

Show Me The Evidence

Best practices for using educational visits
to promote evidence-based prescribing



Executive Summary

2006

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A project of the
Canadian Academic Detailing Collaboration
and Drug Policy Futures



Executive Summary

Pharmaceutical detailing represents a key industry strategy for the promotion of prescription drugs.

Academic detailing programs aim to deliver independent, evidence-based information about best prescribing practices to physicians.

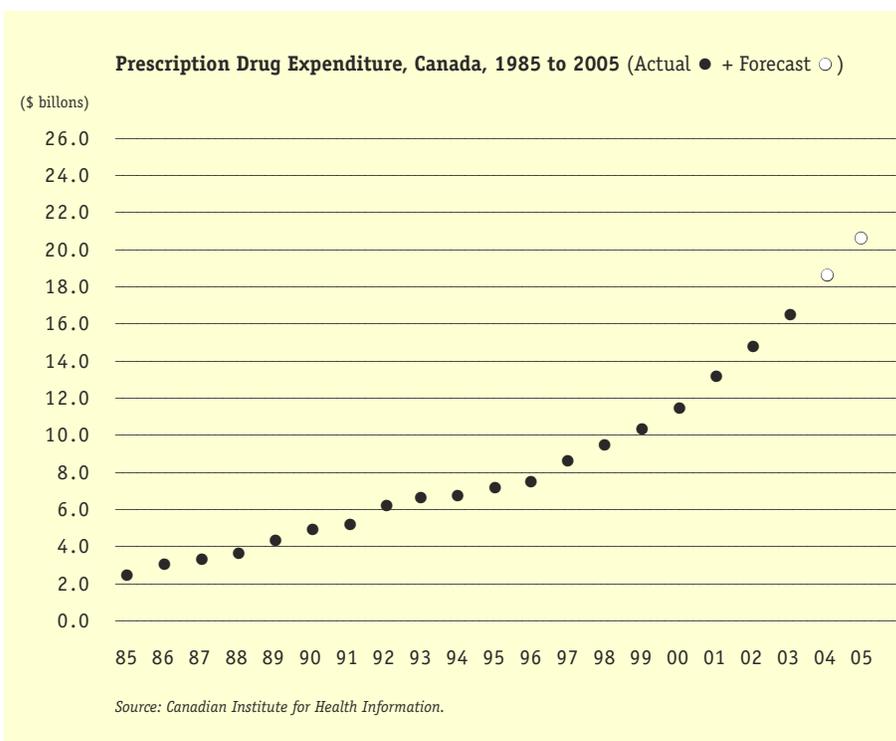
Pharmaceutical detailing, or visits by drug company sales representatives to physicians, represents a key industry strategy for the promotion of prescription drugs. While this promotional practice is far from new, the size of the pharmaceutical sales force has grown in recent years. From 1998 to 2002 the number of drug company detailers working in Canada increased from 3,990 to 5,190 (IMS Health Canada).¹ In 2002, this translated to one sales representative for every 11.4 doctors in Canada. As in other countries around the world, drug companies in Canada are devoting considerable resources to promoting their products directly to physicians in hospitals or in their offices.

Academic detailing has emerged as one strategy to provide balanced messages in the face of the perceived commercial influence of pharmaceutical company detailing on physicians' prescribing. Academic detailing programs aim to deliver independent, evidence-based information about best prescribing practices to physicians through one-on-one or small group visits. This strategy has been used in five Canadian provinces and in Australia, New Zealand, England, the Netherlands and the U.S. Programs operate at arm's length from government, and this independence is valued by physicians.

At a time when drug costs are escalating and drug safety controversies are making the front pages, academic detailing represents a well-tested, effective strategy to promote both cost effectiveness and better patient health by providing evidence-based information to physicians on appropriate prescribing.

In 2005, prescription drug expenditures in Canada continued their steady climb, increasing by 11.5% over the previous year to reach an estimated \$20.6 billion (CIHI 2006). Drug safety issues go far beyond the high-profile withdrawals of Vioxx™, Bextra™ and Baycol™ from the Canadian market. Important safety issues are raised for approximately 20 percent of new drugs after entry to the market (Peterson 2006). Clearly physicians need up-to-date, reliable information to enable them to deliver the safest and most cost-effective care to their patients.

1. This figure includes field managers.



Evaluating academic detailing

While previous research has established that academic detailing represents an effective strategy for promoting optimal prescribing practices (Thomson O'Brien *et al.* 2000; Grimshaw *et al.* 2004), more understanding is needed about best practices in the field. For this reason, members of the Canadian Academic Detailing Collaboration (CADC) in partnership with University of Victoria–based research group Drug Policy Futures set out a multi-faceted approach to studying best practices in academic detailing in a two-year evaluation program from May 2004 to April 2006.

Participating programs included the B.C. Community Drug Utilization Program, the Alberta Drug Utilization Program, the RxFiles Academic Detailing Program (Saskatchewan), Prescription Information Services of Manitoba, and the Dalhousie Academic Detailing Service (Nova Scotia).

The objectives of the study were to assess:

- Current literature and experience relating to *best practices and innovative approaches* for academic detailing and evaluation;
- Key aspects of both the *process of academic detailing* and the *process of collaboration* among academic detailing programs and stakeholders;
- The feasibility of *outcome evaluation* using a rigorous randomized design and inter-provincial collaboration; and
- Lessons learned from this project and potential *actions* for detailing programs, their sponsors and stakeholders.

To meet these objectives, the study included the following main components: a survey of Canadian and international academic detailing programs, needs assessment of physicians, production and analysis of printed educational materials, a time and motion study, an assessment of the feasibility of outcome evaluation, and an evaluation of the process of collaboration.

In 2005, prescription drug expenditures in Canada increased by 11.5% to reach an estimated \$20.6 billion.

Physicians need up-to-date, reliable information to enable them to deliver the safest and most cost-effective care to their patients.

This study focused on developing a framework for best practices in academic detailing.

Success in academic detailing depends on insightful and balanced messages, training and upgrading of detailers, and addressing barriers to prescribing behaviour change.

Physician participation is encouraged by the evidence-based approach of academic detailing and selection of the most relevant topics.

Applying recommended practices from the field of information design to printed educational materials improves their effectiveness.

Preliminary results suggest physicians increased prescribing of recommended therapies as a result of academic detailing on heart failure in B.C.

Key findings: developing best practices

Canadian and international experience

- The design of the message and the delivery of the information should recognize and address the barriers to changing the prescribing behaviour of the physicians being targeted.
- Success in academic detailing relies on the credibility of the program, the detailers and their educational materials. This depends on insightful and balanced messages, training and upgrading of detailers, and addressing barriers to prescribing behaviour change.
- It is also important for academic detailing programs to be independent from industry and operate at arm's length from government.

Needs assessment of physicians

- Participation of physicians is encouraged by the evidence-based approach of academic detailing, selecting relevant topics, and handouts that complement visits.
- Factors that discourage some physicians from participating include dislike of visits during office hours, the inconvenience of arranging visits, and delivery of academic detailing by non-physicians.

Printed educational materials

- Applying recommended practices from the field of information design to printed educational materials improves their effectiveness. Better designed materials were easier to use and helped physicians perform search and recall tasks more efficiently.
- Monitoring of physician response to educational material design provides an opportunity to enhance their acceptability and effectiveness.
- National collaboration on development of printed educational materials should allow for local adaptation of materials and messages to address individual academic detailing program priorities and local physician needs.

Time and motion study

- Time and motion analysis provides the opportunity both for improving program efficiency and for planning development or changes to academic detailing programs.
- Costs to provide academic detailing services will vary widely depending on geography, number of detailers, number of physicians, and most importantly—the depth and nature of research/review required.
- On one topic, costs ranged from \$278 to \$389 per physician visit, including research, training, visits and administration. This represented costs of \$115 to \$316 per prescriber, since some visits included more than one physician.

Outcome evaluation

- Preliminary analysis of results from the B.C. Community Drug Utilization's randomized crossover study of academic detailing on heart failure indicates that academic detailing influenced physicians to increase prescribing of recommended drug therapies.
- Building on the precedent of randomized trials for impact evaluation in B.C., randomized designed delays have been piloted as a methodology for conducting impact evaluation of academic detailing in other provinces.
- Canadian programs are interested in ongoing impact evaluation. However, the resources required for conducting trials and completing data analysis represent a challenge for academic detailing programs. Additional external funding will likely be required for building capacity in this area.
- Continuing to work toward completing impact evaluations in all Canadian academic detailing programs would be a worthwhile goal and a significant legacy of the framework already established by CADC member programs.

Collaboration on academic detailing

- This collaborative evaluation has provided an opportunity for Canadian academic detailing programs to build capacity in several areas of process and outcome evaluation and to help determine effective ways of partnering with one another and with groups such as Drug Policy Futures.
- Among the CADC's successes are the level of cooperation it has achieved and a regular exchange of feedback, experience and expertise. Key challenges of collaboration among academic detailing programs include how to collaborate efficiently and how to reconcile local and national priorities in areas such as printed educational materials development.
- A growing partnership between the CADC and the Canadian Optimal Medication Prescribing and Utilization Service (COMPUS) has developed. The groups are natural partners. COMPUS would benefit from ongoing testing of interventions it is developing, while the CADC has expertise in evaluation and is in regular contact with over a thousand physicians across Canada.

Role for academic detailing in Canada

First Ministers have directed that Canada's National Pharmaceuticals Strategy include as one of its priority actions: *Enhance action to influence the prescribing behaviour of health care professionals so that drugs are used only when needed and the right drug is used for the right problem* (Health Canada 2004). Since academic detailing programs have been established in Canada for precisely this purpose, it is fair to ask: What steps have provinces taken to expand the use of academic detailing in Canada? How does academic detailing form part of a larger evidence-based strategy to promote appropriate drug therapy that is safe, effective and cost-effective?

To date, academic detailing services in Canada have operated on a modest scale. While drug companies employ a sales force of more than five thousand, five Canadian academic detailing programs employ a combined workforce of 10.2 full-time equivalent (FTE) positions (Bacovsky *et al.* 2006). In 2005, programs detailed from two to five topics each and collectively reached about 1,000 doctors per topic (in a country with more than 60,000 doctors). While academic programs in the smaller provinces of Nova Scotia and Saskatchewan operate on a province-wide basis, other programs are less extensive.

One might expect that provinces are planning to ramp up these modest programs to address public concerns about drug safety and a growing drug cost crisis and that the provinces without these services would be moving to establish academic detailing programs. In reality, there is evidence that the existing academic detailing services in Canada are under threat.

Alberta Health and Wellness has recently decided to eliminate funding for the Alberta Drug Utilization Program. The rationale for cutting the program is not clear but apparently relates to shifting priorities within the ministry. Fortunately, the Calgary Health Region has made a decision to fund academic detailing for family physicians within the health region. However, the elimination of the Alberta Drug Utilization Program represents a reduction in the reach of academic detailing services within the province, since these services were also being delivered in the David Thompson Health Region.

Similarly, funding for academic detailing in Manitoba (delivered by the Prescription Information Services of Manitoba) may not be extended in the near future.

Canadian academic detailing programs make an ideal partner for COMPUS, which would benefit from ongoing testing of interventions.

To date, academic detailing services in Canada have operated on a modest scale.

Despite evidence that academic detailing is an effective tool for influencing prescribing behaviour, existing academic detailing services appear to be under threat.

Auditors General in a number of provinces have drawn attention to the value of academic detailing.

The B.C. Auditor General suggests the ministry should consider expanding the use of academic detailing in the province.

Systematic reviews of existing evidence conclude that academic detailing visits can effectively influence the practices of health professionals.

Impact evaluation has suggested that academic detailing programs in Canada effectively influence physician prescribing practices.

This runs contrary to recent studies conducted by provincial Auditors General across Canada and contrary to the evidence that academic detailing is an effective tool for influencing prescribing behaviour.

Auditors General recommendations and comments on academic detailing

Auditors General in a number of provinces have drawn attention to the value of academic detailing or the need for evaluation of programs such as academic detailing which aim to promote optimal prescribing:

- In Nova Scotia, the Auditor General advised that the province's Department of Health should ensure that activities to promote better prescribing, such as physician participation in academic detailing, are enhanced (Nova Scotia 2004).
- In Newfoundland and Labrador, the Auditor General drew attention to the fact that the province lacks an academic detailing service while encouraging the Health department to be more proactive in minimizing costs to its drug program (Newfoundland and Labrador 2005).
- A report from Saskatchewan's Provincial Auditor acknowledged the province's efforts to promote better prescribing through programs such as academic detailing but called for better assessment of these programs to ensure they are meeting the drug plan's objectives (Saskatchewan 2005).
- The B.C. Auditor General suggests the ministry should consider expanding the use of academic detailing in the province, since other jurisdictions such as Saskatchewan and Nova Scotia are funding academic detailing programs at a level above that in British Columbia. The B.C. program serves primarily family physicians on Vancouver's North Shore. (British Columbia 2006)
- Manitoba's Auditor General recently concluded that Manitoba Health has not been active enough in promoting the most appropriate and cost effective prescribing practices to physicians through communication of best practice information (Manitoba 2006).

Effectiveness of academic detailing

Evidence from other jurisdictions. Systematic reviews of existing studies on academic detailing by Thomson O'Brien *et al.* (2000) and Grimshaw *et al.* (2004) conclude that academic detailing visits can effectively influence the practices of health professionals or prescribing practices of physicians in particular. Grimshaw *et al.* found that 11 of 13 clustered randomized controlled trials (RCTs) of educational interventions incorporating academic detailing showed improvements in the performance of health professionals. These trials demonstrated a median effect of 6% absolute improvement in performance.

Evidence in Canada. Some provincial academic detailing programs have used non-randomized drug utilization reviews (DURs) to measure the impact of academic detailing sessions, and a key goal is to move toward ongoing rigorous impact evaluation using a randomized design. Significant progress toward the use of a randomized design for evaluation has been made in the past two years.

Impact evaluation using drug utilization reviews by some provinces has suggested that academic detailing programs in Canada effectively influence physician prescribing practices. For example, a pre- and post-intervention comparison of adherence to clinical practice guidelines on osteoporosis suggested physicians receiving academic detailing on this topic from the Alberta program showed higher guideline adherence than a non-randomized control group.

Preliminary results from a randomized trial of academic detailing on heart failure in B.C. suggest physicians increased prescribing of recommended therapies as a result of the intervention. Other programs have made progress in implementing randomized trials of academic detailing, although analysis of these trials has yet to be completed.

Recommendations

- National policy towards pharmaceutical use as reflected in the evolving National Pharmaceuticals Strategy should be grounded in evidence-based medicine and measures to promote appropriate, cost-effective drug therapy and better patient outcomes. Academic detailing should form a primary component of the strategy (among other evidence-based policies, such as maximum allowable cost).
- The National Pharmaceuticals Strategy should include plans to ramp up existing academic detailing programs and initiate programs in provinces where these services are not currently provided. This would support the dissemination of evidence-based recommendations from the Canadian Optimal Medication Prescribing and Utilization Service (COMPUS).
- Alberta Health and Wellness and Manitoba Health should recognize the value of academic detailing and ensure funding for the delivery of these services to address the need to promote effectiveness, safety and cost-effectiveness in prescribing practices.
- Ongoing evaluation of academic detailing should be supported by provincial drug plans and federal agencies to promote best practices and strengthen the impact of these programs. Impact evaluation using a rigorous randomized design should be used to assess prescribing and health outcomes.

Contents of this report

This report describes a two-year evaluation program undertaken by the Canadian Academic Detailing Collaboration in partnership with Drug Policy Futures to develop a framework for best practices in academic detailing. It may therefore be read as a guide for academic detailing programs, program sponsors and stakeholders for decision-making to promote best practices in academic detailing.

The report is divided into the following sections:

PART ONE: *Process evaluation*, summarizes a series of studies on key aspects of the process of academic detailing.

PART TWO: *Outcome evaluation*, describes the experiences of the five participating Canadian academic detailing programs in evaluation of the impacts of academic detailing on prescribing and presents findings with respect to outcome evaluation practices.

PART THREE: *Collaboration on academic detailing*, provides a review of the process of collaboration among the members of the Canadian Academic Detailing Collaboration and other partners, and describes the challenges and opportunities for effective collaboration.

Lastly, a concluding section, *From evaluation to best practices*, provides reflections on lessons learned from this project and next steps for future collaboration and promotion of best practices in academic detailing.

The National Pharmaceuticals Strategy should include plans to expand the reach of academic detailing services in Canada.

Ongoing evaluation of academic detailing should be supported by provincial drug plans and federal agencies to promote best practices.

This report describes a two-year evaluation program undertaken to develop a framework for best practices in academic detailing.

Canadian Academic Detailing Collaboration

Canada's provincial academic detailing programs work in concert as the Canadian Academic Detailing Collaboration. Since 2003–2004, the CADC has also worked closely with the Drug Policy Futures research group on research and evaluation.

The CADC's stated mission is to enhance the depth and breadth, reach, efficiency and effectiveness of academic detailing programs in Canada. The group's activities include regular communication, education and training, advocacy, partnering with other agencies, and research and evaluation.



British Columbia

B.C. Community Drug Utilization Program

<http://www.cdup.org/>

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Alberta

Alberta Drug Utilization Program

<http://www.uofaweb.ualberta.ca/adup/>



Saskatchewan

RxFiles Academic Detailing Program

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Manitoba

Prescription Information Services of Manitoba (PrISM)

<http://www.prisminfo.org/>

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Nova Scotia

Dalhousie Academic Detailing Service

<http://cme.medicine.dal.ca/ADS.htm>

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Drug Policy Futures

Our team, Drug Policy Futures, operates from the School of Health Information Science at the University of Victoria with funding from the Canadian Institutes of Health Research and the Canadian Medical Association to study innovations in pharmaceutical policy.

We conduct research with a variety of partners, including academic researchers, provincial drug plan managers and employers to develop tools for better policies and management for drug benefit plans.

A key focus of our work is the use of evidence to improve pharmaceutical policies.

Drug Policy Futures

<http://www.drugpolicyfutures.ca>

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A project of the Canadian Academic Detailing Collaboration and Drug Policy Futures

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This report is available in electronic form on the following websites: <http://www.cdup.org>, <http://www.rxfiles.ca/> CADAC, <http://www.prisminfo.org>, <http://www.drugpolicyfutures.ca>

The contents, opinions and any errors contained in the report are the full responsibility of the authors.

Design and photography: George Allen at Design | Strategy | Research |^{INC}

Participating organizations:

- B.C. Community Drug Utilization Program (BC CDUP) <http://www.cdup.org/>
- Alberta Drug Utilization Program (ADUP) <http://www.uofaweb.ualberta.ca/adup/>
- RxFiles <http://www.rxfiles.ca/>
- Prescription Information Services of Manitoba (PrISM) <http://www.prisminfo.org/>
- Dalhousie Academic Detailing Service <http://cme.medicine.dal.ca/ADS.htm>
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