

# 2015 Medicaid Drug Spending Dashboard

## Methodology

November 3, 2016

---

### Background

The 2015 Medicaid Drug Spending Dashboard is an online interactive tool that presents drug spending and utilization information on covered outpatient prescription drugs paid for by State Medicaid agencies. To create this dashboard, CMS identified 70 drugs using national-level drug utilization data for covered outpatient drugs paid for by State Medicaid agencies. Products were selected based on the following criteria:

- 1) 25 drugs with high total program spending;
- 2) 25 drugs with high spending per prescription fill ( $\geq$ \$1,000) and high total program spending;
- 3) 20 drugs with high unit cost increases.

For all drugs included in the tool, CMS displays relevant spending, utilization, and trend data and also includes consumer-friendly information on the product descriptions, manufacturer(s), and clinical indications. To evaluate individual yearly change trends, the percent change from the prior year was calculated.

### Medicaid Drug Data Source

The data source for the dashboard is national-level drug utilization data for covered outpatient drugs paid for by State Medicaid agencies. These data are available publicly on the Medicaid State Drug Utilization Data webpage at <https://www.medicaid.gov/medicaid/prescription-drugs/state-drug-utilization-data/index.html>, which includes state and national-level reports listing the number of prescription fills and amounts paid by states by National Drug Code (NDC). Data were summarized by drug by linking NDCs to the First Databank MedKnowledge™ and aggregating by brand name and generic name. Data were aggregated across all strengths, dosage forms, and routes of administration, except as described below in the unit cost change methodology. Any over-the-counter drugs were excluded from the analysis. All drug cost metrics are based on the “Total Amount Reimbursed” field which represents the total amount reimbursed by both Medicaid and non-Medicaid entities to pharmacies for the drug. This total is not reduced or affected by Medicaid rebates paid to the states. This amount represents both the Federal and State Reimbursement and is inclusive of any applicable dispensing fees. Individual beneficiary user counts are not available in these datasets, thus

measures based on “per user” are not be possible. All data presented in the dashboard are protected based on CMS privacy policies.

## **Drug Selection Criteria**

### *High total program spending*

Total spending reflects the aggregate drug spending for the Medicaid program. The initial inclusion criterion required the drug to have at least 1,000 prescription fills. Next, the drugs were sorted by total spending from highest to lowest and the top 25 drugs were selected.

### *High spending per prescription fill*

Average spending per prescription fill reflects total drug spending divided by the number of prescription fills for the drug during the year. The initial selection criterion required the drug to have at least 1,000 prescription fills. Next, all drugs with an average spending per prescription fill of at least \$1,000 were identified and then sorted by total program spending from highest to lowest. The top 25 drugs were selected, which identified drugs with high average spending per prescription fill and a large effect on total spending. Drugs already selected based on “high total program spending” were not eligible to be considered for selection by these criteria.

### *Annual Change in Average Cost per Unit*

The annual change in average cost per unit reflects the weighted percent change in average cost per unit from the prior year. Since drugs are available in multiple strengths and dosage forms, the percentage change in unit cost was first calculated at the brand name, generic name, strength, dosage form, and route of administration level, and then a weighted average at the brand name and generic name level was calculated for these percent changes using the total number of claims as a weight. Note, manually calculating the percent change in unit cost using the overall “Average Cost per Unit” variables from each year may result in a difference between the weighted average percent change in unit cost since it does not account for differing strengths and dosage forms.

Although many drugs have cost increases, the focus was on identifying increases that had the largest impact to the Medicaid program. Thus, the net effect of the cost increase on the contribution to total spending was determined by calculating what the total spending would have been at the prior year’s unit cost and then subtracting this from the actual total spending. This reflects the amount that would have been saved if the cost did not increase. We selected eligible drugs for unit cost increases based on the following criteria: a net effect of the cost increase on total spending of at least \$2 million (90<sup>th</sup> percentile of increases), and the drug having at least 1,000 prescription fills in both years.

Finally, the drugs were sorted by percent change in unit cost increase from highest to lowest and the top 20 drugs were selected. Drugs that already had been selected based on “high total spending” or “high total annual spending per prescription fill” were not eligible to be considered for selection by these criteria.

Note: although states are required to report NDC-level data to CMS using the “Unit Type” specified in drug products data file (available at <https://www.medicaid.gov/medicaid/prescription-drugs/medicaid-drug-rebate-program/data/index.html>), there are some instances where multiple unit types (e.g., “Milliliter” and “EACH”) are reported for the same NDC. This may affect unit cost calculations and subsequently the Annual Change in Average Cost per Unit metric discussed above.

## Drug Metrics

- Total Spending: aggregate drug spending for the Medicaid program.
- Average Spending per Prescription Fill: total drug spending divided by the number of prescription fills for the drug during the year.
- Annual Change in Average Cost per Unit: calculated as the percent change in average cost per unit (see detailed methodology above for additional details).
- Prescription Fill Count: number of prescription fills for each drug. Includes original prescriptions and refills.
- Unit Count: the sum of the dosage units of medication dispensed across the calendar year (e.g. number of tablets, grams, milliliters or other units).
- Average Cost per Unit: total drug spending divided by the number of dosage units. For drugs with multiple strengths, dosage forms and routes of administration, this is a claim-weighted average unit cost.

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.