Advanced Medical Reviews

Workers' Compensation Pain Management and Prescription Opioids: What can Drug Utilization Reviews reveal?

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According to a 2014 report, the Drug Enforcement Agency (DEA) has documented a significant amount of aberrant behavior involving hydrocodone combination products (HCPs) including: drug theft, doctor shopping, fraudulent oral (call-in) prescriptions, diversion by registrants, and various other drug trafficking schemes. Furthermore, the National Survey on Drug Use and Health (NSDUH) announced that in 2012 over 25.6 million people[I] in the United States reported lifetime non-medical use of HCPs (1). In accordance with the Department of Health and Human Services (HHS), the FDA is reclassifying HCPs from schedule III to schedule II drugs. By reclassifying HCPs the FDA is aiming to heighten the awareness of risks and limit prescription opioids in an effort to improve pain management in our country. However, solely putting restrictions on prescription opioids is not the answer and the FDA is aware of this. In a 2013 statement issued by the Director of the FDA's Center for Drug Evaluation and Research, Janet Woodcock MD states, "Going forward, the agency will continue working with professional organizations, consumer and patient groups, and industry to ensure that prescriber and patient education tools are readily available so that these products are properly prescribed and appropriately used by the patients who need them most (2)."

When it comes to Workers' Compensation, opioids have a high prescription rate for the management of pain. According to a retrospective cohort study of 314 Pharmacy Benefit Management (PBM) cases by the Independent Review Organization (IRO) Advanced Medical Reviews (AMR), 88.5% (278/314) of Workers' Compensation cases included patients who were prescribed at least 1 opioid for pain management. Of those patients, 42% (117/278) were prescribed a total opioid dosage greater than 120 mg Morphine Equivalent Dose (MED)[II], the Official Disability Guideline (ODG) recommended daily maximum.

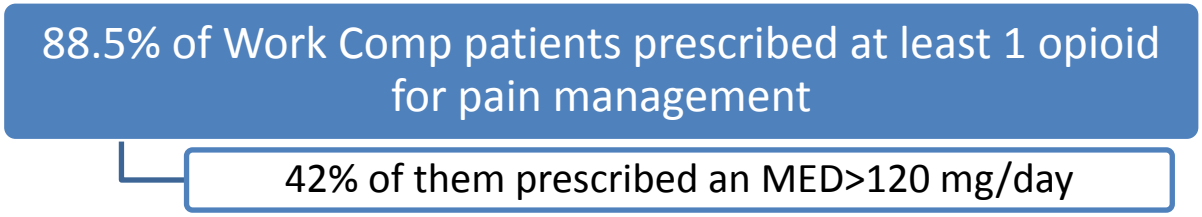

Figure 1. Statistics based on a retrospective cohort study of 314 Workers' Compensation PBM cases by AMR.

[I] This represents 9.9% of the United States population aged 12 years or older (1).

[II] The MED is used to convert the dose and corresponding route/delivery method (e.g. by mouth, intravenous, intramuscular, transdermal, sublingual, subcutaneous) of each opioid a patient has taken over the last 24 hours to a morphine equivalent using a standard conversion table. Since one drug is not necessarily the same as another (a certain opioid may need a higher dosage than another to achieve the same result, depending on the drug and/or route of administration), an MED is used to standardize all opioid dosages (3).

It is important to consider the total MED that a patient is prescribed. There is an increased risk for addiction, aberrant behavior and side effects[III] associated with doses that exceed 120 mg MED/day for chronic pain management (4). Furthermore, high MEDs don't necessarily correlate with improved pain management or return to work. The patients who returned to work in the AMR sample population had a median prescribed MED of 45 mg/day; however, the patients who did not return to work had a median prescribed MED of 120 mg/day. Regarding high MEDs and return to work rates, our research also revealed trends associated with medications prescribed for narcotic side effects. The patients on opioids who did not return to work were being prescribed an average of two narcotic side effect medications, while those that did return to work were only prescribed one.

	Returned to work	Did not return to work
Median daily MED	45 mg	120 mg
Average number of medications prescribed for narcotic side effects*	1.13	2.18

Table 1. Median MED (morphine equivalent dose) and average number of prescribed side effect medications for patients in AMR sample population that did and did not return work.
*Narcotic side effects include: nausea, constipation, lethargy, gastrointestinal distress, anxiety, insomnia, and depression.

These higher prescription volumes result in greater overall costs. In 2012, employers and insurers spent an estimated $1.4 billion on narcotic analgesics for Workers' Compensation pain management (5). According to a 2013 New York Times article, the average Workers' Compensation claim cost without an opioid is $13,000, while inclusion of a short-acting opioid raises the claim to $39,000, and a long-acting opioid skyrockets the average claim to $117,000 (6).

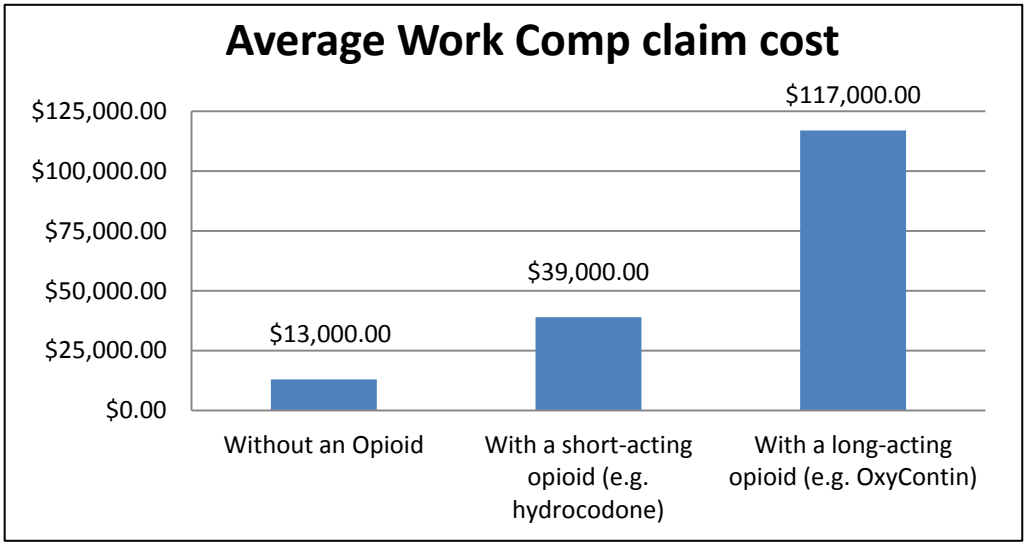

Figure 2. Average 2013 Workers' Compensation claim costs for pain management prescriptions without an opioid, with a short-acting opioid, and with a long-acting opioid (6).

[III] Side effects associated with high MEDs include: nausea, constipation, lethargy, gastrointestinal distress, anxiety and insomnia among others (4).

Our research also discovered trends associated with the total number of medications prescribed, the number of medications prescribed for narcotic side effects and return to work rates, which we will be investigating moving forward. A 2009 study by Hawley et al. found that disability costs employers between 8% - 15% of payroll. The study went on to state that disability costs are expected to increase in the US by 37% over the next 10 years (7).

One might ask, what are the advantages of doing a PBM review? PBM reviews can reveal whether a patient has been tried on first-line therapies for neuropathic pain (e.g. tri-cyclic antidepressants, serotonin–norepinephrine reuptake inhibitors, antiepileptic drugs) before the initiation of a trial of opioids. They can show whether a patient is on side effect medications secondary to prescription opioids. Such reviews can also determine if prescribing physicians are complying with best practices including, presence of a narcotic pain contract, urine drug testing, and opioid monitoring among other things. At AMR we strive to use our PBM reviews as a tool to improve pain management in Workers' Compensation.

Of the cases in our sample population with at least one prescribed opioid (278 cases), our reviewing physicians recommended changes to reduce patients' total daily MED 84.5% of the time. Within the entire sample population, our physician reviewers recommended the initiation of some type of non-pharmacological modality[IV] 88% of the time. Ultimately, when peer-to-peer contact was successful (172/314), the prescribing physicians agreed to implement our reviewing physicians' recommendations 69% of the time. In addition to providing alternative treatment options, our recommendations also prove to be cost effective as we prefer generic and over the counter to brand medications, and non-pharmacological modalities over ineffective medications that patients have been sustained on for excessive periods of time.

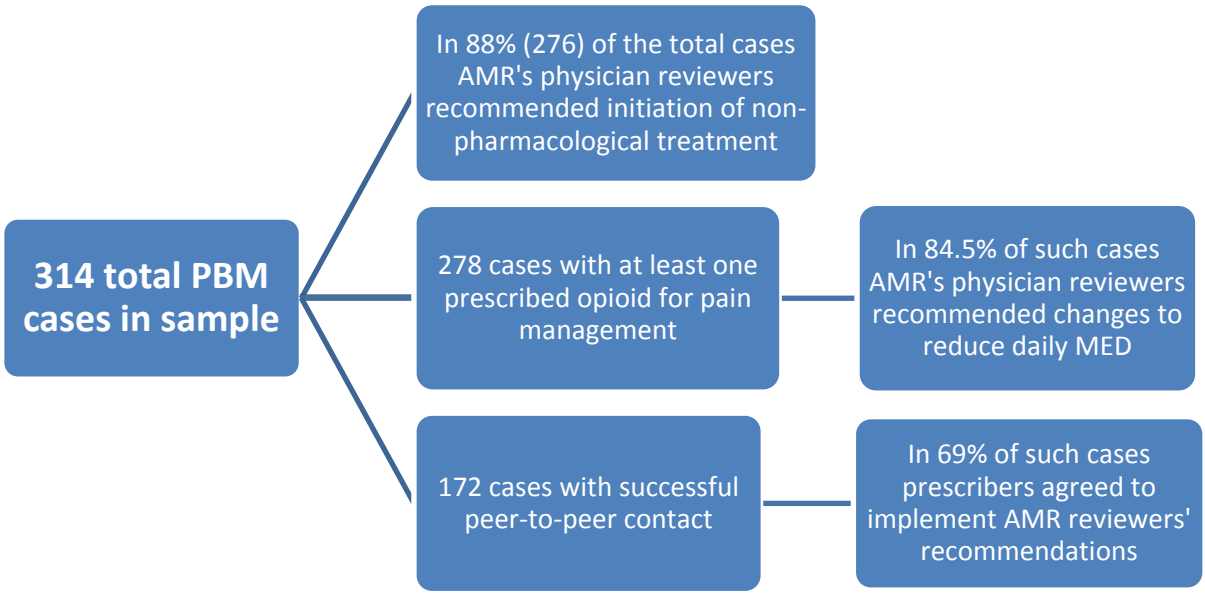

Figure 3.Trends associated with AMR's physician reviewer recommendations and peer-to-peer discussions.

[IV] Recommended non-pharmacological modalities include: psychiatric evaluation, opioid monitoring parameters, cognitive behavioral therapy, sleep hygiene therapy, home exercise programs and physical therapy.

In order to best serve patients across the country, AMR produces comprehensive PBM reviews according to current established evidence based medicine (Official Disability Guidelines, FDA, Physicians' Desk Reference), using the most innovative and adaptable web interface technology available in the industry. Along with improving individual patient care, we believe that PBM reviews will concurrently shed light on strategies which are most effective and those that may not be. Our research shows that higher opioid doses (resulting in increased daily MEDs) not only fail to improve return to work rates, but also incur greater costs for insurers and employers. Moving forward at AMR we intend to investigate associations between the need for medications to treat narcotic side effects, the opioids themselves, the total number of medications prescribed and return to work rates. Lack of monitoring of aberrant behavior, such as the under-utilization of narcotic pain contracts and urine drug screening, is also a topic of concern that our company will be examining.

At AMR we believe that every patient should receive quality healthcare. Therefore, our company plans to continue producing PBM reviews as part of an ongoing effort to improve pain management in our country, while exploring issues associated with prescription opioids as highlighted by the FDA and many others.

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