American Academy of Actuaries

Issue Brief

Key Points

- Pre-pandemic, physicians regularly prescribed opioids to injured workers for pain management.
 Opioids caused absenteeism and job performance issues and drove longer duration of workers' compensation claims.
- During the height of the pandemic, injured workers lost access to key resources and guidance to prevent opioid dependency. Also, precautions for more hazardous industries were negatively impacted and insurers feared increased use of telemedicine could lead to more opioid prescriptions and less adherence to opioid treatment programs.
- Post-pandemic, if frequency rises following the pandemic, medical providers and claims adjusters could be challenged to manage opioid use disorder with the same focus. Many employers have had difficulty finding employees, which could create difficulty in reinstituting pre-employment drug screenings that have limited the incidence of opioid use disorders. Increased use of remote workforce also makes safety programs, loss control visits, and claims investigations more difficult for insurers.



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The Potential Impact of COVID-19 on the Opioid Epidemic

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Over the past decade, the United States has experienced an opioid epidemic.¹ Studies have shown that the United States, with less than 5% of the world's population, uses 80% of the global supply of opioid drugs.² As Dr. David Kessler, the former head of the Food and Drug Administration, has observed, the opioid epidemic is one of the "great mistakes of modern medicine."³ Opioid use also has a significant impact on the U.S. workers' compensation insurance system, which provides wage replacement and medical benefits to injured workers and supports their safe and timely return to work.

The Workers' Compensation Committee of the American Academy of Actuaries has written this issue brief to discuss the potential impact of COVID-19 on the workers' compensation industry's opioid efforts. Each section will describe the impact on three stakeholders—workers, employers, and insurers. The first section will describe the opioid epidemic before the COVID-19 pandemic. The second section will describe the impact during the pandemic. The third section will describe the possible impact once the pandemic subsides. The issue brief also discusses ways that actuaries are involved in evaluating the ongoing impact of the pandemic.

Pre-COVID-19

Impact on Workers

Pre-COVID-19, the impact of opioid use on injured workers was quite significant. Before the opioid epidemic broke in the early 2000s, physicians across the country prescribed opioids with a presumption that they were not addictive. Unfortunately, that led to a large number of injured workers becoming addicted to opioids, many of whom were just following their doctor's advice. In the more tragic cases, injured workers lost their families, became homeless, overdosed, and some eventually died.

As was noted in a 2014 pharmacy benefit industry report *A Nation in Pain: U.S. Opioid Trends*, 49.6% of patients who took opiate painkillers for more than 30 days in the first year of use continued to use them for three years or longer.⁴ While opioid use disorder is not defined based on any time measure of use, the report highlighted that 50% of those who continue opioid use beyond three years are prescribed short-acting opioids rather than longacting opioids. Short-acting opioids are intended for short-duration relief of pain and reflect a higher risk of side effects, complications, and addiction. Long-acting opioids are intended to provide around-the-clock relief of chronic pain and reflect lower abuse potential.

In 2016, the Centers for Disease Control and Prevention (CDC) announced guidelines for prescribing opioids for chronic pain, which included a recommendation for limiting the first-time prescribing of opioids to seven days. This ultimately led to 15 states adopting the seven-day supply limit, with some states adopting a three- to four-day limit.⁵ Major companies like CVS Pharmacy, Express Scripts and Walmart followed suit, limiting opioid prescriptions to a seven-day supply for certain circumstances.^{6,7 8} With state governors across the country creating task forces to address opioid addiction, lawsuits being filed against manufacturers, and the media providing widespread coverage regarding the addictiveness of opioids, physicians and injured workers became more cautious in using opioids to treat chronic pain.

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Impact on Employers

Companies suffered from absenteeism and job performance issues related to employees suffering from substance abuse. The National Safety Council, a nonprofit safety advocate organization, notes that opioids can impair thinking and reaction time, which can lead to serious errors when performing tasks that require focus, attention to detail, or the need to react quickly. With roughly two-thirds of people who have an opioid use disorder being in the workforce, safety efforts focused on employee education, enhanced workplace policies, medication assisted treatment, and employee health and well-being have increased in importance for many employers.⁹

Impact on Insurers

Pre-COVID-19, insurers, third-party administrators, and other medical management firms were aggressively working to reduce the impact of the opioid epidemic on medical spend and injured workers. Efforts included supporting state prescription drug monitoring programs, leveraging multi-disciplinary pain management teams, rolling out opioid awareness campaigns, providing Narcan training,* implementing new prescribing rules, implementing formularies, eliminating compound drugs, educating prescribers through physician peer-to-peer contact, using predictive models to identify and proactively assist higher-risk populations, and establishing comprehensive prescription drug networks.

COVID-19—January 2020 to Present

The emergence of COVID-19 has caused disruptions throughout the U.S. economy. COVID-19 has impeded the insurance industry's efforts to contribute to the fight against opioid dependency from the vantage point of the general workforce. This section discusses the current impact of COVID-19 on the opioid epidemic as it relates to workers, employers, and insurers.

Impact on Workers

Prior to the pandemic's emergence in the United States in early 2020, the national unemployment rate had been at historic lows, averaging 3.7% during 2019.¹⁰ However, as the U.S. economy largely shut down in March 2020 due to COVID-19, there was a sharp increase in the unemployment rate across most industry sectors, reaching 14.7% nationwide in April 2020. Due to the financial stress and resulting isolation facing unemployed workers, unemployment rates are directly correlated with substance abuse and poor mental health.¹¹ As unemployment increased, there may be an increase in the abuse of drugs¹² (i.e., prescribed and illicit opioids and alcohol), along with a rise in anxiety, depression, and suicide.

* Narcan (the brand name for the drug naloxone used to reverse opioid overdose) training programs can include how to screen individuals for an opioid-related overdose; how naloxone works on the body; when naloxone administration is medically indicated; how to administer naloxone; and precautions, warnings, and potential adverse reactions.

With this increased unemployment, there have been fewer employment opportunities in general, as well as fewer employment options for injured workers who are transitioning back to work. It has been difficult for some employers to maintain return-to-work and light-duty programs, especially for "nonessential" employees. As these programs have been scaled back or suspended during this time, workers are more likely to feel less connected to their employers and colleagues, which can increase the potential for opioid abuse.

Certain occupations are likely to see increased workers' compensation claim frequency due to COVID-19. In particular, front-line workers (e.g., health care workers, first responders) and essential workers (e.g., grocery store workers, public transportation employees) may have suffered physical injuries related to COVID-19 due to the nature of their occupations. They may also have experienced mental health injuries due to the exposure of working in their occupations during a pandemic. The physical injuries and mental health challenges could result in an increase in prescribed opioids.

Many nonessential medical treatments were delayed during the early stages of this pandemic as health care providers focused on efforts to minimize the spread of exposure to COVID-19. The impact of these delays included the cancellation of nonessential surgeries, occupational therapy, physical therapy, and doctor visits. These delays may increase the reliance on opioids as injured workers use pain medicine in place of other medical treatment. Similarly, many opioid treatment programs and medication assisted treatment plans have been disrupted due to COVID-19. As a result, injured workers may not have access to important resources (e.g., methadone clinics, detoxification facilities) or receive the necessary guidance to prevent opioid dependency and addiction.

Impact on Employers

The shock from COVID-19 on the U.S. economy dramatically impacted the current workforce, both in terms of number of employed workers and the mix of experience levels within the active workforce. Due to decreased employment, there are fewer people in the workforce, which may result in lower numbers of workers' compensation claims. As companies laid off or furloughed employees, those with less experience typically were released first. As there is higher claim frequency with less experienced workers, this change in the labor force may result in lower claim frequency.¹³

On the other hand, typical precautions taken by employers—especially those in more hazardous industries (i.e., with risks that tend to have higher injury rates)—have been adversely impacted under the circumstances posed by the pandemic. The environment, health, and safety (EHS) departments of larger employers have had to rethink how they identify workplace hazards and reduce accidents with the shift to working from home

and social distancing. Many routine loss control and safety service visits from insurance companies have been delayed or canceled due to COVID-19. These safety efforts are in place as they are known to help mitigate both the frequency and severity of workers' compensation claims. Without these important EHS and insurance company safety initiatives, there could be an increase in accidents that result in prescribed opioids.

Impact on Insurers

The COVID-19 pandemic led to a recession in the U.S. that adversely affected almost all business sectors. Within a workers' compensation system, injured workers may look to settle claims and receive lump-sum payment of future benefits, and insurers would likely seek to reduce the uncertainty of older claims.

The concept of physical distancing has permeated all aspects of life due to COVID-19, and this has accelerated advancements such as the use of medical technology. As telemedicine becomes increasingly available and acceptable as an alternative to traditional practice, injured workers and insurers can leverage application of telemedicine for treatment, rehabilitation, and management of opioid dependency. There is some concern that telemedicine could lead to an increase in the prescribing of opioids and poorer adherence to opioid treatment programs that use medication-assisted treatment (buprenorphine, methadone, naltrexone, naloxone, etc.).¹⁴

At the state level, there has been a significant increase in proposed legislation related to the presumption of workers' compensation benefits related to COVID-19 exposure. Workers' compensation presumption laws pertain to certain occupational diseases and employment classes, such as first responders, to make it easier to qualify for benefits. These legislative efforts have sought to ensure employees who are exposed to COVID-19 while at work receive workers' compensation benefits.¹⁵ Dozens of states have proposed or enacted legislation to expand the presumption of benefits¹⁶. This represents a significant potential exposure for insurers, as the cost of COVID-19 claims was not explicitly considered in the premium for policies that cover 2020 and 2021 claims.

COVID-19 caused the temporary closure of nonessential services (e.g., drug rehabilitation facilities) in many states, and many hospitals postponed elective surgeries and other noncritical procedures. As the availability of medical treatments decreased and professional guidance has waned for injured workers, there is greater potential for those workers to revert to opioids for pain management. This could impede workers' ability and interest in returning to work promptly, which could further increase the duration and resulting severity of both lost-time and medical components of claims.

After the Pandemic

This section explores the period ensuing from vaccine availability to when we fully emerge from the COVID-19 pandemic and associated response. In particular, this section focuses on potential extended and long-lasting impacts on the opioid epidemic. As with the preceding sections, we focus on the impacts on workers, employers, and insurers.

Impact on Workers

The pandemic and ensuing response may lead to large changes in the workforce. Some categories of jobs could experience sharp declines, while there might be a realization of a surge in demand for other jobs. Workers could be displaced as companies place increased reliance on artificial intelligence, robotics, and other automation. While these were ongoing operational initiatives for many companies that preceded COVID-19, organizations might be motivated to expedite implementation.

For job categories that experience sharp growth, inexperienced workers might be hired in large numbers. Continued social distancing would impact the availability and effectiveness of training. Many of the gains achieved in mitigating the impact of the opioid epidemic on workers' compensation systems have been achieved while the number of workers' compensation claims have decreased from year to year. The lower number of claims has allowed for more focused workers' compensation system efforts of doctors, pain management nurses, and claim adjusters to meaningfully address the issues presented by opioids. If frequency should rise, medical providers and insurance personnel could be challenged to adequately address and manage opioid use disorder with the same focused effort.

The federal Drug Enforcement Administration allowed telehealth providers to prescribe opioids during the pandemic. There is a concern over the implications should the relaxed regulation continue in the future. Telehealth appointments can make it more challenging to perform the routine checks and verifications recommended for in-person appointments for pain management. Medical providers and insurance personnel may be challenged to maintain the enforcement of opioid prescription rules and appropriate drug testing performed outside of the doctor's office. If their efforts fail, there could be an increase in opioid use disorder.

Some workers suffered severe symptoms of the COVID-19 virus and were treated in intensive care units. There are reports that some people can suffer long-term impairment as a result.¹⁷ Such impairment could increase the chance that opioids will be prescribed to treat long-term pain for such workers.

To the extent that medical providers are impacted, the dynamic between supply and demand for health care will be challenged, which may result in further delays in treatment with the potential for a greater number of opioid use disorder relapses. For example, treatment programs are typically funded by a combination of private and public resources¹⁸ and there may be a reallocation of both sources away from opioid treatment in a post-pandemic environment. The reduced supply of medical support to workers could cause an increase in the relapse rate.

Impact on Employers

The pool of new workers available to employers has varied by industry as we emerge from the pandemic and societal response. For employers with a larger pool of candidates, those employers may find it possible to re-institute pre-employment drug screenings while still identifying enough candidates for open positions. This has the potential to help limit the incidence of opioid use disorder in the workers' compensation system.

Some sectors of the marketplace may contract, leading to lower demand for workers. For employers in those sectors, there will be fewer jobs for workers returning from injury. This could lead to slower closing rates on workers' compensation claims, including claims that require pain management.

One area of success for rehabilitation of injured workers with opioid use disorders is the sense of purpose that accompanies returning to work.¹⁹ Light-duty and other similar positions that facilitate the transition for return to work are a key component of the process. There might be fewer light-duty and other similar positions, challenging the system to identify other paths to success.

Impact on Insurers

Prior to the pandemic, insurers were successfully facilitating a reduction in accident frequency through online education, introduction of new technology (e.g., augmented/ virtual reality, wearables, sensors), and on-site safety and loss control visits. After a workplace accident, insurers were effectively reducing opioid scripts and morphine milligram equivalents prescribed to injured workers. With many insurance company employees expected to continue to work from home after the pandemic, along with potential continued restrictions on travel, carriers have had to scale back safety and loss control visits, premium audits, fraud investigations, and other claims operations that helped drive these positive results.

Although a number of the initiatives implemented by insurers to help curtail opioid prescription costs and use continue, COVID-19 has caused some disruption to opioid treatment programs focused on helping injured workers overcome addiction. Until COVID-19 stabilizes further, insurance companies may be hesitant to approve new and additional opioid treatment program spending until injured workers can resume in-person treatment.

States are in various stages of discussing and implementing the addition of workers' compensation presumption of benefits related to COVID-19 infections among workers, whether first responders, essential workers, or others. If carriers are required to cover these claims under workers' compensation with unlimited medical coverage, this could lead to increased opioid prescriptions within the workers' compensation system. However, as workers' compensation insurers have a financial stake in these claims, they would assist in the efforts to mitigate and control opioid prescriptions.

Ways Actuaries Are Suited to Help Address Ongoing Impact of the Pandemic

The U.S. economy has begun to transition to the post-pandemic period, and the "new normal" for employers and businesses is starting to emerge. As the insurance industry reacts to the impact of COVID-19 on the workers' compensation market, actuaries are well-suited to assist. Analytical education enables actuaries to identify trends in loss cost components, which in turn facilitates collaboration between actuaries and claims professionals and underwriters to make appropriate adjustments to reserving and pricing models. In addition, actuaries are capable of estimating the far-reaching impact of the pandemic on insurers' operations in order to assist policymakers in considering changes to the regulatory landscape.

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Workers' compensation insurers have made significant contributions to fighting opioid dependency and addiction using multidisciplinary pain management teams, opioid awareness campaigns, prescribing rules, prescription drug formularies, promoting nonopioid alternatives, predictive analytics, and more. The COVID-19 pandemic presents a new set of challenges to these ongoing efforts, and this issue brief discusses some of those challenges that face employers, workers, and insurers. The extent of the pandemic's influence remains unclear, but it will be important for workers' compensation stakeholders to consider these issues to evaluate and minimize the impact of the potential resurgence of opioid use disorders.

Endnotes

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