

CENTER FOR HEALTH INFORMATION AND ANALYSIS

# Performance of the Massachusetts Health Care System

## TECHNICAL APPENDIX

MARCH  
**26**  
Annual Report

THCE, TME, and APM



Publication Number 25-071-CHIA-04A

---

# Total Health Care Expenditures, Total Medical Expenses, and Alternative Payment Methods

## TECHNICAL APPENDIX

### Contents

Total Health Care Expenditures (THCE) .....	3
Health Care Cost Growth Benchmark .....	6
Annualized Trends, 2019 to 2021 .....	7
Health Care Expenditures by Service Category .....	7
Provider Administered Drug Spending .....	11
Prescription Drug Rebates and Pharmacy Expenditures .....	12
Total Medical Expenses (TME).....	15
Managing Physician Group TME .....	16
Alternative Payment Methods (APM).....	17

## Total Health Care Expenditures (THCE)

THCE is calculated annually to fulfill two primary objectives: analysis of state-level expenditures and the annual growth rate, as well as analysis of potential drivers of cost growth. CHIA's THCE model uses data that was reported within the required timeframe by Massachusetts commercial payers, Centers for Medicare and Medicaid Services (CMS), MassHealth - the Massachusetts Medicaid program, and other government agencies.<sup>1</sup>

### Definitions:

THCE is a measure of total spending for health care in the Commonwealth. Chapter 224 of the Acts of 2012 (Chapter 224) defines THCE as the annual per capita sum of all health care expenditures in the Commonwealth from public and private sources, including: (i) all categories of medical expenses and all non-claims related payments to providers, as included in the health status adjusted total medical expenses (TME) reported by CHIA; (ii) all patient cost-sharing amounts, such as deductibles and copayments; and (iii) the net cost of private health insurance, or as otherwise defined in regulations promulgated by CHIA.<sup>2</sup>

### Data Years:

Calendar years (CYs) 2022, 2023, 2024

### Data Sources:

THCE CATEGORY	DATA SOURCE
<b><u>Commercially Insured Expenditures</u></b>	
Commercial Full-Claim	TME data reported by commercial payers to CHIA
Commercial Partial-Claim	TME data reported by commercial payers to CHIA with actuarial estimates
<b><u>Public Coverage Expenditures</u></b>	
MassHealth Accountable Care Partnership Plan (ACPP) and Managed Care Organization (MCO)	TME data reported by commercial payers to CHIA, and MassHealth
MassHealth (Fee for Service (FFS), Primary Care ACO (PCACO), Primary Care Clinician (PCC) plan, ACPP/MCO wrap, supplemental payments)	Reported by MassHealth
Programs Primarily for Dual-Eligibles (SCO, PACE, and One Care)	TME data reported by commercial payers to CHIA, and MassHealth
Medicare Advantage	TME data reported by commercial payers to CHIA

<sup>1</sup> Detailed information on THCE data sources and methodologies is available at:

<http://www.chiamass.gov/assets/docs/r/pubs/15/THCE-Methodology-Paper.pdf> (Last accessed: September 11, 2017)

<sup>2</sup> Defined in M.G.L. c. 12C, Section 1.

THCE CATEGORY	DATA SOURCE
Medicare Parts A and B	CMS data summary to CHIA
Standalone Medicare Part D	CMS data summary to CHIA
Health Safety Net	Reported by HSN
Veterans Health Administration	Veterans Health Administration (VA) Geographic Distribution of VA Expenditures (GDX) Report <sup>3</sup>
<b><u>Net Cost of Private Health Insurance</u></b>	Calculated from the Medical Loss Ratio Reports from the Massachusetts Division of Insurance (DOI), the Annual Statutory Financial Statement, and the Medical Loss Ratio Reports from the Center for Consumer Information and Insurance Oversight (CCIO)
<b><u>Massachusetts population</u></b>	U.S. Census Bureau's Population Estimates Program, Vintage 2025 data <sup>4</sup>

## Methods:

CHIA is required to report on THCE annually to monitor the rate of growth and measure the Commonwealth's progress toward meeting its health care cost growth benchmark by each year. This report provides assessments for the 2024 performance year, examining THCE growth between CYs 2023 to 2024. For commercial payers, data for CY2024 is considered final, based off an average of eight months of claims run-out.

### Commercially Insured Expenditures

In accordance with the requirements of THCE, the model includes expenditures by commercial payers on behalf of Massachusetts residents, including both the fully-insured and self-insured populations. For this final assessment, the primary data source is TME-reported data, which is filed directly with CHIA by the twelve largest commercial payers in the Massachusetts market and the commercial payers offering MassHealth ACPP/MCO plans, Medicare Advantage plans, and SCO/PACE/One Care plans. The TME data includes claims and non-claims payments. Payers submit this data based largely on "allowed amounts," which include paid medical claims as well as patient cost-sharing, such as copayments, coinsurance, and deductibles. As such, the TME data captures the health care expenditures of commercial payers and their members.

In some circumstances, payers are only able to report claim payments for limited medical services due to benefit design, where some services such as behavioral health or pharmacy services may be

<sup>3</sup> National Center for Veterans Analysis and Statistics. <https://www.va.gov/vetdata/expenditures.asp>

<sup>4</sup> US Census Bureau's Population Estimates Program, "State Population Totals and Components of Change: 2020-2025", Annual Estimates of the Resident Population for the United States, Regions, States, District of Columbia and Puerto Rico: April 1, 2020 to July 1, 2025 (NST-EST2025-Pop), Vintage 2025, <https://www.census.gov/data/tables/time-series/demo/popest/2020s-state-total.html>, accessed January 18, 2026.

“carved out”, or provided separately from the other medical services. In these instances, payers are unable to obtain the payment information and do not hold the insurance risk for the carved-out services. Thus, payers reported this type of TME data separately in the commercial partial-claim category.<sup>5</sup> To estimate the full TME amount for the commercial partial-claim population, CHIA made actuarial adjustments based on the reported partial-claim TME data. CHIA updated the commercial partial methodology beginning with the 2023 Annual Report.

The revised methodology uses more granular data on carved-out services and data points from the new Primary Care and Behavioral Health (PCBH) data collection to only gross up commercial partial spending for services that payers reported as carve-outs. To identify the types of payer carve-outs, CHIA utilized *Table A.3: Commercial Partial Member Months by Carved-Out Benefits* in the TME-APM submission. Pharmacy and behavioral health were the only carve-outs reported for CY2022 through CY2024.

For payers that reported commercial partial members with pharmacy carve-outs, the revised methodology grosses up partial pharmacy spending using that payer’s commercial full claim pharmacy PMPM as a percent of commercial full total PMPM. In the event where payers report pharmacy carve-outs for less than 100 percent of their commercial partial member months, the reported commercial partial pharmacy spending for whom pharmacy is not carved out was used to account for those with reported carved out pharmacy services; however, all commercial partial business in CY2022 to CY2024 data had a reported pharmacy carve-out.

For payers that reported commercial partial members with behavioral health carve-outs, CHIA used the Primary Care and Behavioral Health data collection to estimate service percentages, collecting the payer-level behavioral health spending as a percentage of total reported spending. CHIA adjusted hospital inpatient, hospital outpatient, physician, and professional other service categories to include estimated behavioral health spending. Approximately 1.7% of the commercial partial population had a reported behavioral health carve-out in CY2024.

To gross up pharmacy and/or behavioral health carve-outs for payers with only commercial partial business, an all-payer market average was used to gross up carve-outs to the full claim amount. CHIA used the adjusted full-claim PMPM amount for the service categories.

Further detail on this revised methodology can be found in CHIA’s methodology memo *Updated Methodology for Grossing Up Reported TME-APM Commercial Partial Expenditures*.<sup>6</sup>

## Public Coverage Expenditures

---

<sup>5</sup> Please see CHIA’s regulation 957 CMR 2.00 for the submission requirements of TME data.

<sup>6</sup> Center for Health Information and Analysis (July 2021). *Updated Methodology for Grossing Up Reported TME-APM Commercial Partial Expenditures*. Available at: <https://www.chiamass.gov/assets/docs/p/tme-rp/2021-Commercial-Partial-Gross-Up-Revised-Methodology.pdf>

In addition to expenditures by commercial payers and their members, THCE also includes expenditures from public coverage and programs, including MassHealth, Medicare FFS, Medicare Advantage plans, Programs for Dually Eligible, Health Safety Net (HSN), and Veteran Affairs.

Data for MassHealth FFS, PCACO, PCC, and supplemental payments are submitted by MassHealth. MassHealth ACPP/MCOs combines expenditure data submitted by commercial payers, while utilizing membership data submitted by MassHealth. Data for SCO, PACE, and One Care estimates expenditures using both MassHealth and commercially submitted data (see page 7). SCO, PACE, and One Care membership was based on MassHealth's submission. Data for Medicare Advantage plans was obtained from TME data filed by commercial payers with CHIA. Massachusetts beneficiaries' expenditures from Medicare Parts A and B and standalone Medicare Part D were provided to CHIA by CMS. MassHealth and HSN data was obtained through collaboration with those agencies' financial departments. Veterans Health Administration (VA) data was sourced from the VA's publicly available data.

### **Net Cost of Private Health Insurance (NCPHI)**

Because of substantial differences among segments of the Massachusetts health insurance market, NCPHI was calculated on a PMPM basis separately for the five different market segments: (1) merged market<sup>7</sup>; (2) large group fully-insured; (3) Medicare Advantage; (4) Medicaid MCOs and Commonwealth Care; and (5) self-insured. Each segment's PMPM amount was then multiplied by the estimated Massachusetts population in each segment to derive the total NCPHI.

CHIA calculated NCPHI metrics for each Massachusetts-based carrier using annual financial statements and MLR reports that are all situs-based to calculate NCPHI on a per member per month basis. To more accurately reflect the NCPHI amounts for Massachusetts residents, residency-based membership data by carrier was used to determine the total and average NCPHI amount for each segment. Ultimately, the total residency-based membership for each segment was used to calculate the annual NCPHI amounts for the state, aggregating the total NCPHI amounts across all the segments.

## **Health Care Cost Growth Benchmark**

The Health Care Cost Growth Benchmark is the projected annual percentage change in THCE in the Commonwealth, as established by the Health Policy Commission (HPC). The health care cost growth benchmark is tied to growth in the state's economy, the potential Gross State Product (GSP). Chapter 224 has set the potential GSP for 2015 at 3.6%. The HPC established the health care cost growth benchmark for 2017 at 3.6%. From 2018 to 2022, the HPC must set the benchmark equal to Potential Growth State Product (PGSP) minus 0.5%, which is set to 3.1% for 2022. For 2023 and beyond, the benchmark will be established by law at a default rate of PGSP, though the HPC Board

---

<sup>7</sup> Individuals and the Small Group form the "Merged Market" in Massachusetts, in which small group insurance laws apply to all small business and individual plans issued by an insurance carrier.

can modify to any amount deemed reasonable, subject to legislative review. In 2023, the benchmark was set to 3.6%.

## Annualized Trends, 2019 to 2021

CHIA used the annualized trend to examine per capita spending growth for 2019 to 2021, when the COVID-19 pandemic caused anomalous spending trends. Annualized trend from 2019 to 2021 was calculated as  $(2021 \text{ Value}/2019 \text{ Value})^{(1/2)}-1$ .

## Health Care Expenditures by Service Category

This report includes a measure of statewide health care expenditures by service category. The purpose of this measure is to better understand the scale of changes in individual service categories and the share of THCE spending changes that are attributable to each category. CHIA's measure uses data that was reported by Massachusetts commercial payers, the Centers for Medicare and Medicaid Services (CMS), and MassHealth. Please note that this measure excludes the net cost of private health insurance (NCPHI) and the Health Safety Net.

### Definition:

For the purposes of this report, health care expenditures by service category represent the annual sum of all THCE reported spending in each service category. Health care expenditures by service category include health care expenditures from public and private sources, and consists of: (i) all categories of medical payments to providers, and (ii) all patient cost-sharing amounts, such as deductibles, coinsurance, and copayments.

### Data Years:

CYs 2022, 2023, 2024

### Data Sources:

DATA CATEGORY	DATA SOURCE
<b><u>Commercially-Insured</u></b>	
Commercial Full-Claim	TME data reported by commercial payers to CHIA
Commercial Partial-Claim	TME data reported by commercial payers to CHIA with actuarial estimates
<b><u>Public Coverage</u></b>	
MassHealth ACP/MCOs	TME data reported by commercial payers to CHIA, and MassHealth

DATA CATEGORY	DATA SOURCE
MassHealth (FFS, PCC, PCACO, ACPP/MCO wrap, and supplemental payments)	Reported by MassHealth
Programs Primarily for Dual-Eligibles (SCO, PACE, and One Care)	TME data reported by commercial payers to CHIA, and MassHealth
Medicare Advantage	TME data reported by commercial payers to CHIA
Medicare Parts A and B	CMS data summary to CHIA
Standalone Medicare Part D	CMS data summary to CHIA

## Methods:

CHIA's measure of health care expenditures by service category includes all medical expenditures in THCE. As a result, health care expenditures by service category is calculated using both data elements included in THCE for which total expenditures are reported at the service category level and some data elements included in THCE for which total expenditures are not reported at the service category level.

Those insurance categories for which THCE data is provided at the service category level include the following: Commercial full-claim, Commercial partial-claim,<sup>8</sup> MassHealth ACPP/MCO, wrap payments for MassHealth ACPP/MCO members, MassHealth FFS, MassHealth PCC, MassHealth PCACO, Medicare Advantage, and Medicare FFS (which includes Medicare Parts A and B and standalone Part D). Additional information on how spending data is collected and calculated in each of these categories can be found in the THCE section above.

Among the insurance categories for which expenditure data is reported by service category, there is a distinction between expenditures reported by private payers and expenditures reported by public payers. Private payers each submit expenditure data to CHIA in the same format and using the same methods, as defined in CHIA's TME data specifications.<sup>9</sup> Public payers (i.e., MassHealth and CMS) each report expenditure data to CHIA in a manner that is consistent with their own program details. As a result, the service categories used by each of these payers differs somewhat from those used in TME data reporting. CHIA utilized the following crosswalks to align data reported by the public payers with data reported by private payers:

<sup>8</sup> Actuarial adjustments are made to commercial partial-claim expenditures to account for spending on "carved-out" services. For additional information on the methodology for making such adjustments, see the section above on THCE.

<sup>9</sup> <https://www.chiamass.gov/payer-data-reporting-tme-apm/>



*Data Sourced from MassHealth (includes FFS, PCC, PCACO, Temporary, and wrap payments for Medicaid ACPs/MCOs)* <sup>10</sup>

SERVICE CATEGORY, AS REPORTED	CROSSWALK TO TME SERVICE CATEGORIES
Hospital Inpatient	Hospital Inpatient
Hospital Outpatient	Hospital Outpatient
Physicians	Physician
Professionals	Other Professionals
Home Health and Community Health	Other
Long Term Care	Other
Pharmacy	Pharmacy
Dental	Other
Capitation	Non-Claims

*Data Sourced from Medicare FFS*

SERVICE CATEGORY, AS REPORTED	CROSSWALK TO TME SERVICE CATEGORIES
Hospital Inpatient	Hospital Inpatient
Hospital Outpatient	Hospital Outpatient
Non-Hospital Outpatient	Other
Physician	Physician
Other Professionals	Other Professionals
Home Health Agency	Other
Hospice	Other
Skilled Nursing Facility	Other
Pharmacy	Pharmacy
Durable Medical Equipment	Other
Other Suppliers	Other

<sup>10</sup> MassHealth also reports supplemental payments made to certain Massachusetts hospitals. These supplemental payments were categorized as non-claims expenditures.

In addition, several insurance categories included in THCE do not rely on data reported at the service category level. These categories include SCO, PACE, and One Care. For each of these categories, CHIA estimated service category-level spending based on TME reported data. For SCO, PACE, and One Care, CHIA obtains a single aggregated expenditure amount (i.e. capitation amount) from MassHealth. The amount was then apportioned into service categories based on the share of spending reported in each service category for all payers that submitted TME data for SCO, PACE, and One Care.<sup>11</sup>

Effective for the 2026 Annual Report, CHIA required that payers submit member-cost sharing and incurred cost by service category through the TME submission. As the requirement was only for CY2024 data, some payers elected to not resubmit data for CY2022 or CY2023. To account for payers who did not provide a breakout at the service category level, CY2023 data contains estimated member cost-sharing. This was accomplished by using the respective market level proportion of incurred cost vs. member cost-sharing by service category and then applying that to each payers reported total spending in each service category. Medicare Advantage market level percentages were calculated using 94% of the market, and commercial market level percentages were calculated using 81% of the market.

To capture member cost-sharing for commercial partial-claim population, CHIA applied commercial full member cost-sharing percentage to adjusted (grossed-up) THCE commercial partial-claim total expenses, by payer.

### Data Limitations:

CHIA utilized the service categories defined in the TME data specifications<sup>12</sup> when building the health care expenditures by service category measure. As highlighted above, both public and private payers utilize their own set of internal definitions for a given insurance category and these internal definitions may differ for a variety of reasons. As a result, measuring aggregate spending by service category is best used to identify broad trends in spending patterns over time.

In addition, it is important to note that CHIA does not receive TME data for all payers in the SCO, PACE, and One Care markets. In addition, CHIA established the share of spending by service category for the SCO market based on data from data from Wellsense, Commonwealth Care Alliance (CCA), Fallon Community Health Plan (Fallon), Tufts Medicare Advantage, and United SCO. For the One Care market, the share of spending by service category was determined using data from THPP, CCA, and United OneCare. For the PACE market, the share of spending by service category was determined using data from Fallon.

---

<sup>11</sup> CHIA collects SCO, PACE, and One Care data from TME data filers but uses MassHealth reported data for these insurance categories in THCE due to the fact that some payers that offer insurance in these markets do not report TME data to CHIA.

<sup>12</sup> See TME data specifications here: <http://www.chiamass.gov/assets/docs/p/tme-rp/data-spec-manual-tme.pdf>.

## Provider-Administered Drug Spending

Unlike the prescription drugs captured in the pharmacy service category, some medications are covered by the medical benefit and administered by a provider in a health care setting. Provider administered drug spending was included in the 2026 Annual Report to better understand the level to which drug spending contributes to growth in other service categories that are not pharmacy.

### Definition:

*Provider Administered Drug Spending:* Also known as medical pharmacy. Refers to medications covered by the medical benefit and administered by a provider in a health care setting.

*Pharmaceutical Categories:* non-oncologic injections and infusions, chemotherapy drugs, and vaccines administered in a non-retail pharmacy setting.

### Data Years:

CY 2023, CY 2024

### Data Sources:

DATA CATEGORY	DATA SOURCE
Commercial Full	TME data submitted by commercial payers
Commercial Partial	TME data submitted by commercial payers
Medicare Advantage	TME data submitted by commercial payers
MassHealth ACPP/MCO	TME data submitted by commercial payers
MassHealth (FFS, PCC, PCACO, ACPP/MCO wrap)	Reported by MassHealth

### Methods:

Effective for the 2026 Annual Report, CHIA required that payers submit provider administered drug spending for each of the pharmaceutical categories at the service category level. Payers were provided with list of relevant HCPCS/CPT codes to capture their medical pharmacy spending from CHIA.<sup>13</sup>

To capture provider administered drug spending as a proportion of service category spending, the overall total of provider administered drug spending was divided by total service category

<sup>13</sup> List of relevant HCPCS/CPT codes given to payers: <https://www.chiamass.gov/assets/docs/p/tme-rp/2025/2025-Medical-Pharmacy-Code-Set.xlsx>.

expenditures. Hospital inpatient was collected but excluded from reporting due to billing differences such as bundled payments.

## Prescription Drug Rebates and Pharmacy Expenditures

Effective July 1, 2016, the Massachusetts Legislature amended M.G.L. c. 12C such that, when detailing cost growth trends in its annual report, CHIA is required to: “consider the effect of drug rebates and other price concessions in the aggregate without disclosure of any product or manufacturer-specific rebate or price concession information, and without limiting or otherwise affecting the confidential or proprietary nature of any rebate or price.”<sup>13</sup>

To comply with this requirement, CHIA developed and implemented a prescription drug rebate reporting requirement as described above. The submitted data included member months, aggregate prescription drug spending, and aggregate rebates received by the health plan from pharmacy benefit managers and manufacturers for calendar years 2022, 2023, and 2024. This data allows for a better understanding of the share of pharmacy spending that is attributable to prescription drug rebates and how that share has changed over time. More on the data specifications for the reporting requirement can be found here: <http://www.chiamass.gov/prescription-drug-rebate-data-submission>.

Using the data reported as part of this collection, CHIA is able to estimate pharmacy expenditures net of prescription drug rebates and the impact of changes in rebates received by health plans on the pharmacy expenditure growth rate.

### Definitions:

*Prescription Drug Rebate Share of Pharmacy Expenditures:* Aggregate prescription drug rebates divided by aggregate pharmacy expenditures.

*Pharmacy Expenditures Net of Rebates:* Aggregate pharmacy expenditures minus aggregate prescription drug rebates.

*Aggregate Prescription Drug Rebates:* the sum of all rebates and other price concessions (including concessions from price protection and hold harmless contract clauses) provided by pharmaceutical manufacturers for prescription drugs with specified dates of fill, excluding manufacturer-provided fair market value bona fide service fees.

*Aggregate Pharmacy Expenditures:* the sum of all incurred claim allowed payment amounts to pharmacies for prescription drugs, biological products, or vaccines as defined by the payer’s prescription drug benefit in a given calendar year, including member cost-sharing and excluding prescription drug rebates.

Additional information on CHIA's definitions of prescription drug rebates and pharmacy expenditures can be found in the data specification manual for prescription drug rebate data submitters here: <http://www.chiamass.gov/prescription-drug-rebate-data-submission>.

### Data Years:

CYs 2022, 2023, 2024

### Data Sources:

Prescription drug rebate data is reported for the following insurance categories:

DATA CATEGORY	DATA SOURCE
Commercial	Data submitted by commercial payers
Medicare Advantage	Data submitted by commercial payers
Medicare FFS (Standalone Medicare Part D)	Data submitted by commercial payers
MassHealth (FFS, PCACO, PCC)	Data submitted by MassHealth
MassHealth ACP/MCO	Data submitted by both MassHealth and commercial payers
SCO/PACE/One Care	Data submitted by commercial payers and MassHealth

### Methods:

To estimate the prescription drug rebate share of total pharmacy expenditure for Massachusetts residents in a given insurance category, CHIA summed all reported pharmacy expenditures in the insurance category and divided that amount by the sum of all reported prescription drug rebates in that category.

For the MassHealth ACP/MCO insurance category, CHIA received rebate data from both MassHealth and commercial payers. The commercial payer rebate amounts represent supplemental rebates obtained by the commercial payers separately from the rebates obtained by MassHealth. When calculating the rebate share of spending for MCOs, CHIA combined the rebates amounts from both MassHealth and the commercial payers and divided that amount by total pharmacy expenditures reported by commercial ACP/MCO plans.

To estimate pharmacy expenditures net of prescription drug rebates for all Massachusetts residents, CHIA utilized data reported in both the TME and prescription drug rebate data submissions received from payers. TME reported pharmacy expenditures were used to establish aggregate pharmacy expenditures for Massachusetts residents. Aggregate prescription drug rebates were estimated using the payer-specific rebate share, calculated as described above. To estimate aggregate prescription drug rebates, the reported prescription drug rebate share was multiplied by the TME

reported pharmacy expenditures for a given insurance category, calendar year, and payer. The estimated aggregate prescription drug rebates were then subtracted from the aggregate pharmacy expenditures to arrive at estimated pharmacy expenditures net of prescription drug rebates. Data was calculated at the payer level for commercial rebates and at the insurance category level for the other rebate categories; with some exceptions noted below, the data was then summed to determine pharmacy expenditure net of rebates for all Mass. residents.

Several exceptions applied to the methods described above. First, in some instances payers notified CHIA that their TME data included rebates. In these cases, it was not possible to apply a rebate share to TME-reported pharmacy expenditures to estimate aggregate rebates.

For the Commercial Partial-Claim insurance category, CHIA utilized several approaches to determine the rebate share. For those payers that report both full-claim and partial-claim data, CHIA applied the rebate share reported for full-claim members to the pharmacy spending estimated for partial claim members.<sup>14</sup> For those payers that only report partial-claim data, CHIA applied the rebate share for all commercial full-claim members except in instances where either (a) the payer was able to report rebate data for some of its partial claim members, or (b) the payer indicated that its TME data included prescription drug rebates. In the former case, CHIA applied the payer-reported rebate share. In the latter case, CHIA determined the ratio of estimated net pharmacy expenditures, calculated as described above, to the TME reported pharmacy expenditures for the commercial full-claim population. Commercial partial-claim pharmacy expenditures were then adjusted by this ratio.

Similarly, for the SCO, PACE, and One Care categories, CHIA applied the rebate share reported for all members by private payers in the rebate data submissions to the estimated pharmacy expenditures which are calculated as described in the “Health Care Expenditures by Service Category” section above.

Lastly, for MassHealth programs that are administered by MassHealth (FFS, PCC, PCACO), CHIA applied the rebates reported by MassHealth to all pharmacy expenditures reported for those programs as included in the THCE by Service Category.

Note that CHIA does not consider Health Safety Net prescription drug rebates in reporting, and the Veterans Health Administration does not publicly publish prescription drug rebate data.

---

<sup>14</sup> Actuarial adjustments are made to commercial partial-claim expenditures to account for spending on “carved-out” services. For additional information on the methodology for making such adjustments, see the section above on THCE.

# Total Medical Expenses (TME)

## Definitions:

TME is defined as the total medical spending for a member population based on allowed claims (i.e. payer paid amount plus patient cost sharing) for all categories of medical expenses and all non-claims related payments to providers. TME is expressed on a PMPM basis.

- Member zip code TME measures the total health care spending of each Massachusetts zip code, based on member residence, rather than where members received services. Zip codes are self-reported by members, which may lead to certain inaccuracies, particularly in areas with high student or other transient populations.

TME can be measured on an unadjusted basis, which reflects actual spending but does not consider differences among member populations. TME may also be adjusted to reflect differences in member demographics and health status such as age, gender, and clinical profile. This report presents both unadjusted and health-status adjusted (H.S.A.) TME data.

- Unadjusted TME is the actual payments from a commercial payer and its members to health care providers. Unadjusted TME is presented for aggregated analyses across payers, such as statewide and regional analyses. Unadjusted TME is used for such purposes since payers in these analyses utilized different methods in adjusting for health status, and H.S.A. TME results calculated from different health status adjustment methods cannot be directly compared.
- Health-Status Adjusted TME is the total health care spending for the member population of a payer's membership based on allowed claims for all categories of medical expenses and all non-claims related payments to health care providers, adjusted by health status, and expressed on a PMPM basis. H.S.A. TME is analyzed in order to examine the payer-specific TME growth rate for their member populations. This ensures that each payer's TME accounts for the health status and resource utilization of their member populations when comparing a payer's TME growth rate to the health care cost growth benchmark.
- Health-Status Adjustment score is a value that measures a member's illness burden and predicted resource use based on differences in member characteristics or other risk factors.
- Commercial full-claims data includes both self- and fully-insured commercial business for which claims for all medical services were available to the reporting payer. The data captures complete medical spending and is used to calculate commercial TME.
- Commercial partial-claims data includes self- and fully-insured commercial business where the employer separately contracts for one or more specialized services, such as pharmacy or behavioral health service management. In these cases, the reporting payer does not have access to the claims for the separately contracted services. As the full range of medical

expenses is not included in the data reported by the payers, these partial-claims are not included in the TME analyses contained in this report.

**Data Year:**

CYs 2022, 2023, 2024

**Data Source:**

Collected annually by CHIA pursuant to M.G.L. c. 12 C, section 8, from both commercial and public payers. Please see Table TA-1 for a list of payers and reported data.

The 2024 TME data is considered final, with up to, on average, eight months of claims run-out.

## Managing Physician Group TME

**Definition:**

Managing physician group TME measures the total health care spending of members whose plans require the selection of a primary care physician associated with a physician group, adjusted for health status. Thus, managing physician group TME reported by each payer contains exclusively managed care member information. The data reported for each physician group include TME for these members, even when care was provided outside of the physician group. Data related to pediatric physician groups were excluded from the physician group TME analyses.<sup>15</sup>

**Data Year:**

CYs 2022, 2023, 2024

**Data Source:**

Collected annually by CHIA pursuant to M.G.L. c. 12 C, section 8, from both commercial and public payers. Please see Table TA-1 for a list of payers and reported data.

**Parent Physician Groupings:**

To identify and assess the top ten physician groups displayed on the pages, “Trends in Managing Physician Group Commercial Unadjusted TME, 2023-2024” and “Trends in Managing Physician Group Commercial HSA TME, 2023-2024”, in the 2026 Annual Report, CHIA grouped the following parent provider groups:

---

<sup>15</sup> As defined in 957 CMR 2.00, pediatric physician practice is a physician group practice in which at least 75% of its patients are children up to the age of 18.



GROUPED NAME	PARENT PHYSICIAN GROUPS
<b>BILH Entities</b>	Beth Israel Lahey Health (BILH); Beth Israel Deaconess Care Organization (BIDCO); Lahey Clinic; Lahey Clinical Performance Network
<b>South Shore Medical Center</b>	South Shore Medical Center; South Shore Physician Hospital Organization (SSPHO)
<b>Steward</b>	Steward Medical Group; Steward Network Services
<b>UMass</b>	UMass Memorial Healthcare; UMass Memorial Medical Group

## Alternative Payment Methods (APM)

### Definitions:

APMs are payment methods used by a payer to reimburse health care providers that are not solely based on the fee-for-service (FFS) basis. In some APM contracts, financial risk associated with both the occurrence of medical conditions as well as the management of those conditions is shifted from payers to providers to incentivize efficiency and quality of health care delivery.

Global Payment: Global payments are a type of payment arrangement between payers and providers that establishes a spending target for a comprehensive set of health care services to be delivered to a specified population during a defined time period. Global payment arrangements may shift some financial risk from payers to providers. In these cases, if costs exceed the budgeted amounts, providers must absorb those costs, subject to negotiated risk sharing agreements. On the other hand, providers may share in, or retain, the savings if costs are lower than the budgeted amounts and health care quality performance targets are met.

It is important to note that within the framework of a global payment arrangement with a managing physician group, payments to service providers are generally made on a FFS basis. Also, global payments as defined here do not consider the extent of risk, if any, borne by the managing physician group. It is difficult to capture levels of risk, as there is currently no standardized approach to risk classification or reporting.

Limited Budget: Limited budgets, like global payments, represent a move away from FFS-based payments. Limited budgets are payment arrangements whereby payers and providers, either prospectively or retrospectively, agree to pay for a specific set of services to be delivered by a single provider. This could include, for instance, capitated primary care or oncology services. Limited budgets also shift some financial risk from payers to providers.

Bundled Payment: Bundled payments are a method of reimbursing providers, or a group of providers, for providing multiple health care services associated with defined “episodes of care” (e.g. knee surgery, pregnancy and delivery, etc.) for a patient or set of patients. These payments may

include services developed based upon clinical guidelines, severity adjustments to account for the general health status of a patient and comorbidities (other related ailments), and even designated “profit” margins and allowances for potential complications.

Other, non-FFS-based: This category includes all other payment arrangements that are not based on a FFS model, but that also do not easily fit into any of the other categories. This category includes supplemental payments for the Patient Center Medical Home Initiative (PCHMI), for instance.

Fee-for-service (FFS): Under this model, health care providers are reimbursed by payers at negotiated rates for individual services delivered to patients. A variety of FFS payment arrangements exist, including, but not limited to, Diagnosis Related Groups (DRGs), per-diem payments, claim-based payments adjusted by performance measures, and discounted charge-based payments. This category also includes pay-for-performance incentives that accompany FFS payments.

#### Data Year:

CYs 2022, 2023, 2024

#### Data Source:

CHIA collects data on APM from the ten largest commercial payers in the Massachusetts commercial health insurance market, and commercial payers that offered Medicare Advantage plans and MassHealth ACP/MCO plans for CYs 2022, 2023, and 2024. Please see Table TA-1 for a full list of payers and reported data. The APM data was collected at the member zip code level and the managing physician group level, similar to the TME data. The reported payment information, especially the non-claims payments, could differ from the final payment amounts since quality and financial performance is normally part of the features of alternative payment methods. These final settlements for quality and financial performance may have not been completed at the time of APM data submission deadline, which was September 2025.

The APM data is collected by insurance category, product type, and payment method according to member zip code and managing physician group. The APM data is only collected for Massachusetts residents, as determined by the member’s residence on the last day of the reporting year, and for managing physician groups based in Massachusetts. For payment method assignment, payers classified physician groups and members based on the following payment method hierarchy: (1) global payment; (2) limited budget; (3) bundled payment; (4) other, non-FFS based; and (5) FFS.

The Quality Measure Catalog data presented in this chapter is sourced from an annual payer survey issued by CHIA, in collaboration with the Health Policy Commission (HPC). Please review the [2024 Quality Measure Catalog Executive Summary](#) available on CHIA’s website for details about the survey, participating payers, the Aligned Measure Set, and Fidelity rate calculation methodology.

**Table TA-1: List of Payers Reporting 2022-2024 TME and APM Data**

<b>PAYER</b>	<b>DATA TYPE</b>
<b>Aetna Health Insurance Company (Aetna)</b>	Commercial full and partial-claims; Medicare Advantage
<b>Blue Cross Blue Shield of Massachusetts (BCBSMA)*</b>	Commercial full and partial-claims; Medicare Advantage
<b>Commonwealth Care Alliance (CCA)</b>	Medicare Advantage; OneCare; SCO
<b>CIGNA Health and Life Insurance Company (Cigna)</b>	Commercial full and partial-claims
<b>Fallon Health (Fallon)</b>	Commercial full; MassHealth (ACPP/MCO); Medicare Advantage; PACE; SCO
<b>Harvard Pilgrim Health Care (HPHC)</b>	Commercial full and partial-claims; Medicare Advantage
<b>Health New England (HNE)</b>	Commercial full and partial-claims; MassHealth (ACPP/MCO); Medicare Advantage
<b>Health Plans, Inc. (HPI)</b>	Commercial full -claims
<b>Mass General Brigham Health Plan (MGBHP) (formerly AllWays)</b>	Commercial full and partial-claims; MassHealth (ACPP/MCO); Medicare Advantage
<b>Tufts Public Plans – (THPP)</b>	Commercial full-claims; MassHealth (ACPP/MCO); OneCare
<b>Tufts Health Plan (THP)</b>	Commercial full and partial-claims
<b>Tufts Medicare Advantage</b>	Medicare Advantage; SCO
<b>United Healthcare Insurance Company (United)</b>	Commercial full and partial-claims
<b>United Medicare Advantage</b>	Medicare Advantage
<b>United Senior Care Options (SCO)</b>	OneCare; SCO
<b>Wellpoint (formerly UniCare Health Insurance Company)</b>	Commercial partial-claims
<b>WellSense Health Plan (formerly BMC HealthNet)</b>	Commercial full-claims; MassHealth (ACPP/MCO); SCO