## Five Things to Consider when Selecting a Musculoskeletal Injury Prevention Partner

By Doug Dickerson | September 29, 2023



Many companies are now available that are providing musculoskeletal (MSK) injury prevention solutions. The field has become very crowded over the past three years. The marketing messages from all providers sound so similar that it is difficult to understand their differences well enough to know which partner would be best for your company. They all make claims that sound too good to be true, and many of the claims are too good to be true.

#### Has the technology been independently verified?

There are many injury prevention offerings available in the market today. These offerings are primarily built using technologies that leverage <u>artificial intelligence</u>, wearable sensors, and <u>computer vision</u> to detect high-risk movements by a worker. However, not all these technologies can detect high-risk or high-load movement. Of those that are capable, some are much more capable than others. You should be able to verify that an independent third party has validated your chosen solution.

Look for a partner that can provide these independent studies to you. The study should include the name of the institution that performed the validation and the credentials of the academics who performed the validation.

## Does the product prevent the types of injuries that are the most prominent and expensive in your organization?

For most companies, musculoskeletal injuries account for the highest workers' compensation cost; this is where these technologies prove useful. You should dig a little deeper and ensure that the product you choose effectively prevents MSK injuries of the body parts that are most injured in your company. Likely, this will be one of the following: shoulder, lumbar spine, or knee. You will want to compare this to the body parts covered by the available solutions. Not all the technologies cover all three of these body areas.

## Will your workers see the product as something to help protect them or something to spy on them?

Critical to the success of the rollout of an MSK injury prevention product is that the workers buy into the program and believe it is being implemented to protect them. When they do this, this can have a significant positive impact beyond the reduction in injuries by also improving your organization's overall culture. This can lead to increased productivity and reduced employee turnover.

The key to getting this buy-in from the workers is that they are confident of the intent behind the initiative. They will support and appreciate the program when they understand it is being implemented for their protection. If, however, they believe it is being put in place to monitor their productivity, effort, or rule compliance, they will see it as intrusive. Employees must have a complete understanding of what the product is monitoring and what it is not monitoring.

For example, some employees may feel like they are being spied upon if the technology tracks things like their location or their heart rate. These data points are not needed for the prevention of MSK injuries. Ensuring the product only collects what is needed to protect the worker is a key factor to consider and valuable information to share with the workers.

#### Does the solution identify workers at high risk of injury and provide guidance to the worker and the safety manager on how to reduce their risk of injury?

It is important that the technology identifies which workers are experiencing high-stress loads on their bodies because of their movement patterns, provides immediate feedback, and a plan for how to reduce this risk. This plan should be personalized to the worker and the job to provide the most benefit to workers. Giving people immediate feedback when hazardous movements occur allows them to change behavior immediately in real-time. Where training is also needed, personalizing this training, even when digitally delivered, helps to create credibility and incentive to learn new movement techniques in performing job tasks.

Personalization can also occur by empowering onsite safety teams or partners with data to realize which team members need their guidance and how. There is no one-size-fits-all approach when it comes to human movement.

Some technology partners offer extra services for safety teams that are small or highly distributed, such as human movement coaches. These coaches should be trained to interpret digital data and offer services that supplement the existing safety team to extend their reach and save them time.

# Are you able to try out the product (and let your workers try out the product) before committing to a large expense?

The return on investment from an MSK injury prevention solution can be remarkably high. However, it is still good to pilot the solution with a small set of workers before committing to a full rollout of the solution. This is important not only to ensure you have selected the correct partner but also to optimize the rollout for your company and culture and apply the learnings from the pilot to the full rollout.

You should select a partner who not only allows a pilot but recommends it. Clear and tailored communication with the workers at key stages of the rollout is critical to the program's success. Starting with a pilot will enable you and your partner to optimize this communication with a smaller group to ensure a more successful rollout to the broader set of workers.

#### **Conclusion**

In the past few years, significant advancements have been made in digital MSK technologies. This has been fueled, in part, by large investments in this sector by venture capital firms. Many of these technologies are focused on injury prevention solutions, and the promise of these solutions is exciting. This has resulted in a lot of options for safety professionals to choose from. Selecting the correct solution is an important but not easy decision. We have identified five critical areas to consider when making these decisions. If you evaluate your potential partners in all five of these areas, your likelihood of selecting a partner that will enable you to be successful is high.

#### **Key Takeaways**

- Consider all five of these areas in the evaluation of the solutions you chose.
- Ensure that you select a solution that your workers will buy into and want to embrace.
- Be very methodical in your initial rollout of the solution and start with a pilot.



#### **Meet The Author**

Doug Dickerson is the senior vice president of data strategy for the Value Creation Team at Bardavon Health Innovations. He has held several senior leadership roles at Bardavon, including managing the data science, product development, product management, and product design teams. Doug earned a B.S. in Computer Science from the University of Kansas. He has worked in both large corporations and start-ups including IBM, Sprint, Informix, Digital Archaeology, Handmark, and OneLouder.