Health Is Primary

Charting a Path to Equity and Sustainability

PCC 2023 EVIDENCE REPORT

Prepared by PCC primary care collaborative ROBERT GRAHAM CENTER
Authors
Alison Huffstetler, MD
Ann Greiner, MCP
Anam Siddiqi, MPH
Ann Kempski, MS
Grace Walter, MD
Jeongyoung Park, PhD
Michael Topmiller, PhD
Melissa Filippi, PhD
Amy Bianco
Josh DeKlotz

Reviewers
Beth Carter, PhD, MPH; AARP
Tracey Henry, MD; Emory University
Lauren S. Hughes, MD, MPH, MSc, MHCDS, FAAFP; Eugene S. Farley, Jr. Health Policy Center

Special Thanks
Special thanks to the AAFP Foundation for their financial support.
Dear Colleagues,

Based on the data in the Primary Care Collaborative’s 2023 Evidence Report, patients’ ability to find and sustain a primary care relationship is strained and getting worse. What should be the front door of our nation’s health care system is not open to many, particularly those in low-income communities and rural communities. And our report may well be underestimating the problem at hand, given that most of the data available to inform our analysis are pre-pandemic.

Reports suggest that the COVID-19 pandemic prompted more Primary Care Clinicians to opt for early retirement, to cut back on hours, or to seek non-clinical jobs. This workforce contraction is happening precisely when patients need primary care more than ever—to get back in the swing of managing chronic conditions, to catch up on preventive care, and to address more acute issues exacerbated in recent years.

This report’s analysis identifies many supply-and-demand issues challenging the provision of relationship-based primary care. And the maps within show that some communities have it worse than others when it comes to primary care access: there is a fourfold difference across states grouped into regions. This should not be a surprise when a related measure, life expectancy at the state level, has such a dramatic spread, from a low of 72 years in Mississippi to a high of 81 years in Hawaii.

Our policy solutions do not offer a single panacea and suggest that it will take leadership across many sectors to pry open our health system’s front door for all communities. The longer that front door is jammed, the harder it becomes to break it free. We must put our collective shoulders into the work ahead to rebuild and reimagine primary care.

Regards,

Ann Greiner
President and CEO
Primary Care Collaborative
Executive Summary

There have been many attempts to address perennial shortages of primary care in the United States, including expansions of the federal Health Center Program and overall expansion of insurance. With the Affordable Care Act (ACA), specifically the Health Insurance Marketplace® and Medicaid expansion in 41 states and the District of Columbia, almost 16 million residents (about the population of New York) received coverage and access to care. Technology and the broadening of the primary care workforce beyond physicians also are enabling more primary care options.

These trends should contribute to an increasing share of the population with a regular source of primary care, yet we continue to see a decline. One in four people in the United States has no such relationship, and those who do are increasingly naming a facility rather than a clinician as their usual source of care. In 2019, 40 percent of adults in the United States had no primary care visit in a year. Simultaneously, we continue to see a decline in primary care spending as a share of total health care spending alongside an increasing proportion of the population living in medically underserved communities.

Most of these trends are based on data collected before the pandemic. Yet, numerous sources report that the COVID-19 pandemic contributed to increased primary care burnout, early retirements, and practice closures, suggesting that the situation may be more dire than the data currently reflect.

The Primary Care Collaborative’s (PCC) 2023 Evidence Report unpacks the major drivers shaping the establishment and maintenance of primary care relationships and the availability of comprehensive primary care services, embodying the kind of care envisioned by the Shared Principles. While we do not attempt to quantify these drivers, we use the construct of supply and demand to illuminate them further.

We also focus our attention on understanding why particular communities and individuals are more at risk of losing or not having primary care relationships that they can count on. Finally, we describe potential solutions that policymakers and health system leaders can take to address the underlying factors and trends.

The National Academies of Science, Engineering, and Medicine (NASEM) defined high-quality primary care as a public good in its 2021 seminal report, “Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care.” NASEM’s definition 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.”
Public goods are undersupplied by market forces because their benefits accrue broadly to individuals, communities, economies, and society. Consequently, we cannot expect market forces alone—even when boosted by public programs and subsidies—to solve our primary care access problem. What we need is evidence-based and better-targeted policy solutions focused on data, workforce, payment, and care delivery to render primary care a robust public good.

**Supply of Primary Care**

Primary care physicians (PCPs), nurse practitioners (NPs), and Physician Associates/Physician Assistants (PAs)—the latter two often grouped as Advanced Practice Practitioners (APPs)—are increasingly less likely to choose primary care, resulting in an aging workforce, and an overall shortage of PCPs. This trend is compounded by PCPs moving to jobs away from the front line of care, reducing their clinical hours, or retiring from medicine altogether.

Approximately 35,345 PCPs retired in 2022, more than double (17,238) those who matched to primary care that year; 9,380 to internal medicine, 4,916 to family medicine, and 2,942 to pediatric positions. This may be an overcount because many physicians who select internal medicine and pediatrics later subspecialize and do not practice in primary care.

---

**Medical Need Is Significant**

The number of medically disenfranchised in this country is estimated to be 100 million, about 30 percent of the U.S. population, according to an analysis by the National Association of Community Health Centers (NACHC) and HealthLandscape. Black, Hispanic, and Asian American/Pacific Islander individuals, as well as those living in rural and poor urban areas are more likely to be disenfranchised as a percentage of their population in comparison to White Americans. The definition of medically disenfranchised is derived by adding the populations in Health Professional Shortage Areas (HPSAs) and Medically Underserved Areas/Populations (MUA/Ps) against primary care professionals serving in these geographies and populations, and then subtracting those currently served by Community Health Centers (CHCs).

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>U.S. Population</th>
<th>Medically Disenfranchised</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>75.8%</td>
<td>68.7%</td>
</tr>
<tr>
<td>Black</td>
<td>13.6%</td>
<td>15.7%</td>
</tr>
<tr>
<td>Asian American/Pacific Islander</td>
<td>1.3%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>18.9%</td>
<td>21.9%</td>
</tr>
</tbody>
</table>

The composition of who is providing primary care also has shifted, with increasing numbers of primary care NPs and PAs, but not enough to make up for the declining number of PCPs. Most analysts agree that there is a primary care shortage, and all agree that there is a maldistribution issue, with rural and low-income urban areas having less primary care on a population basis.

The following two charts provide more granular data.

Annually since 2014, there has been a net decrease in the number of Primary Care Clinicians available per 100,000 individuals in the United States (Figure 1). Overall, there was a deficit of 4.91 PCCs per 100,000 in 2014, and that has more than doubled to a net decrease of 10.11 PCCs per 100,000 individuals in 2019.

The decrease for Primary Care Physicians is even steeper. More specifically, there was a net loss of 8.03 PCPs per 100,000 based on more retirements than entrances in 2012 as compared to a net loss of 14.22 PCPs per 100,000 in 2020 (Figure 2). The retirement of PCPs far exceeds the entrance of these physicians into the primary care workforce.

“I wish I could see more patients. I wish I could focus more on providing preventative care and health education. I wish I could provide greater support to individuals managing chronic health conditions.”

– Laura Okolie, DMSc, MBA, MHS, PA-C

**FIGURE 1**

Inflow and Outflow, Primary Care Clinicians per 100,000 Population, 2014–2019 (with Physician Retirement at Age 65)

<table>
<thead>
<tr>
<th>Year</th>
<th>Inflow per 100,000</th>
<th>Outflow per 100,000</th>
<th>Net per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>10</td>
<td>-5</td>
<td>5</td>
</tr>
<tr>
<td>2015</td>
<td>5</td>
<td>-5</td>
<td>0</td>
</tr>
<tr>
<td>2016</td>
<td>5</td>
<td>-5</td>
<td>0</td>
</tr>
<tr>
<td>2017</td>
<td>5</td>
<td>-5</td>
<td>0</td>
</tr>
<tr>
<td>2018</td>
<td>5</td>
<td>-5</td>
<td>0</td>
</tr>
<tr>
<td>2019</td>
<td>5</td>
<td>-5</td>
<td>0</td>
</tr>
</tbody>
</table>

Data Source: American Medical Association Physician Masterfile 2012-2020; Medicare Provider Utilization and Payment Data: Physician and Other Supplier Public Use File 2013–2020; U.S. Census 2012-2020

Notes: Primary Care Clinicians includes PCPs, NPs, and PAs. As for PCPs, inflow was calculated as the number of PCPs (per 100,000 population) entering the workforce after completion of their fields training program, while outflow was calculated as the number of PCPs retiring at age 65. As for NPs and PAs, inflow and outflow were identified based on Medicare billing such that we assumed someone billing for the first time was a new provider and when someone no longer billed for at least two consecutive years we assumed they were no longer providing those services.
**FIGURE 2**
Inflow and Outflow, Primary Care Physicians per 100,000 Population, 2012–2020 (with Physician Retirement at Age 65)

- **Inflow per 100,000**
- **Outflow at age 65 per 100,000**
- **Net at age 65 per 100,000**

Data Source: American Medical Association Physician Masterfile 2012–2020; U.S. Census 2012–2020

Notes: As for PCPs, inflow was calculated as the number of PCPs (per 100,000 population) entering the workforce after completion of their fields training program, while outflow was calculated as the number of PCPs retiring at age 65.

**FIGURE 3**
Net Loss of Primary Care Clinicians (DO, MD, NP, PA) per 100,000 Population, per State, 2019

Data Source: American Medical Association Physician Masterfile; Medicare Provider Utilization and Payment Data: Physician and Other Supplier Public Use File; U.S. Census

Notes: Primary Care Clinicians include PCPs, NPs, and PAs. As for PCPs, inflow was calculated as the number of PCPs (per 100,000 population) entering the workforce after completion of their fields training program, while outflow was calculated as the number of PCPs retiring at age 65. As for NPs and PAs, inflow and outflow were identified based on Medicare billing such that we assumed someone billing for the first time was a new provider and when someone no longer billed for at least two consecutive years we assumed they were no longer providing those services.
These PCP declines are not experienced equally across the country. A state-by-state analysis shows that the states experiencing the largest loss of Primary Care Clinicians fell by a range of 14.5 percent to 21.8 percent and were mostly concentrated in the Northeast and West (Figure 3). In contrast, those states that experienced the least decline, 2.9 percent to 6.6 percent, tended to be in the South and Midwest. These data represent more than a fourfold difference in PCP decline between regions.

DEMAND FOR AND ON PRIMARY CARE

The population in the United States is growing, aging, and becoming more racially diverse. In the 2020 U.S. Census, 17 percent of people in the country were older than 65, a 38.6 percent increase from the 2010 census, and there was a 22 percent increase in Hispanic or Latino populations alongside 5.6 percent growth in the Black population. Older adults have more complex care needs, averaging three chronic medical conditions and with most taking five or more prescription medications; they also are more likely to experience cognitive decline. These factors contribute to more demand for primary care, and for a more diverse primary care workforce.

As demand for more primary care increases, there is simultaneously increased demand on primary care providers. Patient demand for mental health services has increased exponentially, with nearly 50 million adults in the United States experiencing a mental illness in 2019, and with at least 4 in 10 adults presenting in a primary care office. In addition, there is a greater awareness of patients’ social vulnerabilities and their effects on patient outcomes, and recognition of the prevalence of loneliness, particularly among the elderly. These increased demands are challenging for primary care providers to meet.

While changing patient demographics are driving demand for primary care, financial barriers to care may be dampening such demand. Specifically, analysts see a relationship between the growing prevalence of High-Deductible Health Plans (HDHPs) and reduced demand for primary care services. While certain preventive health screenings are covered on a pre-deductible basis under HDHPs, management of chronic conditions and other needed services in primary care can only be accessed after the deductible (between $1,000 and $5,000 or more) is paid, making care financially out of reach for many in the United States.

In several cases as a primary care provider, I’ve practiced at the upper limit of my scope due to a patient’s extended specialist wait time. During these cases, my collaborating physician and I work together to craft a care plan that can bridge the patient’s needs until they can be seen.”

– Laura Okolie, DMSc, MBA, MHS, PA-C
A MIX OF SUPPLY AND DEMAND

Primary care innovations are attempting to fill the primary care access gap, including direct primary care, telehealth, and retail clinics, responding to both demand and supply factors. A central question is whether these innovations support or undermine the primary care relationship and related access issues.

Direct Primary Care (DPC), where patients or their employers pay a monthly subscription fee outside of an insurance arrangement, is increasingly popular. There are approximately 2,000 active physicians in family medicine that practice in a DPC model. This model provides more ready access to primary care, in large part because of the reduced size of patient panels, but also because the practices are freed up from insurers’ administrative and quality reporting requirements. Yet due to DPC’s reduced patient panel size, the growth of this kind of care may be contributing to access issues at the community level. In addition, such care may be financially out of reach for lower- and middle-income people.

Telehealth spiked during the COVID-19 pandemic and remains a practice feature despite the ebbing of the pandemic. Specifically, 3.3 percent of visits were virtual in 2021 as compared to less than 0.1 percent pre-pandemic. Urban residents were more likely to have a telehealth visit to any specialty (3.3 percent) as compared to their rural counterparts (2.1 percent). In addition, at least one study shows that Black and Hispanic individuals were less likely to use telehealth. Telehealth offerings vary. On one end of the spectrum, telehealth is integrated into existing practices. On the other end, telehealth is separate from and may replace existing relationships.

Retail clinics had first access to COVID-19 vaccines and tests and their popularity soared. According to a Morning Consult poll, 35 percent of the U.S. public received care in a retail clinic in 2021. Simultaneously, retail giants—including CVS, Walgreens, and Walmart—appear to be expanding their primary care strategies, adding brick-and-mortar clinics that provide more comprehensive primary care services than previously. And the number of urgent care clinics is growing rapidly, too. They offer some primary care services in an alternative setting.
**SUPPLY**

**Factors Increasing Primary Care Supply (per population)**
- Overall growth in NPs, PAs
- Small increase in primary care residency programs
- Tech-enabled primary care teams caring for larger patient panels
- Effective patient panel management
- Retail clinics (generally addressing low-acuity episodic needs)

**Factors Decreasing Primary Care Supply (per population)**
- Decline in physicians going into primary care
- Rising, earlier retirement rates
- Decreased direct patient care time for active primary care clinicians
- Direct primary care models with smaller patient panels

**DEMAND**

**Factors Increasing Primary Care Demand**
- Domestic migration
- Aging and changing demographics of U.S. population
- Growing medical complexity
- Increasing social complexity, SDOH, loneliness
- Increased mental health demand
- Telehealth (increased access, decreased burden)

**Factors Decreasing Primary Care Demand**
- Financial barriers to primary care, including high-deductible health plans
- Patient self-management with support of the internet
POTENTIAL SOLUTIONS

There is no panacea to solving the primary-care-access issues our country faces. It will take an array of solutions to reopen and rebuild the front door of our health system.

These solutions start with collecting accurate and transparent workforce data about PCPs, NPs, and PAs to inform policy. We also need consistent and transparent data about how primary care is currently financed and paid for, including overall primary care spending at the payer level and by organization, as well as how and how much Primary Care Clinicians are paid. This data can inform policymakers about how the United States “values” primary care versus other health care specialties and sectors.

Arguably the most powerful lever at policymakers’ disposal is payment. Taking a page from the NASEM report, we argue that to enhance primary care access, the country needs to invest considerably more in primary care and needs to pay for primary care differently. Hybrid payments—a mix of capitated and fee-for-service payments—can allow clinicians to provide shared decision-making and better customize care to fit patients’ needs and preferences. Hybrid payments also would provide financial support to build a team that offers more comprehensive and needed primary care services.

Policymakers also need to consider how to better support the existing primary care workforce and to attract more clinicians to select primary care as a specialty. Ideas suggested in these sections include leveraging technology to bolster primary care, team-based models of care that enable increased patient access, and flexibility for individuals to practice part time, take breaks to care for children or elderly parents, and to practice across state borders. In addition, upstream programs can recruit and support diverse students entering primary care, shorter undergraduate education can reduce education costs, and federal policymakers can redirect Graduate Medical Education (GME) funds to better support more primary care training sites.

Finally, employers have a role to play in mitigating the effects of HDHPs that dampen employee demand for primary care due to financial barriers. They can do so by offering creative solutions such as on-site/near-site clinics, relationships with primary care practices, direct primary care, or by encouraging employees to return to more traditional health plan offerings through monetary incentives. Employers also can educate their employees about the value of maintaining a primary care relationship and provide incentives to do so.
About the Primary Care Collaborative

Founded in 2006, the Primary Care Collaborative (PCC) is a not-for-profit multi-stakeholder membership organization dedicated to advancing an effective and efficient health system built on a strong foundation of primary care and the patient-centered medical home. Representing a broad group of public and private organizations, the PCC’s mission is to unify and engage diverse stakeholders in promoting policies and sharing best practices that support growth of high-performing primary care and achieve the “Quadruple Aim”: better care, better health, lower costs, and greater joy for clinicians and staff in delivery of care.

www.thePCC.org

About the American Academy of Family Physicians (AAFP) Robert Graham Center

The AAFP’s Robert Graham Center aims to improve individual and population healthcare delivery through the generation or synthesis of evidence that brings a family medicine and primary care perspective to health policy deliberations from the local to international levels. The information and opinions contained in research from the AAFP’s Robert Graham Center do not necessarily reflect the views or policies of the American Academy of Family Physicians.

www.graham-center.org