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BULLETIN

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New CWCI research on the prescription drugs used to treat California injured workers shows that while opioids still top the list in terms of both volume and total payments, efforts to curb the use of these powerful painkillers appear to be paying off, as they now account for less than a quarter of all workers' compensation prescriptions, down from nearly a third a decade ago, while other drugs – especially anti-inflammatories and anticonvulsants that are often used as alternative painkillers – now represent a much larger share.

Using a sample of 12.5 million prescriptions dispensed to California injured workers between 2007 and June 2017, the Institute focused its research on drugs that were used to treat injured workers with lost-time claims. The study tracks changes in the prescription and payment distributions among major therapeutic drug groups, producing benchmark data that can be used in the future to measure the impact of the new prescription drug formulary on prescribing patterns and reimbursements; then takes a detailed look at the volume, cost, potency and types of opioids used in the system. Among the key findings:

- Opioids, anti-inflammatories, and anticonvulsants were the most common drugs dispensed on the indemnity claims in 2017, accounting for more than half of all filled prescriptions. In terms of payments, opioids, dermatological drugs, and anticonvulsants ranked as the top three drug categories, together consuming 46.5 percent of the indemnity claim drug spend.
- Although opioids remain the number one drug category for California workers' compensation indemnity claims, they declined sharply over an 8-year period, falling from a record 32.1 percent of all prescriptions dispensed on 2008 and 2009 indemnity claims to 23.2 percent of the filled prescriptions in 2017.
- Opioid's share of the total indemnity claim drug spend fell to 18.6 percent in 2017, the lowest level in more than a decade and well below the record high of 30.5 percent in 2009.
- Opioids were far less prevalent in the early stages of accident year (AY) 2015 and 2016 indemnity claims than in earlier accident years. Among AY 2016 lost-time claims, 21.6 percent had opioids prescribed in the first three months, down from 29.1 percent of the AY 2015 lost-time claims and down from the record 37.1 percent of the AY 2008 indemnity claims. AY 2007-2014 data show the prevalence of opioids in indemnity claims prior to AY 2015 was far more stable, as the percentage of claims involving opioids at 12 months post injury and beyond was typically around 40 percent.
- Among indemnity claims, the number of opioid prescriptions per user at different levels of claim development has now been trending down for several years. For example, the average number of opioid prescriptions in the first three months post injury fell to 1.8 in AY 2016, well below the peak level of 2.5 prescriptions in AY 2009. Data on more mature claims from earlier accident years also showed a decline, with the average number of opioid prescriptions per user in the first 60 months post injury falling from a record 8.8 prescriptions for AY 2007 claims to 7.0 prescriptions for AY 2012 claims.
- While both the prevalence and volume of opioid prescriptions in the early stages of a claim have declined, the average strength of the opioids dispensed in the first three months, measured by morphine milligram

equivalents (MMEs) per prescription, has shown little change, suggesting that similar strength opioids are being used in the early stages of a claim. On the other hand, more developed data on claims from earlier accident years show a decline in average MMEs per prescription at 60 months post injury.

- The average strength per opioid prescription dispensed to an injured worker continues to increase sharply within each accident year as the claims develop, often doubling between the 3-month and the 60-month benchmarks. Among AY 2012 indemnity claims, the most recent for which 60-month data are available, the average strength of the opioid prescriptions dispensed in the first three months was 282 MMEs, while the average strength per opioid prescription dispensed at 60 months post injury was 555 MMEs. This pattern of increasing the quantity and/or strength of the drugs given to injured workers who remain on opioids for extended periods suggests that these workers may often develop a tolerance to the drugs and must rely on increasingly higher dosages or stronger medications if they are not weaned off of the opioids.
- After hitting a peak with AY 2007 and AY 2008 indemnity claims, the total number of MMEs dispensed per opioid user declined at all six levels of claim development examined (three months through five years), confirming that fewer opioid prescriptions are being provided.
- Generics comprised 92.4 percent of all opioids dispensed on indemnity claims in the first half of 2017, the highest level in the 9-1/2 year study period. At the same time, the 2017 data show the average payment per opioid prescription fell to $83, the lowest level during the study period. The reduction in the average opioid payment reflects both the declining use of brand drugs and the decrease in the average amount paid for generics, which fell to $45 in the first half of last year, helping to offset the increase in the average paid for brand opioids, which jumped to a record $551 per prescription.
- Hydrocodone was the leading opioid dispensed to injured workers in each year of the study, accounting for between 50.1 percent and 62.9 percent of all opioids dispensed on indemnity claims during the 9-1/2 year span, followed by Tramadol and Oxycodone. Together these three drugs accounted for at least 80 percent of the opioids dispensed on indemnity claims for each year in the study.
- Hydrocodone also accounted for the largest share of the indemnity claim opioid drug spend in each year of the study. However, that share has dwindled from 39.3 percent in 2009 to just 21.2 percent in 2017 – the combined effect of Hydrocodone's declining percentage of the opioid prescriptions and a 20 percent reduction in the average amount paid for Hydrocodone. Tramadol, with 19.3 percent of the payments, now ranks second among all opioids in terms of drug spend, though Buprenorphine, used as a painkiller and an alternative to Methadone for opioid addiction, surpassed Oxycodone as the third most costly opioid in 2016, and in 2017 its share of the opioid dollars continued to grow, increasing to 17.2 percent.

Full results of CWCI's study have been published in a CWCI Research Update report, "California Workers' Comp Prescription Drug Distributions & Opioid Trends." CWCI members and subscribers can access the report at www.cwci.org and others can purchase it at the Store.