

The Productive Workplace



**Pelletier
& Associates**

Volume 4, Issue 1
January 2008

Pelletier & Associates to Appear at

34th Annual PARMA Conference

Diana Pelletier

As 2008 begins, Pelletier & Associates is prepared to emerge as one of the premier providers of Disability Management Services in the Southern California. Part of our focus is to reach out to professionals in the field of Risk Management, particularly in the public sector in an effort to help create safer work environments by minimizing injuries and helping to mitigate exposures to injuries. In an effort to expand our network, we will be attending and exhibiting at the “Magic of Risk Management” - 34th Annual Public Agency Risk Manager’s Conference and Exhibition at the Disneyland Resort, scheduled for February 10 – 13th, 2008. With educational sessions focused on topics related to workers’ compensation, return-to-work and injury prevention, Pelletier & Associates, is prepared to not only provide solutions to some of the most difficult risk management related issues present, but also to learn from some of the most experienced practitioners in the field. Our goal is to support the risk management community in their task of keeping employees as safe as possible at work while keeping costs to a minimum. Managing workers’ compensation problems is a large task and our expertise and over 20 years of experience in case management has helped us to provide consulting and training services that help fill the gaps employers are seeking to resolve.

AFTER A HARD DAY’S WORK The staff of Pelletier & Associates, Inc. poses for the camera after a successful presentation at NECE in Las Vegas November 2007.



In the Spotlight:

Anatome freeBOARD Keyboard Platform

Marie Martinez

The latest product from Anatome has arrived in the form of a functionally inventive and user-friendly keyboard platform. The freeBOARD's unique layout places the mouse closer to the user, reducing stress on the shoulder. It accomplishes this by placing the numerical keypad in a slide-out deck to the right of the mouse, which allows the mouse to be situated within closer reach. The logic behind this design follows that the numeric keypad, which is used less frequently than the mouse in most cases, can be placed in a more practical area where it won't obstruct accessibility of the mouse. The freeBOARD comes with a keyboard, mouse, numeric keypad slide-out deck, as well as a gel-like palm rest for added comfort. It also includes a built-in mouse deck, which serves as a built-in mouse pad. The freeBOARD is an ideal option for those who require an entirely new set of office equipment, as it is a complete package.



Defining Meaningful and

Sustainable Metrics



Previously, I have emphasized the need to set clear ergonomic policy for your organization in terms of both the activities it is willing to perform and the program's goals, or indicators of success. In defining meaningful and sustainable metrics, the need to set clearly defined, easily measurable goals really comes into play.

Establishing an Effective Methodology

Ergonomics as a practice has been slowly gaining understanding and acceptance since the 60's, and by now, many modern employers have addressed the more obvious ergonomic issues

that have clearly been correlated with safety and repetitive motion injuries (RMIs). During the Clinton administration, a federal ergonomic standard was enacted, but it was ultimately de-legislated and deemed to be too burdensome on employers, and based on bad science. True or not, the elimination of the federal ergonomic standard paralleled the prevailing fuzzy notion of ergonomics by most large employers. Adding to this negative perception, there are currently 12 to 15 organizations that claim to have viable input when it comes to establishing ergonomic standards, often times disagreeing on significant issues.

Today, there seems to be a resurgence of ergonomic initiative, at least in more proactive states; however, even in an environment of reduced workplace injuries, ergonomics still suffers from the belief that its activities cannot be directly correlated with those injury reductions. Instead, it is hard safety programs based on *lagging* post-injury and lost work time indicators that are getting all the credit.

Ergonomics programs, as opposed to safety programs, have the potential not only to prevent injuries, but also to increase productivity. That is why to survive (and it should), the ergonomics industry needs to step up and definitively prove its worth demonstrating a return on investment. The tracking and use of *leading* indicators are critical to this end.

The Nuts & Bolts of Ergonomic Information

Just so we're on the same page, let's standardize our terminology:

Policy: A general statement made by an organization stating its position, intentions and goals. In more severe situations, such statements of position should refer to issues the organization is facing, while its intentions should generally reflect the type of remediation that will be employed.

Goal: What your ergonomics program is trying to achieve over the next 6 to 12 months. Goals should be very specific, and they should be reviewed at least annually. For example:

- To reduce the filing of repetitive motion related workers' compensation claims by at least 50% when compared to the same period last year
- To identify and perform an in-person ergonomic intervention for all employees at high risk for sustaining a cumulative trauma disorder
- To put each employee in the organization through basic ergonomic awareness training by December 31
- To reduce ergonomic risk factors in the call center by 70%





Metric: A collection of goal-associated data points that, when taken together over a period of time, clearly determine if a goal has been met. To achieve the goals listed above, the following activities and tracking would be required:

- Access to year over year data for both the total number of employees in your organization and the number of RMI-related workers' comp claims filed
- Each employee would need to undergo an on-line evaluation or return a risk questionnaire to determine their risk level: high, medium, or low. A more costly approach, but potentially more effective, would be to evaluate each employee's risk level via an in-person evaluation, not relying on electronic means to determine their risk level.
- Have each employee trained either via on-line or in-person means. Each method has its pros and cons, primarily related to cost and effectiveness.
- Each employee's workstation would need to be evaluated, primarily looking for risk factors. Any risk factors present would need to be counted both before and after the evaluation. Although cursorily possible through on-line risk assessment, this type of metric is most accurately developed via in-person evaluation.



Data Point: One element of a set of data typically collected as part of your ergonomic process. Demonstrating the effectiveness of an ergonomic intervention may require that a data point be collected in more than one phase. In the #4 example above, risk factors can be collected at three distinct points:

- prior to the evaluation
- after on-site adjustments have been made
- after all recommended products have been installed

In the case of manually collected risk factors, it is most efficient to track them by category, as opposed to by specific risk factor. Pain and discomfort can be efficiently tracked by area of the body, as opposed to specific symptom. The ergonomics industry has generally agreed on seven risk categories, and standardized body parts.



Leading vs. Lagging Indicators: Metrics that can only be collected *after* an injury occurs are said to be lagging indicators. While it is vital to see positive trends in lagging indicators, they are often times not available until years after an injury has occurred and a case has been settled. For this reason it is difficult to attribute reductions in injury-related indicators to an ergonomics program. Management will typically ask the question, "how do you know that your ergonomics activity is responsible for this trend?" The provision of lagging indicators is often a grey area for companies. Fearing legal recourse, or not

understanding HIPAA regulations, many companies refuse to make injury data available to the ergonomic staff, even for the purpose of correlating their activities.

If your ergonomics program is based *solely* on lagging indicators, it is likely that your program will eventually lose its funding. The following are typical lagging indicators:

- Illness and injury rates
- Lost time
- Workers' Compensation costs

Leading indicators, however, address the issue of timely and attributable correlation to ergonomic activity. They can be collected *before* an injury occurs and are not protected by the veil shielding injury-based data. The following are widely used leading indicators:

- Initial and resulting risk factors, including affected body parts
- Initial and resulting pain and discomfort levels
- Training type and participation



Classification: Classifying your ergonomic interventions is a simple but critical step in the process. How far you go in classifying your data should be determined by the level of detail described in your metrics, and any trending areas you intend to explore in the future. Typical ergonomic assessment classifications are as follows:

- Department (or organizational level)
- Location, for geographically diverse organizations or campus settings
- Job function, category, or title
- Environment (seated workstation, material handling, manufacturing, laboratory, etc.)
- Type of intervention (preventative, worksite audit, post injury, etc.)
- Age, height, gender, use of eye ware



When paired with metrics, each of these classifications can yield invaluable insight into your organization's exposure. Consider having the answers to the following questions:

- Which departments or job functions create the most ergonomic risk?
- Of those, are there job modifications that can be put in place to reduce that risk ... *and potentially increase productivity?*
- Is there a correlation between risk factor reduction and ergonomic training?
- Of the products you have recommended, which ones have proven to be the most effective in reducing risk and discomfort?



Determining the level to which your ergonomic interventions are classified does require some forethought, but even in the extreme, this is not overly taxing. The association of this data to your assessments is a one-time event, unless an employee is re-evaluated. Using this data is generally *not* a day-to-day operational task. Rather, it should be used quarterly to report metrics, or yearly to identify trends.

The right way to develop your metrics

The employee-based, ergonomic assessment is the ideal means to gather and track metrics. The larger the population of ergonomic assessments in a given period of time, the more meaningful and definitive your metrics will be. To this end, both on-line and in-person assessments can be used to extend your outreach. If both are used, the challenge will be in standardizing the measurements, and unifying the reporting. Just remember, each method is diametrically opposed in terms of cost and effectiveness.



What's reasonable, how far should you go?

In determining your programs goals, remember that to definitively know that you have achieved a goal, a highly correlated metric will be required. The more stated goals your program has, the more data points you will have to collect. Keep each goal as targeted as possible, qualifying them only by collection phase (before, after, etc.) and classification categories. Cast the broadest net by focusing your program's goals on increased

participation and outreach. My recommendation would be to have no more than five stated annual goals for your ergonomic program. If your ergonomics program is just starting out or your staff is extremely limited, I would recommend no more than three.

With the possible exception of classification, do not over support the stated goals of your ergonomic policy. With regards to classification, you never know what questions you will want to ask or what trending will reveal in future years, so I recommend capturing as much classification data as possible.

As a general rule, try to keep your data points as generalized as possible while still maintaining enough detail to perform later trending analysis ... potentially even in subsequent years. Focus on data collection first, and analysis later. Here are some good examples of how you can generalize your data collection:

Instead of focusing on counting individual risk factors, tabulate risk factor categories. Generalizing even further than the seven industry accepted risk factor categories, try just counting three “super risk factor categories”:

- Physical – risk factors that you can have a direct impact on through product and workstation adjustments
- Rate and Repetition – risk factors that require a job function change to correct
- Behavioral and Bad Habits – risk factors that can be corrected only through education and subsequent adoption by the employee

Instead of counting specific pain and discomfort symptoms, just count parts of the body that are experiencing pain and discomfort.

If your ergonomic process does not require any product related integration to other systems such as procurement, try counting product recommendations just by category (chairs, pointing devices, keyboard trays, etc.) instead of by specific product. This could potentially limit later analysis and integration, but if no metrics, trending, or other systems require tracking down to the individual product level, this may simplify your data collection effort.

Increase your ergonomic program’s outreach

Yes, there some potential drawbacks to generalization, but they are usually far outweighed by the benefits of increased person-to-person outreach. At the end of the year, demonstrating that you have achieved your goals is made more significant when *more* people have been affected. This approach is not “dumbing down your program,” or “watering down your goals.” It is focusing a limited resource (typically one evaluator per several thousand employees) so as to have the most impact.

Finally, if your ergonomics program is just starting out, your efforts should be targeted at streamlining your process and integrating the collection of data points. Numerous, reasonably priced software tools can go a long way towards organizing your data, especially if you have limited funding or staff, or you are responsible for a geographically limited set of employees.

In later articles, I will discuss best practices for integrating data collection into your ergonomic process, as well as what program components you will need to support your ergonomic policy.



Ergonomic principals should be considered not only at work, but also in your daily life. Cars are one place where ergonomic awareness can be heightened.

1 First, make sure that the car that you choose fits your lifestyle. Ensure a proper fit by taking into consideration your body size, the tasks that will be completed inside the car and the different ergonomic features offered by car manufacturers.

2 Once you've found a car that provides a good fit, sit all the way back in your seat with your upper and lower back fully supported. Adequate upper and lower back support helps reduce strain by redistributing pressure points.

3 Adjust your seat so that your thighs are well-supported. Avoid positioning the seat base length so that the back of your knees touch the seat; allow a few inches clearance in between the tip of the chair and the underside of your knees.

4 Sit with your knees at a higher level than your hips.

5 Make sure that the mirrors are adjusted properly. Even slight maladjustments may result in fine neck movements that can contribute to feelings of tension and discomfort over a prolonged period.

6 Position yourself directly in front of the wheel. This prevents rotation of the spine.

7 The wheel should be placed as close and as low as possible to avoid excessive or over-reaching. Make sure the wheel, gear shift and pedals are well within reach to avoid stretching.

8 Let your arms remain loose and relaxed while holding the wheel. Avoid resting your left arm partially out of the window or inserting your hand into the holes on the wheel.

9 Empty your pockets. Having a wallet or other items in your back pockets can create an uneven sitting posture which can result in a great deal of pressure on your back.

10 Never tuck your left leg underneath your right leg or place your left foot up on the seat. These positions are extremely awkward and may contribute to lower back or hip problems.

11 Don't forget to always be aware of your posture. Bad body mechanics can lead to back or other painful musculoskeletal injuries. Be mindful of your weight, exercise and do daily stretches. Always remember to stop during long drives so that you can stretch your legs. Stretching releases built-up tension and eases tightness in your muscles.

