Workers' Comp

Examining Opioid Utilization Drug Trends

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Opioid utilization in workers' comp has steadily been trending downwards. Yet, data from Mitchell's Pharmacy Trends Report reveals other impactful discoveries for opioid therapeutic classes and dependency issues. In today's Inside Workers' Comp, Nikki Wilson, Pharm.D./MBA, Director, Clinical Product | Pharmacy Solutions, joins us to take a deeper dive into the data.

Tom Kerr (TK): Nikki, 2021 saw declining trends in opioid utilization and spend, along with reductions in MED. Can you tell us more about this?

Nikki Wilson (NW): 2021 had some promising highlights related to opioid utilization. To level?set, MED stands for morphine?equivalent dose. It's largely a way for us to speak about uniform opioid dosing. The different opioid medications out there have varying potencies, meaning different amounts or measures of each type of opioid might be required to achieve the same analgesic activity or desired pain relief effects.

Put another way, more potent doesn't mean more effective. It simply refers to the respective dose needed to attain equivalent pain control. As you can imagine it can be difficult to measure total dose, the total effect, or

even dose?based risk in a patient who might be using more than one type of opioid without some kind of standardization.

It would be very hard for us to do the drug trends the way we do. It'd be almost impossible for us to make any broad generalizations at the population or across groups without a uniform standard of measure.

In that sense, morphine?equivalent dose, or MED, provides us with just that. That's what it's there for. Essentially, calculating a person's total opioid dose using MED requires converting each opioid they're taking to the amount it would be equivalent to if it were morphine. That's where we get the name.

That consistent measure allows for a representation of the cumulative amount of opioids that are taken in a time period. Usually, that's determined on a per?day basis. In the case of MED thresholds, measures against risk, or any of the guidelines that are out there, the morphine?equivalent daily dose is represented.

Some references might use a different abbreviation. You might see MEDD or MME per day, morphine milligram equivalence, which emphasizes daily measurement but, in general, they're all the same thing. They're all referring to that 24?hour morphine?equivalent dose unless otherwise indicated.

I find it helpful to talk about this in an analogy using currency to help people understand or explain that concept of MED.

If you think of all the different currency measures in the world ?? yen, rubles, pesos, pounds, francs, etc. ?? if you live in America and are familiar with the US dollar, it might be difficult for you to conceptualize how much cumulative value you might be discussing if you have several amounts in many different countries.

You're about to travel. You want to know how far your dollar will go. Comparisons can be difficult. If you're to apply however that exchange rate to convert each of those currencies to what their values would be in US?dollar equivalents, suddenly, it's easier to know that full amount.

In that example, the US dollar is like morphine, and the currency exchange rate is like the opioid morphine? equivalent conversation factor. That general concept of converting many different measures to one uniform standard measure is basically the same.

TK: Why is it so important to track MED?

NW: Medical literature and clinical studies have shown that there is an increased risk of death from opioids associated with rising morphine?equivalent dose or MED.

For that reason, we've seen a lot of guidance come out from the various national guidelines such as that from the Centers for Disease Control and Prevention, or CDC, and the work comp?specific Official Disability Guidelines, or ODG.

Those both recommend keeping MED to the lowest effective dose, preferably less than 50, and to avoid escalating above 90 morphine?equivalent dose milligrams. The guidelines also promote the use of the lowest effective dose for the shortest duration possible, and they want you to consider non?opioid alternatives.

These are recommendations that have been borne out in our trend data, with trends continually reflecting decreasing opioid utilization and increased use of opioid?alternative medications.

As you'll see in our current drug trends report, the percentage of opioid scrips with the high MED value, defined in alignment with those evidence?based prescribing guidelines as MED 90 and above, has continued to decline.

In addition, there was a 0.3 percent reduction in the average MED per prescription. Those metrics are important because lowering MED also helps to lower the risk associated with an opioid's potential to cause life?threatening respiratory depression.

TK: What medications are most often prescribed within the opioid therapeutic class?

NW: 2021 yielded another year of declines in both opioid utilization and cost. Those that we saw at the top of the bubble within that class, looking at aggregate trends across our top five opioid meds, those aggregate trends now would be data that we're seeing from both pharmacy bill review and from our retail space, which is mail? order and retail pharmacies.

Those medications ranked by costs include oxycodone and hydrocodone products and Nucynta. That bucket of medications, as a point of reference, accounted for the majority of the scrips and costs within the opioid class. They accounted for 65.8 percent of all usage and, together, accounted for 64.2 percent of all costs within the opioid class.

In other words, that's most of what we're talking about. Their activity can offer further insight into the favorable trends experienced among this impactful therapeutic class.

TK: Which drugs represent the highest cost within the class?

NW: Oxycontin, which is a controlled?release or long?acting version of oxycodone, took the top spot for cost at 24 percent, followed closely by a combination product, oxycodone with acetaminophen at 20.3 percent of all costs in that class.

Oxycodone/acetaminophen's cost percentage was due, when I looked into the data a little further, in part to the volume of prescriptions represented in that category. That includes generic versions of common branded products such as Percocet and Endocet.

Oxycontin remains largely a brand?only medication. While the volume was comparatively low when we were looking at other opioids in the top five, at only 5.8 percent of total scrips, it was still high enough in cost to secure that No.1 spot.

No. 3 by cost are the hydrocodone/acetaminophen products. These remain the top medication by utilization within the opioid drug class, making it just under a third of total opioid scrips at 30.6 percent, making up 8.8 percent of total opioid costs. The category includes generic versions of common brands you might be familiar with, such as Vicodin, Norco, and Lortab.

The remaining two medications rounding out that top five ranked by cost are Nucynta, followed by oxycodone. Of note, Nucynta first showed up in the top five fairly recently, just a few years back in 2019, when it knocked then more?commonly?prescribed Tramadol out of that fifth spot.

Nucynta held the No. 4 spot by cost in 2021, and it's still currently only available as a brand?name medication. In terms of utilization, Tramadol ranks much higher. It's the third?highest opioid by rank, while Nucynta's No. 13. That gives some insight into how that higher price tag associated with branded Nucynta drives it up the list in terms of opioid cost ranking.

In fact, those top five opioids, by cost, remained unchanged in rank from 2020 to 2021. Nucynta is the only opioid not in the top five for both cost and utilization.

Overall, one last thing to note when looking at trend changes among those top five opioid meds is that they all experienced declines in scrips per claim and cost per claim from 2020 to 2021. Overall, total opioid utilization fell by 10.2 percent per claim, and costs dropped by 13.8 percent per claim, with the top five representing a 9.7 percent and 14.7 percent decrease in those same categories.

TK: Can you walk us through opioid dependence or opioid use disorder and what we're seeing in the data?

NW: This is a subject near and dear to my heart. We've been focusing our efforts on how we can start impacting change in this arena. It's another critical component in the strategy to address opioid risk beyond monitoring MED and opioid utilization. It surrounds the issue of opioid use disorder and recovery.

The way we think about addiction, as we've always talked about it in the past, and opioid dependence has changed over the years. Today, we've seen a shift within the medical community as a whole toward considering opioid addiction as a chronic disease affecting both the brain and behavior. It really has no cure, but it can be controlled with successful treatment.

That has impacted everything from the way we approach opioid therapy and pain management to how we diagnose a use disorder, as well as what types of therapeutic and psychosocial methods might be most appropriate for successful management of such a disorder.

One definition I like that is very helpful to describe the attitude around this concept comes from the American Society of Addiction Medicine. They describe addiction as a "primary, chronic neurobiologic disease with genetic, psychosocial, and environmental factors influencing its development and manifestation."

I think that is so true because there is a lot going on beyond the physical and beyond anything we can measure with this type of disease state. Further advancing that disease state approach, the terms opioid addiction and dependence are giving way to a broader definition of the condition.

That's what we keep talking about. That's why you keep hearing the term opioid use disorder or OUD. That's the new diagnosis. In fact, the American Psychiatric Association no longer classifies addiction within its *Diagnostic and Statistical Manual of Mental Disorders,* the *DMS-5.* It's basically the handbook for any type of diagnosis for a mental health?related condition.

When they updated that some years ago, back in 2013, they replaced the two separate disorders of substance abuse and substance dependence with a single category of substance use disorder, under which specific substances such as opioids are further differentiated.

TK: What are we seeing in the data regarding OUD**?**

NW: What we know today with the opioid epidemic and much of the research that's available to us is that our country struggles mightily with opioid misuse and abuse. Certainly, OUD is part of that picture.

What we're seeing in our data related to this topic surrounds the increased use of medications that might be onboard to address OUD including buprenorphine and methadone, which are often employed as part of an overall medication?assisted treatment approach for management of opioid addiction.

In our first drug trends report, we noted an increased utilization of OUD medication such as buprenorphine products and Lucemyra, which is a drug specifically targeting opioid withdrawal symptoms during detox or weaning. That was up 7.4 percent from 2020 to 2021.

We've also seen continued increasing use of opioid alternative medications prescribed to manage pain such as an uptick in our anticonvulsants and antidepressants classes that are typically onboard in chronic or nerve?related pain conditions. That speaks to that shift in focus of more of an overall disease management approach for persons struggling with opioid use issues.

With that goal of treatment being essentially to get the person to stop using the drug or drugs of abuse, in this case, opioids, to stay drug?free, and to be productive in their home, vocational, and social environments. We're always thinking about that when considering treatment options.

One additional thing to note, especially with the pandemic, we saw some challenges related to treatment of opioid use disorder. People weren't able to get the support perhaps they once had whether they were inpatient at a long?term residential facility offering addiction recovery services or just didn't have the same access to care with quarantine and shutdowns that were occurring.

One thing it did was shine a light on the need for a variety of approaches to reach these individuals and the importance of ongoing support. Our nation also saw a spike in overdose deaths from opioids during that particular time, the highest we've ever had in an annual period since the opioid epidemic was declared years ago which, again, speaks to the importance of addressing opioid risks effectively.

We're seeing more and more states starting to consider substance use disorder treatment options with several now adopting definitive language covering mental health services for drug rehabilitation and/or medication? assisted treatment measures within their workers' comp statutes, which is encouraging to see.

TK: OK, so let's expand on medication-assisted treatment and Naloxone. Can you briefly explain how their utilized?

NW: As we've touched on a bit already, medication?assisted treatment, or MAT, is one of the options for managing opioid use disorder. The method is typically applied along with counseling and other support. The Food and Drug Administration, or the FDA, along with several state and national opioid guidelines continue to promote MAT as an effective treatment option for opioid use disorders that can help some people to sustain recovery.

Naloxone, on the other hand, is prescribed as more of an immediate safety measure. It's the opioid overdose reversal agent, or essentially a drug that reverses the immediate effects of opioid intoxication or is a rescue to allow time for that person to obtain emergency medical care following an overdose.

TK: How do you track MAT and Naloxone treatment?

NW: We've been specifically monitoring within our book the trends associated with medications used for MAT as well as Naloxone. There are three drug ingredients approved by the FDA for the treatment of opioid dependence or OUD.

The types of pharmacotherapy for OUD include agonist replacement treatment, which just means those receptors that are stimulated by an opioid that we might have on board for pain can continue to be stimulated with methadone or the partial agonist buprenorphine, meaning it will hit those receptors, but at a certain point, it exhibits a ceiling effect. That's what a partial agonist is, where no additional dose will exhibit an increased effect. It's a little bit less of a risk of overdose in that regard as well.

There's either those two types, or there's antagonist treatment, also known as abstinence therapy, with Naltrexone, which blocks those receptors, reverses the effects of other opioids at those receptors. It may also

include any of those options along with the use of additional supporting agents such as those on board to help with managing opioid withdrawal symptoms as a means of entry into treatment.

All that falls under the bubble of MAT. Methadone and buprenorphine are the ones we see most commonly, and they're actually opioids themselves. They carry some of the same precautions and considerations as other drugs within the class. However, when they're used properly as part of an overall treatment program, the risks are minimized.

Since we've been discussing that addiction can be thought of as a chronic disease, the idea behind the use of those two drugs, methadone or buprenorphine, one way to think about it, it's been likened to the use of maintenance medications to manage other disease states such as diabetes or heart disease where you're continually taking something to help manage.

TK: How do these treatments work?

NW: When use appropriately as part of a medication?assisted treatment regimen, these treatments can allow the person to avoid withdrawal symptoms and cravings that would normally occur from discontinuation of an opioid of abuse, which can be a roadblock to a lot of people trying to get to full recovery and healthy living.

The dosages used for this type of treatment have been shown to reduce opioid cravings and withdrawal, and they're intended to help restore balance to brain circuits affected by opioid use disorder, thus allowing that patient's brain to heal while they're working toward recovery.

The idea is that the person's more empowered with all of that on board to begin making lifestyle changes that lead to an addiction?free future.

Both the national guidelines such as those from the Centers for Disease Control and Prevention and the workers' comp?specific ODG recommend the use of medication?assisted therapy using methadone or buprenorphine where appropriate.

They have guidelines out there that indicate clinicians should offer or arrange evidence?based treatment, usually medication?assisted treatment with buprenorphine or methadone in combination with behavioral therapies for patients with opioid use disorder.

ODG recommends either drug for the treatment of opioid dependence in certain patients and by select prescribers, so there's good support there. There's some guidance, some indications for when to use it. The World Health Organization also lists support of those two drugs for OUD.

That's just one of the options. MAT is one of the options for minimizing overdose risk and adverse outcome risk through treatment of opioid use disorder. Another approach, which can be used in conjunction with MAT, is considering or co?prescribing a Naloxone product. Remember, that's the opioid overdose rescue agent.

Some of the guidance out there indicates when to give Naloxone, including some of those same guidelines I keep referencing, those from the CDC, which recommends offering it to both patients and, this is important, patients' household members or even caregivers because the person experiencing the overdose can't always dose themselves.

It's important that those individuals have education on how to use, when to use, with patients at risk for overdose.

There’s a number of different criteria factors out there, including different MAT levels, if they’ve had a history of overdose, history of substance use disorder, if they’re concurrently taking a medication that could lead to central nervous system depression such as a benzodiazepine or some other sort of sedative, or even if they have a disease state that puts them at a higher risk for an overdose.

Overdose occurs through depression of the central nervous system to the point where breathing stops, so respiratory depression it’s referred to. If that patient already has a history of a pulmonary disease or has sleep apnea or some other issue that also affects breathing, that could be a risk factor as well.

There’s a couple of ways Naloxone can be delivered: as an injectable or a nasal spray. It’s considered first line. It’s pretty easy to get anymore. Most states have some sort of standing order in place or a way to get it without a prescription. If not, a doctor can co?prescribe it or can get one. It’s fairly easy to obtain.

We’re continuing to track use of all those agents we just discussed in our data, all of those evidence?based medication approaches. We have that information, and specifically MAT drugs and Naloxone have been trending in this year’s opioid drugs trends report.

In 2021, we saw a slight increase in the utilization and costs associated with MAT drugs commonly prescribed to treat OUD, a little over one percent.

We also saw that the percent of at?risk opioid claims based on a MED level over 50, where guidelines suggest Naloxone would be indicated, the percent that were in that category and also receiving prescriptions for Naloxone nearly doubled from the year before at 6.4 percent.

Things are trending in the right direction according to the evidence?based recommendations out there when it comes to managing OUD and minimizing risk with opioids.

TK: So, you’re seeing an increase in these overdose treatment drugs. Does that mean there’s an increase of opioid overdoses in comp?

NW: No, that isn’t borne out of our data. More what we’re seeing is just the incidence of prescribing. The recommendation is for the patients that meet the criteria, or even if there’s any chance that they might be at risk from the opioid regimen they’re receiving, it makes sense to have that on hand.

It doesn’t mean they’re using it. It doesn’t mean they’ve ever overdosed, but it could be one of the reasons that it’s prescribed, they’ve got a history of that occurring. It’s not necessarily indicating overdose increase per se. All we can see is that dispensing data — it just looks like it is on board, it is being prescribed, and that’s what we’re seeing.

TK: That makes sense. That’s a good thing because if there is a risk of overdose, and a family member or roommate has it on hand it can be treated very quickly to try to reverse the effects.

NW: That’s right. It’s just one of those evidence?based options for minimizing risk that we see as a safety measure.

TK: Thanks, Nikki. And you can catch up all three parts of our drug trends series and access the Mitchell’s Pharmacy Solutions Trends Report at Enlyte.com/drug-trends. In our next Inside Workers’ Comp, we explore how workers’ comp extends to U.S. employees who are injured while overseas. Until then, thanks for listening.



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