

Characteristics Associated with Opioid Overdose in a Medicaid Population

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Introduction

Medicaid beneficiaries are prescribed opioids at twice the rate of the rest of the population and are three to six times more likely to overdose. Based on pain guidelines and data analysis, state programs can implement utilization management programs that promote safe use of opioids.

Objective

Describe the characteristics and opioid drug use patterns of recipients who experienced an overdose.

Methods

Using a claims database, we identified 746 consecutive recipients who had a diagnosis of opioid overdose between January 2015 and June 2016. Opioid drug use patterns, coordination of care concerns, history of substance abuse and pain-related diagnoses (acute pain, chronic pain and cancer) of the target group six months prior to overdose were compared to a control group of 140,129 consecutive recipients with opioid utilization during the same period who did not experience an opioid overdose.

Results

The average morphine milligram equivalent (MME) in the target group was 67.7, compared to 58.4 in the control group. The target group had larger percentages of recipients receiving MME ≥ 90 (32.8%), long-acting products (23.3%), and ≥ 5 opioid prescriptions (50.5%) compared to the control group (8.3%, 12.7% and 27.4%, respectively). Coordination of care issues, while low in incidence, were more prevalent in the target group as well: 3.0% of the target group had prescriptions from ≥ 3 physicians per month (1.1% control group); 1.7% of the target group used ≥ 3 pharmacies per month (0.6% control group). History of substance abuse was over four times more prevalent in the target group (29.1%) compared to the control group (7.0%). Over 87% of the target group had chronic pain, either alone (38.1%) or in addition to other pain-related diagnoses (49.6%). Half of the target group had 2 or more pain-related diagnoses. 23.3% of the target group experienced 2 or more overdoses within the study period.

Conclusion

The data indicates opioid overdose is more likely with MME ≥ 90 , long-acting opioids, higher prescription counts and a history of abuse, prior overdose, chronic pain and multiple pain-related diagnoses. Medicaid programs should consider utilization management strategies addressing these issues to help reduce the incidence of opioid overdose in prescription opioid users. Patient education addressing the purpose, use and dosing of long acting opioids and alternative pain management strategies should also be considered.

Figure 1: Percent of Population by Morphine Milligram Equivalent (MME) Dose

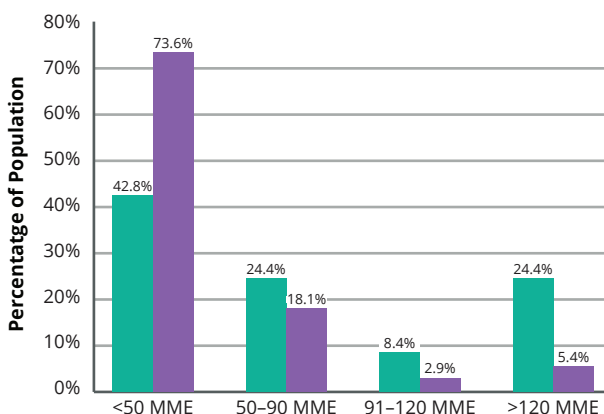


Figure 2: Percent of Population by Number of Prescriptions by Month

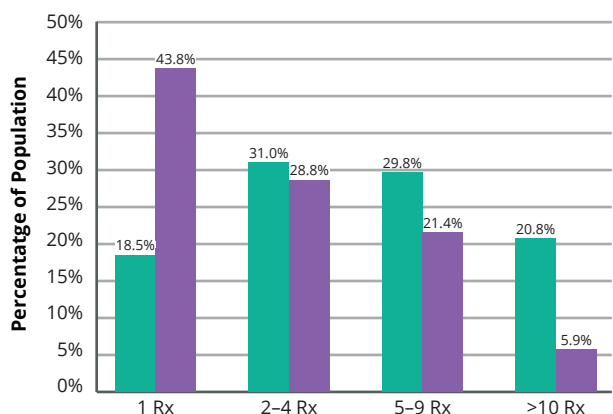


Figure 3: Percent of Population with Selected Characteristics

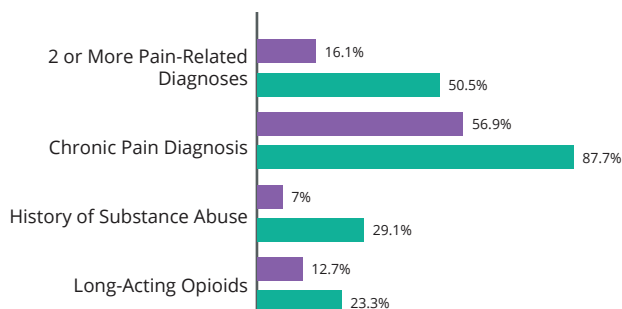
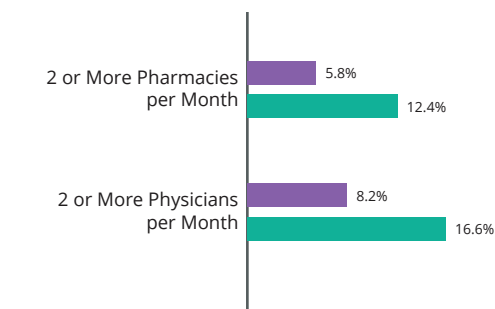


Figure 4: Percent of Population with Coordination of Care Issues



■ Overdose ■ Control