at work

Information on workplace research from the Institute for Work & Health

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Research Excellence Advancing Employee Health

Leading the Institute

r. Cameron Mustard is poised to lead the Institute wearing two distinct hats, assuming the role of President in addition to his previous responsibilities as Scientific Director. Mustard, who has been the Institute's Scientific Director since 1999, was appointed to the position of President in September.

"The Institute is a dynamic organization with an international reputation and a vital role in Ontario, strong Board guidance and excellent staff," says Mustard. "The great strength of the Institute is the talent, diversity and commitment of staff, researchers, and the knowledge transfer and exchange team."

His combined role has three primary responsibilities: providing direction for the scientific agenda, developing vibrant relationships with external stakeholders to support the transfer of research evidence, and managing the Institute's daily operations.

Mustard expects to lead the Institute through an exciting period. This past year, the Institute underwent its second five-year review process. An international panel reviewed the Institute's research and research transfer programs. The panel's recommendations were positive and provided guidance to the IWH Board of Directors on directions for the future. These recommendations included encouragement to the Institute to continue its strong commitment to research excellence in workplace musculoskeletal disorders while continuing to expand the scale and scope of the Institute's research and knowledge transfer activities of relevance to workplace parties, clinical



Dr. Cameron Mustard and Board Director Dr. Lorna Marsden

audiences and policy-makers. This guidance will serve as a springboard for the strategic planning process now under way. The final result will be a blueprint for the Institute's development for the next five years.

He notes the annual core WSIB funding contributed to the Institute represents approximately \$1.50 for each insured worker in Ontario. In addition to this crucial core funding, Institute scientists are the recipients of an additional \$1.3 million annually in competitively awarded peer-reviewed research support.

According to the Institute's submission to the panel, the economic returns to the Ontario economy from policy decisions influenced by the Institute's research in the period 1997-2001 exceeded the investment in the Institute over this period. Mustard is confident that the same benefits will be returned in the next five years of the Institute's life, generating economic returns to the 200,000 workplaces in Ontario and most importantly, leading to improved health and well-being for the six million members of the Ontario labour force.

The Institute for Work & Health is an independent, not-for-profit organization whose mission is to research and promote new ways to prevent workplace disability, improve treatment, and optimize recovery and safe return to work.

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Institute News

Searching for a new Mustard Fellow

The Institute invites applications for its Mustard Fellowship in Work Environment and Health. Named after the Institute's first Board Chair, Dr. Fraser Mustard, the fellowship aims to develop outstanding researchers in the area of work and health, and build capacity for innovative multidisciplinary research in the area of work environment and employee health. It is a two-year fellowship, based at the Institute's offices in Toronto, and is open to those with doctoral-level training, including students in their final stages of their PhD.

While all those with research interests relevant to the Institute's

mission may apply, there are several areas of particular interest to the Selection Committee for this current fellowship selection. These areas include: the organization of work and organizational/managerial processes in relation to health; promoting and evaluating workplace health interventions; and biological correlates of work and stress.

Interested applicants should visit the Institute's web site (www.iwh.on.ca) to obtain full details about the fellowship and the procedure for applying. The deadline for applications is December 31, 2002. The fellowship will commence in early 2003.

At Work and Infocus moves to quarterly circulation in 2003

arlier this year, the Institute's communications team initiated an evaluation of our products, including the newsletters and our web site. This included focus groups, surveys, and a product analysis by an external communications professional. Based on this valuable feedback, we're making some changes in the new year.

First, *At Work* and *Infocus* will be moving from a bi-monthly to a quarterly publication schedule. You can look for your first 2003 *At Work* in March, followed by issues in June, September and December. *Linkages* will continue to be published twice per year and will accompany the June and December issues of *At Work*.

Many of our readers have expressed an interest in receiving materials electronically. As a result, we are now offering an electronic delivery option for all three publications. While print copies will still be available, if you would prefer to receive an e-mail version, please e-mail Communications Associate Katherine Russo at krusso@iwh.on.ca.



Finally, to ensure our stakeholders are up to date with the latest news about Institute projects and initiatives, we will be introducing the @work e-lert in 2003. This new and dynamic feature will be offered automatically to all of our electronic readers. Look for this special initiative on our web site in the coming year.

Your comments about these changes and new initiatives are welcome. Feel free to contact Manager, Communications Kathy Knowles Chapeskie by e-mail (kchapeskie@iwh.on.ca) or by phone at (416) 927-2027. ext. 2115.



Workplaces

NEW MODEL MONITORS HEALTH OF NURSES

new conceptual model on monitoring the health of nurses in Canada was unveiled at a recent stakeholder workshop (see sidebar). It captures how nurses' physical and mental health, as well as their sense of well-being and job satisfaction, are dependent on a number of factors. It also demonstrates how the health-care system itself impacts on nurses' health.

The model (see diagram below) identifies 15 factors at the workplace, job and individual levels. These factors were culled from an original list of 380 that emerged out of a research project funded by the Canadian Health Services Research Foundation, Ontario's Ministry of Health and Long-Term Care and Health Canada's Office of Nursing Policy.

At the stakeholder workshop, participants agreed that the list of factors captured in the conceptual model reflected their experience of nurse health. The model will help frame future research and will lend additional support to policy recommendations that have emerged from other research studies. The participants also agreed that it would be useful to have a regular, Canada-wide survey to help develop and monitor indicators of nurses' health.

"The ultimate goal of this project was to help policy and decision-makers

maintain and enhance the health of the nursing workforce by developing a mechanism for monitoring the health of nurses in Canada," says Dr. Michael Kerr, an Institute Scientist and Assistant Professor, School of Nursing, University of Western Ontario. Kerr and Dr. Heather Laschinger, Professor, School of Nursing, also at University of Western Ontario, were the project's co-principal investigators.

Although the objectives of the research project were achieved and the factors affecting nurses' health were identified, the definition of some of these factors, such as "workload intensity" and "clinical autonomy," still need clarification. Institute Research Associate Colette Severin, who was the project co-ordinator, identified some logistical issues. "Some of the indicators are not well defined. For example, 'workload' is on everyone's mind but it needs a common definition before it can be monitored effectively."

"The solutions are coming to light," says Dr. Judith Shamian from Health Canada's Office of Nursing Policy and an Institute Adjunct Scientist. "How we turn this data collection into policy evaluation is also a critical step so that we can evaluate the impact of relevant policies on workplace and nurses' health."

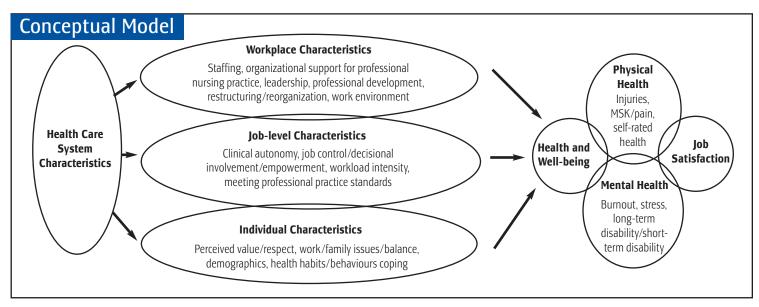
Partnering with Decision-makers

Involvement and partnership with stakeholders is a key part of the research and knowledge transfer businesses of the Institute. The project investigating factors that impact on nurses' health is an example of this collaborative effort.

"Since the targeted users of the proposed model for monitoring the health of nurses are policy-makers, decision-makers and nursing administrators, achieving a broad-based dialogue was critical to our success in developing a framework that was meaningful and useful," says Dr. Kerr. "The workshop brought the players to the table to discuss the new model to monitor nurses' health, which was an important component of this study."

Decision-makers, researchers, nursing administrators and policy-makers from across Canada attended the workshop, which was co-sponsored by Health Canada's Office of Nursing Policy.

"This is about survival of the system," says Dr. Shamian. "The economic importance [of nurses' health] is huge, and it has an impact on patient care. This study is about putting together what is known across the country. We can now talk about monitoring and evaluation, and solutions. The health-care community is in a position to take evidence-based action."





PREDICTING THE EXPECTED COURSE OF RECOVERY

The DASH (Disabilities of the Arm, Shoulder and Hand) Outcome Measure, currently used by many clinicians, can also help predict probable recovery for patients with shoulder disorders.

A group of researchers from the Institute, led by Dr. Dorcas Beaton, collaborated with the Quality Management group of the College of Physiotherapists of Ontario to examine predictors of recovery patterns for patients with shoulder disorders. Three hundred and sixty-one patients with soft-tissue injuries of the shoulder, who began receiving physiotherapy treatment between September and December 2000, were studied. Data collected from patients included: demographics, patient

expectations of recovery, disorder and work information, co-morbidity, medications and outcomes from self-report standardized measures (the *DASH*, a measure of pain and disability and a health-related quality of life measure). Physiotherapists recorded their clinical findings, referring diagnosis, treatment provided and their prediction of level of activity at discharge, and time to recover.

While most of the 361 patients improved, their *DASH* scores over time were used to plot recovery patterns. A technique known as "cluster analysis" was used and four distinct recovery patterns emerged. "Cluster analysis is an exploratory technique that searches data from a large group and discovers a

structure of 'natural' groupings," says Institute Biostatistician Michael Manno. The four clusters were then used by Master's student and physiotherapist Carol Kennedy to determine which patient factors (for example, age, duration of symptoms, etc.) were associated with different recovery patterns.

The team is now exploring the development of a prognostic tool. They are working to see how well they can use the DASH scores, combined with the cluster analysis, in a way that can assist clinicians by:

- Predicting probable recovery by placing patients into one of two groups (DASH score indicates high and low disability groups);
- Coupling the DASH score with other known factors such as age, duration of symptoms, medication use, and patient prediction of time to recover to assist with setting the expected course of treatment and recovery;
- Providing a baseline in order to measure change over time; and
- Further refining the probable course by re-administering the DASH at four weeks to determine rate of recovery (rapid or slow).



Policy-Makers

INSTITUTE PROVIDES INPUT ON YOUTH WORKPLACE INJURY PROGRAM

Institute researchers are participating in a new national injury-prevention initiative that aims to reduce and prevent youth workplace injury. Passport to Safety is a national standards and training initiative focused on raising knowledge of rights and practices concerning workplace health and safety among adolescents and young adults.

"Injuries among young workers are an urgent priority for prevention in Ontario and across Canada," says Dr. Cameron Mustard, Institute President & Scientific Director. "The Institute has been invited to contribute expertise in the design of this important program and in its evaluation."

The program is open to youth between the ages 14 to 24 who receive a Passport to Safety, which can be filled with electronic "stamps." Participants collect stamps when they participate in already-established e-learning and safety programs across the country. These programs can include first-aid training, CPR, babysitting courses, and car safety training, which are offered by numerous organizations. According to the program's literature, a valid passport will assist youth to attain employment based on their health and safety education transcript.

The goal is to have one million young Canadians registered as Passport to Safety holders by 2007.

The Passport to Safety Standards and Advisory Board comprises leaders across Canada from private, public and labour sectors and provides advice on the program's development. Paul Kells, founder of the Safe Communities Foundation, is leading the project. The national roll-out of the program is expected in the fall of 2003.

For more information about Passport to Safety, please e-mail Ruth Frolic at rfrolic@safecommunities.ca.



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