MASSACHUSETTS
HEALTH POLICY COMMISSION

HEARING TO DETERMINE THE 2024

HEALTH CARE COST GROWTH BENCHMARK

NATIONAL CONTEXT AND AFFORDABILITY IMPLICATIONS OF MASSACHUSETTS TRENDS

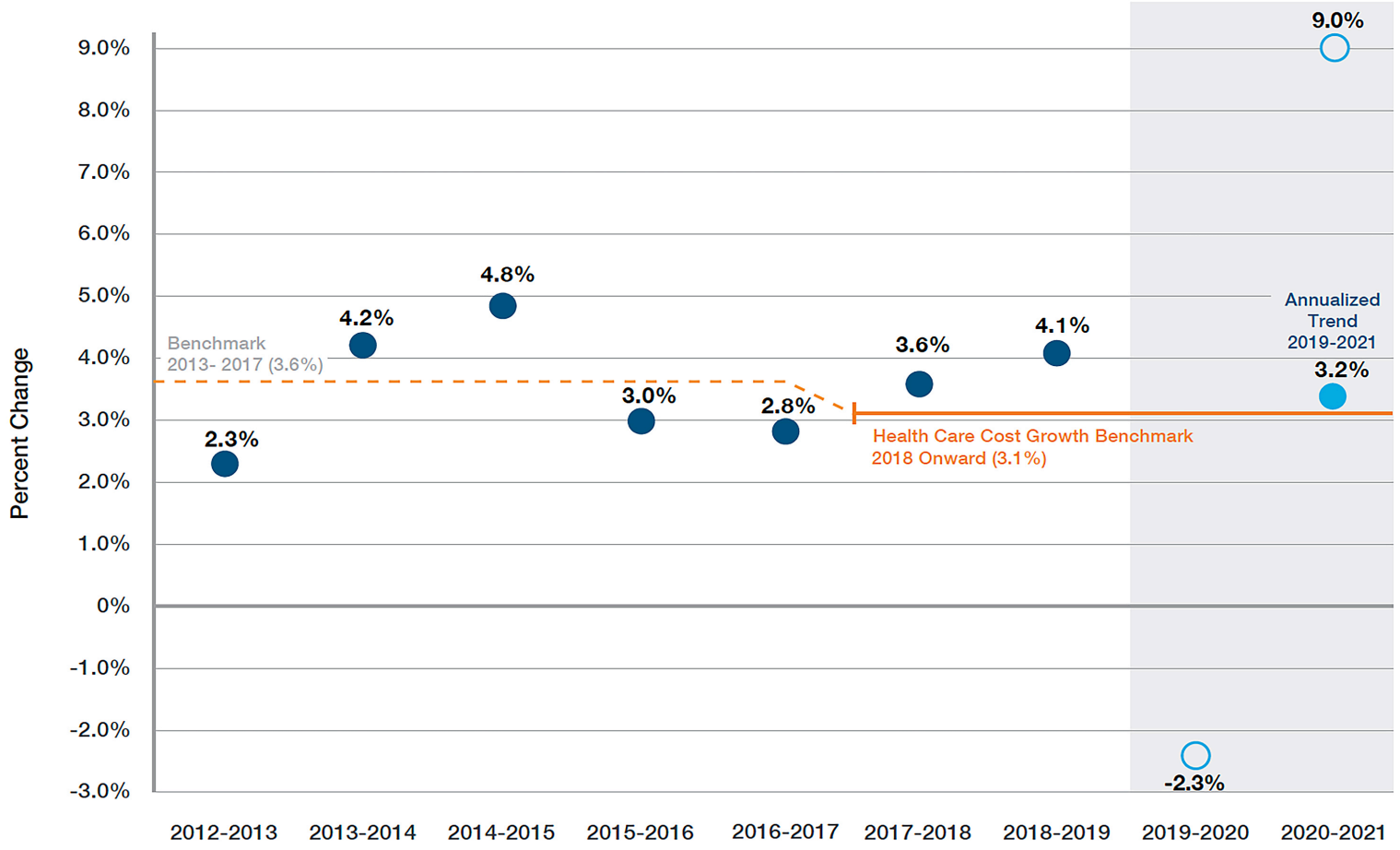
Dr. David Auerbach, Senior Director of Research and Cost Trends, HPC

Presentation Outline

1. **Recent Spending Trends**
2. Opportunities for Reducing Spending Growth
3. Implications of Recent Spending Growth for Affordability of Health Care

Over the first two years of the COVID-19 pandemic, health care spending increased an average of 3.2% each year.

Massachusetts annual growth in per capita total health care spending relative to the benchmark, 2012 to 2021

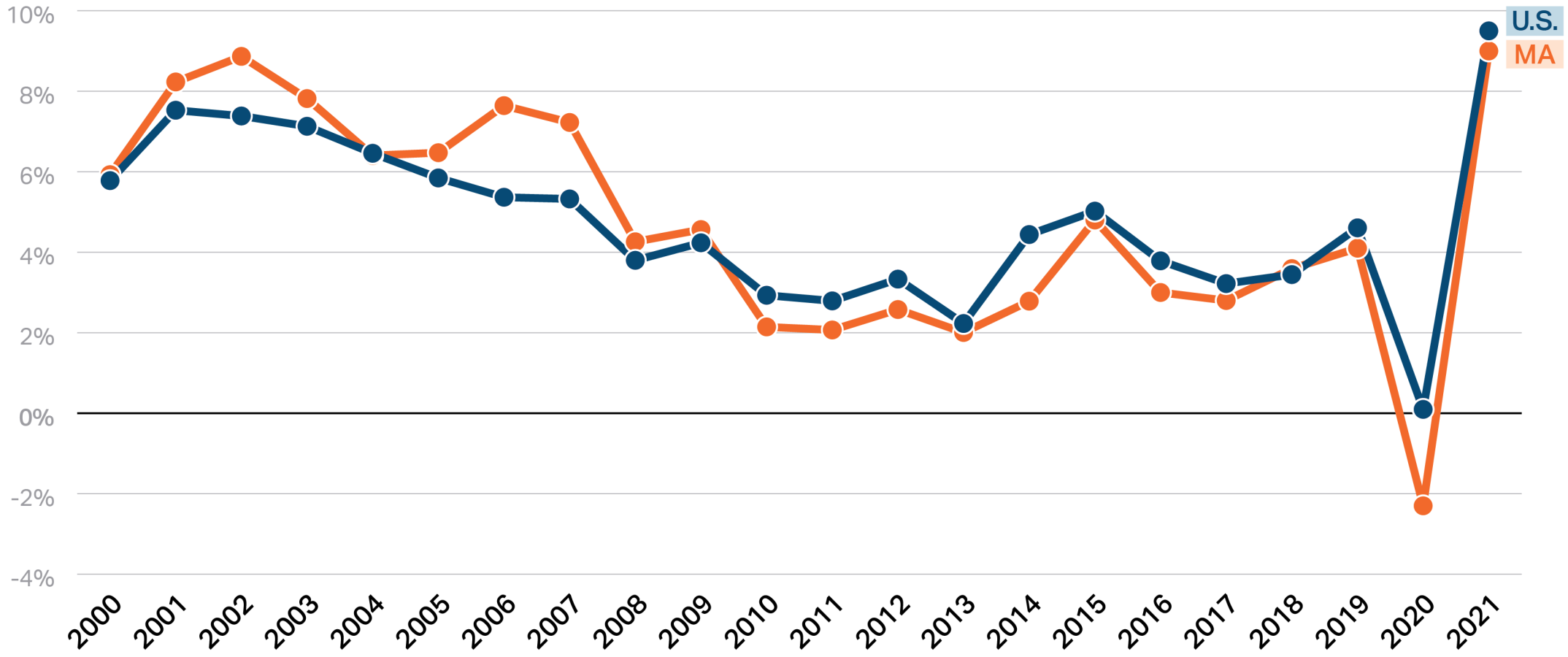


Average annual growth rate, 2012-2021:
3.52%

Source: Massachusetts Center for Health Information and Analysis, Annual Reports on the Performance of the Massachusetts Health Care System 2013-2023.

Massachusetts' overall rate of spending growth was slightly below the national rate in 2020 and 2021.

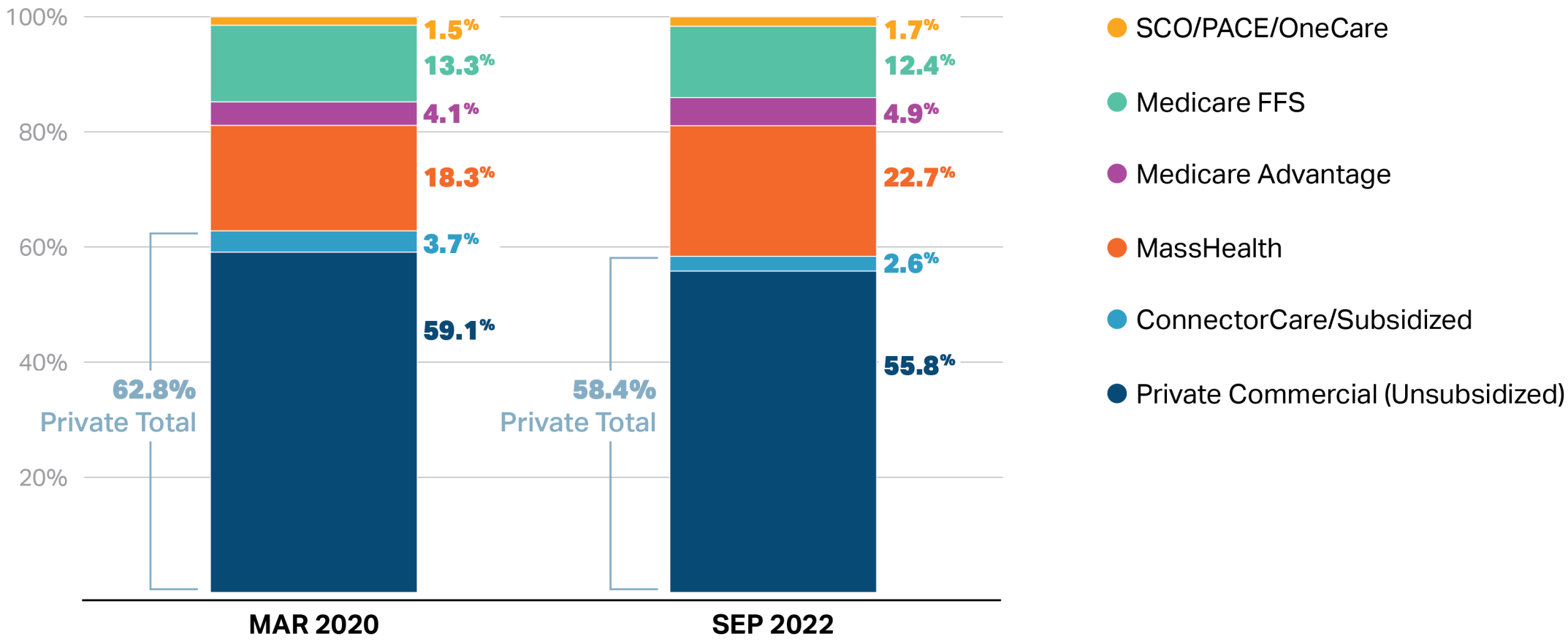
Annual growth in per capita health care spending from the previous year to the year shown, Massachusetts and the U.S., 2006-2021



Notes: U.S. data includes Massachusetts. Massachusetts and US data exclude federal COVID-19 relief funding.
Sources: Centers for Medicare and Medicaid Services, National Healthcare Expenditure Accounts Personal Health Care Expenditures Data, 2014-2021 and State Healthcare Expenditure Accounts, 1999-2014; Center for Health Information and Analysis, growth in Total Health Care Expenditures per capita, 2014-2021.

The percentage of Massachusetts residents with commercial health insurance coverage declined from 62.8% to 58.4% (a drop of 300,000 residents) since March 2020.

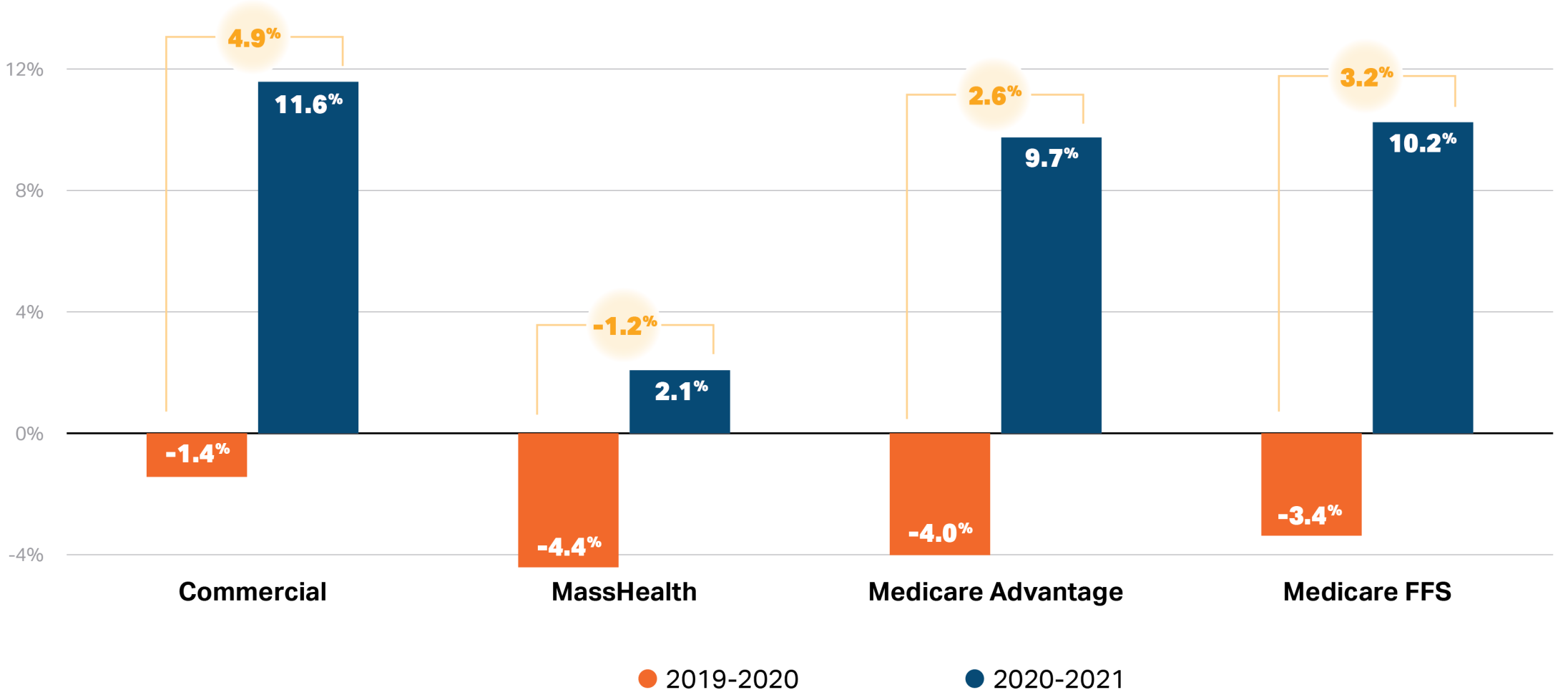
Percentage of Massachusetts residents enrolled in each primary source of coverage



Notes: Slight adjustments were made to account for the fact that the time periods shown were reported in two different data releases. March, 2022 was used as the convergence point. MassHealth includes only members with primary coverage via MassHealth.
Source: Massachusetts Center for Health Information and Analysis: Enrollment trends. https://www.chiamass.gov/enrollment-in-health-insurance/

On a per-enrollee basis, commercial spending grew nearly 5% per year from 2019 to 2021, compared to 3% for Medicare enrollees and a 1% decline for MassHealth enrollees.

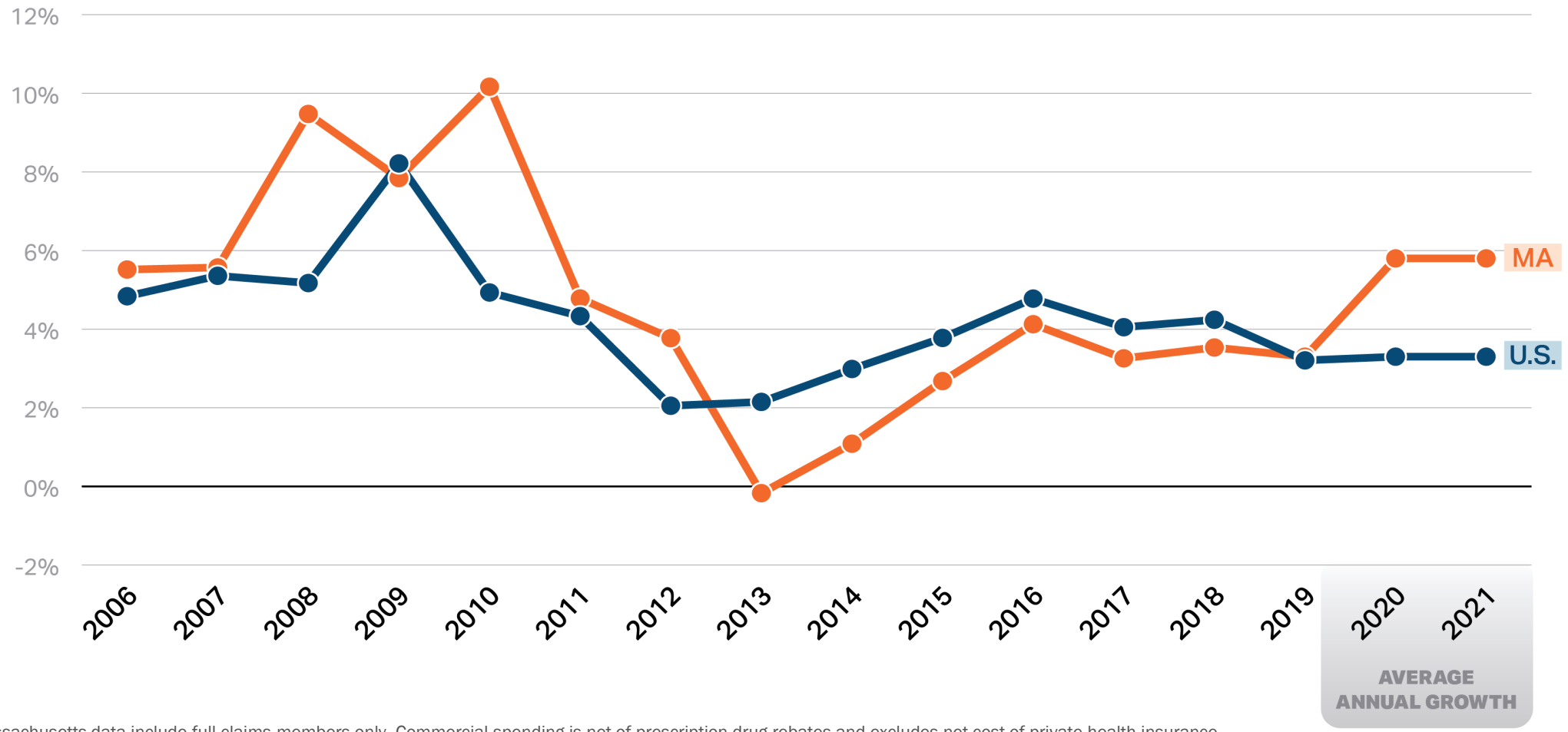
Annual growth (2019-2020 and 2020-2021) and average annual growth (2019-2021) in spending per enrollee, by market



Notes: Commercial spending includes insurer administrative spending, both full and partial claims, and is net of prescription drug rebates. MassHealth includes only full coverage enrollees in the Primary Care Clinician (PCC), Accountable Care Organization (ACO-A, ACO-B), and Managed Care Organization (MCO) programs. Figures are not adjusted for changes in health status.
Sources: HPC analysis of Center for Health Information and Analysis, Annual Report on the Performance of the Massachusetts Health Care System, 2023.

After several years of lower spending growth, commercial spending growth in Massachusetts outpaced the US average from 2019-2021.

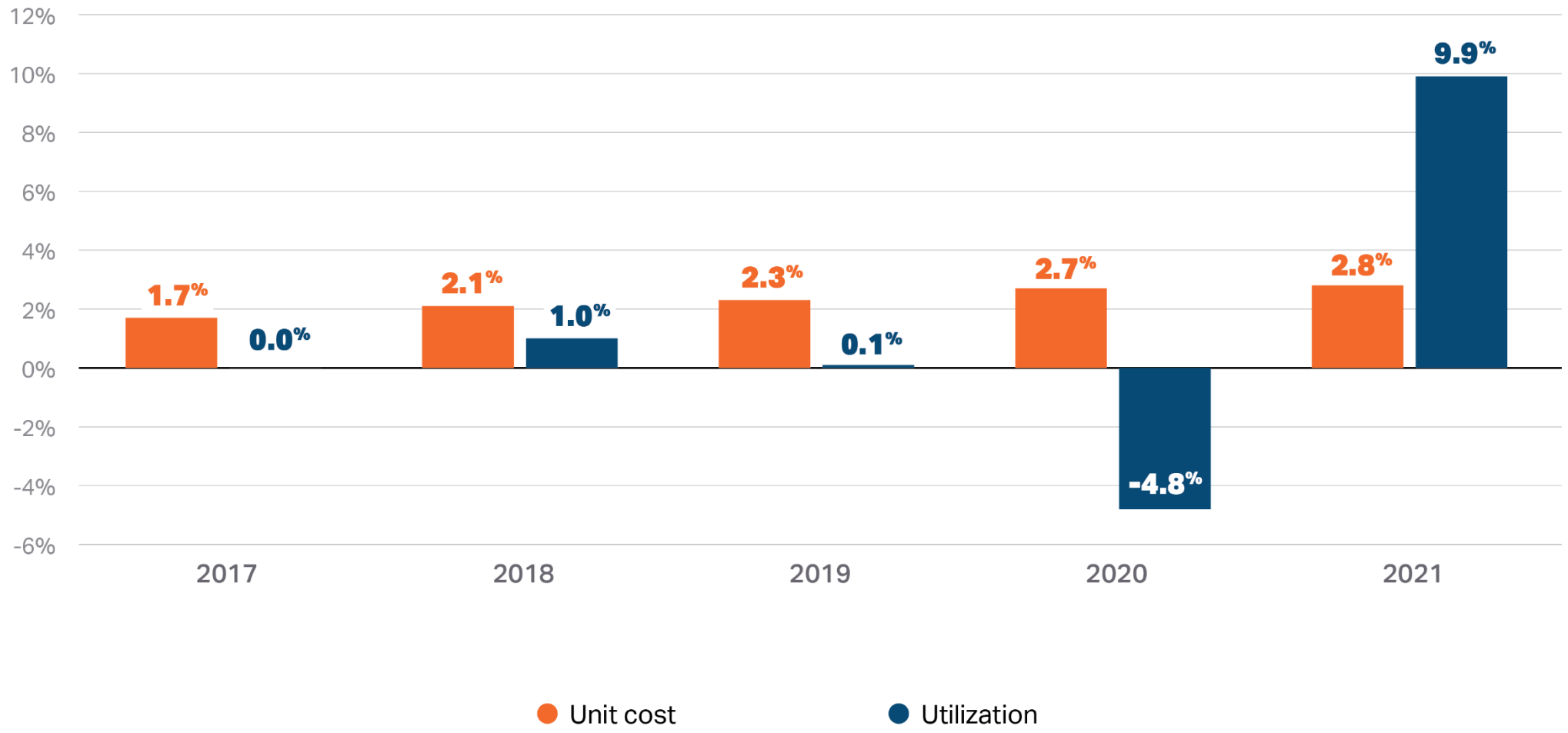
Annual growth in per capita commercial health care spending, Massachusetts and the U.S., 2006-2021. Data for 2020 and 2021 represent average annual growth from 2019-2021. Other data points represent growth from the previous year to the year shown.



Notes: Massachusetts data include full-claims members only. Commercial spending is net of prescription drug rebates and excludes net cost of private health insurance.
Sources: Centers for Medicare and Medicaid Services, National Healthcare Expenditure Accounts Personal Health Care Expenditures, 2014-2021 and State Healthcare Expenditure Accounts 2005-2014; Center for Health Information and Analysis, Total Health Care Expenditures, 2014-2021

Commercial spending growth in 2021 was driven by continued price increases and an increase in utilization.

Payer-reported percent change in commercial unit costs (prices) and utilization for a large Massachusetts insurer from previous year to the year shown



Source: Pre-Filed Testimony submitted to the HPC in advance of the 2021 and 2022 Annual Cost Trends Hearings.

Prescription drugs and hospital outpatient services were leading drivers of commercial spending growth from 2019-2021.

Annual per-member growth rate in spending between 2019-2021:

- Retail prescription drugs (net of rebates): 7.7%
- Hospital outpatient services: 5.4%
  - *Facility spending: 6.5%*
  - Professional spending: 1.7%
- Hospital inpatient services: 4.3%
  - *Facility spending: 4.8%*
  - Professional spending: 1.6%
- Office, urgent care, retail clinic: 1.2%

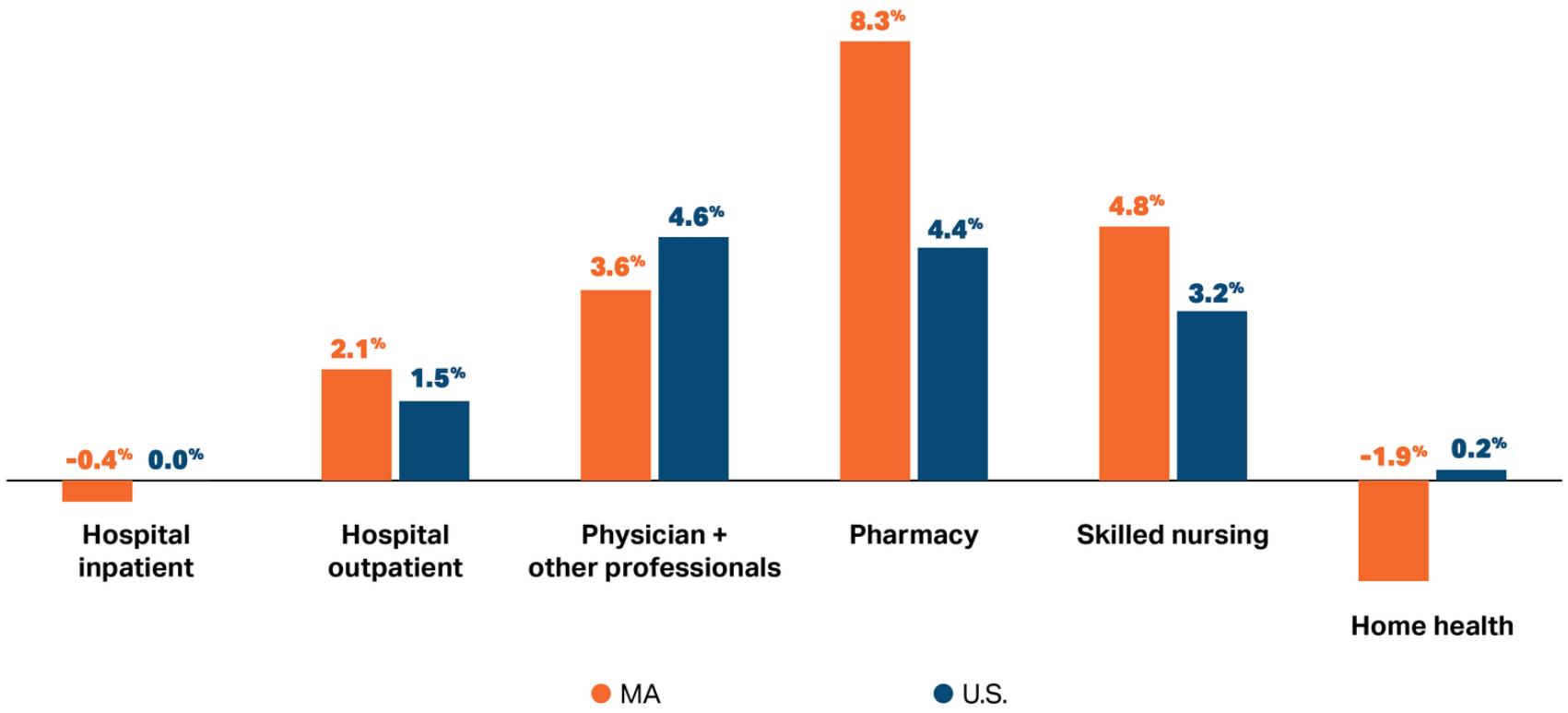
Accounting for 1/3 of commercial spending, these are services such as lab tests, minor surgeries, and MRIs provided on an outpatient basis (no overnight stay) at a facility owned by a hospital

Per-member spending on retail and clinician-administered prescription drugs combined now accounts for 25.5% of commercial spending in 2021 (up from 24.7% in 2019).

Notes: Average rebate percentages are applied to retail prescription drug spending but not clinician-administered drug spending. Clinician-administered drug spending includes the professional spending associated with these encounters. Hospital outpatient spending includes some additional settings that bill on facility claims (UB-04) such as Ambulatory Surgical Centers.
Sources: HPC analysis of the Massachusetts All Payer Claims Database. Retail drug analysis and per-member spending analysis examining retail and clinician-administered drug exclude Anthem.

Spending on prescription drugs and hospital outpatient services among Massachusetts Medicare beneficiaries also grew faster than the national average.

Average annual growth from 2019-2021 per FFS Medicare beneficiary, Massachusetts and the US overall

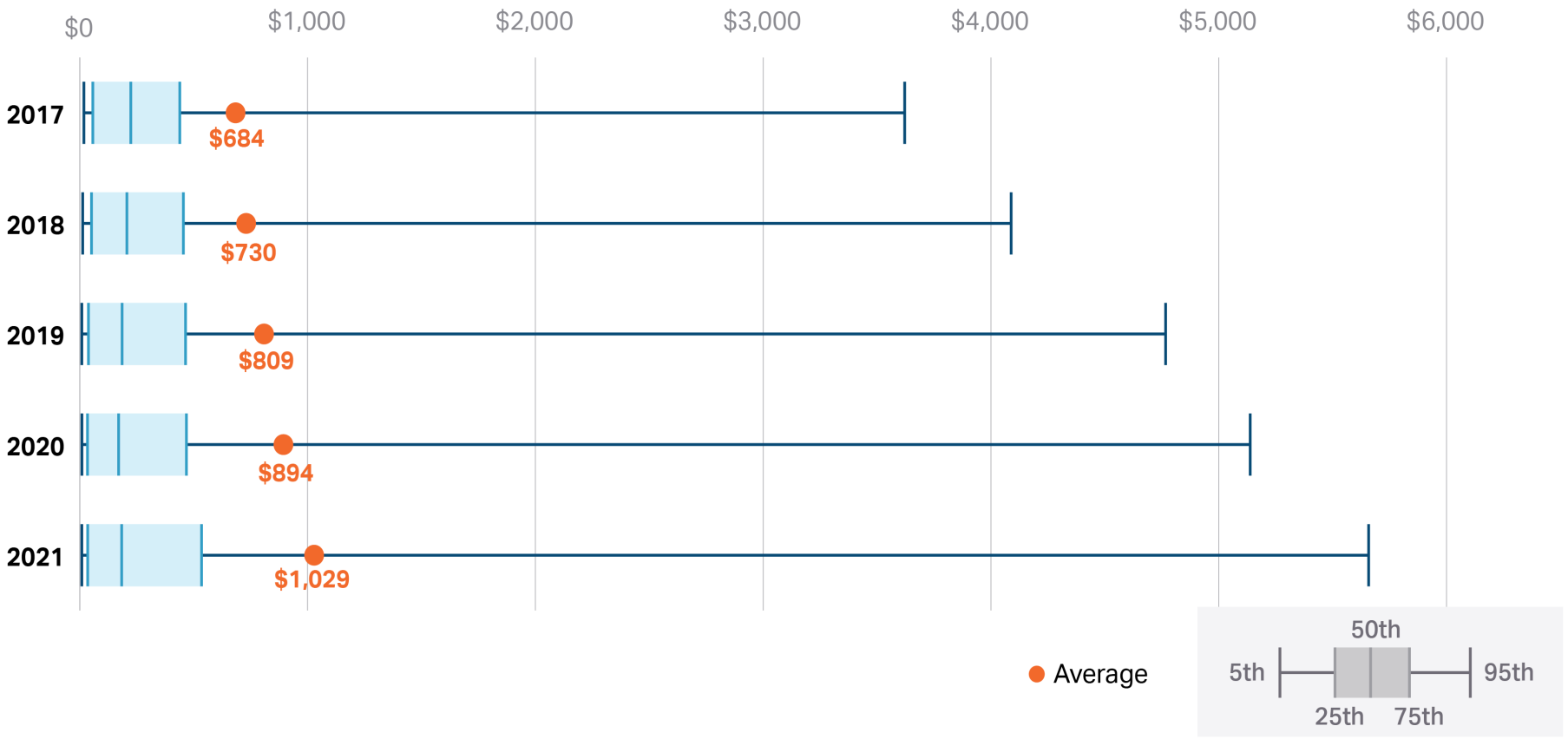


Average annual growth from 2019-2021 per Medicare beneficiary in Massachusetts was **2.9%** compared to **2.6%** nationally.

Note: Pharmacy represents total Part D spending per Part D enrollee. All other categories represent spending growth in the given category per Medicare enrollee defined as enrolment in either part A or B. Total spending is defined as the sum of medical spending per part A or B enrollee plus pharmacy spending per part D enrollee.
Source: Centers for Medicare and Medicaid Services, special data request.

Average commercial spending (gross) per branded prescription increased 15% in 2021 to over $1,000 per prescription, with 6% of prescriptions exceeding $5,000.

Gross spending distribution per branded prescription, 2017-2021

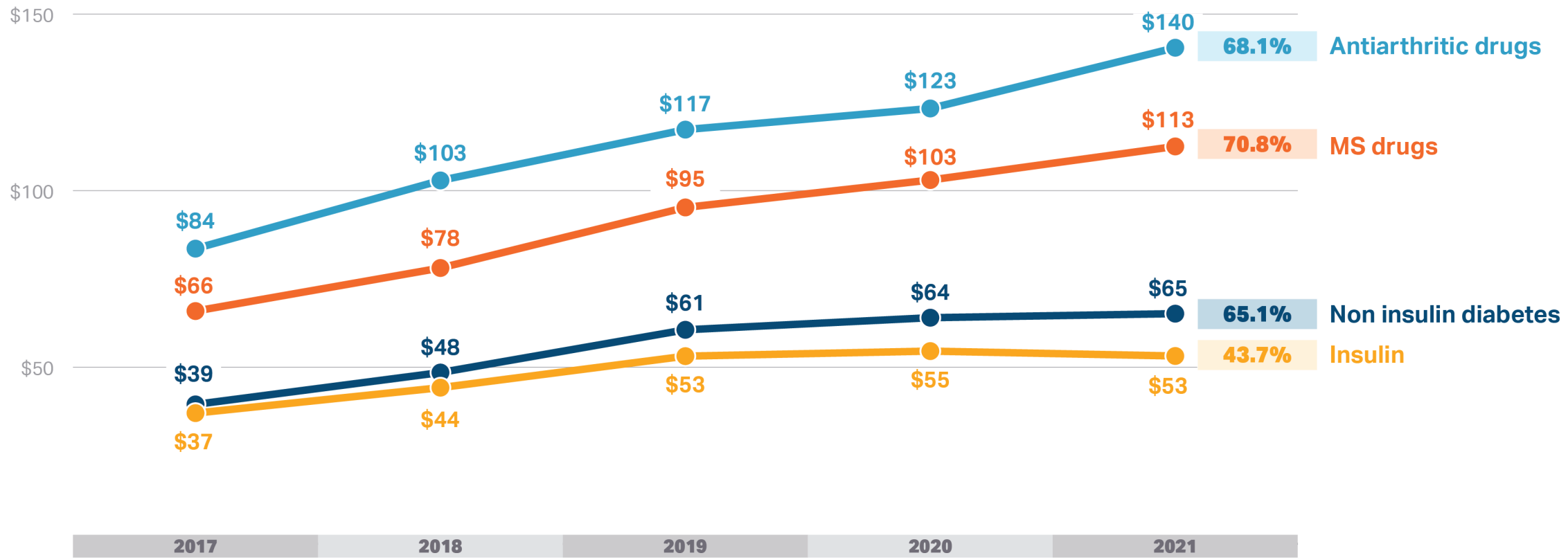


- The price of generic drugs has remained stable, with an average spending of $30 per prescription in 2017 and $31 in 2021.

Notes: Claims with implausible spending and cost-sharing values were excluded. COVID-19 vaccines were excluded from analysis in 2021.
Sources: HPC analysis of the Center for Health Information and Analysis (CHIA) All-Payer Claims database, 2017-2021. Data for 4 large payers were included in the analysis.

Average out of pocket spending for a 30-day supply of prescription drugs for several common chronic conditions grew more than 60% from 2017 to 2021.

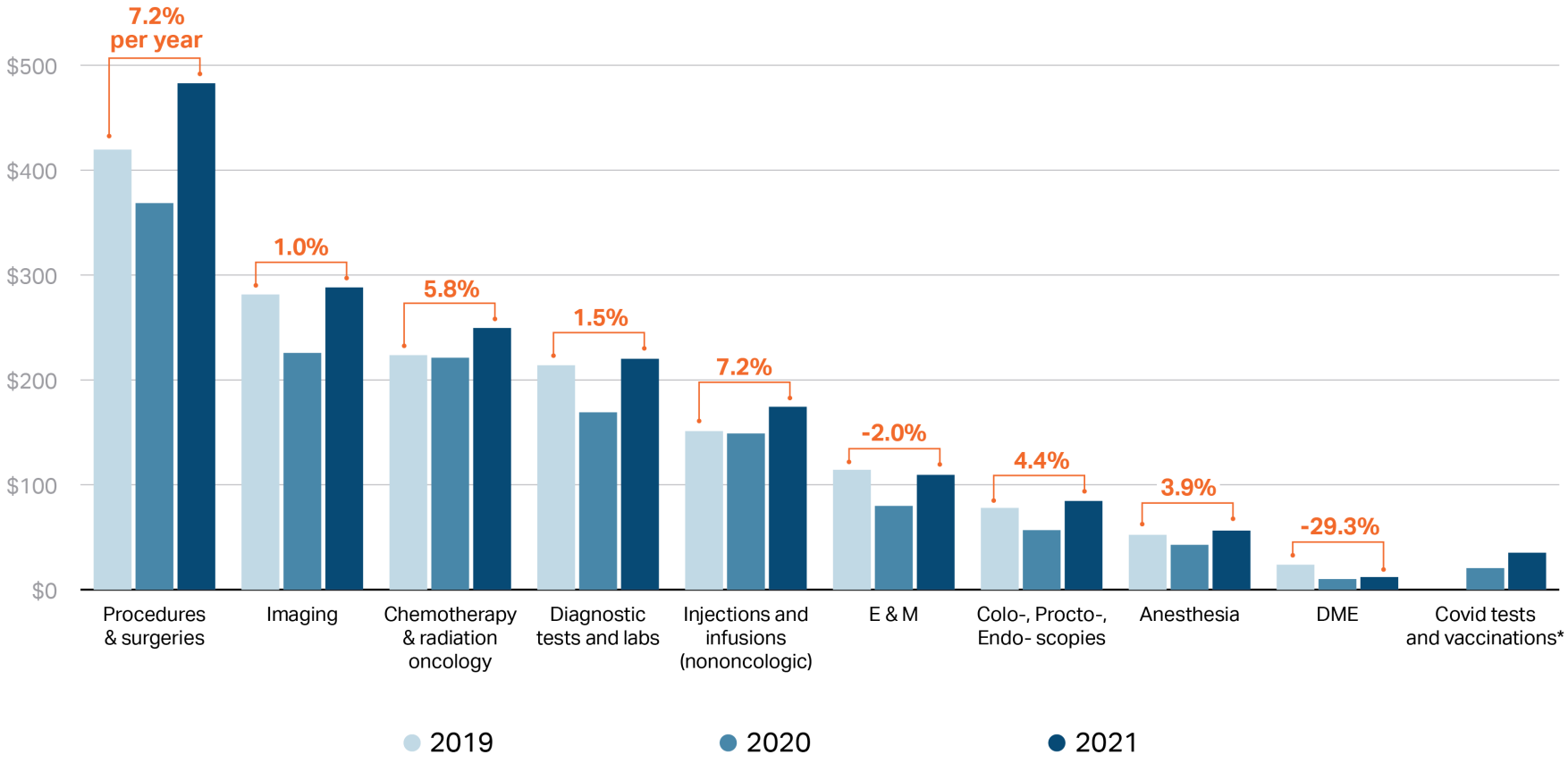
Average cost sharing per prescription (30-day supply) for selected classes of drugs, 2017-2021



Notes: Drugs were identified based on lists or clinical guidelines published by the Arthritis Foundation, American College of Rheumatology, American Diabetes Association, and National MS society. Clinician-administered drugs, which are typically covered under a plan's medical benefits, are excluded.
Sources: HPC analysis of Center for Health Information and Analysis (CHIA) All-Payer Claims database, 2017-2021. Data for 4 large payers were included in the analysis.

Hospital outpatient spending growth was driven mostly by growing facility prices. Spending growth varied by category of care.

Annual per-member hospital outpatient department spending by procedure category and average annual growth in per-member spending, 2019-2021



- Hospital facility prices increased 11% from 2019-2021 and accounted for most of the growth in hospital outpatient spending.
- COVID tests and procedures accounted for 2 percentage points of hospital outpatient spending growth from 2019 to 2021.

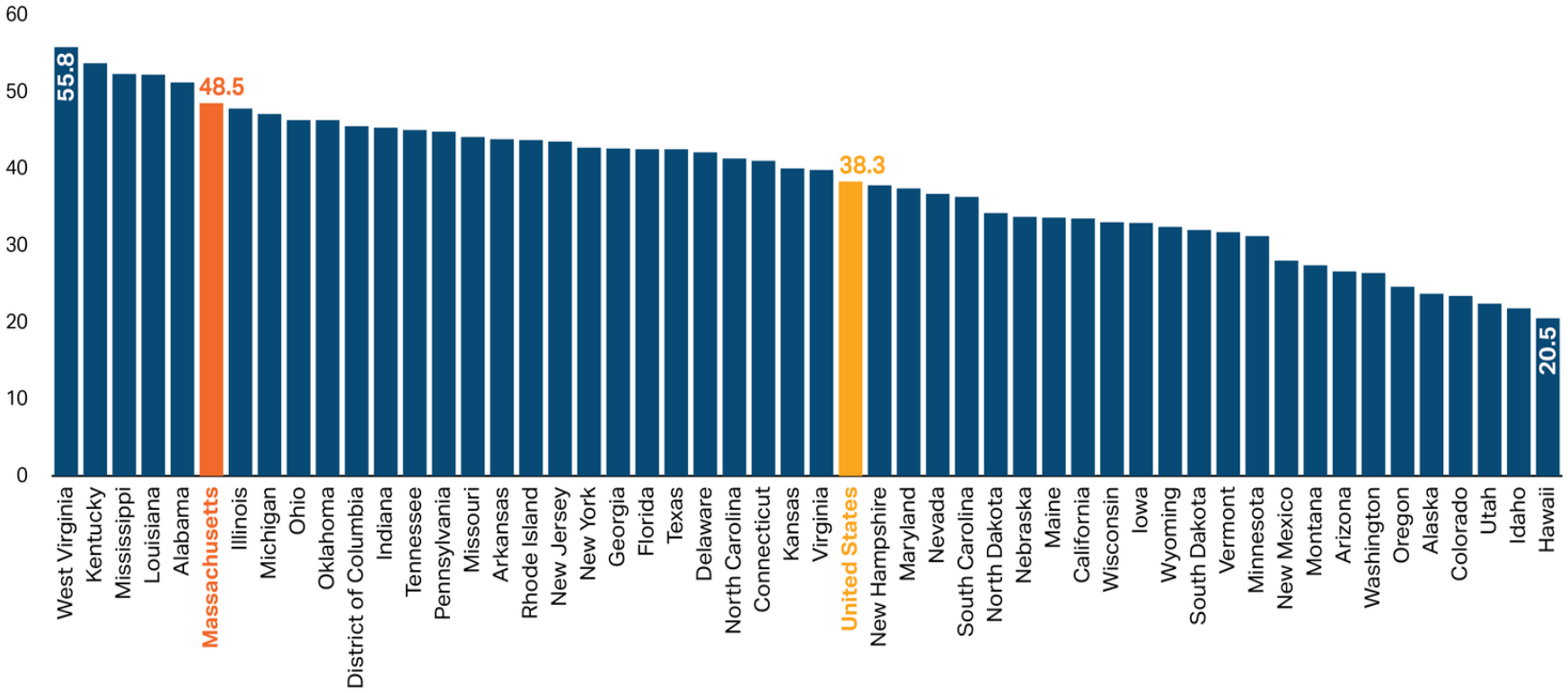
Notes: Hospital outpatient department spending is defined as spending on all ambulatory patient encounters in the facilities owned by acute care hospitals. HPC applied the restructured BETOS classification system version 2022 as well as CCS categories version 2022 and Covid vaccination CPT codes from AMA to classify procedures into categories of spending.
Sources: HPC analysis of the Center for Health Information and Analysis (CHIA) All-Payer Claims Database, 2019-2021, V 2021.

Presentation Outline

1. Recent Spending Trends
2. **Opportunities for Reducing Spending Growth**
3. Implications of Recent Spending Growth for Affordability of Health Care

Massachusetts has one of the highest rates of avoidable hospital use in the U.S.

Avoidable hospital admissions per 1,000 Medicare beneficiaries by state, 2019



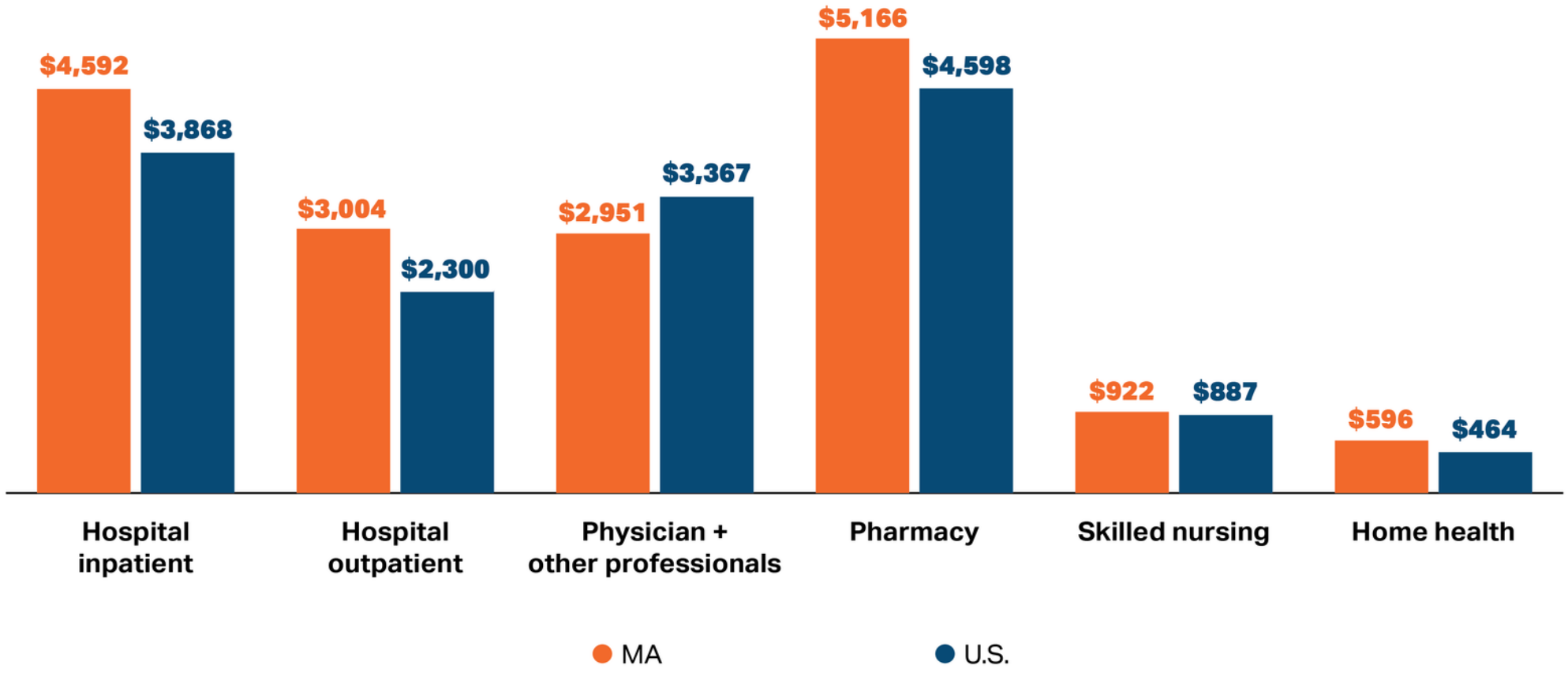
Notes: Data shown includes only beneficiaries enrolled in Medicare fee-for-service aged 65+ and combine admissions for the following ambulatory care-sensitive conditions: diabetes, COPD, asthma, hypertension, CHF, dehydration, bacterial pneumonia, UTI and lower extremity amputation.
Source: HPC analysis of Chronic Conditions Data Warehouse (CCW) data, via CMS Geographic Variation Public Use File
1 HPC analysis of the Center for Medicare and Medicaid Services Geographic Variation Public Use file, 2019
2 Radley DC, Baumgartner JC, and Collins SR. Scorecard on State Health System Performance: How Did States Do During the COVID-19 Pandemic? Appendicies. Commonwealth Fund. June 2022. Available at https://www.commonwealthfund.org/sites/default/files/2022-06/Radley_2022_State_Scorecard_Appendices.pdf
3 HPC original analysis of data from the Health Costs and Utilization Project (HCUP), 2019
4 KFF. Hospital Emergency Room Visits per 1,000 Population by Ownership Type. 2021. Available at https://www.kff.org/other/state-indicator/emergency-room-visits-by-ownership

Compared to other states, MA:

- Has the second highest **Medicare readmissions rate** (2019).[1]
- Is ranked first in "Healthy Lives" but only **35th best in "Avoidable hospital use and cost"** (2017-2020).[2]
- Had the highest share of **ED patients admitted for a full hospital stay** among 35 states (2019).[3]
- Has the 14th highest rate of **ED visits** (2021).[4]

Hospital outpatient department spending for Massachusetts Medicare beneficiaries is 31% above the national average while physician and other professional spending is below average.

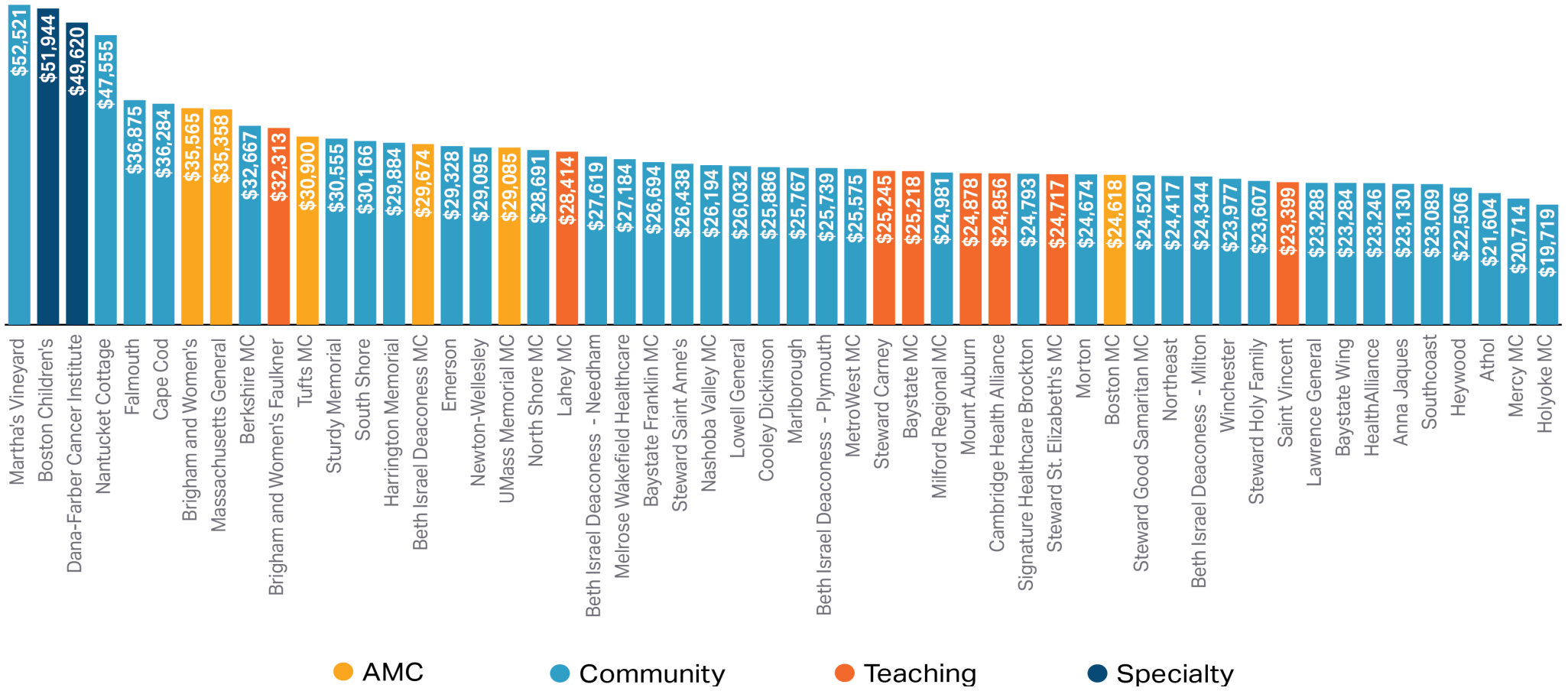
Medicare FFS spending per beneficiary in 2021, Massachusetts and the U.S.



Note: Pharmacy represents total Part D spending per Part D enrollee. All other categories represent spending per Medicare enrollee defined as enrolment in either part A or B.
Source: Centers for Medicare and Medicaid Services, special data request.

Commercial hospital outpatient prices vary widely by hospital. The price of a market basket of 50 routine services varied from under $20,000 to more than $50,000 in 2021.

Cost of an identical market basket of HOPD services at each Massachusetts hospital shown in 2021

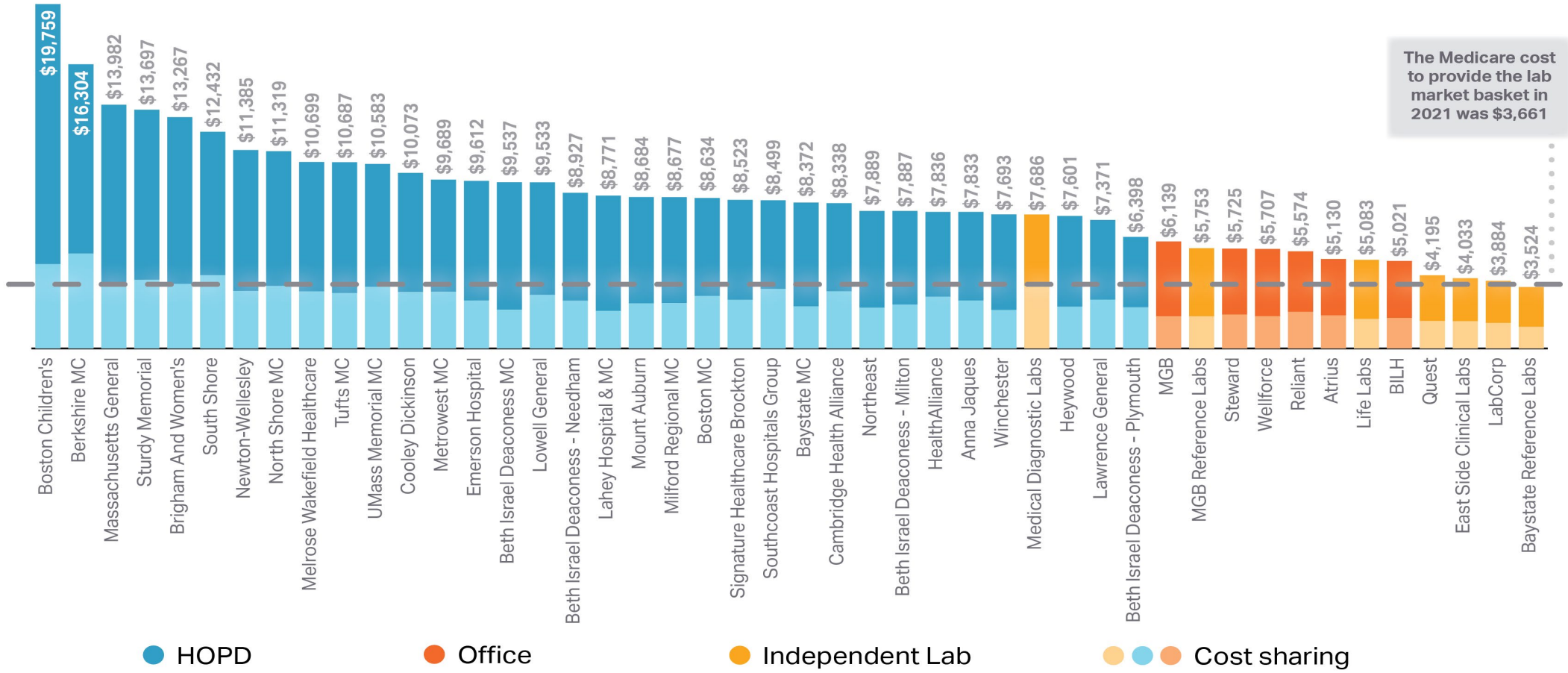


Notes: The graph shows the cost of a fixed quantity of each of the same 50 procedure codes using each hospital's average price for each service in 2021. for each procedure code. Hospitals with fewer than 20 service encounters for any individual procedure code have imputed values based on the average ratio of that hospital's prices to the statewide mean price for their non-missing services. See https://www.mass.gov/doc/4-commercial-price-trends/download (imputation method 2) for more detail and list of procedure codes included in the index and their associated quantities. Some slight adjustments have been made since the publication of this technical appendix that are not yet reflected.

Source: HPC analysis of the Center for Health Information and Analysis (CHIA) All-Payer Claims Database, 2019-2021, V 2021. Data for 5 large payers were included in the analysis.

Commercial price variation for lab tests is even more pronounced. In 2021, lab prices ranged from equivalent to Medicare rates at independent labs to more than three times that amount for many hospitals.

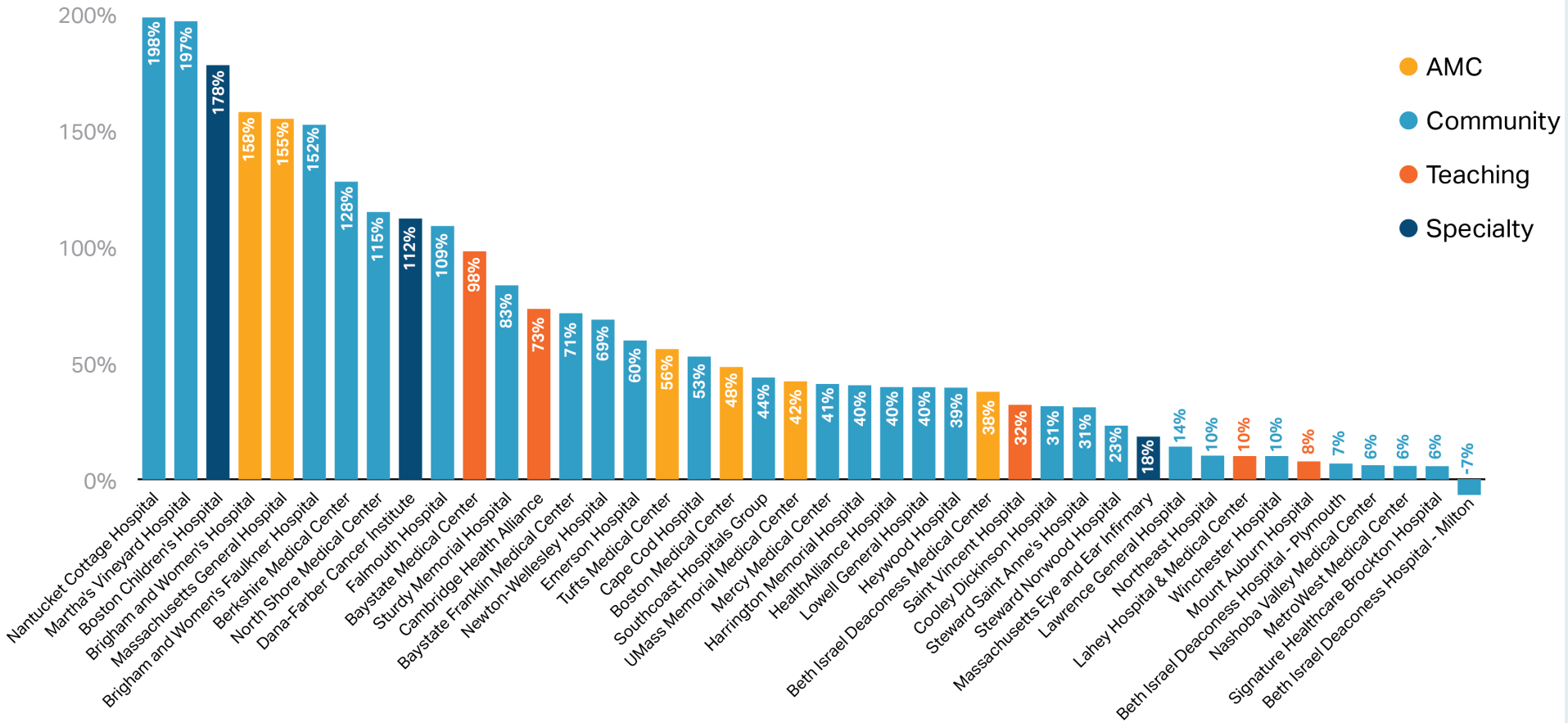
Total cost of a fixed laboratory services market basket, including cost-sharing, among Massachusetts providers in 2021



Notes: The index represents the cost of the same 50 lab services in each hospital or provider shown, weighted by total statewide spending on each lab in 2019 and using the average price of each lab for each provider in 2021. Providers with fewer than 20 service encounters for any individual procedure code have imputed values (statewide mean price) for that procedure code and are not included if more than 20 procedure codes would need to be imputed.
Sources: HPC analysis of the Center for Health Information and Analysis (CHIA) All-Payer Claims Database, 2019-2021, V 2021. Data for 5 large payers were included in the analysis; HPC analysis of information from the Centers for Medicare and Medicaid Services, Clinical Laboratory Fee Schedule (2021).

Payers paid some hospitals 100% more for physician-administered drugs than the hospitals' cost to buy the drugs.

Physician-administered drug prices as a percent over estimated acquisition price, by Massachusetts hospital, 2021

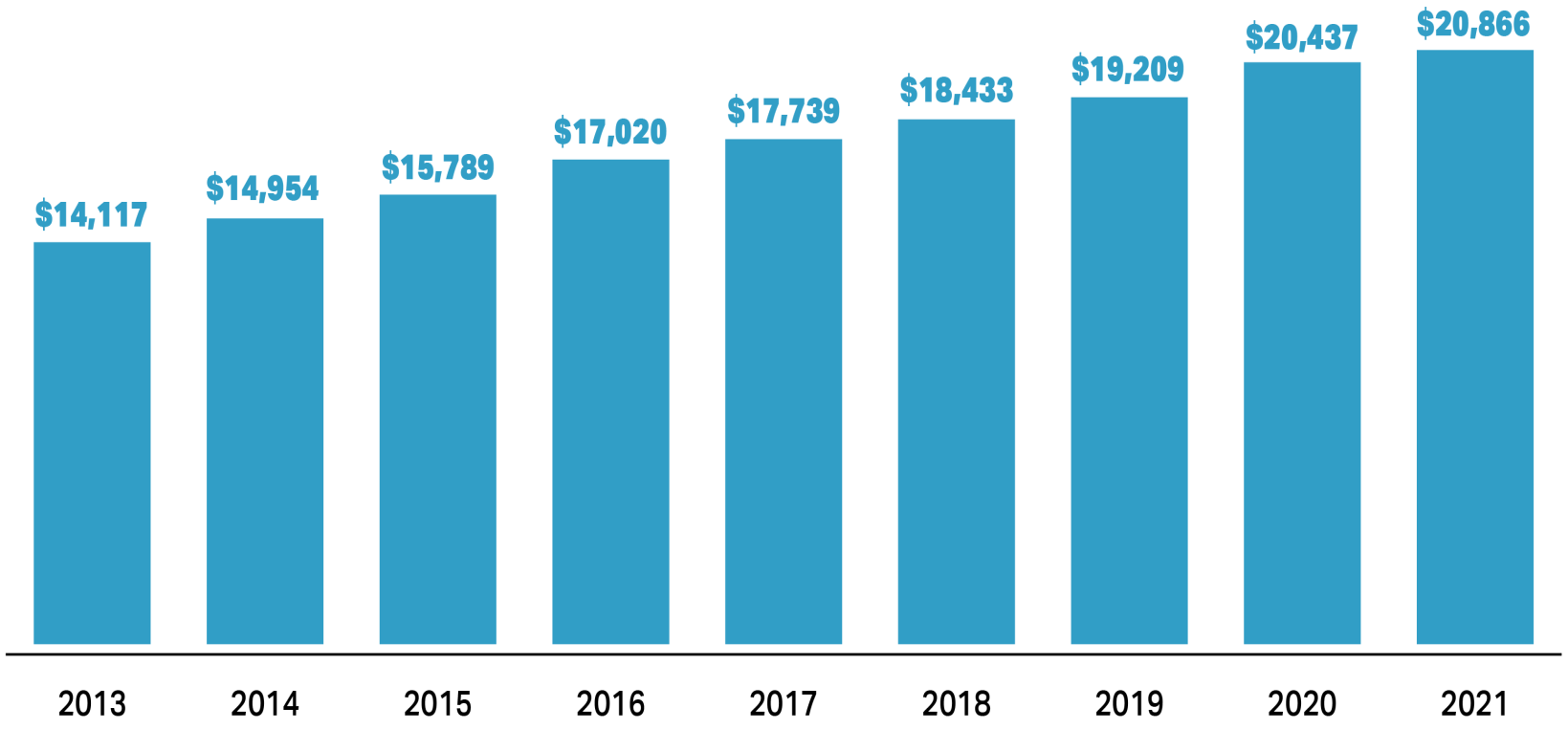


Notes: Data represents aggregate spending over estimated acquisition cost for each hospital based on 15 drugs combined including Alimta, Avastin, Darzalex, Entyvio, Herceptin, Kadcyla, Keytruda, Neulasta, Ocrevus, Opdivo, Perjeta, Remicade, Rituxan, Sandostatin Lar Depot, and Tysabri. Data includes reductions in acquisition cost (ASP minus 22.5%) based on participation in 340B drug program. Hospitals with fewer than 11 encounters for all drugs were excluded.
Sources: HPC analysis of the Center for Health Information and Analysis (CHIA) All-Payer Claims Database, 2019-2021, V 2021. Data for 5 large payers were included in the analysis. Acquisition cost estimated using the Centers for Medicare and Medicaid Services, ASP Drug Pricing Files (2020-2021).
1: Based on comparison to: Chang, Jessica Y., and Aditi P. Sen. "Comparison of Prices for Commonly Administered Drugs in Employer-Sponsored Insurance Relative to Medicare." JAMA Health Forum. Vol. 4. No. 2. American Medical Association, 2023.

Massachusetts median commercial prices paid for physician administered drugs exceeded the national average for 6 of 8 drugs analyzed.[1]

Since 2013, commercial spending for a hospital visit in Massachusetts increased 48%, exceeding $20,000 in 2021.

Total inpatient spending per commercial discharge and average length of stay for commercial hospital stays, 2013-2021

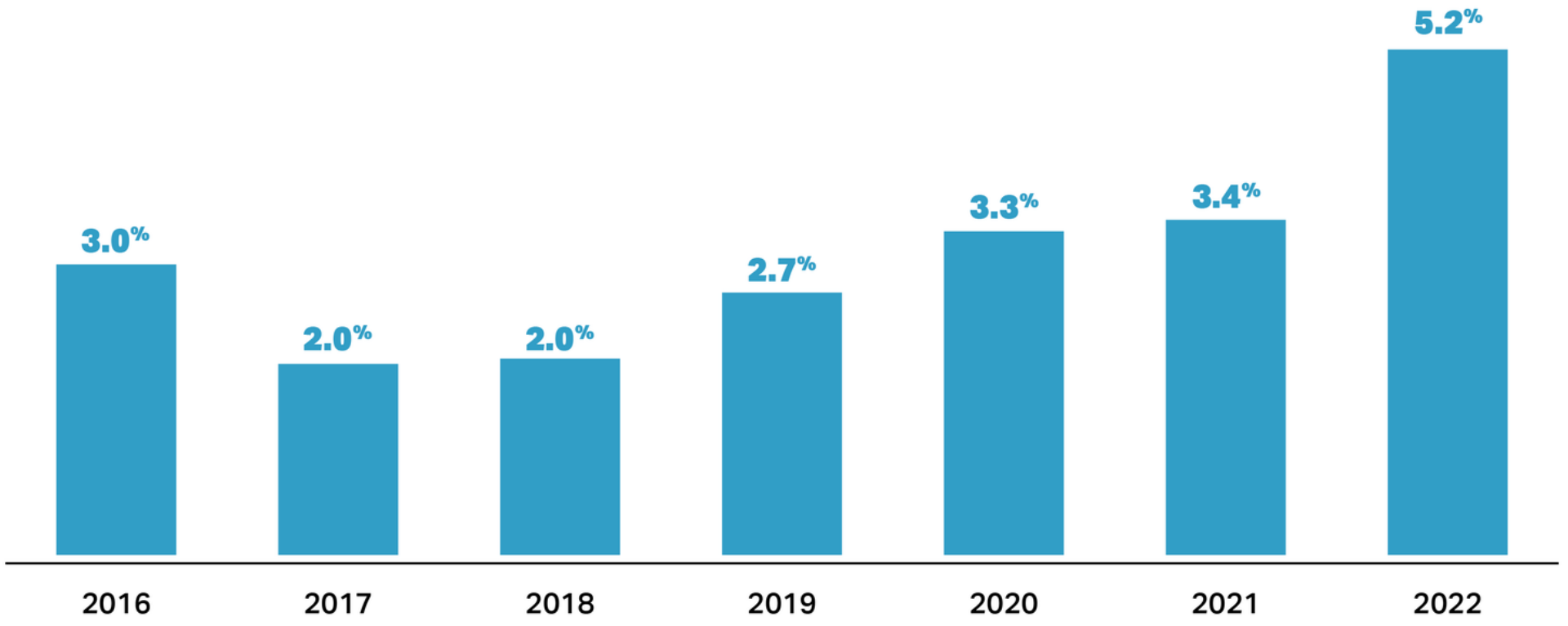


Notes: Certain discharges were excluded from the analysis including transfers, rehabilitation stays, those from Shriner's Hospital, and those with LOS more than 180 days.
1: Net asset totals exclude Steward, Shriner's, Tenet and Trinity. 80% of 2021 assets were held by 5 hospital systems.
Sources: CHIA Hospital Inpatient Discharge Data, 2013-2021 (volume and LOS). Spending data are derived from full and partial-claims commercial spending by category for 2016-21 and full claims only from 2013-16 (based on data availability) from the Massachusetts Center for Health Information and Analysis, Annual Reports on the Performance of the Massachusetts Health Care System 2013-2023.

- Net assets for Massachusetts hospital systems increased from $22 to $41 Billion over this period.[1]

National commercial hospital prices increased markedly in 2022.

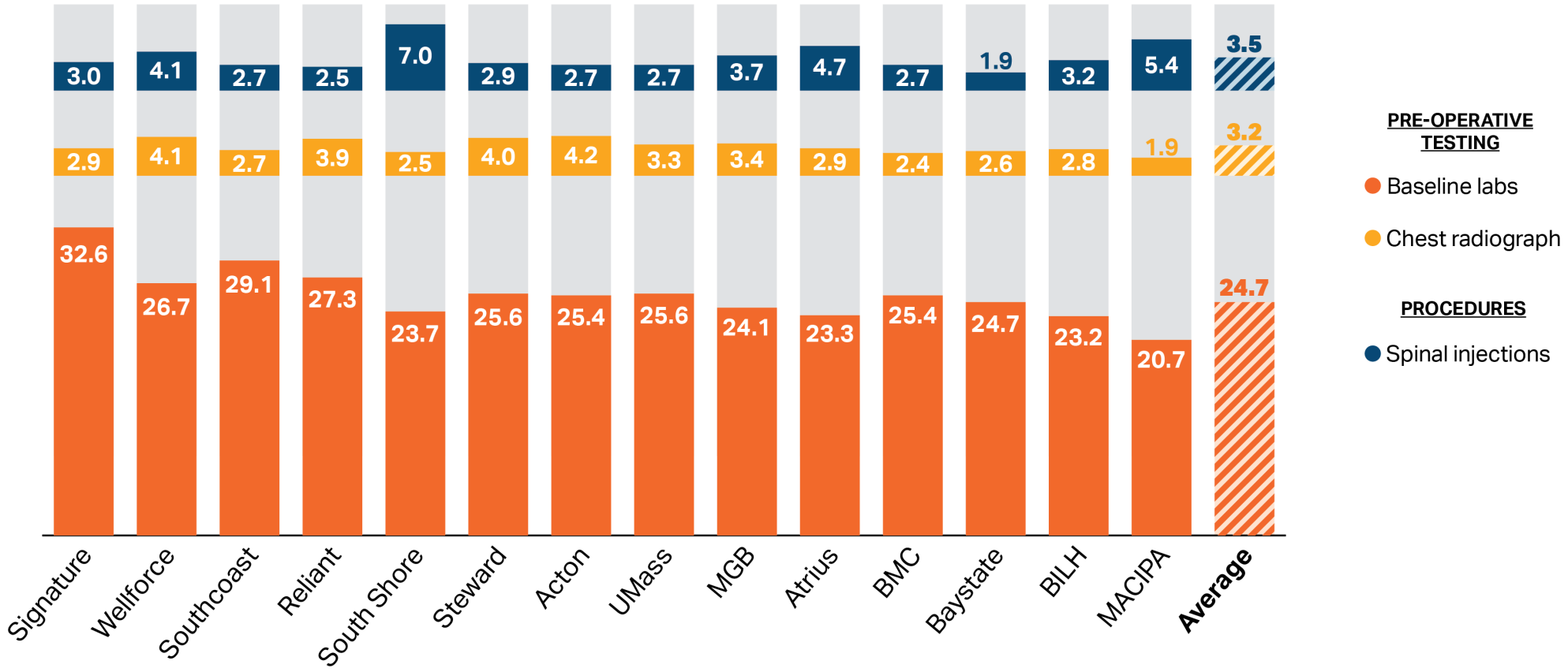
Annual growth in commercial hospital prices from the previous calendar year to the year shown.



Source: Altarum Institute, Health Sector Economic Briefs: Price brief. Underlying data provided to the HPC by the Altarum Institute. Prices based on underlying producer price index data for hospitals calculated by the Bureau of Labor Statistics.

Low-Value Care Opportunity: Between 20% and 33% of eligible patients of the largest provider groups in Massachusetts received unnecessary pre-operative baseline labs.

Low-value pre-operative testing and procedures per 100 eligible commercial patients, 2019: baseline labs, chest radiograph, spinal injections

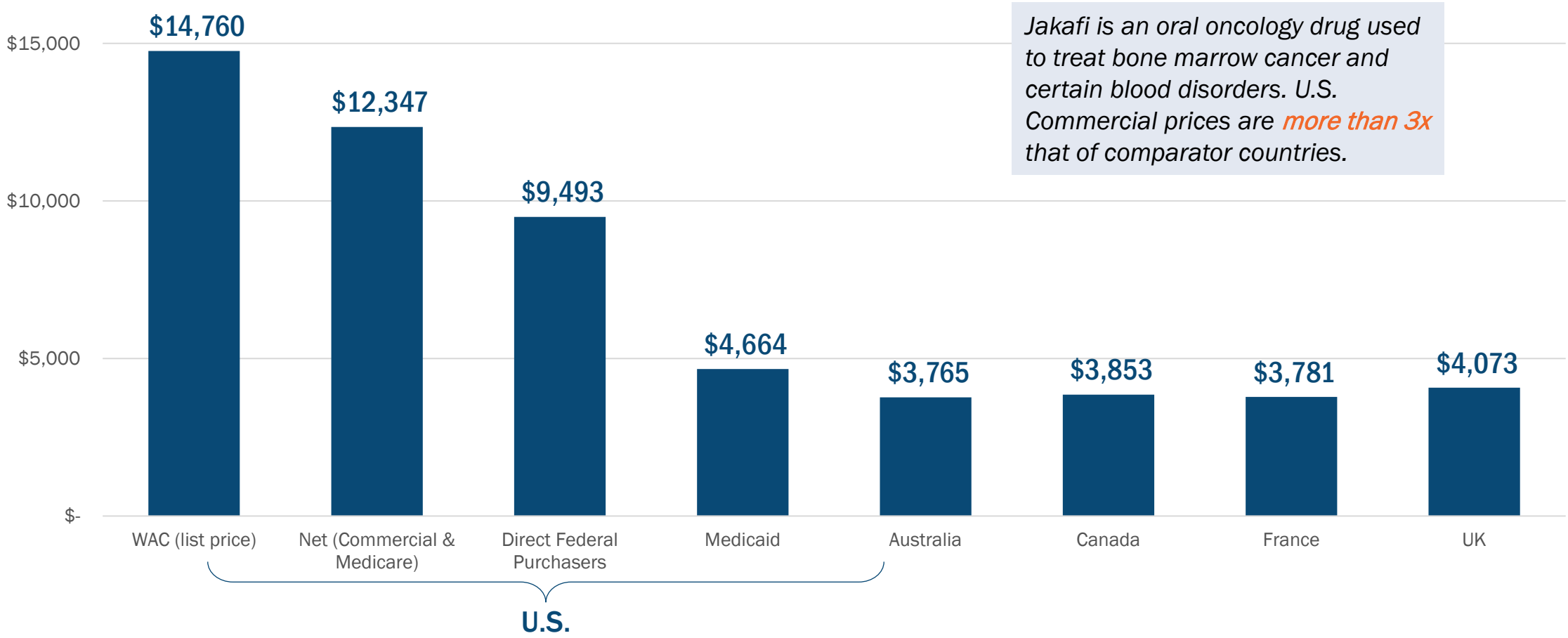


Notes: Baseline labs = Baseline labs in patients without significant systemic disease undergoing low-risk surgery; Chest radiograph = Chest radiographs occurring less than 30 days before a low or intermediate risk non-cardiothoracic surgical procedure (not associated with inpatient or emergency care). Based on a patient's medical history and inclusion criteria for each low-value measure, a patient could be counted in multiple measures. Results for the low-value stent procedure are not presented by provider organization due to small numbers at some organizations. Average reflects rate for all commercial patients, including patients not attributed to a listed provider organization.

Sources: HPC analysis of Center for Health Information and Analysis All-Payer Claims Database, 2019, V 10.0.

Drug Pricing Opportunity: A recent HPC examination of high cost drugs found that U.S. commercial prices are at least 3x more expensive than prices in four comparator countries.

Price for a month supply of Jakafi



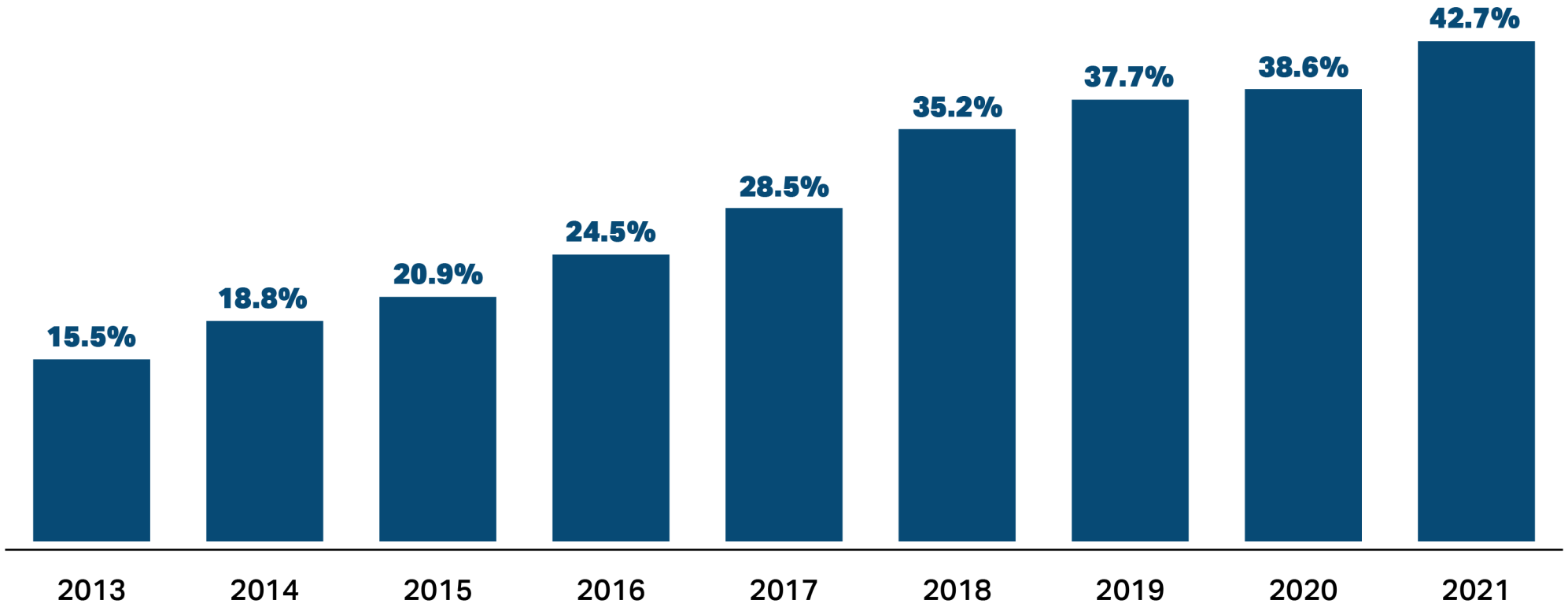
Notes: All prices were as of December 2021. The list price is also known as the Wholesale Acquisition Cost (WAC) and is the price charged by drug manufacturers to wholesalers or pharmacies, before discounts or rebates are applied. Net commercial and Medicare prices were obtained from SSR Health and are calculated by comparing publicly reported manufacturer revenue with estimated utilization data. Medicaid prices were calculated using Medicaid's formula available online. Drug prices for federal purchasers and comparator countries were publicly available online in fee schedules and represent the "maximum" being paid in other countries.
Sources: IBM Red Book; SSR Health; VA Office of Procurement, Acquisition, and Logistics; Australia Fee Schedule; Canada (Quebec) List of Medications; French Public Drug Database; NHS Prescription Services

Presentation Outline

1. Recent Spending Trends
2. Opportunities for Reducing Spending Growth
3. **Implications of Recent Spending Growth for Affordability of Health Care**

The percentage of commercially-insured Massachusetts residents enrolled in high deductible plans has increased from 16% to 43% from 2013 to 2021.

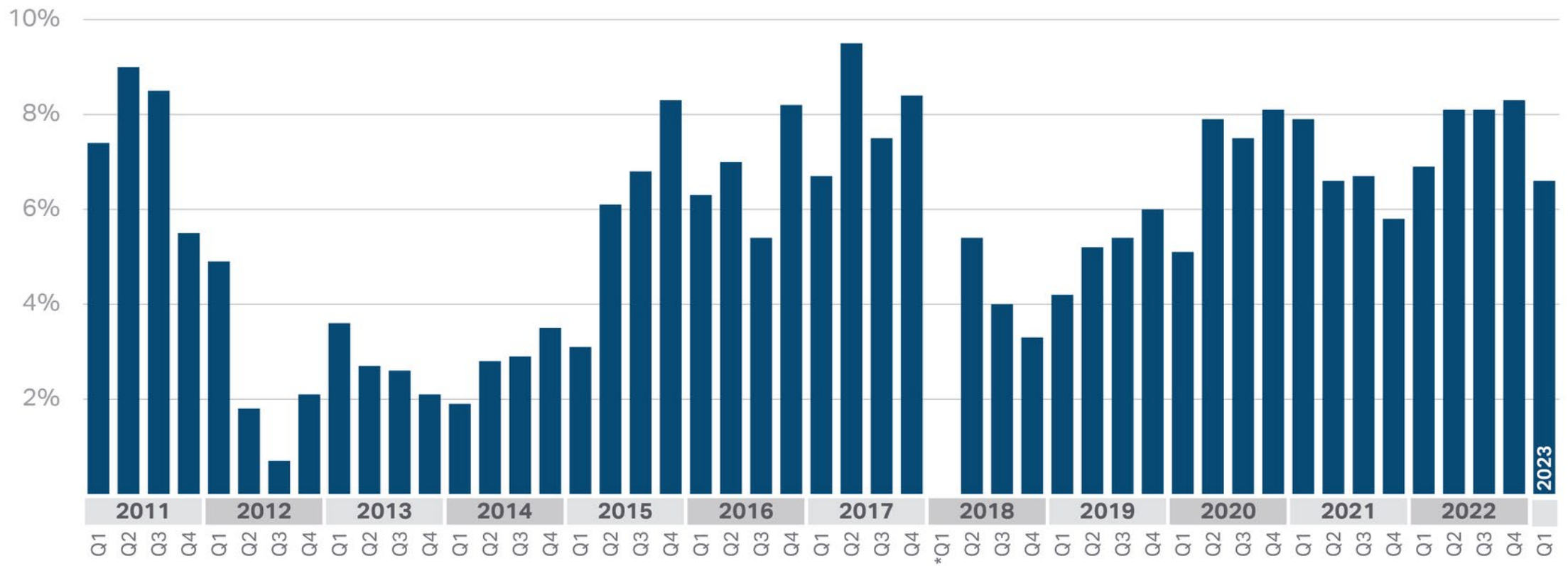
Percentage of Massachusetts commercial enrollees whose plan has a high deductible, 2013-2021



Notes: High deductible plans are defined federally as a plan having a single/family deductible of $1,250/$2,500 in 2013-2014; $1,300/$2,600 in 2015-7; $1,350/$2,700 in 2018-9 and $1,400/$2,800 for 2020-21. GIC plans do not allow high deductibles.
Source: Center for Health Information and Analysis Annual Reports, 2016-2023.

Annual premium increases for companies with fewer than 50 employees and individuals purchasing their own insurance have averaged 6-8% in recent years.

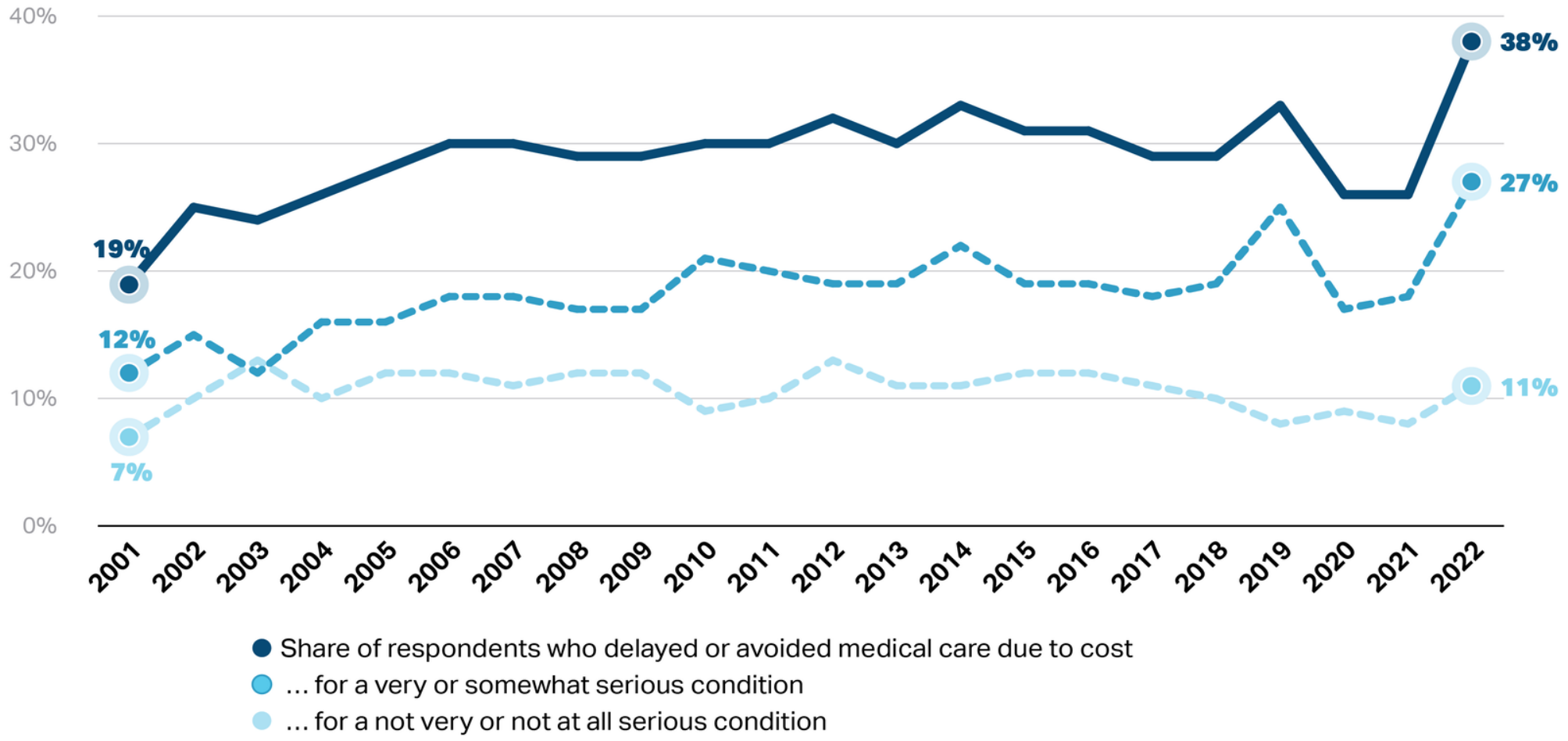
Year-over-year approved enrollment-weighted average rate increases for the Massachusetts merged market, 2011-2023



Notes: The Q1 2018 increase was 18% due to federal changes to cost sharing reduction subsidies in the Affordable Care Act exchanges. This data point was removed from the figure.
Source: Massachusetts Division of Insurance merged market quarterly rate increase data.

The percentage of US residents putting off medical care due to cost reached an all-time high of 38% in 2022. Most put off care for serious conditions.

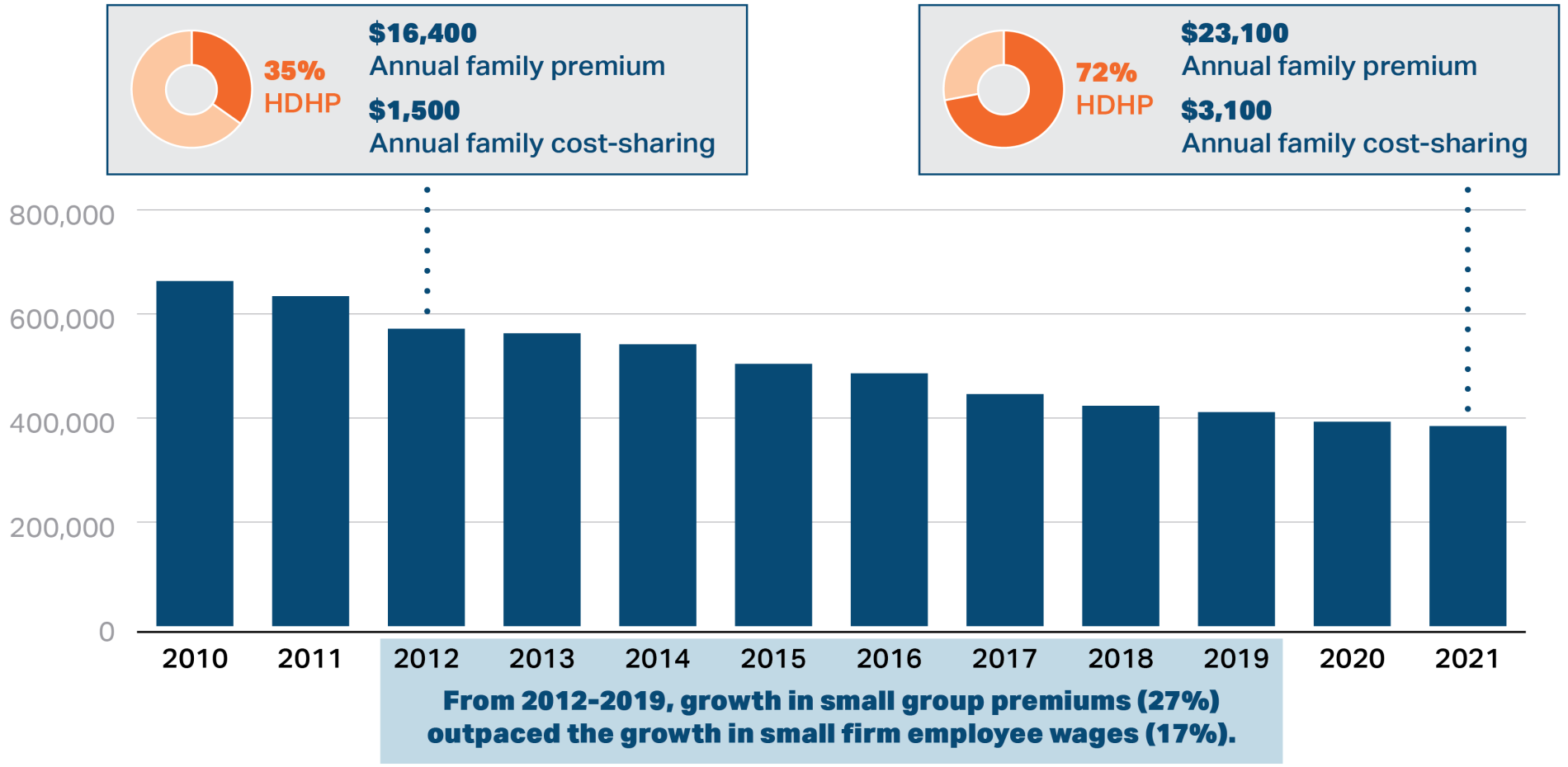
Share of US respondents who put off medical treatment because of cost in the prior 12 months, and by severity of condition or illness



Note: Includes U.S. adults aged 18 and older living in all 50 states and the District of Columbia. "Within the last 12 months, have you or a member of your family put off any sort of medical treatment because of the cost you would have to pay? [IF YES] When you put off this medical treatment, was it for a condition or illness that was -- very serious, somewhat serious, not very serious or not at all serious?"
Source: Gallup, Gallup Poll Social Series (GPSS), Health and Healthcare poll, November 9-December 2, 2022.

For small employers in Massachusetts, premium growth has outpaced wage growth while out of pocket spending and the use of high deductible health plans has doubled since 2010.

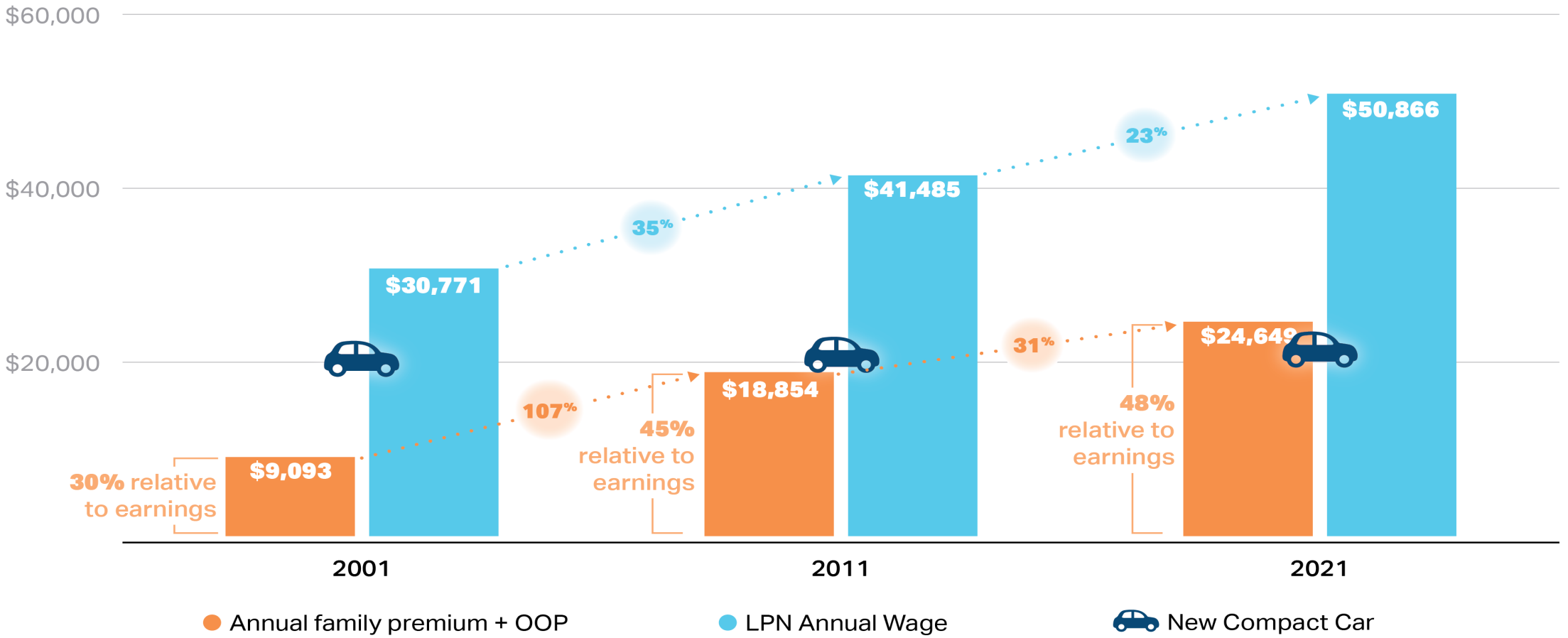
Small group (firms with between 1 and 50 employees) enrollment, percent of plans with HDHPs, and average premiums and cost-sharing paid.



Notes: High Deductible plans were defined as single/family plans with a deductible of more than $1,200/$2,400 in 2012 and of $1,400/$2,800 in 2021. Enrollment reflects membership in commercial carriers and health maintenance organizations. Sources: Wage data from the CPS-ASEC. Premium and HPHC data from CHIA Annual Reports. PMPM premium data from the CHIA Annual Reports were converted to family premiums using data from the Agency for Healthcare Resources and Quality (the MEPS-IC). Enrollment data from Massachusetts Division of Insurance, Small Employer & Individual Membership Highlights, 2010-2021.

Average annual health care spending for a Massachusetts family with commercial insurance (total premium and out of pocket spending) approached $25,000 in 2021.

Average Massachusetts family health insurance premium plus out of pocket health care spending combined compared to an average salary for a licensed practical nurse in Massachusetts and the average national price of a new compact car, 2001, 2011 and 2021



Sources: Wage data from the US Bureau of Labor Statistics. Family Health Insurance premiums are for Massachusetts from the Agency for Health Care Quality – Medical Expenditure Panel Survey, Insurance Component. Car cost information is based on car-specific inflation from the BLS and the compact car price index from Kelly Blue Book. https://www.in2013dollars.com/New-cars/price-inflation/2000-to-2019?amount=15000