Special Report

This special report highlights the Institute's Healthy Workplace Balanced Scorecard project. The Scorecard is in the pilot stage of its development, yet there's been a high level of anticipation from workplaces. This report on the scorecard is in response to this growing interest, and highlights that "what gets measured, gets done:" tracking a balanced set of key "healthy workplace" indicators can help improve your workplace's health and safety.

Improving the health and safety of employees and creating a healthy workplace can make good financial sense. Decreased absenteeism, and more satisfied employees may enhance individual and organizational performance. One way to ensure that health and safety gets the attention it requires is to measure upstream health and safety indicators.

The Healthy Workplace Project Team: Ann-Sylvia Brooker; Donald Cole; Joan Eakin (University of Toronto); Mickey Kerr, Lynda Robson, Colette Severin, Harry Shannon.

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For more information on any of these research projects, contact Dee Kramer at the Institute, (416) 927-2027, ext. 2146. For additional copies of this report, please contact Greer Palloo by e-mail, info@iwh.on.ca. Other special reports and publications are available on our Web site at www.iwh.on.ca.



Research Excellence
Advancing Employee Health

"What Gets Measured Gets Done"

The Healthy Workplace Balanced Scorecard

The Institute for Work & Health's Healthy Workplace Balanced Scorecard is in the pilot stage of its development, yet there's been a high level of anticipation from workplaces. This special report on the scorecard is in response to this growing interest, and highlights the importance of measurement. Tracking a balanced set of key "healthy workplace" indicators can help improve your workplace's health and safety. There will be a second report once the project has reached the next stage.

Improving the health and safety of employees, and creating a healthy workplace can make good financial sense: there is decreased absenteeism, and more satisfied employees, which may enhance individual and organizational performance.

One route to achieving this goal is to focus on measuring health and safety. It provides ongoing feedback on progress towards goals that can help promote, and improve an organization's strategy for health, safety and wellness.

The Healthy Workplace Balanced Scorecard is a measurement tool

that collects and balances data on a number of indicators that both predict and track outcomes of health and safety performance.



Lynda Robson

The Scorecard

A healthy workplace is a workplace that promotes and maintains the physical and mental health of its employees. Healthy workplace performance assessment measures how well the organization does this.



The Institute is piloting a Healthy Workplace Balanced Scorecard under the direction of Lynda Robson, one of the project's principal investigators and a research associate at the Institute. The notion of balance in this scorecard comes from the balance between measures of health outcomes (such as the traditional trailing indicators of health,

Model of a healthy workplace



Harry Shannon

Institute
researchers, led
by senior scientist
Harry Shannon
and research
associate Lynda
Robson, have
developed a

conceptual model of a "healthy workplace", that distinguishes different factors that can affect worker health at a societal level, the workplace level, the job level, and even at the individual level. The model acted as a guide when the Institute developed its Healthy Workplace Balanced Scorecard.

Potential benefits and promises

"There are a number of benefits to having ongoing health and safety performance measures in a balanced scorecard," says Lynda Robson. It encourages continuous improvement in safety and health. It draws attention to the root causes of illness and illness. It can be customized to meet a workplace's objectives, and we think it can become a vehicle for developing a common vision among the various workplace stakeholders."

Other potential advantages are:

- It is a tool for operationalizing a workplace's strategy.
- It provides a summary of key data.
- It tracks improvements in health and safety.
- It provides a balanced overview by looking both at health outcomes and their root causes.
- It can be used to communicate health and safety up and down the organization.
- It facilitates early detection, decision-making and intervention into areas of concern.
- It can involve both labour and management in its creation.

"This is a comprehensive model that includes both work and nonwork exposures," says Harry Shannon, senior scientist at the

Institute. "The model captures the idea that you can effect change by intervening at different levels in the organization."

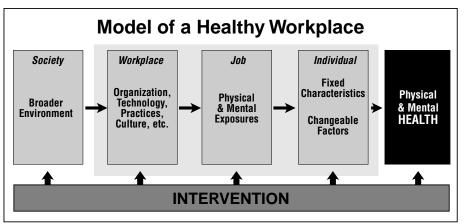
"The model helps you to focus on what's 'upstream' when trying to find out what's causing

a particular exposure on the job," says Institute senior scientist,

Donald Cole. He gives the example of a worker who is beginning to feel pain or numbness in her arms and hands.

At the individual level, the worker may have a previous injury. At the job level, her chair was unadjustable to allow good posture. But upstream workplace factors would also include the workplace equipment purchasing policy and whether she

received training on how to use her workstation equipment.



A healthy workplace

is a workplace that

promotes the mental

and physical health

of its employees.

maintains and

"Collecting information

takes time, so you have

to make sure that you

collecting the informa-

purpose." V.P. of a manufacturing company

know why you are

tion, and for what

Adapted from Robson, Shannon, Polanyi, Kerr, Eakin, Brooker, Cole (1999)

What gets measured . . .

(Continued from page 1)

including injury frequency, injury severity, and absenteeism), and leading indicators of health (i.e., ones which predict health outcomes).

The idea of the scorecard was inspired by the Kaplan & Norton balanced scorecard on business indicators, widely accepted in management circles. It is also based on the Institute for Work & Institute

Health's healthy workplace model that conceptualizes a healthy

workplace and the possibility of interventions at various levels: the societal, the workplace, the job, and the individual level. This model is based on research by the Institute and other organizations

concerning predictors of employee health.

The Healthy Workplace Balanced Scorecard supports the idea that what gets measured, gets done: Tracking a balanced set of key "healthy workplace"

indicators can help improve your workplace's health and safety.

Scorecard Framework

The Institute's scorecard framework sets up four categories for healthy workplace strategic objectives and their corresponding performance indicators. In practice we start with the outcomes and work backwards to identify the causes.

1. Health Outcomes. Example: a company's health and safety objectives could be to: "prevent the occurrence of work-related musculoskeletal disorders", or "reduce the severity of back pain", or "reduce absenteeism from burnout". Indicators could be lost-time frequency, prevalence of illness or injury

The Scorecard

balances leading and

Trailing indicators are

downstream indicators

trailing indicators.

of illness or injury.

Leading indicators

predict safety or

health problems

illness happens.

before an injury or

among employees, or the average severity of the reported symptoms.

2. Hazardous
Exposures on the
Job. Example: job
exposure objectives
could be seen as
either reduced
exposure to heavy
lifting, or reduced
exposure to stress
factors. Indicators

could be how often weights over 10 or 20 kg are lifted, or results of an employee survey of stressful working conditions.

3. Workplace Determinants of Job Exposure. Objectives in this category could be increasing the availability of work spaces

"Healthy Workplace" Balanced Scorecard

Implementation of "Healthy Workplace" Intiatives

Workplace Determinants of Job Exposures

Hazardous Job Exposures Health Outcomes

Determinants of health-based cause-and-effect relationships through the four scorecard perspectives.

Healthy workplace determinants

that meet ergonomic guidelines, changing the work

schedule, or changing the organization's approach to safety. Indicators could be per cent of temporary hours over total hours, or the results of a safety climate survey.

4. Implementing Healthy Workplace Initiatives. Objectives in this category could be replacing equipment, delivering training on risk factors. Indicators

could be the percent of equipment budget spent, percent of supervisors and employees receiving training.

"With a balanced scorecard, you work out a chain of cause-and-effect relationships," says Donald Cole, senior scientist at the

Institute for Work & Health. "Change can take place with health and safety initiatives which impact on the workplace, job exposures, and ultimately health

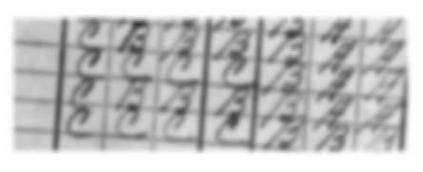
outcomes. If you repeat the scorecard over time, you can mark your progress towards your objectives."



Donald Cole

Possible leading indicators of safety or injury problems in the workplace

- working condition checklist results
- chemical monitoring results
- · safety climate survey results
- safety behaviour ratings
- safety management audit ratings
- per cent of workers & managers effectively trained in health & safety
- per cent of health and safety plans for year implemented
- per cent of required joint health and safety committee meetings held
- time until completion of accident investigation



Creating your own Healthy Workplace Balanced Scorecard

The process of creating an individualized Healthy Workplace Balanced Scorecard is itself a way of checking the alignment of a company's activities with its health and safety objectives. If done collaboratively, the process builds trust, ensures that both management and workers have their interests represented, and facilitates communication between all those involved.

Based on our experience, the experience of others working with balanced scorecards, and the recommendations of Kaplan & Norton (see below), the process could include:

 Holding meetings of the scorecard development team to clarify the corporate health and safety strategy and to prioritize objectives. Both

- management and labour should be involved at this early stage.
- Reviewing the data currently being collected and aggregated for various purposes in the organization and identify its strengths and weaknesses (e.g. employee satisfaction questionnaires, absenteeism, injuries, and program monitoring).
- Reviewing evidence of health and safety risks in the workplace and industry.
- Selecting predictive and outcome indicators for the scorecard; identifying measurement gaps.
- Identifying target values for indicators based on internal and external benchmarks.
- Planning rollout of the scorecard in the organization, including communication and systemization of the data collection.

The Balanced Scorecard for Business



Robert S. Kaplan and David P. Norton's Balanced Scorecard, which has been used widely by business managers for the last decade, was the inspiration for the Institute's Healthy Workplace Balanced Scorecard.

"The widespread knowledge of the Kaplan and Norton scorecard should

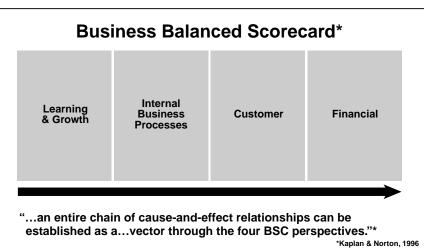
encourage companies to use our Healthy Workplace Balanced Scorecard, "says Lynda Robson, who leads the balanced scorecard project at the Institute. "The fact that top management already knows about the balanced scorecard concept suggests a potential readiness to take up related information. We've been told that this should make it easier for middle management to talk to them about health & safety performance and our scorecard."

The Kaplan & Norton scorecard balances a group of traditional financial outcome indicators, with three groups of indicators that are predictive of financial outcomes. These groups come from alternative "perspectives": the customer, the internal processes, and innovation and learning. Indicators in the four perspectives are linked by cause-and-effect relationships.

The four sets of indicators give you a fuller picture without being overwhelmed

by data. It ensures that a company's vision is reflected in what is prioritized day-to-day. Kaplan & Norton stress the importance of choosing measures that can translate top management's long-term strategy into tangible goals and short-term operational actions.

The Balanced Scorecard, like the Healthy Workplace Balanced Scorecard, is only a generic framework or template. Every business or every industry customizes their own scorecard to fit their vision, strategy, technology, and culture. A scorecard is developed by firstly defining the company's vision; then examining the four perspectives to see how they would change if the vision is to be successful; determining the critical success factors under each perspective; and lastly, selecting critical parameters to track the success factors.



Management and labour give Scorecard go ahead

The Institute's Healthy Workplace Balanced Scorecard got the "highfive" from management and

labour representatives. They said they could see how the scorecard could identify problem areas and areas of strength.

and safety issues. So Managers and labour we've had to develop representatives came from many sectors our own." (manufacturing, public sector, financial, construction, etc.). Managers were chosen because their companies had been recognized for their health and safety performance.

Opinions were sought on: indicators for ideal "healthy workplace" performance

> assessment tools; the adequacy of current measurement methods; and their opinion of the proposed Healthy Workplace Balanced Scorecard

A number of representatives were familiar with the Kaplan and

Norton balanced scorecard, some were even using it, and two of them were using injuries as an indicator in their balanced scorecard.

Some interesting points that came out of these interviews include:

- Management and labour supported the concept of measuring workplace predictors of health, as well as health outcomes, in performance assessment.
- Management was interested in measuring how individual characteristics, circumstances, and behavior affect employee health, whereas labour was not.
- Labour was not nearly as enthusiastic as management with the assessment methods that are in use now. They said that they are excluded from their development and that the results are imposed upon them.
- The interviews with labour leaders highlighted a concern that joint health and safety

(Continued on page 6 🗢)



"There's no tool that is

adequately reflects

work organization,

workload, and health

Union health

Balanced Scorecard: Next Steps

This year, the Institute has initiated a collaborative pilot study with St. Michael's hospital in Toronto to create a customized scorecard for the hospital.

The selection of the performance indicators will be based on the health and safety strategy of the hospital, research evidence on health and safety risks in the health care sector, data that is currently available, and the joint decisions of the researchers and the hospital's workplace parties (both management and labour).

This project is being led by Lynda Robson, Donald Cole and Colette Severin from the Institute for

Work & Health, in collaboration with Dr. Linn Holness (Chief of the Department of Occupational and Environmental Health) and Patricia Petryshen (VP Patient Care and Programs) at St. Michael's Hospital.

The Institute plans to take the scorecard more widely within the health-care sector to create a more generalizable scorecard. It will also take the scorecard into other sectors

The ultimate goal, says Lynda Robson, co-principal investigator of the Healthy Workplace Project at the Institute for Work & Health, is to have a Healthy

Workplace Balanced Scorecard framework, a menu of indicators, and educational materials. This will help workplace parties make scorecards that are relevant to their particular needs.

As the scorecard develops in its sophistication and wider use. the Institute will provide published updates to keep workplace parties abreast of its development.

We expect this report to be available in the summer of 2001.



Colette Severin

Further Readings

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Published by
Institute for Work & Health
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Special Report • Winter 2000 © Copyright 2000

The Institute for Work & Health operates with the support of the Ontario Workplace Safety & Insurance Board



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committees (JHSC) are not typically involved in ongoing safety & health monitoring, but that a balanced scorecard approach might be useful and acceptable to JHSCs.

This research project was conducted by Eva Oliveira and Dr. Joan Eakin, from the University of Toronto, and Robson. "This feedback is encouraging" says Robson, "both labour and management could see potential benefits to using the proposed tool. There's a role for the Institute to provide a scorecard with a menu of potential indicators, especially for organizations with less resources or technical expertise."

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About the Institute for Work & Health

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, improved treatment, and optimal recovery and safe return-to-work. The Institute is dedicated to research and the transfer of research results into practice in health care, clinical settings, and the workplace.

Originally known as the Ontario Workers'
Compensation Institute, the Institute was renamed in 1994 to recognize the broad range of activities it had undertaken. The Institute maintains a strong research focus on fundamental factors that contribute to work-related disability with a view to both primary and secondary prevention. This is in addition to research

into the treatment and management of work-related injury, and the examination of broader population-level work issues.

The Institute was established by the Ontario Workplace Safety & Insurance Board (WSIB) and still maintains an arm's-length contractual relationship, as well as playing an active role in the WSIB Research Advisory Council. In addition to the support of the WSIB, the Institute also maintains an extensive set of relationships with other purchasers, providers, and research organizations.

The Board of Directors at the Institute is chaired by Dr. Lorna Marsden, president and vice-chancellor at York University, and is composed of senior business, labour, and academic leaders. The president of the Institute is Terrence J. Sullivan, PhD.

The Institute has formal affiliations with three universities: University of Toronto, University of Waterloo and McMaster University. The Institute's association with the university community and its access to workplaces and key sources of data, have made it a respected training centre. There are several outstanding scientists and students working at the Institute, many of whom have won awards and distinctions from national organizations such as Medical Research Council of Canada and The Canadian Institute for Advanced Research. Scientists and policy makers from around the world have come to consult and study at the Institute.

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