human, BC Children's Hospital
Gordon Soon, The Hospital For Sick Children

Lynn Spiegel, The Hospital For Sick Children
Kate Neufeld, Royal University Hospital
Piya Lahiry, The Hospital For Sick Children
Mehul Jariwala, Royal University Hospital
Ciaran Duffy, Children's Hospital of Eastern Ontario
Meghan MacPherson, BC Children's Hospital
Sue MacQueen, Arthritis Society
Christy Whiteman, Ontario
Senya Kyle-Oldrieve, British Columbia

Objectives:

We aimed to develop a list of tests or treatments frequently used in pediatric rheumatology which may be unnecessary based on existing evidence.

Methods:

A Choosing Wisely (CW) working group composed of 16 pediatric rheumatologists, 1 allied health practitioner, 1 parent, and 1 patient used the Delphi method to generate, rank, and refine the ranking of a list of tests, procedures and treatments used in the care of pediatric rheumatology patients that may be unnecessary, nonspecific or harmful. The items with the highest content agreement and perceived impact were presented in a survey to all Canadian Rheumatology Association (CRA) physician and trainee members who practice pediatric rheumatology. Respondents were asked to consider their agreement with the item, its impact, and ranking of the items. Five items with the highest composite scores were put forward for literature review, as well as few additional items selected by the CW methodology subcommittee.

Results:

The initial Delphi procedure generated 80 unique items. After 3 rounds of Delphi, the list was narrowed down to 13 items. The CW survey was completed by 41/81 (51%) CRA physician and trainee members. Participants were 56% (n=27) female, 47% (n=23) were between 36-49 years of age, and 18% (n=9) have been in practice for ≥ 25 years. Geographic distribution included: 50% (n=24) in Ontario, 21% (n=10) in British Columbia, 19% (n=9) in Prairie Provinces, 10% (n=5) in Quebec and Atlantic provinces. The items with the highest composite scores were: antinuclear antibody testing, drug toxicity monitoring, HLAB27 testing, rheumatoid factor/anti-CCP testing, and lyme serology. Two additional items were also felt to be important by consensus of the CW methodology subcommittee: numerous or repeated intra-articular steroid injections, periodic fever gene testing. These seven highest priority items were advanced for literature review.

Conclusions:

We have identified areas for potential quality improvement in the care of children and youth being evaluated and treated for rheumatic disease. The content and wording of the final CW list will be refined based on literature review.

TO SCAN OR NOT TO SCAN: UTILITY OF HEAD CT FOR ALTERED MENTATION IN INPATIENTS

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Background and Goal:

Computed tomography (CT) of the head is often ordered as part of the algorithmic approach to assess altered mental status (AMS) in the inpatient setting to exclude potentially life-threatening or reversible pathology. The majority of patients with altered mentation have no focal symptoms and are found to have a metabolic derangement or delirium. This study aims to determine how frequently noncontrast head CT was ordered for AMS on admitted patients without focal deficits or known intracranial pathology, and the proportion of studies with positive findings.

Methods and Results:

A retrospective analysis of inpatient head CTs ordered for altered mental status at a single institution in 2019 was performed. Patients with known acute stroke, focal deficits, or other intracranial pathology, as well as patients in the emergency department, admitted to the intensive care unit or cardiac care unit were excluded. Overall, 168 head CTs met inclusion criteria, with a mean age of 73.5 years \pm 11.9. Of these, 2.4% (n=4) were positive for clinically significant findings.

Impact and Lessons Learned:

There is a low diagnostic yield for head CT ordered on inpatients with AMS and without focal neurologic symptoms. Many patients who demonstrate positive findings on imaging studies ordered for AMS have known risk factors for intracranial pathology. The use of physician tools such as the American College of Radiology Appropriateness Criteria and the Canadian Association of Radiologists Referral Guidelines has the potential to reduce the unnecessary or repetitive use of ionizing radiation imaging studies for non-focal symptoms.

PALLIATIVE CARE EARLY AND SYSTEMATIC (PACES): BEGINNING ALBERTA'S JOURNEY TO PROVIDE SYSTEMATIC, EARLY PALLIATIVE CARE FOR ADVANCED CANCER PATIENTS

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Introduction:

Specialist palliative care (PC) access for cancer patients in Alberta is over 75%. However, first contact with PC services occurs only 2 months before death. The international standard is ≤ 8 weeks of advanced cancer diagnosis. The Palliative Care Early and Systematic (PaCES) knowledge translation project adapts and implements evidence-based practices for delivering early and systematic PC at the health system level for patients with advanced cancer.

Goal:

Develop and implement the first Alberta early PC pathway for patients with advanced colorectal cancer.

Activities:

The pathway and key resources were developed using process mapping and root cause analysis, and released provincially for use by oncology clinicians in January 2019. A Calgary implementation team actively supported uptake, addressing opportunity barriers with, screening methods, local resource tips, symptom guides, shared care letters and scripts for introducing PC.

Impact:

The primary outcome is the number of patients receiving PC ≥ 3 months before death. Secondary outcomes are patient and caregiver-focused (e.g., quality of life), system-focused (e.g. hospitalization), and health-care professional focused (e.g. survey). Interim results will be presented.

Challenges:

Challenges included cueing oncologists within clinic workflow, avoiding change fatigue, and sustaining engagement in change. Some PC and home care clinicians challenged their role in providing early PC.

Lessons Learned:

Local clinical champions and buy-in from health system leaders were critical, including each clinical area. Project success required implementation funding for project personnel, process mapping and quality-improvement methodology, and culture/change management expertise.

PHYSICIAN ASSESSMENT AND FEEDBACK DURING QUALITY CIRCLE TO REDUCE LOW-VALUE SERVICES IN OUTPATIENTS: A PRE-POST QUALITY IMPROVEMENT STUDY

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Background:

The impact of the Choosing Wisely (CW) campaign is debated as recommendations alone may not modify physician behavior. The aim of this study was to assess whether behavioral interventions with provider assessment and feedback could reduce low-value services.

Methods:

Pre-post quality improvement intervention with parallel comparison group involving outpatients followed in a Swiss managed care network, including 700 general physicians (GP) and 150'000 adult patients. Interventions included performance feedback about low-value activities and comparison with peers during GP quality circles (QC). We assessed individual physician behavior and health care use from laboratory and insurance claims files between August 1, 2016, through October 31, 2018. Main outcomes were the change in prescription of three low value services 6 months before and 6 months after each intervention: measurement of prostate specific antigen (PSA) and prescription rates of proton pump inhibitor (PPI) and statins.

Results:

Among primary care practices, a QC intervention with provider feedback and peer comparison resulted in lower rates of PPI prescription (pre-post mean prescriptions per GP 25.5 ± 23.7 vs 22.9 ± 21.4 , $p < 0.01$, $p = 0.49$), PSA measurement (6.5 ± 8.7 vs 5.3 ± 6.9 tests per GP, $p < 0.01$, $p = 0.84$), as well as statins (6.1 ± 6.8 vs 5.6 ± 5.4 prescriptions per GP, $p < 0.01$, $p = 0.21$). Changes in prescription of low-value services among GP who did not attend QCs were not statistically significant over this time period.

Conclusion:

Our results demonstrate a modest but statistically significant effect of QCs with educative feedback in reducing low-value services in outpatients. Limiting overuse in medicine is very challenging and dedicated discussion and review time of actionable data may help.

A SURVEY TO EXPLORE ASYMPTOMATIC BACTERIURIA SCREENING PRACTICES IN ELDERLY EMERGENCY DEPARTMENT PATIENTS

Joseph Choi, University Health Network

Christopher Tsoutsoulas, University of Toronto

Introduction:

Inappropriate screening for and treatment of asymptomatic bacteriuria (ASB), continues to be common for elderly patients in the emergency department (ED). We examined practices among emergency physicians (EPs) regarding the use of urine studies in the workup of elderly patients presenting to the ED with non-specific symptoms.

Methods:

We performed a survey of EP practices regarding screening for and treating ASB in the ED. The survey contained 5 cases based on clinical scenarios from the 2019 guidelines on ASB from the Infectious Diseases Society of America. None would not warrant screening for, nor treatment of, ASB. We asked EPs if they would order a urinalysis, and if they would prescribe antibiotics and/or send a culture if urinalysis was sent prior to assessment and had a positive result.

Results:

The survey had 46 respondents (53% response rate). A urinalysis was ordered by 26% to 84% of EPs. Of those who would not have ordered a urinalysis, 32-50% would have acted on a positive result by sending a urine culture, and 9-18% would have prescribed antibiotics.

Conclusion:

Our survey suggests that a positive result may sway a clinician to order more tests and treatment even if their pre-test suspicion of a urinary tract infection was low. Targeted quality improvement initiatives may reduce this practice.

QUALITY IMPROVEMENT IN THE MANAGEMENT OF STAGE FOUR PRESSURE INJURIES

Alan Rogers, Sunnybrook Health Sciences Centre

Introduction:

Pressure injuries are relatively common, life-threatening complications of spinal cord injury or severe critical illness. Preventative measures are of paramount importance, but surgical candidates with stage 3/4 injuries warrant consideration of definitive closure. The aim of this study was to review the experience of a single plastic surgeon at a major academic health sciences centre over a three year period.

Methods:

All patients who received flap closure of stage four pressure injuries over a three year period (July 2017 to July 2020) were included in a quality improvement initiative to improve time to formal surgical debridement, flap closure and discharge to a rehabilitation facility. Patient demographics, co-morbidities, indications for surgery, length of stay, number of surgeries, type of flaps performed, complications and follow-up were recorded. Areas for improvement were considered with a view to establishing a sustainable system of care for these patients.

Results:

Thirty patients with 47 stage 4 pressure injuries underwent debridement and flap closure. The majority had spinal cord injuries, and were admitted with sepsis, most commonly associated with osteomyelitis. The infectious disease team was the most frequent referring service, although medical, orthopaedic and plastic surgical services were also often consulted first. Ischial and sacral sores were the most prevalent, and flaps utilized were usually fasciocutaneous V-to-Y advancement flaps. Muscle flaps were utilized for larger, deeper defects. Given the general condition of the patients on referral, closure was often staged using NPWT (with instillation) after initial debridement, before closure. Complications included a few cases of dehiscence, haematoma and recurrence. Cases were frequently performed after hours and on weekends.

Discussion:

Patients who are surgical candidates and present to this hospital often have their pressure injuries managed conservatively with wound care is continued in the community. The cost of managing stage four pressure injuries non-operatively is exorbitant, and the likelihood that they go on to heal, without complication, is extremely small. It is hoped that this study motivates for a more coordinated system of elective surgical management of pressure injuries which would have major co-saving benefits as well as significantly enhance the quality of life of these patients.

CHOOSING WISELY IN BURN CARE, CANADA

Alan Rogers, Sunnybrook Health Sciences Centre

Background:

Burn injury is a major cause of morbidity and mortality internationally, and is associated with considerable direct and indirect costs. The Choosing Wisely Campaign was launched in 2012 and has been applied to a broad spectrum of disciplines in almost thirty countries, with the objective of reducing unnecessary or potentially harmful investigations and procedures, thus reducing costs and improving outcomes.

Methods:

The Choosing Wisely Canada list for Burns was developed by members of the Canadian Special Interest Group of the American Burn Association. Eleven recommendations were generated from an initial list of 29 statements using a modified Delphi process and SurveyMonkey™.

Results:

Recommendations included statements on avoidance of prophylactic antibiotics, restriction of blood products, use of adjunctive analgesic medications, monitoring and titration of opioid analgesics, and minimizing “routine” bloodwork and microbiologic or radiologic investigations.

Conclusions:

The Choosing Wisely recommendations aim to encourage greater discussions between those involved in burn care and their patients, with a view to optimize outcomes, while also reducing cost and adverse effects associated with unnecessary therapeutic and diagnostic procedures.

ARE WE USING BLOOD WISELY IN PATIENTS WITH CIRRHOSIS AND GI BLEEDING IN CALGARY HOSPITALS?

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Background:

We used Emergency Department (ED) electronic triage notes at 4 Calgary hospitals to identify patients with cirrhosis and GIB (2017 – 2019). Of a total 819 ED presentations with GIB, 74% were related to portal hypertension. Appropriately, 88% were started on antibiotics, but only 66% were started on octreotide. Median length of stay for decompensated cirrhosis with variceal bleeding was 7.5 days (IQR 6.2-8.5) with a 30-day readmission rate of 20.3% (IQR 17.7-22.1), about twice that reported in the USA. During hospitalization, 46% of patients received a blood transfusion when their baseline hemoglobin was greater than 90 g/L.

With the Physician Learning Program (PLP) and CME&PD at the University of Calgary, we held a workshop at the Calgary Liver Course in December 2020, with 75 participants from Calgary. A review of CPGs was followed by facilitated audit and feedback (A&F) using Mentimeter™ for audience participation. Quality Improvement leads from ED, General Internal Medicine, Gastroenterology & Hepatology and Interventional Radiology reflected on the data.

Challenges include the complex and multidisciplinary nature of the management of patients with cirrhosis and GIB. Multiple areas for improvement have been identified, including conservative transfusion strategies. PLP plans further site-specific A&F. Standardized order sets and education interventions are being developed to improve the adherence to CPGs and CWC recommendations.

'URINE' IT WITH US: CHOOSING METABOLIC TESTING WISELY

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Yiming Wang, The Hospital for Sick Children, University of Toronto

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Lauren Chad, The Hospital for Sick Children, University of Toronto

Background:

Urine amino acids (UAA) are often erroneously ordered as they are incorrectly thought to be part of a “basic” metabolic work-up. This has led to unnecessary testing with mounting costs (at SickKids, UAAs cost ~\$50,000/6 months) and patient safety issues (e.g. delayed ordering of the correct test). Our goal is to improve patient safety and reduce costs by avoiding unnecessary UAA testing.

Methods:

We audited the number of, and indications for, UAAs processed at SickKids over 2 months. We then implemented the following interventions: 1) broadened the search terminology in our hospital's EMR for plasma amino acids to reduce inadvertent UAA ordering, 2) removed UAAs from a hypoglycemia panel, and 3) introduced an automated warning which requires an indication for ordering UAAs.

Results:

Pre-implementation data demonstrates that, of the SickKids internal orders, 49% (24/49) were indicated, 8% (4/49) had unclear indications, and 43% (21/49) were not indicated. Of this last group, 33% (7/21) were part of a hypoglycemia panel. Of the external orders, only 16/35 had clinical information available: 75% were part of a work-up for developmental delay/autism. Post-implementation data is in process.

Conclusions:

Many unnecessary UAAs are being ordered. Recurrent inappropriate indications include hypoglycemia, developmental delay/autism, and as part of a “basic” metabolic work-up. With measures to optimize UAA ordering, we anticipate a reduction in inappropriately ordered UAAs with a concomitant reduction in costs and improvement in patient safety. This project was selected as one of the five SickKids Choosing Wisely recommendations for 2020.

UTILIZATION OF DATA IN EDUCATION OPPORTUNITIES- A MODEL FOR PROMOTING SUSTAINED PRACTICE IMPROVEMENT: LABORATORY UTILIZATION

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Oliver David, Mosaic Primary Care Network
Kelly Burak, University of Calgary
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Jody Pow, Health Quality Council of Alberta
Markus Lahtinen, Health Quality Council of Alberta
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Background:

Alberta spends 700 million dollars per annum on laboratory services. 58% of these costs are attributed to tests ordered by Family Physicians. Clinician test ordering practices vary and studies show 35 % of all lab testing to be of low value. Choosing Wisely recommendations advise against ordering annual screening blood tests on low- risk populations.

Providing family physicians with access to individualized data reports with meaningful matched peer comparators, and engaging them in multi-faceted educational opportunities increases likelihood of promoting appropriate lab utilization and sustained practice change.

The Physician Learning Program has collaborated with key stakeholders to develop individualized Lab Utilization Reports available to all Albertan Primary Care Physicians. Set in an Online Learning Environment these reports are linked to latest evidence and multiple resources to facilitate practice change.

The unique circumstances of the COVID-19 pandemic caused increased strain on healthcare resources, including lab testing. This presented a timely opportunity to deliver a highly interactive educational webinar promoting these principles, and normalizing physician interactions with data. 160 physicians provided overwhelmingly positive feedback with many confirming a commitment to change. In addition, there was a marked increase in requests for these reports in the following week. This ongoing study shows positive early outcomes in confirming the efficacy of interactive educational opportunities combining promotion of evidence-based practice with data-informed physician self-reflection in achieving commitment to sustained practice change. Invitation to participate in follow-up surveys will reinforce these commitments, identify facilitators and barriers to inform future work.

LONG-TERM FOLLOW-UP AND SCALING UP OF THE NEW PEPS MODEL OF CARE IN LONG-TERM CARE

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Objectives:

Assess the sustainability of the previously studied PEPS care model on polypharmacy (≥ 10 medications), mean medications per resident and potentially inappropriate antipsychotics use in long-term care facilities (LTCFs) over 3 years.

Design:

Open labelled ecological quasi-experimental study with a control group.

Setting and Participants:

The PEPS group composed of six LTCFs previously exposed to the care model (700 beds) were compared to a control group composed of two LTCFs (257 beds) in Quebec. All individuals residing in the studied LTCFs were included.

Methods:

Mean medications per resident, excessive polypharmacy and potentially inappropriate antipsychotics use were reviewed starting a year prior to the PEPS intervention up to three years after or up to July 2020, whichever came first.

Results:

The groups totalized 2976 care episodes. Modest variations of the studied variables were shown between our 3 groups in the year before the intervention. An absolute diminution in the proportion of polypharmacy (-20.4%, $P_{trend} < 0.0001$), in the mean number of regular medications (-2.6, $P_{trend} < 0.0001$) and in the proportion of inappropriate antipsychotics (-9.9% $P_{trend} < 0.0001$) was observed for the initial PEPS group at 3 years. Modest decreases were observed in the study variables for the control group and they are not significant for the antipsychotics ($P_{trend} = 0.2199$).

Conclusion:

To our knowledge this study has the longest observation period of the impact of a pharmacist-led care model in LTCF setting. The PEPS care model is sustainable and generalizable to other LTCFs if properly implemented.

Choisir avec soin

Les résumés soumis en français

OPTIMISATION DE LA TRAJECTOIRE DE SOINS ET SERVICES PAR LA MISE EN OEUVRE DES MEILLEURES DONNÉES PROBANTES

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Contexte :

Le vieillissement démographique ainsi que l'apparition de maladies chroniques engendrent de multiples transformations du réseau de la santé et des services sociaux. Les suivis et la coordination des interventions se complexifient particulièrement en situation d'exacerbations. Dans un souci d'optimiser la trajectoire de soins gériatriques, les professionnels ont avantage à adopter et appliquer judicieusement les pratiques exemplaires et les recommandations émises par les organismes normatifs et accréditeurs.

Dans le cadre d'un projet doctoral, une étude de cas s'intéresse à la contribution des professionnels de la santé à la création de valeur à la trajectoire de soins gériatriques. Les professionnels sont regroupés dans une communauté de pratique virtuelle appuyée par une plateforme wiki évoluée nommée SEKMED. Cette plateforme interprofessionnelle permet la création, le partage et la révision de ressources documentaires basées sur les pratiques exemplaires et recommandations provenant d'organismes comme Choisir avec soin. Les connaissances s'intègrent directement dans le processus clinique du professionnel dans un module permettant la documentation clinique informatisée. De plus, un moteur de recherche ontologique pousse au professionnel des ressources documentaires associées aux expressions transcrites appuyant ainsi l'apprentissage en continu.

Les résultats préliminaires démontrent que SEKMED contribue à la mise en oeuvre des meilleures données probantes et facilite la communication clinique interprofessionnelle. La plateforme permet la pratique clinique augmentée où le professionnel est davantage confiant, clarifie son rôle et adopte une approche réflexive. De plus, une optimisation du temps, de la qualité et des coûts de la trajectoire de soins et de services gériatrique est observable qualitativement.

STATUT DE LA JUDICIEUSE UTILISATION DES EXAMENS ET TRAITEMENTS MÉDICAUX DANS LA FORMATION MÉDICALE QUÉBÉCOISE

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Anton Volniansky, Groupe d'intérêt Choisir avec soin, Université de Montréal

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Contexte :

La modification d'une pratique bien ancrée est difficile pour les médecins en pratique. Il apparaît donc essentiel d'inclure des notions en lien avec l'utilisation appropriée des ressources durant la formation médicale. À l'heure actuelle, il n'existe aucun curriculum officiel sur ces notions.

Objectif de l'étude :

Sonder les étudiants en médecine au Québec sur leurs apprentissages en lien avec l'utilisation judicieuse des tests et des traitements durant leur formation.

Méthodologie :

Un sondage en ligne anonyme a été distribué durant les cours et événements universitaires aux étudiants en médecine des quatre facultés québécoises (Universités de Laval, McGill, Montréal et Sherbrooke) dans le cadre de la semaine interuniversitaire québécoise Choisir avec soin.

Résultats :

À titre de résultats préliminaires, entre le 11 janvier et 31 janvier 2021, 355 étudiants ont répondu au sondage à l'Université de Montréal. Parmi ceux-ci, 216 (61%) connaissaient l'existence de la campagne Choisir avec soin et 331 (93%) d'entre eux considéraient que l'utilisation judicieuse des ressources constitueraient un enjeu clé dans leur future pratique. 60 % des répondants mentionnent que leur formation ne leur permet pas ou pas suffisamment de développer leur esprit critique par rapport à l'utilisation d'examen et de traitements inutiles en santé. Les commentaires reçus suggèrent une hétérogénéité dans l'enseignement de ces concepts.

Conclusion :

Ces données mettent en lumière l'intérêt étudiants à développer les aptitudes qui leur permettront d'exercer pleinement le rôle CANMEDS de leader. Elles illustrent également des opportunités pour les universités de développer un curriculum sur la saine gestion des ressources en santé.

SEMAINE QUÉBÉCOISE ÉTUDIANTE CHOISIR AVEC SOIN 2021

Marie-Audrey Peel, Université de Sherbrooke

David Houle, Université de Montréal

Contexte :

Afin de faire connaître les recommandations de Choisir avec soin aux étudiant.es en médecine, nous avons organisé, en tant que représentant.es ESPOIRS des universités québécoises, la toute première semaine québécoise Choisir avec soin du 25 au 29 janvier 2021. Sous le thème « Choisir avec soin à travers les années », les représentant.es des quatre facultés de médecine ont organisé des conférences ou des activités interactives permettant de promouvoir l'utilisation judicieuse des ressources. Les sujets abordés ont explicité la pertinence de Choisir avec soin tout au long du cycle de vie des patient.es. Les étudiant.es de l'Université Laval ont organisé une conférence sur la pédiatrie, ceux de l'Université de Montréal sur le TDAH, ceux de l'Université McGill sur la gériatrie et ceux de l'Université de Sherbrooke sur les transfusions. L'Université de Sherbrooke a également réalisé une activité interactive sur le rôle des étudiant.es et des externes par rapport à Choisir avec soin. En plus de rejoindre près de 350 participant.es au total, cette semaine a permis de promouvoir le sondage élaboré par l'Université de Montréal (David Houle et Anton Volniansky) pour connaître l'opinion des étudiant.es par rapport à l'intégration des recommandations Choisir avec soin dans le curriculum de leur université. Bien que dans le contexte de la pandémie à COVID-19 toutes les activités ont dû être réalisées en ligne, ce contexte particulier a catalysé une collaboration sans précédent entre les quatre facultés de médecine québécoises pour faire connaître Choisir avec soin auprès des étudiant.es.