

CENTER FOR HEALTH INFORMATION AND ANALYSIS

**PERFORMANCE OF THE
MASSACHUSETTS
HEALTH CARE SYSTEM**

ANNUAL REPORT
SEPTEMBER 2018



Errata

After the September 2018 publication of this report, Harvard Pilgrim Health Care identified a material correction to its 2016 and 2017 total medical expense (TME) data submission. CHIA incorporated this corrected data into the report, revising the results of 2017 Total Health Care Expenditures per capita, 2017 commercial THCE and TME service category trends, and 2016 Managing Physician Group Health Status Adjusted (HSA) TME trends. Initial THCE spending was originally calculated as \$8,907 per Massachusetts resident. This figure has been revised to \$8,908 per capita. CHIA would like to thank Harvard Pilgrim Health Care for identifying the submission error and bringing it to our attention.

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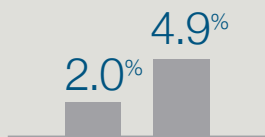
1.6%

THCE totaled \$61.1 billion in 2017, or \$8,908 per capita; this represents an increase of 1.6% from 2016, below the health care cost growth benchmark.

-0.2% / -2.4%

Total MassHealth spending decreased by 0.2% in 2017, driven in part by a 2.4% decrease in enrollment.

KEY FINDINGS



Annual growth in fully-insured premiums accelerated—from 2.0% in 2016 to 4.9% in 2017.

5.7%

Between 2016 and 2017, member cost-sharing continued to grow at a faster rate (5.7%) than inflation, average wages, and premiums.



By 2017, 28.2% of members with private commercial insurance were enrolled in high deductible health plans.



Pharmacy and hospital outpatient spending remained the largest drivers of THCE growth.



TME increased in 2017 for commercial and MassHealth MCO members, and decreased for Medicare Advantage members.

-1.3_{pp}

Adoption of APMs decreased by 1.3 percentage points in the commercial market in 2017, driven largely by a decline in HMO members covered under an APM.

EXECUTIVE SUMMARY

Each year, pursuant to M.G.L. c. 12C, the Center for Health Information and Analysis (CHIA) reports on the performance of the Massachusetts health care system, monitoring cost and quality trends over time to inform policymaking.

Total Health Care Expenditures

In 2017, Total Health Care Expenditures (THCE) in Massachusetts grew 1.6% to \$8,908 per resident (\$61.1 billion statewide).¹ For the second consecutive year, the growth rate fell below the 3.6% benchmark set by the Health Policy Commission. This deceleration in expenditure growth occurred across all service categories, including hospital inpatient, hospital outpatient, and prescription drugs; although spending in the latter two categories continued to increase faster than the benchmark.

There was more variation in expenditure growth between public and commercial insurance categories in 2017. Public insurance programs overall reported minimal expenditure growth, with MassHealth spending slightly declining. Although

commercial expenditure growth also slowed and remained below the 3.6% benchmark, members and employers saw cost-sharing and premium obligations rise faster than the benchmark, inflation, and wages.

Public Insurance Programs

Aggregate MassHealth expenditures, which comprised over one quarter of THCE, decreased by 0.2% in 2017, a notable decline compared with prior year growth rates of 4.3% in 2016 and 6.1% in 2015. This spending decline was due, in part, to a decrease in MassHealth membership. In addition, although spending growth accelerated for prescription drugs as well as inpatient and outpatient hospital services, spending for home health and long term care fell substantially.

Medicare spending, which also made up over one quarter of THCE, continued recent trends of slower growth, increasing by 1.9% in 2017 compared to 3.5% in 2016 and 7.0% in 2015. This trend was largely consistent with national patterns.

¹ These figures reflect CHIA's initial assessment of 2016-2017 growth, with finalized figures published next year. See *Understanding the Differences: Comparing Initial and Final THCE* and the [technical appendix](#) for more detail.

Commercial Insurance

Commercial health care expenditures and the net cost of private health insurance (NCPHI)² combined to make up over 40% of THCE in 2017. While overall commercial spending growth continued to moderate in 2017, increasing by 3.1%, member cost-sharing and fully-insured plan premiums grew more rapidly, placing additional financial burdens on members and employers who pay those costs.

Increased enrollment in high deductible health plans (HDHPs) occurred across the commercial market, disproportionately impacting members covered by small- and mid-size employer-sponsored insurance (ESI) plans, as well as unsubsidized individual purchasers. In 2017, over 50% of small- and mid-size employer group members had an HDHP, as did nearly 75% of unsubsidized individual purchasers. Accordingly, these market segments had the highest member cost-sharing burdens.

Lower-income individual purchasers with ConnectorCare plans were shielded from a significant portion of out-of-pocket expenses due to cost-sharing reduction (CSR) subsidies. However, recent federal policy changes, including the elimination of federal CSR subsidy payments, necessitate continued monitoring of this segment of the commercial market.

Premiums for fully-insured commercial plans increased 4.9%

in 2017 to \$483 per member per month, after growing 2.0% in 2016. Members covered by small employers experienced the largest percentage increase in premiums (6.9%), although their premiums remained the lowest among ESI plans.³

Alternative Payment Models (APMs) and Quality

APM contracts generally hold primary care providers accountable for achieving cost and quality targets. A growing share of MassHealth members in 2017 had primary care providers engaged in alternative payment contracts for their care. This growth preceded the implementation of Accountable Care Organizations for MassHealth members in March 2018.

In the commercial market, following a 6.7 percentage point increase in 2016, APM adoption declined 1.3 percentage points in 2017. However, APMs continued to increase among PPO products.

Overall, patients rated their experiences with Massachusetts primary care providers highly in 2017, consistent with prior years. Patients scored primary care providers highest on measures of communication, and lowest on measures of behavioral health and support for managing their own health care. Other quality metrics indicate progress among hospitals in maternity care, medication safety, and reducing health care-associated infections. ●

² NCPHI reflects administrative costs for both private commercial insurance plans as well as privately-administered public plans; private commercial costs comprised 74% of NCPHI in 2017.

³ For information on coverage costs for members covered under self-insured plans, see [page 71](#).

TOTAL HEALTH CARE EXPENDITURES

KEY FINDINGS

TOTAL HEALTH CARE EXPENDITURES

THCE totaled \$61.1 billion in 2017, or \$8,908 per capita; this represents an increase of 1.6% from 2016, below the health care cost growth benchmark.

Spending for MassHealth members decreased 0.2% in 2017, driven in part by a 2.4% decrease in enrollment.

Increases in pharmacy and hospital outpatient spending continued to be the largest drivers of THCE growth between 2016 and 2017.

Spending for prescription drugs totaled \$9.7 billion in 2017, a 5.0% increase from 2016. This trend has continued to slow from 6.4% growth in 2016 and 12.1% growth in 2015.

TOTAL HEALTH CARE EXPENDITURES

A key provision of the Massachusetts health care cost containment law, Chapter 224 of the Acts of 2012, was to establish a benchmark against which the annual change in health care spending growth is evaluated.

The Center for Health Information and Analysis (CHIA) is charged with calculating Total Health Care Expenditures (THCE) and comparing its per capita growth with the health care cost growth benchmark, as determined by the Health Policy Commission. For 2017, this benchmark was set to 3.6%.¹

THCE encompasses health care expenditures for Massachusetts residents from public and private sources, including all categories of medical expenses and all non-claims-related payments to providers; all patient cost-sharing amounts, such as deductibles and copayments;

and the cost of administering private health insurance (called the net cost of private health insurance, or NCPHI).²

It does not include out-of-pocket payments for goods and services not covered by insurance, such as over-the-counter medicines, and it also excludes other categories of expenditures such as vision and dental care.

Each year, CHIA publishes an initial assessment of THCE based on data with at least 60 days of claims run-out for the previous calendar year, which includes payers' estimates for claims completion and for quality and performance settlements. Final THCE is published the following year, based on final data which is submitted 17 months after the end of the performance year.

This report provides final results for the calendar year 2016 performance period and initial results for 2017. •

Notes: Detailed methodology and data sources for THCE are available at <http://www.chiamass.gov/total-health-care-expenditures>.

Unless otherwise stated, 2016-2017 comparisons are based upon 2016 final data. A discussion of the differences between 2016 initial and final data can be found at the end of this chapter.

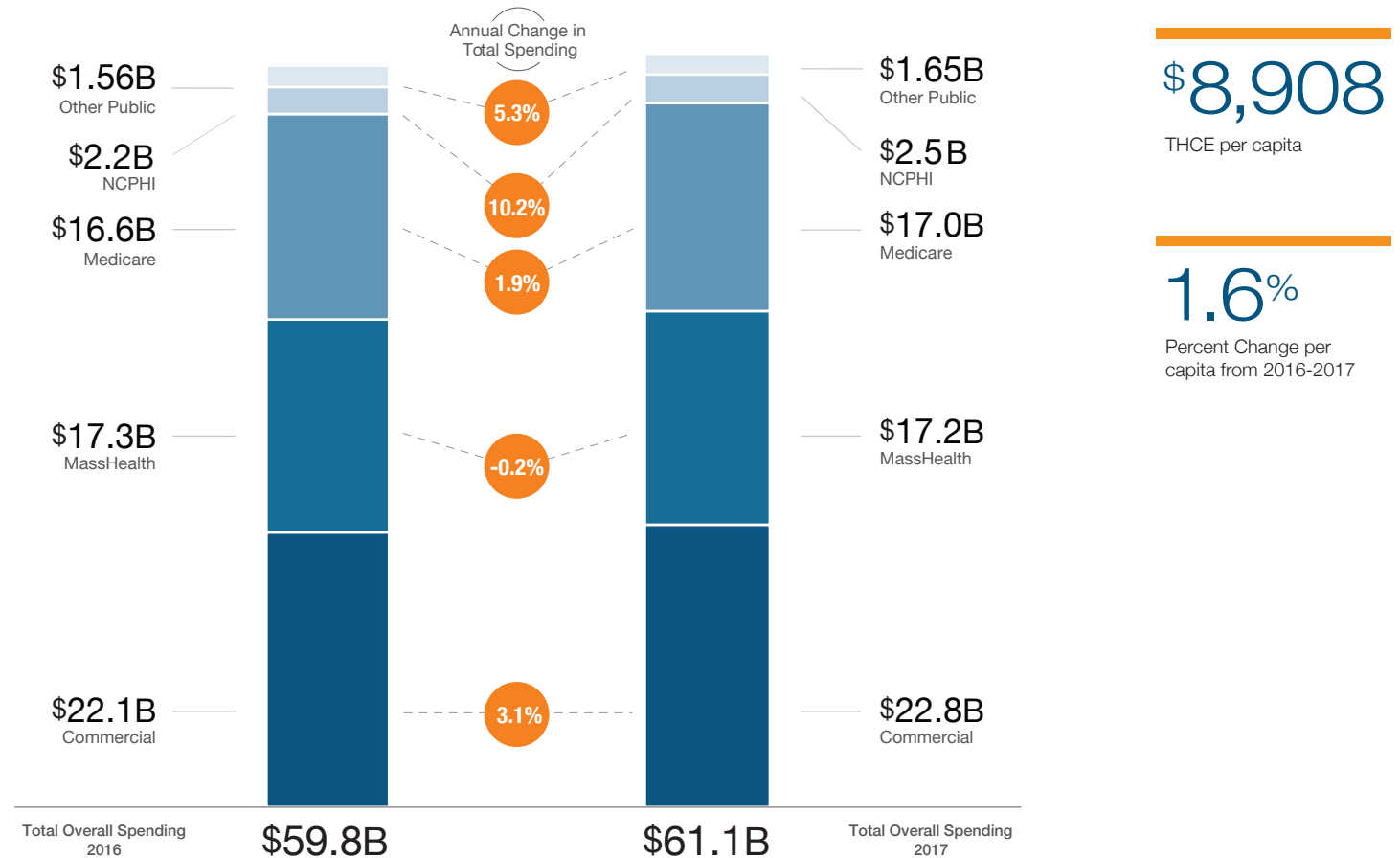
TOTAL HEALTH CARE EXPENDITURES

THCE represents the total amount paid by or on behalf of Massachusetts residents for insured health care services. It includes spending for commercially insured members, MassHealth-covered members, Medicare beneficiaries, other public programs, and the NCPHI for Massachusetts residents.

THCE totaled \$61.1 billion in 2017, an increase of \$1.3 billion from 2016, while the Massachusetts population grew by 0.5%. Commercial health care spending, which comprised 37.3% of THCE, grew by 3.1% to \$22.8 billion while Medicare spending (27.8% of total spending) increased by 1.9% to \$17.0 billion.

MassHealth (28.2% of total spending) was the only component of THCE to experience a decrease in total spending, declining by 0.2% to \$17.2 billion in 2017. This decline was driven in part by a 2.4% decrease in MassHealth enrollment.

Components of Total Health Care Expenditures, 2016-2017



THE INITIAL ESTIMATE OF TOTAL HEALTH CARE EXPENDITURES PER CAPITA GROWTH WAS 1.6% FOR 2017, BELOW THE HEALTH CARE COST GROWTH BENCHMARK.

Source: Payer-reported data to CHIA and other public sources.

Percent changes are calculated based on non-rounded expenditure amounts. Please see [databook](#) for detailed information.

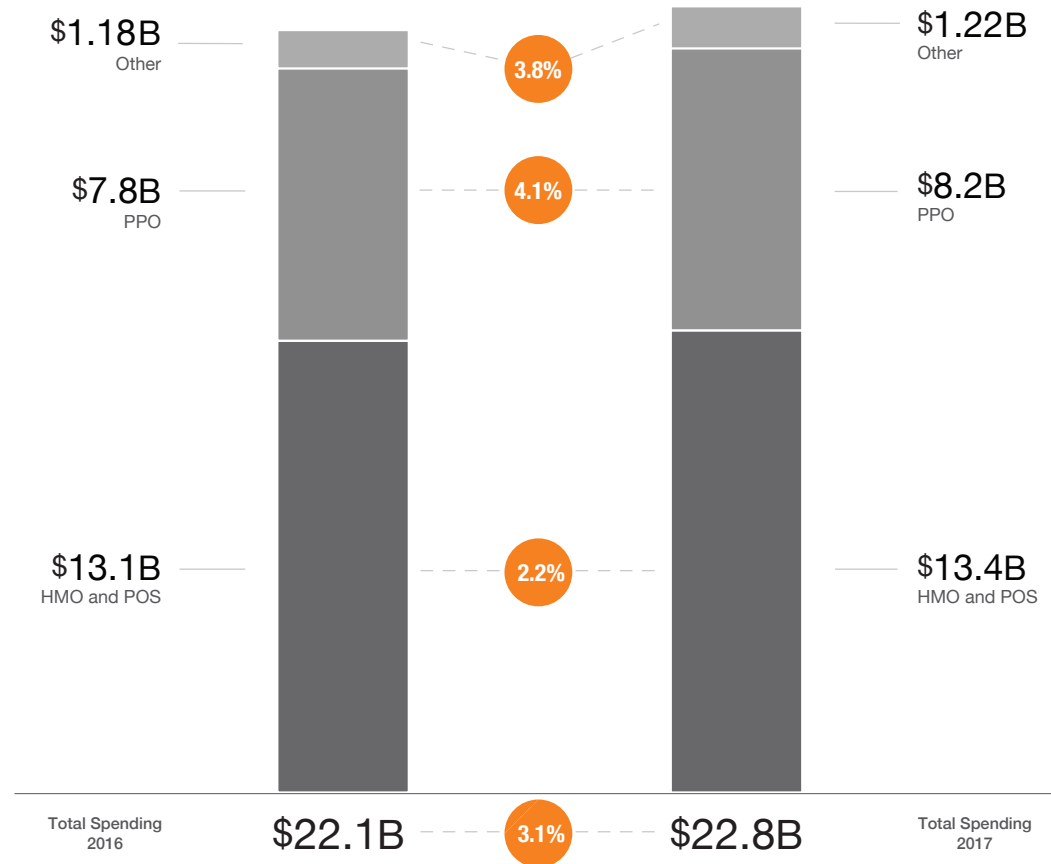
TOTAL HEALTH CARE EXPENDITURES

Within the commercial insurance market, private payers offer a variety of insurance product types. Different product types vary by the provider networks offered, the accessibility of in-network providers, and cost-sharing levels, among other factors.

The most common commercial insurance products in Massachusetts are managed care products including Health Maintenance Organization (HMO) and Point-of-Service (POS) plans. These plans are typically distinguished by their requirement that a member select a primary care provider to manage the member's care. In 2017, HMO and POS plans accounted for 58.8% of commercial spending. Overall spending on HMO and POS products increased by 2.2% to \$13.4 billion in 2017.

Preferred Provider Organization (PPO) plans differ from HMO/POS plans, as they allow members to schedule visits without a referral. Accompanying an increase in covered members, PPO spending increased by 4.1% to \$8.2 billion in 2017.

Components of Total Health Care Expenditures: Private Commercial Insurance by Product Type, 2016-2017



SPENDING INCREASED FOR ALL COMMERCIAL INSURANCE PRODUCT TYPES BETWEEN 2016 AND 2017.

Source: Payer-reported data to CHIA and other public sources.

Notes: For commercial partial-claim data, CHIA estimates spending by product type by multiplying the share of member months reported in TME data by the estimated total commercial partial-claim expenditures.

Percent changes are calculated based on non-rounded expenditure amounts. Please see [databook](#) for detailed information.

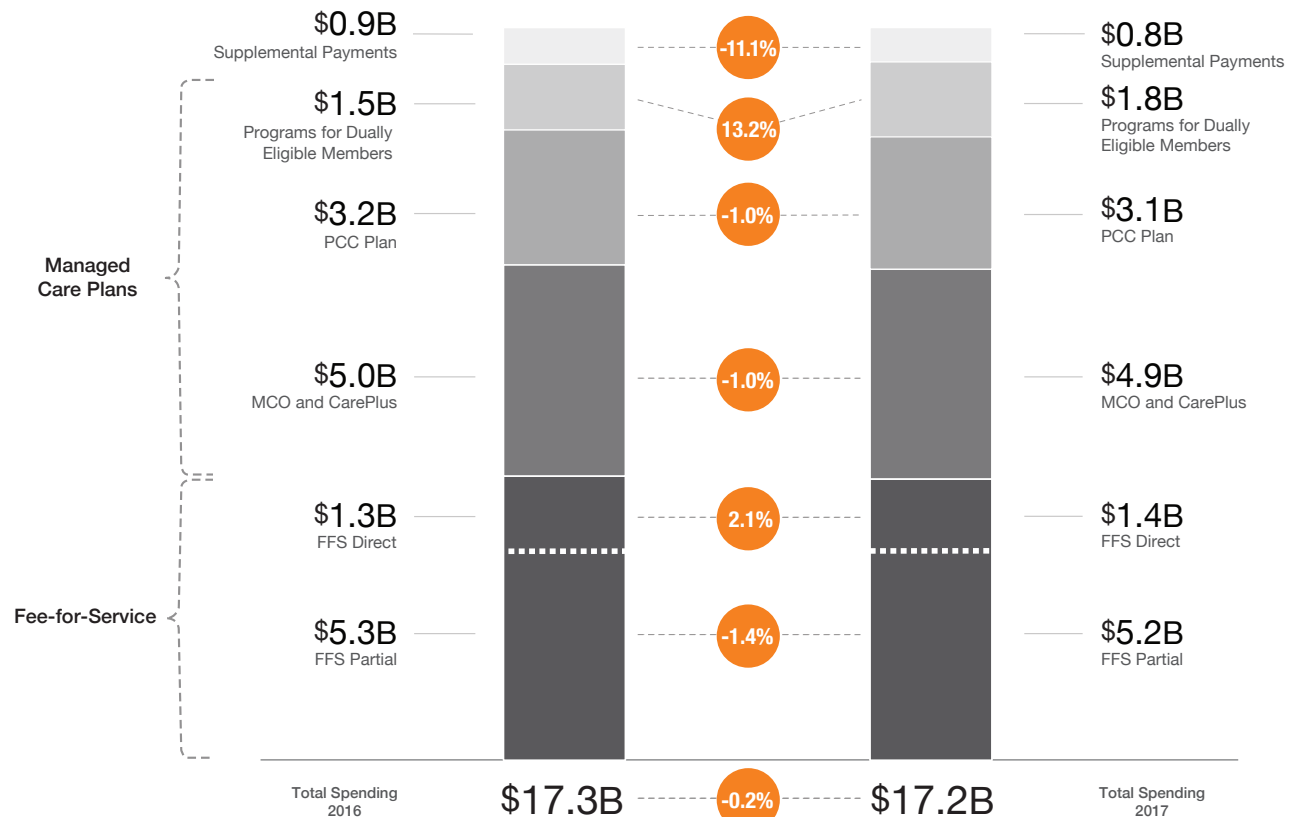
TOTAL HEALTH CARE EXPENDITURES

The majority of MassHealth members (75.0%) are enrolled in a managed care plan. MassHealth contracts with private managed care organizations (MCOs) to manage the care of MassHealth members, while MassHealth directly administers the Primary Care Clinician (PCC) plan. In 2017, MCO spending decreased by 1.0% while member months decreased by 5.8%. PCC Plan spending decreased by 1.0%, and member months declined by 1.7%.

Some MassHealth members receive services on a fee-for-service (FFS) basis. FFS Direct spending, which includes FFS members with primary medical coverage, increased 2.1%, while enrollment declined 3.8%. FFS Partial reflects spending for eligible members who receive primary coverage from other insurance. FFS Partial spending decreased 1.4%, while enrollment increased 2.7% in 2017.

Other MassHealth managed care programs are designed primarily for populations that are dually eligible for Medicare and Medicaid. Spending for these programs increased by 13.2%, while enrollment for these programs increased by 17.6% from 2016-2017.

Components of Total Health Care Expenditures: MassHealth by Program Type, 2016-2017



TOTAL MASSHEALTH SPENDING DECREASED BY 0.2% IN 2017, DRIVEN IN PART BY A 2.4% DECREASE IN ENROLLMENT.

Source: Payer-reported data to CHIA and other public sources.

Notes: MassHealth programs for dually eligible members include Senior Care Options (SCO), for members ages 65 and older; the Program of All-inclusive Care for the Elderly (PACE), for members ages 55 and older; and One Care, for members ages 21 to 64. MassHealth "Direct" includes FFS members with primary, medical coverage through MassHealth. Fee-for-Service Partial spending by MassHealth reflects spending for eligible members who receive primary coverage from other insurance (e.g., Medicare, other commercial insurance), in some cases through premium assistance.

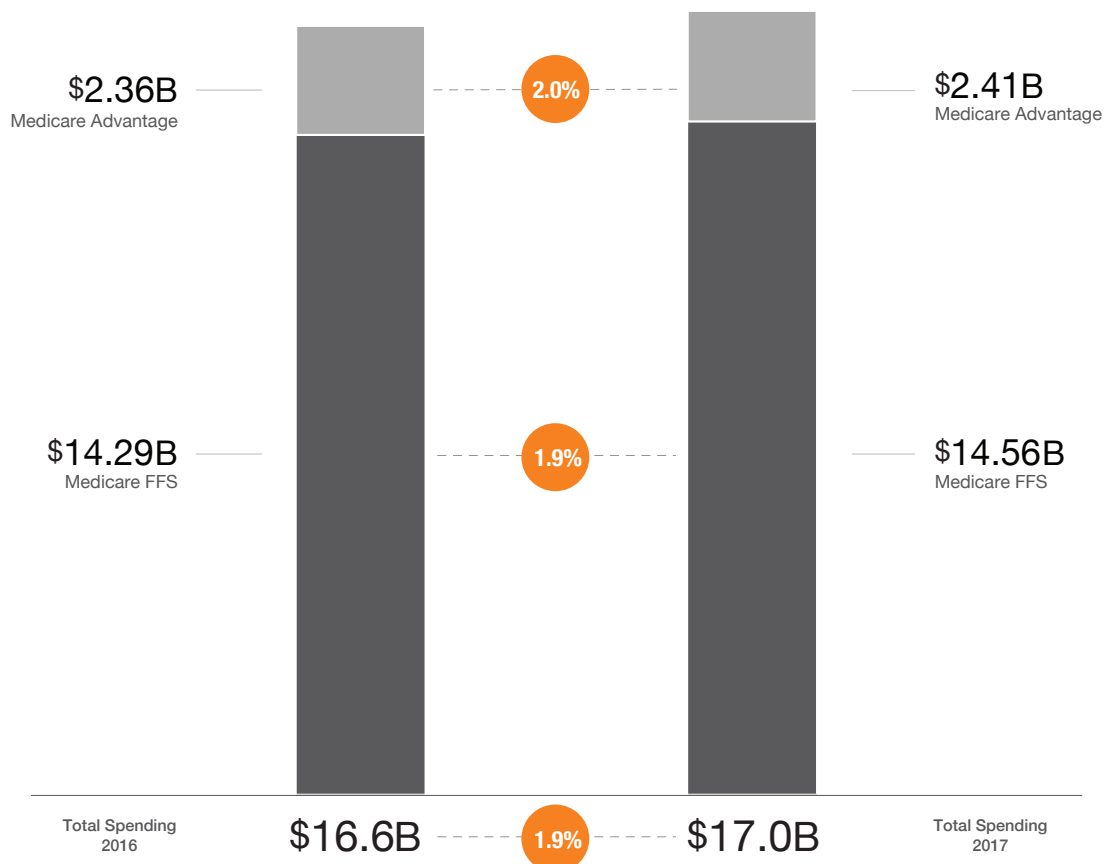
Percent changes are calculated based on non-rounded expenditure amounts. Please see [databook](#) for detailed information.

TOTAL HEALTH CARE EXPENDITURES

Within the Medicare program, eligible individuals choose between traditional Medicare FFS insurance and Medicare Advantage products which are managed by private insurers. For beneficiaries, the primary difference between the two programs is that in return for managed care and some provider network limitations, Medicare Advantage plans offer different benefit designs (e.g., reduced cost-sharing) and some coverage enhancements.

Total Medicare expenditures increased from \$16.6 billion in 2016 to \$17.0 billion in 2017. At the product level, Medicare FFS spending increased by 1.9% to \$14.56 billion and Medicare Advantage spending increased by 2.0% to \$2.41 billion in 2017.

Components of Total Health Care Expenditures: Medicare Programs, 2016-2017



MEDICARE ADVANTAGE EXPENDITURES INCREASED BY 2.0% WHILE MEDICARE FFS SPENDING INCREASED BY 1.9%.

Source: Payer-reported data to CHIA and other public sources.

Notes: In THCE, beneficiaries that are dually eligible for Medicare and Medicaid and enroll in plans specifically designed to better coordinate their care (e.g., Senior Care Options) are included in MassHealth spending. As a result, the share of spending attributable to Medicare Advantage may not be comparable to figures published by other sources.

Percent changes are calculated based on non-rounded expenditure amounts. Please see [databook](#) for detailed information.

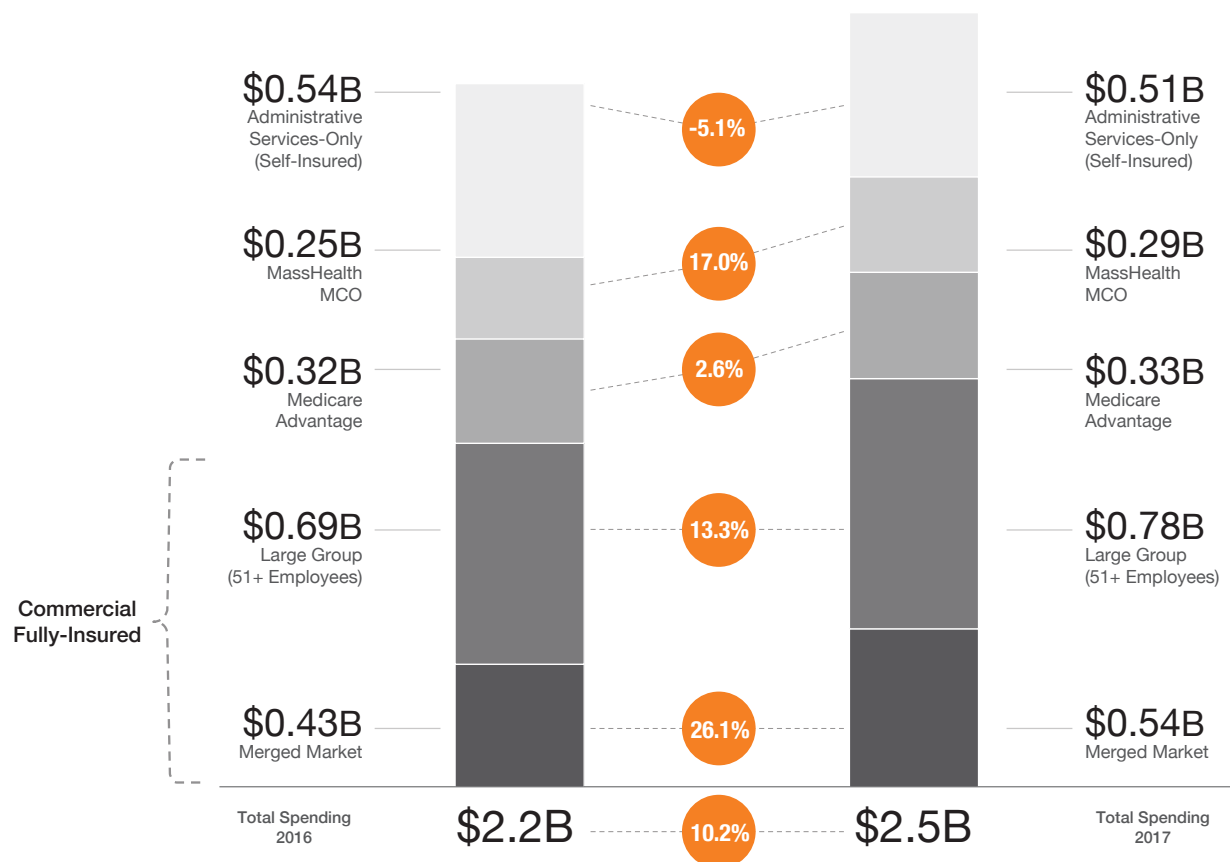
TOTAL HEALTH CARE EXPENDITURES

NCPHI captures the costs to Massachusetts residents associated with the administration of private health insurance, and is broadly defined as the difference between the premiums that health plans receive on behalf of Massachusetts residents, and the expenditures for covered benefits incurred for those same members.

In 2017, total spending for NCPHI increased by 10.2% to \$2.5 billion. Expenses increased in all market sectors except for the administrative services-only (ASO), or self-insured, market. The largest increase was in the merged market, where spending increased by more than 25% between 2016 and 2017.

Components of Total Health Care Expenditures:

Net Cost of Private Health Insurance by Market Sector, 2016-2017



NCPHI INCREASED BY 10.2% TO \$2.5 BILLION IN 2017, DRIVEN BY INCREASES IN ALL MARKET SECTORS EXCEPT SELF-INSURED.

Source: Massachusetts Medical Loss Ratio Reports from Massachusetts Division of Insurance. Federal Medical Loss Ratio Reports from Center for Consumer Information and Insurance Oversight. Annual Statutory Financial Statement and Supplemental Health Care Exhibit from National Association of Insurance Commissioners.

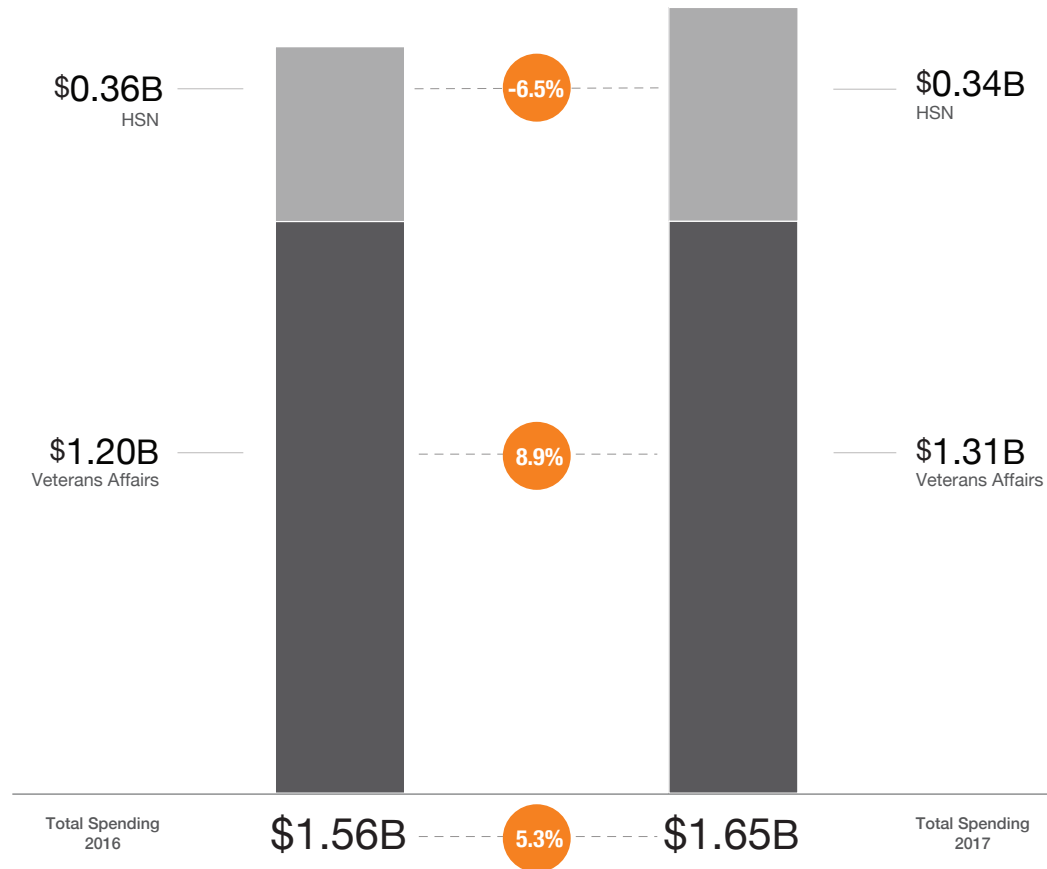
Notes: NCPHI Large Group data combines the fully-insured mid-size, large group, and jumbo groups.

TOTAL HEALTH CARE EXPENDITURES

The Department of Veterans Affairs, through its Veterans Health Administration division, provides health care for certain eligible US military veterans. Medical spending for Massachusetts veterans increased 8.9% to \$1.31 billion in 2017.

The Health Safety Net (HSN) pays acute care hospitals and community health centers for medically necessary health care services provided to eligible low-income uninsured and underinsured Massachusetts residents up to a predetermined amount of available funding. HSN provider payments decreased 6.5% to \$0.34 billion in 2017, consistent with declines in spending last year.

Components of Total Health Care Expenditures: Other Public Programs, 2016-2017



HEALTH CARE SPENDING FOR MASSACHUSETTS VETERANS GREW 8.9% IN 2017; HEALTH SAFETY NET EXPENDITURES DECLINED BY 6.5%.

Source: Payer-reported data to CHIA and other public sources.

Notes: Veterans Affairs data source updated. HSN data source updated. See [technical appendix](#) for details. Percent changes are calculated based on non-rounded expenditure amounts. Please see [databook](#) for detailed information.

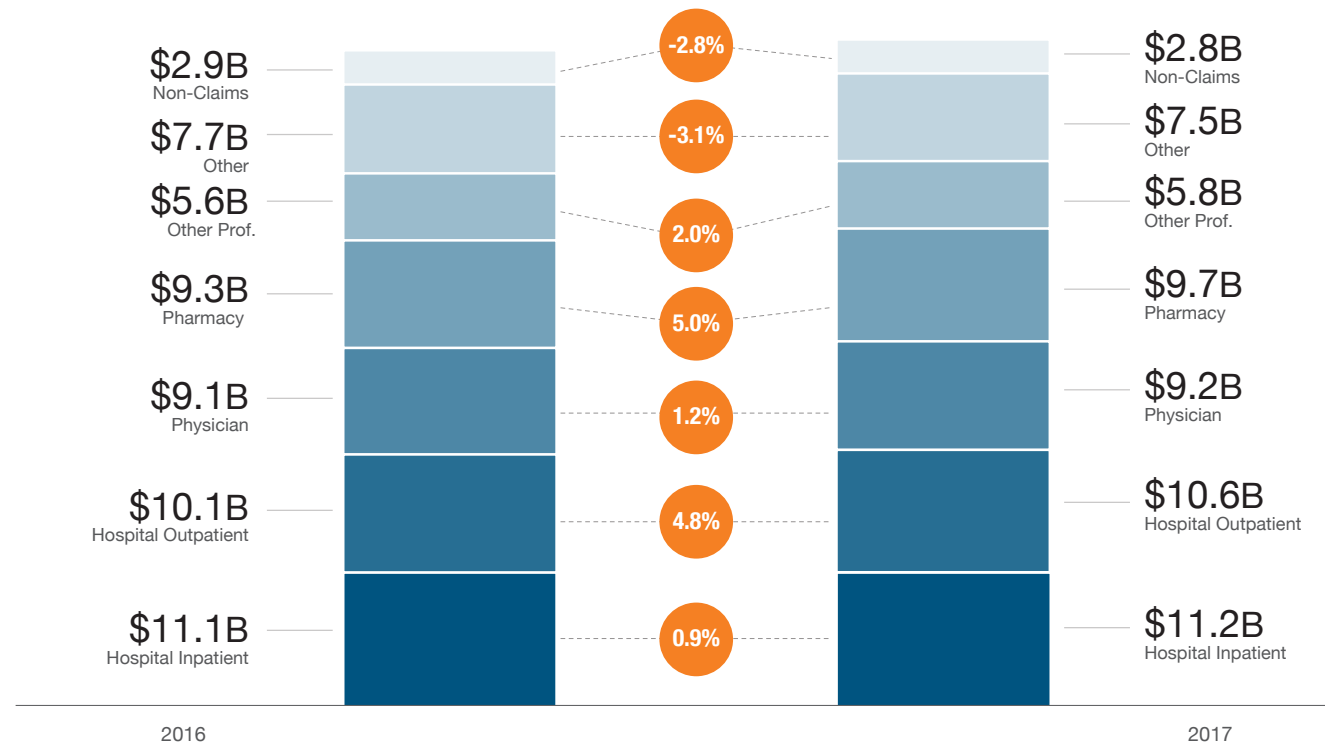
TOTAL HEALTH CARE EXPENDITURES

Hospital services accounted for the largest share of overall THCE spending in 2017, with inpatient and outpatient expenses totaling \$21.8 billion. Hospital outpatient experienced the second largest growth in spending among all service categories, increasing 4.8% between 2016 and 2017 to \$10.6 billion.

Consistent with prior years, prescription drug spending experienced the highest growth among major service categories. Pharmacy spending increased by 5.0% in 2017, a slower rate than in past years as pharmacy spending increased by 6.4% in 2016 and 12.1% in 2015.

Spending for physician services increased slightly, from \$9.1 billion in 2016 to \$9.2 billion in 2017, an increase of 1.2%. Other professional services spending increased by 2.0%, to \$5.8 billion in 2017.

Total Health Care Expenditures by Service Category, 2016-2017



HEALTH CARE SPENDING INCREASED IN ALL BUT ONE CLAIMS-BASED SERVICE CATEGORIES, WITH THE HIGHEST GROWTH IN THE PHARMACY AND HOSPITAL OUTPATIENT SPENDING CATEGORIES.

Source: Payer-reported TME data to CHIA and other public sources.

Notes: Excludes net cost of private health insurance, VA, and HSN;³ for insurance categories where THCE primarily utilizes MassHealth capitation amounts to determine total spending (i.e., SCO, One Care, and PACE), CHIA estimates expenditures by service category by multiplying MassHealth-provided expenditure amounts by the total share of spending in each service category as reported by payers in TME; public insurers do not submit data to CHIA utilizing the same service category definitions as private payers use to submit TME data. When calculating expenditures in each service category, CHIA crosswalks Medicare and MassHealth into TME service categories. For additional detail on how expenditures are crosswalked for these payers, see the [technical appendix](#).

TOTAL HEALTH CARE EXPENDITURES

From 2016 to 2017, THCE in Massachusetts increased by \$1.3 billion.

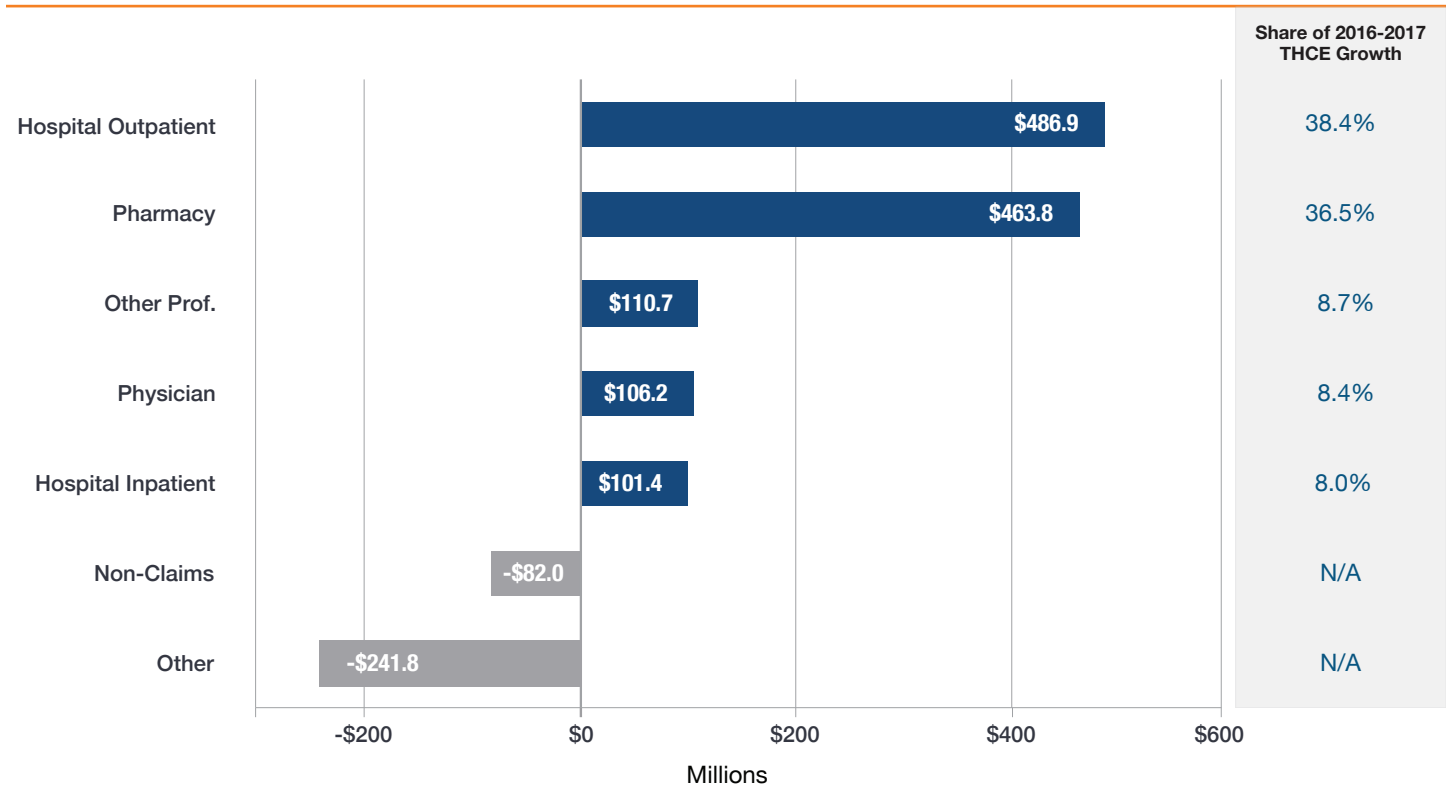
Hospital outpatient spending was the largest component of total medical expenditure growth, accounting for 38.4% of new spending.

Prescription drug spending increased by \$463.8 million between 2016 and 2017. While the rate of spending growth moderated from prior years, pharmacy spending accounted for 36.5% of THCE growth.

Spending on hospital inpatient services grew at less than 1.0% and accounted for 8.0% of the \$1.3 billion additional spending in 2017. Increases in physician and other professional spending also contributed to overall THCE growth, accounting for 8.4% and 8.7% of overall growth, respectively.

THCE growth was also impacted by spending reductions in the non-claims and other expenses categories.

Change in Total Health Care Expenditures by Service Category, 2016-2017



INCREASES IN HOSPITAL OUTPATIENT AND PHARMACY SPENDING WERE THE HIGHEST DRIVERS OF THCE GROWTH BETWEEN 2016 AND 2017.

Source: Payer-reported TME data to CHIA and other public sources.

Notes: Excludes net cost of private health insurance, VA, and HSN; for insurance categories where THCE primarily utilizes MassHealth capitation amounts to determine total spending (i.e., SCO, One Care, and PACE), CHIA estimates expenditures by service category by multiplying MassHealth-provided expenditure amounts by the total share of spending in each service category as reported by payers in TME; public insurers do not submit data to CHIA utilizing the same service category definitions as private payers use to submit TME data. When calculating expenditures in each service category, CHIA crosswalks Medicare and MassHealth into TME service categories. For additional detail on how expenditures are crosswalked for these payers, see the [technical appendix](#).

UNDERSTANDING THE DIFFERENCES: COMPARING INITIAL AND FINAL 2016 THCE

In order to meet statutory deadlines, data used to calculate initial THCE is reported to CHIA with only 60-90 days of claims run-out after the close of the calendar year. As such, the initial assessment of THCE includes payer estimates for claims that have been incurred but not reported, as well as projections of quality and financial performance settlements for providers.

Generally, differences between preliminary and final submission are attributable to variation in the degree of accuracy with which payers predict finalized member eligibility, claims payments, and performance-based settlements. These estimates are often based on historical or market trends, which may or may not accurately reflect the current Massachusetts market. Final data, which allows for a 15-month claims run-out period updates the initial estimates with the actual claims and non-claims experience for the performance period.

The final assessment of 2015-2016 THCE per capita growth was 3.0%, below the 3.6% benchmark. The initial assessment of per capita growth, reported in CHIA's *2016 Annual Report*, was 2.8%.

Payers were required to update 2016 spending with more complete claims. In addition, several payers updated data to reflect minor data adjustments, corrections, or to reflect updates in the health status adjustment tools.

For more detailed information on 2016 final data and the health status adjustment tools used in this reporting period, please see the [databook](#).

TOTAL HEALTH CARE EXPENDITURES

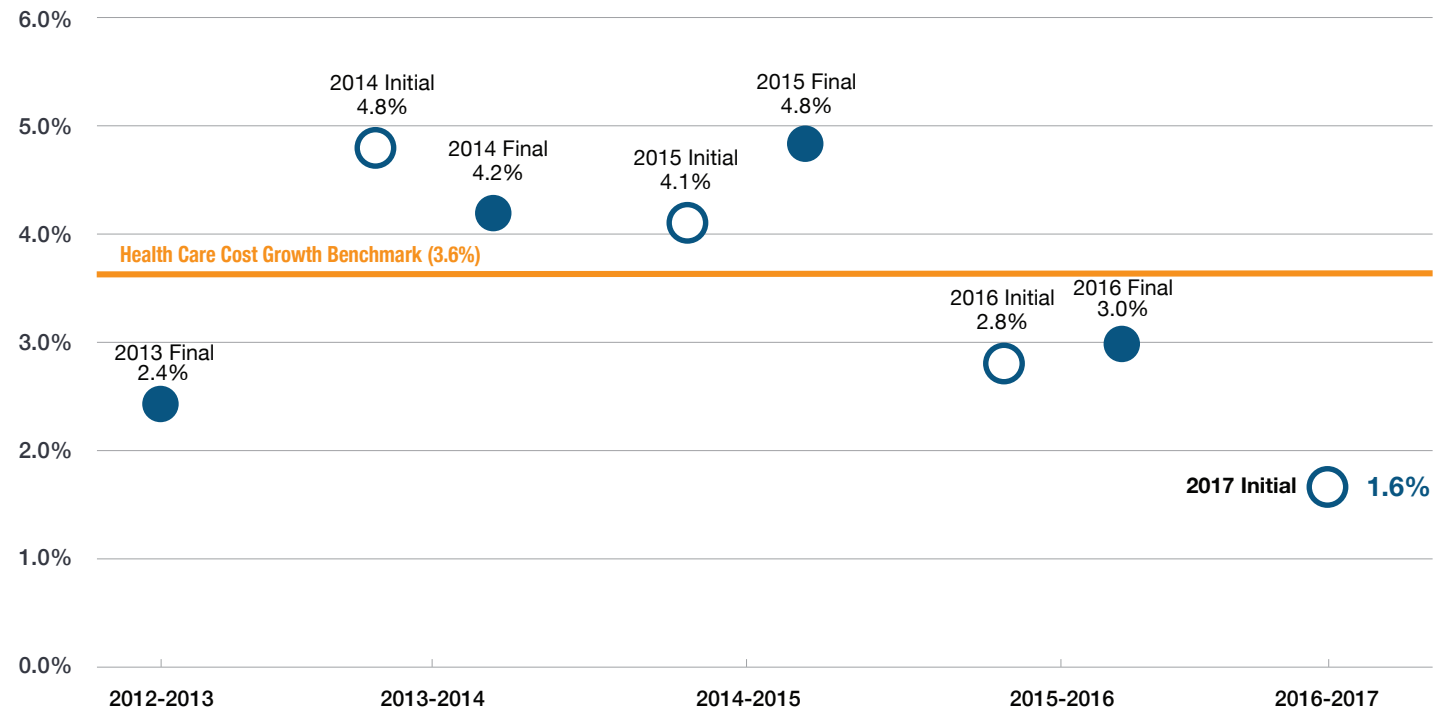
Each year CHIA calculates an initial THCE trend for the prior calendar year, which is then updated with more complete data the following year.

THCE totaled \$61.1 billion in 2017, an increase of \$1.3 billion from 2016.

THCE spending per Massachusetts resident grew 1.6% to \$8,908 per capita, below the 3.6% cost growth benchmark set by the Health Policy Commission.

The initial assessment of 2015-2016 THCE per capita growth, reported in September 2017, indicated an increase of 2.8%. Updated with final data, THCE per capita growth in 2016 was revised to 3.0% growth.

Per Capita Total Health Care Expenditures Growth, 2013-2017



FINAL THCE PER CAPITA GROWTH WAS 3.0% IN 2016, BELOW THE HEALTH CARE COST GROWTH BENCHMARK.

Source: Total Health Care Expenditures from payer-reported data to CHIA and other public sources. Inflation from the U.S. Bureau of Labor Statistics: Consumer Price Index 12-Month Percent Change. Gross State Product from U.S. Bureau of Economic Analysis: GDP by State in Current Dollars.

A CLOSER LOOK:

PRESCRIPTION DRUG SPENDING AND REBATES

In recent years, pharmacy expenditures have comprised a growing share of health care spending, both nationally and in the Commonwealth.

Unlike other payments for health care services, measuring pharmacy expenditures is complicated by prescription drug rebates, which include discounts and other price concessions, as well as refunds for a portion of the price of the drugs, which are paid by pharmaceutical manufacturers to pharmacy benefit managers (PBMs) and health plans.

These refunds are generally paid retrospectively and typically negotiated between the drug manufacturer and PBMs based on the PBM's or the PBM clients' formulary placement for the manufacturer's drug and their patients' utilization of the drug.^{4,5} Refunds can be structured in a variety of ways, and rebate amounts vary significantly by drug and payer type.

This section contains analysis of data to estimate the amount of rebates that payers received from manufacturers, and how those rebates may impact the amount that payers ultimately spend on prescription drugs. Note that THCE includes the actual amounts that payers paid to pharmacies; rebate dollars retained by payers are deducted from claims expenses in NCPHI.

Measuring the amount of prescription drug rebates is critical to understanding prescription drug cost and its impact on total health care spending in Massachusetts. In addition, developing a better understanding of commercial health plan rebates represents an opportunity to advance transparency of information that, with the exception of rebates for publicly funded insurance programs, has not been available to the public.

CHIA's measure of THCE reflects payments made to pharmacies at the point-of-sale for prescription drugs, including health plan payments and member cost-sharing, as defined in M.G.L. Chapter 12C. Many payers receive point-of-sale price reductions that reduce the payments made to pharmacies. The pharmacy spending included in THCE for these payers reflects the actual payments to pharmacies.

To estimate how pharmacy expenditure levels and trends may be impacted by rebates received by health plans, CHIA developed a new data specification and began collecting data from health plans in June 2017.⁶ The submitted data includes member months, aggregate prescription drug spending, and aggregate rebates received by the health plan from manufacturers.⁷

Payers report all rebates received from manufacturers, regardless of whether they were transferred by the PBM retrospectively or at the point-of-sale and regardless of what type of payment (e.g., refunds versus price concessions) that the rebate took when transferred.

This data enables CHIA to compute the following metrics:

Total Pharmacy Spending: The amount paid by payers to pharmacies at the point-of-sale for members' prescription drugs, as calculated in THCE pursuant to M.G.L. chapter 12C §16.

Net Pharmacy Spending: Total pharmacy expenditures as reported in THCE less additional rebates, discounts, and price concessions received retrospectively by the payer from drug manufacturers.

See [technical appendix](#) for more detailed information on the methodology used in this section. •

A CLOSER LOOK: PRESCRIPTION DRUG SPENDING AND REBATES

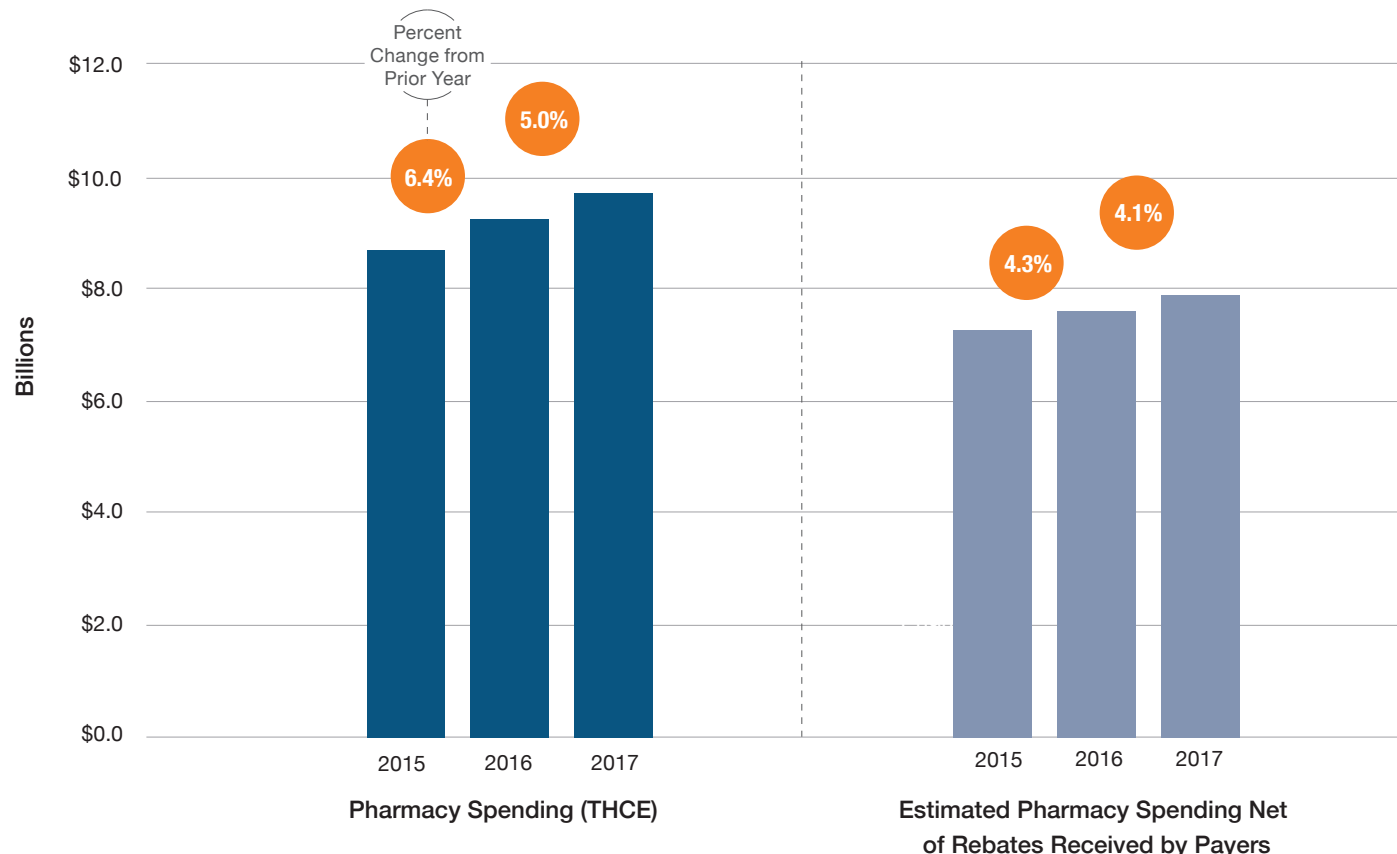
In 2017, payer payments to pharmacies for prescription drugs in THCE totaled \$9.7 billion, reflecting a 5.0% growth from \$9.3 billion in 2016. This growth trend is slower than the prior year, when spending grew by 6.4%.

Prescription drug rebates, transmitted to payers from drug manufacturers, reduce payer total expenses for prescription drugs.

Prescription drug rebates are estimated to have grown over the last three years, from \$1.7 billion in 2015 to \$2.0 billion in 2016, to \$2.2 billion in 2017.

Estimating pharmacy expenses net of rebates received by payers suggests that payers' net expenditures for prescription drugs grew 4.1% from 2016 to 2017. This is similar to growth in the prior year; estimated pharmacy expenses net of rebates received by payers grew 4.3% in 2016.

Estimated Impact of Rebates on Pharmacy Spending and Growth, 2015-2017



FROM 2016 TO 2017, PAYER PAYMENTS FOR PRESCRIPTION DRUGS GREW BY 5.0% IN THCE. ESTIMATED REBATES TO PAYERS WOULD REDUCE THIS RATE TO 4.1%.

Source: Payer-reported data to CHIA.

Notes: Total pharmacy payments reported by payers in THCE may include prescription drug price concessions or discounts transmitted at the point-of-sale, including coverage gap discounts. Pharmacy spending net of rebates estimates the impact of reducing the total pharmacy costs to payers by retrospective rebates, in addition to any price discounts included in THCE.

A CLOSER LOOK: PRESCRIPTION DRUG SPENDING AND REBATES

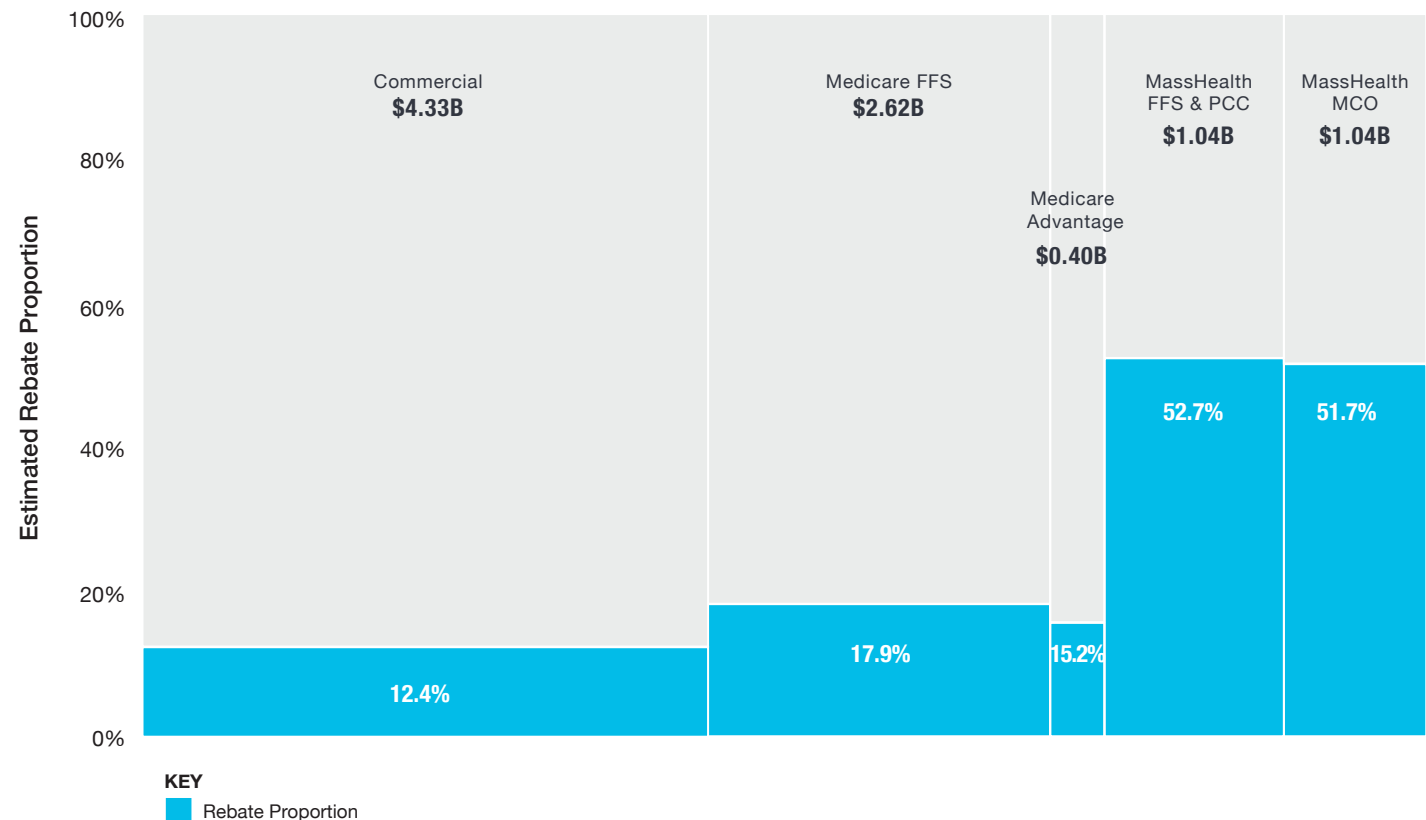
Private payers, commonly through PBMs, negotiate with drug manufacturers to receive rebates on their members' prescription drug utilization. Legal requirements, member demographics, utilization trends, and coverage decisions all may impact payers' ability to negotiate rebates.

In the commercial market—the largest market segment in terms of total pharmacy spending—payers reported that they received rebates equal to 12.4% of total pharmacy spending.

Commercial payers offering Medicare Part D plans also negotiate with manufacturers. Payers who offer standalone Prescription Drug Plans for Medicare FFS members reported rebates equal to 17.9% of total pharmacy spending in 2017, while payers who offer Medicare Advantage plans reported 15.2%.

Federal law dictates minimum requirements for rebates to state Medicaid programs, and also allows for supplemental rebates to MassHealth MCOs. As a result, MassHealth plans reported the highest rebate percentage, 52.7% of pharmacy spending for FFS and PCC plans, and 51.7% of pharmacy spending for MCO plans.

Pharmacy Spending and Estimated Drug Rebate Proportion by Insurance Category, 2017



PHARMACY REBATES VARIED FROM 12.4% TO 52.7% ACROSS INSURANCE CATEGORIES.

Source: Payer-reported data to CHIA.

Notes: Total pharmacy payments reported by payers in THCE may include prescription drug price concessions or discounts transmitted at the point-of-sale, including coverage gap discounts. Pharmacy spending net of rebates estimates the impact of reducing the total pharmacy costs to payers by retrospective rebates, in addition to any price discounts included in THCE.

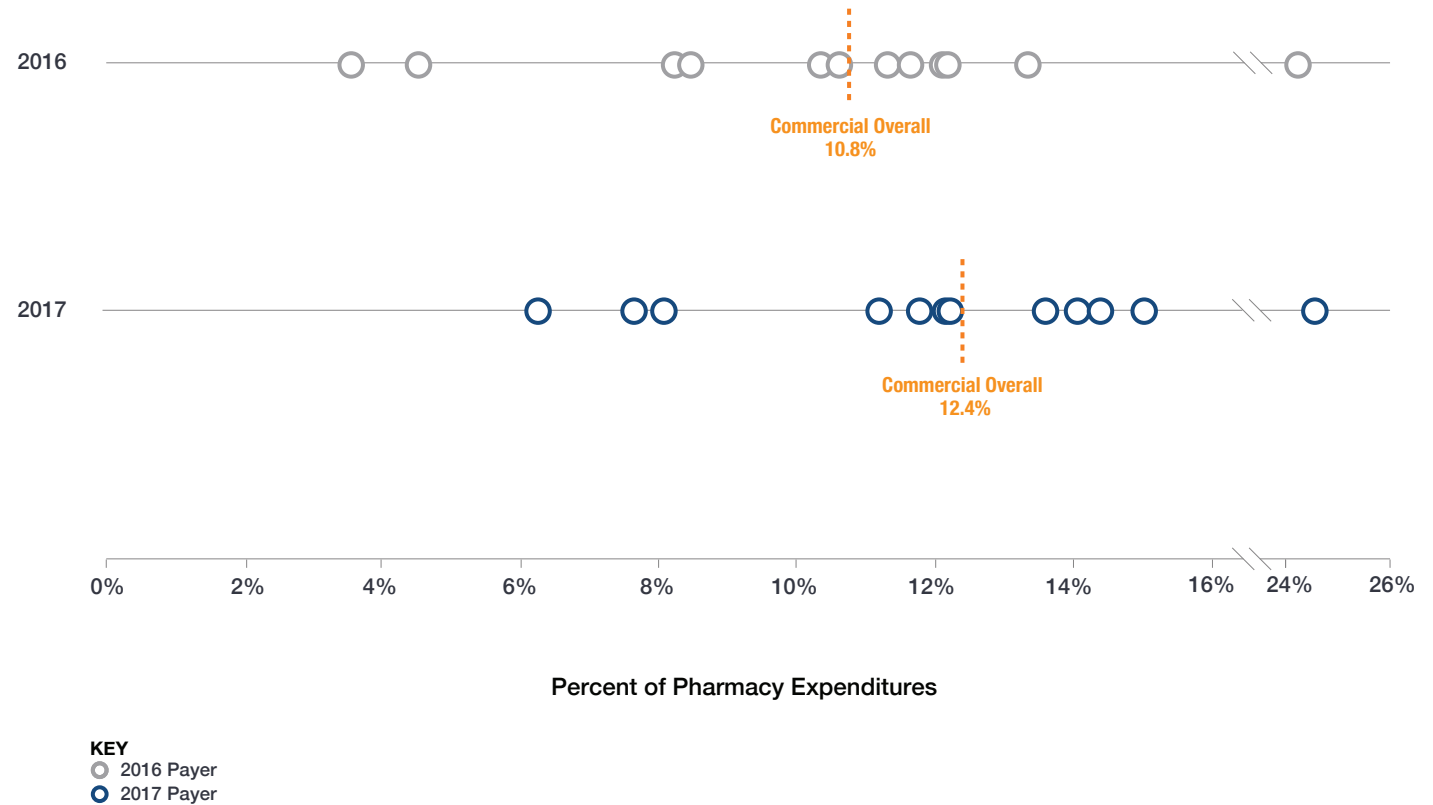
A CLOSER LOOK: PRESCRIPTION DRUG SPENDING AND REBATES

Overall, commercial payers received 12.4% of pharmacy spending back from manufacturers in the form of rebates in 2017. This is an increase of 1.6 percentage points from 2016. There was variation, however, in reported rebate shares across commercial payers.

Variation in payer-reported rebate shares may be driven by several factors, including member demographics, utilization trends, coverage decisions, and market power. In addition, variation may be driven by the complexity and variability of payer-PBM contracts.

In 2017, seven of the 12 payers' reported rebate percentages were within two percentage points of the overall market rebate percentage of 12.4%, one more than the prior year. Additionally, the range of reported rebate shares was smaller than in 2016.

Range of Payer-Reported Commercial Rebates as a Percentage of Gross Pharmacy Expenditures, 2016-2017



THE REBATE PROPORTION OF COMMERCIAL PHARMACY EXPENDITURES INCREASED IN 2017 FROM 10.8% OF OVERALL EXPENDITURES TO 12.4%.

Source: Payer-reported data to CHIA.

TOTAL HEALTH CARE EXPENDITURES NOTES

- 1 Pursuant to M.G.L. c.6D, §9, the benchmark for 2017 is tied to the annual rate of growth in potential gross state product (PGSP). The benchmark for 2018 is equal to the PGSP minus 0.5% (or 3.1%). This revised benchmark will be reflected next year. Detailed information available at <https://www.mass.gov/info-details/health-care-cost-growth-benchmark>.
- 2 NCPHI includes administrative expenses attributable to private health insurers, which may be for commercial or publicly funded plans.
- 3 Note that CHIA's methodology for calculating the share of expenditures by service category included data from the Veterans Administration and the Health Safety Net in the *2017 Annual Report*. These sources are not included in 2018 THCE calculations by service category as data was unavailable.
- 4 PBM clients include, but are not limited to, health plans, self-funded employers, and public insurance programs.
- 5 Factors that are often considered when negotiating rebates include a drug's formulary tier placement and cost-sharing level, utilization management tools like prior authorizations and step edits, and the market share captured by the drug relative to possible competitor products.
- 6 In July 2016, the Massachusetts Legislature revised M.G.L. Chapter 12C to require CHIA's analysis of cost growth 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 concession agreement."

QUALITY OF CARE

IN THE COMMONWEALTH

KEY FINDINGS

QUALITY OF CARE IN THE COMMONWEALTH

Adult patient-reported experiences were very similar in 2016 and 2017, with highest scores for Provider Communication and lowest scores for Self-Management Support.

The unplanned, all-payer readmission rate for Massachusetts acute care hospitals was 15.9% in SFY 2016—the same rate as in the previous year.

Five of 32 reporting Massachusetts acute care hospitals fully met all three Leapfrog standards for reducing unnecessary maternity care.

In 2017, more hospitals performed better than predicted on measures of C. difficile, CAUTI, and MRSA than in 2016.

QUALITY OF CARE IN THE COMMONWEALTH

Information about health care quality is central to efforts by consumers, industry decision makers, policymakers, and others working toward realizing a common goal of high-value health care. CHIA monitors and reports on health care quality using measures selected from the Commonwealth's Standard Quality Measure Set (SQMS), as well as other measures of interest to these stakeholders. While the measures in this section do not fully evaluate the quality of health care in Massachusetts, the data presented focuses on several important aspects of care.

This chapter summarizes the performance of Massachusetts acute care hospitals and primary care providers on selected metrics related to quality and safety. These measures cross

different domains of quality assessment, reporting on patient perceptions of their own care experiences, hospital readmissions, maternity-related care, medication safety, and the incidence of health care-associated infections.

CHIA calculates performance on all-payer adult acute hospital readmissions by applying a standard methodology to the Massachusetts Hospital Inpatient Discharge Database.

CHIA acquires data for the other measures included in this chapter from datasets created by other organizations that collect data directly from health care providers, including the Centers for Medicare and Medicaid Services (CMS), the Leapfrog Group, and Massachusetts Health Quality Partners. •

QUALITY OF CARE IN THE COMMONWEALTH

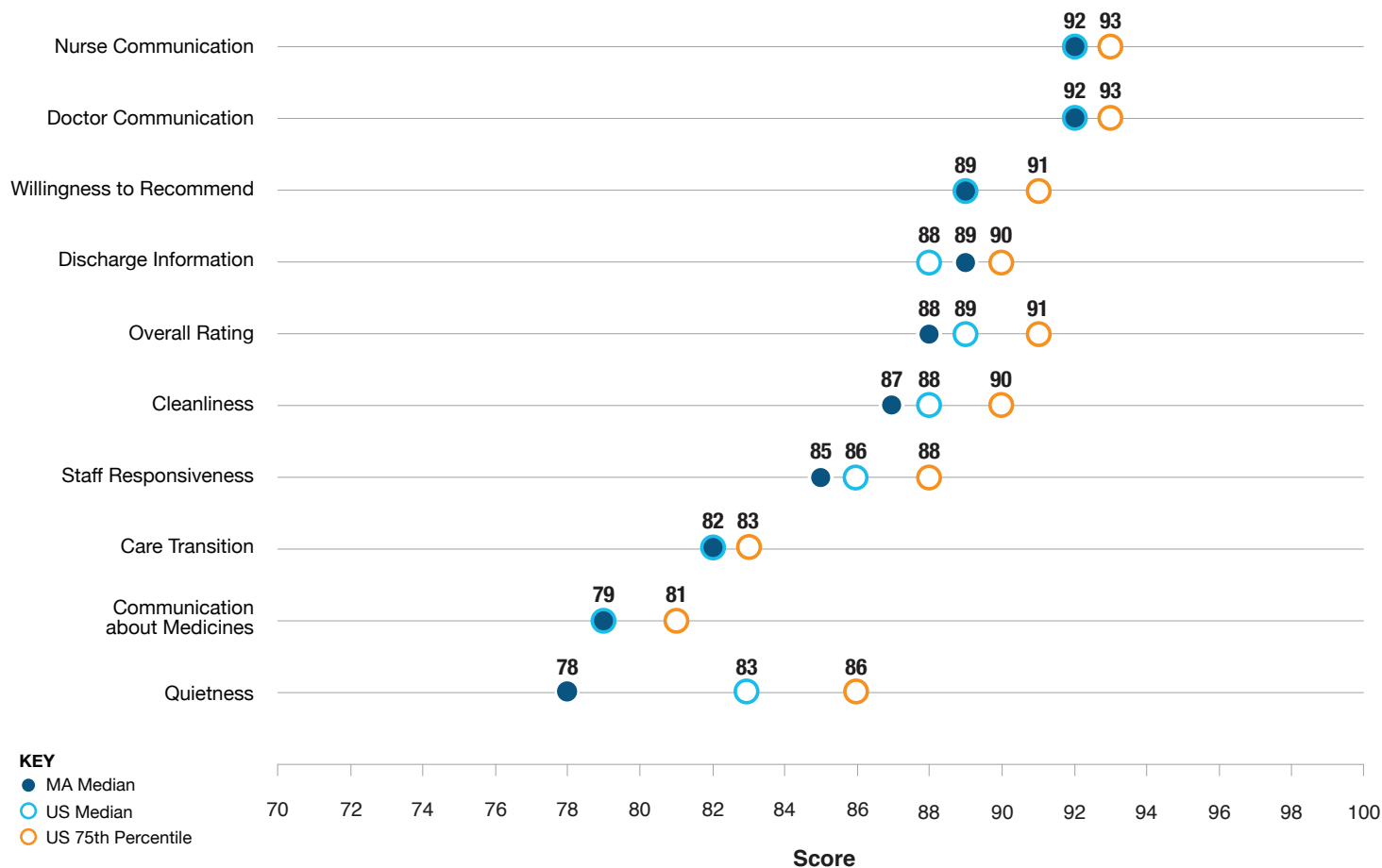
On most measures, patient-reported scores of Massachusetts hospitals were similar to the median scores of patients at hospitals nationally, with Massachusetts scores deviating no more than one point from national medians.

However, patient experience ratings of Massachusetts hospitals were consistently below the patient experience ratings of the top (quartile) performing hospitals nationally.

Patients rated Nurse and Doctor Communication more highly than other domains of care (median score of 92 out of 100), as did patients nationally. Median scores were lowest for Communication about Medicines (79 out of 100) and Quietness (78 out of 100).

In 2017, the median score in Massachusetts for Quietness was five points below the national median score (78 statewide vs. 83 nationally, out of 100).

Patient-Reported Experience During Acute Hospital Admission, July 2016-June 2017



THE REPORTED EXPERIENCE OF PATIENTS ADMITTED TO MASSACHUSETTS HOSPITALS WAS SIMILAR TO THE MEDIAN PATIENT-REPORTED EXPERIENCE NATIONALLY; ONLY QUIETNESS DEVIATED NOTABLY.

Source: CMS Hospital Compare.

Notes: Includes all payers, patients ages 18+.

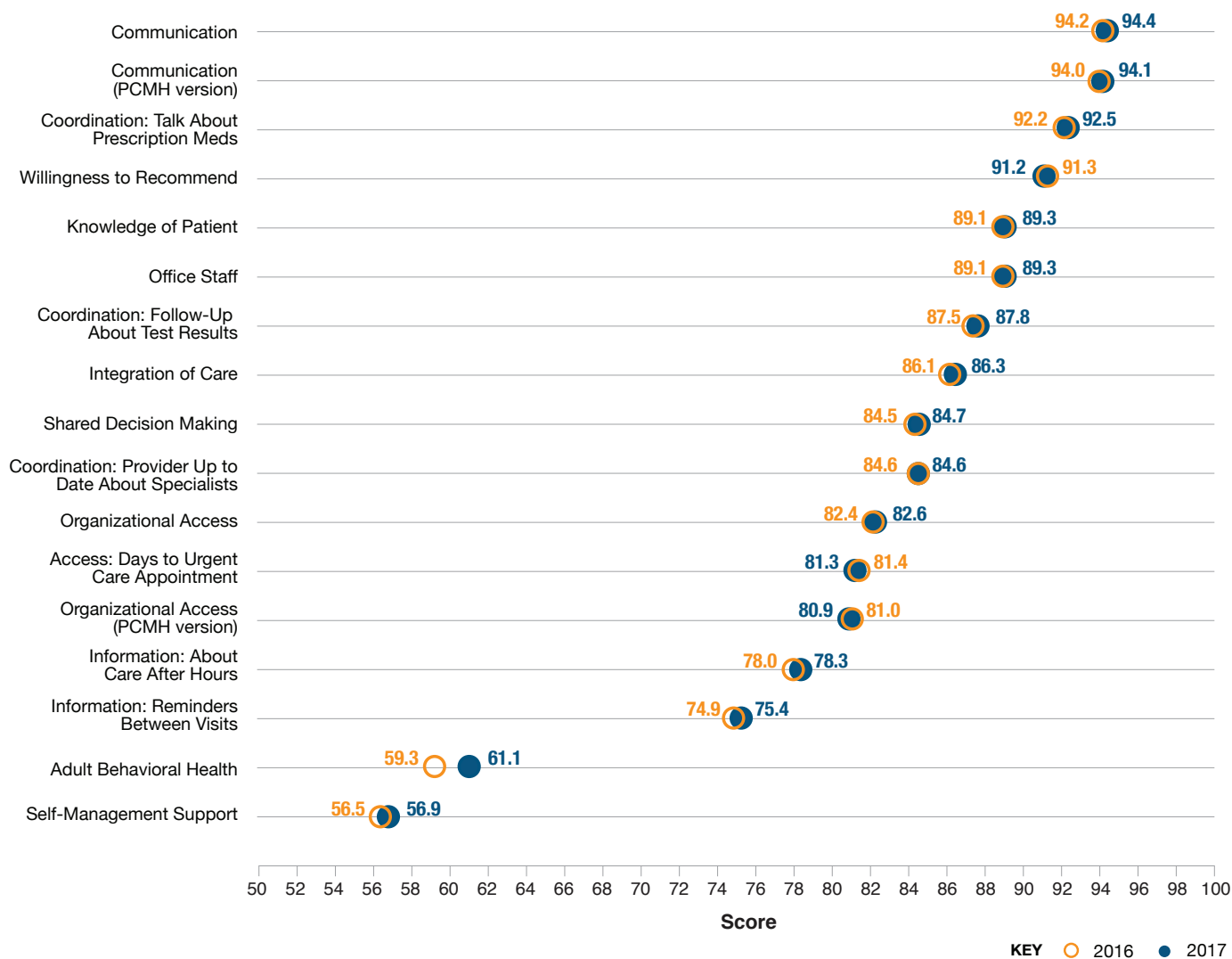
QUALITY OF CARE IN THE COMMONWEALTH

Overall, adult patients expressed positive experiences with their primary care providers in both 2016 and 2017. While improvements in individual medical group scores were minor, small improvements across many medical groups led to improvement in the statewide scores for most domains in 2017.

Adult patients rated Massachusetts primary care medical groups highest on domains of Provider Communication, Coordination: Talking with Patients about Prescription Medications, and Patient Willingness to Recommend Provider. Of the 17 measures included in the survey, Adult Behavioral Health and Self-Management Support were the lowest-scoring measures in 2017 (61.1 and 56.9, respectively, out of 100), though both improved slightly from 2016.

ADULT PATIENT-REPORTED EXPERIENCES WERE VERY SIMILAR IN 2016 AND 2017, WITH HIGHEST SCORES FOR PROVIDER COMMUNICATION AND LOWEST SCORES FOR SELF-MANAGEMENT SUPPORT.

Primary Care Patient-Reported Experiences for Adults, 2016-2017



Source: Massachusetts Health Quality Partners, Patient Experience Survey (PES).

Notes: Adult patients' ages 18+. Survey conducted on a sample of commercial health plan members.

QUALITY OF CARE IN THE COMMONWEALTH

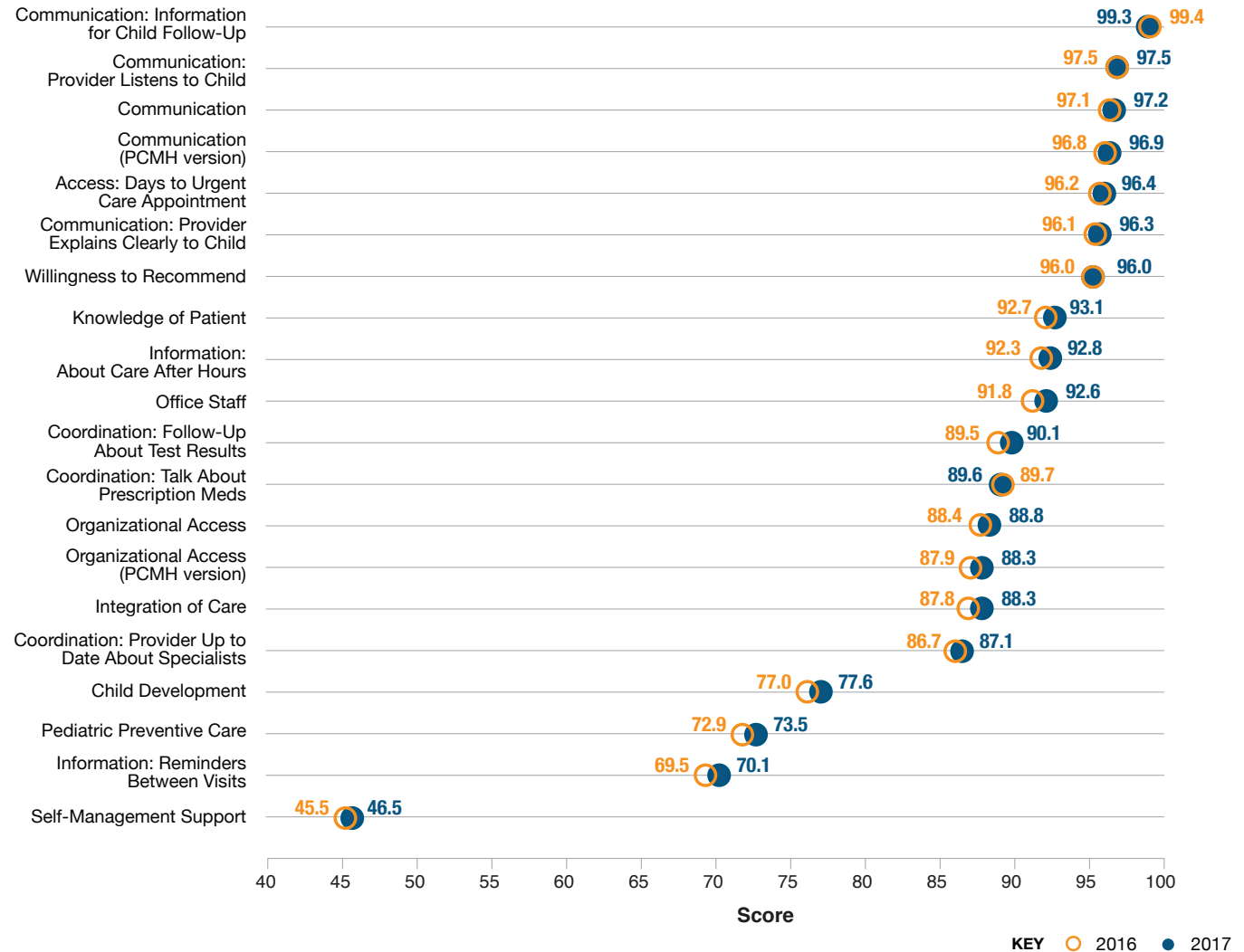
Similar to adult patient-reported experiences with primary care providers, the communication domain was the highest scoring for pediatric patients, particularly for Information for Child Follow-Up and Provider Listens to Child (99.3 and 97.5, respectively, out of 100).

Scores were lowest for measures of Pediatric Preventive Care, Information: Reminders Between Visits, and Self-Management Support for pediatric patients (73.5, 70.1, and 46.5, respectively, out of 100).

The biggest change between years was a 1.0 point increase for the Self-Management Support measure. This score remains far lower, however, than all other pediatric patient experience measures.

PRIMARY CARE PATIENT-REPORTED EXPERIENCES FOR PEDIATRIC PATIENTS WERE HIGHEST FOR DOMAINS OF PROVIDER COMMUNICATION, AND LOWEST FOR SELF-MANAGEMENT SUPPORT.

Primary Care Patient-Reported Experiences for Pediatrics, 2016-2017



Source: Massachusetts Health Quality Partners, Patient Experience Survey (PES).

Notes: Pediatric patients' ages 0-17; parent or caregiver was surveyed on patient's behalf. Survey conducted on a sample of commercial health plan members. The self-management support measure refers to how supported the caregiver feels in independently managing the pediatric patient's care.

QUALITY OF CARE IN THE COMMONWEALTH

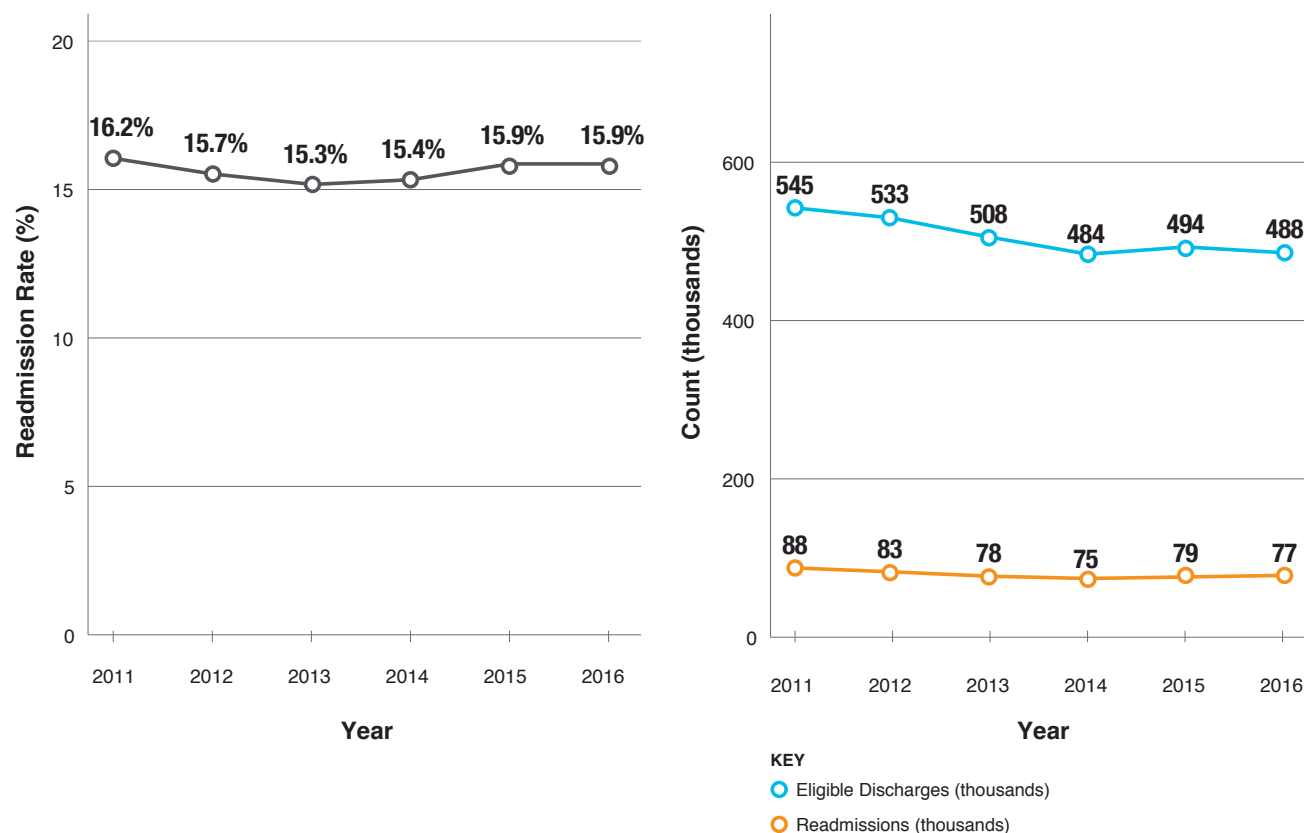
Unplanned hospital readmissions, many of which may be preventable, are costly and could adversely impact patient health and experience of care.

Any unplanned admission within 30 days of an eligible discharge is counted as a readmission.

Statewide, the observed readmission rate remained steady at 15.9% in SFY 2016. Readmission rates have been relatively stable over the six-year period with a range of 15.3% to 16.2%. However, Medicare readmission rates in Massachusetts are higher than national readmission rates.¹

The statewide number of eligible inpatient discharges decreased slightly from 493,884 in 2015 to 488,418 in 2016. The total number of statewide, all-payer readmissions also decreased slightly from 78,769 in 2015 to 77,443 in 2016.

Trends in Statewide All-Payer Adult Acute Hospital Readmission Rate, Discharges, and Readmissions, SFY 2011-2016



THE UNPLANNED, ALL-PAYER READMISSION RATE FOR MASSACHUSETTS ACUTE CARE HOSPITALS WAS 15.9% IN SFY 2016—THE SAME RATE AS IN THE PREVIOUS YEAR.

Source: Massachusetts Hospital Inpatient Discharge Database, July 2010 to June 2016.

Notes: Analyses include eligible discharges for adults with any payer, excluding discharges for obstetric or primary psychiatric care. The observed readmission rates depicted here were calculated as the number of readmissions that occurred in a year as a proportion of all discharges eligible for inclusion in the measure during that year.

QUALITY OF CARE IN THE COMMONWEALTH

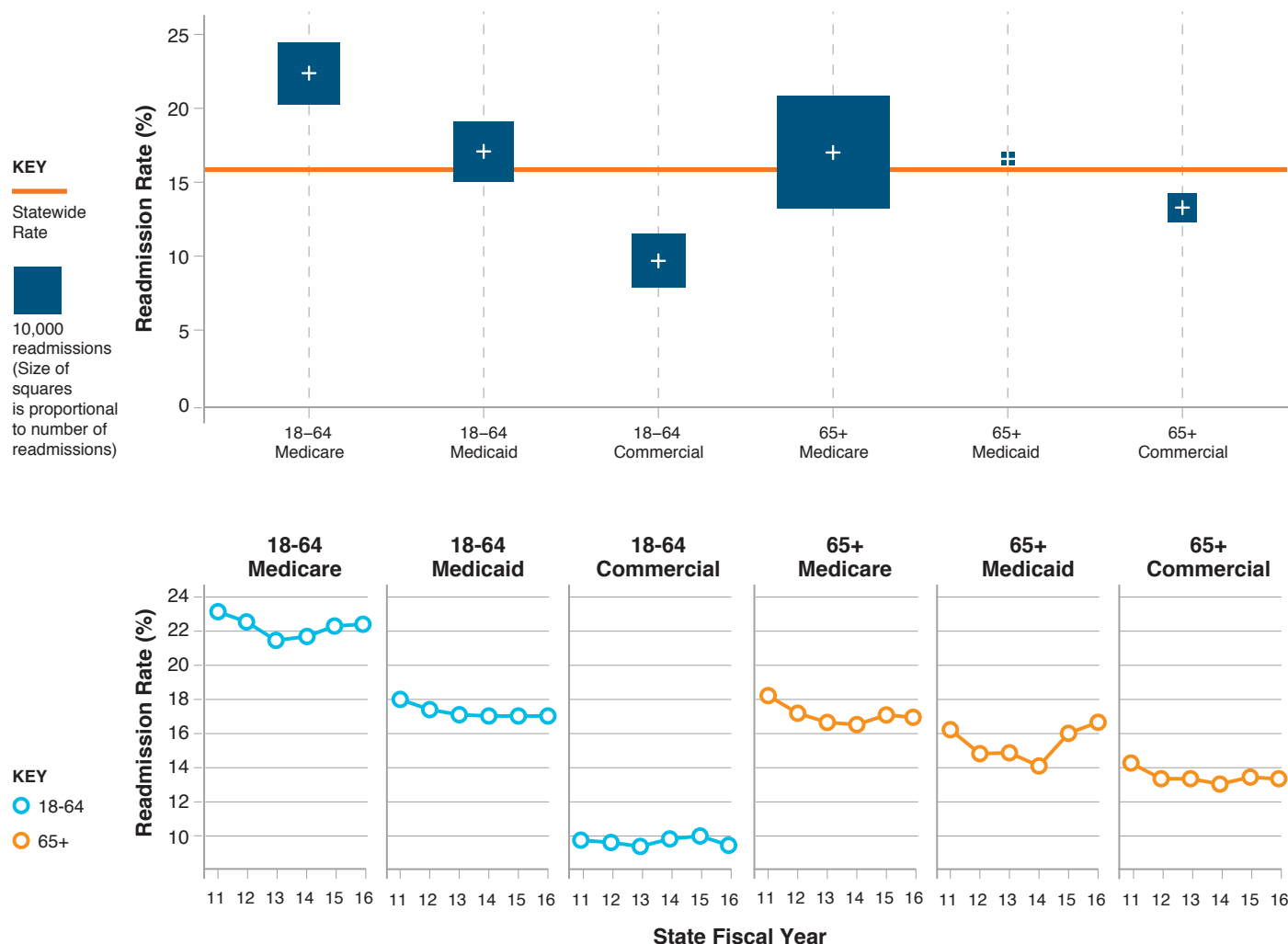
Across all age groups, readmission rates for Medicare and Medicaid patients were higher than the rates for commercial patients.

Medicare beneficiaries, ages 18 to 64, had the highest rate of 30-day readmissions (22.4%). Medicaid members in this age group had a readmissions rate of 17.1%, while commercial members had a rate of 9.7%.

Though there were substantial differences in readmission rates for adults ages 18-64, differences in readmission rates were more narrow for adults over age 65 (13.3%-17.0%), regardless of payer type.

**MEDICARE BENEFICIARIES,
AGES 18-64, HAD THE
HIGHEST RATE OF 30-DAY
READMISSIONS (22.4%).**

All-Payer Adult Acute Hospital Readmissions by Patient Age and Payer Type, SFY 2016



Source: Massachusetts Hospital Inpatient Discharge Database, July 2015 to June 2016.

Notes: The size of the squares in the top figure is proportional to the number of readmissions. Analyses include eligible discharges for adults with any payer, excluding discharges for obstetric or primary psychiatric care. These observed readmission rates are not adjusted for differences in patient severity or service mix across payer types.

QUALITY OF CARE IN THE COMMONWEALTH

Childbirth is the most common reason for a hospital admission in Massachusetts.

To reduce potentially harmful and unnecessary maternity procedures, the Leapfrog Group (Leapfrog) sets standards and collects voluntary data from hospitals to measure performance.

To fully meet the Leapfrog standard for early elective deliveries, no more than 5% of deliveries may be performed early (between 37 and 39 weeks) without a medical reason. The Leapfrog standard recommends that no more than 23.9% of women with low risk pregnancies deliver via cesarean section. Finally, Leapfrog identifies 5% or below as the target for the share of childbirths in which episiotomies are performed.

In 2017, five reporting hospitals fully met all standards, and all reporting hospitals met at least one.²

Rates of Maternity-Related Procedures Relative to Performance Targets, by Hospital, 2017

	Early Elective Deliveries	C Section	Episiotomy
Leapfrog Standard	≤ 5.0%	≤ 23.9%	≤ 5.0%
Fully Met Three Standards			
Berkshire Medical Center	0.0%	16.2%	1.3%
Beth Israel Deaconess Medical Center	0.0%	23.5%	3.1%
Cooley Dickinson Hospital	0.0%	15.6%	3.0%
Mount Auburn Hospital	0.0%	19.3%	4.0%
Signature Healthcare Brockton Hospital	0.0%	15.6%	3.4%
Fully Met Two Standards			
Anna Jaques Hospital	3.8%	28.4%	3.4%
Baystate Franklin Medical Center	0.0%	27.5%	1.3%
Baystate Medical Center	3.3%	33.6%	3.6%
Beth Israel Deaconess Hospital-Plymouth	0.0%	27.0%	2.1%
Beverly Hospital	0.0%	26.0%	2.0%
Boston Medical Center	1.7%	25.1%	2.2%
Brigham and Women's Hospital	4.8%	27.2%	4.6%
Cape Cod Hospital	4.2%	25.0%	2.6%
Emerson Hospital	1.9%	33.1%	3.0%
Fairview Hospital	0.0%	27.1%	2.3%
Heywood Hospital	1.3%	2.5%	7.8%
Holyoke Medical Center	0.0%	24.4%	2.4%
Lowell General Hospital-Main Campus	0.2%	28.7%	3.4%
Morton Hospital	0.0%	30.4%	4.3%
St. Vincent Hospital	1.2%	33.5%	4.9%
Sturdy Memorial Hospital	0.0%	22.8%	8.5%
Winchester Hospital	0.0%	29.4%	3.1%

	Early Elective Deliveries	C Section	Episiotomy
Leapfrog Standard	≤ 5.0%	≤ 23.9%	≤ 5.0%
Fully Met One Standard			
Falmouth Hospital	0.0%	37.5%	7.7%
Hallmark Health System Melrose-Wakefield Hospital	0.0%	27.0%	8.2%
Holy Family Hospital	2.2%	35.9%	6.3%
Milford Regional Medical Center	0.0%	29.4%	14.2%
Newton-Wellesley Hospital	1.6%	27.8%	9.0%
Norwood Hospital	0.0%	28.5%	9.7%
South Shore Hospital	1.0%	28.8%	6.2%
St. Elizabeth's Medical Center	3.2%	26.2%	9.4%
Steward Good Samaritan Medical Center, Inc.	0.0%	28.0%	7.2%
Tufts Medical Center	8.3%	26.3%	4.8%

KEY

Fully meets standard	Some progress
Substantial progress	Willing to report

FIVE OF 32 REPORTING MASSACHUSETTS ACUTE CARE HOSPITALS FULLY MET ALL THREE LEAPFROG STANDARDS FOR REDUCING UNNECESSARY MATERNITY CARE.

Source: The Leapfrog Group Hospital Survey. The Leapfrog Hospital Survey is based on voluntary hospital reporting and does not include data for all Massachusetts hospitals.

Notes: All payers, all ages. See [technical appendix](#) for information on Leapfrog's standards and scoring methodologies. A hospital is "Willing to Report" if it provided data for a measure to Leapfrog but has not demonstrated progress according to Leapfrog's scoring methodology.

QUALITY OF CARE IN THE COMMONWEALTH

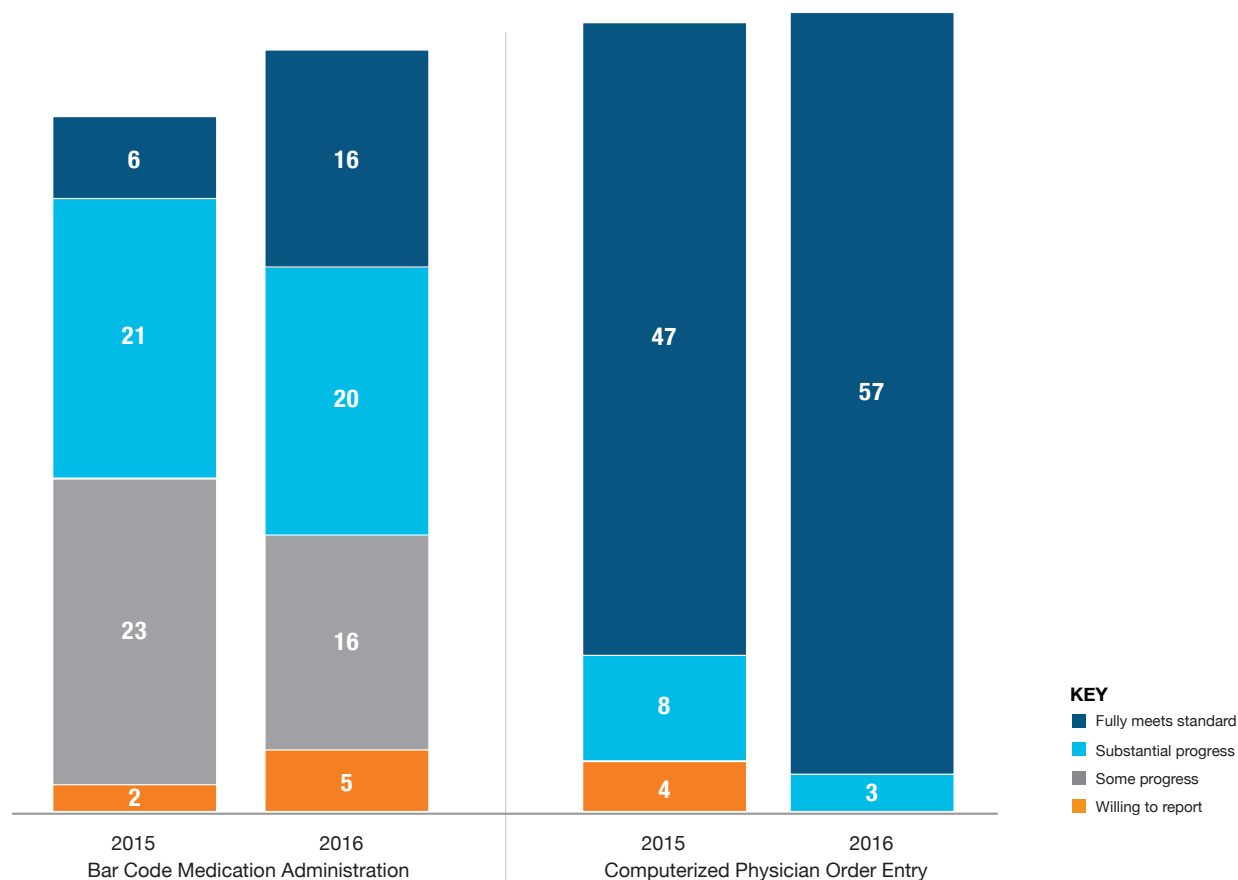
Medication errors are a common source of harm for patients in hospitals. Leapfrog standards to mitigate these problems include the more consistent use of both bar code medication administration (BCMA) and computerized physician order entry (CPOE) systems.

BCMA involves matching a patient-specific barcode and the medication's barcode prior to administering a drug. Leapfrog's standard calls for BCMA systems in 100% of medical, surgical, and intensive care units.

To fully meet the Leapfrog standard for CPOE, at least 75% of medication orders must be entered electronically into a system that identifies at least 50% of common prescribing errors such as drug interactions, allergies, and incorrect dosage prescriptions.³

Across both measures from 2015 to 2016, an increasing share of reporting hospitals fully met Leapfrog's standards.

Number of Hospitals Meeting Leapfrog Standards for Implementing Interventions to Improve Medication Safety, 2015-2016



IN 2016, 16 OUT OF 57 REPORTING HOSPITALS FULLY MET THE BCMA STANDARD, AND 57 OUT OF 60 REPORTING HOSPITALS FULLY MET THE STANDARD FOR CPOE, BOTH IMPROVEMENTS FROM 2015.

Source: The Leapfrog Group Hospital Survey. The Leapfrog Hospital Survey is based on voluntary hospital reporting and does not include data for all Massachusetts hospitals.
Notes: All payers, all ages.

QUALITY OF CARE IN THE COMMONWEALTH

Health care-associated infections are reported as a Standard Infection Ratio (SIR), which compares the number of actual infections in a hospital to the number of predicted infections.

On measures of *Clostridium difficile* (C. difficile), catheter-associated urinary tract infections (CAUTI), and methicillin-resistant *Staphylococcus aureus* (MRSA), more hospitals performed better than predicted in 2017 than in 2016. Furthermore, on measures of C. difficile and CAUTI, fewer performed worse than predicted in 2017.

Four out of 56 reporting hospitals had worse-than-predicted rates of C. difficile, and four out of 48 reporting hospitals had worse-than-predicted rates of CAUTI in 2017, whereas none of the 41 reporting hospitals were rated worse-than-predicted for central line-associated blood stream infections (CLABSI).

Hospitals performed similarly in 2017 on Surgical Site Infection (SSI) measures, relative to 2016.

Incidence of Health Care-Associated Infections, Relative to Hospital-Specific Predictions, 2016-2017

		BETTER	NO DIFFERENT	WORSE	Total Number of Reporting Hospitals
C. difficile	2016	9	41	7	57
	2017	14	38	4	56
CAUTI	2016	4	37	7	48
	2017	8	36	4	48
CLABSI	2017	7	34		41
MRSA	2016	3	36		39
	2017	8	28	1	37
SSI: Colon Surgery	2016	3	39	2	44
	2017	3	35	3	41
SSI: Hysterectomy	2016		10		10
	2017		7	1	8

IN 2017, MORE HOSPITALS PERFORMED BETTER THAN PREDICTED ON MEASURES OF C. DIFFICILE, CAUTI, AND MRSA THAN IN 2016.

Source: CMS Hospital Compare.

Notes: SIR predictions are based on historical data and adjusted based on factors known to impact infection rates, such as patient characteristics, facility size, and facility type. CMS refers to a SIR of 1.0 as the national benchmark. "Better," "No Different," and "Worse" represent how hospitals performed relative to their predicted infection value. CMS suppressed 2016 CLABSI data due to data quality concerns.

QUALITY OF CARE IN THE COMMONWEALTH NOTES

- 1** Massachusetts Health Policy Commission, *2017 Annual Health Care Cost Trends Report Chartpack* (Boston, March 2018), <https://www.mass.gov/files/documents/2018/03/28/2017%20CTR%20Chartpack.pdf>.
- 2** This publication is based on 2018 survey results containing hospitals who submitted their data to Leapfrog by the first submission deadline of June 30, 2018. Hospitals can submit results until December 31, 2018. These data will be updated quarterly on CHIA's interactive quality report; please consult that report for the most current survey results. Available at: <http://www.chiamass.gov/quality-of-care-in-the-commonwealth/>.
- 3** For the 2018 survey, the Leapfrog group updated the CPOE Scoring Algorithm with increased targets and a new method for combining the two elements of the measure for an overall CPOE Score. At the time of publication of this report, not all hospitals who submit data to Leapfrog had fully reported both elements. Hospitals are able to submit this data until December 31, 2018. In light of these considerations, this report includes data from the 2017 Leapfrog survey. Results from the 2018 survey will be included in a future CHIA publication. For a description of the updates to the CPOE Scoring Algorithm, please see the Summary of Changes to the Leapfrog Hospital Survey & Responses to Public Comments document available at: http://www.leapfroggroup.org/sites/default/files/Files/Summary_of_Changes_2018.pdf.

TOTAL MEDICAL EXPENSES

& ALTERNATIVE PAYMENT METHODS

KEY FINDINGS

TOTAL MEDICAL EXPENSES & ALTERNATIVE PAYMENT METHODS

TME increased in 2017 for commercial and MassHealth MCO members, and decreased for Medicare Advantage members.

Per member per month spending for commercial full-claim members slowed across all major service categories.

Adoption of APMs increased significantly in the MassHealth PCC plan, and remained nearly level in the commercial and MassHealth MCO markets.

Commercial APM adoption continued to increase in the PPO product type, increasing four percentage points between 2016 and 2017.

TOTAL MEDICAL EXPENSES AND ALTERNATIVE PAYMENT METHODS

CHIA monitors health care spending for Massachusetts residents by public and private payers using a metric called Total Medical Expenses (TME). TME represents the full amount paid to providers for health care services delivered to a payer's member population, expressed on a per member per month (PMPM) basis. TME includes the amounts paid by the payer and patient cost-sharing, and covers all categories of medical expenses and all non-claims-related payments to providers, including provider performance payments.

In addition to spending levels and trends, CHIA collects information on how payments to providers are made. Historically, the majority of health care services have been paid using a FFS method. As payers increasingly look to promote coordinated, higher value care, they are shifting toward alternative payment methods (APMs), using non-FFS methods of payment in which some of the financial risk associated with the occurrence of medical conditions as well as the management of those conditions is shifted from payers to providers.

Generally, APMs are intended to give providers new incentives

to control overall costs (e.g., reduce unnecessary care and provide care in the most appropriate setting) while maintaining or improving quality.

This chapter focuses on 2016 final and 2017 preliminary TME and APMs¹ using the following metrics:

TME: Total expenditures for health care services in a given year, divided by the number of member months in the payer's population.

Health-Status Adjusted (HSA) TME: TME adjusted to reflect differences in the health status of member populations.

Managing physician group TME: Total medical spending for members required by their insurance plan to select a primary care provider, or are attributed to a primary care provider pursuant to a contract between a payer and provider.

APM adoption: The share of member months associated with a primary care provider engaged in an alternative payment contract with the reporting payer. •

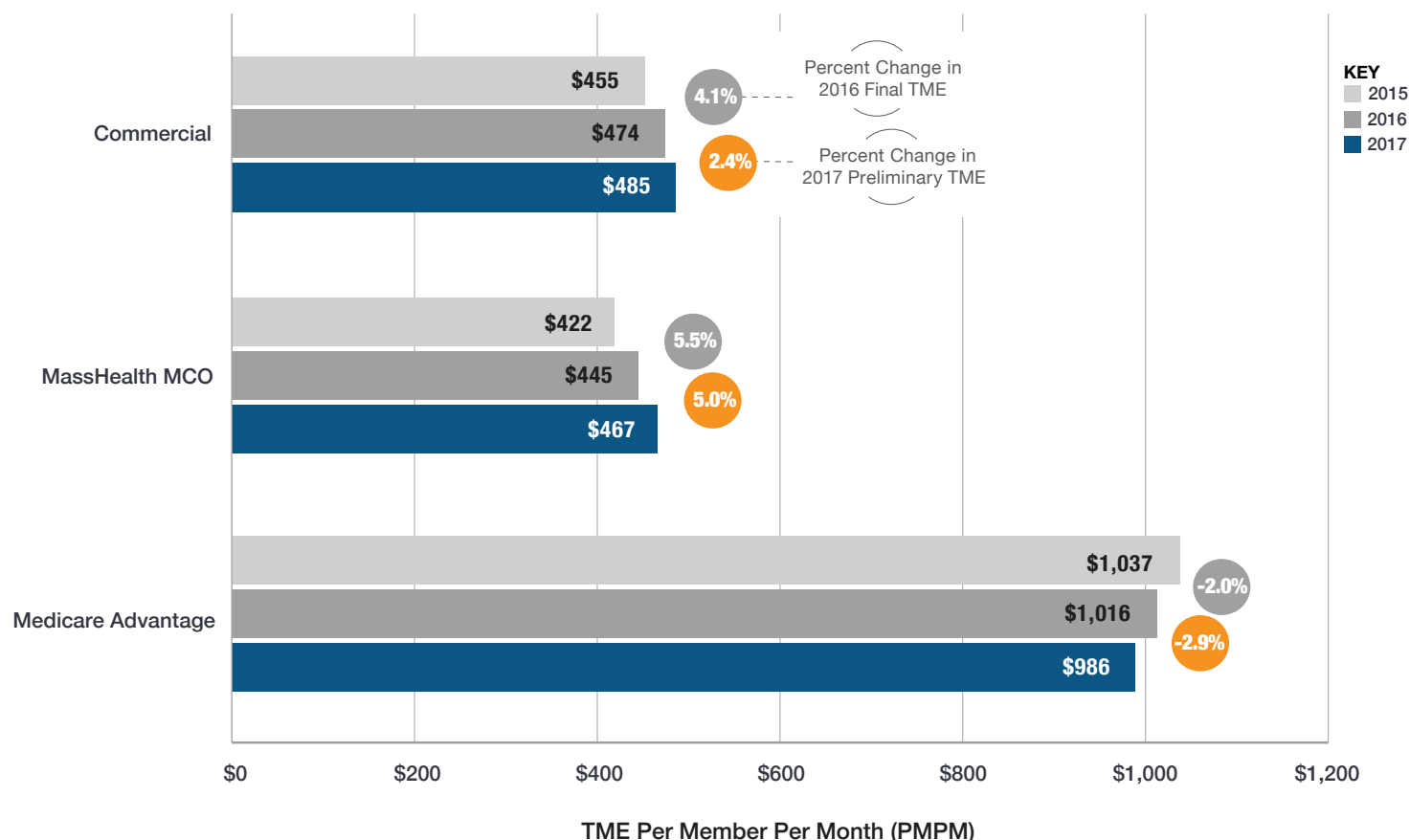
TOTAL MEDICAL EXPENSES & ALTERNATIVE PAYMENT METHODS

In 2017, TME was \$485 PMPM for commercial members for whom the payer had full-claims data,² an increase of 2.4% from 2016. For 12 of the 13 commercial payers, TME increased on a PMPM basis from 2016 to 2017.³ While seven of 13 commercial payers reported increases in member months, overall there was a 0.5% decrease in full-claim member months between 2016 and 2017.

MassHealth MCOs reported TME of \$467 PMPM in 2017, an increase of 5.0%, which is similar to the increase in 2016 (5.5%). Total expenses declined in the MassHealth MCO category by 1.1% from 2016 to 2017; however, member months decreased by 5.8%. Three of the six MCO payers reported decreases in both expenses and member months, while the other three reported increases.

TME for Medicare Advantage members was \$986 PMPM in 2017, a decrease of 2.9% from the prior reporting year. Medicare Advantage enrollment continued to grow in 2017, increasing by 5.0% from 2016.

Total Medical Expenses Per Member Per Month by Insurance Category, 2015-2017



TME INCREASED IN 2017 FOR COMMERCIAL AND MASSHEALTH MCO MEMBERS, WHILE DECREASING FOR MEDICARE ADVANTAGE MEMBERS.

Source: Payer-reported TME data to CHIA.

Notes: For detailed Medicare Advantage data, please see the [databook](#). 2016 data displayed above reflects final TME. Percent changes are calculated based on non-rounded expenditure amounts.

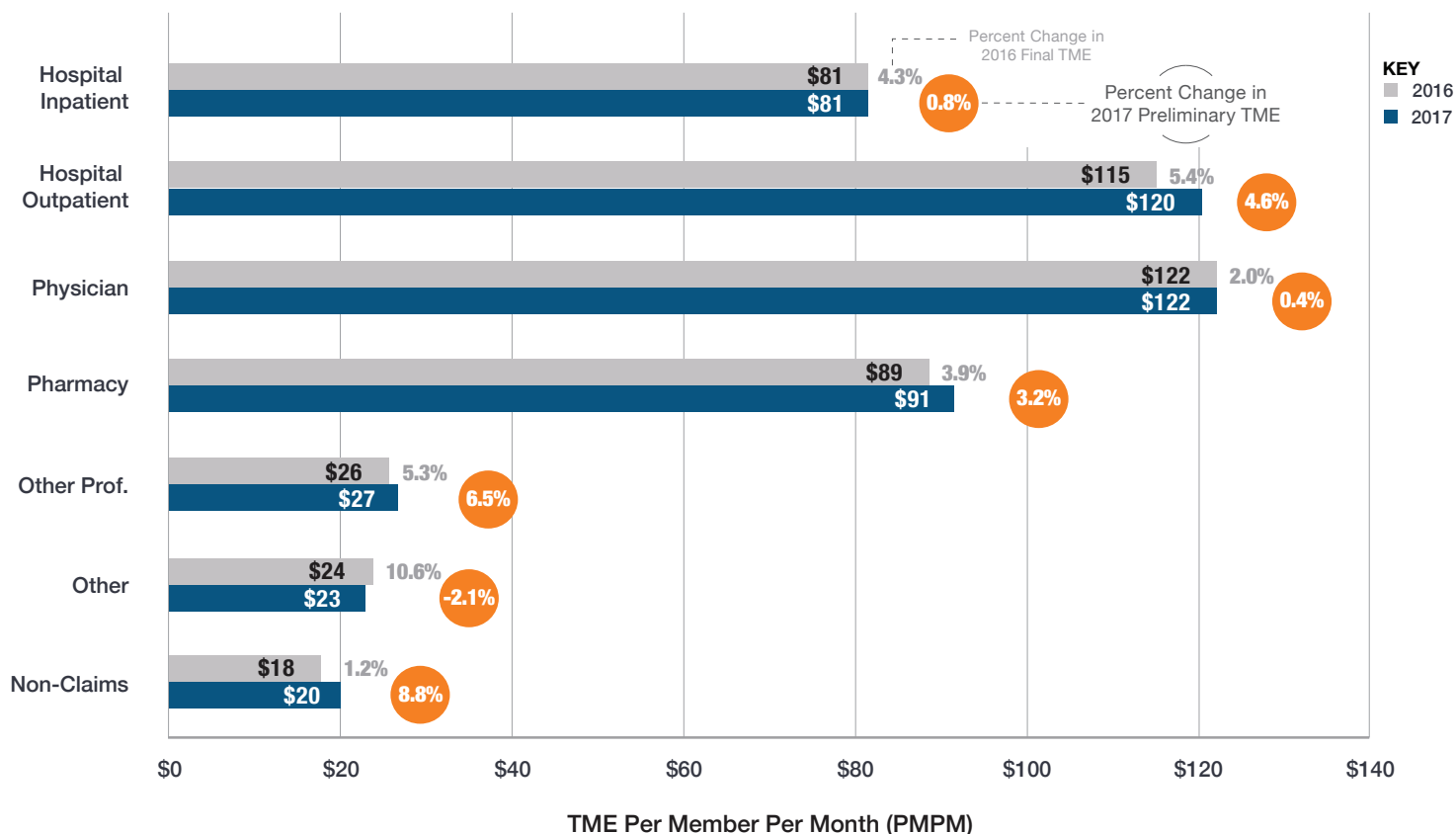
TOTAL MEDICAL EXPENSES & ALTERNATIVE PAYMENT METHODS

Hospital inpatient and outpatient services, physician services, and prescription drugs comprised 85.6% of TME spending for the commercial full-claim population in 2017. While spending in these service categories continued to grow from 2016 to 2017, the rates of growth slowed from prior years.

Hospital outpatient and pharmacy spending increased at rates faster than overall TME. As in 2016, hospital outpatient services experienced the largest growth in spending among all major claims-based service categories, increasing 4.6%, or \$5 PMPM, between 2016 and 2017 while hospital inpatient spending increased by 0.8%.

Pharmacy services spending grew by 3.2% in 2017 after growing by 3.9% in the prior year.

Commercial Total Medical Expenses Per Member Per Month by Service Category, 2016-2017



PER MEMBER PER MONTH SPENDING FOR COMMERCIAL FULL-CLAIM MEMBERS SLOWED ACROSS THE FOUR MAJOR SERVICE CATEGORIES IN 2017, RANGING FROM 0.8% TO 4.6%.

Source: Payer-reported TME data to CHIA.

Notes: Data displayed above represents commercial full-claim spending only. Commercial full-claim TME represented 72.9% of total commercial expenditures in 2017. For definitions of service categories please see TME data specifications: <http://www.chiamass.gov/assets/docs/p/tme-rp/data-spec-manual-tme.pdf>. 2016 data displayed above reflects final TME. Percent changes are calculated based on non-rounded expenditure amounts.

Minuteman terminated all policies in December 2017 and is not included in this analysis.

TOTAL MEDICAL EXPENSES & ALTERNATIVE PAYMENT METHODS

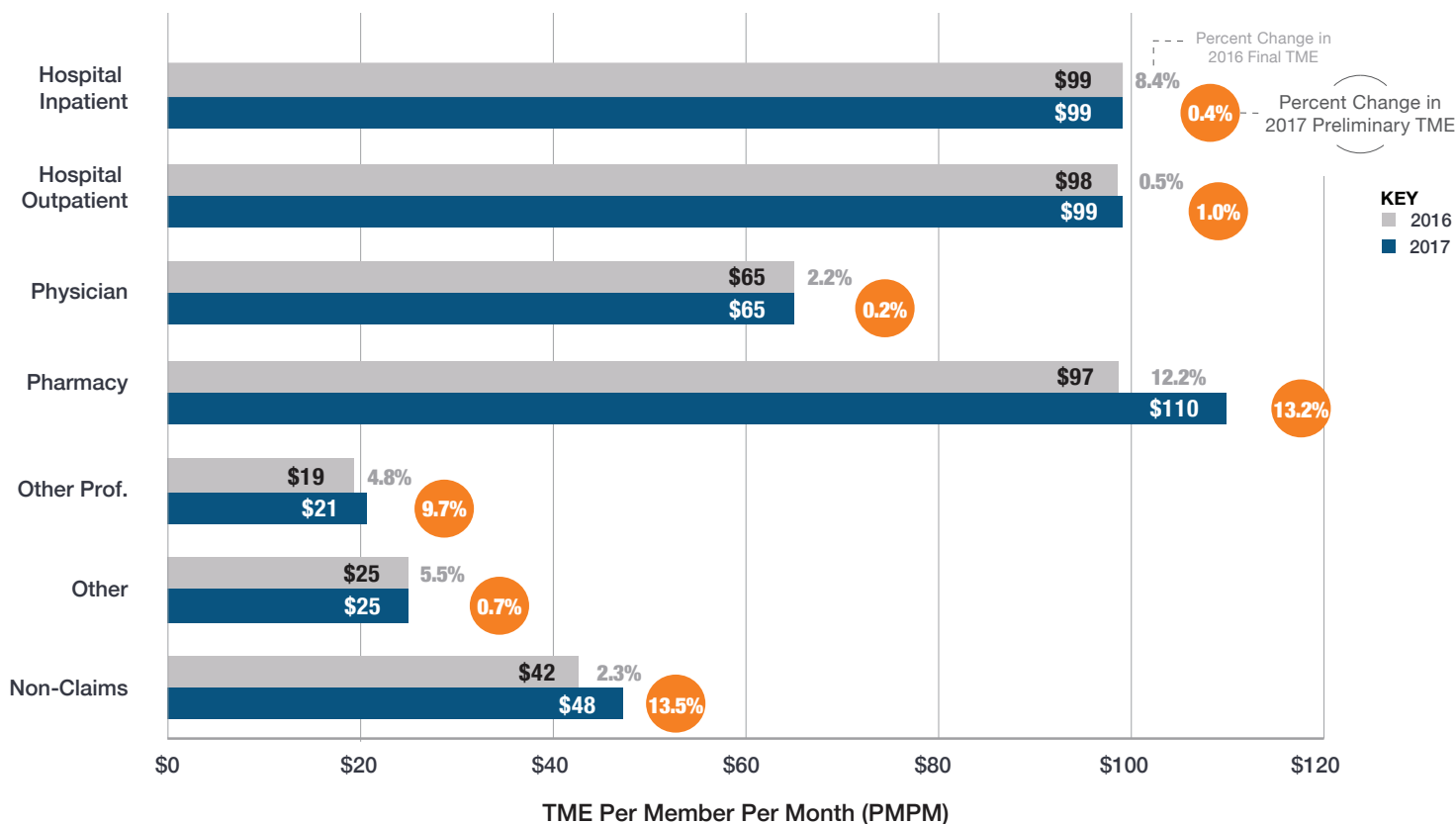
For MassHealth MCO members, PMPM spending increased across all service categories. Spending growth moderated, however, in two of the four largest service categories.

Hospital inpatient and outpatient spending remained steady, increasing 0.4% and 1.0%, respectively, in 2017. PMPM spending for inpatient services slowed from the prior performance period.

Spending growth for physician services slowed considerably, increasing only 0.2% between 2016 and 2017, compared to an increase of 2.2% in the prior year.

Spending for pharmacy services grew faster than other service categories, increasing by 13.2% to \$110 PMPM in 2017. Pharmacy spending represented the largest spending category for MassHealth MCOs in 2017.

MassHealth MCO Total Medical Expenses Per Member Per Month by Service Category, 2016-2017



PER MEMBER PER MONTH PHARMACY SPENDING EXCEEDED BOTH HOSPITAL INPATIENT AND OUTPATIENT SPENDING IN 2017 FOR MASSHEALTH MCO MEMBERS.

Source: Payer-reported TME data to CHIA.

Notes: For definitions of service categories please see TME data specifications: <http://www.chiamass.gov/assets/docs/p/tme-rp/data-spec-manual-tme.pdf>. 2016 data displayed above reflects final TME.

TOTAL MEDICAL EXPENSES & ALTERNATIVE PAYMENT METHODS

TME can also be examined on an HSA basis for each payer's member population, which adjusts for member illness burden.

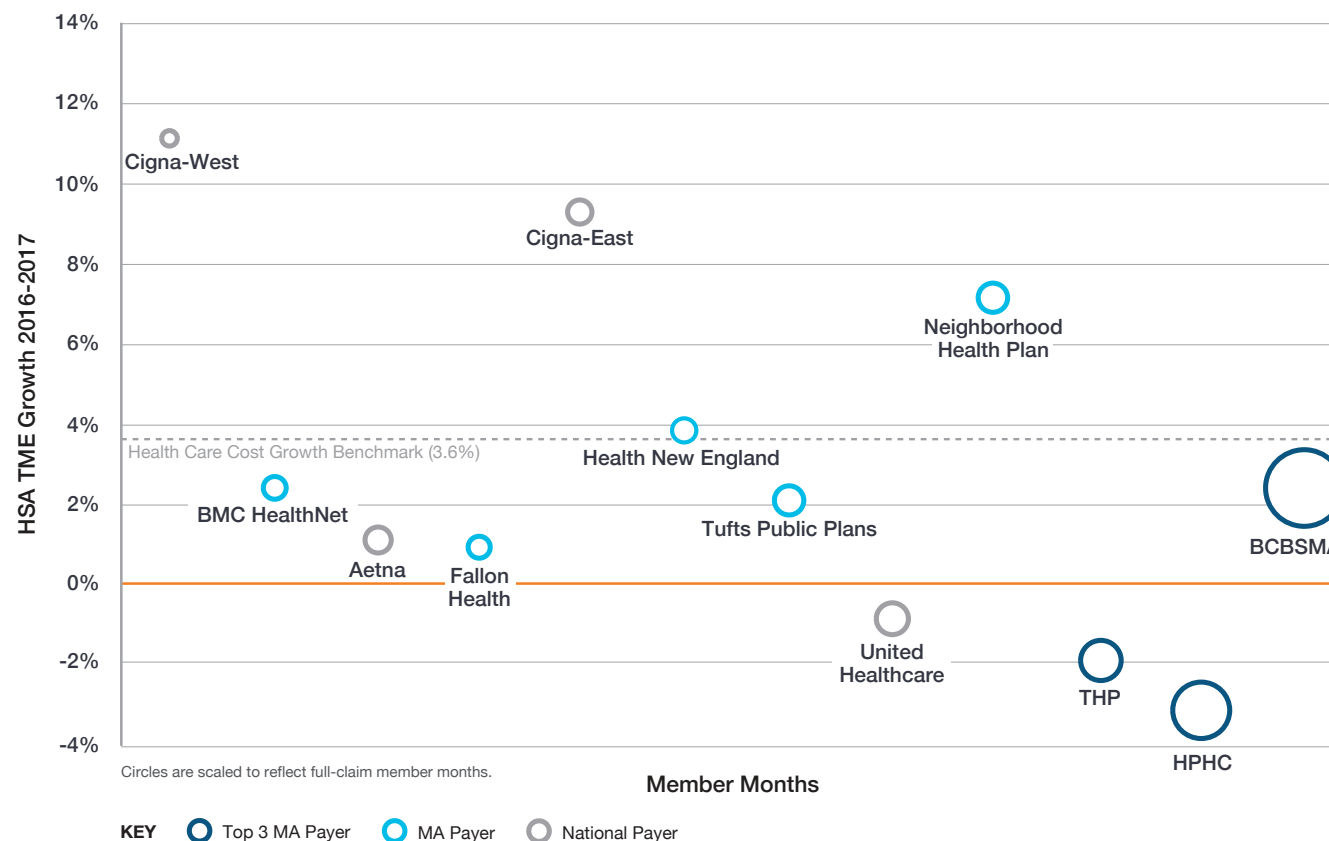
Eight of the 13 commercial payers—accounting for 86.2% of the commercial full-claim population—reported preliminary HSA TME growth below the 3.6% benchmark from 2016 to 2017.

The three largest Massachusetts-based commercial payers, Blue Cross Blue Shield of Massachusetts (BCBSMA), Harvard Pilgrim Health Care (HPHC), and Tufts Health Plan (THP), accounted for 64.8% of member months in 2017. BCBSMA reported preliminary HSA TME growth of 2.4%, while HPHC and THP reported declines of 3.1% and 1.9%, respectively.

The other six Massachusetts-based commercial payers accounted for 20.1% of commercial full-claim member months. Three of these payers reported HSA TME growth from 2016 to 2017 below the 3.6% benchmark.

The four national payers accounted for 15.1% of commercial full-claim member months. The two larger payers, Aetna and United Healthcare, reported HSA TME trends below the 3.6% benchmark from 2016 to 2017.

Change in Preliminary Commercial Health Status Adjusted TME by Payer, 2016-2017



THE THREE LARGEST PAYERS REPORTED LOW OR NEGATIVE PRELIMINARY HEALTH STATUS ADJUSTED TME GROWTH IN 2017.

Source: Payer-reported TME data to CHIA.

Notes: CeltiCare HSA TME growth of 70.1% not displayed. Data displayed above reflects commercial full-claim TME expressed on a PMPM basis. The tools used for adjusting TME for health status of a payer's covered members vary among payers, and therefore adjustments are not uniform or directly comparable across payers. Payers are required, however, to utilize a consistent health status adjustment tool and version across three data years to ensure within payer comparability of HSA TME. See the [databook](#) for a list of health status adjustment tools used for the data presented in this report. Minuteman Health terminated all policies in December 2017 and is not included in this analysis.

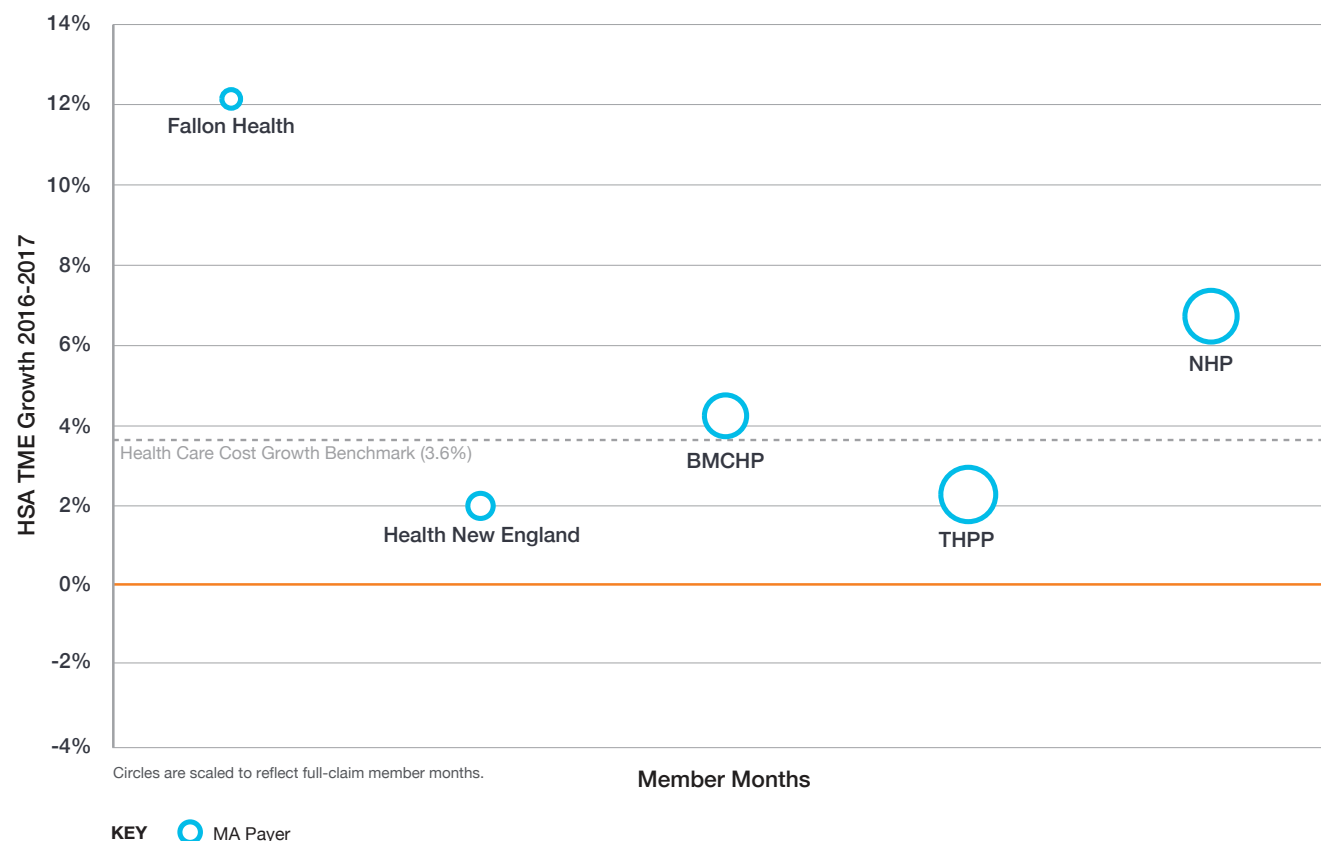
TOTAL MEDICAL EXPENSES & ALTERNATIVE PAYMENT METHODS

In 2017, six payers offered MassHealth MCO plans. All six reported increases in HSA TME from 2016 to 2017, with four payers reporting increases greater than the 3.6% benchmark.

The majority of MassHealth MCO members (82.2%) were enrolled with Neighborhood Health Plan (NHP), Tufts Public Plans (THPP), and BMC HealthNet Plan (BMCHP). THPP reported an increase in member months, while NHP and BMCHP reported declines in their MCO membership populations from 2016 to 2017.

The remaining three payers accounted for 17.8% of member months in 2017. CeltiCare and Fallon reported double-digit increases in HSA TME from 2016 to 2017, along with increases in member months. Health New England (HNE) (7.9% of member months) reported a 2.0% increase in HSA TME.

Change in Preliminary MassHealth MCO Health Status Adjusted TME by Payer, 2016-2017



THE THREE LARGEST MASSHEALTH MCO PAYERS COVERED 82.2% OF MASSHEALTH MCO MEMBERS, AND REPORTED INCREASES IN PRELIMINARY HSA TME RANGING FROM 2.2% TO 6.7%.

Source: Payer-reported TME data to CHIA.

Notes: CeltiCare HSA TME growth of 38.8% not displayed. The tools used for adjusting TME for health status of a payer's covered members vary among payers, and therefore adjustments are not uniform or directly comparable across payers. Payers are required, however, to utilize a consistent health status adjustment tool and version across three data years to ensure within payer comparability of HSA TME. See the [databook](#) for a list of health status adjustment tools used for the data presented in this report.

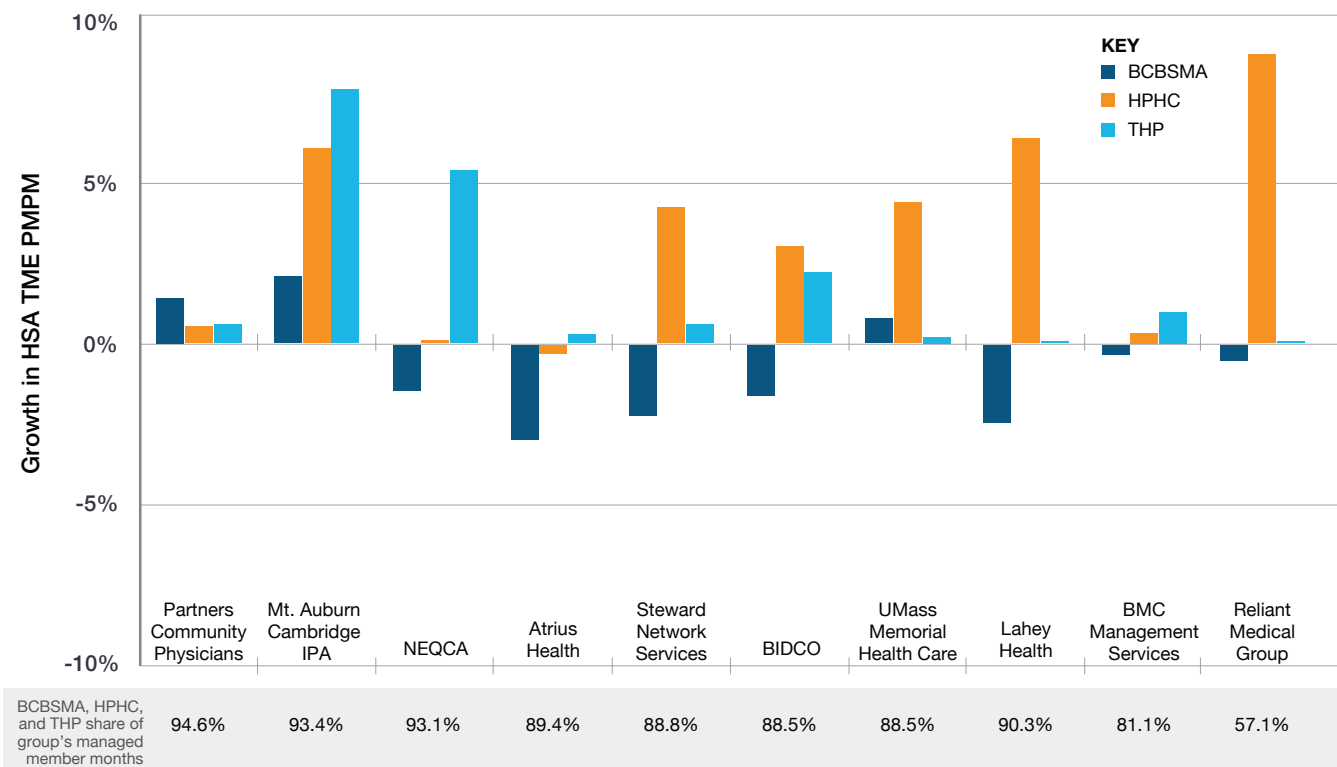
TOTAL MEDICAL EXPENSES & ALTERNATIVE PAYMENT METHODS

Managing physician group HSA TME measures the total medical spending for commercial members attributed to a primary care provider (PCP).⁴ Data reported here is based on final TME from 2015-2016 for members whose plan requires selection of a PCP as well as members who have been attributed to a PCP pursuant to a contract between the payer and the physician group.⁵

Members managed by Partners Community Physician Organization, Mt. Auburn Cambridge IPA, and UMass Memorial Health Care experienced increases in HSA TME in all three payers' networks.

Seven of the 10 managing physician groups experienced decreases in HSA TME in at least one payer's network between 2015 and 2016. Atrius Health experienced a decline in HSA TME for two of the three payer networks.

Change in Managing Physician Group Commercial Health Status Adjusted TME, 2015-2016



THREE OF THE 10 LARGEST MANAGING PHYSICIAN GROUPS EXPERIENCED INCREASES IN HSA TME FOR ALL THREE PAYER NETWORKS BETWEEN 2015-2016.

Source: Payer-reported TME data to CHIA.

Notes: Managing physician group TME is presented for final data only. Differences between preliminary and final TME data are often more pronounced for physician groups as the patient population at the managing physician group level is much smaller than the member population used in the health plan preliminary TME analysis, and due to the adoption of APM contract arrangements. The ten largest managing physician groups are calculated based on total member months of the parent provider group.

Managing physician group TME includes the constituent local practice groups for that entity during the data reporting period, pursuant to payer-provider contracts. As local practice group affiliations change, managing physician group TME may reflect different local practice groups across years. Local constituent practice groups included in managing physician groups displayed above may vary between payer networks. For additional detail on the local practice groups comprising managing physician groups, see TME [databook](#).

TOTAL MEDICAL EXPENSES & ALTERNATIVE PAYMENT METHODS

Over the past several years payers have been using APMs as a way to promote coordinated care while also providing incentives to control overall costs while maintaining or improving quality.

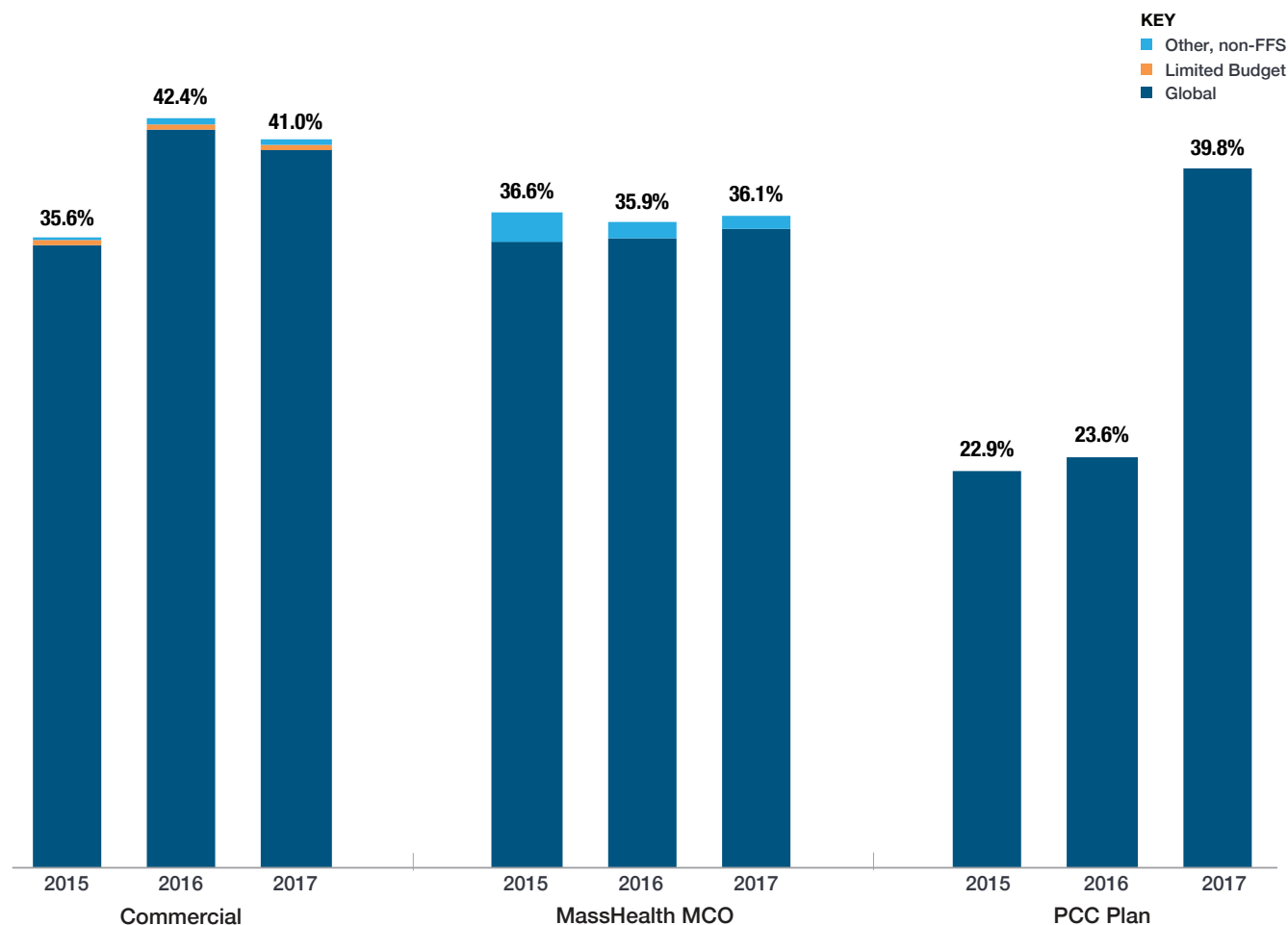
In the Massachusetts commercial market, the share of members whose care was paid for using APMs was 41.0% in 2017, a 1.3 percentage point decrease from 2016.

MassHealth MCOs reported APM use for 36.1% of members in 2017, a slight increase from the prior year.

While APM adoption remained nearly level in the commercial and MassHealth MCO markets, the share of members in the MassHealth PCC Plan whose care was paid for using APMs increased by 16.2 percentage points, from 23.6% in 2016 to 39.8% in 2017.

Global payment arrangements continue to be the dominant APM employed by payers, accounting for 98.6% of commercial APM arrangements. Among MassHealth plans global payments accounted for 98.0% of APMs in the MCO market, and 100% of APMs in the PCC plan.

Adoption of Alternative Payment Methods by Insurance Category, 2015-2017



IN 2017, THE LARGEST INCREASE IN APM ADOPTION RATES WAS IN THE MASSHEALTH PCC PLAN.

Source: Payer-reported APM data to CHIA.

Notes: Membership under APMs is measured by the share of member months associated with a primary care provider engaged in an alternative payment contract with the reporting payer.

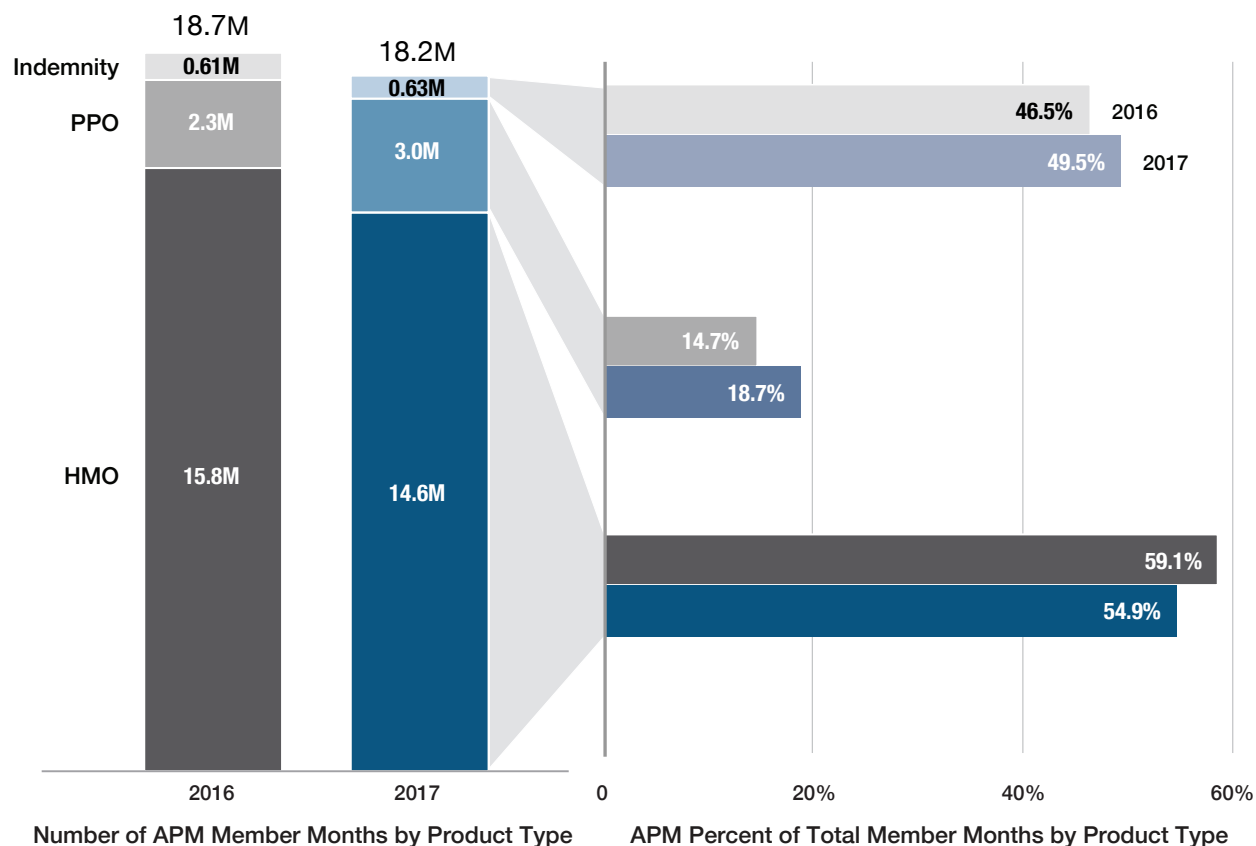
TOTAL MEDICAL EXPENSES & ALTERNATIVE PAYMENT METHODS

The number of commercial members whose care was paid for using APMs declined by 2.7% between 2016 and 2017, or 0.5 million member months. This was largely due to a decline in HMO members covered under an APM, which declined from 15.8 million member months in 2016 to 14.6 million in 2017.

In 2017, the proportion of PPO members covered under an APM increased to 18.7%, or 3.0 million member months, from 14.7%, or 2.3 million member months, in 2016. This was largely driven by increases in BCBSMA, THP, and THPP PPO members whose care was paid for through an APM.

APM adoption within the Indemnity product type increased slightly, from 0.61 million member months to 0.63 million between 2016 and 2017. Similar to last year, this was attributable to an increase in the adoption of global payment arrangements by UniCare.

Commercial APM Adoption by Product Type, 2016-2017



THE PROPORTION OF MEMBERS UNDER APM ARRANGEMENTS INCREASED FOR PPO AND INDEMNITY PRODUCT TYPES AND DECLINED FOR HMO MEMBERSHIP.

Source: Payer-reported APM data to CHIA.

Notes: Membership under APMs is measured by the share of member months associated with a primary care provider engaged in an alternative payment contract with the reporting payer. The data displayed above includes both full-claim and partial-claim members.

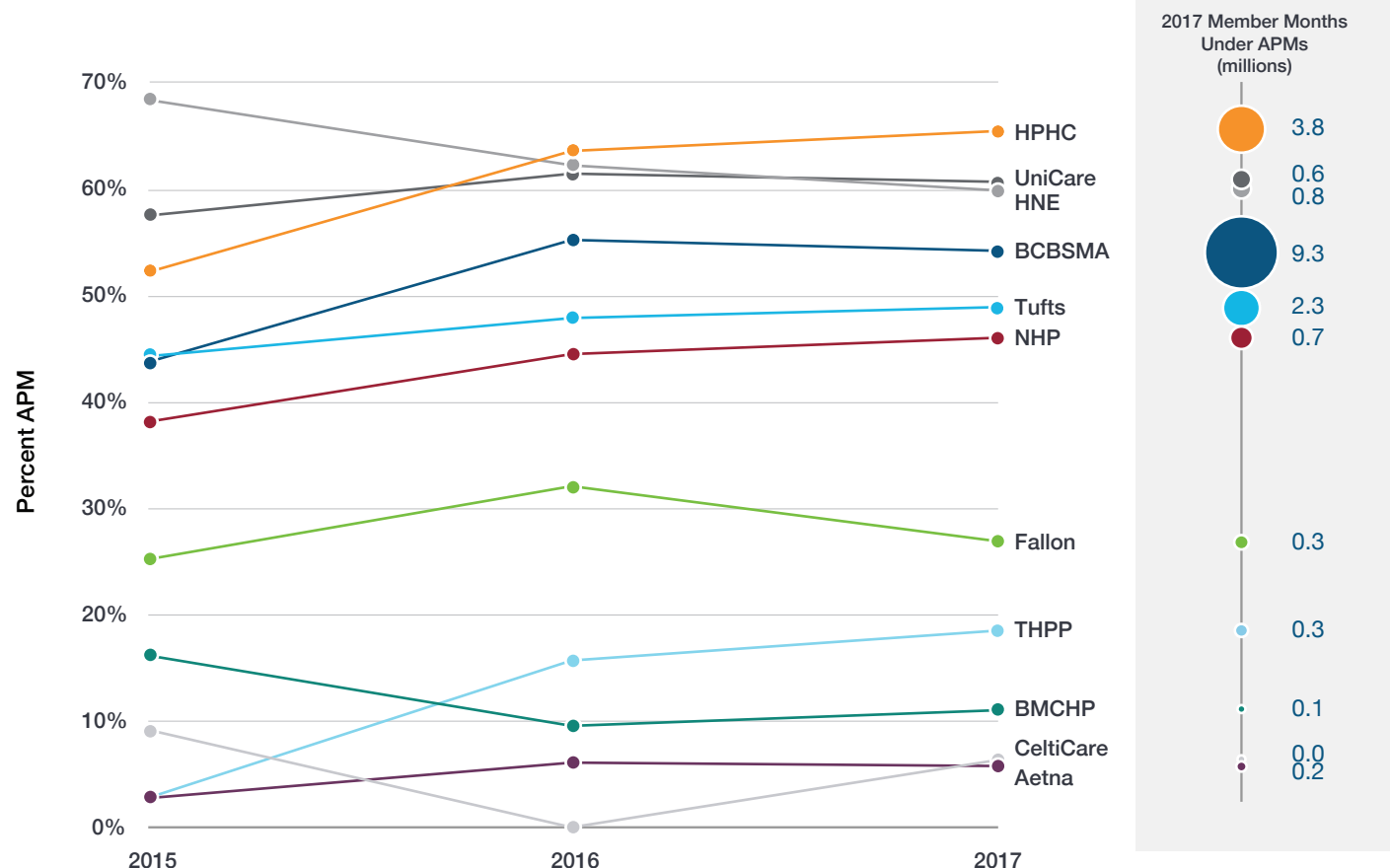
TOTAL MEDICAL EXPENSES & ALTERNATIVE PAYMENT METHODS

Eleven of 13 commercial payers engaged in APM arrangements in 2017. Six of these 11 payers reported increases in the proportion of members whose care was paid for using an APM from 2016 to 2017.

Overall, the proportion of members whose care was paid for under an APM decreased slightly in 2017; the majority of care for commercial members continued to be paid using fee-for-service (59.0%). HPHC, UniCare, HNE, and BCBSMA had the majority of their members' care paid for through an APM arrangement, consistent with prior years. Three of the four payers, however, reported slight decreases in the proportion of members care paid under APM arrangements between 2016 and 2017.

Cigna and United Healthcare reported no APMs in 2017, consistent with prior years.

APM Adoption Trends by Commercial Payers, 2015-2017



IN 2017 APM ADOPTION RATES DECREASED SLIGHTLY AMONG COMMERCIAL PAYERS, INCLUDING THREE OF THE FOUR PAYERS WITH THE MAJORITY OF THEIR MEMBERS COVERED UNDER APM ARRANGEMENTS.

Source: Payer-reported APM data to CHIA.

Notes: Cigna and United Healthcare do not provide APMs. Harvard Pilgrim Health Care's data includes subsidiary Health Plans Inc. Membership under APMs is measured by the share of member months associated with a primary care provider engaged in an alternative payment contract with the reporting payer. Minuteman Health terminated all policies in December 2017. The data displayed above includes both full-claim and partial-claim members.

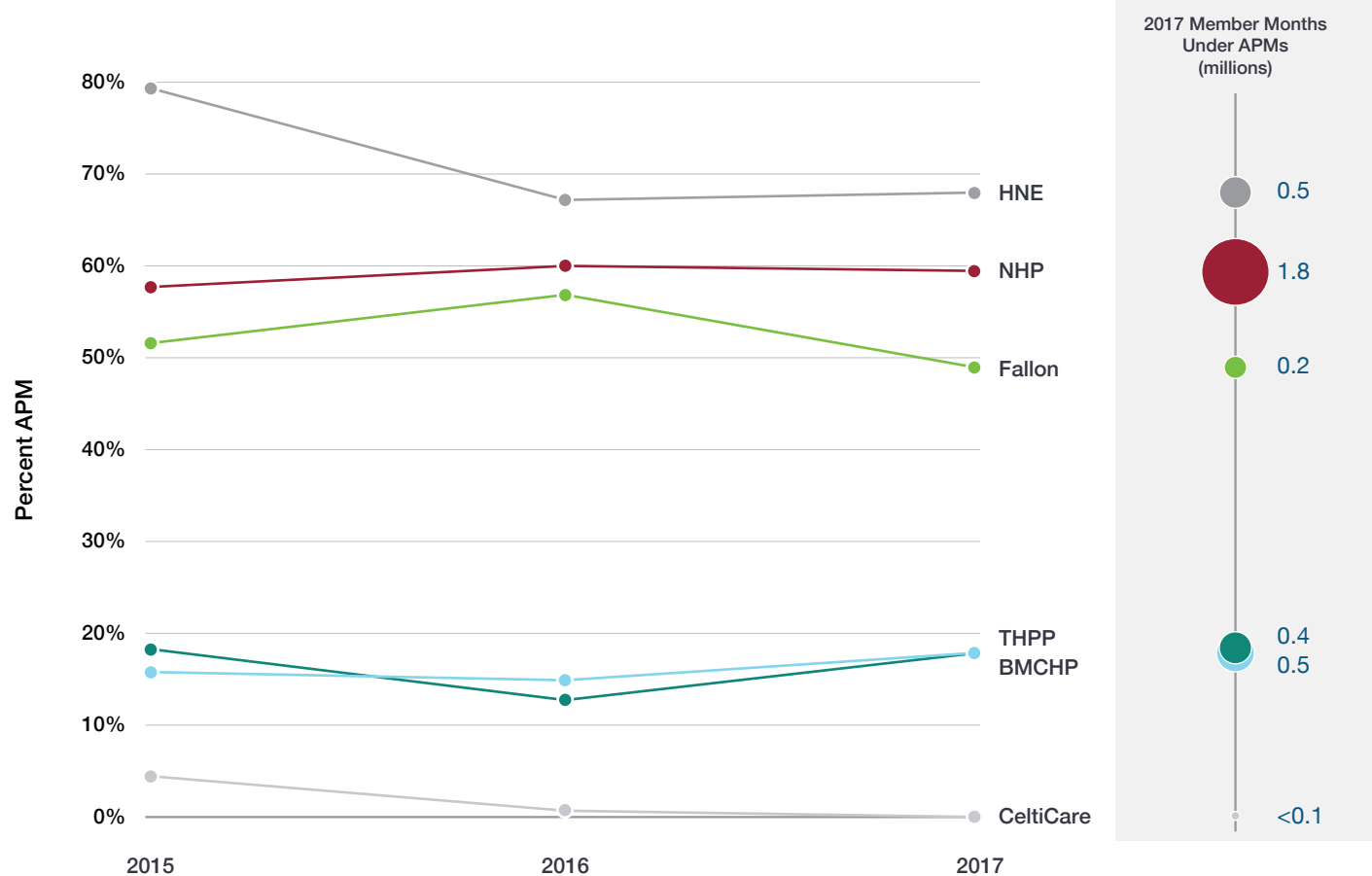
TOTAL MEDICAL EXPENSES & ALTERNATIVE PAYMENT METHODS

In 2017, all MassHealth MCO payers engaged in APM contract arrangements, covering 36.1% of total MassHealth MCO members.

Three of the six MCO payers (NHP, Fallon, and CeltiCare) reported decreases in the proportion of members in APM arrangements from 2016 to 2017. While Fallon reported the largest decrease (7.7 percentage points), it maintained the third highest APM adoption rate at 49.4%.

HNE and NHP reported that the majority of their MassHealth members were covered under an APM arrangement, consistent with prior reporting years. HNE reported a slight increase (0.3 percentage points) in APM adoption between 2016 and 2017.

APM Adoption Trends by MassHealth MCOs, 2015-2017



APM ADOPTION AMONG MASSHEALTH MCOS WAS LARGELY CONSISTENT IN 2017; FIVE OF SIX PAYERS REPORTED CHANGES IN APM ADOPTION OF LESS THAN THREE PERCENTAGE POINTS BETWEEN 2016 AND 2017.

Source: Payer-reported data to CHIA and other public sources.

Notes: Membership under APMs is measured by the share of member months associated with a primary care provider engaged in an alternative payment contract with the reporting payer. Percent changes are calculated based on non-rounded expenditure amounts. Please see [databook](#) for detailed information.

TOTAL MEDICAL EXPENSES & ALTERNATIVE PAYMENT METHODS

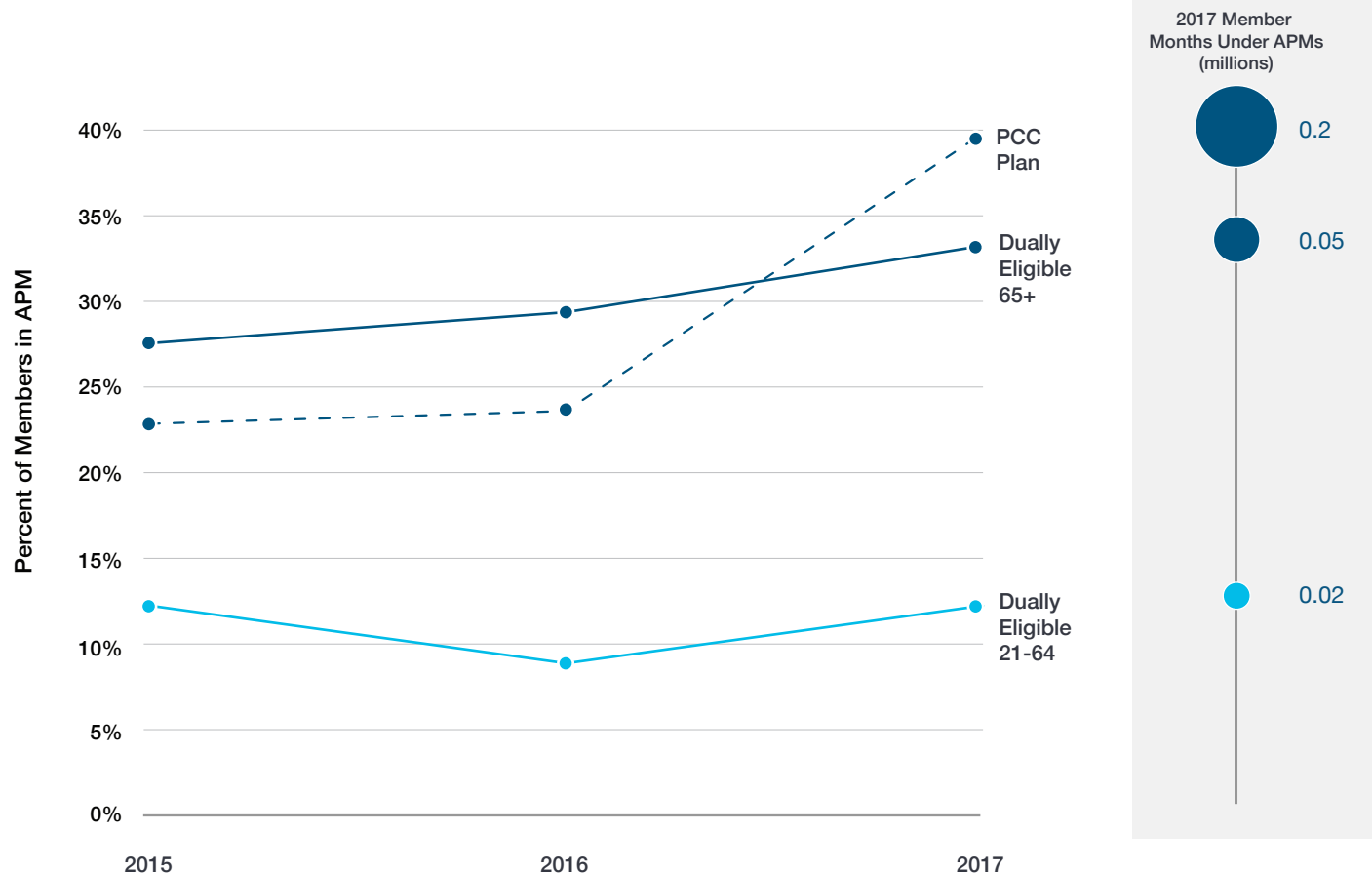
The proportion of MassHealth PCC Plan members, dually eligible seniors, and dually eligible adults under age 65 whose care was paid for under APM arrangements increased from 2016 to 2017.

In 2017, 39.8% of PCC Plan members had their care paid for under an APM, a 16.2 percentage point increase from 2016.

Thirty-one percent of dually eligible members 65 and older had their care paid for under an APM in 2017, compared to 27.4% in 2016.

APM adoption increased for dually eligible adult members younger than 65, following declines in previous years. In 2017, 11.4% of dually eligible adults under 65 were covered under an APM, compared to 8.3% in 2016.

APM Adoption Trends by MassHealth PCC Plan and Programs for Dually Eligible Members, 2015-2017



APM ADOPTION INCREASED FOR MASSHEALTH PCC AND BOTH DUAL ELIGIBILITY PROGRAMS BETWEEN 2016 AND 2017.

Source: Payer-reported data to CHIA.

Notes: Membership under APMs is measured by the share of member months associated with a primary care provider engaged in an alternative payment contract with the reporting payer. Percent changes are calculated based on non-rounded expenditure amounts. Please see [databook](#) for detailed information.

TOTAL MEDICAL EXPENSES & ALTERNATIVE PAYMENT METHODS NOTES

- 1 Final TME and APM data have at least 15 months of claims run-out and finalized performance payment settlements. Preliminary TME/APM data represents, at minimum, three months of claims run-out. In order to report preliminary TME/APM that is comparable to the previous year's data, payers apply completion factors, which include payer estimates for the expenses for services that have been incurred but not reported (IBNR) by service category. See the [technical appendix](#) for more information.
- 2 Commercial full-claim TME data reflects data for which the payer is able to collect information on all direct medical claims and subcarrier claims. In some circumstances, payers are only able to report claims payments for limited medical services due to benefit design, where some services such as behavioral health or pharmacy services may be "carved out," or provided separately from other medical services. In these instances, payers are unable to obtain the payment information and report this type of TME data separately in the commercial partial-claim category.
- 3 All Minuteman Health insurance policies were terminated on December 31, 2017 as they were unable to secure licensing approval to participate in the state insurance exchange program for 2018. MHI did not submit 2017 TME or APM data to CHIA, only top-level expense information for THCE. MHI is excluded from all TME and APM analysis.
- 4 Managing Physician Group TME analyses are presented on a health status adjusted basis to account for differences in health status of members between managing physician groups within a given payer and insurance category. The tools used for adjusting TME for health status of a payer's covered members vary among payers so that adjustments are not uniform or directly comparable across payers. Note that TME data is not adjusted for differences in covered benefits within payers and between providers.
- 5 Managing physician group TME is presented for final data only. Differences between preliminary and final TME data are often more pronounced for physician groups as the patient population at the managing physician group level is much smaller than the member population used in the health plan preliminary TME analysis. Also, managing physician group TME is likely to fluctuate due to contracts that include settlements for physician group financial and quality performance, which are often not finalized until after the close of the calendar year. Member months and TME included in this analysis reflect data for Massachusetts members required to select a PCP by plan design, and members who were attributed during the reporting year to a PCP, pursuant to a contract between the payer and provider for financial or quality performance.

PRIVATE COMMERCIAL CONTRACT ENROLLMENT

KEY FINDINGS

PRIVATE COMMERCIAL CONTRACT ENROLLMENT

Across all market sectors, at least 75% of enrollment was concentrated among three payers, but the top payers varied by market sector.

In 2017, 58.8% of Massachusetts contract members were covered through employers with at least 500 employees.

The proportion of members enrolled in HDHPs (28.2%) increased in most market sectors in 2017. HDHPs were more common among unsubsidized individual purchasers and smaller employer groups.

Between 2015 and 2017, HMO and PPO plan enrollment decreased slightly as enrollment in POS products increased.

PRIVATE COMMERCIAL CONTRACT ENROLLMENT

As part of its efforts to monitor the changing health care landscape, CHIA collects and analyzes Massachusetts private commercial health insurance enrollment data. Data reported by payers for 2015 through 2017 reflects more than 4.6 million contract lives.¹ CHIA analyzed enrollment by market sector, product type (HMO, PPO, POS), funding type, and benefit design type (HDHP, tiered network, limited network). Unless otherwise noted, the remaining chapters of this report highlight membership and cost trends for members covered under private commercial contracts established in Massachusetts (which may include non-Massachusetts residents).²

While the vast majority of private commercial members are covered under employer-sponsored insurance (ESI), some individuals purchase plans via the Health Connector, through brokers, or directly from insurers. Within the report, these members are referred to as “individual purchasers.”

Depending on income and other eligibility factors,³ qualifying Massachusetts residents may purchase ConnectorCare plans

that include state and federal cost-sharing reduction (CSR) subsidies and premium subsidies and tax credits. Of the payers included in this report, BMCHP, Fallon, HNE, NHP, and THPP offered ConnectorCare plans.⁴

Individual purchasers and the small employer group operate as a “merged market” with different premium-rating requirements and Affordable Care Act (ACA) benefit standards than larger employer group purchasers. Due to ongoing notable federal changes in premium and cost-sharing assistance programs, this report contains A Closer Look at individual purchasers. However, other federal regulatory changes may also be impacting small group plans, and CHIA intends to further assess the merged market in a subsequent brief.

Chapter results do not include data for student health plans offered by colleges and universities. The [dataset](#) contains more information on this population as well as expanded enrollment and financial data for the private commercial market. ●

For additional insight into:

- Employer-sponsored insurance plans, see CHIA's [2016 Massachusetts Employer Survey](#).
- Massachusetts insurance enrollment trends, including Medicare and Medicaid enrollment, see CHIA's most recent [Enrollment Trends](#) publication.

PRIVATE COMMERCIAL CONTRACT ENROLLMENT

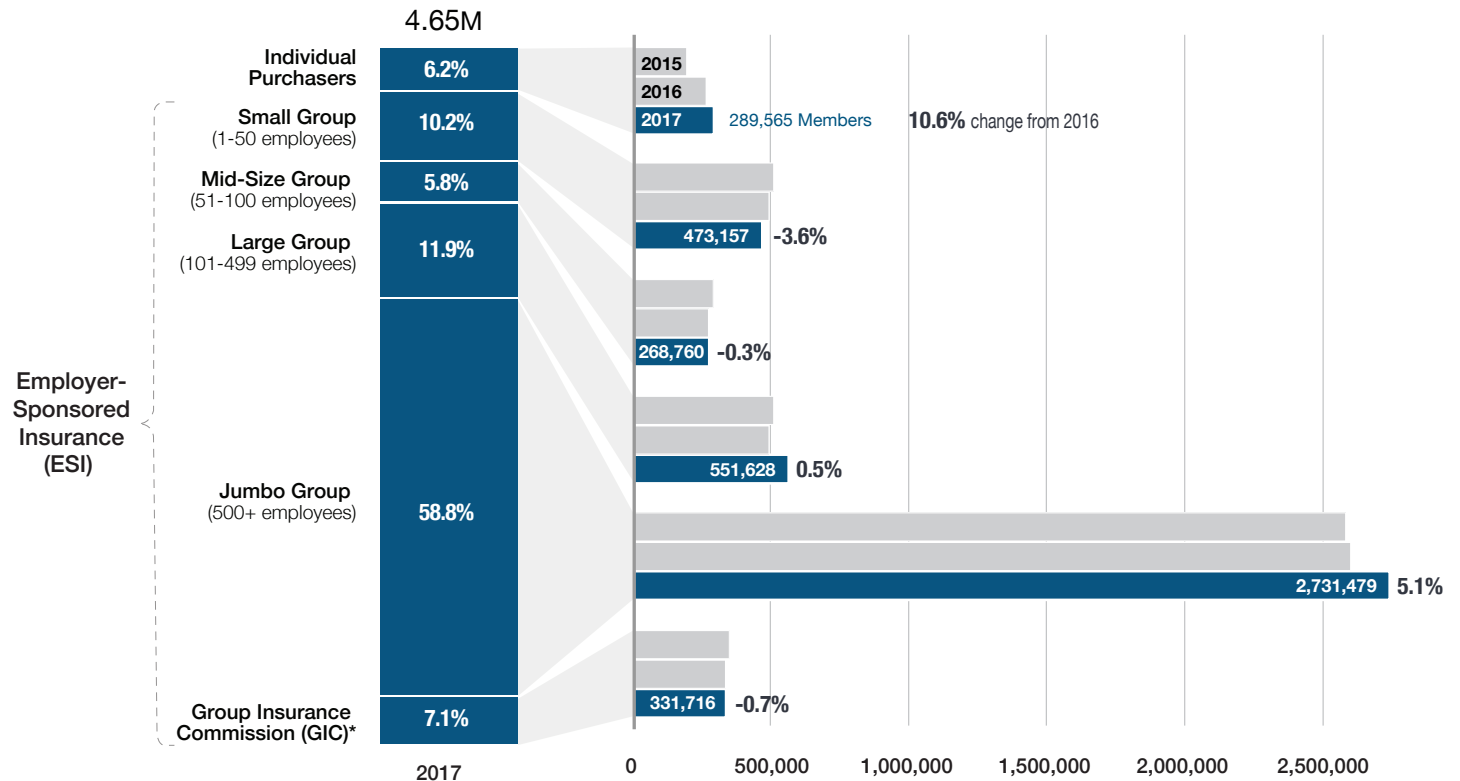
Approximately three in five Massachusetts residents are covered by private commercial insurance.⁵ In 2017, as in prior years, the vast majority (93.8%) of private commercial coverage was purchased through ESI plans, with the Commonwealth's largest employers (those with 500+ employees) covering 2.7 million contract lives, or 58.8% of the market.

The number of individual purchasers continued to increase, although growth from 2016 to 2017 (+10.6%) was slower than in previous years. During the same period, enrollment in small group health plans decreased by 3.6%. These two sectors are "merged" for premium-rating purposes.

Jumbo group enrollment growth was largely driven by the administrative relocation of several larger employer accounts; these "new" contract members may not all reside in the Commonwealth.⁶

*Reported Group Insurance Commission (GIC) enrollment includes active employees, retirees, and dependents enrolled in non-Medicare plans.

Enrollment by Market Sector, 2015-2017



JUMBO GROUP EMPLOYERS WITH AT LEAST 500 EMPLOYEES COVERED 58.8% OF PRIVATE COMMERCIAL INSURANCE ENROLLEES IN 2017.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Data for individual purchasers excludes CeltiCare and Minuteman Health which fell below the membership reporting threshold for this data request. Chapter results include BMCHP for the first time this year. Jumbo group does not include GIC members. See [technical appendix](#).

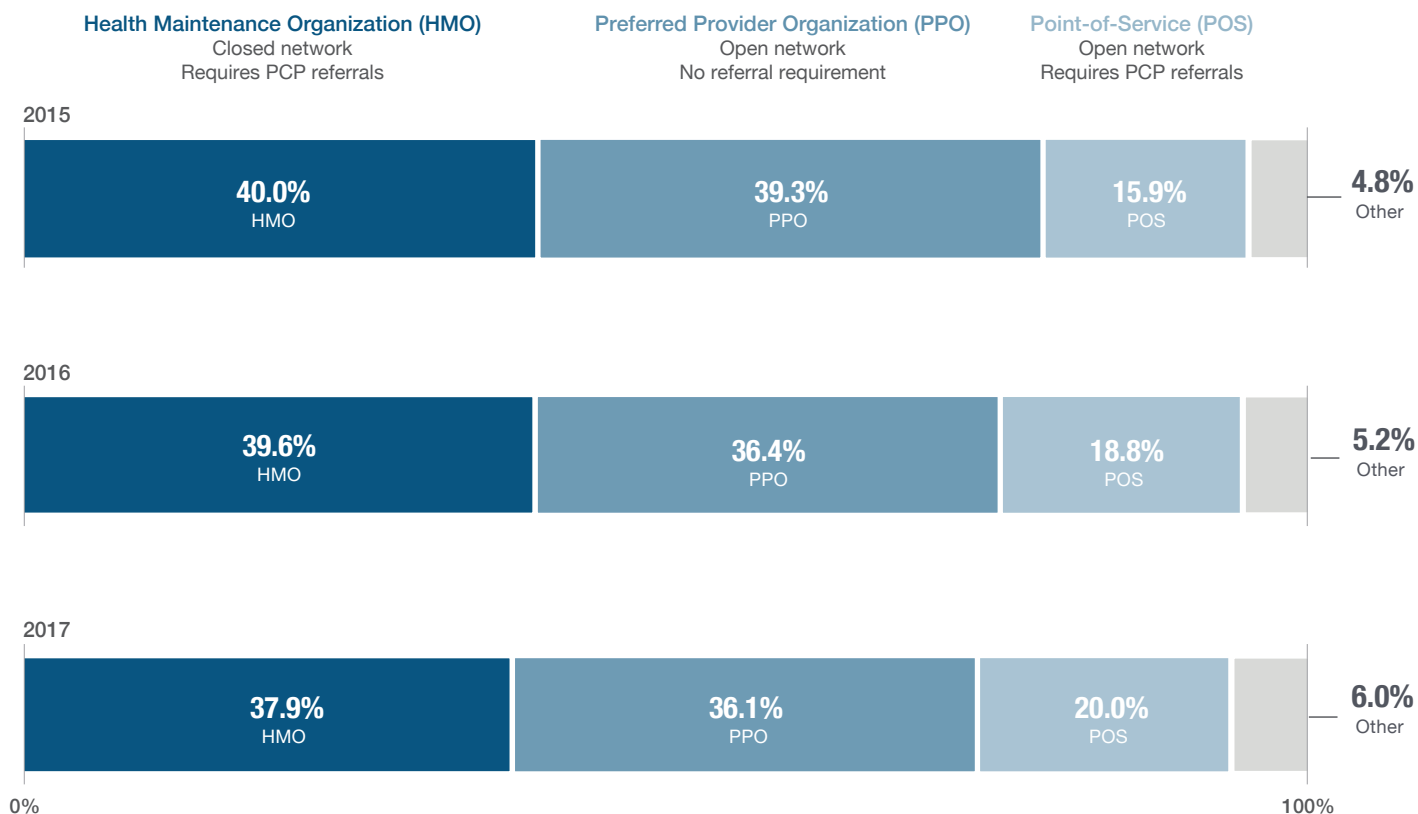
PRIVATE COMMERCIAL CONTRACT ENROLLMENT

Insurance product types play a role in determining the breadth of provider networks for members as well as PCP referral requirements.

In 2017, the gradual decline of HMO and PPO products continued, as POS and other product types became more prevalent in Massachusetts. HMO enrollment decreased slightly year-over-year to 37.9% of the total private commercial market in 2017, while PPO plans represented 36.1% of the market. With the exception of the Group Insurance Commission (GIC), there was a notable shift away from HMO plans for members covered by larger employers.

By 2017, POS plans represented 20.0% of Massachusetts private commercial enrollment, an increase of approximately four percentage points since 2015. Growth was concentrated among jumbo group employers and the GIC.

Enrollment by Product Type, 2015-2017



BETWEEN 2015 AND 2017, HMO AND PPO PLAN ENROLLMENT DECREASED SLIGHTLY AS ENROLLMENT IN POS PRODUCTS INCREASED.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Chapter results include BMCHP for the first time this year. See [technical appendix](#).

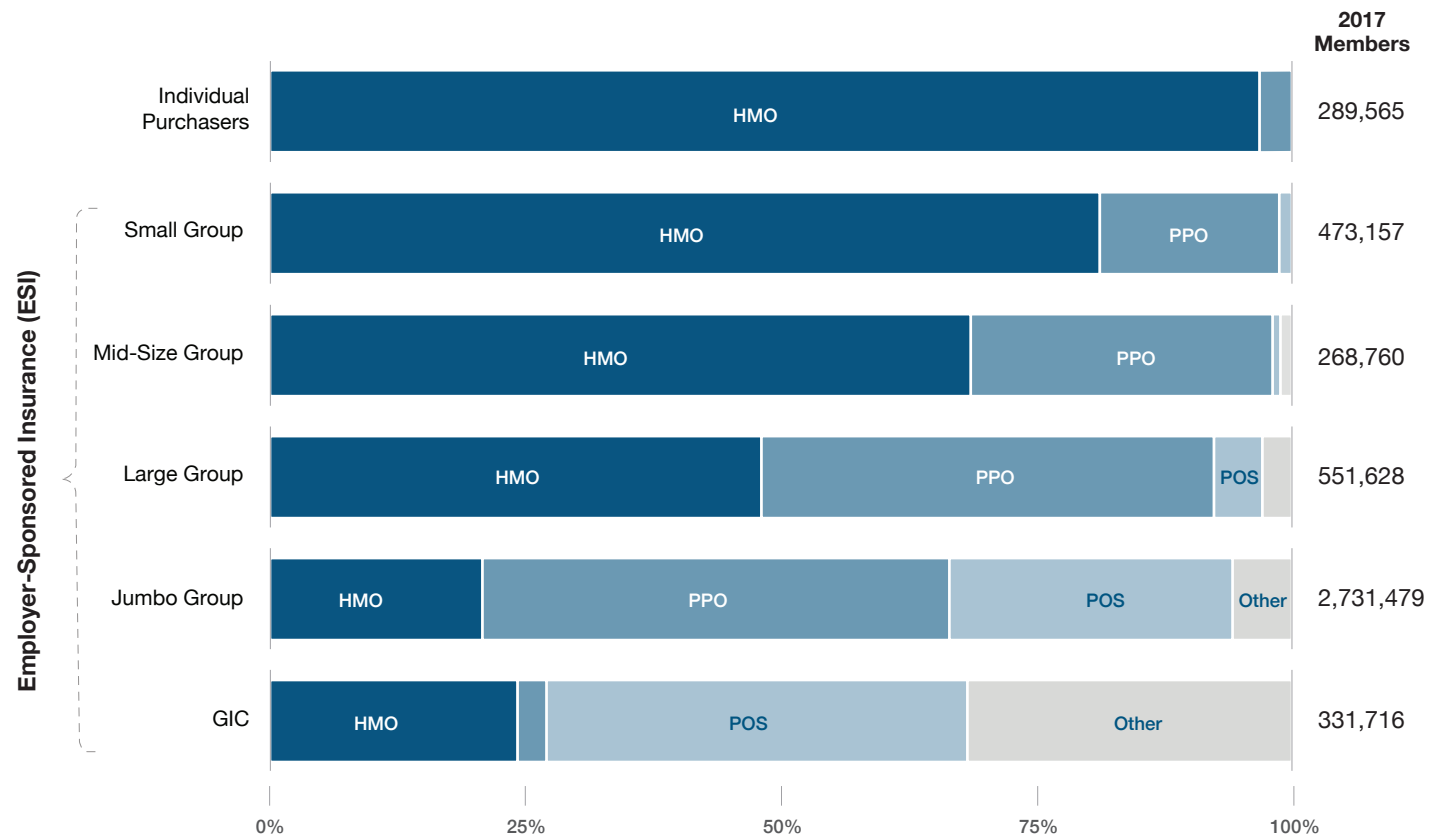
PRIVATE COMMERCIAL CONTRACT ENROLLMENT

Membership by product type varies across market sectors and, for ESI plans, reflects a combination of choices by employers and health plan enrollees. Except for the GIC, HMO plan prevalence was higher among smaller employers, while PPO plan prevalence was higher among larger employers.

In 2017, nearly all (97.1%) individual purchasers were enrolled in HMO plans, compared to just over one-fifth (20.5%) of jumbo group members. POS plans were common among jumbo group (27.7%) and GIC (41.2%) members, but not in other market sectors.

Data from CHIA's *Massachusetts Employer Survey* suggests that larger employers are more likely than smaller ones to consider provider networks as one of the most important factors in selecting a health carrier or plan.⁷ This may be a factor in the higher prevalence of PPO and POS plans among large and jumbo group enrollees, since these product types offer more expansive networks than traditional HMO plans.

Enrollment by Market Sector and Product Type, 2017



MEMBERS OF LARGER EMPLOYER GROUPS TENDED TO ENROLL IN PPO AND POS PLANS, WHILE SMALLER EMPLOYER GROUPS AND INDIVIDUAL PURCHASERS FAVORED HMO PLANS.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Data for individual purchasers excludes CeltiCare and Minuteman Health which fell below the membership reporting threshold for this data request. Chapter results include BMCHP for the first time this year. Jumbo group does not include GIC members. See [technical appendix](#).

PRIVATE COMMERCIAL CONTRACT ENROLLMENT

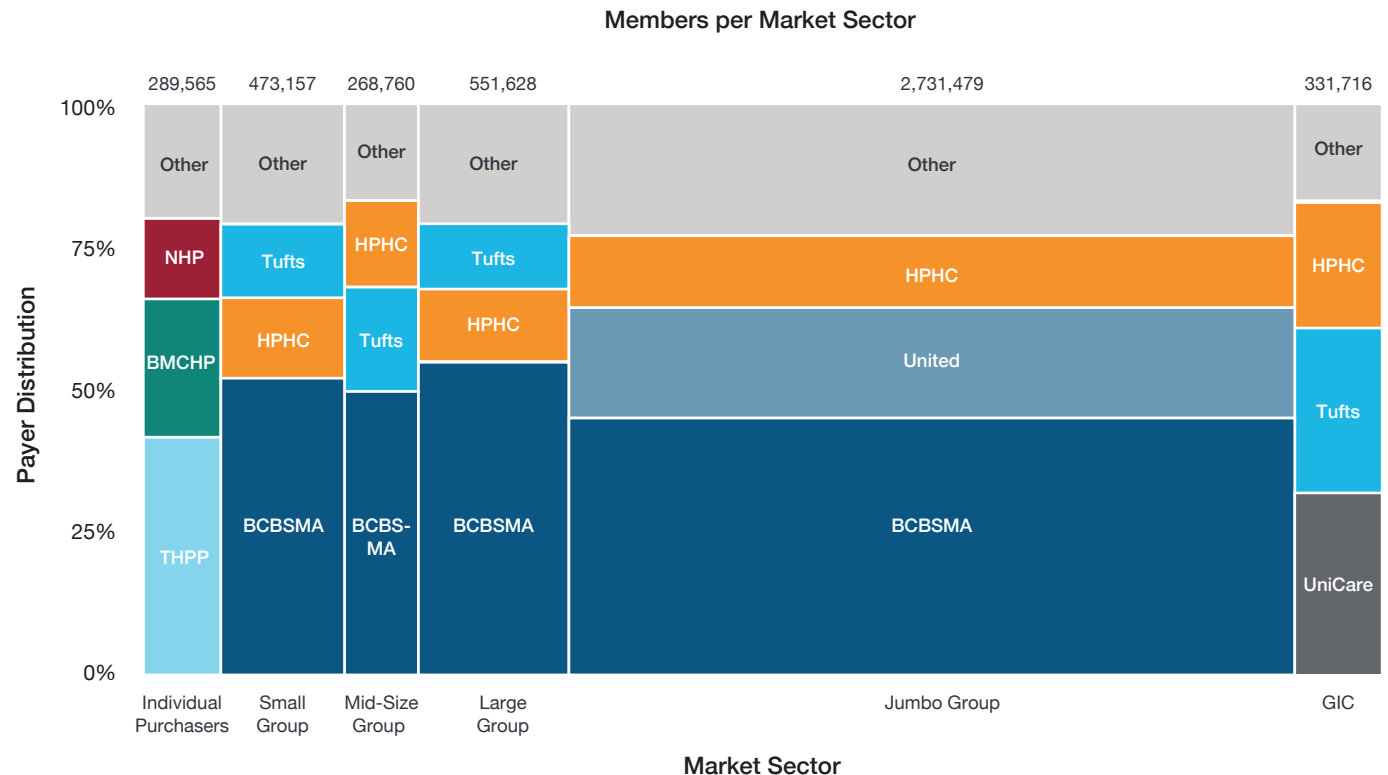
In 2017, BCBSMA remained the largest private payer overall, with 42.2% of the Commonwealth's commercial contract membership. However, payer market share varied across market sectors.

Except for the GIC, BCBSMA maintained the largest market share in every ESI market category, enrolling half of all members. HPHC, Tufts, and United also held large portions of the ESI market—Tufts among smaller employer groups and United among jumbo employers.

One in three GIC members enrolled in plans offered by UniCare, a subsidiary of Anthem.

BMCHP and THPP, which historically served MassHealth members, together enrolled nearly two-thirds of individual purchasers in 2017. For more information on individual purchasers, see *A Closer Look: Individual Purchasers* on [page 87](#).

Largest Payers by Market Sector, 2017



ACROSS ALL MARKET SECTORS, AT LEAST 75% OF ENROLLMENT WAS CONCENTRATED AMONG THREE PAYERS, BUT THE TOP THREE PAYERS VARIED BY SECTOR.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Data for individual purchasers excludes CeliCare and Minuteman Health which fell below the membership reporting threshold for this data request. Chapter results include BMCHP for the first time this year, and THPP is reported separately from its parent company, Tufts. Jumbo group does not include GIC members. See [technical appendix](#).

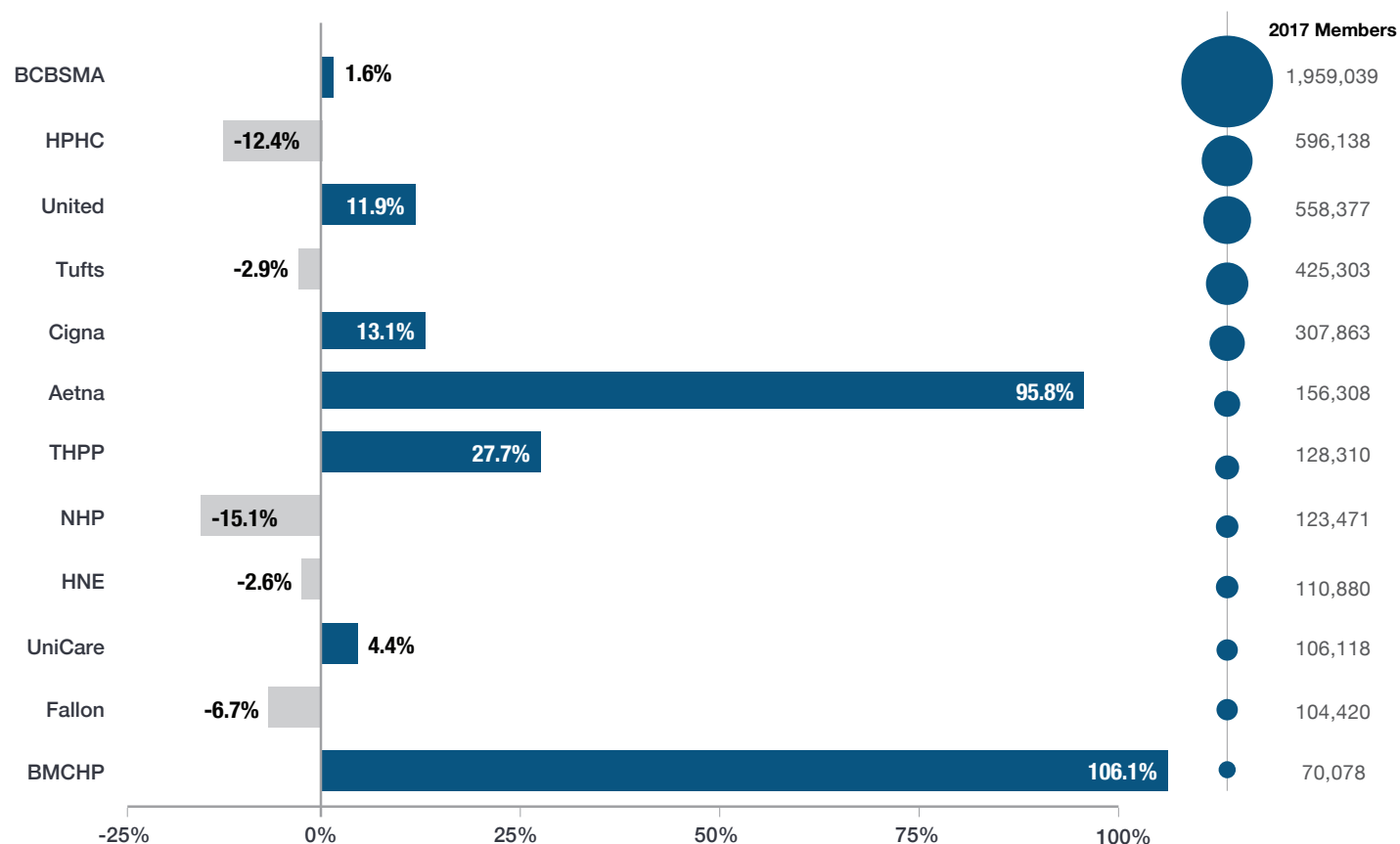
PRIVATE COMMERCIAL CONTRACT ENROLLMENT

Between 2016 and 2017, BMCHP, Aetna, and THPP experienced the largest percentage increases in Massachusetts contract membership, while NHP and HPHC reported notable enrollment declines.

Compared to the prior year, NHP and HPHC lost 15.1% and 12.4%, respectively, of their overall private commercial membership in 2017. These enrollment declines were concentrated in the merged market, where both payers reported significant premium increases. At the same time, BMCHP more than doubled its 2016 enrollment (+106.1%) to 70,000 members in 2017. THPP also grew (+27.7%) to more than 128,000 members.

Aetna nearly doubled its Massachusetts enrollment (+95.8%) to over 156,000 members in 2017, and gains were concentrated among self-insured employer groups with at least 500 employees.⁸

Enrollment Changes by Payer, 2016-2017



HPHC AND NHP LOST MEMBERSHIP IN 2017 AS THEIR MERGED MARKET PREMIUMS INCREASED, WHILE INDIVIDUAL PURCHASER ENROLLMENT GREW FOR BMCHP AND THPP.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Data excludes CeltiCare and Minuteman Health which fell below the membership reporting threshold for this data request. Chapter results include BMCHP for the first time this year, and THPP is reported separately from its parent company, Tufts. See [technical appendix](#).

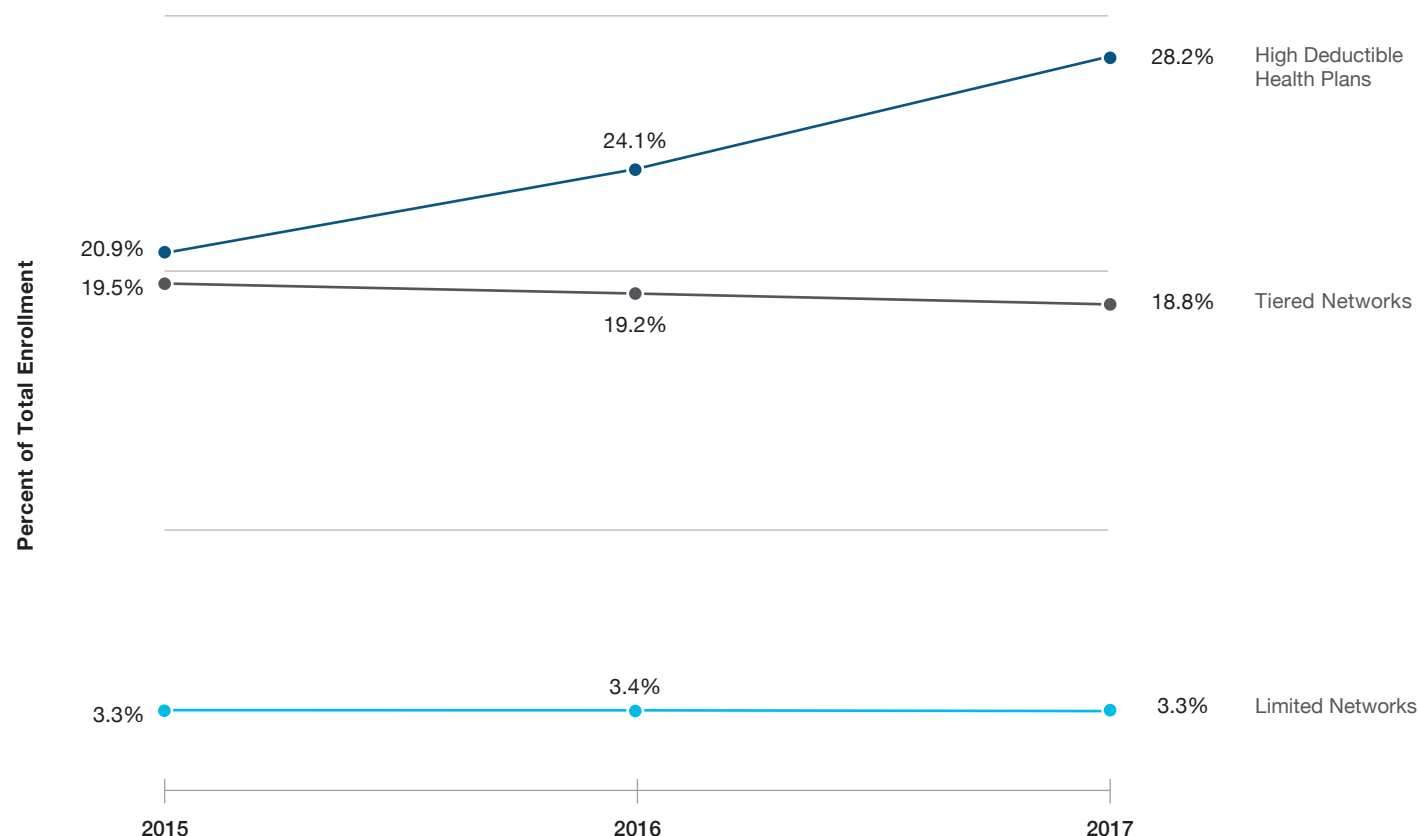
PRIVATE COMMERCIAL CONTRACT ENROLLMENT

One strategy for lowering medical claims and premium costs is to structure benefits so that members have incentives to seek high-value care. Three benefit design types offered in Massachusetts are high deductible health plans (HDHPs), tiered networks, and limited networks.⁹

From 2016 to 2017, HDHP enrollment increased from 24.1% to 28.2% of the private commercial market,¹⁰ continuing a long-term growth trend. During the same period, enrollment in tiered networks (18.8% of members) and limited networks (3.3% of members) remained relatively steady.¹¹

The GIC has led payer development and adoption of tiered and limited provider networks in the Commonwealth. Outside the GIC, only 12.5% of members were enrolled in tiered networks and 2.3% were enrolled in limited networks in 2017.

Enrollment by Benefit Design Type, 2015-2017



ENROLLMENT IN HIGH DEDUCTIBLE HEALTH PLANS CONTINUED TO GROW, WHILE ADOPTION OF TIERED AND LIMITED NETWORKS HELD STEADY.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Chapter results include BMCHP for the first time this year. HDHPs defined by IRS individual plan deductible threshold. Benefit design types are not mutually exclusive. United HDHP enrollment data excluded due to data quality concerns. See [technical appendix](#).

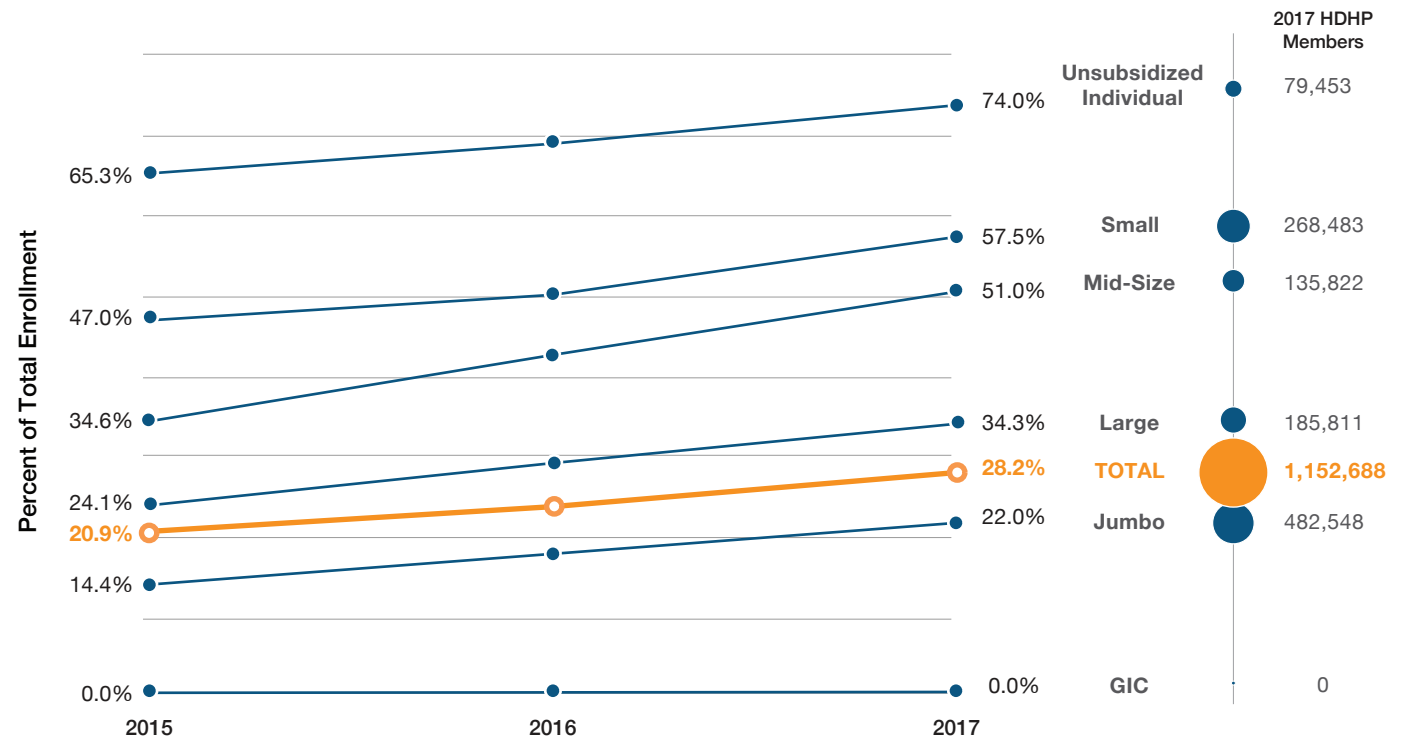
PRIVATE COMMERCIAL CONTRACT ENROLLMENT

HDHP enrollment grew 19.2% (+186,000 members) between 2016 and 2017. By 2017, over 1.15 million Massachusetts members (28.2%) were enrolled in an HDHP.

The majority of HDHP members in 2017 received coverage through larger employers.¹² However, the proportion of members enrolled in HDHPs tended to decrease as employer group size increased, with three-quarters (74.0%) of unsubsidized individual purchasers¹³ and more than half of members covered through small and mid-size employers enrolled in an HDHP in 2017.

HDHPs were not offered to GIC or ConnectorCare members. All other market sectors experienced increases in the percentage of members enrolled in HDHPs.

High Deductible Health Plan (HDHP) Enrollment by Market Sector, 2015-2017



IN 2017, MORE THAN ONE IN FOUR (28.2%) MASSACHUSETTS CONTRACT MEMBERS WERE ENROLLED IN AN HDHP. THESE PLANS WERE MORE COMMON AMONG SMALLER GROUP SIZES.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. HDHPs defined by IRS individual plan deductible threshold. United enrollment data was excluded due to data quality concerns. Data for individual purchasers excludes CeltiCare and Minuteman Health which fell below the membership reporting threshold for this data request. Chapter results include BMCHP for the first time this year. Jumbo group does not include GIC members. ConnectorCare members excluded from graph due to low reported HDHP enrollment. See [technical appendix](#).

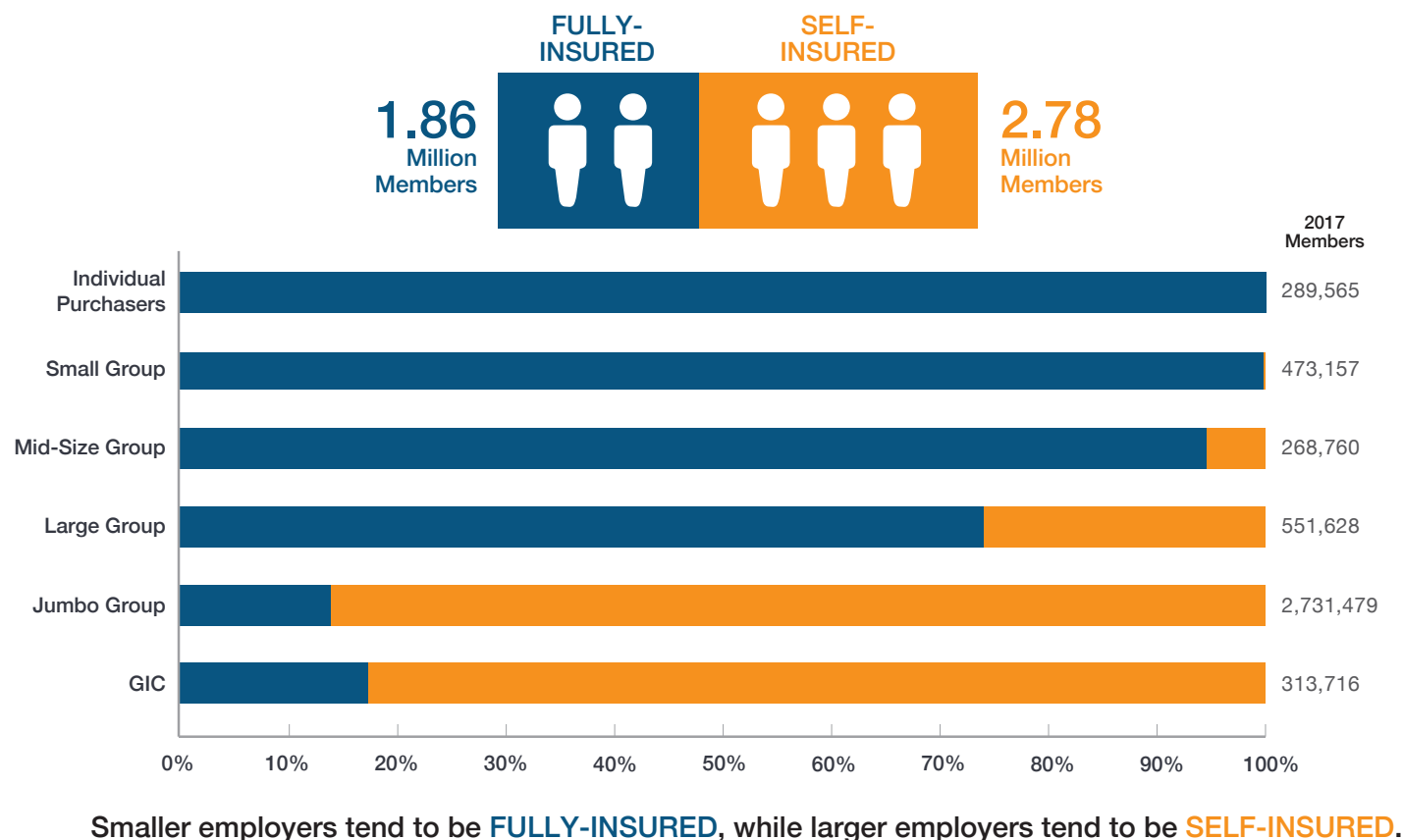
PRIVATE COMMERCIAL CONTRACT ENROLLMENT

Employers may choose to provide health insurance through fully- or self-insured arrangements. Under fully-insured plans, payers assume the financial risk for covering members' medical expenses in exchange for a monthly premium. Self-insured employers assume financial risk for eligible medical costs incurred by their employees and employee-dependents.

In 2017, fully-insured membership represented 40.1% of the Massachusetts private commercial market (1.86 million members).

Self-insurance was most common among members receiving coverage through jumbo group employers with at least 500 employees (86.1% of members self-insured) and the GIC (82.4%). Self-insurance among smaller employers remained low in Massachusetts.

Enrollment by Funding Type, 2017



APPROXIMATELY 40% OF PRIVATE COMMERCIAL MEMBERS WERE ENROLLED IN FULLY-INSURED PLANS IN 2017, WHICH WERE MOST PREVALENT AMONG INDIVIDUAL PURCHASERS AND SMALLER EMPLOYER GROUPS.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Data for individual purchasers excludes CeltiCare and Minuteman Health which fell below the membership reporting threshold for this data request. Chapter results include BMCHP for the first time this year. Jumbo group does not include GIC members. See [technical appendix](#).

PRIVATE COMMERCIAL CONTRACT ENROLLMENT NOTES

- 1 Chapter results based on commercial contract member data provided by Aetna, Blue Cross Blue Shield of Massachusetts (BCBSMA), Boston Medical Center HealthNet Plan (BMCHP), Cigna, Fallon Health, Harvard Pilgrim Health Care (HPHC—including Health Plans, Inc.), Health New England (HNE), Neighborhood Health Plan (NHP), Tufts Health Plan (Tufts), Tufts Health Public Plans (THPP), UniCare, and United Healthcare. Payers with fewer than 50,000 Massachusetts primary, medical enrollees were not required to submit data. 2018 was the first year that BMCHP was required to submit data for this portion of CHIA's *Annual Report*.
- 2 Massachusetts residents may be covered by contracts executed outside the Commonwealth. Reported contract members may reside inside or outside Massachusetts; out-of-state contract members are most often covered through a Massachusetts-based employer.
- 3 Massachusetts residents with household incomes less than or equal to 400% of the Federal Poverty Level and who are not eligible for MassHealth, Medicare, or employer-sponsored insurance may qualify for Advance Premium Tax Credits (APTCs) to reduce premiums. Individuals eligible for APTCs with income less than or equal to 300% of the Federal Poverty Level may also be eligible for ConnectorCare plans with reduced premiums and cost-sharing.
- 4 CeliCare and Minuteman also offered ConnectorCare plans but did not meet the private commercial insurance enrollment threshold to report data to CHIA for this report. For more information on ConnectorCare, see <https://www.mahealthconnector.org>.
- 5 Center for Health Information and Analysis, *Enrollment Trends* (Boston, August 2018), <http://www.chiamass.gov/enrollment-in-health-insurance/>.
- 6 Aetna and United both reported substantial growth in self-insured jumbo group enrollment for 2017. Aetna advised CHIA that its growth was influenced by several large employers, including General Electric, which changed their situs to Massachusetts.
- 7 Center for Health Information and Analysis, *Massachusetts Employer Survey: 2016 Summary of Results* (Boston, March 2017), <http://www.chiamass.gov/massachusetts-employer-survey/>.
- 8 In communications with CHIA, the payer attributed this trend to several large employer accounts that changed their situs to Massachusetts; new contract members may not all reside in the Commonwealth.
- 9 These categories are not mutually exclusive. For instance, a plan offering access to a tiered provider network could also be considered an HDHP based on its deductible level.
- 10 Plans were classified as HDHPs if the individual policy deductible was greater than or equal to the qualifying Internal Revenue Service threshold. The minimum individual deductible for an HDHP was set at \$1,300 from 2015 through 2017. Under CHIA's data specifications, only a plan's individual deductible level must satisfy the threshold to be reported in this category.
- 11 Tiered network plans are those that segment their provider networks into tiers, typically based on differences in the quality and/or cost of care provided. Limited network plans offer members access to a reduced or selective provider network which is smaller than the payer's most comprehensive provider network within a defined geographic area. For complete definitions, see [technical appendix](#).
- 12 In 2017, 58.0% of HDHP members were enrolled in the large or jumbo group market sectors.
- 13 Some individual purchasers classified as "unsubsidized" within this report received APTCs to lower the cost of premiums. However, these members did not receive assistance paying for deductibles or other cost-sharing obligations.

PRIVATE COMMERCIAL COVERAGE COSTS

KEY FINDINGS

PRIVATE COMMERCIAL COVERAGE COSTS

Annual growth in fully-insured premiums accelerated — from 2.0% in 2016 to 4.9% in 2017. Small group members experienced the largest percentage increase (+6.9%) in 2017.

Benefit levels were associated with premium costs across market sectors. Cost-sharing reduction subsidies increased effective benefit levels for ConnectorCare members.

Premium trends from 2016 to 2017 varied substantially by payer, ranging from a 10.9% decrease for BMCHP members to a 16.5% increase for NHP members.

Commercial contract member medical costs grew more slowly from 2016 to 2017 than in the previous year. Medical costs for self-insured members remained higher than fully-insured medical costs.

PRIVATE COMMERCIAL COVERAGE COSTS

CHIA collects and analyzes data on the cost of coverage for Massachusetts private commercial health insurance. Payers submit financial data by market sector, product type (HMO, PPO, POS), funding type, and benefit design type (HDHP, tiered network, limited network). This chapter covers the period from 2015 to 2017.¹

Private commercial insurance is administered on a fully- or self-insured contract-basis, with employers facing different sets of costs for each funding method. The cost for providing fully-insured coverage is measured by the monthly premium, in exchange for which the payer will assume all financial risk associated with members' eligible medical expenses during the contract period. For self-insured coverage, the employer retains the financial risk for medical claims costs while contracting with a payer or third party administrator to design and administer health plans for its employees and their dependents.

Trends in fully-insured premiums and fully- or self-insured medical claims costs are not directly comparable. Premiums are set by payers prospectively based on anticipated medical spending, while medical claims reflect the actual cost of services provided to plan members.

CHIA reports the full premium amount collected by health plans, inclusive of member contributions, employer contributions (for employer plans), and federal and state premium credits and subsidies (for plans sold to individual purchasers). In 2016, the most recent year for which survey data was available, Massachusetts employees directly paid approximately one-fourth of their total premium costs.²

Chapter results do not include data for student health plans offered by colleges and universities. The [dataset](#) contains more information on this population as well as expanded enrollment and financial data for the private commercial market. ●

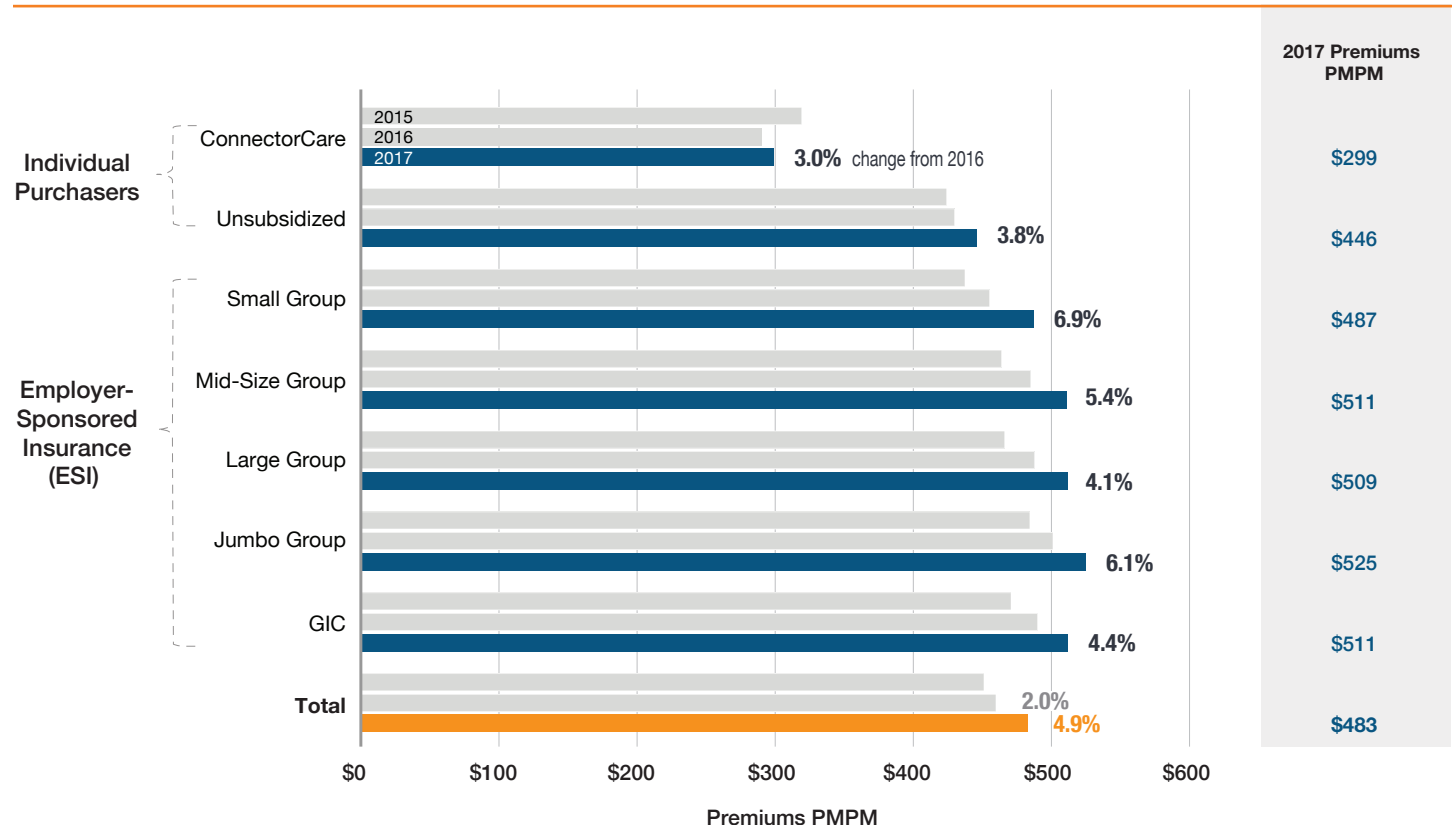
PRIVATE COMMERCIAL COVERAGE COSTS

Between 2016 and 2017, fully-insured premiums increased by 4.9% overall to \$483 PMPM, after growing just 2.0% in the prior year.

While all market sectors reported premium increases of at least 3.0%, small group members experienced the highest one-year increase of 6.9%. At \$487 PMPM, small group premiums were lower than those for other employer size categories in 2017. Despite having lower average premiums, survey data indicates that employees of smaller firms are responsible for paying a larger proportion of their total monthly premiums, on average, than employees of larger firms.³

Premiums for individual plans grew 3.0% for ConnectorCare and 3.8% for unsubsidized plans from 2016 to 2017. While two major payers, NHP and HPHC, reported premium increases far in excess of these amounts,⁴ their impact on overall market sector trends was moderated as individual purchasers shifted towards other, lower-cost plans.

Fully-Insured Premiums by Market Sector, 2015-2017



FULLY-INSURED PREMIUMS INCREASED BY 4.9% FROM 2016 TO 2017. SMALL GROUP MEMBERS EXPERIENCED THE LARGEST PERCENTAGE INCREASE (+6.9%).

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Premiums are net of MLR rebates for 2015 and 2016; 2017 MLR rebate payments had not been finalized at reporting time. All reported premiums were scaled by the "Percent of Benefits Not Carved Out." Premiums for Unsubsidized and ConnectorCare members are not reported net of APTCs, which would further reduce that market sector's PMPM premiums from the member's perspective. Data for individual purchasers excludes CeltiCare and Minuteman Health which fell below the membership reporting threshold for this data request. Chapter results include BMCHP for the first time this year. Jumbo group does not include GIC members. See [technical appendix](#).

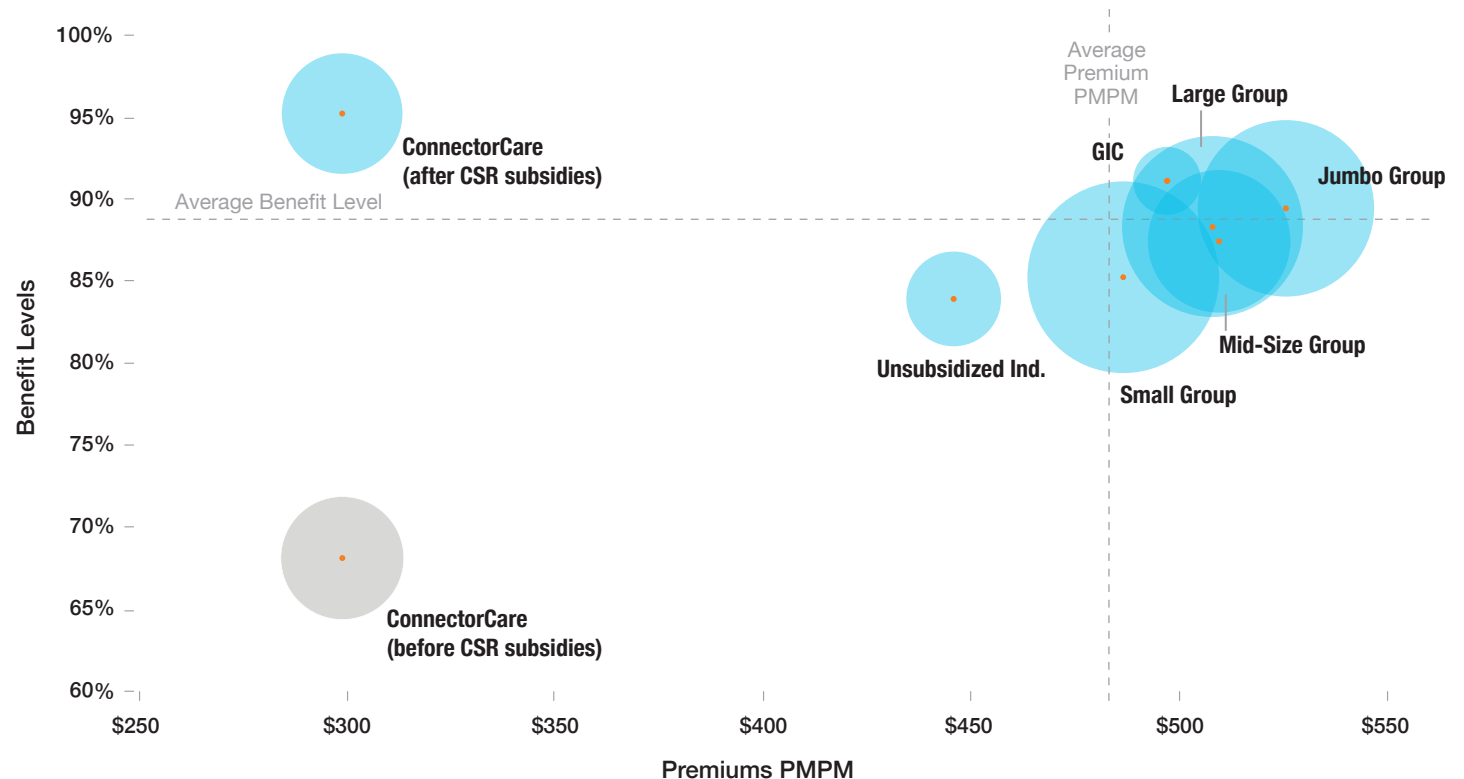
PRIVATE COMMERCIAL COVERAGE COSTS

In addition to considering provider networks, insurance purchasers compare and balance plan premiums with potential out-of-pocket costs.

Benefit levels (measured as the percentage of total medical claims covered by the health plan) varied across market sectors in 2017, with larger group sizes paying higher premiums in exchange for having more costs covered by the plan. These calculated benefit levels do not reflect other factors that may also influence premiums, such as network size and efficiencies of scale.

The ConnectorCare model, which is available to low- and middle-income Massachusetts residents, applies CSR subsidies to select unsubsidized individual plans from the “silver” benefit tier (actuarial value of 70% ±2%). In 2017, these subsidies effectively raised ConnectorCare members’ experienced benefit levels from 68% to 95%. ConnectorCare members also received premium subsidies and tax credits, lowering their individual member contributions below the averages reported here.

Fully-Insured Premiums vs. Benefit Levels, 2017



BENEFIT LEVELS WERE ASSOCIATED WITH PREMIUM COSTS ACROSS MARKET SECTORS. COST-SHARING REDUCTION SUBSIDIES INCREASED EFFECTIVE BENEFIT LEVELS FOR CONNECTORCARE MEMBERS.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Premiums were not adjusted to account for 2017 MLR rebate payments, which had not been finalized at reporting time. Benefit levels were calculated as the percentage of total claims that were paid by the payer (i.e., ratio of paid claims to allowed claims). Circles are sized according to the fully-insured membership in each market sector. All reported premiums were scaled by the “Percent of Benefits Not Carved Out.” Premiums for Unsubsidized and ConnectorCare members are not reported net of APTCs, which would further reduce that market sector’s PMPM premiums from the member’s perspective. Data for individual purchasers excludes CeliCare and Minuteman Health which fell below the membership reporting threshold for this data request. Chapter results include BMCHP for the first time this year. Jumbo group does not include GIC members. See [technical appendix](#).

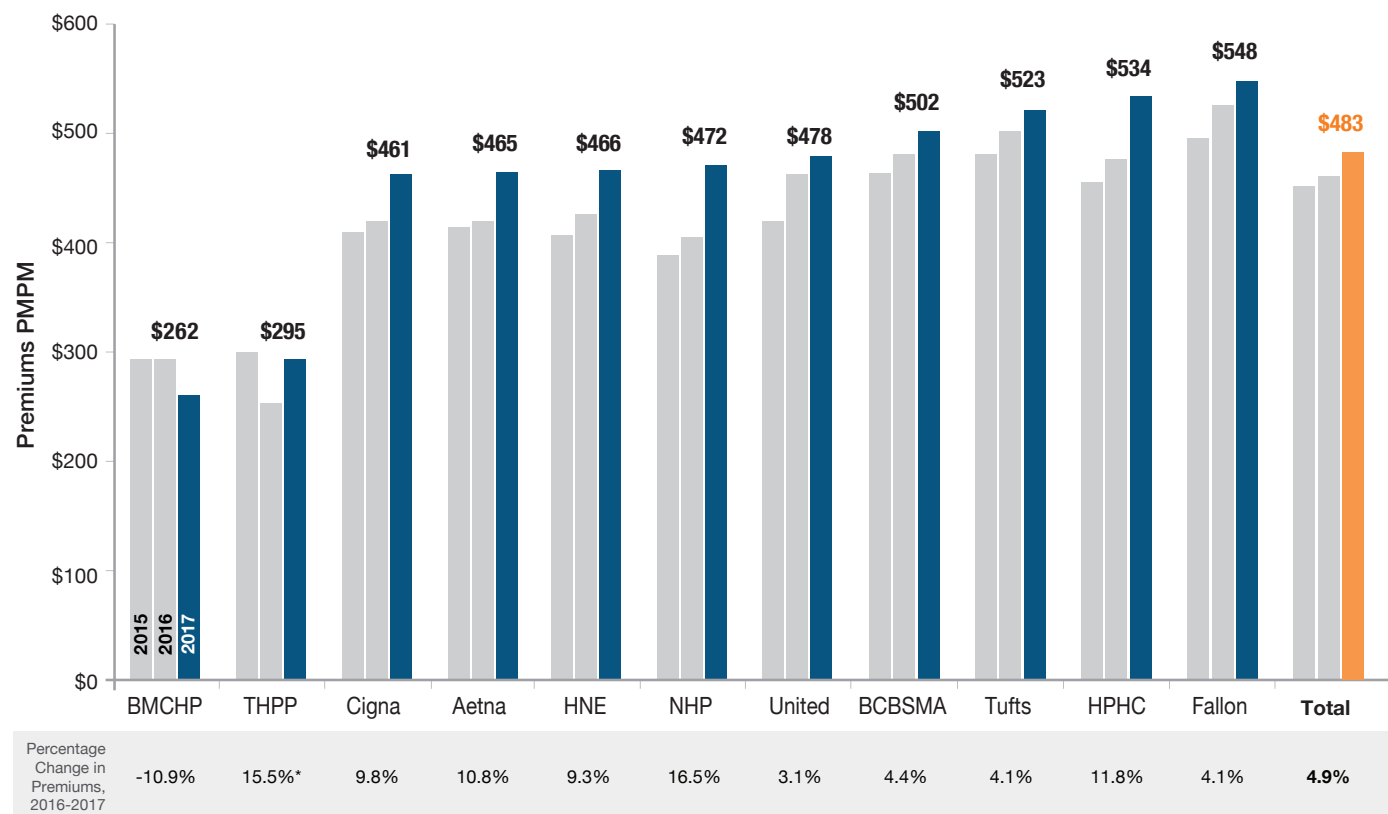
PRIVATE COMMERCIAL COVERAGE COSTS

Fully-insured premiums rose 4.9% from 2016 to 2017 to \$483 PMPM.

While most payers reported overall premium increases, BMCHP was the only payer for which premiums decreased (-10.9%). BMCHP is one of two payers, along with THPP, that specialize in offering lower cost plans primarily to individual purchasers.

Of all payers in Massachusetts, NHP reported the highest year-over-year premium increase in 2017, rising by 16.5% to \$472 PMPM. HPHC premiums also increased significantly to \$534 PMPM (+11.8% since 2016). These premium increases were concentrated in the merged market, where both payers experienced notable enrollment losses.

Fully-Insured Premiums by Payer, 2015-2017



PREMIUM TRENDS VARIED SUBSTANTIALLY BY PAYER FROM 2016 TO 2017, RANGING FROM A 10.9% DECREASE FOR BMCHP MEMBERS TO A 16.5% INCREASE FOR NHP MEMBERS.

*As in 2016, THPP is anticipated to owe its members a large medical loss ratio (MLR) rebate for its 2017 plan year. Therefore, the final 2016 to 2017 premium growth is likely to be lower than the 15.5% increase currently observed in the data.⁵

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Premiums are net of MLR rebates for 2015 and 2016; 2017 MLR rebate payments had not been finalized at reporting time. All reported premiums were scaled by the "Percent of Benefits Not Carved Out." Premiums for Unsubsidized and ConnectorCare members are not reported net of APTCs, which would further reduce that market sector's PMPM premiums from the member's perspective. Data for individual purchasers excludes CeliCare and Minuteman Health which fell below the membership reporting threshold for this data request. Chapter results include BMCHP for the first time this year, and THPP is reported separately from its parent company Tufts. UniCare is not included in graph due to low fully-insured membership but is included in total. See [technical appendix](#).

PRIVATE COMMERCIAL COVERAGE COSTS

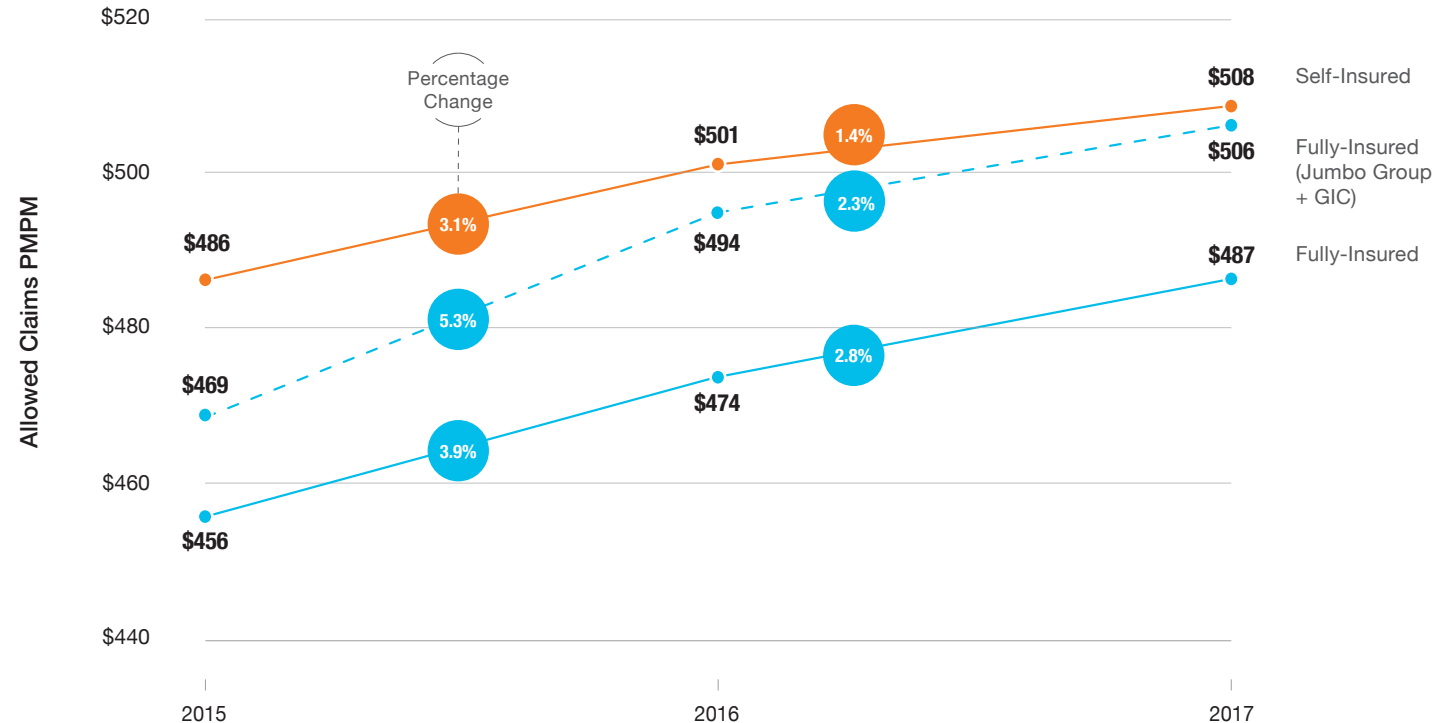
A self-insured employer pays the direct cost of its members' medical claims, as adjudicated and billed by its payer or third-party administrator, rather than monthly premiums. In 2017, self-insured members' medical care (including member cost-sharing) cost \$508 PMPM, a 1.4% increase from the previous year.⁶

The cost for fully-insured members' medical care (\$487 PMPM in 2017) was less than self-insured medical costs but increased at a higher rate (+2.8%) between 2016 and 2017.

Medical claims costs for fully-insured jumbo group (500+ employees) and GIC members—the two market sectors that are predominately self-insured—were about the same (\$506 PMPM) as self-insured member costs in 2017.

Compared to the previous year, medical claims costs grew more slowly from 2016 to 2017 for both fully- and self-insured members. Differences in medical claims spending could reflect differences in benefit design, provider networks, or members' underlying health status, among other factors.

Medical Claims Costs by Funding Type, 2015-2017



MEDICAL COSTS GREW MORE SLOWLY FROM 2016 TO 2017 THAN IN THE PREVIOUS YEAR. MEDICAL COSTS FOR SELF-INSURED MEMBERS REMAINED HIGHER THAN FULLY-INSURED MEDICAL COSTS.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. All reported claims amounts were scaled by the "Percent of Benefits Not Carved Out." United claims cost data was excluded due to data quality concerns. Chapter results include BMCHP for the first time this year. See [technical appendix](#).

PRIVATE COMMERCIAL COVERAGE COSTS NOTES

- 1 Chapter results based on commercial contract member data provided by Aetna, Blue Cross Blue Shield of Massachusetts (BCBSMA), Boston Medical Center HealthNet Plan (BMCHP), Cigna, Fallon Health, Harvard Pilgrim Health Care (HPHC—including Health Plans, Inc.), Health New England (HNE), Neighborhood Health Plan (NHP), Tufts Health Plan (Tufts), Tufts Health Public Plans (THPP), UniCare, and United Healthcare. Payers with fewer than 50,000 Massachusetts primary, medical enrollees were not required to submit data. 2018 was the first year that BMCHP was required to submit data for this portion of CHIA's *Annual Report*.
- 2 Center for Health Information and Analysis, *Massachusetts Employer Survey: 2016 Summary of Results* (Boston, March 2017), <http://www.chiamass.gov/massachusetts-employer-survey/>.
- 3 Center for Health Information and Analysis, *Massachusetts Employer Survey: 2016 Summary of Results* (Boston, March 2017), <http://www.chiamass.gov/massachusetts-employer-survey/>.
- 4 Between 2016 and 2017, NHP's average premiums increased 23.7% to \$436 PMPM for ConnectorCare members and 15.8% to \$459 PMPM for unsubsidized individual purchasers. HPHC's average unsubsidized individual premium increased 42.3% to \$598 PMPM over the same period. See *A Closer Look* on [page 87](#) for more information.
- 5 Based on its 2016 MLR, THPP issued its members \$40 million in rebate payments, lowering reported 2016 premiums by \$33 PMPM. Anticipated 2017 rebate amounts are based on THPP's Supplemental Health Care Exhibit filing, where THPP estimated that it would ultimately owe \$33 million in rebates for 2017. This estimated rebate payment would lower reported 2017 premiums by approximately \$21 PMPM, resulting in an annual premium increase of 7.1%.
- 6 In previous years, CHIA reported premium-equivalents for self-insured members. This metric combined the portion of medical costs which employers are responsible for paying (i.e., incurred claims) and the administrative service fees that payers received from self-insured employers. Since 2016, payer submission of administrative service fees for self-insured accounts has been optional. CHIA did not receive enough administrative service fee data in 2018 to calculate a marketwide premium-equivalent figure.

MEMBER COST-SHARING

KEY FINDINGS

MEMBER COST-SHARING

Between 2016 and 2017, private commercial member cost-sharing increased by 5.7% to \$52 PMPM—an acceleration from the previous year’s growth rate of 4.3%.

Member cost-sharing continued to be higher among smaller employer groups, while subsidies helped minimize cost-sharing burdens for ConnectorCare members.

Members enrolled in high deductible health plans paid \$81 PMPM in cost-sharing in 2017, over twice what members of lower deductible plans paid.

In 2017, 8.8% of Massachusetts survey respondents were underinsured, spending 10%+ of their family income on out-of-pocket health care expenses despite having insurance.

MEMBER COST-SHARING

CHIA collects and analyzes data on Massachusetts member cost-sharing. Payers submit financial data by market sector, product type (HMO, PPO, POS), funding type, and benefit design type (HDHP, tiered network, limited network). This chapter covers the period from 2015 to 2017.¹

Member cost-sharing includes all medical expenses allowed under a member's plan but not paid for by the payer, employer, or CSR subsidies (e.g., deductibles, copays, and co-insurance). Figures in this chapter are inclusive of members who incurred little to no medical costs as well as those who may have experienced substantial medical costs. It does not include out-of-pocket payments for goods and services not covered by the members' health insurance policies (e.g., over-the-counter medicines, vision, and dental care). Member

cost-sharing also does not account for employer offsets, such as health reimbursement arrangements or health savings accounts.

This chapter also includes findings from CHIA's 2017 *Massachusetts Health Insurance Survey* (MHIS) which reflect the impacts of medical costs on Massachusetts households with all forms of insurance coverage (including private commercial, MassHealth, and Medicare) as well as the uninsured.

Chapter results do not include average cost-sharing amounts for student health plans offered by colleges and universities. The [dataset](#) contains more information on this population as well as expanded enrollment and financial data for the full private commercial market. ●

For additional insight into health care affordability, see CHIA's [Findings from the 2017 Massachusetts Health Insurance Survey](#).

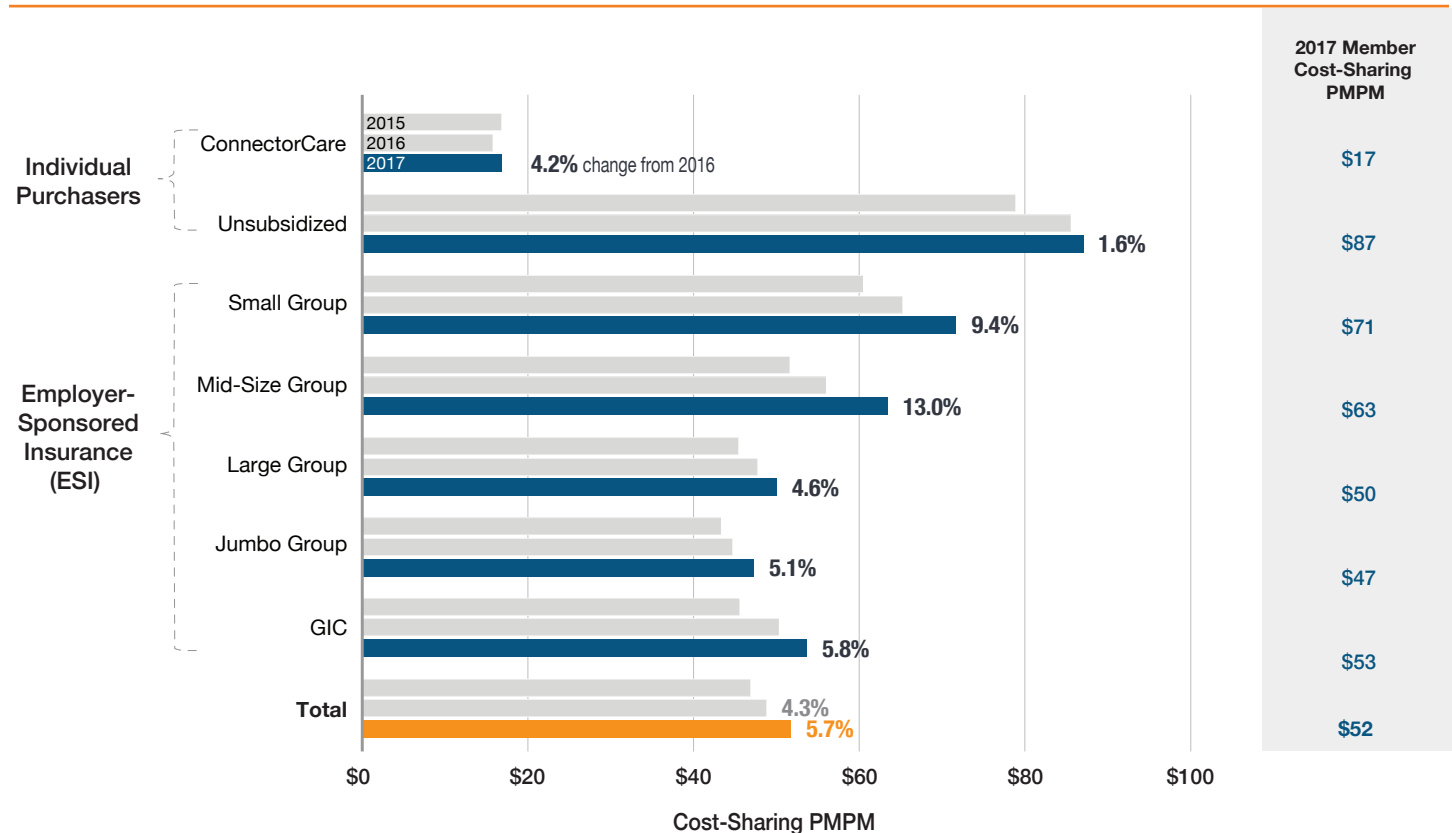
MEMBER COST-SHARING

Massachusetts member cost-sharing growth continued to outpace premium increases in 2017, rising 5.7% to \$52 PMPM.

As with HDHP prevalence, cost-sharing obligations varied by market sector, with members covered by smaller employers paying more, on average, than those covered by larger employers. Unsubsidized individual purchasers paid the most in member cost-sharing in 2017 (\$87 PMPM), followed by small (\$71 PMPM) and mid-size (\$63 PMPM) group members. Small and mid-size group members also experienced higher year-over-year cost-sharing increases (+9.4% and +13.0%, respectively) compared to larger employer groups.

ConnectorCare members benefited from substantially reduced cost-sharing of just \$17 PMPM in 2017. These low- and middle-income Massachusetts residents received state and federal CSR subsidies to reduce out-of-pocket expenses. For more on the impact of CSR subsidies, see *A Closer Look: Individual Purchasers*.

Cost-Sharing by Market Sector, 2015-2017



MEMBER COST-SHARING CONTINUED TO BE HIGHER AMONG SMALLER EMPLOYER GROUPS IN 2017. SUBSIDIES HELPED MINIMIZE COST-SHARING BURDENS FOR CONNECTORCARE PLAN MEMBERS.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. All reported cost-sharing amounts were scaled by the "Percent of Benefits Not Carved Out." United financial data and Fallon ConnectorCare cost-sharing data were excluded due to data quality concerns. Data for individual purchasers excludes CeltiCare and Minuteman Health which fell below the membership reporting threshold for this data request. Chapter results include BMCHP for the first time this year. Jumbo group does not include GIC members. See [technical appendix](#).

MEMBER COST-SHARING

Member cost-sharing for Massachusetts private commercial health insurance increased by 5.7% between 2016 and 2017, an acceleration from the previous year's growth rate of 4.3%. On average, members paid \$52 PMPM in cost-sharing in 2017.

Fully-insured members paid more in cost-sharing (\$57 PMPM in 2017) and experienced faster cost increases (+7.6% since 2016) than did members of self-insured plans, who paid \$47 PMPM (+4.2% since 2016). In part, these differences are likely to reflect cost-sharing trends for the different market sectors that utilized each funding strategy.²

Between 2016 and 2017, Massachusetts member cost-sharing grew faster than regional inflation (+2.5%) and national wages and salaries (+2.5%).³

Cost-Sharing by Funding Type, 2015-2017



MEMBER COST-SHARING TRENDS ACCELERATED IN 2017. AVERAGE COST-SHARING INCREASED BY 5.7% SINCE 2016, SUBSTANTIALLY FASTER THAN INFLATION AND AVERAGE WAGE GROWTH.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. All reported cost-sharing amounts were scaled by the "Percent of Benefits Not Carved Out." United financial data was excluded due to data quality concerns. Chapter results include BMCHP for the first time this year. See [technical appendix](#).

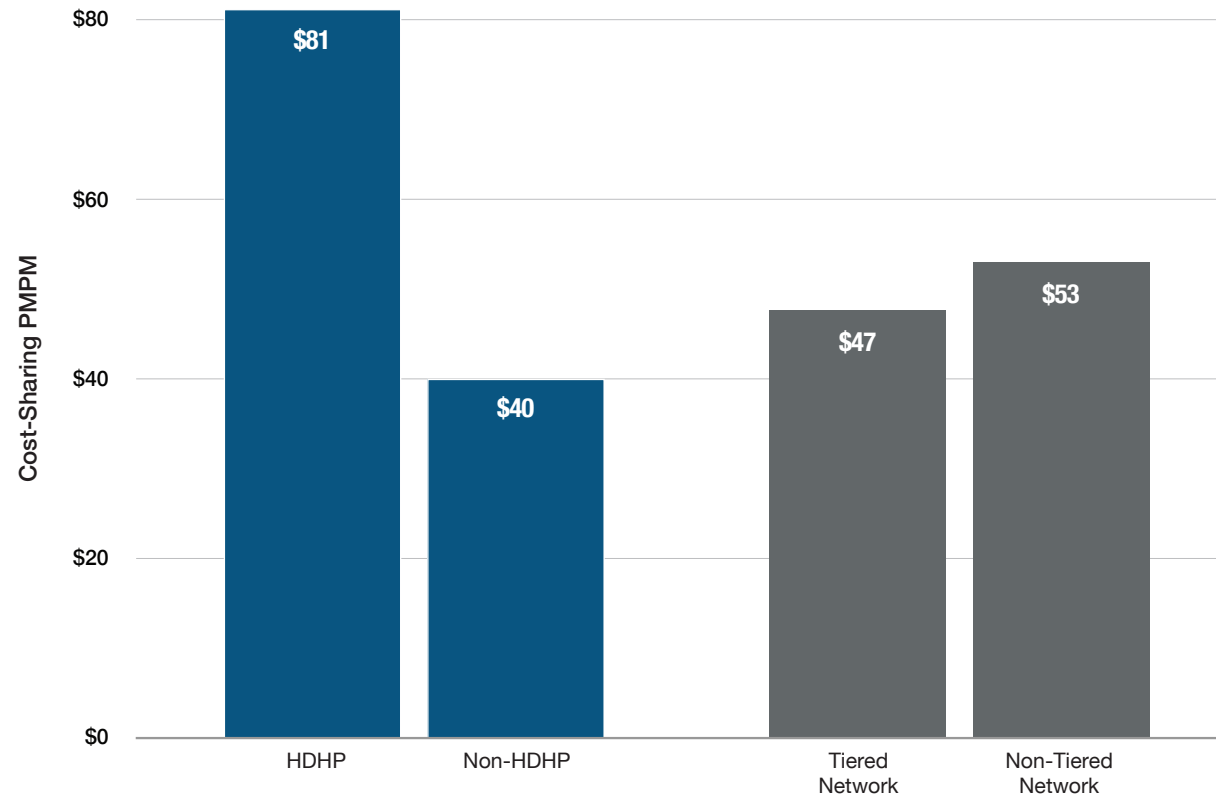
MEMBER COST-SHARING

HDHPs and tiered networks represent two different strategies to control health insurance costs.

HDHPs are designed to incentivize members to reduce unnecessary and low-value care through higher levels of cost-sharing, although recent studies have shown that HDHP members may reduce all care, including high-value preventive care.⁴ In 2017, HDHP members paid \$81 PMPM in cost-sharing, over twice what members enrolled in lower deductible plans paid (\$40 PMPM).

Tiered network plans encourage members to seek high-value care by varying copays/coinsurance according to provider cost and/or quality metrics. On average, tiered network members paid 10.3% less in cost-sharing than members of non-tiered network plans paid in 2017. This outcome could reflect attempts by tiered network plan members to obtain care from providers in lower cost-sharing tiers.

Cost-Sharing by Benefit Design Type, 2017



IN 2017, MEMBERS ENROLLED IN HIGH DEDUCTIBLE HEALTH PLANS PAID \$81 PMPM IN COST-SHARING, OVER TWICE WHAT MEMBERS OF LOWER DEDUCTIBLE PLANS PAID.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Limited network cost-sharing data, which is not shown here due to low plan enrollment, is available in the [dataset](#). All reported cost-sharing amounts were scaled by the "Percent of Benefits Not Carved Out." United financial data was excluded due to data quality concerns. Chapter results include BMCHP for the first time this year. See [technical appendix](#).

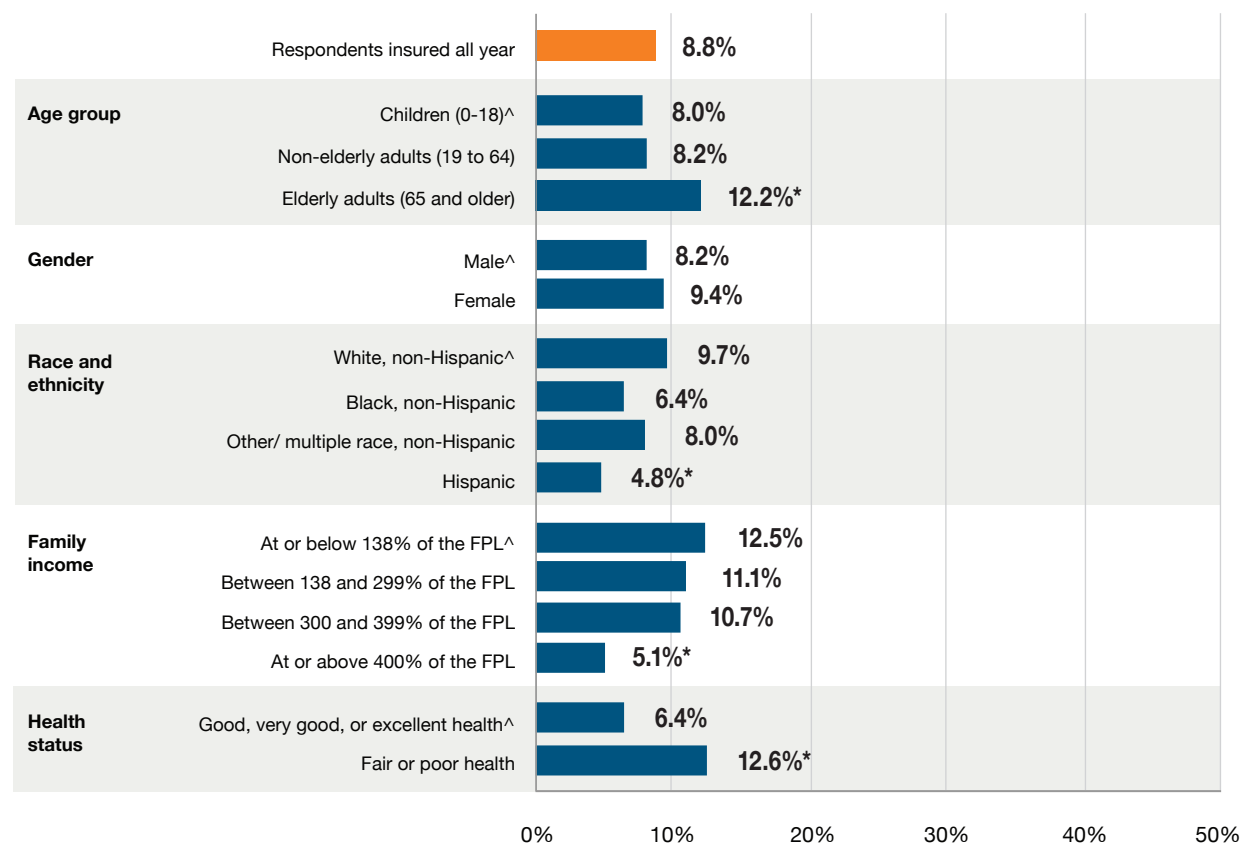
MEMBER COST-SHARING

While Massachusetts continues to lead the nation in insurance coverage, with 96.3% of survey respondents insured in 2017,⁵ findings from CHIA's *Massachusetts Health Insurance Survey* suggest that affordability challenges remain.

“Underinsurance” estimates the number and share of insured persons who are exposed to high health costs relative to their incomes, spending 10% or more of family income on out-of-pocket health care expenses. In 2017, nearly one in 10 (8.8%) Massachusetts respondents were underinsured.

Low-income respondents were more likely than high-income respondents to be underinsured. Additionally, over one in eight respondents in fair or poor health or with an activity limitation were underinsured, as were nearly one in eight elderly respondents, likely reflecting in part their higher use of the health care system.

Underinsurance by Individual Characteristics, 2017



IN 2017, 8.8% OF RESPONDENTS WERE UNDERINSURED, SPENDING 10% OR MORE OF THEIR FAMILY INCOME ON COST-SHARING EXPENSES, DESPITE HAVING HEALTH INSURANCE COVERAGE FOR THE PAST 12 MONTHS.

[^]Reference group

*Difference from estimate for reference group is statistically significant at the 5% level.

Source: 2017 Massachusetts Health Insurance Survey.

Notes: CHIA's MHIS is a population-based survey that includes members with commercial, MassHealth, and Medicare insurance coverage, as well as those without insurance coverage.

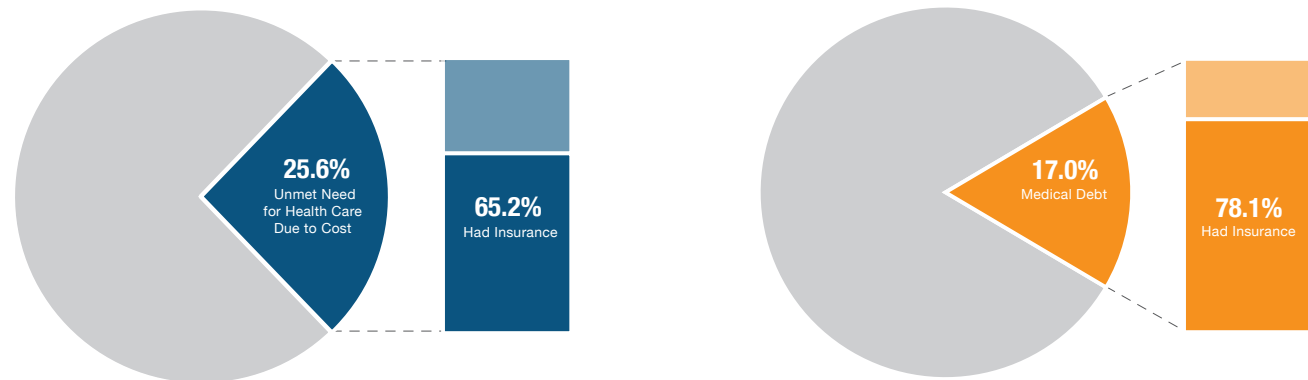
MEMBER COST-SHARING

In 2017, 25.6% of Massachusetts survey respondents reported having gone without needed medical or dental care due to cost; two-thirds (65.2%) of these had health insurance at the time they needed care. For such respondents, the most common reasons for going without care were that the care was not covered under their health plan (49.6%) or the copayment was too high (36.7%).

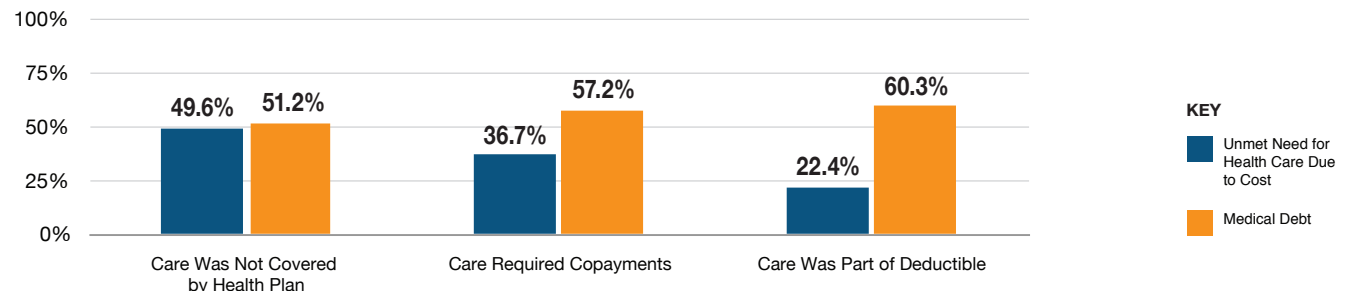
Among the 17.0% of survey respondents who reported carrying medical debt in 2017, 78.1% had insurance coverage when all the bills were incurred. The most common reason for incurring medical debt was care that had to be paid under the member's deductible (60.3% of respondents). Respondents also reported incurring medical debt due to copayments (57.2%) and care that was not covered by their health plan (51.2%).

Unmet Needs Due to Cost and Medical Debt, 2017

Unmet Health Care Needs Due to Cost and Medical Debt by Insurance Status



Reasons for Unmet Needs or Medical Debt Among the Insured



MOST RESPONDENTS WHO WENT WITHOUT NEEDED HEALTH CARE DUE TO COSTS OR INCURRED MEDICAL DEBT WERE COVERED BY HEALTH INSURANCE AT THE TIME.

Source: 2017 Massachusetts Health Insurance Survey.

Notes: CHIA's MHIS is a population-based survey that includes members with commercial, MassHealth, and Medicare insurance coverage, as well as those without insurance coverage. Needed health care included both medical and dental services. Reasons for unmet needs or medical debts are not mutually exclusive categories, as respondents were asked to select all reasons that applied.

MEMBER COST-SHARING

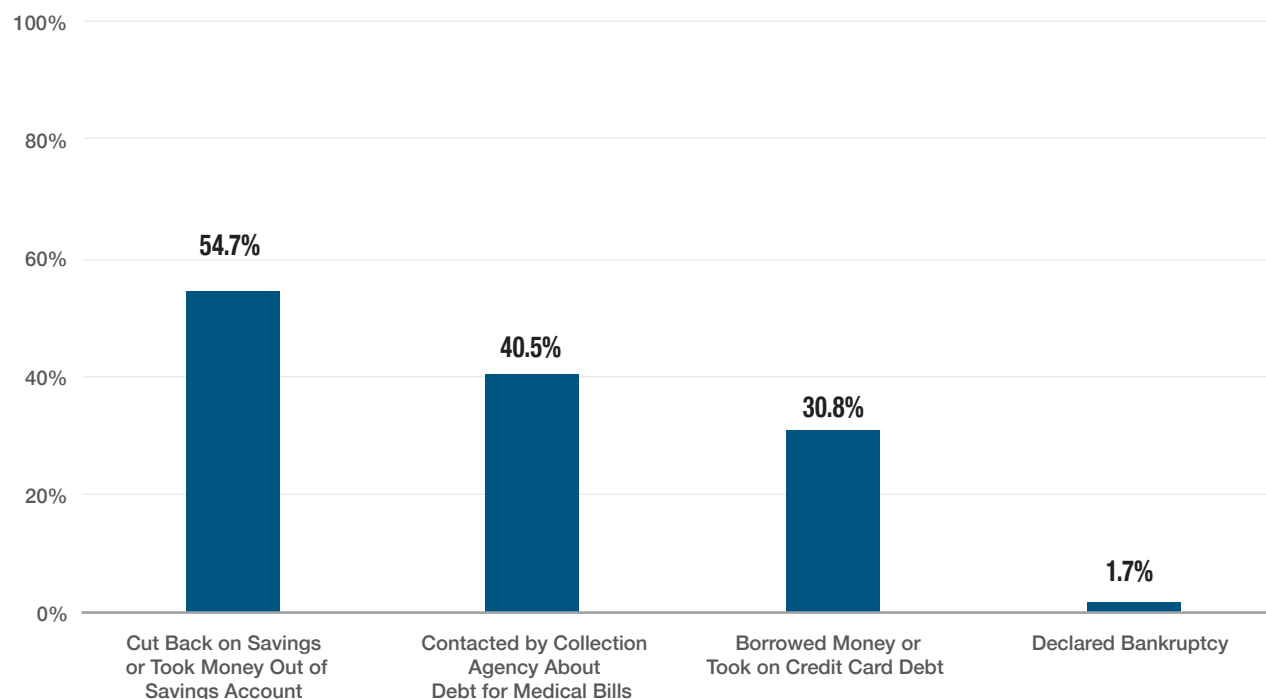
In 2017, 15.8% of Massachusetts respondents reported problems paying family medical bills in the 12 months prior to the survey, and 17.0% reported paying off family medical bills over time (medical debt).

These respondents reported experiencing several serious consequences as a result. For instance, 40.5% of respondents with difficulty paying family medical bills or medical debt reported being contacted by a collection agency, and 1.7% reported declaring bankruptcy.

Respondents tried to mitigate the effects of problems paying family medical bills or medical debt by cutting back on savings or taking money out of a savings account (54.7%) and by borrowing money or taking on credit card debt (30.8%).

Implications of Problems Paying Family Medical Bills and Medical Debt, 2017

Most respondents with problems paying family medical bills or medical debt reported serious consequences as a result.



IN 2017, 40.5% OF RESPONDENTS WITH PROBLEMS PAYING FAMILY MEDICAL BILLS OR MEDICAL DEBT WERE CONTACTED BY A COLLECTION AGENCY ABOUT THEIR MEDICAL BILLS.

Source: 2017 Massachusetts Health Insurance Survey.

Notes: CHIA's MHIS is a population-based survey that includes members with commercial, MassHealth, and Medicare insurance coverage, as well as those without insurance coverage. Estimates add to more than 100% because respondents could choose multiple categories.

MEMBER COST-SHARING NOTES

- 1 Chapter results based on commercial contract member data provided by Aetna, Blue Cross Blue Shield of Massachusetts (BCBSMA), Boston Medical Center HealthNet Plan (BMCHP), Cigna, Fallon Health, Harvard Pilgrim Health Care (HPHC—including Health Plans, Inc.), Health New England (HNE), Neighborhood Health Plan (NHP), Tufts Health Plan (Tufts), Tufts Health Public Plans (THPP), and UniCare. Payers with fewer than 50,000 Massachusetts primary, medical enrollees were not required to submit data. 2018 was the first year that BMCHP was required to submit data for this portion of CHIA's *Annual Report*. Data for United Healthcare was excluded due to data quality concerns.
- 2 For instance, the majority of self-insured members were part of the jumbo group market sector, which had a lower HDHP penetration rate than smaller group sizes in 2017.
- 3 Inflation, not seasonally-adjusted: "Consumer Price Index Boston-Cambridge-Newton, MA-NH," *U.S. Bureau of Labor Statistics*, accessed July 25, 2018, https://www.bls.gov/regions/new-england/data/consumerpriceindex_boston_table.htm. Wages, not seasonally adjusted: "Wages and salaries for All Civilian workers in All industries and occupations, Index," *U.S. Bureau of Labor Statistics*, accessed August 16, 2018, <https://beta.bls.gov/dataViewer/view/timeseries/CIU102000000000001>.
- 4 Brot-Goldberg, Zarek, et al. "What Does a Deductible Do? The Impact of Cost-Sharing on Health Care Prices, Quantities, and Spending Dynamics." NBER Working Paper No. 21632, 2015, <http://www.nber.org/papers/w21632>.
- 5 Center for Health Information and Analysis, *Findings from the 2017 Massachusetts Health Insurance Survey* (Boston, December 2017), <http://www.chiamass.gov/assets/docs/r/survey/mhis-2017/2017-MHIS-Report.pdf>.

A CLOSER LOOK: INDIVIDUAL PURCHASERS

Massachusetts residents who do not enroll in health insurance through either an employer or government-funded programs can enroll in individual plans via the Massachusetts Health Connector, through a broker, or directly from a payer. Individual purchasers represent a relatively small but growing proportion of total private commercial insurance, and this market sector has experienced significant changes in the past decade.

Individuals with household incomes less than or equal to 300% of the Federal Poverty Level (FPL) may qualify for ConnectorCare plans with state and federal CSR subsidies, state premium subsidies, and federal advance premium tax credits (APTCs).¹ Within this report, non-ConnectorCare individual plans are referred to as “unsubsidized”; however, some individuals purchasing these plans may also receive APTCs to lower their monthly premium contributions.²

While ConnectorCare and unsubsidized individual purchasers share a rating pool and many other coverage requirements (along with small group members, they comprise the Massachusetts merged market), these populations are distinct in their market trends.

This section continues the analysis of data presented in the preceding three chapters. Findings are based on enrollment, premiums, and claims data submitted by payers for 2015 through 2017.³

Several recent federal policy changes have addressed plans sold to individual purchasers. In October 2017, federal CSR subsidy payments to payers were discontinued,⁴ although payers were still mandated to provide reduced cost-sharing to qualifying members. In Massachusetts, payers were permitted to compensate for the lost subsidy payments in

2018 by raising silver-tier plan premiums (a practice known as “silver-loading”).⁵ The federal government also recently loosened restrictions on association health plans and increased the maximum policy duration of short-term limited duration plans, which do not need to meet ACA coverage and rating standards, starting in 2018 and 2019.^{6,7}

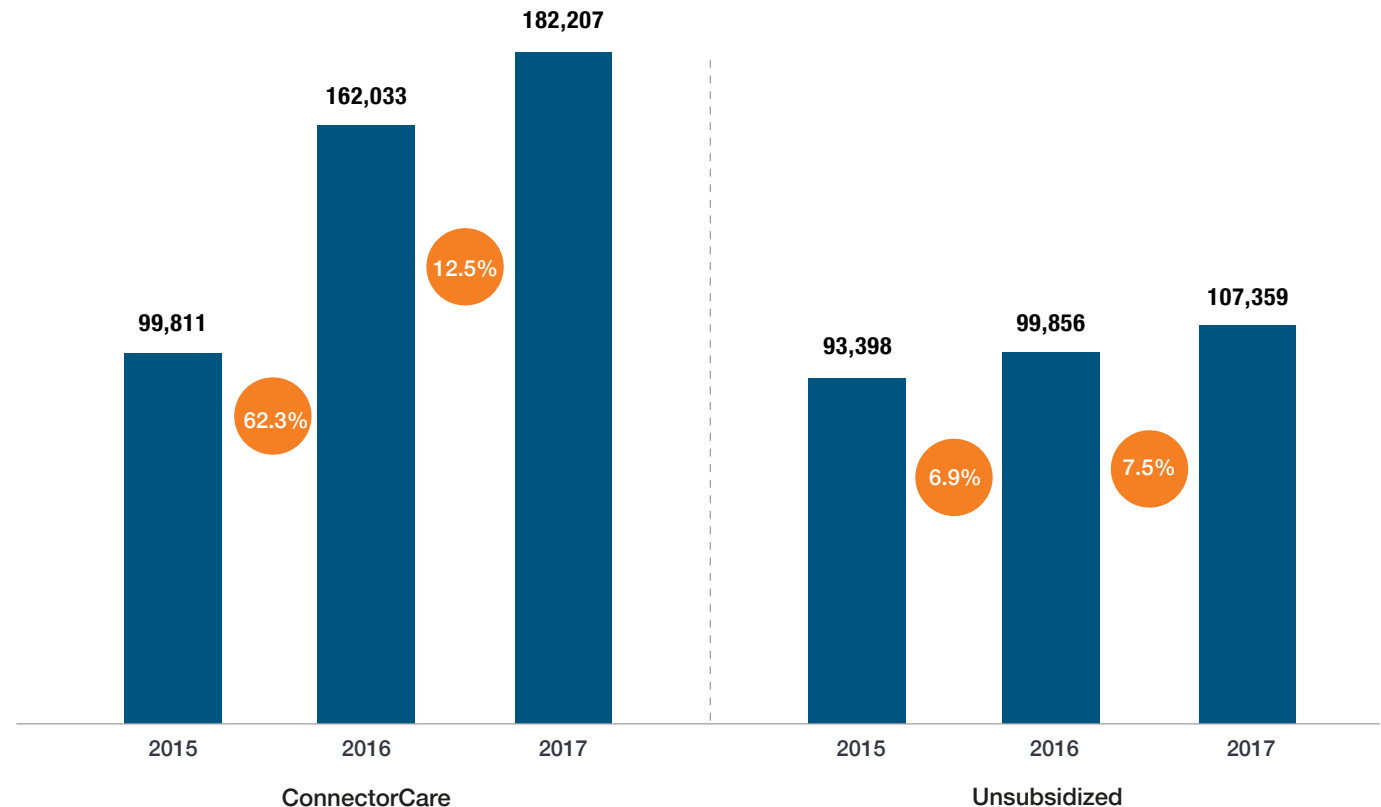
State officials and regulatory agencies are closely monitoring these policy changes, and Massachusetts maintains a state-level individual mandate that requires Massachusetts residents to maintain comprehensive coverage or pay a penalty.⁸ •

A CLOSER LOOK: INDIVIDUAL PURCHASERS

From 2016 to 2017, overall individual purchaser enrollment increased by 10.6%, growing to nearly 290,000 members in 2017. Sixty-three percent of these individuals qualified for and enrolled in subsidized ConnectorCare plans with reduced cost-sharing, while the remainder enrolled in unsubsidized coverage.

Since the program was implemented in 2014, ConnectorCare enrollment has consistently outpaced growth in the more established unsubsidized individual sector, although ConnectorCare growth moderated from 2016 to 2017. During this one-year period, ConnectorCare enrollment grew 12.5% to over 182,000 members, while unsubsidized individual membership continued its steady growth (7.5%) to approximately 107,000 members.

Individual Purchaser Enrollment, 2015-2017



CONNECTORCARE ENROLLMENT INCREASED BY 12.5% FROM 2016 TO 2017—SLOWER THAN THE PREVIOUS YEAR'S TREND BUT STILL OUTPACING UNSUBSIDIZED INDIVIDUAL ENROLLMENT GROWTH.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Data for individual purchasers excludes CeliCare and Minuteman Health which fell below the membership reporting threshold for this data request. According to CHIA's August 2018 *Enrollment Trends*, average ConnectorCare enrollment in 2017, including CeliCare and Minuteman, was approximately 186,000 members. Chapter results include BMCHP for the first time this year. See [technical appendix](#).

A CLOSER LOOK: INDIVIDUAL PURCHASERS

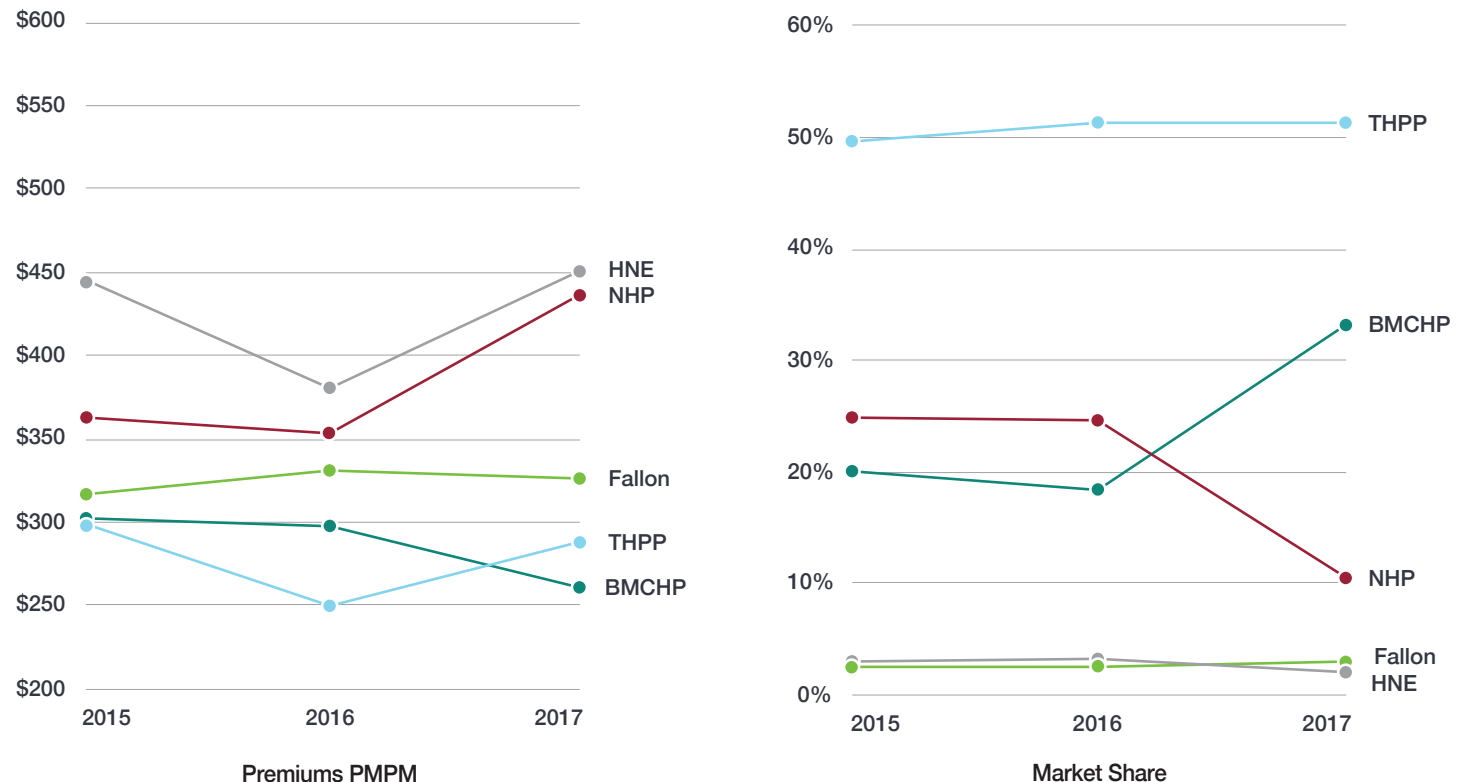
While ConnectorCare plans share a consistent benefit structure, members consider other factors such as monthly premiums, geographic availability, and provider networks when selecting a plan.

NHP enrolled one-fourth of ConnectorCare members in 2015 and 2016, but its market share fell by 14.3 percentage points in 2017 as its average premiums rose 23.7%. Members may have migrated to BMCHP, which offered the lowest average premium in 2017 and gained 14.9 percentage points in market share that year.

These trends increased payer consolidation in this segment of the market. BMCHP and THPP together enrolled 84.6% of ConnectorCare members in 2017.⁹

Reported premiums include member contributions and any federal tax credits and/or state premium subsidies received by payers on members' behalf; ConnectorCare members' contributions were substantially lower than the full premium amounts shown here.

ConnectorCare Premiums and Market Share, 2015-2017



BMCHP AND THPP, WHICH OFFERED THE LOWEST AVERAGE PREMIUMS, ENROLLED 84.6% OF CONNECTORCARE MEMBERS IN 2017.

Source: Payer-reported data to CHIA.

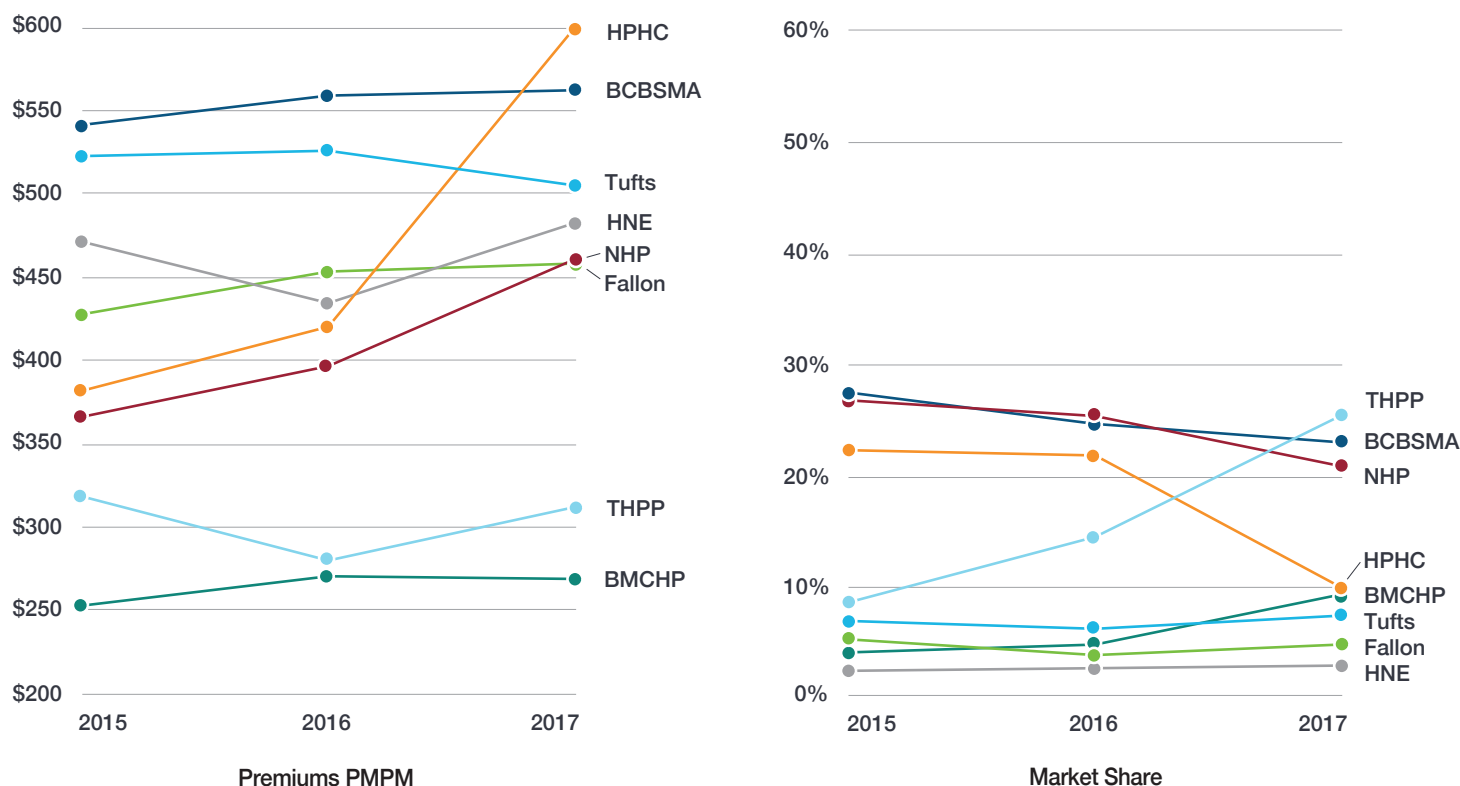
Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Premiums are net of MLR rebates for 2015 and 2016; 2017 MLR rebate payments had not been finalized at reporting time. All reported premiums were scaled by the "Percent of Benefits Not Carved Out." Premiums are also not reported net of APTCs, which would further reduce PMPM premiums from the member's perspective. Data for individual purchasers excludes CeltiCare and Minuteman Health which fell below the membership reporting threshold for this data request. Chapter results include BMCHP for the first time this year, and THPP is reported separately from its parent company Tufts. See [technical appendix](#).

A CLOSER LOOK: INDIVIDUAL PURCHASERS

Compared to ConnectorCare, unsubsidized individual purchasers navigated a broader range of coverage options in 2017. A larger number of payers sold plans to unsubsidized individual purchasers, and no payer held more than one-quarter market share in 2017. At \$598 PMPM, HPHC's average premium was more than twice BMCHP's average premium (\$268 PMPM). These unsubsidized premiums reflect a broad range of benefit levels, as members choose among catastrophic, bronze, silver, gold, and platinum tier plans.

With so many available options, unsubsidized individual purchasers may react to premium increases by seeking out lower cost plans. HPHC lost more than half of its market share in 2017 after raising premiums 42.3% in one year. THPP, which maintained low premiums, enrolled the most unsubsidized members of any payer in 2017, more than tripling its market share since 2015.

Unsubsidized Premiums and Market Share, 2015-2017



AS NHP AND HPHC INCREASED PREMIUMS IN 2017, UNSUBSIDIZED INDIVIDUAL PURCHASERS MIGRATED TO PAYERS OFFERING LOWER COST PLANS.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Premiums are net of MLR rebates for 2015 and 2016; 2017 MLR rebate payments had not been finalized at reporting time. All reported premiums were scaled by the "Percent of Benefits Not Carved Out." Premiums are also not reported net of APTCs, which would further reduce PMPM premiums from the member's perspective. Data for individual purchasers excludes CeltiCare and Minuteman Health which fell below the membership reporting threshold for this data request. Chapter results include BMCHP for the first time this year, and THPP is reported separately from its parent company Tufts. See [technical appendix](#).

A CLOSER LOOK: INDIVIDUAL PURCHASERS

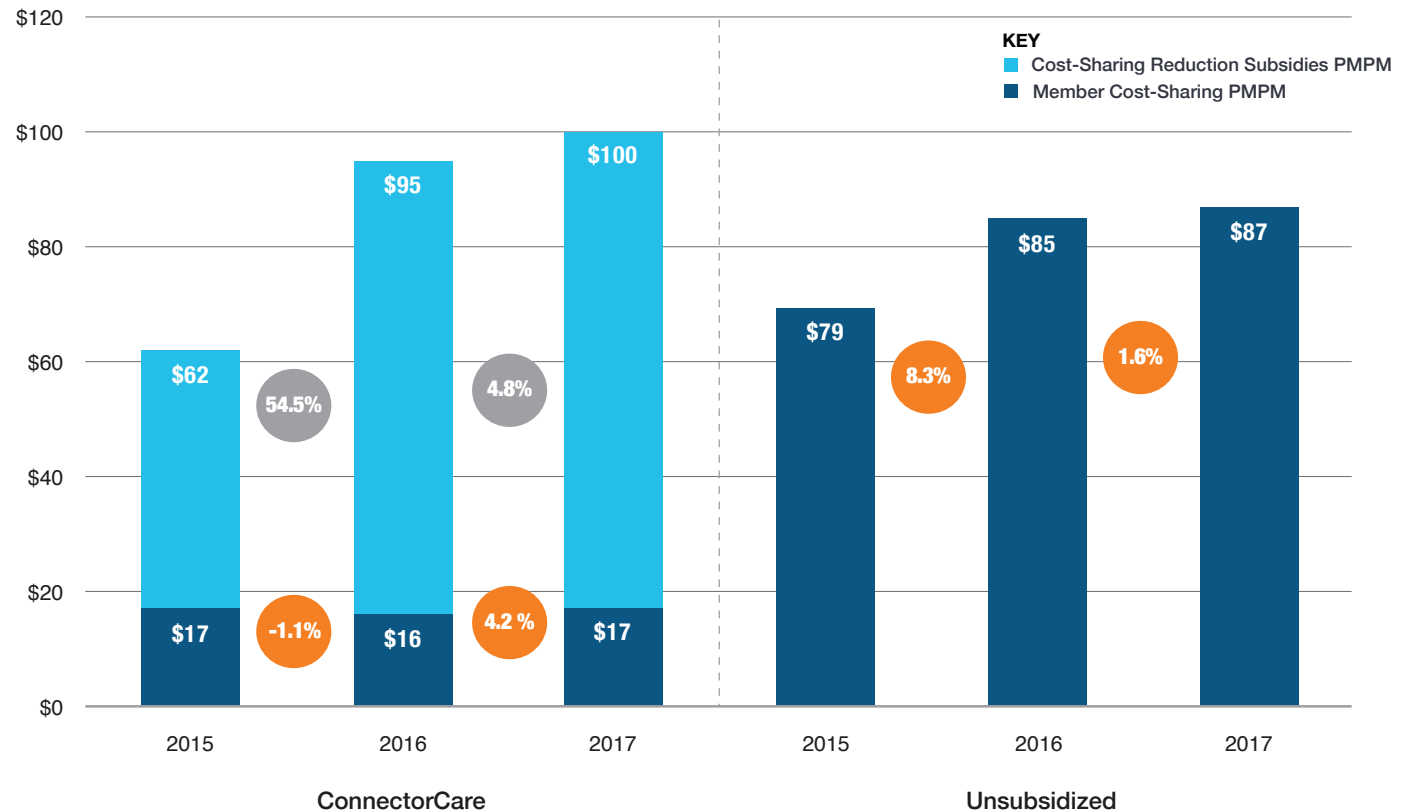
In 2017, ConnectorCare members were responsible for an average of \$17 PMPM in cost-sharing, an increase of less than \$1 from the previous year. The dollar value of CSR subsidy payments (\$100 PMPM in 2017) also stabilized during this period, increasing 4.8% from 2016 to 2017 following a 54.5% increase in the prior year.

Growth in unsubsidized member cost-sharing was similarly modest, increasing 1.6% from 2016 to 2017 to \$87 PMPM.

Individual purchasers experienced notably lower cost-sharing increases than members covered by employer plans. (ESI cost-sharing increased by 6.1% since 2016.)

Trends in individual purchaser premiums and cost-sharing may vary significantly in the years ahead, given the discontinuation of federal CSR subsidy payments.

Individual Purchaser Cost-Sharing, 2015-2017



COST-SHARING INCREASES WERE MODEST FROM 2016 TO 2017 FOR BOTH CONNECTORCARE (\$1 PMPM) AND UNSUBSIDIZED INDIVIDUAL PURCHASERS (LESS THAN \$2 PMPM).

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. All reported cost-sharing amounts were scaled by the "Percent of Benefits Not Carved Out." Fallon ConnectorCare cost-sharing data was excluded due to data quality concerns. Data for individual purchasers excludes CeltiCare and Minuteman Health which fell below the membership reporting threshold for this data request. Chapter results include BMCHP for the first time this year. See [technical appendix](#).

A CLOSER LOOK: INDIVIDUAL PURCHASERS NOTES

- 1 ConnectorCare plans are only available for purchase via the Massachusetts Health Connector.
- 2 Under the Affordable Care Act, APTCs are available to qualifying individuals with household incomes up to 400% FPL.
- 3 Chapter results based on commercial contract member data provided by Blue Cross Blue Shield of Massachusetts (BCBSMA), Boston Medical Center HealthNet Plan (BMCHP), Fallon Health, Harvard Pilgrim Health Care (HPHC), Health New England (HNE), Neighborhood Health Plan (NHP), Tufts Health Plan (Tufts) and Tufts Health Public Plans (THPP). United Healthcare also provided data to CHIA but did not report its individual membership. Payers with fewer than 50,000 Massachusetts primary, medical enrollees were not required to submit data. 2018 was the first year that BMCHP was required to submit data for this portion of CHIA's *Annual Report*.
- 4 "Trump Administration Takes Action to Abide by the Law and Constitution, Discontinue CSR Payments." U.S. Department of Health and Human Services. <https://www.hhs.gov/about/news/2017/10/12/trump-administration-takes-action-abide-law-constitution-discontinue-csr-payments.html>.
- 5 Massachusetts Health Connector, Open Enrollment 2018: Context and Membership Update (Boston, December 2017), https://www.mahealthconnector.org/wp-content/uploads/board_meetings/2017/12-14-2017/Open-Enrollment-Membership-Update-121417.pdf.
- 6 Employee Benefits Security Administration, U.S. Department of Labor, "Definition of "Employer" Under Section 3(5) of ERISA – Association Health Plans, Final Rule" *Federal Register* 83, no. 120 (June 21, 2018): 28912, <https://www.gpo.gov/fdsys/pkg/FR-2018-06-21/pdf/2018-12992.pdf>.
- 7 Internal Revenue Service, U.S. Department of the Treasury, Employee Benefits Security Administration, U.S. Department of Labor, U.S. Department of Health and Human Services, "Short-Term, Limited-Duration Insurance, Final Rule" *Federal Register* 83, no. 150 (August 3, 2018): 38212, <https://www.gpo.gov/fdsys/pkg/FR-2018-08-03/pdf/2018-16568.pdf>.
- 8 "830 CMR 111M.2.1: Health Insurance Individual Mandate; Personal Income Tax Return Requirements" Massachusetts Department of Revenue, <https://www.mass.gov/regulations/830-CMR-111m21-health-insurance-individual-mandate-personal-income-tax-return>.
- 9 Data excludes two smaller payers, Minuteman Health and CeliCare Health, that also enrolled ConnectorCare members during this period.

PRIVATE COMMERCIAL PAYER USE OF FUNDS

KEY FINDINGS

PRIVATE COMMERCIAL PAYER USE OF FUNDS

Approximately 87% of premium dollars collected in 2017 were used to pay for fully-insured members' medical care.

For plans sold to employers with more than 50 employees, payers retained \$68 PMPM from earned premiums in 2017, an \$11 PMPM increase from the previous year.

In the merged market, premium retention grew from \$48 PMPM in 2016 to \$57 PMPM in 2017, even as two temporary ACA premium stabilization programs ended.

PRIVATE COMMERCIAL PAYER USE OF FUNDS

CHIA collects and analyzes data on Massachusetts payers' administrative costs in the private commercial health insurance market as part of its efforts to monitor and appropriately profile overall health plan spending. This chapter covers the period from 2015 to 2017.¹

For fully-insured lines of business, CHIA reports data on “premium retention,” which is the proportion of premium dollars not spent on member medical claims, by market sector (employer size). Payers use retained premium funds to cover administrative expenses, broker commissions, taxes and fees, and any required MLR rebates.

Plans sold to individual purchasers and small groups in the Massachusetts “merged market” are subject to ACA transfer

programs—risk adjustment, reinsurance (through 2016), and risk corridors (through 2016)—that were designed to stabilize premiums and protect against adverse selection during the initial years of the law's implementation. Reported premium retention amounts in the merged market include the impact of these premium stabilization programs.

Chapter results do not include data for student health plans offered by colleges and universities. The [dataset](#) contains more information on this population as well as expanded enrollment and financial data for the full private commercial market. ●

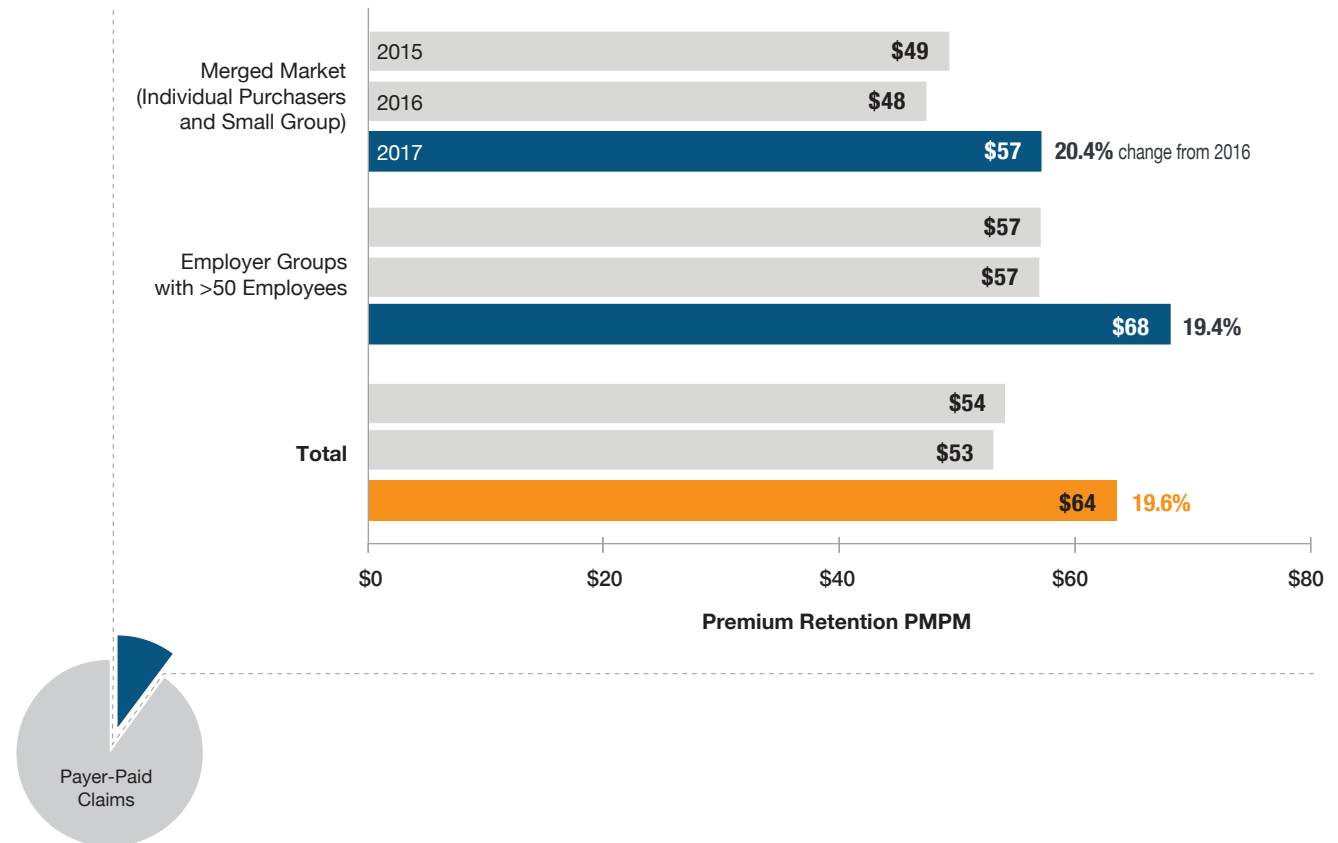
PRIVATE COMMERCIAL PAYER USE OF FUNDS

After paying for fully-insured members' medical costs, payers retained \$64 PMPM from premiums in 2017, a 19.6% increase from 2016. This increase was notable in light of the 1.9% decrease observed in premium retention from 2015 to 2016. Retention grew rapidly in both the merged market (+20.4% from 2016 to 2017) and among larger employer groups (+19.4%).

In 2017, payers retained \$57 PMPM from merged market premiums and \$68 PMPM from plans sold to employers with more than 50 employees. The proportion of premiums used to pay for medical costs (approximately 87%) was similar for both merged market and larger employer plans.²

These results apply to members with insurance policies contracted in Massachusetts; similar growth trends were observed for commercial NCPHI. (For more on NCPHI, see [page 8](#).)

Fully-Insured Premium Retention by Market Segment, 2015-2017



FOLLOWING SLIGHT DECLINES FROM 2015 TO 2016, PREMIUM RETENTION GREW RAPIDLY IN 2017 FOR BOTH MERGED MARKET (+20.4%) AND LARGER EMPLOYER GROUPS (+19.4%).

Source: Payer-reported data to CHIA.

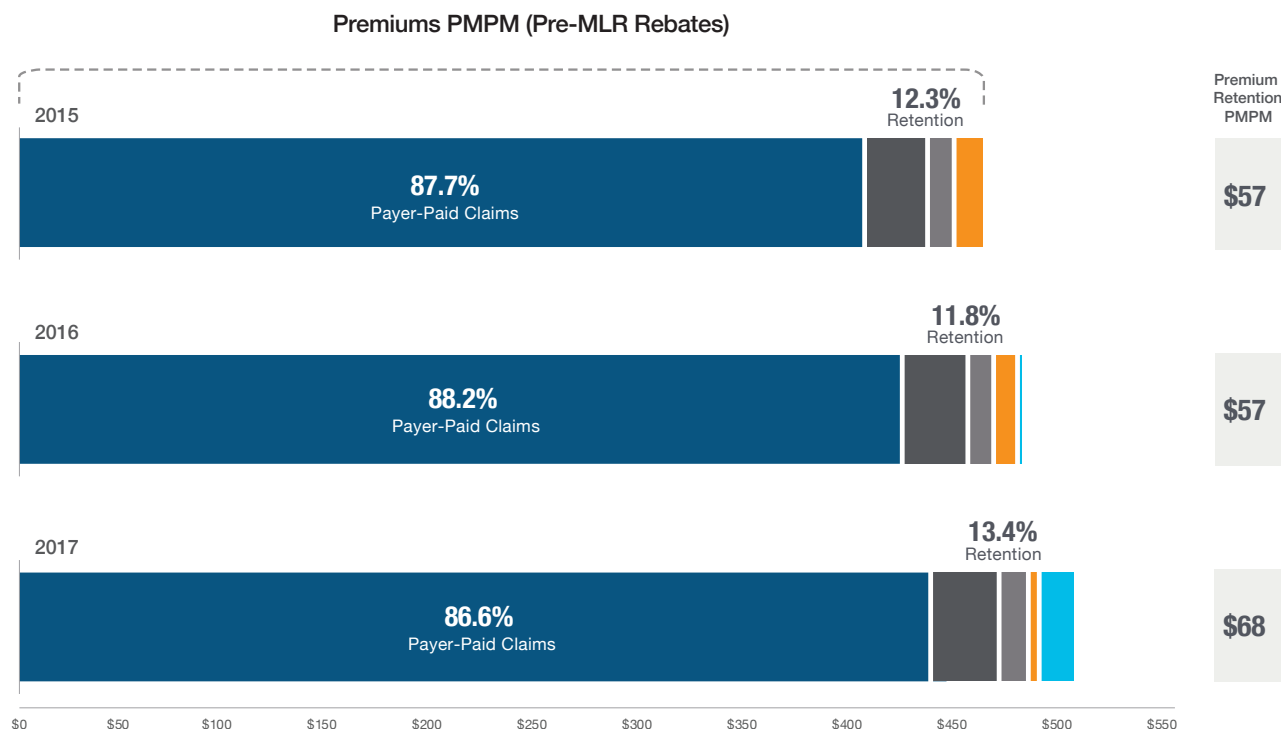
Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Reported premiums have not been adjusted to account for MLR rebates, as those are a component of retention. Reported premiums, claims, and retention amounts have not been scaled by the "Percent of Benefits Not Carved Out." United financial data was excluded due to data quality concerns. See [technical appendix](#).

PRIVATE COMMERCIAL PAYER USE OF FUNDS

In 2017, as in 2016, the vast majority of premium dollars collected (86.6%) were used to pay for members' medical care. Payers used the remainder, which was "retained" (13.4%), to pay for plan administration, broker fees, and premium taxes, among other expenses, with any residual funds representing surplus (profit).

Payers consider expected costs for the year ahead when setting premium levels. From 2016 to 2017, earned premiums rose faster (+5.2%) than payers' medical claims liability (+3.3%) for plans sold outside the individual and small group market. Premium retention increased by \$11 PMPM during this time.

Fully-Insured Payer Use of Premiums (>50 Employees), 2015-2017



Retention components are shown in more detail on the next page.

PREMIUM RETENTION FOR LARGER EMPLOYER PLANS INCREASED BY \$11 PMPM FROM 2016 TO 2017, AS PREMIUM GROWTH (+5.2%) OUTPACED PAYERS' SPENDING ON MEDICAL CLAIMS (+3.3%).

Source: Payer-reported data to CHIA.

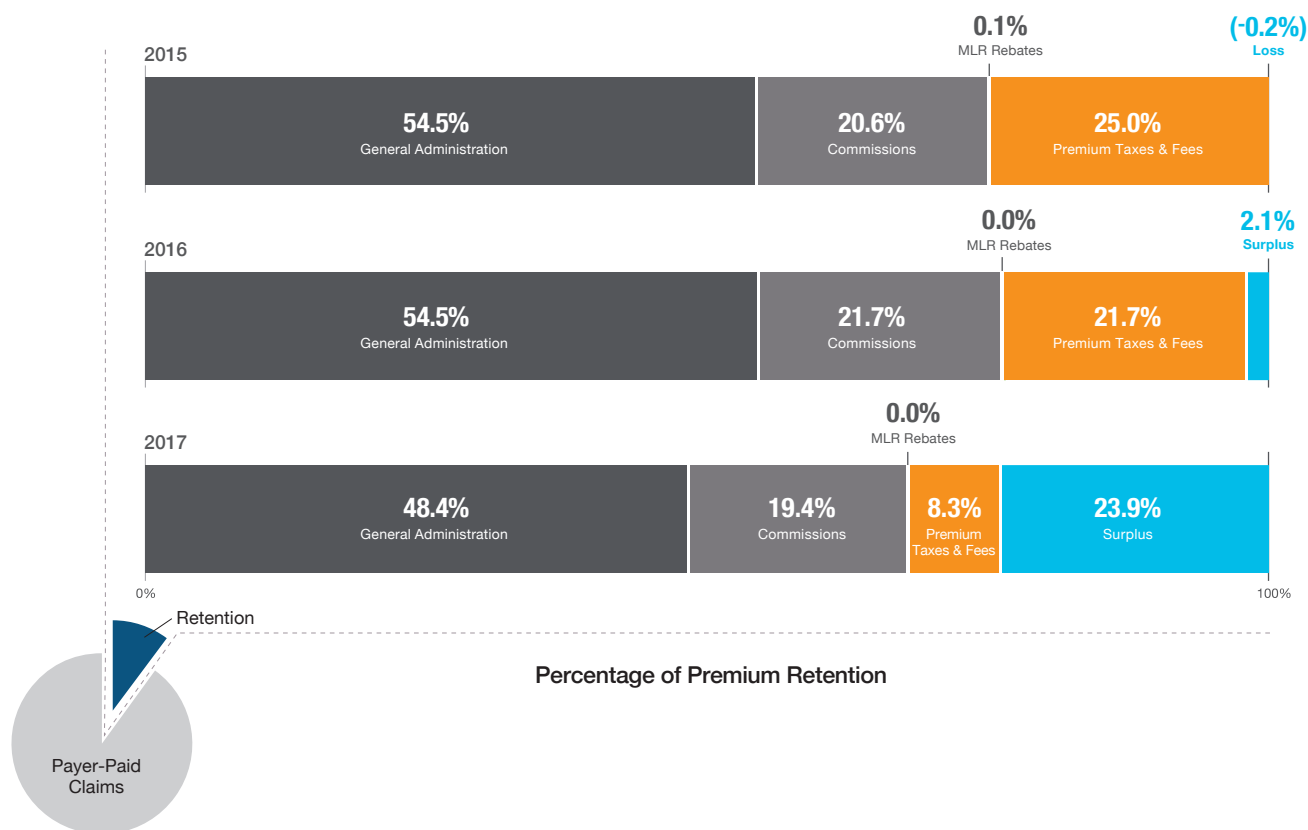
Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Reported premiums have not been adjusted to account for MLR rebates, as those are a component of retention. Reported premiums, claims, and retention amounts have not been scaled by the "Percent of Benefits Not Carved Out." The distribution of retention components in this graph was estimated from SHCE data. United financial data was excluded due to data quality concerns. See [technical appendix](#).

PRIVATE COMMERCIAL PAYER USE OF FUNDS

Among fully-insured plans with more than 50 employees, general administrative expenses—including cost of plan design, claims administration, and customer service—accounted for 48.4% of retained premiums in 2017. While average administrative costs did not vary substantially from 2016 to 2017 (approximately \$29 PMPM in both years), the proportion of retained premiums spent on general administration decreased by six percentage points as total premium retention increased.

Premium taxes and fees decreased from 21.7% of retention in 2016 to 8.3% in 2017, as Congress passed a one-year moratorium on collection of the ACA's health insurance provider fee.³ After accounting for all expenses, payers reported nearly one-quarter (23.9%) of retained premiums as surplus in 2017; this surplus represented 2.8% of earned premiums.⁴ The 2016 to 2017 increase in payer surplus (+\$13 PMPM) was greater than the decrease in taxes and fees (-\$6 PMPM).

Fully-Insured Premium Retention Components (>50 Employees), 2015-2017



AFTER LOSSES IN 2015 AND SLIM MARGINS IN 2016, PAYERS REPORTED 23.9% OF PREMIUM RETENTION—OR 2.8% OF TOTAL PREMIUMS—IN THIS MARKET SEGMENT AS SURPLUS IN 2017. THERE WAS ALSO A ONE-YEAR DECLINE IN TAXES AND FEES.

Source: Supplemental Health Care Exhibit (SHCE) payer-reported data.

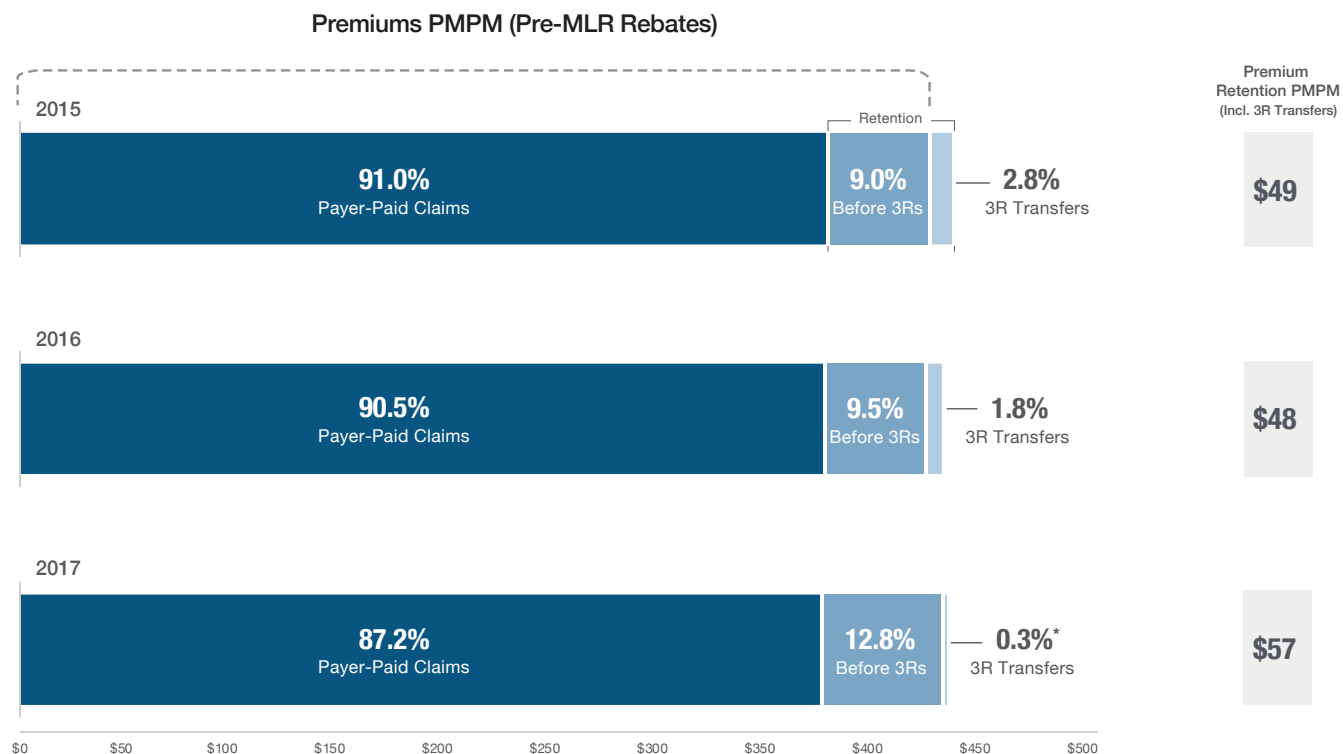
Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Data source differs from premium retention reported elsewhere in chapter. Includes data for United. See [technical appendix](#).

PRIVATE COMMERCIAL PAYER USE OF FUNDS

The ACA established three programs known informally as the “3Rs”—risk adjustment, reinsurance (individual plans only), and risk corridors—that were designed to stabilize premiums and protect against adverse member selection during the initial years of the law’s implementation. Of these three, only risk adjustment was intended as a permanent program; reinsurance and risk corridors were implemented for three years through 2016.

Within the merged market, the percentage of premiums that payers spent on members’ medical claims declined each year from 2015 (91.0% of premiums) to 2017 (87.2%). By 2017, payers retained a similar proportion of premiums for merged market plans (13.1%, including 3R payments) as was retained for larger employer plans (13.4%). This stabilization, which occurred even as the temporary reinsurance and risk corridor transfer programs ended, may signal improving financial viability of merged market plans.

Fully-Insured Payer Use of Premiums (Merged Market), 2015-2017



MERGED MARKET PREMIUM RETENTION INCREASED BY MORE THAN \$9 PMPM IN 2017, EVEN AS TWO TEMPORARY ACA PREMIUM STABILIZATION PROGRAMS ENDED.

*2017 “3R Transfers” include only risk adjustment. As a revenue neutral program, risk adjustment transfer amounts should sum to zero dollars across the total merged market. However, two payers who owed money to the risk adjustment fund (CeltiCare and Minuteman) fell below CHIA’s reporting threshold and are not included in this chapter.

Source: Payer-reported data to CHIA, CMS.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Reported premiums have not been adjusted to account for MLR rebates, as those are a component of retention. Reported premiums, claims, and retention amounts have not been scaled by the “Percent of Benefits Not Carved Out.” All percentages expressed as portion of earned premiums (pre-MLR rebates). Percentages total to greater than 100% due to additional 3R revenue. Due to the timing of SHCE data submissions, more detailed analysis of premium retention components was unavailable for merged market plans. United financial data was excluded due to data quality concerns. See [technical appendix](#).

PRIVATE COMMERCIAL PAYER USE OF FUNDS NOTES

- 1** Chapter results based on commercial contract member data provided by Aetna, Blue Cross Blue Shield of Massachusetts (BCBSMA), Boston Medical Center HealthNet Plan (BMCHP), Cigna, Fallon Health, Harvard Pilgrim Health Care (HPHC—including Health Plans, Inc.), Health New England (HNE), Neighborhood Health Plan (NHP), Tufts Health Plan (Tufts), Tufts Health Public Plans (THPP), UniCare, and United Healthcare. Payers with fewer than 50,000 Massachusetts primary, medical enrollees were not required to submit data. 2018 was the first year that BMCHP was required to submit data for this portion of CHIA's *Annual Report*.
- 2** Earned premium differences reported here are prior to paying out any MLR rebates owed to members, since rebates are a component of retention.
- 3** *Consolidated Appropriations Act, 2016*, Public Law 114-113, *U.S. Statutes at Large* 129 (2015): 3037-3038. <https://www.gpo.gov/fdsys/pkg/PLAW-114publ113/pdf/PLAW-114publ113.pdf>.
- 4** Based on \$510 PMPM average premium (pre-MLR rebates) reported by payers in SHCE. Average premium may vary from premiums reported elsewhere in this report due to different data specifications and payer inclusion criteria, among other reasons.

GLOSSARY OF TERMS

Administrative Services-Only (ASO): Commercial payers that perform administrative services for self-insured employers. Services can include plan design and network access, claims adjudication and administration, and/or population health management.

Advance Premium Tax Credit (APTC): Federal tax credits, available to those with incomes up to 400% of the Federal Poverty Limit (FPL) who purchase coverage through the Health Connector, which lower the members' monthly premium.

Alternative Payment Methods (APMs): Payment methods used by a payer to reimburse health care providers that are not solely based on the fee-for-service basis.

Benefit Level: A measure of the proportion of covered medical expenses paid by insurance. Benefit levels may be estimated by several different methods; see [technical appendix](#).

ConnectorCare: A type of qualified health plan (QHP) offered through the Health Connector with lower monthly premiums and cost-sharing for those with household incomes at or below 300% of the Federal Poverty Level (FPL).

Cost-Sharing: The amount of an allowed claim that the member is responsible for paying. This includes any copayments, deductibles, and coinsurance payments for the services rendered.

Cost-Sharing Reduction (CSR) Subsidies: State and/or federal subsidies which reduce out-of-pocket expenses towards copayments, coinsurance, and deductibles for qualifying individual purchasers with incomes at or below 300% of the Federal Poverty Level (FPL). These subsidies are applied to

designated ConnectorCare plans sold through the Health Connector. The federal government suspended its portion of CSR subsidy payments in late 2017.

Employer-Sponsored Insurance (ESI) Plans: Health insurance plans purchased by employers on behalf of their employees as part of an employee benefit package.

Fully-Insured: A fully-insured employer contracts with a payer to pay for eligible medical costs for its employees and dependents in exchange for a pre-set annual premium.

Funding Type: The segmentation of health plans into two types—fully-insured and self-insured—based on which entity bears the risk for members' medical costs.

Group Insurance Commission (GIC): The organization that provides health benefits to state employees and retirees in Massachusetts.

Health Care Cost Growth Benchmark (Benchmark): The projected annual percentage change in Total Health Care Expenditure (THCE) measure in the Commonwealth, as established by the Health Policy Commission (HPC). The benchmark is tied to growth in the state's economy, the potential gross state product (PGSP). The Commonwealth has set the PGSP for 2015 at 3.6 percent. Accordingly, the HPC established the health care cost growth benchmark for 2015 at 3.6 percent.

Health Connector: The Commonwealth's state-based health insurance marketplace where individuals, families, and small businesses can purchase health plans from insurers.

High Deductible Health Plan (HDHP): A health plan with an individual plan

deductible greater than or equal to the relevant Internal Revenue Service threshold, set at \$1,300 for 2015 through 2017.

Health Maintenance Organizations (HMOs): Insurance plans that have a closed network of providers, outside of which coverage is not provided, except in emergencies. These plans generally require members to coordinate care through a primary care physician.

Limited Network: A health insurance plan that offers members access to a reduced or selective provider network, which is smaller than the payer's most comprehensive provider network within a defined geographic area and from which the payer may choose to exclude from participation other providers who participate in the payer's general or regional provider network. This definition, like that contained within Massachusetts Division of Insurance regulation 211 CMR 152.00, does not require a plan to offer a specific level of cost (premium) savings in order to qualify as a limited network plan.

Managing Physician Group Total Medical Expenses: Measure of the total health care spending of members whose plans require the selection of a primary care provider associated with a physician group, or who are attributed to a primary care provider pursuant to a contract between a payer and provider, adjusted for health status.

Market Sector: Average employer or group size segregated into the following categories: individual purchasers, small group (1-50 employees), mid-size group (51-100 employees), large group (101-499 employees), jumbo group (500+ employees), and the Group Insurance Commission (GIC). In the small group market segment, only those small employers that met the definition of "Eligible Small Business or Group" per Massachusetts Division of Insurance Regulation 211 CMR 66.04 were included, except as otherwise noted in the Massachusetts Division of Insurance Bulletin 2016-09.

Medical Loss Ratio (MLR): As established by the Division of Insurance: the sum of a payer's incurred medical expenses, their expenses for

improving health care quality, and their expenses for deductible fraud, abuse detection, and recovery services, all divided by the difference of premiums minus taxes and assessments.

Merged Market: The combined health insurance market within which both individual (or non-group) and small group plans are purchased.

Net Prescription Drug Spending: Payments made to pharmacies for members' prescription drugs less rebates received by the health plan from manufacturers.

Percent of Benefits Not Carved Out: The estimated percentage of a comprehensive package of benefits (e.g., pharmacy, behavioral health) that are accounted for within a payer's reported claims.

Primary Care Clinician (PCC) Plan: A managed care health plan for MassHealth members. In the PCC Plan, primary care providers are called primary care clinicians (PCCs). Members select or are assigned a PCC from a network of MassHealth providers. Members can use the MassHealth network of hospitals and specialists to receive care as coordinated with their PCC and can use the Massachusetts Behavioral Health Partnership (MBHP) behavioral health provider network for behavioral health services.

Point-of-Service (POS): Insurance plans that generally require members to coordinate care through a primary care physician and offer both in-network and out-of-network coverage options.

Preferred Provider Organizations (PPOs): Insurance plans that identify a network of "preferred providers" while allowing members to obtain coverage outside of the network, though to typically higher levels of cost-sharing. PPO plans generally do not require enrollees to select a primary care physician.

Premium Retention: The difference between the total premiums collected by payers and the total spent by payers on incurred medical claims.

Premiums, Earned: The total gross premiums earned prior to any medical loss ratio rebate payments, including any portion of the premium that is paid to a third party (e.g., Connector fees, reinsurance). Includes Advance Premium Tax Credits, where applicable.

Premiums, Earned, Net of Rebates: The total gross premiums earned after removing medical loss ratio rebates incurred during the year (though not necessarily paid during the year), including any portion of the premium that is paid to a third party (e.g., Connector fees, reinsurance). Includes Advance Premium Tax Credits, where applicable.

Prescription Drug Rebate: A refund for a portion of the price of a prescription drug. Such refunds are paid retrospectively and typically negotiated between the drug manufacturer and pharmacy benefit managers, who may share a portion of the refunds with clients that may include insurers, self-funded employers, and public insurance programs. The refunds can be structured in a variety of ways, and refund amounts vary significantly by drug and payer.

Prevention Quality Indicators: A set of indicators that assess the rate of hospitalizations for “ambulatory care sensitive conditions,” conditions for which high quality preventive, outpatient, and primary care can potentially prevent complications, more severe disease, and/or the need for hospitalizations. These indicators calculate rates of potentially avoidable hospitalizations in the population and can be risk-adjusted.

Product Type: The segmentation of health plans along the lines of provider networks. Plans are classified into the following categories in this report: Health Maintenance Organizations, Point-of-Service, Preferred Provider Organizations, and Other.

Qualified Health Plans (QHPs): A health plan certified by the Health Connector to meet benefit and cost-sharing standards.

Risk Adjustment: The Affordable Care Act program that transfers funds among payers offering health insurance plans in the Merged Market to

balance out enrollee health status (risk).

Self-Insured: A self-insured employer takes on the financial responsibility and risk for its employees' and dependents' medical claims, paying claims and administrative service fees to payers or third party administrators.

Standard Quality Measure Set (SQMS): The Commonwealth's Statewide Quality Advisory Committee recommends quality measures annually for the state's Standard Quality Measure Set. The Committee's recommendations draw from the extensive body of existing, standardized, and nationally recognized quality measures.

Tiered Network Health Plans: Insurance plans that segment their provider networks into tiers, with tiers typically based on differences in the quality and/or the cost of care provided. Tiers are not considered separate networks, but rather sub-segments of a payer's HMO or PPO network. A tiered network is different than a plan simply splitting benefits by in-network vs. out-of-network; a tiered network will have varying degrees of payments for in-network providers.

Total Health Care Expenditures (THCE): A measure of total spending for health care in the Commonwealth. Chapter 224 of the Acts of 2012 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 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.

Total Medical Expenses (TME): The total medical spending for a member population based on allowed claims for all categories of medical expenses and all non-claims related payments to providers. TME is expressed on a per member per month basis.

INDEX OF ACRONYMS

ACA	Affordable Care Act	MGL	Massachusetts General Law
APM	Alternative Payment Method	MHIS	Massachusetts Health Insurance Survey
APTC	Advance Premium Tax Credit	MLR	Medical Loss Ratio
ASF	Administrative Service Fee	MMCO	MassHealth Managed Care Organization
ASO	Administrative Services-Only	MRSA	Methicillin-Resistant Staphylococcus Aureus
BCBSMA	Blue Cross Blue Shield of Massachusetts	NBER	National Bureau of Economic Research
BCMA	Bar Code Medication Administration	NCPHI	Net Cost of Private Health Insurance
BIDCO	Beth Israel Deaconess Care Organization	NEQCA	New England Quality Care Alliance
BMCHP	Boston Medical Center HealthNet Plan	NHP	Neighborhood Health Plan
CAUTI	Catheter-Associated Urinary Tract Infection	PACE	Programs of All-Inclusive Care for the Elderly
CHIA	Center for Health Information and Analysis	PBM	Pharmacy Benefit Managers
CLABSI	Central Line-Associated Blood Stream Infection	PCC	Primary Care Clinician
CMR	Code of Massachusetts Regulations	PCP	Primary Care Provider
CMS	Centers for Medicare & Medicaid Services	PDP	Prescription Drug Plan
CPOE	Computerized Physician Order Entry	PES	Patient Experience Survey
CSR	Cost-Sharing Reduction	PMPM	Per Member Per Month
ERISA	Employee Retirement Income Security Act of 1974	POS	Point-of-Service
ESI	Employer-Sponsored Insurance	PPO	Preferred Provider Organization
FFS	Fee-for-Service	QHP	Qualified Health Plan
FPL	Federal Poverty Level	SCO	Senior Care Options
GIC	Group Insurance Commission	SFY	State Fiscal Year
HDHP	High Deductible Health Plan	SHCE	Supplemental Health Care Exhibit
HMO	Health Maintenance Organization	SIR	Standard Infection Ratio
HNE	Health New England	SSI	Surgical Site Infection
HPHC	Harvard Pilgrim Health Care	SQMS	Standard Quality Measure Set
HSA	Health Status Adjusted	THCE	Total Health Care Expenditures
HSN	Health Safety Net	THP	Tufts Health Plan
IRS	Internal Revenue Service	THPP	Tufts Health Public Plans
MA	Massachusetts	TME	Total Medical Expenses
MCO	Managed Care Organization	VA	Veterans Affairs



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