

CENTER FOR HEALTH INFORMATION AND ANALYSIS

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# COMMERCIAL PRESCRIPTION DRUG USE & SPENDING 2015–2017

TECHNICAL APPENDIX

FEBRUARY 2020

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# Prescription Drug Use & Spending, 2015-2017 (February 2020)

## TECHNICAL APPENDIX

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## Introduction

CHIA's *Prescription Drug Use & Spending 2015-2017* report provides information on prescription drug expenditures incurred during calendar years 2015, 2016 and 2017 for Massachusetts residents covered by most fully-insured, private commercial plans. In 2018, about 44% of Massachusetts residents with private commercial insurance were covered by a fully-insured plan.<sup>1</sup> The expenditure amounts presented in this publication reflect payments made by pharmacy benefit managers (PBMs) 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), Release Version 7.0 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 eleven payers: Anthem, Blue Cross Blue Shield of Massachusetts, Boston Medical Center HealthNet Plan, CeltiCare Health, Fallon Health, Health New England, Harvard Pilgrim Health Care, Minuteman, AllWays Health Partners (formerly Neighborhood Health Plan), Tufts Health Plan, and Tufts Health Public Plans (formerly Network Health). 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. Pharmacy claims that could not be tied to any member eligibility (0.25% of claims) were excluded.

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).

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<sup>1</sup> See CHIA's Enrollment Trends [report](#), which defines coverage as unique, Massachusetts residents with primary, medical membership within the 14 largest commercial payers, as well as MassHealth (Medicaid) and Medicare.

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**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 First Databank's (FDB) MedKnowledge database, which groups drugs based on National Drug Codes (NDCs) into therapeutic classes. Specifically, CHIA used FDB's Generic Therapeutic Class (GTC) grouping, which classifies drugs according to their most common intended use. CHIA also used the FDB Generic Name Indicator to determine generic versus brand name status.

The FDB Generic Therapeutic Class groupings have been slightly updated since the August 2018 Prescription Drug Use & Spending [publication](#). The most significant change is the addition of a new class: Anti-inflammatory Tumor Necrosis Factor Inhibiting Agents or "TNF blockers," which are drugs that suppress the body's natural response to tumor necrosis factor (TNF), a protein produced by white blood cells that cause inflammation. These drugs treat illnesses such as rheumatoid arthritis, Crohn's disease, psoriatic arthritis. This new FDB Therapeutic class includes drugs that were classified in the Antiarthritics therapeutic class, such as Humira, Enbrel and Simponi, in the previous *Prescription Drug Use & Spending* report using 5.0 APCD data.

This report excludes data for pharmacy claims submitted with NDCs not recognized by FDB. Both the number of prescriptions and the total dollar amount of NDC codes that were not classified were less than 0.05% of the totals across the three years of data.

Based on FDB's classifications, different NDCs may share the same drug name but fall into different therapeutic classes. In most of these cases, a small proportion of a drug's prescriptions were categorized in the Unclassified Drug Products therapeutic class. In the dashboard publication, these prescriptions are excluded from the "top 20" lists of drugs, however all prescriptions are included in the accompanying dataset.