Patterns of Chronic Higher-Dose and Lower-Dose Opioid Use in Federal Workers' Compensation Claimants

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Executive Summary

Few studies have rigorously assessed the long-term benefits of opioids, yet the risks of long-term opioid use are well known. Addiction and misuse increase with each additional week of opioid use, and overdose and death are highly associated with increasing dose, its formulation, its concurrent use with certain other drugs, and certain other comorbid conditions. A cursory review of OWCP's claimant database reveled that a large proportion of injured federal workers have been taking opioids chronically at varying doses for years. Thus, this descriptive study aimed to identify claimant-specific attributes in those chronically taking opioids that are associated with either lower (<90 MED) or higher (≥ 90 MED) dose. The 90 MED threshold was utilized because it is a CDC-recommended threshold above which clinicians should avoid or justify a decision to further increase the dose.

Results:

- Throughout FY17 and FY18 over 40,870 unique injured workers were receiving opioids
- 18,128 were receiving opioids chronically for non-cancerous reasons
- Over one third of the population (6,084) was over the age of 65
- Nearly one in four (4,166) were taking a higher dose (≥ 90 MED)
- In addition to the higher-dose, this group was also more likely to have differing attributes
 that may increase their risk of overdose and death versus their lower dose counterparts,
 such as
 - o Receiving Extended-release opioids (78.2% vs. 20.4%)
 - Among the extended release opioid prescriptions, Oxycontin (34.2% vs. 19.0%) was the most pronounced
 - Concomitant use of benzodiazepines (21.6% vs. 11.1%)
 - Concomitant mental health conditions, including depression (7.4% vs. 4.0%), bipolar (6.0% vs. 3.6%), and anxiety (5.0% vs. 3.9%)
- The total number of prescriptions between the two groups also differed:
 - Oxycodone (49.4% vs. 21.1%)
 - Fentanyl (9.5% vs. 0.9%)
 - Hydrocodone (10.2% vs. 42.4%)
 - o Tramadol (1.3% vs. 18.1%)
- The higher dose group was more likely to go to ≥ 4 Prescribers and ≥ 4 Pharmacies (4.3% vs. 2.5%)

The opioid epidemic has far-reaching effects which can be seen in injured federal workers. This is the first known study to reveal that these claimants were not only differentiated by dose, but also by specific attributes that may compound the risk of overdose and death even further. Overall, this study provided much needed insight into areas where improvements can be made to assist potential at-risk claimants, and reduce chronic opioid use. OWCP will be striving to make measurable progress based on this study, and others, through its four-point strategic plan to combat the opioid epidemic and reduce the potential for opioid misuse and addiction.