

**Performance
of the
Massachusetts
Health Care
System**

Annual Report
March 2021



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March 2021

CENTER FOR HEALTH INFORMATION AND ANALYSIS



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2021 Annual Report Key Findings

THCE totaled \$64.1 billion in 2019, or \$9,294 per capita. This represented an increase of 4.3% from 2018, exceeding the health care cost growth benchmark.

Hospital services, physician, and pharmacy expenditures continued to be the largest service categories of THCE spending.

Pharmacy spending totaled \$10.7 billion in 2019, an increase of 7.2% from 2018. Net of prescription drug rebates, pharmacy spending was \$8.3 billion, an increase of 3.0% from the prior year.

Annual growth in commercial insurance premiums decelerated— from 5.7% in 2018 to 2.2% in 2019.

While average commercial member cost-sharing growth slowed from 2018 to 2019, this trend was not observed in all market sectors.

Among members surveyed in both commercial and MassHealth populations, patient experience ratings were highest for the Communication domain and lowest for Self-Management Support.

Executive Summary

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

Total Health Care Expenditures

In 2019, Total Health Care Expenditures (THCE) in Massachusetts were \$64.1 billion. THCE per capita grew 4.3% to \$9,294 per resident, exceeding the 2019 benchmark of 3.1% set by the Health Policy Commission. The final THCE growth for 2018 also exceeded the benchmark, growing 3.6% from the prior year.

Spending growth accelerated across all four of the largest service categories (hospital inpatient, hospital outpatient, pharmacy, and physician services) between 2018 and 2019. As in prior years, gross prescription drug spending, which increased by 7.2% in 2019, accounted for the

greatest share of the growth in THCE. Net of rebates received by payers, prescription drug spending increased 3.0%.

Commercial Insurance

Total expenditures for private commercial health plans, which comprised nearly 40% of THCE, grew 5.7% in 2019, faster than in 2018 (+4.3%). For the first time in several years, hospital outpatient spending was the largest component of total commercial expenditures in 2019, followed by spending on physician services. Among the four largest commercial service categories, hospital outpatient spending grew the fastest between 2018 and 2019 (+8.1%), followed by gross pharmacy spending (+6.0%).

Following several years of rapid growth, premiums for fully-insured plans increased 2.2% between 2018 and 2019, much slower than in the prior year (+5.7%). While all

commercial market sectors experienced slower premium growth in 2019, unsubsidized individual purchasers experienced an average premium decrease of 1.1% as members favored high deductible health plans (HDHPs) and payers offering lower cost plans with smaller provider networks. Across the market, premium retention—defined as the portion of premium dollars not spent on members’ medical expenses—declined as claims costs grew at a faster rate than premiums. Payers reported declining profitability of fully-insured lines of business in 2019, driven by losses in the merged (individual and small group) market.

Growth in average member cost-sharing also decelerated in 2019, rising 2.8% to \$53 PMPM compared to 6.3% growth in 2018. However, there was substantial variation by market sector, with members in the merged market continuing to experience annual cost-sharing increases above 7% and paying more out of pocket, on average, than members enrolled through large employer plans. These trends coincided with a high prevalence of HDHP enrollment among unsubsidized individual purchasers and small group enrollees.

Public Insurance Programs

Total MassHealth expenditures, which represented one quarter of THCE, increased 2.8% in 2019; MassHealth membership declined during this period.

Total MassHealth expenditures for long term care, home health, and community health comprised the largest service category in 2019; however, aggregate spending for this category decreased for the third consecutive year. Total spending for other professional services, including nurse practitioners, social workers, and physical therapists, again grew rapidly (+6.7%) in 2019. Spending also increased for hospital inpatient, prescription drugs, and non-claims, but declined for physicians and hospital outpatient services.

Growth in Medicare spending, which encompassed nearly 30% of THCE, slowed slightly, increasing 5.2% in 2019 following a 5.8% increase the prior year. This was lower than the 2019 national Medicare expenditure trend (+6.7%).

Among Medicare beneficiaries, hospital inpatient services accounted for the largest service category in 2019, and increased by 3.6% in 2019. Total expenditures rose fastest, however, for services provided by non-physician

professionals which grew by nearly 10%, followed by prescription drugs and hospital outpatient expenses, both of which grew by more than 8.5%.

Coordination and Quality

Global budget arrangements are intended to incentivize primary care providers to manage their patients' health care across the continuum, while controlling costs and meeting quality targets. Alternative payment methods (APMs) between payers and provider organizations promote these objectives; however, in 2019, APM adoption continued to decline slightly among commercial health plans, particularly among smaller plans. In addition, nearly half of the global budget arrangements in the commercial market (the predominant type of APM) limited provider accountability for certain services, such as prescription drugs and behavioral health. The number of members covered under an APM within the

Commonwealth's Medicaid population continued to increase due to the implementation of MassHealth's Accountable Care Organization (ACO) program, with more than 80% of MassHealth MCO and ACO-A members covered under an APM arrangement in 2019.

This year's report is the first to include findings from a patient experience survey that MassHealth issued to a sample of ACO members with a primary care visit in 2018. Overall, respondents expressed positive experiences with their primary care providers for both adult and pediatric visits. The statewide average performance of MassHealth ACO primary care providers exceeded the minimum performance thresholds set by MassHealth on all measures, where applicable. The 2018 scores will serve as a baseline for evaluating progress towards quality goals defined by MassHealth. •

CONTENT NOTE

This report focuses on the time period through 2019. In recognition of the challenges faced by the Massachusetts health care delivery system as payers and providers respond to the COVID-19 outbreak, CHIA delayed some data submissions and reporting. Although this report covers a time period prior to the outbreak of COVID-19 in Massachusetts, it will provide a valuable foundation to further study the impact the pandemic has had on the stability of health delivery systems in the Commonwealth.

In the interest of informing Massachusetts policymakers, payers, providers, employers, and researchers, CHIA has expanded and increased the frequency of several other health care reporting initiatives. The following resources provide more timely insight into the impact of COVID-19 on the Commonwealth:

- [Monthly Enrollment Summaries](#)
- [Hospital and Health System Financial Performance](#)

CHIA continues to monitor these trends and will provide updates as additional data becomes available. CHIA will also support new reporting on COVID-19, telehealth, and other relevant topics as directed under the 2021 legislation, “An Act promoting a resilient health care system that puts patients first.”

Total Health Care Expenditures

KEY FINDINGS

Total health care expenditures grew 4.3% to \$9,294 from 2018 to 2019.

Total spending grew across all components of THCE except for NCPHI. Commercial spending increased the most among the three main market sectors.

Hospital services, physician, and pharmacy expenditures continued to be the largest service categories of THCE spending.

Prescription drug rebates are estimated to have grown over the past three years to \$2.3 billion in 2019.

Total Health Care Expenditures

A key provision of the Massachusetts health care cost containment law, Chapter 224 of the Acts of 2012, was the establishment of 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.

From 2013 to 2017, the health care cost growth benchmark was set at 3.6%. For the 2017 to 2018 performance period, the benchmark was set at 3.1%.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 and 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

Notes:

Detailed methodology and data sources for THCE are available at <https://www.chiamass.gov/thce-tme-apm/>.

payers' estimates for claims completion and for quality and performance settlements. For 2019, the average claims run-out was five months as a result of a delayed submission schedule.³

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 preliminary results for 2019 and final results for calendar year 2018. •

Total Health Care Expenditures

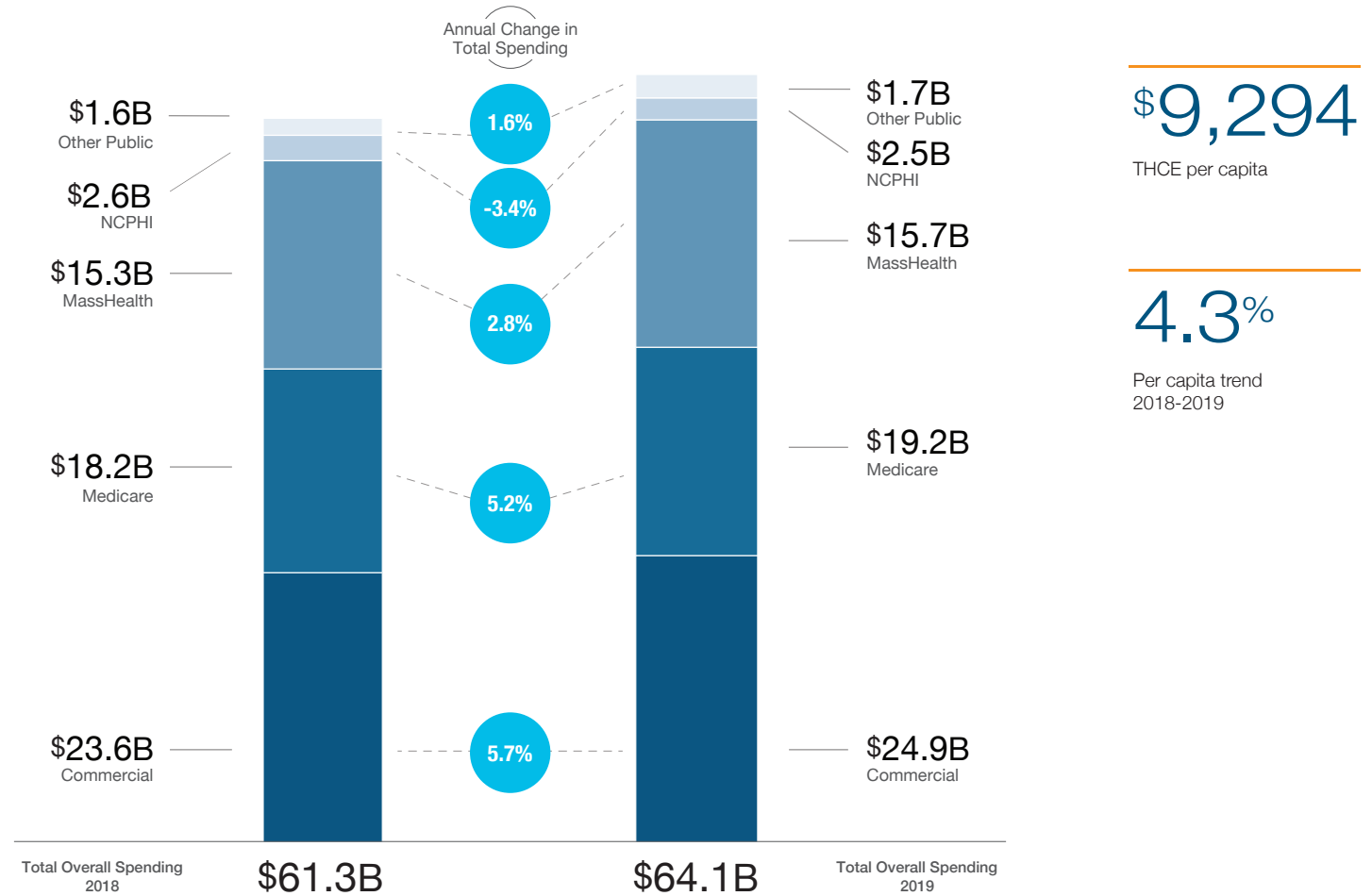
THCE totaled \$64.1 billion in 2019. This represents an increase of \$2.7 billion from 2018, during which the state's population grew slowly (0.1%). THCE spending per resident grew 4.3% to \$9,294 per capita, greater than the 3.1% cost growth benchmark set by the Health Policy Commission.

Total commercial health care spending, which comprised 38.9% of THCE, grew 5.7% to \$24.9 billion. Commercial membership increased by 0.4% during this period.

Medicare spending (29.9% of total spending) increased by 5.2% to \$19.2 billion, accompanied by enrollment growth of 2.5%. MassHealth (24.6% of total spending) reported an increase in total spending, increasing by 2.8% to \$15.7 billion in 2019, while enrollment declined by 2.9%.

NCPHI, which measures the private administrative costs of providing health insurance, comprised 3.9% of THCE, with total expenses decreasing by 3.4% from 2018 to 2019.

Components of Total Health Care Expenditures, 2018-2019



The initial estimate of Total Health Care Expenditures per capita growth is 4.3% for 2019, which exceeds the health care cost growth benchmark.

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

Notes: Preliminary trends are based payer data submissions with an average run-out period of five months. This is a longer run-out period than previous years, and as a result it is expected there will be less variation between these preliminary trends and final trends to be reported next year. 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. 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 Health Maintenance Organization (HMO) plans. These plans typically require that a member select a primary care provider to manage the member's care. In 2019, HMO plans accounted for 45.1% of commercial spending, slightly higher than in 2018. Overall spending on HMO products increased by 11.6% to \$11.2 billion in 2019, accompanied by an increase in membership (4.8%).

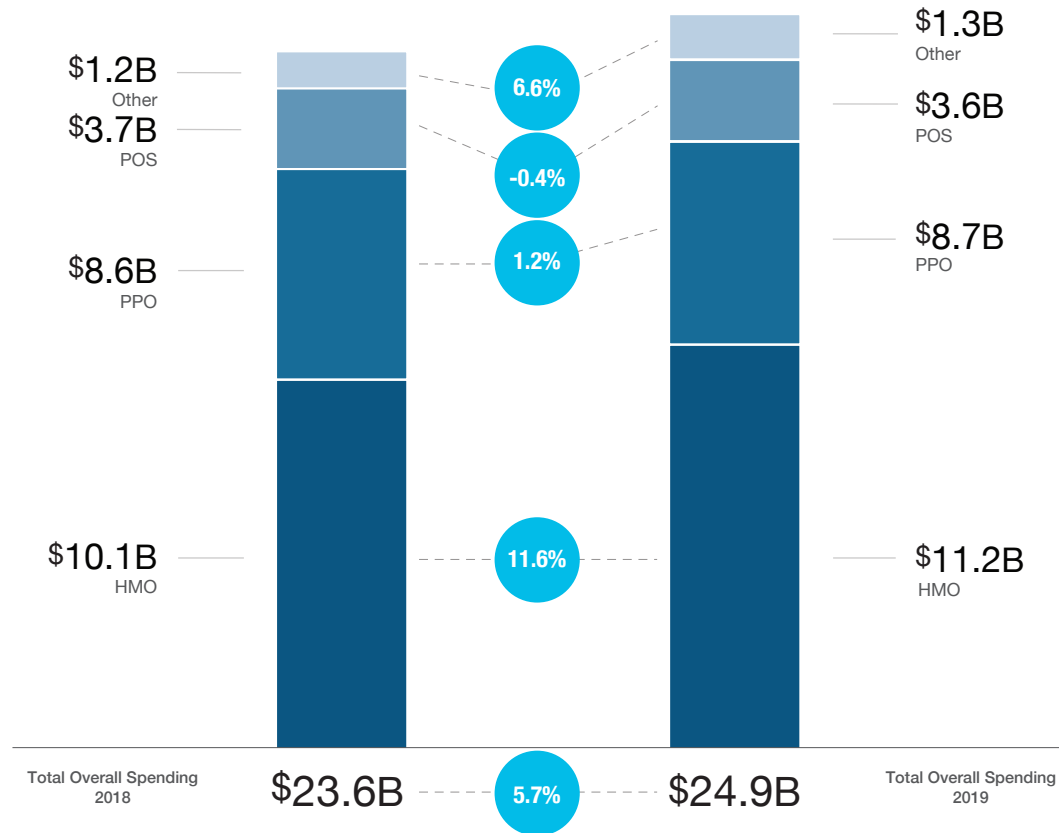
Spending for Preferred Provider Organization (PPO) plans, which allow members to schedule visits without a referral, increased by 1.2% to \$8.7 billion in 2019, accompanied by a 3.1% decrease in membership.

Point-of-Service (POS) plans were the only commercial product to experience a decrease in spending (-0.4%) in 2019, as enrollment in POS plans declined (-4.9%). Spending for the Other product type category increased by 6.6% to \$1.3 billion in 2019, along with a slight increase in enrollment (0.5%).

Components of Total Health Care Expenditures: Private Commercial Insurance by Product Type, 2018-2019



THCE COMPONENTS
Detailed View



Spending for HMO plans increased by 11.6% in 2019, accompanied by a 4.8% increase in membership.

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

In Massachusetts, approximately 1.2 million residents were enrolled in Medicare, the federal health insurance program for people ages 65 and older, as well as for individuals with long-term disabilities.

Within the Medicare program, eligible individuals choose between traditional Medicare coverage administered by the federal government (“traditional Medicare”), and Medicare Advantage products which are managed by private insurers. In the Commonwealth, most beneficiaries receive coverage through traditional Medicare (80.6% in 2019), though a growing share are enrolling in Medicare Advantage plans (19.3% in 2019—an uptick from 18.6% in 2018).

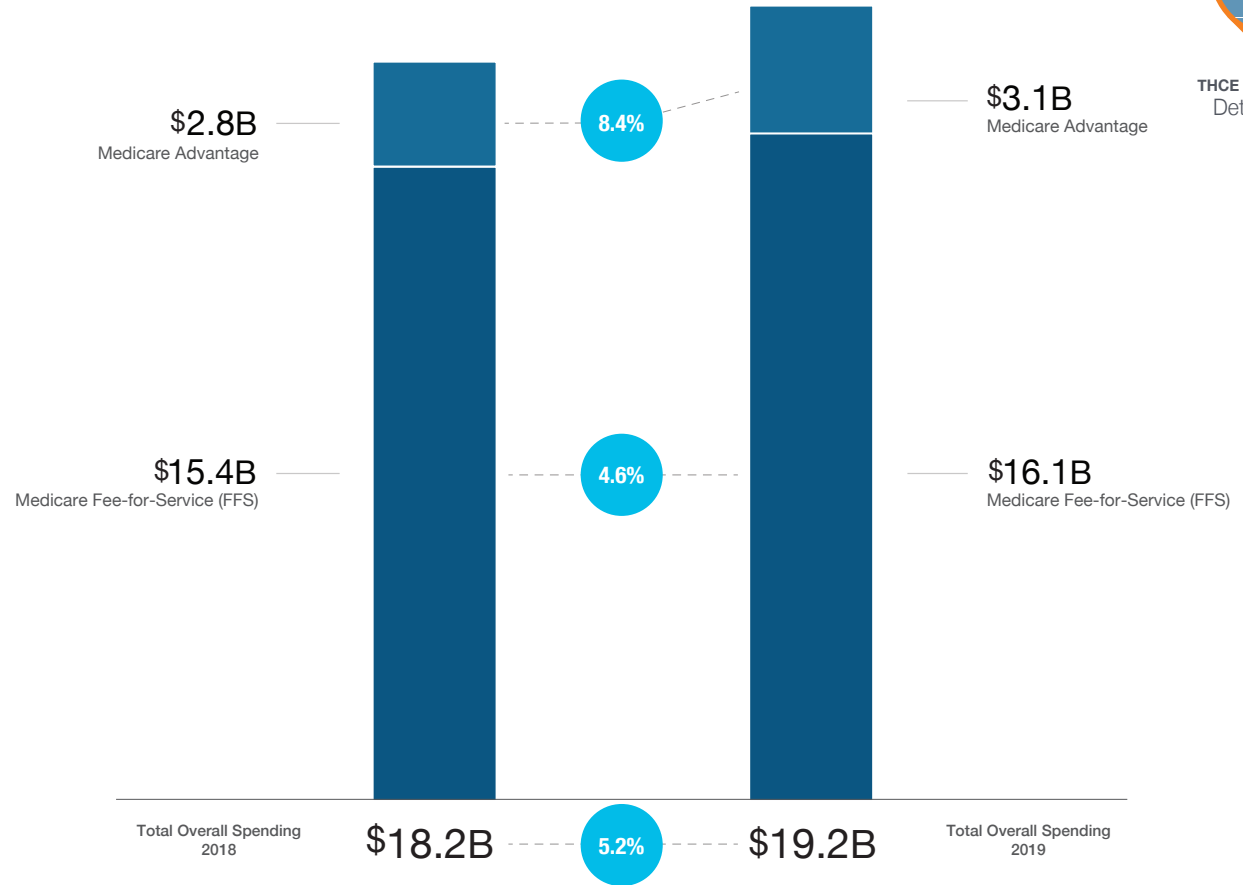
Total Medicare expenditures increased by 5.2%, from \$18.2 billion in 2018 to \$19.2 billion in 2019. Growth was faster within Medicare Advantage (8.4%) than traditional Medicare (4.6%).

Total Medicare spending nationally, across both traditional and Medicare Advantage, grew faster than in Massachusetts, estimated at 6.7%.⁴

Components of Total Health Care Expenditures: Medicare Programs, 2018-2019



THCE COMPONENTS
Detailed View



Medicare Advantage expenditures increased by 8.4% while traditional Medicare spending increased by 4.6%.

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

Notes: Harvard Pilgrim Health Care reported Medicare Advantage data for 2017, 2018, and 2019, that was not previously reported to CHIA. For additional information on enrollment in Medicare programs, see CHIA's [Enrollment Trends](#) reporting. Traditional Medicare includes Part D expenditures for traditional Medicare enrollees. 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 may not be comparable to figures published by other sources. Percent changes are based on non-rounded expenditure amounts. Please see [databook](#) for detailed information.

Total Health Care Expenditures

In 2019, approximately 1.8 million Massachusetts residents relied on MassHealth for either primary or partial/secondary medical coverage.

From 2018 to 2019, overall MassHealth spending increased by 2.8%, while membership declined (3.6% among members with primary medical coverage, and 1.1% among members with secondary or partial coverage).

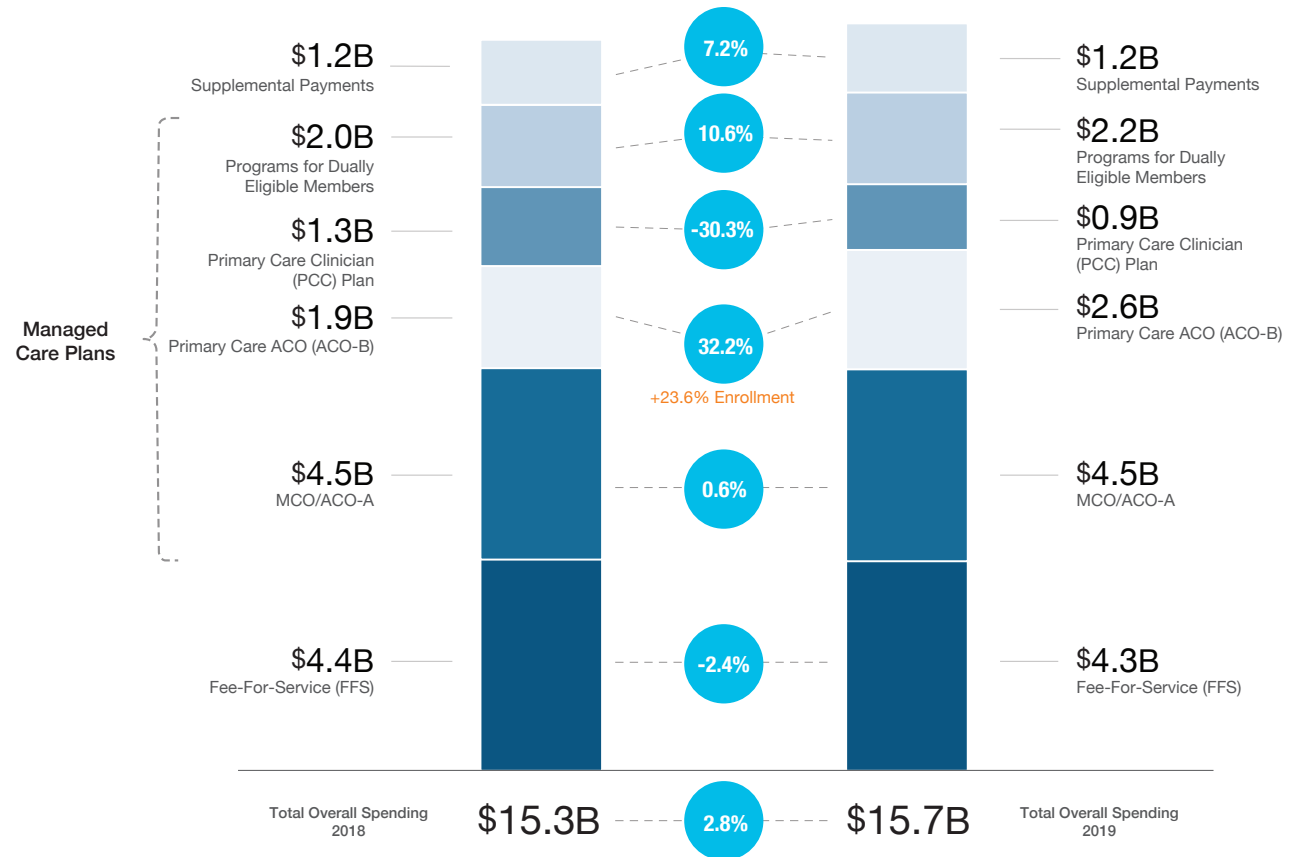
The largest spending increases were in Primary Care ACOs (ACO-B) and programs for dually eligible members, where spending increased by 32.2% and 10.6%, respectively. This spending growth was driven by increases in enrollment of 23.6% in ACO-B plans and 11.2% for dually eligible programs. Spending for supplemental payments also increased from 2018 and 2019.

Since the implementation of the Accountable Care Organization (ACO) program in 2018, membership and spending continued to decline in the Primary Care Clinician (PCC) Plan and FFS programs. Managed Care Organization (MCO)/ACO-A spending was flat while enrollment declined 5.8% from 2018 to 2019.

Components of Total Health Care Expenditures: MassHealth by Program Type, 2018-2019



THCE COMPONENTS Detailed View



Overall MassHealth spending increased 2.8% between 2018 and 2019.

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

Notes: Members of MCO-Administered ACOs (ACO-C) are counted within the MCO population. For additional information on enrollment in MassHealth programs, see CHIA's [Enrollment Trends](#) reporting. 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 55 and older; and One Care, for members ages 21 to 64. Percent changes are calculated based on non-rounded expenditure amounts. Please see [databook](#) for detailed information.

Total Health Care Expenditures

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

In 2019, NCPHI spending decreased by 3.4% to \$2.5 billion. This follows a 9.2% increase in spending in 2018. For commercial market sectors, merged market and large group NCPHI declined by 14.9% and 3.0%, respectively, while commercial ASO lines of business showed an increase of 2.6% in NCPHI. NCPHI for Medicaid MCO/ACO-A decreased by 23.7%.

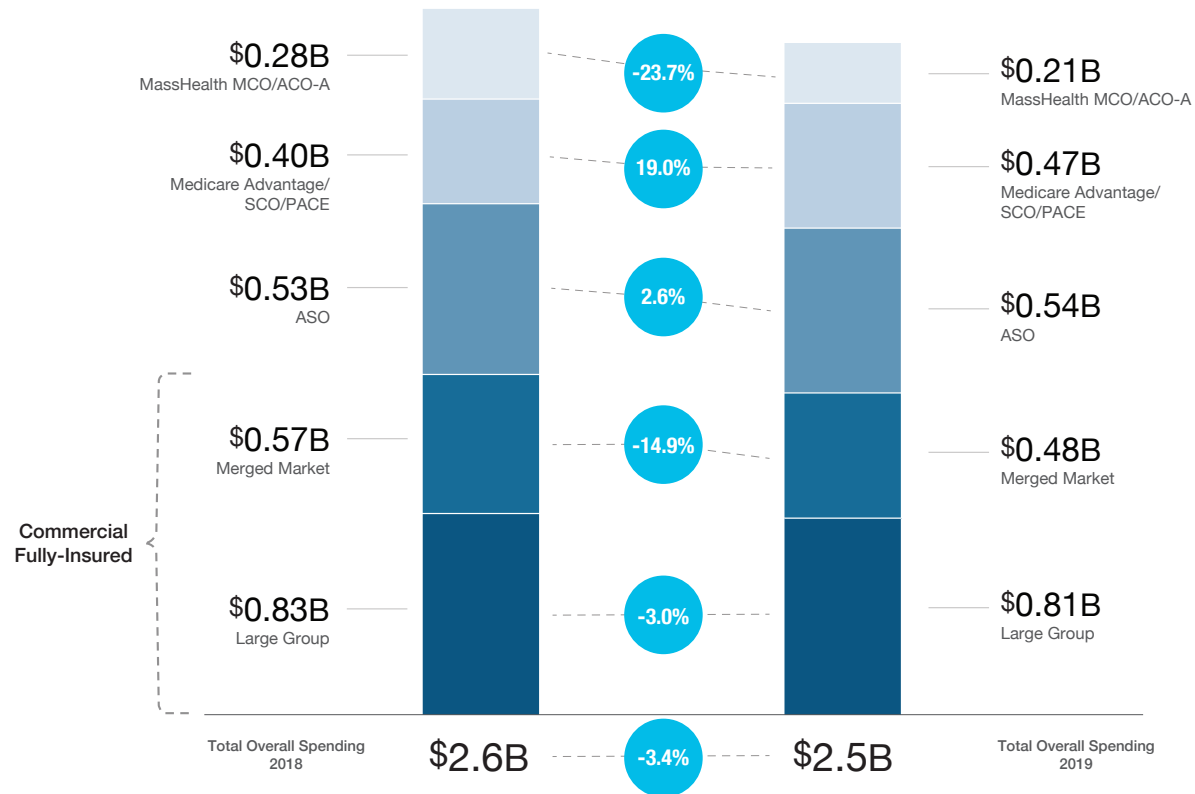
NCPHI balances retained by insurers are used to pay general administrative expenses, broker commissions, as well as taxes and fees. Additional remaining balances result in surpluses that may be used to build reserves for future claims.

State and federal medical loss ratio regulations limit the share of retained premiums that can be used for non-medical expenses. For more information on payer use of funds, see page 75.

Components of Total Health Care Expenditures: Net Cost of Private Health Insurance by Market Sector, 2018-2019



THCE COMPONENTS
Detailed View



NCPHI decreased by 3.4% to \$2.5 billion in 2019, primarily driven by decreases in Medicaid MCO/ACO-A, merged market, and large group market sectors.

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 (SHCE) from National Association of Insurance Commissioners.

Notes: NCPHI Large Group combines the fully-insured mid-size, large, and jumbo groups. The self-insured category reflects fees collected by payers for administrative services only.

Total Health Care Expenditures

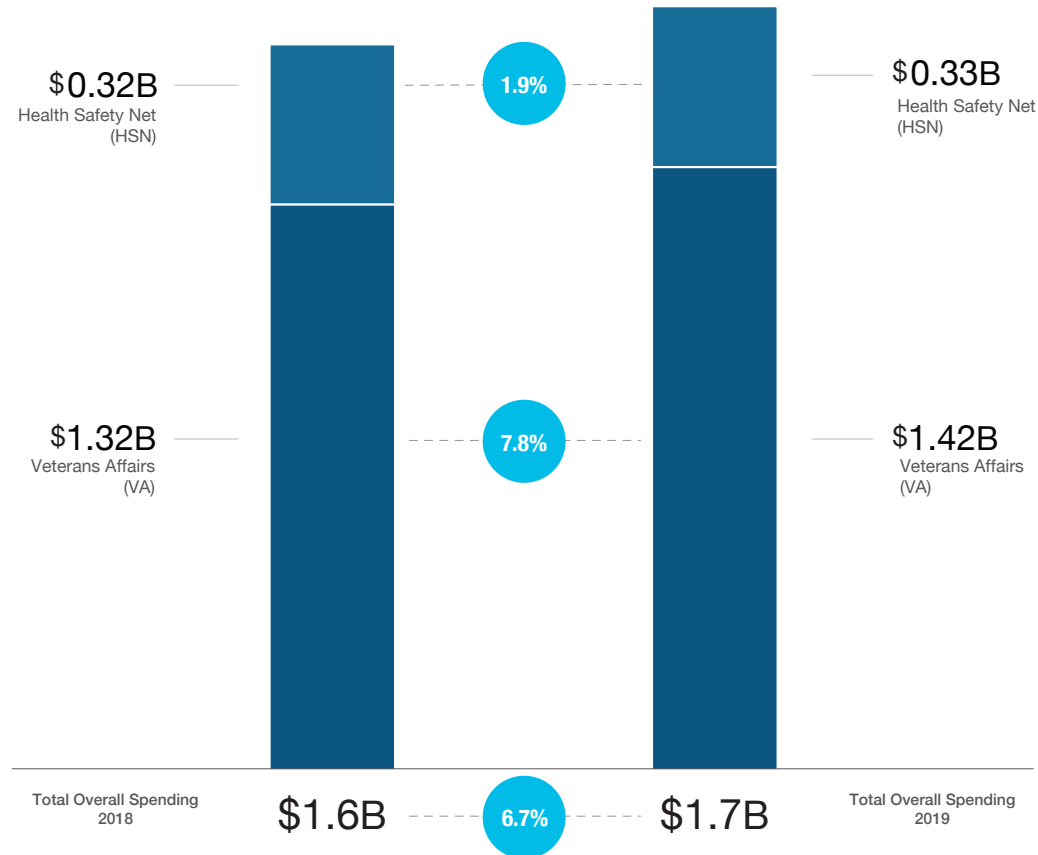
The U.S. Department of Veterans Affairs, through its Veterans Health Administration division, provides health care for certain eligible U.S. military veterans. Medical spending for Massachusetts veterans increased 7.8% to \$1.4 billion in 2019.

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 increased 1.9% in 2019.

Components of Total Health Care Expenditures: Other Public Programs, 2018-2019



THCE COMPONENTS
Detailed View



Health care spending for the Veterans Health Administration grew by 7.8% in 2019; Health Safety Net expenditures increased by 1.9%.

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

Notes: Veterans Affairs data sourcing 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

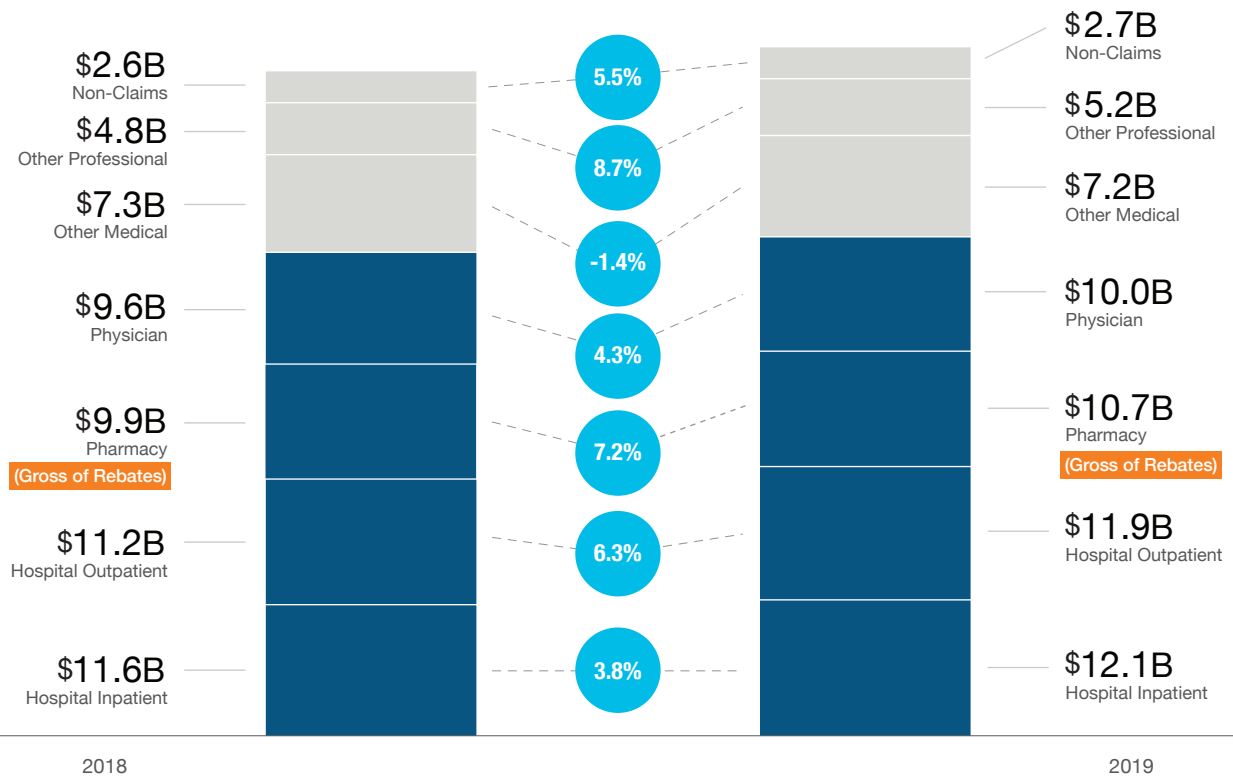
Hospital services accounted for the largest share of overall THCE spending in 2019, with inpatient and outpatient expenses together totaling \$24.0 billion. Hospital outpatient spending increased by 6.3% between 2018 and 2019, to \$11.9 billion while hospital inpatient increased by 3.8% to \$12.1 billion.

Consistent with prior years, prescription drug spending experienced the highest growth among the four largest service categories. Gross pharmacy spending increased by 7.2% in 2019, over one percentage point faster than in 2018 (6.0%).

Spending for physician services increased by 4.3% to \$10.0 billion in 2019. Spending for other professional services, which includes care provided by a licensed practitioner other than a physician (such as nurse practitioner or psychologist), increased by 8.7%, to \$5.2 billion in 2019. Non-claims spending increased by 5.5% between 2018 and 2019, following a decrease in spending from 2017 to 2018.

Other medical spending (e.g., skilled nursing facility and home health services, durable medical equipment, among others) was the only service category to experience a decrease in spending.

Total Health Care Expenditures by Service Category, 2018-2019: Gross of Prescription Drug Rebates



From 2018 to 2019, spending increased across the four largest service categories, with the highest growth in pharmacy.

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

Notes: Excludes net cost of private health insurance, VA, and HSN. 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.

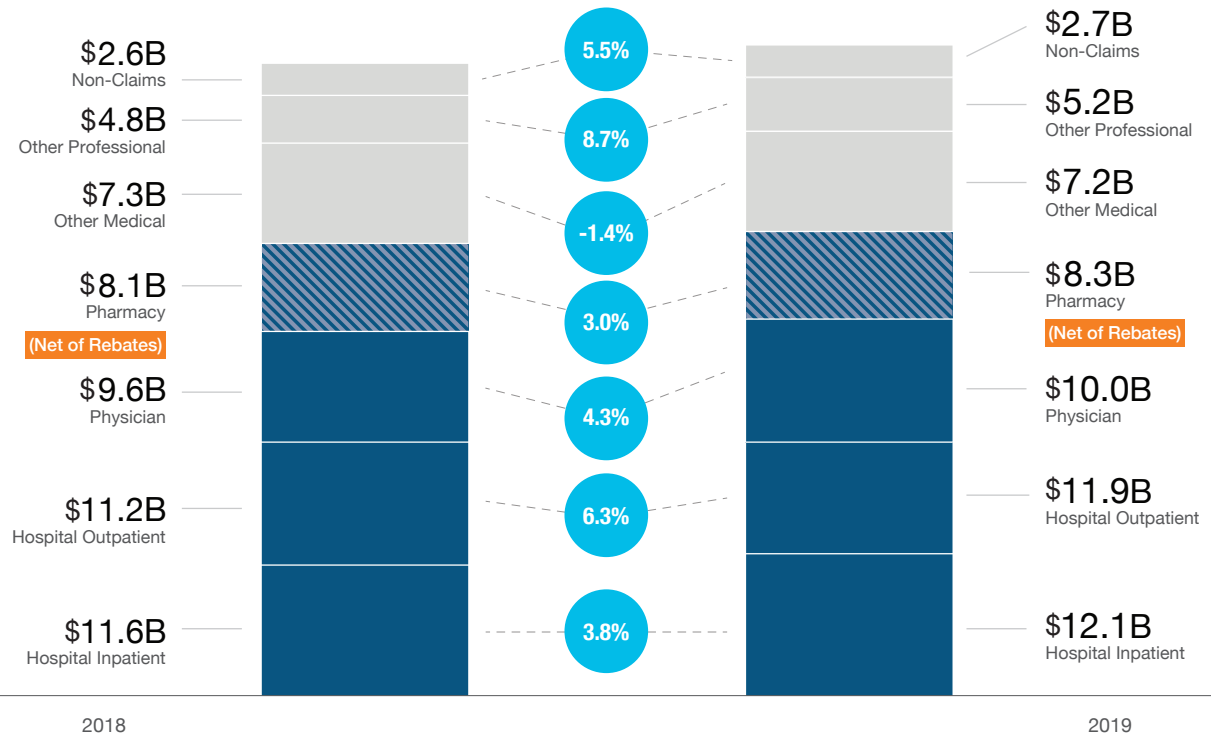
Total Health Care Expenditures

Pharmacy expenditures represent spending under a payer's prescription drug benefit; other service categories may include additional spending associated with drugs that are administered in other care settings such as a hospital or physician's office, which are not included under the pharmacy service category.⁵

Net of prescription drug rebates, pharmacy spending was \$8.3 billion in 2019, a 3.0% increase from 2018.

After accounting for rebates, pharmacy expenditures were reduced by \$2.3 billion and fell behind physician and hospital inpatient and outpatient spending.

Total Health Care Expenditures by Service Category, 2018-2019: Net of Prescription Drug Rebates



Net of rebates, pharmacy spending increased at a lower rate than all other major service categories from 2018 to 2019.

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

Notes: Excludes net cost of private health insurance, VA, and HSN. 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. Percent changes are calculated based on non-rounded expenditure amounts. Please see [databook](#) for detailed information.

Total Health Care Expenditures

From 2018 to 2019, THCE in Massachusetts increased by \$2.7 billion gross of pharmacy rebates.

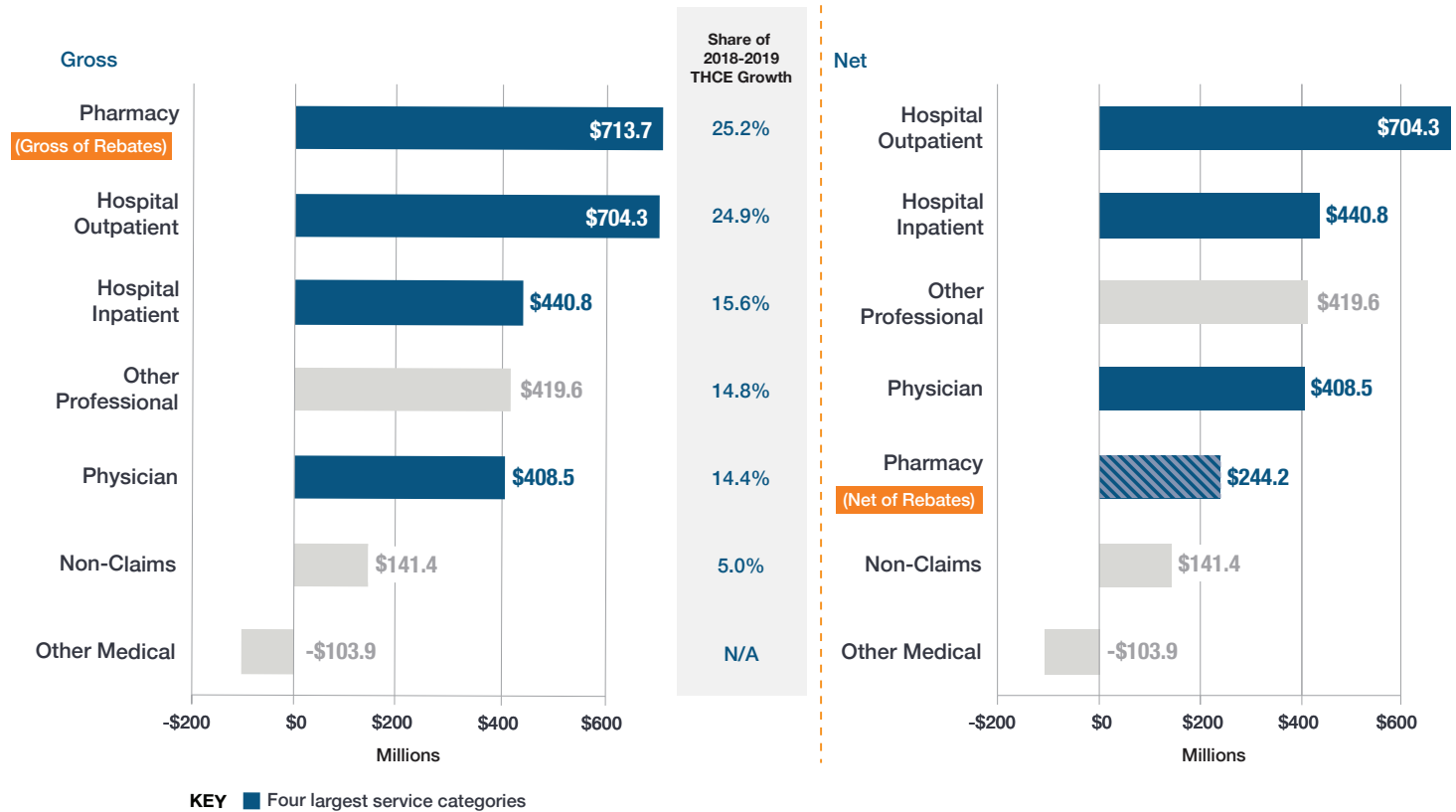
Gross of prescription drug rebates, pharmacy spending was the largest component of medical expenditure growth, accounting for 25.2% of the increased spending. Hospital outpatient was the second largest contributor to growth in spending, increasing \$704.3 million between 2018 and 2019 and accounting for 24.9% of THCE growth.

After accounting for pharmacy rebates, pharmacy spending fell behind the other major service categories in year-over-year growth, resulting in hospital outpatient being the largest driver of expense growth.

Hospital inpatient, other professional, and physician spending also attributed to similar shares of overall THCE growth, accounting for 15.6%, 14.8% and 14.4% of overall growth, respectively. Non-claims spending increased slightly, accounting for 5.0% of overall growth in 2019.

Other medical expenses was the only service category to experience a decrease in spending, declining \$103.9 million from 2018 to 2019.

Change in Total Health Care Expenditures by Service Category, 2018-2019



Increases in pharmacy and hospital outpatient spending were the largest drivers of THCE growth between 2018 and 2019.

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

Notes: Excludes net cost of private health insurance, VA, and HSN. For detailed information about how expenses were grouped into service categories, see [technical appendix](#).

Total Health Care Expenditures

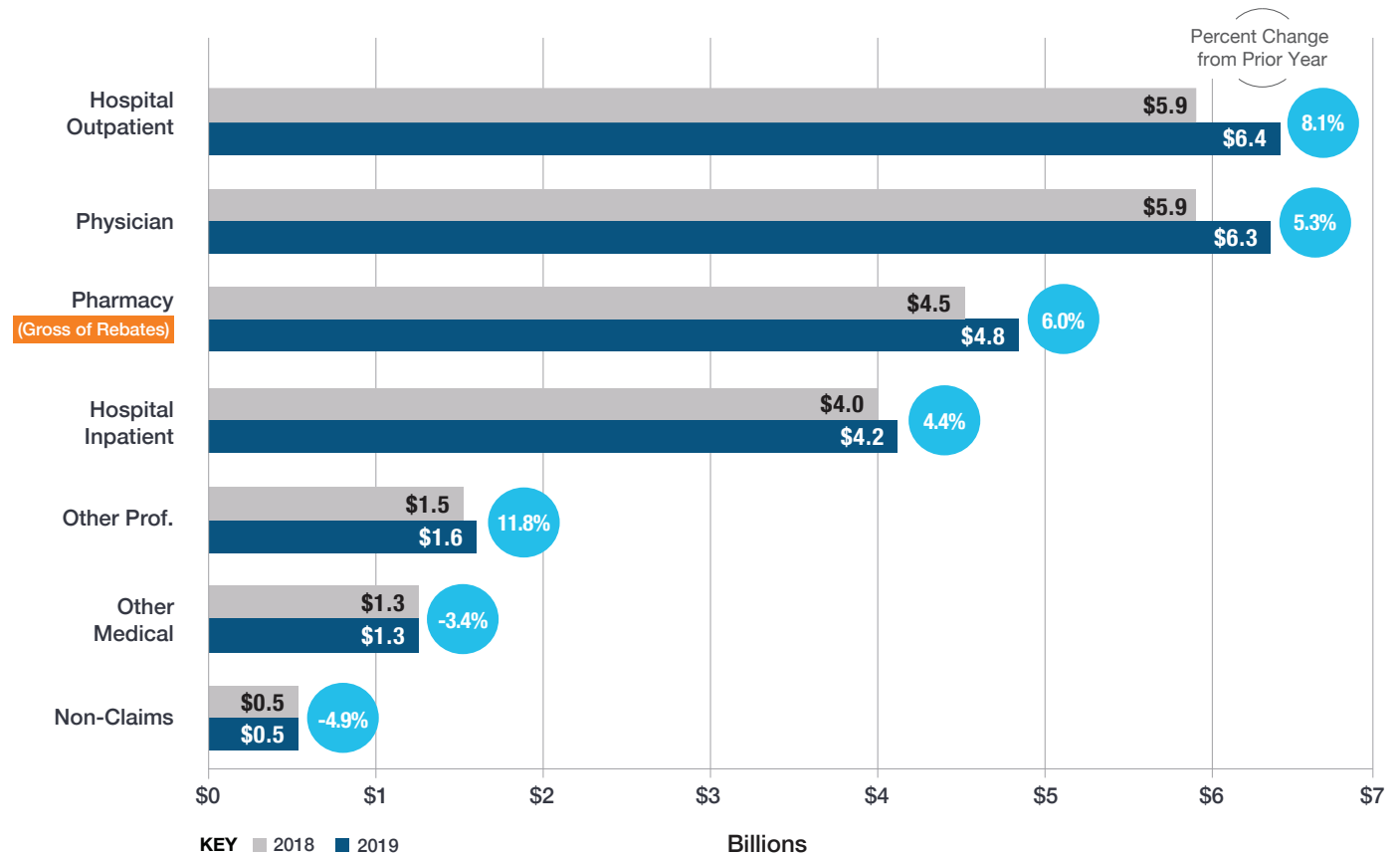
Commercial spending totaled \$24.9 billion in 2019, representing 38.9% of overall THCE spending. Among the four major service categories, hospital outpatient represented the largest proportion of spending and was the biggest driver of commercial spending increase in 2019.

The physician service category was the second largest spending component, totaling \$6.3 billion in 2019, an increase of 5.3% from the prior year.

Pharmacy and hospital inpatient expenses comprised smaller portions of overall commercial spending, totaling \$4.8 billion and \$4.2 billion, respectively, in 2019. Gross of prescription drug rebates, commercial pharmacy spending increased 6.0% from 2018 to 2019.

Other professional experienced the largest growth in spending across all commercial service categories, increasing 11.8% to \$1.6 billion in 2019. Non-claims and other medical spending were the only service categories to experience a decrease in spending, declining by 4.9% and 3.4%, respectively, from 2018 to 2019.

Commercial Spending by Service Category, 2018-2019



Commercial spending increased for all major service categories in 2019, with the highest growth in hospital outpatient.

Source: Payer-reported TME 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. Pharmacy data displayed above is gross of prescription drug rebates. Excludes net cost of private health insurance. Percent changes are calculated based on non-rounded expenditure amounts. Please see [databook](#) for detailed information.

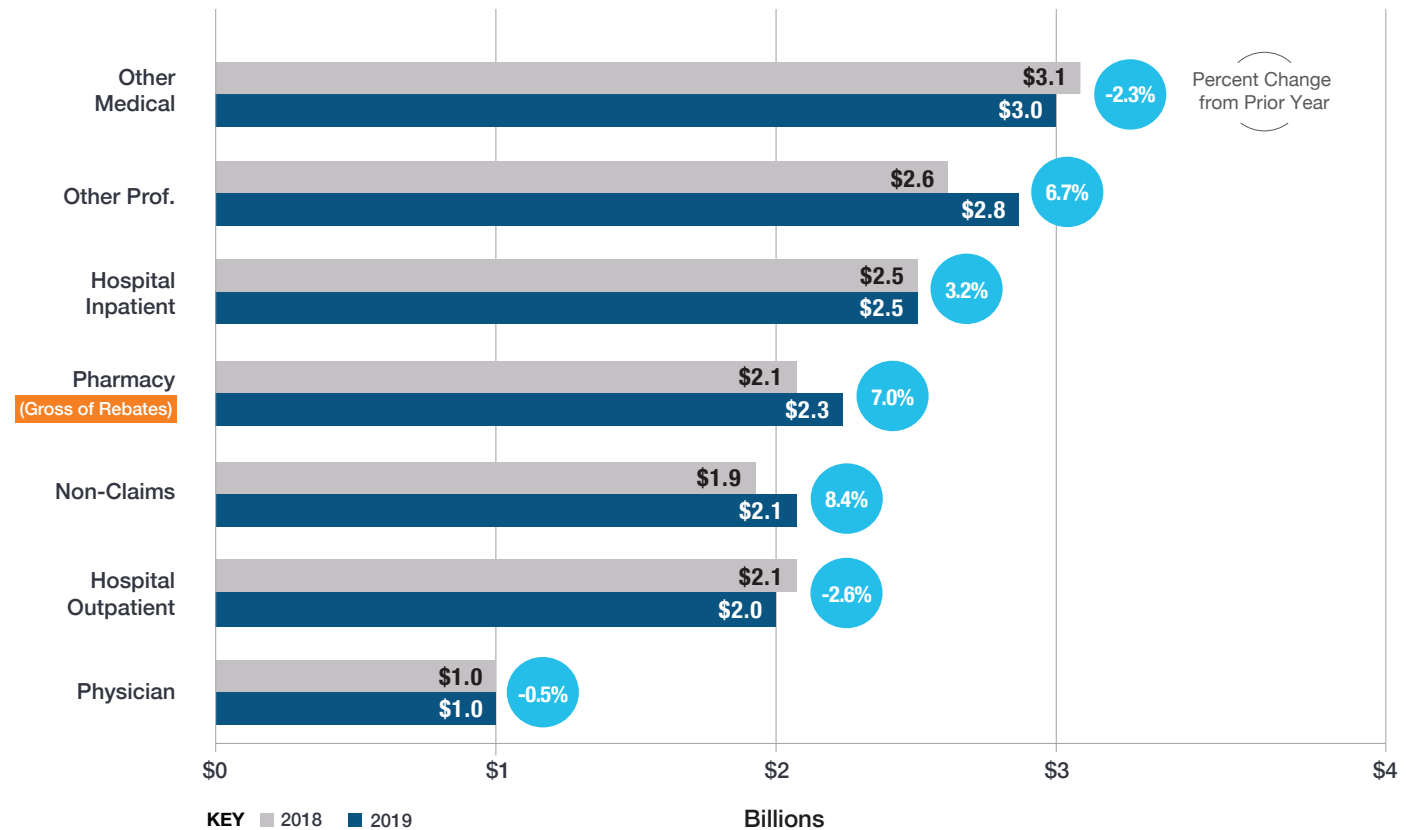
Total Health Care Expenditures

MassHealth spending totaled \$15.7 billion in 2019, representing 24.6% of overall THCE spending.

Other medical, other professional, and non-claims spending comprised over half of MassHealth total expenses in 2019. Other medical, which includes dental, long term care, and home health services, was the largest component of MassHealth spending, totaling \$3.0 billion in 2019, a decrease of 2.3% from 2018. Other professional spending was the second largest spending component, increasing 6.7% from 2018 to 2019, to \$2.8 billion. Non-claims spending also increased, totaling \$2.1 billion in 2019, an increase of 8.4%.

The four major service categories comprised a smaller portion of overall spending for MassHealth when compared to the commercial market. Among the major service categories, the largest spending component in 2019 was hospital inpatient, totaling \$2.5 billion, an increase of 3.2% from 2018. Pharmacy spending, gross of rebates, experienced the largest increase in spending among the major service categories, increasing 7.0% from 2018 to 2019 to \$2.3 billion. Hospital outpatient and physician services experienced decreases in spending between 2018 and 2019.

MassHealth Spending by Service Category, 2018-2019



MassHealth spending grew from 2018 to 2019, with the largest increases in non-claims, pharmacy, and other professional spending.

Source: Payer-reported data to CHIA and other public sources. Pharmacy data displayed above is gross of prescription drug rebates.

Total Health Care Expenditures

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

The final reported trend in THCE growth between 2017 and 2018 was 3.6%. This was higher than the health care cost growth benchmark of 3.1% set by the Health Policy Commission. The preliminary trend for 2018 THCE growth, reported as 3.1% in the 2019 Annual Report, was based on 60 days of claims run-out.

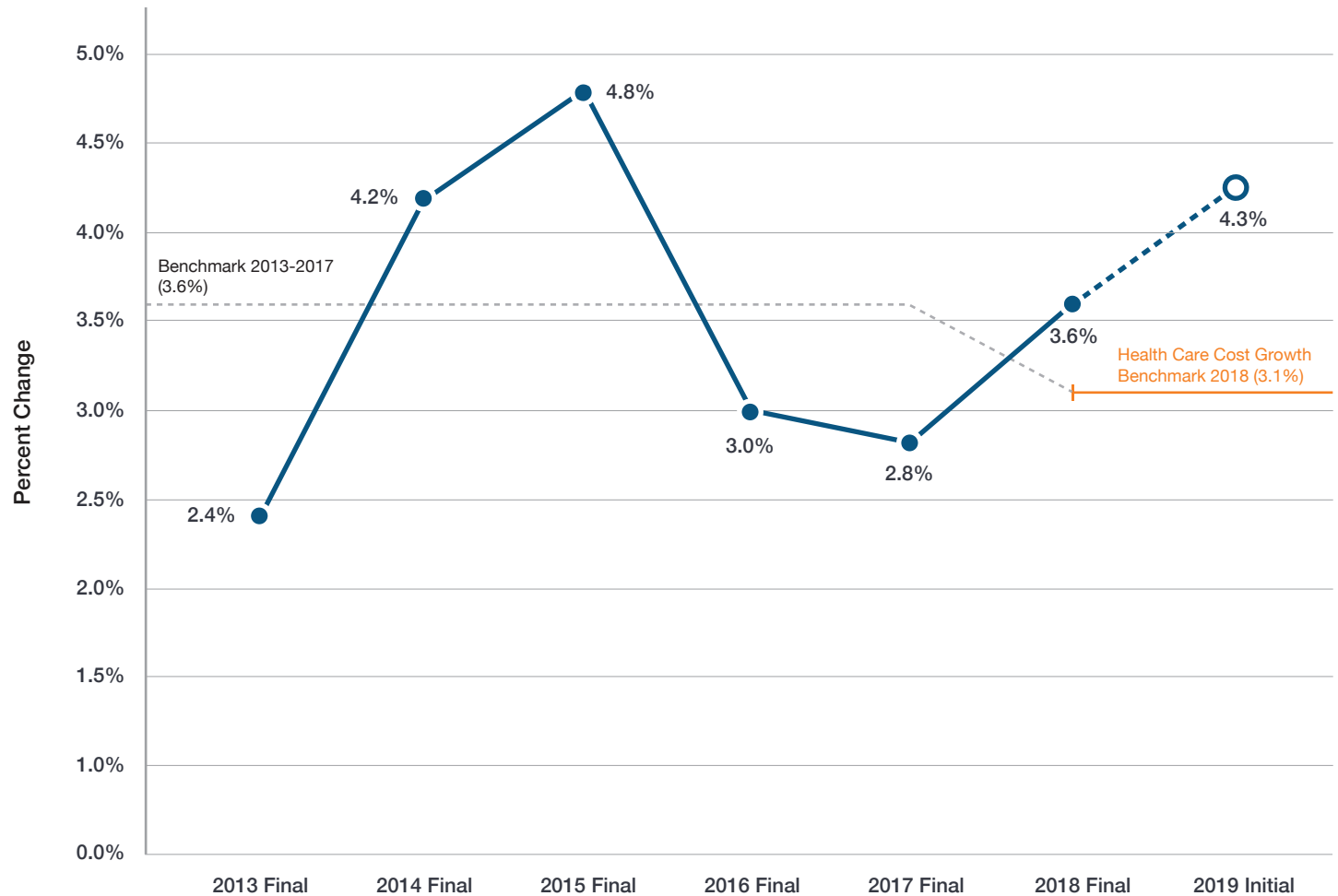
The preliminary 2019 THCE trend of 4.3% reported in this year's report, which exceeds the 3.1% cost growth benchmark, reflects five months of claims run-out on average.

Per capita THCE growth was slightly higher than growth in the Massachusetts economy (4.2%), and above increases in national wages and salaries (2.9%) and regional inflation (1.9%).

Consistent with prior years, per capita THCE growth was below the national per capita growth, as estimated by the Centers for Medicare and Medicaid Services' (CMS) National Health Expenditure Accounts, which were projected to grow 4.7% in 2019.

There was longer claims run-out for this year's reporting cycle, please see page 25 for more details.

Per Capita Total Health Care Expenditure Trends, 2013-2018



THCE growth per capita exceeded the health care cost growth benchmark in 2019.

Source: Total Health Care Expenditures from payer-reported data to CHIA and other public sources.

Notes: Preliminary trends are based on payer data submissions with an average run-out period of five months. This is a longer run-out period than previous years, and as a result it is expected there will be less variation between these preliminary trends and final trends to be reported next year.

Understanding the Differences: Comparing Initial and Final 2018 THCE

In order to meet statutory deadlines, data used to calculate initial THCE is usually 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. In 2019, the average run-out of submitted data was five months as a result of a delayed submission schedule.

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 17-month claims run-out period updates the initial estimates with the actual claims and non-claims experience for the performance period. Preliminary trends presented in this year's report are based on a longer run-out period than previous reports, and as a result it is expected there will be less variation between these preliminary trends and final trends to be reported next year.

The final assessment of 2017-2018 THCE per capita growth was 3.6%, in excess of the benchmark. The initial assessment of per capita growth, reported in CHIA's 2019 Annual Report, was 3.1%.

This difference in preliminary and final THCE per capita growth was driven primarily by upward spending trends within the commercial partial insurance category. Payers were required to update 2018 spending with more complete claims and non-claims-based payments. In 2018 contracting changes resulted in Group Insurance Commission (GIC) members shifting from the commercial full to commercial partial insurance category.

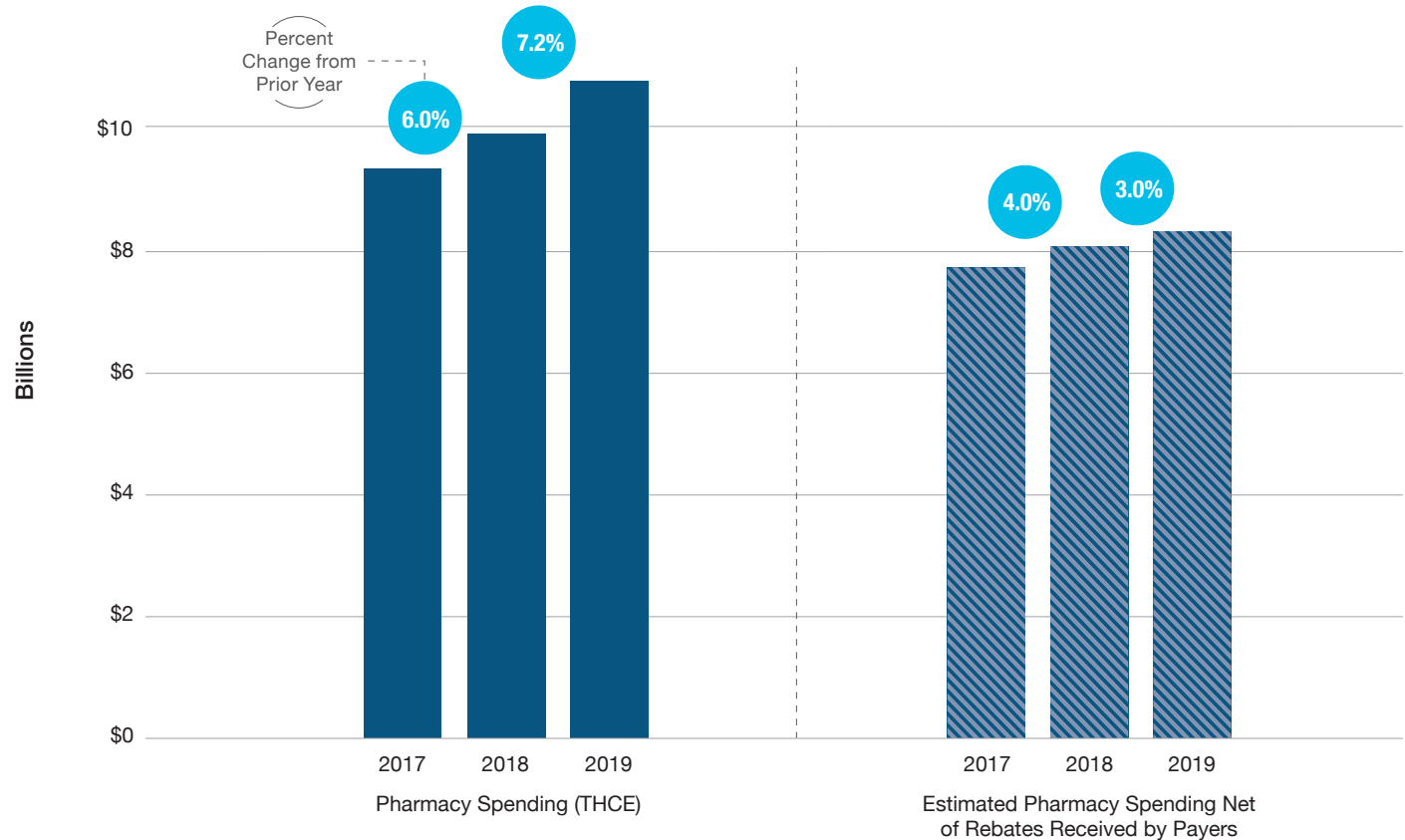
Several payers updated both 2017 and 2018 data to reflect minor data adjustments, corrections, or to reflect updates in the health status adjustment tools.

For more detailed information on 2018 final data and the health status adjustment tools used in this reporting period, please see the [databook](#).

Estimated Impact of Rebates on Pharmacy Spending and Growth, 2017-2019

THCE reflects gross prescription drug expenditures, which represent payer payments to pharmacies, along with member cost-sharing. Both public and private payers, however, commonly through pharmacy benefit managers (PBMs), negotiate with drug manufacturers to receive rebates on their members' prescription drug utilization. Additionally, federal law dictates minimum requirements for rebates to state Medicaid programs, and allows private payers that offer MassHealth plans to negotiate supplemental rebates as well. These rebates reduce payer total expenses for prescription drugs.

In 2019, gross prescription drug expenditures totaled \$10.7 billion, a 7.2% increase from \$9.9 billion in 2018. This growth was higher than the prior year, when spending grew by 6.0%. Prescription drug rebates are estimated to have grown over the last three years, from \$1.6 billion in 2017 to \$2.3 billion in 2019. Net of rebates, expenditures for prescription drugs grew 3.0% in 2019, a percentage point lower than the 2018 trend (+4.0%).



From 2018 to 2019, prescription drugs expenditures grew by 7.2%; net of rebates the increase was 3.0%.

Source: Payer-reported data to CHIA.

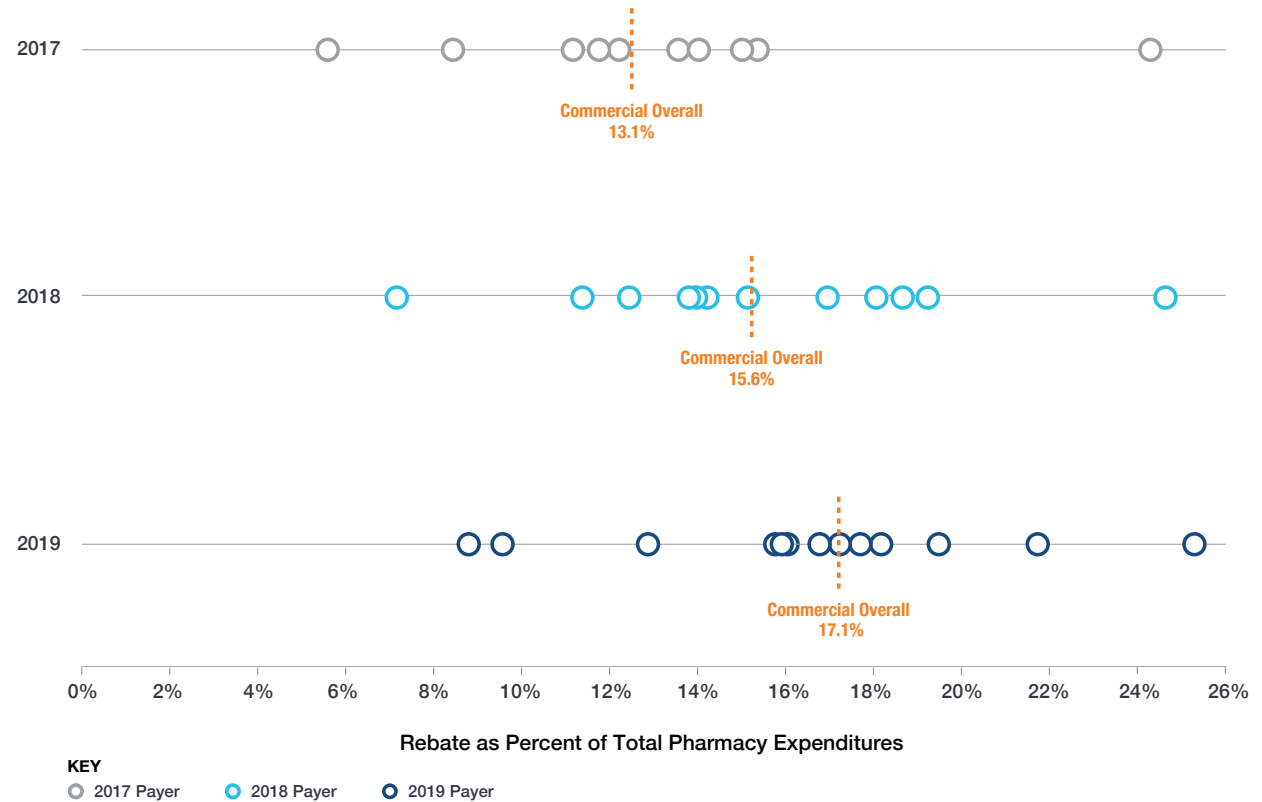
Notes: Total pharmacy payments reported by payers in THCE may include prescription drug price concessions or discounts transmitted at the point-of-sale, including coverage gap discounts. Pharmacy spending net of rebates estimates the impact of reducing the total pharmacy costs to payers by retrospective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

Range of Payer-Reported Commercial Rebates as a Percentage of Gross Pharmacy Expenditures, 2017-2019

Overall, commercial payers received 17.1% of pharmacy spending back from manufacturers in the form of rebates in 2019. This percentage reflects the amount payers received from PBMs. This percentage is an increase of 1.5 percentage points from 2018.

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. Variation in rebate percentages among commercial payers narrowed from 2017 to 2019.

In 2019, six reported rebate proportions were within two percentage points of the overall commercial rebate proportion. There were five reported rebate proportions within two percentage points of the 2018 overall commercial rebate proportion (15.6%).



Across the commercial market in 2019, 17.1% of pharmacy expenditures were returned to payers in the form of rebates.

Source: Payer-reported data to CHIA.

Notes: Overall rebate percentages determined by comparing the reported rebate amounts from all commercial payers by the reported pharmacy expenditures in Total Medical Expenditures by commercial payers. See [technical appendix](#) for more information.

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%). 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** In recognition of the challenges faced by the Massachusetts health care delivery system as payers and providers respond to the COVID-19 outbreak, CHIA delayed some data submissions and reporting. Due to the delayed submission schedule, the average run-out of submitted data was five months.
- 4** National trends in Medicare spending are estimated based on data reported to CHIA by CMS.
- 5** Pharmacy spending includes payments only for drugs covered under a member's prescription drug benefit. Payments for drugs administered at a physician's office or hospital setting are not included in the pharmacy service category and would instead be included in the service category representative of the place of service.

Total Medical Expenses & Alternative Payment Methods

KEY FINDINGS

Eight of 11 commercial payers reported HSA TME below the benchmark of 3.1%.

The largest physician groups experienced varied HSA TME growth by network.

APM adoption remained relatively stable for commercial payers, and continued to increase for MassHealth MCOs and ACO-As.

Four of the 10 largest managing physician groups had more than 90% of their managed member months under global payment arrangements.

Total Medical Expenses & Alternative Payment Methods

In addition to measuring the Commonwealth's THCE, CHIA also monitors health care spending by private commercial and privately administered Medicaid and Medicare plans and their members. The Total Medical Expense (TME) data included in this chapter enables a more detailed examination of spending drivers within health plans and among provider organizations that manage patients' care.

TME represents the total 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 as well as member cost-sharing, and covers all categories of medical expenses and all non-claims-related payments to providers, including provider performance payments. TME is reported for Massachusetts residents.

In addition to spending levels and trends, CHIA collects information about the payment arrangements between payers and providers. Historically, the majority of health care services have been paid using a fee-for-service (FFS) method. Chapter 224 of the Acts of 2012 set goals to increase the adoption of alternative payment methods (APMs) which are methods of payment in which some of the financial risk associated with the delivery of medical care as well as the management of health conditions is shifted from payers to providers.

Generally, APMs are intended to give providers new incentives to control overall costs (e.g., reduce unnecessary services and provide services in the most appropriate setting) while maintaining or improving quality.

This chapter focuses on TME data reported by private commercial and privately administered Medicaid and Medicare plans. For private commercial payers specifically, TME is presented for commercial full-claim data only, which represents members for whom the payer has access to and is able to report all claims expenses. TME data is also examined on a Health Status Adjusted (HSA) basis for each payer's member population. While the tools used for adjusting TME for health status of a payer's covered members vary among payers, HSA TME adjusts for differences in member illness burden and expected medical costs associated with members' recorded diagnoses. As a result, HSA TME levels are generally lower than unadjusted TME levels (which represent actual dollars of spending PMPM). Individual trends vary, as HSA TME cannot be compared across payers, but often HSA TME grows more slowly than unadjusted TME.¹

This chapter reports on 2018 final and 2019 preliminary² TME and APMs 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: TME for members required by their insurance plan to select a primary care provider (PCP), as well as for members who are attributed to a PCP as part of a contract between the 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

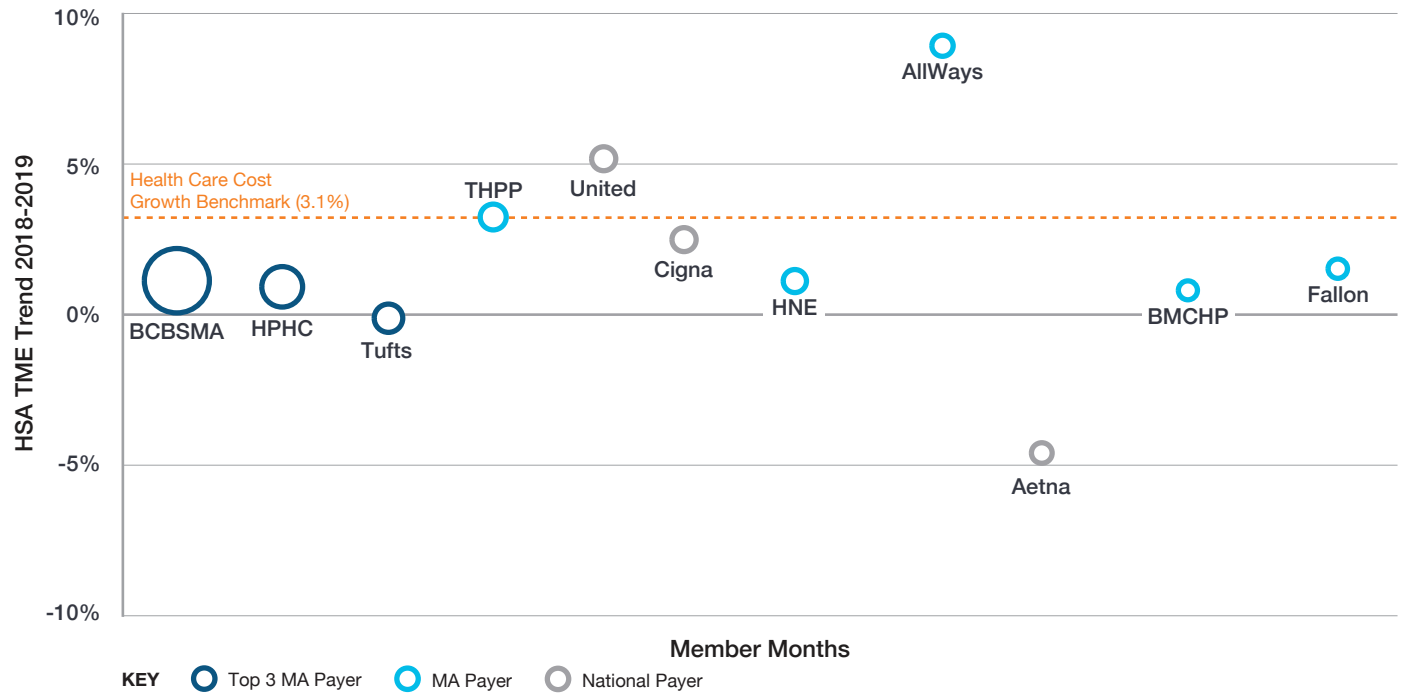
CHIA examines TME on a HSA basis for each payer's member population, which adjusts for differences in member illness burden and medical costs.

Eight of the 11 commercial payers, accounting for 83.4% of the commercial full-claim population, reported preliminary HSA TME growth below the 3.1% benchmark from 2018 to 2019.^{3,4}

The three largest Massachusetts-based commercial payers, Blue Cross Blue Shield of Massachusetts (BCBSMA), Harvard Pilgrim Health Care (HPHC), and Tufts Health Plan (Tufts) accounted for 63.7% of member months in 2019. Tufts reported a 0.2% decline in HSA TME. BCBSMA and HPHC reported HSA TME increases below the benchmark, at 1.7% and 0.7%, respectively.

Tufts Health Public Plans (THPP), United, and AllWays Health Plan (AllWays) reported HSA TME growth above the 3.1% benchmark from 2018 to 2019. Two national payers, Aetna and Cigna, reported HSA TME growth under the benchmark.³

Change in Preliminary Commercial HSA TME by Payer, 2018-2019



Circles are scaled to reflect member months. Payers are presented in order based on number of member months.

Eight of the 11 commercial payers reported preliminary health status adjusted TME trends below the benchmark in 2019, including the three largest commercial payers.

Source: Payer-reported TME data to CHIA.

Notes: Data presented here should be considered preliminary, incorporating on average five months of claims run-out and payers' estimates for quality and other performance settlements. Commercial full-claims data represents members for whom the payer has access to and is able to report all claims expense, and represented 66.2% of total commercial member months in 2019. The tools used for adjusting TME for health status of a payer's covered members vary among payers, and therefore adjustments are not directly comparable across payers. See the [databook](#) for a list of health status adjustment tools used for the data presented in this report. These trends are based on expenditures that reflect payments to providers, and are gross of prescription drug rebates received by health plans after the point of sale.

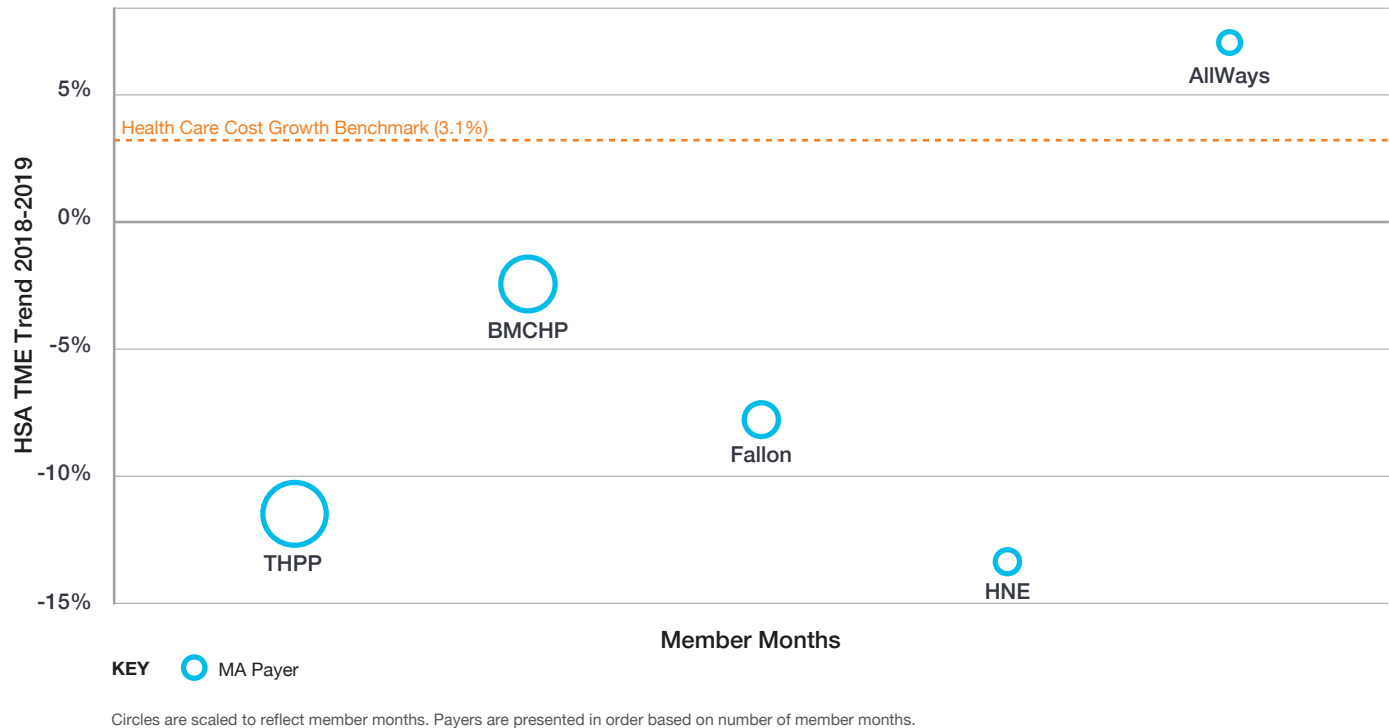
Change in Preliminary MassHealth MCO and ACO-A HSA TME by Payer, 2018-2019

In 2019, BMC HealthNet Plan (BMCHP) and THPP offered ACO-A and MCO plans to their MassHealth members. Fallon, Health New England (HNE), and AllWays offered only ACO-A plans to their MassHealth members.

Fallon was the only payer that reported an increase in membership, and AllWays reported the greatest decrease in membership among all MassHealth MCO and ACO-A payers (-47.7%).

The majority of MassHealth MCO/ACO-A members (89.3%) were enrolled with THPP, BMCHP, and Fallon. All three of these payers reported negative preliminary HSA TME growth from 2018 to 2019.

The remaining two payers, AllWays and HNE, accounted for 10.7% of member months in 2019. AllWays reported preliminary HSA TME growth above the benchmark at 6.3%, while HNE reported negative HSA TME growth at -14.0%.



Four of the five MassHealth MCO/ACO-A payers reported negative preliminary health status adjusted TME trends in 2019.

Source: Payer-reported TME data to CHIA.

Notes: Data presented here should be considered preliminary, incorporating on average five months of claims run-out and payers' estimates for quality and other performance settlements. 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. See the [databook](#) for a list of health status adjustment tools used for the data presented in this report. These trends are based on expenditures that reflect payments to providers, and are gross of prescription drug rebates received by health plans after the point of sale.

Total Medical Expenses & Alternative Payment Methods

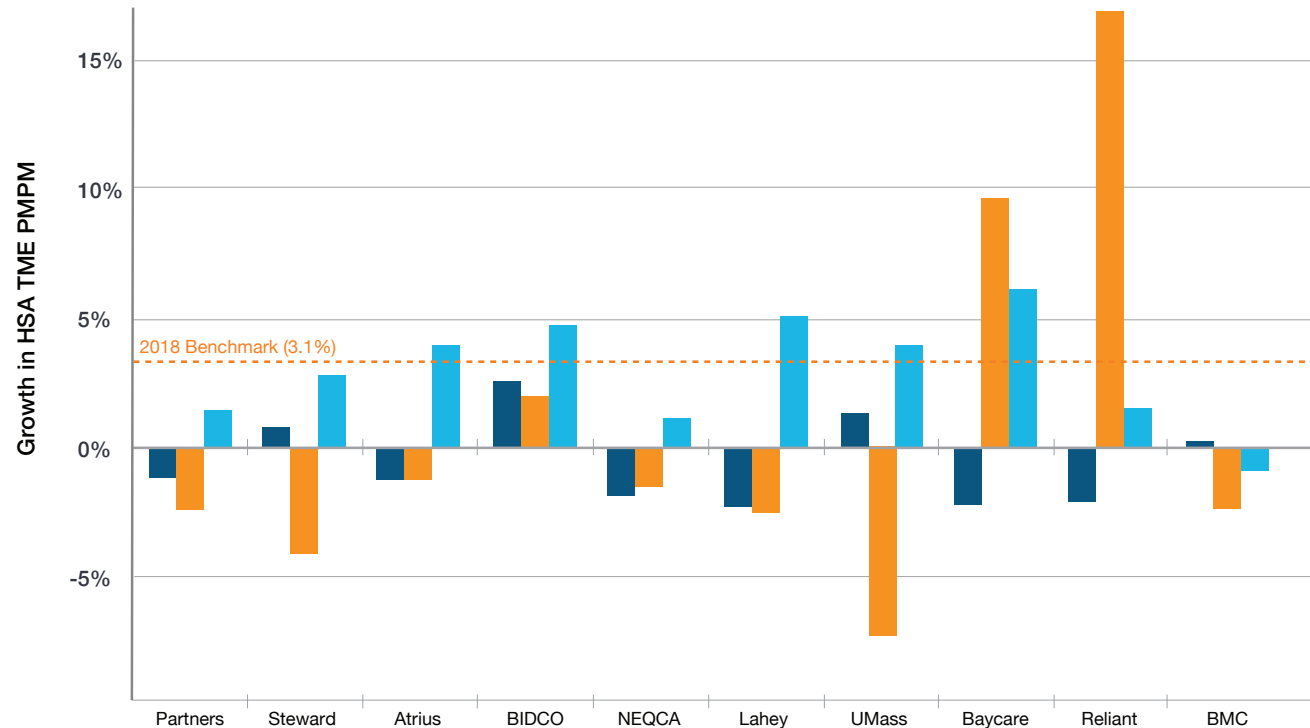
Managing physician groups, often multi-specialty practices that include primary care providers (PCPs), are responsible for coordinating the care of their members. Managing physician group HSA TME measures the total medical spending for commercial members attributed to a PCP, adjusted to reflect differences in physician groups' patient populations.

Managing physician group HSA TME is measured on a final basis as there is a longer claims run-out period. The 10 largest physician groups within the networks of the three largest payers represented 57.3% of managed member months in 2018.

Six of the 10 physician groups had HSA TME growth above the 3.1% benchmark in at least one of the payer's network. In 2018, the benchmark was lowered from 3.6% to 3.1%.

All of the 10 largest physician groups had HSA TME growth below the benchmark in BCBSMA's network.

Change in Final Managing Physician Group Commercial HSA TME, 2017-2018



BCBSMA, HPHC, and Tufts Share of Group's Managed Member Months	94.7%	81.0%	89.8%	72.9%	96.9%	89.7%	79.9%	47.3%	61.6%	66.3%
Total Managed Member Months in 2018	3.1M	2.3M	2.2M	1.6M	1.3M	1.2M	1.0M	0.8M	0.7M	0.5M

Key ■ BCBSMA ■ HPHC ■ Tufts

The largest physician groups experienced varied HSA TME growth by network in 2018.

Source: Payer-reported TME data to CHIA.

Notes: Data reported here is based on final 2017-2018 commercial full-claim TME data, both for members whose plan requires the selection of a PCP, as well as for members who were attributed to a PCP pursuant to a contract between the payer and the physician group, such as a PPO APM. The tools used for adjusting TME for health status of a payer's covered members vary among payers, and therefore HSA TME is not comparable across payers. See the [databook](#) for more information. Health New England represented the largest share of member months for Baycare. These trends are based on expenditures that reflect payments to providers, and are gross of prescription drug rebates received by health plans after the point of sale.

Total Medical Expenses & Alternative Payment Methods

Payers and providers have been using APMs to promote coordinated care while also providing incentives to control overall costs and maintain or improve quality.

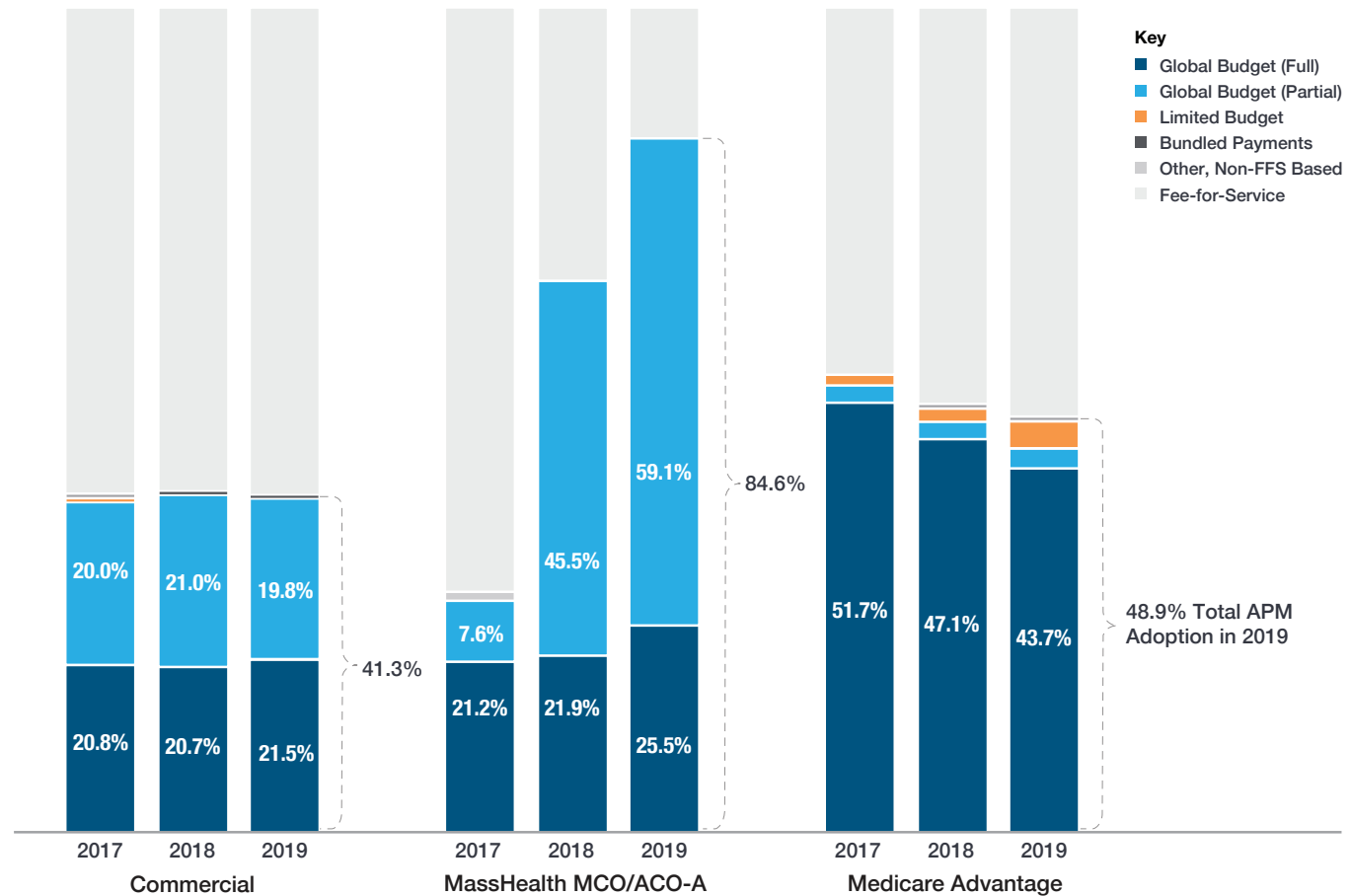
In the Massachusetts commercial market, overall APM adoption has remained relatively stable since 2017.

MassHealth MCO and ACO-A APM adoption continued to increase after the MassHealth ACO program was implemented in 2018, with reported APM use for 84.6% of members in 2019, an increase of 17.2 percentage points from 2018.

In 2019, 3.3% of Medicare Advantage members had their care paid for under a limited budget arrangement, more than doubling from the 1.5% in 2018. However, overall APM adoption continued to decline in this insurance category.

Global payment arrangements continued to be the dominant APM employed by payers, accounting for 99.9% of commercial APM arrangements, 100% of MassHealth MCO and ACO APM arrangements, and 93.2% of Medicare Advantage APM arrangements in 2019.

Adoption of Alternative Payment Methods by Insurance Category, 2017-2019



APM adoption remained relatively stable for commercial payers, while adoption for MassHealth continued to increase.

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. Global partial APMs reflect arrangements in which the physician group is not held accountable for certain services, often pharmacy and behavioral health expenses.

Total Medical Expenses & Alternative Payment Methods

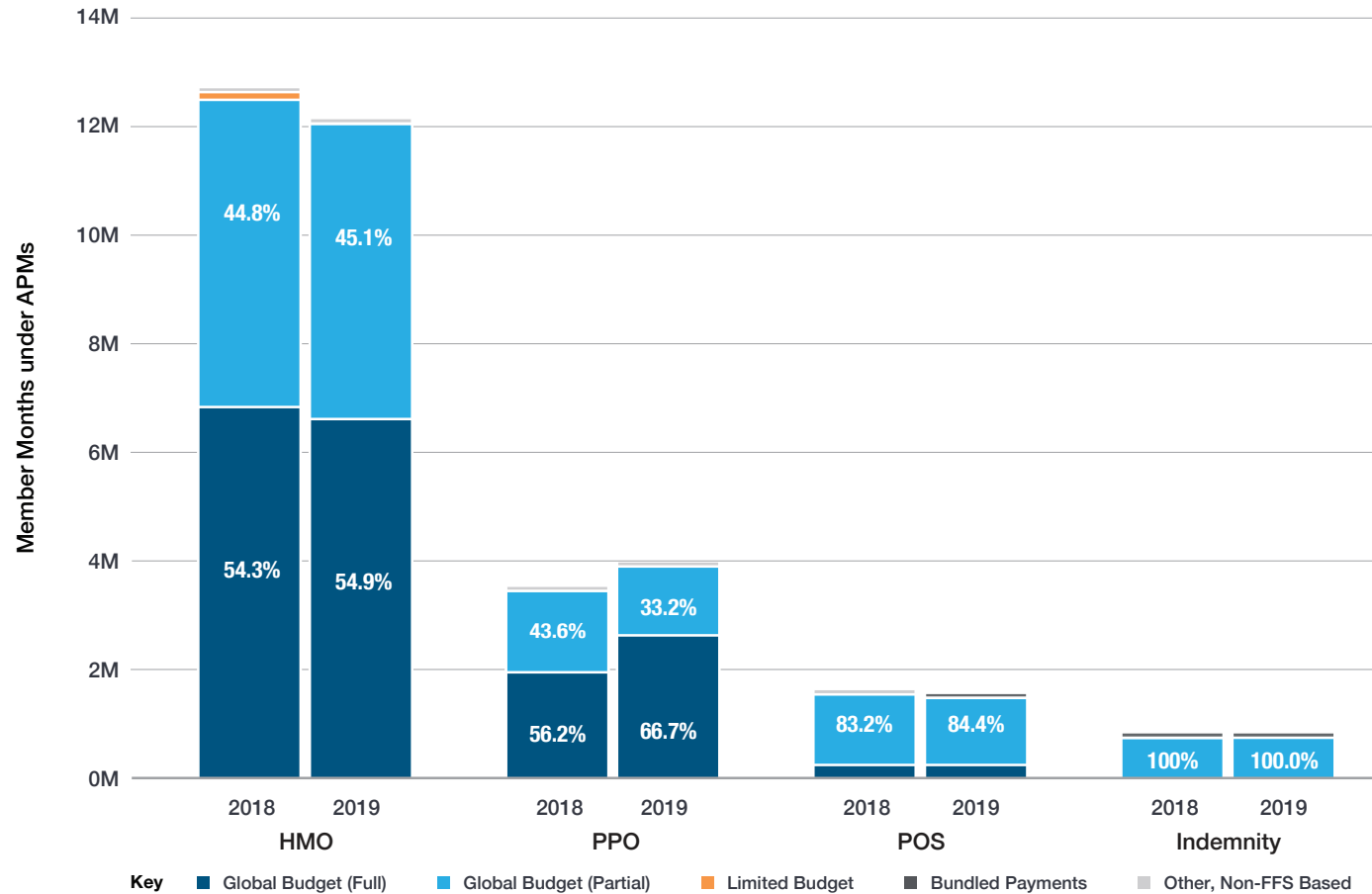
The 41.3% of commercial members whose care was paid for using APMs in 2019 equated to 18.2 million member months. The majority of these members (87.7%) were enrolled in HMO or PPO products.

APM adoption for HMO members decreased from 63.8% to 58.3% between 2018 and 2019.

The proportion of total PPO member months covered under an APM increased from 22.0% to 25.3% between 2018 and 2019, due to an increase in member months under a global full payment arrangement, even as total PPO enrollment decreased.

Among HMO and PPO products, global arrangements that held primary care providers accountable for all services (global full) were most common, whereas contracts with services carved out from the global budget (global partial) were more prevalent among POS and Indemnity plans. Pharmacy and behavioral health were the most common services excluded from global partial arrangements.

Alternative Payment Methods by Commercial Product Type, 2018-2019



APM adoption decreased among HMO products and increased among PPO products, with global full budget arrangement as the predominant APM.

Source: Payer-reported APM data to CHIA.

Notes: Membership under APMs is measured by the share of managed 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, and totals 41.3% of the total commercial member months in 2019.

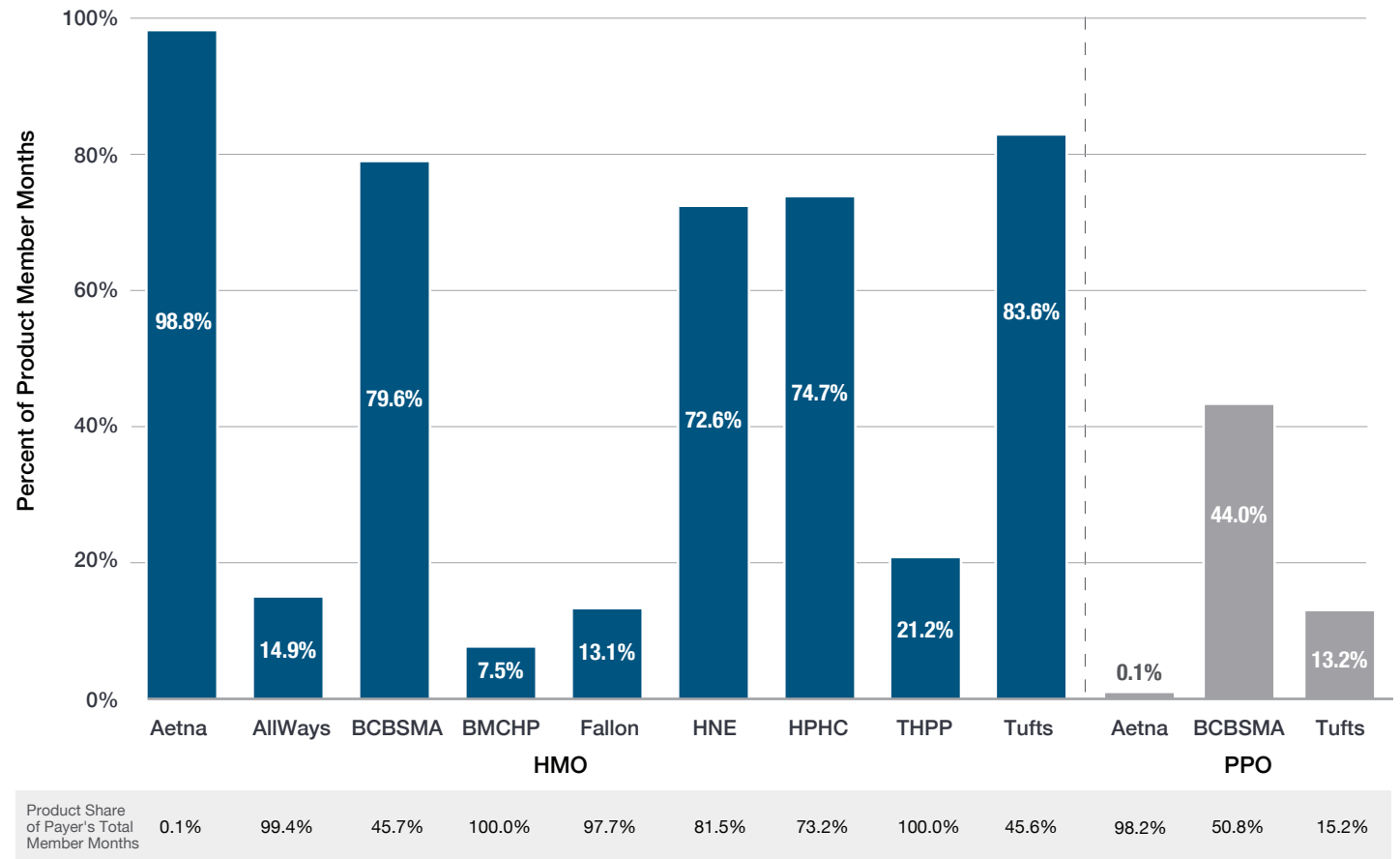
Total Medical Expenses & Alternative Payment Methods

HMO and PPO plans represented 82.0% of commercial membership and \$19.3 billion in spending in 2019.

Nine payers reported APM use for their HMO populations. Five of these payers, Aetna, BCBSMA, HNE, HPHC, and Tufts, reported over 70% of their HMO members under APM arrangements in 2019, with Aetna reporting nearly 100%, although Aetna has few member months in HMO products.

PPO products had lower APM adoption use than HMOs, with three payers reporting APM use for PPO members in 2019. BCBSMA had the highest APM adoption among PPO products at 44.0%, an increase from 37.6% in 2018. Tufts reported 13.2% of PPO members with APM adoption. Aetna reported that the majority of its member months were in PPO products, with very few of these members managed under APM arrangements (0.1%). AllWays, Cigna, Fallon, HNE, HPHC, Health Plans, Inc. (HPI), and United reported all of their PPO members in FFS arrangements in 2019.

HMO and PPO Alternative Payment Method Adoption by Commercial Payer, 2019



Of the 10 commercial payers, nine reported the utilization of APMs for HMO products compared to three for PPO plans.

Source: Payer-reported APM data to CHIA.

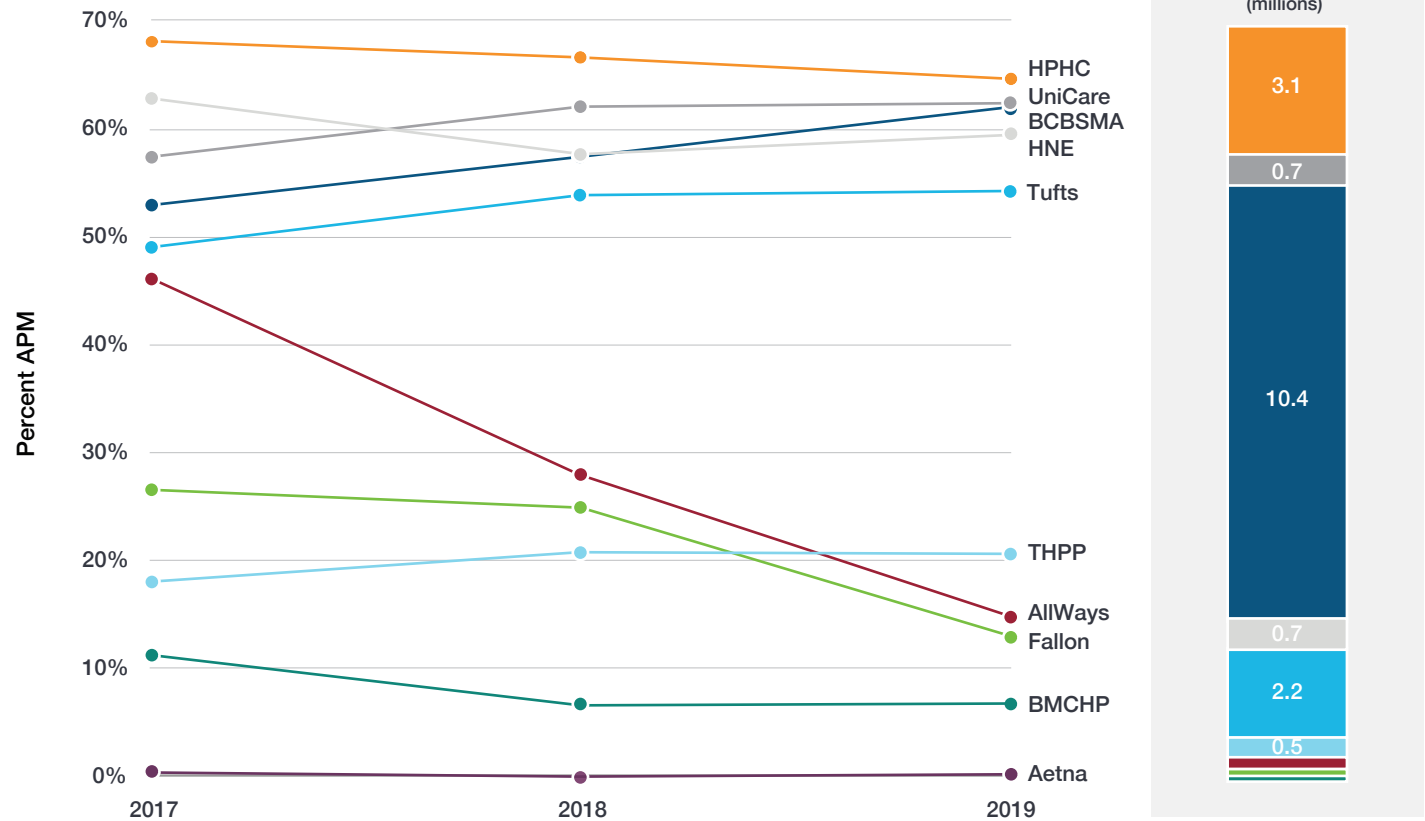
Notes: Cigna, HPI, and United Healthcare reported the use of no APMs. Membership under APMs is measured by the share of member months associated with a primary care provider engaged in an alternative payment contract with the reporting payer. The data displayed above includes both full-claim and partial-claim members, and represents 36.3% of total commercial member months in 2019.

APM Adoption Trends by Commercial Payers, 2017-2019

Ten of 13 commercial payers reported utilization of APM arrangements in 2019. HPHC, UniCare, BCBSMA, HNE, and Tufts had the majority of their members' care paid for through an APM arrangement, consistent with prior years. HPHC was the only one of these five payers to report a decrease from 2018 to 2019.

BCBSMA reported the largest increase in the proportion of members whose primary care provider was engaged in an APM contract. Four payers, BMCHP, HNE, Tufts, and UniCare, reported slight increases. AllWays and Fallon reported decreases greater than 10 percentage points.

Cigna and United Healthcare reported no APM usage in 2019, consistent with prior years.



The commercial payers with a majority of members in an APM arrangement remained consistent between 2018 and 2019.

Source: Payer-reported APM data to CHIA.

Notes: Cigna, HPI, and United Healthcare reported no use of APMs. 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

APMs are implemented as a shared initiative between payers and the physician groups that manage patients' care.

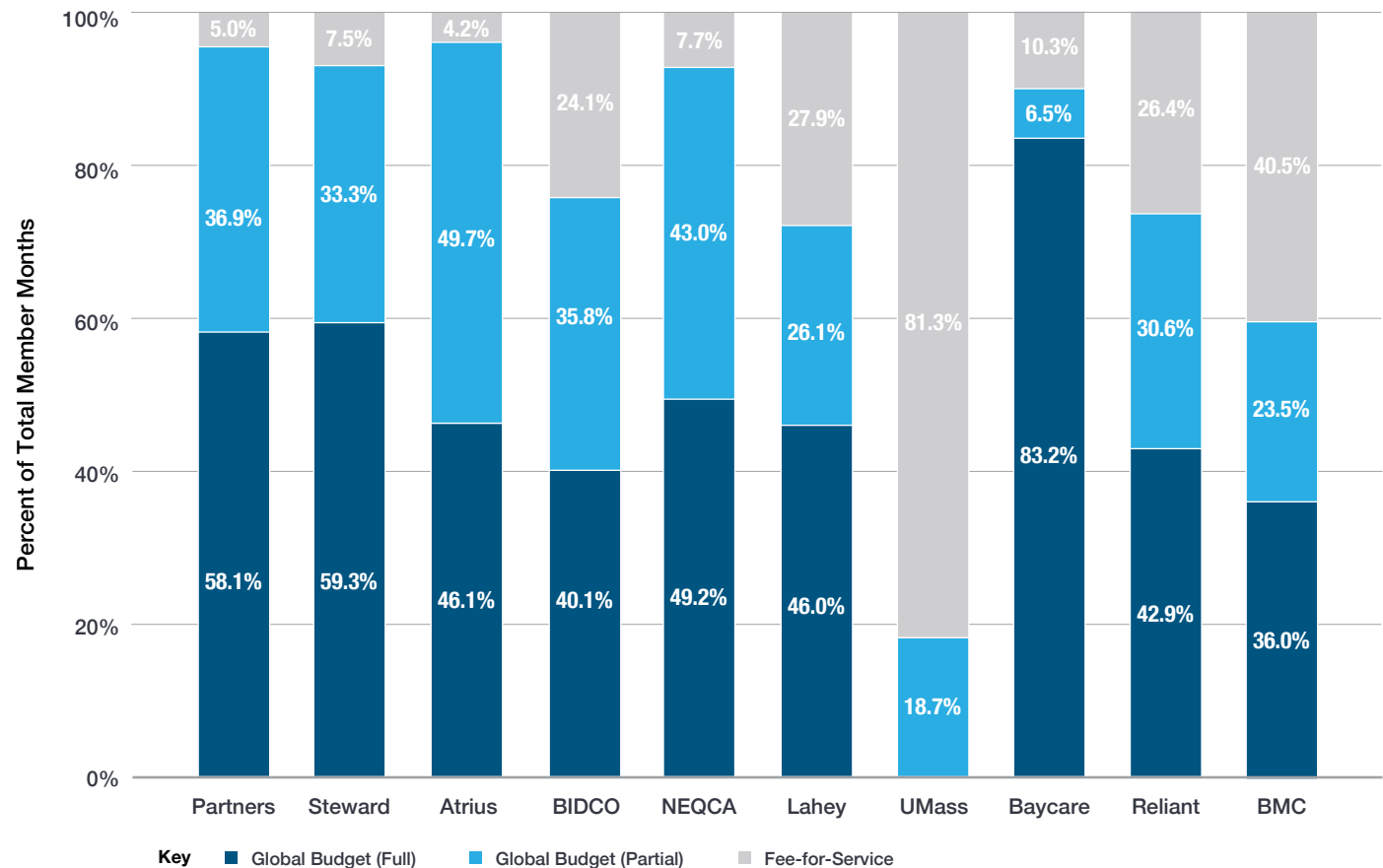
The 10 largest physician groups accounted for 46.7% of adult HMO and PPO members in 2019.

Overall, across the top 10 managing physician groups, 83.2% of managed member months were under an APM arrangement, an increase from 81.5% in 2018. Nine of these 10 managing physician groups had more than half of their managed member months under an APM. Partners Community Physicians Organization and Atrius Health had the highest share of member months under APMs, at 95.0% and 95.8%, respectively.

BIDCO experienced the largest increase in global payment arrangements between 2018 and 2019, from 57.3% of member months in 2018 to 75.9% in 2019.

UMass continued to have the lowest rate of APM adoption of the 10 largest physician groups in 2019.

Commercial Adoption of Alternative Payment Methods by Managing Physician Group, 2019



Four of the 10 largest managing physician groups reported over 90% of their managed member months under a global payment arrangement.

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 adult HMO and PPO members, and represents 37.2% of total commercial member months in 2019.

APM Adoption Trends by MassHealth MCOs and ACO-As, 2017-2019

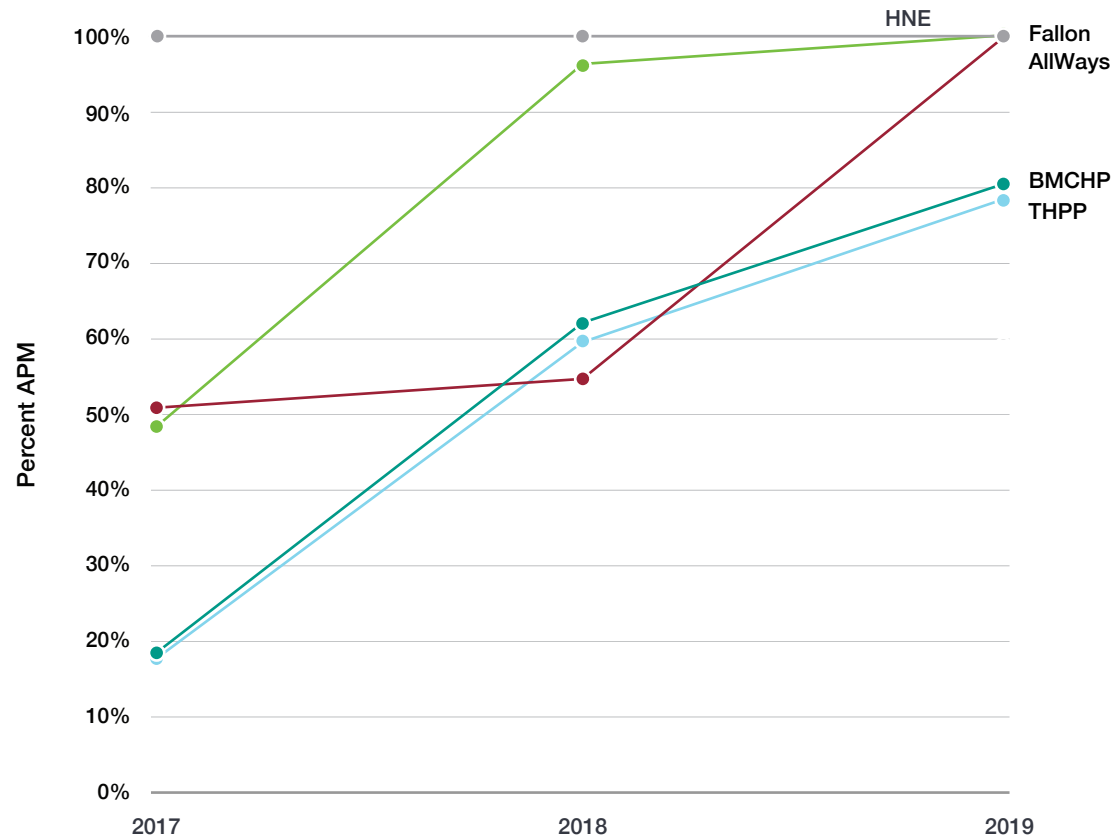
MassHealth MCO and ACO-A payers reported continued increases in APM utilization following the implementation of the MassHealth ACO program in 2018.

In 2019, all five MassHealth MCO and ACO-A payers reported APM contract arrangements, covering 84.6% of total members, an increase from 67.4% in 2018.

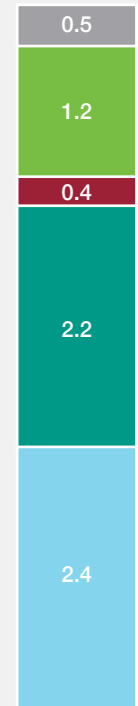
HNE reported all members under an APM contract during the three-year period.

The four other payers with MassHealth MCO and ACO contract arrangements reported increases in APM adoption between 2018 and 2019. Fallon and AllWays reported 100% adoption in 2019.

BMCHP and THPP, the two largest payers, had similar APM adoption trends from 2017 to 2019, with 2019 rates at 80.3% and 78.4%, respectively.



2019 Member Months Under APMs (millions)



Three payers reported 100% APM adoption for MassHealth MCO and ACO-A members in 2019.

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 Notes

1 In recent years, the Health Policy Commission has compared the increases in severity to what would be expected based on population health trends. Analysis of these trends can be found in the [2019 Cost Trends Report](#).

2 In order to meet statutory deadlines, this report includes information using both preliminary and final TME and APM data. Preliminary TME/APM data is usually reported to CHIA with only 60-90 days run-out after the close of the calendar year. However, with the reporting date pushed back due to COVID-19, this report's preliminary data incorporates, on average, five months of claims run-out. Preliminary TME includes payer estimates for claims that have been incurred but not reported, as well as projections of quality and financial performance settlements for providers. Final data, which allows for a 17-month claims run-out period, updates the preliminary estimates with the actual claims and non-claims experience for the performance period. This chapter highlights health status adjusted TME using preliminary data for payers, and final data for physician groups.

Generally, differences between preliminary and final TME/APM submissions are attributable to variation in the degree of accuracy with which payers predict finalized member eligibility, claims payments, and performance-based settlements. Non-claims based settlements, in particular, are often settled later than claims; as a result, payers with more non-claims may have more variation in preliminary and final TME/APM data.

Preliminary trends presented in this year's annual report are based on payer data submissions with an average claims run-out period of five months, due to CHIA moving the submission deadline until later in the calendar year. This is a longer run-out period than in previous annual reports, and as a result, it is expected there will be less variation between these preliminary trends and final trends to be reported next year.

For more detailed information on 2018 final data, please see the [databook](#).

3 See note 2.

4 All TME expenditures and trends in this chapter reflect payments to providers, and are gross of rebates received by health plans after the point of sale.

5 Cigna-East and Cigna-West reported under a single entity name, Cigna. This was a change from how members were classified in earlier CHIA reports.

Private Commercial Contract Enrollment

KEY FINDINGS

While individual purchaser enrollment grew faster than any other market sector, the vast majority (92.6%) of private commercial members were covered through employers in 2019.

The three largest local payers in Massachusetts experienced membership declines in 2019, while AllWays and THPP saw sizeable gains.

By 2019, 35.1% of Massachusetts contract members were enrolled in high deductible health plans (HDHPs).

HDHP enrollment continued to grow steadily across nearly all market sectors, with the fastest growth among jumbo group employers.

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 2017 through 2019 reflects more than 4.5 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 for themselves and their families 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, qualifying Massachusetts residents may purchase ConnectorCare plans that include state cost-sharing reduction (CSR) subsidies and premium subsidies and federal tax credits. Prior to October 2017, ConnectorCare funding also included federal CSR subsidies. Of the payers included in this report, AllWays, BMCHP, Fallon, HNE, and THPP offered ConnectorCare plans.³

In Massachusetts, the individual and small group markets operate as a “merged market” with different premium-

For additional insight into:

- Employer-sponsored insurance plans, see CHIA's 2018 [Massachusetts Employer Survey](#).
- Massachusetts insurance enrollment trends, including Medicare and Medicaid enrollment, see CHIA's most recent [Enrollment Trends](#) publication.
- The impact of COVID-19 on insurance coverage in the Commonwealth, see CHIA's [Monthly Enrollment Summaries](#).

rating requirements and Affordable Care Act (ACA) benefit standards than larger employer group purchasers.

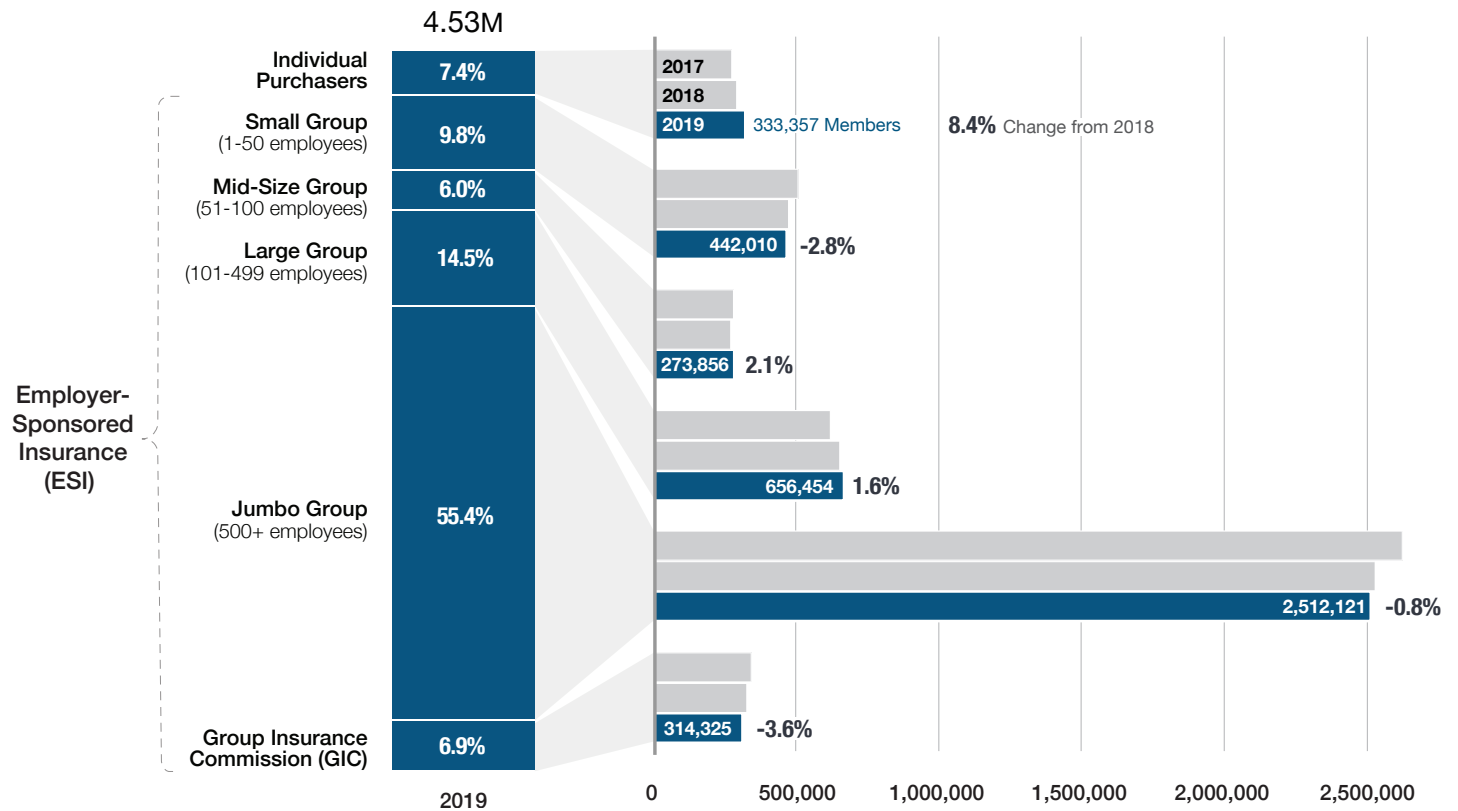
Chapter results do not include data for student health plans offered by colleges and universities. The [dataset](#) contains more information on this population as well as expanded enrollment and financial data for the private commercial market. •

Enrollment by Market Sector, 2017-2019

Approximately three in five Massachusetts residents are covered by private commercial insurance.⁴ Private commercial enrollment held steady in 2019 (-0.1%) after decreasing 2.3% in 2018. Enrollment is reported as average membership within each year.

The vast majority (92.6%) of private commercial coverage was purchased through ESI plans. More than 2.5 million contract lives, or 55.4% of the market, were enrolled through jumbo group employers. The rate of decline in jumbo group enrollment slowed from 4.1% in 2018 to 0.8% in 2019. The mid-size group market sector had the fastest growth rate among ESI market sectors at 2.1%.

The number of individual purchasers grew at a faster rate than in prior years, increasing 8.4% between 2018 and 2019. The increase was largely driven by growth in the ConnectorCare population, which increased 10.2% to nearly 210,000 members. During the same period, enrollment in small group health plans decreased by 2.8%. The individual and small group sectors are “merged” for premium-rating purposes.



While 92.6% of members were covered by employer-sponsored insurance in 2019, individual purchasers continued to show the fastest percentage growth in enrollment.

Source: Payer-reported data to CHIA.

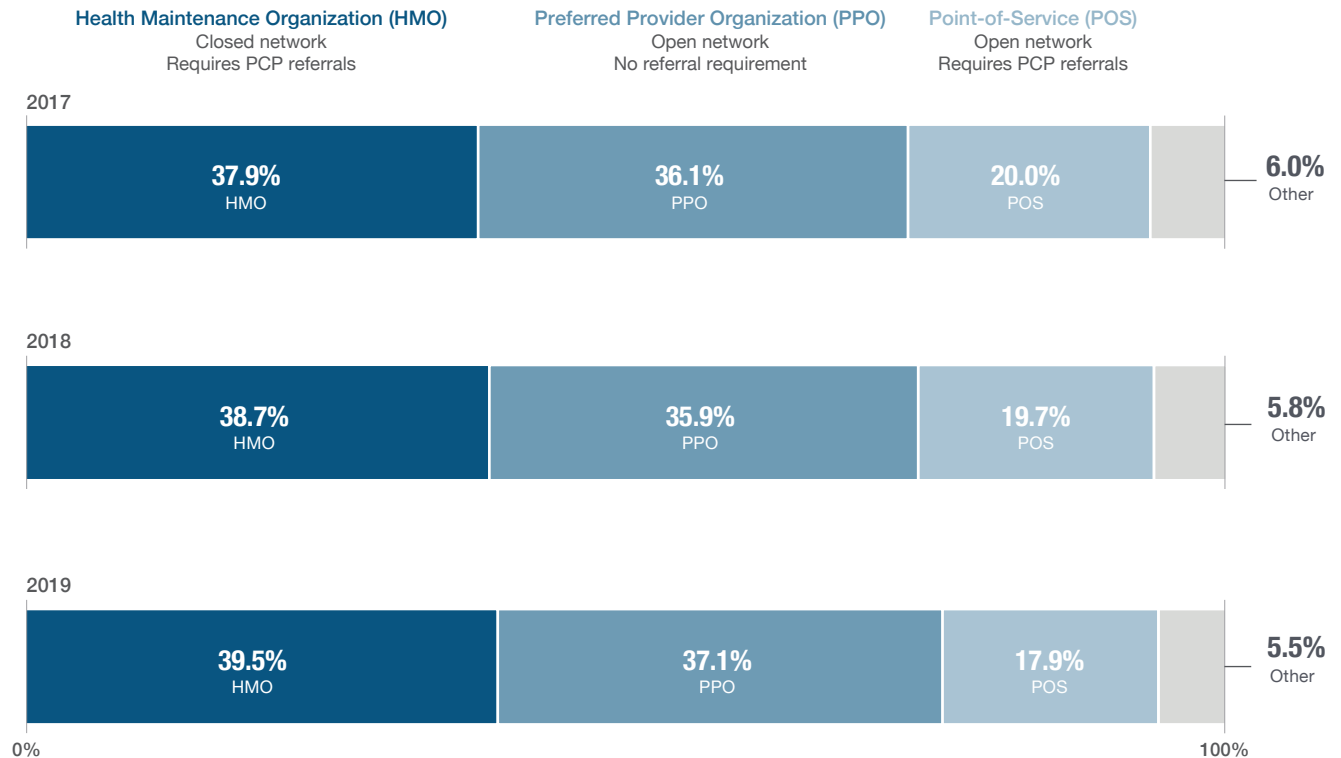
Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. See [technical appendix](#).

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

Between 2017 and 2019, there was a small but steady increase in the proportion of members enrolled in HMO and PPO products. Over three-quarters of members were enrolled in HMO (39.5% of all members) or PPO (37.1%) plans in 2019. The proportion of members in POS plans, which offer members the flexibility to receive out-of-network care with referral from a PCP, decreased from 19.7% in 2018 to 17.9% in 2019.

An additional 5.5% of private commercial contract members were classified in “Other” product types, which include EPO and Indemnity plans.

Enrollment by Product Type, 2017-2019



Between 2017 and 2019, the proportion of members enrolled in HMO and PPO plans increased slightly as POS enrollment declined.

Source: Payer-reported data to CHIA.

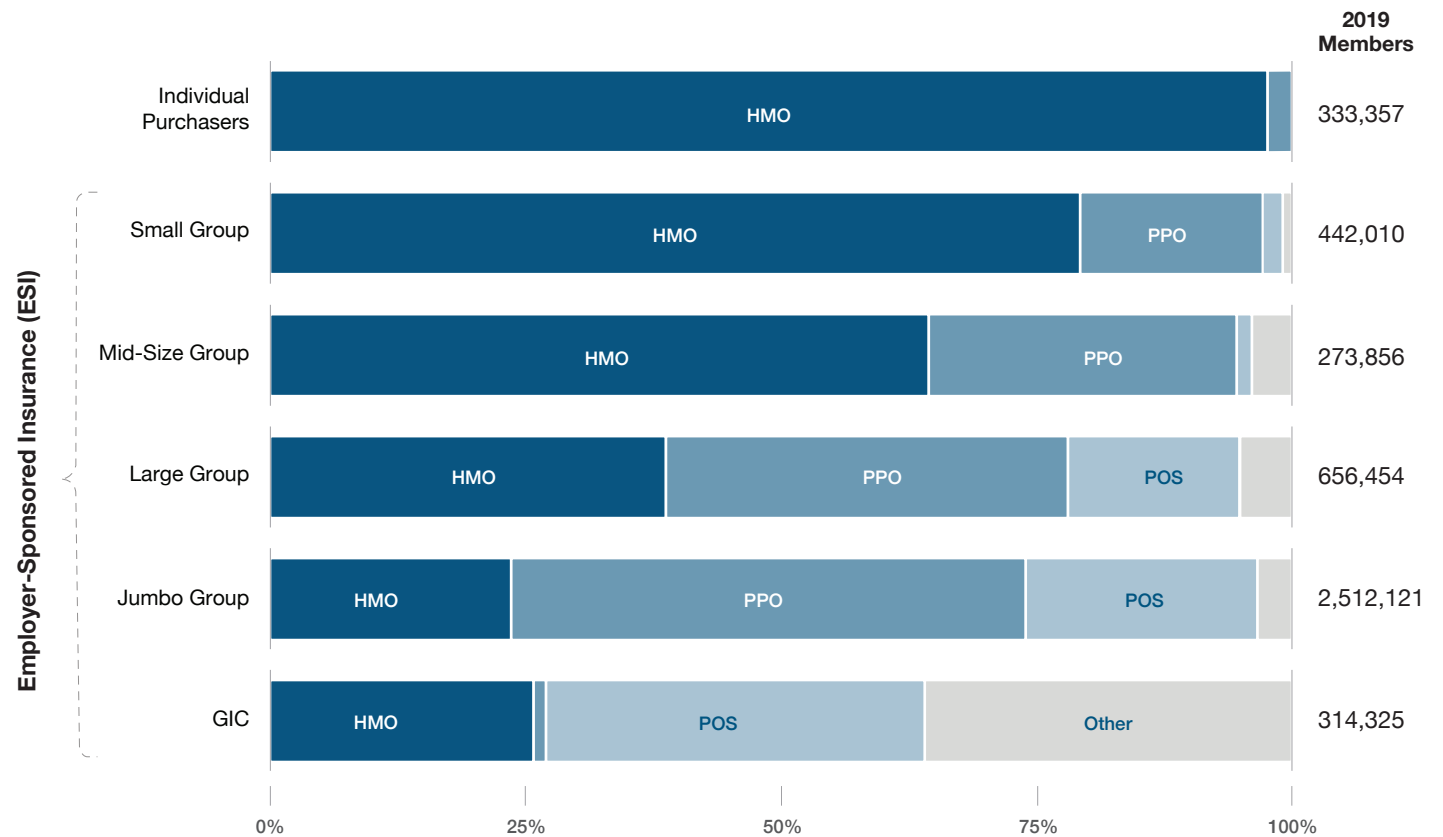
Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. See [technical appendix](#).

Enrollment by Market Sector and Product Type, 2019

Membership by product type varies across market sectors and, for ESI plans, reflects a combination of choices by employers and health plan enrollees. In general, HMO plan prevalence is higher among smaller employers, while larger employers favor PPO and POS plans with looser network requirements.

In 2019, nearly all (97.8%) individual purchasers were enrolled in HMO plans, compared to nearly one-fourth (23.6%) of jumbo group members. POS plans were common among large group (16.9%), jumbo group (22.7%), and GIC (37.3%) members, but not in other market sectors. The GIC had the highest percentage of members enrolled in Other plans (35.5%), which reflects the GIC's Indemnity plan offerings.

Data from CHIA's [Massachusetts Employer Survey](#) suggests that larger employers are more likely than smaller ones to offer more than one type of health plan to their employees.⁵



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.

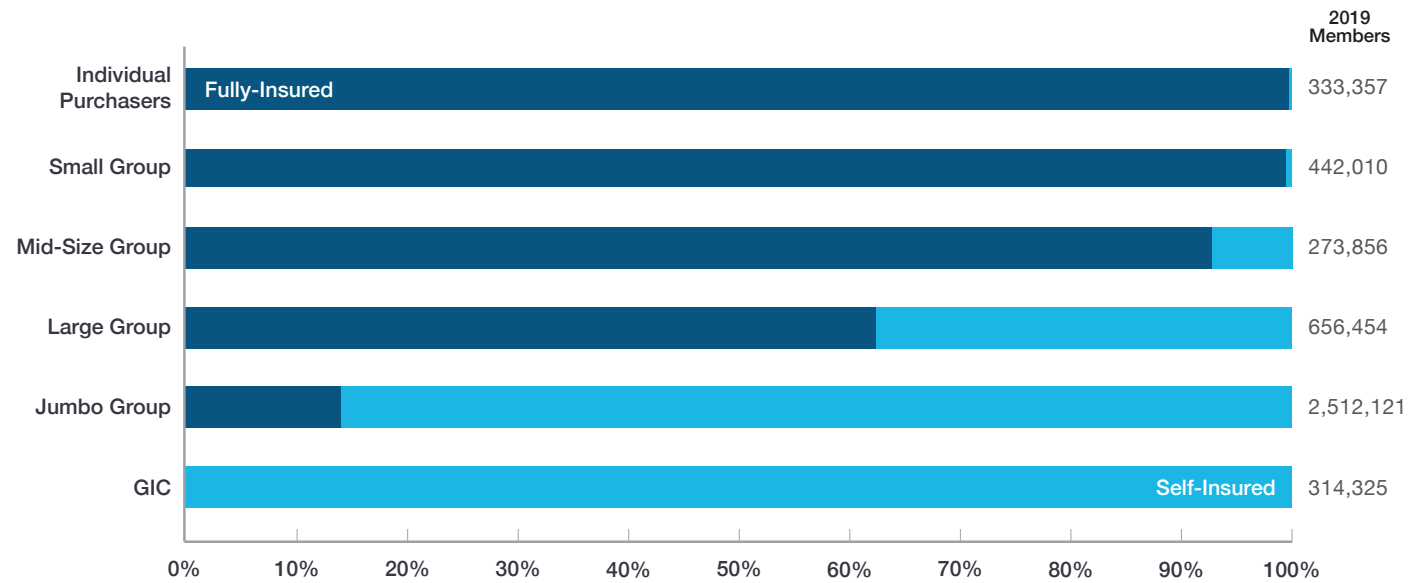
Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. See [technical appendix](#).

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 2019, self-insured membership represented 60.5% of the Massachusetts private commercial market (2.74 million members). Self-insured enrollment increased 1.4%, driven by self-insured growth in the large group and GIC market sectors.

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 (100% self-insured). In July 2018, the GIC converted all remaining fully-insured plans to self-insured.⁶ Self-insurance among smaller Massachusetts employers remained low, but ticked up slightly in the small (+240 members) and mid-size (+6,000 members) market sectors in 2019.

Enrollment by Funding Type, 2019



In 2019, 60.5% of private commercial members were enrolled in self-insured plans, which were most prevalent among larger employer groups.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. See [technical appendix](#).

In 2019, BCBSMA remained the largest private payer overall, with 41.3% of the Commonwealth's commercial contract membership. However, payer market share varied across market sectors.

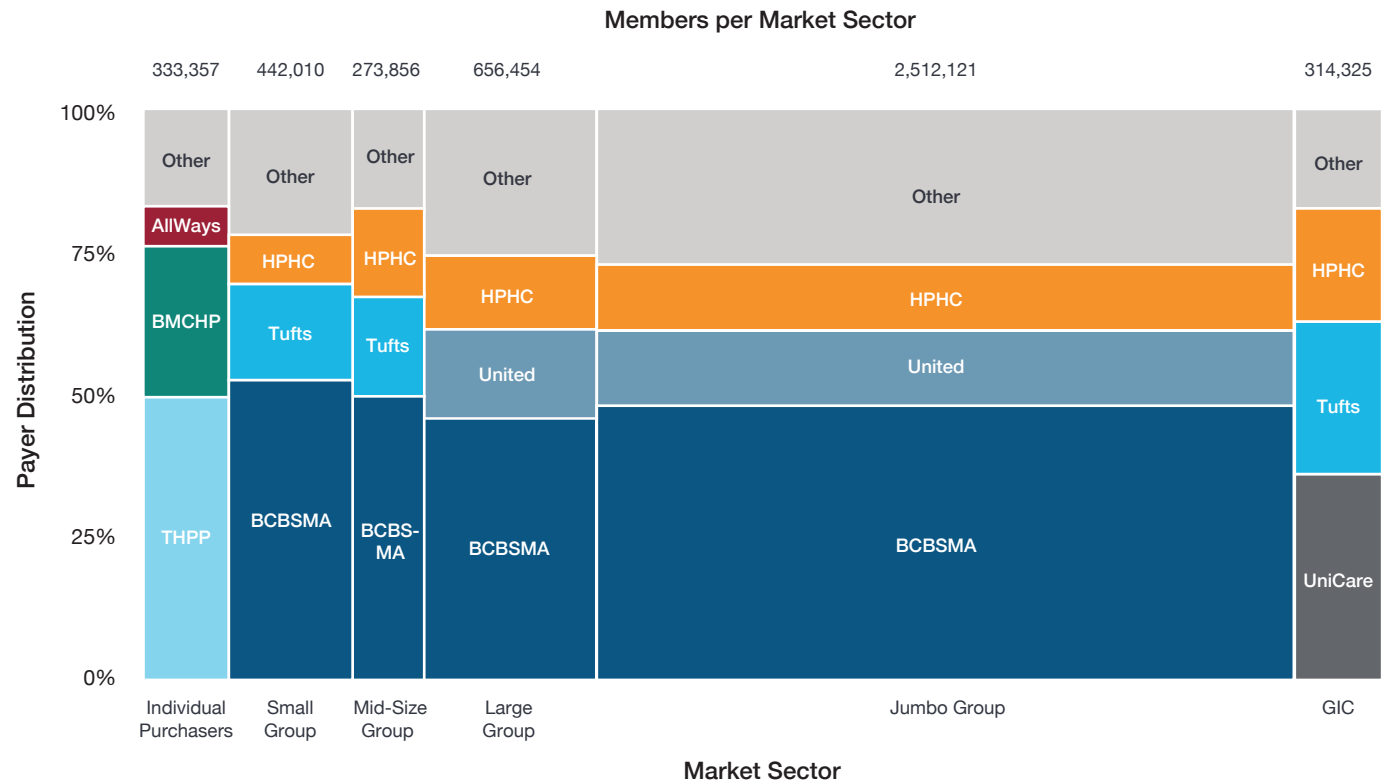
Other than the GIC, BCBSMA maintained the largest market share in every ESI market sector, enrolling nearly half of all members. HPHC, Tufts, and United also held significant portions of the ESI market.

More than one in three GIC members (35.5%) enrolled in plans offered by UniCare, a subsidiary of Anthem.

BMCHP and THPP, which historically served MassHealth members, together enrolled three-fourths of individual purchasers in 2019.

HPHC and Tufts (including THPP) merged at the start of 2021.⁷ In 2019, HPHC/Tufts/THPP combined would have had the second largest membership of any payer, with 24.0% of the commercial market.

Largest Payers by Market Sector, 2019



BCBSMA maintained nearly half of the market share in all ESI market sectors except GIC.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. THPP is reported separately from its parent company, Tufts. See [technical appendix](#).

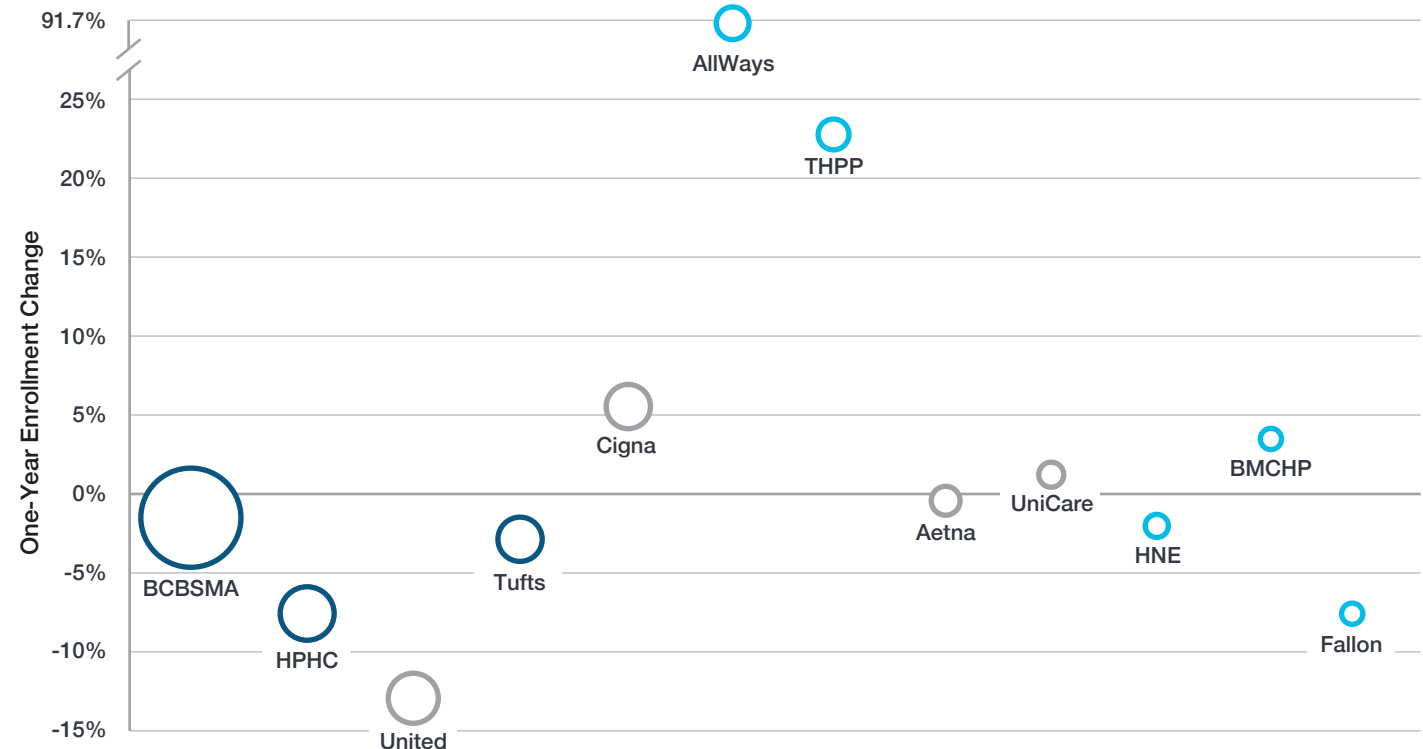
Private Commercial Contract Enrollment

The three largest local payers (BCBSMA, HPHC, and Tufts) all reported declining enrollment in 2019. HPHC lost merged market membership for the third year in a row, while also experiencing decreases in jumbo group and GIC enrollment in 2019. BCBSMA also reported decreases in merged market membership. Although Tufts reported declines in large group and GIC market sectors, the broader organization experienced a net gain in members due to THPP.

THPP had the second fastest member growth at 22.9%, growing to nearly 183,000 members, due to increases in both the individual and small group sectors.

Alliways reported the largest percentage increase in Massachusetts contract enrollment from 2018 to 2019 at 91.7%, due to a 103,000 member increase in the jumbo group sector. In 2019, Alliways started covering the employees of Partners HealthCare, the state's largest private employer, shifting this membership away from BCBSMA.⁸ Alliways is also owned by Partners HealthCare (recently rebranded as Mass General Brigham).

Enrollment Changes by Payer, 2018-2019



2019 Members	1,870,075	523,174	465,627	379,591	357,149	208,667	182,966	147,232	111,592	106,664	89,840	89,547
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Circles are scaled to reflect membership.

KEY ● Top 3 MA Payer ● MA Payer ○ National Payer

The three largest local payers in Massachusetts experienced membership declines in 2019, while Alliways and THPP saw sizeable gains.

Source: Payer-reported data to CHIA.

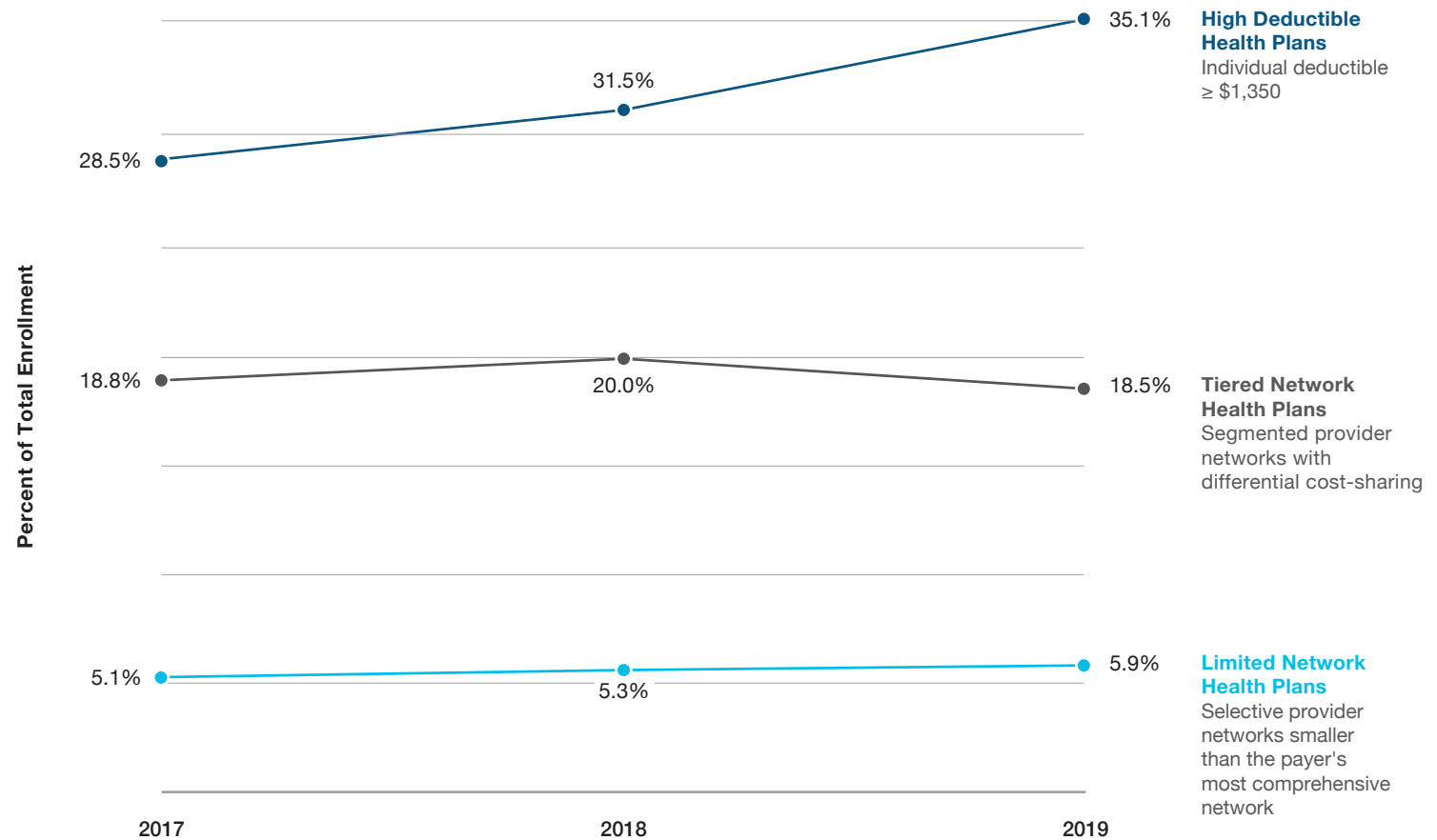
Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. THPP is reported separately from its parent company, Tufts. See [technical appendix](#).

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 2018 to 2019, HDHP enrollment increased from 31.5% to 35.1% of the private commercial market, continuing a long-term growth trend. During the same period, enrollment in tiered networks (18.5% of members in 2019) and limited network enrollment (5.9% of members) remained relatively steady.¹⁰

The GIC has led payer development and adoption of tiered and limited provider networks in the Commonwealth. Apart from the GIC, only 12.6% of members were enrolled in tiered networks and 5.6% were enrolled in limited networks in 2019.

Enrollment by Benefit Design, 2017-2019



Enrollment in high deductible health plans continued to grow, while tiered and limited network enrollment remained stable.

Source: Payer-reported data to CHIA.

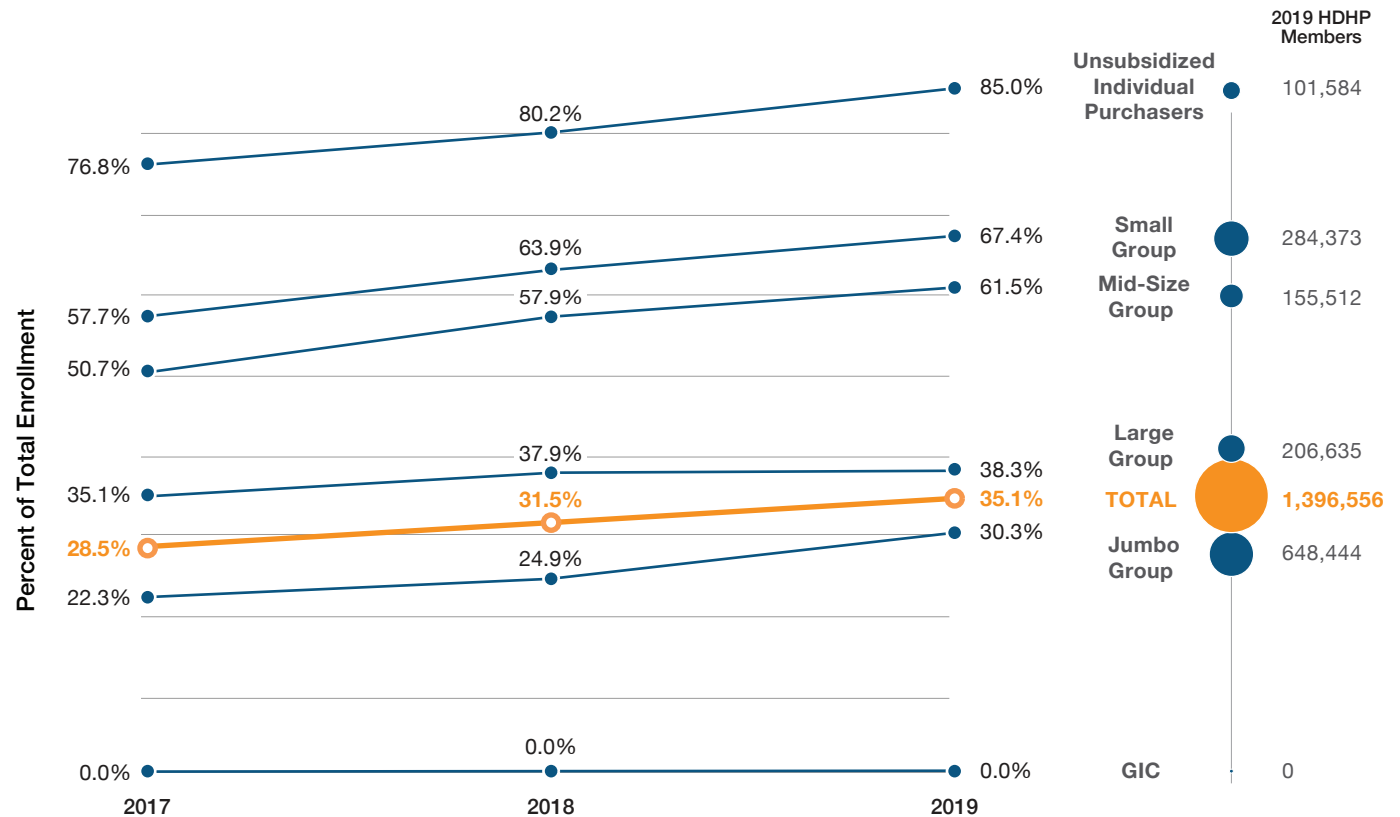
Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. HDHPs defined by IRS individual plan deductible threshold which was \$1,300 in 2017 and \$1,350 in 2018 and 2019. Benefit design types are not mutually exclusive. United HDHP enrollment data and Fallon HDHP, limited, and tiered network enrollment data were excluded due to quality concerns. See [technical appendix](#).

High Deductible Health Plan (HDHP) Enrollment by Market Sector, 2017-2019

HDHP enrollment grew 13.5% (+166,000 members) between 2018 and 2019, a faster growth rate than the previous year. By 2019, 1.4 million Massachusetts members (35.1%) were enrolled in an HDHP. HDHP penetration increased in every market sector offering these plans, with the fastest growth rate in the jumbo group at 24.8%.

The majority of HDHP members in 2019 received coverage through larger employers. However, the proportion of members enrolled in HDHPs tended to decrease as group size increased, with 85.0% of unsubsidized individual purchasers and over 60% of members covered through small and mid-size employers enrolled in an HDHP. HDHPs were not offered to GIC or ConnectorCare members.

A CHIA research brief *Offering and Enrollment in High Deductible Health Plans at Massachusetts Firms* finds that 70% of Massachusetts employees were offered HDHPs through their employer in 2018, and employees at smaller firms were more likely to be offered an HDHP without a savings option (HSAs or HRAs) compared to employees at larger firms.¹¹



HDHP enrollment continued to grow steadily across nearly all market sectors, with the fastest growth among jumbo group employers.

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 which was \$1,300 in 2017 and \$1,350 in 2018 and 2019. Fallon and United enrollment data were excluded due to data quality concerns. ConnectorCare trend not shown as members were not offered HDHPs. Unsubsidized individual purchasers include some members receiving APTCs. See [technical appendix](#).

Private Commercial Contract Enrollment Notes

- 1** Chapter results based on commercial contract member data provided by Aetna, AllWays Health Partners (AllWays), Blue Cross Blue Shield of Massachusetts (BCBSMA), Boston Medical Center HealthNet Plan (BMCHP), Cigna, ConnectiCare, Fallon Health, Harvard Pilgrim Health Care (HPHC—includes Health Plans, Inc.), Health New England (HNE), 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.
- 2** Massachusetts contract members may reside inside or outside Massachusetts; out-of-state contract members are most often covered through a Massachusetts-based employer.
- 3** CeltiCare and Minuteman also offered ConnectorCare plans in 2017 but did not meet the enrollment threshold to report data to CHIA for this report. Full ConnectorCare eligibility criteria are available from the Massachusetts Health Connector at <https://www.mahealthconnector.org/>.
- 4** Center for Health Information and Analysis, *Enrollment Trends* (Boston, September 2020), <http://www.chiamass.gov/enrollment-in-health-insurance/>.
- 5** Center for Health Information and Analysis, *2018 Massachusetts Employer Survey Summary of Results* (Boston, June 2019), <http://www.chiamass.gov/massachusetts-employer-survey/>.
- 6** Massachusetts Group Insurance Commission. *A Time for Collaboration – Annual Report: Fiscal Years 2017 and 2018*. (Boston, July 2019) https://www.mass.gov/files/documents/2019/07/02/GIC_Annual%20Report%20FY2017-FY2018.pdf.
- 7** “Tufts Health Plan and Harvard Pilgrim Health Care Officially Come Together.” Tufts Health Plan, January 4, 2021. <https://tuftshealthplan.com/visitor/company-news/2021/tufts-health-plan-and-harvard-pilgrim-health-care>.
- 8** McClusky, Priyanka Dayal. “Partners HealthCare shifting 100,000 employees, families to company-owned insurer.” Boston Globe, June 27, 2018. https://www3.bostonglobe.com/business/2018/06/26/partners-healthcare-shifting-employees-families-company-owned-insurer/dSoSBeQgS1PHClxYqAAAnL/story.html?p1=Article_Inline_Text_Link&arc404=true.
- 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** THPP classified all its members as enrolled in limited network plans, to better reflect the scope of THPP’s network in comparison to its parent company, Tufts. This was a change from how THPP’s members were classified in CHIA reports published before 2019.
- 11** Center for Health Information and Analysis, *Offering and Enrollment in High Deductible Health Plans at Massachusetts Firms: Which Workers Can Offset Cost through a Savings Option?* (Boston, November 2020). <https://www.chiamass.gov/assets/docs/r/pubs/2020/High-Deductible-Health-Plans-CHIA-Research-Brief.pdf>.

Private Commercial Premiums

KEY FINDINGS

Annual growth in fully-insured premiums decelerated—from 5.7% in 2018 to 2.2% in 2019.

Members covered through larger employers had higher premiums and higher benefit levels.

Most market sectors experienced average annual premium increases between one and four percent in 2019.

Unsubsidized individual plan premiums declined 1.1% on average in 2019, as membership shifted towards payers offering lower cost plans.

Private Commercial Premiums

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 2017 to 2019.¹

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.

For fully-insured coverage, 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 2018, the most recent year for which survey data was available, Massachusetts employees directly paid 26-30%, on average, of their total premium costs.² Reported premiums reflect a range of enrollment decisions by members and employers, including changing plans during open enrollment to mitigate anticipated premium increases.

In a change from prior reports, financial amounts have not been scaled to account for benefit carve-outs. Carve-outs are most common among the largest employer groups, including the GIC. See the [technical appendix](#) for more details.

Chapter results do not include data for self-insured coverage or for student health plans offered by colleges and universities. The [dataset](#) contains more information on these populations as well as expanded enrollment and financial data for the private commercial market. •

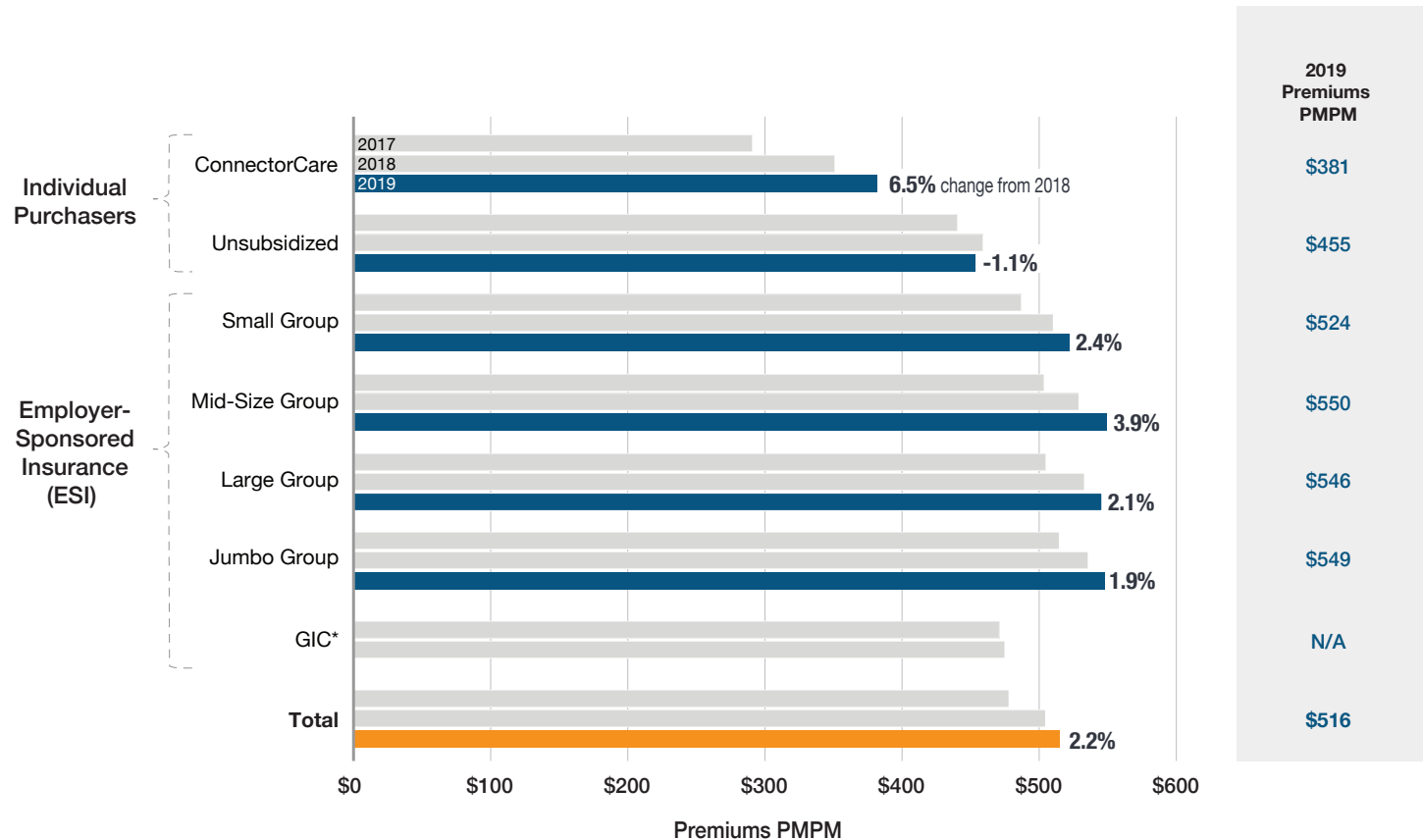
Between 2018 and 2019, fully-insured premiums increased by 2.2% overall to \$516 PMPM, after growing 5.7% in the prior year.

All market sectors experienced slower premium growth from 2018 to 2019 than in the prior year. While most market sectors reported premium increases between one and four percent, the base premiums underlying ConnectorCare plans (which were the lowest overall of any market sector) had the highest one-year increase of 6.5%. However, this premium growth has slowed after the large increase from 2017 to 2018, when payers compensated for the loss of federal CSR subsidies in late 2017.

At \$524 PMPM, small group premiums were lower than those for other employer size categories in 2019. 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

*All GIC plans were converted to self-insured at contract renewal in mid-2018.

Fully-Insured Premiums by Market Sector, 2017-2019



Fully-insured premiums increased by 2.2% from 2018 to 2019. ConnectorCare plans showed the largest percentage increase (+6.5%).

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Reported premiums are net of MLR rebates. Premiums have not been scaled to account for benefit carve-outs, which may vary by plan. Unsubsidized individual purchasers include some members receiving APTCs. See [technical appendix](#).

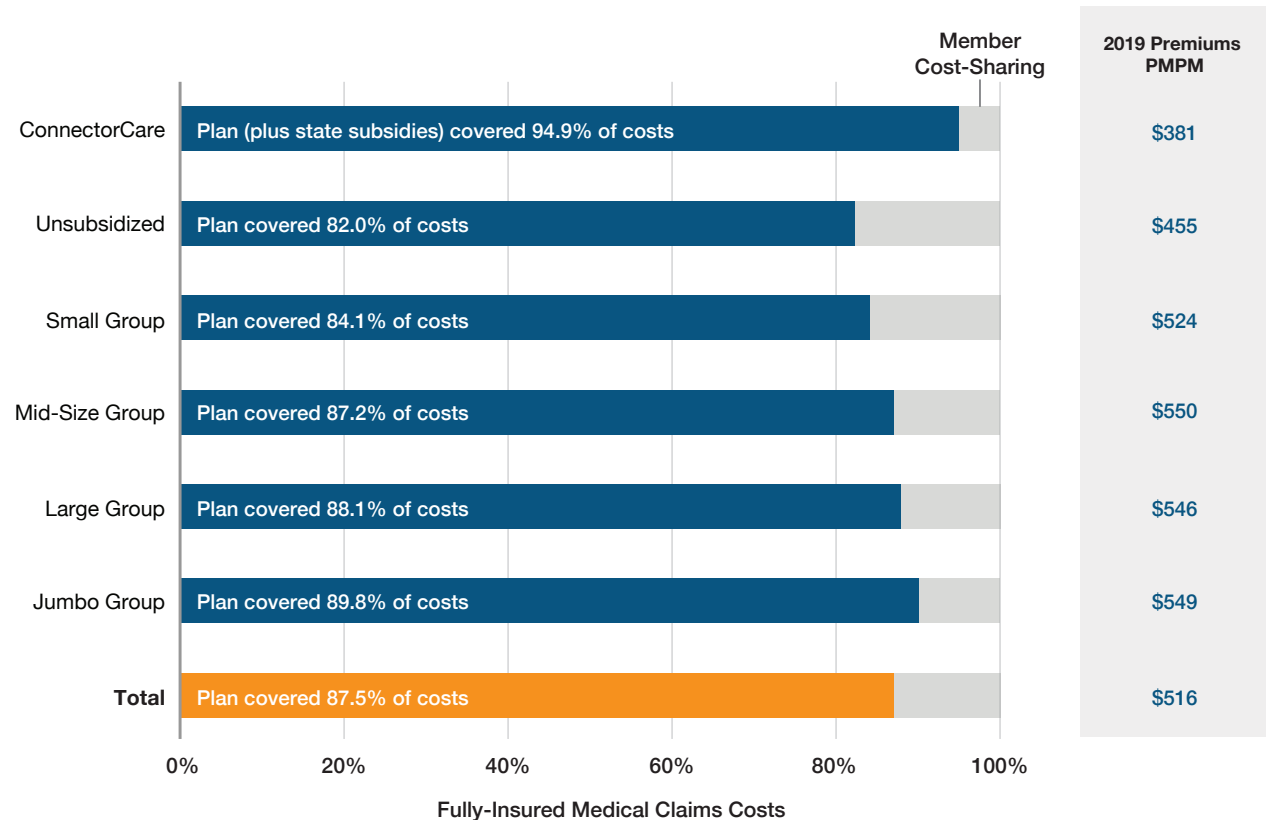
Insurance purchasers (members and/or employers) compare and balance health plan premiums with potential out-of-pocket costs.

In 2019, Massachusetts fully-insured contract members enrolled in plans covering 87.5% of medical costs on average. Benefit levels (measured as the percentage of medical costs covered by the health plan) varied across market sectors. In general, members enrolled through larger employer groups had more of their medical costs covered by their health plans, but this came at the cost of higher premiums.

In most market sectors, fully-insured benefit levels declined slightly between 2017 and 2019. The greatest decline was reported for unsubsidized individual plans, where the portion of costs covered by the health plan decreased from 84.2% of costs in 2017 to 82.0% of costs in 2019.

Reported benefit levels do not reflect other factors that may also influence premiums, such as provider network size, experience rating, and efficiencies of scale.

Fully-Insured Benefit Levels by Market Sector, 2019



Members covered through larger employer groups had more generous health insurance coverage, along with higher premiums.

Source: Payer-reported data to CHIA.

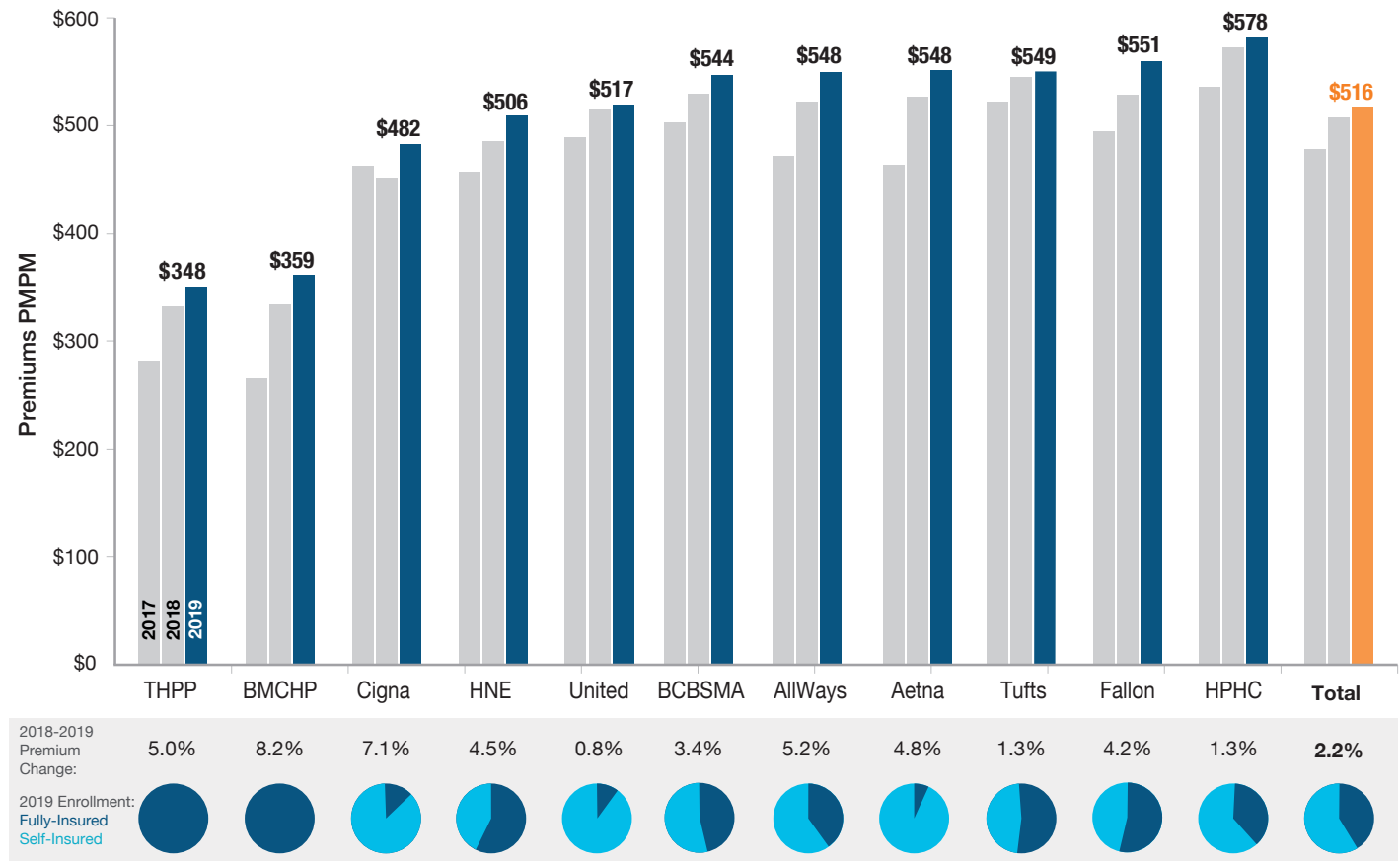
Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Reported premiums are net of MLR rebates. Premiums have not been scaled to account for benefit carve-outs, which may vary by plan. Benefit level data for Fallon and United was excluded due to data quality concerns. Unsubsidized individual purchasers include some members receiving APTCs. See [technical appendix](#).

Average premiums varied greatly across payers, reflecting underlying differences in market sector participation, provider contracting, and other factors.

Compared to the prior year, premium growth decelerated for most payers in 2019, with the exception of Cigna which had a relatively small portion of its membership enrolled in fully-insured plans.

Once again, THPP and BMCHP—both of which specialize in low cost plans with smaller networks—had the lowest average premiums in 2019 (\$348 PMPM and \$359 PMPM, respectively). These payers consistently reported the lowest premiums in all segments of the merged market (ConnectorCare, unsubsidized individual purchasers, and small group).

Fully-Insured Premiums by Payer, 2017-2019



Most payers reported slower premium growth from 2018 to 2019.

Source: Payer-reported data to CHIA.

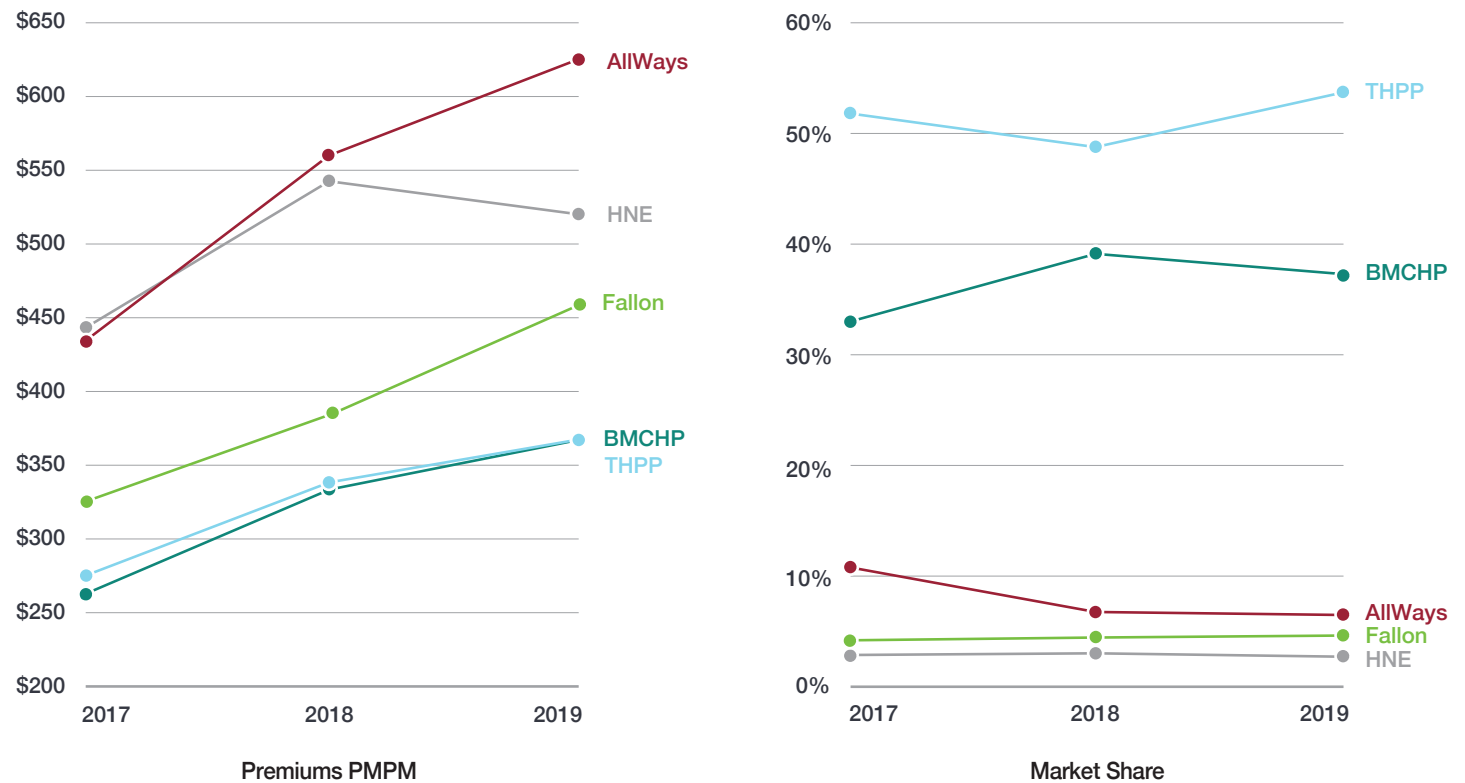
Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Reported premiums are net of MLR rebates. Premiums have not been scaled to account for benefit carve-outs, which may vary by plan. UniCare is not included in graph due to low fully-insured membership but is included in total. See [technical appendix](#).

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

After rising sharply in 2018 to compensate for the loss of federal CSR subsidies, the base premiums underlying ConnectorCare plans increased 6.5% on average in 2019. The gap in premiums offered by the two lowest cost payers—THPP (\$362 PMPM) and BMCHP (\$363 PMPM)—continued to narrow in 2019, and together these two payers enrolled 90.6% of ConnectorCare members.

AllWays continued to lose market share in 2019, as its average ConnectorCare base premium rose 12.1% to \$625 PMPM. While ConnectorCare members' actual premium contributions varied by income level and region (and were substantially less than the base premiums reported here), AllWays was considered the highest cost offering in every region within the payer's operating area, apart from the two regions where AllWays was the sole ConnectorCare option.⁴

ConnectorCare Premiums and Market Share, 2017-2019



More than 90% of ConnectorCare members were covered by THPP or BMCHP, which also offered the lowest average premiums in 2019.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Reported premiums are net of MLR rebates. Premiums have not been scaled to account for benefit carve-outs, which may vary by plan. After accounting for state and federal premium subsidies, ConnectorCare members' contributions were substantially lower than the full premium amounts reported here. See [technical appendix](#).

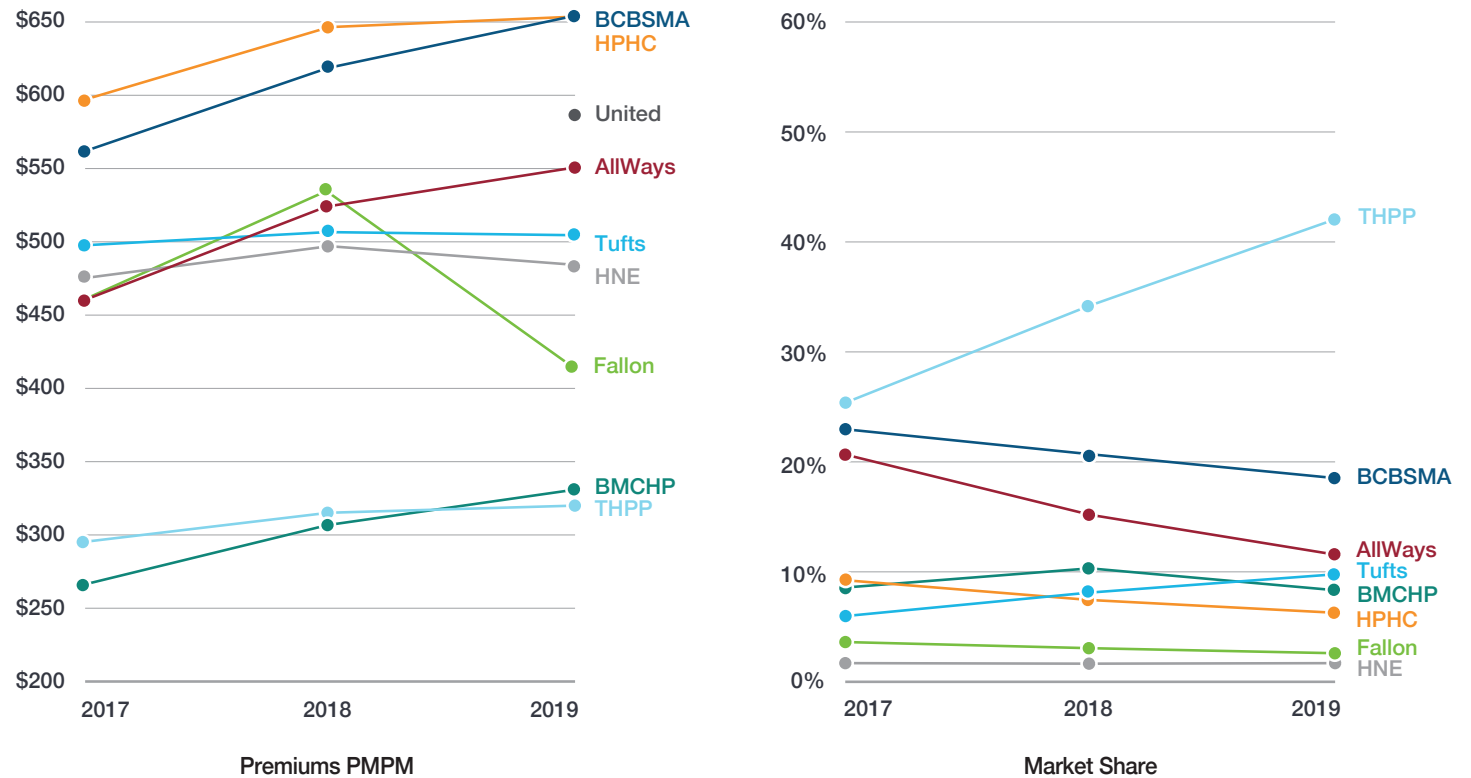
Private Commercial Premiums

Compared to ConnectorCare members, unsubsidized individual purchasers navigated a broader range of coverage options. In 2019, the average BCBSMA member paid approximately twice as much in premiums (\$655 PMPM) as the average THPP member paid (\$325 PMPM). These unsubsidized premiums reflected a broad range of benefit levels, provider choices, and other factors.

From 2018 to 2019, average unsubsidized individual premiums declined slightly (-1.1%), as membership shifted towards payers offering lower premiums. By 2019, THPP captured 41.6% market share, up from 25.0% just two years earlier, while higher cost payers BCBSMA, AllWays, and HPHC lost market share.

Reported premiums include Advance Premium Tax Credits (APTCs) for members below 400% of Federal Poverty Level (FPL). These members would have paid less than the full amounts shown here.

Unsubsidized Individual Premiums and Market Share, 2017-2019



By 2019, 41.6% of unsubsidized individual purchasers were enrolled through THPP, which offered the lowest average premiums.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Reported premiums are net of MLR rebates. Premiums have not been scaled to account for benefit carve-outs, which may vary by plan. THPP is reported separately from its parent company, Tufts. United reported low unsubsidized individual purchaser enrollment corresponding to less than 0.5% market share (not shown). Unsubsidized individual purchasers include some members receiving APTCs. See [technical appendix](#).

Private Commercial Premiums Notes

- 1** Chapter results based on commercial contract member data provided by Aetna, AllWays Health Partners (AllWays—formerly Neighborhood Health Plan), Blue Cross Blue Shield of Massachusetts (BCBSMA), Boston Medical Center HealthNet Plan (BMCHP), Cigna, Fallon Health, Harvard Pilgrim Health Care (HPHC—includes Health Plans, Inc.), Health New England (HNE), 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.
- 2** Center for Health Information and Analysis, *2018 Massachusetts Employer Survey Summary of Results* (Boston, June 2019), <http://www.chiamass.gov/massachusetts-employer-survey/>.
- 3** Center for Health Information and Analysis, *2018 Massachusetts Employer Survey Summary of Results* (Boston, June 2019), <http://www.chiamass.gov/massachusetts-employer-survey/>.
- 4** Massachusetts Health Connector, “Supplemental Materials for the 2019 Seal of Approval,” (Boston, September 2018), https://www.mahealthconnector.org/wp-content/uploads/board_meetings/2018/09-13-18/2019-Final-SoA-Supplement-091718.pdf.

Private Commercial Member Cost-Sharing

KEY FINDINGS

Between 2018 and 2019, private commercial member cost-sharing increased by 2.8% to \$53 PMPM.

While average member cost-sharing growth slowed from 2018 to 2019, this trend was not observed in all market sectors.

HDHP member cost-sharing decreased by 1.4% in 2019, while members with lower deductible plans experienced cost-sharing growth.

Cost-sharing and premiums continued to increase at a faster rate than wages and inflation.

Private Commercial 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 2017 to 2019.¹

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.

While federal CSR subsidies were discontinued in late 2017, the Commonwealth was able to preserve cost-sharing relief for low-income residents enrolled in ConnectorCare plans. This topic was covered in more detail in CHIA's *2019 Annual Report on the Performance of the Massachusetts Health Care System*.

In a change from prior reports, financial amounts have not been scaled to account for benefit carve-outs. Carve-outs are most common among the largest employer groups, including the GIC. See the [technical appendix](#) for more details.

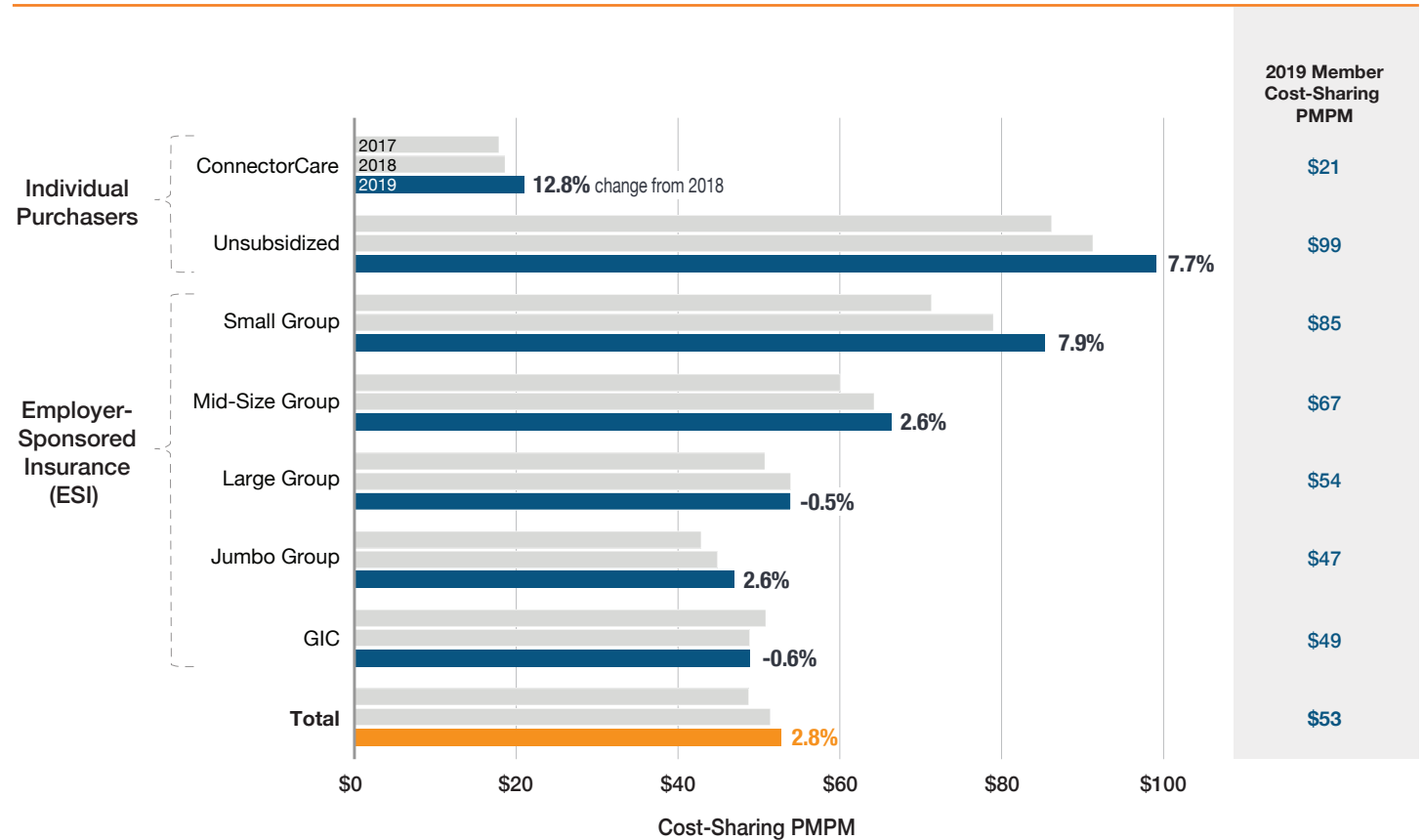
Chapter results do not include average cost-sharing amounts for student health plans offered by colleges and universities. The [dataset](#) contains more information on this population as well as expanded enrollment and financial data for the full private commercial market. •

After increasing 6.3% in 2018, Massachusetts member cost-sharing growth slowed in 2019, rising 2.8% to \$53 PMPM.

However, cost-sharing growth varied by market sector, with members in the merged market continuing to experience high cost-sharing increases in 2019 (+7.7% for unsubsidized individuals and +7.9% for small group members), consistent with trends in previous years. Meanwhile, members enrolled through larger employers experienced low or stable cost-sharing growth and paid less in member cost-sharing than those covered by smaller employers.

After CSR subsidies were applied, ConnectorCare members benefited from low cost-sharing of just \$21 PMPM in 2019. Although this represented a 12.8% increase over 2018, the dollar value of the increase was only \$2 PMPM on average.

Cost-Sharing by Market Sector, 2017-2019



While average member cost-sharing growth slowed from 2018 to 2019, this trend was limited to larger employer groups.

Source: Payer-reported data to CHIA.

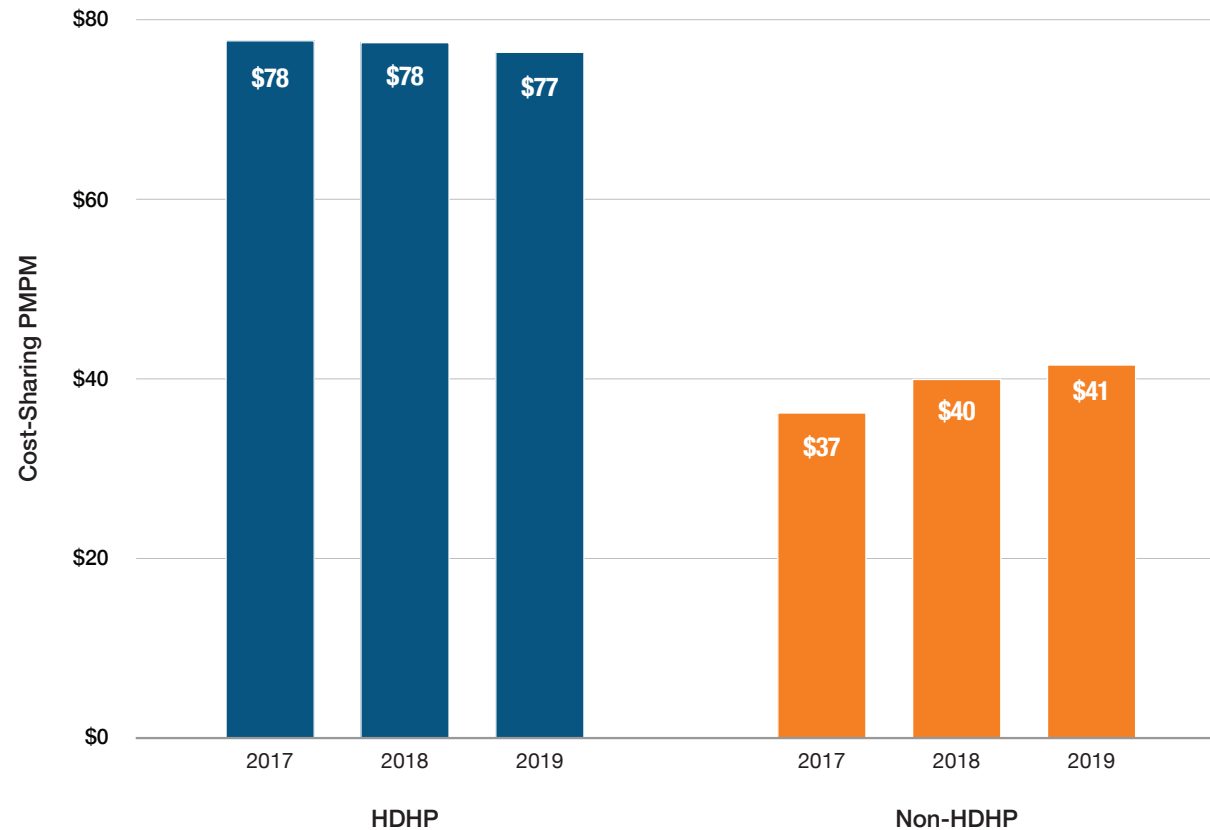
Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Cost-sharing amounts have not been scaled to account for benefit carve-outs, which may vary by plan. Financial data for Fallon and United were excluded due to data quality concerns. Unsubsidized individual purchasers include some members receiving APTCs. See [technical appendix](#).

In recent years, member cost-sharing trends have been shaped by increasing HDHP adoption. In 2019, HDHP members paid \$77 PMPM in cost-sharing, almost twice what members enrolled in lower deductible plans paid (\$41 PMPM).

Among members enrolled in HDHPs, cost-sharing declined by 0.4% in 2018 and 1.4% in 2019. In contrast, cost-sharing in lower deductible plans grew each year (but at a slower rate in 2019). This finding could reflect different utilization patterns by members in high and low deductible health plans.

Savings options such as health savings accounts and health reimbursement accounts are offered by some employers with HDHPs, which can mitigate the effects of higher cost-sharing. Survey results suggest that in 2018, 39% of Massachusetts employees were offered HDHPs with savings options through their employer, and 11% of those offered health insurance by their employer enrolled in HDHPs with savings options.²

Cost-Sharing by Deductible Level, 2017-2019



In 2019, members enrolled in high deductible health plans paid \$77 PMPM in cost-sharing, while members of non-HDHP plans paid \$41 PMPM.

Source: Payer-reported data to CHIA.

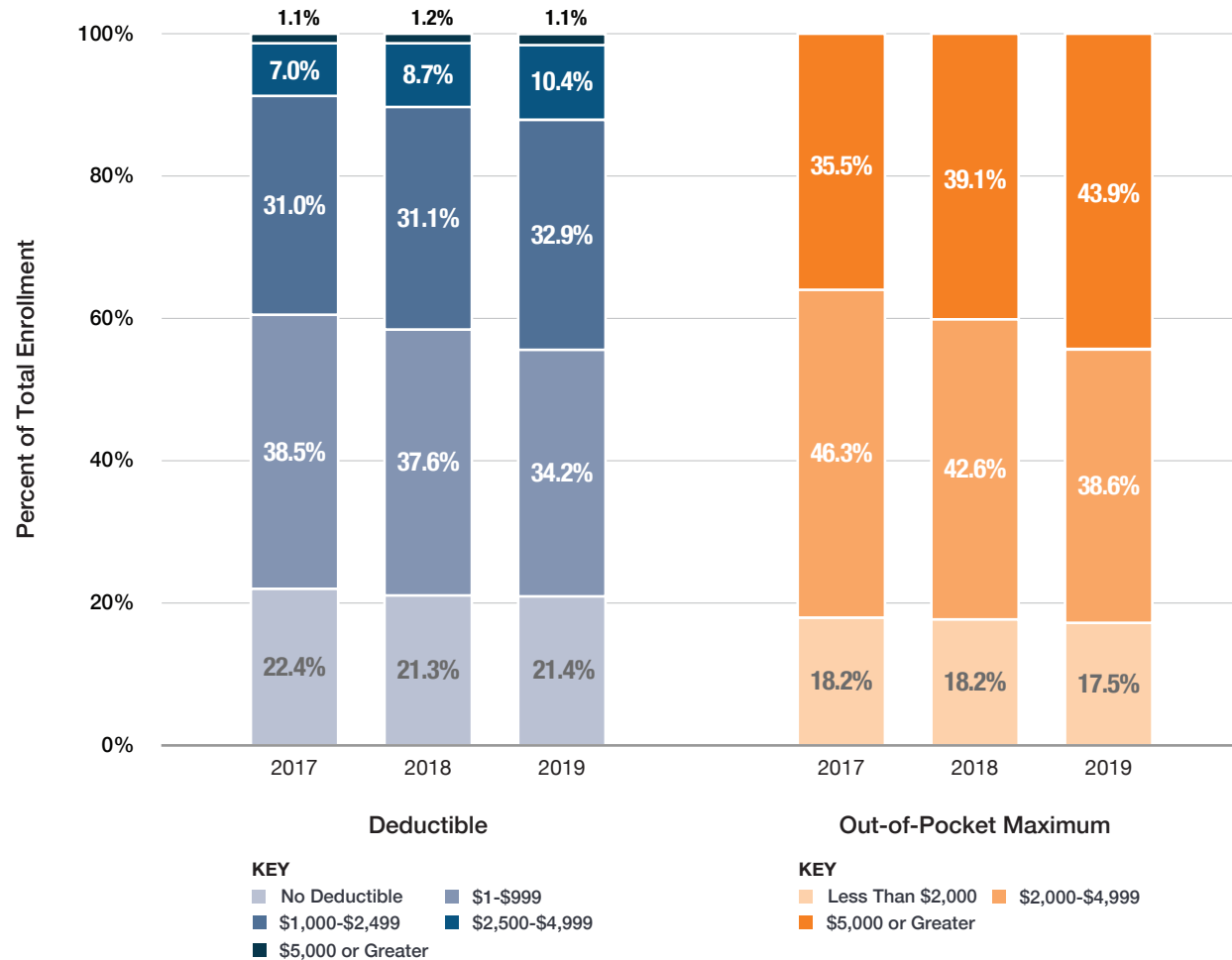
Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. HDHPs are defined by the IRS single (individual) policy deductible threshold, which was \$1,300 in 2017 and \$1,350 in 2018 and 2019. Cost-sharing amounts have not been scaled to account for benefit carve-outs, which may vary by plan. Financial data for Fallon and United were excluded due to data quality concerns. See [technical appendix](#).

Private Commercial Member Cost-Sharing

During the period from 2017 to 2019, approximately four out of five Massachusetts commercial members were enrolled in plans with deductibles.* The percentage of members with deductibles over \$1,000 grew in each year reported, from 39.1% in 2017 to 44.4% in 2019.

Under the ACA, members are shielded from additional cost-sharing on covered medical services once they have met their out-of-pocket maximum for the plan year. In 2019, 38.6% of members had an annual out-of-pocket maximum between \$2,000 and \$4,999. The percentage of members that had an out-of-pocket maximum of at least \$5,000 increased from 35.5% in 2017 to 43.9% in 2019. While this represents the maximum cost-sharing that a member can expect to pay for covered services, many members will pay far less during the year.

Enrollment by Deductible and Maximum Out-of-Pocket Level, 2017-2019



In 2019, 44.4% of private commercial members had an annual deductible of at least \$1,000.

*Payers classified membership based on cost-sharing levels for single (individual) policies.

Source: Payer-reported data to CHIA.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Data from Cigna was excluded due to data quality concerns. See [technical appendix](#).

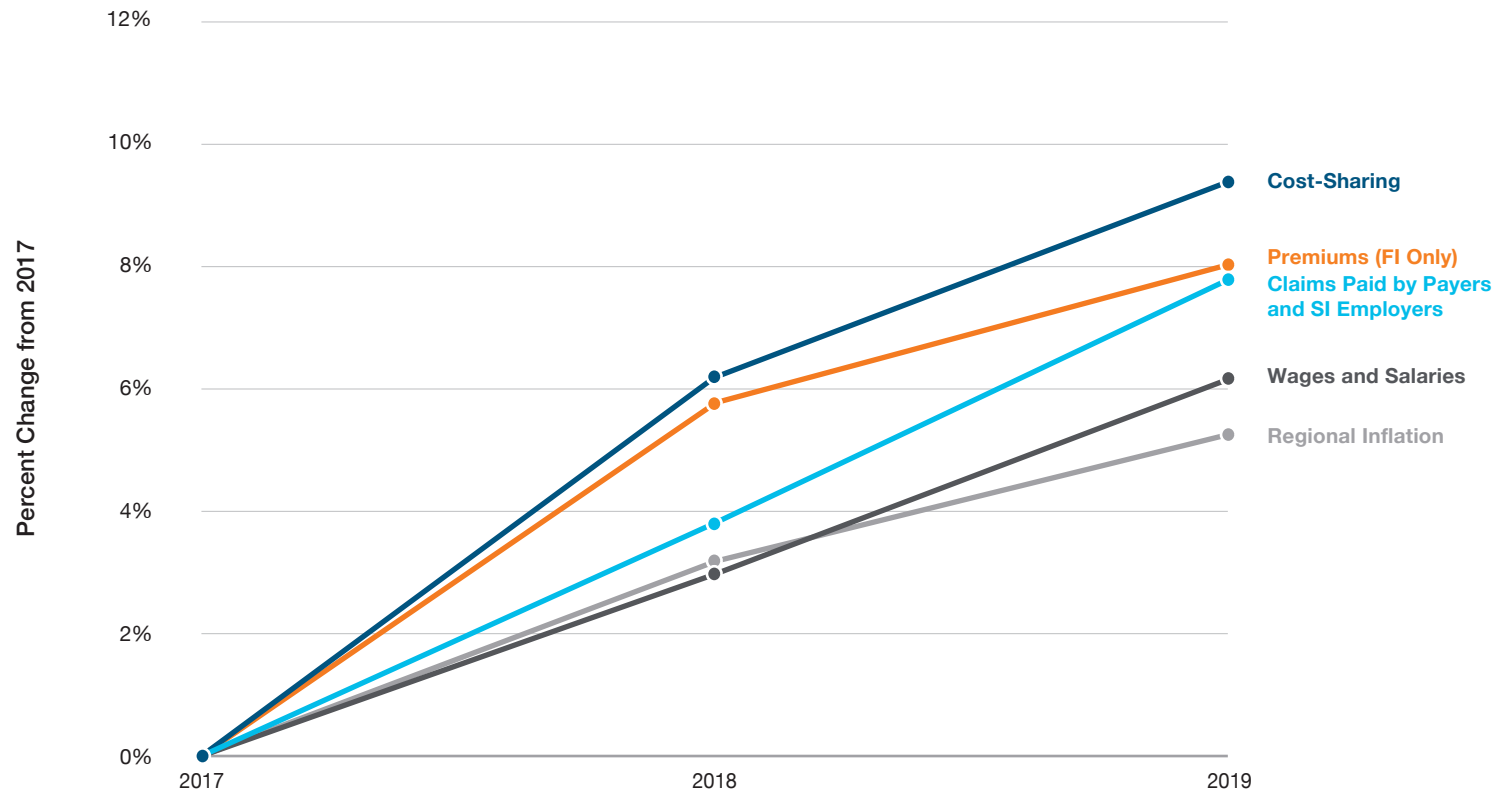
Private Commercial Member Cost-Sharing

Despite decelerating in 2019, premium and cost-sharing growth continued to outpace claims spending, wages, and inflation between 2017 and 2019.

Premiums increased 8.0% during this two-year period, while cost-sharing grew 9.2%. Growth in claims spending by payers and self-insured employers (incurred claims) accelerated slightly in 2019, resulting in a two-year growth of 7.9% that nearly matched premium increases. Actuaries rely on historical spending data (among other factors) to set future premium rates.

Each of these metrics grew faster than wages and inflation, increasing the gap between health care spending and other general economic spending measures.

Private Commercial Insurance Affordability, 2017-2019



Member cost-sharing and premiums increased at a faster rate than wages and inflation between 2017 and 2019.

Source: Payer-reported data to CHIA, Bureau of Labor Statistics.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Reported cost-sharing, premiums, and claims amounts have not been scaled to account for benefit carve-outs, which may vary by plan. Cost-sharing and claims data for Fallon and United were excluded due to data quality concerns. See [technical appendix](#).

Private Commercial Member Cost-Sharing Notes

- 1** Chapter results based on commercial contract member data provided by Aetna, AllWays Health Partners (AllWays—formerly Neighborhood Health Plan), Blue Cross Blue Shield of Massachusetts (BCBSMA), Boston Medical Center HealthNet Plan (BMCHP), Cigna, Harvard Pilgrim Health Care (HPHC—includes Health Plans, Inc.), Health New England (HNE), 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. Data for Fallon Health and United Healthcare was excluded due to quality concerns.
- 2** Center for Health Information and Analysis, *Offering and Enrollment in High Deductible Health Plans at Massachusetts Firms: Which Workers Can Offset Cost through a Savings Option?* (November, 2020), <https://www.chiamass.gov/assets/docs/r/pubs/2020/High-Deductable-Health-Plans-CHIA-Research-Brief.pdf>.

Private Commercial Payer Use of Funds

KEY FINDINGS

After paying for fully-insured members' medical costs, payers retained \$62 PMPM of premiums in 2019, a 7.3% decrease from 2018.

Merged market claims costs grew more rapidly than premiums in 2019, resulting in \$6 PMPM in losses and a \$10 PMPM decrease in merged market retention from the prior year.

For plans sold to employer groups with more than 50 employees, surplus and retention both remained relatively stable in 2019, declining \$1 PMPM each.

Private Commercial Payer Use of Funds

CHIA analyzes federally-reported data on Massachusetts payers' administrative costs in the private commercial health insurance market as part of its efforts to monitor and profile overall health plan spending. This chapter covers the period from 2017 to 2019.¹

For fully-insured lines of business, which make up 39.5% of private commercial enrollment, CHIA reports data on “premium retention,” which is the proportion of premium dollars not spent on member medical claims, by market segment (employer size). Payers use retained premium funds to cover administrative expenses, broker commissions, taxes, and fees. Premiums in this chapter are reported net of any required Medical Loss Ratio (MLR) rebates.

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

ACA's risk adjustment program which was designed to stabilize premiums and protect against adverse selection. In 2018, CMS added a national high-cost risk pool to its risk adjustment methodology to subsidize expenses for members with claims cost in excess of \$1 million using fees collected from payers offering risk adjustment-covered plans.² Within this chapter, reported claims amounts in the merged market reflect the impact of the risk adjustment program.

For the first time, this edition of the Payer Use of Funds chapter uses federal MLR data, which payers report to CMS. Although data is sourced from federal MLR filings, the purpose and calculation of reported premium retention differ significantly from those of the federal MLR metric. The federal MLR reports an insurer's rebate position using a three-year average of financial data and making

allowable adjustments, without consideration of rebates paid in prior years. Premium retention is calculated using CHIA's annual financial loss ratio formula, which was developed using actuarial methods and principles. Premium retention data reported by CHIA is not sufficient to determine whether payers met federal MLR thresholds. See page 75 for more details. Due to the changes in data sourcing and methodology, retention data from this report cannot be compared to prior annual reports.

Premium retention does not apply to self-insured coverage; however, the administrative component of self-insured employer plans is included in CHIA's NCPHI measure. See page 17. •

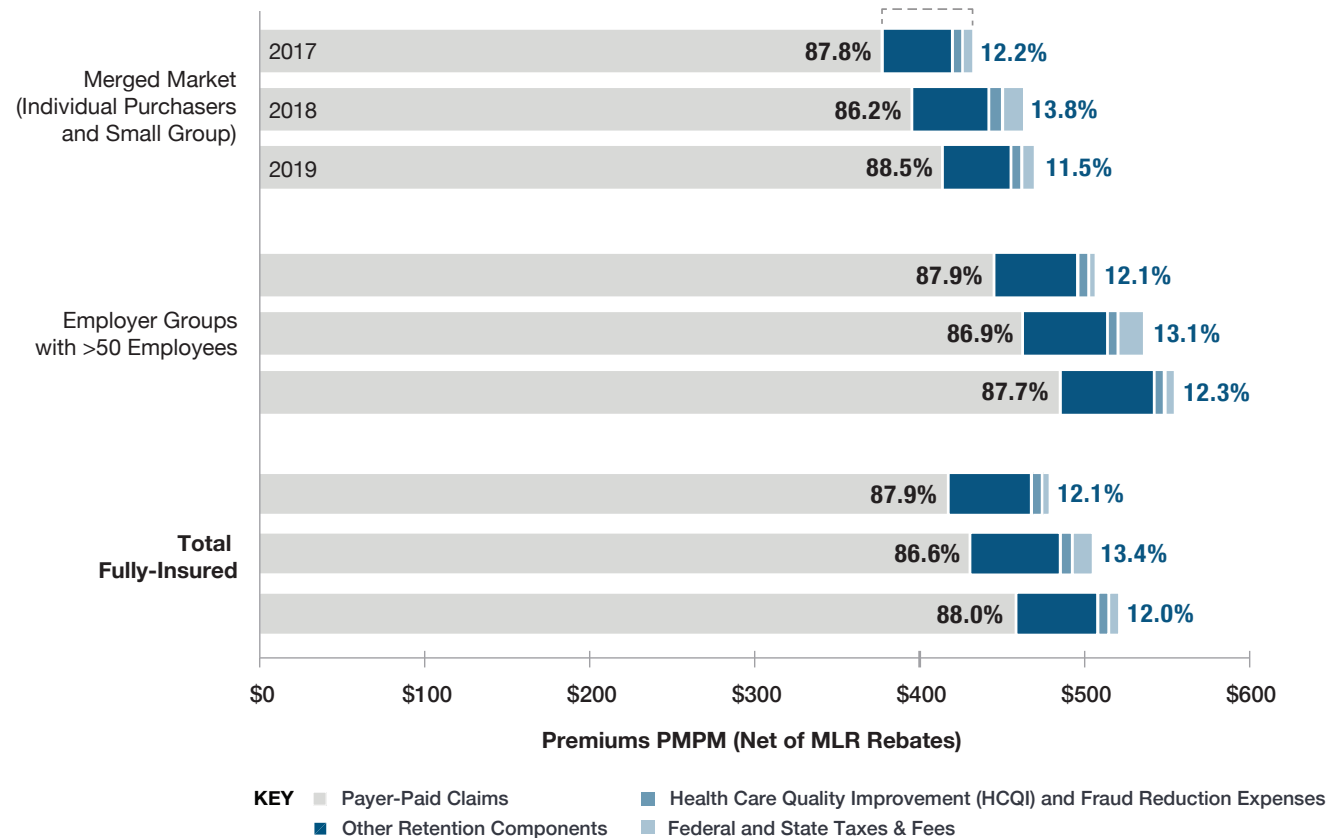
Private Commercial Payer Use of Funds

In 2019, 88.0% of premiums were used to pay for fully-insured members' medical care.* Payers retained the remaining 12.0% to pay for plan administration and other expenses, with any residual funds representing surplus. Surplus premium funds may be added to payers' capital reserves as protection against future losses.

When payers' claims liability grows more rapidly than premiums, retention amounts decline. Merged market premium growth slowed in 2019 relative to 2018, while claims costs increased steadily across the three-year period, resulting in 11.5% premium retention in 2019. Larger employer groups experienced relatively steady growth in both premiums and claims costs between 2017 and 2019, resulting in 12.3% premium retention in 2019.

*Note: The payer-paid claims percentages reported on this page are distinct from federal MLR. The federal MLR formula treats Health Care Quality Improvement (HCQI) and fraud reduction expenses, as well as taxes and fees, differently than CHIA's annual financial loss ratio. See page 75.

Fully-Insured Payer Use of Premiums by Market Segment, 2017-2019



Premium retention decreased from 13.4% in 2018 to 12.0% in 2019 as claims costs grew at a faster rate than premiums.

Source: Payer-reported MLR data submitted to CMS.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Reported premiums are net of MLR rebates, and payer-paid claims have been reduced to account for Cost-Sharing Reduction (CSR) subsidies. Reported premiums, claims, and retention amounts have not been scaled to account for benefit carve-outs, which may vary by plan. Results are not directly comparable to prior Private Commercial chapters due to differences in data sources. Data from ConnectiCare and Reliance Standard Life Insurance Company are included. See [technical appendix](#).

Understanding the Differences: Federal Medical Loss Ratio and CHIA's Annual Financial Loss Ratio

What is the federal Medical Loss Ratio (MLR)?

The purpose of the federal MLR is to measure an insurer's rebate position. Health insurance consumers with fully-insured coverage are protected by federal and state laws that require insurers to spend a minimum percent of collected premiums on medical care. The percent of premiums spent on medical care, or federal MLR, is calculated within a licensed payer and market segment over a three-year average. In Massachusetts, if a payer's federal MLR falls below 88% in the merged market or below 85% in the fully-insured large group market in any reporting year, that payer is required to issue rebates to consumers for the unused premium dollars. For the purposes of determining federal MLR rebate amounts, spending on Health Care Quality Improvement (HCQI) and fraud reduction count towards medical care, and taxes and fees are subtracted from premiums. In addition, the federal MLR formula does not consider any rebates paid in prior years, and further adjustments are allowed to reflect the size of the population and whether premium rates are pooled across licenses.

How do claims percentages reported in this chapter differ from federal MLR?

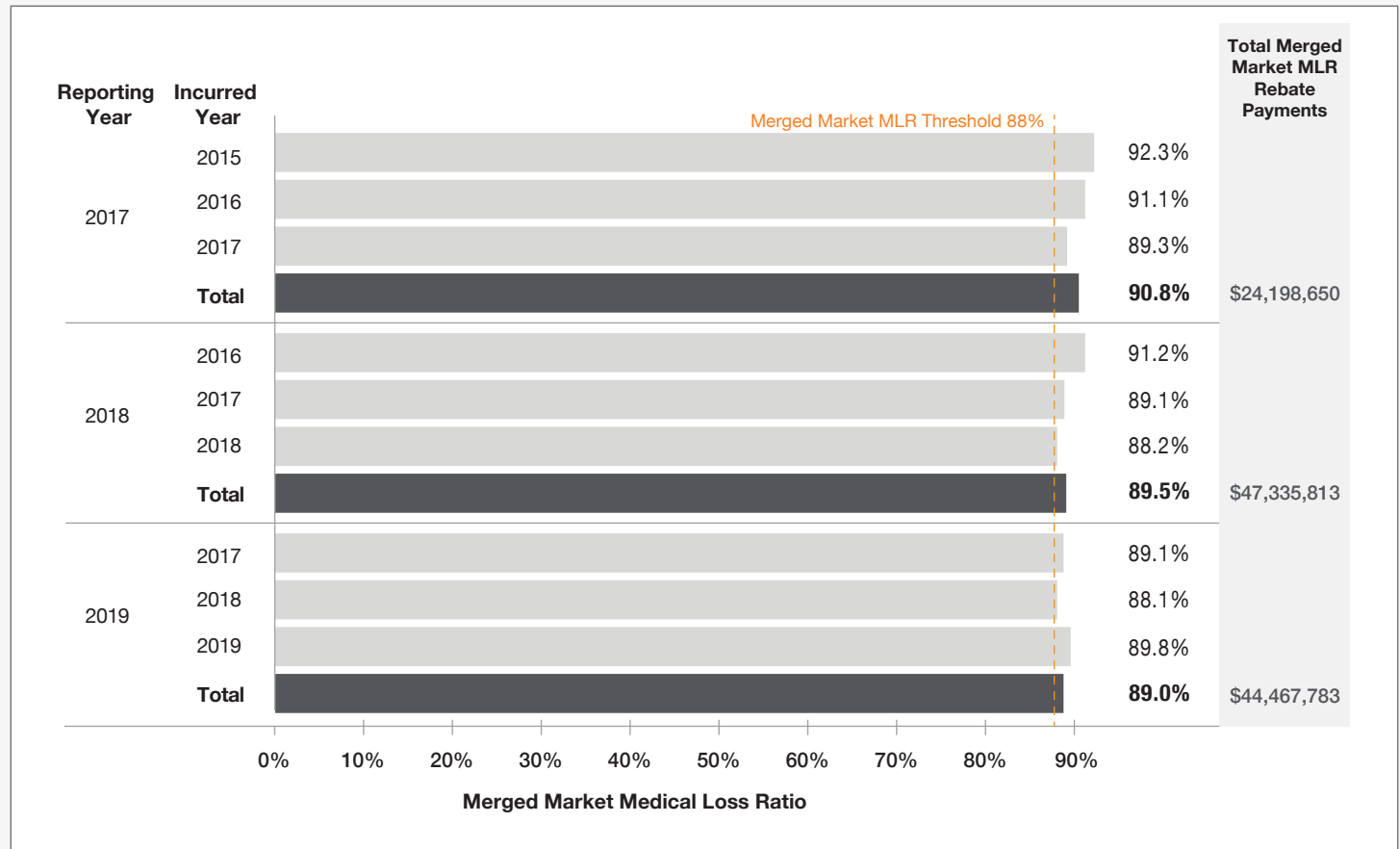
Payer-paid claims percentages in this chapter are based on CHIA's annual financial loss ratio formula, which was developed in accordance with actuarial methods and principles. While the federal MLR and CHIA's annual financial loss ratio use the same source data, the calculation and intended purpose of the two ratios are distinct. CHIA's annual financial loss ratio was designed to measure how much of an insurer's premium is retained in a given year. Unlike federal MLR, the annual financial loss ratio does not count HCQI and fraud reduction as claims expenses; taxes and fees are not subtracted from premiums; and premiums are reduced by the total amount of MLR rebates paid in that reporting year. The annual financial loss ratio is calculated within the merged market, within fully-insured large group, and in total across all payers, within a given year. For all of these reasons, ***payer-paid claims percentages reported in this chapter cannot be used to determine whether MLR thresholds were met.***

Understanding the Differences: Federal Medical Loss Ratio and CHIA's Annual Financial Loss Ratio

	Federal Medical Loss Ratio	CHIA's Annual Financial Loss Ratio
Purpose	Determine compliance with MLR thresholds and calculate MLR rebate amounts, if applicable	Measure percent of premiums spent on members' medical costs and percent retained for other expenses
Population	By licensed payer By fully-insured market segment	Across payers By and across fully-insured market segments
Time Period	Average over three calendar years	One calendar year
HCQI and Fraud Reduction Expenses	Added to incurred claims*	Not considered
MLR Rebates	Not considered	Subtracted from earned premiums
Taxes & Fees	Subtracted from earned premiums	Not considered
Simplified Formula	$\frac{1}{3} \sum_{i=2017}^{2019} \left(\frac{\text{Incurred Claims}^* + \text{HCQI} + \text{Fraud Reduction Expenses}}{\text{Earned Premiums} - \text{Taxes \& Fees}} \right)_i$ <p>Note: the federal MLR formula considers other financial amounts and adjustment factors not shown here.</p>	$\frac{\text{Incurred Claims}^*}{\text{Earned Premiums} - \text{MLR Rebates}}$

*Incurred claims minus pharmacy rebates, minus CSR subsidy payments, and net of risk adjustment and high cost risk pool payments

Understanding the Differences: Federal Medical Loss Ratio and CHIA's Annual Financial Loss Ratio



The merged market MLR thresholds were met and exceeded in each reporting year from 2017 to 2019. While the percentages above represent the entire merged market, federal MLR is calculated and regulated at the licensed

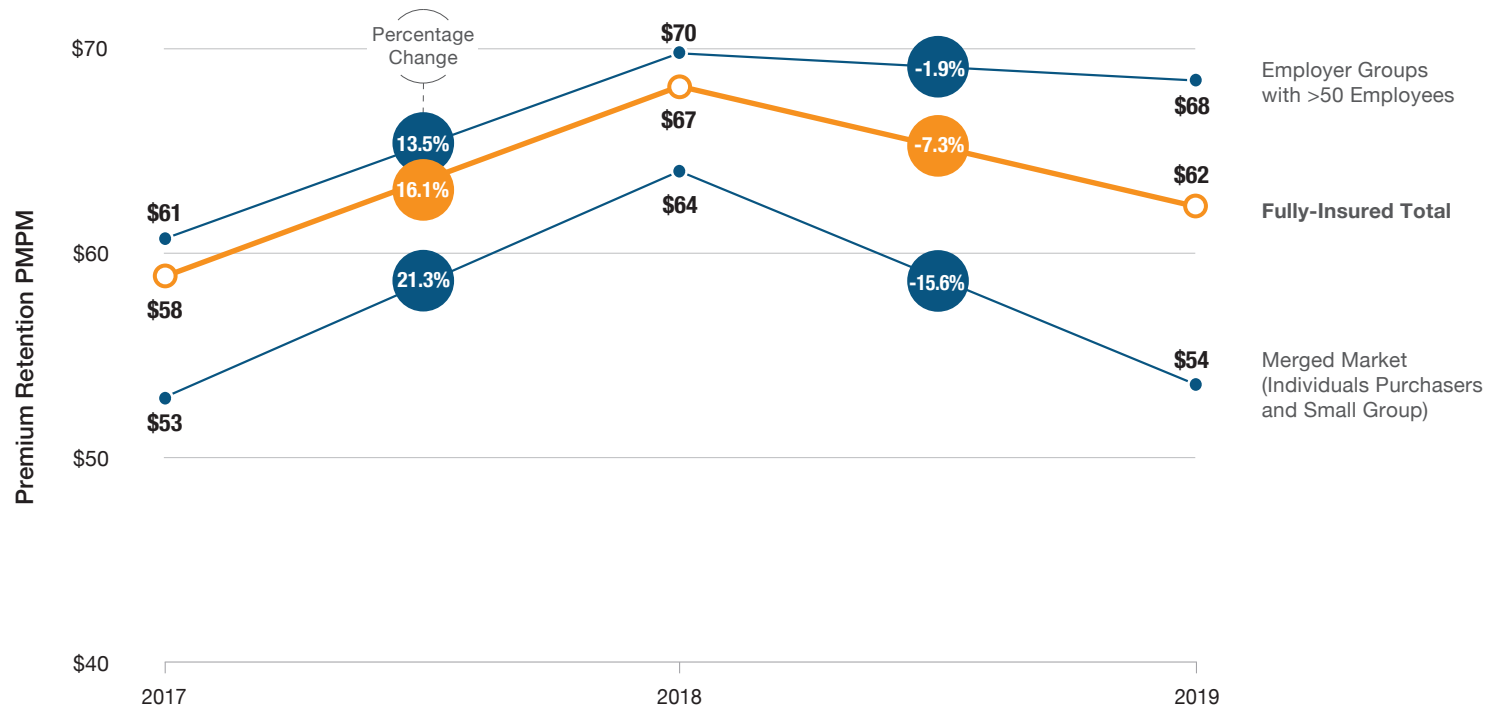
insurer level. Any licensed insurer that did not meet the MLR threshold for a given reporting year paid rebates to consumers. The annual totals of the MLR rebates paid by all insurers in the merged market are shown to the right.

After paying for fully-insured members' medical costs, payers retained \$62 PMPM from premiums in 2019. Average retention grew rapidly in 2018 (+16.1%), then declined in 2019 (-7.3%) as claims costs increased at a faster rate than premium increases.

In 2019, payers retained \$54 PMPM from merged market premiums and \$68 PMPM from plans sold to employers with more than 50 employees. While retention increased at similar rates across market sectors in 2018, the trends diverged in 2019 as retention in the merged market decreased rapidly (-15.6%) and retention for larger employer groups stabilized (-1.9%).

These results apply to members with insurance policies contracted in Massachusetts; the same data was used to calculate NCPHI for Massachusetts residents enrolled in commercial fully-insured plans. (For more information, see NCPHI results on page 17.)

Fully-Insured Premium Retention by Market Segment, 2017-2019



Payers retained an average of \$62 PMPM in 2019, a 7.3% decrease from 2018, although trends varied by market segment.

Source: Payer-reported MLR data submitted to CMS.

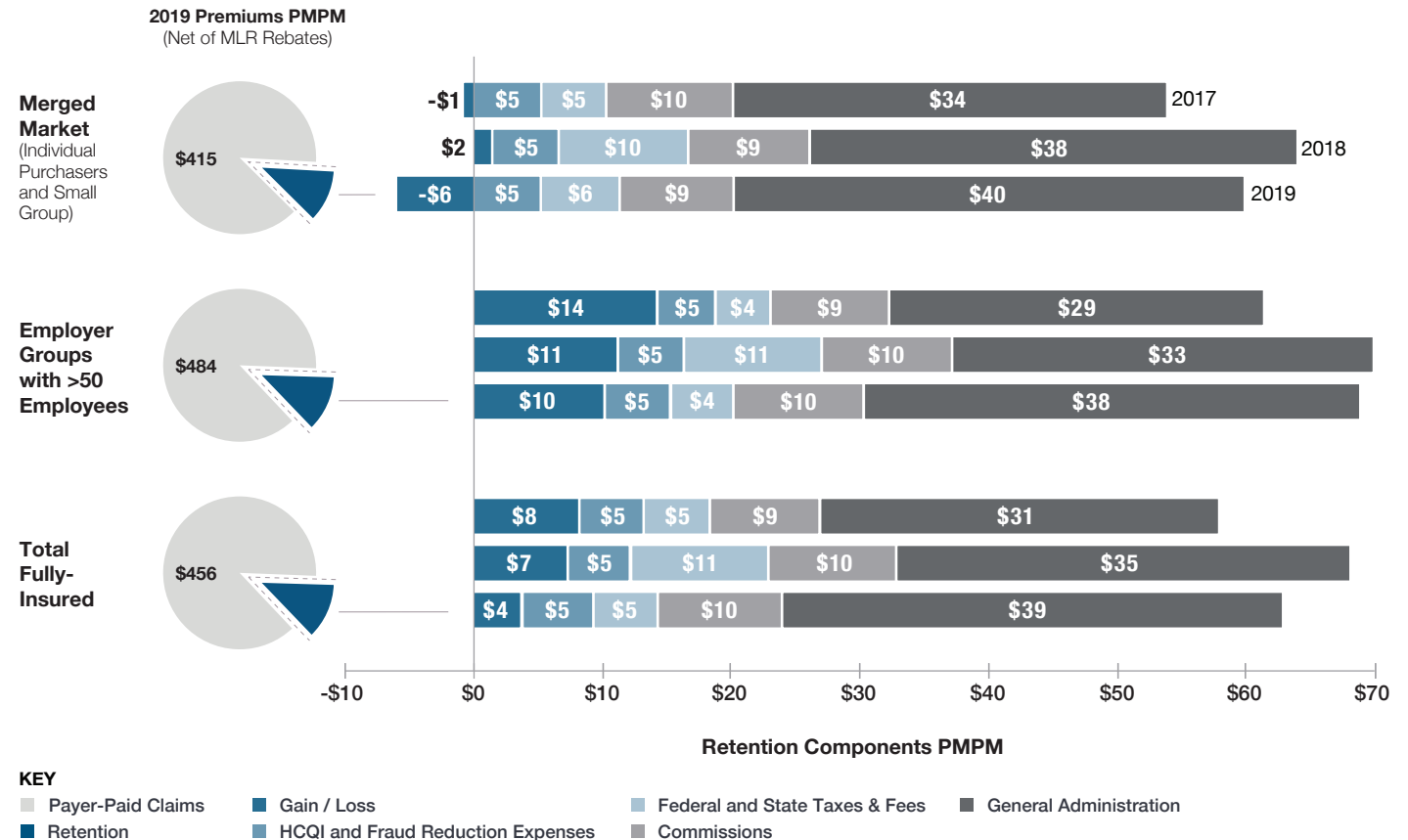
Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Reported premiums are net of MLR rebates. Reported retention amounts have not been scaled to account for benefit carve-outs, which may vary by plan. Results are not directly comparable to prior Private Commercial chapters due to differences in data sources. Data from ConnectiCare and Reliance Standard Life Insurance Company are included. See [technical appendix](#).

Fully-Insured Premium Retention Components by Market Segment, 2017-2019

Across fully-insured market segments, payers spent the majority of retained premium funds on general administrative expenses including cost of plan design, claims administration, and customer service.

The merged market experienced a decline in profitability in 2019, resulting in losses of \$6 PMPM (1.3% of premiums). Losses in the merged market, which represented 40.7% of fully-insured enrollment in 2019, drove total fully-insured margins down to \$4 PMPM (0.7% of premiums) despite gains of \$10 PMPM (1.9% of premiums) from plans sold to employer groups with more than 50 employees.

The ACA established the health insurance provider fee, which is assessed in proportion to premiums.⁴ Following a moratorium in 2017⁵ and a suspension in 2019,⁶ the fee has been repealed starting with fee year 2021.⁷ In 2018, this fee represented approximately \$6 PMPM or 1.2% of earned premiums in the fully-insured market.



Gains in the fully-insured market decreased \$4 PMPM between 2017 and 2019, driven by declining profitability in the merged market.

Source: Payer-reported MLR data submitted to CMS.

Notes: Based on Massachusetts contract-membership, which may include non-Massachusetts residents. Reported premiums are net of MLR rebates, and payer-paid claims have been reduced to account for Cost-Sharing Reduction (CSR) subsidies. Reported retention amounts have not been scaled to account for benefit carve-outs, which may vary by plan. Results are not directly comparable to prior Private Commercial chapters due to differences in data sources. Enrollment figures in this chapter are based on payer-reported MLR data and may differ from prior chapters. Data from ConnectiCare and Reliance Standard Life Insurance Company are included. See [technical appendix](#).

Private Commercial Payer Use of Funds Notes

- 1** Chapter results based on publicly available medical loss ratio (MLR) reports submitted to CMS for the 2017, 2018, and 2019 reporting years. The following payers were included in analysis: Aetna, AllWays Health Partners (AllWays), Blue Cross Blue Shield of Massachusetts (BCBSMA), Boston Medical Center HealthNet Plan (BMCHP), Cigna, ConnectiCare, Fallon Health, Harvard Pilgrim Health Care (HPHC), Health New England (HNE), Reliance Standard Life Insurance Company, Tufts Health Plan (Tufts), Tufts Health Public Plans (THPP), UniCare, and United Healthcare. Results are not comparable to results reported in previous Private Commercial chapters or prior annual reports due to differences in data sources.
- 2** Centers for Medicare & Medicaid Services (CMS), HHS, Final Rule, “Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment Parameters for 2018; Amendments to Special Enrollment Periods and the Consumer Operated and Oriented Plan Program,” Federal Register 81, No. 246 (December 22, 2016): 94080. <https://www.govinfo.gov/content/pkg/FR-2016-12-22/pdf/2016-30433.pdf>.
- 3** “Explaining Health Care Reform: Medical Loss Ratio (MLR),” Kaiser Family Foundation, accessed August 5, 2019, <https://www.kff.org/health-reform/fact-sheet/explaining-health-care-reform-medical-loss-ratio-mlr/>.
- 4** Patient Protection and Affordable Care Act, Public Law 111-148, U.S. Statutes at Large 124 (2010): 865-868. <https://www.congress.gov/111/plaws/publ148/PLAW-111publ148.pdf>.
- 5** 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>.
- 6** Fourth Continuing Appropriations For Fiscal Year 2018, Federal Register Printing Savings, Health Kids, Health-Related Taxes, and Budgetary Effects, Public Law 115-120, U.S. Statutes at Large 132 (2018): 38-39. <https://www.congress.gov/115/plaws/publ120/PLAW-115publ120.pdf>.
- 7** Further Consolidated Appropriations Act, 2020, Public Law 116-94, U.S. Statutes at Large 133 (2019): 3119. <https://www.congress.gov/116/plaws/publ94/PLAW-116publ94.pdf>.

Quality of Care in the Commonwealth

KEY FINDINGS

Among members surveyed in both MassHealth and commercial populations, patient experience ratings were highest for the Communication domain, and lowest for Self-Management Support.

The unplanned all-payer readmission rate for Massachusetts acute care hospitals was 15.4% in SFY 2018—a decrease from the previous year.

Nine of 39 reporting Massachusetts acute care hospitals fully met all three Leapfrog standards for reducing unnecessary maternity care.

53 of 60 reporting hospitals fully met the Leapfrog standard for National Quality Forum Safe Practices, though some low scores in each contributing domain identify opportunities for improvement.

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 adherence to safe practices standards.

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 CMS, the Leapfrog Group, and Massachusetts Health Quality Partners. •

Quality of Care in the Commonwealth

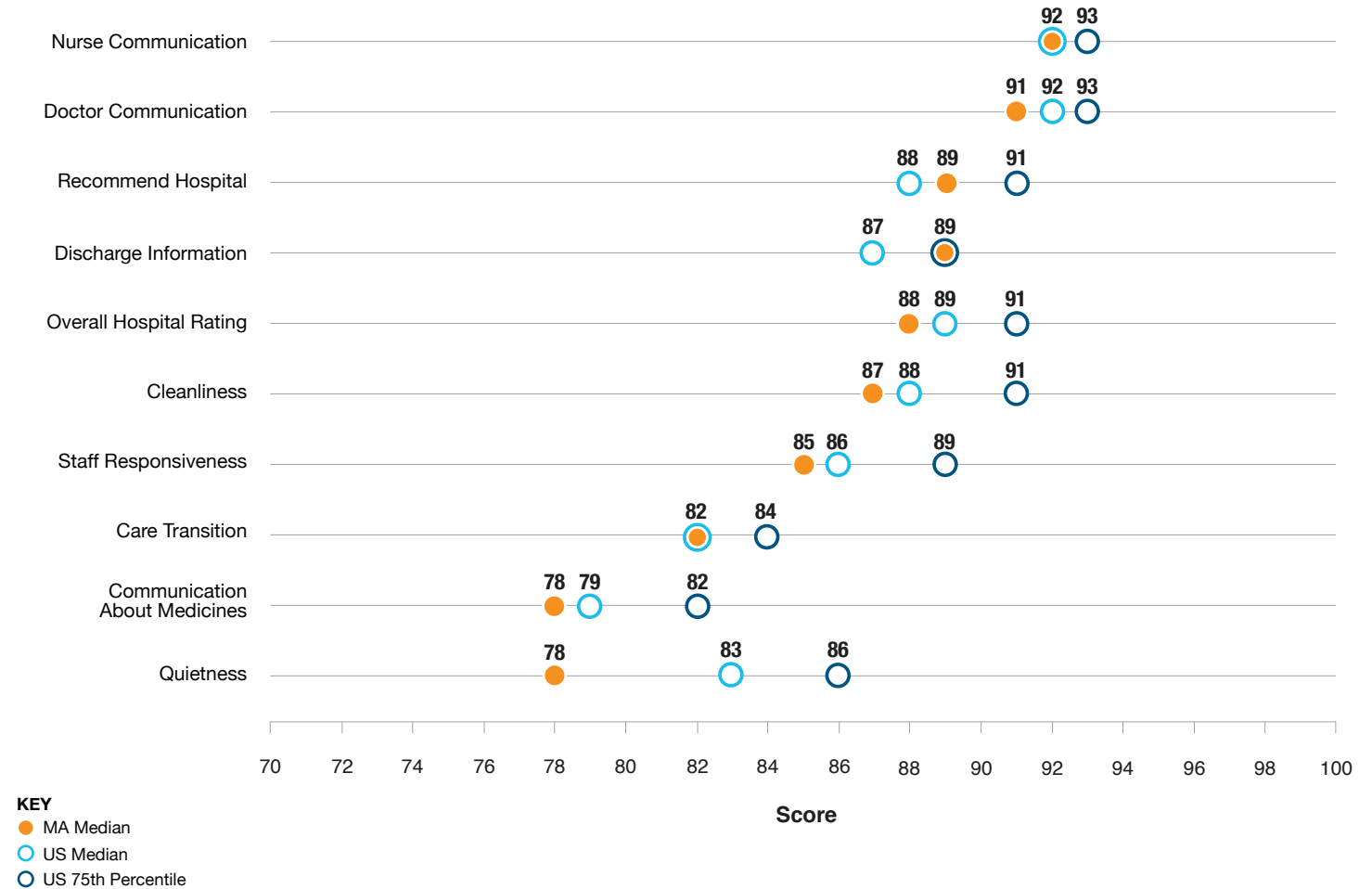
On most measures, patient-reported scores of Massachusetts hospitals were similar to the median scores of patients at hospitals nationally, with Massachusetts scores generally deviating no more than one point from national medians.

However, patient experience ratings of Massachusetts hospitals continued to fall below the patient experience ratings of the top-performing (75th percentile) hospitals nationally.

Massachusetts patients rated Nurse and Doctor Communication more highly than other domains of care (median score of 92 and 91, respectively, out of 100), as did patients nationally (median score of 92 for both measures out of 100). Statewide median scores were lowest for Quietness and Communication about Medicines (both 78 out of 100).

In 2019, 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, 2019



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

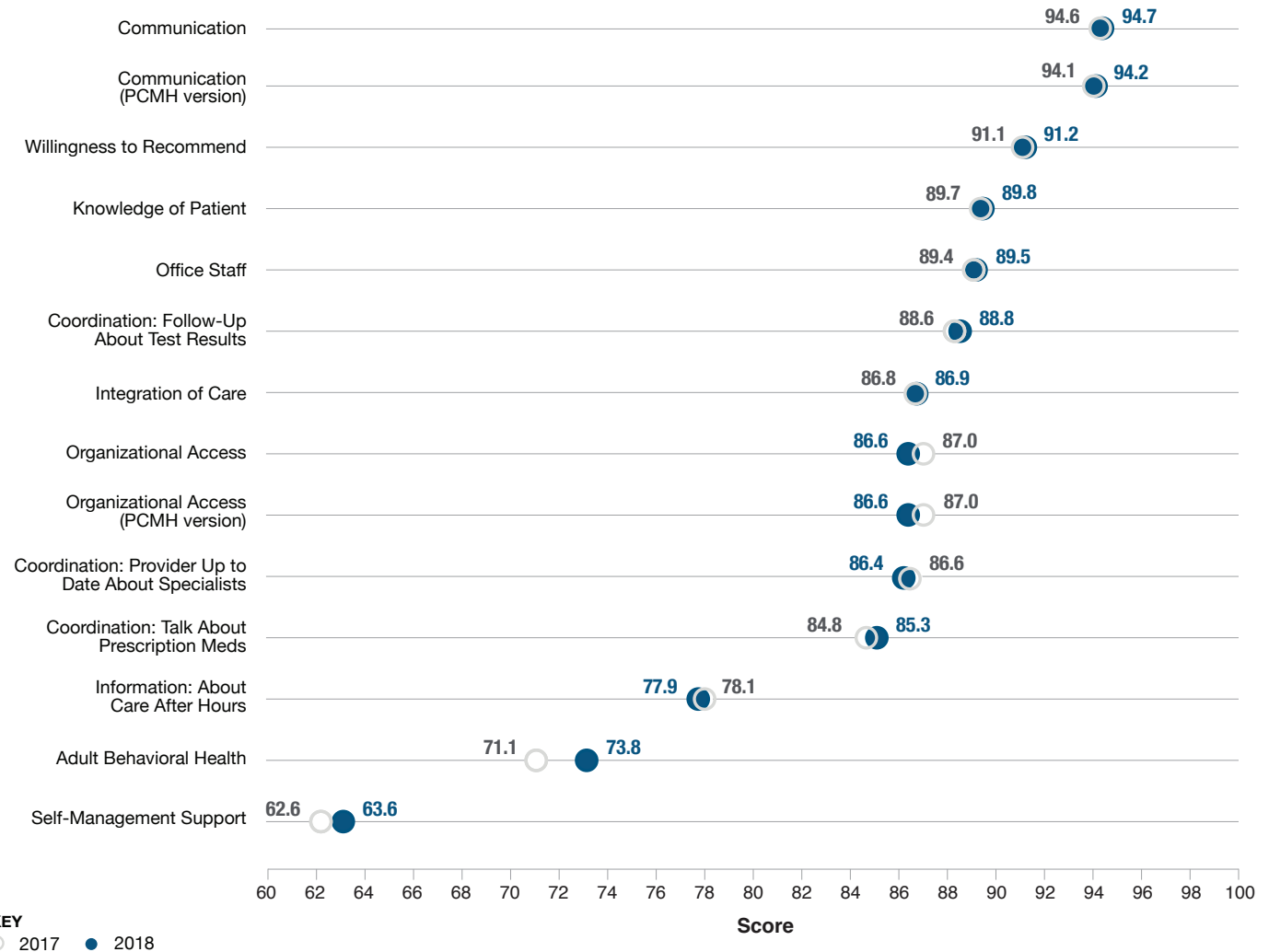
Overall, adult patients expressed positive experiences with their primary care providers in both 2017 and 2018.

Statewide, scores were very similar from 2017 to 2018, with adult patients rating Massachusetts primary care visits highest on domains of Provider Communication and Patient Willingness to Recommend Provider. Of the 14 measures included in the survey, Adult Behavioral Health and Self-Management Support were the lowest-scoring measures in 2018 (73.8 and 63.6, respectively, out of 100), though both improved from 2017.

Adult Behavioral Health is the only measure that changed by more than one point from 2017 to 2018.

Adult Behavioral Health and Self-Management Support scored the lowest overall, but these two measures also showed the most improvement.

Primary Care Patient-Reported Experiences for Adults, 2017-2018



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

Notes: Adult patients' ages 18+. Survey conducted on a sample of commercial health plan members. The adult behavioral health composite refers to how patients answered the questions, "In the last 12 months, did anyone in this provider's office ask you if there was a period of time when you felt sad, empty, or depressed?" and "In the last 12 months, did you and anyone in this provider's office talk about things in your life that worry you or cause you stress?"

Quality of Care in the Commonwealth

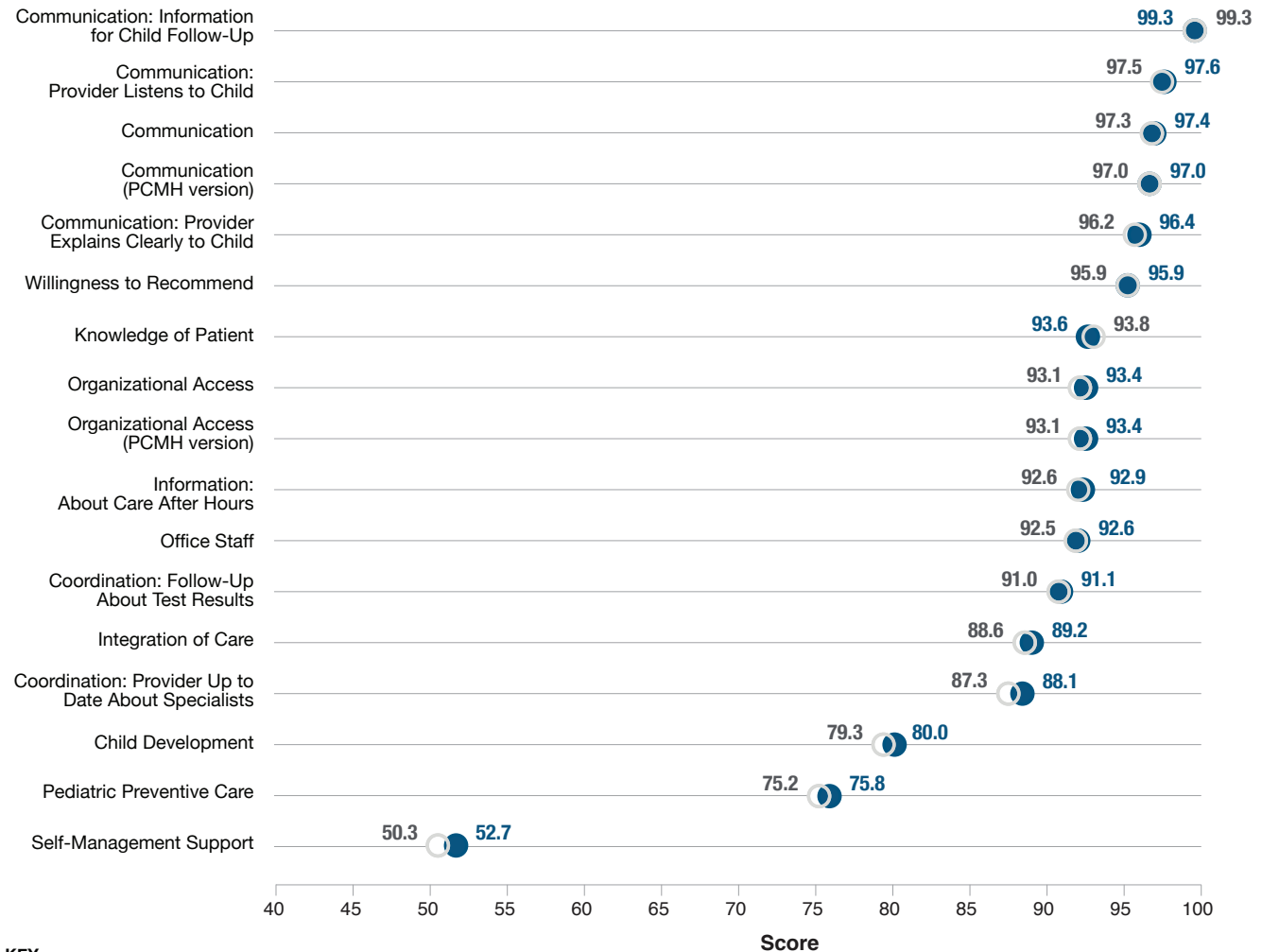
Similar to adult patient-reported experiences with primary care providers, the communication domain was the highest scoring for pediatric patients, particularly for Information for Child Follow-up and Provider Listens to Child (99.3 and 97.6, respectively, out of 100).

2018 scores were very similar to 2017. Only the measure of Self-Management Support changed by a difference of more than one point, improving from 50.3 to 52.7, though this score remains far lower than all other pediatric patient experience measures.

Scores were lowest for measures of Child Development, Pediatric Preventive Care, and Self-Management Support for pediatric patients (80.0, 75.8, and 52.7, respectively, out of 100), though all three measure scores were improvements from 2017.

Pediatric primary care patient-reported experiences remained very similar in 2018 to scores in 2017.

Primary Care Patient-Reported Experiences for Pediatrics, 2017-2018



KEY
 ○ 2017 ● 2018

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

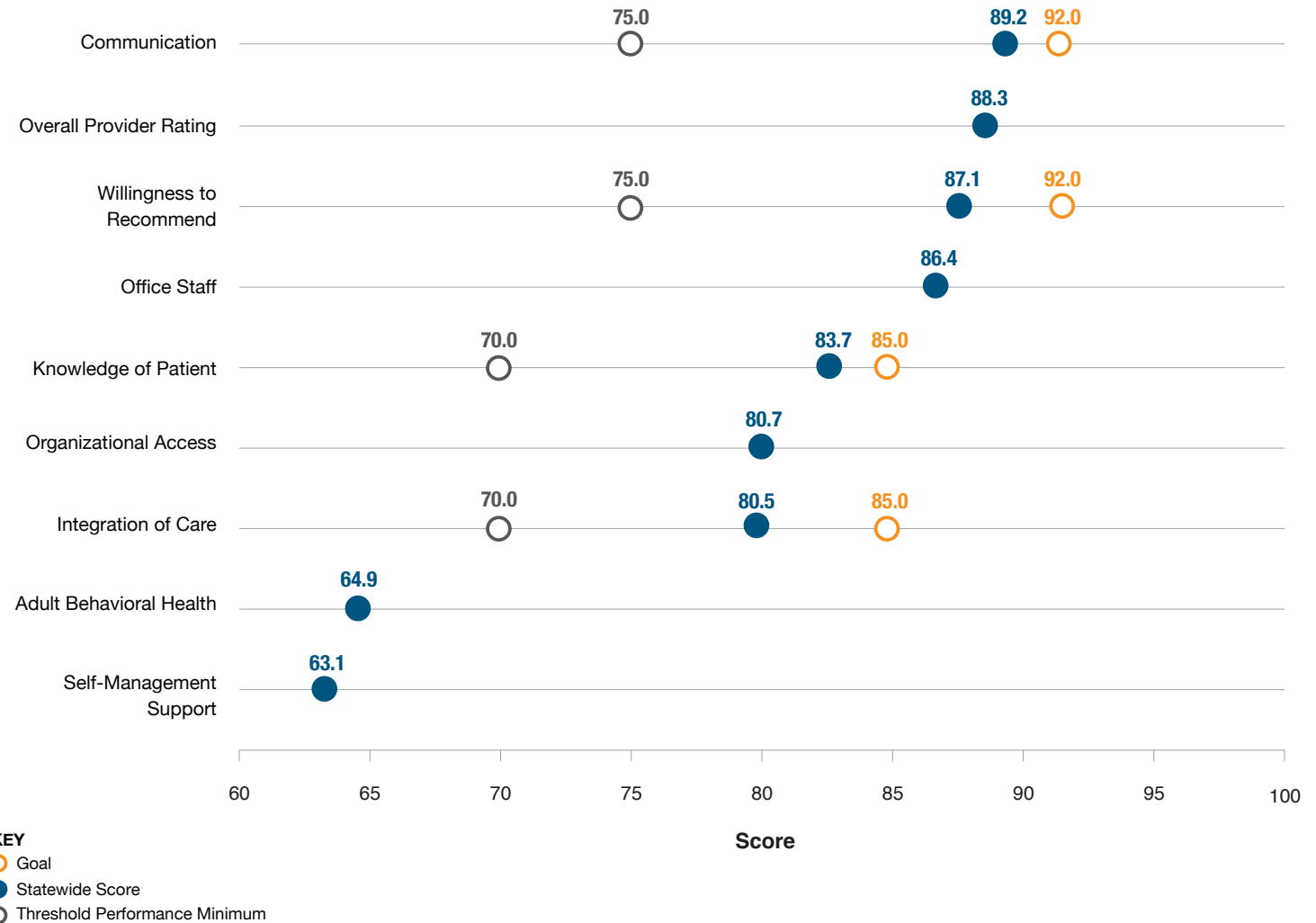
New this year, MassHealth issued a primary care Patient Experience Survey to a sample of ACO members that had a primary care visit in 2018. The scores shown here include a statewide baseline, and MassHealth also identified a threshold minimum and goal target for four of the measures for ACO performance.

Overall, adult patients expressed positive experiences with their primary care providers in 2018. MassHealth ACO scores are similar to, but slightly lower than, comparable surveys performed by commercial health plans.

Where applicable, MassHealth ACO primary care providers surpassed the threshold on all measures, and are making progress toward achieving the goal targets.

Similar to the commercial population, scores reported by MassHealth members were highest for Communication, and lowest for Adult Behavioral Health and Self-Management Support.

MassHealth Member Primary Care Patient-Reported Experiences for Adults, 2018



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

Notes: Adult patients' ages 18+. Survey conducted on a sample of MassHealth ACO plan members. The adult behavioral health composite refers to how patients answered the questions, "In the last 12 months, did anyone in this provider's office ask you if there was a period of time when you felt sad, empty, or depressed?" and "In the last 12 months, did you and anyone in this provider's office talk about things in your life that worry you or cause you stress?"

Quality of Care in the Commonwealth

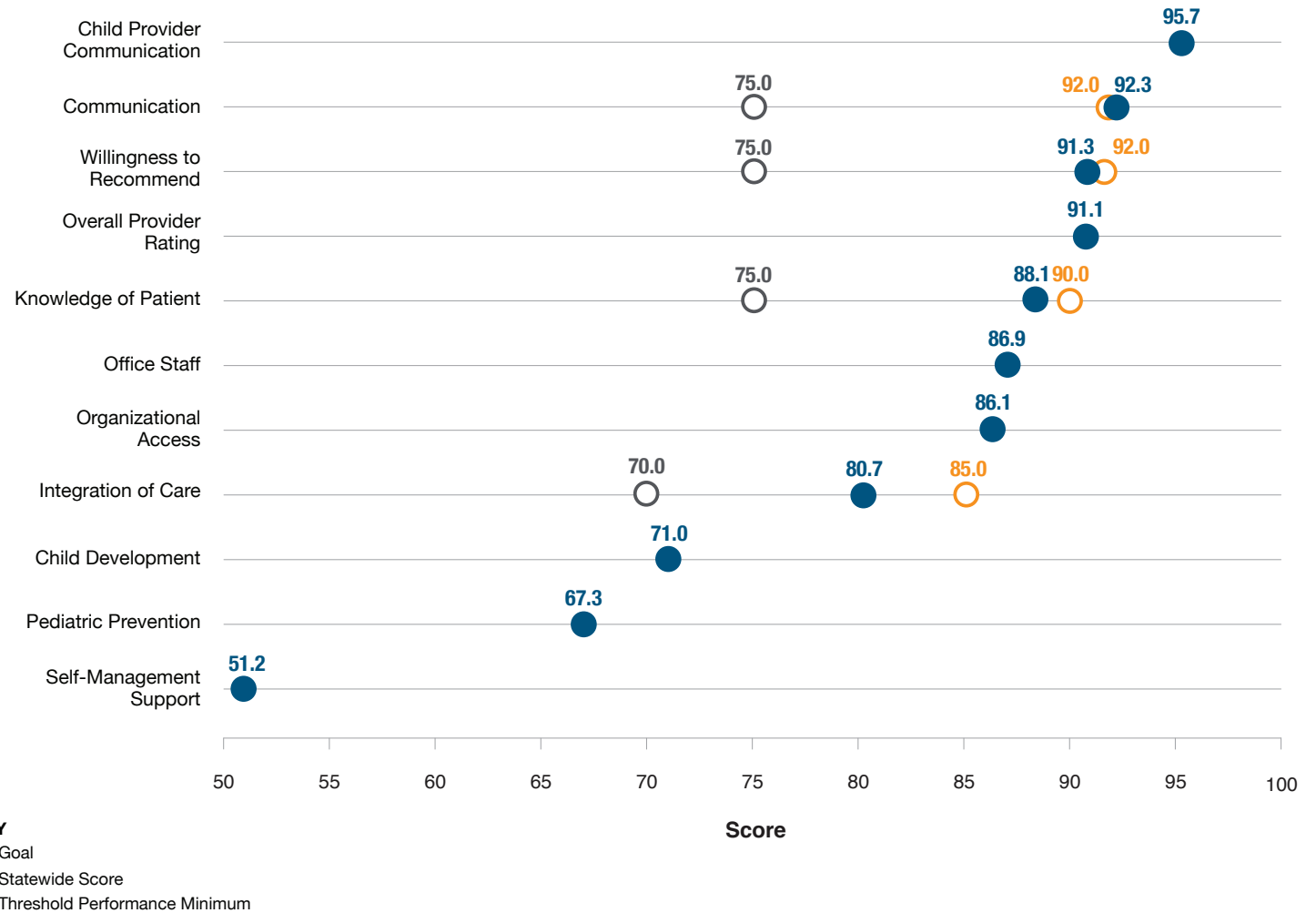
Similar to adult patient-reported experiences with MassHealth ACO primary care providers, pediatric visits scored highest in the Communication measures.

For the applicable measures, all four scored at least 10 points higher than the minimum performance threshold score. The score for Communication also surpassed the goal score of 92, with a score of 92.3.

As observed in the commercial population, scores were lowest for measures of Pediatric Prevention and Self-Management Support (67.3 and 51.2, respectively).

Baseline 2018 scores were highest for Communication, and lowest for Pediatric Prevention and Self-Management Support.

MassHealth Member Primary Care Patient-Reported Experiences for Pediatrics, 2018



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 MassHealth ACO plan members. The self-management support measure refers to how supported the caregiver feels in independently managing the pediatric patient's care.

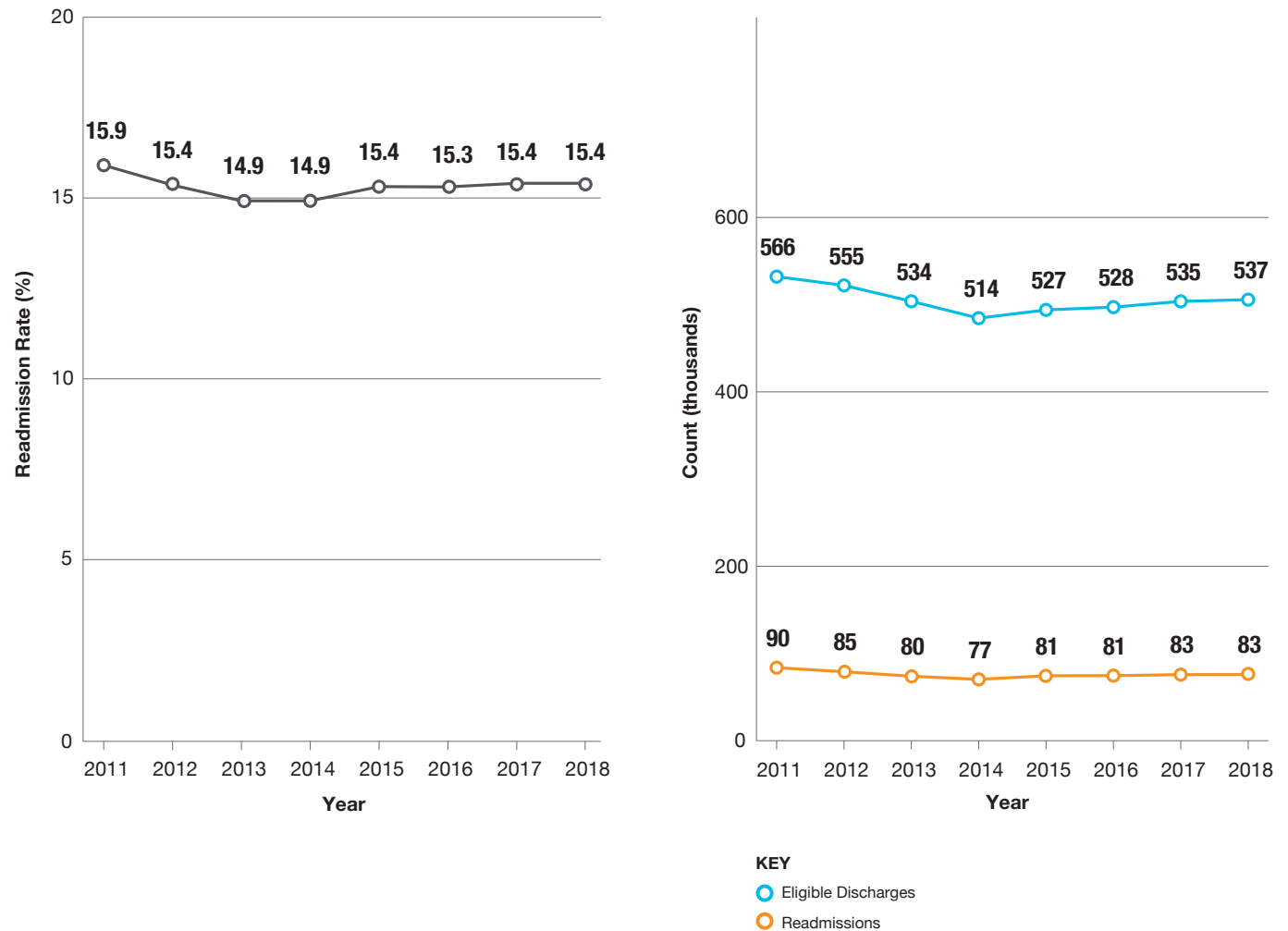
Trends in Statewide All-Payer Adult Acute Hospital Readmission Rate, Discharges, and Readmissions, 2011-2018

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

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

The eight-year trend in all-payer readmission rates shows that after a decline from 2011-2013 and an increase from 2013-2015, readmission rates have stabilized in recent years. In 2018, the statewide observed readmission rate was 15.4%.

After a decline from 2011-2013 and an increase from 2013-2015, readmission rates have stabilized in recent years.



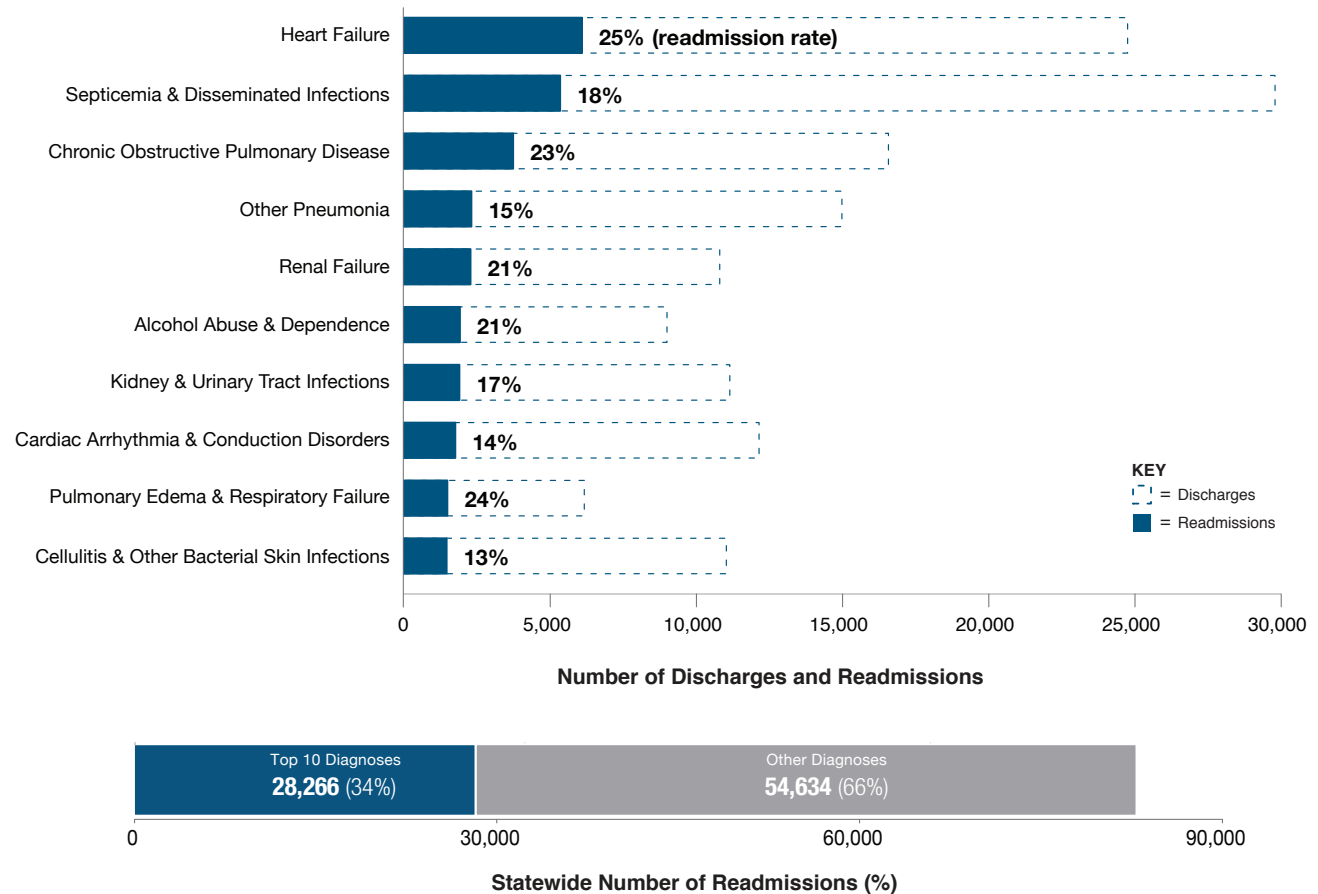
Source: Massachusetts Hospital Inpatient Discharge Database, July 2010 to June 2018.

Notes: This year's report matches patient records using a probabilistic patient identifier, instead of Social Security Number. Readmission rates may not match those from earlier reports. Analyses include eligible discharges for adults with any payer, excluding discharges for obstetric or primary psychiatric care.

Discharge Diagnoses with the Highest Numbers of Readmissions, 2018

Certain discharge diagnoses are associated with higher numbers of readmissions. The top three discharge diagnoses with the highest numbers of readmissions in 2018 were heart failure, septicemia, and chronic obstructive pulmonary disease.

These top 10 discharge diagnoses cumulatively accounted for approximately one-third of all readmissions. While it may be important to focus readmission reduction efforts on these high volume conditions, exclusively focusing on the top 10 diagnoses would miss a substantial portion of all readmissions.



Source: Massachusetts Hospital Inpatient Discharge Database, July 2017 to June 2018.

Notes: The discharge diagnosis is based on APR DRG version 30.0. Some discontinuity in trend by diagnosis may be attributed to the change in diagnostic coding from ICD-9-CM to ICD-10-CM in October 2016. Due to technical changes, readmission rates may not match those from earlier reports. Analyses include eligible discharges for adults with any payer, excluding discharges for obstetric or primary psychiatric care.

The top 10 discharge diagnoses with the highest numbers of readmissions accounted for nearly one-third of all readmissions in 2018.

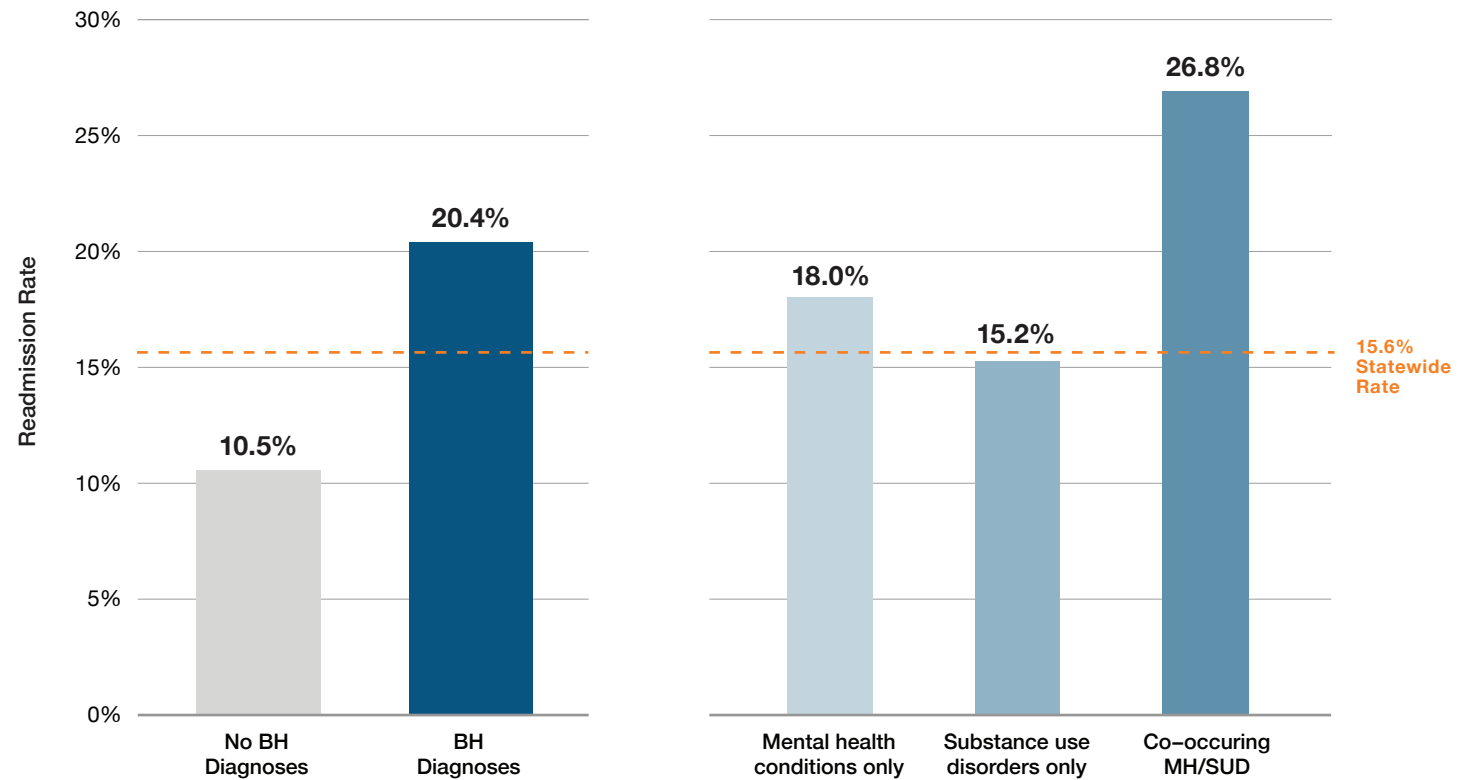
Statewide Readmission Rate and Behavioral Health Comorbidity, 2018

A growing body of evidence indicates that patients with comorbid behavioral health conditions are at higher than average risk for readmissions, and that behavioral health comorbidity is associated with high hospital utilization and cost.

The readmission rate for patients with behavioral health comorbidities was nearly twice as high as the readmission rate for patients without any behavioral health comorbidity (20.4% vs. 10.5%) in 2018.

Patients with comorbid co-occurring mental health and substance use conditions had the highest readmission rate (26.8%), which was more than two and a half times the rate of patients with no behavioral health comorbidity (10.5%).

Relative to patients without any behavioral health comorbidity, patients with comorbid mental health conditions only and substance use disorders only had higher readmission rates, at 18.0% and 15.2%, respectively.



The readmission rate for patients with behavioral health diagnoses was nearly twice as high as the rate for patients with no behavioral health diagnosis in 2018.

Source: Massachusetts Hospital Inpatient Discharge Database, July 2017 to June 2018.

Notes: Analyses include discharges from Massachusetts acute care hospitals for adults (age 18+) with any payer and exclude the following discharges: obstetric admission, treatment for cancer, leave against medical advice, and rehabilitative admission. BH = Behavioral Health, MH/SUD = Mental Health Conditions/Substance Use Disorders. The statewide readmission rate in this analysis is not directly comparable to the rate in the other statewide readmissions analyses in this report (pages 88 and 89), due to inclusion of discharges with a primary psychiatric diagnosis.

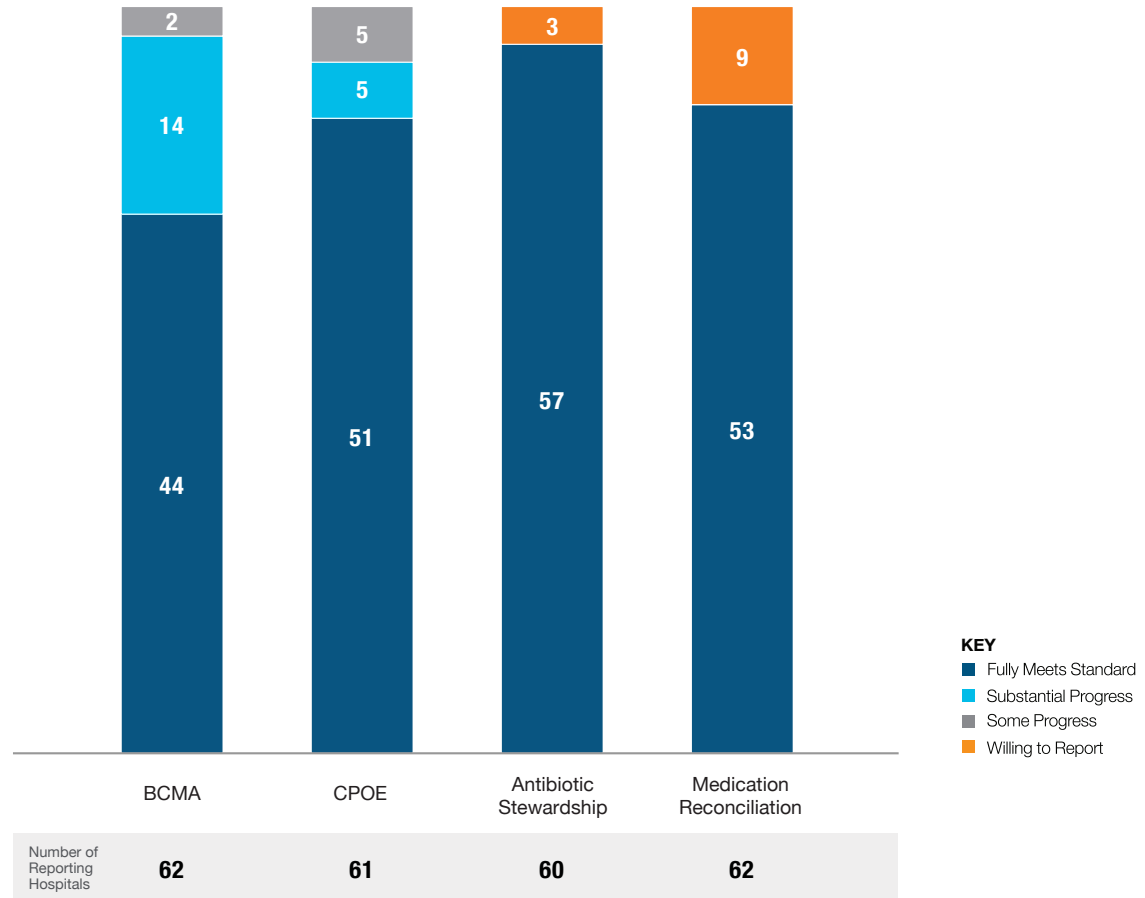
Number of Hospitals Meeting Leapfrog Standards for Safe and Appropriate Medication Use, 2019

Bar Code Medication Administration (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 Computerized Physician Order Entry (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.

To fully meet the standard for Antibiotic Stewardship, a hospital must have implemented all seven Core Elements identified by the Centers for Disease Control and Prevention (CDC) for a successful Antibiotic Stewardship Program.

Finally, to fully meet the standard for Medication Reconciliation, a hospital must use a nationally endorsed protocol to collect data on the accuracy of its medication reconciliation process and report the data collected to Leapfrog.



In 2019, the majority of reporting hospitals fully met the Leapfrog standard for BCMA, CPOE, Antibiotic Stewardship, and Medication Reconciliation.

Source: The Leapfrog Group Hospital Survey. The Leapfrog Hospital Survey is based on voluntary hospital reporting and does not include data from all Massachusetts hospitals. Notes: All payers, all ages. For detailed descriptions of each intervention and scoring methodology, please see the [technical appendix](#).

Rates of Maternity-Related Procedures Relative to Performance Targets, by Hospital, 2019

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

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

In 2019, nine reporting hospitals fully met all three standards, and only one reporting hospital did not fully meet any standard.

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.

	C Section	Early Elective Deliveries	Episiotomy
Leapfrog Standard	≤ 23.9%	≤ 5.0%	≤ 5.0%

Fully Met Three Standards (9 Hospitals)

Berkshire Medical Center	21.3%	0.0%	1.0%
Cooley Dickinson Hospital	22.7%	0.0%	4.0%
Heywood Hospital	11.6%	1.8%	2.1%
Lowell General Hospital - Main Campus	23.8%	2.3%	4.1%
Mercy Medical Center of Springfield	23.2%	0.0%	2.3%
Mount Auburn Hospital	23.0%	0.0%	3.4%
Signature Healthcare Brockton Hospital	11.7%	0.0%	3.1%
St. Luke's Hospital	22.4%	0.0%	4.4%
Tobey Hospital	15.0%	2.9%	2.3%

Fully Met Two Standards (19 Hospitals)

Anna Jaques Hospital	26.2%	0.0%	3.5%
Baystate Medical Center	29.7%	1.4%	2.8%
Beth Israel Deaconess Hospital Plymouth	32.9%	0.0%	2.5%
Beth Israel Deaconess Medical Center	28.5%	4.5%	3.4%
Beverly Hospital	27.6%	0.0%	2.6%
Boston Medical Center	29.9%	0.0%	1.5%
Brigham And Women's Hospital	27.7%	2.2%	4.7%
Cape Cod Hospital	31.6%	0.0%	2.4%
CHA Cambridge Hospital	24.0%	0.0%	2.0%
Emerson Hospital	33.9%	1.2%	2.8%
Fairview Hospital	29.5%	0.0%	2.2%
HealthAlliance-Clinton Hospital	15.2%	0.0%	6.8%
Holyoke Medical Center	29.8%	0.0%	0.7%
Lawrence General Hospital	21.6%	0.0%	5.2%
Newton-Wellesley Hospital	22.4%	4.3%	7.2%
Norwood Hospital	24.3%	0.0%	5.0%
Steward Good Samaritan Medical Center, Inc.	25.6%	0.0%	4.2%
U Mass Memorial Medical Center - Memorial Campus	22.3%	2.7%	5.8%
Winchester Hospital	29.4%	0.0%	1.9%

	C Section	Early Elective Deliveries	Episiotomy
Leapfrog Standard	≤ 23.9%	≤ 5.0%	≤ 5.0%

Fully Met One Standard (10 Hospitals)

Baystate Franklin Medical Center	24.0%	11.1%	1.1%
Charlton Memorial Hospital	25.4%	0.0%	5.9%
Falmouth Hospital	32.7%	2.9%	5.4%
Holy Family Hospital	31.0%	3.0%	7.1%
Melrose-Wakefield Hospital	24.9%	0.0%	6.7%
Milford Regional Medical Center	31.9%	0.0%	9.6%
North Shore Medical Center	26.9%	0.0%	6.9%
South Shore Hospital	28.0%	0.0%	6.5%
St. Elizabeth's Medical Center	27.0%	0.0%	5.9%
Tufts Medical Center	26.2%	11.8%	3.0%

Fully Met No Standard (1 Hospital)

Sturdy Memorial Hospital	28.7%	7.1%	9.0%
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KEY

■ Fully Meets Standard	■ Some Progress
■ Substantial Progress	■ Willing to Report

Nine of 39 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 from 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.

Hospital Adherence to the Leapfrog Standard for National Quality Forum (NQF) Safe Practices, 2019

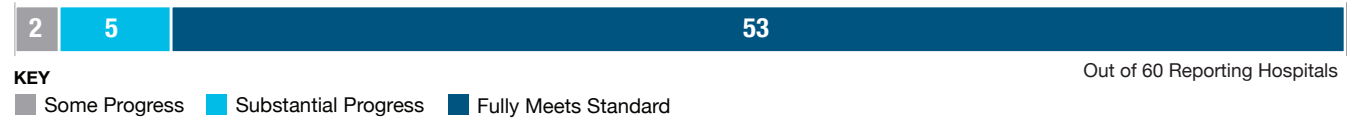
The Leapfrog Safe Practices Score (SPS) measures hospitals' progress on five of the National Quality Forum's (NQF) Safe Practice areas. Each practice area is assigned an individual weight, which is factored into the overall score.

The overall score (max 500) is comprised of five domains: Culture of Safety Leadership Structures and Systems (120), Culture Measurement, Feedback, and Intervention (120), Risk and Hazards (100), Nursing Workforce (100), and Hand Hygiene (60). Descriptions of each domain can be found in the [technical appendix](#) of this report.

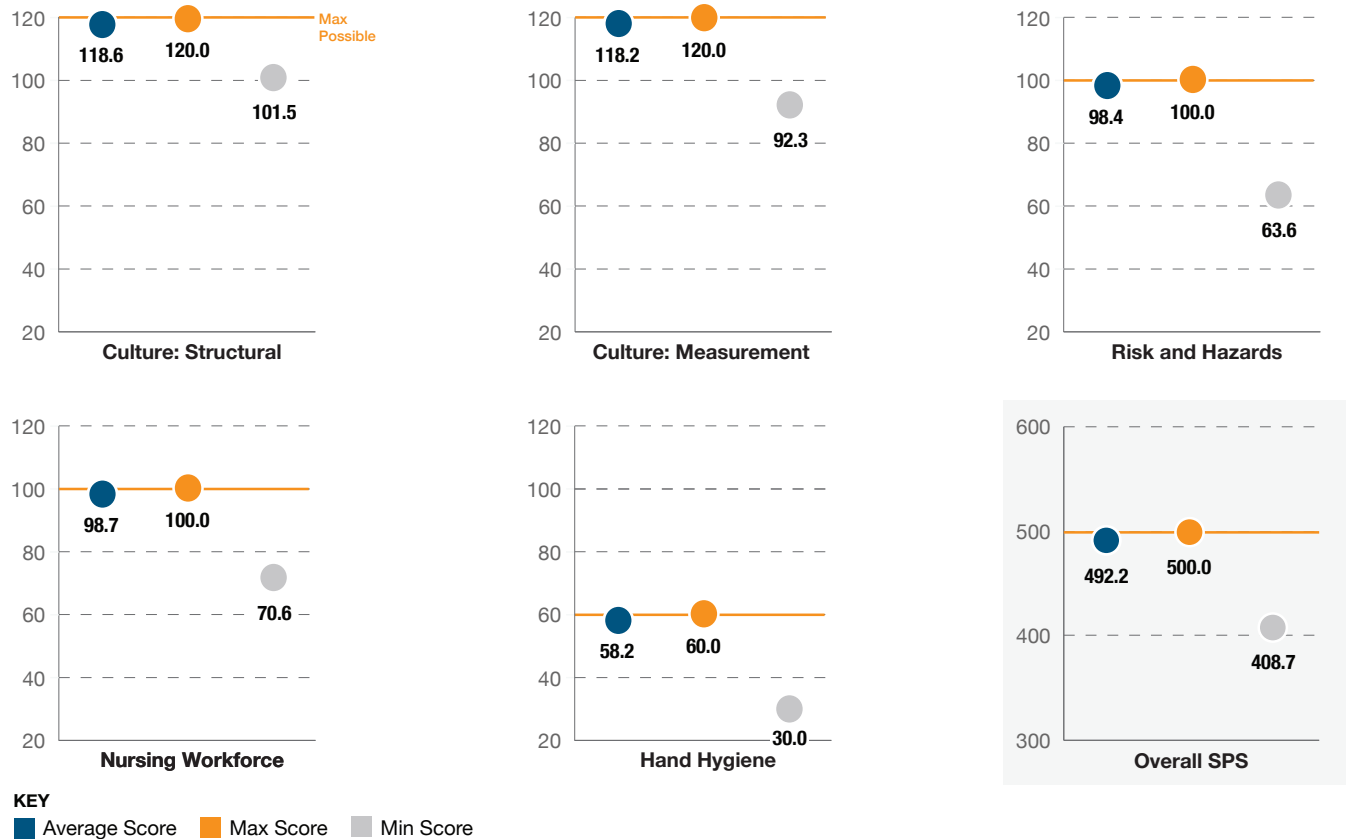
Overall, Massachusetts hospitals adhered to Leapfrog's NQF safe practices standard in 2019, though some low scores pulled down the average in each domain and identify opportunities for improvement.

In 2019, 53 out of 60 reporting hospitals fully met the Leapfrog standard for NQF safe practices.

Overall Safe Practices Score (SPS) Performance



Breakdown of Overall SPS by Factor



Source: The Leapfrog Group Hospital Survey. The Leapfrog Hospital Survey is based on voluntary hospital reporting and does not include data from all Massachusetts hospitals. Notes: For more information about the Leapfrog survey and scoring algorithm, see the [technical appendix](#).

Glossary of Terms

Accountable Care Organizations (ACOs): Groups of health care providers that contracts with a payer to assume responsibility for the delivery of care to its attributed patients, and for those patients' health outcomes.

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 below 400% of the Federal Poverty Level (FPL) who enrolled in plans sold on the Health Connector. Credits may either be applied directly to premiums to lower the member's monthly payments or may be paid in a lump sum as a part of the member's tax return. APTC amounts are calculated by comparing the individual's income to the cost of the second cheapest silver tier plan available to them. If the cost of that plan exceeds a specified percent of the member's income, the federal government pays the difference in APTCs.

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. Actuarial values may be estimated by several different methods; for the method used in this report, 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: Payments made by the federal government and/or the Commonwealth of Massachusetts directly to ConnectorCare payers to lower copayments and eliminate deductibles and coinsurance in ConnectorCare plans.

Employer-Sponsored Insurance (ESI): 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.

Glossary of Terms (continued)

Funding Type: The segmentation of health plans into two types—fully-insured and self-insured—based on how they are funded.

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 benchmark for 2018 is equal to the PGSP minus 0.5%, or 3.1%.

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): As defined by the IRS, a health plan with an individual plan deductible exceeding \$1,300 for 2017 and \$1,350 for 2018 and 2019.

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), and jumbo group (500+ employees). 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; otherwise, they were categorized within mid-size.

Glossary of Terms (continued)

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. This ratio is calculated within a licensed payer and market segment over a three-year average.

Merged Market: The combined health insurance market within which both individual (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.

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.

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 MLR 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).

Premium Retention: The difference between the total premiums collected by payers (net of MLR rebates) and the total spent by payers on incurred medical claims.

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

Glossary of Terms (continued)

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 one of four mutually exclusive 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 between 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 employee-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.

Glossary of Terms (continued)

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	HSN	Health Safety Net
ACO	Accountable Care Organization	IRS	Internal Revenue Service
APM	Alternative Payment Method	MA	Massachusetts
APTC	Advance Premium Tax Credit	MCO	Managed Care Organization
BCBSMA	Cross Blue Shield of Massachusetts	MGL	Massachusetts General Law
BCMA	Bar Code Medication Administration	MLR	Medical Loss Ratio
BIDCO	Beth Israel Deaconess Care Organization	MMCO	MassHealth Managed Care Organization
BMCHP	Boston Medical Center HealthNet Plan	NCPHI	Net Cost of Private Health Insurance
CDC	Centers for Disease Control and Prevention	NEQCA	New England Quality Care Alliance
CHIA	Center for Health Information and Analysis	NQF	National Quality Forum
CMS	Centers for Medicare & Medicaid Services	PACE	Programs of All-Inclusive Care for the Elderly
CPOE	Computerized Physician Order Entry	PBM	Pharmacy Benefit Managers
CSR	Cost-Sharing Reduction	PCC	Primary Care Clinician
EPO	Exclusive Provider Organization	PCP	Primary Care Provider
ESI	Employer-Sponsored Insurance	PES	Patient Experience Survey
FFS	Fee-for-Service	PMPM	Per Member Per Month
FPL	Federal Poverty Level	POS	Point-of-Service
GIC	Group Insurance Commission	PPO	Preferred Provider Organization
HCQI	Health Care Quality Improvement	SCO	Senior Care Options
HDHP	High Deductible Health Plan	SFY	State Fiscal Year
HMO	Health Maintenance Organization	SHCE	Supplemental Health Care Exhibit
HNE	Health New England	SI	Self-Insured
HPHC	Harvard Pilgrim Health Care	SPS	Safe Practice Score
HPI	Health Plans, Inc.	SQMS	Standard Quality Measure Set
HSA	Health Status Adjusted	THCE	Total Health Care Expenditures

Index of Acronyms (continued)

THP	Tufts Health Plan
THPP	Tufts Health Public Plans
TME	Total Medical Expenses
VA	Veterans Affairs



For more information, please contact:

CENTER FOR HEALTH INFORMATION AND ANALYSIS

501 Boylston Street
Boston, MA 02116

www.chiamass.gov
[@Mass_CHIA](https://twitter.com/Mass_CHIA)

(617) 701-8100