FEATURE

KNOWLEDGE TRANSLATION AND THE DUTY OF CARE: A MEDICAL–LEGAL ANALYSIS

by Dr. Peggy J. Blair

Two major shifts have taken place in the medical–legal landscape in recent years. The first has been a shift towards "evidence-based" medicine. The second involves an enhanced focus on knowledge transfer, or "knowledge translation" (KT). KT is a somewhat vague term referring to the means by which evidence-based research in healthcare reaches its many stakeholders, including scientists, hospital administrators, doctors, researchers, policy makers, politicians and consumers.

KT is designed to respond to allegations that conventional medical treatments have often lagged behind medical knowledge. Examples sometimes offered include the fact that diethylstilbestrol (DES) was prescribed to pregnant women for years after evidence suggested it was ineffective, or that doctors prescribed calcium-channel blockers for heart attacks despite a lack of proof that they worked and some evidence they were harmful. To give a more recent example, menopausal women have long been urged to take hormone-based therapies until studies released in 2002 established that estrogen replacement therapy significantly raised their risks of breast cancer (Limbert 2003).

The Canadian Institutes of Health Research (CIHR) has popularized the term "knowledge translation." CIHR's objectives include a mandate to find ways by which research can translate into "improved health for Canadians, more effective health services and products, and a strengthened health care system" (*CIHR Act* 2000). Arguing that KT is a fundamental responsibility of the academic community, CIHR president Alan Bernstein has announced that his agency will establish a series of National Centres of Health Innovation that will help caregivers, policy makers, hospital administrators and other parties in the healthcare system to become more aware of new discoveries and new information about the efficacy of alternative forms of therapy (Canadian Federation for the Humanities and Social Sciences 2003).

In the past, it has been said that "considerable amounts of money have been spent on clinical research while relatively little attention has been paid to ensuring that the findings of research were captured by its potential beneficiaries" (Cochrane Musculoskeletal Group 2003). The very fact that a federal research funding agency has been given the Herculean task of funding research and then transferring the knowledge generated to such disparate groups represents a change in priorities in healthcare research and funding generally.

The task is certainly formidable. As Dr. Dave Davis, the Associate Dean of Continuing Education at the Faculty of Medicine, University of Toronto, has argued (Davis et al. 2003), a large gulf remains between what is known and what is practised.

Traditionally, research findings have been directed primarily at physicians through publications and continuing medical education. However, recent studies indicate that the mere dissemination of information has proven unsuccessful. Busy clinicians have little time to keep up with exponentially expanding studies through the traditional distribution of journals and other published works (Grimshaw 1998), given an overwhelming amount of information, demands by patients for immediate answers and the reality that practitioners "can't deliver everything" (Health Canada 2002). However, as the Cochrane Musculoskeletal Group (2003) has pointed out, healthcare professionals have a responsibility to keep up with research findings and must find "effective and efficient strategies for staying well informed of new, high-quality research findings." As the CMG concludes, with considerable understatement, "[i]n addition to time constraints, you may sometimes find the conclusions of individual articles conflicting or confusing, and feel uncomfortable changing your practice based on this literature."

Traditional methods of knowledge distribution are also limited by the fact that they are incapable of measuring whether the information has actually been applied. In this respect, KT is said to have the "potential to improve understanding of, and overcome the barriers to, implementing evidence-based practice." However, an overriding concern in finding appropriate KT processes for already overworked healthcare professionals is that they may have difficulty absorbing and processing available information, "even when the desire to do so exists and the avenues for obtaining good information are known" (Health Canada 2002).

At present, what literature there is indicates that passive educational activities are poor at changing physicians' behaviour, while multifaceted strategies are more effective. An example is the increased use of ramipril to prevent cardiovascular events in high-risk patients, achieved by a multifaceted approach involving

> widespread media coverage of the trial followed by national specialist continuing medical education events and journal reporting. Many of the opinion leaders in Ontario's cardiology community were trial investigators and participants. Adoption and adherence was reinforced by promotion of the drug by the pharmaceutical industry through marketing practices and hosting small group events. (Davis et al. 2003)

Several studies have also tried to change physician behaviour by using "feedback loops" involving respected peers who introduce doctors to new technologies, follow up with them and distribute statistics as to whether the new treatment has been incorporated into their practices. Such "dynamic" mechanisms have proven to have some success, although they have not addressed the issue of how many feedback loops any busy physician can realistically absorb.

As Limbert (2003) points out, a few teaching centres have already made the paradigm shift to evidence-based practice. The Department of Obstetrics, Gynecology, and Reproductive Sciences at San Francisco General Hospital, for example, has replaced traditional lectures with problem-solving seminars. Some organizations are publishing structured summaries of evidence-based practice guidelines, with information as to how they were derived.

Another factor driving the demand for KT involves the increasing amount of Internet research conducted by patients. Kendall Ho (2003) describes a typical situation: "It's a busy day in your office, and you are running behind. Your patient with arthritis of the knee greets you with a small stack of printouts from the Internet on glucosamine. She wants to know whether taking this medicine would be beneficial."

The Romanow Report highlighted the need for an expanded public health knowledge base, and recognized that the Internet can be used to meet a variety of needs. As a result, there is an increasing interest in applying a technology-enabled approach to KT.[1] With projects being planned that would ensure universal access to licensed medical research on-line, it

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is increasingly likely that patients will arrive at doctors' offices with materials that they have located on the Internet.

Assuming that KT processes are developed that place such research within easy reach of doctors as well as patients, the question arises as to what effect KT will have on physician liability. Will there be an increase in actions against doctors as informed patients question their medical care? Or will the courts expect consumers to inform themselves more, and rely less on the medical information provided to them by doctors?

Ironically, the more effective KT processes are, the more likely it is that legal actions will take place. Consumers with a greater understanding of possible treatments can be expected to be more demanding of their physicians and less forgiving of their errors. Claims of professional negligence are likely to increase as patients, armed with KT studies, disagree with steps taken by their doctors.

As well, an increased use of Internet-based KT is almost certain to lessen the distinction usually drawn between rural and urban doctors in terms of their respective access to resources while increasing the legal standard of care generally. Until recently, courts had found that a doctor need have only a "reasonable degree of learning and skill ordinarily possessed by practitioners in similar communities in similar cases."[2] This "locality rule," however, is already changing because of technological advances. It may be rejected completely once multifaceted approaches, including the Internet, are used as means of conveying information to physicians by CIHR and other "knowledge translation" agencies.

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In *Crawford v. Penney*, the Ontario Superior Court dismissed the defendant physician's arguments that "the standard of care to which a physician is to be held is flexible enough to allow for variations within the standard based on personal practice shaped by the surrounding body of practitioners."[3] In *obiter*, or non-binding remarks, the court declared there was no longer any basis on which to differentiate between the standard to which urban and rural physicians are held given advances in the distribution and availability of knowledge. As the court pointed out, given

> the improvements in modern communications, medical education and the uniformity of examinations for doctors in Canada … regard must be had to the present advanced state of the profession and to the easy means of communication with, and access to, the large centres of education and science. … Communications and access to information have improved greatly [so] that there is even less reason to differentiate between localities. … a principle that permits an inferior brand of medicine for rural Canadians cannot be countenanced.[4]

As a result, the rural practitioner was expected to adhere to *higher* standards in assessing risk, given his or her remote location "because of the lack of availability of immediate help. The need to refer patients to specialists, therefore, may be greater in a rural setting than in an urban setting." Importantly, the judge held that "[a] rural physician practicing his/her profession is under the same obligation as is a physician with a similar practice in an urban setting to keep up with developments in areas of medicine pertinent to their practices." Finally, the judge indicated that once information had been disseminated to family practitioners in Ontario, the physician had a duty to keep up with developments.[5]

The need to keep up to date of developments in medical treatment was also expressed in the decision of the Supreme Court of Canada in *Chevrette v. Lapointe*. There, Justice L'Heureux-Dubé made an oblique reference to "best evidence" as that based on treatment protocols available "at the time."[6] Her comments are a clear indication that a physician who disregards or fails to stay on top of information on best practices is likely to be considered negligent. Where agencies such as CIHR or researchers funded by them have produced research findings, and have taken steps to distribute them, then a physician may be found liable if he or she is not aware of them.

But will the legal relationship between patients and doctors also change owing to KT? Early views of the doctor–patient relationship assumed the physician was in complete control by virtue of his or her superior knowledge, with the patient vulnerable and dependent as a result. Recently, the Supreme Court of Canada found that the imbalance in the doctor–patient relationship created a fiduciary relationship and expanded the former duty on the part of a physician to use only reasonable skill, care and judgment.[7] An additional legal question arising from KT processes is whether this imbalance will change as patients became better informed. There are, for example, some cases in which the patients have themselves been physicians and have conducted their own medical research, raising the issue of just how sophisticated a patient must be before the physician's duty of care is correspondingly lowered.

This issue arose in *Atack v. Castle*.[8] Dr. Atack, an Ottawa neurologist, alleged negligence on the part of Dr. Castle, an orthopaedic surgeon. According to the decision, Dr. Atack had undertaken some research of his own into his particular health condition.[9] Although the court was at pains to insist that Dr. Atack's position as a physician was not a consideration in its decision, it nonetheless found that Dr. Atack's conduct, as someone knowledgeable with the healthcare system, compelled him to follow his doctor's advice. Dr. Atack's failure to follow up with his physician despite being advised to do so was found fatal to his claim.

Although it asserted that Dr. Atack's status as a physician was not relevant, the court nonetheless stated, somewhat contradictorily, that the fact that Dr. Atack was a doctor meant he was *not* like other patients: "It is not a sufficient explanation to say that he should be treated as a patient like any other patient. In other words, it is not sufficient for him to say that the fact that he also is a physician is not relevant."[10] The circuitous net in which Dr. Atack was caught is obvious. As a physician, he had questions about the standard of care he was receiving. His failure to abide by his physician's instructions, however, was evaluated on the basis not that he was a patient, but that as a physician, he should have known better than to ignore his doctor's advice and then allege negligence.

The court was asked whether the duty of a physician to a patient who is a physician is different than the duty to other patients. Although the court felt that the answer was "yes," it declined to make a definitive finding.[11] However, the court did suggest that the standard of care might well depend on how sophisticated the patient is:

> A professional, obviously, will be required to exercise more diligence when dealing with an unsophisticated and/or a very dependent client or patient where the professional is, or should be aware, that there is considerable reliance for advice and guidance, *i.e. more so than where the client or patient is a sophisticated self-reliant one.*[12]

If this is so, then while the standard of care required of a doctor may well be raised once evidence-based research become more readily available through KT, patients who avail themselves of "knowledge transferred" research may also face a higher standard of responsibility for the decisions they too make. In this manner, their "vulnerability" and the consequent degree of fiduciary responsibility held towards them by their doctors may well be affected by their own knowledge and sophistication. As the courts have also stated:

> [T]he fact that the common law imposes significant obligations on a doctor in a doctor–patient relationship does not mean that the patient is thereby absolved of all responsibility for himself and his well-being in his dealing with the doctor. The doctor–patient relationship is premised on trust. It is unique in the sense that the doctor's ability to discharge his fiduciary obligations to his patient is inextricably linked with the information imparted to him by his patient. How does this impact on the duty of care that a patient owes to himself? The duty a patient owes to himself is to do everything reasonably necessary to ensure he is not harmed, failing which he exposes himself to the submission that he has been contributorily negligent in the losses suffered by him.[13]

KT, then, may result in situations in which patients are found to have contributed to the negligence they allege. For example, the well-publicized "Million Women" study in the United Kingdom (Beral 2003) indicated that women taking long-term combination hormone-replacement therapy (HRT) could be twice as likely to develop breast cancer. In the future, a postmenopausal woman who is aware of the studies but decides to continue with HRT anyway may well be considered contributorily negligent.

There is another way in which KT may change the duty of care. KT studies that address treatment protocols are more likely to be seen by the courts as providing an objective standard of care than that provided by expert testimony. The duty on a physician to become informed, and to stay informed, then, may be much greater in the era of KT than previously. The failure to do so may carry greater consequences.

Notes

1. The Canadian Health Libraries Association's proposal to do this was discussed in the Romanow Report and has been supported by Health Canada, the Canada Institute for Scientific and Technical Information, the Association of Canadian Medical Colleges, the US National Library of Medicine and the Canadian Cochrane Network and Centre. However, at the time of writing this article, it has not yet been funded (McGowan et al. 2003).
2. *Wilson v. Swanson*, [1956] SCR 804 (SCC), at 817.
3. *Crawford v. Penney*, unreported decision, Ontario Superior Court, 15 January 2003, reference ONSC 2465-94.
4. *Ibid*., at para. 251.
5. *Ibid.*, at para. 253.
6. *Chevrette v. Lapointe*, [1992] 2 SCR 351 (SCC), n.p.
7. [1992] 2 SCR 224 (SCC).
8. *Atack v. Castle*, unreported decision, Ontario Superior Court, 15 May 2003, referenced as ONSC 99-CV-10517.
9. *Ibid.*, at para. 146.
10. *Ibid.*, at para. 197.
11. *Ibid.*, at para. 204.
12. *Ibid.*, at para. 208.
13. [1990] AJ No. 844 (Alta. QB).

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TELEPSYCHIATRY: IMPLICATIONS FOR LICENSING AND CREDENTIALING

by Dr. Harry Karlinsky

Telepsychiatry can be defined in many ways. In the following discussion, it is defined as the live, interactive audio and visual communication that is attained through videoconferencing and that appears to offer a reasonable alternative to the traditional face-to-face psychiatrist–patient encounter. Although telepsychiatry is an intuitively appealing means of increasing access to psychiatric expertise, especially in Canada's many underserved rural and remote communities, there are many obstacles to its widespread use. One of the consistently cited roadblocks is the issue of physician licensure—the formal process by which an official agency grants an individual the legal right to practise medicine. In Canada, this is a provincial or territorial responsibility (Pong and Hogenbirk 1999). The key question in the licensure debate surrounding the practice of telepsychiatry is whether the physician (in the case of this discussion, a psychiatrist) is considered to be practising in the province or territory where he or she resides or in the one where the patient is located.

Unfortunately, no consensus in Canada has been reached on where the site of care or locus of accountability is deemed to rest. In 1998, after two years of discussion and review, the Federation of Medical Licensing Authorities recommended to provincial and territorial licensing authorities that they adopt the positions "that when a physician provides a medical service by means of telemedicine, the service is deemed to occur at the patient's location" and "that physicians who wish to provide medical services by means of telemedicine in Canada must satisfy the licensing or registration requirement of the jurisdiction in which their intended patients reside" (Federation of Medical Licensing Authorities n.d.). The clear implication was also explicitly stated: that licensing authorities

> define professional misconduct in their jurisdiction as including practice by telemedicine by any member in respect of patients located in the jurisdiction of any other medical licensing authority in Canada in circumstances where the member has not obtained the necessary registration license or authority to do so from the medical licensing authority in whose jurisdiction the patient is located at the time such service is rendered.

As of October 2000, three provinces had declined to approve the recommendations, and efforts to resolve the issue have so far met with limited success (Carlisle 2000). For example, in a starkly opposing view, the Collège des médecins du Québec "considers that, in the practice of telemedicine, the medical act is performed in the place where the physician being consulted practises, and not in the place where the patient is" (Collège des médecins du Québec 2000).

Despite the lack of consensus on where a telehealth act is performed, it does seem to be clear that, if it is decided that the medical act occurs where the patient is located, then physicians who are providing telehealth from another province or territory will need to obtain licences in more than one jurisdiction. In these circumstances—and discussed from the broad perspective of telehealth activities in general rather than telepsychiatry per se—Pong and Hogenbirk have presented the various policy options related to addressing the dual or multiple licensure issue and have examined each in terms of its pros and cons (Pong and Hogenbirk 1999). Possible solutions cited include a national licensure system, telehealth