Benchmarking leading indicators of occupational health and safety performance

Dr Cameron Mustard
Institute for Work & Health

Schedule 2 Employers Group Conference
October 5, 2016
There is growing interest in using leading indicators to support occupational health and safety (OHS) improvements.

Leading Indicators are measures of organizational practices that can identify risk of OHS incidents and identify opportunities to strengthen OHS practice.

Benchmarking with leading indicators is the simple idea that employers draw value from having a comparison of their practices – against their peers and within their own organizations.

The Institute for Work & Health has developed the first evidenced-based tools in Ontario for this purpose.

In this presentation the speaker will introduce leading indicator tools that address different needs and a benchmarking database representative of organizations across Ontario.

Participants will learn how the applications have been used for monitoring progress at workplaces and their potential for benchmarking against peers.

Participants will have an opportunity to test one of the tools to get an overview of their own organization’s safety performance.

www.iwh.on.ca
Who we are and what we do

• Independent, non-profit research institute
• Multi-partite Board of Directors: labour, employer, research
• Established in 1990
• Research on the effectiveness of prevention, treatment and return-to-work in work-related disorders
• Commitment to knowledge transfer and exchange
IWH research projects examples

- Shift work, heat stress, office ergonomics
- Economic evaluation of OHS programs
- MSD prevention, auditing and training effectiveness
- Workers compensation benefits programs comparisons
- Best practices in return to work
- Leading indicators of OHS

www.iwh.on.ca
How do we know our safety efforts are working?

We can monitor the rate of workplace incidents, of injuries and the amount of time lost as a result of injury.

• These “lagging” or “trailing” indicators are signal that improvements are needed in the workplace safety system.

• However (and fortunately), many workplaces have too few injuries to be able to distinguish real trends from random occurrences.

• Enter leading indicators
What are leading indicators of OHS?

*Occupational health and safety* leading indicators are organizational conditions (policies, procedures and practices) and management and worker activities that will influence occupational injuries and diseases.

**Leading indicators** precede injuries and illnesses.

**Leading indicators** can help identify factors affecting the risk of injury, allowing workplaces to address these factors before injuries occur.
How do we know what measures to use?

The effort to identify leading indicators of work injury and illness has looked at several distinct (though related) influences:

• Safety Culture
• Safety Climate
• Labour-management h&s committees
• Organizational policies and practices
• OHS management systems
• Elements of regulations, standards and workplace best practices
What we know about leading indicators of OHS today

- IWH has developed leading indicators measures with OHS experts and researchers
- Tested leading indicators measures in several studies
- Sectors: services, manufacturing, agriculture, health care, education, municipal, construction, transportation, electrical & utilities and pulp and paper
- In different sectors, geographic regions, all firm sizes
- Key informant
How have you used leading indicators?

1. Start a discussion on OHS
2. Analyze gaps
3. Monitor OHS improvements
4. Compare your results over time
5. Compare your results with your peers
6. All of the above

www.iwh.on.ca
Two of the leading indicator measures we recommend

Organizational Policies and Practices: 5 measures
1. Health & safety practices (6 items)
2. Health & safety leadership (6 items)
3. Ergonomics (4 items)
4. Disability mgmt/prevention (7 items)
5. Employee engagement (4 items)

Organizational Performance Metric (OPM):
- a simple 8-item measure

www.iwh.on.ca
Organizational Performance Metric (OPM) – a quick glance

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Formal safety audits at regular intervals are a normal part of our business.</td>
</tr>
<tr>
<td>2.</td>
<td>Everyone at this organization values ongoing safety improvement in this organization.</td>
</tr>
<tr>
<td>3.</td>
<td>This organization considers safety at least as important as production and quality in the way work is done.</td>
</tr>
<tr>
<td>4.</td>
<td>Workers and supervisors have the information they need to work safely.</td>
</tr>
<tr>
<td>5.</td>
<td>Employees are always involved in decisions affecting their health and safety.</td>
</tr>
<tr>
<td>6.</td>
<td>Those in charge of safety have the authority to make the changes they have identified as necessary.</td>
</tr>
<tr>
<td>7.</td>
<td>Those who act safely receive positive recognition.</td>
</tr>
<tr>
<td>8.</td>
<td>Everyone has the tools and/or equipment they need to complete their work safely.</td>
</tr>
</tbody>
</table>
IWH-OPM (Organizational Performance Metric) Predicts Future (3 Years) Workers Compensation Claims

Lost Time Claims

OPM Score

25% Fewer
Other jurisdictions are using or adopting the OPM

“Future uses are expected to help identify opportunities to raise health and safety awareness for employers and employees across B.C.”

[...in an employer survey to establish a baseline measure and to track change down the line in PEI.]

[...as a benchmark tool to measure occupational health and safety culture among employers in New Brunswick.]
Worksafe Alberta recommends use of the OPM, May 2015
Your turn

Here is your opportunity to use the OPM. (2-sided handout)

Answer questions in regards to % of time that each practice takes place at your organization.

| 80 - 100 % | 60 - 80 % | 40 - 60% | 20 - 40% | 0 - 20% |
Questions 1-4 (for reference)

1. Formal safety audits at regular intervals are a normal part of our business.

2. Everyone at this organization values ongoing safety improvement in this organization.

3. This organization considers safety at least as important as production and quality in the way work is done.

4. Workers and supervisors have the information they need to work safely.
Questions 5-8 (for reference)

<table>
<thead>
<tr>
<th>80 - 100 %</th>
<th>60 - 80 %</th>
<th>40 - 60%</th>
<th>20 - 40%</th>
<th>0 - 20%</th>
</tr>
</thead>
</table>

5. Employees are always involved in decisions affecting their health and safety.

6. Those in charge of safety have the authority to make the changes they have identified as necessary.

7. Those who act safely receive positive recognition.

8. Everyone has the tools and/or equipment they need to complete their work safely.
Add up your scores on each question and divide by 8
Interpret your score

IWH-OPM final score is equal to or greater than 3: You are performing well overall. Continue to strive for occupational health and safety (OHS) excellence. Consider the IWH-OPM follow-up questions to help you improve on any of the items.

IWH-OPM final score is equal to or greater than 2 but less than 3: Specific health and safety practices in your organization may need some improvement. Consider if the lower-scored items should be a focus area for your company, and use the IWH-OPM follow-up questions to help you review your practices and policies. Consider contacting a health and safety association or another source of OHS expertise for information about how to improve.

OPM final score is less than 2: Your work in health and safety likely needs attention and improvement. It is recommended that you contact a health and safety association or another source of OHS expertise for further assistance. Use the IWH-OPM follow-up questions to help you review your practices and policies to start making improvements.
Comments about the OPM?
What is benchmarking?

Benchmarking is a way to evaluate or check (something) by comparison with a standard.

“To compare organizational processes and performance metrics to industry bests and best practices from other organizations.” Wikipedia
Have you used benchmarking in your OHS work?

1. Benchmarking against peers in your “sector”?
2. Benchmarking against peers in other sectors?
3. Benchmarking against your own organization (between/among departments)?
4. Benchmarking against your own organization (over time)?
5. All of the above?
Leading indicators benchmarking testimonial

“The OLIP benchmarking report prompted us to take a closer look ... it showed potential for improvements in monitoring and communicating about internal OHS programs.”

“But we also used it for our prequalification audits for contractors. The audits used to just measure compliance and relied on lagging indicators. Now we’ve inserted leading indicators… so we understand how well equipped [the contractors] are to perform for us.”

– Property management company.
Leading indicators benchmarking testimonial

- Heavy equipment manufacturer

“[The questionnaire results] pointed out our weaknesses.”

“Compared over time, it showed how we improved in leadership engagement, participation, and in our ergonomics programs.”
How do your scores measure up to organizations in similar sectors?
Compare your score to the **average** and (lowest) scores in the IWH benchmarking database

<table>
<thead>
<tr>
<th>Organizational Performance Metric (OPM)</th>
<th>Education n=81</th>
<th>Municipal n=62</th>
<th>Healthcare n=197</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPM (8 items)</td>
<td>3.27 (1.13)</td>
<td>2.90 (0.88)</td>
<td>3.93 (0.25)</td>
</tr>
</tbody>
</table>

Lowest possible score = 0  Highest possible score = 4
Different tools for different purposes

OPM is a gap analysis tool, a conversation starter

Organizational Policies and Practices (OPPs)

-Five categories, with 27 items overall

-Gives a more comprehensive review of programs for drilling down into areas of potential improvement
### Average and (lowest) scores across sectors (OPPs)

<table>
<thead>
<tr>
<th>Organizational Policies and Practices</th>
<th>Healthcare n=197</th>
<th>Education n=81</th>
<th>Municipal n=62</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health &amp; safety practices (6 items)</td>
<td>3.93 (1.7)</td>
<td>3.46 (1.5)</td>
<td>3.18 (1.5)</td>
</tr>
<tr>
<td>Health &amp; safety leadership (6 items)</td>
<td>3.48 (1.3)</td>
<td>3.37 (0)</td>
<td>3.17 (0)</td>
</tr>
<tr>
<td>Ergonomics (4 items)</td>
<td>3.11 (0)</td>
<td>2.90 (0)</td>
<td>2.65 (0)</td>
</tr>
<tr>
<td>Disability mgmt/prevention (7 items)</td>
<td>3.51 (0)</td>
<td>3.31 (0)</td>
<td>3.20 (0)</td>
</tr>
<tr>
<td>Employee engagement (4 items)</td>
<td>3.15 (2.5)</td>
<td>3.48 (1.0)</td>
<td>2.93 (1.0)</td>
</tr>
</tbody>
</table>

Lowest possible score = 0  Highest possible score = 4
What does it take to make large improvements in health and safety? Four case studies of ‘break-through’ change

A metal manufacturer went from failing a government agency health and safety audit to creating an environment in which workers are empowered to raise safety concerns, knowing they’ll be acted on quickly—all part of its remarkable trajectory of ‘breakthrough change.’

www.iwh.on.ca
Leading indicators questionnaire and benchmarks online

https://www.iwh.on.ca/iwh-opm

https://www.iwh.on.ca/olip-benchmarks-and-scorecard
Questions and comments welcome!
Acknowledgement

The Institute for Work & Health operates with the support of the Province of Ontario.

The views expressed in this document are those of the authors and do not necessarily reflect those of the Province of Ontario.
Keep up on evidence-based practices from IWH

Sign up online for our monthly e-alerts, our quarterly newsletter, event notifications and more: www.iwh.on.ca/e-alerts

Follow @iwhresearch on Twitter: www.twitter.com/iwhresearch

Connect with us on LinkedIn: www.linkedin.com/company/institute-for-work-and-health

Subscribe to our YouTube channel: www.youtube.com/iwhresearch

This document/slide is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License: http://creativecommons.org/licenses/by-nc-nd/4.0/.
Organizational Policies and Practices (OPP)
1-Never (0%); 2-Sometimes (25%); 3-Half of the time (50%); 4-Most of the time (75%); 5-Always (100%)

1) SP= SAFETY PRACTICES

SP1. Unsafe working conditions are identified and improved promptly

SP2. Your company maintains excellent housekeeping.

SP3. Equipment is well maintained.

SP4. Action is taken when safety rules are broken.

SP5. Supervisors/managers confront and correct unsafe behaviours and hazards when they occur.

SP6. Supervisors/managers are trained in job hazards and safe work practices for jobs they supervise.
OPPs cont’d

2) HSL= HEALTH AND SAFETY LEADERSHIP

HSL1. Top management is actively involved in the safety program.

HSL2. The safety manager (or, the person in charge of health & safety) receives support from top management.

HSL3. Your company spends time and money on improving safety performance.

HSL4. Your company considers safety to be equally important as production and quality in the way work is done.

HSL5. Your company analyzes injury and illness data (e.g., claims data, first aid logs) to identify causes and target solutions.

HSL6. The safety program or committee has the responsibility, authority and resources to identify and address safety problems.
OPPs cont’d

3) EP= ERGONOMIC PRACTICES

EP1. Jobs are designed to reduce heavy lifting.

EP2. Jobs are designed to reduce repetitive movement.

EP3. Ergonomic strategies are used to improve workstation design.

EP4. Ergonomic factors are considered in purchasing new tools, equipment, or furniture.
OPPs cont’d

4) DP = DISABILITY PREVENTION

DP1. Someone from your company contacts the employee shortly after an injury or illness to express concern and offer assistance.

DP2. Someone from your company makes follow-up contact with employees off work due to injury and assesses their progress toward return to work.

DP3. Someone from your company maintains regular communication with the injured employee’s physician to facilitate return to work.

DP4. Claim management within your company is well-coordinated from initial injury to claim resolution.

DP5. Your company makes job accommodations to enable employees to return to work (e.g., modified job duties, flexible schedule, or special equipment).

DP6. Your company consults with the employee about their own accommodation and seeks the employee’s input.

DP7. After injured or ill employees return to work, someone from your company follows up to adjust work situations as needed.
OPPs cont’d

5) POC = PEOPLE-ORIENTED CULTURE

POC1. Employees are involved in decisions affecting their daily work.

POC2. Working relationships are cooperative.

POC3. There is a high level of trust in the employee/employer relationship at your company.

POC4. Communication is open and employees feel free to voice concerns and make suggestions.