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This Issue

For Knowledge Transfer
Educational Influentials: Keeping each other informed

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The supplement:
Every issue of the Institute's *At Work* newsletter is accompanied by *Infocus*, which highlights specific issues or research findings as they relate to our stakeholders.

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INSTITUTE FOR WORK & HEALTH
INSTITUT DE RECHERCHE SUR LE TRAVAIL ET LA SANTÉ

Research Excellence Advancing Employee Health

Educational Influentials: Keeping each other informed

Not that long ago, most scientists believed that publishing their results was the final step in the research process. But in this new era of "knowledge transfer," many researchers realize that publication alone has limited value as a way to disseminate important research knowledge. They want better strategies that ensure key messages from their research are actually delivered to those who can put the findings into practice.

Earlier attempts at knowledge transfer involved "pushing" important messages out to intended audiences. Under the "push model," one identifies a specific audience that could use certain research information. Then a strategy is devised to deliver the message to that audience in order to inform them and/or to change practice behaviour.

More recently, those studying and those practicing knowledge transfer have recognized that "pushing" research is not as effective as building and sustaining relationships with target audiences. Listening to each other can create a win-win outcome. Research knowledge can be used to improve practice while "real-world" experiences from target audiences can enhance and improve the research process.

This has become known as the "exchange model" of knowledge transfer. The exchange model is built on networking theory[1] and is also supported by

knowledge transfer evidence. For example, research has found that knowledge uptake is better achieved through interactive processes–at least for most audiences–than by using more traditional methods such as lectures.[2]

At the Institute for Work & Health, we are moving toward a model that incorporates stakeholder input and participation throughout the research process (see graphic on page 3).

But to accomplish this ambitious goal, we must begin actively developing relationships with clinicians, public policy-makers, labour groups, workers, employers and prevention partners.

The Institute's Educational Influentials Project has begun the process of building relationships with several groups of clinicians in Ontario. It is enabling us to deliver our research-based messages to clinicians so they can incorporate evidence into practice decisions while at the same time we can hear their "real-world" experiences and ideas which may, in turn, help us design better research.

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WSIB Workplace Safety & Insurance Board
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Recognizing the challenge

Much of the research being done by IWH scientists involves learning more about the nature, course and treatment of musculoskeletal problems such as back and neck pain and soft-tissue injuries to the upper and lower extremities. Our researchers also look for new and better ways to measure disability caused by these problems and to help injured workers return to their jobs as quickly and as safely as possible.

We believe our research messages will be especially useful to practitioners who work on the interface of work and health–chiropractors, physiotherapists, kinesiologists, occupational therapists and occupational health nurses.

By some estimates, there are as many as 8,000 such clinicians in Ontario. The challenge for our small team of scientists and KTE specialists was to find some way to begin building ties with these practitioners.

In search of a methodology

To launch our relationship-building plan, we looked at the literature on knowledge transfer. Had other researchers investigated the best ways to transfer knowledge to clinicians? If so, which methods were most effective? This led us to the literature on Opinion Leaders.

The concept of Opinion Leaders–people within a group who act as natural mentors and teachers and thus influence others–is not new. But it has been given fresh currency within the knowledge transfer community. A recent Cochrane review defined clinical opinion leaders as "health professionals nominated by their colleagues as being educationally influential".[3]

"I feel a responsibility to my peers to find the most effective, efficient practices. The network is an excellent vehicle to disseminate information about what works and what doesn't work."

–Fergal O'Hagan
Kinesiologist &
Manager, Wellness Works Professionals

Much research into the role of educationally influential clinicians has focused on how Opinion Leaders can help implement a specific guideline or improve practice with a particular patient population–for example, within a defined practice environment such as a community, hospital or ward.[4]

However, our objectives are much broader. First, we want to build long-term relationships with rehabilitation professionals for the purpose of knowledge transfer and exchange; and second, we are interested in targeting clinicians across the entire province.

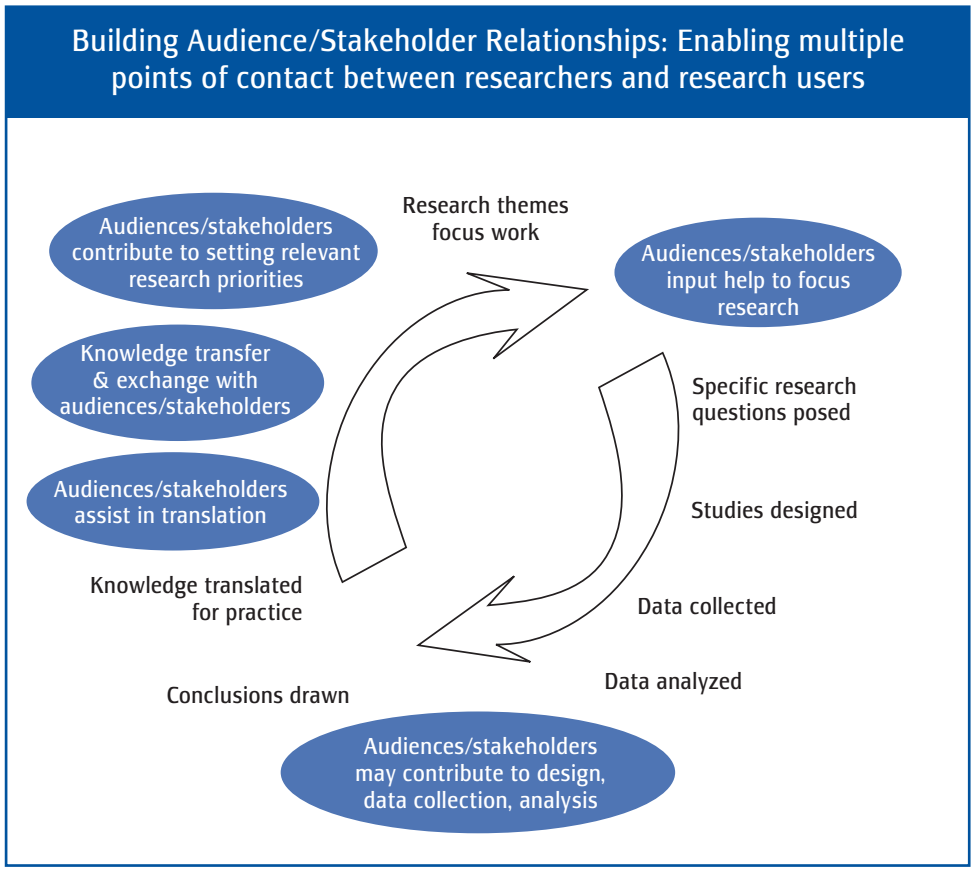
The literature describes methods for identifying and using formal opinion leaders–high-ranking academics or clinicians already singled out by professional or special interest organizations. Another standard approach has been to put out a call for volunteers–asking clinicians to "self-select" and serve as Opinion Leaders.

While there is merit in such approaches, we decided the best route–one most likely to yield success–was to target Opinion Leaders actually chosen by their peers. But how would we go about finding these people? We turned to work completed in the late 1970s by American continuing medical educator Roland Hiss[5] to assist us with the methodology.

Hiss demonstrated that within medicine, certain individual doctors were frequently sought out by their peers as informal teachers and mentors.

He found that these individuals–whom he called "educationally influential" (EI)–were perceived as sharing certain characteristics. To paraphase his findings:

They were seen as natural teachers. These clinicians expressed themselves clearly and concisely, they took time to



IWH model of incorporating stakeholder input in the research process

answer questions from students or colleagues and they seemed to enjoy sharing what they knew with others.

They were considered to be current. These clinicians were seen as always up-to-date with the latest practices in their field and they demonstrated a high level of clinical expertise.

They were perceived as caring and empathetic. These clinicians demonstrated a high level of "humanistic concern." They never talked down to people and treated colleagues as equals, even when they were offering help.

Hiss also showed it was possible to design a questionnaire to identify physician EIs. The survey asked respondents to name a person or people within their practice area who demonstrated these characteristics. Once a group of EI physicians had been identified, Hiss recruited them to assist with continuing medical education.

Since Hiss' original work, others have followed his method for identifying EIs and using them to help with knowledge transfer–for example, in guideline implementation or improving care in hospitals and communities.[6]

Seeking out EIs

We had two major goals in using Hiss' methodology to seek out influential clinicians.

First, we wanted to identify individual clinicians, on a discipline-by-discipline basis, who were perceived by their peers to be educationally influential. We hoped to recruit these individuals to take part in knowledge transfer activities–for example, sharing evidence-based research about the clinical management of musculoskeletal disorders, return to work and injury prevention.

We also wanted these clinicians to serve as a resource, a sort of "listening post" to keep us connected to the "real world" of work-health interventions. We wanted to understand their priorities and to hear their ideas about the areas where research is needed.

We began by focusing on physiotherapists, a group of professionals who are on the front lines when treating workers with musculoskeletal injuries.

The first step was establishing a partnership with the College of Physiotherapists of Ontario. The College was receptive to the EI concept and, besides wanting to help us, they realized that identifying EI physiotherapists might be useful in furthering some of their own internal projects.

Since the College requires all registered physiotherapists to indicate their primary focus of practice, they were able to select a sub-group of physiotherapists who routinely treated clients with musculoskeletal disorders. In particular, they identified those who saw large numbers of people with disabling back pain.

Approximately 1,000 Ontario physiotherapists met these initial criteria. Through a survey of these registrants with the College, we were able to identify approximately 107 EI physiotherapists.

Our next step was to contact these clinicians directly, with the specific goal of delivering evidence-based messages pertaining to low-back pain and return to work. Our hope was that these messages would be disseminated throughout the physiotherapy community.

In April 2002, we invited a sub-group of EI physiotherapists from

"I am always interested to hear what my colleagues in other parts of the province are experiencing related to various professional and clinical issues. Discussing these issues with peers in a network is beneficial for all involved."

–JoAnne Piccinin
Professional Practice Leader, Physiotherapy
Ontario Workplace Safety & Insurance Board

"Belonging to a network with my peers keeps me current on evidence-based practices. What I learn from the network, I can then tell a colleague and they, in turn, can pass the information on to other colleagues."

–Marg Creen
Disability Management Consultant
Manulife Financial

central-east Ontario to attend a Research Transfer Day. We used a simple format–researchers presented evidence about management of low-back pain, followed by an EI-led discussion about how this evidence fits with "real world" practice. This was followed in September 2003 with an invitation to all EI physiotherapists to attend a session, held at the Institute, on the basics of conducting a systematic literature review.

We have made similar approaches to two other groups–the Ontario Occupational Health Nursing Association and the Ontario Kinesiology Association. We surveyed their members and were able to identify 38 occupational health nurse EIs and 85 kinesiologist EIs. We also held research transfer sessions with these two groups.

All of these sessions were structured to balance the opportunity for an exchange of information and ideas. Our purpose was to bring research knowledge to the EIs, but also to learn about the realities of care from the practitioners' perspective.

The physiotherapist and kinesiologist EIs were given an opportunity to provide input on IWH research projects (which served as an "exchange" activity within the context of "knowledge transfer and exchange"):

- The physiotherapists completed a questionnaire about how they use exercise therapy to help patients with low-back pain. They were asked what exercise they recommend and what kind of outcomes were achieved. This information will be used by IWH researcher Dr. Jill Hayden in her "Cochrane Systematic Review of Exercise for Low-Back Pain."

- The kinesiologists provided an inventory of ergonomic and health and safety assessment tools which they use in their practices and also shared their experiences in using these tools. This data will become part of a seven-year study on workplace health being carried out by IWH Senior Scientist Dr. Donald Cole.

The next steps

We plan to meet with the EI physiotherapists, occupational health nurses and kinesiologists at least twice a year and continually seek opportunities to involve them in our research activities, using e-mail, mail or telephone contact. The EIs have been generally very positive and receptive about doing their own part to sustain this new relationship.

We continue to expand the Educational Influentials Project and are planning to approach chiropractor and occupational therapist organizations so we can identify EI clinicians within these professions.

We have encountered certain obstacles to broad participation–namely the constraints faced by EIs who live outside the greater Toronto area. We are considering a number of options. For example:

- We might host knowledge transfer & exchange sessions regionally so that we bring the researchers to the EIs.

- Rather than hosting discipline-specific sessions, we could invite EIs across disciplines (but within the same geographic region) to attend a meeting together–making the exchange sessions "multidisciplinary."

Our ultimate goal is to see an IWH-led Clinical Knowledge Broker Network operating in Ontario. This would be a unique, multidisciplinary group of clinicians who share a practice focus in the work/health interface.

We realize that building these relationships takes time and requires a long-term commitment, both on the part of the Institute and by those in the EI groups. From each new contact, we are learning how to improve the next encounter.

Perhaps the greatest challenge of the Educational Influentials Project will be to define and measure the specific impact we achieve through these relationships. In the true spirit of knowledge transfer and exchange, we will seek input about evaluation from our EI partners, so the outcomes we track are meaningful to everyone involved.

References

1. Doreian P, Woodard KL. Defining and locating cores and boundaries of social networks. *Social Networks*, 1994; 16: 267-293.

   Doreian P, Woodard KL. Fixed list versus snowball selection of social networks. *Social Science Research*, 1992; 21: 216-233.

   Ebers M. Explaining inter-organizational network formation. The formation of inter-organizational networks. New York: Oxford University Press, 1997. p. 3-40.

2. Davis D., et al. Impact of formal continuing medical education. *Journal of the American Medical Association*, 1999; 282: 867-874.

3. Grimshaw J, et al. Changing provider behaviour. *Medical Care*, 2001; 39 (8, Supplement 2).

4. Lomas J, Enkin M, Anderson GM, Hannah WJ, Vayda E, Singer, J. Opinion leader vs audit and feedback to implement practice guideline: Delivery after previous cesarean section. *Journal of the American Medical Association*, 1991; 265: 2202-2207.

5. Hiss RG, Macdonald R & Davis WR. Identification of physician educational influentials in small community hospitals. *Res Med Educ.*, 1978; 17:283-288.

6. Grzybowski S. Identifying educational influentials for formal and informal continuing medical education in the province of British Columbia. *J Contin Educ Health Prof.*, 2000; 20: 85-90.