Opioid Overdose Incidence among Medicaid Members Receiving Opioids with and without Mental Illness Diagnosis Wilbers K, Sheen JV, Powell K, Williams A, Brink D

Introduction

We are continuing to understand factors driving opioid overdose. The more we understand, the more likely we are to identify possible solutions. Substance use disorders (SUD) and mental illness frequently coexist. Although there is debate about the nature of any cause and effect relationship, there is a high rate of comorbidity between SUD and mental illness. This study was designed to identify relationships between opioid overdose with various mental illness diagnoses.

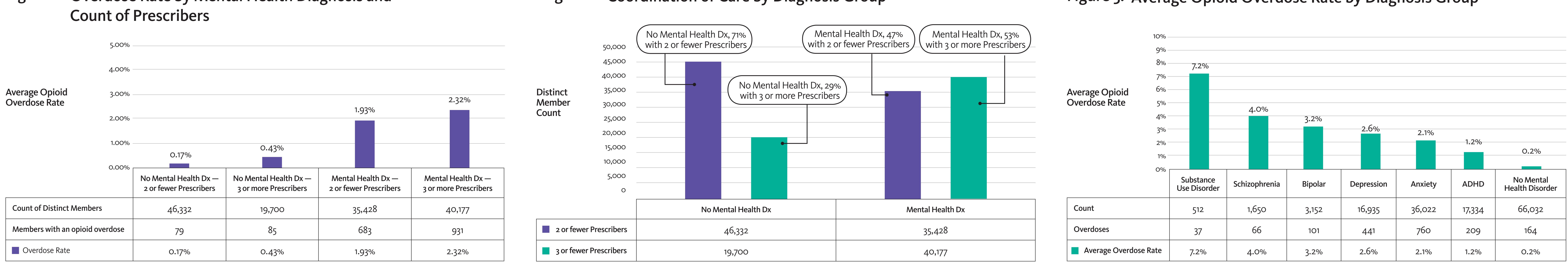
Objective

Determine the frequency of opioid overdose in Medicaid members with mental illness receiving opioids.

Methods

Using a Medicaid claims database, 141,637 members were identified who filled an opioid prescription between 10/01/2017 and 09/30/2018. Prescriptions for less than 10 days' supply and members with a cancer diagnosis in the past two years were previously excluded. Members were stratified into four groups based on history of mental illness and number of prescribers. The control group contained 46,332 members using opioids with no mental illness and two or fewer prescribers (group 1). 19,700 members had no mental illness and three or more prescribers (group 2), 35,428 had mental illness and two or fewer prescribers (group 3) and 40,177 members had mental illness and three or more prescribers (group 4). Opioid overdose frequency by mental illness and count of prescribers were analyzed.

Figure 1: Overdose Rate by Mental Health Diagnosis and **Count of Prescribers**



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Figure 2: Coordination of Care by Diagnosis Group

Results

Overall there were 1,778 (1.26%) overdoses. Group 1 had 79 overdoses for a rate of 0.17%, 85 in group 2 (0.43%, a 153% increase over the control), 683 in group 3 (1.93%, a 1031% increase over control), and 931 in group 4 (2.31%, a 1259% increase over control). Of the members with no mental illness 29% had 3 or more prescribers, while 51% of members with mental illness had 3 or more prescribers. Patients with SUD had a higher rate of overdose (7.2%) compared to other mental illnesses, (schizophrenia 4.0%, bipolar 3.2%, depressive disorder 2.6%, anxiety disorder 2.1%, and ADHD 1.2%).

Conclusion

Members with mental illness had the highest incidence of overdose among opioid users and that was compounded in those with three or more prescribers. Potential coordination of care issues were increased by the presence of a mental illness (MH) diagnosis. Opioid management programs targeting substance use disorders have the potential to lower overdoses, as do programs that encourage treatment of schizophrenia, bipolar and depressive disorders.





Figure 3: Average Opioid Overdose Rate by Diagnosis Group