

Commercial Prescription Drug Use & Spending

2018-2022

June 2024

Technical Appendix



Prescription Drug Use & Spending, 2018-2022 (June 2024)

TECHNICAL APPENDIX

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Introduction

CHIA's *Prescription Drug Use & Spending 2018-2022* report provides information on prescription drug expenditures incurred during calendar years 2018 through 2022 for Massachusetts residents covered by most fully-insured, private commercial plans. In 2022, about 39% of Massachusetts residents with private commercial insurance were covered by a fully-insured plan.¹ The expenditure amounts presented in this publication reflect payments made by pharmacy benefit managers (PBMs), health plans, and patients to pharmacies, and do not reflect manufacturer rebates which have an impact on net PBM and health plan spending. These payment amounts do not represent manufacturer list prices or net revenue for manufacturers and other entities along the prescription drug supply chain.

Prescription data was sourced from the Massachusetts All Payer Claims Database (MA APCD), specifically the Pharmacy Claims (PC) and Member Eligibility (ME) files.

Data Source Notes

Pharmacy claims data was sourced from the MA APCD for fully-insured private commercial lines of business for the following ten payers: Anthem, Blue Cross Blue Shield of Massachusetts, CIGNA, Fallon Health, Health New England, Harvard Pilgrim Health Care, Mass General Brigham Health Plan (formerly AllWays Health Partners), Tufts Health Plan, and Tufts Health Public Plans, and WellSense (formerly Boston Medical Center HealthNet Plan). Commercial plan types include Health Maintenance Organization (HMO), Preferred Provider Organization (PPO), Point of Service (POS), and Exclusive Provider Organization (EPO) plans.

Member Eligibility data was limited to unique Massachusetts residents with primary, medical insurance. Pharmacy Claims data was limited to final-versioned claims only.

The dataset used does not reflect the impact of prescription drug rebates which may have a significant impact on health plan spending.

This report does not include spending for drugs or administration of drugs covered under a medical benefit (i.e., drugs administered by providers and paid for under medical benefit rather than a pharmacy benefit).

Measures and Calculations

Allowed Amount: A payer's contracted maximum amount that it will allow to be paid for a claim, also referred to as "Total Expenditures". It includes a portion that the insurer will pay plus a portion designated as the insured's out-of-pocket liability (copay, coinsurance, and deductible). For this report, CHIA calculated Allowed Amounts using the following MA APCD Pharmacy Claims elements: Paid Amount (PC036) + Deductible Amount (PC042) + Copay Amount (PC040) + Coinsurance Amount (PC041).

¹ See CHIA's Enrollment Trends [report](#), which defines coverage as unique, Massachusetts residents with primary, medical membership within the 12 largest commercial payers, as well as MassHealth (Medicaid) and Medicare.

Average Cost per Prescription: A calculated measure that reflects the sum of total expenditures (Allowed Amount) divided by the sum of the number of prescriptions for a given therapeutic class or drug.

$$\frac{\Sigma(\text{Allowed Amount})}{\Sigma(\text{Number of Prescriptions})}$$

Day's Supply: Day's Supply (PC034) represents the number of days the prescription will last if taken as prescribed (e.g., a 30-day supply).

Number of Prescriptions: The sum of the number of pharmacy claim lines.

Patient Out-of-Pocket: The patient's liability toward the total Allowed Amount. For this report, CHIA calculated this amount using the following MA APCD Pharmacy Claims elements: Deductible Amount (PC042) + Copay Amount (PC040) + Coinsurance Amount (PC041).

Payer Paid: The amount an insurance plan paid for a claim.

Per Member per Month (PMPM): A calculated measure that reflects the sum of a financial field (e.g., Allowed Amount, Payer Paid, etc.) by the total number of member months during a 12-month calendar period.

Therapeutic Classes and Drug Names

To categorize drugs for comparative purposes, CHIA used IBM Micromedex's ® Red Book® database, which groups drugs based on National Drug Codes (NDCs) into therapeutic classes. Specifically, CHIA used Red Book's Generic Therapeutic Class (GTC) grouping, which classifies drugs according to their most common intended use. The previous Prescription Drug Use & Spending report published in February 2020 was based on the Generic Therapeutic Class grouping from First Databank (FDB) MedKnowledge database. Therefore, the therapeutic class groupings are different between reports and should not be compared or combined for trending purposes.

CHIA also used the Generic Drug Indicator (PC029) to determine generic versus brand name status.

Based on Red Book's classifications, different NDCs may share the same drug name but fall into different therapeutic classes. Drugs named "Unknown" include drugs that have not been classified or identified by Red Book and are excluded from the list of top 20 drugs by total expenditures but included elsewhere in the report and in the accompanying dataset.

Drugs with fewer than 11 prescriptions were excluded from the accompanying dataset to comply with CHIA's data privacy policies.