

April 2011 - March 2012

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 the Pharmacare Programs. These educational interventions are often coordinated with policy interventions to facilitate change and to provide the rationale for change.

Most DEANS interventions are multi-faceted and inter-professional, using presentation vehicles 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 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. New 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.

Funding from the Canadian Institutes of Health Research (CIHR) through a Meeting, Planning and Dissemination Grant under the Knowledge Translation Supplement competition facilitated the further development of the *Katie* tools. *Katie* videos are being prepared for the website and for use in educational programs. *Katie* templates for PowerPoint slides and other materials have also been developed.

A new tool, the *Katie* Clinical Significance Calculator, has been developed and posted on the website. This is an online tool that allows the user to enter study data and calculate the relative risk reduction (RRR), the absolute risk reduction (ARR) and numbers needed to treat (NNT) or harm (NNH). For information about *Katie* and to access *Katie* tools, go to: <http://katie.dal.ca/>

### Diabetes Management

DEANS continued efforts to disseminate the “Optimal Therapy Recommendations for the Prescribing and Use of Blood Glucose Test Strips”. These recommendations, published by the Canadian Agency for Drugs and Technologies in Health (CADTH), indicated that routine self-monitoring of blood glucose (SMBG) is not required for most individuals with type 2 diabetes who are not using insulin.

As detailed in last year’s annual summary, DEANS funded an inter-professional educational program: “Self-Monitoring Blood Glucose: Are We Singing from the Same Song Sheet?” Following its launch

in February 2011, presentations of this program continued throughout 2011/12. The program has been very well-received. Participants particularly appreciate the evidence-based approach.

### **Managing Drug Diversion**

As detailed in last year's annual summary, Dalhousie University's Continuing Medical Education and Continuing Pharmacy Education launched an inter-professional education program to improve collaboration and communication between physicians and pharmacists in the area of drug diversion. The program was designed to be highly interactive with the presenters providing information through role-played scenarios.

Presentations of this innovative program continued across the province throughout 2011/12. The program underwent a format change in late 2011; it is now a 1.5 hour case-based program. The new format has been well-received by participants across the province.

### **Opioids for Chronic Non-Cancer Pain**

As detailed in last year's report, the Dalhousie *Academic Detailing Service* (ADS) developed an educational intervention, "Opioids in Chronic Non-cancer Pain" based on the National Opioid Use Guideline Group (NOUGG), "Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-Cancer Pain". The detailers provided reprints of the guideline, a document explaining where evidence exists, where evidence does not exist and suggestions for how gaps may be filled in practice, and a decision-support tool the "opioid manager" that can be included in the patient's chart. All materials for this ADS topic are available at:

[http://cme.medicine.dal.ca/ad\\_resources.htm](http://cme.medicine.dal.ca/ad_resources.htm).

The academic detailers began visiting family physicians in fall 2010 and continued in 2011/12. This topic was very popular with family physicians. The detailers visited more than 427 physicians and continued to receive requests for presentations through September 2011. A session was presented at the fall CME refresher.

Participants particularly appreciated the case-based interactive format of this session.

The ADS has also completed a video for the Canadian Guideline group, at their request, demonstrating how to use the opioid manager. The video can be viewed at:

[http://nationalpaincentre.mcmaster.ca/opioidmanager/opioid\\_manager\\_video.html](http://nationalpaincentre.mcmaster.ca/opioidmanager/opioid_manager_video.html)

As always, the Dalhousie ADS materials were modified and delivered to nurses through their videoconference continuing education programming and to pharmacists through Dalhousie Continuing Pharmacy Education's *Academic Detailing Rx*. A session was presented at the fall CPE refresher, and was very well received.

### **Hypertension**

In 2011, the ADS developed an educational intervention "Issues in Hypertension". All materials for this topic are available at: [http://cme.medicine.dal.ca/ad\\_resources.htm](http://cme.medicine.dal.ca/ad_resources.htm)

This review addresses the following four questions:

- What is the evidence for a treatment target of <140/90 mmHg in the elderly?
- What is the evidence for a treatment target of <130/80 mmHg in persons with diabetes?
- What is the role of adhering to a low sodium diet and assuring good compliance with medications in managing hypertension?
- What is the evidence for the efficacy and safety of aliskiren (Rasilez™), a direct renin inhibitor, in hypertension?

The academic detailers began their educational visits to physicians in September 2011. Physicians report that the materials are very informative and applicable to their clinical practice, in particular the information related to hypertension management of the elderly. The detailers provided physicians with a one-page laminated summary outlining the evidence for treatment targets for the

elderly and persons with diabetes.

As with other Dalhousie ADS programs, the materials were modified and delivered to other health professionals: nurses through their videoconference continuing education; and pharmacists through *Academic Detailing Rx*, Dalhousie Continuing Pharmacy Education.

### **Evidence-Based Medicine Specialist Project**

Members of the DEANS Management Committee have been educating medical students and family physicians about considerations when interacting with the pharmaceutical industry. This work evolved into a research project known as DocInfo that has been led by Dalhousie Continuing Medical Education and was launched in 2010. The purpose of this project was to explore how physicians use various sources of information when making prescribing decisions.

The focus of the DocInfo project was primary care physicians. The “Evidence-based Medicine Specialist Project”, launched in 2011, addresses similar issues for medical specialists. As a first step, the researchers gathered data on the presentations at the Canadian Society of Internal Medicine Annual Scientific Meeting held in Halifax, October 15-17, 2011. Analysis of the presentations is now underway to understand how data are presented to specialists.

### **Audit and Feedback of Prescribing Profiles to Nova Scotia Family Physicians who are using Electronic Medical Records for Prescribing**

The use of electronic medical records (EMRs) in primary care provides an opportunity to collect accurate, complete and timely data on patient-health system interactions that can support clinical decision-making. These data may also be used to promote optimal medication use by providing feedback to physicians regarding their prescribing profiles.

DEANS provided funding to support the development of a demonstration project “Audit and feedback of prescribing profiles to Nova

Scotia family physicians who are using electronic medical records for prescribing”, will be led by Dr. Nandini Natarajan, Associate Professor, Department of Family Medicine, Dalhousie University. The objectives of this project are:

- To assess the feasibility of using prescription data extracted from the Nightingale EMR for Maritime Network Canadian Primary Care Surveillance System Network (MarNet CPCSSN) to calculate the Drug Utilization 90% (DU90%) prescribing indicator for all participating and consenting physicians.
- To provide physicians with their individual DU90% prescribing profile and aggregate physician profile. Feedback will include key messages to physicians on specific prescribing issues such as safety, cost and adherence to guidelines.
- To gather physician feedback on the usefulness of the profile, the feedback processes and the value of the information provided.

This project will be a collaborative effort between researchers at Dalhousie University (Faculties of Medicine, Health Professions and Computer Science) and, possibly, Canada Health Infoway. DEANS is pleased to support this developing project, which will provide valuable insights regarding physicians’ willingness to receive and use information compiled from EMRs to promote optimal prescribing.

### **Publications/Presentations**

Allen M, Dunbar, Fleming I, McLean-Veysey P, Tobin C. Using CADTH recommendations for self-monitoring of blood glucose in Nova Scotia: Go fast alone or go far together. Panel discussion at Canadian Agency for Drugs and Technologies in Health (CADTH) Invitational Symposium. Vancouver 2011.

<http://www.cadth.ca/media/symp2011/present/D3%20%20CADTH%20Recommendations%20on%20SMBG%20-%20Allen%20et%20al.pdf>

Allen M, Gardner D, Fleming I, McLean-Veysey

P, Isenor J, Murphy A, Rodriguez G. Katie: Knowledge translation for physicians and pharmacists (*Katie*). Presentation at First International Conference Faculty Development. Toronto ON. May 22, 2011.

Allen M, Hill T, Silver I, Lindsay E. Knowledge translation and quality improvement of educational interventions (*Katie*). Workshop at the Association of Faculties of Medicine of Canada, Standing Committee on Continuing Professional Development (AFMC SCCPD) Retreat. Toronto ON. May 2011.

Allen M. Getting the most out of CME Programs: Questions to ask, answers to expect (*Katie*). Presentation for family physicians at Dalhousie CME Refresher. Halifax NS. December 2011.

Allen M. Getting Evidence into CME Programs (*Katie*). Videoconference presentation to CME Advisory Committee, University of Western Ontario. London ON. December 2011.

Allen M, Macleod T, Zwicker B, Chiarot M, Critchley C. Interprofessional education in chronic non-cancer pain. *Journal of Interprofessional Care* 2011;25:221-222.

Allen M, Kelly K, Fleming I. Meta-analysis supports ACCORD BP but effect of excessive diastolic blood pressure lowering uncertain. *Journal of Hypertension* 2012;30:436-438.

Clark R, Fisher J, Sketris IS, Johnston G. An examination of trends in acetaminophen/opioid combination prescriptions in Nova Scotia using data from the Nova Scotia Prescription Monitoring Program, 2011 Canadian Agency for Drugs and Technologies in Health Symposium. Vancouver BC. April 3-5, 2011.

\* Winner of the 2011 CADTH Symposium Best Student Poster Award

<http://cadth.ca/en/events/cadth-symposium-archives/2011-cadth-symposium/poster-presentations>

Deal H, Gillis J, Sketris I, Wilson J, Borden N, Cooke C. Nova Scotia Seniors Pharmacare

Medication Review Program 2008/09: A retrospective analysis. 2011 Annual Canadian Pharmacists Association National Conference. Montréal QC. May 28-31, 2011. (Poster)

Duncan J. Drug treatment of hypertension in Nova Scotia: Utilization data from public drug programs (Seniors Pharmacare) 2005 to 2009. Hypertension Advisory Meeting. May 2011.

Drug diversion: An interdisciplinary approach. April 19, 2011, Middleton NS. November 28, 2011, New Glasgow NS.

and

Professional Development Week, National Student Pharmacy Conference. Halifax NS. January 13, 2012. (Oral presentation)

Fisher J, Sketris IS, Zhang Y, Johnston G, Burge F. The effect of an educational intervention on meperidine use in Nova Scotia, Canada: A time-series analysis. 2011 Annual Canadian Association for Health Services and Policy Research Conference. Halifax NS. May 2-12, 2011. (Oral presentation).

<https://cahspr.ca/sites/default/files/imce/C3.3.pdf>

and

2011 Annual Dalhousie Pharmacy Refresher. Halifax NS. October 30, 2011.

Fisher J, Zhang Y, Sketris IS, Johnston G, Burge F. The effect of and educational intervention on meperidine use in Nova Scotia, Canada: a time-series analysis. *Pharmacoepidemiol Drug Saf* 2012;21(2);177-183. Doi: 10.1002/pds.2259. Epub 2011 Nov.

Fleming I, McLearn H. *Academic Detailing Rx – Opioids in Chronic Non-cancer Pain*. Annual Dalhousie Pharmacy Refresher. Halifax NS. October 29, 2011.

Hill-Taylor B, Hurley KF, Sketris IS, O'Connell C, Sinclair D, Wing A. Evaluating a pediatric emergency department intervention: Promotion of a standard practice change from salbutamol inhalation by nebulization to metered-dose inhalers with holding chambers. 2011 Canadian Agency for Drugs and Technologies in Health Symposium.

Vancouver BC, April 3-4, 2011. (Oral presentation).

<http://www.cadth.ca/media/symp2011/present/C6%20-%20Informing%20Clinical%20Practice%20-%20Hill-Taylor.pdf>

*Issues in Hypertension 2011*. Dalhousie CME Academic Detailing Service, June 2011. [http://cme.medicine.dal.ca/ad\\_resources.htm](http://cme.medicine.dal.ca/ad_resources.htm). (Kelly K, Consultant Drug Evaluation Pharmacist).

Jayabarathan A, McLean-Veysey P, Allen M. Applying evidence to practice (*Katie*). Presentation for family physicians at Dalhousie Refresher. Halifax NS. February 2012.

*Katie* workshops for speakers at the Annual Dalhousie Pharmacy Refresher. Live online webinar. Halifax NS. September 7, 2011 and September 14, 2011.

Kelly K. BP targets in diabetes. Diabetes Care Program Nova Scotia (DCPNS) Provincial conference. Halifax NS, April 29, 2011.

Kelly K, Fleming I. *Academic Detailing Rx* - Issues in hypertension. Annual Dalhousie Pharmacy Refresher. Halifax NS. October 29, 2011.

Kelly K, Fleming I. The hype in hypertension. *Academic Detailing Rx*. Live online, February 8, 2012.

Kelly K., Fleming I. Hypertension treatment goals in the elderly and patients with diabetes: What is the evidence. 38th Annual February Refresher: Therapeutics, Faculty of Medicine. Halifax NS. February 23, 2012.

Law M, Ma T, Fisher J, Sketris I. Independent pharmacist prescribing. *Can Pharm J* 2012:17-23.

*\*Most accessed article in April 2012*

and

2011 Annual Canadian Association for Health Services and Policy Research Conference. Halifax NS. May 2-12, 2011. (Oral presentation).

<http://www.cahspr.ca/sites/default/files/imce/D4.1.pdf>

Law M, Ma T, Fisher J, Sketris I. Independent pharmacist prescribing. 2011 Annual Dalhousie Pharmacy Refresher. Halifax NS. October 30, 2011. (Poster)

Lummis H, Natarajan N, Sketris I. Discrepancies in medication information when free text fields are used in the electronic medical record at two academic family practice clinics. 2011 Annual Canadian Association for Health Services and Policy Research Conference. Halifax NS, May 10-12, 2011. (Poster)

McLean-Veysey P. Self Monitoring of blood glucose. Diabetes Care Program of Nova Scotia Provincial Workshop. Halifax NS. April 28, 2011.

McLean-Veysey P, Allen M, Dunbar P. Self monitoring of blood glucose – Are we singing from the same song sheet? Interprofessional workshops. Dartmouth NS, April 12, 2011. Kentville NS, November 1, 2011. Antigonish NS, November 2, 2011. Yarmouth, January 10, 2012. New Glasgow NS, March 29, 2012.

Opioids in Chronic Non-cancer pain. *Academic Detailing Rx*. Dartmouth NS. May 9, 2011.

Putnam W, Lawson B, Buhariwalla F, Goodfellow M, Goodine R, Hall J, Lacey K, MacDonald I, Burge F, Natarajan N, et al. Hypertension and type 2 diabetes: What family physicians can do to improve control of blood pressure – an observational study. *BMC Family Practice* 2011:12:86

Van Aarsen, K, Burge F, Lawson B, Putnam R, Natarajan N, Cameron S, Gass D. Identifying the denominator for quality indicator measurement in two Canadian EMRs: How hard is it? 2011 Annual Canadian Association for Health Services and Policy Research Conference. Halifax NS, May 10-12, 2011.



### **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. Michael Allen, Continuing Medical Education, Dalhousie University
- Dr. Connie LeBlanc, Continuing Medical Education, Dalhousie University
- Dr. Nandini Natarajan, Department of Family Medicine, Dalhousie University
- Dr. Ingrid Sketris, College of Pharmacy, Dalhousie University
- Dr. Jennifer Isenor, Division of Continuing Pharmacy Education, College of Pharmacy, Dalhousie University
- Dr. David Gardner, College of Pharmacy, Dalhousie University
- Ms. Charmaine Cooke, Population Health Research Unit, Dalhousie University
- Ms. Denise Pellerin, Manager, Nova Scotia Prescription Monitoring Program
- Ms. Jennifer Ross Makhan, Regional Pharmacist, First Nations and Inuit Health, Health Canada
- Ms. Kathleen Shipp, Regional Pharmacist, First Nations and Inuit Health, Health Canada
- Ms. Allison Bodnar, Pharmacy Association of Nova Scotia

For more information about DEANS, go to <http://www.gov.ns.ca/health/pharmacare/deans.htm>

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