Reducing Inappropriate Co-Prescribing Behaviors

A retrospective analysis of targeted letters to outlier prescribers of opioids and benzodiazepines

Target a Priority Outcome

Opioid overprescribing represents a significant public health issue. Under the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities (SUPPORT) Act, the Centers for Medicare & Medicaid Services (CMS) in the Department of Health & Human Services sends annual notifications to outlier prescribers to encourage reducing prescriptions to recommended levels.[1] The Center for Program Integrity (CPI), which oversees efforts to safeguard the Medicare and Medicaid programs from fraud, waste and abuse, is interested in learning the impact of these efforts.

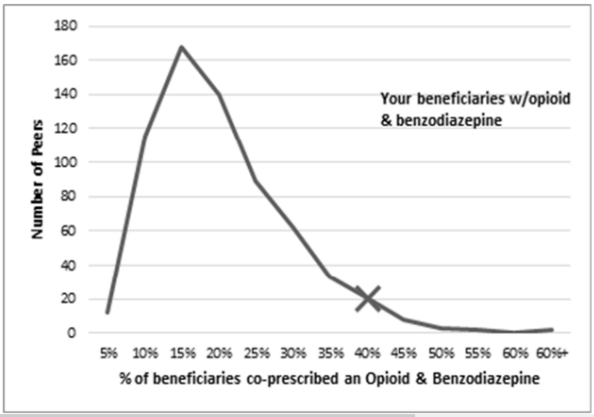
Translate Evidence-Based Insights

In 2019-2020, an estimated 2.3 million adults had a prescription opioid use disorder,[2] and 23 percent of all opioid overdose deaths in 2020 involved prescription opioids.[3] Empirical evidence suggests that physician prescribing practices play a pivotal role in tackling the opioid epidemic.[4] Of note, prescribing rates have decreased in recent years: The overall opioid dispensing rate in 2020 was 43.3 prescriptions per 100 people, the lowest rate in 15 years. However, lack of consistent pain management prescribing practices continue to contribute to persistent challenges in the prevention, management, and treatment of pain, leading to misuse and overdose related to opioids.[5]

Beginning in 2019 and following the direction of the SUPPORT Act, CMS designed and implemented annual peer-comparison interventions, which targeted outlier prescribers of opioids or outlier co-prescribers of concomitant opioids and benzodiazepines. Co-prescribing refers to the act of prescribing two medications together to the same patient— in this case, there are health risks associated with co-prescribing benzodiazepines and opioids, including respiratory depression, enhanced sedation, and death.

In January 2020, letters were sent to 689 outlier co-prescribers of concomitant opioids and benzodiazepines. The letters were designed to overcome (i) lack of information on the part of the prescribers regarding appropriate prescription levels and/or (ii) a lack of attention to their opioid and benzodiazepine co-prescribing behavior. Directing attention to the behavior of their peers might prompt prescribers to adjust prescriptions to recommended levels based on best practices within their specialty.

Figure 1: *Figure from CMS's January 2020 letter comparing prescribers' co-prescribing levels to that of their peers.*



[1] SUPPORT Act, available from https://www.govinfo.gov/content/pkg/PLAW-115publ271/html/PLAW-115publ271.htm

[2] Misuse of Prescription Drugs Research Report, available from https://nida.nih.gov/publications/research-reports/misuse-prescription-drugs/what-scope-prescription-drug-misuse

[3] Misuse of Prescription Drugs Research Report, available from https://nida.nih.gov/publications/research-reports/misuse-prescription-drugs/what-scope-prescription-drug-misuse

[4] Schnell M, Currie J. Addressing The Opioid Epidemic: Is There A Role For Physician Education? Am J Health Econ. 2018 Summer;4(3):383-410.

[5] U.S. Department of Health and Human Services (2019, May). Pain Management Best Practices Inter-Agency Task Force Report: Updates, Gaps, Inconsistencies, and Recommendations. Retrieved from U. S. Department of Health and Human Services website: https://www.hhs.gov/ash/advisory-committees/pain/reports/index.htm

Embed Evaluation

The prescribers were selected from those who co-prescribed an opioid and benzodiazepine for at least 30 consecutive days to five or more Medicare patients in the last 12 months. The prescribers sent letters were in the top 10 percent of co-prescribers according to both the average Morphine Milligram Equivalent (MME)[6] per day of opioids prescribed to Medicare beneficiaries, as well as the percent of beneficiaries with overlapping prescriptions. MME per day cutoffs differed across states and specialties. CPI partnered with OES to design a retrospective analysis of the effects of these letters on prescribing behavior.

Analyze Using Existing Data

OES recommends analyzing Medicare Part D Prescription Drug Event (PDE) data using the CMS Integrated Data Repository (IDR) which tracks Medicare beneficiary enrollment and healthcare utilization. OES recommends comparing prescriber behavior among those who received the letters to prescribers in the 80th-89th percentiles who did not receive a letter. Prescriber behavior can be measured in terms of 1) total MME among patients co-prescribed opioids and benzodiazepines, and 2) percent of beneficiaries with overlapping prescriptions.[7]

Results

OES was not able to complete the analysis as planned. In cases where data are not available or the evaluation did not provide comparable comparison groups, OES does not report results. In this case, outcome data were not available in the format needed for analysis.

The analysis plan posted on the OES website details a strategy for how a potential analysis may be conducted. CMS plans to complete the analysis and report their findings (results forthcoming).

Build Evidence

OES has shared recommendations to CPI about how to facilitate conducting a rigorous causal analysis of CPI-led interventions, such as these letters sent to outlier prescribers in response to the SUPPORT Act. CPI is following the OES-proposed analysis plan to measure the impact of the January 2020 letters that have already been mailed on subsequent prescribing of opioids and benzodiazepines.

Based on results from this proposed analysis, there may be room to further test and also expand the scope and frequency of feedback letters, since CPI will continue to mail letters to high prescribers annually, in accordance with Provisions 6065 and 6052 of the SUPPORT Act.

[6] MME accounts for strength and number of opioids prescribed and is a measure that converts different opioid prescriptions into an equivalent dose in morphine using established conversion factors and to an aggregate dose for a patient over a specific period of time.

[7] The proposed analysis described in this abstract was prespecified in an analysis plan, which can be found at https://oes.gsa.gov/projects/opioid-retrospective-analysis/.