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BULLETIN

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A new CWCI report finds that a relatively small number of low-volume/ high-cost drugs used to treat California injured workers have become significant cost drivers within their therapeutic drug groups, with 3 drugs that represented 2.1% of the Anti-Inflammatory prescriptions dispensed in 2021 accounting for 47.3% of the Anti-Inflammatory payments, and 4 drugs that represented 24.2% of the Anticonvulsant prescriptions consuming 72.5% of that group's payments.

The report, based on data from CWCI's Prescription Drug Application, is the first in a 3-part series that highlights drugs used to treat injured workers in California that have an outsized impact on total payments within their drug group, reviews the factors that contribute to the high cost of those medications, and tracks how each drugs' share of the prescriptions and payments within its group changed from 2012 through 2021. In addition, the authors note the change in the average amount paid per prescription for the low-volume/high-cost drugs across the 10-year study period, and the percent of the prescriptions dispensed as a brand rather than a generic drug.

CWCI updated its Prescription Drug Application last month with utilization and payment data through June 2022. The most recent full-year data noted 7 drug groups that accounted for at least 5% of the workers' compensation prescriptions filled in 2021. With Opioid use trending down for more than a decade, Anti-Inflammatories have become the number one drug group in California workers' compensation, and the new data show that remains the case, as they represented more than a third of the prescriptions dispensed in 2021 and nearly a quarter of the total drug spend. However, a 2021 CWCI analysis found that while overall utilization of Anti-Inflammatories has been flat since the state's evidence-based formulary took effect in 2018, and that inexpensive ibuprofen and naproxen represent most of the prescriptions in this drug group, Anti-Inflammatories' share of the total drug spend jumped sharply, largely driven by payments for two low-volume, high-priced drugs: fenoprofen calcium and ketoprofen. Both drugs are used to treat arthritis and pain, both lack price controls, and under the formulary both are exempt from prospective utilization review (UR). Given the disproportionate impact of these 2 low-volume Anti-Inflammatories on the total drug spend, the Institute decided to revisit the Prescription Data Application to update the fenoprofen calcium and ketoprofen data and to see what other low-volume/high priced drugs in the top 7 drug groups have a similar impact on total payments in their drug group.

Part I in the research series focuses on the Anti-Inflammatories and Anticonvulsants. The updated Anti-Inflammatory data show that ibuprofen and naproxen remain dominant, representing two-thirds of the Anti-Inflammatory prescriptions dispensed in 2021, but with average payments per prescription of $12 and $49 respectively, they are relatively cheap, so as in the earlier study, it is low-volume, high-cost fenoprofen calcium and ketoprofen that kept Anti-Inflammatories at the top of the list in terms of total drug spend. In addition, the new data identified a third Anti-Inflammatory, the biologic etanercept (Enbrel) which is used to treat rheumatoid arthritis, psoriatic arthritis, inflammatory arthritis affecting the spine and large joints, and plaque psoriasis. Although etanercept is rarely used in workers' compensation, because of its extremely high cost it consumed a disproportionately high share of the Anti-Inflammatory payments.

Fenoprofen calcium, ketoprofen, and etanercept are not in the national Medicaid database, so they have no Federal Upper Limit (FUL) – the maximum fee allowed under Medicaid, which also serves as a price control in the Medi-Cal and California workers' compensation pharmacy fee schedules. Instead, these drugs are paid at 83% of their average wholesale price, which is based on manufacturer pricing. The impact of the lack of an FUL combined with their Exempt status in the formulary is evident in the average payment data for fenoprofen calcium and ketoprofen over the past few years. Fenoprofen calcium increased from $192 per prescription in 2016 (the last year that the CWCI application had records for this drug prior to the formulary taking effect in 2018) to $1,479 in 2021, while ketoprofen increased from $107 per prescription in 2017 to $1,073 in 2021. All of the fenoprofen calcium and ketoprofen dispensed in 2021 was generic, but in prior years when brand fenoprofen calcium was dispensed, the average payments were higher for the generic versions of the drug, underscoring that generic availability alone does not necessarily reduce the total amount paid for a drug. Given the high average amount paid per prescription in 2021, fenoprofen calcium consumed 33.2% of the Anti-Inflammatory payments even though it represented only 1.4% of the Anti-Inflammatory prescriptions, while ketoprofen, with 0.6% of the Anti-Inflammatory prescriptions, accounted for 9.8% of the payments.

Etanercept is listed as a Non-Exempt drug in the formulary, so since the formulary took effect in 2018 it has been subject to prospective UR, which helps ensure that its use conforms to evidence-based medicine standards, but it is not in the Medicaid database and has no FUL, and as with many biologic drugs, no low-priced generic alternative is available. As a result, the average payment per prescription for etanercept increased steadily from $1,930 in 2012 to $7,716 in 2021, and in the handful of claims in which it was used, only the brand version could be dispensed, so despite accounting for less than 0.1% of the Anti-Inflammatory prescriptions in 2021, it consumed 4.3% of the payments.

Anticonvulsants, which are often used to treat pain, have also seen their share of workers' compensation prescriptions increase as opioid use has declined, as they went from 5.5% of the prescriptions in 2012 to 9.6% in 2021, making them the second most heavily used drug group that year. Over that same decade, Anticonvulsants went from 5.0% to 8.1% of the total workers' compensation drug spend. Gabapentin has consistently been the number one Anticonvulsant prescribed for injured workers in California, and in each of the 6 most recent years in the study (2016 through 2021) it represented about 70% of all Anticonvulsants dispensed, but with an average payment of $23 per prescription in 2021, it consumed just 21.5% of the Anticonvulsant dollars. Conversely, the review of the specific Anticonvulsants used to treat California injured workers identified 4 low-volume/high-cost medications that had a significant impact on the total amount paid for this drug group: lacosamide, levetiracetam, lamotrigine, and pregabalin. In 2021, these 4 drugs together accounted for 24.2% of the Anticonvulsant prescriptions, but 72.5% of the Anticonvulsant drug spend.

Of these 4 drugs, pregabalin (Lyrica), a Non-Exempt drug often prescribed for patients with nerve pain or anxiety, had the greatest impact, as it was the second most common Anticonvulsant prescribed in 2021, though its 20.7% share of the Anticonvulsant prescriptions was far below its 55.5% share of the payments. The 10-year trend shows pregabalin's share of the Anticonvulsant prescriptions fell from 22.9% in 2012 to 17.5% in 2017, but during that period it was only available as a brand drug, so the average payment more than doubled from $229 to $484 and its share of the Anticonvulsant drug spend climbed from 51.5% to 67.5%.

Pregabalin's share of the Anticonvulsant prescriptions increased after the formulary and the Pain Management and Opioid Treatment Guidelines took effect in 2018, but the average payment peaked at $557 that year, and in 2019 so too did pregabalin's share of the Anticonvulsant drug spend (77.5%) as the FDA approved 9 generic versions of the drug, which quickly hit the market at a fraction of the cost of the brand version. As a Non-Exempt drug, pregabalin is subject to prospective UR, which allows payers more control over whether a brand or generic version is dispensed, so since 2018 UR has become a critical tool in containing the cost of the drug. By 2021, the payment differential between brand and generic pregabalin had widened, as the average payment for generics fell to $152 per prescription while the average payment for brand versions rose to $714, but by that point generics accounted for 92% of the pregabalin prescriptions. With the shift toward generics, the study notes that the average payment for pregabalin overall declined to $197 in 2021, so it now consumes a smaller, yet still significant share of the Anticonvulsant drug spend.

The other Anticonvulsants noted in the report are lacosamide, which is Not Listed in the formulary but is sometimes used off-label for pain management and mental health disorders if the prescriber presents an evidenced-based rationale for its use; levetiracetam, a Non-Exempt drug used to prevent seizures; and lamotrigine, a Non-Exempt drug used to treat seizures that is used off label as a mood stabilizer in patients with bipolar disorder. These 3 drugs account for much smaller shares of the workers' compensation Anticonvulsant prescriptions (0.7%, 1.7%, and 1.0% respectively), but their high average payments make them significant cost drivers within the Anticonvulsant group. In 2021, lacosamide, which was only available as a brand drug, had an average payment of $832 and accounted for 8.3% of the Anticonvulsant payments; levetiracetam, which in recent years has been increasingly dispensed as a brand drug (at an average payment of $1,880 in 2021) had an overall average payment of $274 and accounted for 6.3% of the Anticonvulsant dollars; and lamotrigine, which has a high-priced extended-release brand version, had an average payment of $174, and accounted for 2.4% of the Anticonvulsant drug spend.

More details on these drugs are included in a Spotlight Report, *Cost-Driver Medications in the Top California Workers' Comp Drug Groups: Part 1, Anti-Inflammatories & Anticonvulsants*. CWCI members and subscribers can log on to our website to access the report here, others can purchase a copy from our online Store. CWCI members can also log onto the Interactive Research Tools section under the Research tab to access both the Prescription Drug App and the MTUS Formulary App, which has prescription data broken out by formulary category.

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