Medicaid Opioid Prescribing Mapping Tool
Methodology
May 2023

Background

The Medicaid State Opioid Prescribing Mapping Tool is an online interactive mapping tool that presents geographic comparisons of the opioid prescribing rate at the state level. This mapping tool allows the user to see both the number and percentage of de-identified Medicaid opioid claims to better understand how this critical issue impacts states nationwide.

Opioid prescribing rates are derived using Medicaid data on prescription drugs prescribed by health care providers and reported by states to the Centers for Medicare & Medicaid Services (CMS). The mapping tool presents data for the most recent data year as well as one- and five-year change rates. For example, the release of 2019 data included changes in rates from 2018 to 2019 and changes in rates from 2014 to 2019. The underlying data tables are available for each calendar year, 2013 through the most recent data year. The mapping tool does not contain beneficiary information.

Methods

The national and state measures presented in this mapping tool were aggregated from the Medicaid State Drug Utilization Data[1] (excluding over-the-counter prescriptions). Details about the Medicaid State Drug Utilization Data collected through the Medicaid Drug Rebate Program are publicly available.[2] These data include state-level reports listing the number of prescription fills and amounts paid by states by National Drug Code (NDC). Data were summarized by NDC and linked to a list of NDCs classified as opioids.

The list of opioids included in the Opioid Prescribing Mapping Tool is generated using the Medicare Part D Overutilization Monitoring System (OMS), which can change from year to year. Opioid claims for each calendar year are identified using the OMS opioid list updated each year.[3]

Fee-for-service claims indicate the drug was prescribed in a Fee-For-Service (FFS) program and Managed Care claims indicates the drug was prescribed in a Manage Care Organization (MCO).

Data Limitations

In order to protect the privacy of beneficiaries, suppression is applied to the Opioid Prescribing Mapping Tool data. At each aggregated geographic level, any derived opioid claim counts between 1 and 10 are suppressed (replaced with missing values). Secondary suppression is applied in cases where a single subgroup category is primary suppressed. For example, if the Fee-for-Service opioid claim count for a given state is primary suppressed but the Managed Care opioid claim count is not primary suppressed, then the Managed Care opioid claim count for that state must be secondary suppressed to prevent disclosure of the Fee-for-Service opioid

---

[1] https://www.medicaid.gov/medicaid/prescription-drugs/state-drug-utilization-data/index.html
[2] https://www.medicaid.gov/medicaid/prescription-drugs/medicaid-drug-rebate-program/index.html
[3] For additional information on Medicare Part D OMS please see https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovContra/RxUtilization.html.

claim count suppressed value. Secondary suppression prevents backing into a primary suppressed value by using the values from the other opioid claim counts such as total opioid claim count.

The information presented in this mapping tool does not indicate the quality or appropriateness of care provided by individual physicians or in a given geographic region. For instance, high opioid prescribing for beneficiaries with cancer, palliative care and end of life care may be appropriate. In addition, opioids such as Methadone, may be prescribed for pain management as well as part of drug addiction detoxification and maintenance program. The mapping tool does not distinguish the various reasons for opioid prescribing.

Finally, the number of claims reflect prescriptions that have been filled by the beneficiary. The mapping tool does not measure whether a beneficiary took the medication.

How to Use the Mapping Tool

The Medicaid Opioid Prescribing Mapping Tool allows the user to explore opioid prescribing rates and changes in rates at the state level. The user can navigate around the map by clicking and dragging to a point of interest, as well as zooming in or out to adjust the state map to a larger or smaller view. Zooming in or out can be done by scrolling the mouse wheel, typing the "+" or "-" keys on the keyboard, or by clicking the "+" or "-" buttons on the mapping tool. The user can obtain more information about a particular state by clicking on the map, where a pop-up box displays opioid prescribing rates as well as the number of opioid claims and overall claims. For the maps that display rates by plan type, the user can click on the pop-up box and then move the slider bar to compare Fee-for-Service opioid prescribing rates to Managed Care opioid prescribing rates. Fee-for-Service opioid prescribing rates are shown to the left of the slider bar and Managed Care opioid prescribing rates are shown to the right of the slider bar. The web browsers that currently support the mapping tool include: Edge, Firefox, Chrome, Safari, iOS Safari, Chrome for Android.

The data for the mapping tool can be downloaded [here](#).

CMS is obligated by the federal Privacy Act, 5 U.S.C. Section. 552a and the HIPAA Privacy Rule, 45 C.F.R Parts 160 and 164, to protect the privacy of individual beneficiaries and other persons. All direct identifiers have been removed from this data file.