

Work Comp Insights

Artificial Intelligence and its Impact on Workers' Compensation

Recent years have seen artificial intelligence (AI) surge in popularity. Such technology encompasses machines, computer systems and other devices that can simulate human intelligence processes. In other words, this technology can perform a variety of cognitive functions typically associated with the human mind, such as observing, learning, reasoning, interacting with its surroundings, problem-solving and engaging in creative activities.

Applications of AI technology are widespread, but some of the most common include computer vision solutions (e.g., drones), natural language processing systems (e.g., chatbots), and predictive and prescriptive analytics engines (e.g., mobile applications). This technology has the potential to change many aspects of the workplace, especially as it pertains to preventing and managing occupational injuries. As a result, implementing such technology could have a significant impact on organizations' workers' compensation programs.

This article provides more information on the ways AI technology can be leveraged to address employee injuries, bolster recovery processes and minimize overall workers' compensation expenses.

Addressing Employee Injuries

When employees get injured on the job, prompt treatment is critical. Fortunately, AI technology can quickly identify when workplace incidents and related injuries occur (e.g., computer vision tools detecting an employee slipping and falling on the floor), paving the way for speedy response measures. Specifically, this technology can help organizations address employee injuries in the following ways:

Providing Fast Diagnoses

When workplace incidents arise, AI technology is able to utilize advanced imaging and scanning techniques to diagnose employees' injuries at rapid rates, permitting these workers to get the medical assistance they need and move forward with treatment as soon as possible.

Improving Assessment Accuracy

Apart from the ability to diagnose employees' injuries, AI technology is equipped with immense data analysis capabilities. This means it can break down complex medical information with ease. As such, this technology can generally deliver more in-depth insight regarding employees' conditions than a human doctor, resulting in more accurate medical assessments.

Creating Personalized Treatment Plans

After injured employees have received their diagnoses and medical assessments, it's important for them to proceed with proper treatment. AI technology is capable of reviewing employees' unique medical records and injury characteristics to generate customized treatment plans that cater to their individual needs. In turn, this expedites and enhances recovery outcomes.

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Bolstering Recovery Processes

In addition to helping organizations initially address employee injuries, AI technology can prove valuable throughout these workers' recovery journeys, equipping them with the resources and support needed to regain their health and resume their positions in a timely manner. Here's an outline of ways such technology can bolster recovery processes:

Offering Real-Time Monitoring

When paired with wearable devices and sensors (e.g., smartwatches), AI technology can assess injured employees in real time and monitor their recovery progress, providing doctors with immediate feedback and permitting them to respond accordingly.

Adjusting Treatment Plans As Needed

Based on injured employees' recovery progress and medical records from those who have recovered from similar conditions, AI technology can continue to revise individualized treatment plans and deliver researched recommendations on rehabilitation techniques that are most effective for workers' specific situations.

Implementing Advanced Rehabilitation Solutions

AI technology can also optimize injured employees' recovery outcomes by automating certain rehabilitation components. For example, workers recovering from spinal cord injuries can use AI-powered exoskeletons, which are wearable robotic devices that could enable them to regain their balance, coordination, strength and—in some cases—ability to walk at faster rates. Additionally, employees recovering from amputation injuries can leverage AI-embedded systems to obtain 3D designs for prosthetic parts or receive adaptive tissue and muscle assistance, thus helping them restore their mobility.

Minimizing Workers' Compensation Expenses

Altogether, AI technology can help organizations reduce their total workers' compensation expenses by both preventing and mitigating potential claims. In particular, this technology can cut costs in the following ways:

Investigating Claims

AI technology can utilize sophisticated coding capabilities and data analysis strategies to review workers' compensation claims and conduct in-depth investigations of associated occupational injuries. From there, such technology can help identify key causes of workplace incidents, distinguish primary diagnoses for claims, detect possible comorbidities among injured employees and determine treatment-related cost drivers. Based on these results, AI technology can highlight incident trends and injury patterns, offering guidance to help organizations prevent similar claims in the future and make more cost-effective decisions if such claims arise.

Selecting Ideal Providers

Medical services and treatment options can vary between health care providers. While claims adjusters may suggest certain doctors for treating injured employees, these providers may not offer the highest-quality care. AI technology relies on historical data and predictive analytics to recommend top-performing providers for injured workers' particular situations, allowing them to receive the best possible care and experience optimal recovery outcomes. According to the latest industry data, using AI technology to direct injured employees to high-quality providers can help organizations reduce their workers' compensation claim costs by up to 45%.

Detecting Treatment Anomalies

By taking a closer look at treatment records related to workers' compensation claims, AI technology can recognize potential anomalies, such as procedures or medications administered for injuries that don't usually require these types of services. This can help injured employees avoid unnecessary treatment and protect organizations from incurring additional workers' compensation expenses associated with such services.

Reducing Claim Complexity

Industry research shows that as much as 80% of workers' compensation claims involve minor injuries that don't require treatment from medical specialists. Yet, some organizations direct injured employees to such specialists for most occupational ailments. AI technology can permit organizations to easily determine whether specialist treatment is necessary, helping them save time and money amid the recovery process and prevent workers' compensation claims from becoming overly complex.

Conclusion

AI technology could make all the difference in helping organizations improve upon their workers' compensation programs by promoting greater injury detection and response measures, advanced recovery methods and cost-effective claims management protocols. Further, this technology can give organizations the resources needed to limit employee injuries and put a stop to associated workers' compensation claims before they even begin.

Nevertheless, AI technology can be costly to implement and continues to evolve, carrying the potential for unknown risks. For instance, AI-related liability issues and data privacy exposures have become rising concerns across the employment landscape. With this in mind, organizations should consult trusted experts (e.g., legal counsel and insurance professionals) and assess their specific workers' compensation program needs before adopting AI technology.

Contact us today for additional workers' compensation resources.