MASSACHUSETTS
HEALTH POLICY COMMISSION

Estimating the Impact of COVID-19 on the Health Care System

Updated July 22, 2020

Background and Next Steps

As part of its efforts to support the Commonwealth with **insights about the impact of the COVID-19 pandemic on the Massachusetts health care system**, the Health Policy Commission (HPC) has compiled the most recent national and state information available to understand the range of potential impacts.

In the following slides, the HPC:

- Summarizes select **industry reports and other economic and survey data** on health care utilization and spending and provider and payer impacts, and
- Using Massachusetts utilization and spending data, models **differential impacts** of the pandemic on use of care by service category, provider organization and sector.

The HPC will **continue to analyze** the impact of COVID-19 on spending and utilization in Massachusetts as data becomes available and monitor health system changes to **inform policy efforts** during and after the crisis.

Potential Impacts of the COVID-19 Pandemic on the Health Care System: June Update

Presentation Agenda

- Summary of new industry reports and studies of the impact of the COVID-19 pandemic on spending and utilization through mid-May, after most states have reopened to varied extents

- Continued discussion of the implications of the pandemic on and opportunities for the HPC's work including preliminary results of impact modeling on provider organizations

The reduction in health care utilization and spending in April was dramatic, with declines of greater than 50% in many categories.

Change in quantity for April 2020 relative to April 2019

Hospital Services

- Emergency department visits: **-50%**
- Inpatient discharges: **-33%**
  - *Smallest hospitals: -38%*
  - *Largest hospitals: -28%*
- Outpatient revenue: **-50%**
- Operating room minutes: **-80%**

Physician Office Visits and Services

Variation by type of care (see next slide)

Overall: **-60% to -70%**

Prescriptions

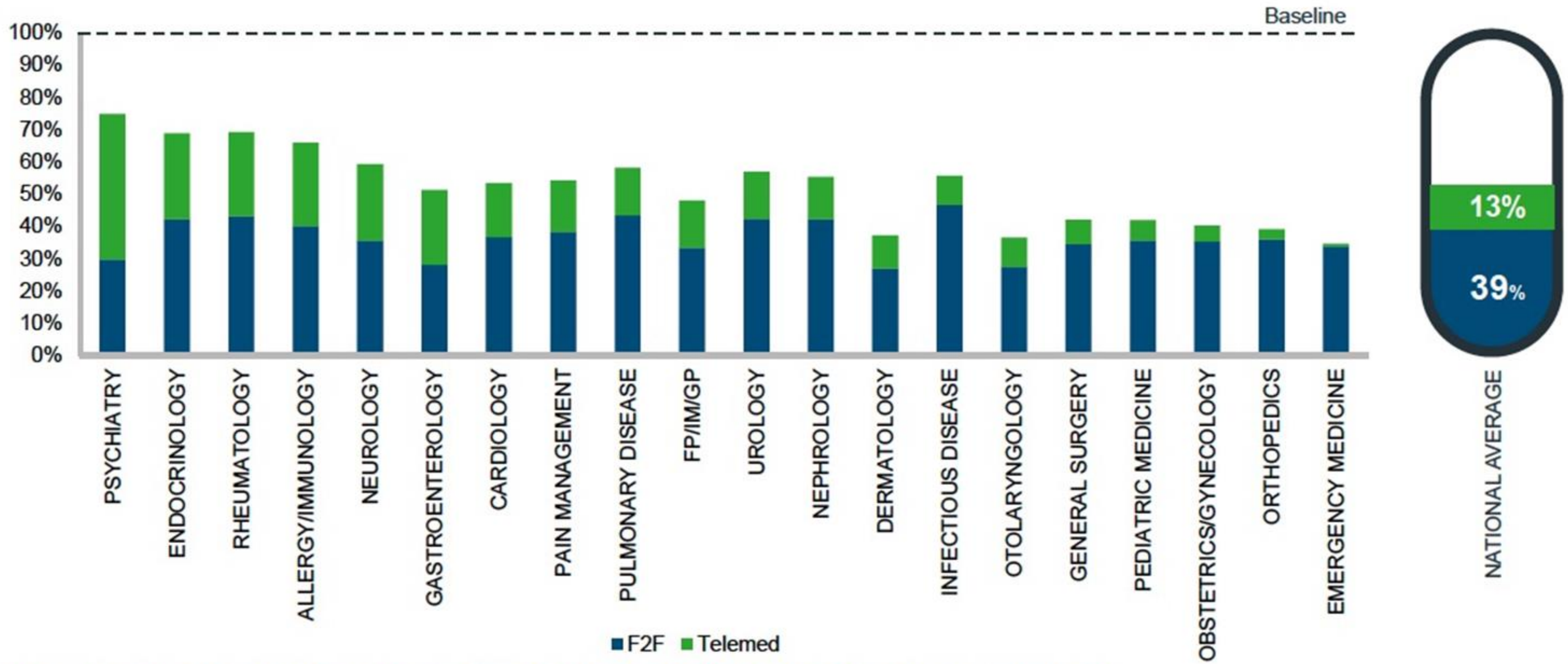
Reductions tied to fewer office visits that would initiate new prescriptions

Overall: **-10%**

Sources: KaufmanHall, May 2020 National Hospital Flash Report; Strata Decision Technology, National Patient and Procedure Volume Tracker, version 5.11.20; IQVIA, Monitoring the impact of COVID-19 on the Pharmaceutical Market, May 15, 2020, data week ending May 1, 2020; Ateev Mehrotra, Michael Chernew, David Linetsky, Hilary Hatch, and David Cutler, "The Impact of the COVID-19 Pandemic on Outpatient Visits: A Rebound Emerges," The Commonwealth Fund and Phreesia; CDC Morbidity and Mortality Weekly Report, Impact of the COVID-19 Pandemic on Emergency Department Visits — United States, January 1, 2019–May 30, 2020, June 3, 2020

The reduction in physician care and use of telehealth varied by specialty.

Visit volume (blue = in-person; green = telehealth) for week ending 5/1/20 relative to Jan-Feb 2020



Source: IQVIA: Real World Data, Medical Claims, 2020, adjusted, baseline is set as average visit volume for first 8 weeks of 2020 for each respective specialty

COVID-19 Market Impact - w/e May 1, 2020

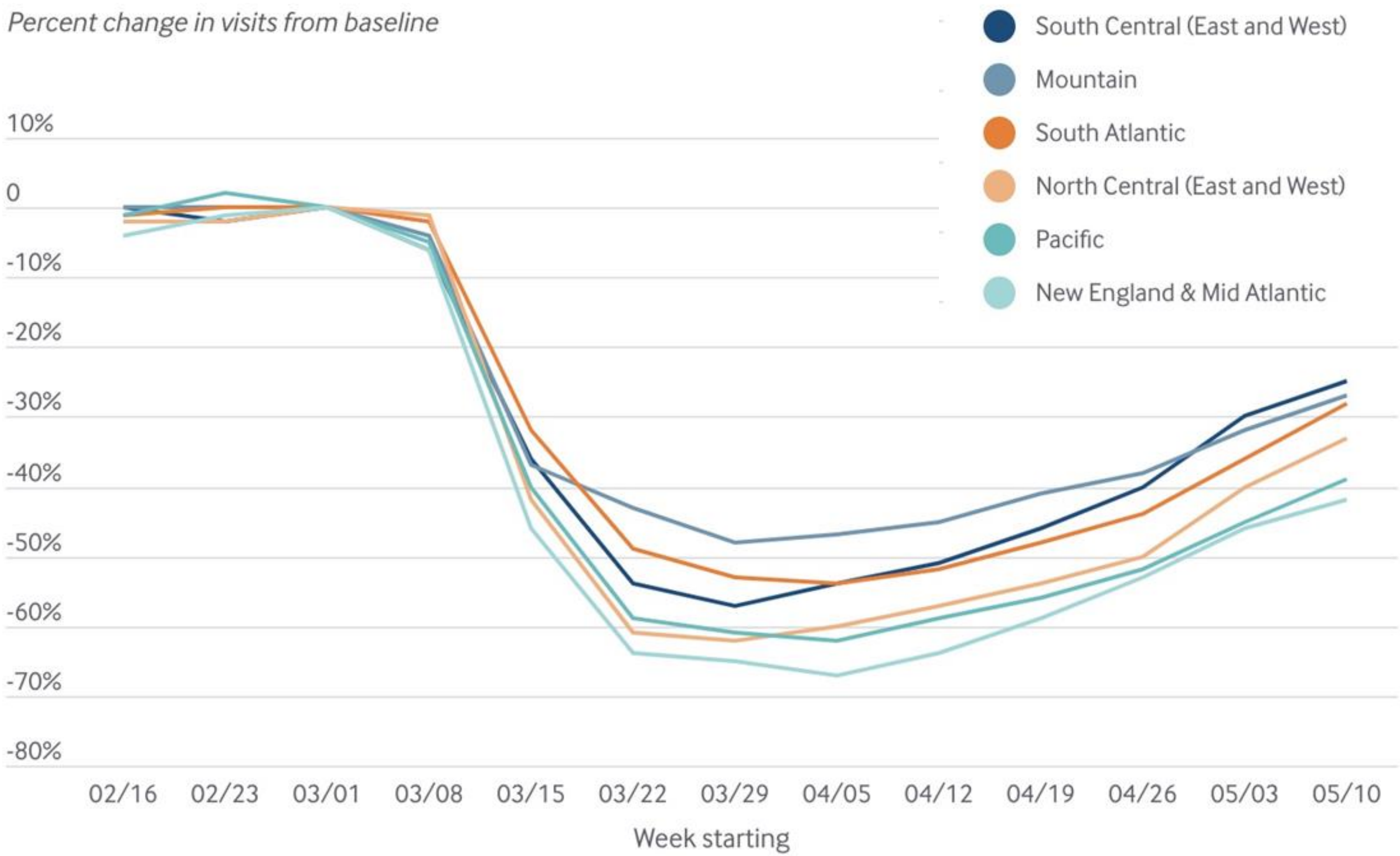
IQVIA

HPC

Sources: IQVIA, Monitoring the impact of COVID-19 on the Pharmaceutical Market, May 15, 2020, data week ending May 1, 2020.
Notes: “F2F” refers to in-person care that is delivered face to face.

Data through mid-May shows an increase in visit volume after steep declines in March and April, with New England rebounding more slowly.

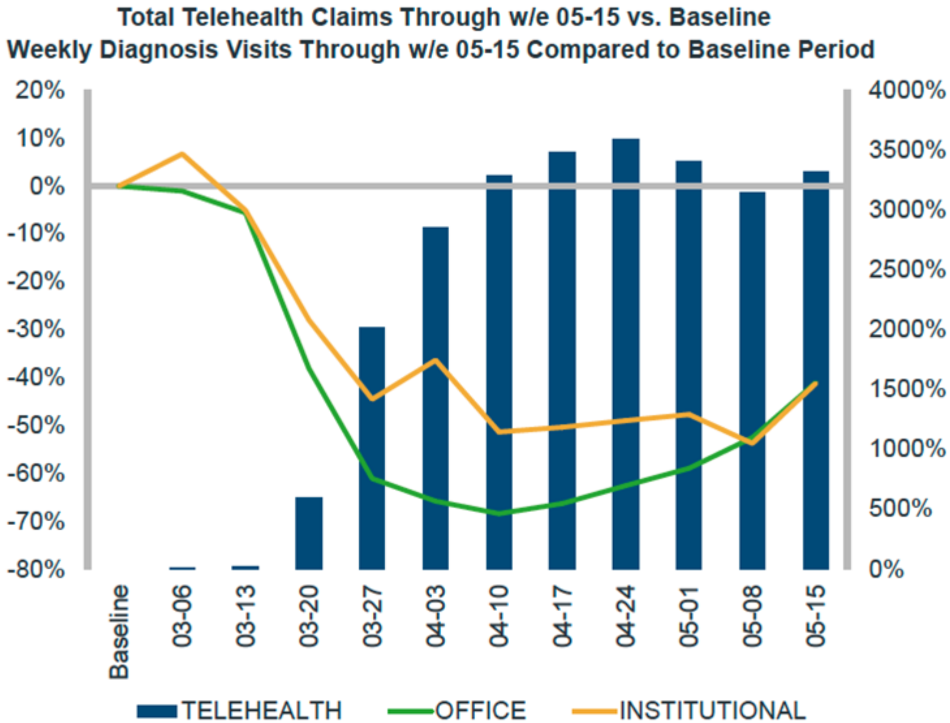
Visit volume (all types) relative to week of March 1, 2020

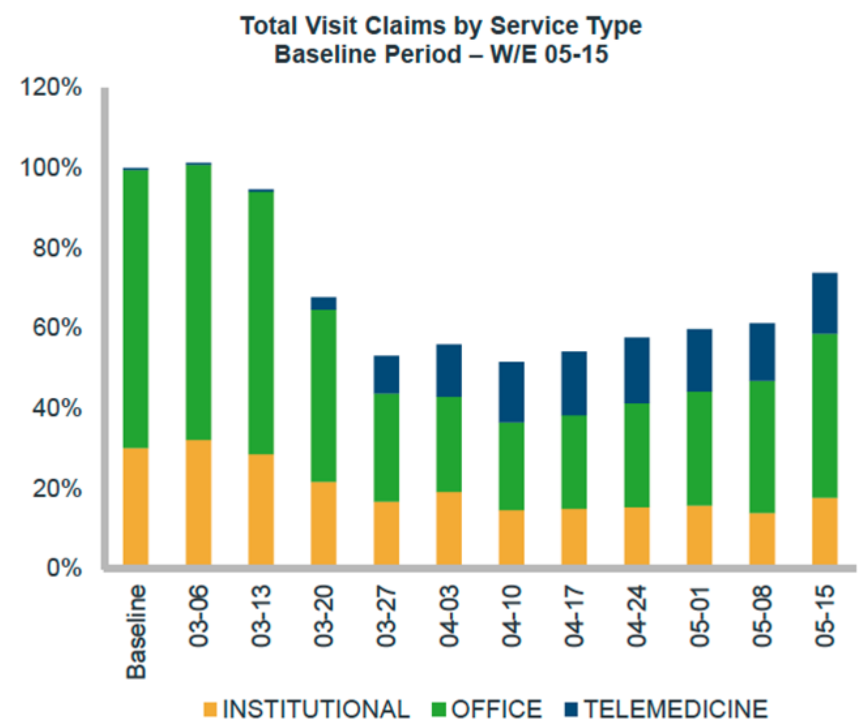


Sources: Ateev Mehrotra, Michael Chernew, David Linetsky, Hilary Hatch, and David Cutler, "The Impact of the COVID-19 Pandemic on Outpatient Visits: A Rebound Emerges," The Commonwealth Fund and Phreesia. Data from from Phreesia's clients, which include more than 1,600 provider organizations representing more than 50,000 providers across all 50 states.

Through mid-May, total telehealth claims have held steady even as some office-based care resumed.

Visit volume (all types) relative to January – February, 2020





Data for latest week date controlled against prior periods; estimates have been applied to reflect anticipated late-adjudicated claims based on historical rates

Source: IQVIA: Medical Claims Data Analysis, 2020; Baseline = Average of TH visits for period W/E 1/10/2020-2/28/2020,
Estimated amounts for latest 2 weeks applied based on likely claims still to be received due to data latency or claim processing delays; See Appendix for further details

COVID-19 Market Impact - w/e May 15, 2020

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IQVIA, Monitoring the impact of COVID-19 on the Pharmaceutical Market, May 29, 2020, data week ending May 15, 2020.

IQVIA

In the Northeast, telehealth increased from 0.07% of all claims to 11.1% from March 2019 to March 2020, compared to 7.5% in the U.S. overall.

FAIR Health
Know Your Source

Monthly Telehealth Regional Tracker, Mar. 2020

Northeast: CT, ME, MA, NH, NJ, NY, PA, RI, VT

Top Five Procedure Codes by Utilization, 2019 vs. 2020

In order from most to least common

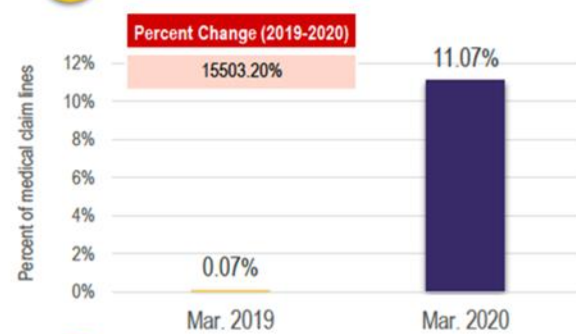
Mar. 2019

CPT®/HCPCS	DESCRIPTION
99201	NEW PATIENT OFFICE OR OTHER OUTPATIENT VISIT, TYPICALLY 10 MINUTES
99444*	PHYSICIAN OR HEALTHCARE PROFESSIONAL EVALUATION AND MANAGEMENT OF PATIENT CARE BY INTERNET (EMAIL) RELATED TO VISIT WITHIN PREVIOUS 7 DAYS
90834	PSYCHOTHERAPY, 45 MINUTES
99213	ESTABLISHED PATIENT OFFICE OR OTHER OUTPATIENT VISIT, TYPICALLY 15 MINUTES
99441	PHYSICIAN TELEPHONE PATIENT SERVICE, 5-10 MINUTES OF MEDICAL DISCUSSION

Mar. 2020

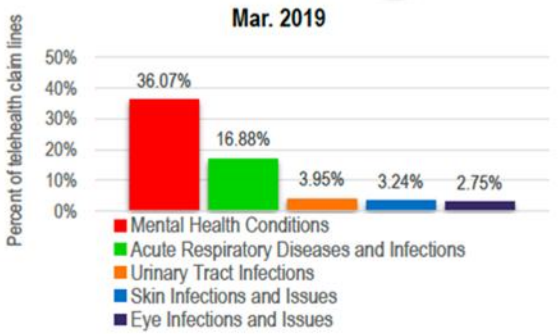
CPT®/HCPCS	DESCRIPTION
99213	ESTABLISHED PATIENT OFFICE OR OTHER OUTPATIENT VISIT, TYPICALLY 15 MINUTES
99214	ESTABLISHED PATIENT OFFICE OR OTHER OUTPATIENT VISIT, TYPICALLY 25 MINUTES
90837	PSYCHOTHERAPY, 60 MINUTES
90834	PSYCHOTHERAPY, 45 MINUTES
99442	PHYSICIAN TELEPHONE PATIENT SERVICE, 11-20 MINUTES OF MEDICAL DISCUSSION

Volume of Claim Lines, 2019 vs. 2020

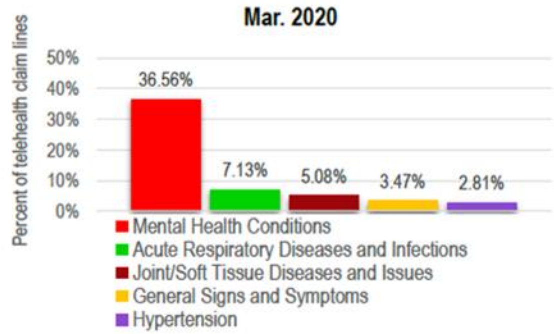


Top Five Diagnoses, 2019 vs. 2020

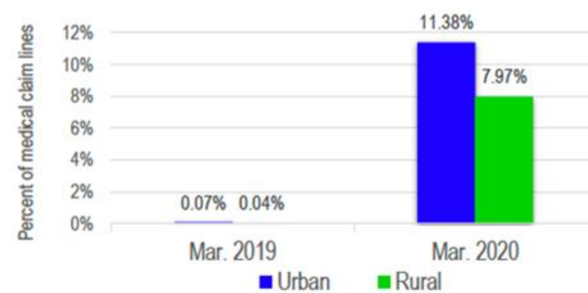
Mar. 2019



Mar. 2020



Urban vs. Rural Usage, 2019 vs. 2020



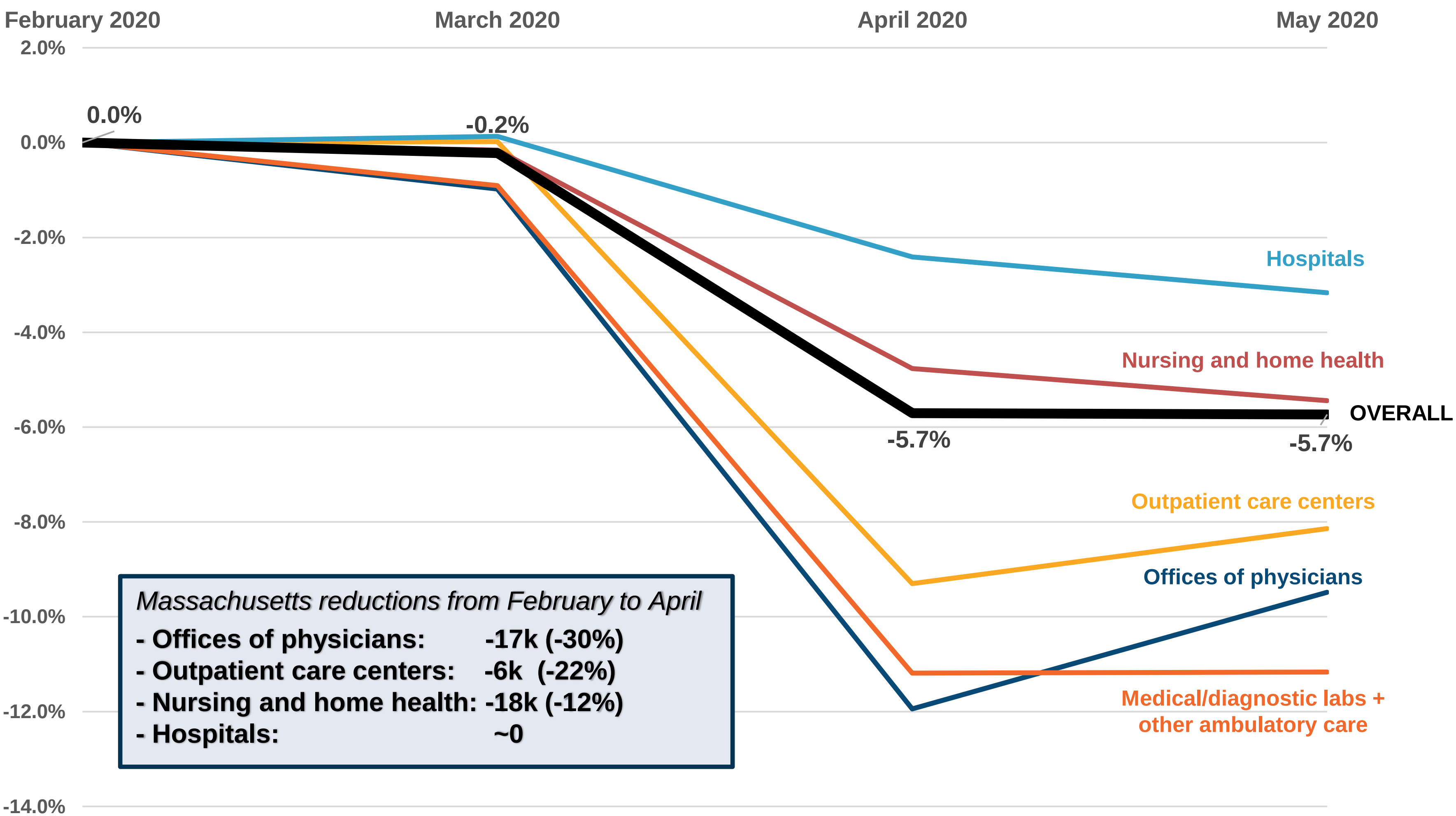
* Code deleted at the end of 2019.

Source: FH NPIC® database of more than 31 billion privately billed medical and dental claim records from more than 60 contributors nationwide.

fairhealth.org | fairhealthconsumer.org | fairhealthconsumidor.org | 855-301-FAIR (3247) | info@fairhealth.org

Overall health care employment has dropped 6% nationally since February 2020, with some variation among sectors, but all declining.

Percent change in health care industry employment, by sector, February – May, 2020



Sources: BLS: Table B-1. Employees on nonfarm payrolls by industry sector and selected industry detail released on June 5, 2020 and May 8, 2020.

Notes: Overall and figure excludes office of dentists and other health practitioners. "Nursing and home health" includes employment numbers for nursing and residential care facilities and home health care services.

Results of a new survey of Massachusetts providers suggest primary care practices are struggling financially.

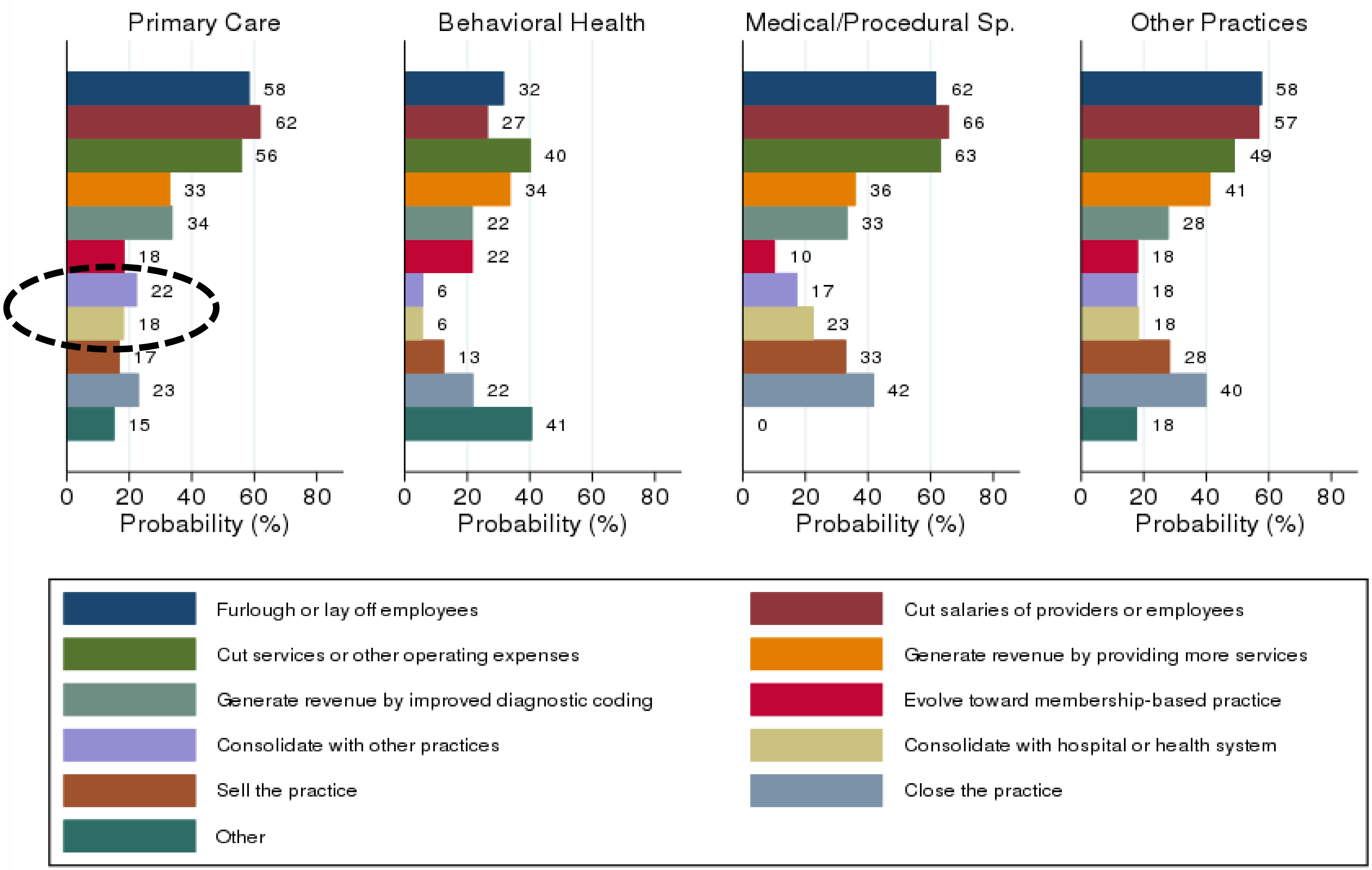
A research collaboration across faculty from the state's medical schools in conjunction with **HPC**, the **Massachusetts Chapter of the American College of Physicians**, and other **academic partners** produced a targeted survey of provider practices from late May to early June 2020 on the impacts of COVID-19.

- Responses from more than 400 practices across all provider types
- Practice-level results are weighted, where appropriate, by provider FTE
- Convenience sample – not necessarily representative

NOTE: Results are preliminary

Primary care practices are considering a range of potential responses, including furloughs, salary or service cuts, and increased consolidation.

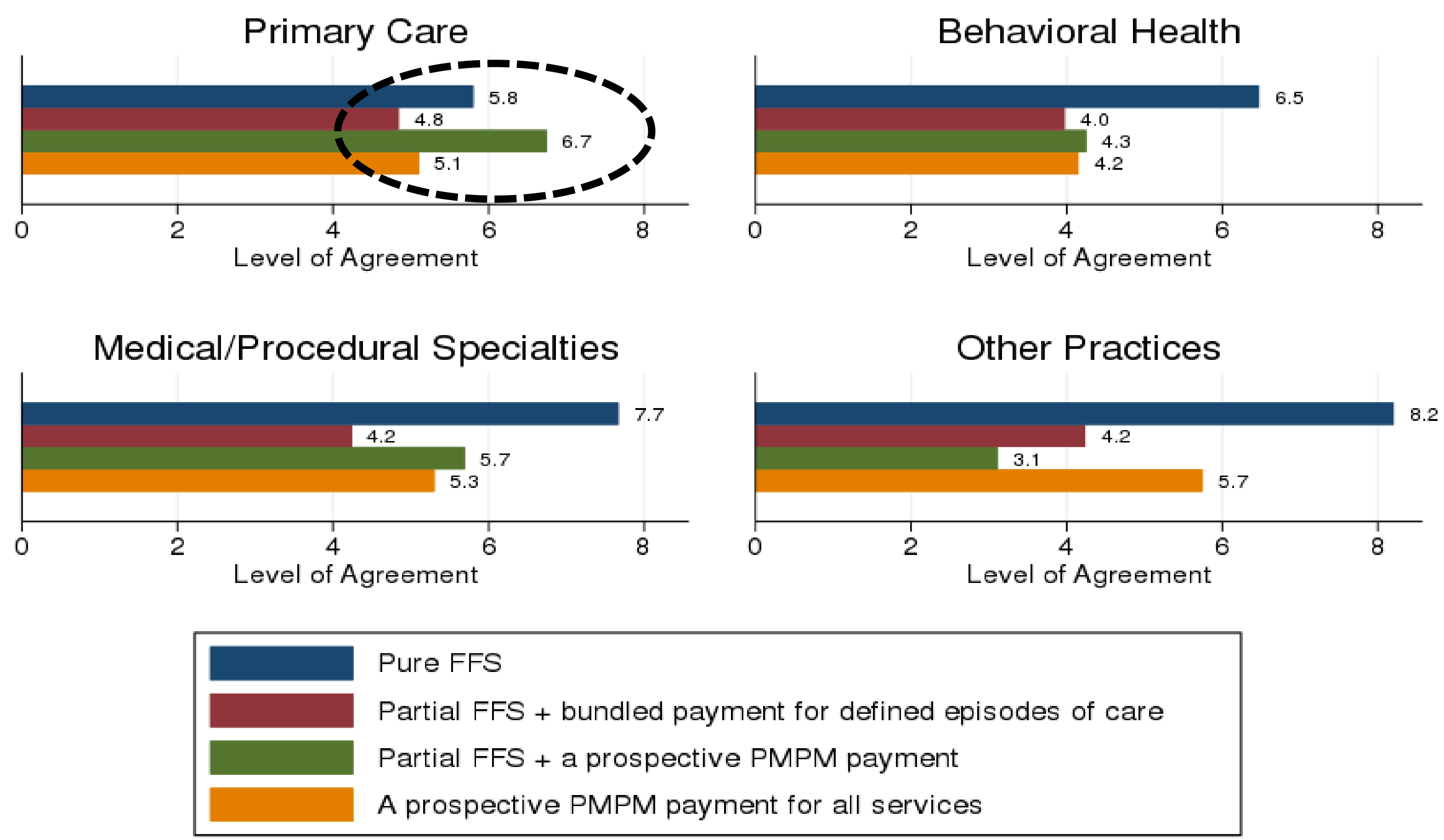
Of all practices, % that checked each response (multiple responses allowed). PRELIMINARY RESULTS



Source: Preliminary results from survey of Massachusetts provider practices conducted May 20 to June 10; results weighted by practice FTE

Many primary care practices report an interest and preference for a partial capitation payment system going forward.

Of all practices, subjective favorability of each payment method. DATA ARE PRELIMINARY



Notes: FFS = fee-for=service, PMPM = per-member-per-month.
Values are weighted by the pre-COVID practice size.

Source: Preliminary results from survey of Massachusetts provider practices conducted May 20 to June 10; results weighted by practice FTE

Several estimates suggest a significant dampening of spending for calendar year 2020 (relative to 2019).

Decrease in spending from reduction in *non*-COVID-19 care

- **-4 to -22%** (Milliman Actuarial Consulting)
  - *Largest magnitude for Commercial*
  - *Smallest magnitude for Medicaid*
- **-12%** (implied) (Kronick, May 2020 Health Affairs blog)

Increase in spending due to COVID-19 Care

- **1.6 to 2.7%** (Milliman)
- **1.0 to 1.6%** (Kronick)

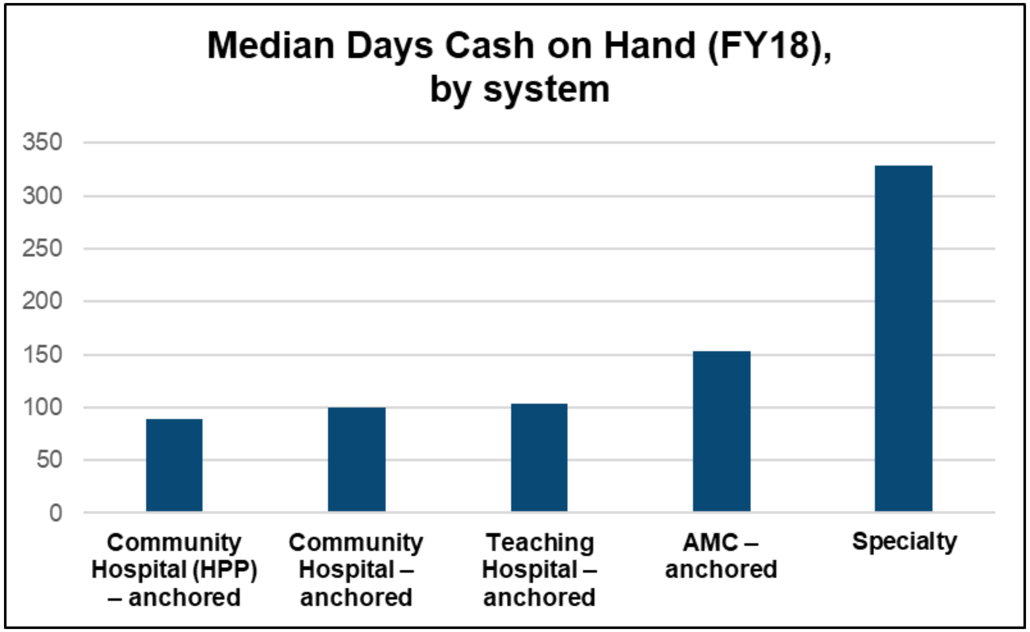
The HPC applied estimates in the midpoint of this range to industry reports of spending impacts by category of care to estimate annualized impacts by provider organization type.

Sources: Richard Kronick, "How COVID-19 Will Likely Affect Spending, And Why Many Other Analyses May Be Wrong", Health Affairs Blog, May 19, 2020; Milliman Actuarial Consulting, "Estimating the Impact of COVID-19 on healthcare costs in 2020: key factors of the cost trajectory," Hayley Rogers, Charley Mills and Matt Kramer, April 2020

Results of Simulated Effects on Massachusetts Providers and Total Spending for Calendar Year 2020

Relatively **larger** impacts expected for:

- **Community Hospitals**
  - Generally rely on a greater share of revenue is from outpatient care, which has a larger reduction
  - On average, community hospitals were in a more difficult financial position pre-COVID



- **Physician-led Organizations and Community Health Centers**
  - Less inpatient revenue to offset reductions in non-COVID care elsewhere

Board Discussion: HPC Policy Priorities and Workstreams for 2020

The HPC can support the Commonwealth with insights about the impact of the COVID-19 pandemic and inform policy efforts during and after the crisis.

Potential HPC work:

- Examine **differential impacts** on different types of provider organizations, for example:
  - Community hospitals and Academic Medical Centers (AMCs)
  - Physician practices, including primary care practices
  - Community Health Centers
- Model impact of potential **market structure changes**, including consolidation pressures resulting from COVID-19
- Evaluate the impact of **temporary** changes in practice and policy (e.g., expansion of telehealth, expanded scope of practice, setting of out-of-network benchmarks, reduction in unnecessary or low-value care, reduction in administrative complexity) and make policy recommendations to **sustain positive changes**
- Explore, with other public and private partners, new/revised payment models for **primary care, behavioral health care, and hospitals** that can provide necessary revenue, while still incentivizing efficient and innovative care delivery
- Evaluate **health system and workforce capacity** to support health planning for potential future infection waves or pandemics
- Target **innovative investments** to foster resiliency within the health care system and communities most impacted by the COVID-19 pandemic and resulting health, social, and economic disruptions (e.g., MassUP)

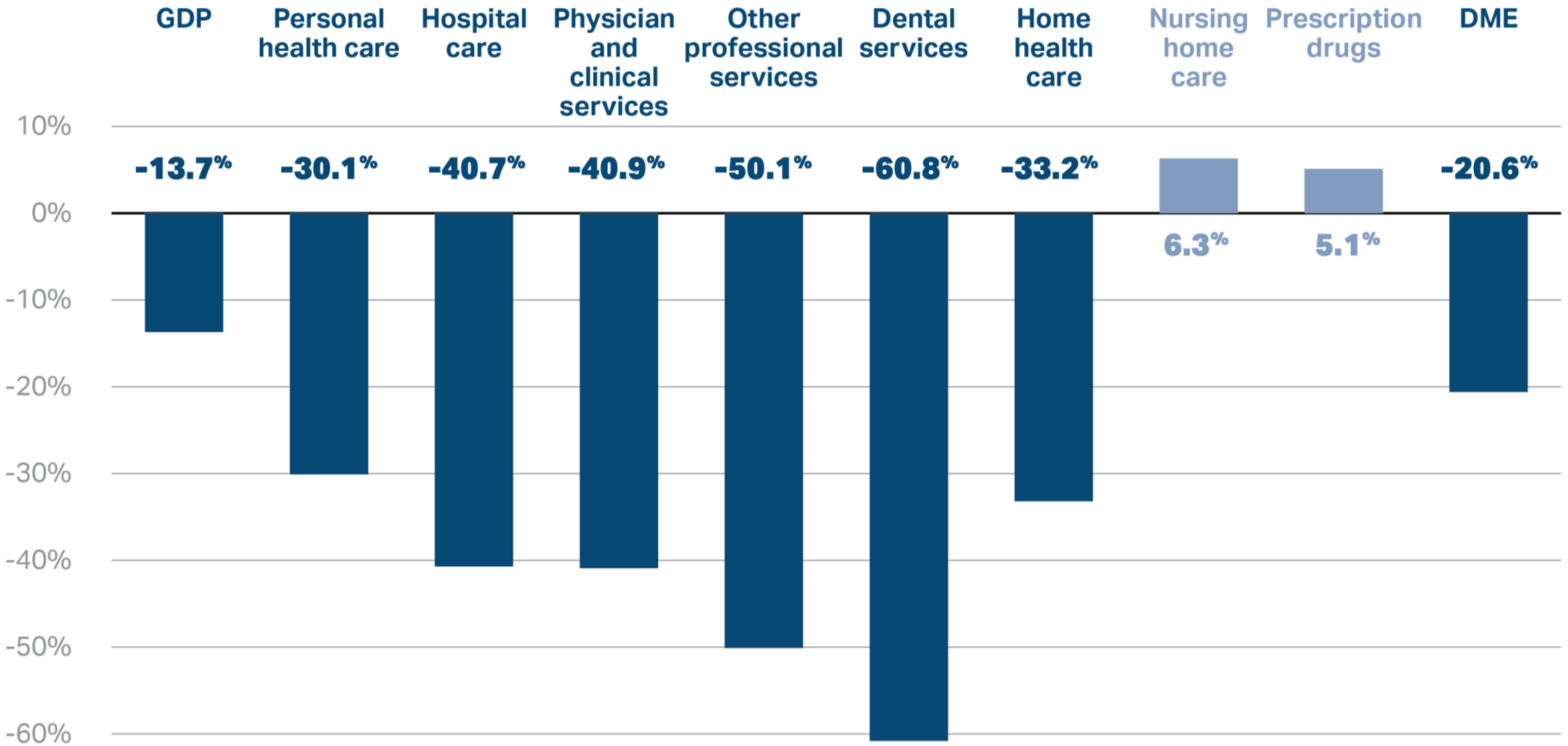
Summary: Updated Findings of the Impact of COVID-19 on Health Care

As the COVID-19 pandemic produces unique challenges to the Massachusetts health care system, the HPC is leveraging its **data assets, research expertise, investment experience, and market knowledge** to support policy efforts during and after the crisis. A compendium of industry reports on utilization trends and other COVID-related findings may be found on the HPC's website.

- Health care spending dropped 30% in April. Overall health care spending in 2020 is still on track to be approximately 10% **lower** than in 2019.
- Health care spending dropped **faster** than the overall economy in April (30% vs. 14%), but health care employment dropped **slower** than overall employment (6% vs. 12%).
- Most Massachusetts hospitals had **negative margins** in the first quarter of 2020.
- One national for-profit health plan that operates in Massachusetts reported a **doubling of net income** in April-June of 2020, driven by a 70% medical loss ratio (vs. 83% MLR in Q2, 2019)
- Independent primary care practices in Massachusetts are **much more likely to say they will close** versus hospital or health system-owned practices.
- Pediatric visits remain far below pre-pandemic levels while adult visits have **returned to baseline levels** as of mid-June when including telehealth.
- Telehealth visits have **declined by about a third** from their April peak as adult in-person visits have increased.

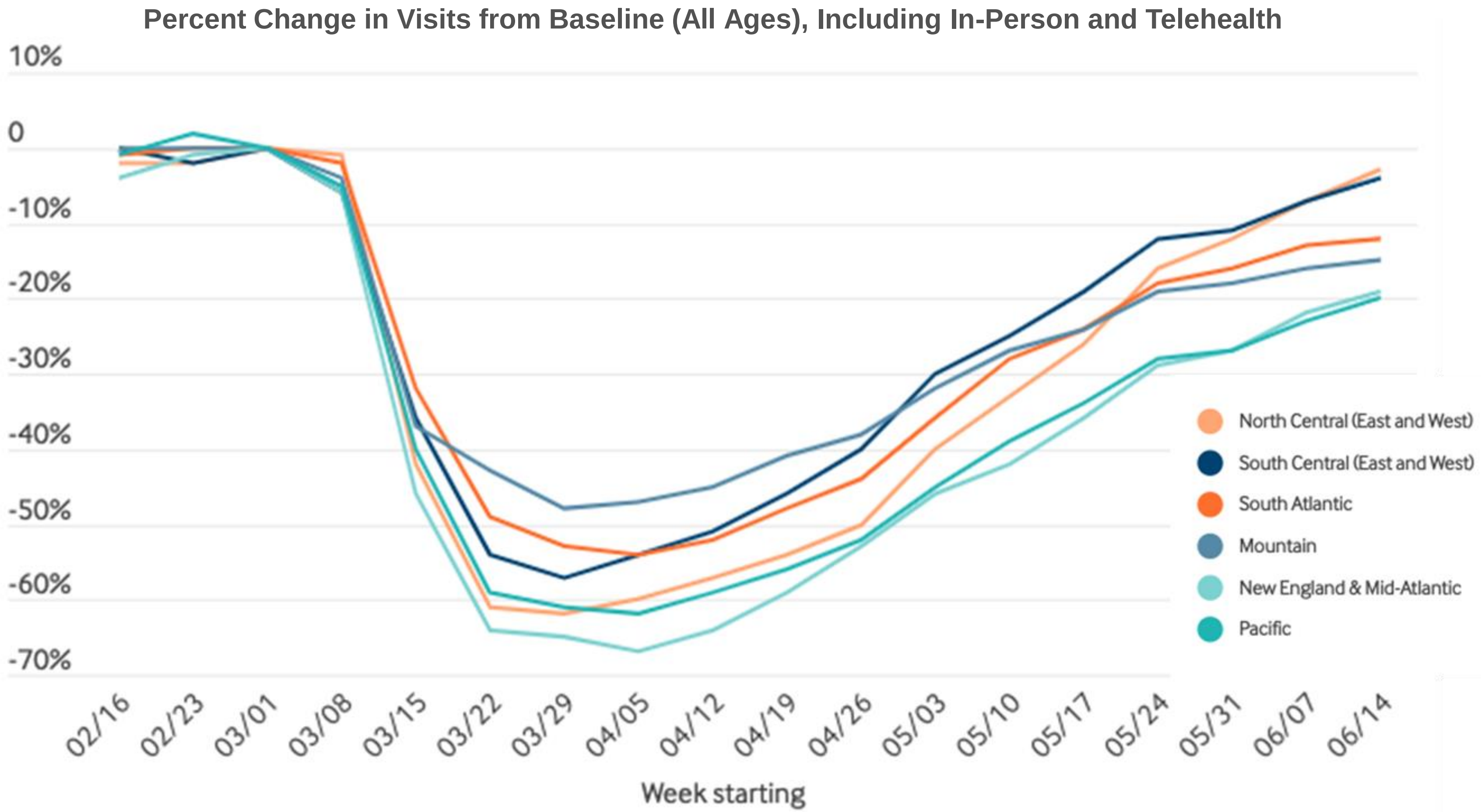
Total health care spending in April 2020 was 30% less than the previous year, with substantial variation by category.

Change in spending between April 2019 and April 2020



Sources: Altarum Institute Health Sector Economic Indicators. Spending brief: Insights from Monthly National Health Spending data through April, 2020. June 12, 2020.

By mid-June, outpatient visits in the Northeast had returned to 80% of baseline levels when telehealth is included.



Data are presented as a percentage change in the number of visits in a given week from the baseline week (March 1–7). Distribution of states across U.S. census divisions is available at the census website.

Source: Ateev Mehrotra et al., *The Impact of the COVID-19 Pandemic on Outpatient Visits: Practices Are Adapting to the New Normal* (Commonwealth Fund, June 2020). https://doi.org/10.26099/2v5t-9y63

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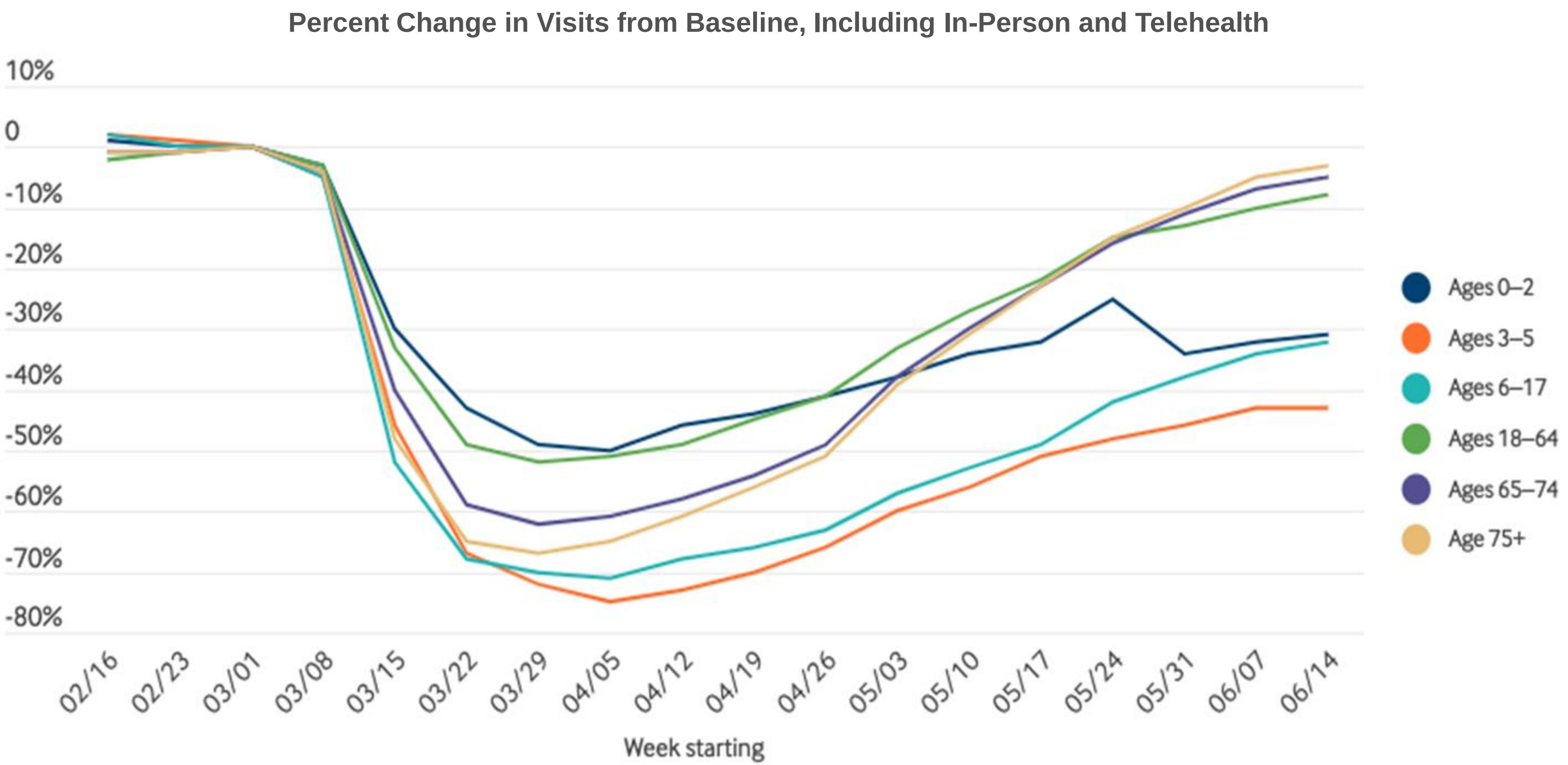
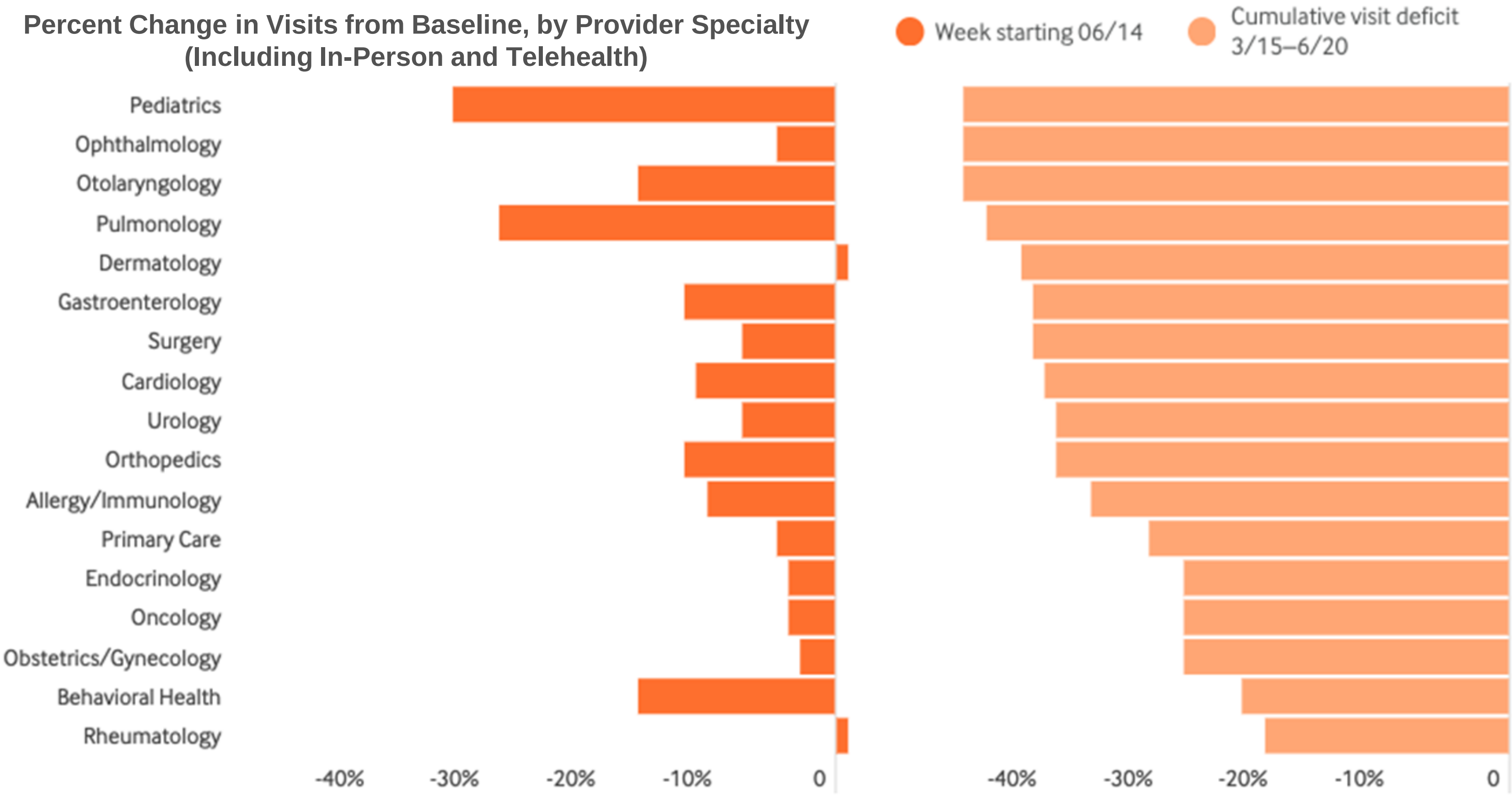
Pediatric visits remain far below baseline levels while adult visits are approaching typical rates.



Data are presented as a percentage change in the number of visits of any type (in-person and telemedicine) in a given week from the baseline week (March 1–7).

Source: Ateev Mehrotra et al., *The Impact of the COVID-19 Pandemic on Outpatient Visits: Practices Are Adapting to the New Normal* (Commonwealth Fund, June 2020). https://doi.org/10.26099/2v5t-9y63

Changes in visit volume vary by specialty.



Data are only for select specialties shown. The decline shown is reflective of all visit types (in-person and telemedicine). Visits from nurse practitioners and physician assistants are not included.

Source: Ateev Mehrotra et al., *The Impact of the COVID-19 Pandemic on Outpatient Visits: Practices Are Adapting to the New Normal* (Commonwealth Fund, June 2020). https://doi.org/10.26099/2v5t-9y63

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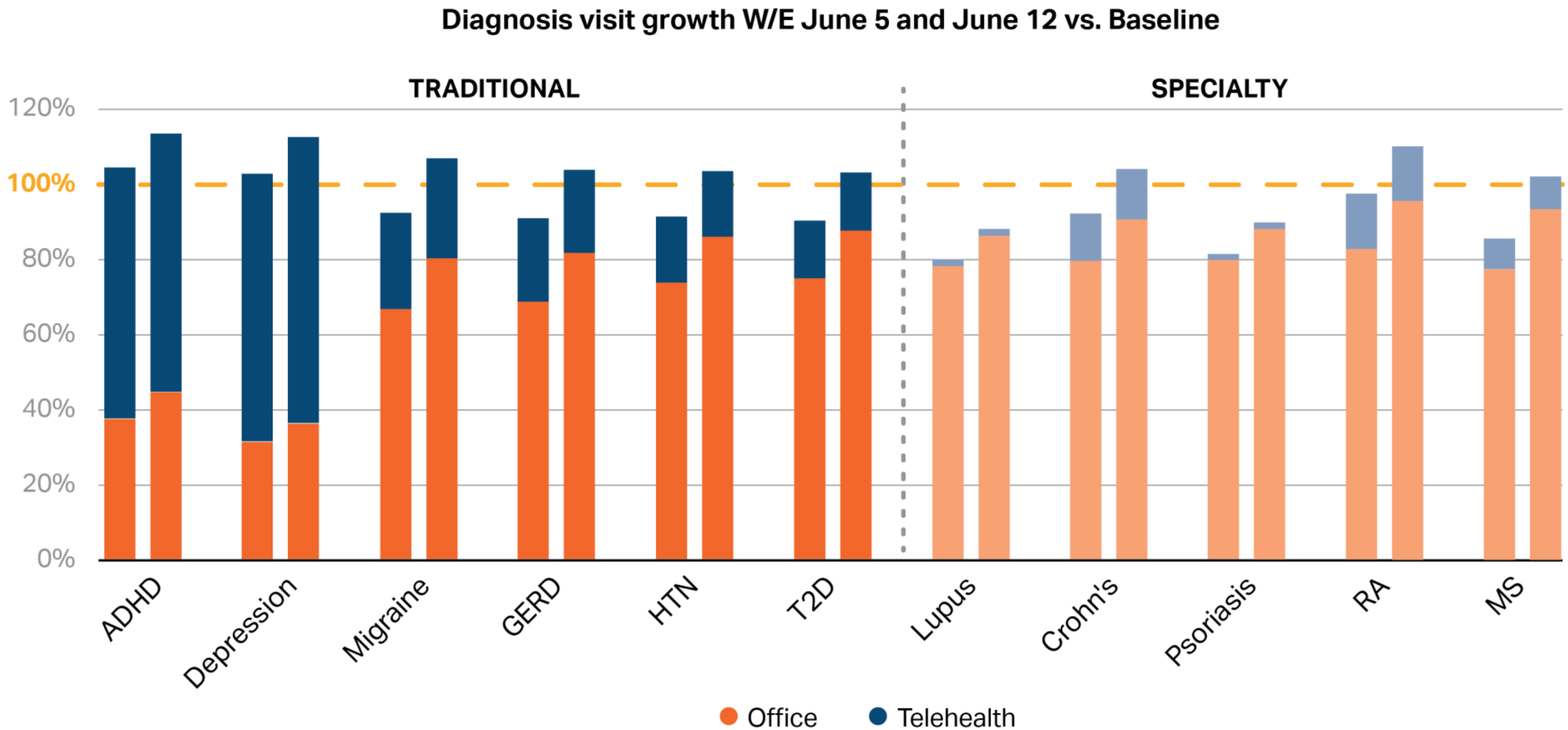
As of mid-June, visits have returned to baseline levels for many conditions when telehealth is included.



Data for latest week date controlled against prior periods; estimates have been applied to reflect anticipated late-adjudicated claims based on historical rates

Source: IQVIA: Medical Claims Data Analysis, 2020; Baseline = Average of claims for period W/E 1/10/2020-2/28/2020,
Estimated amounts for latest 2 weeks applied based on likely claims still to be received due to data latency or claim processing delays; See Appendix for further details

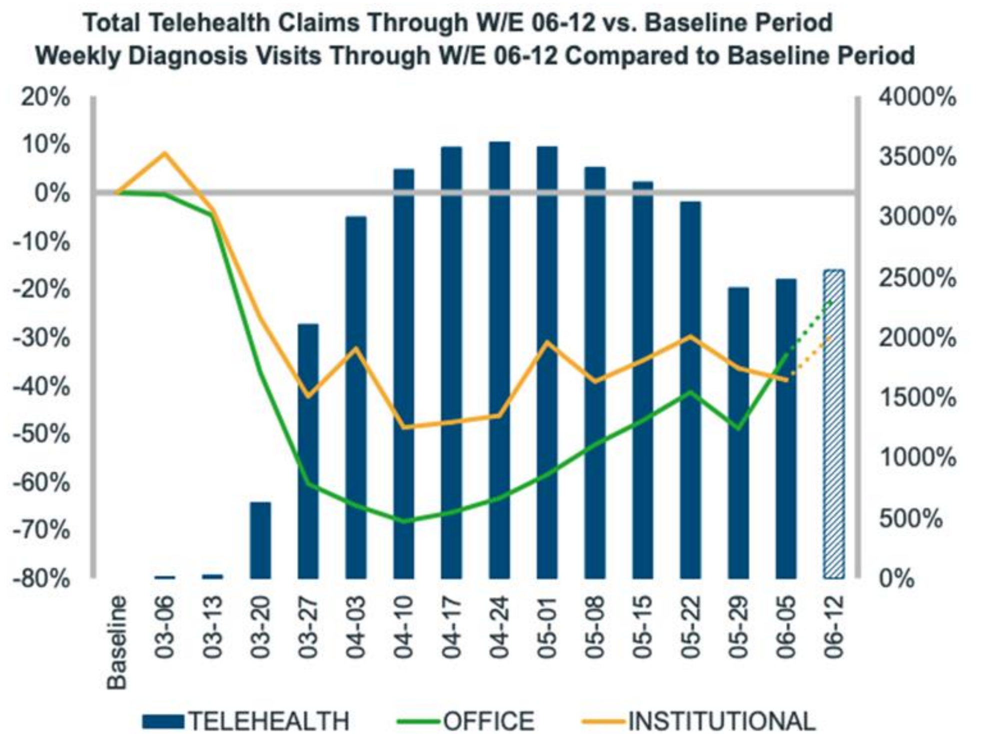
COVID-19 Market Impact - w/e June 12, 2020

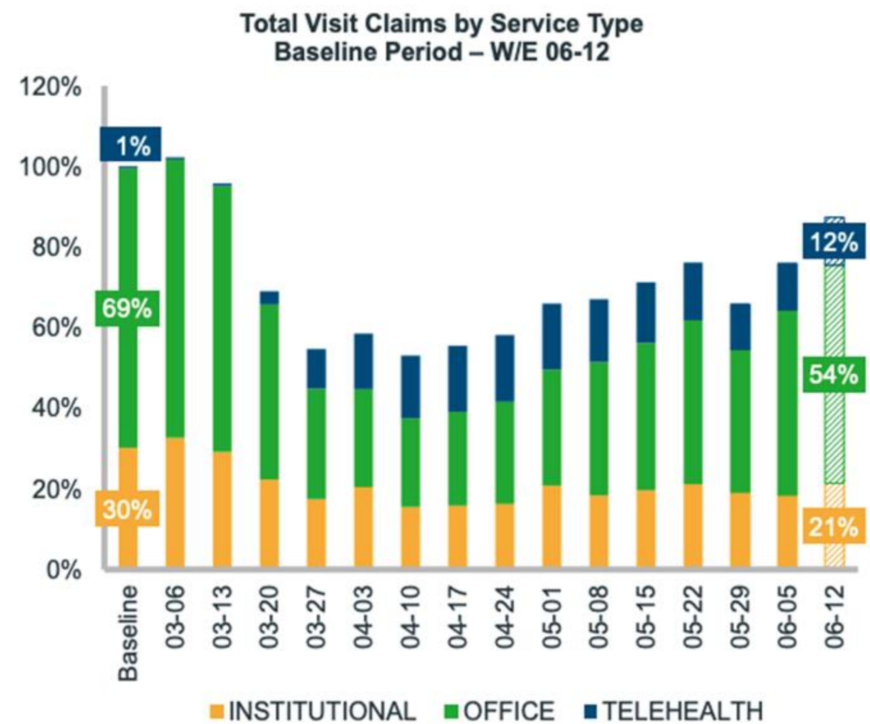
IQVIA

HPC

Sources: IQVIA, Monitoring the impact of COVID-19 on the Pharmaceutical Market, June 26, 2020, data week ending June 12, 2020.

Telehealth visits have declined from their peak in April, but remain far above the pre-pandemic baseline.





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Source: IQVIA: Medical Claims Data Analysis, 2020; Baseline = Average of claims for period W/E 1/10/2020-2/28/2020,
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COVID-19 Market Impact - w/e June 12, 2020

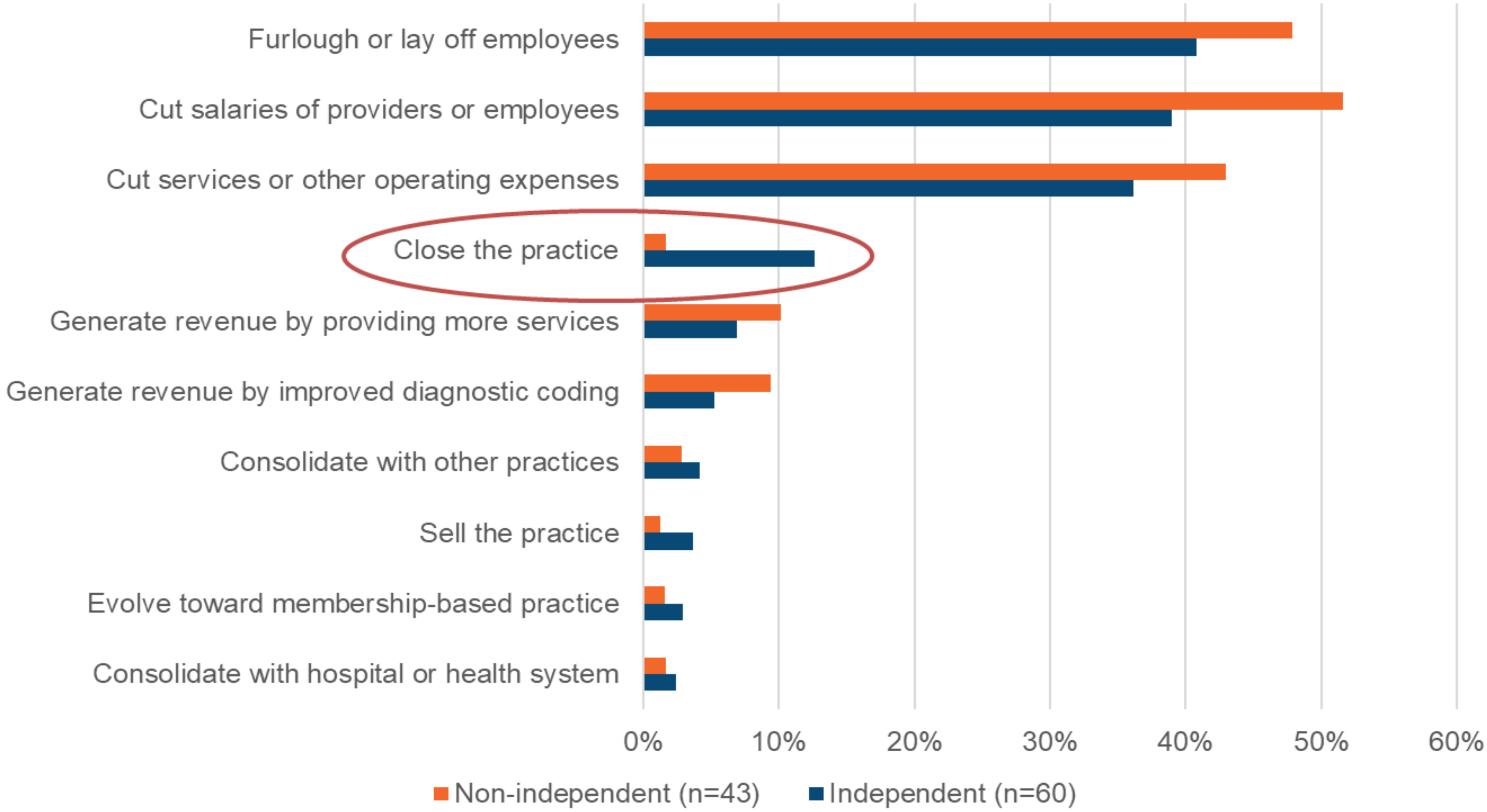
IQVIA

HPC

Sources: IQVIA, Monitoring the impact of COVID-19 on the Pharmaceutical Market, June 26, 2020, data week ending June 12, 2020.

Massachusetts Practice Survey: Independent practices are more likely to say that they would close.

Overall likelihood that practice would take each action



Notes: “Independent” in the survey meant owned by a hospital or health system

Zirui Song et al, “Economic and Clinical Impact of COVID-19 on Provider Practices in Massachusetts” Interim Results: May 20 – June 17, 2020. https://www.mass.gov/doc/economic-and-clinical-impact-of-covid-19-on-provider-practices-in-massachusetts/download

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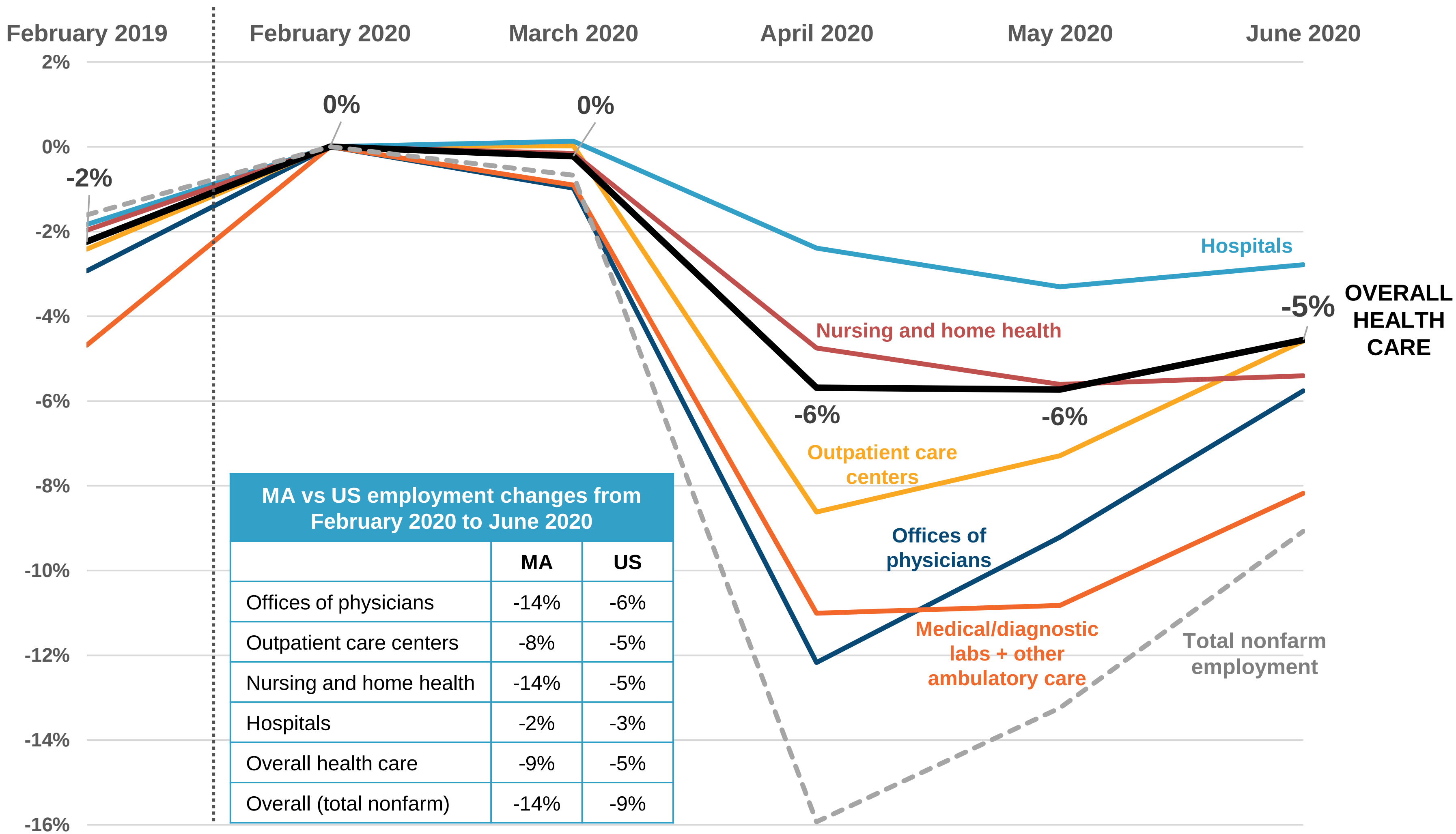
July 22, 2020

National health care employment remains 5% below February levels. Massachusetts saw a larger drop in physician office and nursing home/ home health employment.

Percent change in national health care industry employment, by sector, February 2019 – June 2020



MA vs US employment changes from February 2020 to June 2020		
	MA	US
Offices of physicians	-14%	-6%
Outpatient care centers	-8%	-5%
Nursing and home health	-14%	-5%
Hospitals	-2%	-3%
Overall health care	-9%	-5%
Overall (total nonfarm)	-14%	-9%

Sources: BLS: Table B-1. Employees on nonfarm payrolls by industry sector and selected industry detail released on July 2, 2020, June 5, 2020, May 8, 2020, and March 6, 2020.

Notes: *Overall and figure excludes office of dentists and other health practitioners. "Nursing and home health" includes employment numbers for nursing and residential care facilities and home health care services.

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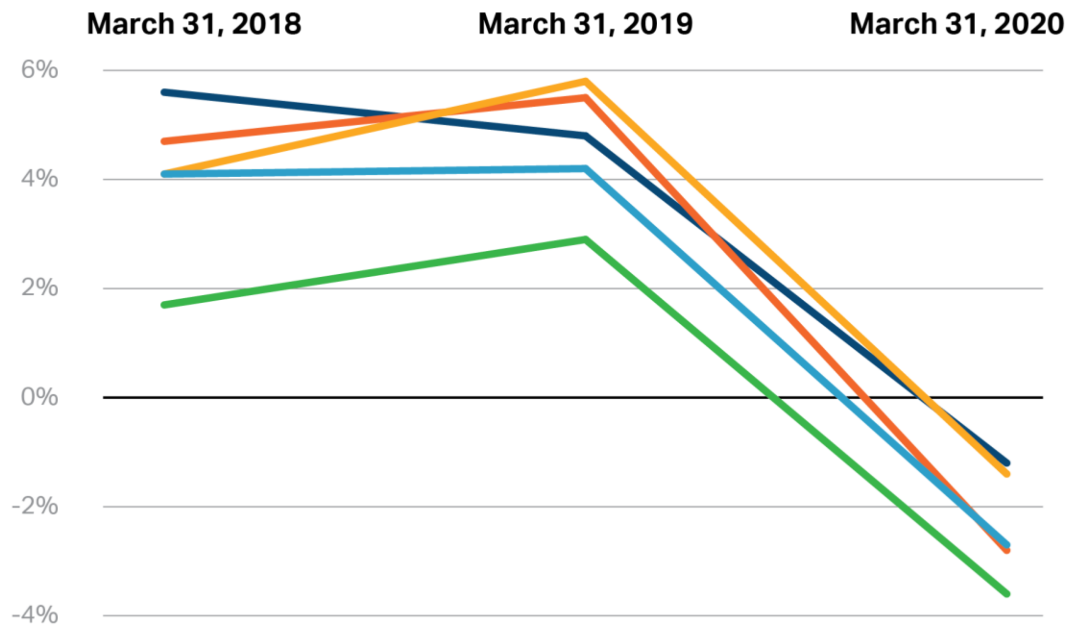
Massachusetts hospital margins were negative in Q1 of 2020 for all cohorts.

Total margin for Massachusetts hospitals for Q4 2019 and Q1 2020



	March 31, 2018	March 31, 2019	March 31, 2020
Statewide Median	4.1%	4.2%	-2.7%
AMC	4.1%	5.8%	-1.4%
Teaching Hospital	4.7%	5.5%	-2.8%
Community Hospital	1.7%	2.9%	-3.6%
Community-HPP	5.6%	4.8%	-1.2%

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Massachusetts Center for Health Information and Analysis: hospitals and health systems financial performance: https://www.chiamass.gov/hospital-financial-performance/