

Narcotics Abuse in Workers' Compensation

Substances, Psychology and Solutions

While most doctors agree that the use of narcotics (medically referred to as opioids) and other drugs make sense when their use causes pain to decrease, function to improve, and generates only minimal adverse effects, there is considerable controversy associated with the use of these drugs.

This controversy stems from the problems associated with the long term use of opioids; risks that include addiction, increased pain sensitivity (medically referred to as hyperalgesia), hormonal effects, depression and suppression of the immune system among other problems.¹

Combine these side effects with the vast number of people that experience these effects (51% experience at least one adverse effect according to the American Chronic Pain Association²) and the skyrocketing costs of these drugs and the importance of the issue becomes clear.

Just how big is the problem? NCCI reports that 20% of workers' compensation medical costs of fully developed claims are spent on prescription drugs with narcotics accounting for 34% of this spend—80% of which is long term (after the first six years).³ This indicates that prolonged use is pervasive and the associated costs are catastrophically high.

Medications and Chronic Pain

This paper focuses on the use of narcotics in treating chronic pain. We define chronic pain as pain that lasts three or more months or, rather, pain that lasts longer

than would be expected given the underlying physical injury. Included in this definition is pain associated with chronic medical conditions, neuropathic pain (pain resulting from nerve damage) and psychogenic pain (pain associated with no apparent injury).⁴

Opioids and How They Work

Opioids can be natural or synthetic. Naturally occurring opioids are derived from opium and include morphine and codeine. Synthetic opioids can be partially synthetic such as hydromorphone, oxycodone, or wholly synthetic such as levorphanol, fentanyl, methadone, propoxyphene and meperidine.

Most opioids are classified by the United States Drug Enforcement Administration as Schedule II drugs because of their highly addictive nature. (Heroin, for example, is a Schedule I opioid on the I-V scheduling spectrum, whereas fentanyl, hydromorphone, pure hydrocodone, pure codeine and morphine are classified as Schedule II drugs.)

These highly addictive drugs work by binding to pain receptors in the brain, spinal cord and other parts of the body. In fact, opioids follow the same pathway responsible for "rewards." The same reward pathways activated when a person receives positive reinforcement ("reward") for certain behaviors, are also activated by opioids. Natural rewards such as food, water, sex and nurturing are required for the survival of the species.

Opioids replicate what nature has programmed—positive reinforcement—which forms the foundation of their addictive nature. A person activates the reward pathway when taking an addictive drug because these drugs increase dopamine levels in a very specific area known as the nucleus accumbens.

Scientists have been able to measure brain neurotransmitter levels in this part of the brain in lab animals that have become addicted to drugs. In the landmark Science article published in 1997 entitled “Addiction Is a Brain Disease, and It Matters,” Alan Leshner, a former director of NIDA wrote: “Scientific advances over the past 20 years have shown that drug addiction is a chronic, relapsing disease that results from the prolonged effects of drugs on the brain. As with many other brain diseases, addiction has embedded behavioral and social-context aspects that are important parts of the disorder itself.”⁵

This is a core concept in addiction medicine. With neural networks and pain sensory systems communicating with other brain pathways involved in emotions and cognition, there is considerable overlap between chronic pain and addiction. This overlap makes chronic pain, in the context of addiction, a very complicated biopsychosocial disorder.

Further complicating matters is the fact that scientists have found that addicts experience more pain. Tolerance builds, pain increases and the vicious cycle ensues.

Opioid Use

Given that opioids are so addictive, one might ask why the drugs are used on such a prolonged basis. This line of questioning is not new. In fact, it dates back to the 1800s when prominent physician Clifford Abbot wrote, “At such times I have certainly felt it a great responsibility to say that pain, which I know is an evil, is less injurious than morphia, which may be an evil. Here experience is needed. Does morphia tend to encourage the very pain it intends to relieve?”⁶

Scientists have studied the links between the use of opioids and increased pain a great deal. And, as research mounts, opioids—especially long term use of opioids—has come under increasing criticism. However, many physicians still favor the use of opioids. Physicians using opioids often base their use on the belief that the pain relief opioids provide is superior to that provided by other analgesic medications (even if these have not been tried).⁷

The American College of Occupational and Environmental Medicine recommended the following guidelines⁸ for appropriate use:

- Opioids should be used in acute musculoskeletal pain only when there is significant objective evidence of injury, when other medications such as NSAIDs and acetaminophen are contraindicated or on a very limited basis if other medications have failed to control pain in the short term (up to 3 weeks after acute injury).
- In chronic pain, in infrequent instances, short-term use of an opioid may occasionally be helpful during the initial active physical rehabilitation of persons with objective evidence for de-conditioning, increased pain with exercise, and (fear avoidant) chronic pain behavior during initial therapy to facilitate physical activation if other means of temporary reduction in the musculoskeletal pain that increases with exercise, such as heat, acetaminophen or NSAIDs, are ineffective. In that setting, the judicious, short-term use of one non-combination, short-acting narcotic like oxycodone or codeine may be indicated. A maximum duration of four weeks is suggested.
- In rare situations when a patient derives clear functional benefit from opioid use, continued use may be indicated with careful management.

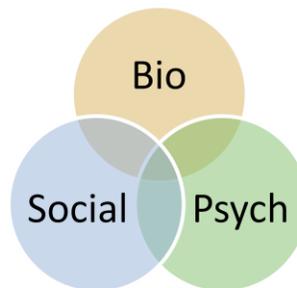
Likely Abusers

Today more is known about those at greater risk for developing chronic pain and opioid abuse problems. Long held beliefs about conditions said to be predictive of narcotic abuse and chronic pain such as high analog scale ratings (e.g. 10/10), use of multiple pain descriptors, poor perceived coping skills and a history of being treated by many providers, are now being replaced with a larger fact base within the literature.

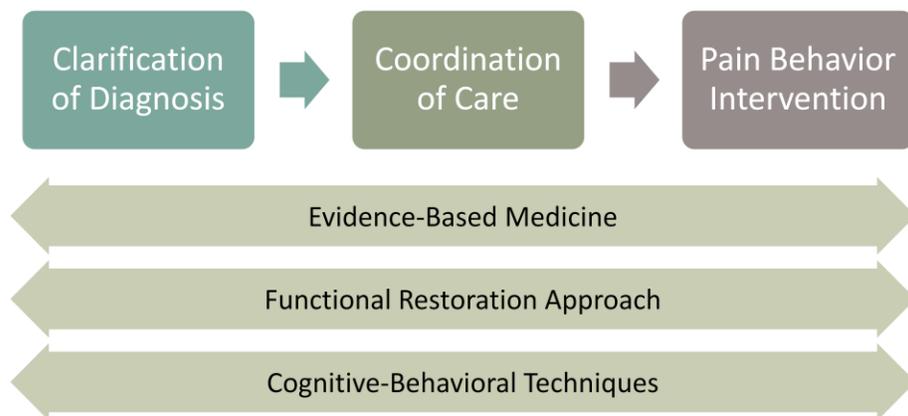
It is now known that Axis I disorders and other historical risk factors play a greater role in the likelihood of addiction and opioid abuse. Some of the worst risk factors include major depression, panic disorders, post traumatic stress disorders, eating disorders, personality disorders, substance abuse disorders, history of alcohol dependency and poor employment histories.

Paradigm's Model for Addressing Chronic Pain:

Best Recovery Model



Key Components



Pain Intervention That Works

So what can be done? We know that pain is a very subjective experience, and chronic pain is deeply intertwined on a biological, psychological and social level with addiction. We know that some people are more likely to become addicted. Are the American College of Occupational and Environmental Medicine guidelines enough? What should be done for those more likely to become addicted or for those already addicted to their prescription medications?

To address the complexities of chronic pain and opioid abuse, the best studied evidence-based treatment for chronic pain is biopsychosocial. Overreliance on a strictly biomedical approach results in overutilization of medical technologies, delayed treatment of comorbid conditions that contribute to pain, adverse treatment-related consequences and poor clinical outcomes.

Studies have proven evidence-based, multidisciplinary treatment of chronic pain to be most successful. No other approach has consistently demonstrated positive outcomes with respect to return to work, decreased healthcare utilization, reduction of opioid medication use, increased function and reduced disability claims.

However, success requires a motivated individual and a skilled treatment team willing to work within the biopsychosocial model. One must clarify the diagnosis, ensure the right care and match the proper interventions with the right circumstances.

Clarify the Diagnosis

It is imperative to clarify the diagnosis using objective criteria and not the highly variable self-report. When one alternatively measures the problem using a subjective pain rating, the psycho-social influences will likely be intermixed and all pain, regardless of cause, will be reported together.

To clarify any inconsistencies one needs to ask questions such as:

- Is the diagnosis confirmed with objective findings?
- Were controversial diagnostic criteria used?
- Are behavioral and/or emotional factors contributing to prolonged recovery?
- Are any additional evaluations needed?

Ensure the Right Care

Once clear on the issues, coordination of the right care becomes the priority. Appropriate providers will emphasize functional restoration over an interventional approach. Additionally, they will use evidence based medical guidelines and cognitive/behavioral techniques to move the focus of control and responsibility back to the injured worker.

Those influencing the course of the claim can help ensure that the patient sees the right types of providers—experts that address behavioral factors and coordinate a care plan that addresses the emotional, motivational and other secondary issues.

Monitor Interventions

Another key role in managing the patient is monitoring the interventions that are being prescribed. In this regard it is often helpful to have the support of independent pain experts (such as Paradigm) to help prevent addictive medication abuse, ensure that prescriptions are within proper clinical guidelines, and consult on the appropriateness and options surrounding surgeries and costly procedures.

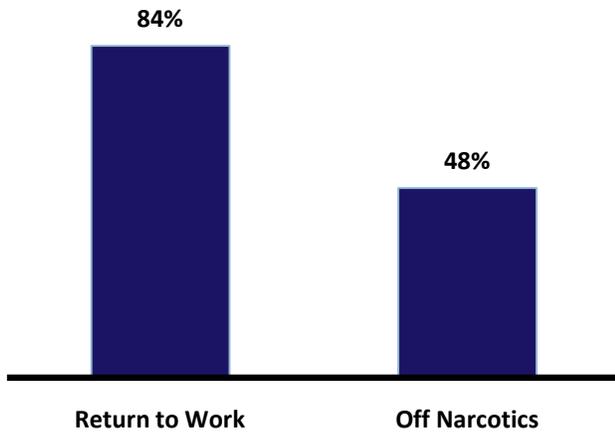
The goal in monitoring interventions is not to deny care, medication or procedures, but to understand the circumstances under which the interventions will be successful and when other types of care (e.g. behavior therapy) will prove more useful.

Results

Paradigm's Systematic Care ManagementSM incorporates all the elements outlined in this article: a biopsychosocial orientation, consistent use of evidence-based medical guidelines and systematic use of the three core management components (diagnosis clarification, coordination of care and informed monitoring of interventions). Evidence that Paradigm's methodology delivers outstanding outcomes is shown in figure 1 (early intervention) and figure 2 (later stage intervention).

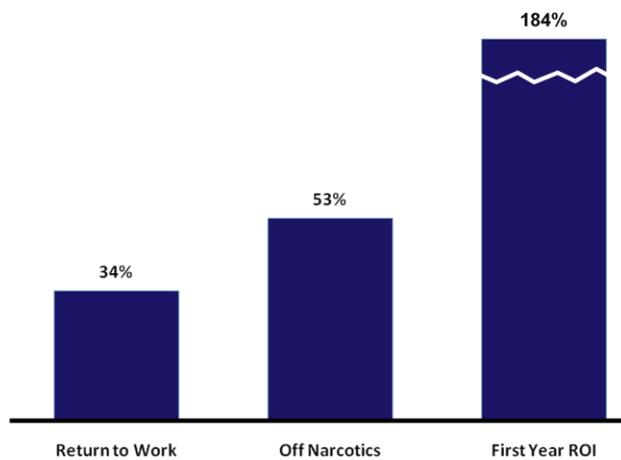
Figure 1 illustrates Paradigm's success in returning the employee to work when allowed to manage the case just as the individual begins to exhibit chronic pain warning signs.

Figure 1: Early Referrals (less than one year from date of injury)



The later stage results shown in figure 2 demonstrate how the right approach can even impact later stage cases referred for medical management an average of six years from the date of injury.

Figure 2: Later Referrals (average case age six years from date of injury)



In the end, it is most important to recognize and address issues as early as possible. Addiction and chronic pain are highly interrelated and deserve the attention of all of us as an industry.

High costs can only be addressed when the injured worker receives the right care. Focusing on the right medical approach, biopsychosocial is the right first step to addressing the high cost of opioids in workers' compensation claims.

¹ Steven D. Feinberg, American Chronic Pain Association "ACPA Chronic Pain Medications Supplement" 2008

² Ibid

³ NCCI Workers' Compensation Prescription Drug Study, 2008 Update

⁴ Alex Swedlow, Laura Gardner, John Ireland, and Elizabeth Genovese, "Pain Management and the Use of Opioids in the Treatment of Back Conditions in the California Workers' Compensation System" CWCI Report to the Industry, June 2008

⁵ Alan Leshner "Addiction Is a Brain Disease, and It Matters"

⁶ Clifford Abbot Practitioner. 1870; (3):327-330

⁷ Ibid Swedlow, CWCI

⁸ Harris, J.S., Hegmann, K.T., Holland, J.P., Sinnott, P., Torkelson, C., Weiss 2 M. The ACOEM Occupational Medicine Practice Guideline Methodology updated. JOEM, submitted for publication