Analysis of Prescription Drug Monitoring Program (PDMP) Data Assessing the Impact of a State Intervention on High Risk Prescribers in New York State

Performer: Brandeis University

Principal Investigator: Andrew Kolodny, M.D.

Project Duration: September 5, 2012 – February 28, 2019

Regulatory Science Challenge

Policy makers at both the state and federal levels have attempted to implement a wide range of programs to reduce the incidence of opioid use disorder and prevent opioid-related overdose deaths. These efforts include policies and programs to foster more cautious opioid prescribing practices. For example, the majority of states require prescribers to query their state's Prescription Drug Monitoring Programs (PDMPs) under certain conditions. Many states and the District of Columbia provide prescriber "report cards" which summarize a prescriber's own prescribing history and other clinically relevant information. These report cards, sometimes referred to as score cards or feedback reports, are intended to provide an opportunity for clinicians to examine their prescribing behaviors in the context of improving the quality of their patients' care. However, there are few studies evaluating the effects of such policies and interventions aiming to address the opioid crisis. This study, using a public health model approach to educate clinicians, contributes to the understanding on the effects of a state agency's implementation of a targeted educational intervention using a state PDMP.

Project Description

This project was based on the hypothesis that an educational intervention by the New York State's Department of Health targeting clinicians engaged in high-risk prescribing practices would reduce these practices and improve patient safety. A targeted intervention approach was utilized to address prescribing practices most likely to result in a serious adverse event. While all patients on opioid therapy are at risk, those on the highest doses, and those taking opioids in combination with benzodiazepines, have the highest rates of drug-related morbidity and mortality.

There were two methods of delivering the intervention: postal mail or email. Clinicians received the intervention directly from the New York State Department of Health Bureau of Narcotic Enforcement along with the CDC's Tapering Opioids for Chronic Pain pocket guide on September 18, 2017. The letter informed them that their prescribing patterns may be considered high-risk opioid prescribing. It specified that a review of the PDMP data found that in a six-month period, he/she may have prescribed:

• more than 90 milligram morphine equivalents per day to one or more patients;

• an opioid and a benzodiazepine to the same patient during the same month and had opioids for at least three consecutive months; or

• opioids for at least three consecutive months to one or more patients.

Project Goals

- Target an educational intervention at high risk prescribers who provide relatively high doses of opioids and those who provide both opioids and benzodiazepines to the same patient.
- Implement and assess the impact of a low-cost educational intervention aimed at reducing risky opioid prescribing practices to improve outcomes in patients with pain.

Project Results

The final report of the researchers to the FDA included the following results:
- This project demonstrated the positive effects of a relatively low-cost educational intervention with clinicians considered at-risk for inappropriate opioid prescribing.
- Utilizing PDMP data to target certain groups of clinicians may be a useful method to avoid or minimize alert fatigue.
- There was a significant effect on prescribers who received the postal mailed letters containing the educational intervention compared to the control group. Prescribers in the postal group had statistically significant reduced trend levels for all three outcome measures (chronic opioid therapy, co-prescribing, and high MME) compared to the control group.
- There were no statistically significant differences between the email and control groups for any of the three outcome measures.