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at work

IN THIS ISSUE

Assessing the adequacy of workers' comp benefits for permanently disabled workers

Workers who suffer permanent impairments from a work injury often receive workers' compensation benefits to replace lost earnings. Just how well three compensation programs provided adequate benefits is the subject of a new *Issue Briefing* from the Institute for Work & Health.

Workers permanently impaired by a job injury often earn less than they did before they were hurt. This loss of earnings is due not only to their physical impairment, but also to career disruption, a weaker relationship with their employer, and sometimes the stigma attached to being an injured worker.

Provincial workers' compensation agencies in Canada are responsible for providing adequate compensation to disabled workers to make up for lost earnings. In Ontario, permanently impaired workers account for about 10 per cent of all claimants.

A new *Issue Briefing* summarizes research by the Institute for Work & Health (IWH) that explored how well workers' compensation benefits programs replaced lost earnings among permanently disabled workers. The research looked at three programs: two in Ontario and one in British Columbia.

The evidence suggests that, on average, these programs did well. Based on the sum of post-injury job earnings and workers' compensation benefits, permanently disabled workers had incomes that were, on average, what they would have been had they not been injured.

Assessing outcomes based on degree of impairment

However, closer analysis reveals that some permanently impaired workers did not fare so well. When post-injury income was examined among groups of workers with similar degrees of impairment, a lot of variation was found within each category of impairment.

In the Ontario programs, about one-third of those with an impairment rating of less than 50 per cent had a combination of workers' compensation benefits and labour market earnings that was less than 75 per cent of what they would have earned had it not been for their injuries.

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CBRG managing editor to retire

Vicki Pennick, managing editor of the Cochrane Back Review Group (CBRG) housed at the Institute for Work & Health (IWH), is retiring. CBRG coordinates the publication of literature reviews on the prevention, diagnosis and treatment of back pain, neck pain and other spinal disorders.


Vicki Pennick

When Pennick joined IWH in 1996, she was involved in a project implementing evidence-based guidelines for acute low-back pain in the cities of Peterborough and Guelph, Ont. This foray into back-care evidence got her hooked. In 2002, she took on the role of managing editor (then called coordinator) of CBRG. She's been at the helm ever since.

Pennick, who officially leaves IWH in June, has seen a lot of change at CBRG during the past decade. The number of randomized and case-controlled trials on back pain now in the Cochrane library has jumped from 685 to over 3,600, and the number of reviews from 19 to 49, 29 of which have been updated at least once.

"The management of low-back pain has changed dramatically over the years," she reflects. "For instance, no one recommends going to bed for six weeks anymore to relieve back pain." For more information on CBRG, go to www.cochrane.iwh.on.ca.

IWH contributes to back pain book

Institute for Work & Health scientists have contributed to a new book called *Evidence-Based Management of Low Back Pain*, recently published by Elsevier Science. The book brings together in a single, practical source the latest evidence on the management of acute and chronic low-back pain. Its multidisciplinary approach covers a wide range of treatments – from manual therapies to medical interventions to surgery.

Among the expert contributors are IWH Scientist Dr. Andrea Furlan and Director of Operations Emma Irvin, who helped write the chapter on massage therapy. They and IWH Associate Scientist Dr. Carlo Ammendolia also helped write the chapter on needle acupuncture. To order the book, go to www.elsevier.ca/ISBN/9780323072939/Evidence-Based-Management-of-Low-Back-Pain.

WHAT RESEARCHERS MEAN BY...

Qualitative Research

Qualitative research aims to make sense of human experience, beliefs and actions. As such, it provides a rich source of information on social systems and processes.

It's tempting to define "qualitative research" by what it is not. It is not based on statistics or surveys or experiments; that is, it *is not* quantitative research.

But it's also important to understand what qualitative research *is* – an approach used largely in the social sciences to explore social interactions, systems and processes. It provides an in-depth understanding of the ways people come to understand, act and manage their day-to-day situations in particular settings.

To put it simply, quantitative research uses numbers to help us understand "what" is happening. Qualitative research uses words and images to help us understand more about "why" and "how."

Compare, for example, two studies from the Institute for Work & Health (IWH), both addressing the issue of long-term workers' compensation claims. One is using quantitative methods to find out what is driving increases in the duration of lost-time claims over the last decade. Using administrative data from the Workplace Safety and Insurance Board, the researchers are testing their hypotheses that claim duration may be associated with injury severity, a changing work environment or policy changes.

The other study used qualitative methods to explore why and how some injured workers remain on workers' compensation for long periods of time. Based on interviews with injured workers and service providers in Ontario, the study found that workers with long-term claims often tried hard to return to work but encountered many roadblocks beyond their control. These included seemingly mundane problems such as incomplete medical forms and miscommunication among the workplace parties. Taken together, such challenges prevented workers' return to work.

How qualitative research is done

Qualitative research collects information that occurs naturally; that is, it doesn't set up experiments. The main methods for collecting research include:

- conducting interviews and focus groups, during which people retell their experiences, thoughts and actions;
- observing people in their own settings;
- analyzing documents (from government reports to personal diaries); and
- analyzing conversations (as contained in documents, speeches, interviews, etc.).

With this collected information, qualitative research can be used to:

- **describe** the nature of what exists and how it is experienced by those in it (i.e. context); e.g. help us understand the experience of having a long-term claim;
- **explain** why things exist as they do; e.g. help us understand the events leading to long-term claims, the circumstances in which long-term claims occur and why they continue to occur;
- **evaluate** the effectiveness of interventions that aim to change what exists; e.g. help us understand the quality of any programs put in place to reduce long-term claims; and
- **generate** suggestions for ways to improve things, or for potential areas of new research; e.g. help us understand strategies for supporting workers on long-term claims and helping people avoid them to begin with.

Qualitative versus quantitative

Qualitative and quantitative research are often discussed as two camps, with researchers belonging to one or the other. However, this us-versus-them scenario is quickly falling by the wayside. There is a growing understanding that the two types of research share much in common.

Both strive for reliability and validity of their data, and both have developed systematic methods of doing so. As well, both aim to produce results that can be generalized and practically applied to help understand and solve problems.

In fact, the two types of research can be complementary and part of the same "toolkit" when it comes to exploring an issue, as shown by IWH research into long-term claims. The choice isn't about one being more accurate, more objective or more in-depth than the other, but about what information the researchers are trying to find out.

Looking for good workplace injury stats? Try the emergency department

Workers' compensation data is typically used to track the performance of workplace health and safety. A recent study from the Institute for Work & Health suggests emergency department records can provide an independent source of reliable information on job-related injuries and illnesses.

An accurate picture of the number and types of workplace injuries and illnesses is critical to an effective occupational health and safety (OHS) system. This information helps determine where to focus prevention and enforcement efforts, and then assess how well these efforts are working.

That being the case, the use of workers' compensation records by OHS authorities causes concern for many. They wonder just how reliable workers' compensation administrative data is as a source of information on the incidence of work injuries and illness.

A recent study by the Institute for Work & Health (IWH) suggests another source of information is available in Ontario: emergency department records. These records can be used to track the performance of the OHS system and to assess the reliability of workers' compensation data on acute injuries.

"In order to improve health and safety, we need to know where we stand, and that means having high quality surveillance information," says IWH President and Senior Scientist Dr. Cam Mustard. "Emergency department records in Ontario are a valid source of information on the incidence of work-related disorders and should be incorporated by OHS authorities into the routine surveillance of the health of workers."

Researchers find areas of agreement

Mustard led a team of researchers comparing accepted workers' compensation lost-time claims from 2004 to 2008 to emergency department visits attributed to a work-related cause during the same period. These numbered just over 435,000 and just under 700,000, respectively.

(Researchers expected the higher number of emergency department visits. Emergency departments treat patients who file lost-time claims and no-lost-time claims. As well, a number of emergency department patients with work-related injuries will not file a claim, will have their claim denied or be ineligible to file a claim at all, given that 30 per cent of Ontario's labour force is not covered by workers' compensation.)

The study found strong agreement between emergency department and WSIB records in a number of areas:

- The frequency of work-related emergency department visits relative to the frequency of accepted lost-time WSIB claims remained constant over the five-year period – at about 60 per cent greater.
- There was a 17.3 per cent reduction in work-related emergency department visits, and a 17.8 per cent reduction in lost-time compensation claims from 2004 to 2008.
- The incidence of serious injuries resulting in concussion or fracture (by age group and gender) was generally the same in emergency department and WSIB records.

The accuracy of hospital reporting on emergency department visits is understood to be very high. Therefore, the strong agreement of emergency department data with WSIB data regarding the reduction in lost-time claims over the five-year period and the incidence of concussions and fractures is noteworthy. "We can have more confidence in the view of the world presented by WSIB lost-time claims data, particularly with respect to trends over time and the incidence of serious injuries," Mustard says.

Emergency room data can help fill void

Perhaps most important is the finding that emergency room data offer a good source of information on the incidence of acute workplace injuries. The December 2010 report of the Expert Advisory Panel on Occupational Health and Safety commissioned by the Ontario Ministry of Labour called on the system partners to improve the reliability and validity of OHS data currently collected for the purposes of performance measurement.

"Emergency department information can help fulfil this recommendation," says Mustard. "Because it offers population-based, year-over-year and consistent measures of work-related injuries, it meets the definition of high quality surveillance information. What's more, because it's completely independent of workers' compensation information, it can give us insight into the accuracy of administrative data reported by the WSIB."

The study by Mustard and his team, titled "Comparison of data sources for the surveillance of work injury," has been submitted for publication. An executive summary is available at: www.iwh.on.ca/other-reports.

In Brief

Emergency department records can offer high quality work-injury surveillance information independent of workers' compensation data.

IMMIGRANT WORKER SAFETY:
IWH develops OHS information tool for newcomers

Institute for Work & Health researchers are helping fill a gap in the occupational health and safety system: the need for information tailored to immigrant workers, delivered to them through the services they regularly access at the community level.

Immigrant workers are a vital and important part of Canada's labour market. One in five Canadian workers is an immigrant and, as of this year, immigrants are expected to account for all of Canada's net labour force growth.

Yet, immigrant workers are among Canada's most vulnerable when it comes to their health and safety on the job. This was raised in the report of the Expert Advisory Panel on Occupational Health and Safety, which submitted its recommendations to the Ontario Minister of Labour in December 2010.

The Panel was appointed last year to examine Ontario's occupational health and safety landscape. It came in the wake of a horrific workplace accident on December 24, 2009, when four migrant construction workers died and a fifth was seriously injured after their swing-stage platform snapped 13 stories above the ground.

Based in part on Institute for Work & Health (IWH) research findings, the Panel acknowledged that immigrant workers are vulnerable for a number of reasons: not knowing their legal rights, working in jobs without experience or hazard-specific training, and being unlikely to raise health and safety issues for fear of losing their jobs. It therefore recommended that Ontario's health and safety system "develop information products in multiple languages and formats for distribution through various media and organizations" to raise awareness of OHS among immigrants and other vulnerable workers.

IWH Scientist Dr. Agnieszka Kosny and her team are already on the job, developing information and training modules for immigrant workers on their rights and responsibilities under employment, occupational health and safety and workers' compensation legislation. And they're working with settlement agencies to get the information out.

Immigrants face barriers post-injury

The need for this type of training and information became evident to Kosny in a study she completed last year looking at the experiences of immigrants who had been injured on the job. Over the course of the study, Kosny and her team interviewed 28 recent immigrants with work-related injuries, as well as service providers who work with immigrant workers.

Dr. Agnieszka Kosny

Although Kosny noted that the experiences of new immigrants after a work injury are not always all that different than those of Canadian-born workers, some problems are magnified because of their status as newcomers. Here's what she found:

- Many of the workers in the study tended to have jobs that did not mirror the ones they left behind in terms of experience and qualifications required (see related story on page 5). Thus, they ended up doing jobs they had never done before, involving manual, heavy and repetitive work, and with little knowledge of the hazards, tools or machinery associated with the work.
- Because of "settlement-related pressures" (i.e. the need to finance their new life in Canada and/or to send money to family in their country of origin), along with an acute awareness of their poor position in the labour market after months of looking for work in their field, keeping a job took on a more pressing quality.
- Despite this, injured immigrant workers did tend to tell an employer or health-care provider, even if informally, of their work-related injury. However, these parties sometimes failed to report the injury in a timely or appropriate manner, as required by law. Because new immigrant workers knew little about how the system is supposed to operate, they were unlikely to complain.
- Immigrant workers' poor English skills made navigating the workers' compensation system problematic. Understanding forms, decisions and requirements was difficult, leading to misunderstandings with employers, health-care providers and adjudicators. This led to frustration all around, and undermined the credibility of newcomers who were sometimes viewed as "not cooperating."

Among the many important findings, Kosny noted that injured immigrant workers had little knowledge about their rights and responsibilities. "Even though many workers took language-training classes, attended job-search workshops or received materials about coming to Canada, workers consistently reported never receiving any information about employment standards, their OHS rights or the workers' compensation system during the settlement process," says Kosny.

Therefore, Kosny recommends – as does the Expert Advisory Panel – that this information be included in material received by people preparing to come to Canada or shortly after they arrive, as well as in job-search and language-training classes offered through settlement agencies. She included this recommendation in her April 2011 study report, which has been submitted to the journal *Ethnicity & Health* for publication.

Settlement agency pilots information tool

Kosny and her team are now following up on this recommendation. To begin, they conducted a national scan for safety resources currently available online to recent immigrants. They found 224 resources. Most of these offered information on employment standards; few focused on workers' compensation.

In a March 2011 report summarizing the results of this scan, the research team included a number of case studies highlighting unique ways to communicate information on employment standards, OHS and workers' compensation to newcomers. For example, the Progressive Intercultural Community Services of British Columbia offers a "Cultural Navigator," which provides in-person advice to clients about workers' compensation matters such as filing a claim and returning to work. It has also set up a dedicated WorkSafeBC resource room, where clients can access a computer with embedded WorkSafeBC links, as well as a DVD-based library of WorkSafeBC publications: www.pics.bc.ca/site/news/1286908195.html.

The IWH team has now developed two training and information modules for newcomers to Ontario: one on workplace health and safety and one on workers' compensation. They are piloting the modules at a settlement agency in Toronto, with the aim of integrating the modules into existing job-search programs.

The tool is expected to be ready in June. "The hope is to eventually make these modules available to other organizations," says Kosny. "I'd like to see this information included in all job-search workshops offered through settlement agencies in Ontario."

For more information on the scan of health and safety resources available for immigrants, go to: www.iwh.on.ca/plenaries/2011.

In Brief

Immigrant workers receive little information about their OHS and workers' compensation rights and responsibilities during the settlement process.

Over-qualified immigrants at risk of poorer mental health

Recent immigrants working in jobs for which they are over-qualified are more likely to report declines in their mental health than immigrants who are in jobs suited to their education, experience and expectations. This is a concern, given that about half of recent immigrants who are working end up in jobs for which they are over-qualified.

This is the finding of a recent study by the Institute for Work & Health (IWH) that explored just how common over-qualification is among new immigrants to Canada, and how it affects their general and mental health. The study was published last December in *Ethnicity & Health* (Vol. 15, No. 6, pp. 601-619).

"Many of us have heard accounts of engineers or physicians immigrating to Canada only to find jobs driving taxis," says IWH Research Associate Cynthia Chen, the lead author of the study. "In this research, we examined the impact of that kind of over-qualification on immigrants' well-being."

Chen and her colleagues analyzed data from the Longitudinal Survey of Immigrants to Canada (LSIC), administered by Statistics Canada. The sample included employed immigrants who had worked before coming to Canada and were in good health upon their arrival. They were interviewed three times during the four years after they first arrived and were asked questions about their general and mental health. One of the questions asked if they experienced any emotional problems such as "persistent feelings of sadness, depression or loneliness" in the previous 12 months. A total of 2,685 immigrants were included in the sample.

Immigrants were considered over-qualified if the skills required in their current job in Canada were lower than their level of education, or lower than the skills required in their previous job before arrival in Canada or expected job when they decided to immigrate. The study found that about 52 per cent of these immigrants were over-qualified based on their education levels, 44 per cent based on their experience and 43 per cent based on their expectations.

Moreover, immigrants who were over-qualified in any of these three ways reported declines in their mental health over the four-year period (although not in their general health), and this decline could be traced to their general dissatisfaction with their job situation.

"Canadian immigration policy selects highly skilled, healthy immigrants to be admitted into this country," Chen says. "Without proper recognition and use of their foreign educational credentials and work experiences, it is unlikely that new immigrants will achieve their potential in the Canadian labour market."

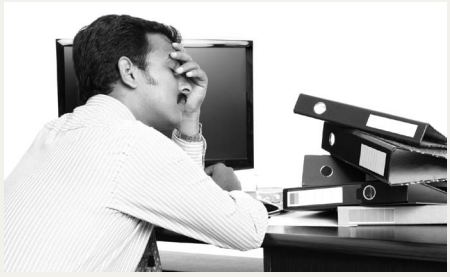

Photo ©iStockphoto.com/anandkrish16

She points out that immigrants receive very little information when applying to come to Canada about the types of work they are likely to end up in and how long they may remain in jobs for which they are over-qualified.

"Immigrants should be made more aware of these challenges when they apply to move to Canada," Chen says, "because this study shows that unmet job expectations increase the risk of a decline in mental well-being over a relatively short time."

In Brief

Many recent immigrants end up in jobs for which they are over-qualified, putting them at risk of poorer mental health within a relatively short period of time.

RELATIONSHIP TROUBLE:

The role of health-care providers in complex workers' compensation claims

The interactions among health-care providers, injured workers and workers' compensation boards can result in problems that delay the return to work of injured workers with complicated claims, according to a recent analysis by Institute for Work & Health researchers.

Health-care professionals can face challenges in meeting the needs of disabled workers. Some of these challenges arise from the requirements of workers' compensation systems — particularly when dealing with complex and long-term claims — and may delay the return to work of injured workers.

Photo ©iStockphoto.com/nicolesy

These are the findings of an Institute for Work & Health (IWH) analysis of the sometimes complicated relationships among injured workers, health-care providers and workers' compensation boards. The analysis was led by IWH Scientist Dr. Agnieszka Kosny, a collaborator on a larger IWH study headed by Scientist Dr. Ellen MacEachen.

The larger study examined why injured workers with long-term workers' compensation claims have problems with return to work (see: www.iwh.on.ca/highlights/toxic-dose). A paper on these newest findings, titled "The role of health-care providers in long-term and complicated worker's compensation claims," was published online by the *Journal of Occupational Rehabilitation* in April (DOI: 10.1007/s10926-011-9307-3).

Begun in 2008, the qualitative study was based on in-depth interviews with injured workers and service providers. This latter group included health-care providers (HCPs) such as general practitioners, occupational health physicians, physiotherapists and chiropractors, along with employees of Ontario's Workplace Safety and Insurance Board and legal representatives.

Health-care professionals play an important role in workers' compensation systems. They are relied upon to establish the work-relatedness of injuries, to provide workers' compensation boards (WCBs) with information about injuries, and to make assessments and recommendations regarding a worker's ability to return to work.

However, when problems arise in the interactions among HCPs, injured workers and WCBs, the progress of injured workers through the system can become complicated, resulting in delays in their return to work. Kosny and MacEachen examined how and why this happened, and found problems in four main areas.

1. The problem of access

Some injured workers have problems accessing the health care they need. Sometimes it's because of geography. They may live in areas where family physicians and/or specialists are in short supply. But, according to the paper, it can also be because of their status as compensation claimants.

Some health-care providers are reluctant to provide services to workers' compensation beneficiaries because they don't feel they are paid enough when the claims become complex. As well, some health-care providers find the administrative reporting requirements — forms, requests for information and ongoing reports — to be onerous.

These factors "can make the health-care provider a little less willing to take on someone with a claim or to think twice before taking on or treating someone who has a complicated claim," says Kosny.

Whether access is difficult because of claimant status or geography, workers may end up in emergency rooms or walk-in clinics to get the health care they need. But, as Kosny points out, these services are not ideal for workers with complicated claims because HCPs in these settings may not be able to provide the detailed medical information and history required by the workers' compensation system.

2. The problem of communication and understanding

Workers' compensation boards need detailed and timely health-care information in order to promptly adjudicate a claim. Yet, some HCPs are unfamiliar with workers' compensation processes and the level of detail required.

"This has come up in a number of studies that I have been involved with," says Kosny. "A health-care provider may not realize how important it is to give details and very precise information and, if they don't do that, how that might affect a worker's claim."

HCPs may not have the clinical information needed for adjudication because they are unable to collect it in the first place, the paper adds. This may be the case when injured workers are uncomfortable about disclosing the details of their condition, are intimidated by the health-care practitioner, fail to disclose problems secondary to the main complaint, and/or have language difficulties.

3. The problem of knowledge

At times, HCPs find it difficult to provide the level of diagnostic and work-relatedness certainty needed by workers' compensation boards to adjudicate claims, the paper suggests. This is a particular concern for workers with "invisible" injuries such as musculoskeletal disorders and chronic pain, which can be more difficult to diagnose and attribute to work with certainty. These workers can end up getting sent from one health-care practitioner to another as a WCB tries to gather the medical evidence necessary to make a decision.

"Compensation system decision-makers prefer diagnostic certainty, and instances of medical uncertainty are not always easily

managed," Kosny says. "In the case of conflicting medical opinions or diagnostic uncertainty, workers could be launched into a cycle of claim denial and appeals, which may be financially and psychologically devastating."

4. The problem of decision-making ownership and authority

The paper also describes how injured workers and HCPs sometimes find it difficult to determine who is ultimately in charge of the worker's health and the worker's claim. This confusion can arise, for example, when disagreements occur between treatment recommendations made by a claimant's doctor and the recommendations found in clinical management guidelines adopted by workers' compensation boards.

This puts injured workers "between a rock and a hard place," Kosny says. Some workers may have to choose between following their doctor's recommendations or following the recommendations of the workers' compensation board in order to secure their claim.

Researchers offer some suggestions

Kosny says there are no easy answers to the challenges identified by this analysis. However, the paper did conclude with some suggestions:

- Find ways to decrease the administrative burden on HCPs working with the workers' compensation system. For example, re-evaluate the frequency and nature of health-care provider contact required by workers' compensation boards. It may be that HCPs treating workers with permanent and, potentially, long-term claims do not need to continually report back on minute changes in treatment plans and medication.
- Continue to educate HCPs and workers on the type and amount of information needed by the workers' compensation system to process and accept claims without delay. ✚

FIVE EASY PIECES:

Easy-to-use tool helps predict back-pain outcomes

A simple, five-question tool has been developed to help front-line doctors identify those patients with back pain who are at risk of severe and long-term functional limitations and, therefore, potentially in need of more aggressive treatment and follow-up.

Five simple questions could help doctors determine early on which patients with back pain need extra attention and which do not. This was the finding of a study led by Dr. Clermont Dionne, director of the Population Health Research Unit (URESP) within the Centre de recherche FRSQ at the Centre hospitalier affilié universitaire de Québec. His study team included Institute for Work & Health (IWH) Senior Scientist Claire Bombardier and Adjunct Scientist Dr. Renee-Louise Franche.

The finding was based on a study of 1,262 people who showed up with back pain at the emergency department of a Quebec City hospital between September 2002 and April 2004. Upon intake, the study participants filled out a questionnaire that asked about issues related to their mental and physical health. The questionnaire included 17 questions from a tool known as "the Cassandra rule," which has been shown in other studies to accurately predict functional outcomes among patients with back pain.

The emergency department doctors who then saw these patients were asked to make their own predictions about the long-term, back-related functional limitations of these study participants. The participants were followed for two years to determine how well their backs were functioning.

The research team found that five of the 17 Cassandra questions performed just as well as all 17 in predicting outcomes. It also found that these five questions predicted outcomes more accurately than the physicians did.

In the end, the team developed a simple-to-use, five-item tool (see below) that can help front-line doctors classify patients early on and add to their own judgment about outcomes. Most important, it can be used to determine which patients may need more aggressive treatment and closer follow-up to prevent long-term, back-related functional limitations and which ones would benefit from more conservative (or minimal) treatment.

The full study, "Five questions predicted long-term, severe, back-related functional limitations: Evidence from three larger prospective studies," was published in the January 2011 issue of the *Journal of Clinical Epidemiology* (Vol. 64, No. 1, pp. 54-66; DOI:10.1016/j.jclinepi.2010.02.004). ✚

PREDICTING LONG-TERM BACK-RELATED FUNCTIONAL LIMITATIONS

In the past month, how much were you distressed by:

	Not at all	A little bit	Moderately	Quite a bit	Extremely	
Feeling everything is an effort	0	1	2	3	4	DK
Trouble getting your breath	0	1	2	3	4	DK
Hot or cold spells	0	1	2	3	4	DK
Numbness or tingling in parts of your body	0	1	2	3	4	DK
Pain in your heart or chest	0	1	2	3	4	DK

Predicting outcomes: The cut-off point for this tool is 0.80. That is, patients who score <0.80 are at low risk of long-term and severe functional limitations, while those who score ≥0.80 are at high risk. To calculate where patients stand relative to this cut-off, add up the totals for the questions answered. One missing/DK (don't know) answer is allowed. Then divide this total by the number of items answered. So, for example, let's say someone answers all five questions, replying "Extremely" to four of the questions and "Moderately" to one. The total [(4x4)+(1x2)=18] divided by the number of items answered (5) results in a score of 3.6, indicating high risk. Let's say someone doesn't know the answer to one question, answers "Not at all" to two questions and "A little bit" to the other two. The total [(2x0)+(2x1)=2) divided by the number of questions answered (4) results in a score of 0.50, indicating low risk.

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WSIB Workplace Safety & Insurance Board
CSPAAT Commission de la sécurité professionnelle et de l'assurance contre les accidents du travail

Assessing the adequacy of workers' comp benefits... continued from front page

IWH Scientist Dr. Emile Tompa, who led the research on which the *Issue Briefing* is based, explains that the three programs studied reflect common approaches taken by workers' compensation boards. The three programs were:

- **Permanent Impairment Program (Ontario, before 1990)**. This program compensated a worker based on the percentage of physical impairment, applied to the worker's pre-injury earnings. According to Tompa, this type of program is common in the United States, and benefits are straightforward to calculate.
- **Loss of Earnings Capacity Program (Ontario, from 1990-1997)**. This scheme provided benefits for earnings losses relative to the worker's earnings before injury. It is based on an assessment of "future economic loss" (FEL benefit). As well, a lump-sum benefit was provided for pain, suffering and loss of enjoyment of life based on the percentage of physical impairment.
- **Bifurcated Program (British Columbia, until 2002)**. Two options were considered for each beneficiary in this system: a benefit based on percentage of physical impairment and pre-injury earnings, or a benefit based on an assessment of the worker's loss-of-earnings capacity relative to pre-injury earnings. The worker received the larger amount.

For each of these programs, Tompa and his research team calculated what permanently disabled workers earned in the labour market after their injury, as well as what they received in workers' compensation benefits. They then calculated "earnings replacement rates" in one of two ways.

In the first method, they compared the sum of post-injury earnings plus benefits to pre-injury earnings. In the second method, they compared the sum of post-injury earnings plus benefits to the earnings of workers ("controls") who had similar characteristics as the injured workers but did not experience work injury. The *Issue Briefing* focuses on the second method.

Overall, Tompa found that the earnings replacement rate for workers, after taxes, was on average close to 100 per cent in each of the three workers' compensation programs: 99 per cent in both the pre- and post-1990 Ontario programs and 104 per cent in the B.C. program.

Tompa also looked at the results by degree of assessed physical impairment, with categories ranging from one to five per cent impairment to over 50 per cent. He found that the earnings replacement rate was, on average, at least 95 per cent for each category of physical impairment.

However, *within* each impairment category, he also found a great deal of variation in earnings replacement rates. While some workers experienced very high replacement rates, about one-third of Ontario permanent disability claimants with less than 50 per cent impairment had an earnings replacement rate of less than 75 per cent – and some much less.

"It's critical to think about the variation in earnings replacement rates among individual injured workers," Tompa says. "It looks like particular attention should be paid to the adequacy of earnings replacement among those with low levels of impairment, as earnings losses appear to be sizeable even for those assessed as having impairment levels of five per cent or less."

Tompa notes that this study looked at benefit programs that have since been changed in both Ontario and B.C. It also looked at old workers' compensation claims, dating from 1994 or earlier, in order to be able to collect almost a decade of data on post-injury earnings. Tompa is currently conducting similar research looking at more recent claims and current benefit systems.

To read the full *Issue Briefing*, go to: www.iwh.on.ca/issue-briefings.

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