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Title: *Evaluation of Opioid Dispensing in the Community Pharmacy with the Implementation of St. Louis County Prescriptions Drug Monitoring Program*

Abstract

Background: The United States is currently facing an opioid epidemic as thousands of people are losing their life due to opioid addiction and overdose. One way to help slow the spread of unwarranted prescriptions opioids getting on the streets is Prescription Drug Monitoring Programs (PDMP). These are databases that tell health care providers the controlled substances that a patient received at a pharmacy, including quantity and prescriber. All states have a state-wide PDMP, except for Missouri. In 2017, St. Louis County implemented a PDMP with hopes that the state would follow. We conducted a retrospective data analysis of a small pharmacy chain in and around the St. Louis area to evaluate the difference in opioids leaving the pharmacy after the launch of the St. Louis County PDMP, hypothesizing a decrease in our measures.

Methods: Using EnterpriseRx computer software system for the chain around St. Louis, we ran reports from 21 different pharmacies for 180 days before and 180 days after the launch of the PDMP on April 25th, 2017 for the following opioids: tramadol, hydrocodone, oxycodone, fentanyl, acetaminophen with codeine and morphine. The following measures were evaluated: total tablets, total milligrams/micrograms of medication and average prescriptions per day.

Results: For each opioid for each store, around half of them saw an increase in our measures after the launch of the county PDMP, and about half saw a decrease in our measures after PDMP.

Conclusion: Our results were mixed with some stores seeing a decrease and some seeing an increase in opioids leaving the pharmacy. It's hard to deny the impact that a PDMP can have on opioids dispensing.