Primary Care Spending:

High Stakes, Low Investment

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Dear Colleagues,

The Primary Care Collaborative's 2020 Evidence Report findings, based on data from 2017 to 2019, show that the U.S. health system's investment in primary care—as measured by primary care spend—is low and declining. This reality is also true at the state level with the majority of states also experiencing a decline in primary care investment over this time period. These findings are in alignment with recent data published in peer-reviewed literature.

This reality did not bode well for patients when the COVID-19 pandemic struck, particularly for vulnerable and marginalized communities.

Racial and ethnic minorities have higher rates of chronic medical conditions, including obesity, diabetes, and kidney disease. They are less likely to be eligible for or able to afford coverage, and less likely to remain continuously covered, rendering ongoing relationships to primary care more tenuous. Many are essential workers, including many health care and long-term care workers, unable to work from home, more likely to face occupational exposure, and at risk of bringing the virus home to family members. This perfect storm of conditions has led to more severe illness and death from COVID-19 in communities of color.

Access to primary care has also been an issue for higher income patients, with stay-at-home orders requiring practices and patients to pivot to telehealth. Not all patients were successful in making this transition and some are putting off care out of concern that they will be exposed to the virus. There continues to be an overall decline in primary care visit volume, which ultimately will affect the health of both patients and primary care practices.

Under the pandemic, states are in a particularly precarious position with rising Medicaid costs and plummeting tax revenue. Policies to invest more in primary care, particularly those that leverage alternative payment models, are part of the solution to address the health inequities that COVID-19 has laid bare, enhancing the overall health of populations, and deriving more value for the healthcare dollar.

A more robust primary care platform can also support better integration with behavioral health, public health and community services. This kind of integration is the kind of pandemic preparedness that other countries already have in place and that the U.S. desperately needs.

COVID-19 is a crisis that must catalyze not only states, but all the other stakeholders in our system. We are past due to reimagine and reinvest in primary care.

Kind regards,

Ann Greiner
President and CEO
Primary Care Collaborative

Executive Summary

U.S. INVESTMENT IN PRIMARY CARE SPENDING FELL BETWEEN 2017 AND 2019

A growing body of literature shows that health systems with a foundation of robust, comprehensive primary care achieve better, more equitable health outcomes and are also less costly.[1] As a result, leaders domestically and internationally are increasingly interested in understanding the primary care orientation of their systems. Primary care spending, defined as the percentage of total healthcare spending accounted for by primary care, is a proxy for such orientation.

For the second consecutive year, the Primary Care Collaborative (PCC) is reporting primary care spending nationally and at the state level. The 2020 PCC Evidence Report, *Primary Care Spending: High Stakes, Low Investment*, finds that in 2019 primary care spending across commercial payers was only 4.67% of total national commercial healthcare spending, *falling* from 4.88% in 2017.

The data source for this study is FAIR Health's FH NPIC® (National Private Insurance Claims) repository, described in detail below. This nationally representative database of private healthcare claims information—the largest in the country—contains claim records for persons across all ages who are enrolled in private insurance plans (both fully insured and self-insured), including employer-sponsored, individual and Medicare Advantage plans, in all 50 states. Primary care *spending* is defined as the percentage of total annual spending on medical care services and prescription drugs that is spent on primary care services, using both narrow and broad definitions of primary care clinicians and services. Spending was calculated based on estimated "allowed amounts" (payor-contracted rates), which includes patient cost-sharing (e.g., copays).

A 50-state analysis of primary care spending was conducted using FAIR Health's FH NPIC database. State estimates were statistically adjusted to account for differences in age distributions across states.

The analysis finds primary care spending percentage across states varied from a low of 3.14% in Kentucky to a high of 9.48% in Michigan in 2019 using a narrow definition of primary care providers and services, and from a low of 5.57% in Pennsylvania to a high of 16.64% in Mississippi using a broad definition of primary care spending. Both the narrow and broad definitions vary by a *factor of 3* between the highest- and lowest-spending states. The negative trend in primary care spending over a three-year period (2017 to 2019) was observed across 39 states when using a narrow definition of primary care clinicians and services and across 30 states when using a broad measure.

The *negative trend* in primary care spending percentage from 2017 to 2019 found in the 2020 PCC Evidence Report was also observed in other studies measuring slightly different time periods and using modestly different measures of primary care spend (see table 3.1 in the full report). An analysis by Reiff, et al., using the Health Care Cost Institute's sample of commercial claims from employer-sponsored plans, found primary care spending was 4.35% of total healthcare spending in 2017 and had declined from 2013.[2] Another estimate of primary care spending using survey data across all payers found primary care spending was 5.4% of total national healthcare expenditures in 2016, down from 6.5% in 2002.[3]

Non-Claims Spending Not Included in Analysis

Could the absence of non-claims spending, such as spending associated with value-based payment models, account for the findings across this analysis and the other reports cited? It cannot be ruled out. Most surveys of the share of payments flowing through alternative payment models by payer or by share of provider revenue find the share is lowest in the commercially insured population but highest in the Medicare Advantage population.[4] The 2019 *Learning and Action Network APM Measurement Effort* found 35.8% of total U.S. healthcare payments were "tied to alternative payment models (APMs)" in 2018. The share

of payments in APMs in commercial lines of business was lower at 30.1% and higher in Medicare Advantage at 53.6%.[4] A survey conducted by the American Medical Association found that in 2018, an average of 70.3% of practice revenue came from fee-for-service and 29.7% came from alternative payment methods, a share that has been relatively unchanged since 2012.[5]

At the state level, Oregon includes both claims and non-claims spending on primary care in its measure of primary care spending and nevertheless found a decline in primary care spending as a share of total spending between 2017 and 2018.[6] Other available state-level data are reviewed in the full report.

Is primary care's share of total spending declining because spending on other sectors of health care is growing or declining more rapidly? The analysis presented in this 2020 Evidence Report finds that, between 2017 and 2019, primary care per capita healthcare spending *declined* by 2.48%, while primary care spending per capita fell even more, declining by 3.78%. We believe 2018 is an "outlier" year because it included an especially bad flu season, resulting in an increase in the number of patients seeking care at urgent care centers, emergency rooms, and other venues of care excluded from the primary care construct—including patients who do not have primary care providers to treat them.

Other Measures of Primary Care Orientation Not Increasing

The 2020 PCC Evidence Report also reviews recently published evidence on primary care utilization and the primary care workforce, two other proxies for a health system's primary care orientation. Specifically, primary care visits are flat or declining, and the percentage of adults reporting a "usual source of care" has stalled despite the coverage expansions enacted in the Affordable Care Act.[7] The number of primary care physicians per capita declined from 2005 to 2015.[8] Significant recent growth in the nurse practitioner workforce practicing in primary care, however, appears to be somewhat offsetting the decline in the primary care physician workforce.[9]

In short, there is little evidence that the U.S. healthcare system is reorienting to primary care when reviewing trends in at least two of three key areas, namely primary care spending and utilization.[10] Many factors are likely contributing to these trends, including the role of changing benefit design in commercial health plans as well as the slow pace in transitioning provider payment from fee-for-service to value-based, particularly in the commercially insured population under age 65.

WHY PRIMARY CARE SPENDING MATTERS: AN ASSOCIATION WITH BETTER OUTCOMES

Why should we be concerned that primary care spending appears to be declining? A growing body of evidence measuring health system performance and population health outcomes finds that greater primary care orientation, using a range of measures (i.e., workforce, spending, utilization) and levels of analysis (i.e., geographic, system, subpopulation, health plan) is associated with better value: enhanced population health outcomes, greater equity, and more efficient use of healthcare resources.[8]

The 2020 PCC Evidence Report results are consistent with the previously documented association in the 2019 PCC Evidence Report between higher primary care spending at the state level and fewer emergency department visits, hospitalizations, and preventable hospitalizations.[11] Analysis of the FAIR Health dataset reveals that states with higher investment in primary care as a percentage of total healthcare spending also tended to have lower emergency department visit rates, hospitalization rates, and potentially avoidable hospitalization rates. While our analysis does not attempt to control for other important factors influencing these measures, this relationship makes intuitive sense. One of the scatterplots follows (p. 4), with the full set of scatterplots found in the body of the report.

Data and Methods: Measuring Primary Care Spending Percentage

The 2019 PCC Evidence Report, *Investing in Primary Care: A State-Level Analysis*, released in July 2019, provided 29 states with first-ever information about primary care spending across public and private payers. The 2020 PCC Evidence Report is based on an analysis of FAIR Health's database of private healthcare claims—the largest in the nation—that currently contains more than 31 billion claim records for medical and dental services from 2002 to the present. FAIR Health data are submitted by over 60 national and regional payors and third-party administrators who insure or process claims for private insurance plans (both fully insured and self-insured plans), across all 50 states. These plans include employer-sponsored, individual, small and large group and Medicare Advantage plans. The 2020 analysis breaks new ground with the inclusion of state-level, age-adjusted, timely estimates of primary care spending for 50 states to enable cross-state comparisons and inform health care stakeholders.

Percentage of Members with Avoidable Hospitalization versus Primary Care Spending Percentage (Broad) at the State Level

Michigan (9.48%) for narrow and Mississippi (16.64%) for broad, while the lowest were found in Kentucky (3.14%) for narrow and Pennsylvania (5.57%) for broad. Eight out of 10 states with the highest primary care spending are in this category if either a narrow or broad measure is used. Only about half of the states identified in the bottom 10 with respect to a narrow definition of primary care spend remain in this category under a broad definition.

Majority of States Experienced a Drop in Primary Care Spending, 2017-2019

The decline in primary care spending percentage between 2017 and 2019 was observed across most states using both a narrow and a broad definition of primary care spending percentage. Thirty-nine states saw a drop in primary care spending when measured using a narrow definition, and 30 states saw a drop using a broader definition. The drop in primary care spending broadly defined is especially striking in light of evidence indicating significant growth in the nurse practitioner workforce practicing in primary care settings.[13]

Data Source Differences and Limitations

Caution should be used in comparing the state spending percentages and rankings included in the 2020 PCC Evidence Report with the 2019 PCC Evidence Report, as the data sources are quite different and have different strengths and limitations. There are also differences in methods between the two reports. Caution should also be used in comparing the primary care spending percentages generated from FAIR Health commercial claims with those from state All-Payer Claims Databases (APCDs). For example, state APCDs generally have only small samples of self-insured employer plan claims, which account for a significant share of the commercially insured market (61% of employer-sponsored enrollment in 2019[14]), whereas self-insured plans are well-represented in FAIR Health's commercial claims data. State APCDs may also include Medicare fee-for-service, Medicaid, and other public health plan claims, which are not included in FAIR Health's commercial claims repository. (FAIR Health holds a separate collection of Medicare fee-for-service claims, but those claims were not used for this report.)

A description of FAIR Health and its datasets can be found in Appendix A, and a detailed explanation of methods is included in the full report. Primary care spending is measured using definitions derived from those described in Bailit, et al. in a 2017 report for the Milbank Memorial Fund.[12] The narrow definition captures spending related to services provided by primary care physicians, specifically family and internal medicine, pediatrics, and general practice physicians, in offices and outpatient settings. The broad definition includes all of the clinicians, services, and settings in the narrow definition of primary care and adds other members of the primary care clinical team, including services provided by nurse practitioners (NPs), physician assistants (PAs), geriatricians, adolescent medicine specialists, and gynecologists.[13]

STATE PRIMARY CARE SPENDING VARIED WIDELY IN 2019

Significant variation in primary care spending across states in 2019 was found. The 10 states with the highest primary care spending percentage and the 10 states with the lowest percentages are listed in Table 1.1 and Table 1.2 in the full report. These results have been age-adjusted; unadjusted data are also reported in Appendix B. The highest percentages were found in

IMPLICATIONS AND RECOMMENDATIONS

The 2020 PCC Evidence Report provides new and timely data for state and national leaders as they reflect on their healthcare spending priorities against their goals for improving population health, addressing health inequities, and keeping costs in check. The COVID-19 pandemic has resulted in more than 230,000 deaths in the U.S. and higher morbidity and mortality for our country's racial and ethnic minorities, and it has put more financial pressure on state budgets, including healthcare budgets.[15,16] The pandemic raises the urgency for policymakers to improve health outcomes through new care-delivery models that are supported by effective, sustainable payment policies.

The declining trend found in primary care's already low share of national healthcare spending from 2017 to 2019, compounded by the widespread vulnerabilities in primary care access caused by the 2020 pandemic, are a clarion call to action for healthcare leaders, purchasers, payers, and policymakers. To reorient the U.S. healthcare system toward primary care will involve greater investment in primary care, channeled through alternative payment models, and changes to existing benefit designs. Such polices can be leveraged to support team-based, technology-enabled, comprehensive care models that encourage timely, high-value primary care and prevention.

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Introduction and National Results

1.1 THE CASE FOR MORE INVESTMENT IN PRIMARY CARE

For the second consecutive year, with the backdrop of a global pandemic, the Primary Care Collaborative has chosen to report on the U.S.'s primary care spending rate given primary care's importance as the foundation of a high-value health system. Primary care spending is defined as the proportion of all medical spending devoted to primary care and is a measure or indicator for assessing a healthcare system's orientation toward primary care. The 2020 Evidence Report includes both narrow and broad measures of primary care spending across a large part of the population for all 50 states.

BOX 1.0

More Primary Care Physicians Associated with Lower Mortality Rates

A larger supply of primary care physicians relative to the population is also associated with better health outcomes. A recent analysis of physician workforce data found an association between population-level life expectancy (the primary outcome) and primary care physicians relative to population. While the number of U.S. primary care physicians rose between 2005 and 2015, the increase did not keep pace with population growth. Higher losses in physicians per capita were found in rural areas. After adjusting for demographic, socioeconomic, and behavioral factors across geographies, the authors found that every 10 additional primary care physicians per 100,000 population was associated with a 51.5 day increase in life expectancy, compared to a 19.2 day increase in life expectancy for every increase of 10 specialists per 100,000 population. An additional 10 primary care physicians per 100,000 population was also associated with reduced cardiovascular, cancer, and respiratory mortality.[8]

A growing body of evidence has found that healthcare systems with a strong primary care orientation have relatively better, more equitable population health outcomes and more efficient resource use.[1] These associations have been documented across countries and across states and other geographic areas within the United States.[1] The Primary Care Collaborative's 2019 Evidence Report, *Investing in Primary Care: A State-Level Analysis*, added to the evidence base by confirming the association between higher state primary care spending and lower rates of emergency department utilization, hospitalizations, and preventable hospitalizations.[11]

1.2 COVID-19 REVEALED VULNERABILITIES

Primary care practices, as the "front door" to the healthcare delivery system, were vulnerable to the pandemic in ways that reflect the interdependencies across providers and between public health systems and providers. Supply-chain disruptions, lack of stockpiles of personal protective equipment, basic components of testing kits, and weak linkages between practices and laboratories are just a few of the factors that hampered primary care's response. Patient surges in acute care settings may have been larger because primary care's capacity to respond was limited.

A survey conducted regularly during the pandemic by the Larry A. Green Center in collaboration with the Primary Care Collaborative began in mid-March 2020 and continued as this report went to press. The Green Center survey has provided real-time data from practicing primary care clinicians about their experiences and their patients' experiences during the pandemic.[17] The capacity of practices to respond was greatly impacted by their reliance on fee-for-service payments. In April, when much of the U.S. was under stay-at-home orders, *less than half* of the care provided by primary care practices was reimbursable.[18] This worse-case situation improved since the spring of

2020, although the primary care platform was not back to pre-pandemic levels when the 2020 PCC Evidence Report went to print.[19]

Case studies conducted for the Commonwealth Fund suggest that primary care practices experienced with the Patient-Centered Medical Home (PCMH) model and participating in alternative payment models (APMs), had a care-management and population-health infrastructure, and that received some revenue in a per-member, per-month form have been able to weather the COVID-19 storm relatively better than practices without the infrastructure and non-visit payments to support it.[20]

1.3 DATA USED FOR 2020 ESTIMATES

In an effort to report statistically valid results for 50 states, the 2020 PCC Evidence Report uses data from FAIR Health, an independent, nonprofit organization that collects and manages the nation's largest database of privately billed health insurance claims. FAIR Health's private healthcare claims repository includes claims submitted by over 60 national and regional payors and third-party administrators who insure, or process claims for private insurance plans (both fully insured and self-insured plans), including employer-sponsored, individual and Medicare Advantage plans. FAIR Health provided the data presented in the tables and graphs included in the report and appendices. A more detailed description of FAIR Health, its dataset, and the methods used in this study, can be found in Appendix A.

The 2019 PCC Evidence Report, *Investing in Primary Care: A State-Level Analysis*, released in July 2019, provided 29 states with first-ever information about primary care spending as a share of total spending across public and private payers using the Agency for Healthcare Research and Quality (AHRQ) Medical Expenditure Panel Survey (MEPS) data.[11] This report was developed in partnership with researchers from the Robert Graham Center.

For the 2020 PCC Evidence Report, patient profiles were created by FAIR Health for each year 2017, 2018 and 2019 for patients who had 12 months of continuous coverage, and included patient imputed residence, age band, and gender. The patient's residence was imputed using an algorithm based on proximity to a primary care provider visited.

FAIR Health quantifies spending for all services (except prescription drug spending) using its imputed "allowed amounts." A detailed description of the methodology for calculating imputed allowed amounts can be found in Appendix A. FAIR Health does not receive prescription medication data for the majority of patients in its database. For prescription drug spending, for each analysis year, each patient is assigned a static drug spending amount as follows:

2017: $862
2018: $995
2019: $1,084

These amounts were consistent with other sources for drug spending (IQVIA, Commonwealth Fund, Brookings Institution); please see the appendix for more details.

FIGURE 1.0

Percentage of Primary Care Office Visits That Were Reimbursable April 10-13, 2020

- A lot (>50%)
- A little (<20%)
- Not happening
- N/A

17.90%
43.70%
8.70%
29.70%
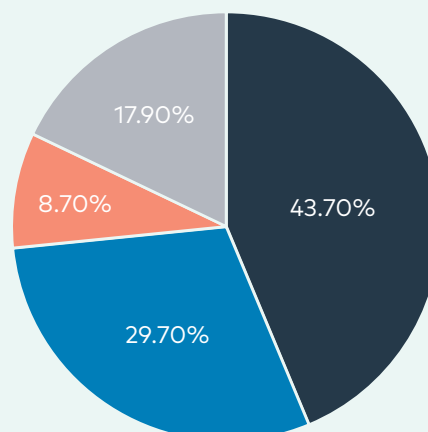
Data source: Larry A. Green Center and Primary Care Collaborative, COVID-19 Survey

1.4 METHODS: DEFINING NARROW AND BROAD MEASURES OF PRIMARY CARE SPENDING

The 2020 Evidence Report uses "narrow" and "broad" primary care clinician and service-based definitions to measure primary care spending, which come from the definitions established by Bailit, Friedberg, and Houy in a report published by the Milbank Memorial Fund in 2017.[12] The narrow definition captures spending related to services provided by primary care physicians, specifically family and internal medicine, pediatrics, and general practice physicians, in office and outpatient settings. Services include evaluation and management visits, preventive visits, care-transition or coordination services, and in-office preventive services, screening, and counseling. The broad definition includes all of the clinicians, services, and settings in the narrow definition of primary care and adds other members of the primary care clinical team, including the same services in the narrow definition but provided by nurse practitioners (NPs), physician assistants (PAs), geriatricians, adolescent medicine specialists, and gynecologists, and preventive services provided in a broader range of settings.[10] The Graham Center has also done significant work in contributing to the defining of primary care spending percentages.[21]

BOX 1.1

Commonwealth Fund: Primary Care Spending on Commercially Insured Adults, 2018

The Commonwealth Fund recently added state-level primary care spending percentage estimates in its Health Systems Data Center. Specifically, the Commonwealth Fund reports primary care spending in a sample of employer-sponsored plans in 2018, using a dataset of proprietary claims owned by MarketScan. The Commonwealth Fund reports primary care spending percentages for adults between the ages of 18 and 65 with employer-sponsored care and finds a slightly higher primary care spending percentage of 5.95% using a definition that falls between the PCC's definition for narrow and broad spending—including services provided by NPs and PAs but not the additional services encompassed by our broad definition.[22]

TABLE 1.0

Clinicians Included in Narrow and Broad Definitions of Primary Care

Category 1: Narrow Specialty Definition	Category 2: Broad Specialty Definition
a. Family medicine	a. Family medicine
b. Internal medicine	b. Internal medicine
c. Pediatric medicine	c. Pediatric medicine
d. General practitioner	d. General practitioner
	e. Nurse practitioner (NP)
	f. PA (Physician assistant)
	g. Geriatric medicine
	h. Adolescent medicine
	i. Gynecology

1.5 FINDINGS: PRIMARY CARE SPENDING IS LOW AND DECLINING

The 2020 PCC Evidence Report finds both the primary care spending percentage measured with a narrow definition and the primary care spending percentage measured with a broad definition were low and declined between 2017 and 2019 among the commercially insured U.S. population, which includes individuals enrolled in Medicare Advantage plans. In 2017, primary care spending defined narrowly was 4.88% and fell to 4.67% in 2019. A decline in primary care spending defined broadly was also observed, falling from 7.8% in 2017 to 7.69% in 2019. Table 1.1 and Table 1.2 below rank the 10 states with the highest primary care spending percentage and the 10 states with the lowest spending—adjusted for age.

While it is difficult to compare these findings directly with other measurement efforts using different datasets and populations as well as different definitions, all studies of U.S. primary care spending are low in comparison to other high-income countries and trending lower over time.[23] Results reported from studies that measure primary care spend trends in Table 1.3 on page 11 suggest that primary care, which is expected to serve as the universal front door to the healthcare system, is not garnering resources commensurate with its potential to influence population health outcomes and overall value.

BOX 1.2

What is the "Right" Level of Primary Care Spending as a Proportion of Total Health Care Spending?

There is not a consensus about either how to measure primary care spending or what level is the "right" level of primary care spending as a proportion of total healthcare spending. In light of persistent shortcomings in U.S. health outcomes on preventable and manageable chronic diseases, gaps in outcomes across racial groups, geographies, income, and education levels, and recent alarming declines in life expectancy, the current average level of primary care investment in the U.S. appears insufficient. Moreover, a review of the level of primary care investment in similar high-income countries suggests the U.S. may be spending only half or less of what many other countries with developed economies spend while also generating better population health outcomes than the U.S.[24]

TABLE 1.1

10 States with Highest Primary Care Spending as Share of Total Healthcare Spending, 2019

Rank	2019 Age- Adjusted Narrow	PC Spend %	2019 Age- Adjusted Broad	PC Spend %
1	Michigan	9.48	Mississippi	16.64
2	Mississippi	8.63	Oregon	15.35
3	Arizona	8.35	Idaho	13.95
4	Oregon	8.07	Michigan	13.86
5	Maryland	7.56	Arizona	13.70
6	Iowa	7.08	Iowa	13.69
7	North Carolina	6.84	South Dakota	12.63
8	Massachusetts	6.58	North Carolina	12.37
9	Idaho	6.47	Wisconsin	12.27
10	South Dakota	6.23	Maryland	11.95
	U.S. Average	**4.67**		**7.69**

TABLE 1.2

10 States with Lowest Primary Care Spending as Share of Total Healthcare Spending, 2019

Rank	2019 Age- Adjusted Narrow	PC Spend %	2019 Age-Adjusted Broad	PC Spend %
1	Kentucky	3.14	Pennsylvania	5.57
2	Pennsylvania	3.37	California	6.10
3	New Mexico	3.53	New Jersey	6.38
4	Indiana	3.57	Oklahoma	6.53
5	Colorado	3.62	Florida	6.94
6	Ohio	3.81	Missouri, Alabama	7.12
7	Vermont	3.82	Delaware	7.14
8	Alaska, Nevada	3.87	Colorado	7.19
9	Montana	3.92	Texas	7.25
10	Florida	3.96	Nevada	7.37
	U.S. average	**4.67**		**7.69**

In a study using data from the Medical Expenditure Panel Survey (MEPS), which surveys a broad population including the commercially insured, those enrolled in public programs, and uninsured persons, Martin et al. found a decline in primary care spending between 2002 and 2016 from 6.5% to 5.4% using a narrow definition of primary care services and providers.[25] Results from a study of a commercially insured population using claims data from three national payers found a decline in primary care spending from 4.6% in 2013 to 4.35% in 2017 using a narrow definition of primary care spending. The same study also found a decline using a more broadly defined primary care spending measure, falling from 8.97% in 2003 to 8.04% in 2017.[2] The measures in these studies are not directly comparable, as they vary in the populations included and data sources used, but they are all consistently low and appear to be trending lower.

1.6 NATIONAL FINDINGS: CAVEATS AND DISCUSSION

The 2020 PCC Evidence Report finding that primary care spending percentage declined between 2017 and 2019 should be a cause for concern for policymakers and healthcare leaders and stakeholders. These results, together with the finding from Reiff, et al. that primary care spending as a share of total spending fell in a different large sample of commercial claims data

between 2013 and 2017, and similar findings using data across all populations and over a longer time period suggest a lack of progress in reorienting the U.S. healthcare system toward prevention and primary care.

Caution should be used in comparing estimates of primary care spending percentage that use different data sources with different populations and payer types and different definitions of primary care clinicians, services, and settings. The PCC 2020 Evidence Report analysis does not include non-claims spending. Some non-claims spending may be considered "value-based" using the definitions and categories established by the Health Care Payment and Learning and Action Network.[4] The amount and share of primary care spending in various forms of value-based payment is very difficult to estimate, especially in the commercial sector and at the national level. Non-claims payments to providers may be more common in Medicare Advantage plans, as noted earlier. Approximately 30% of payments for all healthcare expenditures by commercial payers were value-based in 2018; the percentage is over 50% in Medicare Advantage.[4] It is also challenging to measure the share of primary care spending associated with value-based payments. A regular survey by the American Medical Association (AMA) suggests that the proportion of physician practice revenue in value-based arrangements has been stable at roughly 30% between 2012 and 2018.[26]

TABLE 1.3

U.S. Primary Care Spending Trend Findings from Three Studies

Study	Data Sources	Years	Primary Care Spend (Narrow)	Trend (Narrow)	Primary Care Spend (Broad)	Trend (Broad)
Kempski, Greiner	**FAIR Health National Private Insurance Claims database (Commercial claims, including Medicare Advantage)**	**2017-2019**	**2017: 4.88%** **2019: 4.67%**	**Negative**	**2017: 7.80%** **2019: 7.69%**	**Negative**
Martin, et al. *Primary Care Spending in the U.S. 2002-2016*[25]	Surveys of individuals, all payers (MEPS)	2002-2016	2002: 6.5% 2016: 5.4%	Negative	Not reported	N/A
Reiff, et al. *Primary Care Spending in the Commercially Insured Population*[2]	Commercial claims for employer-sponsored coverage from 3 national payers (HCCI)	2013-2017	2013: 4.6% 2017: 4.35%	Negative	2013: 8.97% 2017: 8.04%	Negative

FIGURE 1.1

Percentage of Members Hospitalized versus Primary Care Spending Percentage (Broad) at the State Level

$y = -0.0693x + 0.0635$

X-axis: Primary Care Spending % - Broad
Y-axis: % Members Hospitalized
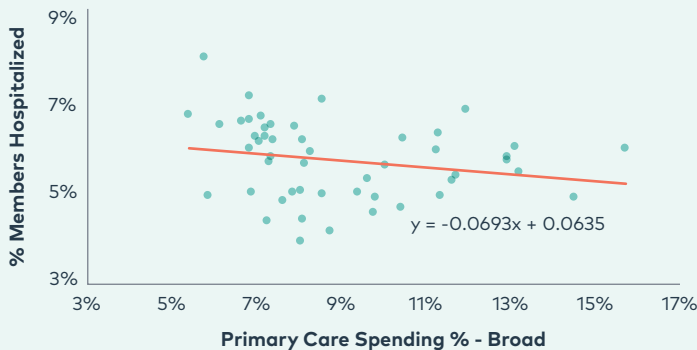
FIGURE 1.2

Percentage of Members with Avoidable Hospitalization versus Primary Care Spending Percentage (Broad) at the State Level

$y = -0.1574x + 0.0969$

X-axis: Primary Care Spending % - Broad
Y-axis: % Members with Avoidable Hospitalization
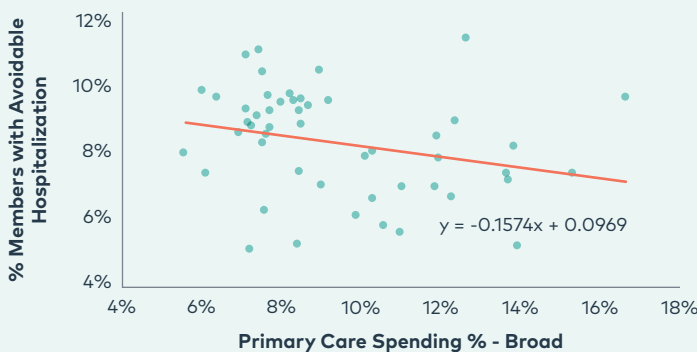
FIGURE 1.3

Percentage of Members with an Emergency Department Visit versus Primary Care Spending Percentage (Broad) at the State Level

$y = -0.1773x + 0.183$

X-axis: Primary Care Spending % - Broad
Y-axis: % Members with an Emergency Department Visit
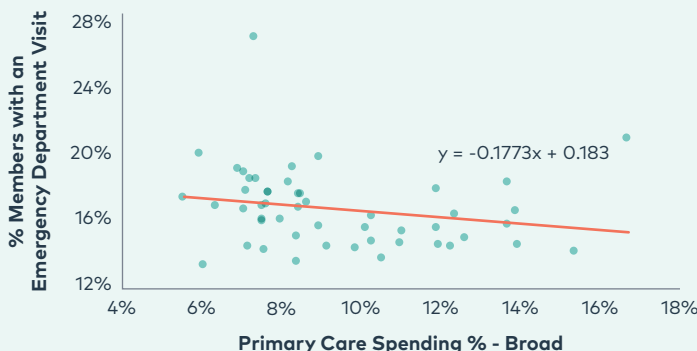
1.6a – Trends in Overall Spending Outpacing Changes in Primary Care Spending

The analysis of FAIR Health claims data from 2017 to 2019 showed a decline in per capita total healthcare spending across the national sample of persons continuously insured of -2.48% over the two-year period, while primary care spending per capita fell more, by -3.78%. The finding by Reiff, et al. over the 2013-2017 period revealed that primary care spending per person rose, but total spending per person rose faster.[2] Data limitations do not permit disaggregating spending between price and utilization. This more nuanced data would help to understand the factors driving the observed decline in primary care spending percentage as well as the factors behind the per capita decline in total and primary care spending between 2017 and 2019 in the FAIR Health sample. Review of other evidence suggests the decline in overall spending and primary care's share between 2017 and 2019 is driven by utilization declines.

Some states are beginning to measure both claims and non-claims spending. Overall spending on primary care (both claims and non-claims) rose in Oregon between 2017 and 2018, but total spending rose even more quickly, so consequently the percentage spent on primary care fell between 2017 and 2018. On a per-member, per-month basis, however, nearly all carriers spent more on primary care in 2018 compared to 2017 in Oregon.[27]

1.7 ASSOCIATION BETWEEN PRIMARY CARE SPENDING AND HEALTH CARE OUTCOMES

The 2020 PCC Evidence Report results are consistent with the 2019 PCC Evidence Report and find a negative association between the measures of primary care spending percentage and measures of utilization, including emergency department visits, hospitalizations, and hospitalizations that are potentially amendable to influence by expanded access strategies, good chronic care management, and care coordination in primary care (see Figures 1.1, 1.2, 1.3). For example, the Agency for Healthcare Research and Quality (AHRQ) notes that "hospitalizations due to ambulatory care-sensitive conditions (ACSC) such as hypertension and pneumonia should be largely prevented if ambulatory care is provided in a timely and effective manner" and that "effective primary care is associated with lower ACSC hospitalization (also referred to as avoidable hospitalization)."[28] Avoiding emergency department (ED) visits and hospitalizations through targeted strategies to strengthen and invest in primary care capacity can improve patient outcomes and the appropriate use of health system resources.[29]

Evidence on Primary Care Workforce, Utilization, Role of Plan Design

2.1 TRENDS IN PRIMARY CARE WORKFORCE: MIXED SIGNS OF REORIENTING TO PRIMARY CARE

Recent trends in the growth of the primary care workforce provide mixed evidence for a shift toward more primary care orientation by the U.S. healthcare system. Per capita growth in primary care physicians was essentially flat between 2010 and 2016, as reported by Xue, et al. and negative as reported by Basu et al., looking at trends between 2010 and 2015.[8,9]

The primary care clinician workforce is broader than primary care physicians, however, as reflected in the broad definition of primary care spending used in the 2020 and 2019 PCC Evidence Reports. According to the American Association of Nurse Practitioners, there were 290,000 nurse practitioners (NPs) in the U.S. in 2019; almost 90% are certified in an area of primary care, with 69% practicing in primary care roles.[30] In contrast, 21% of physician assistants (PAs) practice in primary care, according to the American Association of Physician Assistants.[31]

The nurse practitioner workforce practicing in primary care has grown substantially in recent years, growing at an annual rate of 3 per 100,000 population from 2010 to 2016, while the primary care physician workforce remained flat over the same period. Looking at Health Service Areas (HSAs) ranked by income level, Xue, et al. also found a "narrowing gap between primary care NPs and physician workforce supply over time, particularly in low-income and rural areas."[9]

In light of the growth in the nurse practitioner workforce since 2010 and its concentration in primary care, a measure of primary care spending percentage using a broad definition might be expected to be rising over time. Yet at least two studies using recent data, including the PCC 2020 analysis of commercial primary care spending percentage, suggest otherwise. Analysis and discussion of the possible factors explaining why primary care spending broadly defined is not growing in commercially insured populations despite large increases in the primary care nurse practitioner workforce is beyond the scope of the 2020 PCC Evidence Report but deserves the attention of health-services researchers.

2.2 EVIDENCE RELATED TO PRIMARY CARE UTILIZATION

A review of primary care literature published since 2019 suggests primary care utilization is flat or declining among the commercially insured adult population and that patients with a regular source of care rose only slightly after the Affordable Care Act (ACA) was implemented and is now holding steady.

A study published in the *Annals of Internal Medicine* found a decline of 24% in adult primary care visits between 2008 and 2016 in a commercially insured population, while visit rates to specialists remained stable. Visits to alternative venues, such as urgent care clinics, increased by almost 50% over the period studied, but this did not make up for the sharp decline in traditional primary care visits. Out-of-pocket costs for problem-based visits also rose.[32] Another measure of utilization among a commercially insured population conducted by Reiff, et al. found that the share of insured persons utilizing primary care increased only slightly from 78.35% to 79.65% from 2013 to 2017.[2]

The percentage of adults reporting a "usual source of care" rose only modestly from 76% to 78% between 2013 and 2016 after the rollout of the ACA's coverage expansion and has since leveled off, despite estimates

that 20 million previously uninsured gained coverage under the ACA.[33] Twelve states, including the populous states of Texas and Florida, have still not taken up the option to expand Medicaid to poor adults.[34] Rates for both Black and Latino adults continue to lag behind the rate of Whites reporting a usual source of care. Only 61% of adult Latinos reported a usual source of care in 2018, the lowest among all groups surveyed.[35] The self-reported regular source of care measure, included in the Centers for Disease Control's National Health Interview Survey, is not an ideal proxy for primary care utilization because it allows respondents to include emergency departments in their response as a "regular source of care."[36]

2.3 TRENDS IN BENEFIT DESIGN MAY DISCOURAGE PRIMARY CARE UTILIZATION

In an analysis of primary care spending before and after the implementation of the Affordable Care Act (ACA) marketplaces, no increase in primary care spending in inflation-adjusted dollar amounts was found among adults who enrolled in private nongroup insurance coverage and were eligible for ACA premium and/or cost-sharing subsidies. Using a "difference-in-differences" design to examine primary care spending for adults eligible for ACA marketplace coverage before and after the opening of the ACA marketplaces, researchers compared these adults to adults with employer-sponsored coverage (the control group). They found no difference in spending between the two groups over the three years after 2014 when marketplace coverage became available, and only a very slight uptick in primary care utilization was found among the ACA eligible adults.[37]

Strikingly, primary care spending and utilization for the control group (the population in employer-sponsored coverage) also fell between the pre-ACA (2010-2013) period and post-ACA (2014-2017) period studied. The authors speculate that the failure to find a coverage effect on primary care spending after the availability of ACA marketplace coverage might be explained by the "poor incentives for primary care associated with the low dollar value of cost-sharing subsidies."[37] In other words, high patient cost-sharing levels in ACA plans and the growing size of deductibles in employer-sponsored coverage may discourage primary care utilization beyond mandated preventive screenings with zero cost-sharing under the ACA.[38]

2.4 DISCUSSION: BENEFIT DESIGN AND PRIMARY CARE IN COMMERCIAL COVERAGE

The trend of high and rising deductibles in both Affordable Care Act marketplace and employer-sponsored coverage may help explain the decline of primary care spending and utilization observed in commercial claims data sources and across different study designs.[38] In a working paper posted at the National Bureau of Economic Research (NBER), Brot-Goldberg, et al. found that when a large employer implemented a high-deductible health plan, overall employee healthcare spending was reduced by roughly 13% annually, and that some of the services consumers elected to forgo were "likely of high value in terms of health and potential to avoid future costs." Almost all of the decline in spending came from an outright reduction in consumers' demand for services, not from shopping for lower-priced care options.[39]

More research is needed on the association between insurance-plan design and primary care spending and utilization. Some research, for example, indicates that managed health plans such as HMOs, whose popularity has declined in the commercial market, spend relatively more on primary care and devote more spending to non-claims payments than Preferred Provider Organization (PPO) plan models, whose market share has grown.[11] There is some evidence that Medicare Advantage plans, where enrollment is concentrated in HMO products, are more likely to share risk with providers and pay non-claims-based payments.[4,40] The adoption in Medicare Advantage (MA) of a quality "stars" program with financial bonuses for plans may incentivize MA plans to invest more in primary care and collaborate more closely with primary care clinicians.[41]

Other trends that reflect changing benefit designs in commercial plans and care settings include a growing percentage of primary care services delivered in retail clinic and urgent care settings, workplace clinics, or Direct Primary Care models in which patients (or employers on their behalf) pay a monthly subscription. Spending from all these settings and models may not be fully captured in claims data.

State Findings

3.1 STATE-BY-STATE ANALYSIS OF PRIMARY CARE SPENDING PERCENTAGE

3.1a – Wide Variation, Declining Trend in Primary Care Spending

The 2020 PCC Evidence Report looks at state-level spending in both 2017 and 2019 and adjusts the data for differences in age distributions across states. Primary care spending by age varies. Adjusting each state's age profile to match the national age distribution enables comparisons of primary care spending that are driven by factors other than differences in age distributions across states – with age a variable that state policymakers cannot readily influence.

Figure 3.0 represents national primary care spending percentages by age group. All results in Tables 3.0 and 3.1 reflect age-adjusted estimates of state-level primary care spending percentage. State measures of primary care spending as a share of total spending and state-relative rankings change only slightly after adjusting for differences in state population age profiles in the FAIR Health sample. Tables with state spending estimates unadjusted by age can be found in Appendix C.

The analysis of 2019 claims data found wide variation across states in primary care spending, with the highest-spending states spending *three times as much* on primary care as a share of total healthcare expenditures than the lowest-spending states using both definitions of primary care.

At the same time, nine of the 10 states that comprised the highest-spending primary care percentage states using a narrow definition also comprised the highest 10 primary care spending states using a broad definition, although the rankings change slightly.

Both narrowly defined and broadly defined primary care spending fell between 2017 and 2019 for most states. More specifically, *in 2019, 39 states spent a smaller percentage on primary care narrowly defined as compared to 2017, and 30 states spent less as a*

percentage on primary care spending defined broadly in 2019 compared to 2017, according to the FAIR Health analysis. The decline in the broad measure of primary care spending is especially striking considering the significant increase in nurse practitioners serving in primary care roles over the last several years.

The minority of states that saw increases between 2017 and 2019 included states that have been engaged in strategies to invest in primary care, including Oregon, North Carolina, Washington, and Idaho. Others, such as Arizona and Mississippi, had relatively high primary care spending levels in 2017 and increased their levels in 2019.

FIGURE 3.0

Distribution of Primary Care Spend by Age, 2019

National Percent PC Spend – Narrow by Age
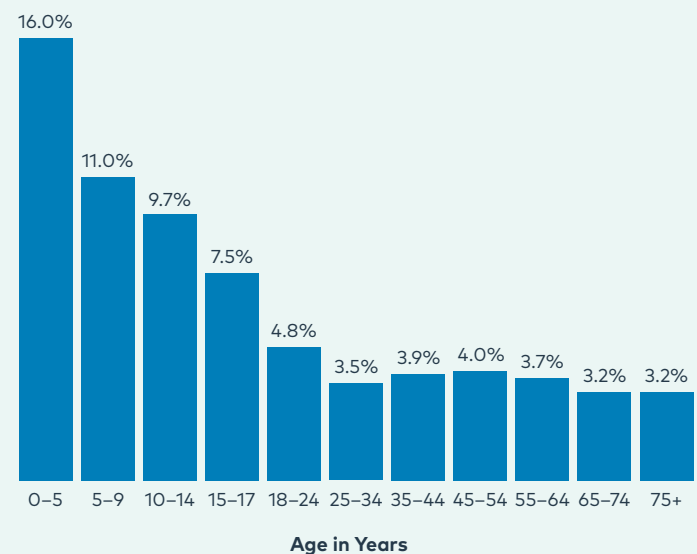
Data © FAIR Health, Inc.

TABLE 3.0

State Primary Care Spending Percentage, Narrow and Broad, Adjusted for Age, 2019

Rank	State	% PC Spend – Narrow (Age-adjusted)	State	% PC Spend – Broad (Age-adjusted)
	U.S. avg.	**4.67**	**U.S. avg.**	**7.69**
1	Michigan	9.48	Mississippi	16.64
2	Mississippi	8.63	Oregon	15.35
3	Arizona	8.35	Idaho	13.95
4	Oregon	8.07	Michigan	13.86
5	Maryland	7.56	Arizona	13.70
6	Iowa	7.08	Iowa	13.69
7	North Carolina	6.84	South Dakota	12.63
8	Massachusetts	6.58	North Carolina	12.37
9	Idaho	6.47	Wisconsin	12.27
10	South Dakota	6.23	Maryland	11.95
11	Wisconsin	6.11	North Dakota	11.92
12	Virginia	6.00	Minnesota	11.88
13	Utah	5.99	Nebraska	11.04
14	Minnesota	5.81	Wyoming	10.99
15	Maine	5.66	Utah	10.55
16	Nebraska	5.42	Washington	10.30
17	North Dakota	5.41	Massachusetts	10.28
18	Washington	5.38	Connecticut	10.12
19	Illinois	5.13	Montana	9.86
20	New Hampshire	5.11	Maine	9.18
21	Georgia	4.92	New Hampshire	8.99
22	Rhode Island	4.88	Kentucky	8.98
23	South Carolina	4.75	South Carolina	8.69
24	Louisiana	4.72	Virginia	8.52
25	Wyoming	4.67	Illinois	8.48
26	Arkansas	4.59	Louisiana	8.46
27	Oklahoma	4.49	Rhode Island	8.43
28	Kansas	4.44	Alaska	8.40
29	Delaware	4.38	Ohio	8.30
30	New Jersey	4.35	New Mexico	8.22
31	Hawaii	4.34	Vermont	7.99
32	Tennessee	4.28	Indiana	7.71
33	West Virginia	4.26	Tennessee	7.70
34	California	4.26	Georgia	7.66
35	Texas	4.23	New York	7.63
36	New York	4.14	Hawaii	7.58
37	Alabama	4.03	West Virginia	7.55
38	Missouri	4.01	Kansas	7.54
39	Connecticut	3.98	Arkansas	7.43
40	Florida	3.96	Nevada	7.37
41	Montana	3.92	Texas	7.25
42	Nevada	3.87	Colorado	7.19
43	Alaska	3.87	Delaware	7.14
44	Vermont	3.82	Alabama	7.12
45	Ohio	3.81	Missouri	7.12
46	Colorado	3.62	Florida	6.94
47	Indiana	3.57	Oklahoma	6.53
48	New Mexico	3.53	New Jersey	6.38
49	Pennsylvania	3.37	California	6.10
50	Kentucky	3.14	Pennsylvania	5.57

TABLE 3.1

Trend in Primary Care Spending Percentage, Narrow and Broad, Adjusted for Age, 2017-2019

Rank (highest to lowest) increase 2017-2019	State	% Change in PC Spend 2017-2019 – Narrow	State	% Change in PC Spend 2017-2019 – Broad
	U.S. avg.	-0.21	U.S. avg.	-0.11
1	ID	2.54	ID	4.52
2	OR	2.16	OR	3.97
3	UT	1.82	UT	3.79
4	NC	1.44	NC	3.71
5	WA	1.00	WA	2.29
6	WY	0.44	WY	0.93
7	OK	0.34	AZ	0.56
8	AZ	0.26	MT	0.50
9	IL	0.18	PA	0.46
10	KY	0.11	MS	0.46
11	PA	0.09	SD	0.46
12	AK	0.01	AL	0.36
13	WI	-0.04	IN	0.29
14	MA	-0.07	IL	0.24
15	MT	-0.07	AK	0.14
16	AL	-0.09	FL	0.11
17	CA	-0.09	SC	0.09
18	CO	-0.10	WI	0.09
19	IN	-0.11	CO	0.03
20	FL	-0.15	MA	0.02
21	NJ	-0.17	MN	0.01
22	MN	-0.20	NE	-0.04
23	SC	-0.22	CA	-0.08
24	NE	-0.24	ND	-0.12
25	IA	-0.27	IA	-0.16
26	MD	-0.28	KY	-0.17
27	ND	-0.28	LA	-0.23
28	MS	-0.29	NJ	-0.23
29	MO	-0.34	MD	-0.26
30	TN	-0.34	NV	-0.27
31	GA	-0.35	NM	-0.28
32	OH	-0.36	OH	-0.31
33	DE	-0.38	MO	-0.34
34	TX	-0.39	TX	-0.39
35	VT	-0.40	TN	-0.47
36	LA	-0.43	KS	-0.48
37	NV	-0.46	GA	-0.51
38	SD	-0.48	MI	-0.57
39	KS	-0.49	NH	-0.72
40	ME	-0.59	CT	-0.76
41	NH	-0.65	ME	-0.76
42	NY	-0.75	NY	-0.97
43	NM	-0.77	DE	-1.02
44	MI	-0.80	RI	-1.02
45	CT	-0.82	VT	-1.14
46	AR	-0.88	OK	-1.17
47	RI	-0.97	HI	-1.29
48	WV	-1.13	WV	-1.32
49	HI	-1.26	VA	-1.57
50	VA	-1.30	AR	-6.19
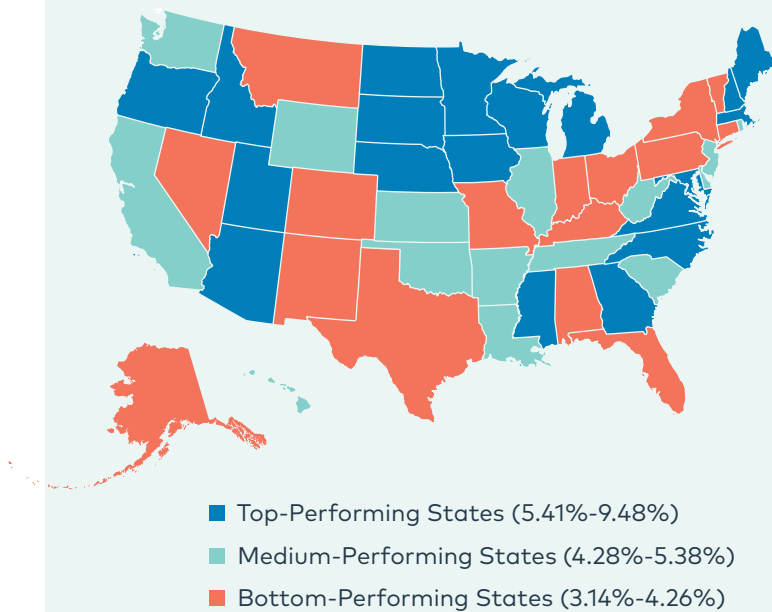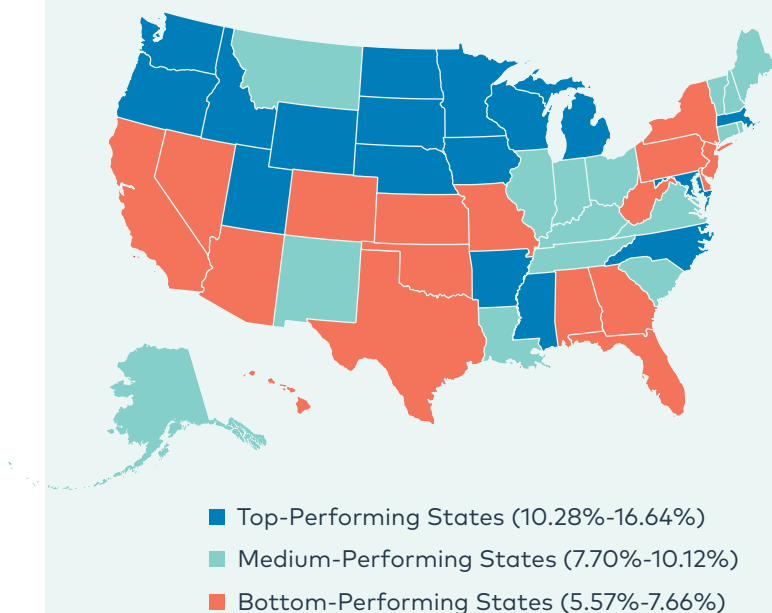
spending as a percentage of total healthcare spending among persons across all ages who are enrolled in private insurance plans (both fully insured and self-insured), including employer-sponsored, individual, and Medicare Advantage plans, 2019.

3.2 DATA, METHODS, AND LIMITATIONS

The FAIR Health data used for the 2020 PCC Evidence Report is private insurance claims, and therefore this report captures only claims-based payments to estimate primary care spending percentage; it does not capture non-claims payments, which in some states and for some payers may be a large share of total primary care spending. The Milbank Memorial Fund commissioned a report to help states assess and capture non-claims-based payments to primary care. A summary of the report's recommendations can be found in Appendix F.[42] How large is the non-claims payment share? An AMA study from 2018 showed that physician practice revenue (not specific to primary care) linked to value based payments is at 30 percent and has remained roughly at that level since 2012, based on regular surveys that the AMA conducts every two years.[43]

Data limitations also do not allow disaggregating spending into price and utilization components. This more nuanced data would provide insight into the factors driving the observed decline in primary care spending percentage as well as the dynamic behind the per capita decline in total and primary care spending between 2017 and 2019 in the FAIR Health sample.

While the FAIR Health claims data are timely and allow for a full 50-state analysis, it is limited to persons covered by commercial insurance plans, including those enrolled in fully insured and self-insured plans, along with persons 65 years and older covered by commercial Medicare Advantage plans. The imputed allowed amount used for this study is based on the maximum amount that private insurance will pay for a claim. The data do not include Medicare fee-for-service data, nor for non-claims-based payments. Medicare Advantage enrollees are not representative of the entire Medicare population in a state; the fee-for-service Medicare population tends to be older and sicker on average than Medicare Advantage enrollees. In addition, the percentage of beneficiaries enrolled in Medicare Advantage plans varies by state. Finally, the share of non-claims payment varies by plan type, and some evidence suggests that Medicare Advantage plans pay non-claims, risk-based payments at a higher rate than other types of commercial plans.[44]

FIGURE 3.1

Primary Care Spend Percentage

Narrow Definition

- ■ Top-Performing States (5.41%-9.48%)
- ■ Medium-Performing States (4.28%-5.38%)
- ■ Bottom-Performing States (3.14%-4.26%)

Broad Definition

- ■ Top-Performing States (10.28%-16.64%)
- ■ Medium-Performing States (7.70%-10.12%)
- ■ Bottom-Performing States (5.57%-7.66%)

The sample includes claims for persons with 12 months of continuous coverage during the year before the year under analysis and the year after the year under analysis for persons who also incurred at least one claim. Persons with no primary care claims during a year who meet these criteria are included in the sample. FAIR Health imputes a person's state of residence based on an algorithm that assigns the state of residence based on primary care and other outpatient claims, with all spending that is linked to the person attributed to the person's imputed state of residence. Data limitations do not allow us to disaggregate the impact of changes in payment rates, for example, an increase in hospital prices that may be contributing to higher overall healthcare spending, nor changes in sector utilization rates (e.g., more specialty visits). This more nuanced data would help to understand the factors driving the observed decline in primary care spending percentage.

3.3 DISCUSSION OF STATE-SPECIFIC RESULTS

3.3a – Importance of Non-Claims Spending Data: What State Reports Tell Us

The findings using FAIR Health claims data may be biased downward by the absence of non-claims data in the numerator and denominator; non-claims spending appears to be increasing in the few state-issued primary care spending reports that attempt to measure it. Non-claims payments for primary care services also appear to vary across states. Non-claims payments may include "value-based" pay-for-performance bonuses or withholds; shared savings relative to a benchmark; per-patient, per-month capitation; or other type of non-fee-for-service payment.[4] In states where one payer or system plays a dominant role and uses a high share of non-claims payments, such as Kaiser Permanente does in California, an analysis of claims-only data undoubtedly underestimates the state measure of primary care's share of total spending.

Recent findings from state primary care spending reports and other state healthcare spending reports highlight variation in non-claims spending both within states across payers and across states. The findings below are not from a random sample of states but rather states with a strong policy focus on advancing alternative payment models and investing in primary care.

- **Oregon's** 2020 primary care spending report estimates large commercial payers are spending almost 50% of total primary care spending on non-claims payments, but this result is skewed by Kaiser Permanente's 91% non-claims share of PC spend. Most large commercial plans are spending 15% of primary care spending on non-claims payments in Oregon. Non-claims-based spending accounts for more than half of total primary care spending in both Medicare Advantage and Medicaid Coordinated Care Organizations.[27]

- **Rhode Island** estimates non-fee-for-service payments account for more than 50% of total primary care spending.[45] This likely explains Rhode Island's relatively low primary care spending percentage found in the 2020 PCC Evidence Report compared to the state's own analysis.

- **Vermont** estimates that about 14% of its commercial primary care spending is on non-claims-based costs but notes that $86 million in prospective payments were not included in its primary care spending report because the share of this spending allocated to primary care could not be estimated accurately.[46]

- **Colorado** recently estimated that population-based payments from alternative payment models accounted for 40% of total primary care spending in Colorado in 2018. The claims-only estimate used for the 2020 PCC Evidence Report thus fails to capture a substantial portion of primary care spending in Colorado.[47]

- The **Massachusetts** Health Policy Commission reports extensively on healthcare spending in the Commonwealth. It found the overall rate of alternative payment model adoption across all commercial products declined from 45% in 2016 to 42.8% in 2018 when measured as a percentage of member months.[48]

- **Delaware's** "preliminary" report on healthcare spending under its healthcare spending benchmark initiative estimates that total non-claims spending in 2018 was a negligible $64 million on a total state healthcare spending base of almost $8 billion.[49]

Even among the "pacesetter" states surveyed here, the amount of revenue paid by commercial plans using non-claims payment types can vary greatly within a state and across plans and programs, making it difficult to attribute to primary care clinicians and practices accurately. Moreover, the rate at which payers are increasing the share of total payments paid through non-claims mechanisms also appears to be uneven.

Ten states currently measure state primary care spending, and two more states are committed to doing so. Only Rhode Island, Colorado, and Oregon are measuring both claims and non-claims components of spending. There are data, measurement, and methodological challenges that must be addressed as states attempt to measure the non-claims share of spending on primary care and other services.

3.3b – Other Possible Factors Driving Variation Across State Primary Care Spending

Over the last 10 years, many states have implemented policies to encourage investment in primary care infrastructure and capacity, often in conjunction with value-based payment reforms. Rhode Island, for example, has been making almost all increases in primary care investment in non-claims spending, which is not captured in the PCC 2020 Evidence Report analysis. As noted above, Vermont has embarked on system-wide payment reform with an All-Payer Accountable Care Organization (ACO) model, and the prospective payments to its ACO are not captured by the PCC 2020 Evidence Report analysis.

Insurance plan design also may play a role in state variation in primary care spending.[12] California, Minnesota, Washington, and Oregon have a tradition of managed care in their commercial markets (including Medicare Advantage). The annual Health Care Payment, Learning and Action Network (HCPLAN) survey of payers suggests Medicare Advantage plans are more likely to make non-claims, value-based payments to providers—payments that would not be captured in the FAIR Health data.[4]

Other states with relatively high primary care spending percentages, such as Michigan, Maryland, North Carolina, and perhaps Mississippi, have dominant Blue Cross Blue Shield carriers in their commercial markets, and some (i.e., Michigan) have had large employers active in purchasing health care. Several Blue Cross Blue Shield plans operating in the relatively high spending primary care states have encouraged and incentivized primary care practices to adopt Patient-Centered Medical Home (PCMH) capabilities and seek accreditation as such.[50] Since plans with high statewide market penetration are more likely to care for plan participants across their lifetimes, they may have a better "business case" for investing in primary care.

Other factors driving variation in primary care spending percentage may include state-level variation in other components of total spending, including drug, hospital, and specialist price levels, rates of growth, and utilization. Recent reports that attempt to measure state-level hospital prices and utilization, as is done by the Massachusetts Health Policy Commission in its annual healthcare cost benchmarking process, and the 2020 report issued by RAND for a coalition of employers may provide further insight into why primary care spending percentage is or is not relatively high or low or increasing in particular states.[48,51] More research is needed to understand these state-level results and potential confounders.

SECTION 4

Recent State Actions

4.1 BACKGROUND AND CONTEXT

State policymakers have taken note of the strong role that primary care plays in generating better population health outcomes, addressing health inequities, and enhancing value. To date, 12 states have reported or committed to report primary care spending. Appendix H highlights recent state action to measure primary care, build on previous efforts to measure primary care, and to set official targets for primary care spending. The COVID-19 pandemic has delayed some state actions in 2020.

As they grapple with healthcare cost growth that often exceeds state revenue and economic growth, state policymakers are taking actions to strengthen the capacity of primary care to help drive greater value from state healthcare spending and improve the performance of their healthcare delivery systems. The 2019 PCC Evidence Report includes a discussion of the evidence for and adoption of the Patient-Centered Medical Home (PCMH) model that many states employed to spur and align public and private payers to strengthen primary care's capacity to meet the needs of diverse state populations.[10]

Despite the unprecedented demands of a global pandemic in 2020, many states maintained progress in building data infrastructure, staff capacity, and dedicated resources for measuring primary care spending and supporting enhanced primary care practice models. States have often established multi-stakeholder working groups to advise these measurement efforts and assist to align and implement payment and delivery models that build investment in state primary care capacity.

4.2 SETTING TARGETS FOR PRIMARY CARE SPENDING PERCENTAGE TO PROMOTE ACCOUNTABILITY

More states are including spending targets for primary care, following **Rhode Island's** lead in 2010 to establish a target of 10.7% of total healthcare spending on primary care. In January 2020, **Connecticut** Gov.

Ned Lamont (D) issued Executive Order 5 establishing a state healthcare cost benchmarking process that also includes a primary care spending target of 10% by 2025. **Delaware** has set a target of 12% by 2024, and **Oregon** now requires that its commercial carriers and Medicaid Coordinated Care Organizations achieve a minimum of 12% of primary care spend by 2023. At the end of 2019, the Colorado Primary Care Payment Reform Collaborative recommended that all commercial payers should be required to increase the percentage of total medical spending (excluding pharmacy) spent on primary care by at least 1% annually through 2022.[52] These recommendations (with minor modifications) were being incorporated into regulation by the Department of Insurance as this report went to print. **Washington state** is contractually requiring its Medicaid MCOs and plans serving school employees to report on primary care spending and has a minimum payment requirement on commercial plans participating in the Cascade Public Option plan to pay 135% of Medicare for primary care services. **Massachusetts** Governor Charlie Baker (R) introduced legislation in advance of the 2020 legislative session that would measure and set targets for primary care and behavioral health spending, but the effort has been slowed by the need to focus on pandemic response.

With **Connecticut** Gov. Lamont's issuance of Executive Order 5 early in 2020, five states (Colorado, Connecticut, Delaware, Oregon, and Rhode Island) are now measuring and setting a target for a primary care spending percentage or have announced an intent to do so. **Maine** and **Delaware** issued their first primary care spending reports in 2020. A growing number of states (Oregon, Connecticut, Delaware, Vermont, and Washington) are or will be measuring primary care spending in the context of broader healthcare cost benchmarking efforts. **Massachusetts** is measuring primary care spending together with the other five New England states under an initiative of the New England States Consortium Systems Organization (NESCSO) to report primary care spending across these states using a common definition of primary care spending.

See Appendix H for links to state laws, executive orders, and primary care spending reports.

4.3 STATE INNOVATORS IN 2020

Rhode Island was the first state to set targets for primary care spending as part of the broad authority granted to the Office of the Health Insurance Commissioner to promote healthcare affordability. In 2020, Rhode Island updated the regulations that engage the state insurance carriers, provider systems, clinicians, and consumers in the ongoing affordability effort. Colorado is finalizing regulations in 2020 under a model similar to Rhode Island's. Both states are featured below. At the highest levels of state leadership, Massachusetts has committed to increasing investment in primary care and behavioral health, though legislation has been temporarily paused by the pandemic. Finally, a consortium of New England states is collaborating to use a common primary care measure and will be publishing a comparative report across six states before the end of 2020.

Colorado

Legislation enacted in 2019 gives the Colorado Division of Insurance (DOI) the authority to develop affordability standards and targets for commercial payer investments in primary care. Colorado also established a primary care payment reform collaborative of stakeholders to advise the DOI. In December 2019, the Collaborative issued its recommendations.[52] They include:

- A broad and inclusive definition of primary care

- Requirements that commercial payers increase their primary care spend by at least 1 percentage point annually through 2022

- The state should identify metrics to track improvements from increased investment in primary care

- Increased investment in primary care should be offered primarily through infrastructure investments and alternative payment models using prospective payment

Massachusetts

In late 2019, Gov. Charlie Baker (R) proposed comprehensive legislation to improve outcomes, increase access, and "bring down costs" by promoting access to behavioral health and primary care services and setting a target to increase spending on primary care and behavioral health services by 30% over three years "within the construct of the state's healthcare benchmark."[53] The Massachusetts Health Policy Commission (HPC) joined Gov. Baker in calling for increased investment in primary care. Specifically, the HPC recommended that "payers and providers should increase spending devoted to primary care and behavioral health while adhering to the cost growth benchmark."[48]

New England States Consortium Systems Organization (NESCSO)

With support from the Milbank Memorial Fund, the New England States Consortium Systems Organization has collaborated with several New England states (Maine, Massachusetts, Vermont, Rhode Island, New Hampshire, and Connecticut) to develop a multi-state report on primary care spending across all payers using a consensus definition to support cross-state "apples to apples" comparisons. Building upon the PCC's recommendation and through engagement with Onpoint Health Data, NESCSO will be releasing a "New England States All-Payer Report on Primary Care Investments" during the fourth quarter of 2020. Participating states include Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. This report will utilize standardized data from the six New England states' all-payer claims databases (APCDs), reflecting both public and private payments. The report will identify the percentage of all-payer primary care spending relative to overall healthcare spending (excluding retail pharmacy) and will provide a framework to evaluate whether increased investment in primary care improvements has an impact on cost growth, access to healthcare services, or the quality of care and healthcare outcomes in each state.

The report will include all allowed amounts for defined expenditures reported to the APCD on behalf of primary care providers with taxonomy codes in the categories of general practice, family medicine, pediatrics, internal medicine, nurse practitioners, and physician assistants. Primary care services provided by Federally Qualified Health Centers, rural health clinics, and critical-access hospitals also will be included. The report will include two definitions of primary care services—one narrow, the other broad:

- **Definition #1:** The narrow definition is restricted to primary care services and procedures, as defined by this study, provided by primary care providers.

- **Definition #2:** The broad definition will include all services, excluding OB/GYN services, provided by the same primary care practitioner types. [54]

Pennsylvania

In October 2020, Pennsylvania Gov. Tom Wolf (D) signed Executive Order number 2020-05, which establishes the Interagency Health Reform Council to "to evaluate the potential alignment of Commonwealth health care payment and delivery systems to provide efficient, whole-person health care that also contains costs, reduces disparities, and achieves better health outcomes for Pennsylvanians."[55] If related legislation is not passed, the executive order instructs the council to develop healthcare cost growth benchmarks and make recommendations for future targets by March 31, 2021.

Part of the council's responsibilities include setting spending targets for primary care and behavioral health to promote whole-person care in the state. The first report of healthcare reform recommendations is to be submitted by December 31, 2020.

Rhode Island

In 2020, the Rhode Island Office of the Health Insurance Commissioner updated its groundbreaking "affordability standards" for commercial health insurers, first established in 2010, by raising the bar for more comprehensive payment reform and system reforms.[56]

Rhode Island leaders had the foresight to embed primary care investment targets in broader system-affordability and value goals, tied to specific system transformation activities and expectations of payers and primary care clinicians. The revised standards focus on accelerating behavioral health integration and set aggressive targets for prospective payment models that encompass primary care. By 2024, insurers must have 60% of their individuals covered by prospective payment models for primary care and behavioral health integration.

In addition, accountability standards for insurer-hospital contracting are updated. These standards have been a key factor in Rhode Island's success in advancing affordability while exceeding its primary care investment target.[57] Rhode Island has also adopted overall system cost benchmark targets and joins a growing number of states in recognizing the role that measuring, public reporting, and public engagement play in providing ongoing accountability for achieving affordability.

The COVID-19 pandemic may interrupt some of the activities and timelines in the new standards, but Rhode Island has an effective, ongoing process for convening stakeholders and monitoring delivery-system performance to support primary care clinicians and health plans as they respond to and learn from the challenges of managing COVID-19.

Implications and Opportunities for States

A healthcare system that is transitioning to emphasize value should also be a healthcare system that is reorienting to primary care, yet reorientation is not apparent in recent national data on primary care spending as a percentage of total healthcare spending for populations covered by commercial health plans. States display wide variation in primary care spending, with top-spending states reaching levels that suggest they have made significant progress reorientating their healthcare system to primary care.

Since 2010 and the enactment of the Affordable Care Act, the federal government has been adopting value-based payment policies in Medicare in an effort to transition from fee-for-service reimbursement systems to payment models that reward quality and outcomes at lower cost trends. Primary care is viewed as the necessary foundation for most of these value-based payment policies. Many states have embraced payment and delivery-system reforms as well. Commercial payers and leading employer purchasers also began incorporating various pay-for-value components into fee-for-service reimbursement, with the intent to transition to risk-sharing payment models over time. Despite the decade of effort, many analysts have concluded that these efforts are proceeding too slowly.

In addition, studies reviewed in the 2020 PCC Evidence Report suggest that the enhanced insurance coverage realized through the ACA is not enough to increase the percentage of adults with a regular source of primary care, to increase primary care utilization, or to grow the percentage of the healthcare dollar spent on primary care.

Changes in health insurance benefit designs for commercially insured populations, including those on ACA exchanges—such as high-deductible plans—may be working against both expected gains in access to primary care and in efforts to reorient the U.S. healthcare system to primary care based on alternative payment models.

States are well-positioned to be change agents in driving value and a reorientation of the healthcare system toward primary care.

They are purchasers of public-employee health coverage and Medicaid coverage for low-income and other vulnerable residents, which gives them clout with payers and providers. States have regulatory authority over insurance carriers in the individual and fully insured group markets. Consequently, states can shape the products offered in at least part of their commercial market and require data reporting to monitor progress. States license healthcare providers and can define their accountabilities, and they fund the training of many healthcare workers. Finally, states are well-positioned to convene stakeholders to promote alignment between Medicare and other payers and programs and to monitor progress through measurement and public reporting initiatives.

COVID-19 has forced states to re-focus priorities in the short term, but the pandemic also provides lessons for states for the medium and longer term.

The slow pace of progress in adoption of value-based payment made primary care clinicians more vulnerable and less prepared to respond to COVID-19, with reliance on face-to-face visits paid retrospectively and lack of capital to invest in telehealth and to weather plunging visit volume. These conditions further weakened the primary care platform but perhaps have rendered primary care more amenable to delivery and payment-model changes.

For patients, the pandemic is a perfect storm, particularly for those in demographic groups with weak ties to primary care and for those living in communities that lack housing that allows for social distancing, high prevalence of food insecurity, and jobs that require them to interact with the public. Without regular access to primary care, individuals from underserved communities and racial minorities are more likely to have undiagnosed

chronic disease.[58] Burdened with high rates of chronic conditions, members of these communities have suffered an enormous toll of illness and death from COVID-19.

States that commit to addressing health disparities laid bare by COVID-19 can invest more in primary care, particularly through value-based payment models, to enhance the health of their populations. Higher investment in primary care has the added benefit of potentially controlling overall healthcare spending, freeing up funding for roads and schools. Such investment would also strengthen the resiliency of state healthcare delivery systems to better manage other public health emergencies.

Federal policymakers and private payers also need to do their part. In the U.S., primary care spending is between 5% and 8%, as compared to an average of 14% in the OECD countries. This may well be one of a number of factors that contribute U.S. life expectancy being 2 to 3 years lower than our European counterparts. Additionally, with overall U.S. spending on health care as a share of the economy roughly double the OECD average, we have a lot of opportunity for improvement.[59,60,61] It is past time to re-orient our system toward primary care in order to realize our mutual goal of enhanced healthcare value.

States that commit to addressing health disparities laid bare by COVID-19 can invest more in primary care, particularly through value-based payment models, to enhance the health of their populations. Higher investment in primary care has the added benefit of potentially controlling overall healthcare spending, freeing up funding for roads and schools.

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Appendix A

METHODOLOGY FOR PCC ANALYSIS: AUGUST 2020

FAIR Health used its longitudinal dataset to conduct the analysis for the PCC. Using dates of service between January 1, 2017 and December 31, 2019, we first created a cohort of patients who had a full year of coverage (12-month continuity of coverage) for each individual year of analysis: 2017, 2018, 2019. To ensure 12-month continuity of coverage, we identified patients who incurred claims in the prior year timeframe (e.g., January 1, 2016 through December 31, 2016 for the 2017 analysis year) and claims in the post-year timeframe (e.g., January 1, 2018 through December 31, 2018 for the 2017 analysis year). FAIR Health imputed a residence state for each patient by evaluating claims for primary care and other office visits and using an algorithm used in prior studies.

We then analyzed the FAIR Health dataset using two categories of **provider specialties**, below:

Category 1: PCP-1 – Narrow Specialty Definition	Category 2: PCP-3 – Broad Specialty Definition
a. Family medicine	a. Family medicine
b. Internal medicine	b. Internal medicine
c. Pediatric medicine	c. Pediatric medicine
d. General practitioner	d. General practitioner
	e. Nurse practitioner (NP)
	f. PA (Physician assistant)
	g. Geriatric medicine
	h. Adolescent medicine
	i. Gynecology

We identified the **place of service/service type** associated with each claim line using a combination of place of service, service type (for UB-04 claims), and procedure code. Categorizations included: outpatient facility services; office-based services; inpatient hospital care; emergency department visits, prescription medications* (See *Rx swag*); vision care; dental care; mental health care; home health care; other medical category.

Imputed Allowed Amounts: We quantified the "spend" using our Imputed Allowed Amount Methodology.[a] Imputed allowed amounts were assigned to each claim line and were used for all subsequent spend calculations.

*The Rx Swag: In the absence of prescription medication data in the FAIR Health dataset, we introduced the Rx swag methodology to determine the actual prescription spend for each patient. For each analysis year, a patient was associated with a static prescription spend amount (categorized as **non-PCP spend** in subsequent calculations). We created a derived claim line for each patient for each analysis year using the following spend values and analyzed the combination of both actual and derived ("swagged") claims lines:

2017: $862
2018: $995
2019: $1,084

CREATING PATIENT PROFILES

We created a **"Per-patient-per-year Profile"** with the following values:

- year of analysis (date of service year)
- patient identifier
- patient imputed residence
- patient age band
- patient gender
- type 1 diabetes
- type 2 diabetes
- asthma
- mental health
- hypertension
- had ED visit
- was hospitalized
- had potentially avoidable hospitalization

Age Band: We assigned each patient to one of the following 10 single-age categories for each analysis year: under 5; 5 to 9 years; 10 to 14 years; 15 to 17 years; 18 to 24 years; 25 to 34 years; 35 to 44 years; 45 to 54 years; 55 to 64 years; 65 to 74 years. We then calculated a patient's age on the date of service using the patient's date of birth and the date of service on the claim. To avoid double counting, we categorized patients into a **single-age category per year** using the patient's average age across their claims data within a given year and categorized each patient into a single patient age band using his/her average age.

Gender: If a patient had more than one gender listed on their claims (a rare occurrence), we attributed the most commonly appearing gender on the patient's claims.

Chronic Conditions: We identified patients with the following chronic conditions: *Type 1 Diabetes, Type 2 Diabetes, Asthma*, *Mental Health*, and *Hypertension*, indicated by Yes/No. As requested in the specification, a patient tagged with a chronic condition in any analysis year carried that tag across the **entire analysis**, e.g., a patient tagged with Asthma in 2018 would be tagged with Asthma in 2017, 2018, and 2019.

Metric Categories: We identified the following metric categories for **each patient** on a **per year** basis: *At least one emergency department visit during the analysis year; at least one inpatient hospitalization during the analysis year*; and *at least one potentially avoidable hospitalization (pac) during the analysis year*, indicated by Yes/No. Unlike the chronic condition indicators, metric categories are specific to the **analysis year.**

USING THE PATIENT PROFILE

Patient profile data, used for various detailed reports, were joined to the analysis data on *patient id* and *year of analysis*, thereby allowing the data to be aggregated and split by patient attributes. State-level PCP spend percentages were calculated for each analysis year for both broad and narrow PCP definitions. Actual PCP spend percentages were calculated using a state's broad/narrow PCP spend divided by the state's total spend.

Given the variation of age distributions between states, we used a weighted average methodology to calculate **normalized PCP spend** (controlling for differences in state age demographics) as follows:

A. Calculate the percentage of members in each age group (a) on a national level
   i. These are the age group weighting factors, *Wa*
B. Calculate primary care (*PC*) spend as a percentage of total spend per state (s) per age group, *PCsa*
C. Calculate normalized PC spend per state as a weighted average, where:
   ii. *Normalized_PCsa = a(PCas ×Wa)*

This weighted methodology was also used on the "Normalized" versions of **Figures 1.1, 1.2, 1.3** for the **Y-axis** values ('*% with at Least One ED* Visit', *'% with at Least One Hospitalization'* and *'% Avoidable Hospitalizations'*), since the **X-axis value** (PCP Spend Narrow Definition) was controlled for age.

a. We used specialties in *Appendix B of the Primary Care Spending Study Technical Specifications in the Friedberg/Milbank Memorial Fund July 2017 paper*, with changes based on the *2019 PCC Evidence Report*. See Allowed Methodology Overview.pdf

FAIR Health
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FAIR HEALTH METHODOLOGY ALLOWED AMOUNT BENCHMARKS

Summary

FAIR Health offers benchmark data products for "allowed amounts," that is, the amounts that serve as the basis for reimbursement from insurers and other payors to providers or insureds for specific healthcare services. Allowed amounts reflect the total of both the member cost-share and the insurer's payment, for specific healthcare services. The allowed amount benchmarks provide insight into contracted[1] rates and support in-depth analytics while safeguarding the proprietary interests of payors and providers.

Methodology Overview

FAIR Health creates its allowed amounts benchmarks using 12 consecutive months of claims data from privately billed healthcare claims received from approximately 60 insurers and administrators for plans that cover over 150 million individuals nationwide. FAIR Health first determines the ratio of the actual allowed amount to the actual billed charge for each claim line (i.e., each line representing a specific procedure or service).

The averages of the ratios for the codes in each group of related codes are then determined for each region[2] (Northeast, South, Midwest, West). The applicable regional ratio for a group of procedures is then applied to each individual charge in that procedural group. The application of these ratios to actual billed charges, which FAIR Health sorts by their local market areas, creates imputed allowed amounts that reflect the economics of their specific geographic areas.

These imputed allowed amounts then serve as the underlying data used to determine allowed amount benchmarks for over 12,000 official procedure codes. FAIR Health arrays the imputed allowed amounts from the 50th to the 95th percentile for each procedure code in each one of 493 geographic regions nationwide. These regions, called "geozips," generally correspond to the first three digits of a zip code.

Categorizing Procedure Codes

FAIR Health's methodology uses similar or related procedures to determine the allowed amount ratios, provided that each group of procedures includes at least 500 reported services with allowed amounts on the claim. For example, CPT Code 99215 is in the group *Established Patient Office or Other Outpatient Services,* along with all codes in the range CPT 99211-99215. If the group does not contain a sufficient number of reported occurrences for those procedures, the codes in that group are then placed in a broader group of similar procedures. For example, all codes in the ranges CPT 99201-99205 *and* 99211-99215 are included in the broader group, *Office or Other Outpatient Services*. If the broader group has at least 500 procedures, ratios for the procedures are determined based on the occurrences in this larger group.

If a group still does not contain a sufficient number of procedures, the codes are assigned to a large group of five broadly-related procedures according to code groups established by the American Medical Association: Evaluation and Management, Surgery, Radiology, Pathology and Lab, and Medicine.[3]

Calculating Imputed Allowed Amounts and Identifying Outliers

For every release of a module, FAIR Health determines the ratio of the allowed amount to billed charge for each claim line then determines the average of those ratios within each group of codes and each applicable region of the country. These ratios are applied to the billed charge on every claim line to produce the imputed allowed amounts.

FAIR Health applies its standard MAD 4 outlier methodology to the *actual* allowed amounts to determine high and low outlier thresholds, which are applied to the imputed allowed amounts on a geozip basis. This outlier methodology identifies and excludes the imputed allowed amounts, if any, which are so low or so high that their inclusion in the range of imputed allowed amounts risks distorting the range and thereby the resulting benchmarks.

Establishing Allowed Amount Benchmarks

After application of the outlier methodology, allowed amount benchmarks are determined for each procedure code in each geozip by arraying from lowest to highest the imputed allowed amounts for the code in the geozip. Provided there are at least nine occurrences of the procedure code in this array, the percentile benchmarks are determined from the 50th to the 95th percentiles. If there are fewer than nine[4] occurrences, benchmarks are determined using a relative value and conversion factor methodology.

Assessment

The allowed amount methodology produces benchmarks that meaningfully reflect prevailing contracted rates for specific procedures in specific locations. FAIR Health performed a variety of statistical analyses and comparisons to assess this methodology. Measurement of the overall relationship of all imputed allowed amount values to all the actual allowed amounts for all codes at both the national and the geozip level showed a correlation of +0.9.

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1   Because in-network values represent a much smaller percentage of dental claims than medical claims, dental allowed amounts reflect both in-network and out-of-network reimbursement amounts.

2   A national average is used to calculate allowed amounts for anesthesia services.

3   Similar large groups are established for Dental and HCPCS codes.

4   Eleven occurrences for outpatient benchmarks.

Appendix B

TABLE B.0

Commercial Primary Care Spending as Share of Total Spending (unadjusted and age-adjusted), 2019

State	% PC Spend Narrow (unadj.)	Rank 2019	State	% PC Spend Broad (unadj.)	Rank 2019	State	% PC Spend Narrow (age-adj.)	Rank 2019	State	% PC Spend Broad (age-adj.)	Rank 2019
U.S. avg.	4.67%			7.63%			4.67%			7.69%	
MI	9.37%	1	MS	16.24%	1	MI	9.48%	1	MS	16.64%	1
MS	8.53%	2	OR	15.02%	2	MS	8.63%	2	OR	15.35%	2
AZ	8.02%	3	IA	13.79%	3	AZ	8.35%	3	ID	13.95%	3
OR	7.87%	4	MI	13.64%	4	OR	8.07%	4	MI	13.86%	4
MD	7.35%	5	ID	13.27%	5	MD	7.56%	5	AZ	13.70%	5
IA	7.23%	6	AZ	12.85%	6	IA	7.08%	6	IA	13.69%	6
NC	6.84%	7	WI	12.59%	7	NC	6.84%	7	SD	12.63%	7
MA	6.81%	8	MN	12.48%	8	MA	6.58%	8	NC	12.37%	8
UT	6.35%	9	NC	12.26%	9	ID	6.47%	9	WI	12.27%	9
ID	6.27%	10	ND	12.02%	10	SD	6.23%	10	MD	11.95%	10
WI	6.23%	11	NE	11.52%	11	WI	6.11%	11	ND	11.92%	11
MN	6.15%	12	MD	11.47%	12	VA	6.00%	12	MN	11.88%	12
ME	6.07%	13	UT	11.14%	13	UT	5.99%	13	NE	11.04%	13
VA	5.92%	14	SD	10.64%	14	MN	5.81%	14	WY	10.99%	14
NE	5.73%	15	MA	10.63%	15	ME	5.66%	15	UT	10.55%	15
ND	5.59%	16	WA	10.27%	16	NE	5.42%	16	WA	10.30%	16
SD	5.42%	17	CT	10.18%	17	ND	5.41%	17	MA	10.28%	17
WA	5.37%	18	WY	10.17%	18	WA	5.38%	18	CT	10.12%	18
NH	5.22%	19	ME	9.83%	19	IL	5.13%	19	MT	9.86%	19
RI	5.05%	20	MT	9.41%	20	NH	5.11%	20	ME	9.18%	20
IL	5.04%	21	NH	9.30%	21	GA	4.92%	21	NH	8.99%	21
GA	4.90%	22	RI	8.91%	22	RI	4.88%	22	KY	8.98%	22
AR	4.68%	23	AK	8.45%	23	SC	4.75%	23	SC	8.69%	23
LA	4.67%	24	VA	8.28%	24	LA	4.72%	24	VA	8.52%	24
SC	4.51%	25	OH	8.26%	25	WY	4.67%	25	IL	8.48%	25
DE	4.46%	26	IL	8.25%	26	AR	4.59%	26	LA	8.46%	26
WY	4.39%	27	LA	8.16%	27	OK	4.49%	27	RI	8.43%	27
CA	4.39%	28	VT	8.15%	28	KS	4.44%	28	AK	8.40%	28
KS	4.35%	29	SC	8.08%	29	DE	4.38%	29	OH	8.30%	29
NJ	4.23%	30	KY	8.02%	30	NJ	4.35%	30	NM	8.22%	30
TX	4.18%	31	NY	7.71%	31	HI	4.34%	31	VT	7.99%	31
TN	4.18%	32	GA	7.62%	32	TN	4.28%	32	IN	7.71%	32
OK	4.14%	33	IN	7.56%	33	WV	4.26%	33	TN	7.70%	33
NY	4.12%	34	TN	7.43%	34	CA	4.26%	34	GA	7.66%	34
CT	4.09%	35	NM	7.40%	35	TX	4.23%	35	NY	7.63%	35
MO	3.98%	36	KS	7.36%	36	NY	4.14%	36	HI	7.58%	36
WV	3.85%	37	AR	7.30%	37	AL	4.03%	37	WV	7.55%	37
VT	3.82%	38	NV	7.15%	38	MO	4.01%	38	KS	7.54%	38
AK	3.81%	39	CO	7.10%	39	CT	3.98%	39	AR	7.43%	39
MT	3.79%	40	TX	7.08%	40	FL	3.96%	40	NV	7.37%	40
OH	3.79%	41	DE	6.94%	41	MT	3.92%	41	TX	7.25%	41
AL	3.79%	42	MO	6.85%	42	NV	3.87%	42	CO	7.19%	42
NV	3.77%	43	AL	6.56%	43	AK	3.87%	43	DE	7.14%	43
HI	3.63%	44	CA	6.37%	44	VT	3.82%	44	AL	7.12%	44
CO	3.62%	45	WV	6.32%	45	OH	3.81%	45	MO	7.12%	45
IN	3.56%	46	NJ	6.26%	46	CO	3.62%	46	FL	6.94%	46
FL	3.49%	47	FL	6.18%	47	IN	3.57%	47	OK	6.53%	47
NM	3.42%	48	HI	6.18%	48	NM	3.53%	48	NJ	6.38%	48
PA	2.98%	49	OK	5.90%	49	PA	3.37%	49	CA	6.10%	49
KY	2.75%	50	PA	4.81%	50	KY	3.14%	50	PA	5.57%	50

Appendix C

TABLE C.0

Commercial Primary Care Spending as Share of Total Spending (unadjusted and age-adjusted), 2017

State	% PC Spend Narrow (unadj.)	Rank 2017	State	% PC Spend Broad (unadj.)	Rank 2017	State	% PC Spend Narrow (age-adj.)	Rank 2017	State	% PC Spend Broad (age-adj.)	Rank 2017
U.S. avg.	**4.99%**			**7.81%**			**4.88%**			**7.80%**	
MI	10.26%	1	MS	15.62%	1	MI	10.28%	1	MS	16.18%	1
MS	8.80%	2	MI	14.30%	2	MS	8.92%	2	MI	14.43%	2
AZ	7.83%	3	IA	13.78%	3	AZ	8.10%	3	IA	13.85%	3
MD	7.78%	4	AR	13.27%	4	MD	7.84%	4	AR	13.62%	4
IA	7.58%	5	MN	12.64%	5	IA	7.35%	5	AZ	13.14%	5
VA	7.12%	6	WI	12.55%	6	VA	7.30%	6	MD	12.21%	6
MA	6.97%	7	AZ	12.25%	7	SD	6.71%	7	WI	12.18%	7
ME	6.77%	8	ND	12.00%	8	MA	6.65%	8	SD	12.17%	8
MN	6.55%	9	MD	11.72%	9	ME	6.25%	9	ND	12.04%	9
WI	6.35%	10	NE	11.37%	10	WI	6.14%	10	MN	11.87%	10
RI	6.11%	11	OR	11.15%	11	MN	6.02%	11	OR	11.38%	11
SD	6.03%	12	CT	10.95%	12	OR	5.90%	12	NE	11.08%	12
OR	5.90%	13	MA	10.73%	13	RI	5.86%	13	CT	10.88%	13
NH	5.87%	14	SD	10.70%	14	NH	5.76%	14	MA	10.26%	14
ND	5.85%	15	ME	10.47%	15	ND	5.69%	15	VA	10.09%	15
NE	5.82%	16	RI	9.94%	16	NE	5.66%	16	WY	10.06%	16
NC	5.41%	17	NH	9.82%	17	HI	5.60%	17	ME	9.94%	17
AR	5.27%	18	VA	9.64%	18	AR	5.47%	18	NH	9.71%	18
GA	5.25%	19	WY	9.04%	19	NC	5.40%	19	RI	9.45%	19
LA	5.08%	20	ID	8.99%	20	WV	5.39%	20	ID	9.43%	20
CT	5.00%	21	VT	8.96%	21	GA	5.27%	21	MT	9.36%	21
WV	4.95%	22	NY	8.73%	22	LA	5.15%	22	KY	9.15%	22
HI	4.94%	23	OH	8.61%	23	SC	4.97%	23	VT	9.13%	23
NY	4.94%	24	NC	8.58%	24	IL	4.95%	24	HI	8.87%	24
IL	4.91%	25	LA	8.36%	25	KS	4.93%	25	WV	8.87%	25
KS	4.86%	26	AK	8.30%	26	NY	4.89%	26	LA	8.69%	26
SC	4.81%	27	MT	8.25%	27	CT	4.80%	27	NC	8.66%	27
DE	4.68%	28	KY	8.14%	28	DE	4.76%	28	OH	8.61%	28
TN	4.54%	29	SC	8.12%	29	TN	4.63%	29	NY	8.60%	29
TX	4.52%	30	GA	8.05%	30	TX	4.62%	30	SC	8.60%	30
CA	4.44%	31	WA	8.01%	31	NJ	4.52%	31	NM	8.50%	31
WA	4.44%	32	IL	8.01%	32	WA	4.38%	32	AK	8.26%	32
UT	4.37%	33	TN	7.82%	33	MO	4.35%	33	IL	8.24%	33
MO	4.36%	34	KS	7.80%	34	CA	4.35%	34	TN	8.17%	34
NJ	4.30%	35	HI	7.78%	35	NV	4.33%	35	GA	8.17%	35
NV	4.26%	36	WV	7.78%	36	NM	4.30%	36	DE	8.16%	36
VT	4.19%	37	DE	7.56%	37	WY	4.23%	37	KS	8.02%	37
OH	4.18%	38	NV	7.44%	38	VT	4.21%	38	WA	8.01%	38
WY	4.04%	39	NM	7.38%	39	UT	4.17%	39	TX	7.64%	39
NM	3.91%	40	MO	7.32%	40	OH	4.17%	40	NV	7.64%	40
OK	3.89%	41	TX	7.32%	41	OK	4.16%	41	MO	7.46%	41
ID	3.85%	42	IN	7.22%	42	AL	4.12%	42	IN	7.42%	42
AK	3.85%	44	UT	7.06%	44	FL	4.11%	44	OK	7.17%	44
AL	3.84%	44	CO	6.98%	44	MT	3.99%	44	CO	7.16%	44
MT	3.83%	45	OK	6.47%	45	ID	3.93%	45	FL	6.83%	45
CO	3.72%	46	CA	6.34%	46	AK	3.86%	46	AL	6.76%	46
IN	3.66%	47	NJ	6.30%	47	CO	3.72%	47	UT	6.76%	47
FL	3.62%	48	AL	6.18%	48	IN	3.68%	48	NJ	6.61%	48
PA	3.02%	49	FL	6.16%	49	PA	3.29%	49	CA	6.18%	49
KY	2.74%	50	PA	4.56%	50	KY	3.03%	50	PA	5.11%	50

Appendix D

TABLE D.0

2017-2019 Trend Primary Care Spending, Broad and Narrow (unadjusted and age-adjusted)

State	Diff. 2017-2019 Narrow (unadj.)	Diff. 2017-2019 Broad (unadj.)	Diff. Narrow (age-adjusted)	Diff. Broad (age-adjusted)
U.S. avg.	-0.32%	-0.18%	-0.21%	-0.11%
AK	-0.04%	0.15%	0.01%	0.15%
AL	-0.04%	0.38%	-0.09%	0.35%
AR	-0.59%	-5.97%	-0.88%	-6.19%
AZ	0.19%	0.61%	0.26%	0.55%
CA	-0.05%	0.03%	-0.09%	-0.07%
CO	-0.10%	0.11%	-0.10%	0.03%
CT	-0.92%	-0.77%	-0.82%	-0.76%
DE	-0.21%	-0.62%	-0.38%	-1.02%
FL	-0.14%	0.02%	-0.15%	0.11%
GA	-0.36%	-0.43%	-0.35%	-0.50%
HI	-1.30%	-1.60%	-1.26%	-1.29%
IA	-0.35%	0.01%	-0.27%	-0.17%
ID	2.42%	4.28%	2.54%	4.51%
IL	0.13%	0.24%	0.18%	0.24%
IN	-0.10%	0.34%	-0.11%	0.28%
KS	-0.51%	-0.44%	-0.49%	-0.48%
KY	0.01%	-0.12%	0.11%	-0.18%
LA	-0.41%	-0.20%	-0.43%	-0.23%
MA	-0.16%	-0.11%	-0.07%	0.02%
MD	-0.44%	-0.26%	-0.28%	-0.25%
ME	-0.71%	-0.64%	-0.59%	-0.75%
MI	-0.89%	-0.66%	-0.80%	-0.57%
MN	-0.40%	-0.16%	-0.20%	0.02%
MO	-0.39%	-0.47%	-0.34%	-0.34%
MS	-0.26%	0.61%	-0.29%	0.46%
MT	-0.04%	1.16%	-0.07%	0.50%
NC	1.43%	3.68%	1.44%	3.71%
ND	-0.25%	0.02%	-0.28%	-0.12%
NE	-0.09%	0.15%	-0.24%	-0.04%
NH	-0.65%	-0.53%	-0.65%	-0.72%
NJ	-0.07%	-0.04%	-0.17%	-0.23%
NM	-0.49%	0.01%	-0.77%	-0.28%
NV	-0.49%	-0.28%	-0.46%	-0.27%
NY	-0.82%	-1.02%	-0.75%	-0.98%
OH	-0.38%	-0.35%	-0.36%	-0.31%
OK	0.25%	-0.57%	0.34%	-1.17%
OR	1.96%	3.87%	2.16%	3.97%
PA	-0.04%	0.25%	0.09%	0.46%
RI	-1.06%	-1.02%	-0.97%	-1.02%
SC	-0.30%	-0.04%	-0.22%	0.10%
SD	-0.60%	-0.06%	-0.48%	0.46%
TN	-0.37%	-0.39%	-0.34%	-0.47%
TX	-0.34%	-0.24%	-0.39%	-0.39%
UT	1.98%	4.08%	1.82%	3.79%
VA	-1.20%	-1.36%	-1.30%	-1.57%
VT	-0.37%	-0.81%	-0.40%	-1.14%
WA	0.93%	2.26%	1.00%	2.30%
WI	-0.12%	0.03%	-0.04%	0.09%
WV	-1.10%	-1.46%	-1.13%	-1.32%
WY	0.36%	1.13%	0.44%	0.93%

Appendix E

DATA USED TO MAKE SCATTERPLOTS

To generate the scatterplots, FAIR Health included persons with at least one of these events identified: **emergency department visit**, **hospitalization**, and **preventable hospitalization** during the analysis year.

Avoidable hospitalizations included those for COPD, chronic bronchitis and asthma; congestive heart failure; constipation, fecal impaction and obstipation; dehydration, volume depletion, including acute renal failure and hyponatremia; hypertension and hypotension; poor glycemic control; seizures; UTI; and weight loss and nutritional deficiencies.

TABLE E.0

Percentage of Members Hospitalized (≥1) versus Primary Care Spending Percentage (Broad)

Geographic Location	Geographic Population	% Members Hospitalized (age-adj.)	% Broad PCP Spend (age-adj.)
AK	731,545	3.94%	8.40%
AL	4,903,185	7.08%	7.12%
AR	3,017,804	6.65%	7.43%
AZ	7,278,717	5.68%	13.70%
CA	39,512,223	4.93%	6.10%
CO	5,758,736	5.00%	7.19%
CT	3,565,287	5.30%	10.12%
DE	973,764	5.95%	7.14%
FL	21,477,737	6.53%	6.94%
GA	10,617,423	5.76%	7.66%
HI	1,415,872	4.36%	7.58%
IA	3,155,070	5.77%	13.69%
ID	1,787,065	5.43%	13.95%
IL	12,671,821	6.13%	8.48%
IN	6,732,219	6.11%	7.71%
KS	2,913,314	6.39%	7.54%
KY	4,467,673	7.01%	8.98%
LA	4,648,794	4.42%	8.46%
MA	6,892,503	4.56%	10.28%
MD	6,045,680	4.91%	11.95%
ME	1,344,212	4.14%	9.18%
MI	9,986,857	5.98%	13.86%
MN	5,639,632	5.93%	11.88%
MO	6,137,428	6.58%	7.12%
MS	2,976,149	5.95%	16.64%
MT	1,068,778	5.01%	9.86%
NC	10,488,084	5.35%	12.37%
ND	762,062	6.27%	11.92%
NE	1,934,408	6.18%	11.04%
NH	1,359,711	4.97%	8.99%
NJ	8,882,190	6.45%	6.38%
NM	2,096,829	5.00%	8.22%
NV	3,080,156	6.11%	7.37%
NY	19,453,561	5.67%	7.63%
OH	11,689,100	6.42%	8.30%
OK	3,956,971	7.95%	6.00%
OR	4,217,737	4.88%	15.35%
PA	12,801,989	6.67%	5.57%
RI	1,059,361	5.04%	8.43%
SC	5,148,714	5.87%	8.69%
SD	884,659	6.78%	12.63%
TN	6,829,174	6.45%	7.70%
TX	28,995,881	6.22%	7.25%
UT	3,205,958	5.58%	10.55%
VA	8,535,519	5.63%	8.52%
VT	623,989	4.82%	7.99%
WA	7,614,893	4.89%	10.30%
WI	5,822,434	5.27%	12.27%
WV	1,792,147	6.19%	7.55%
WY	578,759	4.66%	10.99%

TABLE E.1

Percentage of Members with (≥1) Avoidable Hospitalization versus Primary Care Spending Percentage (Broad)

Geographic Location	Geographic Population	% Members PAC (age-adj.)	% Broad PCP Spend (age-adj.)
AK	731,545	5.26%	8.40%
AL	4,903,185	10.71%	7.12%
AR	3,017,804	10.85%	7.43%
AZ	7,278,717	7.11%	13.70%
CA	39,512,223	7.29%	6.10%
CO	5,758,736	5.09%	7.19%
CT	3,565,287	7.79%	10.12%
DE	973,764	8.78%	7.14%
FL	21,477,737	8.47%	6.94%
GA	10,617,423	9.53%	7.66%
HI	1,415,872	6.20%	7.58%
IA	3,155,070	7.29%	13.69%
ID	1,787,065	5.17%	13.95%
IL	12,671,821	9.43%	8.48%
IN	6,732,219	8.64%	7.71%
KS	2,913,314	8.15%	7.54%
KY	4,467,673	10.27%	8.98%
LA	4,648,794	9.13%	8.46%
MA	6,892,503	7.93%	10.28%
MD	6,045,680	7.75%	11.95%
ME	1,344,212	9.40%	9.18%
MI	9,986,857	8.06%	13.86%
MN	5,639,632	6.91%	11.88%
MO	6,137,428	9.14%	7.12%
MS	2,976,149	9.50%	16.64%
MT	1,068,778	6.05%	9.86%
NC	10,488,084	8.83%	12.37%
ND	762,062	8.37%	11.92%
NE	1,934,408	6.91%	11.04%
NH	1,359,711	6.97%	8.99%
NJ	8,882,190	9.52%	6.38%
NM	2,096,829	9.57%	8.22%
NV	3,080,156	8.96%	7.37%
NY	19,453,561	8.40%	7.63%
OH	11,689,100	9.42%	8.30%
OK	3,956,971	9.70%	6.00%
OR	4,217,737	7.31%	15.35%
PA	12,801,989	7.87%	5.57%
RI	1,059,361	7.36%	8.43%
SC	5,148,714	9.24%	8.69%
SD	884,659	11.19%	12.63%
TN	6,829,174	9.13%	7.70%
TX	28,995,881	8.65%	7.25%
UT	3,205,958	5.77%	10.55%
VA	8,535,519	8.71%	8.52%
VT	623,989	9.37%	7.99%
WA	7,614,893	6.57%	10.30%
WI	5,822,434	6.62%	12.27%
WV	1,792,147	10.26%	7.55%
WY	578,759	5.60%	10.99%

TABLE E.2

Percentage of Members with (≥1) Emergency Department Visit versus Primary Care Spending Percentage (Broad)

Geographic Location	Geographic Population	% Members - ED Visit (age-adj.)	% Broad PCP Spend (age-adj.)
AK	731,545	13.57%	8.40%
AL	4,903,185	18.77%	7.12%
AR	3,017,804	18.40%	7.43%
AZ	7,278,717	18.22%	13.70%
CA	39,512,223	13.35%	6.10%
CO	5,758,736	14.52%	7.19%
CT	3,565,287	15.59%	10.12%
DE	973,764	17.70%	7.14%
FL	21,477,737	18.96%	6.94%
GA	10,617,423	16.93%	7.66%
HI	1,415,872	16.03%	7.58%
IA	3,155,070	15.75%	13.69%
ID	1,787,065	14.57%	13.95%
IL	12,671,821	17.55%	8.48%
IN	6,732,219	17.62%	7.71%
KS	2,913,314	15.98%	7.54%
KY	4,467,673	19.64%	8.98%
LA	4,648,794	16.72%	8.46%
MA	6,892,503	14.74%	10.28%
MD	6,045,680	14.60%	11.95%
ME	1,344,212	14.51%	9.18%
MI	9,986,857	16.54%	13.86%
MN	5,639,632	15.54%	11.88%
MO	6,137,428	16.65%	7.12%
MS	2,976,149	20.76%	16.64%
MT	1,068,778	14.37%	9.86%
NC	10,488,084	16.30%	12.37%
ND	762,062	17.79%	11.92%
NE	1,934,408	15.38%	11.04%
NH	1,359,711	15.64%	8.99%
NJ	8,882,190	16.79%	6.38%
NM	2,096,829	18.21%	8.22%
NV	3,080,156	26.61%	7.37%
NY	19,453,561	14.30%	7.63%
OH	11,689,100	19.12%	8.30%
OK	3,956,971	19.83%	6.00%
OR	4,217,737	14.16%	15.35%
PA	12,801,989	17.34%	5.57%
RI	1,059,361	15.05%	8.43%
SC	5,148,714	17.01%	8.69%
SD	884,659	14.96%	12.63%
TN	6,829,174	17.65%	7.70%
TX	28,995,881	18.41%	7.25%
UT	3,205,958	13.76%	10.55%
VA	8,535,519	17.50%	8.52%
VT	623,989	15.99%	7.99%
WA	7,614,893	16.25%	10.30%
WI	5,822,434	14.45%	12.27%
WV	1,792,147	16.79%	7.55%
WY	578,759	14.67%	10.99%

Appendix F

DEFINING ESTIMATING PRIMARY CARE SPENDING; WHAT TO DO ABOUT NON-FEE-FOR SERVICE PAYMENTS FOR PRIMARY CARE?

States that have been early leaders in estimating primary care spending percentage have learned from each other in defining primary care spend and have adopted and adapted definitions to fit their own priorities and perspectives. Within data limitations, states have adopted a framework of narrow and broad categories of clinicians and services; however, each state has chosen different clinicians and services and had to rely on different sources of state-level data.

State approaches also vary in the populations measured, the definition of total healthcare spending (i.e., medical spending only versus medical plus prescription spending), and the inclusion of various kinds of non-fee-for-service payments. As support grows among payers and purchasers to use alternative payment models instead of fee-for-service, the question of how to measure non-fee-for-service, i.e., non-claims, payments arises.

The Milbank Memorial Fund and the Graham Center for Policy Studies in Family Medicine and Primary Care have provided thought leadership and technical support to undergird primary care spending in a systems framework.[2] This framework, along with technical assistance also provided with Milbank Fund support, has been used by states that have been early leaders in estimating primary care spending percentage.

Milbank Memorial Fund and the California Health Care Foundation commissioned RAND to review how leading states and payers are currently attempting to identify and measure the amount of non-fee-for-service spending dedicated to primary care and to convene state leaders and experts to identify a potential path toward a standardized approach. The RAND researchers made the following preliminary recommendations:

- Develop a single approach for categorizing types of non-FFS payments
- Select a common approach for identifying what types of non-FFS payments are considered primary care payments
- Define a uniform population or frame for data collection on the basis of situs of insurance contracts as is most feasible for payers
- Work toward disaggregated data reporting by provider organization and patient ZIP code, as opposed to cumulative payments from each payer

Appendix G

COMPARISONS WITH STATE ESTIMATES OF PRIMARY CARE SPENDING AMONG COMMERCIALLY INSURED

How does our primary care spend number compare to other studies that looked at the commercially insured population? PCC found a lower level of primary care spend in a population limited to commercially insured compared to the all-payer measure reported in the PCC 2019 Evidence Report and is consistent with the findings reported from HCCI.[2] Previous research exploring variation in primary care spend by payer type is mixed. States such as Oregon, Maine, and Vermont that have looked at primary care spend by payer find Medicaid spend is slightly higher than commercial spend. In Delaware's preliminary primary care spend report, Medicaid primary care spending is lower. Further research is needed to understand what factors are driving the differences in primary care spending percentage across payers.

TABLE G.0

Comparison of State Primary Care Commercial Spend Between State Reports, 2020 PCC Estimates

State	State Estimate Commercial PC Spend (2018, 2019) (Narrow and Broad)	2020 PCC Evidence Report 2019 Commercial PC Spend (Narrow and Broad)	Notes
Colorado	9.7%	3.62%; 7.19%	Colorado estimates both claims and non-claims primary care spending using a broad definition; does not include pharmacy in its total spending measure
Delaware	13.5%	4.46%; 6.94%	Delaware uses data reported by plans; might not been reported consistently
Maine	5.7%; 10.5%	6.07%; 9.83%	Maine's report also does not include non-claims payments; commercial estimate does not include Medicare Advantage
New England States Consortium Systems Organization. (NESCSO) (ME, MA, VT, RI, NH, CT)	5.5%; 8.1%	5.0%; 9.1% (unadj. avg. across states)	NESCSO's report includes claims data and fee-for-service equivalency, which is an estimate for how much capitated claims would have been paid under FFS (this estimate is submitted by insurers to the APCD)
Oregon	13%	7.87%; 15.02%	Oregon's definition is closer to PCC's broad definition, includes non-claims spend; Oregon's commercial estimate does not include Medicare Advantage
Rhode Island	12.5%	5.05%; 8.91%	Includes non-claims payments; comparable to broad definition?
Vermont	9.2%	3.82%; 8.15%	Vermont's estimate includes some non-claims spend; definition tracks broad measure
Washington	4.5%; 5.7%	5.38%; 10.30%	Washington's estimate does not include non-claims spending on primary care; Washington's commercial estimate does not include Medicare Advantage

Appendix H

RECENT STATE ACTIONS TO MEASURE, REPORT AND SET PRIMARY CARE INVESTMENT TARGETS

TABLE H.0

Actions Taken by States Since the Publication of the PCC 2019 Evidence Report Related to Measuring and Reporting Primary Care Spending

State	Legislative Action 2019-2020	Executive Branch Action (includes convening primary care stakeholder advisory group)	Spending Report Issued?	Incorporating PC Spending Targets in State-regulated Insurers, State Contracting?
Colorado	In 2019, HB 19-1233 tasked Insurance Commissioner with: 1) forming a collaborative to advise on increasing primary care spend 2) issuing rules to set affordability standards, including PC spend targets	In late 2019, issued recommendations to define PC spend; required commercial payers to increase PC spend by 1% per year through 2022; invest in advanced PC models, using prospective payment	Yes, First annual report included in Appendix D of Primary Care Reform Report (p.46)	Yes, recommendations issued by Colorado Primary Care Collaborative; not yet implemented
Connecticut	HB 5018 introduced to codify EO 5 introduced; not yet enacted	Gov. Ned Lamont (D) issued Executive Order 5 in January 2020 to address rising health care costs while improving outcomes; calls for setting overall cost growth benchmark while increasing state primary care spend to 10% by 2025	TBD	TBD
Delaware	In 2019, Delaware's State Assembly passed SB 227, which created the Primary Care Reform Collaborative; requires all insurance providers to participate in the Delaware Health Care Claims Database and requires individual, group, and state employee insurance plans to reimburse primary care clinicians at no less than the physician Medicare rate for 3 years	Delaware Health Care Commission released "preliminary" health care spending data as part of its health care spending benchmark initiative; includes estimates of primary care spending	Yes, in late 2020 Delaware Office of Value Based Care to release standards for primary care target	Yes, target of at least 12% by 2024; 1% point annual increase (not incorporated into regulatory or purchasing requirements at this time)
Maine	In June 2019, Maine passed legislation called "An Act to Establish Transparency in Primary Health Care Spending," which requires insurers to report primary care expenditures and the Maine Quality Forum to report annually the percentage of total medical expenditures paid for primary care to the Department of Health and Human Services and to the legislature		Yes, Maine Quality Forum released its first primary care spending report as required under PL, Ch 244 to include commercial, state plan, and Medicaid	
Massachusetts	Gov. Charlie Baker (R) filed HD 4547, reform legislation to authorize Massachusetts Health Policy Commission to establish aggregate primary care and behavioral health spend target that would be 30% above baseline for 3-year period, modified thereafter. Not enacted as of 8/2020	In February 2020, the Massachusetts Health Policy Commission recommended that "Commonwealth should take action to increase spending in primary care and behavioral health care. . . HPC should track and report on primary care and behavioral healthcare spending trends annually and hold entities accountable for meeting improvement targets if they fall short of benchmark spending."[48]	Yes, Massachusetts Health Policy Commission to analyze PC spend; part of New England States Consortium Systems Organization joint effort that includes commercial, state plan, and Medicaid	

Continued on next page.

State	Legislative Action 2019-2020	Executive Branch Action (includes convening primary care stakeholder advisory group)	Spending Report Issued?	Incorporating PC Spending Targets in State-regulated Insurers, State Contracting?
New England States Consortium Systems Organization (NESCSO) (ME, MA, VT, RI, NH, CT)			Yes, multi-payer report published November 2020	
Oregon			Yes, Oregon Health Authority (OHA) 2020 report includes a draft of PC spending data, with the final report to be issued December 2020 Includes Medicaid, commercial, and public employees	Yes, SB 321 (2017) requires Medicaid CCOs and commercial plans must spend 12% on primary care by 2023
Pennsylvania		In October 2020, Pennsylvania's Gov. Tom Wolf (D) signed Executive Order number 2020-05, which establishes the Interagency Health Reform Council to "to evaluate the potential alignment of Commonwealth health care payment and delivery systems to provide efficient, whole-person health care that also contains costs, reduces disparities, and achieves better health outcomes for Pennsylvanians."		Part of the Council's responsibilities include setting spending targets for primary care and behavioral health to promote whole-person care in the state.
Rhode Island	Ch. 42-14.5, 42-24.6 of RI GL authorizes Insurance Commissioner to set minimum primary care spending target for state-regulated insurers; engage in practice transformation activities as part of promoting Affordability Standards	Rhode Island Insurance Commissioner (OHIC) regularly updates regulations at 230 RICR-20-30-4 implementing Affordability Standards to include specific care-transformation activities, payment-reform actions	Yes, issued by RI OHIC since 2014; 2020 report found that PC incentive payments and payment to medical homes have grown dramatically from 2008-2018; commercial payers	Yes, For state-regulated insurers, spend at least 10.7% after 2014; 1% point increase between 2010-2014
Vermont	Enacted SB 53 in 2019, tasking the Green Mountain Care Board with measuring primary care spending; recommending target; projecting avoided costs "downstream."		Green Mountain Care Board issued report to Vermont legislature in 2020 after stakeholder consultation process; finds "baseline" primary care spend of 10.2% using consensus definition	No recommended target as of February 2020 from Green Mountain Care Board
Washington	In 2019, Chapter 415 budget bill enacted by legislature; directed Office of Financial Management to determine annual primary care spending	Washington Health Care Authority is moving ahead with multi-payer primary care transformation model; Washington Public Option Cascade Health Plan moving forward (as of August 2020); includes primary	Yes, December 2019 report finds that PC spending percentage ranges from 4.4% (narrow definition) to 5.6% (broad definition)	
West Virginia	Enacted SB 641 in 2019; creates grant program to conduct annual primary care spending report		TBD	

Appendix I

SUMMARY REPORT ON THE NESCSO MULTI-STATE REPORT REGARDING PRIMARY CARE INVESTMENTS FOR THE PRIMARY CARE COLLABORATIVE[54]

The New England States Consortium Systems Organization (NESCSO) is a nonprofit corporation organized under the laws of the Commonwealth of Massachusetts. The NESCSO "Learning Community" provides a forum for New England state government representatives to discuss available policy and regulatory tools that states can use to respond to changes in the healthcare markets and to explore opportunities for regional collaboration.

In November 2018, the Primary Care Collaborative (PCC) published its "Consensus Recommendations on Increasing Primary Care Investments." One of the PCC's recommendations was that "primary care investments should be tracked and reported through a standardized measure…across all payers. This data is essential to demonstrate that increases in investment lead to improved quality."

Building upon the PCC's recommendation and through engagement with Onpoint Health Data, NESCSO with assistance from the Milbank Memorial Fund will be releasing a "New England States All-Payer Report on Primary Care Investments" during the fourth quarter of 2020. Participating states include Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. This report will utilize standardized data from the six New England states' all-payer claims databases (APCDs), reflecting both public and private payments. The report will identify the percentage of all-payer primary care spending relative to overall healthcare spending (excluding retail pharmacy) and will provide a framework to evaluate whether increased investment in primary care improvements has impact on cost growth, access to healthcare services, or the quality of care and healthcare outcomes in each state.

The report will include all allowed amounts for defined expenditures reported to the APCD on behalf of primary care providers with taxonomy codes in the categories of general practice, family medicine, pediatrics, internal medicine, nurse practitioners, and physician assistants. Primary care services provided by Federally Qualified Health Care Centers, Rural Health Clinics, and Critical Access Hospitals also will be included. The Report will include two definitions of primary care services – one narrow, the other broad:

1. **Definition #1:** The narrow definition is restricted to primary care services and procedures, as defined by this study, provided by primary care providers.

2. **Definition #2:** The broad definition will include all services, excluding OB/GYN services, provided by the same primary care practitioner types.

A separate accounting for OB/GYN providers and related services also will be included in the report.

The report also will include available, state-reported information related to non-fee-for-service (FFS) payments such as capitation payments, risk-based payments, payments for primary care medical home or patient-centered medical home (PCMH) recognition, payments for achievement of quality/cost-savings goals, and payments to help providers adopt health information technology.

Preliminary results from the NESCSO report are as follows:

- The study included information on 7.1 million Commercial, Medicaid, Medicare Advantage, and Medicare FFS members across all six New England states.

- The all-payer combined Primary Care percent of total medical expenditures across all six states was 5.5% using the narrow provider and service-based Definition #1, and was 8.1% using the broader, service-based Definition #2. These results fell within the range of other previously published studies.

- When calculated by payer type for Definition #1, the average Primary Care percent of total medical expenditures was 6.1% for Commercial (range 4.9% to 8.0%), 7.0% for Medicaid (range 4.5% to 10.1%), 5.5% for Medicare Advantage (range 4.7% to 6.1%), and 3.4% for Medicare FFS (range 2.8% to 4.2%).

The final written report also will feature information regarding lessons learned, data limitations, and recommendations for consideration regarding future analyses of primary care investments.