

Improving Workers Comp Through Data

by Jim Harris

Unmanaged medical costs have always been a potential sinkhole for workers compensation claims. As risk managers in charge of workers comp programs strive to optimize medical costs and improve outcomes for injured workers, they must formulate a medical management approach that will yield the best results for their unique set of injuries and work conditions.

In today's age of sophisticated technology, data analytics may hold the key. As information is gathered in the claims process, data analytics can help reveal the trajectory of a case. The more information that is collected and assessed through the life of the claim, the better a data model can predict where a case is headed. For this to happen, however, all the appropriate data elements must come together—claims, bill review, utilization review, case management, and pharmacy benefits—to get a complete picture.

Data points across all of an organization's claims tell a story about the program as a whole, helping risk managers view the big picture in terms of trends in high-cost and problematic areas. With this type of intelligence, they may begin to design a medical management approach that can change the course of individual cases and improve overall program performance. The following are



specific ways data analytics can impact workers compensation case management performance:

1. Detection of spiraling claims: In most cases, workers comp programs have seen the value in assigning case managers to catastrophic claims, such as brain or spinal injuries, that require complex care coordination to ensure the best possible outcomes.

The real challenge is in identifying the seemingly routine claims that turn into complex and costly cases. New approaches in analysis can help identify

escalating cases that need clinical intervention. Managed care organizations have identified key factors that indicate when a claim has reached a critical tipping point. Workers comp programs that incorporate these guidelines—grounded in evidence-based medicine, analytics and industry data—can identify escalation early on.

2. Assessment of case severity: With work-related injuries, the compensable diagnosis is not the only factor that will determine the severity of a case, as this factor alone does not tell the whole story.

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It is important to consider all elements that impact the claimant's injury, recovery and outcome.

One tool that can help predict risk and benchmark treatment is the Work Loss Data Institute's Official Disability Guidelines. Sophisticated managed care organizations have begun to use the guidelines' comorbidity calculator along with their own clinical expertise and key data points to arrive at a case severity rating on a scale of 1 to 100.

A claim initially perceived as moderate with a 33-point score might be determined not to need case management. In order for the score to be accurate, however, the claimant must be thoroughly assessed to determine if there are other complicating factors, such as comorbidities and other risk factors that would increase the case's severity rating, and thus be more likely to have a poor outcome if left unmanaged. This model will examine a host of characteristics, such as obesity and prolonged use of narcotics, that can complicate recovery, and then indicate when case management would be favorable.

3. Scoring referrals using predictive modeling and machine learning: Referral-scoring tools have long been used to help identify individual cases that would benefit most from case management. These tools rely on an organization's historical data to generate scores when claims are reported and as new data is collected. They then produce a predicted risk profile based on potential

cost benefit, as well as the probability that the case would have been managed in the past.

Predictive analytics continues to apply more advanced data models to referral scoring. They can integrate these case severity ratings and use data mining, text analytics and statistical modeling to identify patterns and predict future outcomes. These predictive models capture relationships among the data points to help assess the risk profile of future cases. Prescriptive analytics goes a step further, suggesting actions that could be taken to lower the level of risk on these cases.

The next frontier is machine learning, a form of artificial intelligence that enables computers to learn without being explicitly programmed. As a result, machine learning systems can analyze streams of new data and identify new indicators that signify when a claim is escalating and needs intervention.

4. Scorecards to improve program performance: The analytics process can take massive amounts of information on workers comp injuries and put that data into meaningful scorecards. These reports monitor key performance indicators that help to evaluate the success of an organization's medical management approach. Since each organization is unique, the scorecard should be customized to reflect the indicators that the enterprise specifically deems important.

With the first set of scorecards, risk

managers can begin to see where and when telephonic and field case management services are brought in and gauge the resulting costs and outcomes against overall medical spending. This offers a sense of what leads to effective use of case management services in relation to their unique claims experience. The first set of reports also serves as a baseline to monitor program progress over time and to identify ongoing areas for improvement. In fact, scorecard reviews should be scheduled on at least a quarterly basis.

With ongoing reports, program managers can identify new and emerging risks, such as the costliest claims by injury type, location or position, or the most common injuries by body part. Looking at these factors can help identify areas that would benefit from more aggressive medical management. When one global retailer found an alarming increase in shoulder injuries, for example, it created educational programs that helped claims staff readily identify the cases that would benefit from clinical intervention. At the same time, worksites implemented safety guidelines and training to reduce the rate of shoulder injuries.

With a similar scorecard strategy, workers comp programs can also evaluate and improve care by enhancing provider networks. Provider scorecards assess if networks have the right mix of physicians and can compare and stratify peer providers based on certain quality measures. Workers comp programs can

then strive to increase referrals to the providers that consistently perform well and deliver quality outcomes.

5. Looking beyond the data: Although there are many sophisticated data tools, when it comes to case management, programs cannot rely on data alone. A plethora of subjective factors must also be monitored and assessed to ensure quality. Case managers often go above and beyond their expected roles, using unique experience, empathy and

expertise to improve the lives of injured workers. These factors cannot be summarized and quantified with statistics. Instead, organizations need to have subjective methods to review these factors that represent the “heart” of their medical management program.

With this in mind, managed care companies are evaluating individual case managers, using both subjective and objective measures of performance. This allows case management organizations

to evaluate staff performance and identify areas where individuals may benefit from additional training and mentoring. They thus foster the development of their case managers, providing them with opportunities to build their knowledge and skills, and at the same time, recognizing and promoting case management excellence. ■

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