Misunderstanding safety leading indicators

Safety has long suffered from a lack of insightful measurements. In the search for identifying the right or key indicators, several organizations end up confusing activities with leading indicators or delude themselves that their results are due to their activities and efforts, or lack thereof.

With the need to better understand business performance, specifically financial performance, leading indicators were developed. Businesses have realized that measuring revenue and profit did not provide a complete picture of financial health nor facilitate forecasting. Similarly in safety, measuring the activities and results is not a true representation of where your organization is in safety performance and culture nor more importantly where it is going. Worse, this approach often creates a dangerous delusion nudging the belief, “We are achieving great results and therefore it must be due to the steps we are taking.”

What if results are due to normal variation or are temporarily responding to an increase in attention or focus in safety? Perhaps you were just luckier this year. Drawing a correlation between activities and results can be quite misleading.

Albeit financially focused, Wikipedia provides a good description of leading indicators. “Leading indicators are indicators that usually change before the economy as a whole changes. They are therefore useful as short-term predictors of the economy.”

Consider health as an example. A known leading indicator is blood pressure. Is it below normal, normal, pre-hypertension, hypertension or (worse) seek out immediate attention? Blood pressure provides valuable insight into risk factors and a better, proactive representation of one aspect of an individual’s health. Your blood pressure is what is referred to as a performance indicator.

What you might do to both affect and test your blood pressure would be a process indicator. The fact you either have or have not had a heart attack, stroke or liver failure, all potential conclusions to high blood pressure, is a result and thus a lagging indicator. Exercise, diet and taking your blood pressure are all important to both do and track. However, measuring how often you take your blood pressure, how long you exercise and counting your calorie intake provides very little insight into your picture of health.

As organizational performance and culture matures, measurements of incident rate become pointless and are rarely descriptive, predictive or motivating. Organizations must evolve. Those that have pioneered thinking in this area often start with measuring activities as leading indicators but there is still confusion.

Take near-miss reporting for example. Is this leading or lagging? Some leaders believe that because they are reporting and tracking near misses, they are using leading indicators in their evolution of culture, and trust in measurement and data collection. The only difference between a near miss and recordable is time, position, severity or lack. A near miss is an event that has occurred; the incident threshold has passed. It too is a lagging indicator.

Consider perception surveys. Alone they are a lagging indicator as they outline beliefs that already exist, but what is influencing the beliefs and how do those beliefs impact common practice decisions, behaviors and organizational storytelling? At best, perception surveys, like safety work orders or suggestions, are process indicators. Measuring cycle time for safety work orders or identifying experiences that are impacting or reinforcing perceptions would result in performance indicators. How is the performance data responding to our activities? This is valuable. This provides insight into why we are experiencing our current results.

In business and medicine, we have evolved societal thinking that measuring your results and activities are alone ineffective tactics. We must understand performance, both what impacts it and how it impacts our results. Otherwise, how can we better understand if we truly are doing the right things or just getting luckier each year?

For more information, contact Galloway at (936) 273-8715 or email info@ProActSafety.com.