

## Workers' Compensation Data Analytics: Optimizing Claims and Managed Care Outcomes

### Executive Briefing

**Patricia Brookey**

Senior Vice President

Managed Care Services, PMA Companies



***PMA Executive Briefings** explore strategies necessary to effectively manage workers' compensation costs.*

In this series of ***PMA Executive Briefings***, we examine the role of data analytics in reducing employers' total cost of risk and optimizing workers' compensation program outcomes.

In the last Executive Briefing, we looked at pre-loss analytics—using insights and knowledge from data to prevent losses and keep a workplace safe. In this issue, we focus on using data analytics to produce better workers' compensation claims outcomes.

Post-loss data analytics helps insurance companies/Third-Party Administrators (TPAs) take action by providing insights that can be used to more effectively monitor the progress of claims and identify opportunities to accelerate recoveries. Effective use of data can also point to issues that impede a claim's progress, such as ineffective treatment, treatment not aligned with clinical guidelines, and plateaus in patient recoveries.

Below, we examine three key areas where workers' compensation data analytics can be used to produce better claims outcomes:

- selecting medical providers
- developing and applying intervention triggers
- determining appropriate return-to-work strategies

### **Medical Provider Selection—Analyzing Treatment and Prescribing Patterns**

The role of the physician in achieving optimal claims outcomes cannot be understated. An injured worker's recovery begins with the first physician order, and physician oversight continues throughout the life of a claim. This is why insurance companies/TPAs try to direct care to approved network physicians and utilize physician panels when possible.

***“Data analytics can provide relevant information to the insurance company/TPA to enable them to set up strategies to keep claims on track and moving forward.”***

**Data analytics can play an important role in providing insights to assess a provider’s performance.** In particular, they can help identify those physicians who follow evidence-based clinical guidelines with medical rationale for treatment, which is key to ensuring that injured workers receive quality care with optimal outcomes.

Valuable insights can be gained by integrating several data points into the analysis, including physicians’ prescribing and treatment patterns. This historical information provides critical details that can correlate physicians’ treatment decisions with patient outcomes.

For example, is physical therapy working and, if not, is surgery being considered within the right time period? Are X-rays and MRIs being performed at the right juncture? Has the physician over-utilized or under-utilized diagnostic tools? What drugs are being prescribed, and are opioids prescribed when not appropriate or in a way that will lead to addiction or impede recovery?

The answers to these and many other treatment and prescribing questions are analyzed within the context of evidence-based medicine to identify patterns and build a profile of each provider. These profiles help with decisions on where care should be directed, which physicians should be on panels and how providers are selected.

### **Intervention Triggers**

Data analytics can provide relevant information to the insurance company/TPA to enable them to set up strategies to keep claims on track and moving forward.

For example, with data analytics, automatic alarms can be established to promptly identify when intervention is needed and what resources are necessary throughout the life of the claim. These alerts can be set at the onset of a claim based

upon specific injuries, clinical guidelines, as well as mitigating factors. These factors can include comorbidities like smoking or diabetes, the worker’s age (especially if they are over age 55), and psychosocial factors such as language barriers, dependents or second jobs that can affect treatment strategies.

These triggers should be focused on the progress of the injured worker’s recovery, set off by factors such as when treatment is not producing expected results, non-compliance with recommended care, unexpected changes in a worker’s condition, and pharmacy issues, including narcotics and physician dispensing.

Interventions in response to the alerts may include educating the worker about complying with treatment, communicating with the employer, working with a physician to pursue alternate forms of treatment or engaging nurse specialists to review recovery results.



Consider the use of triggered interventions in this example. An injured worker had spinal surgery, including a spinal cord stimulator implant, to help alleviate pain. Despite having the implant, he continued to take a heavy dose of an opioid for pain. This dual treatment for pain, along with deviation from clinical guidelines for expected recovery, raised red flags that triggered an intervention.

A pharmacy nurse specialist was assigned and determined that the spinal cord stimulator may not be functioning properly. The stimulator was adjusted, and the worker was weaned off the opioid. The injured worker's recovery improved, saving an estimated \$12,000 in annual drug costs and potentially preventing opioid dependency.

### Determining Return-to-Work Strategies

As part of the holistic approach to managing an injured worker's recovery, data analytics can provide insights to help insurance companies/TPAs make decisions about the most appropriate return-to-work option for injured workers, including:

- returning to the same job or modified (light) duty position with the same employer
- retraining for a different job with the current employer
- working for a new employer that can accommodate job restrictions
- retraining in a different line of work

Data related to the type and severity of an injury, comorbidities and psychosocial factors help an insurance company/TPA make better decisions about the injured worker's ability and likelihood to return to work.

### About the Author



**Patricia Brookey is Senior Vice President of Managed Care Services** of PMA Companies. In this role, Ms. Brookey is responsible for leading PMA's corporate-wide managed care operations. In addition to providing strategic leadership, Ms. Brookey is responsible for overseeing medical networks and vendor management, bill review, product quality, and case management functions.

Previously, Ms. Brookey was PMA's Vice President of Managed Care Services. She joined PMA in 2009, and has nearly three decades of experience in the development and implementation of medical cost containment programs. Ms. Brookey is a Certified Rehabilitation Counselor (CRC), Certified Case Manager (CCM), and Licensed Rehabilitation Counselor (LRC). She earned a Master of Science degree from Loyola University and a Bachelor of Science degree from Louisiana State University.

## Managing Chronic Pain

Managing chronic pain after surgery is a good example of how data analytics can improve treatment. From the day a worker is injured, data can be used to help build an injured worker profile. This profile should take into account many factors, including the specific injury, the injured worker's use of opioids for pain, the worker's age, and comorbidities and psychosocial factors that may complicate recovery—and increase the likelihood of the worker developing a drug dependency.

By building an accurate profile and leveraging insights from data to deploy the right interventions and specialists, a treatment plan can be developed prospectively to wean the worker off pain killers at the most appropriate time, while implementing physical therapy and other treatments that will be more effective.

In the next **PMA Executive Briefing**, we examine the role of workers' compensation data analytics in benchmarking and stewardships.