

April 2020 - March 2021

The Drug Evaluation Alliance of Nova Scotia (DEANS) provides Nova Scotia with a structure to identify, develop, implement, and evaluate educational interventions that address drug utilization issues in Nova Scotia (NS). These educational interventions are often, but not always, coordinated with policy interventions in the NS Pharmacare programs to facilitate change and to provide the rationale for change.

Most DEANS interventions are multi-faceted and inter-professional, using delivery methods such as live online classrooms, didactic presentations, small-group workshops, and academic detailing to disseminate evidence on best practices. To measure the impact of interventions, DEANS establishes linkages with academic evaluators and encourages evaluations that generate new evidence to inform drug policy.

DEANS is coordinated by a volunteer Management Committee which oversees all activities and is responsible for establishing and managing partnerships. Much of the success of DEANS is due to its ability to build a framework of key partnerships and to engage these partners in the implementation and evaluation of initiatives.

### **Health Technology Assessment**

DEANS continues to pursue ways to encourage the use of health technology assessment as a bridge between research and clinical decision-making.

The *Katie* Program, which was launched in 2009, continues to support innovative methods of transferring knowledge from learning activities to clinical practice. The aim of the *Katie* program is to encourage all learners to be critical learners. Educational tools have been developed to help learners enhance their critical appraisal skills.

Workshops were developed to encourage presenters to incorporate *Katie* principles in their presentations and to encourage moderators to pose *Katie* questions during the question and answer portion of educational programs. Moderators are encouraged to access the tool “*Tips for Moderators*”. The goal of this tool is to help session moderators engage the audience and facilitate learning.

For information about *Katie* and to access *Katie* tools, go to: <http://katie.dal.ca/>

### **Hypertension in High Risk Adults, Pregnancy and Children**

In 2019/20, the Academic Detailing Service (ADS) developed an educational intervention “*Hypertension in High Risk Adults, Pregnancy and Children*”. The purpose of this topic is to review and discuss the recommendations and supporting evidence for the management of hypertension in high risk patients, pregnant women, and children and adolescents. The topic addresses the following: what blood measurement techniques should be used to diagnose hypertension; the evidence to treat to a target of <120 mm Hg in adults; the antihypertensive medications that should be avoided in pregnancy; the roles of ASA and calcium supplementation in preventing preeclampsia; how to manage non-severe hypertension in pregnancy and post-partum; what children and adolescents should have their BP monitored and how should it be measured; and how hypertension is diagnosed and managed in children and adolescents.

The detailers began their educational visits in September 2019 and continued until mid-March 2020 when all ADS services were suspended due to the COVID-19 pandemic. Detailing visits resumed June 1, 2020 using a virtual platform.

During the pre-pandemic period, October 2019 to mid-March 2020, detailers completed 90 in-person visits with 325 participants, including 208 physicians and 117 other health care providers. From June 1, 2020 to August 2020, detailers completed 31 virtual visits for 52 participants including 46 physicians and 6 other health care providers. Overall, there were 121 visits for 377 participants (254 physicians and 123 other health care providers).

In addition to the detailing visits, this topic was presented on September 23, 2020, by webinar. Co-presenters were Ms. Kelly MacKinnon and Dr. Edie Baxter.

All materials are published online and are available through the following link:  
<https://medicine.dal.ca/departments/core-units/cpd/programs/academic-detailing-service/AC-Service-Resources.html>

### **Acute Pain**

As reported previously, DEANS embarked upon a multi-stage program to support educational initiatives related to the Provincial Opioid Strategy in 2018/19. The objective of the educational strategy was to foster prescriber engagement in practice change around opioid prescribing. The educational initiatives would complement existing programs and strategies developed in Nova Scotia and nationally, including the current Canadian Opioid Guidelines, 2017.

The first stage of the stepwise approach was the development of a toolkit focused on acute ambulatory pain management, choices before opioids. This was an important first step because long term opioid use frequently begins with use for the treatment of acute pain.

Work commenced in early 2018/19 with planning meetings to identify the key focus areas, including five specific acute pain conditions, musculoskeletal, dental, acute and subacute low back pain, migraine, and minor trauma and post-surgical (post-discharge), and risk assessment for the non-opioid, pharmacological alternatives (NSAIDs and acetaminophen).

Development of the toolkit continued throughout 2018/19. The toolkit included evidence addressing prescribing for specific conditions and drug specific information to aid appropriate, safe prescribing of non-opioid medications. The evidence to support recommendations was primarily derived from systematic reviews with meta-analyses and randomized controlled trials.

In 2020/21, the toolkit initiative was transformed to support the development of an Academic Detailing topic, “*Acute Pain: Musculoskeletal, Low Back and Post-surgical*”. The detailers began their educational visits in mid-February 2021, and had completed 45 visits by March 31, 2021 (20 in-person and 25 virtual).

The total of 122 participants included 93 physicians, 10 nurse practitioners, 10 RNs and 9 pharmacists. Of note, 21 participants were new to Academic Detailing. Visits will continue through 2021.

All materials are published online and are available through the following link:  
<https://medicine.dal.ca/departments/core-units/cpd/programs/academic-detailing-service/AC-Service-Resources.html>

### **Choosing Wisely with Academic Detailing**

Choosing Wisely is a global movement to advance dialogue around avoiding unnecessary tests and treatments, and to promote smart and effective decision making. Choosing Wisely Canada was launched in April 2014 and Choosing Wisely Nova Scotia in November 2017. Eleven of the first 150 topics on Choosing Wisely Canada’s lists were topics previously developed and delivered by the Dalhousie ADS.

As reported previously, the inaugural Choosing Wisely with Academic Detailing Conference took place in October 2015 and was held at the Membertou Conference Centre in Cape Breton. The second, in October 2016, was held at White Point Beach Resort, NS, the third in October 2017 at Oak Island, NS, the fourth October 12 – 14, 2018 at the Digby Pines Resort, Digby NS, and the fifth was held October 25 – 27, 2019 at Fox

Harb'r Resort, Wallace NS.

The COVID-19 pandemic required a change in format for the sixth conference. The 2020 conference was held virtually, on October 3, 2020. Topics included: Acute pain, Communication skills to help prevent pain chronification and key messages from academic detailing resources using a case-based approach; SSRIs for mild to moderate depression and anxiety; Antimicrobial update; deprescribing; The Bloom Program; and An update on Choosing Wisely.

The format of this interprofessional, interactive and case-based conference, with a registration cap of 50 participants, has been very successful. Conference content is co-developed by pharmacists and physicians, and is presented in carefully crafted cases introduced by a physician or pharmacist to include details that introduce therapeutic uncertainty. The evidence review and synthesis is presented by a pharmacist with specific attention to details required to address the needs of the patient(s) presented in the case. A physician-pharmacist pair presents a range of therapeutic options for each case to stimulate interprofessional discussion of treatment approaches in these challenging cases.

The conference was recognized with a 2020 Innovation Award by the Royal College of Physicians and Surgeons, Canada.

**Optimizing Therapy Through Collaboration:  
Linking Local Primary Care Clinician  
Perspectives around Deprescribing with  
Behaviour Change Techniques**

Deprescribing is the planned and supervised process of dose reduction or stopping of medication(s) that may be causing harm or no longer providing benefit. This area of study is gaining momentum across the country with the goal of optimizing medication use and minimizing medication morbidity.

DEANS has provided funding support for pharmacy students to assist the Optimizing Therapy through Collaboration (OPTx) team with

deprescribing projects. The initiative started in the spring of 2017 and is ongoing.

The team has completed two background studies: 1) a scoping review and 2) a qualitative study. The scoping review found 44 studies published between 2002 and 2018 that evaluated deprescribing strategies in primary care. Identified interventions were categorized using the Behaviour Change Techniques (BCTs) taxonomy. The qualitative study involved one-on-one interviews and focus groups with primary care providers (family physicians, nurse practitioners and pharmacists) in Nova Scotia around the influences on deprescribing in their practice. The interviews and focus groups were coded using the Theoretical Domains Framework version 2 (TDF(v2)).

The results of the two studies were combined by linking the TDF domains with intervention functions to identify applicable BCTs from the published literature to determine gaps in research and areas of the BCW that may have potential benefits in the design of future deprescribing strategies. More information on the BCW is available at:

<https://implementationscience.biomedcentral.com/articles/10.1186/1748-5908-6-42>

The team has now published the qualitative study of interviews and focus groups with local healthcare providers around deprescribing and the scoping review of primary care deprescribing strategies. Those studies informed a Knowledge Exchange Event with stakeholders in 2019. During 2020, the deprescribing project has focused on dissemination of the previously completed studies.

Unfortunately, dissemination strategies have been delayed due to pandemic-related changes in healthcare priorities. With those delays in mind, the current focus is on the development and evaluation of a deprescribing education program for healthcare providers and students, which was identified as a stakeholder key priority at the Knowledge Exchange Event.

## STOPP-START Criteria

The STOPP-START criteria are evidence-based sets of explicit criteria developed to facilitate screening for potentially inappropriate prescribing in older persons. STOPP refers to **S**creening **T**ool of **O**lder **P**erson's potentially inappropriate **P**rescriptions and START to **S**creening **T**ool to **A**lert doctors to the **R**ight **T**reatment. These criteria were developed in Ireland using a modified Delphi process that involved 18 experts in geriatric pharmacotherapy from across the United Kingdom and Ireland.

Antipsychotic medications are often prescribed to older adults. These medications have safety concerns requiring careful consideration of risks and benefits for each patient. The STOPP criteria identifies antipsychotic use in those with a history of falls as potentially inappropriate.

As reported previously, a team of Nova Scotia researchers, funded partly by DEANS, studied antipsychotic drug dispensations to Nova Scotia older adults. The researchers then examined trends, predictors, and adherence with this STOPP criteria by identifying continued antipsychotic use following a fall-related hospitalization. The findings of these studies have been reported previously.

The researchers continued their work on this initiative in 2019/20 and 2020/21, with a focus on antipsychotic usage among nursing home residents. The objectives of this study were to identify dispensing patterns in antipsychotic medications for older persons who reside in a Long Term Care Facility (LTCF) from April 1, 2009 to March 31, 2017 in Nova Scotia, and to identify the proportion of older adults taking antipsychotics and residing in a LTCF who continue an antipsychotic after a fall-related hospitalization.

The Seniors' Pharmacare Program had on average 103,620 beneficiaries (59.1% female) in each of the fiscal years between 2009 and 2017. In each study year, a mean of 6,816 (6.5%) Seniors' Pharmacare beneficiaries (75.2% female) 66 years

of age and older resided in a LTCF. Over the six-year study period, 19,164 (12.4%) Seniors' Pharmacare beneficiaries received at least one antipsychotic dispensation.

Stratifying by residential setting, 17,201 (90%) of the Seniors' Pharmacare beneficiaries receiving at least one antipsychotic dispensation resided in a LTCF. Approximately 40% of Nova Scotian older adults residing in a LTCF were dispensed an antipsychotic at least once in each of the six years studied. Further work is ongoing to provide more detailed investigation of the type of drug and factors associated with prescribing.

### ***Sleepwell: An Initiative to Transform Insomnia Treatment***

Sleepwell is a program aimed at reducing the use of sedative-hypnotics used in the management of insomnia and increasing access to and use of cognitive-behavioural therapy for insomnia (CBTi), the first-line recommended treatment of chronic insomnia. Whereas sedative-hypnotics do not address the underlying causes of insomnia and are associated with serious adverse effects that occur more often with age, CBTi is a form of sleep therapy learned by the individual over a 6-week program that can be delivered by a trained therapist, online program, app, or workbook. Newer self-guided formats have resulted in CBTi being substantially more accessible to patients with chronic insomnia than in the past.

As previously reported, Sleepwell was originally proposed in 2013. At its outset, with its inaugural web presence ([sleepwellns.ca](http://sleepwellns.ca)) and toolkit to raise awareness of the initiative, *SleepWell Nova Scotia* was somewhat ahead of its time. The initiative has evolved and has been rebranded as *Sleepwell* for a wider reach, and the program has grown in terms of recognition, research and use.

The new website ([mysleepwell.ca](http://mysleepwell.ca)), launched May 5, 2018, offers the public and health care providers information and curated tools to help the program achieve its objectives. Since May 2018, [mysleepwell.ca](http://mysleepwell.ca) has been used by 100,896 people, with over 532,000 pageviews. Clearly indicating

that the information is engaging and useful, the average person uses the website for 3 minutes 30 seconds and visits 5 pages.

Website access is high across Nova Scotia, Canada, and Internationally. Approximately two-thirds of visitors are female and there is more interest in CBTi compared to sleeping pills, with 7 visits to the CBTi pages for every 2 visits to the sleeping pills pages. In the past year, Sleepwell's tools and resources have been used over 34,000 times and downloaded by site visitors 8,000 times.

Sleepwell has featured prominently in professional education and media. This spring, Queen's University Continuing Professional Education program offered an 8-session online course titled *Insomnia Interventions – First-line Treatment for Insomnia in Primary Care*. Dr. Gardner, the co-developer of Sleepwell, led 3 of these sessions, collaborating with colleagues from psychology, psychiatry, social work, and pharmacy affiliated with Queen's University. The focus of these sessions was the promotion of CBTi and the safe gradual dose reduction of sedative-hypnotics, for which Sleepwell resources were recommended to participants. Sleepwell was also featured in public and professional education sessions in Nova Scotia, Manitoba, and Newfoundland and Labrador in 2020-2021.

Sleepwell is at the core of a randomized controlled trial underway in New Brunswick. The Sleepwell resources are being compared to a similar set of resources from the Canadian Deprescribing Network as well as to a treatment-as-usual (control) group. The study is evaluating how effective the interventions (delivered as a mailed package with information about ways to get a good night's sleep and about sleeping pills) are at reducing sedative-hypnotic use, increasing the use of non-pharmacological approaches to sleep, and improving sleep outcomes. Study results are expected in the second half of 2022.

In the past two years, two Dalhousie University MSc in Psychiatry Research students have chosen to focus their thesis projects on sedative-hypnotic use to advance our understanding of the older

patient's experience with long-term use and efforts to stop treatment. The second MSc student will be starting her thesis work in 2021-2022. As an undergraduate student, in 2017, she worked with the Sleepwell team, to develop and evaluate various components of Sleepwell and its information.

### **Farewells and Welcomes**

In 2020/21, DEANS said farewell to Dr. Constance LeBlanc as Associate Dean, Continuing Professional Development, Faculty of Medicine, and welcomed Dr. Stephen Miller in this role. In summer 2020, the DEU welcomed Ms. Laura Miller to the team.

### **Publications/Presentations**

Acute Pain: Musculoskeletal, low back and post-surgical. Dalhousie CPD Academic Detailing Service, December 2020. [Academic Detailing Service Resources - Continuing Professional Development - Dalhousie University](#)

Allen M, McLean-Veysey P, Rodney-Cail N. "Acute Pain: Communication Skills to Help Prevent Pain Chronification and Key Messages from Academic Detailing Resources using a Case-based Approach," *Dalhousie University Choosing Wisely with Academic Detailing Conference*, virtual presentation, October 3, 2020.

Alshengeti, A, Slayter, K, Black, E, Top K. "Online Virtual Patient Learning: A Pilot Study of a New Modality in Antimicrobial Stewardship Education for Pediatric Residents." *BMC Research Notes*, 13(339).

Baxter E, MacKinnon K. "Hypertension: High Risk Adults, Pregnancy and Children: Ten top Questions and Answers from Detailing", *Dalhousie University Continuing Professional Development Medical Education*, virtual presentation, September 23, 2020.

Black E, Neville H, Losier M, Harrison M, Abbass K, Slayter K, Johnston L, Sketris I. Antimicrobial

Use at Acute Care Hospitals in Nova Scotia: A Point Prevalence Survey. *Canadian Journal of Hospital Pharmacy*, 71(4):234-42.

Bonnar P. "Update on Spectrum (NSHA)." *Dalhousie University Choosing Wisely with Academic Detailing Conference*, virtual presentation, October 3, 2020.

Dysart A. "Deprescribing: Case-based discussion of appropriate deprescribing focusing on communication." *Dalhousie University Choosing Wisely with Academic Detailing Conference*, virtual presentation, October 3, 2020.

Gardner D, Turner J, Wilson R, Farrell B, Wintemute K, Newport K (moderator). "Working Together to Improve Patient Care, One Medication at a Time. Sedatives & insomnia – deprescribing and non-drug alternatives." *Online webinar: SaferMedsNL, Newfoundland and Labrador*. January 28, 2021.

Hazelton L, Baxter E. "SSRIs for mild to moderate depression and anxiety". *Dalhousie University Choosing Wisely with Academic Detailing Conference*, virtual presentation, October 3, 2020.

Isenor JE, Kennie-Kaulbach N, Kehoe S, Bai I, Martin-Misener R, Burge F, Burgess S, Kits O, Helwig M, Reeve E, Whelan AM. Priority Strategies for Implementing Deprescribing in Primary Health Care in Nova Scotia: Highlighting Pharmacist Opportunities. Ontario Pharmacy+ Evidence Network: 2021 OPEN Summit. Presented online February 10, 2021.

Isenor JE, Bai I, Cormier R, Helwig M, Reeve E, Whelan AM, Burgess S, Martin-Misener R, Kennie-Kaulbach N. Deprescribing Interventions in Primary Health Care Mapped to the Behaviour Change Wheel: A Scoping Review. *Res Social Adm Pharm*. 2020 Sept 22; S1551-7411(20)30227-8. Online ahead of print Available at: [https://www.sciencedirect.com/science/article/abs/pii/S1551741120302278?dgcid=raven\\_sd\\_aip\\_email](https://www.sciencedirect.com/science/article/abs/pii/S1551741120302278?dgcid=raven_sd_aip_email)

Kennie-Kaulbach N, Kehoe S, Whelan AM, Reeve E, Bai I, Burgess S, Kits O, Isenor JE. Use of a Knowledge Exchange Event Strategy to Identify Key Priorities for Implementing Deprescribing in Primary Healthcare in Nova Scotia, Canada. *Evid Pol*. Online ahead of print 2021 March 30. Available at: <https://www.ingentaconnect.com/content/tpp/ep/pr e-prints/content-evidpold2000060>

Kennie-Kaulbach N, Cormier R, Kits O, Reeve E, Whelan AM, Martin-Misener R, Burge F, Burgess S, Isenor JE. Influencers on Deprescribing Practice of Primary Healthcare Providers in Nova Scotia: An Examination Using Behavior Change Frameworks. *Medicine Access @ Point of Care*. 2020;4: <https://doi.org/10.1177/239920262092250> Epub 2020 June 3. Available at: <https://journals.sagepub.com/doi/10.1177/2399202620922507>

LeBlanc C. "Update on Choosing Wisely." *Dalhousie University Choosing Wisely with Academic Detailing Conference*, virtual presentation, October 3, 2020.

MacDonald G, Black K. "Systematic review of antimicrobial stewardship interventions to improve management of bacteriuria in hospitalized adults". *Association of Faculties of Pharmacy in Canada*, virtual abstract and poster submission, 2020. Received the AFPC / council for Continuing Pharmaceutical Education Pharmacy Student Research Poster award.

MacKinnon K. "Risks, Contraindications and Differences among NSAIDs". *Dalhousie Continuing Professional Development Medical Education Annual Fall Refresher conference*, virtual presentation, January 29th, 2021.

MacKinnon K, McLean-Veysey P, Rodney-Cail N. "The Pharmacist Toolbox for Acute Pain Management...What Actually Helps?" *Pharmacy Association of NS Annual Conference*, virtual presentation, November 6, 2020.

Miller L. "The Bloom Program." *Dalhousie*

*University Choosing Wisely with Academic Detailing Conference*, virtual presentation, October 3, 2020.

Murphy AL, Jacobs LM, Gardner DM. “Pharmacists’ experiences with the Bloom Program application process.” *Canadian Pharmacists Journal*, 154(1):42-51.

Nakhla, N, Black, E, Abdul-Fattah, H, Taylor J. “Self-Care Education Across Canadian Pharmacy Schools: Curriculum Survey Findings”. *Canadian Pharmacists Journal*, 154(1):52-60.

Sketris I, McLean-Veysey P, Farrell L, Miller S, Fisher J. “The Drug Evaluation Alliance of Nova Scotia, Canada: improving population drug use.” *Riga Stradins University Latvia Research Use Week*, virtual presentation, March 25, 2021.

Trenaman SC, Hill-Taylor B, Matheson K, Gardner DM, Sketris I. Antipsychotic Drug Dispensations in Older Adults, including Continuation after a Fall-related Hospitalization: Identifying Prescriptions Criteria using the Nova Scotia Seniors’ Pharmacare Program and Canadian Institute for Health’s Discharge Databases. *Current Therapeutic Research-Clinical and Experimental*, Aug31:89:27-36.doi:10.1016/j.curtheres.2018.002. eCollection 2018 PMID: 30294400.

### **DEANS Management Committee**

- Ms. Lisa Farrell, (Chair) Liaison Officer, Canadian Agency for Drugs and Technologies in Health
- Ms. Pam McLean-Veysey, Team Leader, Drug Evaluation Unit, QEII Health Sciences Centre
- Dr. Connie LeBlanc, Continuing Professional Development, Faculty of Medicine, Dalhousie University
- Dr. Stephen Miller, Continuing Professional Development, Faculty of Medicine, Dalhousie University
- Dr. Edie Baxter, Continuing Professional Development, Department of Family Medicine, Dalhousie University
- Dr. Mathew Grandy, Department of Family Medicine, Dalhousie University
- Dr. Ingrid Sketris, College of Pharmacy, Dalhousie University
- Ms. Diane Harpell, Pharmacy Association of Nova Scotia
- Ms. Susan Mansour, College of Pharmacy, Dalhousie University
- Dr. David Gardner, College of Pharmacy, Dalhousie University
- Ms. Lisa Green, Manager, Nova Scotia Prescription Monitoring Program
- Ms. Lillian Berry, Pharmacist Consultant, Nova Scotia Prescription Monitoring Program
- Ms. Jennifer Ross Makhan, Regional Pharmacist, First Nations and Inuit Health, Health Canada

For more information about DEANS, go to <http://novascotia.ca/dhw/pharmacare/drug-evaluation-alliance-of-nova-scotia.asp>

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