

EDITORIAL

A Canadian quest for optimal drug prescribing: 40 years on

Count what is countable, measure what is measurable. What is not measurable, make measurable.
[Galileo, 1564-1642]

The symposium proceedings, 'Prescribing indicators: What can Canada learn from European countries?' that appears in this issue [J Popul Ther Clin Pharmacol Vol 19\(1\):e78-e98](#) provides food for thought to Canadian policy makers. The article, which is based on an important meeting held in Halifax in June 2009, presents useful advice from three European settings and brings into focus the question of why Canada has not developed a comparable emphasis on measurement of prescribing indicators. This gap in our national drug policy armamentarium is particularly surprising in view of the considerable strengths that Canada possesses in the disciplines that are critically important to evaluation of prescribing, viz, clinical pharmacology, clinical pharmacy, clinical toxicology, pharmacoepidemiology, drug safety studies, pharmacoconomics and outcomes review.

Of course, the failure to evolve national prescribing indicators may, in part, reflect a conscious decision. Canadians are generally second to none in their enthusiasm for performance indicators applied to health care. However, behind this enthusiastic acceptance there is a persistent rumble of discontent reflecting a belief that performance indicators are often too heavily focused on management issues and cost containment, with insufficient attention paid to leadership in pursuit of optimal health outcomes. In any system that elects to focus heavily on indicators, there is a danger that focus will be unintentionally misplaced and that the choice of indicators will create a blindness to important outcomes that remain unidentified. When drug prescribing is considered, this danger is high because optimal performance has never been consistently defined.

Nonetheless, it is a fact that Canada has lagged substantially in agreement on prescribing indicators and the article by Sketris et al should

provoke a constructive review of our position. In the early days of drug surveillance there was active Canadian involvement in drug safety studies and distinctive Canadian participation in the Boston Collaborative Drug Surveillance Program.¹ Many will also recall the efforts made in the 1990s to develop the Canadian Pharmaceutical Information Agency (CAPIA). CAPIA set forth a pan Canadian vision and platform for the development and dissemination of well validated prescribing information across Canada. This worthy initiative was ultimately stillborn because of an all too common Canadian failing, the inability of provincial governments that bear ultimate responsibility for drug reimbursement plans to agree on a centralized process for therapeutic evaluation.

During the past two decades, there have been a number of initiatives to evaluate and improve drug use in Canada, some of which are mentioned in the Sketris paper. The most significant recent development has been the establishment of the Drug Safety and Effectiveness Network (DSEN), funded by Health Canada and embedded within the Canadian Institutes for Health Research.² DSEN was initiated in 2009 and has now created several platforms of research critically important to standardized drug evaluation. Most importantly, a network devoted to methodologic refinement and execution of drug use studies has been formed.

Canada has also made considerable efforts in the field of knowledge translation and knowledge mobilization and, when related to indicators of drug prescribing, this is most evident in efforts at academic detailing. More than a decade ago, studies of academic detailing across Canada were funded by the Primary Health Care Transition Fund³ and numerous academic centres have invested heavily in academic detailing programs led by both pharmacists and physicians.

There have also been a number of false starts and disappointments. Beginning in 2004 there was a brief flurry of promise that we would achieve an essential condition necessary for the success of drug prescribing indicators in bringing about the convergence of basic sciences, pharmaceutical sciences and population sciences relevant to the state of therapeutic practice. The Canadian Therapeutics Congress was created in Winnipeg in 2004 and for five years annually brought together basic pharmacologists, clinical pharmacologists, epidemiologists, outcomes researchers and clinical pharmacists and toxicologists to study the environment for therapeutics in a comprehensive fashion.

Then in 2009, for reasons difficult to discern, the pharmacoepidemiologists decided that they would prefer to meet in the absence of direct discussion about the place of pharmaceutical products in clinical practice. That decision seems particularly shortsighted at a time when the message is clear from all governments and funding agencies that they are particularly interested in identifying a return on investment that flows from a strategy for patient oriented research (SPOR).⁴ In the literature that CIHR has used describing SPOR, the challenge is described as crossing 'the second valley of death', moving from scientific validation of clinical treatments to actual change in the behaviour of health professionals involved in the prescribing and dispensing of treatments.

My response therefore to the provocative article of Sketris et al is that there is an underlying 'wicked problem',⁵ best expressed as a question: How can we best achieve a convergence of research and educational capacities needed to achieve best therapeutic outcomes and would success add or subtract from healthcare costs? The determinants of optimal prescribing are hugely complex and, while it is easy to endorse the pursuit of appropriate prescribing, it is very difficult at times to define what is inappropriate. That said, Canada is better equipped than most nations to conduct studies aimed at identifying the most effective therapeutic approaches; however, a pan-Canadian framework is lacking and, to some extent at least, there is insufficient trust among the various key disciplines that must come together to produce credible, comprehensive evaluation of therapy. Unfortunately, Canadian efforts, laudable

though they may be, are often region specific, focused on the short term and lacking overall coordination and commitment to needed knowledge mobilization.

It would be an exceptional outcome for Canada if the meeting described in this issue were to succeed in focusing our attention on the underlying 'wicked problem' and galvanize us in efforts to produce a national strategy for promotion of optimal drug prescribing. Forty years of effort would at last be duly rewarded.

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REFERENCES

1. Borda IT, Napke E, Stapleton C. Drug surveillance data in a Canadian hospital. *Can J Med Assoc* 1976;114:517-22.
2. Drug Safety and Effectiveness Network. <http://www.cihr-irsc.gc.ca/e/40269.html> [accessed April 02, 2012]
3. Health Canada. Primary Health Care Transition Fund. <http://www.hc-sc.gc.ca/hcs-sss/prim/phctf-fassp/index-eng.php> [accessed April 02, 2012]
4. Canadian Institutes of Health Research. Strategy for Patient-Oriented Research. <http://www.cihr-irsc.gc.ca/e/41204.html> [accessed April 02, 2012]
5. Rittel HWJ, Webber MM. Dilemmas in a general theory of planning. *Policy Sciences* 1973;4:155-69.