

# Access & Equity in Medicaid

ROBUST PRIMARY CARE IS A MUST



## Authors

**Sarah Greenough, MPP** | Primary Care Collaborative

**Leighton Ku, PhD, MPH** | Center for Health Policy Research, Milken Institute School of Public Health, George Washington University

## Contributors

**Noah Westfall, MPH** | Primary Care Collaborative

**Ann Greiner, MCP** | Primary Care Collaborative

**Larry McNeely, MPA** | Primary Care Collaborative

**Kirsten Barboza, BA** | Primary Care Collaborative

## Reviewers

**Kathryn E. Phillips, MPH** | California Health Care Foundation

**Stephanie Glier, MPH** | American Academy of Pediatrics

**Megan Douglas, JD** | National Center for Primary Care, Morehouse School of Medicine

## PCC Medicaid Workgroup

PCC's Medicaid workgroup advised the project by offering scoping and assessment criteria, prioritizing strategies, and identifying related policy options. Workgroup participation does not imply individual or organizational support for the strategies described in this report.

**Brandon Wilson, DrPH, MHA** | Community Catalyst (Co-Chair)

**Stephanie Glier, MPH** | American Academy of Pediatrics (Co-Chair)

**Louise Cohen, MPH** | Primary Care Development Corporation (PCDC)

**Nicholas DeGregorio, MD** | UPMC Health Plan

**Amanda Fredriksen, MHS** | AARP

**Frank Harrington, JD** | American Association of Nurse Practitioners

**Vacheria Keys, JD** | National Association of Community Health Centers

**Chelsea Newhall** | AmeriHealth Caritas

**Leighton Ku, PhD, MPH** | Center for Health Policy Research, Milken Institute School of Public Health, George Washington University

## Subject Matter Experts

**Ignatius Bau, JD** | Health Equity Consultant

**Timothy Day, MSPH** | Centers for Medicare & Medicaid Services

**Hector Flores, MD** | Altas/Family Care Specialists Medical Group

**Mollie Gelburd, JD** | AHIP

**Tricia McGinnis, MPP, MPH** | Center for Health Care Strategies

**Kelsey Brykman, MS** | Center for Health Care Strategies

**Matt Salo** | Salo Health Strategies; formerly National Association of Medicaid Directors

## Acknowledgements

This publication was produced with funding from the California Health Care Foundation (CHCF), an independent, nonprofit philanthropy helping Californians with low incomes get the health care they need. Learn more at [chcf.org](http://chcf.org). To learn more about efforts to strengthen primary care in California, visit [www.chcf.org/primary-care-matters](http://www.chcf.org/primary-care-matters)

PCC is especially grateful to Kathryn E. Phillips, CHCF Associate Director, Improving Access to Care, for her support and thoughtful input throughout the project.



**California Health Care Foundation**

PCC also thanks its seven subject matter experts for sharing their experiences and wisdom through interviews; its workgroup members for their time and guidance, particularly the group's generous and adept co-chairs, Stephanie Glier and Brandon Wilson; the brief's reviewers, including the co-chairs and Megan Douglas of Morehouse School of Medicine, for their careful reads and additions; and the project's advisor, Leighton Ku of George Washington University, for his helpful contributions and overall commitment to improving care for the underserved.

## About the PCC

The Primary Care Collaborative is a national multi-stakeholder organization dedicated to advancing an effective and efficient health system built on a strong foundation of primary care. Representing a broad group of public and private organizations, PCC's mission is to unify and engage diverse stakeholders in promoting policies and sharing best practices that support the growth of high-performing primary care that treats the whole person.



# Contents

<b>Executive summary</b>	<b>1</b>
<b>Background</b>	<b>7</b>
<b>Our process</b>	<b>8</b>
<b>Strategies</b>	<b>9</b>
1. Report and increase the share of Medicaid spending on primary care	10
2. Increase payment to primary care clinicians	13
3. Support behavioral health and primary care integration	16
4. Pursue population-based payment models	19
5. Stratify data and incorporate health equity quality incentives into payment models	24
6. Increase federal funding for community health centers and create new access points	27
7. Pay for community health workers	30
8. Encourage PCMH attributes, including care coordination	34
<b>Other strategies</b>	<b>39</b>
<b>Managed care as a lever</b>	<b>40</b>
<b>Limitations</b>	<b>42</b>
<b>Conclusion</b>	<b>43</b>
<b>References</b>	<b>44</b>

# Executive summary

Primary care is an essential, and today largely undervalued, foundation of the U.S. health care system. That may be especially true in Medicaid where beneficiaries—disproportionately high-need, children, pregnant women, and people of color—require robust primary care but are often underserved. The Primary Care Collaborative (PCC) undertook a review of existing evidence and emerging practices to identify the most effective payment and care delivery strategies for strengthening primary care in Medicaid, independent of other policy options, such as eligibility or benefit expansions. That process, consisting of literature reviews and key informant interviews, and overseen by a multi-stakeholder workgroup, identified eight strategies for improving primary care access and outcomes in Medicaid:

- 1 Report and increase the share of Medicaid spending going to primary care**
- 2 Increase payment to primary care clinicians**
- 3 Support behavioral health and primary care integration**
- 4 Pursue population-based payment models**
- 5 Stratify data and incorporate health equity quality incentives into payment models**
- 6 Increase federal funding for community health centers and create new access points**
- 7 Pay for community health workers**
- 8 Encourage Patient-Centered Medical Home (PCMH) attributes, including care coordination**

This report describes the evidence for each and considerations for implementation. It also recognizes the important role managed care plays as a lever to realize and amplify their effects.

Taken together, the strategies are largely consistent with calls for primary care transformation system-wide, including in NASEM's 2021 **report** on primary care: Medicaid must pay primary care more, and pay primary care differently, to improve the health of its beneficiaries. Those new dollars through value-based payments can strengthen existing advanced primary care models and provide resources for key attributes that will improve the quadruple aim and health equity, including connections to community-based services and greater support for behavioral health integration.

## 1 Report and increase the share of Medicaid spending going to primary care

Increasing the proportion of health care dollars that goes to primary care, including in Medicaid, is a direct and trending strategy to strengthen primary care. Evidence of its effect include **inverse associations** between primary care investment and hospitalizations and emergency department visits, and **positive relationships** between Medicaid managed care plan spending on primary care and composite measures of quality. Today, more states are working to shift spending towards primary care using a **range of methods**. Medicaid spending on primary care varies by state—both in absolute terms and relative to commercial payers. A few states are going beyond reporting to setting enforceable targets for levels of primary care spending, including in Medicaid.

Key informants and the literature noted several implementation considerations for the strategy, including how to best report and set targets. Interviewees were largely in agreement that levels of Medicaid investment in primary care were too low but differed on the efficacy of using targets to increase them and where to invest allocated dollars.

## 2 Increase payment to primary care clinicians

Pay for primary care clinicians is **notably low** relative to their peers. This is especially true in Medicaid where, nationally, average fee-for-service primary care physician fees are **just 67%** of those paid in Medicare, **contributing** to lower Medicaid participation by clinicians. Evidence of the impact of pay increases on primary care access—largely focused on the Affordable Care Act's (ACA) Medicaid parity provision—is **mixed**. Potential reasons include its short time frame and implementation obstacles. Administrative burden and **late payments** in Medicaid may also generally inhibit clinician acceptance of Medicaid. Still, some point to the ACA fee bump as a positive given that **nineteen states** chose to continue the temporary policy change in some form. And there is stronger evidence of a **positive effect** for dual-eligible Medicare and Medicaid beneficiaries.

The Centers for Medicare and Medicaid Services (CMS) have been pursuing this strategy through its waiver authority by requiring states (such as California, Arizona, Oregon and Massachusetts) to increase rates for certain specialties. Congress could also act by increasing state Federal Medical Assistance Percentages to states that reimburse primary care at Medicare levels. Network adequacy standards may be another way to encourage managed care organizations to increase their rates in order to expand provider networks. In its May 2023 proposed Medicaid rules (**one** addresses managed care; **the other** primarily fee-for-service), CMS proposed new standards for measuring access in managed care and new rate transparency provisions for primary care.

### 3 Support behavioral health and primary care integration

Medicaid enrollees have better outcomes when behavioral health is integrated with primary care. Two leading approaches to this are the Collaborative Care Model (CoCM) and the Primary Care Behavioral Health (PCBH) model. CoCM—a model that utilizes primary care providers in collaboration with behavioral health care managers and psychiatric consultants—has some of the most robust **evidence of impact**, including significant **improvement** in depression and anxiety. And its effect sustains, and in some cases, may be even greater, for publicly insured patients. Separately, PCBH, a **team-based approach** to managing biopsychosocial issues involving an integrated behavioral health consultant, has demonstrated success improving **outcomes** and patient and clinician **experience**. This success appears to hold true in **safety net settings**, including **reduced preventable inpatient utilization**. A third approach integrates primary care with community behavioral health centers—showing **mixed results**.

Payment is often cited as a key barrier to better behavioral health integration (BHI). Fee-for-service billing codes for integrated care have had partial uptake. As of June 2022, 24 state Medicaid agencies were **covering CoCM codes**—though with varying rates and **levels of policy complexity**. Key informants pointed to ‘expanded and consistent’ coverage of codes to improve BHI in Medicaid, while noting implementation alone **does not necessarily** lead to notable utilization. Alternative payment models may offer a better way to sustainably achieve BHI in Medicaid. Examples include models out of **Colorado** and **Oregon**. And states can **play a major role** in advancing BHI in managed care.

### 4 Pursue population-based payment models

Medicaid primary care population-based payment (PBP) models—offering “**upfront, flexible payments**” tied to quality—have been implemented in several states, including **Colorado, Maine, Washington**, and **Oregon**, and through the Center for Medicare and Medicaid Innovation (CMMI). States **pursue these models** through waivers, state plan amendments, CMMI, and CMS review of managed care rates and contracts, with Medicaid agencies **increasingly doing so**. Rigorous, long-term evaluations of primary care PBPs for enrollees exclusively covered by Medicaid are still in the “evidence-building phase”. Out of CMMI, Comprehensive Primary Care Plus (CPC+), whose “track 2” involved hybrid capitation, showed **mixed results**; Medicaid-focused models were **not included in analyses**, and practices in disadvantaged areas had **lower participation**. Many more Medicaid PBPs are newer, but their available results are described as promising, with models that “**make intuitive sense**” to improve quality, experience, and equity. Medicaid accountable care organization arrangements exist in 14 states with **mixed results**.



Multi-payer alignment—described as “absolutely necessary” for success of these models—was among the most recurrent themes of PCC’s key informant interviews. Yet challenges abound: the diversity of state policies, approaches, and managed care plans; constraints on CMMI’s statutory authority to waive Medicaid policies; and existing fragmentation of performance measures and incentives. Nevertheless, many felt that CMS and CMMI must ultimately lead the way with PBP models. Future processes, interviewees advised, must involve more active conferring with states and plans and must better include small practices. (CMMI’s [latest primary care model](#) aims to target “the large proportion” of safety net and primary care providers that have not participated in previous models.) Other implementation considerations include: addressing clinician apprehension of capitated models; offsetting the capacity and infrastructure constraints on small practices; and the potential unintended consequences of PBPs, such as practices limiting care or selectively serving healthier patients.

## 5 Stratify data and incorporate health equity quality incentives into payment models

States can leverage payment innovations to further health equity goals, including equity-focused alternative payment models (APMs), [payment enhancements to safety net providers](#), and primary care payment [tailored to patient populations](#) according to health status, social risk, and historic under-investment. Momentum is growing on this front. In 2021, a [dozen states](#) were linking Medicaid financial incentives to health disparities metrics, up from just two states in 2019. The evidence on their impact—how well they address disparities in care/outcomes and if they have unintended consequences—is almost entirely left to be seen.

Measures stratified by race, ethnicity, language, or disability status, are key to meaningfully address disparities, including through APMs. Today, data on race and ethnicity in Medicaid are largely [incomplete](#). A majority of states are now making [explicit efforts](#) to address data completeness, including requiring disaggregated quality metrics through managed care contracts and using 1115 waivers to pay for stratified reporting. Interviewees acknowledged that “we are still figuring out the right way to incorporate equity into payment models”, cautioning that value-based models must be intentionally designed to ensure that disparities are addressed, rather than worsened.

## 6 Increase federal funding for community health centers and create new access points

Community health centers—which provide **comprehensive primary care** to patients in underserved areas—are integral to Medicaid and vice versa. Serving **one in five** Medicaid enrollees, health centers receive **over 40%** of their revenue from the program. Over decades, health centers have reliably shown to provide the **same or higher quality** primary care as other settings and **better access** for underserved populations. This holds for Medicaid enrollees. Moreover, health centers are often recognized as leaders in reducing health care disparities in primary care. Such care is associated with **lower overall health care costs**—with health centers saving 15% among Medicaid fee-for-service adults and 22% among children.

NASEM's 2021 primary care **report** calls on the Department of Health and Human Services, enabled by Congressional appropriations, to “target sustained investment in the creation of new health centers” in federally designated shortage areas. Ultimately, the number and scope of community health centers largely depends on funding for Section 330. Mandatory funding for health centers expires at the end of fiscal year 2023, and there are **bipartisan efforts** to extend and expand health center funding, although the outcome is not yet known.

## 7 Pay for community health workers

Increasingly, community health workers (CHWs) are considered key members of primary care teams. They both improve primary care outcomes and “**open the door to primary care**” by connecting low-income individuals to Medicaid. Several models exist for integrating CHWs, including embedding them in primary care teams as patient navigators, advocates and/or companions. Evidence of their **impact is strong**: CHWs improve outcomes, “such as chronic disease control, when CHWs are engaged in team-based care”. Results remain strong in safety net settings, with some of the most **promising evidence** coming from the **IMPACT model**, an intervention that integrates CHWs in primary care to address health barriers among low-income populations.

Today, at least **21 states** authorize Medicaid payment for CHW services; **12 states** specifically address the use of CHWs in managed care contracts. And states across the political spectrum are exploring **how to finance** CHW services through Medicaid. However, current law and regulation do not require coverage of CHW services in federal programs, although this may change soon in Medicare if **pending regulatory proposals** are finalized. NASEM's primary care **report** acknowledges that payment often inhibits the use of CHWs who are currently paid through a “**patchwork of funding options**”; and that comprehensive payment models, with flexible resource allocation, offer the best way forward. Experts highlighted the important role CHWs play as members of expanded care teams under value-based payment and as “health equity change agents”.



## 8 Encourage PCMH attributes, including care coordination

Advanced primary care models are integral to better health, and the Patient-Centered Medical Home (PCMH) is the most widely implemented. The **model** employs a multi-disciplinary care team holistically managing patients' health. Medicaid beneficiaries are **inconsistently served** by medical homes, with variation across and within states. Some states **go beyond common standards** to include elements such as integration of primary care with public health and social services.

**Research** around the PCMH model overall has shown improvements in quality, utilization, and costs, though not uniformly. In Medicaid specifically, there is mixed, though more promising in the longer-term, evidence for the potential of PCMH elements to improve outcomes. This report summarizes the evidence from large evaluations of federal programs involving Medicaid enrollees as well some state efforts.

While PCMH is a care delivery strategy, the payment that underlies it largely dictates the model's success and sustainability. Many of the PCMH demonstrations to-date have relied on fee-for-service payments, with an additional—and usually meager—care management fee on top. NASEM's primary care **report** highlights this challenge, along with lack of multi-payer alignment, and PCC's interviewees echoed it. They noted the challenge for primary care practices to cover upfront and ongoing transformation costs without greater investment and realigned incentives. Others pointed to a primary care medical education system that leaves clinicians unprepared and burned out—contributing to growing workforce shortages.

---

### The takeaway

Some of the identified strategies have strong evidence of success; others show promise but are new and need time to demonstrate their impact. Most are known strategies, with several in operation for decades but not at scale, while others are at least generally accepted today. Still, Medicaid beneficiaries continue to face substantial barriers to access and equitable, high-quality care. This report suggests that to realize the aim of accessible, advanced primary care in Medicaid, what's needed is not a single "silver bullet" innovation. Rather, the country needs broad, vocal, and focused support for an agreed upon set of policies that strengthen primary care. These policies must be pursued systematically and with sustained, sufficient investment, transparent reporting, and enforcement mechanisms that provide accountability. Only then will we realize the full promise of primary care to better the health of those covered by Medicaid.

# Background

Medicaid is an essential source of coverage in the U.S. for low-income populations and people with disabilities, covering nearly 94 million individuals across Medicaid and CHIP as of March 2023 ([CMS, n.d](#)). Medicaid covers a disproportionate share of people of color, with gains in Medicaid coverage helping to reduce racial disparities in coverage over time ([Guth et al., 2023](#)). More than half of Black, Hispanic, American Indian and Alaska Native, and Asian, Native Hawaiian, and Other Pacific Islander children in the country are covered by Medicaid and CHIP ([Artiga & Hill, 2022](#)).

With over 60% of its enrollees identifying as Black, Hispanic, Asian American, or other persons of color, the health inequities seen across the U.S. health system are “particularly relevant” to Medicaid ([MACPAC, 2021](#)). And disparities in coverage, access, and quality within Medicaid are **well-studied**.

Primary care plays an important role in reducing such disparities ([Rittenhouse et al., 2023](#)) and is foundational to good health ([Starfield et al., 2005](#)). Yet investment in it is chronically low and declining ([Kempinski & Greiner, 2020](#)). This holds true for Medicaid, whose spending on primary care has “fallen nearly continuously since 2014, from a high of 5.3% to a low of 4.2% in 2020” ([Jabbarpour et al., 2023](#)). Within Medicaid, racial differences exist in health care spend, with Black enrollees generating lower spending and using fewer primary care services than White enrollees ([Wallace et al., 2022](#)). Access to primary care is also declining, including in Medicaid. The percent of Medicaid enrollees with a usual source of care fell from 82.5% in 2015 to 76.8% in 2020 ([Jabbarpour et al., 2022](#)). The same analysis also found that Medicaid enrollees are “disproportionately represented in the emergency department (ED),” representing 38.5% of the population using the ED as their usual source of care, despite representing just 19.2% of the population. Here, too, racial and ethnic differences exist with Black and Hispanic nonelderly adults being significantly less likely to have a usual source of care compared with White adults ([Jabbarpour et al., 2022](#)).

As a state-federal partnership, Medicaid’s unique regulatory and financing mechanisms warrant specialized attention to better understand how to improve primary care for its recipients. And the different characteristics and needs of the program’s covered populations further merit a singular focus on Medicaid. At the same time, Medicaid’s vast reach—particularly as a major source of coverage for people of color—creates urgency to identify and execute strategies that will strengthen primary care for Medicaid recipients with the goal of furthering health equity and improving the health of millions of Americans.

# Our process

The Primary Care Collaborative, with funding from the California Health Care Foundation, undertook a process to identify and assess evidence-based strategies for strengthening primary care in Medicaid. We reviewed published articles, evaluations, and gray literature for both proven and promising practices to improve primary care for Medicaid beneficiaries. This search was complemented by findings from six semi-structured interviews with experts representing clinicians, consumers, payers, evaluators, and state Medicaid advisors. We developed an interview guide to probe topics such as high-priority policy changes; barriers and enablers to implementation; health equity; team-based care; and payment levels and models.

PCC convened an eight-member multi-stakeholder workgroup and hired a health policy research consultant to inform its work. They collectively advised on scoping parameters, offered assessment criteria, prioritized strategies, and identified related policy options.

The scope of our scan focused specifically on strategies related to payment and delivery reform, underpinned by the payment-related recommendations made in the National Academies of Sciences Engineering and Medicine (NASEM) 2021 Consensus Study **Report** "Implementing High-Quality Primary Care". We aimed to assess interventions based on their demonstrated impact on improving access, improving health outcomes, and reducing disparities (as opposed to process measures or short-term costs savings). PCC limited its scan to assessments of policies and programs carried out specifically within Medicaid-populations, either exclusively or in-part.

Throughout this brief, the term "strategy" describes a high-level concept for strengthening primary care in Medicaid; the term "lever" describes a mechanism by which a strategy may be attained or implemented; and the term "policy option" describes legislative, regulatory, and market-based avenues for pursuing those strategies in the real world.

# Strategies

PCC identified eight key payment and delivery strategies for strengthening primary care in Medicaid. Far from an exhaustive list, these strategies were among those that exhibited either the strongest evidence of success or the greatest promise for impact. Below we describe the research and current landscape for each, while introducing implementation considerations raised by the literature and key informants.

The strategies include:

- 1** Report and increase the share of Medicaid spending going to primary care
- 2** Increase payment to primary care clinicians
- 3** Support behavioral health and primary care integration
- 4** Pursue population-based payment models
- 5** Stratify data and incorporate health equity quality incentives into payment models
- 6** Increase federal funding for community health centers and create new access points
- 7** Pay for community health workers
- 8** Encourage Patient-Centered Medical Home (PCMH) attributes, including care coordination

“ We are no longer at the point of saying, ‘Let’s continue to let 10,000 flowers bloom.’ We need to figure out which of these flowers are blooming in such a way that is useful to the most people and plant a whole lot more of those everywhere. Because the only way you get systemic change in Medicaid—or in any system—is that you make it systematized, you make it widespread, you make it easy to adopt, you make it obvious.”

– Matt Salo, Salo Health Strategies, formerly National Association of Medicaid Directors

# 1 Report and increase the share of Medicaid spending on primary care

## The evidence

Increasing the proportion of health care dollars that goes to primary care\*, including in Medicaid, is a direct and trending strategy to strengthen primary care. NASEM's [report](#) on implementing high-quality primary care supports the option of increasing the allocation of spending to primary care by asserting: "clear evidence suggests that systems oriented toward primary care in both policy and relative resource allocation show improved population outcomes and better efficiency over time ([Bitton et al., 2017](#)), ([Shi, 2012](#))".

The Primary Care Collaborative in its 2019 [evidence report](#) found inverse associations between primary care investment and three outcomes: total hospitalizations, hospitalizations for ambulatory care-sensitive conditions and emergency department visits ([Jabbarpour et al., 2019](#)), though noting that causality or directionality could not be inferred. More recently, the California Health Care Foundation released a [report](#) that analyzed primary care spending by 13 Medi-Cal managed care plans in California. It found a statistically significant relationship "...between plans with higher primary care spending percentages and those that scored higher on the Aggregated Quality Factor Score, a composite measure of overall care quality, which includes the percentage of plan members who complete well-child visits, receive immunizations, have control of their diabetes, and receive recommended cancer screenings, among other measures" ([Edrington et al., 2022](#)). It also found that higher percentage spending on primary care was associated with better plan ratings from the National Committee for Quality Assurance (NCQA), which evaluates plans on quality of care, patient experience, and plans' efforts to improve.

---

\* Methods of measuring the percentage of overall health care expenditures attributable to primary care are not standardized and depend on the source of data. A common approach is to identify expenditures for ambulatory care provided by designated primary care physicians, e.g., pediatricians, family practitioners, non-specialty internists, etc. Others view primary care related to evaluation and management (E&M) and preventive care as compared to procedures, recognizing that many non-primary care physicians conduct E&M and preventive services and some care by primary care physicians are more specialized procedures. Medicaid claims and encounter data offer more detail, but are complicated, and managed care utilization often lacks expenditure data. Other relevant issues are which services and populations are included or excluded ([Edrington et al., 2022](#)). Primary care spending is also influenced by the types of populations served: e.g., children are likely to have a larger share of primary care expenditures, while aged and disabled populations are likely to have more specialty and inpatient expenditures.

## The strategy in practice

Health care purchasers are now using a range of ways to shift spending towards primary care. A separate report by the California Health Care Foundation ([Condon et al., 2022](#)) identifies three key mechanisms: transparency (measurement and reporting); contracting (shaping formal agreements); and regulatory (statutes and regulations).

Few data exist for Medicaid spending on primary care, and the measures are often inconsistent, but more states are requiring transparency and reporting of primary care investment levels. Some states, including Oregon, Maine, and Vermont, report slightly higher rates of primary care spending in Medicaid relative to commercial payers, whereas other states, including Delaware, report slightly lower rates ([Kempinski & Greiner, 2020](#)). A NESCSO analysis of 7.2 million lives across six New England states finds an average primary care percent of total medical expenditures of 8.0% for Medicaid using a narrow definition restricted to primary care services and procedures provided by primary care providers ([NESCSO, 2020](#)). (Rates by other payer types ranged from 3.4% to 6.1%.) And the California Health Care Foundation's report analyzing primary care spending among managed care plans in California found that the proportion of primary care (defined broadly) averaged 11% of total expenditures, though with a wide range of 5% to 19% ([Edrington et al., 2022](#)).

Today, some states are going beyond reporting to setting enforceable targets for levels of primary care spend, including in Medicaid. Oregon requires its Medicaid Coordinated Care Organizations to achieve a minimum of 12% on primary care spending ([Kempinski & Greiner, 2020](#)). Prior to the target start date, variation among the state's Medicaid plans was notable: in 2019 primary care spending ranged from 8.9% to 22.5% ([Condon et al., 2022](#)). Colorado also has primary care investment requirements that apply to its Medicaid plans; these require carriers to increase the proportion of total medical expenditures allocated to primary care by one percentage point annually in 2022 and 2023 ([Colorado Division of Insurance, 2020](#)).

## Implementation considerations

The literature and key informant interviews highlighted several considerations for policies to report and increase the proportion of primary care spending. Some suggested the idea of distinguishing Medicaid thresholds from other payer thresholds given the unique needs of the program's populations. For example, the California Health Care Foundation's recent report on primary care and health equity offered sample recommendations for the state to consider, including: "whether Medi-Cal should have a discrete target for primary care investment that reflects the needs of Medi-Cal members and serving providers, reflects the structure of the Medi-Cal benefit package, and addresses historic under-investments in Medicaid payments to providers" ([Rittenhouse et al., 2023](#)). One perspective noted the importance of reporting primary care spend not only as a percentage of total spend, but also as a dollar figure (such as per member per month) given the wide variation in total spend between states and programs, which can be significant.



Key informants underscored the complexity of both defining primary care—what gets counted, and what does not—and finding the right level of detail necessary for reporting: “Given that it takes effort to collect this information, it’s important to think about the correct balance: what do we really need to make sure, not just that we’re spending more money, but that it’s actually going to the right place?” One interviewee pointed to states that are breaking out levels of primary care investment by sub-groups, including pediatric versus adult populations and by race.

Key informants were largely in agreement that levels of Medicaid investment in primary care were too low but differed on the efficacy of using targets to increase them. Proponents of the strategy deemed it necessary to support truly robust primary care, especially given the costs of team-based care. Yet some voiced skepticism around the political reality of the strategy: “As long as the premise of putting more money into primary care looks like either a threat or a flash in the pan, there will be entities looking to subvert it or only give lip service.” Another interviewee shared a similar sentiment: “The idea of upping the floor of percentage primary care spend... to me, it’s still a fee for service kind of mentality that pits primary care versus specialty care. It’s going to make people feel threatened. We should move more towards value-based payments in which everybody sees themselves as the winner. And everybody sees that the savings can be shared.” What’s more, some acknowledged the tension of reallocating dollars away from specialty care—which is often already difficult to access for Medicaid enrollees.

Indeed, for many key informants, how funds are invested was critical to the idea of successfully increasing investment, with value-based payment models offering a possible answer. Some states, such as Washington and Colorado, are explicitly pursuing primary care investment in this context by tying greater investment to transformation and participation in alternative payment models ([Brykman et al., 2023](#)). Though, as one interviewee reflected, value-based models offer the promise of increasing primary care investments in ways that keep patients healthy—and without hurting state budgets—but that “we’re still learning what it takes to fulfill that promise.”

“ You can throw all the money that you want at some of these organizations, and they’re still not going to have the capacity to pivot [to value-based payment] without some direct support. Technical assistance and upfront grants to providers serving disadvantaged communities is key.”

– Tricia McGinnis, Center for Health Care Strategies

# 2

## Increase payment to primary care clinicians

Pay for primary care clinicians is notably low relative to their peers ([Fujisawa & Lafortune, 2008](#)), contributing to challenges retaining primary care clinicians and recruiting new ones ([NASEM, 2021](#)). This is especially true in Medicaid where, nationally, average fee-for-service primary care physician fees are just 67% of those paid in Medicare ([KFF, 2021](#)). Such low reimbursement levels contribute to lower Medicaid participation by physicians, and fewer providers participating in Medicaid could reduce access to primary care ([Holgash & Heberlein, 2019](#)). One strategy for improving primary care access is to pay primary care clinicians more through incentives and fee-for-service schedules.

### The evidence

Among the most researched attempts at this is the Affordable Care Act's Medicaid parity provision that required states to increase Medicaid reimbursements for primary care, with the federal government paying 100% of the difference in fees. For 2013 and 2014, it increased Medicaid payment rates for qualifying primary care physicians and services to at least 100% of Medicare levels under both fee-for-service and managed care.

While some studies of the fee bump suggested some positive effect ([Polsky et al., 2015](#)), other studies showed no association between the pay bump and participation in Medicaid ([Decker, 2018](#)) or Medicaid service volume ([Mulcahy et al., 2018](#)). A 2019 systematic review ([Saulsberry et al.](#)) of the literature on the ACA Medicaid parity provision concluded that the overall evidence is "mixed", with the most consistent positive effects seen around improved access to care.

Several studies posit potential reasons for not seeing greater impacts from the parity provision, including: the short timeframe for implementation; complex "system modifications necessary for claims payment"; the need to update contracts and capitation payments; lack of provider awareness of the new provision; and the near-term end date of the policy that expired after two years ([MACPAC 2013, 2015](#)). Another report ([Zuckerman et al., 2017](#)) notes that "Implementation difficulties and delays in federal rulemaking meant that most eligible physicians did not

begin receiving higher fees until mid- to late 2013". PCC's conversations with key informants uniformly underscored these concerns, emphasizing the short timeframe and implementation obstacles as major impediments to the ACA Medicaid parity provision. As one interviewee described it: "States just scrambled to implement it. Some providers didn't even know about it. It was like 101 around how not to implement a rate increase in Medicaid."

Administrative burden and late payments may also contribute to the muted effect of rate increases on provider acceptance of Medicaid. One analysis finds that physicians lose an estimated 18% of Medicaid revenue to billing problems, compared with less than 5% for Medicare and less than 3% for commercial insurers ([Dunn et al., 2021](#)). Some states, such as Idaho, commonly delay Medicaid payments at the end of the year when there are budget shortfalls. Others, such as California, have cut the state Medicaid dental benefit when budgets were tight, only to reinstate it when coffers refilled. Experts say such churn leads to skepticism of rate increases among clinicians who may wonder if, and how long, such changes will last.

Still, some point to the ACA fee bump as a positive for primary care given that 19 states chose to continue the temporary policy change in some form after the provision expired ([Zuckerman et al., 2017](#)), suggesting that "...even a temporary federal policy had lasting effects on some states' approaches to Medicaid reimbursement." And there is much stronger evidence of a positive effect for dual-eligible Medicare and Medicaid beneficiaries than for the overall Medicaid population ([Cabral et al., 2022](#)) as the policy greatly increased Medicaid payments of Medicare's cost-sharing. For its part, CMS has concluded "two key drivers of access – provider network size and capacity – are inextricably linked with Medicaid provider payment levels and acceptance of new Medicaid patients" ([Medicaid and CHIP Managed Care Access, 2023](#)).

Apart from the fee bump, other studies of primary care pay show potential positive impacts such as spillover effects from higher primary care reimbursement that reduce mental illness and substance use disorders among Medicaid enrollees ([Maclean et al., 2023](#)) and greater acceptance of Medicaid among practices with nurse practitioners in states where NPs receive 100% of physician Medicaid fee-for-service rates in addition to having full scope of practice ([Barnes et al., 2017](#)).

## Parity with Medicare

One way to increase Medicaid payment rates is to match them to Medicare rates. Indeed, this is what's called for in NASEM's 2021 [report](#), noting that "reforming Medicaid to mirror Medicare's payment standards may be the most straightforward path to ensuring equitable access to high-quality primary care for its beneficiaries" ([NASEM, 2021](#)).

Recently, CMS has been pursuing this avenue through its waiver authority by requiring states to increase rates for certain specialties. For example, as a condition of federal funds for California's Providing Access and Transforming Health (PATH) program, CMS has required the state to "increase and (at least) sustain Medi-Cal fee-for-service provider base payment rates and Medi-Cal managed care payment rates in primary care, behavioral health, and obstetrics care" if its average Medicaid-to-Medicare provider rate ratio falls below 80%. Similar parity policies exist in Arizona, Oregon, and Massachusetts ([Rittenhouse et al., 2023](#)).

Congress could also act on this front. A 2020 [report](#) by the Bipartisan Policy Center on strengthening primary care in Medicaid included the recommendation that Congress increase state Federal Medical Assistance Percentages (FMAP) to 100% for primary care services for states that reimburse at Medicare rates for five years ([Hayes et al, 2020](#)). The report's accompanying analysis of estimated federal costs found that the policy would cost \$27 billion over ten years ([Hammelman & Cohen, 2020](#)).

Several key informants acknowledged the important role Medicare plays, noting that when Medicare takes action, it's easier for "laggard" states to say "ok, this is the new bar". Still, others point out that even Medicare's rates may be insufficient to deliver robust primary care and incentivize better Medicaid acceptance. (The NASEM report also recommends improved valuation methods with a goal to increase the Medicare fee schedule for primary care evaluation & management services by 50%.) Separately, at least two key informants noted the feasibility challenges of implementing rate increases given state and managed care flexibilities.

Some, including the NASEM committee, point to managed care network adequacy standards as a means to improve access for Medicaid enrollees by encouraging managed care organizations (MCOs) to increase their rates in order to expand provider networks. CMS pursued this tack in its May 2023 proposed Medicaid rules ([one](#) addresses managed care; [the other](#) primarily fee-for-service), which include new federal standards for measuring access in managed care, as well as new rate transparency provisions that compare Medicaid rates to Medicare for certain services including primary care. At the same time, some members of PCC's workgroup highlighted how workforce shortages and other challenges contribute to network inadequacies, suggesting that increases in pay were necessary, but not sufficient.

# 3

## Support behavioral health and primary care integration

### The evidence

Behavioral health integration in Medicaid takes many forms, with practices relying on a range of team-members and approaches to meet patients' needs. Two leading models include the Collaborative Care Model (CoCM) and the Primary Care Behavioral Health (PCBH) model.

CoCM has some of the most robust evidence of impact. The model treats common mental health conditions by utilizing primary care providers in collaboration with behavioral health care managers and in consultation with psychiatric consultants. The AIMS Center has compiled an overview of the model's **foundational evidence**, highlighting key research from over 90 randomized controlled trials that show the model to be more effective than usual care for treating depression, anxiety, and other conditions ([AIMS Center, n.d.](#)). This research includes a Cochrane systematic review ([Archer et al., 2012](#)) that found significantly greater improvement in depression and anxiety outcomes for adults in the short-, medium-, and long-term as compared to usual care. The CoCM model has succeeded in a range of safety net settings including rural clinics ([Powers et al., 2020](#)) and public-sector clinics ([Lagomasino et al., 2017](#)). And its effect sustains, and in some cases, may be even greater, for low-income patients ([Katon et al., 2015](#)), ([Grote et al., 2015](#)).

A second widely-adopted model, the Primary Care Behavioral Health (PCBH) model, is a team-based approach to managing biopsychosocial issues ([Reiter et al., 2018](#)) that involves a behavioral health consultant who is integrated into the primary care team to support care. The model has demonstrated success improving outcomes ([Robinson et al., 2020](#)) and patient and provider experience ([American Psychological Association, 2022](#)), though reviews of the model have called for more rigorous studies of its effect on outcomes ([Possemato et al., 2018](#)), ([Hunter et al., 2018](#)). This success appears to hold true in safety net settings ([Begley et al., 2008](#)), including reduced preventable inpatient utilization among patients who received integrated behavioral health services at safety net primary care clinics ([Lanoye et al., 2016](#)).

Another area for consideration is the integration of primary care and preventive physical health services into community behavioral health centers. Since 2009, SAMHSA has annually awarded Primary and Behavioral Health Care Integration grants to cohorts of community behavioral health centers, who often partner with primary care clinics, or occasionally hire primary care clinicians directly. The program aims to improve the health of individuals with Serious Mental Illness (SMI) and/or co-occurring Substance Use Disorder (SUD) by providing coordinated primary care services in community-based settings ([Scharf et al., 2013](#)). Four program features include: screening/referral for physical health prevention/treatment; developing a registry/tracking system for physical health needs/outcomes; care management; and prevention and wellness support services. A [2019 ASPE evaluation](#) that used Medicaid claims data to assess the program's impact found mixed results: some positive effects were seen on patient utilization (all five cohorts saw a reduction in the proportion of patients having four or more emergency department or inpatient visits), while limited effect—positive or negative—was seen on the quality of care measures ([Breslau et al., 2019](#)). In a similar fashion, [HRSA](#) has emphasized behavioral health integration at community health centers; health centers provided over 15 million mental health visits in 2021 ([HRSA, 2022](#)).

### Paying for the models

Payment is frequently cited as the primary barrier to better uptake of behavioral integration models, with many activities not directly reimbursable. A comprehensive [toolkit](#) by the Center for Health Care Strategies (CHCS) outlines the general approaches that may be used to pay for integrated care in Medicaid: "(1) new fee-for-services billing codes (e.g., Washington State's Collaborative Care Model codes); (2) care management payments (e.g., New York's case rates for qualified Collaborative Care Model providers); (3) bundled payments (e.g., Minnesota's Diamond model); and (4) primary care capitation (e.g., Rhode Island's primary care capitation framework)" ([Crumley et al., 2019c](#)).

Fee-for-service billing codes for integrated care have had partial uptake. In 2016, CMS introduced unique CoCM billing codes for collaborative care. As of May 2021, 19 state Medicaid agencies were covering CoCM as a benefit ([California Health Care Foundation, 2021](#))—though with varying rates and levels of policy complexity relative to Medicare (e.g., requiring attestation, limited diagnoses, licensing requirements, and exclusions) ([Raney, 2021](#)). One year later, 24 states were covering the codes (two as limited pilots), and six more were "in progress" ([American Psychiatric Association, 2022](#)). Medicaid agencies and managed care plans may choose to follow CMS guidance for the codes, revise it, or "decline to implement it altogether" ([California Health Care Foundation, 2021](#)). FQHCs and rural health clinics have their own CPT code (G0512) that may be billed monthly if behavioral care managers complete an hour or more of collaborative work per patient ([Raney, 2021](#)).



Key informants highlighted coverage challenges in interviews with PCC: "In the context of Medicaid specifically, one thing that would be tremendously helpful is if there were expanded and consistent coverage of the collaborative care codes. Inconsistent state coverage can be a barrier to uptick of providers billing those codes. That's something tangible that could improve integration." However, implementation of the codes alone does not necessarily lead to notable utilization ([Copeland et al., 2022](#)).

Alternative payment models may offer a better answer for how to sustainably integrate behavioral health services within primary care for Medicaid enrollees. Increasing examples of this approach are emerging. CareOregon launched the Primary Care Payment **Model** (PCPM) for Medicaid members, which adjusts per-member per-month payment levels based on quality performance for four focus areas—including behavioral health integration (BHI). Performance measures for BHI include positive screening for Screening, Brief Intervention, and Referral to Treatment (SBIRT) and depression screening and follow-up. In Colorado, Rocky Mountain Health Plans expanded behavioral health services for Medicaid enrollees by developing an alternative payment model that allowed contracted primary care practices to hire behavioral health staff and offer screenings, brief interventions, ongoing therapy for mild to moderate conditions, and warm handoffs to specialists ([Hostetter & Klein, 2022](#)). A **case study** of the program found the payment approach increased the number of Medicaid beneficiaries receiving behavioral health services, with initial investments offset by savings in total cost of care.

States can play a major role in advancing behavioral health integration within a managed care context. CHCS's BHI **toolkit** outlines the spectrum of approaches states may take in addressing BHI in Medicaid managed care contracts to advance better care. This includes defining MCO requirements and responsibilities for integrated primary care, selecting the screenings to be integrated into primary care, and deciding how much direction to give MCOs in terms of provider pay for integrated care ([Crumley et al., 2019c](#)).

# 4

## Pursue population-based payment models

As much of health care increasingly looks to **alternative payment models**, so, too, does Medicaid. Several key informants underscored the now well-known refrain of tying pay to outcomes, not volume of services. One key interviewee put it this way: "We should ask ourselves—what do we want the Medicaid program to do? I think the super simplistic answer is that we want to get people healthy, and we want to keep them that way. The problem is that the underlying reimbursement nature of Medicaid does not deliver that. If people get healthy, then that means less services, less business, and less money to the system."

Population-based payment models—those that offer "upfront, flexible payments" to provider organizations "tied to quality incentives" (**Brykman et al., 2023**)—for Medicaid have been implemented in several states, including primary care models out of Colorado and Maine (under FFS delivery systems), Washington (under MCO delivery system), and the CMS Innovation Center (Comprehensive Primary Care Plus and Primary care First) (**Houston et al., 2022**), with a new model "Making Care Primary" announced in June 2023. In Oregon, the state's Medicaid coordinated care organizations (CCOs) are required to provide per member per month payments to their PCMH clinics known as Patient-Centered Primary Care Homes, paying "meaningful" amounts that increase annually over five years (**Oregon Health Authority, 2019**). "Primary care PBP models in Medicaid tend to use a hybrid payment mechanism that may help incentivize higher volume of under-utilized preventive care services while creating greater revenue stability than FFS payment" (**Houston et al., 2022**).

States obtain authority to pursue these models through a range of avenues, including via Medicaid Section 1115 demonstrations, state plan amendments, the CMS Innovation Center (CMMI), and "CMS review of managed care rates, contracts and directed payments" (**Houston et al., 2022**). "Federal regulations authorize states to build value-based payments into their managed care contracts to promote clinical quality and efficiency at the point of care", with state Medicaid agencies increasingly utilizing this approach (**Rosenbaum et al., 2022**).

## The evidence

While there is widespread support for the concept of population-based payment in Medicaid, rigorous, long-term evaluations of primary care population-based payment models for enrollees exclusively covered by Medicaid are still under development. As one key informant put it: "We are still very much in the evidence-building phase." Out of CMMI, Comprehensive Primary Care Plus (CPC+), whose "track 2" involved hybrid capitation, showed mixed results including some improvements in service use and quality-of-care, and no net savings ([Lewis et al., 2022](#)). Practices in disadvantaged areas—including those with a higher mean share of households living in poverty—had lower participation rates in the model ([Fraze et al., 2018](#)). CPC+ has been implemented by Medicaid programs in AR, CO, MT, OH, OK, OR, and TN ([CMS, n.d.-b](#)); however, Medicaid-focused models were not included in analyses of the program "...as they serve a different beneficiary population and themes from evaluation results of models focused on Medicaid may differ from those related to Medicare models" ([CMS, 2022a](#)).

In 2022, the Center for Health Care Strategies issued a [comprehensive report](#) on population-based payment (PBP) in Medicaid that describes current state models and outlines considerations for policymakers looking to pursue this type of advanced value-based payment. The report acknowledges that "many Medicaid PBP models are relatively new and are still awaiting results. However, the results that are available are promising" ([Houston et al., 2022](#)). The report's analysis of eleven PBPs—including of primary care, hospital, and total cost of care models—found that "...only models in three states — Maryland, Massachusetts, and Vermont — and CPC+'s Medicare component currently have cost or quality results for their programs, and Pennsylvania's model has anecdotal findings from early evaluations." Without the ability to point to clear evidence, the authors suggest the models still "make intuitive sense" to improve quality, experience, and equity relative to fee-for-service, and that PBPs stronger incentives as compared to other value-based payment approaches such as pay-for-performance and shared savings models "...could allow them to outperform these models' results" ([Houston et al., 2022](#)).

NASEM'S 2021 primary care report notes that Medicaid accountable care organization (ACO) arrangements exist in 14 states "showing mixed results" including some promising outcomes for pediatric populations, and that these "organizations differ in the extent to which they emphasize, incorporate, pay for, and support" primary care ([NASEM, 2021](#)). Its payment actions reflect this, recommending that, under risk-bearing contracts, payers ensure "sufficient resources and incentives flow to primary care" rather than paying primary care on a fee-for-service basis thus "blunting the effects of [the] models".

## Implementation considerations

Perhaps the most recurrent theme of PCC's conversations with key informants was their emphasis on the importance of multi-payer alignment when undertaking advanced value-based payment models for primary care, with some describing it as "absolutely necessary" for success: "If I'm a physician/clinic/group practice, and there are six managed care organizations in my state, and they all want value-based payment... all with slightly different incentives and then Medicare/commercial are doing something different... how many times am I as a business owner going to be forced to completely rethink my business model, my profit margin, my incentives, my longevity? Any more than once or twice, I just won't do it. I will wait it out."

Another expert highlighted how many practices that serve Medicaid patients also serve commercial and Medicare patients, including multiple types of managed care arrangements, each of which has its own set of performance measures and payment formulae. They described how the fragmentation of performance assessment and incentive structures makes it challenging for practices to adequately focus on specific methods of quality improvement. An additional problem is that some practices—particularly unaffiliated smaller and rural practices—lack the administrative capacity to adopt and sustain changes sought by value-based systems.

Some interviewees acknowledged that payer alignment has been a stated goal of federal programs, but without great success. One interviewee observed the challenge of recruiting multiple insurers in CMMI's CPC+ model, when many had their own initiatives with similar goals or conflicts with other policies. Multiple key informants noted that states and payers often felt excluded from the process: "The way CMMI models have worked to date is that, at least from the payer's perspective, it's a bunch of bureaucrats sitting in a room, making decisions about what the model is going to look like, and then it's rolled out sort of 'take it or leave it'. And I don't think that's how it's intended to come out, but it's certainly been a criticism." Another noted barrier was CMMI's challenges working with Medicaid because of the diversity of state policies, approaches, and managed care plans involved, and the constraints on its statutory authority to waive Medicaid policies. Indeed, CMMI's recently released [strategy](#) to support high-quality primary care notes that over half of primary care practices are not participating in CMS ACO initiatives, nor CMMI's Primary Care First model ([Rawal et al., 2023](#)).

Still, many felt that CMS and CMMI need to ultimately lead the way with PBP models given the capacity constraints on states to design and implement these models—an undertaking that can involve significant resources. Interviewees instead advised more active conferring with both states and plans to cultivate buy-in rather than CMS alone setting the design. Other experts pointed to a similar need to better include small practices and clinicians, especially those who serve rural communities, disproportionate shares of Medicaid populations, and those in certain geographic regions with states that have historically not been selected to participate in CMMI models.

When asked about the top policy step to strengthen primary care in Medicaid, one interviewee said a model that offers more resources to practices that participate in a tiered type of PBP: "I think it has to come from CMMI because states appreciate that support, but it also has to have flexibilities so that states can do some customization." In June 2023, CMMI announced its "Making Care Primary" model involving three progressive tracks to move practices to more "flexible prospective payments that can better support primary care teams." The model aims to target the "large proportion of safety net providers and primary care providers that have not participated in previous value-based models" (Rawal et al., 2023).

Interviewees also highlighted the importance of buy-in among practices and providers in shifting towards PBPs. Several key informants pointed to apprehension among providers who feel uneasy or unfamiliar with capitation rates and complicated formulae. One suggested this mindset starts early, during providers' education: "Medical schools tend to insulate themselves from the challenges of capitation. They'll take on capitation contracts, but they know the value they bring as academic medical centers, and they'll hold out to get paid whatever they want to get paid. That environment creates a false sense of security for the faculty, who think the rest of the world operates the same way. So their graduates are not ready...they just don't have any sense of the practice environment." To assuage those fears and improve know-how, interviewees suggested emphasizing the stability of consistent, upfront revenue—particularly in the face of uncertainties exposed by COVID; teaching value-based concepts and team-based policies starting in medical school; and fostering greater payer alignment.

Key informants also pointed to the limited capacity of small and solo providers as a major barrier to their participation in PBPs. They noted the criticality of certain infrastructure like IT, data, and analytic capabilities, along with population fundamentals and capital to succeed in advanced value-based models. Some Medicaid plans have tailored value-based offerings to support small and rural providers such as AmeriHealth Caritas plans in Louisiana and New Hampshire that work with providers to improve technology and population management techniques. One interviewee described how some Independent Practice Associations (IPAs) have increasingly offered practice transformation coaching to their safety net network providers: "IPAs are taking advantage of the tools they have in place to help that solo and small practice doctor say 'I have a partner that is value-added, and I'm going to gravitate towards them with exclusivity.' And in exchange for that, they're going to provide me in-kind dollars of support to help me transform so I can have a successful practice 10 years from now."

Yet not everyone agrees on these providers' role. One key informant more controversially questioned whether it even made sense to bring small and solo providers into advanced payment approaches: "Maybe we stop thinking of the small single-physician shop as the answer to nation's complicated health care needs and instead try to drive more availability of health clinics or other practices with more scope—not necessarily large group practices. Maybe that's just a natural progression of how the workforce evolves. Everybody is consolidating... Maybe we just lean into a greater footprint for integrated types of care." At the same time, a different expert pointed to the effects of practice consolidation creating more "healthcare deserts" in communities that desperately need care, particularly communities of color in both urban and rural settings.

Finally, literature and interviewees alike cautioned against potential unintended consequences of population-based models that could affect Medicaid enrollees and the clinicians who serve them. Risks of poorly designed PBP payment include “providers inappropriately limiting care, taking on more patients than they can care for, or avoiding patients with complex needs” (Brykman et al., 2023). What’s more, programs that require providers to be “at-risk” for costs—many of which are out of their control—may reduce patient access if practices limit the number of Medicaid patients they will accept or are forced to close altogether.

Medicaid agencies are attempting to counter those effects through various approaches. In Oregon, for example, applicants to its Coordinated Care Organization (CCO) 2.0 program must submit a plan for “mitigating any adverse effects VBP implementation may have on health inequities, health disparities, or any adverse health-related outcomes for at-risk populations” (Crumley & Houston, 2019). Then the CCO leadership team meets annually with the Oregon Health Authority to describe the outcomes of the mitigation plan.

It seems likely that Medicaid programs – like Medicare and commercial insurance – will continue to explore methods to increase population- and value-based payment methods but will also need to carefully evaluate these innovations to determine whether the additional administrative effort succeeds in improving quality or lowering cost, as well as determining which types of models are appropriate for different sets of clinicians or patients.

“It’s difficult for states, MCOs, and other payers to make large scale payment infrastructure investments for capitated payment arrangements when it’s not a critical mass of practices for them.”

– Timothy Day, Centers for Medicare & Medicaid Services



# 5 Stratify data and incorporate health equity quality incentives into payment models

States, with encouragement from the administration, are pursuing innovative payment approaches to further health equity goals. Under the Biden Administration, CMS's **Strategic Vision** for Medicaid and CHIP names "Equity" as one of the agency's three priority areas, recognizing several avenues to address it. These include "making funding and new federal investments linked to progress on reducing health disparities" ([Brooks-LaSure & Tsai, 2021](#)).

Value-based payment is one especially fertile area to address health equity. A recent **California Healthcare Foundation report (2023)** offers recommendations including: "Implement and encourage participation in equity-focused alternative payment models that enable integration of social services, public health, and community partnerships into clinical practice" ([Rittenhouse et al., 2023](#)). PCC similarly explored the link between primary care and health equity in a **2022 brief**, calling for better collection of disaggregated race and ethnicity data and transformed primary care payment tailored to patient populations according to health status, social risk, historic under-investment, and other elements ([McNeely et al., 2022](#)).

State Medicaid programs are increasingly tying payment to equity goals. "There is growing interest in integrating equity-targeted quality measurement into value-based payment, with an increasing number of states formally implementing such strategies" ([NCQA, 2021](#)). This can include linking managed care quality incentives "(e.g., performance bonuses, withholds, or value-based state directed payments) to health equity-related performance goals" ([Hinton et al., 2022](#)).

Safety net providers are considered critical to addressing equity in Medicaid. A **2022 report** by the Commonwealth Fund called for "introducing value-based payment strategies that reward providers for achieving health equity goals for the communities and populations they serve" ([Rosenbaum et al., 2022](#)). This strategy acknowledges the unique assets of, and constraints on, safety net providers by offering them payment enhancements that include upfront "readiness investments" and safeguards against financial risk.

## The current landscape

Data from the Kaiser Family Foundation show that in 2021 a dozen states were linking financial incentives to health disparities metrics, up from just two states in 2019. Most of these incentives were in states' managed care delivery systems ([Hinton et al., 2022](#)). One example is Minnesota, whose **Integrated Health Partnerships (IHP)** program 2.0 offers a quarterly population-based payment (PBP) for care coordination and eligibility for shared savings/losses. Half of the shared savings are contingent on overall quality results, with a proposed 20% based on an Equitable Care domain focused on "Improving care for racial and ethnic groups" by closing gaps ([Minnesota Dept. of Human Services, 2022](#)).

While there are several examples of new health equity APM incentives in the works, the evidence on their impact—how well they address disparities in care/outcomes and if they have unintended consequences—is almost entirely left to be seen.

## Implementation considerations

Target measures should be high-priority and, ideally, existing, to minimize new administrative burden. As staff from the Center for Health Care Strategies advise ([Brykman et al., 2023](#)), state policymakers should focus on measures that "show strong evidence of disparities and are reasonably within providers' control to impact," with examples including chronic conditions, patient experience, and immunizations.

Stakeholders are increasingly calling for states to require disaggregated data, with measures stratified by variables such as race, ethnicity, language, or disability status. Today, such data on race and ethnicity in Medicaid are largely incomplete ([Ng et al., 2017](#)), ([Schwartz, 2020](#)). System factors—from unclear instructions to a lack of practice-level incentives to collect the information—impair complete data collection. At the same time, applicants may be hesitant to offer this information "because of lack of understanding about how the information may be used, fears of being denied coverage, and categories not aligning with how they self-identify" ([MACPAC, 2023](#)). A majority of states now use at least one specified strategy to address data completeness ([Hinton et al., 2022](#)). Some require reporting of disaggregated quality metrics through their managed care contracts, such as Louisiana and Michigan, thus "forcing better data collection" ([Patel & Zephyrin, 2022](#)); others, like **Massachusetts**, use 1115 waivers to pay for stratified reporting of quality metrics to be publicly reported.

Key informants weighed in on this issue. One interviewee noted the understandable apprehension of applicants to self-report their race and ethnicity: "We know we need to collect more info on racial/ethnic disparities, but part of the problem is that we intentionally moved away from this to avoid access issues for beneficiaries who were worried (perhaps rightly so) that self-identifying as something might be problematic for them." Other observations included the importance of reporting measures in a way that "doesn't make the primary care practitioner defensive", but instead addresses the scope of the challenge without alienating the workforce integral to

achieving success. Another interviewee acknowledged that “we are still figuring out the right way to incorporate equity into payment models” but that data collection, including around Z codes\*\*, can inform efforts and ensure they do not inadvertently worsen care or outcomes.

Interviewees applauded recent efforts to broadly address social drivers of health, but some cautioned against losing focus. As one key informant explained: “My fear... is that when the conversation goes to social determinants of health, then it is about how do we get health care to pay for housing, how do we get health care to pay for food, etc. I think we should have housing providers pay for housing, and we should have food providers and service organizations pay for food, and health care should *link*; health care should *coordinate*.” The interviewee instead advised a focus on value that could conceivably push practices to address disparities because, in order to bring up the standard of care for the “bottom 25%”, practices will need to better serve low-income communities, patients of color, people with disabilities, and others who are not as well-served by the system. Yet others continued to caution that value-based models must be intentionally designed to ensure that disparities are addressed and safeguard against “cherry-picking” healthy patients.

---

\*\* The use of ICD-10 Z codes—those that capture standardized information about social determinants of health—are still sparsely used today, with just over 1% of 2019 Medicare Advantage beneficiaries (CMS, 2022b) and less than 2% of 2019 Medicare fee-for-service beneficiaries (CMS, 2021) having claims with Z codes.

“Equity is value, and value is equity. The two are not separate in my view. Even the highest performing practices are challenged in providing care to those patients for which equity is an issue, whether it’s language access, racism, or social determinants of health.”

– Ignatius Bau, Health Equity Consultant

# 6

## Increase federal funding for community health centers and create new access points

Community health centers provide comprehensive primary care—inclusive of medical, dental, and behavioral care along with social supports—to patients in federally designated underserved areas regardless of their ability to pay ([Ku et al., 2022](#)). Some also provide additional services such as on-site pharmacies, vision care, and pain management. Today, health centers serve over 30 million people across 15,000+ delivery sites ([HRSA, 2023](#)). Their unique mission and mandate makes them "...designed to meet the needs of those who have complex combinations of health and social needs" ([Ku et al., 2022](#)).

Health centers are integral to Medicaid and vice versa. Safety net providers in underserved communities "form the primary care foundation on which Medicaid managed care rests" ([Rosenbaum et al., 2022](#)), with health centers serving over one in five Medicaid enrollees nationally ([NACHC, 2021](#)). And Medicaid makes up a substantial portion of health center revenue—an average of 41% in 2021 ([KFF, 2022c](#)). (Other revenue sources include: Section 330 grants, Medicare, private insurance, self-pay patients, the CHC Fund established by the ACA, and other grants ([Hayes et al., 2020](#)).)

### The evidence

Over decades, health centers have reliably shown to provide the same or higher quality primary care as compared to other primary care settings. An [issue brief](#) by the Kaiser Commission on Medicaid and the Uninsured (2013) summarizes the overall evidence this way: "...health centers perform as well as or better than other settings (including private primary care physician practices) on diverse measures of access and quality, including rates of screening services and other preventive care, hospital admissions and emergency room visits for ambulatory care-sensitive conditions, and adherence to evidence-based clinical management of chronic conditions." More recent evidence reviews find the same, with research showing benefits for quality of care, better access for underserved populations, economic and employment effects ([Ku et al., 2022](#)), and lower total costs ([Nocon, 2023](#)).

These conclusions hold for Medicaid enrollees served by health centers. Nearly three decades ago, Barbara Starfield's research of outcomes for patients in a state Medicaid program found "no consistent differences in quality of care overall" for patients served by health centers versus other primary care settings ([Starfield et al., 1994](#)). Later research ([Bruen et al., 2013](#)) similarly found no significant differences between health centers and private offices in terms of length of primary care visits or number of services provided.

Indeed, not only are health centers comparable to other primary care settings that serve Medicaid enrollees, several studies show their quality of care to be superior. When quality is measured as a relative reduction in emergency department visits and hospitalizations, health centers fare well over a range of studies involving Medicaid enrollees ([Nocon et al., 2016](#)), ([Evans et al., 2015](#)), ([Rothkopf et al., 2011](#)), ([Falik et al., 2006](#)), ([Falik et al., 2001](#)). (One study's sub-analysis ([Laiteerapong et al., 2014](#)) found higher rates of emergency room visits among Medicaid health center patients versus other Medicaid patients, though it included a small sample size for Medicaid. And [follow-on analyses](#) to [Nocon et al., 2016](#), found mixed results with health center patients having higher emergency department care utilization, but lower costs ([Nocon, 2023](#)).)

Other measures of primary care quality generally show similarly strong results for Medicaid enrollees served by health centers. A 2013 [analysis](#) (Kaiser Commission on Medicaid and the Uninsured) assessed health center performance relative to Medicaid managed care organizations (MCO), finding positive, though mixed, results on quality measures: "Most health centers met or exceeded the Medicaid MCO high-performance benchmarks for the two chronic care measures, but lagged behind the average Medicaid MCO on the Pap test measure."

Health centers are often recognized as leaders in reducing health care disparities in primary care, with several studies showing that health center patients experience fewer racial, ethnic and socioeconomic disparities in access to and quality of care as compared to patients in other primary care settings ([Shi et al., 2013](#)), ([Shi et al., 2009](#)), ([Shin et al., 2003](#)).

Finally, better quality care has also been associated with lower overall health care costs for health center patients compared to other practice types, as more preventive care and chronic disease management lessens the amount of expensive care needed. In his testimony to the Senate HELP committee, Nocon [summarized](#) (2023) recent analyses performed with [collaborators](#) at the University of Chicago that find substantial savings from health centers including 15% lower total costs among Medicaid fee-for-service adult beneficiaries and 22% lower total costs among children.

## The need for sustained investment

Health centers have demonstrated the ability to improve health among some of the country's most marginalized and complex patient populations, including many individuals served by Medicaid. Given their success, NASEM's 2021 [report](#) on primary care calls for the Department of Health and Human Services, enabled by Congressional appropriations, to "target sustained investment in the creation of new health centers (including FQHCs, lookalikes, and school-based health centers), rural health clinics, and Indian health service facilities in federally designated shortage areas" ([NASEM, 2021](#)).

Yet health centers rely on regular Congressional reauthorizations for funds. As a recent Bipartisan Policy Center [report](#) points out: "Community health centers serve a critical role for Medicaid beneficiaries and others, but their reliance on short-term funding creates uncertainty and threatens their ability to operate successfully" ([Hayes et al., 2020](#)). Moreover, a recent [report](#) by the National Association of Community Health Centers (2023) finds that "while the Community Health Center fund has increased by 14% since 2015, medical care inflation has risen by 25%, leading to a 9.3% decrease in federal health center funding in real terms."

While there is strong evidence about the effectiveness of primary care provided by community health centers, and although Medicaid is the largest source of health center revenue, ultimately the number and scope of community health centers largely depends on funding for Section 330, which governs community health center funding through HRSA. Mandatory funding for health centers expires at the end of fiscal year 2023 and there are [bipartisan efforts](#) to extend and expand health center funding, although the outcome is not yet known.

“ Many medical school graduates get diverted from the mission they had simply because nobody taught them how to work in underserved communities. And that leads to burnout. In my experience that is mainly due to the moral injury that they're not doing what they said they would do if they got accepted to medical school.”

– Hector Flores, Altas/Family Care Specialists Medical Group

# 7

## Pay for community health workers

NASEM's [report](#) on strengthening primary care describes high-quality primary care as "...the provision of whole-person, integrated, accessible, and equitable health care by interprofessional teams who are accountable for addressing the majority of an individual's health and wellness needs across settings and through sustained relationships with patients, families, and communities" ([NASEM, 2021](#)). Increasingly, community health workers (CHWs) are considered key members of those interprofessional teams, connecting health care providers and practices with communities. CHWs are frontline public health workers, often with modest professional training, who can serve as trusted community members to better connect patients in the community with the health care system and visa versa. They both improve primary care outcomes (see 'the evidence' below) and "open the door to primary care" by connecting low-income individuals to Medicaid ([Rittenhouse et al., 2023](#)).

### The evidence

A 2023 review of CHW Integration and Effectiveness ([Knowles et al.](#)) describes four models of integration: community-clinical linkages, employment by payers, employment through public health departments, and CHWs embedded in health care institutions. This latter category includes CHWs embedded in primary care teams where they serve myriad roles from patient navigator to advocator and accompanier.

According to the review: "This model is one of the most rigorously studied, with multiple reviews highlighting strong evidence for effectiveness in improving health outcomes, such as chronic disease control, when CHWs are engaged in team-based care" ([Knowles et al., 2023](#)). The authors highlight the benefits these frontline workers offer, including: facilitating better interprofessional communication, supporting care navigation through access to EHRs, and enhancing both patient experience and trust in providers.

In safety net settings specifically, where a high proportion of Medicaid enrollees are served, CHW integration has similarly shown strong effects for strengthening primary care. Some of the strongest evidence for this has come from the IMPaCT model (Individualized Management for Patient-Centered Targets), an intervention

that addresses barriers to health in low-income populations by closely integrating CHWs in primary care practices and coordinating with clinical staff, including having workspace in the practice and access to the EHR ([Kangovi et al., 2020](#)). CHWs provide coaching, social support, advocacy, and navigation, and communicate with providers including electronic messages with progress updates and action plans at 0, 3, and 6 months of the intervention, in addition to ad hoc messages and telephone calls as needed ([Kangovi et al., 2017](#)).

Various studies of the model consistently show positive impact. Early results were promising, with a 2017 study showing that “In a high-risk population of disadvantaged patients with multiple chronic diseases, [the program] led to modest improvements in diabetes, obesity, and smoking, but not in hypertension, compared with collaborative goal-setting alone. The CHW support also improved mental health and quality of primary care [as measured by CAHPS survey] and appeared to reduce hospital admissions” ([Kangovi et al., 2017](#)). The authors also underscore that CHWs work to address root causes of chronic disease and that such changes often take time to show results.

A separate study of patients across three primary care settings—a veterans’ hospital, an FQHC, and an academic family practice clinic— found that the IMPaCT program resulted in “significant and sustained improvements in perceived quality of primary care and reductions in hospital use” ([Long et al., 2019](#)). Another analysis found that patients in the intervention group were more likely to report the highest quality of care and also spent fewer total days in the hospital at 6 months and 9 months as compared to the control group ([Kangovi et al., 2018](#)). Beyond clinical outcomes, economic analyses of the program published in *Health Affairs* found that “...every dollar invested in the intervention would return \$2.47 to an average Medicaid payer within the fiscal year” while likely underestimating the true social return of the intervention ([Kangovi et al., 2020](#)).

Other CHW models have also proven effective for Medicaid patients, including those led by managed care plans. For example, a large Medicaid managed care plan implemented a CHW program in 2018 targeted at members with chronic diseases, multiple ED visits, recent hospitalization, or homelessness. CHWs met with patients by phone and at home to offer support and education while addressing social and health issues ([Gordon et al., 2023](#)). Their many roles included interfacing with primary care, such as helping with PCP assignment, accompanying members to doctors’ appointments, and participating in care conferences with providers. A study of the plan-led CHW program showed positive results for primary care utilization including a greater increase in primary care visits during the first 6 months of the program ([Gordon et al., 2023](#)). Another study of a CHW program implemented in Detroit by three Medicaid health plans saw reductions in ED use at 12-months for patients served by the model as compared to those under usual care; ambulatory care use was also higher for the intervention group ([Heisler et al., 2021](#)).



A study involving focus groups with patients and CHWs explored the ways in which CHWs address barriers to primary care in safety net settings ([Carson et al., 2022](#)). It identified that CHWs address both patient-level barriers through "social support, empowerment, and linkages" and system-level barriers through "enhancing care team awareness of patient circumstances, optimizing communication, and advocating for equitable treatment."

## The current landscape

As of 2021, at least 21 states specifically allowed Medicaid payment for CHW services ([MACPAC, 2022](#)). A MACPAC issue brief on the topic explains state authorities for payment: "States can provide Medicaid payment for CHW services under state plan or Section 1115 demonstration authority. Several states require managed care organizations (MCO) to provide certain CHW services or include CHWs in care teams. In addition, other states allow but do not require MCOs to provide such services" ([MACPAC, 2022](#)). A recent analysis of state requirements for supportive services in MCO contracts found that "only 12 states specifically address the use of community health workers as a form of patient support for some or all populations" ([Rosenbaum et al., 2020](#)). Though interest in CHW services is increasing, with states across the political spectrum exploring how to finance their services through Medicaid ([Worku, 2021](#)).

Today, no consistent federal Medicaid or Medicare policies require coverage for CHW services, "even as other similar workforces such as peer mentors for substance use disorders have expanded through billable services" ([Knowles et al., 2023](#)). The authors suggest that legislation authorizing CHWs to bill for services through Medicaid "offers a pathway to clearer and more sustainable financing for CHWs." This may change over the near term, at least in Medicare. CMS's annual Medicare Part B proposed rule includes proposals to pay for "Community Health Integration" services under Medicare Part B ([CY24 Physician Fee Schedule, 2023](#)). If finalized later in 2023 for Medicare beneficiaries, this policy change may influence billing and payment policy in state Medicaid programs. And some states already now include CHWs as reimbursable.

## Implementation considerations

NASEM's primary care [report](#) (2021) acknowledges that primary care payment today poses a major barrier to community-oriented care, including the use of CHWs, who are paid "through a patchwork of funding options, such as Medicaid demonstration waivers, health homes, Medicaid managed care plans and grants ([Lloyd et al., 2020](#))". The committee asserts that comprehensive payment models that allow for the flexible allocation of resources offers the best way to address that gap. However, they also note that, in the interim, "incremental financing options" exist, including proposals for an optional Medicaid benefit to fund CHWs.

Several key informants highlighted the importance of expanded care teams and noted that their inclusion ties directly to new ways to think about payment. One interviewee pointed out that these care team members are a key aspect of how primary care practices can reasonably take accountability for the outcomes of their attributed patients under value-based payment: "Providers may say, 'How do you expect us to impact the lives of patients that we only see once a year?' The answer: 'You don't, but when you build the team—that includes CHWs, social workers, etc.—you have greater outreach and can influence their outcomes.'"

Some stakeholders, including consumer advocates, also lift up CHWs as "powerful health equity change agents" and have been calling on payers and providers to use CHWs to improve outcomes specifically in communities that "experience health inequities based on racial, sexual, geographic, linguistic, or economic characteristics" (Ruff et al., 2019).

“ Many Medicaid beneficiaries eventually become Medicare beneficiaries. If you look at preventative health and related interventions, it seems they would pay off a lot better if we intervened with patients when they're 40 than when they're 65.”

– Timothy Day, Centers for Medicare & Medicaid Services

# 8

## Encourage PCMH attributes, including care coordination

Advanced primary care models—ones that offer high-quality, whole-person care delivered by a team—are integral to better health. The Patient-Centered Medical Home (PCMH) is among the most widely recognized of these models, with a “multi-disciplinary care team holistically managing patients’ ongoing care, including preventive services, chronic disease management, and access to social services” (KFF, 2022a). Over the last decade plus, several programs have emerged that incent and support care delivered through PCMH models by paying for specified distinctions, attributes, or measures. And many population-based payment models (see above) are based in part on the adoption of PCMH principles to strengthen primary care services.

Medicaid beneficiaries are inconsistently served by medical homes, with variation across and within states. Among adult Medicaid enrollees with a usual source of care nationally, 65% described the practice as consistent with at least three of five key PCMH attributes (Cunningham, 2015). Kaiser Family Foundation’s annual Medicaid Budget Surveys track PCMH programs in states and found that each year between 2015 to 2019, 29-30 states marked ‘yes’ to at least some Medicaid beneficiaries in a state’s Medicaid program being served through a PCMH; yet by 2023, a majority of states indicated there is no PCMH initiative in the state (KFF, 2022a).

### The evidence

Research around the PCMH model overall have shown improvements in quality, utilization, and costs, though inconsistently. As PCC’s 2017 Evidence Report asserts: “meaningful transformation takes time, is dynamic in nature, and displays considerable variations in... outcomes” (Jabbarpour et al., 2017). In the context of Medicaid specifically, there is mixed, though more promising in the longer-term, evidence for the potential of PCMH elements to improve outcomes.

Large evaluations of federal programs show mixed results on utilization, quality, and patient experience for Medicaid enrollees. The FQHC Advanced Primary Care Practice Program (FQHC APCP) (2011-2014) was designed to support the transformation of federally qualified health centers into PCMHs (“advanced primary care practices”). It involved four components to support practices in achieving NCQA

Level 3 PCMH recognition: quarterly care management fees of \$18 per Medicare beneficiary; technical assistance; assistance with biannual readiness assessment surveys; and periodic feedback reports with performance data. A 2016 federal [evaluation](#) of the program found “strong effects of the demonstration for three of the four utilization measures”: FQHC visits, non-ED ambulatory visits, and ED visits ([Kahn et al., 2016](#)). In the second year of the program, rates of FQHC and non-ED ambulatory visits were much higher for Medicaid patients attributed to the demonstration sites than comparison sites, and rates of ED visits decreased more for Medicaid demonstration patients in both years one and two. No effect was seen on inpatient admissions. (Note that care management fees and utilization reports were only provided for eligible Medicare beneficiaries, but the evaluation report still looked at the overall effect of the program on Medicaid beneficiaries.)

Another program, the Multi-payer Advanced Primary Care Practice (MAPCP) Program (2011-2016), was the first PCMH model under CMS, requiring participant practices to meet PCMH recognition requirements and emphasizing the role of care managers ([RTI International, 2017](#)). Payment designs varied widely by state, averaging \$10 or less per beneficiary per month (PBPM). Half of the demonstration states incorporated pay-for-performance elements into payment models. MAPCP saw “limited and inconsistent evidence” on Medicaid outcomes, including minimal evidence of reduced utilization rates and “mixed and unimpressive effects on quality of care among Medicaid beneficiaries in all but two states.” Similarly, access to care/care coordination only improved in two states, and there was no evidence that the program reduced 30-day unplanned readmissions in any of the eight states ([RTI International, 2017](#)). The final evaluation pointed to low PBPMs and insufficient time (nearly all programs were in place 3 years or less) to see results as two primary explanations for the results. It also noted that participation of all payers is critical.

Medicaid Health Homes are another model of care that emphasizes core PCMH elements including integrated and coordinated care. The health home state plan option (2011- present) serves high-need, high-cost Medicaid enrollees with chronic conditions by offering wholistic care with care management and social supports to address patients’ physical, behavioral, and nonclinical needs. A 2018 [report](#) to Congress summarized five years of program evaluations, pointing to early evidence of positive impact on “utilization patterns, costs, and quality” ([ASPE, 2018](#)). Other federal programs, including Comprehensive Primary Care (CPC) and Comprehensive Primary care Plus (CPC+), showed gains in access, care coordination, and some utilization/quality-of-care measures (CPC+) but little or no effect on other measures, patient/physician satisfaction (CPC), and net spending ([Lewis et al., 2022](#)). Evaluations of these programs were limited to Medicare beneficiaries, and CMS cautioned that the ability to extrapolate themes to Medicaid may be limited ([CMS, 2022a](#)).

Studies of state programs show similar, or in some cases, stronger positive effects of PCMH programs to reduce ED visits, hospitalizations, and costs for Medicaid beneficiaries. This includes for Medicaid managed care beneficiaries ([Zhai & Malouin, 2019](#)). Several states used State Innovation Model (SIM) grants to support PCMH programs by funding technical assistance, enhanced care coordination payments, expanded staff, and health information technology investments. An **evaluation** of Round 2 SIM grants found that “generally, states’ PCMH models reduced total spending and use of high-cost acute care services” and that “in most states, the percentage of PCMH patients with at least one annual primary care provider visit increased relative to the comparison group” ([RTI International, 2021](#)). Changes in quality measures were generally not statistically significant.

Oftentimes, state-specific studies focused on utilization measures or cost savings, rather than effect on health outcomes and health equity. One study ([Swietek et al., 2020](#)) showed that quality improvements associated with PCMH enrollment for Medicaid enrollees were inconsistent across racial groups and “not always associated with reductions in racial disparities in quality.”

### Payment hindering practice

While PCMH is described here as a care delivery strategy, the payment that underlies it largely dictates the model’s success and sustainability. Many of the PCMH demonstrations to-date have relied on fee-for-service payments, with an additional—and usually meager—care management fee on top. NASEM’s **report** on implementing high-quality primary care identifies this payment reality, along with a lack of multi-payer alignment, as the two principal factors hindering the PCMH model from reaching its true potential to transform patient experience, outcomes, and costs: “Layering care management fees and shared savings on a largely unchanged chassis of FFS does not drive robust and focused practice change to reduce expensive specialty and hospital-based use; practices largely continue to operate within the confines of FFS, visit-based mentality.” Instead, the Committee calls for stronger incentives in alternative payment models to “counter FFS” and greater multi-payer participation “with more substantial shifts... toward risk-based contracting” ([NASEM, 2021](#)).

Key informants echoed the NASEM report’s conclusions, noting the challenge for primary care practices to cover the upfront costs of transformation and the ongoing costs of maintaining an integrated care team when their payment remained fundamentally unchanged. A fully-powered PCMH model requires greater investment and realigned incentives. One interviewee observed this dynamic in the CPC+ program, noting that “for the vast majority of payers, there isn’t really a lot of unique funding to CPC+. So it really is just continuing on existing programs that often don’t have a strong alternative fee-for-service component to them.”

## Implementation considerations

Interviewees described other barriers and enablers to achieving advanced primary care beyond payment. Barriers ranged from infrastructure costs—both upfront and ongoing—associated with population health management technology, to the challenges of helping low-income patients bridge the digital divide. Others pointed to a medical education system that is disconnected from the true practice environment, leaving clinicians unprepared and burned out. This reality is one of many factors contributing to a growing primary care workforce shortage that inhibits the delivery of comprehensive primary care. Enablers to implementing PCMH included: health information technology; community partnerships, including those that help patients access and use digital tools to manage their health; and practice transformation coaching.

Indeed, coaching—including that offered through IPAs and health plans—was highlighted as an important enabler for all primary care practices, including those serving the safety net. One interviewee offered the example of the support his practice received through a PCMH initiative run by L.A. Care, a health plan serving Medi-Cal enrollees in California. It was “a health plan acting proactively to help its network,” and touted as key to supporting practices who are on the road to advanced primary care but need the infrastructure and coaching to get there. For programs that incentivize PCMH standards, the process to attain those standards is where the real value may lie. As one key informant put it: “PCMH is worth the designation, but it’s really the journey to PCMH that is the most valuable.”

“ Being sincere and committed to moving from volume to value means productivity is no longer defined by how many patients we see, but how much we do for the few patients that we see... Though it begs the question: who is seeing the other patients? And that’s where team-based care comes into play: PAs, nurse practitioners, and other professionals working at the top of their license, and laypersons, working at the top of their training, joining their physician colleagues to provide exceptional care.”

– Hector Flores, Altas/Family Care Specialists Medical Group

How the PCMH model presents in Medicaid varies by state. In 2019, the Center for Health Care Strategies issued a **publication** that profiled state approaches to PCMH in New York, Ohio, and Oregon—three states whose PCMH requirements went beyond common standards to include elements such as integration of primary care with public health and social services; geographic empanelment with risk stratification and targeting; and stronger behavioral health requirements (**Crumley et al., 2019b**). The three states implemented their programs in managed care through a range of approaches including distributing enhanced PCMH payments and shared savings to providers through MCOs and requiring a significant percentage of managed care members to be served by state-defined medical homes.

Oregon has a robust PCMH program in Medicaid. The state requires its Coordinated Care Organizations (CCOs) to have a plan to increase the number of enrollees served by Patient-Centered Primary Care Homes (the state's PCMH equivalent), and it designates "PCPCH enrollment" as one of 19 CCO quality measures used to determine reward payments (**Crumley et al., 2019b**). One PCC key informant specifically commented on Oregon's PCMH initiatives as proof that advanced primary care models can be widely implemented in Medicaid: "Is it just putting people in this patient-centered primary care home that's responsible for better outcomes, or is it everything else that the Coordinated Care Organization has done? It's hard to tease out. But for the feasibility question of can you move a statewide population into these more advanced primary care models? Oregon has clearly done it statewide."

# Other strategies

These eight strategies are far from an exhaustive list of ways to strengthen primary care in Medicaid. Many more exist, spanning efforts to increase cultural competency of care through **trainings/technical assistance** or establishing **minimum standards**, to **diversifying** the primary care and behavioral health workforce. Some strategies focus on empowering patients such as involving enrollees in primary care decision-making at the plan and practice levels; others focus on shoring up primary care providers, such as by promoting **inclusive provider contracts** that offer in-network status for all Medicaid-covered services that safety net providers are qualified to furnish (**Rosenbaum et al., 2022**). Strategies for addressing Medicaid enrollees' social drivers of health are proliferating; these include CMS's **proposed new In-Lieu-of-Services regulations**, state **waivers** to address SDOH and health-related social needs (**Guth et al., 2023**), and Medicaid managed care initiatives **financed** through a variety of means (**Crumley & Bank, 2023**). And telehealth—if pursued equitably—has potential to improve access to primary care and reduce disparities (**Sumarsono et al., 2023**). Beyond the particular scope of this brief—focused on payment and delivery options—other issues, including Medicaid/CHIP coverage, benefit design, and workforce development, are equally critical to ensuring accessible, comprehensive primary care for all eligible individuals, families, and children.



# Managed care as a lever

Today, 72% of Medicaid beneficiaries (2020) are enrolled in comprehensive managed care ([KFF, 2022b](#)), and managed care spending represents over half of total Medicaid spending ([Allen, 2019](#)). In these arrangements, states pay managed care organizations (MCOs) a capitation rate based on FFS rates, and the MCOs contract with health care organizations "through a series of privately negotiated, proprietary arrangements" to provide care to enrollees ([NASEM, 2021](#)). The use of managed care can be a strategy onto itself for strengthening primary care in Medicaid, though conflicting evidence to-date suggests "there is no definitive conclusion as to whether managed care improves or worsens access to or quality of care for beneficiaries" ([MACPAC, n.d.](#)).

Managed care's ubiquity also makes it a powerful lever for advancing the eight strategies described above. States have a range of MCO-related requirements and incentives at their disposal to further primary care goals in Medicaid, including around care coordination/management; MCO payment; provider network; quality assessment and performance improvement; scope of services; utilization management; and value-based payment ([Crumley et al., 2022](#)). Indeed, managed care contracts are a particularly potent and increasingly utilized tool for states: "Through active purchasing, states are shaping the accessibility and quality of health care in their detailed contracts with the MCOs that administer state plans and develop and oversee provider networks" ([Rosenbaum et al., 2022](#)).

Examples abound of managed care as a lever to achieve primary care strategies. Access standards may be among the most well-known levers for increasing provider pay in Medicaid. NASEM's primary care report notes that short of "a complete reform of Medicaid, federal access-to-care standards for state Medicaid programs can be readily modified to catalyze state and MCO payment and coverage policies to prioritize high-quality care" and that "Medicaid determines payment sufficiency through the ability of states and managed care contractors to maintain adequate networks of clinicians" ([NASEM, 2021](#)).

In May 2023, CMS proposed **new regulations** on Ensuring Access to Medicaid Care and on Managed Care Access, Finance, and Quality, which would provide greater transparency to Medicaid primary care payment rates and adopt standards for "timely access to care" such as standards that primary care and OB/GYN appointments be met within 15 days ([CMS, 2023](#)). Although the proposed regulations do not specify how states should achieve the objectives of better primary care access, states and MCOs may respond by modifying payment rates or developing other strategies to improve access to care and quality of services.

Managed care is also used as a lever to advance behavioral health integration with primary care for Medicaid enrollees. A Commonwealth Fund analysis of state Medicaid managed care contracts found the issue to be a key priority for many states: “all states require care coordination and case management to support this integration; in addition, 30 states specify some degree of team care and 22 specify use of value-based payments related to behavioral health integration” ([Rosenbaum et al., 2020](#)). Shifts toward value-based payment are also amplified by managed care contracts, with about half of managed care states identifying a specific target in their MCO contracts for the percentage of provider payments or plan members that MCOs must cover via alternative payment models ([Hinton et al., 2023](#)).

To incentivize improvements in health equity, states can “hold plans accountable for how well they serve communities of color and financially reward decreases in disparities,” such as in Minnesota where the state is “rewarding reductions in health disparities and using MCO quality withholds to penalize worsening health disparities” ([Patel & Zephyrin, 2022](#)). Managed care can also be leveraged to integrate community health workers, though the Commonwealth analysis found that “only 12 states specifically address the use of community health workers as a form of patient support for some or all populations” in their MCO contracts ([Rosenbaum et al., 2020](#)).

Effective use of managed care contracts as a lever means striking the right balance of prescriptiveness (to further the states’ aims) and flexibility (to foster plans’ innovation). This level of specificity varies by state and contract. Rosenbaum et al. note in their analysis of MCO contracts that, taken together, “the mix of high specificity and broad aims coupled with deference suggests that there is much to be learned about why states make the choices they do. These choices may reflect state knowledge about the efficacy of a particular approach (or the lack of evidence); alternatively, key differences may be a greater reflection of the policy and political priorities present in any state” ([Rosenbaum et al., 2020](#)).

Key informants noted the important potential managed care holds—if paired with capacity and incentives—to strengthen primary care in Medicaid. At the same time, another theme involved the importance of fostering capacity within *Medicaid agencies* in order to fully capitalize on the MCO contracting lever. Contract alignment across public purchasers is one enabler. In California, for example, the largest purchasers including the Department of Health Care Services (for Medi-Cal), Covered California (for marketplace participants), and CalPERS (for public employees) have issued **standard contract requirements around primary care**, including nearly identical provisions on primary care spend reporting and targets, as well as on increasing the adoption of value-based models for primary care ([CHCF, 2023](#)).

# Limitations

PCC's scan of evidence-based strategies to improve primary care in Medicaid faced several challenges. First, across all strategies, published evaluations often focused on short-term cost savings rather than impacts on health outcomes and equity, posing a challenge to assessing their value for furthering primary care as a "common good" rather than a "commodity service" as called for in NASEM's 2021 consensus study [report](#) on primary care. The strategies' effects on equity, in particular, were harder to assess: while some strategies, such as advancing health centers, CHWs, and behavioral health integration, had clear evidence of impact, other strategies like the inclusion of equity incentives in value-based payment models, have reduced disparities as a stated goal but their results are yet to be seen. Second, several innovative strategies lack significant evidence and/or do not show substantial success. This is due in part to the early stages of many of the models, which were often only launched within the last few years. Other barriers to available evidence include the lack of aligned and refined primary care performance measures; the exclusion of Medicaid populations from some federal evaluations; and the difficulty of comparing variations of models implemented in different states with different Medicaid environments. Third, comprehensive approaches to payment and delivery reform make it challenging to isolate the effects of a particular intervention. Many of these strategies were implemented as part of broader initiatives and policy reforms, complicating evaluators' abilities to conclusively link intervention and effect.

# Conclusion

None of these strategies is entirely new or particularly revolutionary; several have been in place for decades, and others are at least generally accepted today. Even so, many are yet to be fully realized in Medicaid, despite their evidence of success and the need for stronger primary care. And that may be the point: to strengthen primary care in Medicaid, what's needed is not a single "silver bullet" innovation. Rather, the country needs broad, vocal, and focused support for an agreed upon set of policies that strengthen primary care. These policies must be pursued systematically and with sustained, sufficient investment, transparent reporting, and enforcement mechanisms that provide accountability. As one key informant put it, that may mean leaning away from our tendency to push the envelope and instead leaning back to focus on fundamentals: "Let's focus on getting the minimum baseline up for the whole system, rather than chasing the shiny."

At the same time, a true shift toward more equitable care for Medicaid enrollees will require intentionality in both policy and practice. The proven and promising practices explored in this report offer ways to strengthen primary care—a necessity for healthy communities. But equitable outcomes must still be actively prioritized, and accounted for, across all strategies in order to eliminate disparities in care for Medicaid beneficiaries.

Finally, while we note that it is crucial to improve primary care in Medicaid, the need to strengthen primary care is also important for those with commercial insurance, Medicare and the uninsured. The needs and gaps found in Medicaid have parallels in other health coverage systems and broad-based reforms that span across multiple insurance systems might ultimately be the effective approach. But, as the system dedicated to care for poor and vulnerable Americans, from children to adults, the elderly and disabled, strengthening Medicaid is especially important and urgent.

# References

- AIMS Center. (n.d.). *Evidence Base for CoCM | University of Washington AIMS Center*. Retrieved July 11, 2023, from <http://aims.uw.edu/collaborative-care/evidence-base-cocm>
- Allen, K. (2019, April 18). *Medicaid Managed Care Spending in 2018*. Health Management Associates. <https://www.healthmanagement.com/blog/medicaid-managed-care-spending-in-2018/>
- American Psychiatric Association. (2022, June). Coverage for Psychiatric Collaborative Care Management (CoCM) Codes. <https://www.psychiatry.org/getmedia/c2b57396-00a3-4d46-90db-7bf3414014d3/Coverage-Psychiatric-CoCM-Codes-Payers.pdf>
- American Psychological Association. (2022). *Factsheet: Behavioral Health Integration*. <https://www.apa.org/health/behavioral-health-factsheet.pdf>
- Archer, J., Bower, P., Gilbody, S., Lovell, K., Richards D., Gask, L., Dickens, C., Coventry, P. (2012, October 17). Collaborative care for depression and anxiety problems. *Cochrane Database Syst Rev*. 2012;10:CD006525. doi: [10.1002/14651858.CD006525.pub2](https://doi.org/10.1002/14651858.CD006525.pub2)
- Artiga, S., & Hill, L. (2022, December 20). *Health Coverage by Race and Ethnicity, 2010-2021*. KFF. <https://www.kff.org/racial-equity-and-health-policy/issue-brief/health-coverage-by-race-and-ethnicity/>
- ASPE. (2018). *Report To Congress on the Medicaid Health Home State Plan Option*. U.S. Department of Health and Human Services <https://www.medicaid.gov/state-resource-center/medicaid-state-technical-assistance/health-home-information-resource-center/downloads/medicaidhomehealthstateplanoptionrtc.pdf>
- Barnes, H., Maier, C. B., Altares Sarik, D., Germack, H. D., Aiken, L. H., & McHugh, M. D. (2017). Effects of Regulation and Payment Policies on Nurse Practitioners' Clinical Practices. *Medical Care Research and Review*, 74(4), 431–451. <https://doi.org/10.1177/1077558716649109>
- Begley, C. E., Hickey, J. S., Ostermeyer, B., Teske, L. A., Vu, T., Wolf, J., Kunik, M. E., & Rowan, P. J. (2008). Integrating behavioral health and primary care: The Harris county community behavioral health program. *Psychiatric Services*, 59(4), 356–358. <https://doi.org/10.1176/appi.ps.59.4.356>
- Bitton, A., Ratcliffe, H. L., Veillard, J. H., Kress, D. H., Barkley, S., Kimball, M., Secci, F., Wong, E., Basu, L., Taylor, C., Bayona, J., Wang, H., Lagomarsino, G., & Hirschhorn, L. R. (2017). Primary Health Care as a Foundation for Strengthening Health Systems in Low- and Middle-Income Countries. *Journal of General Internal Medicine*, 32(5), 566–571. <https://doi.org/10.1007/s11606-016-3898-5>
- Breslau, J., Sorbero, M., Kusuke, D., Yu, H., Scharf, D., Schmidt Hackbarth, N., & Pincus, H. (2019). *Primary and Behavioral Health Care Integration Program: Impacts on Health Care Utilization, Cost, and Quality*. RAND Corporation. <https://doi.org/10.7249/RR1601>
- Brooks-LaSure, C., & Tsai, D. (2021). A Strategic Vision for Medicaid And The Children's Health Insurance Program (CHIP). *Health Affairs Forefront*. <https://doi.org/10.1377/forefront.20211115.537685>
- Bruen, B. K., Ku, L., Lu, X., & Shin, P. (2013). No evidence that primary care physicians offer less care to Medicaid, community health center, or uninsured patients. *Health Affairs (Project Hope)*, 32(9), 1624–1630. <https://doi.org/10.1377/hlthaff.2012.1300>
- Brykman, K., Houston, R., Patel, S., & Smithey, A. (2023, March 3). Leveraging Primary Care Population-Based Payments In Medicaid To Advance Health Equity. *Health Affairs Forefront*. <https://doi.org/10.1377/forefront.20230301.496129>
- Cabral, M., Carey, C., & Miller, S. (2021). *The Impact of Provider Payments on Health Care Utilization of Low-Income Individuals: Evidence from Medicare and Medicaid* (Working Paper 29471). National Bureau of Economic Research. <https://doi.org/10.3386/w29471>
- California Health Care Foundation (CHCF). (2021). *Cracking the Codes: State Medicaid Approaches to Reimbursing Psychiatric Collaborative Care*. [Webpage]. <https://www.chcf.org/publication/cracking-codes-state-medicaid-approaches-reimbursing-psychiatric-collaborative-care/#related-links-and-downloads>
- California Health Care Foundation (CHCF). (2023, May). *California Public Purchaser Contract Provisions on Primary Care: Multi-Payer Alignment Drives Investment*. <https://www.chcf.org/wp-content/uploads/2022/04/CAPublicPurchaserContractProvisionsPCMultiPayerAlignment.pdf>
- Carson, S. L., Hong, C., Behforouz, H., Chang, E., Dixon, L. Z., Factor, D., George, S. M., Lewis, J., Majeno, A., Morales, M., Porter, C., Shah, A., Vassar, S., & Brown, A. F. (2022). Mechanisms for Community Health Worker action on patient-, institutional-, and community-level barriers to primary care in a safety-net setting. *The Journal of Ambulatory Care Management*, 45(1), 22–35. <https://doi.org/10.1097/JAC.0000000000000405>
- CMS. (2021). *Utilization of Z Codes for Social Determinants of Health among Medicare Fee-for-Service Beneficiaries, 2019*. <https://www.cms.gov/files/document/z-codes-data-highlight.pdf>
- CMS. (2022a). *Synthesis of Evaluation Results across 21 Medicare Models, 2012-2020*. <https://innovation.cms.gov/data-and-reports/2022/wp-eval-synthesis-21models>
- CMS. (2022b). *Utilization of Z Codes for Social Determinants of Health among a Sample of Medicare Advantage Enrollees, 2017 and 2019*. <https://www.cms.gov/files/document/data-highlight-april-2022.pdf>
- CMS. (2023, April 27). Summary of CMS's Access-Related Notices of Proposed Rulemaking: Ensuring Access to Medicaid Services (CMS 2442-P) and Medicaid and Children's Health Insurance Program (CHIP) Managed Care Access, Finance, and Quality (CMS-2439-P). <https://www.cms.gov/newsroom/fact-sheets/summary-cmss-access-related-notices-proposed-rulemaking-ensuring-access-medicaid-services-cms-2442-p>
- CMS. (n.d.-a) *March 2023 Medicaid & CHIP Enrollment Data Highlights | Medicaid*. (n.d.). Retrieved June 29, 2023, from <https://www.medicaid.gov/medicaid/program-information/medicaid-and-chip-enrollment-data/report-highlights/index.html>
- CMS. (n.d.-b). *CPC+ Participating Regions & Payer Partners*. CMS. <https://innovation.cms.gov/files/x/cpcplus-payerregionlist.pdf#:~:text=CPC%2B%20Participating%20Regions%20%26%20Payer%20Partners%20Greater%20Buffalo,%26%20Northern%20Kentucky%20Region%20Greater%20Kansas%20City%20Region>
- Colorado Division of Insurance. **Regulation 4-2-72 Concerning Strategies to Increase Health Insurance Affordability**. 2020 Dec. <https://drive.google.com/file/d/19NzPs786iToCYw9XSQA0mzvl0QfxTjED/view>
- Condon, M. J., Koonce, E., Sinha, V., Rourke, E., Adams-McBride, M., Green, L., Freedman, J., & Freedman HealthCare LLC. (2022). *Investing in Primary Care: Lessons from State-Based Efforts*. California Health Care Foundation. <https://www.chcf.org/wp-content/uploads/2022/03/InvestingPCLessonsStateBasedEfforts.pdf>
- Copeland, J. N., Jones, K., Maslow, G. R., French, A., Davis, N., Greiner, M. A., Heilbron, N., & Pullen, S. J. (2022). Use of North Carolina Medicaid Collaborative Care Billing Codes After Statewide Approval for Reimbursement. *Psychiatric Services*, 73(12), 1420–1423. <https://doi.org/10.1176/appi.ps.202200027>
- Counts, N., & Nuzum, R. (2022, September 21). *What Policymakers Can Do to Address Our Behavioral Health Crisis*. The Commonwealth Fund. <https://doi.org/10.26099/hak0-3952>

Crook, H., Saunders, R., Roiland, R., Higgins, A., McClellan, M. (2021, June 9). *A Decade of Value-Based Payment: Lessons Learned And Implications For The Center For Medicare And Medicaid Innovation, Part 1*. Health Affairs Blog. DOI: [10.1377/hblog20210607.656313](https://doi.org/10.1377/hblog20210607.656313)

Crumley, D., & Houston, R. (2019a, April 16). *Refining Oregon's Medicaid Transformation Strategy through CCO 2.0: A Q&A with the Oregon Health Authority - CHCS Blog*. Center for Health Care Strategies. <https://www.chcs.org/refining-oregons-medicaid-transformation-strategy-through-cco-2-0-a-qa-with-the-oregon-health-authority/>

Crumley, D., Matulis, R., Brykman K., Lee B., Conway, M. (2019b, August). *Three State Approaches to Patient-Centered Medical Homes: Advancing Primary Care Innovation in Medicaid Managed Care*. Center for Health Care Strategies. [https://www.chcs.org/media/PCI-Toolkit-PCMh-Crosswalk\\_090319.pdf](https://www.chcs.org/media/PCI-Toolkit-PCMh-Crosswalk_090319.pdf)

Crumley, D., Matulis, R., Brykman, K., Lee, B., and Conway, M. (2019c, August). *Integrating Behavioral Health Care into Primary Care: Advancing Primary Care Innovation in Medicaid Managed Care*. Center for Health Care Strategies. [https://www.chcs.org/media/PCI-Toolkit-BHI-Tool\\_090319.pdf](https://www.chcs.org/media/PCI-Toolkit-BHI-Tool_090319.pdf)

Crumley, D., Maulis, R., Brykman, K., Lee, B., Smithey, A, Patel, S., Conway M. (2022). *Advancing Primary Care Innovation in Medicaid Managed Care: Conceptualizing and Designing Core Functions*. Center for Health Care Strategies. [https://www.chcs.org/media/PCI-Toolkit-Part-1-Update\\_081622.pdf](https://www.chcs.org/media/PCI-Toolkit-Part-1-Update_081622.pdf)

Crumley, D., & Bank, A. (2023). *Financing Approaches to Address Social Determinants of Health via Medicaid Managed Care: A 12-State Review*. Center for Health Care Strategies and Association for Community Affiliated Plans. <https://communityplans.wpenginepowered.com/wp-content/uploads/2023/02/Financing-Approaches-to-Address-Health-Related-Social-Needs-via-Medicaid-Managed-Care.docx.pdf>

Cunningham, P. J. (2015). Many Medicaid Beneficiaries Receive Care Consistent With Attributes Of Patient-Centered Medical Homes. *Health Affairs*, 34(7), 1105–1112. <https://doi.org/10.1377/hlthaff.2015.0141>

CY 2024 Payment Policies Under the Physician Fee Schedule and Other Changes to Part B Payment and Coverage Policies; Medicare Shared Savings Program Requirements; Medicare Advantage; Medicare and Medicaid Provider and Supplier Enrollment Policies; and Basic Health Program, 88 FR 52262 (proposed Aug 7, 2023). CMS. <https://www.federalregister.gov/documents/2023/08/07/2023-14624/medicare-and-medicaid-programs-cy-2024-payment-policies-under-the-physician-fee-schedule-and-other>

Decker, S. L. (2018). No Association Found Between The Medicaid Primary Care Fee Bump And Physician-Reported Participation In Medicaid. *Health Affairs*, 37(7), 1092–1098. <https://doi.org/10.1377/hlthaff.2018.0078>

Dunn, A., Gottlieb, J. D., Shapiro, A., Sonnenstuhl, D. J., & Tebaldi, P. (2021). *A Denial a Day Keeps the Doctor Away*. NBER. <https://www.nber.org/papers/w29010>

Edrington, K., Costa J., Williams C., Sadow, J., with Edrington Health Consulting. (2022). *Investing in Primary Care: Why it Matters for Californians with Medi-Cal Coverage*. California Health Care Foundation. <https://www.chcf.org/publication/investing-in-primary-care-why-it-matters-for-californians-with-medi-cal-coverage/>

Ensuring Access to Medicaid Services, 88 FR 28092 (proposed May 3, 2023). CMS. <https://www.federalregister.gov/documents/2023/05/03/2023-08959/medicaid-program-ensuring-access-to-medicaid-services>

Evans, C. S., Smith, S., Kobayashi, L., & Chang, D. C. (2015). The Effect of Community Health Center (CHC) Density on Preventable Hospital Admissions in Medicaid and Uninsured Patients. *Journal of Health Care for the Poor and Underserved*, 26(3), 839–851. <https://doi.org/10.1353/hpu.2015.0081>

Falik, M., Needleman, J., Herbert, R., Wells, B., Politzer, R., & Benedict, M. B. (2006). Comparative Effectiveness of Health Centers as Regular Source of Care: Application of Sentinel ACSC Events as Performance Measures. *The Journal of Ambulatory Care Management*, 29(1), 24. [https://journals.lww.com/ambulatorycaremanagement/Abstract/2006/01000/Comparative\\_Effectiveness\\_of\\_Health\\_Centers\\_as.4.aspx](https://journals.lww.com/ambulatorycaremanagement/Abstract/2006/01000/Comparative_Effectiveness_of_Health_Centers_as.4.aspx)

Falik, M., Needleman, J., Wells, B. L., & Korb, J. (2001). Ambulatory care sensitive hospitalizations and emergency visits: Experiences of Medicaid patients using federally qualified health centers. *Medical Care*, 39(6), 551–561. <https://doi.org/10.1097/00005650-200106000-00004>

Fraze, T. K., Fisher, E. S., Tomaino, M. R., Peck, K. A., & Meara, E. (2018). Comparison of Populations Served in Hospital Service Areas With and Without Comprehensive Primary Care Plus Medical Homes. *JAMA Network Open*, 1(5), e182169. <https://doi.org/10.1001/jamanetworkopen.2018.2169>

Fujisawa, R., Lafortune, G., & OECD. (2008). *The Remuneration of General Practitioners and Specialists in 14 OECD Countries: What are the Factors Influencing Variations across Countries?* (OECD Health Working Papers 41; OECD Health Working Papers, Vol. 41). <https://doi.org/10.1787/228632341330>

Gordon, A. S., Oakes, A. H., Allender, R., Vang, L., Hennemann, B., & Chi, W. C. (2023). Observational Analysis of a Generalized, Health Planned Community Health Worker Intervention in Medicaid. *Journal of Primary Care & Community Health*, 14, 21501319231153600. <https://doi.org/10.1177/21501319231153600>

Grote, N. K., Katon, W. J., Russo, J. E., Lohr, M. J., Curran, M., Galvin, E., & Carson, K. (2015). Collaborative Care for Perinatal Depression in Socioeconomically Disadvantaged Women: A Randomized Trial. *Depression and Anxiety*, 32(11), 821–834. <https://doi.org/10.1002/da.22405>

Guth, M., Haldar, S., Rudowitz, R., & Artiga, S. (2023, June 2). *Medicaid and Racial Health Equity*. KFF. <https://www.kff.org/medicaid/issue-brief/medicaid-and-racial-health-equity/>

Hammelman, E., & Cohen, M. (2020). *Estimated Federal Costs of Recommendations to Strengthen Primary Care in Medicaid*. Bipartisan Policy Center. <https://bipartisanpolicy.org/download/?file=wp-content/uploads/2020/07/20200713-Health-Management-Associates-Estimated-Federal-Costs-of-Recommendations-to-Strengthen-Primary-Care-in-Medicaid.pdf>

Hayes, K., Hoagland, G. W., Harootunian, L., Salyers, E., & Wu, K. (2020). *Advancing Comprehensive Primary Care in Medicaid*. Bipartisan Policy Center. [https://bipartisanpolicy.org/download/?file=wp-content/uploads/2020/07/BPC\\_Health\\_Advancing\\_Comprehensive\\_Primary\\_Care\\_in\\_Medicaid\\_R01.pdf](https://bipartisanpolicy.org/download/?file=wp-content/uploads/2020/07/BPC_Health_Advancing_Comprehensive_Primary_Care_in_Medicaid_R01.pdf)

Health Care Payment Learning & Action Network. (n.d.). *Alternative Payment Model APM Framework*. <http://hcp-lan.org/workproducts/apm-factsheet.pdf#:~:text=The%20Alternative%20Payment%20Model%20%28APM%29%20Framework%20began%20as,a%20pathway%20for%20the%20delivery%20of%20person-centered%20care.>

Heisler, M., Lapidus, A., Kieffer, E., Henderson, J., Guzman, R., Cunmulaj, J., Wolfe, J., Meyer, T., & Ayanian, J. Z. (2022). Impact on Health Care Utilization and Costs of a Medicaid Community Health Worker Program in Detroit, 2018–2020: A Randomized Program Evaluation. *American Journal of Public Health*, 112(5), 766–775. <https://doi.org/10.2105/AJPH.2021.306700>

Hinton, E., Raphael, J., Haldar, S., Gifford, K., Lashbrook, A., Nardone, M., Oct 25, M. W. P., & 2022. (2022, October 25). *How the Pandemic Continues to Shape Medicaid Priorities: Results from an Annual Medicaid Budget Survey for State Fiscal Years 2022 and 2023 - Health Equity*. KFF. <https://www.kff.org/report-section/medicaid-budget-survey-for-state-fiscal-years-2022-and-2023-health-equity/>

Hinton, E., & Raphael, J. (2023, March 1). *10 Things to Know About Medicaid Managed Care* | KFF. <https://www.kff.org/medicaid/issue-brief/10-things-to-know-about-medicaid-managed-care/>

Holgash, K., & Heberlein, M. (n.d.). Physician Acceptance Of New Medicaid Patients: What Matters And What Doesn't. *Health Affairs Forefront*. <https://doi.org/10.1377/forefront.20190401.678690>

Hostetter, M., & Klein, S. (2022, December 14). *Integrating Behavioral Health Services into Primary Care*. The Commonwealth Fund. <https://doi.org/10.26099/wggr-2351>



- Houston, R., Smithey, A., & Brykman, K. (2022). *Medicaid Population-Based Payment: The Current Landscape, Early Insights, and Considerations for Policymakers*. Center for Health Care Strategies. <https://www.chcs.org/resource/medicaid-population-based-payment-the-current-landscape-early-insights-and-considerations-for-policymakers/>
- HRSA. (2023, May). *Health Center Program: Impact and Growth*. Retrieved August 7, 2023, from <https://bphc.hrsa.gov/about-health-centers/health-center-program-impact-growth>
- Hsiao, I. (2022, December 20). *CDRP Team Completes Financial Analysis Research Agenda with HRSA's Bureau of Primary Health Care*. The University of Chicago. <https://chronicdisease.uchicago.edu/cdrp-team-completes-financial-analysis-research-agenda-with-hrsas-bureau-of-primary-health-care/>
- Hunter, C. L., Funderburk, J. S., Polaha, J., Bauman, D., Goodie, J. L., & Hunter, C. M. (2018). Primary Care Behavioral Health (PCBH) Model Research: Current State of the Science and a Call to Action. *Journal of Clinical Psychology in Medical Settings*, 25(2), 127–156. <https://doi.org/10.1007/s10880-017-9512-0>
- Jabbarpour, Y., DeMarchis, E., Bazemore, A., & Grundy, P. (2017). *The Impact of Primary Care Practice Transformation on Cost, Quality, and Utilization*. Primary Care Collaborative. [https://theccc.org/sites/default/files/resources/pcmh\\_evidence\\_report\\_08-1-17%20FINAL.pdf](https://theccc.org/sites/default/files/resources/pcmh_evidence_report_08-1-17%20FINAL.pdf)
- Jabbarpour, Y., Greiner, A., Jetty, A., Coffman, M., Jose, C., Petterson, S., Pivaral, K., Phillips, R., Bazemore, A., & Kane, A. N. (2019). *Investing in Primary Care: A State-Level Analysis*. Primary Care Collaborative and Robert Graham Center. [https://theccc.org/sites/default/files/resources/pcmh\\_evidence\\_es\\_2019.pdf](https://theccc.org/sites/default/files/resources/pcmh_evidence_es_2019.pdf)
- Jabbarpour, Y., Greiner, A., Jetty, A., Kempinski, A., Kamerow, D., Walter, G., & Sibel, J. (2022). *Relationships Matter: How Usual is Usual Source of (Primary) Care?* Primary Care Collaborative and Robert Graham Center. <https://theccc.org/sites/default/files/resources/pcc-evidence-report-2022.pdf>
- Jabbarpour, Y., Petterson, S., Jetty, A., & Byun, H. (2023). *The Health of US Primary Care: A Baseline Scorecard Tracking Support for High-Quality Primary Care*. The Milbank Memorial Fund and The Physicians Foundation. Retrieved July 6, 2023, from <https://www.milbank.org/publications/health-of-us-primary-care-a-baseline-scorecard/i-financing-the-united-states-is-underinvesting-in-primary-care/>
- Kahn, K., Timbie, J., Friedberg, M., Mendel, P., Hiatt, L., Chen, E., Kress, A., Buttorff, C., Lavelle, T., Weidmer, B., Green, H., Kommareddi, M., Malsberger, R., Kofner, A., Rastegar, A., & Setodji, C. (2016). *Evaluation of CMS's Federally Qualified Health Center (FQHC) Advanced Primary Care Practice (APCP) Demonstration: Final Report*. RAND Corporation. <https://doi.org/10.7249/RR886.2>
- Kaiser Commission on Medicaid and the Uninsured. (2013, July). *Quality of Care in Community Health Centers and factors Associated with Performance*. <https://www.kff.org/wp-content/uploads/2013/06/8447.pdf>
- Kangovi, S., Mitra, N., Grande, D., Huo, H., Smith, R. A., & Long, J. A. (2017). Community Health Worker Support for Disadvantaged Patients With Multiple Chronic Diseases: A Randomized Clinical Trial. *American Journal of Public Health*, 107(10), 1660–1667. <https://doi.org/10.2105/AJPH.2017.303985>
- Kangovi, S., Mitra, N., Grande, D., Long, J. A., & Asch, D. A. (2020). Evidence-Based Community Health Worker Program Addresses Unmet Social Needs And Generates Positive Return On Investment. *Health Affairs*, 39(2), 207–213. <https://doi.org/10.1377/hlthaff.2019.00981>
- Kangovi, S., Mitra, N., Norton, L., Harte, R., Zhao, X., Carter, T., Grande, D., & Long, J. A. (2018). Effect of Community Health Worker Support on Clinical Outcomes of Low-Income Patients Across Primary Care Facilities. *JAMA Internal Medicine*, 178(12), 1635–1643. <https://doi.org/10.1001/jamainternmed.2018.4630>
- Katon, W., Russo, J., Reed, S. D., Croicu, C. A., Ludman, E., LaRocco, A., & Melville, J. L. (2015). A Randomized Trial of Collaborative Depression Care in Obstetrics and Gynecology Clinics: Socioeconomic Disadvantage and Treatment Response. *American Journal of Psychiatry*, 172(1), 32–40. <https://doi.org/10.1176/appi.ajp.2014.14020258>
- Kempinski, A., & Greiner, A. (2020). *Primary Care Spending: High Stakes, Low Investment*. Primary Care Collaborative. [https://theccc.org/sites/default/files/resources/PCC\\_Primary\\_Care\\_Spending\\_2020.pdf](https://theccc.org/sites/default/files/resources/PCC_Primary_Care_Spending_2020.pdf)
- KFF. (2013). *Quality of Care in Community Health Centers and Factors Associated With Performance*. <https://www.kff.org/wp-content/uploads/2013/06/8447.pdf>
- KFF. (2021). *Medicaid-to-Medicare Fee Index*. <https://www.kff.org/medicaid/state-indicator/medicaid-to-medicare-fee-index/>
- KFF. (2022a). *States that Reported Patient Centered Medical Homes In Place*. <https://www.kff.org/medicaid/state-indicator/states-that-reported-patient-centered-medical-homes-in-place/>
- KFF. (2022b, August 4). *Total Medicaid MCO Enrollment*. <https://www.kff.org/other/state-indicator/total-medicaid-mco-enrollment/>
- KFF. (2022c, December 5). *Community Health Center Revenues by Payer Source*. <https://www.kff.org/other/state-indicator/community-health-center-revenues-by-payer-source/>
- Kirkendall, B. (2022). *CareOregon Primary Care Payment Model 2022 Program Description*. [https://www.careoregon.org/docs/default-source/providers/quality-metrics-toolkit/more-resources/co-pcpm-program-description-2022-2023.pdf?sfvrsn=1a74137d\\_2#:-:text=The%20Program%20invests%20in%20critical%20services%20that%20are,acute%20care%20service%20environments%2C%20to%20outpatient%20preventive%20services.](https://www.careoregon.org/docs/default-source/providers/quality-metrics-toolkit/more-resources/co-pcpm-program-description-2022-2023.pdf?sfvrsn=1a74137d_2#:-:text=The%20Program%20invests%20in%20critical%20services%20that%20are,acute%20care%20service%20environments%2C%20to%20outpatient%20preventive%20services.)
- Knowles, M., Crowley, A. P., Vasan, A., & Kangovi, S. (2023). Community Health Worker Integration with and Effectiveness in Health Care and Public Health in the United States. *Annual Review of Public Health*, 44(1), 363–381. <https://doi.org/10.1146/annurev-publhealth-071521-031648>
- Ku, L., Sharac, J., Morris, R., Jacobs, F., Shin, P., Brantley, E., & Rosenbaum, S. (2022). *The Value Proposition: Evidence of the Health and Economic Contributions of Community Health Centers*. [https://geigerjibson.publichealth.gwu.edu/sites/g/files/zaxdzs4421/files/2022-08/the-value-proposition-gg-ib-68\\_final-new-82222-rem-by-tc.pdf](https://geigerjibson.publichealth.gwu.edu/sites/g/files/zaxdzs4421/files/2022-08/the-value-proposition-gg-ib-68_final-new-82222-rem-by-tc.pdf)
- Lagomasino, I. T., Dwight-Johnson, M., Green, J. M., Tang, L., Zhang, L., Duan, N., & Miranda, J. (2017). Effectiveness of Collaborative Care for Depression in Public-Sector Primary Care Clinics Serving Latinos. *Psychiatric Services*, 68(4), 353–359. <https://doi.org/10.1176/appi.ps.201600187>
- Laiteerapong, N., Kirby, J., Gao, Y., Yu, T.-C., Sharma, R., Nocon, R., Lee, S. M., Chin, M. H., Nathan, A. G., Ngo-Metzger, Q., & Huang, E. S. (2014). Health care utilization and receipt of preventive care for patients seen at federally funded health centers compared to other sites of primary care. *Health Services Research*, 49(5), 1498–1518. <https://doi.org/10.1111/1475-6773.12178>
- Langellier, B. A., Guernsey De Zapien, J., Rosales, C., Ingram, M., & Carvajal, S. C. (2014). State Medicaid Expansion, Community Interventions, and Health Care Disparities in a United States–Mexico Border Community. *American Journal of Public Health*, 104(8), e94–e100. <https://doi.org/10.2105/AJPH.2014.302013>
- Lanoye, A., Stewart, K. E., Rybarczyk, B. D., Auerbach, S. M., Sadock, E., Aggarwal, A., Waller, R., Wolver, S., & Austin, K. (2017). The Impact of Integrated Psychological Services in a Safety Net Primary Care Clinic on Medical Utilization. *Journal of Clinical Psychology*, 73(6), 681–692. <https://doi.org/10.1002/jclp.22367>
- Lewis, C., Abrams, M. K., Seervai, S., Horstman, C., & Blumenthal, D. (2022, April 28). *The Impact of the Payment and Delivery System Reforms of the Affordable Care Act*. Commonwealth Fund. <https://www.commonwealthfund.org/publications/2022/apr/impact-payment-and-delivery-system-reforms-affordable-care-act>
- Long, J., Kangovi, S., Mitra, N., Norton, L., Harte, R., Carter, T., Zhao, X., & Grande, D. (2019). *Collaborative Goal Setting with or without Community Health Worker Support for Patients with Multiple Chronic Conditions*. Patient-Centered Outcomes Research Institute (PCORI). <https://doi.org/10.25302/7.2019.AD.131007292>

- Maclean, J. C., McClellan, C., Pesko, M. F., & Polsky, D. (2023). Medicaid reimbursement rates for primary care services and behavioral health outcomes. *Health Economics*, 32(4), 873–909. <https://doi.org/10.1002/hec.4646>
- MACPAC. (n.d.). *Managed care's effect on outcomes*. MACPAC. Retrieved July 14, 2023, from <https://www.macpac.gov/subtopic/managed-cares-effect-on-outcomes/>
- MACPAC. (2013). *Medicaid Primary Care Physician Payment Increase*. <https://www.macpac.gov/publication/ch-2-medicaid-primary-care-physician-payment-increase/>
- MACPAC. (2015, January 22). *An Update on the Medicaid Primary Care Payment Increase*. <https://www.macpac.gov/publication/an-update-on-the-medicaid-primary-care-payment-increase-2/>
- MACPAC. (2021, April). *Racial and Ethnic Disparities in Medicaid: An Annotated Bibliography*. <https://www.macpac.gov/wp-content/uploads/2021/04/Racial-and-Ethnic-Disparities-in-Medicaid-An-Annotated-Bibliography.pdf>
- MACPAC. (2022). *Medicaid Coverage of Community Health Worker Services*. <https://www.macpac.gov/wp-content/uploads/2022/04/Medicaid-coverage-of-community-health-worker-services-1.pdf>
- MACPAC. (2023). *Chapter 1: Medicaid Race and Ethnicity Data Collection and Reporting: Recommendations for Improvement*. <https://www.macpac.gov/wp-content/uploads/2023/03/Chapter-1-Medicaid-Race-and-Ethnicity-Data-Collection-and-Reporting-Recommendations.pdf>
- Medicaid and Children's Health Insurance Program (CHIP) Managed Care Access, Finance, and Quality, 88 FR 28092 (proposed May 3, 2023). CMS. <https://www.federalregister.gov/documents/2023/05/03/2023-08961/medicaid-program-medicaid-and-childrens-health-insurance-program-chip-managed-care-access-finance>
- McNeely, L., Douglas Megan, Westfall, N., Greiner, A., Gaglioti, A., & Mack, D. (2022). *PRIMARY CARE: A Key Lever to Advance Health Equity*. The Primary Care Collaborative. <https://theccc.org/sites/default/files/resources/PCC-NCPC%20Health%20Equity%20Report.pdf>
- Minnesota Department of Human Services. (2022). *Request for Proposals for a Grantee to Provide Health Care Services to Medical Assistance and MinnesotaCare Enrollees Under Alternative Payment Arrangements Through Track 1 or Track 2 of the Integrated Health Partnerships (IHP) Demonstration*. [https://mn.gov/dhs/assets/2023-ihp-rfp\\_tcm1053-533409.pdf](https://mn.gov/dhs/assets/2023-ihp-rfp_tcm1053-533409.pdf)
- Mulcahy, A. W., Gracner, T., & Finegold, K. (2018). Associations Between the Patient Protection and Affordable Care Act Medicaid Primary Care Payment Increase and Physician Participation in Medicaid. *JAMA Internal Medicine*, 178(8), 1042–1048. <https://doi.org/10.1001/jamainternmed.2018.2610>
- NACHC. (2021). *Health Centers and Medicaid*. <https://www.nachc.org/wp-content/uploads/2021/03/Medicaid-Factsheet-2021-1.pdf>
- NACHC. (2023). *Closing the Primary Care Gap: How Community Health Centers Can Address the Nation's Primary Care Crisis*. [https://www.nachc.org/wp-content/uploads/2023/02/Closing-the-Primary-Care-Gap\\_Full-Report\\_2023\\_digital-final.pdf](https://www.nachc.org/wp-content/uploads/2023/02/Closing-the-Primary-Care-Gap_Full-Report_2023_digital-final.pdf)
- National Academies of Sciences, Engineering, and Medicine (NASEM). (2021). *Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25983>.
- National Committee for Quality Assurance (NCQA). (2021). *Evaluating Medicaid's Use of Quality Measurement to Achieve Equity Goals*. [https://www.ncqa.org/wp-content/uploads/2021/12/WhitePaper\\_121321\\_StateofHealthEquityMeasurementWhitePaper.pdf](https://www.ncqa.org/wp-content/uploads/2021/12/WhitePaper_121321_StateofHealthEquityMeasurementWhitePaper.pdf)
- NESCO. (2020). *The New England States' All-Payer Report on Primary Care Payments*. <https://nescso.org/wp-content/uploads/2021/02/NESCO-New-England-States-All-Payer-Report-on-Primary-Care-Payments-2020-12-22.pdf>
- Ng, J. H., Ye, F., Ward, L. M., Haffer, S. C. "Chris," & Scholle, S. H. (2017). Data On Race, Ethnicity, And Language Largely Incomplete For Managed Care Plan Members. *Health Affairs*, 36(3), 548–552. <https://doi.org/10.1377/hlthaff.2016.1044>
- Nocon, R. S., Lee, S. M., Sharma, R., Ngo-Metzger, Q., Mukamel, D. B., Gao, Y., White, L. M., Shi, L., Chin, M. H., Laiterapong, N., & Huang, E. S. (2016). Health Care Use and Spending for Medicaid Enrollees in Federally Qualified Health Centers Versus Other Primary Care Settings. *American Journal of Public Health*, 106(11), 1981–1989. <https://doi.org/10.2105/AJPH.2016.303341>
- Nocon, S. *Testimony of Robert Sayoc Nocon, MHS, PhD Assistant Professor, Department of Health Systems Science Kaiser Permanente Bernard J. Tyson School of Medicine*. (2023). [https://www.help.senate.gov/imo/media/doc/Testimony-Nocon-CHCs%202023-0228\\_Final.pdf](https://www.help.senate.gov/imo/media/doc/Testimony-Nocon-CHCs%202023-0228_Final.pdf)
- Oregon Health Authority. (2019, September). *Value-based Payment Roadmap for Coordinated Care Organizations*. <https://www.oregon.gov/oha/HPA/dsi-tc/Documents/OHA-CCO-VBP-Roadmap.pdf>
- Patel, S., & Zephyrin, L. C. (2022, December 19). *Medicaid Managed Care Opportunities to Promote Health Equity in Primary Care*. The Commonwealth Fund. <https://doi.org/10.26099/j55c-0770>
- Polsky, D., Richards, M., Bassey, S., Wissoker, D., Kenney, G. M., Zuckerman, S., & Rhodes, K. V. (2015). Appointment Availability after Increases in Medicaid Payments for Primary Care. *New England Journal of Medicine*, 372(6), 537–545. <https://doi.org/10.1056/NEJMsa1413299>
- Possemato, K., Johnson, E. M., Beehler, G. P., Shepardson, R. L., King, P., Vair, C. L., Funderburk, J. S., Maisto, S. A., & Wray, L. O. (2018). Patient outcomes associated with primary care behavioral health services: A systematic review. *General Hospital Psychiatry*, 53, 1–11. <https://doi.org/10.1016/j.genhosppsych.2018.04.002>
- Powers, D. M., Bowen, D. J., Arao, R. F., Vredevoogd, M., Russo, J., Grover, T., & Unützer, J. (2020). Rural clinics implementing collaborative care for low-income patients can achieve comparable or better depression outcomes. *Families, Systems, & Health*, 38(3), 242–254. <https://doi.org/10.1037/fsh0000522>
- Raney, L. (2020). *Cracking the Codes: State Medicaid Approaches to Reimbursing Psychiatric Collaborative Care*. California Health Care Foundation. <https://www.chcf.org/publication/cracking-codes-state-medicaid-approaches-reimbursing-psychiatric-collaborative-care/>
- Rawal, P., Quinton, J., Hughes, D., & Fowler, L. (2023, June 9). *The CMS Innovation Center's Strategy to Support High-quality Primary Care*. <https://www.cms.gov/blog/cms-innovation-centers-strategy-support-high-quality-primary-care>
- Reiter, J. T., Dobmeyer, A. C., & Hunter, C. L. (2018). The Primary Care Behavioral Health (PCBH) Model: An Overview and Operational Definition. *Journal of Clinical Psychology in Medical Settings*, 25(2), 109–126. <https://doi.org/10.1007/s10880-017-9531-x>
- Rittenhouse, D. R., O'Malley, A. S., Wesley, D. B., Mathematica, Manchanda, R., HealthBegins, Ament, A., & Genevro, J. (2023). *Primary Care's Essential Role in Advancing Health Equity for California*. California Health Care Foundation. <https://www.chcf.org/wp-content/uploads/2023/03/PrimaryCaresEssentialRoleAdvancingHealthEquity.pdf>
- Robinson, P., Von Korff, M., Bush, T., Lin, E. H. B., & Ludman, E. J. (2020). The impact of primary care behavioral health services on patient behaviors: A randomized controlled trial. *Families, Systems & Health: The Journal of Collaborative Family Healthcare*, 38(1), 6–15. <https://doi.org/10.1037/fsh0000474>
- Rosenbaum, S., Casoni, M., Somodevilla, A., Gray, E., Morris, R., Handley, M., & Beckerman, J. Z. (2020, July 30). *How States Are Using Comprehensive Medicaid Managed Care to Strengthen and Improve Primary Health Care*. The Commonwealth Fund. <https://doi.org/10.26099/hpxs-jb21>
- Rosenbaum, S., Shin, P., Sharac, J., Murphy, C., Morris, R., Casoni, M., & Handley, M. (2022, April 6). *Medicaid and Safety-Net Providers: An Essential Health Equity Partnership*. The Commonwealth Fund. <https://doi.org/10.26099/dgea-f882>
- Rothkopf, J., Brookler, K., Wadhwa, S., & Sajovetz, M. (2011). Medicaid patients seen at federally qualified health centers use hospital services less than those seen by private providers. *Health Affairs (Project Hope)*, 30(7), 1335–1342. <https://doi.org/10.1377/hlthaff.2011.0066>



- RTI International, The Urban Institute, & National Academy for State Health Policy. (2017). *Evaluation of the Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration*. CMS. <https://downloads.cms.gov/files/cmimi/mapcp-finalevalrpt.pdf>
- RTI International, The Urban Institute, National Academy for State Health Policy, & CMS. (2021). *Evaluation of the State Innovation Models (SIM) Initiative Round 2: Model Test Final Report*. CMS. <https://innovation.cms.gov/data-and-reports/2021/sim-rd2-test-final>
- Ruff, E., Sanchez, D., & Hernández-Cancio, S., Fishman, E., Gomez, R., (2019). *Advancing Health Equity Through Community Health Workers and Peer Providers: Mounting Evidence and Policy Recommendations*. Families USA. [https://www.familiesusa.org/wp-content/uploads/2019/11/HEV\\_PCORI-CHW-Report\\_11-04-19.pdf](https://www.familiesusa.org/wp-content/uploads/2019/11/HEV_PCORI-CHW-Report_11-04-19.pdf)
- Saulsbury, L., Seo, V., & Fung, V. (2019). The Impact of Changes in Medicaid Provider Fees on Provider Participation and Enrollees' Care: A Systematic Literature Review. *Journal of General Internal Medicine*, 34(10), 2200–2209. <https://doi.org/10.1007/s11606-019-05160-x>
- Scharf, D. M., Eberhart, N. K., Schmidt Hackbarth, N., Horvitz-Lennon, M., Beckman, R., Han, B., Lovejoy, S. L., Pincus, H. A., RAND Health, & RAND Corporation. (2013). *Evaluation of the SAMHSA Primary and Behavioral Health Care Integration (PBHCI) Grant Program: Final Report*. <https://aspe.hhs.gov/reports/evaluation-samhsa-primary-behavioral-health-care-integration-pbhci-grant-program-final-report>
- Schwartz, A. (2020, September 24). *Federal Data Sources for Analyzing Racial and Ethnic Disparities in Medicaid and CHIP*. MACPAC. <https://www.macpac.gov/publication/federal-data-sources-for-analyzing-racial-and-ethnic-disparities-in-medicaid-and-chip/>
- Shi, L. (2012). The Impact of Primary Care: A Focused Review. *Scientifica*, 2012, 1–22. <https://doi.org/10.6064/2012/432892>
- Shi, L., Lebrun-Harris, L. A., Daly, C. A., Sharma, R., Sripipatana, A., Hayashi, A. S., & Ngo-Metzger, Q. (2013). Reducing disparities in access to primary care and patient satisfaction with care: The role of health centers. *Journal of Health Care for the Poor and Underserved*, 24(1), 56–66. <https://doi.org/10.1353/hpu.2013.0022>
- Shi, L., Tsai, J., Higgins, P. C., & Lebrun, L. A. (2009). Racial/ethnic and socioeconomic disparities in access to care and quality of care for US health center patients compared with non-health center patients. *The Journal of Ambulatory Care Management*, 32(4), 342–350. <https://doi.org/10.1097/JAC.0b013e3181ba6fd8>
- Shin, P., Jones, K., & Rosenbaum, S. J. (2003). *Reducing Racial and Ethnic Health Disparities: Estimating the Impact of High Health Center Penetration in Low-income Communities*. GWU Medical Center: Center for Health Services Research and Policy. [https://hsrc.himmelfarb.gwu.edu/cgi/viewcontent.cgi?article=1299&context=sphhs\\_policy\\_facpubs](https://hsrc.himmelfarb.gwu.edu/cgi/viewcontent.cgi?article=1299&context=sphhs_policy_facpubs)
- Starfield, B., Powe, N. R., Weiner, J. R., Stuart, M., Steinwachs, D., Scholle, S. H., & Gerstenberger, A. (1994). Costs vs Quality in Different Types of Primary Care Settings. *JAMA*, 272(24), 1903–1908. <https://doi.org/10.1001/jama.1994.03520240031037>
- Starfield, B., Shi, L., & Macinko, J. (2005). Contribution of Primary Care to Health Systems and Health. *The Milbank Quarterly*, 83(3), 457–502. <https://doi.org/10.1111/j.1468-0009.2005.00409.x>
- Sumarsono, A., Case, M., Kassa, S., & Moran, B. (2023). Telehealth as a Tool to Improve Access and Reduce No-Show Rates in a Large Safety-Net Population in the USA. *Journal of Urban Health : Bulletin of the New York Academy of Medicine*, 100(2), 398–407. <https://doi.org/10.1007/s11524-023-00721-2>
- Swietek, K. E., Gaynes, B. N., Jackson, G. L., Weinberger, M., & Domino, M. E. (2020). Effect of the Patient-Centered Medical Home on Racial Disparities in Quality of Care. *Journal of General Internal Medicine*, 35(8), 2304–2313. <https://doi.org/10.1007/s11606-020-05729-x>
- Wallace, J., Lollo, A., Duchowny, K. A., Lavallee, M., & Ndumele, C. D. (2022). Disparities in Health Care Spending and Utilization Among Black and White Medicaid Enrollees. *JAMA Health Forum*, 3(6), e221398. <https://doi.org/10.1001/jamahealthforum.2022.1398>
- Worku, T. (2021, March 23). *Financing Community Health Workers Through Medicaid*. ASTHO. <https://www.astho.org/communications/blog/financing-community-health-workers-through-medicaid/>
- Yowell, B. (2022). *Coverage for psychiatric collaborative care management (CoCM) Codes [dataset]*. APA. <https://www.psychiatry.org/File%20Library/Psychiatrists/Practice/Professional-Topics/Integrated-Care/Coverage-Psychiatric-CoCM-Codes-Payers.pdf>
- Zhai, S., & Malouin, R. A. (2019, November). Multipayer Primary Care Transformation: Impact for Medicaid Managed Care Beneficiaries. *Am J Manag Care*. 2019;25(11):e349-e357 <https://www.ajmc.com/view/multipayer-primary-care-transformation-impact-for-medicaid-managed-care-beneficiaries>
- Zuckerman, S., Skopec, L., & Epstein, M. (2017). *Medicaid Physician Fees after the ACA Primary Care Fee Bump*. Urban Institute. <https://www.urban.org/research/publication/medicaid-physician-fees-after-aca-primary-care-fee-bump>



[thePCC.org](http://thePCC.org)

601 Thirteenth Street, NW  
Suite 430 North  
Washington, DC 20005