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I got the idea for this paper from my co-authors, who had obtained a grant from Health Canada to evaluate best practices. They asked me to survey Canadian and international academic detailing programs and write an outsider's view of their Collaboration.
Mes coauteurs, qui avaient obtenu une subvention de Santé Canada pour évaluer les pratiques exemplaires, m'ont inspiré l'idée de cet article. Ils m'ont demandé de faire un survol des programmes canadiens et internationaux spécialisés en profilage de recherche et d'exprimer mon opinion en marge de leur collaboration.

Canadian Academic Detailing Collaboration: evaluating processes and outcomes of academic detailing

Five Canadian programs joined forces to identify their best practices

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Summary

Academic detailing to support rational prescribing is relatively new in Canada. In 2003, programs in five provinces formed the Canadian Academic Detailing Collaboration with the goal of preparing topics more accurately and efficiently, and disseminating evidence more effectively. In 2004, they began a two-year evaluation project funded by Health Canada to identify best practices. This article describes the programs in Nova Scotia and the Western provinces, and their coordinated evaluations.

Academic detailing (AD) involves the provision of evidence-based health care and therapeutics information via a one-to-one personal visit by a trained person, usually a pharmacist, to a health provider in his or her own practice setting, with the intent of changing the provider's prescribing behaviour.[1-3] AD is also known as counter-detailing, educational outreach, university-based educational detailing, and public interest detailing.

The Canadian Academic Detailing Collaboration (CADC) consists of AD programs in British Columbia, Alberta, Saskatchewan, Manitoba, and Nova Scotia. With a contribution from Health Canada's Best Practices, they are evaluating processes and outcomes of AD.

The following briefly describes the projects CADC is undertaking and the results obtained so far. Table 1 summarizes the five Canadian programs participating in CADC.

1. Evaluation of AD impacts in Vancouver

Eighty general practitioners (GPs) participating in the British Columbia Community Drug Utilization Program (BC CDUP) were randomized to two groups: group 1 received a two-page newsletter on congestive heart failure, and group 2 received a newsletter on coxibs. Twenty-six physicians in group 1 and 39 in group 2 received academic detailing. After six months, the interventions were reversed. A nonrandomized control group of 334 similar GPs was assessed but received neither intervention. Preliminary Pharmacare data suggest that AD can influence the prescribing of heart failure medications. Currently, Pharmanet, Medical Services Plan, and the Discharge Abstracts Database are being analyzed to quantify the impacts on prescribing to new patients, as well as rates of switching or stopping medications. This study has developed statistical tools and analytical techniques that can be used to assess impacts of AD in the other jurisdictions where central drug claims databases are available to researchers.

2. Best practices and innovative approaches

Representatives from the five Canadian AD programs and 10 international programs were interviewed by R. Bacovsky and studies of AD, both published and unpublished, were examined. Information was obtained on the following:

- Selecting successful topics
- Physician incentives to participate and be influenced by prescribing recommendations

• Effective printed educational materials
• Characteristics of a good academic detailer and a good visit
• Complementary strategies
• Evaluation methods

The survey found that AD programs are similar in terms of their intent to improve prescribing and medication use, but they differ significantly in the types of visits, style of message delivery, educational materials, complementary strategies, and the methods used to address barriers to behavioural change at the individual prescriber level and at the health system level.

3. Evaluation of materials

The Alberta Drug Utilization Program (ADUP) is determining the optimal format and content for printed educational materials (PEMs) used by academic detailers. ADUP consulted with the Department of Art and Design at the University of Alberta to create an information design model, tested samples on a group of physicians, and revised the PEMs used for chronic obstructive pulmonary disease. Criteria for the visual presentation of information have been developed and PEMs on dyslipidemia have been compared from the five programs. Comparisons were made of channels of communication (e.g., print vs electronic media, portable device, desk computer, CD-ROM, or website).

4. Time-and-motion study

Time-and-motion studies to assess the efficiency and feasibility of organizing and conducting face-to-face AD visits are being conducted by RxFiles (Saskatchewan). The data collection methodology was piloted in Saskatchewan and then used by the other CADC programs. Data were collected on the time spent:

• Preparing PEMs (e.g., selection of topic, research, material preparation, reviews)
• Conducting visits (e.g., scheduling, travelling, waiting, cancellations)
• Academic detailing (e.g., topic discussion, follow-up questions, other issues)

Data analysis is underway. A more qualitative analysis of time spent in the process of collaboration on topic preparation is also being done.

5. Rural Evaluation of AD study

Through their Rural Evaluation of Academic Detailing study, the Prescription Information Service of Manitoba (PrISM) is determining if printed educational materials and academic detailing have an impact on the prescribing of β-blockers for congestive heart failure and of benzodiazepines in the elderly. Physicians were requested to complete a questionnaire on their attitudes and beliefs related to particular prescribing behaviours. These questionnaires enhanced the understanding of physicians' intentions in relation to prescribing β-blockers and benzodiazepines. PrISM used a cluster stratified randomized controlled trial with 60 general practitioners (GPs) from two rural regional health authorities. The two-arm intervention included the experimental intervention (PEM mailed to GPs) plus academic detailing (follow-up discussion with GPs regarding printed materials) and a control arm (PEM on separate topic mailed to GPs). PrISM is assessing the cost-effectiveness of these initiatives by collecting time-and-motion and expense data.

6. Family physicians' perceptions of AD

The Continuing Medical Education unit of the Faculty of Medicine at Dalhousie University (Nova Scotia) conducted a project to determine factors that encourage and discourage physicians from using AD. Questionnaires were mailed to family physicians who had never used the AD service (n = 393), had used it once (n = 97), and had used it more than once (n = 379). The overall response rate was 33% (n = 289), with the groups having rates of 18%, 29%, and 51%, respectively. Physicians from each of the three groups were also interviewed.

The factors most likely to encourage participation in AD are using an evidence-based approach, covering topics useful to practice, and providing useful handout material. Factors discouraging participation include spending office time doing CME, scheduling time to see detailer, and having CME provided by a non-MD. Interviews confirmed the questionnaire data. As a result of the study we will maintain our comprehensive evidence-based approach and seek other ways to provide evidence-based messages to physicians who find academic detailing inconvenient.

7. Use of patient lists and chart inserts

Dalhousie CME is testing physicians' use of patient lists for those patients who are taking medications

Sommaire

Le profilage de recherche favorisant la prescription rationnelle est un concept relativement nouveau au Canada. En 2003, des programmes de cinq provinces ont formé la Canadian Academic Detailing Collaboration, afin de préparer les sujets de recherche en faisant preuve d'une précision et d'une efficacité accrues, et en diffusant plus efficacement les données probantes. En 2004, le regroupement a entamé un projet d'évaluation de deux ans pour définir les pratiques exemplaires, grâce à une subvention de Santé Canada. Le présent article décrit les programmes mis en œuvre en Nouvelle-Écosse et dans les provinces de l'Ouest, ainsi que leurs évaluations coordonnées.

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TABLE 1 Canadian Academic Detailing Collaboration programs

	BC Community Drug Utilization Program	Optimal Prescribing in the Millennium (Alberta)	RxFiles (Saskatchewan)	Prescription Information Services of Manitoba	Dalhousie Academic Detailing Service (Nova Scotia)
Started	August 1993	Initial demonstration project in 2001	Initial pilot in May 1997	Spring 2003	Fall 2001
Funding	British Columbia Pharmacare	Alberta Health & Wellness	Saskatchewan Health	Unrestricted grant from industry to Manitoba Health	Nova Scotia Department of Health
Managed by	Pharmacy Department, Lions Gate Hospital	Alberta Drug Utilization Program	Pharmaceutical Services, Saskatoon Health Region	Manitoba Pharmaceutical Association	Dalhousie University Continuing Medical Education
Staff	1 FTE detailer/ researcher (pharmacist); 0.2 FTE pharmacy manager	2.2 FTE detailers (pharmacists); ~0.2 FTE secretary; 0.3 FTE director; development and production of education materials contracted out	5 detailers (pharmacists); 2 researchers plus support staff (i.e., total 2.9 FTEs)	1 FTE (2 part-time pharmacists)	1.8 FTEs among 3 detailers (2 pharmacists & 1 nurse); 0.3 FTE director; 0.3 FTE drug evaluation pharmacist
Target audience	~80 family physicians in North Vancouver	250 physicians in Calgary and David Thompson Health Regions	~600 physicians and other health care providers in Saskatchewan	Family physicians, pharmacists and other health care providers in Manitoba	700 family physicians and other health care providers in Nova Scotia
Physicians detailed per topic	~50 detailed/topic	~90 physicians detailed/topic in central Alberta and ~140 in Calgary	~350 detailed/topic	~50 detailed/topic	~350 physicians detailed/topic
AD topics in 2005	Atrial fibrillation, statin update, aggressive statin therapy, hormonal contraception	Dyslipidemia, pneumonia	Fluoroquinolones; anti-infective guidelines; Parkinson's treatment; restless legs syndrome; opioids in chronic non-malignant pain	Spironolactone in heart failure; oral vitamin K1 in the management of high INR; transdermal fentanyl; pitfalls in drug therapy; statin usage in dyslipidemia	Statins and prevention of CHD; clopidogrel in acute coronary syndrome
AD session	10–15 minutes in duration	~25 minutes in duration	20–30 minutes in duration for individuals; 30+ minutes for groups	~15 minutes in duration; group sessions 30–60 minutes	20–25 minutes in duration
Other interventions	Newsletter *The Review* published at least 4 times/year	-Provincial clinical practice guidelines -Local physician opinion leader -Multidisciplinary CE event to launch topic -Prescribing feedback reports to physicians	Newsletter *RxFiles* published 3 to 4 times/year -Additional Q&As -Small group education; resident & student training -Medicine/Pharmacy/ Nursing continuing education -Annual Drug Comparison Chart Book, PDA support	-Newsletter *Spectrum* (pharmacists) and *Spectrum* MD (physicians) -Both individual and group sessions held -CE presentations to pharmacists and nurses	-Detailed handbook on topic -Small group interactive sessions -Pharmacy/nursing CE programs

FTE = full-time equivalent.

discussed in the detailing session. The detailers come with a letter prepared for the physician to sign, requesting such data from the Ministry. The BC evaluation team at University of Victoria is conducting a Chart Insert Pilot Study to assess the readiness of physicians to use patient-specific chart inserts to serve as reminders of prescribing messages.

Useful websites

BC Community Drug Utilization Program
www.cdup.org
Alberta Drug Utilization Program
www.ualberta.ca/~adup
The RxFiles Academic Detailing Program
www.RxFiles.ca
Prescription Information Services of Manitoba
www.prisminfo.org
Dalhousie Academic Detailing Service
http://cme.medicine.dal.ca/ADS.htm

8. Collaboration on topic development

All the CADC programs collaborated with each other on developing evidence-based information on the role of statins in the prevention of coronary heart disease. The details of the project will soon be submitted for publication. The group also plans to work with the Canadian Optimal Medication Prescribing and Utilization Service (COMPUS), reviewing its materials and recommendations concerning proton pump inhibitors.

Conclusion

The CADC is still too new to achieve the efficiencies in topic preparation that they aim for. However, they have picked up and applied new ideas from each other's programs and feel the evaluations will contribute further insights and serve as a guide to best practices for academic detailing. They are planning other collaborative projects after the Health Canada evaluation is completed. ■

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References

1. Anderson GM, Lexchin J. Strategies for improving prescribing practice. *CMAJ* 1996;154:1013-17.

2. Pharmaceutical Health and Rational Use of Medicines Committee (PHARM), Australian Pharmaceutical Advisory Council (APAC). Quality use of medicines: a decade of research, development and service activity 1991-2001. October 2001. Available: www.health.gov.au/internet/wcms/publishing.nsf/Content/nmp-pdf-qumresearch-cnt.htm (accessed December 6, 2005).

3. Thomson O'Brien MA, Oxman AD, Davis DA, et al. Educational outreach visits: effects on professional practice and health care outcomes. *The Cochrane Database of Systematic Reviews* 2005, Issue 4.