The Case for Investing in Primary Care in California

In May 2021, a new report from the National Academies of Sciences, Engineering, and Medicine (NASEM), *Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care*, sounded a clear alarm: “In large part because of chronic underinvestment, primary care in the United States is slowly dying.”1 In California, revitalizing primary care is emerging as a priority across the public and private sectors for two interconnected reasons. First, primary care is associated with better health, lower costs, and greater health equity. Second, investing in primary care is essential to enable and accelerate progress in related areas, including building a more robust primary care workforce, realizing the promise of expanded health care coverage by ensuring access, and implementing the Department of Health Care Services’ transformative California Advancing and Innovating Medi-Cal (CalAIM) initiative. Without increasing investment in primary care, California’s ambitious population and community health goals are unlikely to be fully realized.

“High-quality primary care is 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.”

To illuminate the rationale for greater investment in primary care, this issue brief/explainer reviews the definition of primary care, including its central attributes as well as the types of providers generally considered to provide primary care; briefly summarizes the evidence on the value of primary care and the status of primary care spending and payment models; and explores the intersection of primary care with three high-priority areas of policy and program development in California.

**Primary Care: Defining Attributes and Providers**

The 2021 NASEM report’s definition of “high-quality” primary care updated the definition provided in the Institute of Medicine’s authoritative 1996 report, *Primary Care: America’s Health in a New Era*, most notably by intentionally incorporating whole-person care and equity. The NASEM report acknowledges that the definition is aspirational, describing what primary care should be rather than what is currently widely available.

Achieving high-quality care requires an understanding of the attributes that generate the desired results. Barbara Starfield is widely recognized for describing the four pillars of primary care practice: first-contact access to care, continuity of care, comprehensive care, and coordination of care.2 Bodenheimer and colleagues reframed the four pillars as 10 “building blocks.” Four “foundational elements” — engaged leadership, data-driven improvement, empanelment, and team-based care — underpin the other six building blocks — patient-team partnership, population management, continuity of care, prompt access to...
Primary care, comprehensiveness and care coordination, and a template of the future.3

The California Quality Collaborative (CQC), a program of the Purchaser Business Group on Health (PBGH), and the Integrated Healthcare Association (IHA) have been working with health care system partners since 2019 to develop shared standards of advanced primary care, describing care that is person- and family-centered, relationship-based, accessible, comprehensive, team-based, integrated, coordinated, and equitable.4 CQC and IHA have also facilitated industry agreement on a measure set aimed at assessing primary care practice performance against the advanced primary care attributes and have piloted the measure set in collaboration with Covered California, the California Public Employees’ Retirement system (CalPERS), and others.5

A related definitional issue is determining which providers and services “count” as primary care, an issue that surfaces in efforts to measure the amount (or share) of health care spending that is dedicated to primary care. Nurse practitioners and physician assistants provide much of the primary care in the US, increasingly as part of a team that may include not just physicians but also community health workers, promotores de salud, certified nurse-midwives, and behavioral health specialists. Accurate and comprehensive measurement of the primary care workforce is challenging both because there is not a one-to-one match between provider specialty and primary care service and because data are lacking for many of the nonphysician professions.6 Providers and specialties consistently included in the definition of primary care for measurement purposes are family (or general) practice, internal medicine and pediatrics without a subspecialty, and nurse practitioners and physician assistants providing population care.7 Other provider specialties that provide a large majority of care to specific populations, such as obstetrician/gynecologists and geriatricians, are sometimes included. Measurement and reporting efforts that have been adopted by several states — some of them accompanied by mandatory primary care spending targets aimed at payers — vary in their definition of primary care.8

**Primary Care Drives High-Value Care, but Realizing Potential Will Require Investment**

Primary care is the foundation of a high-functioning health care system, and it has been undervalued and underinvested in for decades. Investment is not just about paying more to primary care clinicians; it is about transforming the way care is delivered to achieve the aspirational vision set forth in the NASEM definition and CQC attributes, and creating a business model that supports and sustains high-quality primary care. Evidence compiled over decades both nationally and internationally resulted in the NASEM report conclusion that “primary care is the only health care component where an increased supply is associated with better population health and more equitable outcomes.”9

**KEY TAKEAWAY.** Primary care is the foundation of a high-functioning health care system, and it has been undervalued and underinvested in for decades.

**Primary Care’s Contribution to Health Outcomes, Equity, and Value**

Perhaps the most oft-cited evidence of the contribution of primary care to better health outcomes comes from the 2005 review of the literature on the relationship between primary care and health conducted by Starfield, Shi, and Macinko. The authors synthesized several systematic literature reviews of primary care, supplemented by review of additional articles in national and international medical journals, and concluded: “In summary, the studies consistently show a relationship between more or better primary care and most of the health outcomes studied. Primary care was associated with improved health outcomes, regardless...
of the year (1980 to 1995), after variable lag periods between the assessment of primary care and of health outcomes, level of analysis (state, county, or local area), or type of outcome as measured by all-cause mortality, heart disease mortality, stroke mortality, infant mortality, low birth weight, life expectancy, and self-rated health. All but a few studies found this effect for cancer mortality. Over the last decade, the evidence on the contribution of primary care to health outcomes has continued to accumulate. The Primary Care Collaborative produces an annual evidence report, and has compiled a primary care research hub highlighting 24 recent seminal articles from the clinical or health services research literature. Among them: a 2019 study finding that greater primary care physician supply is associated with lower mortality, but per capita supply decreased between 2005 and 2015.

Based on review of the literature, the NASEM report concludes that primary care improves equity, defined as “for everyone, everywhere to access the quality health services they need, when and where they need them.” While disparities in health and health care have long been of interest, the COVID-19 pandemic has heightened awareness of and concern about the extent of inequity in health and health care — and has exacerbated those inequities. Indeed, the pandemic has emphasized the importance of trusted relationships between primary care teams and patients, families, and communities. A study of counties across the US found that the number of primary care physicians per 100,000 population was associated with higher COVID-19 vaccination rates, leading the authors to conclude that “PCPs play a critical role in ensuring vaccine acceptance, especially in resource-limited and vaccine-hesitant regions.”

In addition to improving health outcomes and equity, primary care contributes to lower overall health care spending. In recent years, studies have shown associations between more primary care and less low-value care, both among health systems and in the Medicare fee-for-service population; higher primary care continuity and lower costs and hospitalizations; and broader, more robust practice capabilities and lower utilization and spending. As the evidence mounts, it has become clear that a health care system with sustainable costs will rely on robust primary and preventive care that keeps people healthy and reduces unnecessary and low-value care.

Increasingly, the value of primary care is widely accepted — shifting the discussion to the best approaches to increase availability and access. Despite the robust evidence regarding its value, primary care suffers from underinvestment — and is receiving a declining share of health system resources over time. While more than 35% of health care visits in the US are to primary care physicians, only about 5% of health spending is on primary care, compared with approximately 8% in Organisation for Economic Co-operation and Development countries. While there is no consistent definition or comprehensive source of primary care spending data within the US, an analysis for the Primary Care Collaborative found wide variation among states in spending on primary care in 2019, with a range of 3.1% to 9.5% (average: 4.7%). Moreover, and perhaps more alarming, in comparing spending over time, the analysis found that 39 states spent a smaller share of the health care dollar on primary care in 2019 than in 2017.

KEY TAKEAWAY. In California, 11.4 million people live in a Primary Care Health Professional Shortage Area (HPSA), over one-quarter of the state’s population.

Perhaps not surprisingly, given historic underinvestment, access to primary care is a challenge in many areas of the US, including California. In California, 11.4 million people live in a Primary Care Health Professional Shortage Area (HPSA), over one-quarter of the state’s population. Compared with 10 other high-income countries, US adults are less likely to have a regular source of care or a long-standing relationship with a
primary care provider. Moreover, access to home visits or after-hours care is lowest in the US. A bright spot in the international comparison: Primary care providers in the US were more likely to screen for social service needs and to have social workers in their practice — though the authors point out that this could be due, in part, to lower social needs in other high-income countries compared with the US.25

Investing in Primary Care
To realize the population health benefits of primary care, there is increasing recognition that the historic underinvestment must be addressed. Payment for primary care should be sufficient to support the adoption and maintenance of advanced primary care attributes, including the ability to assess and address patients’ behavioral health and social needs. Reasonable concerns have surfaced regarding the potential for increased investment in primary care to accelerate growth in total health expenditures — anathema for private and public purchasers straining under the current cost burden. But, given that approximately 31% of the US health care dollar was spent on hospital care,26 a relatively small reduction in inpatient care could fund a substantial increase in primary care spending. Several states have set primary care spending targets intended to boost investment, while providing guardrails to protect against increasing total health expenditures. Colorado’s regulation requires that “carriers shall not translate increased primary care spending into higher premiums, and should adopt strategies that improve value and quality of care without increasing total medical expenditures.”27 In Oregon, the statute specifies that coordinated care organizations (delivery systems serving the Medicaid population) spend at least 12% of total expenditures for primary care by January 2023 while operating within a fixed global budget.28 For additional information, see a recent California Health Care Foundation (CHCF) report on lessons from state-based efforts to invest in primary care29 and an online resource on state-level activity maintained by the Milbank Memorial Fund.30

**KEY TAKEAWAY.** Payment for primary care should be sufficient to support the adoption and maintenance of advanced primary care attributes, including the ability to assess and address patients’ behavioral health and social needs.

Increasing the share of health care costs dedicated to primary care is necessary — but not sufficient — to achieve the aspiration of high-quality primary care available to all. Another essential element is structuring payment to primary care providers so that it supports a sustainable business model for delivering high-quality primary care — including practitioners who thrive rather than burn out.31 Tailoring payment to primary care clinicians — and teams — to ensure adequate resources, aligned incentives, and the capacity to build practice-level skills such as population health management and screening for social drivers has received increasing attention in recent years. The NASEM report’s chapter on payment to support high-quality primary care reviews four options, which are not mutually exclusive: (1) build on the existing Medicare Physician Fee Schedule, with modifications to value primary care services more accurately; (2) blend fee-for-service (FFS) and fixed payments, for example, through patient-centered medical home models or Center for Medicare & Medicaid Innovation (CMMI) models such as Comprehensive Primary Care (CPC) and CPC+; (3) adopt global payment models, such as accountable care organizations and CMMI’s Primary Care First; and (4) set societal targets for the share of health care spending that goes to primary care, as a number of states have done.32 The committee that authored the report recommended several action steps, including multi-payer adoption of a hybrid payment model (combining FFS and capitation) for primary care services, ensuring risk adjustment for social as well as medical factors.
In alignment with the NASEM report, the Primary Care Investment Coordinating Group of California (PICG) included “pay for advanced primary care” as one of five recommended actions in April 2022 (see box on page 8). Specifically, the PICG recommends payment for direct patient care using a mix of risk-adjusted capitation and FFS, population-based payment to support population health management, and performance-based payment based on common measures. One major state-based health plan, Blue Shield of California, has already adopted a Primary Care Pay-for-Value Hybrid Payment Model, beginning with its preferred provider organization (PPO) products in 2021. The hybrid model includes four components: (1) population-based payment (per-member per-month, or PMPM) for primary care services, (2) population-based payment (PMPM) for “value services and performance outcomes,” (3) FFS payments for services not included in the PMPM rate, and (4) performance incentives for quality, utilization, and patient experience.33

As California purchasers, payers, policymakers, and other stakeholders pursue increased investment in primary care, it is worth noting the NASEM report’s caution against expectations of short-term return on investment: “Fundamentally, primary care payment reform should be thought of as an investment in future health asset capacity and equity production, instead of a simplistic return on investment for near-term savings. If cost savings are paramount, other means are more effective at reducing costs. What should motivate interested stakeholders more are the measures of population health, equitable outcomes, changing mortality and chronic disease prevalence trends, and overall increased health and well-being for individuals and families that primary care can produce with larger, more predictable, payment.”34

**Strengthening Primary Care to Enable and Accelerate Systemwide Improvement**

Without a stronger and more robust primary care infrastructure, related priorities such as California’s health care workforce, coverage expansion, and the Department of Health Care Services’ ambitious transformation of the Medicaid program through CalAIM will fall short. Increasing investment in primary care is not sufficient to achieve key outcomes, but it is an essential part of the solution.

**Workforce Implications**

California has a shortage of primary care physicians across much of the state, particularly in the more rural regions. In some areas, the discrepancy between need and supply is substantial: Compared with the recommended 60 to 80 primary care physicians per 100,000 population, in 2020 the Inland Empire had only 41, and the San Joaquin Valley and Northern/Sierra regions each had fewer than 50.35 Yet the number and share of California medical residents choosing primary care fields is declining over time. Between 1997 and 2012, the number of residents and fellows in primary care dropped from 961 (30% of residents) to 815 (23% of residents); meanwhile, the number of residents selecting specialty fields is increasing.36 Moreover, primary care residents may not complete their training, or may not end up practicing as generalists. For example, pediatrics or obstetrics/gynecology residents may decide to subspecialize in a field such as oncology; and some primary care residents decide to become hospitalists, focusing only on inpatient care.37 The divergence between the need for primary care providers and the availability of those providers has real consequences for Californians’ health. According to the NASEM report, the national decline in primary care physician supply between 2005 and 2015 of 5.2 physicians per 100,000 population is associated with the loss of 85 lives per day, “the equivalent of a 200-person airplane crashing every 2 to 3 days.”38
KEY TAKEAWAY. The national decline in primary care physician supply between 2005 and 2015 of 5.2 physicians per 100,000 population is associated with the loss of 85 lives per day, “the equivalent of a 200-person airplane crashing every 2 to 3 days.”

In recent years, the primary care shortage has received increasing attention. A recent review of the literature found that state- and federal-level efforts to expand, diversify, and enhance recruitment and retention have been successful in improving the availability of primary care in underserved areas, but the scale and financing have been insufficient to meet the need. California has made a concerted effort to ramp up investment in the primary care workforce in the last several years, and responsibility for statewide workforce initiatives has been concentrated in the Department of Health Care Access and Information (HCAI, formerly the Office of Statewide Health Planning and Development). A recent update on the 2019 report of the California Future Health Workforce Commission noted substantial progress on several priority recommendations related to primary care, including expanding the number of primary care physician residency positions and scaling the engagement of community health workers, promotores, and peer providers.

Workforce initiatives are a core component of implementing high-quality primary care — but they must be supported by a thriving primary care sector with a sustainable business model to support and retain those new providers. While California’s investments in the primary care workforce should be celebrated, they will fall short if clinicians do not experience primary care as a rewarding career. Primary care physicians earn 30% less than other physicians, on average, and they have among the highest rates of physician burnout. Median compensation for physicians in radiology, procedural, and surgical specialties is almost twice that for those in primary care. As the NASEM report put it: “The failure of current primary care physician production and policies to make primary care a more viable career, especially in rural areas, has important implications for health outcomes and inequities.”

Making Access to Care Meaningful

In California, the uninsured rate among the nonelderly declined significantly between 2019 and 2020, from 8.4% to 7.0%, continuing the downward trend from the 15.5% rate in 2013 prior to the implementation of the Affordable Care Act. The dramatic reduction reflects extensive state-level efforts to make coverage more accessible and affordable, including extending Medi-Cal coverage to undocumented children and young adults, and enhanced premium subsidies for Covered California enrollees. In the 2020 uninsured rates, notable improvements were observed among the lowest-income Californians, those who identify as Latino/x, and those residing in rural areas of the state.

KEY TAKEAWAY. California’s shortage of primary care clinicians represents a major barrier to the successful implementation of coverage expansions across the state. It also has equity implications. Nearly two-thirds of Californians living in Primary Care Health Professional Shortage Areas are Latino/x, Black, and Native American.

The new figures signify impressive gains in coverage after years of concerted effort. Yet coverage does not guarantee access to care. Access depends, among other factors, on the availability of providers. California’s shortage of primary care clinicians, exacerbated by the pandemic, represents a major barrier to the successful implementation of coverage expansion across the state. Primary care providers are often the first point of contact for patients, serving as their navigators in a complex and fragmented health care system; this role is particularly crucial for the newly insured. Translating health care coverage gains into meaningful access to care — and improved health
outcomes for patients — requires investing in a robust primary care sector that is attractive to clinicians and meets the needs of Californians.

Enabling CalAIM: California’s Strategic Vision for Medicaid

The scale of California’s Medi-Cal program is massive. Providing care to more than 12 million enrollees, it covers one in three Californians, half of California births, and more than half of California’s school-age children. The Department of Health Care Services started a phased implementation of CalAIM, its ambitious and sweeping transformation initiative, in January 2022. Anchored in a population health approach and whole-person orientation, CalAIM features multiple interrelated components that will be implemented over the next several years. Combined with the statewide procurement of Medi-Cal managed care plans and a standard contract with plan partners, CalAIM has the potential to reshape California’s delivery system — within Medi-Cal and beyond.

Several of the core components of the CalAIM initiative rely on robust primary care, including the following:

- **Enhanced care management.** Intensive, person-centered care management services will be provided to Medi-Cal members with multiple complex needs, including individuals and families experiencing homelessness, adults with serious mental illness or substance use disorder, and adults and youth who are incarcerated and transitioning to the community.

- **Behavioral health delivery system transformation.** Changes to policy and financing will strengthen behavioral health services and promote integration with physical health care.

- **Statewide special needs plans for dually eligible enrollees.** Californians eligible for both Medi-Cal and Medicare will be able to enroll in a managed care plan that coordinates their benefits and care.

---

**KEY TAKEAWAY.** For CalAIM to succeed, primary care must be strengthened to ensure that providers are available in the neighborhoods and communities throughout California where Medi-Cal members live and work.

CalAIM’s vision, and the goals of each of these programs, aligns well with the NASEM report’s aspirational definition of high-quality primary care as care that addresses “the majority of an individual’s health and wellness needs across settings and through sustained relationships with patients, families, and communities.” For CalAIM to succeed, primary care must be strengthened to ensure that providers are available in the neighborhoods and communities throughout California where Medi-Cal members live and work.

**Multi-Stakeholder Engagement and Commitment**

A resurgence of interest in and effort on primary care investment is underway in California. The PICG has taken on a coordination role to facilitate alignment across the many initiatives and activities occurring in both public and private sectors, and has collaborated to develop a strong set of recommended actions (see box on page 8). The proposed Office of Health Care Affordability has the potential to change the California primary care landscape, with the clearly stated intent to promote sustained systemwide improvement in primary care and new requirements that payers measure and report on primary care and behavioral health care spending; an annual report would share information on primary care spending and growth, and relevant quality and equity performance measures. Investing in high-quality primary care can drive higher-value health care for Californians, reorienting the system toward wellness, whole-person care, and equity. It is also an essential component of multiple policy priorities for the state, including creating a more robust
KEY TAKEAWAY. Investing in high-quality primary care is an essential component of multiple policy priorities for the state, including creating a more robust health workforce, ensuring that health care coverage translates into meaningful access to care, and transforming the Medi-Cal program.

PICG Recommended Actions

The Primary Care Investment Coordinating Group of California (PICG) brings together public and private health care purchasers, policymakers, analysis and improvement specialists, consumer advocacy organizations, and funders on primary care investment strategies and activities. PICG members share the goal of promoting action, alignment, and standardization in payment and accountability. The PICG has confirmed a set of recommended actions intended to spur collective effort toward increasing resources to provide and improve primary care in California. Additional information and a list of members is available on the Primary Care Matters resource center.

1. **Measure and report primary care spending.** All payers should participate in measurement and public reporting on the percentage of total medical expenditures spent on primary care. Measurement of primary care spending, including non-claims spending, should be standardized to the extent feasible.

2. **Set a target.** A floor and/or target for primary care spending as a percentage of total medical care expenditures should be set to stimulate adequate investment in primary care services by all payers and plans.

3. **Pay for advanced primary care.** All payers should adopt payment models that support advanced primary care. Based on evidence of impact and aligning with the NASEM recommendation, priority should be given to models that include three components: payment for direct patient care using a mix of risk-adjusted capitation and fee-for-service, population-based payment to support population health management, and performance-based payment based on common measures.51

4. **Establish purchaser requirements.** All purchasers should evaluate benefit design and provider networks, and incorporate contractual requirements such as primary care provider (PCP) selection and matching, with the goal of creating and communicating a primary care–centric delivery system.

5. **Track progress.** The impact of increased primary care spending should be measured. California stakeholders should assemble, regularly compile, and disseminate an implementation scorecard to track progress and report on impact.
About the Author
Jill Yegian, PhD, is principal at Yegian Health Insights, which provides strategic planning, market and policy analysis, and program design and implementation support aimed at improving the health care system on behalf of patients, providers, and payers.

About the Foundation
The California Health Care Foundation is dedicated to advancing meaningful, measurable improvements in the way the health care delivery system provides care to the people of California, particularly those with low incomes and those whose needs are not well served by the status quo. We work to ensure that people have access to the care they need, when they need it, at a price they can afford.

CHCF informs policymakers and industry leaders, invests in ideas and innovations, and connects with changemakers to create a more responsive, patient-centered health care system.

Endnotes
2. See, for example, Geronimo Jimenez et al., “Revisiting the Four Core Functions (4Cs) of Primary Care: Operational Definitions and Complexities,” Primary Care Research & Development 22 (2021): e68.
4. Advanced Primary Care: Defining a Shared Standard (PDF), Purchaser Business Group on Health, to be published June 2020, revised April 2022.
6. McCauley et al., eds., Implementing High-Quality Primary Care.
7. Physicians, nurse practitioners, and physician assistants may specialize in fields such as orthopedics or psychiatry, or focus exclusively on inpatient care; these are excluded from most definitions of primary care because they do not provide comprehensive care to the full population.
9. McCauley et al., eds., Implementing High-Quality Primary Care, 4.
11. See, for example, Yalda Jabbarpour et al., Investing in Primary Care: A State-Level Analysis (PDF), Patient-Centered Primary Care Collaborative, July 2019.
15. McCauley et al., eds., Implementing High-Quality Primary Care, 52, 102, 110.
22. McCauley et al., eds., Implementing High-Quality Primary Care, 19.
23. Kempski and Greiner, Primary Care Spending. Results based on a “narrow” definition of primary care spending.
24. Custom data request, Department of Health Care Access and Information, data from California Primary Care Office and Census Bureau, April 2022.
27. 3 CCR 702-4: Life, Accident and Health (PDF), Concerning Strategies to Enhance Health Insurance Affordability, Section 6: Primary Care Requirements, A(3), Colorado Department of Regulatory Agencies, Division of Insurance, accessed March 31, 2022.
29. Condon et al., Investing in Primary Care.
32. McCauley et al., eds., Implementing High-Quality Primary Care, 281–332.
34. McCauley et al., eds., Implementing High-Quality Primary Care, 318.
36. Diane Rittenhouse et al., Graduate Medical Education Funding in California: Primary Care Physician Crisis (PDF), California Health Care Foundation, February 2019.
38. McCauley et al., eds., Implementing High-Quality Primary Care, 33, 409–11.
42. McCauley et al., eds., Implementing High-Quality Primary Care, 282.
43. McCauley et al., eds., Implementing High-Quality Primary Care, 33.
44. Lacey Hartman, Coverage During a Crisis: Insured Rate for Californians Hits Historic High in First Year of COVID-19 Pandemic, California Health Care Foundation, January 2022.
45. Custom data request, Department of Health Care Access and Information, data from California Primary Care Office and Census Bureau, April 2022.


49. McCauley et al., eds., Implementing High-Quality Primary Care, 4.


51. McCauley et al., eds., Implementing High-Quality Primary Care, 7.