

April 2017 - March 2018

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.

As in previous years, *Katie* principles were incorporated into the Dalhousie Continuing Pharmacy Education Refresher (October 2017) and the Dalhousie Medical Refresher Course (November/December 2017). For information about *Katie* and to access *Katie* tools, go to: <http://katie.dal.ca/>

COPD 2016: What to do with all these new inhalers?

In 2016/17, the Academic Detailing Service (ADS) developed an educational intervention "*COPD 2016: What to do with all these new inhalers?*". This topic addresses the following questions: Is spirometry necessary to diagnose COPD? Should a long acting muscarinic antagonist (LAMA) or long acting beta₂ agonist (LABA) be prescribed when short acting bronchodilators are not controlling symptoms? What is the evidence for benefit or harm for the combination of LAMA plus LABA compared with either agent alone? Who should have an inhaled corticosteroid (ICS) added to therapy? How to choose between the various new inhalers? What are the adverse effects of inhaled COPD medications? This topic has MAINPRO CERT+ Level 2 accreditation, and incorporated evidence from DEANS partner CADTH.

The academic detailers began their educational visits in October 2016, and continued through

2017/18. The detailers completed 288 visits with 485 family physicians, 40 medical students, 56 nurse practitioners, 45 RNs, 7 pharmacists and 15 other health care professionals.

This topic was also presented at Respiriology Rounds, NS Health Authority in April 2017.

All materials are published online and are available through the following link:

<http://www.medicine.dal/departments/core-units/cpd/programs/academic-detailing-service.html>.

Epinephrine in Anaphylaxis

In 2017/18, the Academic Detailing Service (ADS) developed an educational intervention “*Epinephrine in Anaphylaxis*”. The topic addresses the following: How to define and diagnose anaphylaxis, including identifying anaphylaxis triggers; treatment, including epinephrine route of administration and dose; care following an event; and developing a practice plan.

The detailers began their educational visits in October 2017. During 2017/18, the detailers completed 243 visits, with 428 family physicians, 39 medical students, 51 nurse practitioners, 55 RNs, 3 pharmacists and 18 other health care professionals.

All materials are published online and are available through the following link:

<http://www.medicine.dal/departments/core-units/cpd/programs/academic-detailing-service.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.

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 annual conference took place October 2017 at Oak Island, NS.

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. Registration is capped at 50 to promote participant interaction for enhanced learning.

This interprofessional, interactive, case-based conference has been very successful. The use of sequestered locations and the inclusion of a social programme for participants and families provides opportunities for both academic and social interaction. Evaluations have rated this as “*one of the best conferences I have ever attended*”. The fourth annual conference is planned for October 2018, at Digby Pines, NS.

Collaborative Interprofessional Deprescribing Team Project: Scoping Review and Qualitative Study

Deprescribing is the planned and supervised process of dose reduction or stopping of medication(s) that may be causing harm or are no longer causing 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 a collaborative interprofessional deprescribing team project led by Drs. Jennifer Isenor and Natalie Kennie-Kaulbach

is completing a scoping review and qualitative study around deprescribing in primary care. The initiative started in the spring of 2017 and is ongoing.

The objective of the scoping review is to review the literature since 2002 to identify deprescribing interventions that have been evaluated in primary care. Identified interventions will be mapped to the Behaviour Change Wheel (BCW) to determine gaps in research and areas of the BCW that may have potential benefits in the design of future deprescribing implementation strategies. More information on the BCW is available at: <https://implementationscience.biomedcentral.com/articles/10.1186/1748-5908-6-42>

The objective of the qualitative study is to describe the knowledge, attitudes, beliefs, and behaviours of primary care providers (family physicians, nurse practitioners, and pharmacists) in Nova Scotia toward deprescribing. Nine one-on-one interviews and three single-profession focus groups have been completed. The transcripts were coded using the Theoretical Domains Framework version 2 and entered into NVivo. Emergent themes were identified and further classified as barriers or enablers.

Both projects are in the final stages of data analysis and dissemination strategies of the final results are in progress. The results of the two projects will be combined to provide evidence to support deprescribing implementation strategies in primary care in Nova Scotia.

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.

A team of Nova Scotia researchers, funded partly by DEANS, studied antipsychotic drug dispensations to Nova Scotia older adults. The objectives of this study were: to identify trends in antipsychotic dispensations and to investigate adherence to this specific STOPP criteria. The researchers then examined trends, predictors, and adherence with this STOPP criteria by identifying continued antipsychotic use following a fall-related hospitalization.

Beneficiaries of the Nova Scotia Seniors' Pharmacare Program (NSSPP) age ≥ 66 years were included in the descriptive cross-sectional cohort study if they received at least one antipsychotic dispensation during at least one year of the five fiscal years of 2009 to 2013. As well, the researchers examined fall-related hospitalizations for beneficiaries with at least one preceding antipsychotic dispensation over a four-year time period by linking the Pharmacare database to the Canadian Institute for Health Information Discharge Abstract Database.

Each fiscal year, approximately 6% of NSSPP beneficiaries received at least one antipsychotic dispensation. Second generation antipsychotics were most commonly dispensed (70%). Over 75% of NSSPP beneficiaries who had an antipsychotic dispensation prior to a fall-related hospitalization were dispensed an antipsychotic in the 100 days following hospital discharge. This research did not discover any statistically significant predictors of continuing potentially inappropriate therapy.

Despite the recommendations of quality indicators such as the STOPP criteria, antipsychotics are often continued in individuals at a high risk of falling. Future investigations are needed to determine reasons for lack of concordance with this antipsychotic STOPP criteria and to develop interventions at the health team, system, and policy

levels to improve concordance when appropriate.

This work was presented at the 33rd International Conference on Pharmacoepidemiology and Therapeutic Risk Management poster session B. (<https://www.pharmacoepi.org/pub/?id=f331b994-b936-0b4c-28c3-815ed19791f7>)

SleepWell Nova Scotia: An Interdisciplinary Approach to Managing Insomnia

As previously reported, SleepWell was originally proposed in 2013 as a platform and initiative to reduce the inappropriate use of sedative-hypnotics while guiding individuals with insomnia to an alternative, evidence-based, safer non-pharmacological treatment option – cognitive-behavioural therapy for insomnia (CBTi). CBTi is supported by extensive research inclusive of individuals from young to old, with comorbid physical and mental illnesses, who have accessed the treatment in its various formats including therapist-based and self-care options (e.g. books, internet, apps).

At its outset, with its inaugural web presence (sleepwellns.ca) and toolkit to raise awareness of the initiative, *SleepWell Nova Scotia* was somewhat ahead of its time. In 2016 and 2017, the American College of Physicians and the European Sleep Research Society published new insomnia treatment guidelines recommending CBTi as first-line therapy and strongly recommending against the use of sedative-hypnotics unless CBTi has been demonstrated as ineffective for the individual.

Recognizing the relatively high use of sedative-hypnotics in Nova Scotia, DEANS has provided successive small grants to support the development and advancement of SleepWell since its inception and SleepWell has gained substantial interest and endorsements early on.

Shortly following SleepWell's initial release in which specific CBTi resources and services were identified and recommended, other Canadian initiatives focusing on deprescribing of inappropriate medications, especially in people over 65, were developed including

Deprescribing.org and the Canadian Deprescribing Network (CaDeN). In its patient-oriented materials on deprescribing sedative-hypnotics, CaDeN specifically recommends SleepWell as a source of resources for treating insomnia without sleeping pills. There is now a strong partnership between CaDeN and SleepWell supporting the goals of both initiatives.

SleepWell is now entering a new and exciting phase in its development. Again, with the support of DEANS funding, SleepWell is expanding its scope beyond Nova Scotia with the goal of being the key library of recommended self-help resource for individuals with insomnia. The resources are in development to serve not only Nova Scotians but individuals, their care providers, and health care professionals from across Canada and internationally. The original aims remain intact, to reduce the inappropriate use of sedative-hypnotics and to increase the uptake of safer, effective, non-pharmacological first-line treatment of insomnia.

The new website, which is now available with new content continuing to be added, is available at mysleepwell.ca.

Farewells and Welcomes

This has been a year of changes. In June 2017, Dr. Bronwen Jones stepped down as Director, Academic Detailing Service.

In early 2017/18, DEANS welcomed Ms. Diane Harpell back to the Management Committee in her new capacity as PANS representative. In September 2017, DEANS welcomed Dr. Edie Baxter and Ms. Heather McPeake to the Management Committee. Dr. Baxter is a family physician in Halifax, and the new Director of the Academic Detailing Service. Ms. McPeake is the new Manager, NS Prescription Monitoring Program, replacing Mr. Kevin Lynch.

Publications/Presentations

Allen M. "Strategies for ED Opioid Prescribing". *Dalhousie University Choosing Wisely with Academic Detailing Conference*, Oak Island NS.

October 2017.

Allen M, McLean-Veysey P. "One Size Fits All"? Buprenorphine Naloxone in Opioid Use Disorder" *Dalhousie University Choosing Wisely with Academic Detailing Conference*, Oak Island NS. October 21, 2017.

Bailly G, Rodney-Cail N. "Oral Medication in the Management of Overactive Bladder". *Dalhousie University Choosing Wisely with Academic Detailing Conference*, Oak Island NS. October 2017.

Boudreau M, LeBlanc C, Jones B, Sketris I. Dalhousie University's Academic detailing service evaluation. Poster presentation to ISPE (The International Society for Pharmacoepidemiology) Conference, Montreal, QC. August 26-30, 2017. *Pharmacoepidemiol Drug Saf.* 2017; 26(Suppl. 2): 3–636 DOI: 10.1002/pds.4275.

Edmonds L. Duloxetine for pain. *Pharmaceutical Care Rounds, NS Health Authority.* April 26, 2017, Halifax NS.

Epinephrine in Anaphylaxis. Dalhousie CPD Academic Detailing Service, July 2017. <http://www.medicine.dal.ca/departments/core-units/cpd/programs/academic-detailing-service.html>

Fleming I. COPD. What to do with all these new inhalers: Cases you asked about. *Dalhousie University Choosing Wisely with Academic Detailing Conference*, October 21, 2017, Oak Island, NS.

Fleming I, McLean-Veysey P. COPD Academic Detailing: What to do with all these new inhalers. *Respirology Rounds, NS Health Authority.* April 6, 2017, Halifax NS.

Gardner D. Medications and insomnia management. CPD Program Centre: Interventions for Insomnia: What Really Works. *Faculty of Health Sciences, Queen's University.* December 1, 2017, Kingston, ON.

Gardner D. It is not a dream. Sleep well without

sleeping pills. *2018 National Stakeholder Summit on Medication Safety for Older Men and Women.* February 7-9, 2018, Montreal, QC.

Gardner D, Chisholm T. Use of sedatives in and out of hospital. *Annual Meeting. Canadian Society of Hospital Pharmacists – Nova Scotia Chapter.* April 22, 2017, Halifax, NS.

Harpell D. SleepWell Nova Scotia. *Innovation Showcase, Breakfast Satellite Education Session, Canadian Pharmacists Conference 2017*, Calgary AB, June 27, 2017.

Isenor J, Kennie-Kaulbach N, Martin-Misener R, Whelan AM, Burgess S, Burge F, MacLean H, Salsbury E. Healthcare providers' knowledge, attitudes, beliefs, and behaviours toward deprescribing: A Nova Scotia pilot project. *BRIC NS Project Incubator*, Halifax, NS. March 27, 2017.

Isenor J, Kennie-Kaulbach N, Whelan AM, Martin-Misener R*, Burgess S, Burge F. Healthcare providers' knowledge, attitudes, beliefs, and behaviours toward deprescribing: a Nova Scotia pilot project. *North American Primary Care Research Group (NAPCRG) 45th Annual Meeting*, Fairmont The Queen Elizabeth, Montreal, QC, November 18, 2017.

Isenor JE, Minard LV, Stewart SA, Curran JA, Deal H, Rodrigues G, Sketris IS. Identification of the relationship between barriers and facilitators of pharmacist prescribing and self-reported prescribing activity using the theoretical domains framework. *Res Social Adm Pharm.* 2017 Oct 24. [Epub ahead of print] pii:S1551-7411(17)30476-X. doi:10.1016/j.sapharm. 2017. 10.004.

Kelly K, McLean-Veysey P. "Appraising Studies with a Critical Lens". *91st Annual Dalhousie University Continuing Professional Development Fall Refresher.* December 2017.

Kennie-Kaulbach N, Isenor J, Martin-Misener R, Whelan AM, Burgess S, Burge F, MacLean H, Salsbury E. Healthcare providers' knowledge, attitudes, beliefs, and behaviours toward

deprescribing: A Nova Scotia pilot project. *Primary Healthcare Research Day*, Halifax, NS, May 17, 2017.

LeBlanc C. How Doctors Make Decisions. *Mini Medical School 2017*. September 2017, Halifax NS.

LeBlanc C. Benzos: “Centrs + Common Sense”. *Dalhousie University Choosing Wisely with Academic Detailing Conference*, October 2017, Oak Island NS.

LeBlanc C. “Tick Talk”. *Dalhousie University Choosing Wisely with Academic Detailing Conference*, October 2017, Oak Island NS.

LeBlanc C. Leverman J. Emergency Medicine: top 10 Articles to Change your Practice. 91st *Dalhousie University Continuing Professional Development Fall Refresher*. December 2017, Halifax NS.

McLean-Veysey P, Kelly K. Appraising studies with a critical lens. *Dalhousie University Continuing Professional Development Refresher*. December 2017, Halifax NS.

McLean-Veysey P, Marsters D. PPIs: To stop or not to stop: That is the question. *Dalhousie University Choosing Wisely with Academic Detailing Conference*, October 21, 2017, Oak Island NS.

Neville H, Black E, Losier M, Harrison M, Abbas K, Slayter K, Johnston L, Sketris I. Antimicrobial point prevalence survey in Nova Scotia (Canada) acute care hospitals. Poster presentation to The International Society for Pharmacoepidemiology (ISPE) Conference, Montreal, QC. August 26-30, 2017. *Pharmacoepidemiol Drug Saf.* 2017; 26(Suppl. 2): 3–636 DOI: 10.1002/pds.4275.

Rehan S, Sketris I, Rigby H, Hill-Taylor B, Matheson K. Antipsychotic and antiparkinson co-prescription: Adherence to national Parkinson guidelines and the STOPP criteria. Oral presentation to *Primary Health Care Research Day*. May 17, 2017, Halifax, NS.

Rigby HB, Rehan S, Hill-Taylor B, Matheson K, Sketris I. Select antipsychotic prescribing practices in those with Parkinsonism: Adherence to guidelines. *Can J Neurol Sci.* 2017 Sep;44(5):603-606. doi: 10.1017/cjn.2017.36. Epub 2017 May 8.

Rodney-Cail N. Drugs for the treatment of over-active bladder (OAB). *Pharmaceutical Care Rounds, Nova Scotia Health Authority*, April 26, 2017, Halifax NS.

Salsbury L, Isenor JE, Kennie-Kaulbach N, Martin-Misener R, Burge F, Burgess S, MacLean H, Kits O, Reeve E, Whelan AM. Healthcare providers’ knowledge, attitudes, beliefs and behaviours toward deprescribing in Nova Scotia: Preliminary results. Poster presented by L. Salsbury at *College of Pharmacy/NSHA/IWK Student Research Event*, Dalhousie University, Halifax, October 14, 2017, Nova Scotia.

And

Oral presentation, 16th *Annual Crossroads Interdisciplinary Health Research Conference*, Dalhousie University, March 10, 2018, Halifax Nova Scotia.

Spin P, Sketris I, Hill-Taylor B, Ward C, Hurley KF. Response to Review Regarding Cost Analysis of Salbutamol Administration. *CJEM*, 2017 19(6), 500-502. doi:10.1017/cem.2017.358. Epub 2017 August 15.

Trenaman SC, Gardner D, Hill-Taylor B, Matheson K, Sketris I. Antipsychotic drug use by community dwelling older persons and adherence to STOPP criteria after a fall. Poster presentation to ISPE (*The International Society for Pharmacoepidemiology*) Conference, Montreal, QC. August 26-30, 2017. *Pharmacoepidemiol Drug Saf.* 2017; 26(Suppl. 2): 3–636 DOI: 10.1002/pds.4275.

Watson W, Rodney-Cail N. Treatment of anaphylaxis. *Dalhousie University Choosing Wisely with Academic Detailing Conference*, October 21, 2017, Oak Island, NS.

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. Bronwen Jones, Continuing Professional Development, Faculty of Medicine, Dalhousie University
- Dr. Edie Baxter, Continuing Professional Development, Department of Family Medicine, Dalhousie University
- Dr. Alicia Williams, 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
- Mr. Kevin Lynch, Manager, Nova Scotia Prescription Monitoring Program
- Ms. Heather McPeake, Manager, 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>

To suggest topics or issues, contact Judith Fisher at judith.fisher@novascotia.ca