



Beyond Safety: Leading Indicators for Health & Wellbeing





Background and Purpose

While worker wellbeing has not always been seen as closely tied to occupational safety and health, more organizations in the research, academic, and business world are increasingly recognizing the correlations between wellbeing and safety. In a previous Campbell Institute white paper, we described the concept of integrated health and safety, which is the blending of health and safety programs along a continuum of organizational, personal, and occupational activities to enhance overall worker wellbeing and prevent work-related injuries and illnesses (Loeppke et al., 2015). Leading organizations in EHS, like Campbell Institute members, have embraced this more holistic concept of Total Worker Health® (TWH) championed by the Center for Disease Control (CDC) and the National Institute for Occupational Safety and Health (NIOSH).

TWH essentially states that the most effective way to protect workers is to integrate workplace safety protection with off-the-job health promotion. Integration is key as workplace safety, or health protection, typically addresses only the hazards associated with the work environment, and health promotion typically addresses only the lifestyle conditions outside of the workplace that may put workers at risk. It's crucial to make the connection between health protection and health promotion.

To seek continued improvement in an integrated health, safety, and wellbeing management system, we should think about the ways in which this is typically done for other types of management systems. For instance, in the areas of business management and occupational safety, we talk frequently about leading indicators to predict business performance and to prevent incidents and injuries. The information from these leading indicators gives insight into how well the management system is working, and is used to proactively identify gaps that could lead to potential incidents.

This thinking about leading indicators for management systems led the Campbell Institute Health & Wellbeing Workgroup (Workgroup) to ponder leading indicators that are specific to employee health and wellbeing (H&W). How can organizations keep tabs on how their H&W programming is functioning? How can they better predict successful health outcomes? What are the factors that organizations should look at to elevate worker wellbeing?

Research has found that those organizations with healthy employees are also "healthier" when it comes to business performance. In fact, companies with excellent environment, safety, and health programs outperformed the S&P 500 by three to five percent (Fabius et al., 2013). Worker illness has a major monetary impact on an organization's bottom line. The CDC and NIOSH estimate that productivity losses due to personal or family health problems cost U.S. employers \$1685 per employee per year, or about \$225.8 billion annually (Stewart et al., 2003). Poor health may be related to the 55,000 deaths from work-related injuries and illnesses recorded each year. With statistics like these, it makes good business sense to identify and improve leading indicators for worker health and wellbeing.

3

Leading Indicators for Health & Wellbeing

The Office of Disease Prevention and Health Promotion (ODPHP, 2019) runs the Healthy People 2020 program to improve health outcomes among the U.S. population through education and targeted health initiatives. Healthy People 2020 has been tracking leading indicators for health since 2011 and encourages workplaces to use these as benchmarks for evaluating their own workplace wellbeing programs. Some of the indicators that are most applicable to the workplace are related to access to health services, preventative services, and utilization of benefits:

- Percent of workers with health insurance
- Percent of workers with a primary care provider
- Percent of workers getting preventative screenings recommended for their age bracket
- Number and types of healthcare claims filed
- Amount paid out in workers compensation

The majority of the leading health indicators developed by Healthy People 2020 look specifically at physical wellbeing, and also approach health and wellbeing from a general community and public health perspective. While these are still useful data points for organizations of all types to consider, the Workgroup wanted to create a list of leading indicators that were more inclusive of wellbeing – physical, mental, emotional, financial – and provide indicators that employers in a variety of industries can implement and track to improve health and safety outcomes.

To more accurately pin down what the Workgroup means by health and wellbeing leading indicators, we turn to the definition of leading indicators for safety and health from a previous Campbell Institute white paper (Campbell Institute, 2013). Leading indicators are proactive, predictive, and preventive measures that provide clues to potential future incidents and also provide current information on the effectiveness and functioning of a safety management system. Similarly, H&W leading indicators refer to the measures and actions that an organization can take to predict success in worker health outcomes and predict the operation of an organization's health and wellbeing programming. In other words, H&W leading indicators are data and actions that are correlated with positive worker health outcomes and effective H&W organizational activities. They are the factors and inputs that organizations should look to improve to realize improved worker wellbeing and better operational functioning of H&W programs.

During the course of several teleconference meetings in 2018 and 2019, the Workgroup discussed the various indicators and metrics that their organizations were tracking that could be leveraged as leading metrics. After gathering these ideas from all workgroup participants, they worked to categorize these metrics and provide an explanation for each of them.

The Workgroup delineated five different categories for the health and wellbeing leading metrics:

1 Education/Awareness

Metrics intended to measure the awareness of employees when it comes to the organizational H&W offerings

2 Reach

Measures of the scope of H&W activities in terms of geographic location and/or populations reached

3 Participation

Metrics measuring the extent of employee participation in H&W programs/activities

4 Satisfaction

Measures of employee satisfaction with H&W programs/activities

5 Organizational Health

Measures to assess the "health" or functioning of the H&W program



Lists of leading indicator metrics for health & wellbeing

Leading indicator 1: Outreach and communication on H&W activities

A leading indicator that the Workgroup considered important is the type, amount, and frequency of communication on health and wellbeing activities and programming at organizations. The idea here is that by communicating comprehensively and effectively on H&W activities and offerings will increase employee knowledge about the things they can do to improve their wellbeing, increase their participation rate in H&W activities, and improve their health outcomes.

Metric	Explanation	Category
Number of forms of communication (e.g. learning sessions, posters, emails)	The amount and forms of communication regarding H&W can indicate how much effort and resources the organization is committing to employee H&W. Other forms of communication could include online forums, discussion groups, etc. Participation in these forms of communication (e.g. number of questions/responses posted in forums, number of sign-ins) can be counted toward an overall participation metric and can also be indicative of the level of outreach to employees.	Education/ Awareness
Number of sites (or countries) where health and wellbeing activities are offered	The number of sites or countries where H&W activities are offered is a measure of the scope of the program and how far it reaches. In addition to this simple count of sites and/or countries, an organization could also use a scorecard to evaluate and measure the scope of programming (which activities are offered, and where), the budget for programming by site, etc.	Participation; Reach
Participation rate in H&W activities	The level of participation in activities can be an indicator of the effectiveness of outreach to employees. The participation rate can be broken down by participation in different types of activity. Organizations can also utilize an overall scorecard to assess participation and usage of services/benefits.	Participation
Number of programs and activities to reach workers' families and the community as a whole	It's important to have a support framework to bolster the organizational H&W programming.	Education/ Awareness
Rate of participation in screenings	The level of participation in health screenings for different diseases and conditions can be an indicator of the effectiveness of outreach to employees.	Participation

Leading indicator 2: Employee surveys

Like safety perception surveys, employee surveys that focus specifically on health and wellbeing can provide leading metrics to predict employee involvement and participation in activities that benefit their overall wellbeing, hopefully leading to better health outcomes.

Metric	Comments	Category
Number and percent of employees expressing interest in proposed H&W activities	Surveys asking employees about their interest and satisfaction regarding H&W issues and activities can indicate how well an organization's H&W program is run and executed.	Education/ Awareness; Satisfaction
Rate of employee retention	The retention rate could be an indicator of how well an organization conforms to employee expectation in terms of health, wellbeing, safety, and overall company culture.	Satisfaction
Number and percent of employees expressing satisfaction with existing H&W activities	The higher employees' satisfaction with H&W programming, the higher their rates of participation, which should hopefully lead to better chances of improved health outcomes.	Satisfaction



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Leading indicator 3: Comprehensive wellbeing

The Workgroup saw being comprehensive in wellbeing programming in terms of definition, scope, and reach as a leading indicator of employee and community wellbeing. If an organization invests in the overall wellbeing of its workforce and community, it is creating a sustainable employee population – and a sustainable pool from which to draw future employees.

Metric	Comments	Category
Existence of programs that cover the following areas of wellbeing: physical/biometric, mental, emotional, financial	Developing an organizational H&W program that covers all aspects of wellbeing is an indicator of comprehensiveness of the program and organizational culture.	Reach
Existence of programs to assist with healthy eating, nutrition, access to fresh food, access to housing	This metric is in keeping with the NIOSH Total Worker Health framework, which considers off-the-job factors that contribute to worker wellbeing. This is indicative of the program's comprehensiveness and overall organizational culture.	Reach
Existence of health and wellbeing programs that reach out to community and potential future employees	This metric is in keeping with the NIOSH Total Worker Health framework. If we consider that organizations' pool of potential future employees come from the local community, it behooves organizations to invest in the wellbeing of the community. This is an indicator of the comprehensiveness of an organization's H&W program.	Reach
Number and rate enrolled in training related to health and wellbeing	This metric is indicative of the interest among the workforce in taking proactive measures for their health and wellbeing. Examples can be psychological wellness training and the implementation of life critical check-in process (fitness for duty training and check-ins).	Participation
Number and percent of employees expressing satisfaction with these different areas of wellbeing programming	The higher employees' satisfaction with H&W programming, the higher their rates of participation, which should hopefully lead to better chances of improved health outcomes.	Satisfaction

Leading indicator 4: Support for and robustness of H&W programming

Just as the functioning of a safety management system depends greatly on the support and resources devoted to it, so does the functioning of health and wellbeing programming. Factors like participant satisfaction and increased budget and headcount can be leading metrics of how effective an organization will be in delivering H&W activities and realizing positive health outcomes in the employee population.

	Metric	Comments	Category
	Number and percent of employees expressing satisfaction with existing H&W activities	The higher employees' satisfaction with H&W programming, the higher their rates of participation, which should hopefully lead to better chances of	Satisfaction
	Number and percent of employees who indicate their ability to tailor H&W activities to their needs	improved health outcomes.	Satisfaction
	Correlation between employee satisfaction and health outcomes		Satisfaction; Health Outcomes
	Participation rate in H&W activities	The higher the rates of participation in H&W activities, the better the chances of improved health outcomes in the workforce.	Participation
	Existence of programs to monitor or screen for specific physiological conditions (e.g. fatigue, fitness for duty, ergonomic issues)	Developing an organizational H&W program that covers several aspects of physical wellbeing is an indicator of the robustness and support of the program.	Organizational Health
	Number of health professionals per the general worker population	This is similar to the metric of number of safety personnel per employee headcount. In this case, "health professional" could apply to occupational health nurses, occupational therapists, ergonomists, etc. The reasoning is that a higher ratio of health professionals per employee headcount is indicative of the robustness and support of the H&W program.	Organizational Health
	Dollars allocated to H&W programming and activities	The amount allocated to H&W activities can be seen as an investment in the organization: a way to prevent injury/illness, to lower healthcare expenditures, to improve productivity, and a possible way to attract employees to the organization.	Organizational Health
大学 のであると	Amount spent on H&W programming per employee participant	This is essentially the internal cost of H&W programming per worker who participates in H&W activities. It's an indicator of the reach and robustness of the H&W program.	Organizational Health; Reach

Leading indicator 5: Sustainability of health outcomes

Achieving health and wellbeing milestones is admirable, and is even better when health outcomes are sustained over the long term. Measuring the prolonged participation and realization of positive health outcomes provide clues to the effectiveness of organizational H&W programming.

Metric	Comments	Category
Rate of sustained employee engagement in H&W activities	This is a measurement of the engagement in H&W activities that go beyond the basic biometric screening (or other one-time activities) to keep people active and engaged over the long term. The rate of ongoing employee engagement is an indicator of the sustainability of health outcomes and the sustainability of the H&W program.	Participation
Amount paid in incentives to employees	The amount paid in incentives can be an indicator of the amount invested in programming and how many employees are utilizing services and completing activities.	Participation
Completion rate of H&W activities	The higher the completion rate, the better the chances of improved health outcomes.	Participation
Rate of sustainability of positive health outcomes as a result of H&W activities (after six months, 12 months, 24 months, etc.)	Measuring participation in H&W activities is typically the only way organizations evaluate their H&W program, but measuring the sustainability of health outcomes is perhaps more indicative of an effective H&W program.	Participation

Next Steps

The Health & Wellbeing Workgroup at the Campbell Institute created these lists of health and wellbeing leading indicators and metrics to provide other organizations ideas of the types of measures they could be implementing and tracking to improve their H&W activities/programs and improve the health and wellbeing outcomes of their workforce. Similar to how organizations use the data from safety leading indicators to make predictions about potential incidents, these leading indicators for health and wellbeing can alert organizations to the potential health risks that the workforce may experience based on biometric measures and participation in targeted activities. Having this kind of knowledge can help organizations to take proactive measures to avert health issues before they occur or become worse.

Some next steps for this work is to perform an evaluation of these leading indicator metrics for health and wellbeing by gathering the reports from the Institute member companies represented on the Workgroup. How have the numbers for these metrics changed over time? Have they seen improvement in the numbers? How do these leading metrics correlate with lagging metrics like the rates of disease, chronic conditions, or mental health issues? What are the actions that Institute organizations have taken using the data from these leading metrics? What are the success stories that Institute organizations have experienced as a result of using leading indicators for health and wellbeing?

The Workgroup recommends using the data from health and wellbeing leading indicators to feed back into the overall safety and health management system. This is in keeping with the concept of integrated health and safety and Total Worker Health®, both of which encapsulate a comprehensive way of protecting and promoting the health of workers. Future research in this area can explore how leading indicators for health and wellbeing, like those for safety, are critical pieces of a total EHS management system – and keeping workers both safe and well.

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