



Knowledge Translation: *The Next Big Thing*

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Looking back

Stepping off the rapidly moving platform that has been the job of the associate dean of continuing medical education (CME) at the University of Toronto since the mid 1990s gives me an opportunity for “reflection-on-action.”

This is a neat concept, articulated best by Schon, more often applied to clinical situations where we learn by thinking about a past encounter (*e.g.*, in the emergency room)—what went right, what went wrong and how we might improve the outcome. This is an internal quality improvement.

This point in time also provides me with the great luxury of being able to write to my family practice colleagues across the country as an open letter to the primary care CME community.

After messing with it over the last decade at the University of Toronto, here's my take on the CME scene in Canada.

There is plenty to comment on that is good. I'll list some of the accomplishments which have made CME better, especially those that I've seen at the University, including:

- more workshops and small group learning activities;
- better needs assessments;
- standard additions of useful handout materials;
- more alternatives to the standard course, such as video-conferencing or Webcasting;
- more interprofessional education;
- more in-depth workshops, often in topics frequently ignored by industry (*i.e.*, communication skills training, palliative care and psychosocial issues);
- better interactive lecturing and
- some strides in self-directed learning.

Some of us have even begun to tackle public education. Our colleagues in the country's other medical schools and the two professional colleges have also done a heck of a job—I note the Maintenance of Certification Program of the Royal College, in particular.¹

But there's some not-so-good out there, too. In many ways, despite all its success, I would say that organized CME has failed miserably to help family physicians (and many others, including patients) in the way they need it. Here are some cases in point:



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1. There are many examples of overuse in the system—we still order far too many routine preoperative chest X-rays,²⁻⁵ use back X-rays as a treatment for acute low back pain⁶⁻⁸ and prescribe way too many antibiotics.⁹⁻¹¹
2. In case our friends in ministries of health get too excited about reducing overuse, there are plenty of examples of underuse—low Pap smear rates,^{12,13} inadequate diagnosis of depression^{14,15} and low rates of adequate post-myocardial infarction care.^{16,17}
3. There are also many examples of rapid diffusion of information about the good (some might say overblown) qualities of a new drug and the much slower diffusion of information about its side-effect profile.

Whose fault is this? This is a big question and the answers to it, I have come to believe, can be described, analyzed and improved using the rubric of “knowledge translation”—the study of getting best evidence to physicians, professionals and patients in a timely and effective manner.

The knowledge translation questions

As I see it, there are four major topics or chunks of study which fall under the knowledge translation umbrella, all partial answers to the questions raised above. The reader may see even more parts to the puzzle, but this is my take.

The first is the target of learning or change—the clinician (notice I didn’t just say doctor), the patient and even public members.

Have we trained clinicians adequately to handle the information overload problem? Have we given them the right skills to critically appraise information, distill it and use it? And what about ensuring patients get the right information? We certainly know that there’s a lot of misinformation out there too.

Second, what about the sources, types and formats of information, like guidelines, newsletters, monographs, journal articles and reviews? Is the information clear to clinicians? Is it redundant, clear or, worst of all, not evidence-based? Is it concise, readable and accessible? What about guidelines? Are there too many? Are they too cumbersome? Are they unhelpful? (I can hear the resounding “yes” even now).

Third, what about the delivery method, the ways in which we get the information to the “consumer?” Do they get the information to you at the point of care, at the time you need it? (I can hear the “no” even as I type this; I told you we’ve messed up in CME).

Finally, what is the role of the health-care system? It is an endless list of “not getting it,” of making practice more (not less) difficult. This last subject could fill books (and does) and is the subject of the Ontario Ministry of Health’s Transformation Agenda,¹⁸ among others.

So, what to do?

Looking forward: The next big thing

Enter knowledge translation. At the University of Toronto, these questions have been the driving force behind the creation of a research group interested in studying the many faces of the effective knowledge-to-practice research agenda. Here are some examples of our work:

- getting evidence on palm pilots or computer-based programs;
- studying the effect of short, mailed, printed messages;
- analyzing how physicians use their time at CME conferences to promote learning;
- studying the effect of Webcasting;
- evaluating the effect of guideline implementation and
- looking at organizational factors which influence the adoption of knowledge.

We've also become involved in a more practical process, allying with the Guidelines Advisory Committee of the Ontario Medical Association and the Ontario Ministry of Health to provide distilled, evidence-based information to physicians in ways which help (at the point of care) their patients and their practices. In some ways this is the practical face of the knowledge translation agenda.

On a personal note, my University of Toronto sojourn has been a wonderful ride, aided by terrific people, a great faculty and an incredible university. If nothing else, it has provided me with the opportunity to observe the deficiencies of the CME system and to devote some energy to fixing it.

This last piece, the fixing thing, is enough to keep me busy for the next decade or so and all of us busy for many years after that. Clearly, when we have some answers and when we're able to point to more success and evidence-based practice across the country, it will also provide food for more reflection, Schon-style.

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Further references available—contact *The Canadian Journal of CME* at cme@sta.ca.