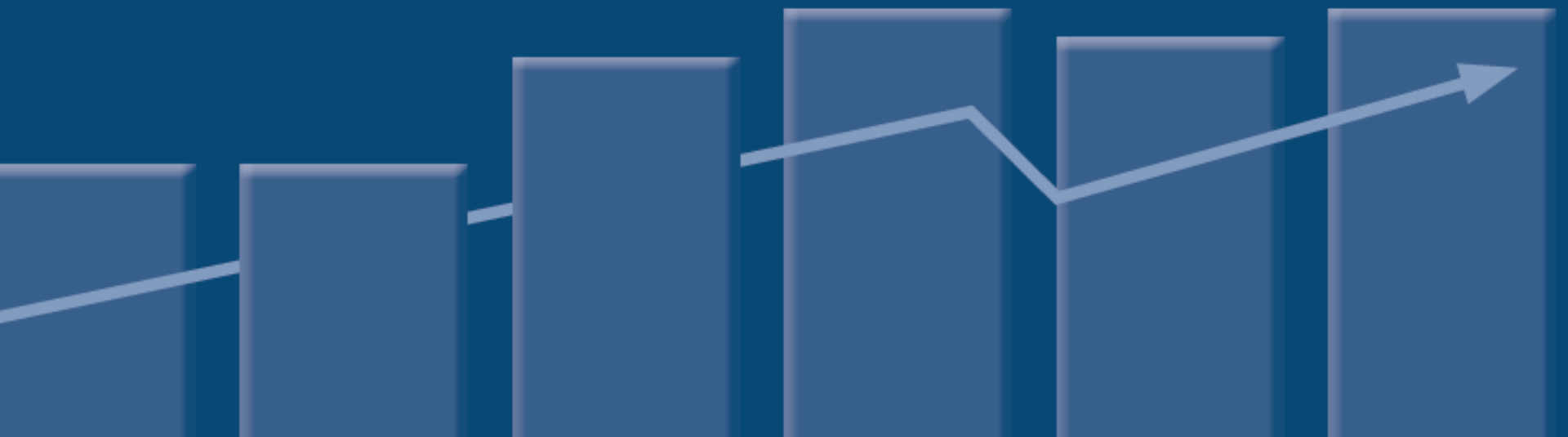
MASSACHUSETTS
HEALTH POLICY COMMISSION

HEARING ON THE POTENTIAL MODIFICATION OF THE

HEALTH CARE COST GROWTH BENCHMARK



Hearing Participants and Presenting Staff

Board of Commissioners, Health Policy Commission

David Seltz, Executive Director, Health Policy Commission

David Auerbach, Director of Research and Cost Trends, Health Policy Commission

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Zack Cooper, Associate Professor of Health Policy and Economics at Yale University and Director of Health Policy at the Yale Institution for Social and Policy Studies

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Senator Cindy Friedman, Chair, Joint Committee on Health Care Financing

Representative Daniel Cullinane, Vice Chair, Joint Committee on Health Care Financing

Honorable Members, Joint Committee on Health Care Financing

Presentation Overview

I. What is the health care cost growth benchmark and how is it set?

II. How has Massachusetts performed against the health care cost growth benchmark and what is driving spending growth?

III. How does Massachusetts compare to the U.S.?

IV. What are the future projections for health care spending growth in the U.S.?

V. How does the HPC hold health care providers and health plans accountable to the benchmark?

VI. Why should Massachusetts continue to focus on health care costs and affordability?

VII. What should market participants and policymakers do to advance the goal of a more efficient, high-quality health care system in Massachusetts?

HPC

Section I.

What is the health care cost growth benchmark and how is it set?

In 2012, Massachusetts became the first state to establish a target for sustainable health care spending growth.

Chapter 224 of the Acts of 2012

An Act **Improving the Quality** of Health Care and **Reducing Costs** through Increased **Transparency**, **Efficiency**, and **Innovation.**

GOAL

Reduce total health care spending growth to meet the **Health Care Cost Growth Benchmark**, which is set by the HPC and tied to the state's overall economic growth.

VISION

A **transparent** and **innovative** healthcare system that is **accountable** for producing **better health** and **better care** at a **lower cost** for the people of the Commonwealth.

HPC

Overview of the Health Care Cost Growth Benchmark

- Sets a target for controlling the growth of total health care expenditures across all payers (public and private), and is set to the state's long-term economic growth rate:
  - Health care cost growth benchmark for 2013 - 2017 equals **3.6%**
  - Health care cost growth benchmark for 2017 - 2019 equals **3.1%**

- The Health Policy Commission can require health care providers and health plans to implement **Performance Improvement Plans** and submit to strict public monitoring

TOTAL HEALTH CARE EXPENDITURES

Definition: Annual per capita sum of all health care expenditures in the Commonwealth from public and private sources

Includes:
- All categories of medical expenses and all non-claims related payments to providers
- All patient cost sharing amounts, such as deductibles and copayments
- Administrative cost of private health insurance

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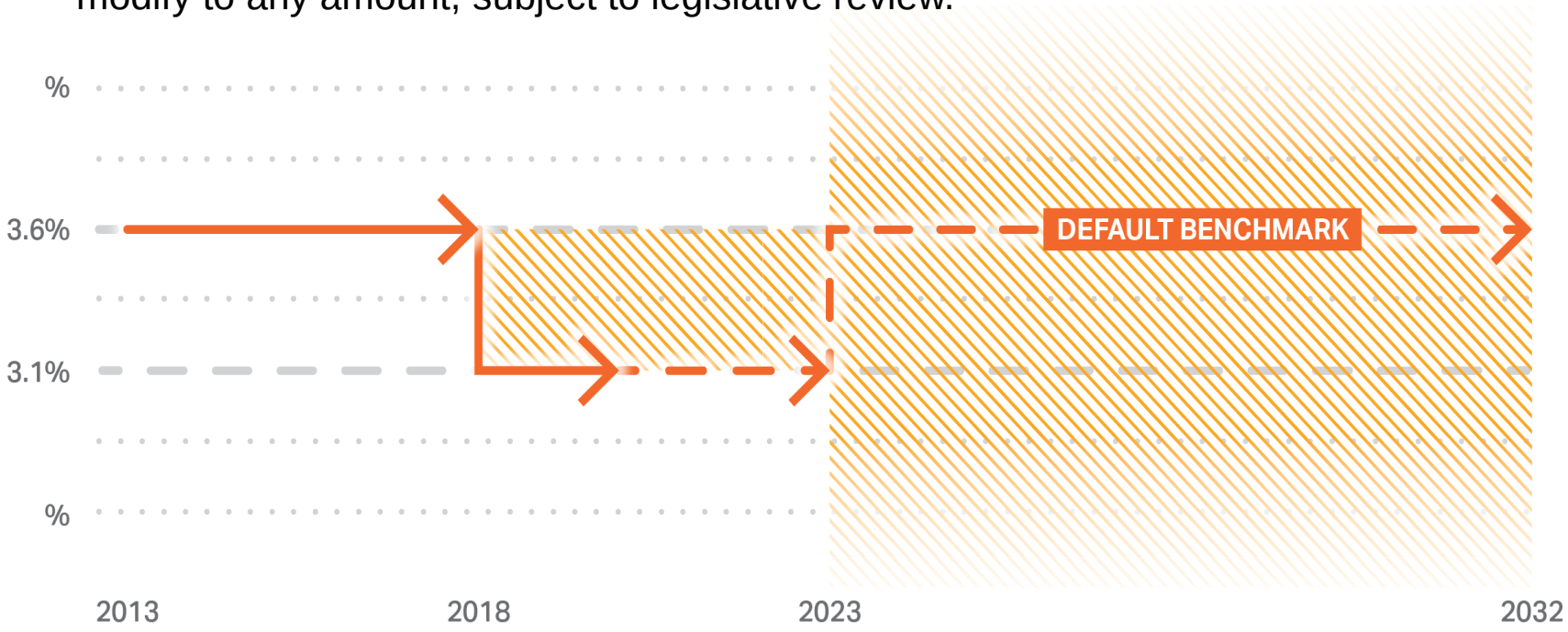
The HPC's authority to modify the benchmark is limited by law and subject to potential legislative review.

- **Years 1-5:** Benchmark established by law at PGSP (3.6%).
- **Years 6-10:** Benchmark established by law at a default rate of at PGSP minus 0.5% (3.1%); HPC can modify the benchmark up to 3.6%, subject to legislative review.
- **Years 10-20:** Benchmark established by law at a default rate of PGSP; HPC can modify to any amount, subject to legislative review.



Benchmark Modification Process: Key Steps

HPC PROCESS TO MODIFY

- The HPC's Board must hold a **public hearing** prior to making any modification of the benchmark.
- Hearing must consider **data** and **stakeholder testimony** on whether modification of the benchmark is warranted.
- Members of the Joint Committee on Health Care Financing may participate in the hearing.
- If the HPC's Board votes to maintain the benchmark at the default rate of 3.1%, the **annual process is complete**.
- If the HPC's Board votes to modify the benchmark to some number between 3.1% and 3.6%, the HPC must submit notice of its intent to modify the benchmark to the Joint Committee **for further legislative review**.

POTENTIAL LEGISLATIVE REVIEW

- Following notice from the HPC of an intent to modify, the Joint Committee must hold a public hearing within 30 days.
- The Joint Committee must submit findings and recommendations, including any legislative recommendations, to the General Court within 30 days of hearing.
- The General Court must act within 45 days of public hearing or the HPC Board's modification of the benchmark takes effect.

Benchmark Modification Process: 2020 Timeline

January 13, 2020

3.1% PGSP established in consensus revenue process

March 11, 2020

Public hearing of HPC Board and Joint Committee on potential modification of benchmark

April 1, 2020

Board votes whether to modify benchmark; if Board votes to modify, it submits notice of intent to modify to Joint Committee on Health Care Financing

April 15, 2020

Statutory deadline for Board to set benchmark

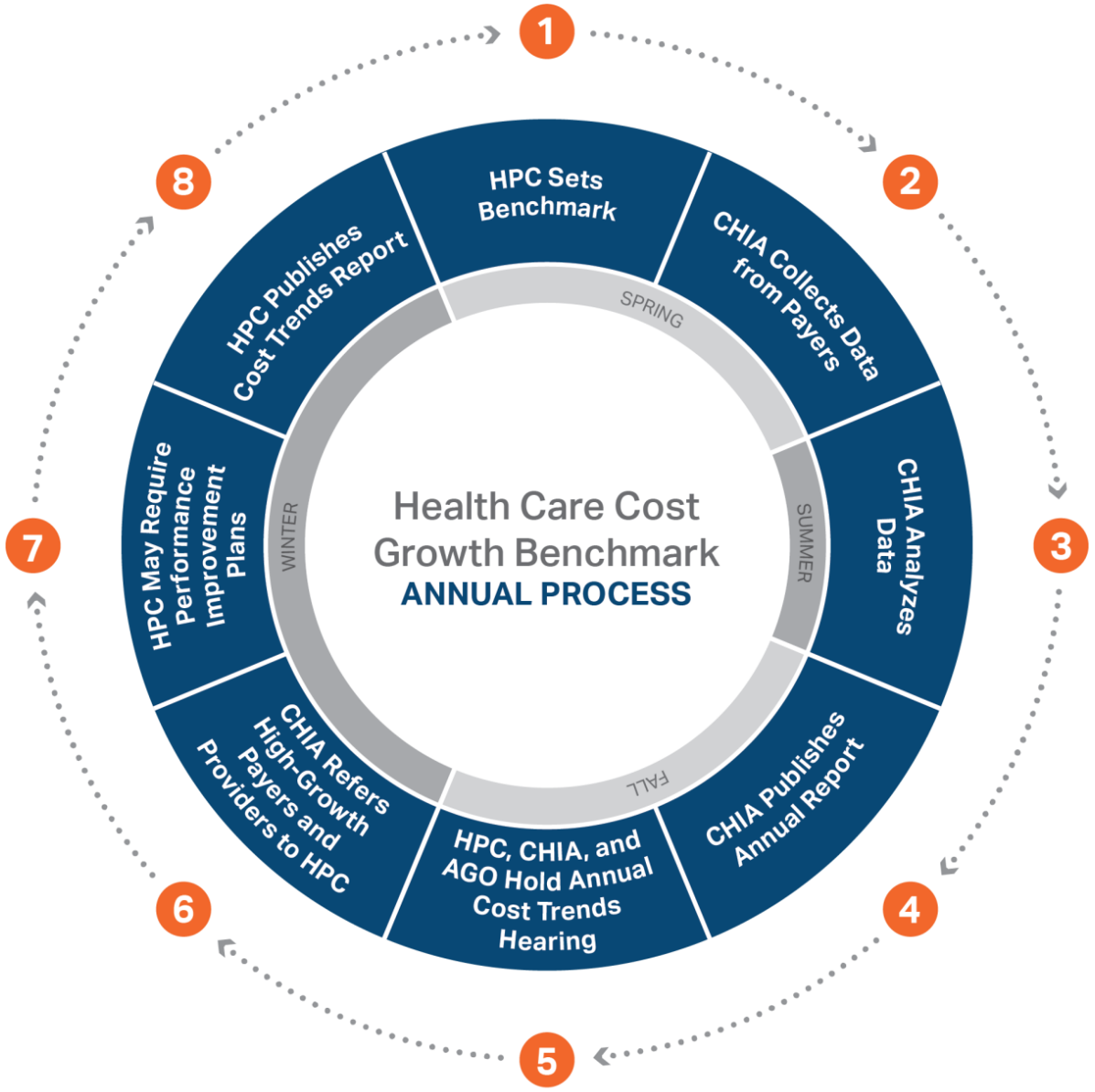
April 2020

Joint Committee holds a hearing within 30 days of notice

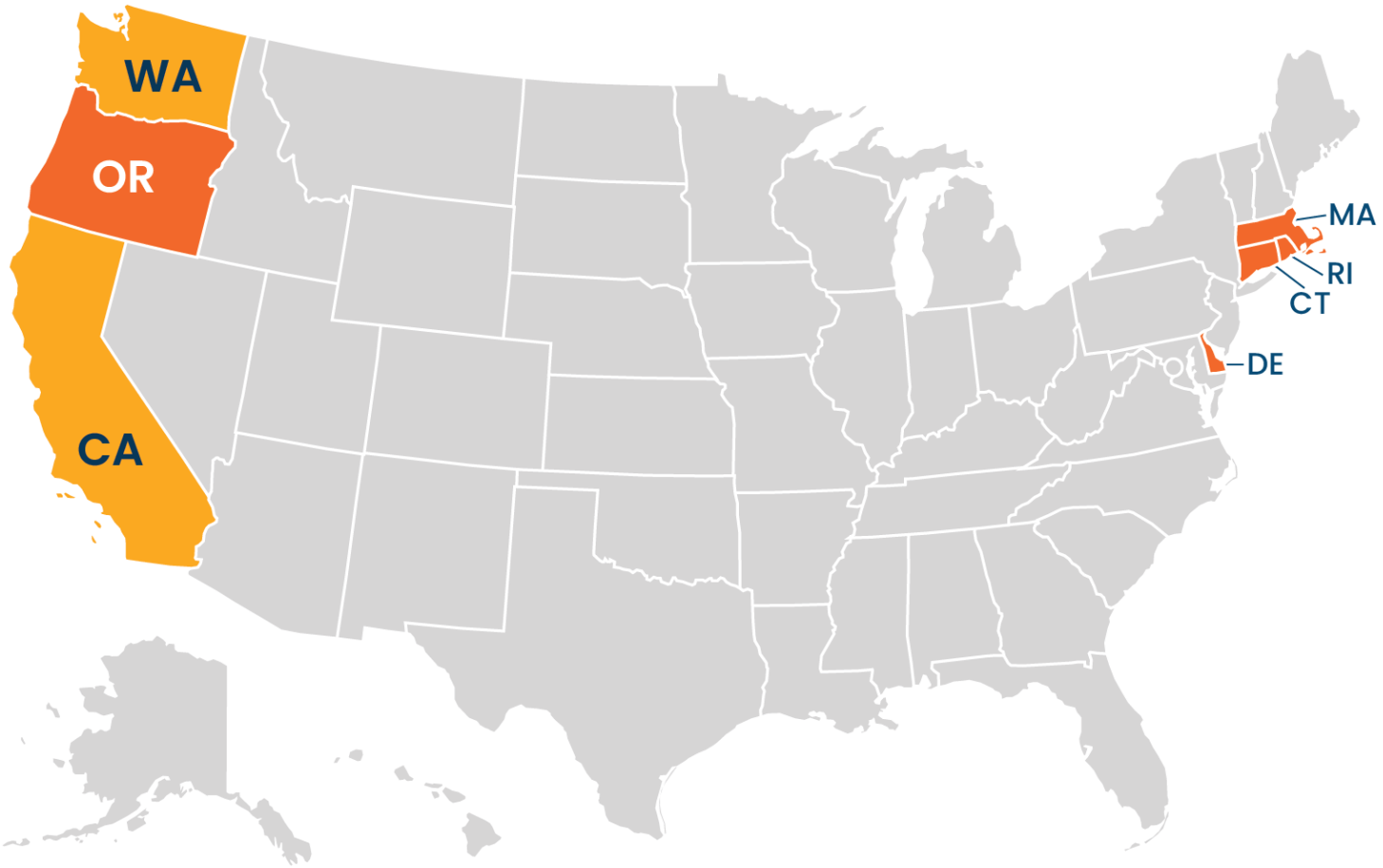
May 2020

Joint Committee reports findings and recommended legislation to General Court within 30 days of hearing; legislature has 45 days from hearing to enact legislation which may establish benchmark; if not legislation, then the Board's vote to modify takes effect

Annual Timeline for HPC and CHIA to Establish the Health Care Cost Growth Benchmark and Evaluate the State's Performance



Five states have now established statewide health care cost growth targets, with many additional states considering similar proposals.



HPC

The HPC employs four core strategies to realize its vision of better care, better health, and lower costs for all people of the Commonwealth.

RESEARCH AND REPORT

INVESTIGATE, ANALYZE, AND REPORT TRENDS AND INSIGHTS

CONVENE

BRING TOGETHER STAKEHOLDER COMMUNITY TO INFLUENCE THEIR ACTIONS ON A TOPIC OR PROBLEM

WATCHDOG

MONITOR AND INTERVENE WHEN NECESSARY TO ASSURE MARKET PERFORMANCE

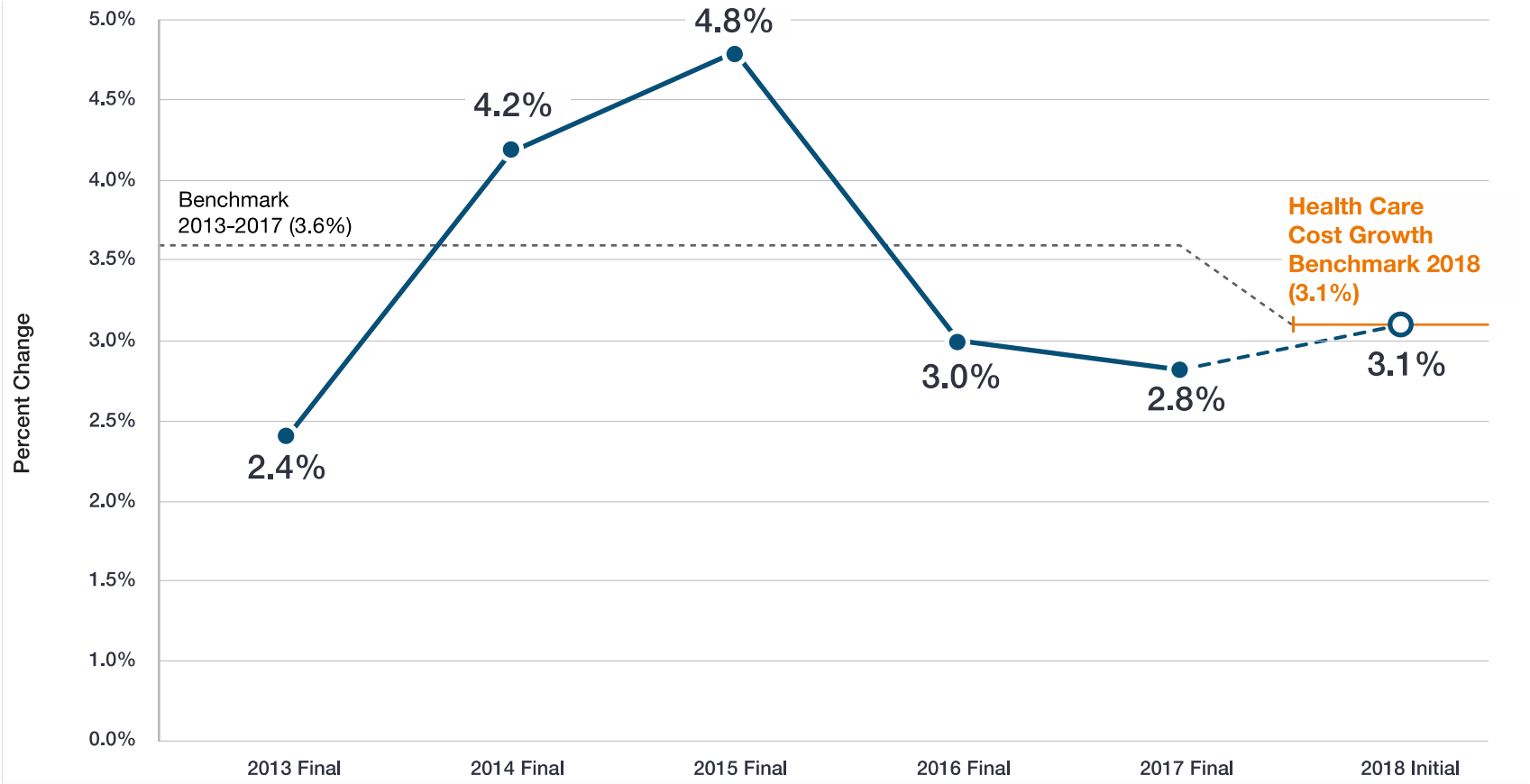
PARTNER

ENGAGE WITH INDIVIDUALS, GROUPS, AND ORGANIZATIONS TO ACHIEVE MUTUAL GOALS

Section II.

How has Massachusetts performed against the health care cost growth benchmark and what is driving spending growth?

From 2012 to 2018, annual health care spending growth averaged 3.38%, below the state benchmark.



The initial estimate of THCE per capita growth for 2018 is 3.1%

This is the third consecutive year it met or fell below the health care cost growth benchmark.

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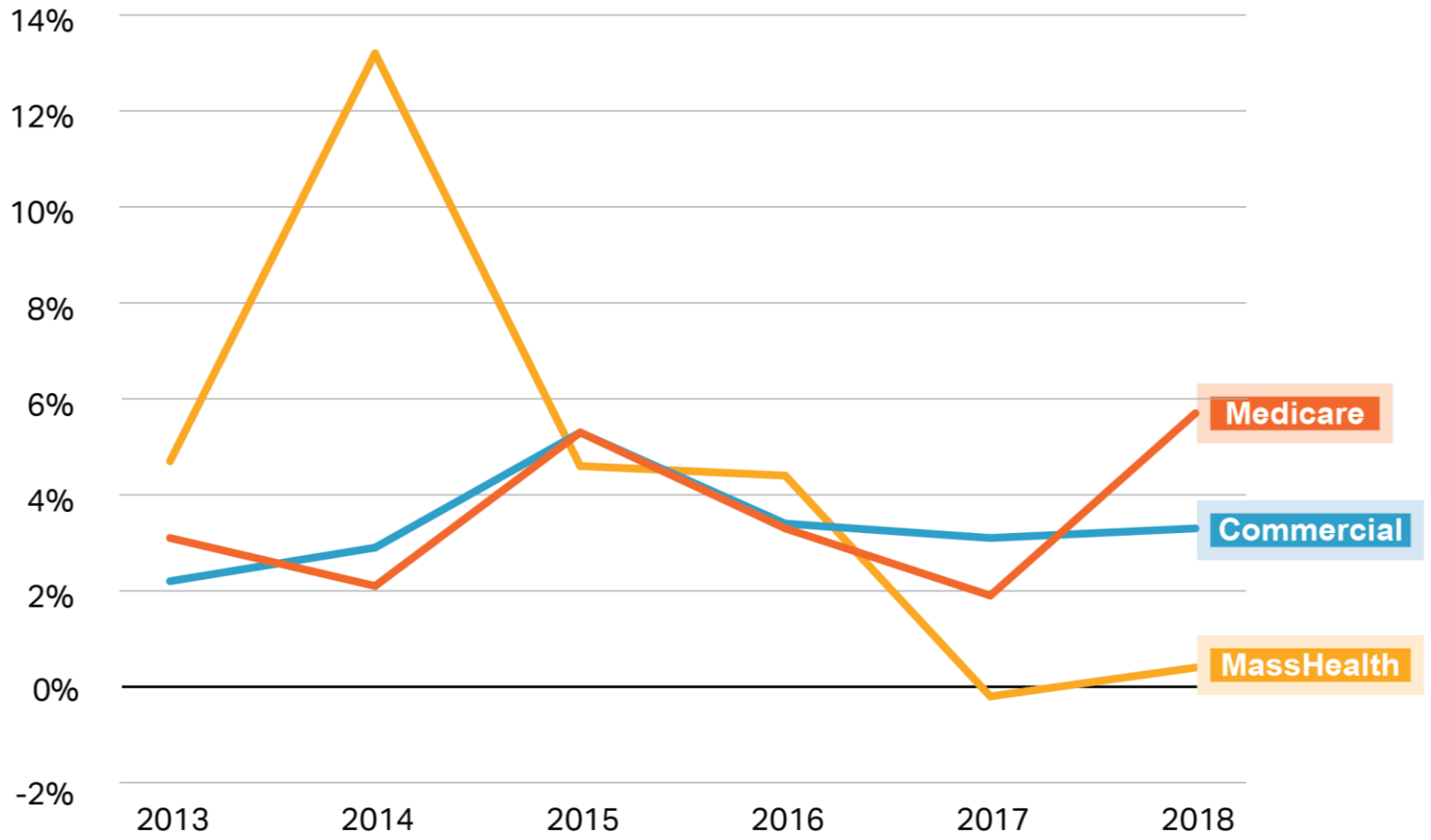
Growth in commercial spending has been steady, while Medicare growth has increased, and MassHealth growth has decreased in recent years.

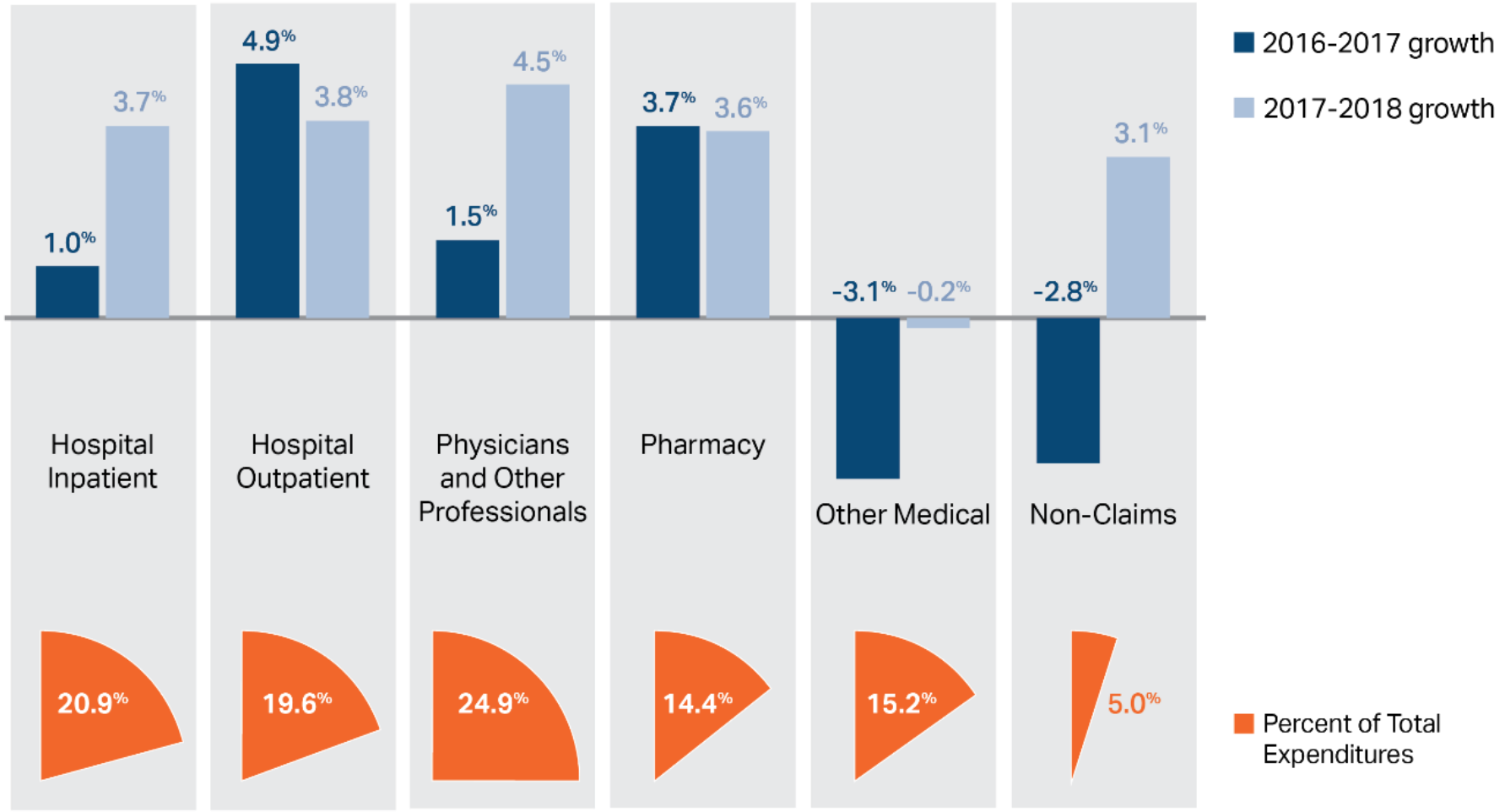
Annual spending growth in Massachusetts by major sector



Source: Massachusetts Center for Health Information and Analysis, Annual Reports 2014-2019.

From 2016 to 2018, hospital outpatient and pharmacy spending growth outpaced the benchmark and other service categories.

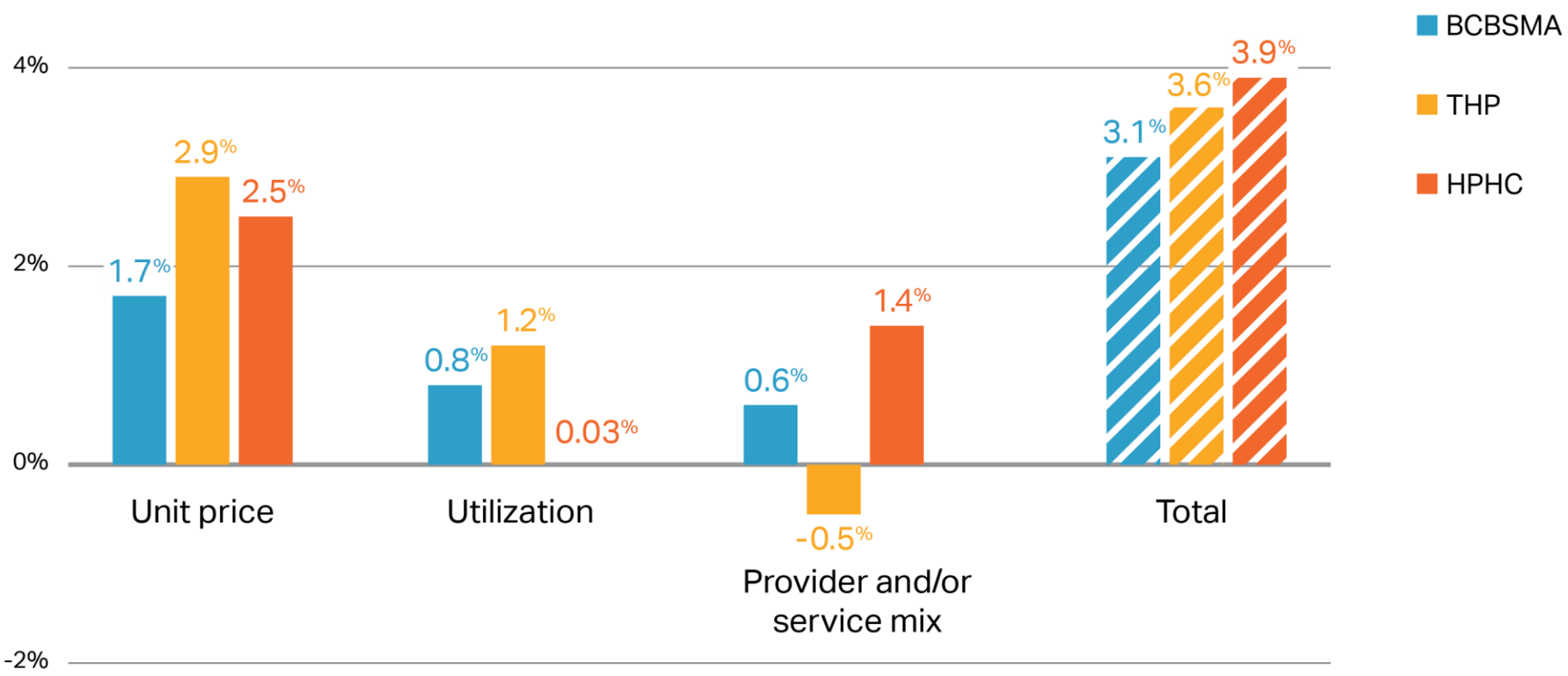
Rates of spending growth in Massachusetts in 2016 – 2018 by category, all payers



Notes: Total expenditures exclude net cost of private health insurance, VA and Health Safety Net. Pharmacy spending is net of rebates. Other medical category includes long-term care, dental and home health and community health. Non-claims spending represents capitation-based payments.
Source: Payer reported TME data to CHIA and other public sources; appears in Center for Health Information and Analysis Annual Report, 2018-9

Unit price increases continued to drive most of the spending growth among Massachusetts' largest insurers over the past three years.

Average annual growth in spending by component for top three Massachusetts payers, 2015 – 2018

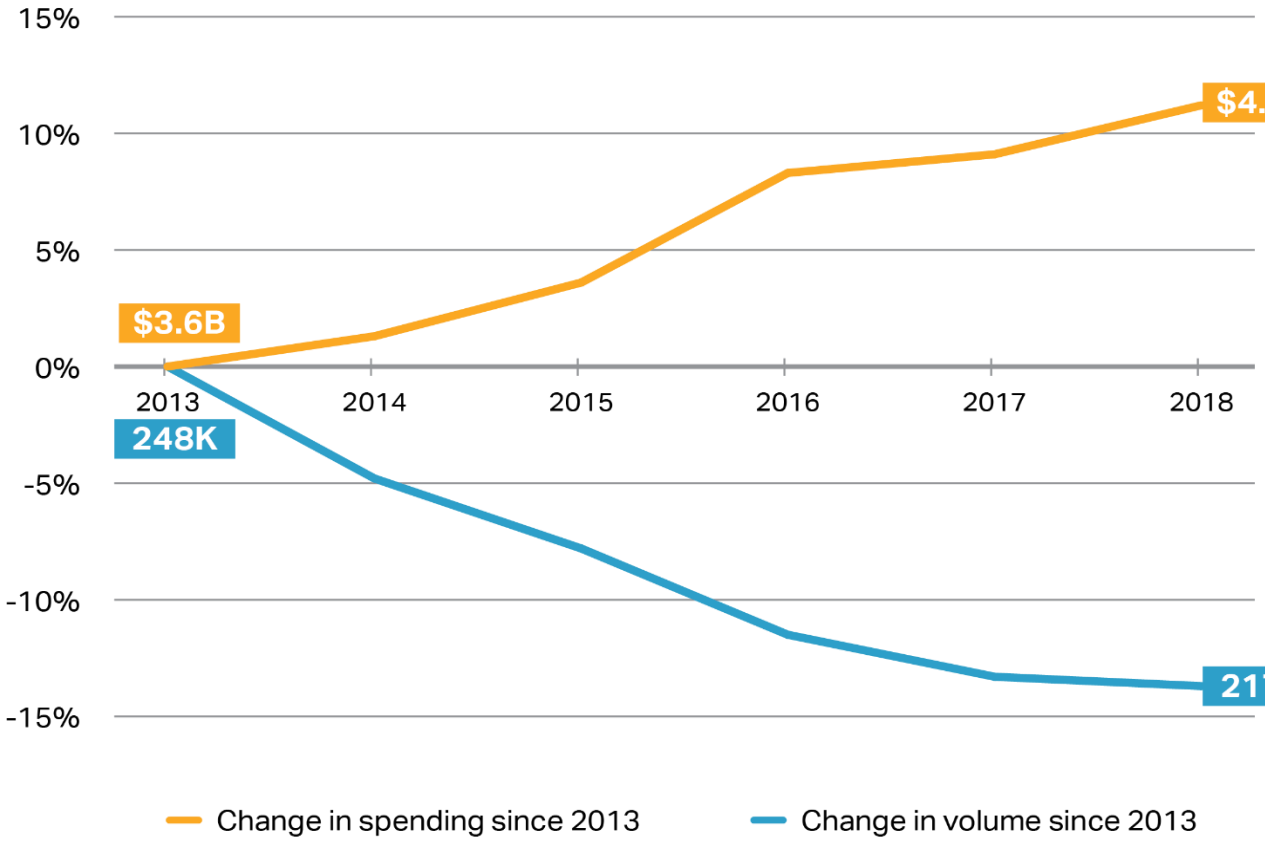


Notes: Average of medical expenditure trend by year 2015-2016, 2016-2017 and 2017--2018. BCBSMA = Blue Cross Blue Shield of Massachusetts; THP = Tufts Health Plan; HPHC = Harvard Pilgrim Health Care.

Source: HPC analysis of Pre-Filed Testimony Pursuant to the 2019 Annual Cost Trends Hearing

Driven by price and acuity increases, commercial inpatient spending grew 11% even as volume fell 14% between 2013 and 2018.

Cumulative change in commercial inpatient hospital volume and spending per-enrollee (percentages) and absolute, 2013 – 2018



Spending per commercial discharge grew **29%** (5.2% annually), from **$14,500 to $18,700,** from 2013 to 2018.

5.2% growth in price per discharge has been divided evenly between **price increases** and **acuity increases**

Notes: Data points indicate % growth from previous year (2013=0). Volume data correspond to fiscal years while spending data are calendar years.

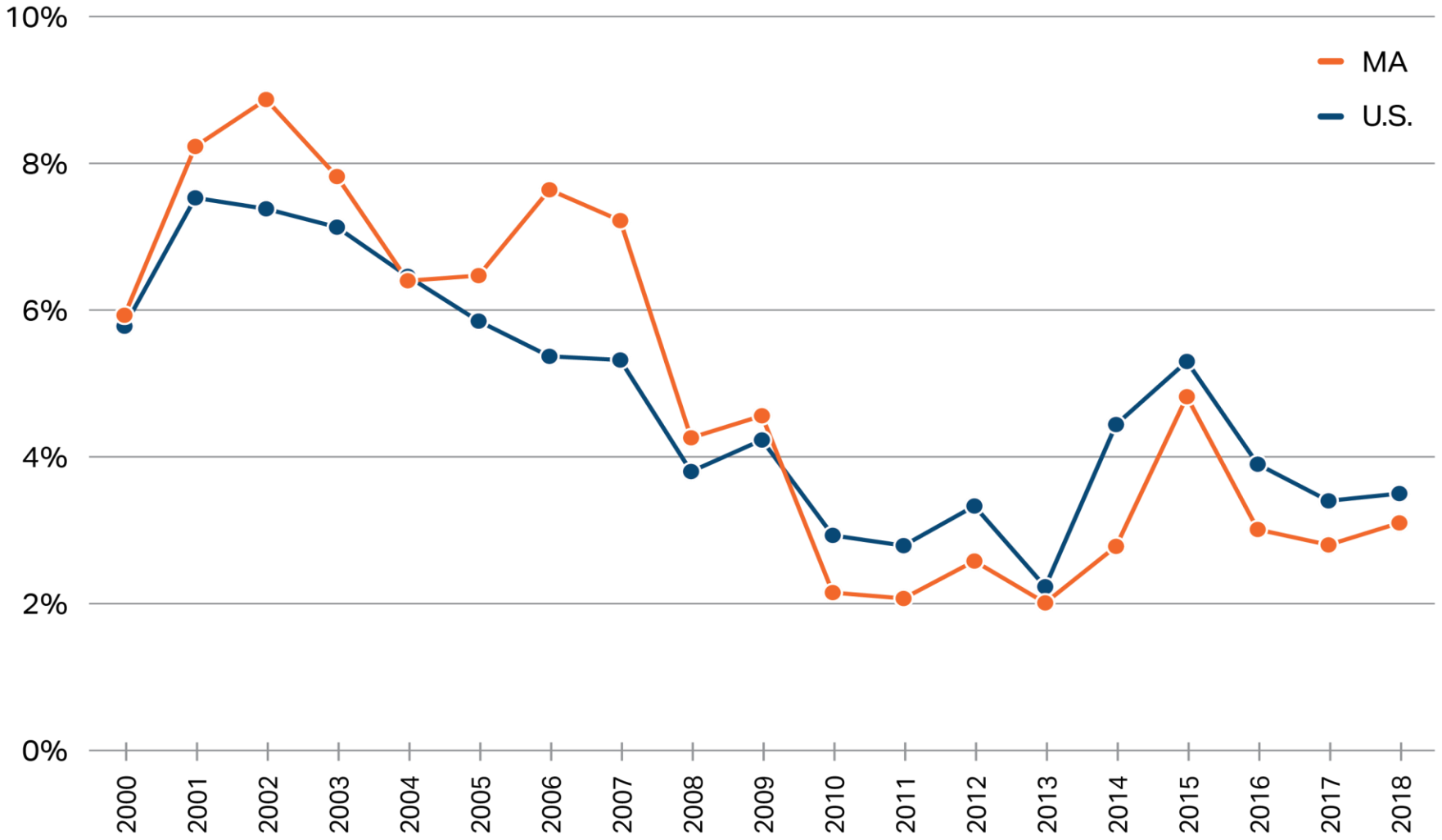
Sources: CHIA Hospital Inpatient Discharge Data, 2013-2018. Commercial full-claims TME from CHIA Annual Report TME Databooks. 2019 Annual report (for 2017-8 growth and 2016-7 growth), 2018 Annual Report (for 2015-6), 2017 annual report (for 2014-2015) and 2016 Annual Report (for 2013-4 growth).

Section III.

How does Massachusetts compare to the U.S.?

Since 2009, total healthcare spending growth in Massachusetts has been below the national rate.

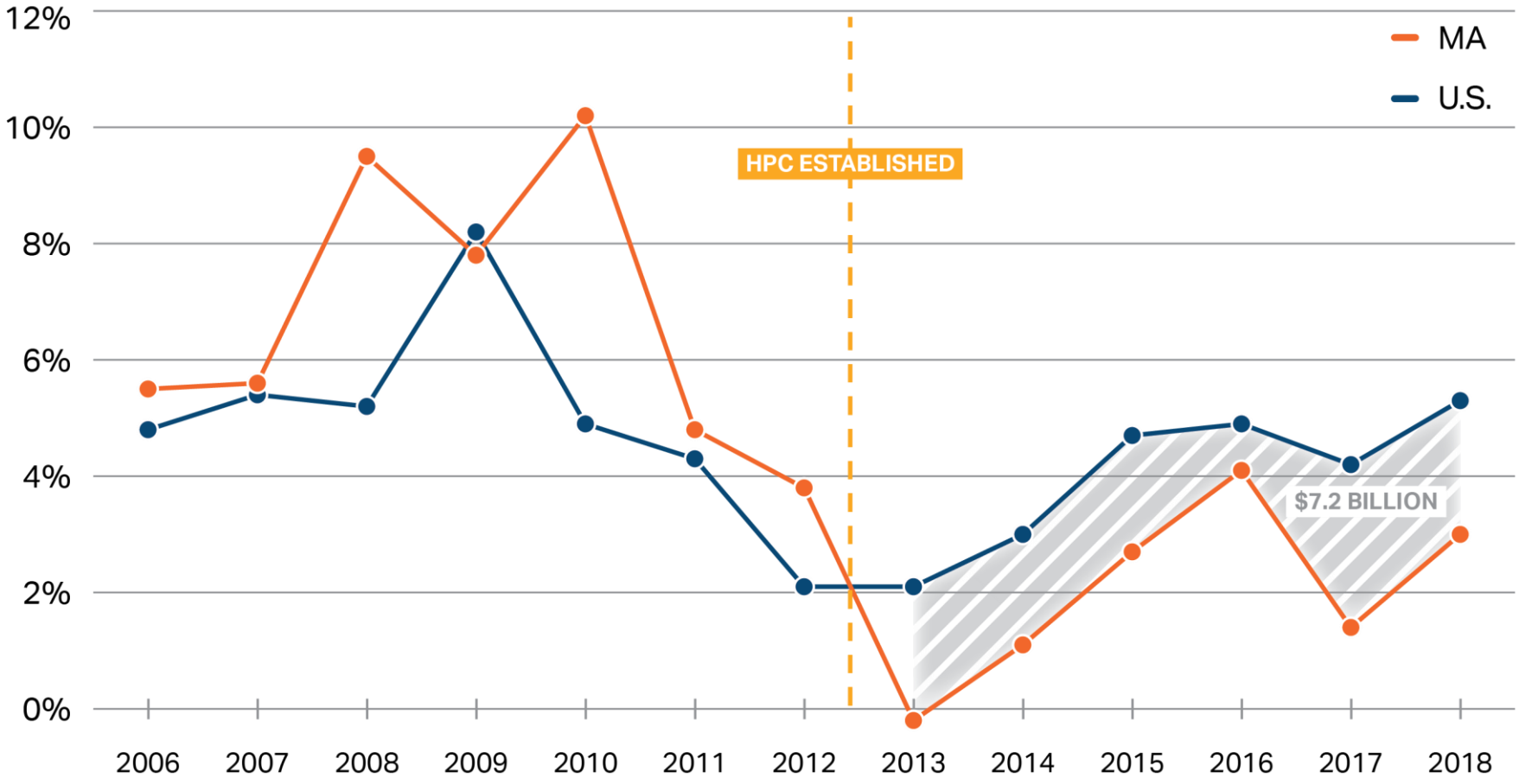
Annual growth in per capita healthcare spending, Massachusetts and the U.S., 2000 – 2018



Notes: U.S. data includes MA.
Sources: CMS National Healthcare Expenditure Accounts, Personal Health Care Expenditures Data (U.S. 2014-2018) ; CMS State Healthcare Expenditure Accounts (U.S. 2000-2014 and MA 2000-2014); CHIA Annual Report THCE Databooks (MA 2014-2018).

Commercial spending growth in Massachusetts has been below the national rate every year since 2013, generating billions in avoided spending.

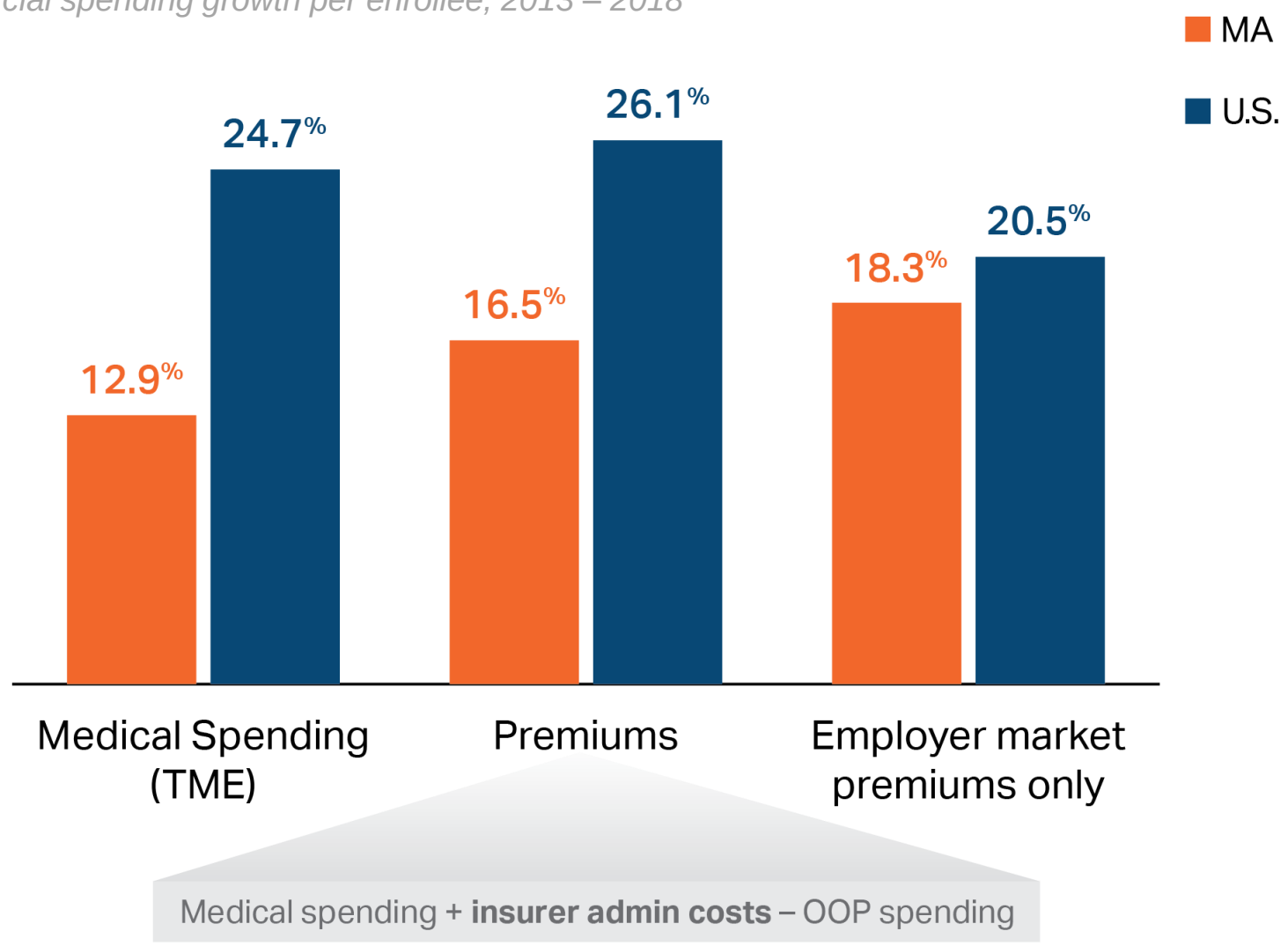
Annual growth in commercial medical spending per enrollee, Massachusetts and the U.S., 2006-2018



Notes: U.S. data includes Massachusetts.
Sources: CMS National Healthcare Expenditure Accounts, Personal Health Care Expenditures Data (U.S. 2014-2018) ; CMS State Healthcare Expenditure Accounts (U.S. 2000-2014 and MA 2000-2014); CHIA Annual Report THCE Databooks (MA 2014-2018).

From 2013 to 2018, commercial spending and premium growth in Massachusetts was below U.S. averages; however, the difference is less pronounced for employer market premiums.

Commercial spending growth per enrollee, 2013 – 2018



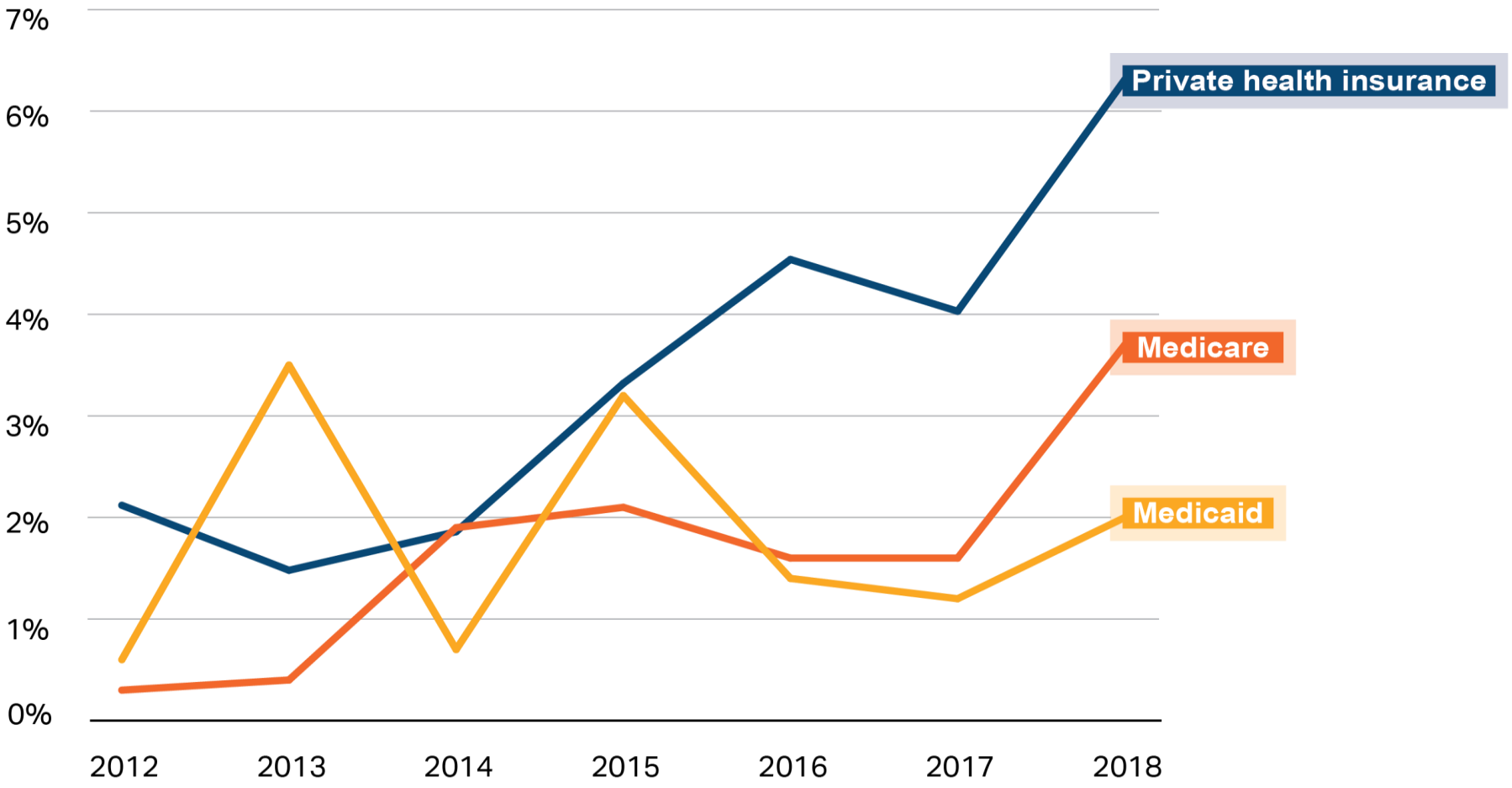
Sources: Massachusetts Center for Health Information and Analysis, Agency for Healthcare Quality and Research, Medical Expenditure Panel Survey, Insurance Component

Section IV.

What are the future projections for health care spending growth in the U.S.?

National trends show an acceleration in private health care spending.

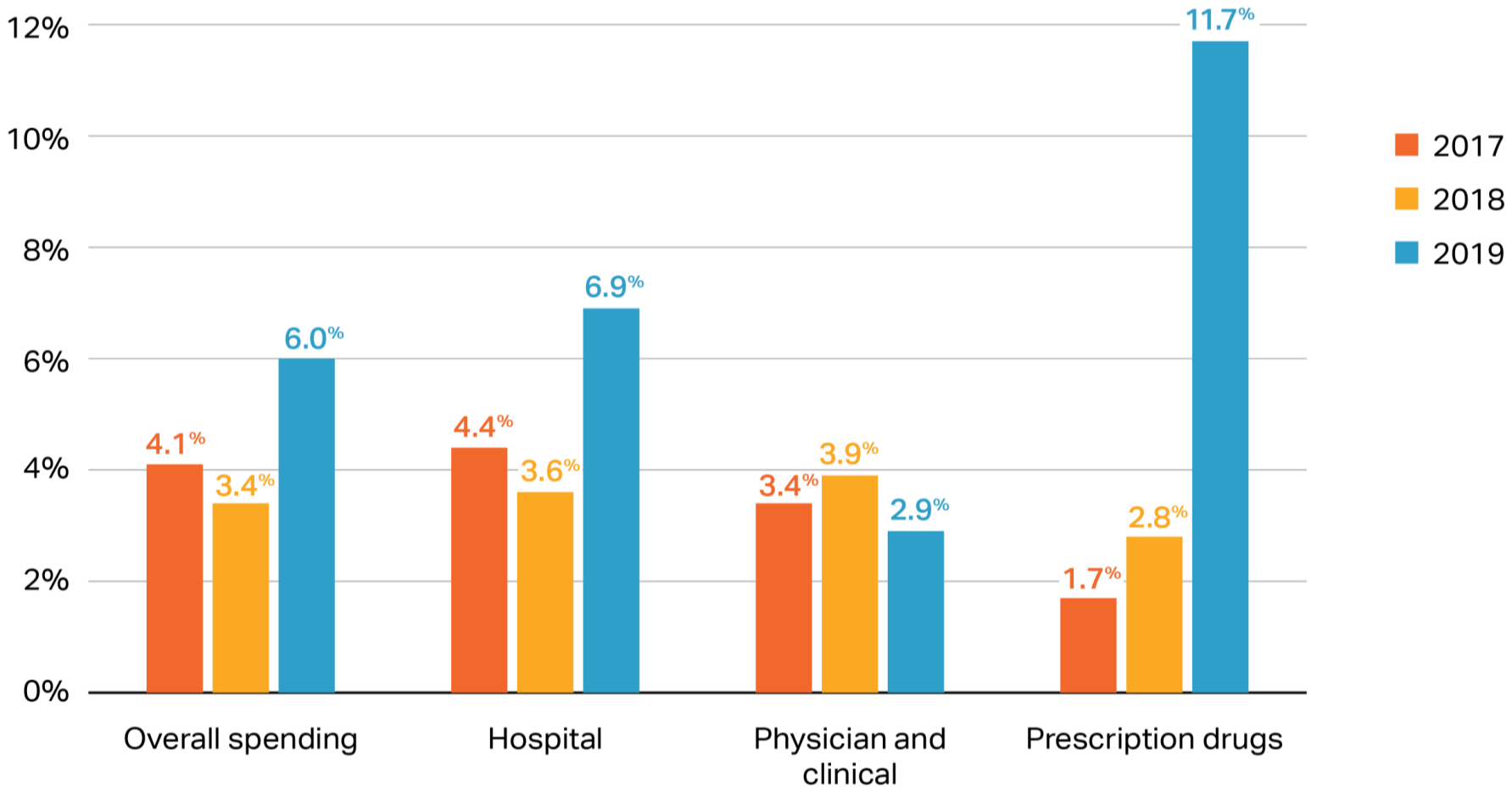
Annual per-enrollee spending growth by payer category



Notes: Centers for Medicare and Medicaid Services: National Health Expenditures, historical series. Private health insurance includes the ACA marketplaces and the individual market. Medigap spending is excluded.

National health spending grew even faster in 2019 than 2018, with a significant increase in prescription drug and hospital spending.

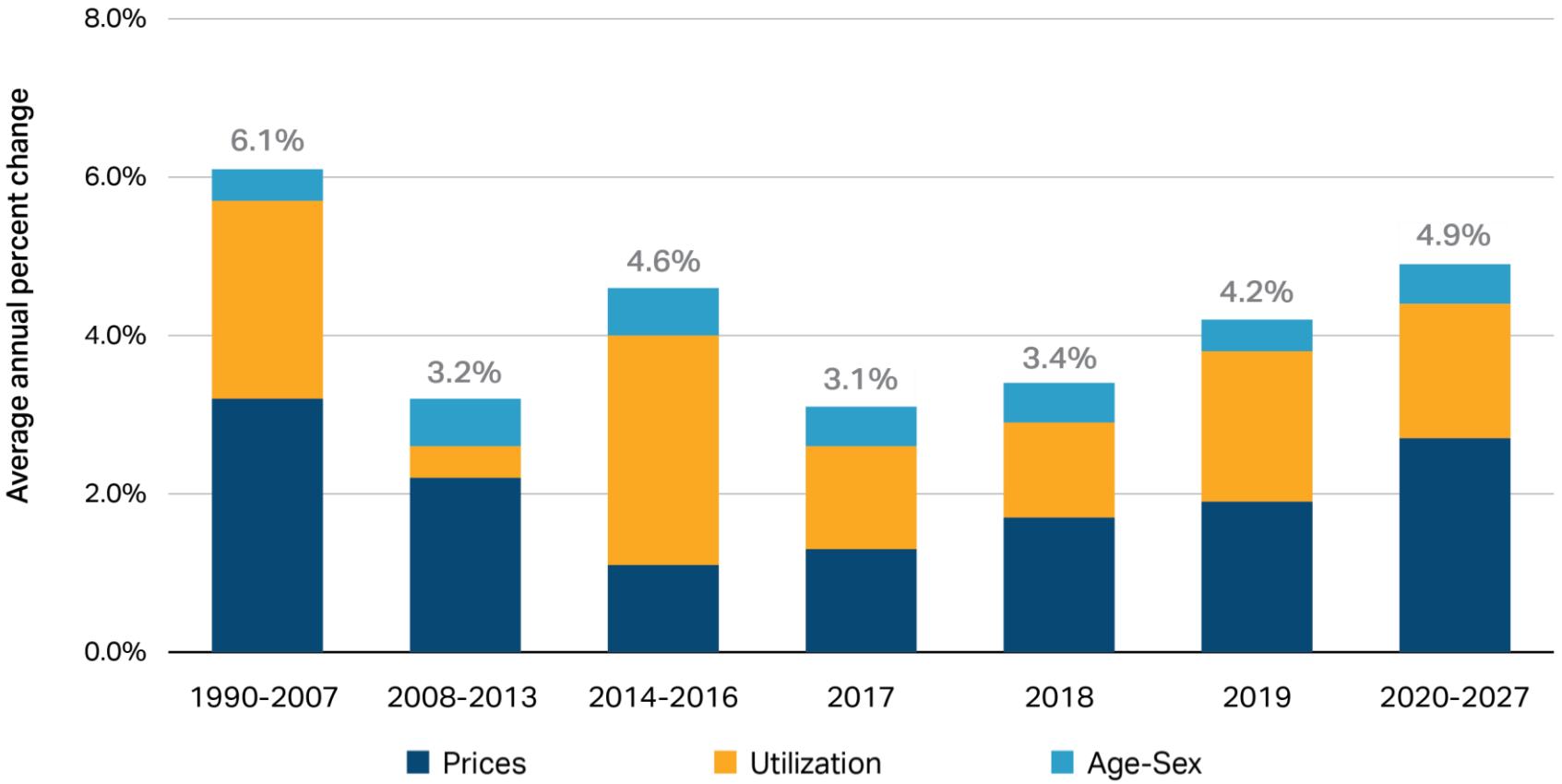
Annual spending growth from previous year overall and by category



Notes: Spending growth is the increase in spending from December of the previous year to the year shown. Prescription drug spending does not account for rebates.
Source: Altarum Institute February 2020 Spending brief. https://altarum.org/sites/default/files/uploaded-publication-files/SHSS-Spending-Brief_Feb_2020-v2.pdf

Price is projected to be a continued driver of future spending growth.

Factors accounting for growth in health care spending, select calendar years, 1990 – 2027



Price accounts for half of spending growth.
Thus, to meet a **3.1% benchmark**, prices can only grow **~1.5% per year.**

Source: Centers for Medicare and Medicaid Services, historical and projected, February 2019.

Section V.

How does the HPC hold health care providers and health plans accountable to the benchmark?

Overview of Performance Improvement Plan (PIP) Process

CHIA Referral

- CHIA analyzes **growth in health status adjusted total medical expense (HSA TME)** for payers and providers and refers those with growth above a defined level to the HPC for further review.
- The only entities referred are those for which HSA TME is reported.

In-Depth HPC Review

- In-depth review of performance **across a range of factors** including, i.e.:
  - Spending
  - Pricing
  - Utilization
  - Populations served
  - Size/ market share/ financial condition

PIP Requirement

- HPC requires PIP where it identifies **significant concerns** about costs
- Entity proposes the PIP and is subject to ongoing monitoring and reporting.
- HPC votes whether PIP is successful.

Process and entities under review are CONFIDENTIAL

Entities required to file a PIP are public

HPC

Health Status Adjusted Total Medical Expenses (HSA TME): An Important but Limited Metric

HSA TME measures all medical spending for a patient population

PAYERS: PMPM spending for all medical services (e.g. hospital, physician, and pharmaceuticals), regardless of who delivered the services to the patient.

- Includes both insurer and patient spending (e.g. co-payments, deductibles).

PROVIDERS: PMPM spending on all medical services **for the provider's primary care patients only**, regardless of who delivered the services to the patient.

- Only data for insurance products that require PCP designation (e.g. HMO) are used in the PIPs process.

HSA TME is adjusted to reflect population health status (risk)

- Does not reflect real-dollar spending, but rather real dollar spending divided by the risk score, a measure intended to reflect the overall health of the population.
- Trends are driven both by changes in spending and in risk scores.

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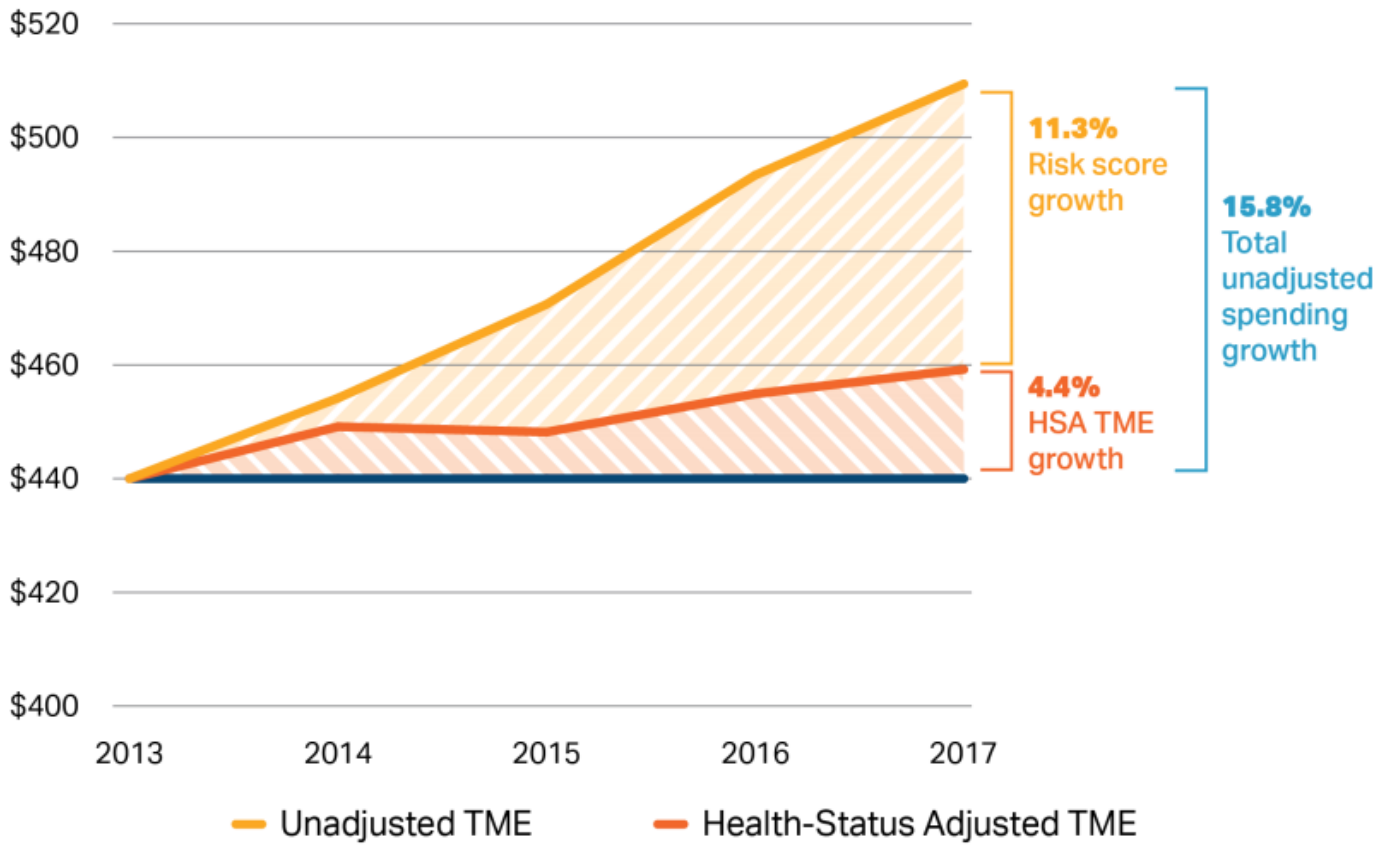
Notes: (PMPM) – Per Member Per Month

Due to the growth in risk scores, HSA TME has grown at a fraction of the rate of actual spending growth.

Commercial per member per month spending



Unadjusted commercial spending has increased about **16%** since 2013, although HSA TME has increased only about **4%.**

Notes: United, Cigna, BMC Healthnet, Minuteman, Celticare and NHP (now Allways) excluded due to data anomalies or wide membership fluctuations
Source: Massachusetts Center for Health Information and Analysis, 2016 and 2018 databooks.

Key Themes in PIPs Review Cycles to Date

Health Status Adjustment Masking Spending Growth

CHIA is required to use changes in health status adjusted spending for referral. Many payers and providers with **high real dollar spending growth have lower HSA TME growth** due to increases in their risk scores and are not referred to the HPC for review.

Pharmaceutical Spending

Pharmacy spending has been a **significant driver of spending growth in all PIPs cycles** to date. Pharmacy spending for a given payer or provider can vary considerably from year to year due to new drugs entering the market, formulary changes, PBM contract changes, and other factors.

Rate Increases

The health care cost growth benchmark is not a cap on rate increases, but it is intended to limit total spending. The HPC has found that many payers and providers have negotiated **rate increases that leave little room for spending increases due to other factors** (e.g. utilization, mix). Restraining rate increases is critical to ensure that the Commonwealth can meet the health care cost growth benchmark in the future.

Reflections on the Performance Improvement Plan Process

Strengths

- The PIPs process is a powerful tool that the HPC can use to **hold individual entities accountable.**
- The HPC's oversight creates an **incentive to limit spending growth.**
- Through the PIPs process, the **HPC has gained significant insight** into market trends and entities' cost control strategies.
- Even without a PIP being required, **entities may make certain cost containment commitments** as part of the review process.

Limitations

- The **scope of referable entities is limited to primary care provider groups**, including all spending for their patients. It does not include several important entities such as hospitals or drug manufacturers.
- The referral criteria are based on HSA TME changes which allows some entities with **high *real-dollar* spending growth** or **high baseline spending *levels*** to avoid referral.
- The HPC **cannot require** a PIP to include **specific goals** or **strategies.**

The 2019 Cost Trends Report recommends policy action to update and strengthen the PIPs review process, based on lessons learned.

#5

ACCOUNTABILITY UNDER THE COST GROWTH BENCHMARK.

The Commonwealth should strengthen its ability to hold health care entities, including hospitals, responsible for their spending growth.

To improve the annual performance improvement plan (PIP) process, policymakers should:

(1) address current limitations of the data the CHIA is required to use in identifying health care entity spending performance by expanding the metrics used to identify health care entities for review; and

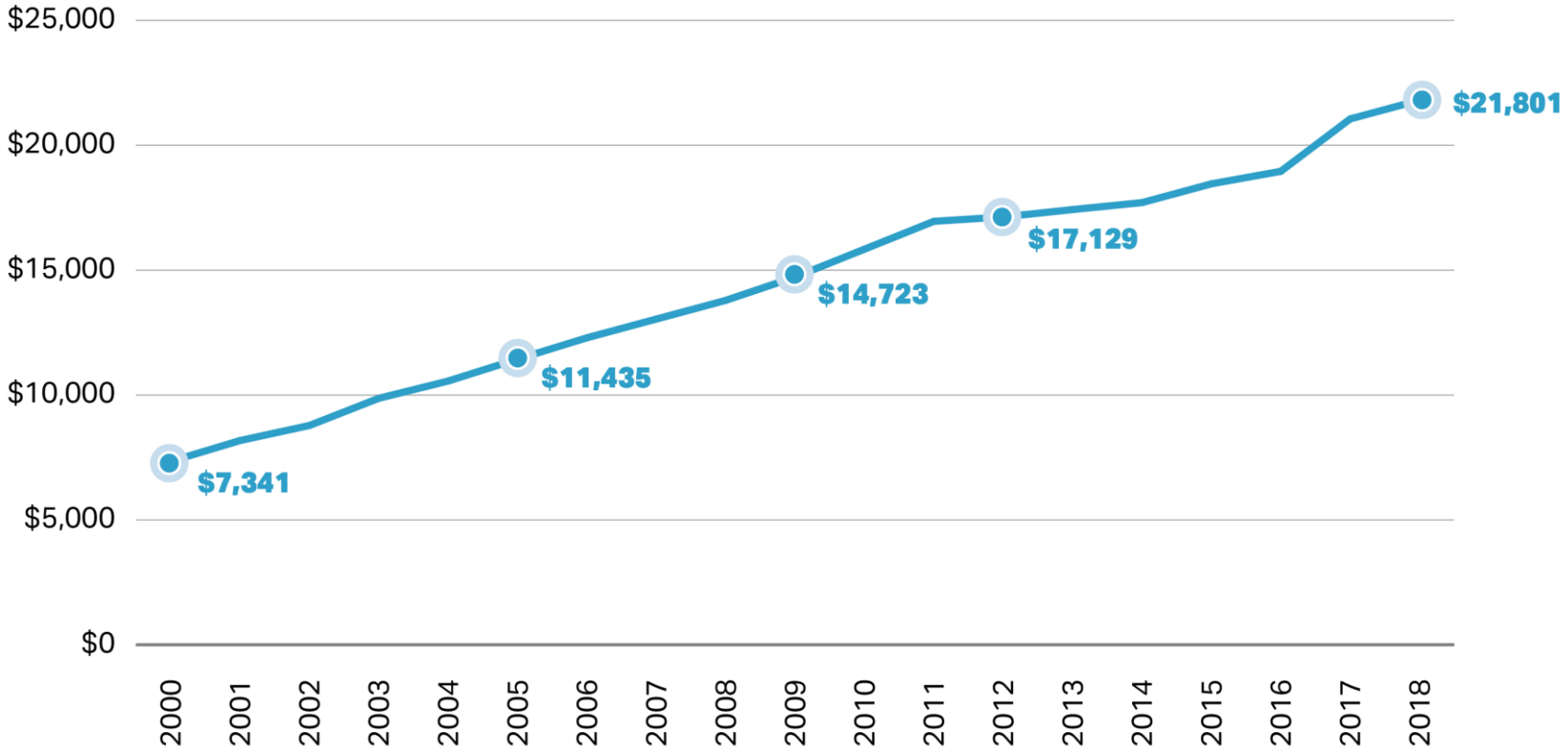
(2) strengthen the HPC's ability to hold health plans and providers accountable for spending that impacts the health care cost growth benchmark by enhancing financial penalties for above benchmark performance and noncompliance.

Section VI.

Why should Massachusetts continue to focus on health care costs and affordability?

Family premiums in Massachusetts have tripled since 2000.

Average family premium for employer-sponsored insurance



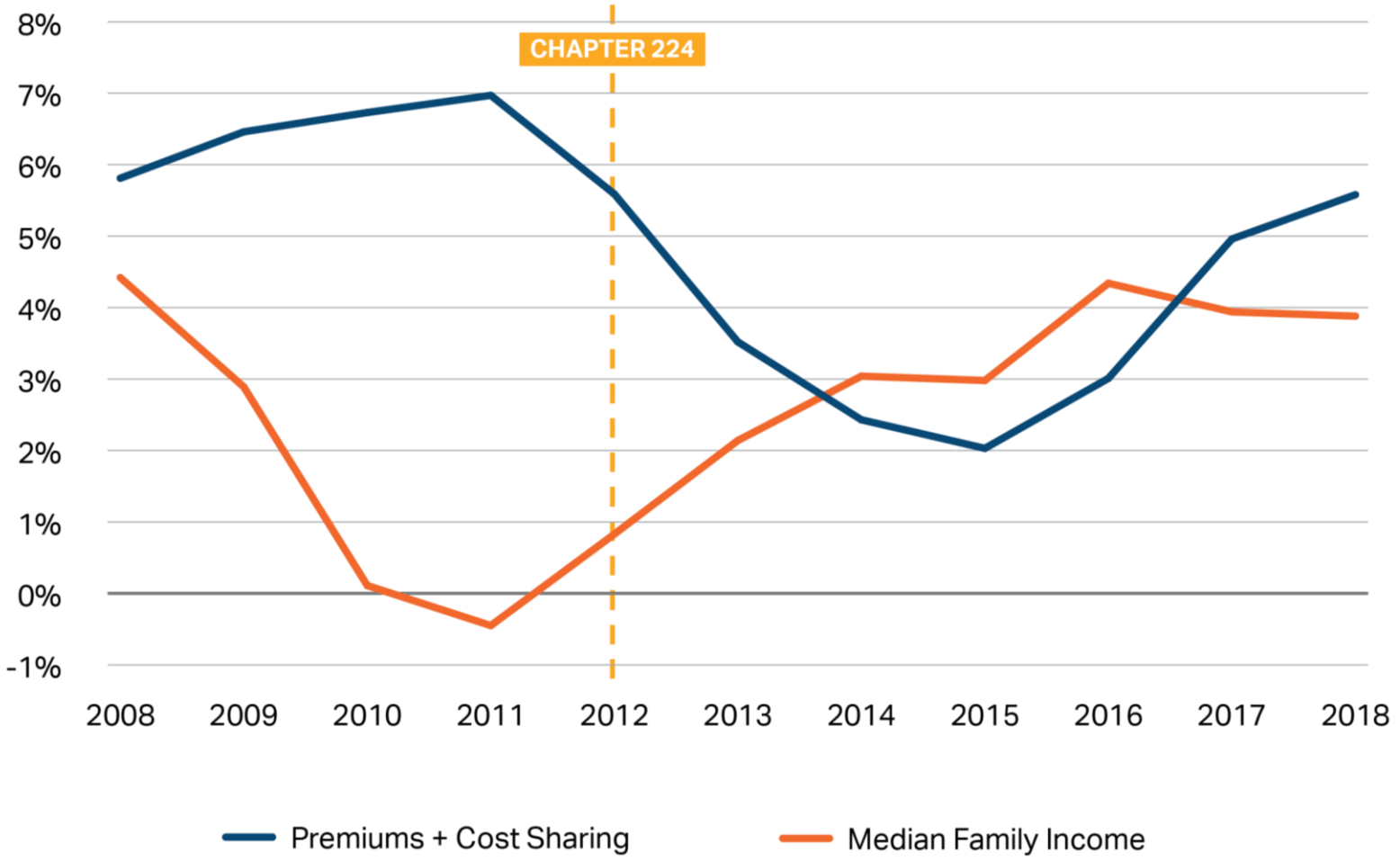
Between 2005 and 2018:

- Average premiums grew **91%**
- Average deductibles grew **415%** (from **$444** to **$2,289**)
- Median family income grew **42%**

Sources: Agency for HealthCare Research and Quality. Medical Expenditure Panel Survey – Insurance Component. And American Community Survey (income).

Premiums and cost sharing growth have accelerated recently, outpacing family income growth.

3-year running average annual growth in premiums plus cost sharing for employer-based insurance and median family income of Massachusetts residents



Notes: Premium and income growth represent smoothed 3-year averages (e.g. data point for 2018 is 3-year annualized growth from 2015 to 2018).

Sources: Premium data are the weighted average (based on the 2018 distribution) of family, single and employee plus 1 premiums for Massachusetts as reported by the Agency for HealthCare Research and Quality (Medical Expenditure Panel Survey). Cost Sharing amounts are derived from data from the Center for Health Information and Analysis reporting of cost sharing and premiums for the employer-based market from 2012-2018. Cost sharing pre-2012 is assumed to remain at the 2012 proportion. Income data is median family income reported from the American Community Survey for Massachusetts.

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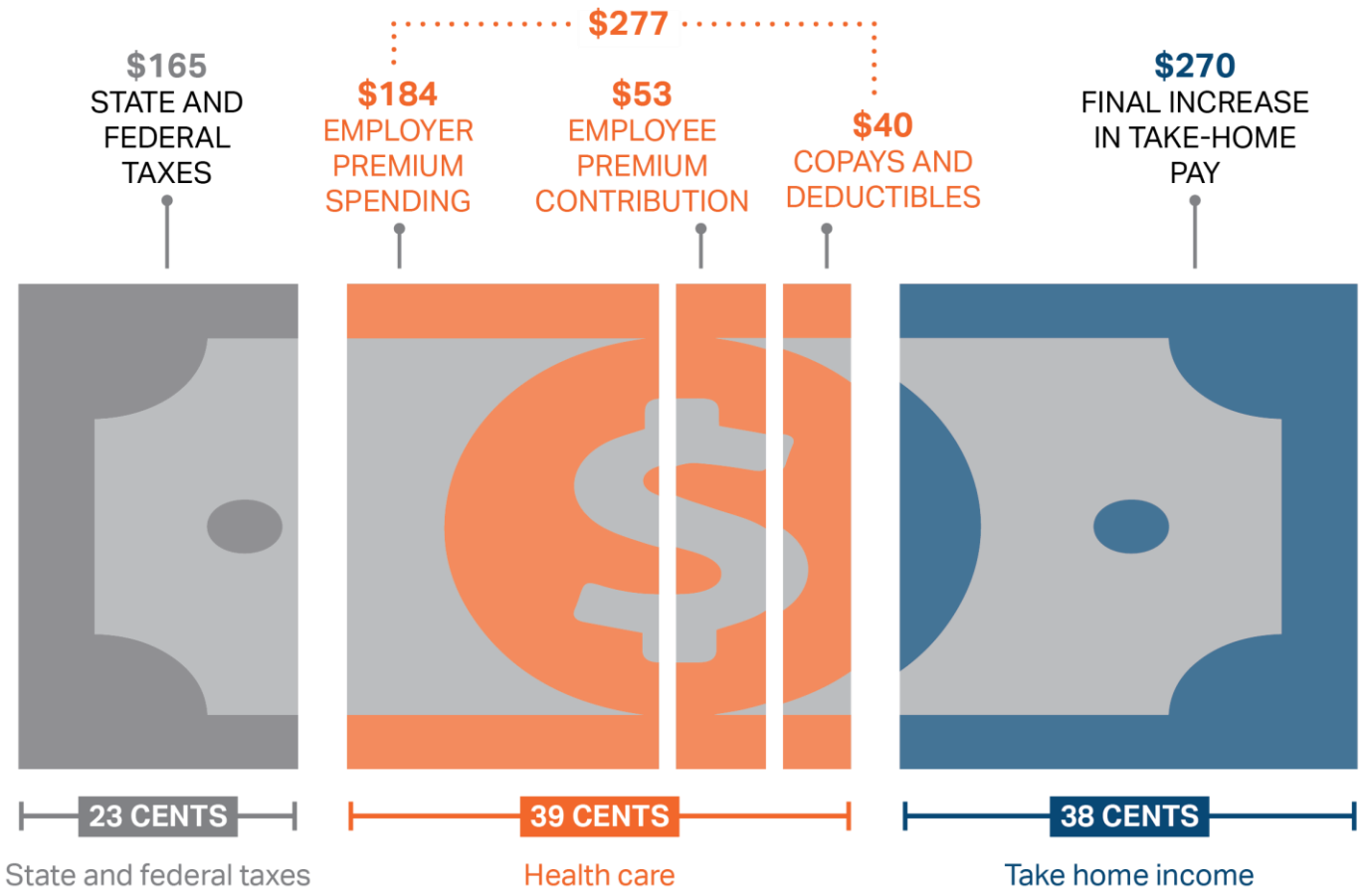
Nearly 40 cents of every additional dollar earned by Massachusetts families between 2016 and 2018 went to health care.

Allocation of the increase in monthly compensation between 2016 and 2018 for a median Massachusetts family with health insurance through an employer



Notes: Data represent Massachusetts families who obtain private health insurance through an employer. Massachusetts median family income grew from $95,207 to $101,548 over the period while mean family employer-sponsored insurance premiums grew from $18,955 to $21,801. Compensation is defined as employer premium contributions plus income as recorded in the ACS and is considered earnings. All premium payments are assumed non-taxable. Tax figures include income, payroll, and state income tax.

Sources: HPC analysis of Agency for Healthcare Research and Quality (AHRQ) Medical Expenditure Panel Survey Insurance Component (premiums) American Community Survey (ACS) 1-year files (income), and Center for Health Information and Analysis 2019 Annual Report (cost sharing).

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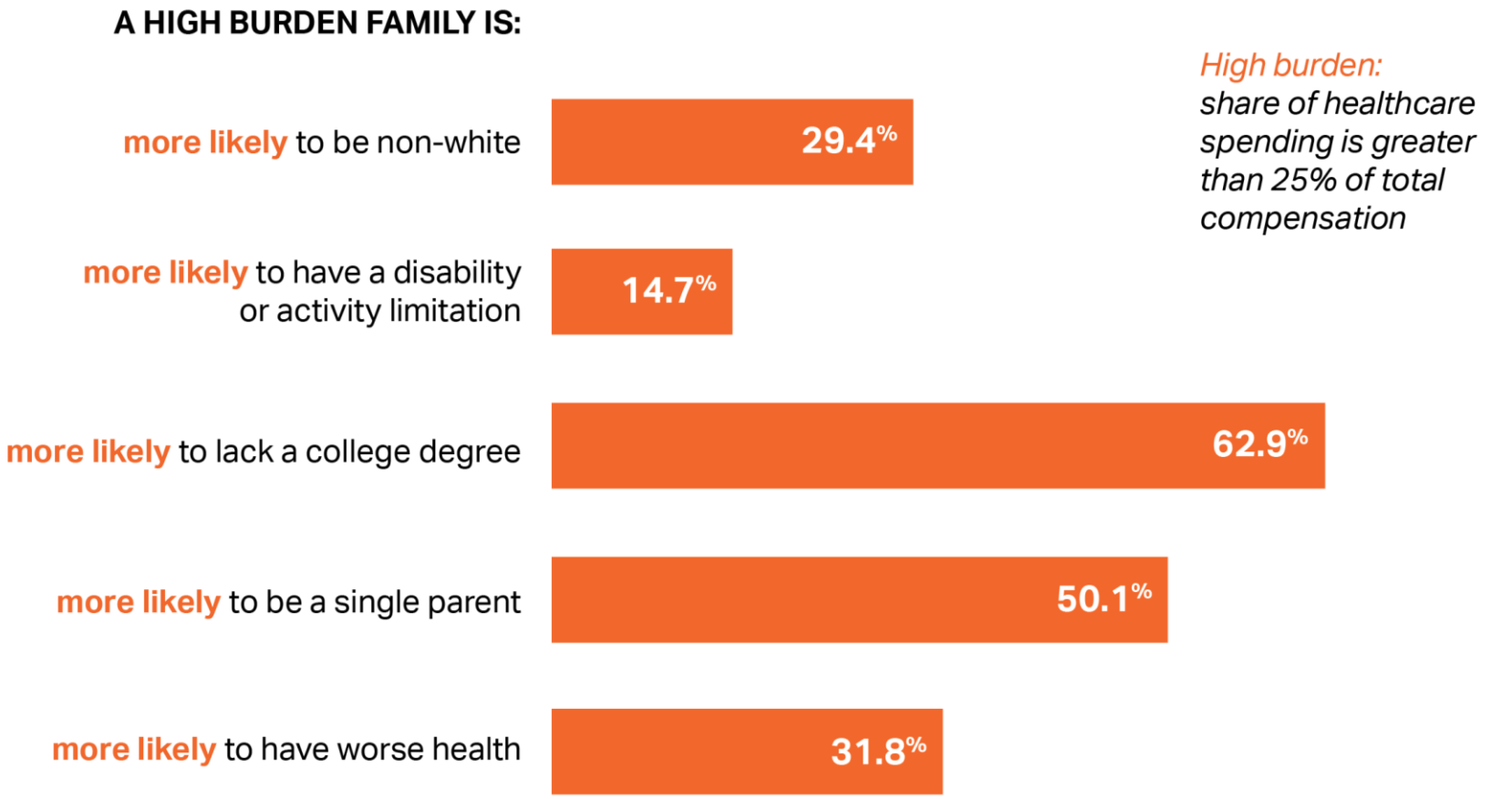
23% of Massachusetts middle-class families spend more than a quarter of all earnings on health care.

Characteristics of middle-class families ("high-burden") with employer-based health insurance that spend more than a quarter of earnings on health care, 2016 – 2018 average



Notes: Estimates are a three-year average of middle class families from 2016-2018; middle class definition is based on General Social Survey (GSS) occupational prestige scores; "high-burden" families are those whose total spending on healthcare (premiums, over-the-counter and other out-of-pocket spending) exceeds 25% of their total compensation. Premiums include employer and employee premium contributions and earnings (compensation) includes employer premium contribution. Disability or activity limitation was defined as difficulty walking or climbing stairs, dressing or bathing, hearing, seeing, or having a health problem or a disability which prevents work or limits the kind or amount of work they can perform. College degree was defined as having a B.A. or higher degree in the family. Single-parent families are those in families who did not report being in a married couple family (male or female reference person). Worse health was defined as those reporting a health status "poor," "fair" or "good."
Source: HPC's analysis of data from the CPS Annual Social and Economic Supplement (ASEC), 2016-8 and Agency for Healthcare Research and Quality (AHRQ) Medical Expenditure Panel Survey (MEPS), 2016-2018 (premiums).

HPC

Section VI.

What should market participants and policymakers do to advance the goal of a more efficient, high-quality health care system in Massachusetts?

Policy Recommendations in the HPC's Annual Cost Trends Report

The HPC's 2019 Cost Trends Report includes a set of 15 policy recommendations necessary to continue progress in achieving the Commonwealth's goal of better health, better care, and lower costs. Many of these topics will be priorities for the HPC's work in the next year.

HPC Recommendations by Topic

1. Primary and Behavioral Health
2. Ambulatory Care
3. Coding Intensity
4. Pharmaceutical Spending
5. Cost Growth Benchmark
6. Consumer Choice
7. Administrative Complexity
8. Facility Fee Reform
9. Out-of-Network Billing
10. Alternative Payment Methods
11. Health Disparities
12. Innovations in Integrated Care
13. Low Value Care
14. Provider Price Variation
15. Affordability

Health Care Spending and Our Fiscal Wellbeing

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Yale University & The National Bureau for Economics Research

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Health Care Costs are a Large Share of Household Budgets

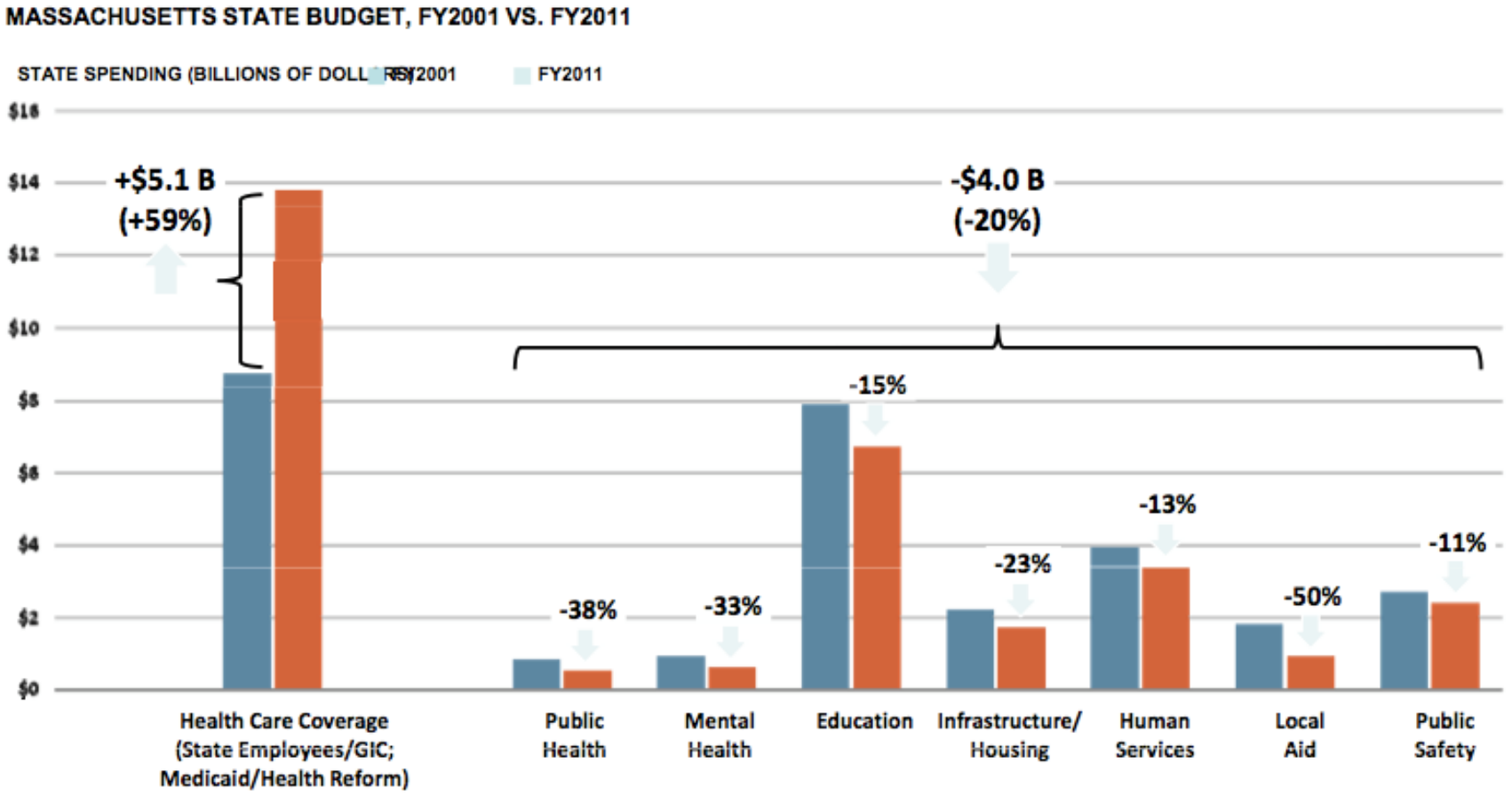
Median Household Income in MA[1]	25th Percentile of Household Income[1]	MA - Family Health Insurance[2]
$77,378	$40,000	$21,801

Sticker Price for New Toyota Corolla: $19,600[4]

Sources

1. https://www.census.gov/quickfacts/fact/table/MA/INC110218
2. AHRQ Medical Expenditure Panel Survey – Insurance Component
3. Hayes, Collins, and Radley (2019). How much US Households with Insurance Spend on Premiums and Out-of-Pocket Costs: A State-By State Look. The Commonwealth Fund.
4. www.toyota.com

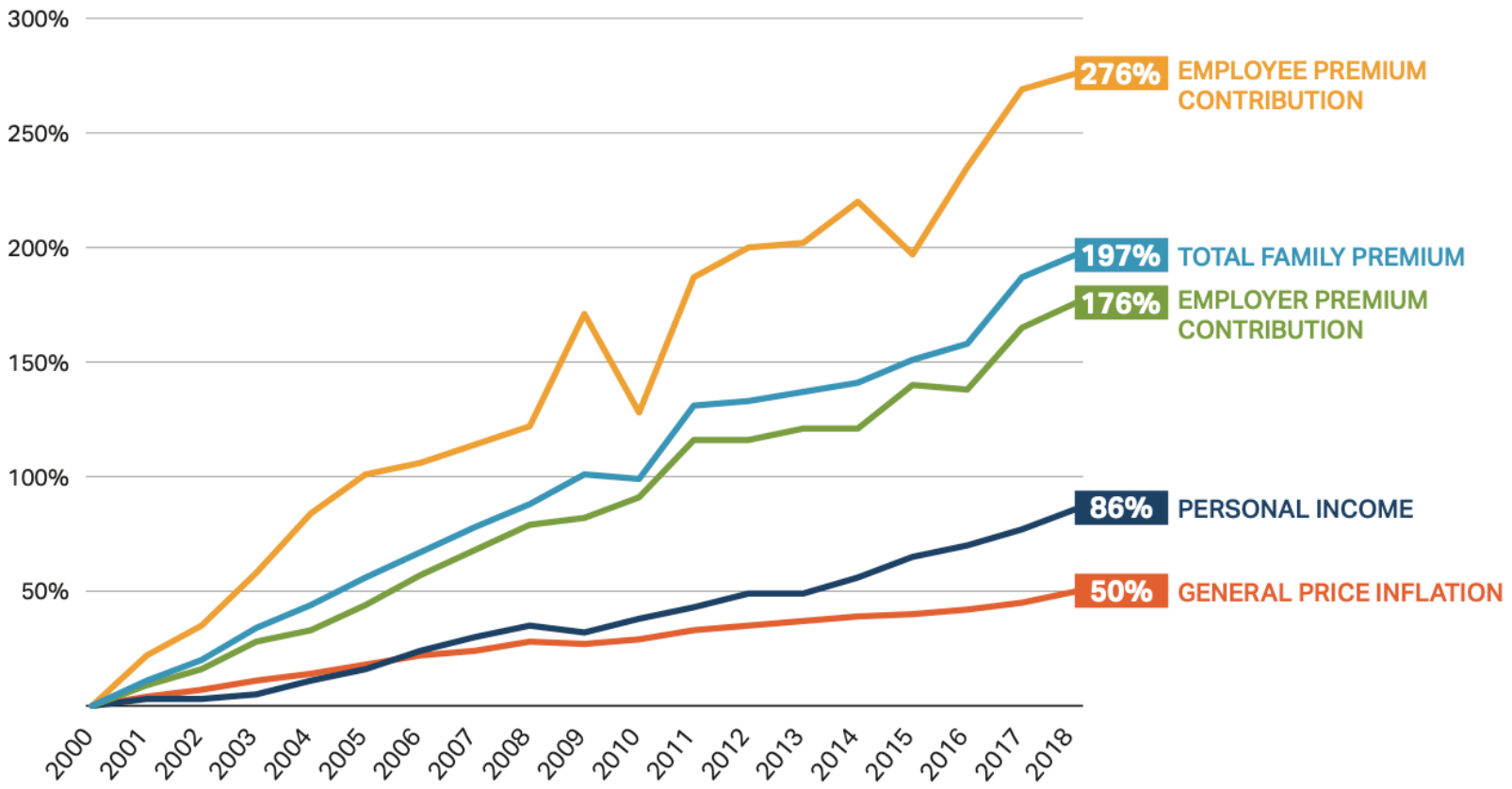
Health Care Spending Crowds Out Spending in Other Key Areas



Sources

1. Massachusetts Budget and Policy Center

When Health Spending Grows Faster than the Rest of the Economy, Families Feel the Squeeze

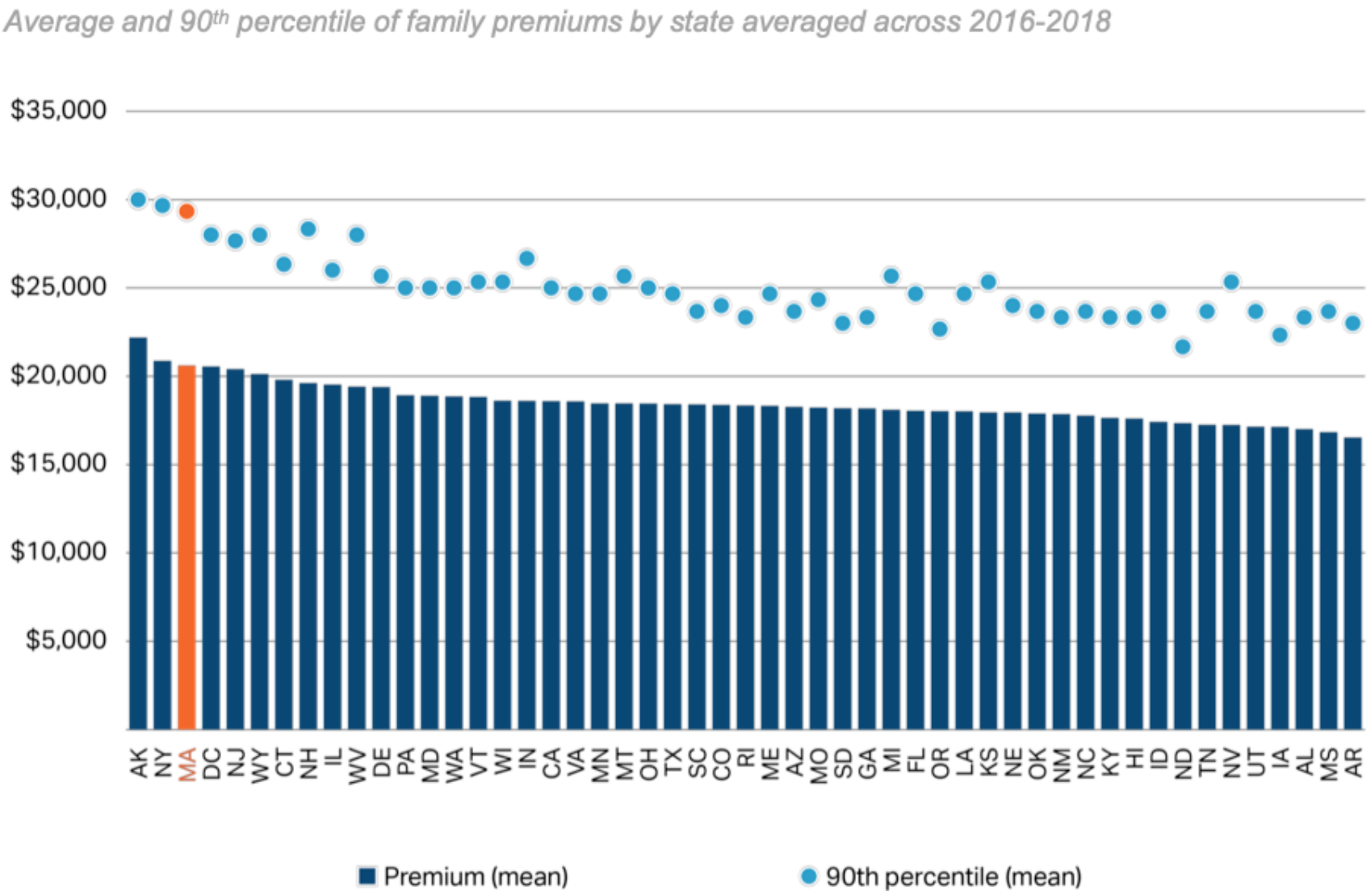


Notes: Total family premium includes the portion of the premium paid by employees and the part paid by the employer. Personal income refers to income per capita in Massachusetts. General inflation refers to changes in the Consumer Price Index (CPI-U).

Sources: HPC analysis of Medical Expenditure Panel Survey (MEPS), Bureau of Labor Statistics (BLS), and Federal Reserve data, 2000-2018

Source: Health Policy Commission, 2020 - https://www.mass.gov/files/documents/2019/10/22/CTH19%20-%20HPC%20Presentation_10-21.pdf

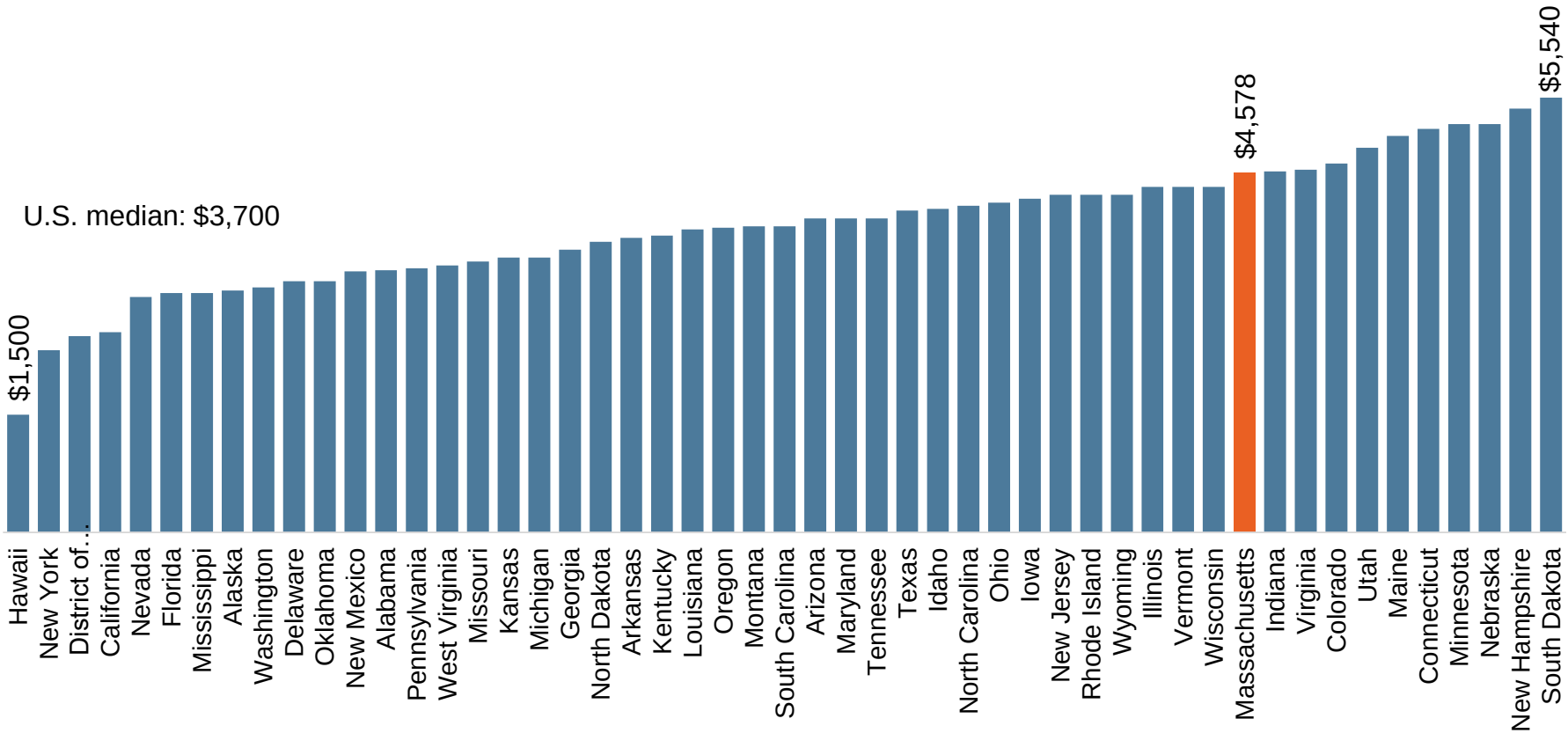
Massachusetts Residents Spend Above Average on Employer-Sponsored Coverage and Medicare



Source: Massachusetts Health Policy Commission, 2020

We Pay for Our Health Insurance Directly, Via Wages, and Via Taxes (It is Borne By Us)

Median annual spending on premium contributions and out-of-pocket costs combined by nonelderly households with employer coverage, 2016–2017

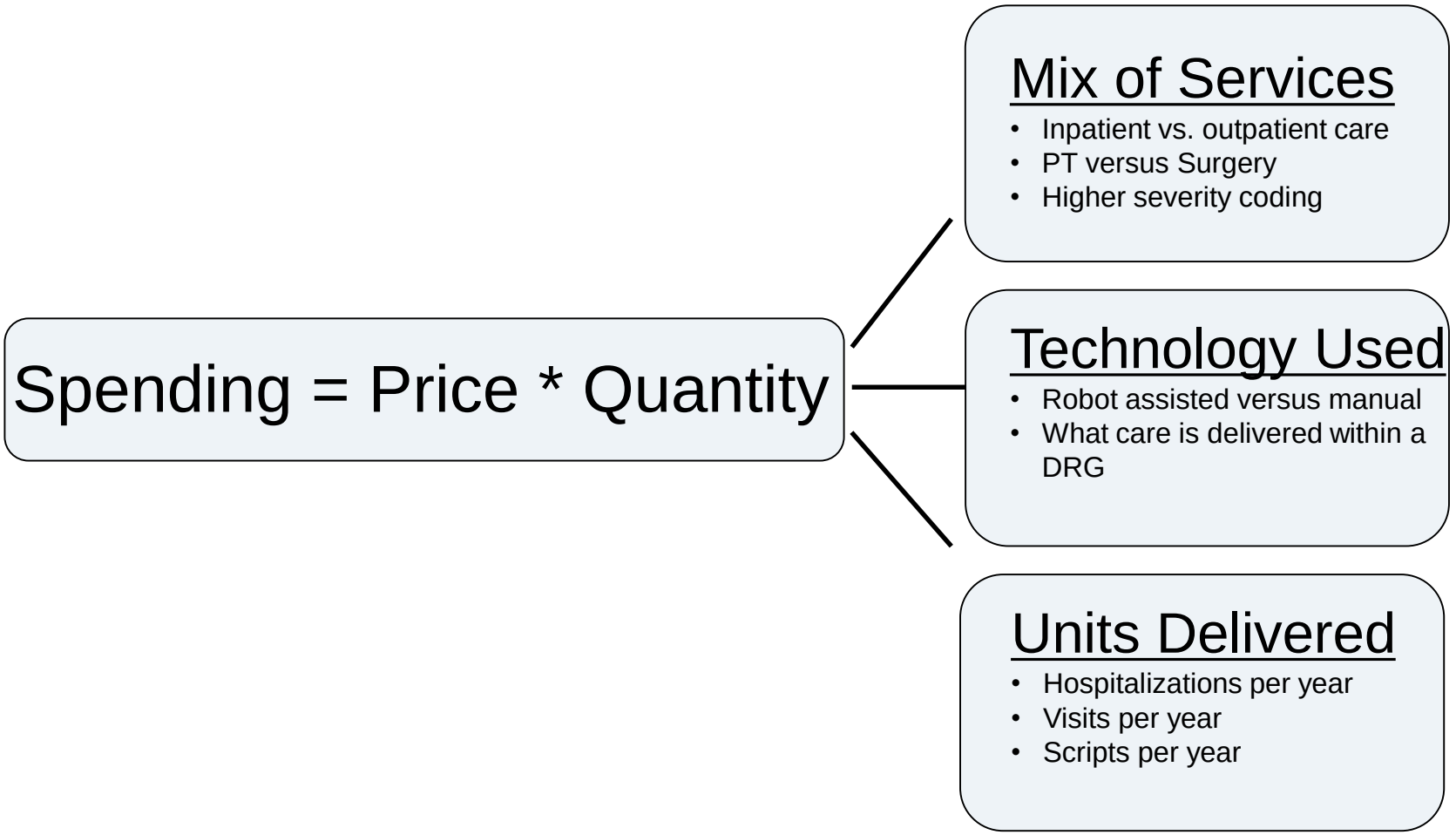


Notes: Premium contributions are the total annual dollar amount that respondents to the Current Population Survey (CPS) reported that their household paid toward the cost of premiums for employer-sponsored insurance. Out-of-pocket costs exclude premiums and are the total annual dollar amount that respondents to the CPS reported their household paid for medical expenditures that were not covered by their employer plan, including payments for doctor or dental visits, prescription medicine, eyeglasses and contacts, and medical supplies (excluding over-the-counter items).

Data: Analysis of Current Population Survey, Annual Social and Economic Supplement, Sept. 2017 and 2018 data releases.

Sources: Hayes, Collins, and Radley (2019). How much US Households with Insurance Spend on Premiums and Out-of-Pocket Costs: A State-By State Look. The Commonwealth Fund.

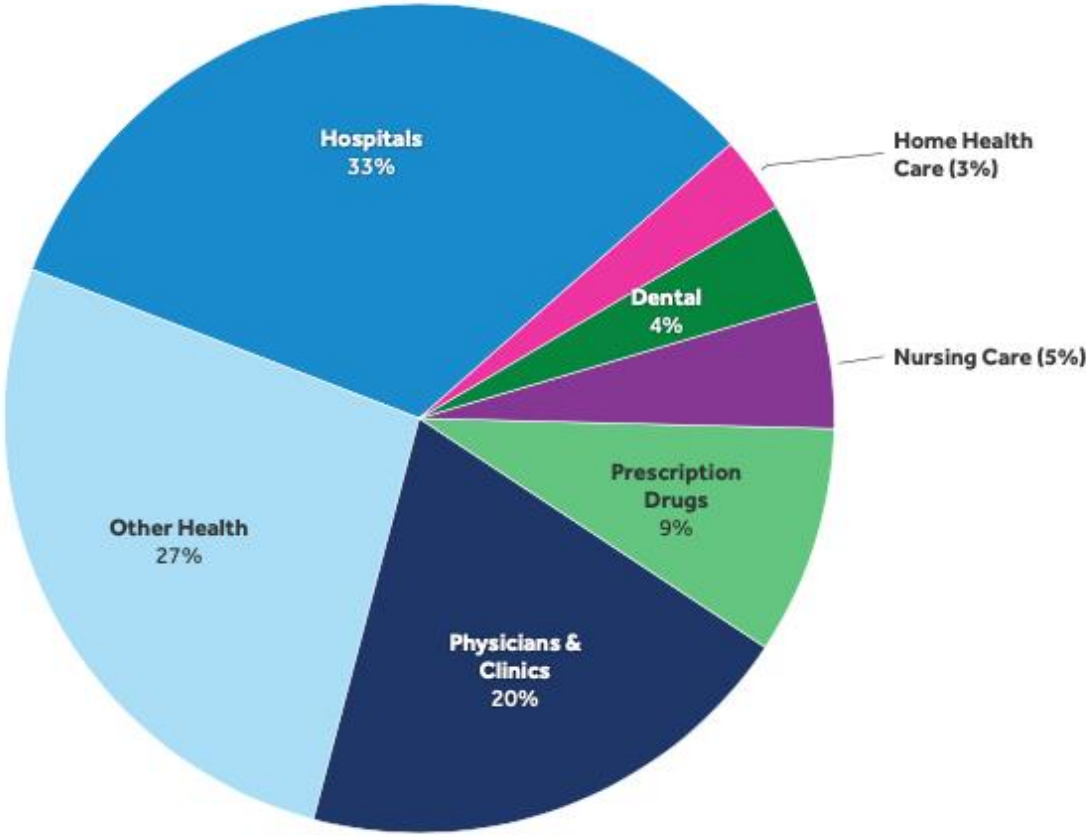
What We Spend is a Function of the Price and Quantity of Care Delivered



Hospital Spending Matters

Hospital and physician services represent half of total health spending

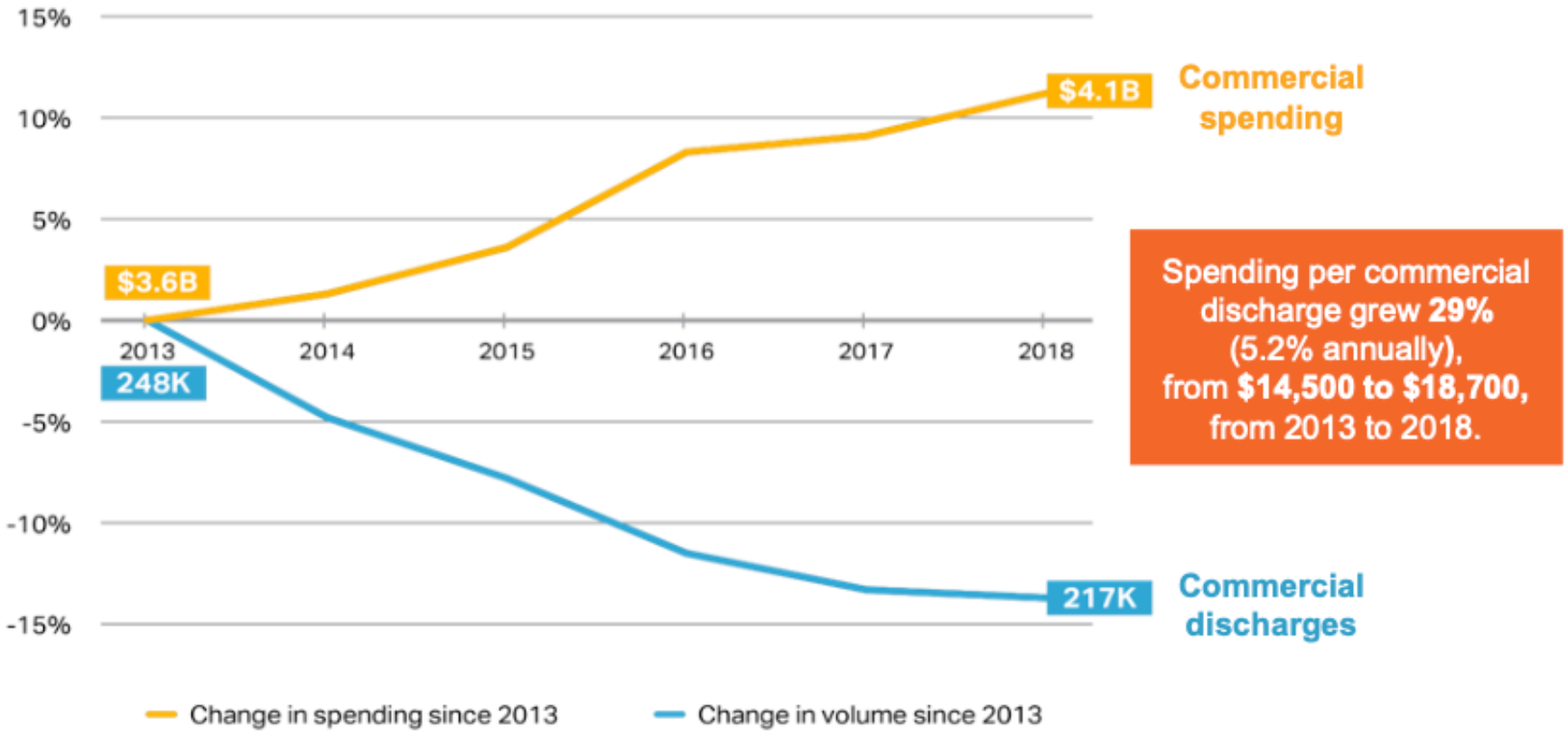
Relative contributions to total national health expenditures, 2018



Notes: 'Other Health' includes spending on other non-durable products, residential and personal care, administration, and other state and federal expenditures. Total does not add to 100% due to rounding.

On the Inpatient Side, Prices are Hugely Important

Cumulative change in commercial inpatient hospital volume and spending per-enrollee (percentages) and absolute, 2013 – 2018



Spending per commercial discharge grew **29%** (5.2% annually), from **$14,500 to $18,700,** from 2013 to 2018.

5.2% growth in price per discharge has been divided evenly between **price increases** and **acuity increases**

Source: Health Policy Commission, 2020 - https://www.mass.gov/files/documents/2019/10/22/CTH19%20-%20HPC%20Presentation_10-21.pdf

What Do We Do?

Health Policy as Whack a Mole

- We will achieve big gains via a series of small steps
- We constantly need to identify discrete problems and propose discrete solutions
- Don’t hold our breath for moonshots
- This requires hugely competent policy-makers who have the power to make rapid changes

1	Increasing organ donation (Macis and Agarwal)
2	Promoting preferred pharmacy networks (Starc and Swanson)
3	Banning co-pay coupons (Dafny)
4	Addressing Surprise Billing (Cooper)

5	Nudges in insurance exchanges (Abaluck and Gruber)
6	Reducing Admin costs via real-time claims adjudication (Orszag and Rekhi)
7	Strengthening antitrust enforcement (Cooper and Gaynor)
8	Optimizing how we pay for off-patient orphan drugs

Out-of-Network Billing

- Physicians do not necessarily participate in the same insurance networks as the hospitals where they practice creating a textbook market failure

- A responsible individual can attend an in-network Emergency Department (ED), but be treated by an out-of-network physician that they could not avoid

    - Exposes patients to significant financial risk from balance billing and higher out-of-pocket costs

    - Undercuts the functioning of health care markets by limiting competition over physician prices

- Out-of-network billing isn’t the norm and most doctors are in-network. However, some firms use as a deliberate strategy that exploits this market failure to generate exceedingly large returns

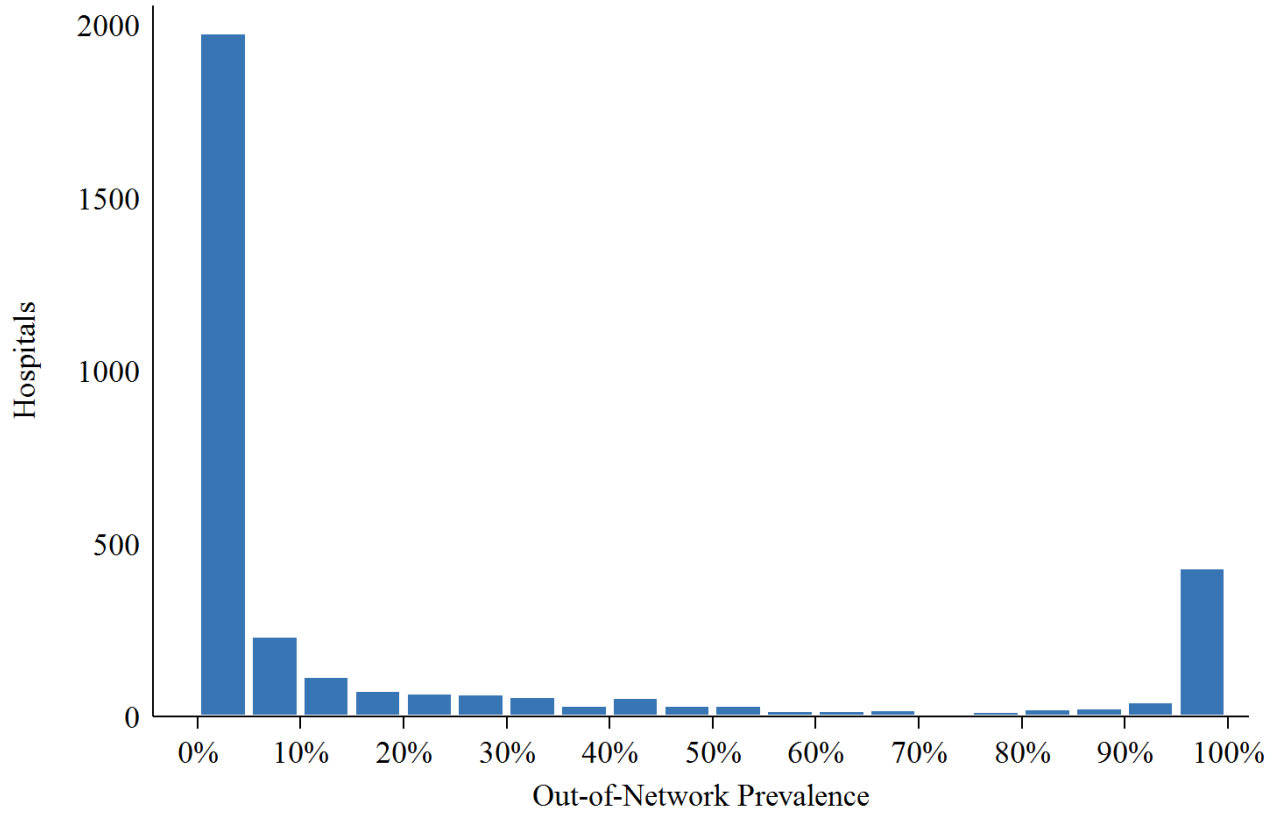
Summary of Results

- 22% of ED visits involved an out-of-network ED physician. For care at in-network hospitals, 12% of anesthesiologists and pathologists billed out-of-network, 6% of radiologists were out-of-network, and 11% of assistant surgeons were out-of-network. As a result, large numbers of patients can receive huge surprise bills

- Because of their strong outside option, these physician are paid significantly more than other specialists. This raises everyone's premiums

  - ED Physicians: In-network Payments: 266% Medicare; Charges at 637%
  - Anesthesiologists: In-network payments 367% of Medicare; Charges at 800%

Distribution of Out-of-Network Billing Across Hospitals

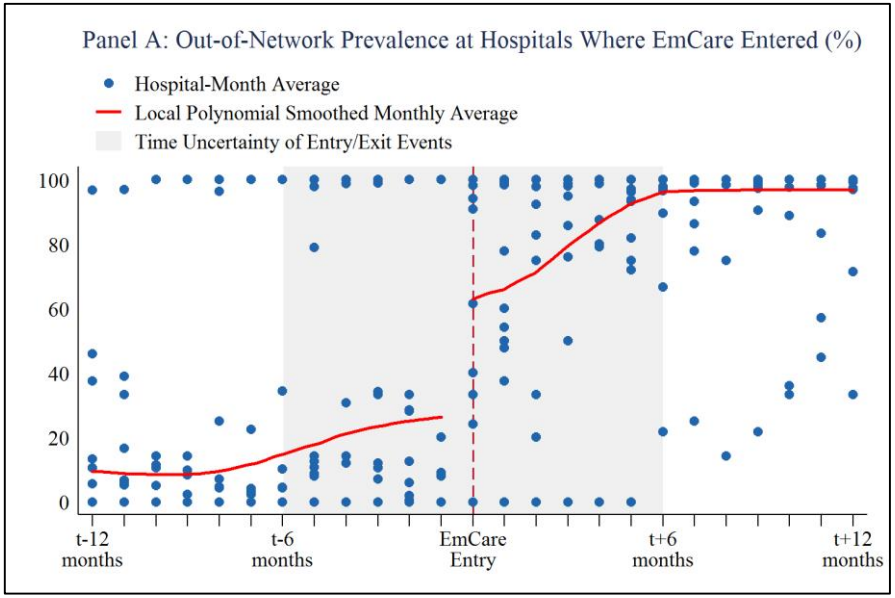


	Observations	10^{th}	25^{th}	50^{th}	75^{th}	90^{th}
Out-of-Network Prevalence	3,345	0	0	0.011	0.278	0.990

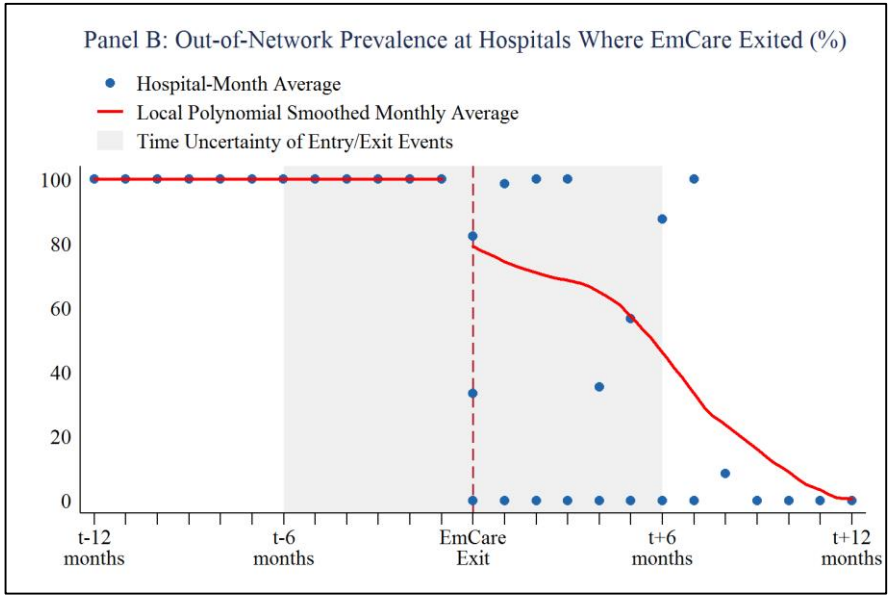
Notes: The figure shows the prevalence of out-of-network ED physician across US hospitals in 2015.

The Effects of EmCare Entry and Exit on OON Rates

EmCare Entry



EmCare Exit



Notes: The panels plot the monthly average out-of-network prevalence by hospital from 12 months before to 12 months after EmCare entered (Panel A) or exited (Panel B) a hospital. In Panel A, we limit our analysis to hospitals with pre-entry out-of-network prevalence below 90 percent. There is six month period of uncertainty on either side of entry and exit dates, which we denote by shading the area gray.

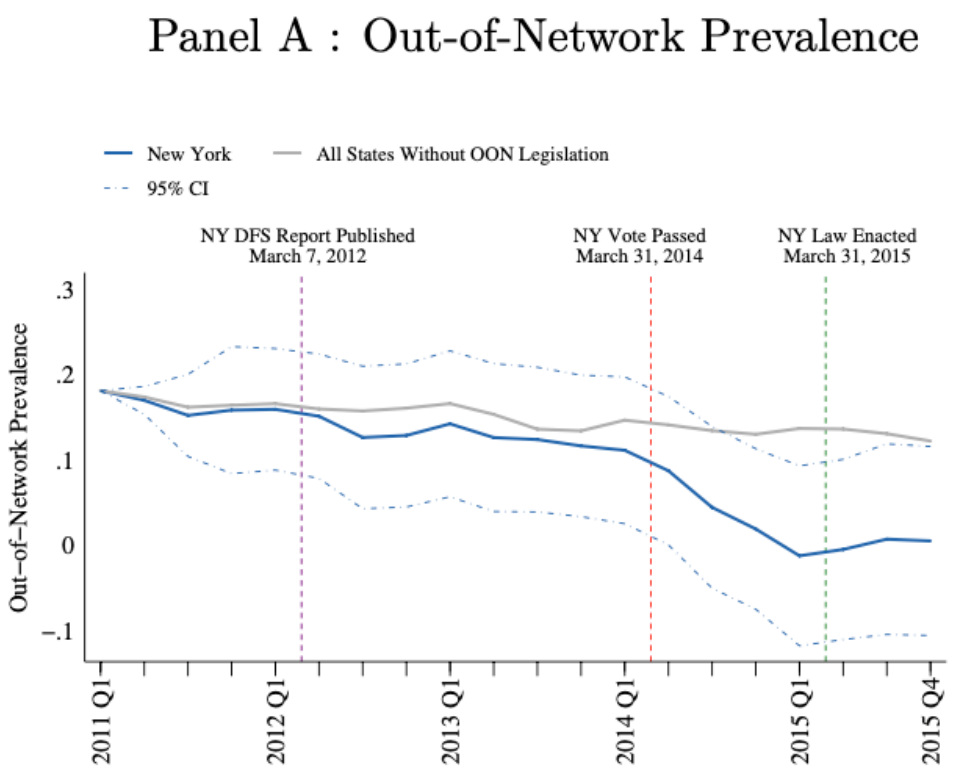
EmCare Entry and Hospital Transfers

1.	Reduction in hospital subsidies	$200,000 per year
2.	Physicians Modifying Their Practice Style	$1.7 million per year
3.	Profit Sharing from Joint Ventures	$88,000
		Total: ~$2,000,000 Annually (Average hospital profits in 2012: $12.9 million)

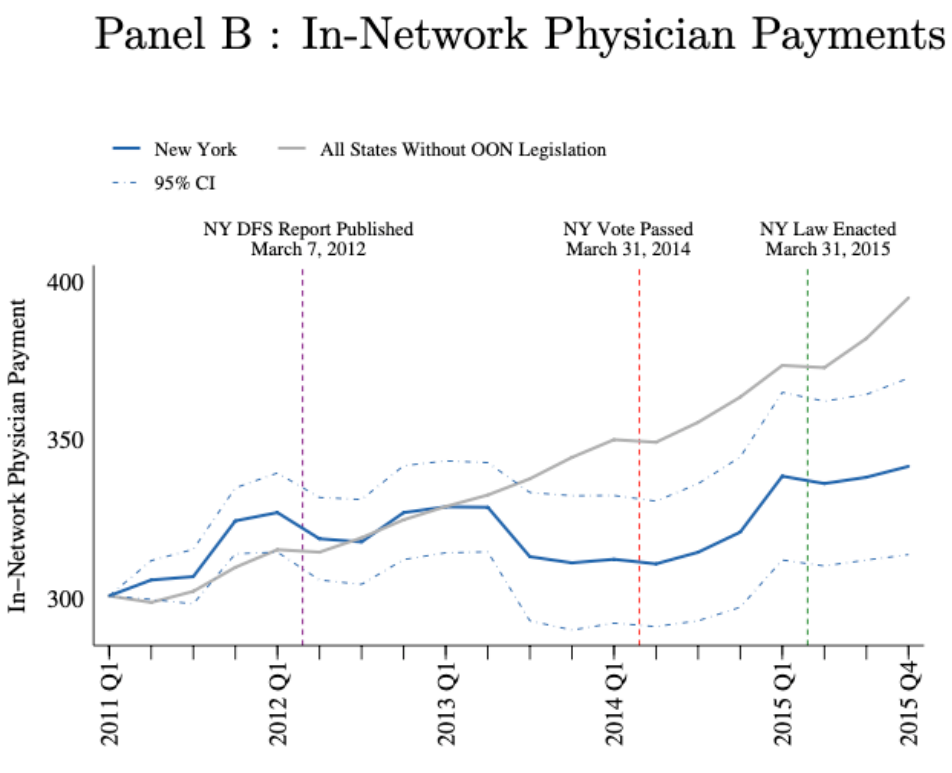
Policy Options for Addressing Out-of-Network Billing

	Policy Approach	Examples	Pros/Cons
1.	Arbitration	Washington, Nevada, New York, Texas, Arizona, Illinois, etc.	**Pros:** evidence from NY **Cons:** devil is in details, administrative cost
2.	Regulating the Outside Option	California, Connecticut, Oregon, Maine, Maryland	**Pros:** Administratively simple **Cons:** Set rates too high/low -> distortions; Subject to lobbying over level of payment
3.	Network Matching	None to Date; Included in Senate Finance Proposal	**Pros:** Administratively simple **Cons:** May give insurers excess bargaining leverage
4.	Bundled Payments	None to Date; Included in Senate Finance Proposal	**Pros:** Restores competitively set rate **Cons:** Changes the way some physicians are paid

New York's Policies Lowered Out-of-Network Prevalence by 88 Percent



Out-of-network prevalence went down by 12.8 Percentage Points (88%)



In-network payments went down by $44.97 (14.8%)

Source: Cooper et al. Forthcoming in the Journal of Political Economy

Public Testimony