

at work

Information on workplace research from the **Institute for Work & Health**

This Issue

For Clinicians

TENS not beneficial as a stand-alone treatment for patients with chronic low-back pain

Profile: student examines chronic neck pain patients' preferences in health-care decision-making

For Workplaces

Institute participates in annual health and safety conference

For Policy-Makers

Coverage under the Ontario Workplace Safety and Insurance Act: a research perspective

Profile: adjunct scientist has broad work and health interests

For Research Transfer

Project team participants taking research to the workplace

This Issue's Supplement

Institute Tool Kit contains useful products for stakeholders

To be notified by e-mail when a new issue of *At Work* is published and available on our web site, send your e-mail address to atwork@iwh.on.ca.



**Research Excellence
Advancing Employee Health**

New developments related to the DASH Outcome Measure

The DASH (Disabilities of the Arm, Shoulder and Hand) Outcome Measure has received international attention within the clinical and research communities since its release six years ago.

The DASH is a 30-item self-completed questionnaire that assists clinicians in measuring symptoms and disability among patients with upper-limb disorders. The DASH was designed to be sensitive to disability from disorders affecting any part of the upper limb, thus eliminating the need for separate questionnaires for the shoulder, elbow, wrist or hand. It was first released in 1996 in collaboration with the American Academy of Orthopaedic Surgeons (AAOS).

As a result of the ongoing interest in the DASH, several new features that will make the DASH more user-friendly and accessible have been added.

Second Edition of the DASH Outcome Measure User's Manual

Since the release of the first edition of the *DASH Outcome Measure User's Manual*, significant testing and research have occurred. To provide clinicians and researchers with the latest DASH information, an updated DASH user's manual will be available in the spring of 2002.

This edition has some new features that include answers to frequently asked questions, details on a new scoring method, and updated information on reliability and validity testing.



Two new chapters are also included in this second edition, says Sherra Solway, an Institute research associate in health measurement. One chapter provides extensive information on score interpretation for individual patients and the other chapter is dedicated to responsiveness testing of the DASH.

The manual will be available in binder format that will allow for future supplements to be inserted.

New Scoring Method

One of the new features of the DASH is a revised scoring method. This new method is simpler, more efficient and less complicated to use than the original when dealing with missing data.

"Although we're recommending this new scoring method, users will arrive at

Continued on page 6

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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Workplace

INSTITUTE PARTICIPATES IN ANNUAL HEALTH AND SAFETY CONFERENCE

The IAPA's annual conference is one of the main health and safety events of the year attracting thousands. *Growing our Future Health & Safety 2002 Conference and Trade Show* runs from April 22 to 24 at the Metro Toronto Convention Centre. This year, the Institute will have a presence through presentations and an information booth.

Monday afternoon workshop

An interactive workshop, led by Institute Senior Scientist Dr. Donald Cole and Research Transfer Associate Dee Kramer, will focus on the Institute's research on workplace organizational factors for health.

Tuesday afternoon session

Dr. Harry Shannon, an Institute senior scientist, will outline his McMaster University team's research findings on how health and safety has improved. His team conducted research within organizations 10 years ago on how workplace organization was related to better safety. Recently, the researchers went back to the same organizations to ask the same questions. Shannon will describe what has changed and what this means for workplace safety.

Wednesday morning workshop

Associate Scientist Dr. Michael Polanyi will participate in an interactive multi-stakeholder workshop entitled, *Injured Workers Speak Out – Improving Compensation and Return to Work Practices*.



Pick up an IWH Tool Kit at the Institute's IAPA booth

Institute trade show booth

This year, the Institute's booth will showcase a variety of Institute "tools." The tools are grounded in the Institute's research evidence and are targeted to specific audiences such as workers or clinicians. This issue's *Infocus* also provides a quick summary of these tools. ▲

Visit the IAPA's web site at www.iapa.on.ca for the more information about the conference.

International conference on prevention

An inaugural conference of the International Network on the Prevention of Accidents and Trauma at Work will be held from Sept. 3 to 6, 2002 in Denmark.

The conference aims to bring together an international network of experts in accident prevention and to provide opportunities for face-to-face exchange of experiences, new findings and best practices in the prevention of work-related accidents. Conference topics include prevention strategies and information and communication.

Institute Senior Scientist Dr. Harry Shannon is a member of the conference's Scientific Committee.

Early registration fees for the conference are available up to May 1. For more information, visit the conference's web site at www.workingsafety.net.



Research Transfer

PROJECT TEAM PARTICIPANTS TAKING RESEARCH TO THE WORKPLACE

The Institute is participating in a research transfer (RT) project led by the Workplace Safety and Insurance Board (WSIB). The goal of the project, which is funded by the WSIB's Research Advisory Council, is to benefit workers in the clothing industry in Ontario.

The RT project involves the transfer of the *Ergonomic Handbook for the Clothing Industry*, a tool developed during an earlier research initiative jointly undertaken by the Institute, the Occupational Health Clinics for Ontario Workers (OHCOW) and the Union of Needletrades Industrial and Textile Employees (UNITE).

The current partners include the Institute and UNITE, as well as representatives of the WSIB, the Industrial Accident Prevention Association (IAPA), the Electrical and Utilities Safety Association (E&USA), and the Workers Health and Safety Centre (WHSC). Their message is: "There are significant risk

factors in the garment industry and there are low-cost solutions that can reduce these risk factors and make work safer."

The team hopes to develop strategies and build a process that may be applied to future research transfer projects.

The IAPA and WHSC have developed their own knowledge transfer approaches to workplaces. An ergonomic checklist, based on the handbook's content, was developed by the IAPA and will be used by its consultants during visits with clothing industry firms. The WHSC will communicate to the sector's Joint Health & Safety Committees (JHSC), via a group of workers qualified as instructors. It will also develop several web-based products.

The WSIB business team is adapting an existing workshop to suit the needs of the workplaces they've identified. The workshops, to be targeted at workplaces that employ more than 50 people and that have JHSCs, will be delivered to the JHSC members of the chosen firms.



The commitment of the partners and the continued involvement of the research team have been instrumental to the project's success to date. From the outset, the researchers have been connected to the research transfer process. The principal investigators met with the project team to identify the key messages for transfer. Subsequently, one of the researchers has remained on the project team providing valuable input. The key message is well on its way to being implemented in the workplace with the use of existing knowledge conduits and unique audience-specific delivery mechanisms. ▲▲



Policy-Makers

COVERAGE UNDER THE ONTARIO WORKPLACE SAFETY AND INSURANCE ACT: A RESEARCH PERSPECTIVE



Currently in Ontario, approximately 65 per cent of the workforce is covered under the collective liability of the Workplace Safety and Insurance Act. Over the past two months, the Ontario Workplace Safety and Insurance Board (WSIB) has been holding consultations on the principles and practices surrounding coverage.

The current system is a complex configuration of covered and non-covered workers, and of collectively insured and self-insured employers and industries. This complexity poses numerous challenges for all, including

researchers, trying to understand workplace injury and the risk of injury.

"It's very difficult to get a comprehensive picture of the Ontario labour force's injury rates and the risk of injury among different subgroups of the working population," says Peter Smith, a research associate with the Institute. "To understand the rate of injury, you need to know not only how many people are getting injured, but more importantly the total number of people in the population at risk, be that by province, industry, occupation, age or gender."

Continued on page 4



Policy-Makers

PROFILE: ADJUNCT SCIENTIST HAS BROAD WORK AND HEALTH INTERESTS

“I believe that research on work and health issues is an area where a person can make a difference in peoples’ lives. People spend the bulk of their life working and making this working time healthier so they can participate in other social activities is valuable,” says Dr. Benjamin C. Amick III.

An Institute adjunct scientist for the past five years, Amick has been a key contributor to a number of Institute research projects across three of the Institute’s research areas.

Amick’s main research interests include trying to understand how participating in the labour market affects employee health, how labour markets can change to create healthier



jobs and organizations, and how occupational health services can both affect how labour markets affect health and act as a point of change for improving jobs and organizations. “Ultimately, I believe these issues are important because a healthy workforce is a competitive advantage for a nation.”

Amick is Associate Professor of Behavioral Sciences and Epidemiology at the University of Texas Health Science Center and Associate Director for

Education, Training and Leadership, Texas Institute for Society and Health, at Rice University. He received his PhD from Johns Hopkins University, School of Hygiene and Public Health in the Department of Behavioral Sciences and Health Education and was a post-doctoral fellow in the Department of Epidemiology and Public Health, Yale School of Medicine.

At a recent Institute plenary, Amick presented some of his research findings

on measuring the impact of illness and injury on work performance. He explained the importance of measuring work outcomes and provided a brief overview of the work he has done on work role functioning.

Currently, Amick is working on two projects with Institute researchers: a four-country study examining the links between labour market policy, labour market experiences, and health, and a project examining work-related musculoskeletal disorders. He is also the co-author of a number of Institute working papers and, in particular, has contributed to a special edition of *Spine* that was edited by Senior Scientist Dr. Claire Bombardier.

Amick says that he has greatly benefited from his relationship with the Institute. “The Institute is one of the top research organizations in the world examining issues of work and health and one of the few seeking to integrate knowledge from various disciplines to form ‘real-world questions’ with ‘real-world solutions.’ The time I spend at the Institute is invaluable.” ▲▲

Adjunct Scientists at the Institute

An adjunct scientist appointment at the Institute is offered to a collaborating researcher who is making a sustained contribution to the success of a research project or program at the Institute. Many of the Institute’s adjunct scientists contribute to the Institute’s working paper series and offer independent reviews of the work of the Institute’s scientific staff.

Currently, the Institute has 20 collaborators appointed as adjunct scientists who are based in research institutions in Canada and the United States. Through this type of appointment, the Institute builds connections to many different research institutions in North America.

Continued from page 3

And that’s where researchers run into difficulty. Under the current legislation, differences in insurance eligibility prevent researchers from being able to accurately determine rates. Workers who are casual, seasonal, and self-employed are often not required to be covered. Employees in some financial institutions and federally-regulated industries are covered under an alternate coverage

schedule. In addition, organizations do not currently report the actual number of employees insured under the provisions of the Act. So, while we may know how many people filed injury claims from a sector, researchers are frequently unclear about how many people are currently covered in that sector.

“In an ideal world, all Ontario workers would report both time-loss and

no-time-loss injuries to one information source. Then, this information combined with accurate information on the employed population would enable us to calculate accurate rates for a variety of different population groups,” says Smith. “This improved information would aid in understanding what’s really happening in the contemporary Ontario workplace.” ▲▲

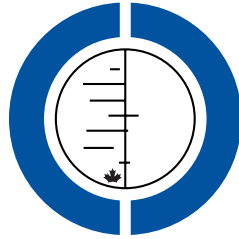


TENS NOT BENEFICIAL AS A STAND-ALONE TREATMENT FOR PATIENTS WITH CHRONIC LOW-BACK PAIN

There is no evidence to support the use of TENS (Transcutaneous Electrical Nerve Stimulation) as a treatment for patients with chronic low-back pain, according to a review of the scientific literature by members of the Cochrane Back Review Group (BRG).

TENS was introduced about 30 years ago as a treatment option for rehabilitation of chronic low-back pain patients. The treatment requires patients to wear a small device with electrodes attached to the skin. It provides continuous electrical pulses to the nerves that stimulate the muscles of the affected area of the back.

The review included more than 250 patients with chronic low-back pain who received the active TENS treatment and 170 patients who received placebo TENS.



There were no statistical differences between the two groups, says Institute Senior Scientist Dr. Claire Bombardier, who is the BRG's co-editor.

Chronic low-back pain is defined as pain that lasts more than 12 weeks. It affects around 10 per cent of those who suffer from low-back pain. Eighty to 90 per cent of the health-care costs associated with back pain are for those patients with chronic low-back pain and disability. ▲▲

Visit the Cochrane Back Review Group's web site at: www.cochrane.iwh.on.ca.

International forum on low-back pain research

Two of the Institute's senior scientists are plenary speakers at the Fifth International Forum for Primary Care Research on Low-back Pain. The Forum will be held in Montreal on May 10 and 11 and is the largest global event of this kind.

Dr. John Frank, a senior scientist, will speak on the *Transfer of Research Results for Decision Making*, a plenary session he will also chair. Institute Senior Scientist Dr. Claire Bombardier, who is also the conference's co-chair, will be involved in a panel debate on compensation of chronic low-back pain. The panel will discuss management versus scientific evidence from researcher and policy-maker views.

The forum will also feature a series of workshops led by international researchers. Institute Visiting Scientist Dr. Maurits van Tulder is the chair of a workshop entitled, *Research on Interdisciplinarity in Primary Care*.

For more information about the conference or to register visit www.lbforum.org.

STUDENT PROFILE: INCLUDING CHRONIC NECK PAIN PATIENTS' PREFERENCES IN HEALTH-CARE DECISION-MAKING

Neck pain is an important health-care problem and, while much research has been done on this condition, there are many unexplored areas. According to Gabrielle van der Velde, one of these unexplored areas is the impact of chronic neck pain patients' perceptions and attitudes on treatment decisions.

A Master's student in clinical epidemiology and health care research in the Department of Health Policy Management and Evaluation at the University of Toronto, van der Velde's research has potential implications for both clinicians and health-care policy-makers. Her work will include



Gabrielle van der Velde

the development of a decision-analysis model of non-surgical treatments for neck pain. She plans to examine common treatments for chronic neck pain and explore patients' preferences concerning the outcomes, including the risks associated with these treatments.

"There is considerable discussion in the scientific community about the risks associated with common treatments, such as cervical spinal manipulation. In

my view, chronic neck pain patients' risk perceptions of the treatments and their preferences for certain outcomes would be a useful addition to the discussion."

Van der Velde, who is also a chiropractor and associate professor at the Canadian Memorial Chiropractic College, is currently at the Institute working closely with the Health Services Research, Monitoring and Evaluation research area and her thesis co-supervisor, Senior Biostatistician Dr. Sheilah Hogg-Johnson. Dr. Murray Krahn of the University Health Network is van der Velde's other co-supervisor. Both Hogg-Johnson and Krahn hold cross-appointments at the University of Toronto. ▲▲

CANADA RESEARCH CHAIR AWARDED



Dr. Claire Bombardier

Dr. Claire Bombardier, an Institute senior scientist, was recently awarded a seven-year Canada Research Chair from the Government of Canada.

The Canada Research Chair targets experienced researchers who are recognized by their peers as world leaders in their fields. The program was established by the federal government in 2000.

Bombardier was awarded the Canada Research Chair in Knowledge Transfer for Musculoskeletal Care. She will focus her research on developing ways to transfer evidence-based knowledge to clinicians on the treatment of the most burdensome musculoskeletal conditions including low-back pain, osteoarthritis, and rheumatoid arthritis.

The chair is co-sponsored by the University of Toronto and the University Health Network. Bombardier will continue her role as senior scientist at the Institute. ▲

Web Site Update

www.iwh.on.ca

The Institute's home page recently received a facelift that provides users a direct link to the newly-launched media room and fact sheets. The new look, which features an updated What's New section, also provides more space for highlighting new features and research initiatives.

The electronic layout for the *At Work* and *Infocus* newsletters has also

Media Room

received an enhanced, cleaner look. It was designed to add more space to the pages and to provide users with easy access to both the HTML and the PDF versions of the newsletters. Readers also have the option to sign up by e-mail to receive notification when new editions of the newsletters are on the site.

Web site questions may be directed to Communications Associate Katherine Lukewich by e-mail at klukewich@iwh.on.ca or by phone at (416) 927-2027 x2148.

RECENT PUBLICATIONS

Income Inequality, Income and Health in Canada: A Prospective Cohort Study (Institute Working Paper #167). CB McLeod, JN Lavis, CA Mustard, GL Stoddart.

Early Rehabilitation: The Ontario Experience (Institute Working Paper #183) SJ Sinclair, S Hogg-Johnson.

Publications Catalogue

The Institute's *Publications Catalogue* is now available in an updated and more user-friendly format. The revised catalogue lists all of the working and occasional papers available for purchase and provides a separate list of all of the Institute's published works. Other types of Institute publications, such as the *BackGuide™*, the Grand Rounds video series, and the *DASH Outcome Measure User's Manual*, each has its own separate section.

The new catalogue is available for download in portable document format (PDF) on the Institute's web site at www.iwh.on.ca.

To place your order for these papers or other Institute publications, contact Administrative Assistant Hanh Ramond by e-mail at hramond@iwh.on.ca or by phone at (416) 927-2027 x2173.

Continued from page 1

the same score if they use either the original or the new scoring method," says Institute Scientist Dr. Dorcas Beaton. Some DASH users indicated that the original scoring was complex and time-consuming, says Beaton. Based on this feedback and a recommendation by members of the Upper Extremity Collaborative Group (a panel of experts who oversees DASH initiatives), a revised scoring method has been introduced.

The new scoring method is detailed in the revised DASH manual and may be accessed on the DASH's new web site at www.dash.iwh.on.ca.

DASH Outcome Measure Translations

"We have had overwhelming interest in the DASH internationally. Official translations are now available in several languages and we continue to be informed of new translation initiatives throughout the world," says Solway.

The official translations, which can be found on the DASH's web site in portable document format (PDF), include the Swedish, Hebrew, French (Parisian) and German DASH Outcome Measures. ▲

To place your order for the second edition of the DASH manual, contact Administrative Assistant Hanh Ramond by e-mail at hramond@iwh.on.ca or by phone at (416) 927-2027 x2173.

Questions about the DASH Outcome Measure may be directed to Research Associate Sherra Solway by e-mail at ssolway@iwh.on.ca or by phone at (416) 927-2027 x2155.

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