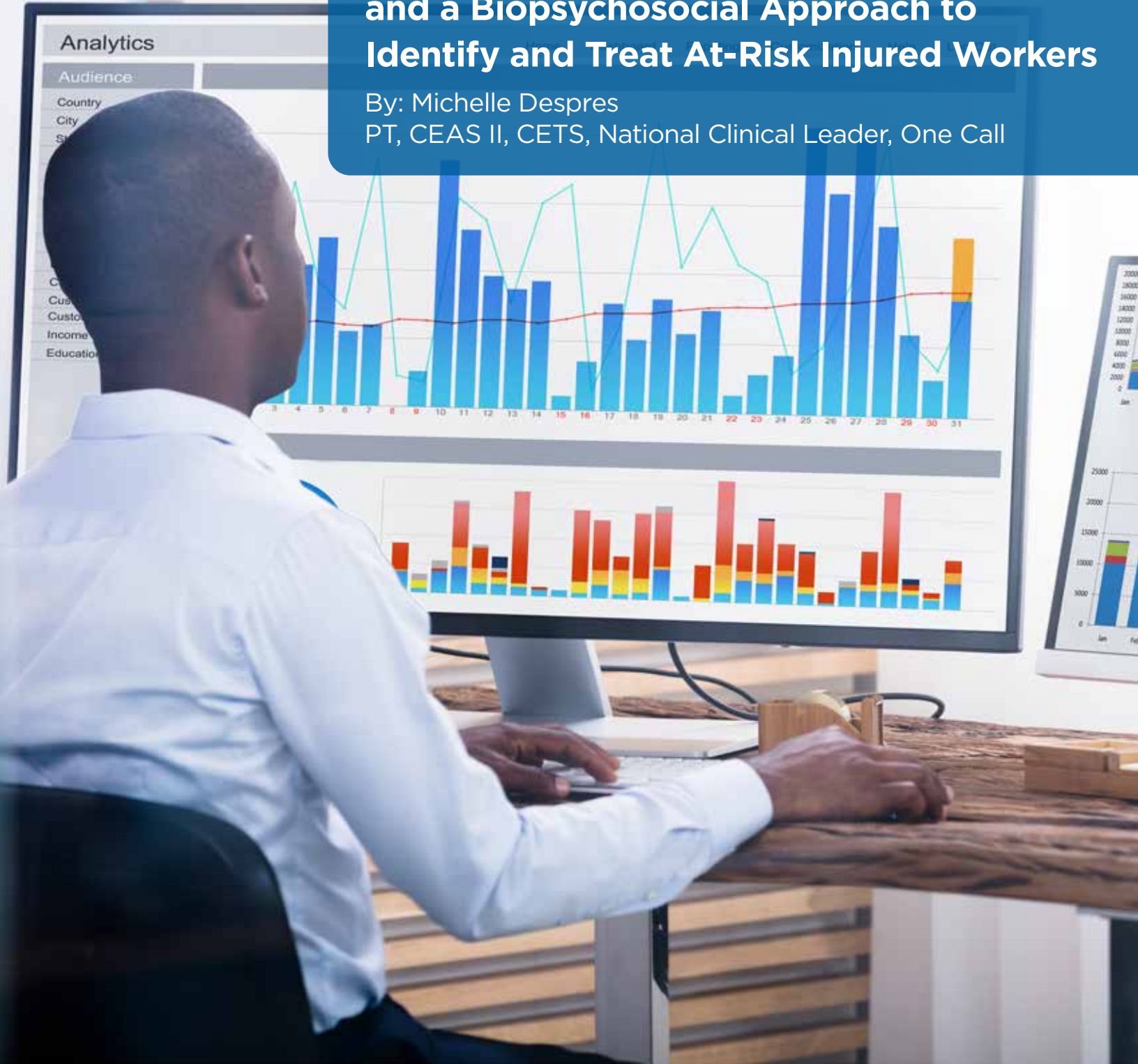


Incorporating Predictive Analytics and a Biopsychosocial Approach to Identify and Treat At-Risk Injured Workers

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SITUATION

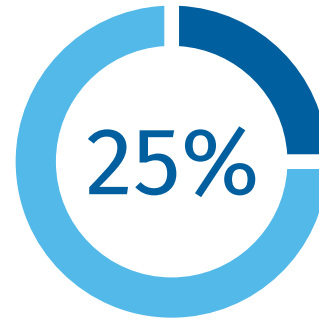
At-Risk Injured Workers Are Slow to Recover, Expensive to Treat

When it comes to physical therapy and rehabilitation, in general, the same guidelines for claims hold true – a small percentage of claims account for a disproportionate percentage of costs. The top five percent of cases account for 25 percent of total PT costs. In fact, the average cost associated with the top five percent is more than five times the average PT cost per case.¹

As these cases unnecessarily drag on or worse, convert into permanent disability, the injured worker may simply give up on returning to normalcy and work while unnecessary costs continue to mount and employers lose productivity.

To-date, the inherent problem has been the difficulty in accurately identifying these individuals early enough to develop and implement an intervention plan quickly and change the potential outcome of the injured worker's treatment. Historically, these cases were identified as problematic and at-risk only after a treatment plan exceeded the initial guidelines, and by then, it was too late to reverse course.

Alternatively, payers recognized certain injuries as the culprit and invested in screening those types of injuries. This 'injury approach' could result in an inaccurate assessment or under-count potentially problematic cases since some problematic cases may not be associated with such injuries. In reality, only a small subset of all cases need attention. The question is...which ones? Screening each claim of a certain type could potentially identify some candidates, but may miss others, and could divert valuable resources that could be used toward treatment and outcomes. A more efficient solution is needed.



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TWO-PRONGED SOLUTION

Predictive Analytics Identify At-Risk Cases; Biopsychosocial Approach Delivers Proactive, Patient-Centered Care

To solve this dilemma, it is important to develop an "early warning" system to identify these cases at inception, and proactively intervene to keep cases tracking toward a successful outcome.

Identifying and Locating Triggers

Predictive analytics help to understand the characteristics of cases more likely to be prolonged and resulting in unfavorable outcomes. The practice of deploying predictive analytics involves overlaying sophisticated algorithms onto claims and managed care data to quickly and accurately identify patterns and relationships – potentially altering clinical pathways and promoting faster, safer recovery for injured workers.

Applied over multiple data points, predictive analytics can identify specific triggers that pinpoint an at-risk case and flag it at the onset of treatment. This enables the therapist to create a more proactive approach to their treatment plan.

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Producing Faster, Better Outcomes

Once a case is identified “at-risk,” it is important to immediately institute intensive supervision, including additional scrutiny of the evaluation, rigorous and frequent review, and ongoing communication with all stakeholders. All interested stakeholders should be informed of the claim’s at-risk status, offered insight into the reasons, and provided possible alternative courses of treatment. The case manager should also be notified; if a case manager has not been assigned, the payer may consider assigning one to the case.

Injured Worker Centric Approach

At-risk injured workers benefit from care delivered by seasoned therapists who understand the concepts of coaching, motivational interviewing and active listening. This personal approach promotes injured worker recovery.

Equally important is engagement with all caregivers. One Call, for instance, can conduct, foster and facilitate peer-to-peer discussions with treating clinicians to understand how the injured worker is progressing and proactively identify any potential barriers to a successful return-to-work. The review culminates with a comprehensive report that summarizes care to-date, co-morbidities identified, job requirements impacted by the injury, and any recommendations for moving forward.

Based on the discussion, there may be recommendations for programs that bring about faster recovery and enhanced outcomes, such as behavioral coaching, delayed recovery programs, cognitive behavioral therapy, and/or functional restoration.

Treating the Whole Person

The risk of taking a biological-only approach to treatment can lead to “medicalization” – an overabundance of prescribed medical therapies with little results; emotional issues such as frustration, anger, and depression; social isolation; opioid misuse; higher claim costs;

and long-term disability.

Many factors in an injured worker’s life, which may be unrelated to physical health, can impact the speed, duration and effectiveness of the injured worker’s recovery. Without tending to the psychosocial aspects of an injured worker’s life and health, recovery can be delayed or fail altogether.

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Biopsychosocial analysis views an individual holistically – it is the social, biomedical, and psychological intersection of health. A biopsychosocial evaluation outlines the way an individual interacts with their job and work environment, taking into consideration:

- Work demands
- Mental responsibilities
- Work culture and community
- Degree of control an injured worker has on the job
- Quality of company leadership
- Methods used by management to provide feedback
- Social support amongst co-workers
- Work stress

By utilizing a biopsychosocial mindset, the therapist identifies barriers to recovery including an inflated level of pain; a belief that recovery is impossible; permanent disability expectations; catastrophic thinking; opioid misuse; loss of physical fitness due to inactivity; a feeling of injustice; depression; and an absence of positive coping skills.

This approach may also uncover specific reasons for an injured worker's delay in returning to work, such as a poor relationship with a supervisor, fear of losing their job, or fear of pain if job duties resume. There may also be barriers within the community or family: lack of transportation, lack of assistance to cope with injury restrictions, or changes in family life and roles.

Assessment and Remedies

An initial assessment for at-risk factors can include simple questions such as:

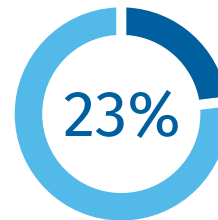
- How are you coping?
- When do you think you'll return to work?
- How much do you worry that your pain will never get better?
- Why do you think this happened to you?
- What do you like about your work?

Remedies for psychosocial barriers range from cognitive behavioral therapy to pain management techniques. Cognitive behavioral goals focus on envisioning the ability to manage despite ongoing pain, re-engaging in hobbies, reinforcing progress and achievements, and identifying and acquiring skills to overcome obstacles.

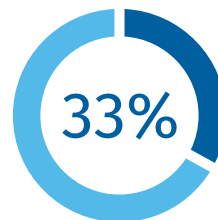
PROVEN RESULTS

Frequent collaboration of providers, adjuster and injured worker built into this approach results in faster recovery at a lower cost. For example, surgical shoulder injuries identified and managed through One Call's At-Risk program have experienced the following reductions:

- 23 percent reduction in the percentage of cases going over utilization benchmarks
- 17 percent reduction in the average cost of the top five percent of outlier cases
- 14 percent reduction in the average visit utilization of the top five percent of outlier cases²



23% reduction in the percentage of **surgical shoulder injuries going over utilization benchmarks** when managed through One Call's At-Risk program.



When predictive analytics were incorporated, one third party administrator experienced a **33 percent cost reduction associated with back claims.**



When predictive analytics were incorporated, one third party administrator experienced a 33 percent cost reduction associated with back claims, a 32.8 percent decrease in average total paid for back injuries, a 34.4 percent decrease in average lost time days, and a 28.95 decrease in average total medical. Another company reported a 71 percent decrease in average paid costs, a 59 percent decrease in average medical costs, and a 75 percent decrease in average lost time days.³

The combination of predictive analytics and biopsychosocial analysis enables accurate identification and positive impact of at-risk injured workers. As an actively engaged partner, One Call is continually refining its At-Risk program – adding additional specificity and actionable intelligence – to successfully return injured workers to work and life.

For more information on One Call's At-Risk program, contact National Clinical Leader Michelle Despres at michelle_despres@onecallcm.com.

One Call's At-Risk Program in a Snapshot

What: Data-driven early identification of potentially at-risk/high-cost cases

Why: Mitigate costs associated with at-risk claims and drive exemplary outcomes

How: Analyze internal and external data trends, build systematic flags, communicate, and provide additional clinical oversight

Goal: Provide value, savings, and clinical expertise that improves return-to-work outcomes for potentially costly, longer duration cases

1 One Call National Data, 2019
2 One Call, National Data for Surgical Shoulder Cases
3 One Call, Third party proprietary data