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The Health of US Primary Care:

A Baseline Scorecard Tracking Support for High-Quality Primary Care



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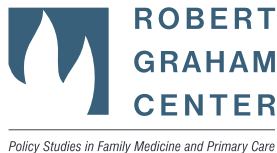
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ABSTRACT

The 2021 National Academies of Sciences, Engineering, and Medicine (NASEM) report *Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care* proposed the development of a scorecard to better monitor and ensure accountability for progress toward high-quality primary care in the United States. This first national primary care scorecard finds a chronic lack of adequate support for the implementation of high-quality primary care in the United States across all measures, although performance varies across states. The scorecard finds:

- 1. Financing:** The United States is systemically underinvesting in primary care.
- 2. Workforce:** The primary care physician workforce is shrinking and gaps in access to care appear to be growing.
- 3. Access:** The percentage of adults reporting they do not have a usual source of care is increasing.
- 4. Training:** Too few physicians are being trained in community settings, where most primary care takes place.
- 5. Research:** There are few federal funding opportunities for primary care research, with only 0.2% of National Institutes of Health funding allocated to primary care.

Given declining life expectancy, racial and ethnic health disparities, the current epidemic of mental health needs, the ongoing COVID-19 pandemic, and other nationwide issues that primary care can help address, these findings represent an urgent call to policymakers and other stakeholders. It is time to accelerate adoption of policies that will demonstrably increase investment in high-quality primary care, create a robust primary care workforce, and enable analysis and learning around the impact of primary care.

INTRODUCTION

Why This Scorecard?

Primary care has long been shown to improve population health and decrease health disparities.¹⁻³ Yet historic underinvestment and projected workforce shortages threaten the positive impact that primary care can have on the health of the nation.^{4,5} The 2021 National Academies of Sciences, Engineering, and Medicine (NASEM) report *Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care* defined high-quality primary care as “the provision of whole-person, integrated, accessible, and equitable health care by interprofessional teams that 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.”⁶

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Primary care has long been shown to improve population health and decrease health disparities.

The NASEM report offered five major recommendations for the advancement of high-quality primary care in the United States:

1. Pay for primary care teams to care for people, not doctors to deliver services.
2. Ensure that high-quality primary care is available to every individual and family in every community.
3. Train primary care teams where people live and work.
4. Design information technology that serves the patient, family, and interprofessional care team.
5. Ensure that high-quality primary care is implemented in the United States.

The NASEM report called for a scorecard to provide regular updates on the nation’s progress toward these objectives. This initial report provides retrospective trend data for the nation and states, where available, and is intended to serve as a baseline to assess changes over time. The NASEM report did not provide any proposed measures to track information technology; this objective will be tracked in future reports. All data are available in the companion [online dashboard](#) organized by the NASEM recommendations. In subsequent scorecards, refinement and updates of these measures will allow for assessment of noteworthy trends nationally and, for some measures, across states.

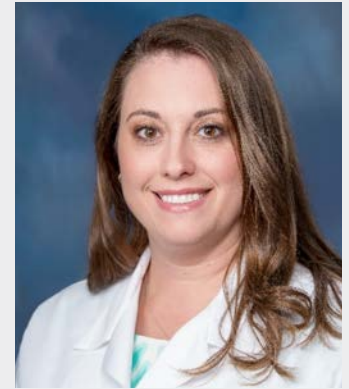
Measurement Strategy

The NASEM report proposed measures according to the following set of principles:

1. The measures should be previously developed – as opposed to proposed new measures – and each should track the committee’s objectives, either directly or indirectly.
2. The measures should be few, easily understood by the public, and consistent over time.
3. Data for the measures must be collected regularly, comprehensively, and reliably for producing assessment at relevant scope or geography; preferably, data will be publicly available and nonproprietary.
4. Accountable unit – the measure should be available at the national and state levels, so as to engage advocates and policymakers.

To identify the metrics ultimately constructed for this scorecard, the authors began with an environmental scan and meetings with key stakeholders. (See [Appendix A](#) for a summary of the meetings.) To validate findings and measurement strategies, scorecard authors engaged with members of the scorecard advisory committee, NASEM committee members, and experts in the data sets being used. Where appropriate, measures were calculated using publicly available data to allow for easier reproducibility by stakeholders in the future. In some instances, particularly when workforce data were needed, the publicly available data did not produce an accurate measure and proprietary data sets were used.

Despite the robust set of measures presented in this scorecard and the accompanying dashboard, there are many gaps in existing data sets that limit the ability to provide an exact evaluation of the health of US primary care. Data limitations notwithstanding, this report can serve as a guide for state and federal agencies, private payers, and other stakeholders invested in strengthening primary care and measuring progress. The detailed methodology section in [Appendix B](#) explains the measures, data sources, and limitations, to facilitate replication of these metrics year after year.



**KRISTINA DIAZ, MD, MBA,
CPE, FAAFP**

Executive Medical Director,
Primary Care, Chief Academic
Officer and DIO, Program Director
Family Medicine Residency
Program, Yuma Regional Medical
Center Program, Yuma, Arizona

**In your opinion, what might
draw more residents to primary
care or improve quality of life
for practicing primary care
clinicians?**

I feel that one of the ways to draw more people to primary care involves the need to express gratitude for our primary care physicians – with words, action, and reimbursement. I also feel that the administrative burden on the primary care specialty needs to be addressed to allow the physician to spend more time in patient care instead of focused on paperwork, such as prior authorizations.

FINDINGS

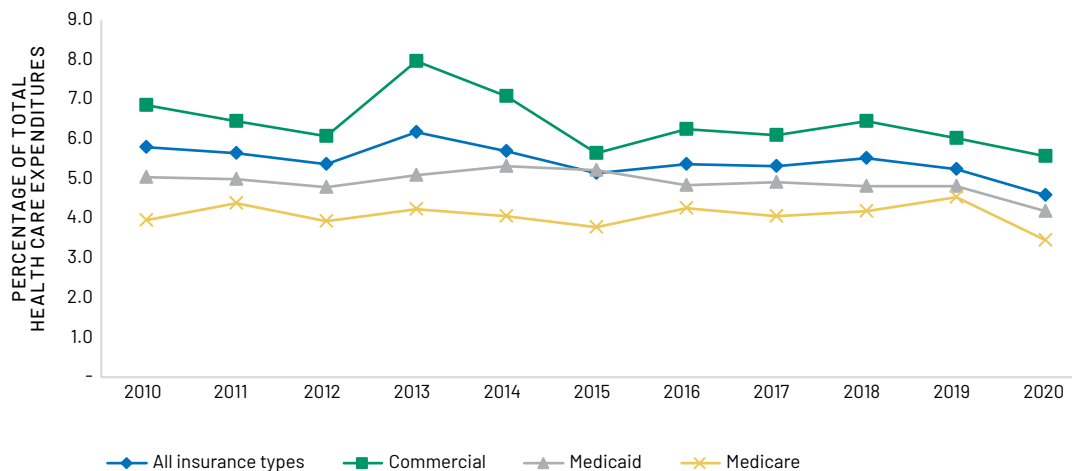
I. Financing: The United States is underinvesting in primary care.

From 2010 to 2020, the percentage of total health care spending allocated to primary care has been low, and little progress has been made over time. US primary care spending for all insurance types over the decade varied from 6.2% in 2013 to 4.6% in 2020. By comparison, Organization for Economic Co-operation Development (OECD) nations spent an average of 7.8% of total health care expenditures on primary care in 2016, according to the NASEM report.

“Primary care spending” depends on payers’^{7,8} and states’⁹ definitions of primary care.¹⁰ For this report, primary care spending was defined as the proportion of total health care expenditures being spent on outpatient and office-based visits to primary care clinicians (Figure 1). This “narrow” definition is restricted to outpatient and office-based expenditures to primary care physicians (PCPs), defined as family physicians, general pediatricians, general internal medicine physicians, general practitioners, and geriatricians. A “broad” definition adds spending for office-based care from nurse practitioners (NPs), physician assistants (PAs), behavioral health clinicians, and obstetricians/gynecologists. ([Appendix B](#) provides additional data using the broad definition, as well as information on how each of the specialties in the broad category contributes to primary care spending.)

US primary care spending for all insurance types over the decade varied from 6.2% in 2013 to 4.6% in 2020.

Figure 1: Primary Care Spending (Narrow Definition) from 2010 to 2020



Data Source: Analyses of Medical Expenditure Panel Survey (MEPS), 2010-2020. MEPS was redesigned in 2018. Data on ambulatory care expenditures derived from the consolidated, office-based, and outpatient event files. See [Appendix B](#) for details.

Notes: The primary care narrow definition is restricted to primary care physicians only. The primary care specialties included family medicine, general practice, internal medicine, pediatrics, geriatrics, and osteopaths.

Spending on primary care as a percentage of total health care spending ranged from 3.5% to 8% depending on payer and year. In the decade studied, Medicare spent the lowest share of health care spending on primary care, followed by Medicaid, and then commercial insurance. Medicare primary care spending increased modestly over time, rising from 3.8% in 2015 to 4.6% in 2019, but then falling to a historic low of 3.5% in 2020. Whether the dip in 2020 is an aberrancy due to the COVID-19 pandemic remains to be seen. Medicaid primary care spending has fallen nearly continuously since 2014, from a high of 5.3% to a low of 4.2% in 2020. Commercial insurance spending on primary care has also declined since 2010, when primary care spending stood at 6.9%. However, since 2015, primary care spending among commercial insurers has been relatively flat.

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Medicaid primary care spending has fallen nearly continuously since 2014, from a high of 5.3% to a low of 4.2% in 2020.

In 2020, 29 states had primary care spending data available. Oregon had the highest commercial, Medicare, and Medicaid primary care spending at 12%, 9.5%, and 8.3%, respectively. One possible explanation for Oregon's high primary care spending is how the state leveraged its Center for Medicare and Medicaid Innovation State Innovation Model funding. Oregon used these financial resources to transform its health care delivery through payment reform, creating Medicaid coordinated care organizations and a transformation center to disseminate best practices among them.¹¹

Most payments for primary care do not support teams that offer whole-person care. The spectrum of payment models for physician reimbursement ranges from fee-for-service (FFS) to full capitation, with many practices having some combination of reimbursement schemes.¹² FFS payments, where physicians are paid for services regardless of quality, may encourage overtreatment and do not support care provided by an interdisciplinary team made up of billing and nonbilling providers. Conversely, capitation, where a physician is paid a fixed amount for each patient for a given period of time regardless of service use, may encourage underuse of resources.¹³ Hybrid payment models (part FFS and part capitated) that reimburse the entire primary care team, though perhaps more administratively complex than pure FFS or pure capitation, outperform both models.¹⁴

Connecticut's State Employee Plan Primary Care Initiative Pilot Supports Investment in High-Quality Primary Care

By Christine Haran

In January 2023, the Connecticut comptroller's office kicked off its State Employee Plan Primary Care Initiative Pilot. The initiative aims to help the state fulfill its goal, codified in a 2022 law, of increasing spending on primary care to 10% of total health care spending by all payers by 2025.

Through the employee plan administrator, Anthem, the initiative provides a significant increase in per-member, per-month care coordination payments, as well as significant quality bonuses, to participating primary care providers. In exchange, the providers commit to improve competencies in core areas identified by the Connecticut Office of Health Strategies Primary Care Roadmap, such as team-based care that includes clinicians and nonclinicians,

including care management personnel. The providers also agree to be held accountable by taking on some shared risk for the total costs of care of their attributed members.

"We're talking about a roughly 50% increase in total funds and resources going toward primary care for these practices," Health Policy and Benefits Division Director Joshua Wojcik said.

To support the insurer and the practices in the analyses of their performance and cost data, the initiative is covering costs for Anthem to hire analysts who will be available to the provider groups. "We're not just giving the primary care groups additional resources to improve their capabilities and walking away," Wojcik said. "We're also demonstrating that we're going to do everything we can to make sure you're successful."

Between 2010 and 2019, the percentage of fully capitated PCP visits remained relatively unchanged, hovering between 7.7% and 9.9% (Table 1), signaling a lack of progress.

Table 1. Percentage of Fully Capitated Physician Visits

Year	All Physician Visits	Non-PCP Visits	PCP Visits
2010	6.4	4.4	8.7
2011	7.0	4.6	9.9
2012	5.5	3.5	8.1
2013	5.5	4.0	7.7
2014	5.1	3.5	7.4
2015	7.1	5.0	8.9
2016	6.8	4.7	8.6
2017	6.7	4.9	9.3
2018	6.5	4.4	9.6
2019*	5.7	4.4	7.7
2020*	6.2	5.3	7.6

Data Source: Analyses of Medical Expenditure Panel Survey (MEPS), 2010-2020. MEPS was redesigned in 2018. Data on ambulatory care expenditures derived from the consolidated, office-based, and outpatient event files. See Appendix B for details.

Notes: The primary care physicians included family medicine, general practice, internal medicine, pediatrics, geriatrics, and osteopaths. All other subspecialists were non-primary care physicians.

*Precision is lower for 2019 and 2020 because of disruptions in data collection due to the COVID-19 pandemic (Samuel Zuvekas, personal communication, September 13, 2022).



KIM STUTZMAN, MD

Program Director, Family Medicine Residency of Idaho – Nampa Residency

Where were you trained, and do you feel like it has impacted your practice?

I trained at Family Medicine Spokane from 1991 to 1994. It was a community program with university affiliation, part of the University of Washington–Washington, Wyoming, Alaska, Montana and Idaho network. Training there clearly impacted my future as I was able to practice full-scope rural medicine in a community of 2,000 individuals for 12 years. Since then, I opened a rurally focused residency.

Oregon: Defining Primary Care Spending with Stakeholders

By Christine Haran

Oregon has been tracking primary care spending since 2016, following the passage of a law requiring the Oregon Health Authority and the Department of Consumer and Business Services to report on the percentage of medical spending allocated to primary care. Annual reports are published in a [data dashboard](#). The spending reports also highlight the percentage of those payments that are value-based.

Starting in 2023, the largest insurers in Oregon, along with the state’s Medicaid managed care plans, called coordinated care organizations, and the public employee benefits plans, will be required to spend at least 12% of all spending on primary care.

“Tracking and publishing these data have helped bring some specificity to these conversations,” said Zachary Goldman, health care cost economist with the Oregon Health Authority, explaining that given the absence of a uniform definition of primary care, there are still open questions about whether to include, for example, pharmaceutical drugs or behavioral health services rendered by a primary care provider, in primary care spending. “Defining these terms (e.g., primary care, value-based payment) in the early stages required significant engagement with interested parties.”

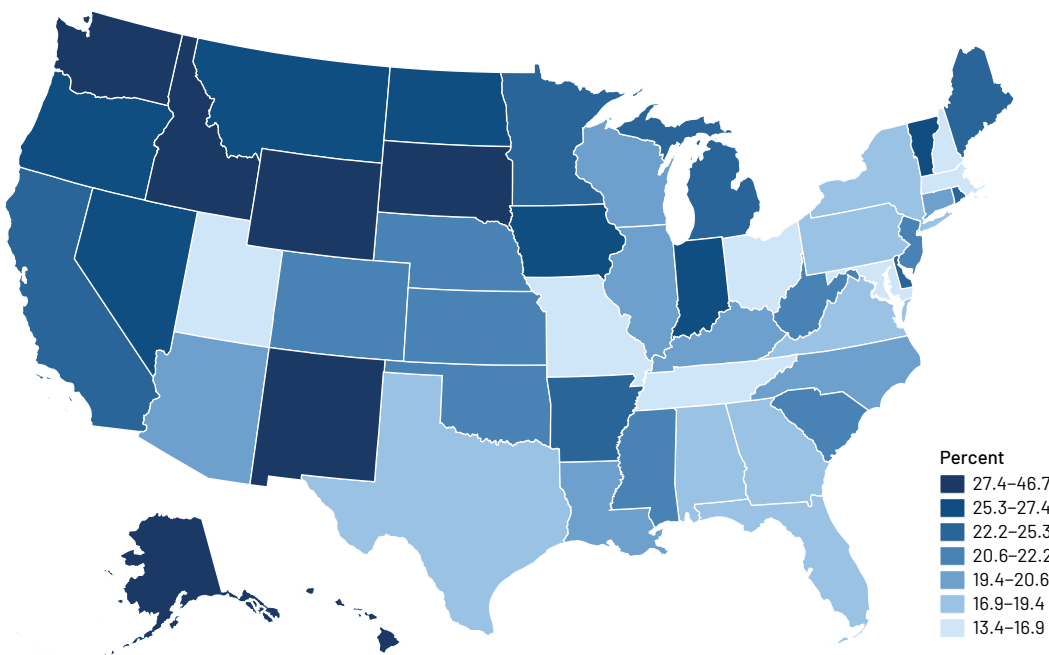
II. Workforce: The primary care physician workforce is shrinking and gaps in access appear to be growing.

Many areas of the country face a shortfall of primary care physicians. The availability of primary care physicians is an important component of access. From 2012 to 2020, just 20% to 21% of all physicians completing their residency, or 1 in 5, were practicing primary care two years later. Overall, about 1 in 3 US practicing physicians are PCPs, so the data point to a national need to strengthen the PCP pipeline to prevent the shortage from worsening.¹⁵

In 2020, rates of physicians entering primary care differed substantially across states (Figure 2), with higher percentages of new primary care physicians in western and rural states like Maine and Alaska. Tracking the percentage of physicians entering the primary care workforce in a state over time will help state officials develop policies that attract and maintain their PCP workforce.

From 2012 to 2020, of all physicians completing their residency, just 1 in 5 were practicing primary care two years later.

Figure 2. Percentage of Physicians Entering Primary Care by State in 2020

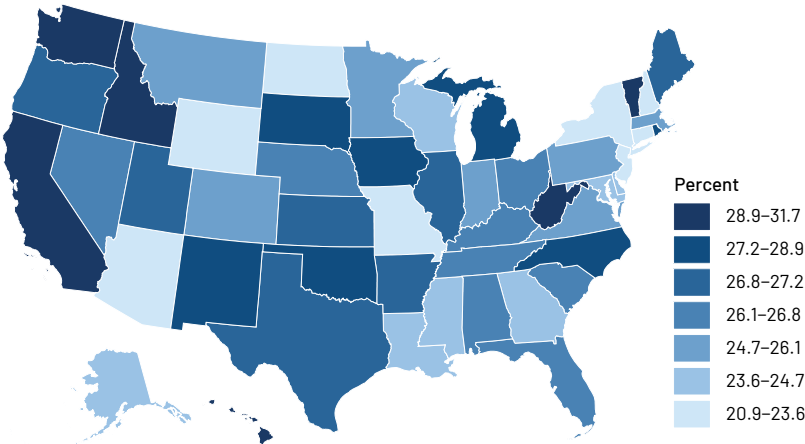


Data Source: Analyses of Accredited Council of Graduate Medical Education data in American Medical Association Masterfile, 2020.
Notes: Primary care specialties included family medicine, general practice, internal medicine, and pediatrics.

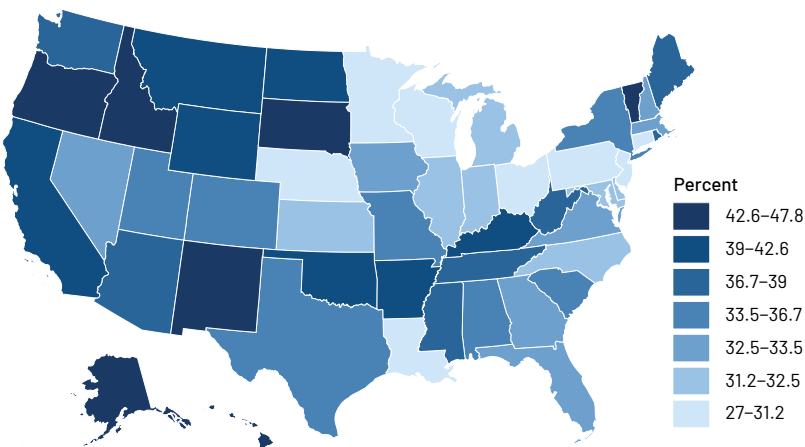
There is wide variation in the proportion of clinicians working in primary care by state (Figure 3). Along with primary care physicians, NPs and PAs are core members of the primary care workforce. In general, the states with a high percentage of primary care physicians also had high percentages of NPs and PAs – with some exceptions. Specifically, Iowa and North Carolina have a high density of primary care physicians but lower percentages of NPs and PAs. In Montana and North Dakota, there was a lower density of primary care physicians but a higher density of NPs and PAs.

Figure 3. Percentage of Physicians, Nurse Practitioners, and Physician Assistants Working in Primary Care by State in 2020

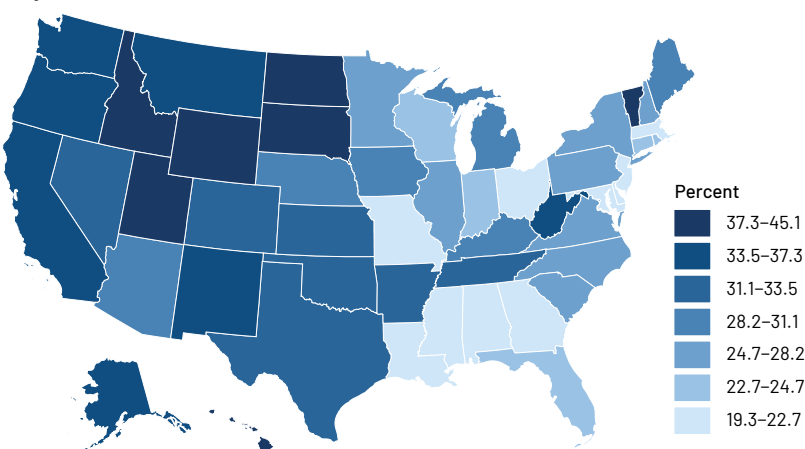
Physicians



Nurse Practitioners



Physician Assistants



Data Source: Analyses of American Medical Association Masterfile (2020), Centers for Medicare and Medicaid Services Medicare Provider Enrollment, Chain, and Ownership System (PECOS) data (2020), and Centers for Medicare and Medicaid Services Physicians and Other Suppliers data (2020).

Notes: Primary care specialties included family medicine, general practice, internal medicine, and pediatrics.



NICOLE SEAGRIFF, DNP, APRN, FNP-BC

On-Site Medical Director, Norwalk and Stamford, Conn., The Community Health Center, Inc. Clinical Program Director, National Nurse Practitioner Residency Program, Associate Faculty, Weitzman Institute

Did your nurse practitioner residency influence your decision to practice primary care?

When I was a student the Yale School of Nursing about 11 or 12 years ago, I had a clinical rotation at the Community Health Center and then applied to the NP residency program. I've been practicing at the Community Health Center ever since. We see similar results among our alumni of the residency program. During the pandemic, colleagues and I [surveyed our alumni](#) and found that 92% of respondents were still working as a nurse practitioner in clinical practice, and that 74% were still practicing as primary care providers – the majority of that group were still at a federally qualified health center.

Are you part of a primary care team?

Yes, we're very fortunate to have an amazing team-based focus. We have huddles in the morning and our teams are all co-located. We work closely with medical assistants, nurses, and ancillary supports like registered dietitians, certified diabetes care and education specialists, podiatrists, chiropractors, and of course – one of our closest collaborators – our behavioral health team.

Regulations related to scope of practice, which many states expanded for NPs and PAs during the COVID pandemic,¹⁶ and the availability of training opportunities, may impact the primary care workforce by state. For example, one study found that states that allow for NP autonomy see an increase in the number of NPs and in health care utilization among rural and vulnerable populations.¹⁷ Indeed, the states in this analysis with a high percentage of NPs working in primary care, such as Oregon, Idaho, and Nebraska, also have less restrictive scope-of-practice laws.¹⁸ Yet, states with very restrictive scope-of-practice laws such as California and Oklahoma also have high rates of NPs working in primary care, indicating that multiple factors determine entry into primary care for advanced practice clinicians. Furthermore, the lack of a uniform national data set that lists advanced practice clinicians' current specialties limits a complete understanding of workforce data for NPs and PAs.

Primary care access continues to lag in underserved communities. Another way of assessing whether every household in every community has access to primary care is measuring the number of primary care physicians per 100,000 population in medically underserved areas (MUAs). An MUA is an area designated by the Health Resources and Services Administration (HRSA) as having too few primary care providers, high infant mortality, high poverty levels, or a large elderly population.¹⁹ Living in MUAs, which are found in both rural and urban areas, has been associated with poor health outcomes, at least partially due to lack of adequate access to health care.^{20,21}

Between 2012 and 2020, the number of PCPs in MUAs remained static, but the PCP supply in non-MUAs rose, increasing the gap in the number of PCPs per 100,000 people by 5%. As of 2020, there were approximately 55.8 PCPs per 100,000 people in MUAs, well below the rate of 79.7 primary care physicians per 100,000 in areas that are not MUAs. As shown in Figure 4, rates for both MUAs (red dots) and non-MUAs (green dots) vary substantially across the nation.

For some states, the gap in PCPs per 100,000 people between MUAs and non-MUAs is large (signified by the length of the arrows). Generally, non-MUAs have more PCPs than MUAs. Although efforts by organizations such as community health centers play a central role in providing access to patients in medically underserved areas, the data demonstrate that much of the country still falls short in meeting these critical access needs.



DAVID C. DUGDALE, MD

Medical Director, Value Based Care, UW Medicine, Professor of Medicine, University of Washington School of Medicine

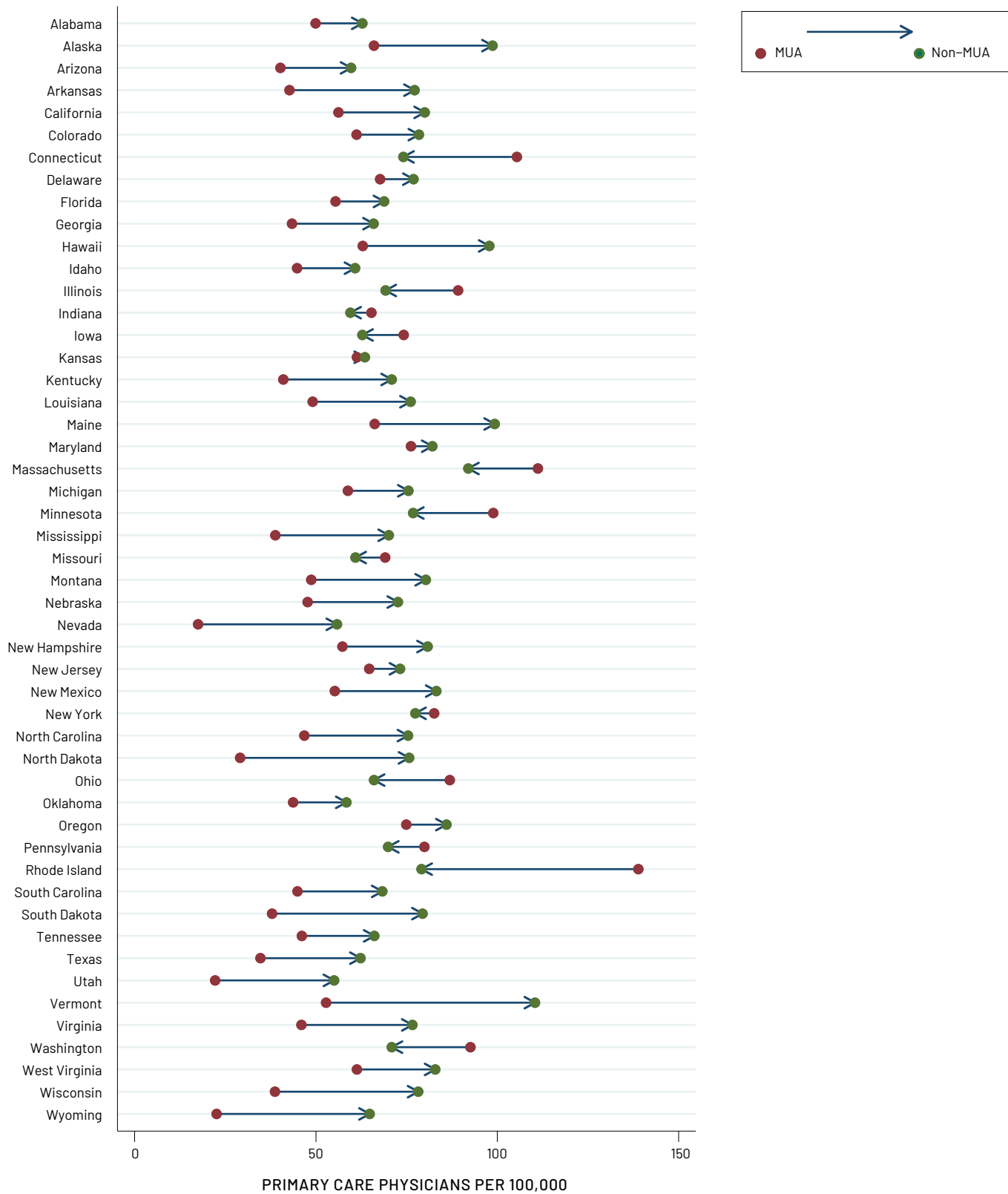
Can you describe your training in internal medicine and how it works today?

I was trained in internal medicine from 1982 to 1985. It was very traditional hospital-based training with some outpatient care in hospital-associated outpatient departments. In the past 15 years, probably the most common training experience for internal medicine clinicians and post-training career trajectory has been into hospital medicine. But there's a subset of internal medicine trained doctors who go into primary care internal medicine like me, and we tend to miss out on exposure to community-based models. I think many training programs have recognized this, and now make residency opportunities available that didn't exist when I was being trained. But it still probably wouldn't have the same type of exposure as our family medicine colleagues, who have emphasized a more community-based approach.

How has your primary care career been meaningful?

The unbound nature of primary care, the open-ended commitment brings certain positives with it that I think many other clinicians simply don't experience. I have valued the intimate knowledge of people's lives and circumstances as they relate to my trying to do the best job I can vis-a-vis their health care. I think, for the most part, that holistic view isn't hardwired into the field in other specialties.

Figure 4. Primary Care Physicians per 100,000 People in MUAs and non-MUAs by State



Data Source: Analyses of site-level information from publicly available Accredited Council for Graduate Medical Education data, MUA HRSA Data Warehouse, Medically Underserved Area Dataset (2020), and United States Department of Agriculture Rural-Urban Continuum Codes.

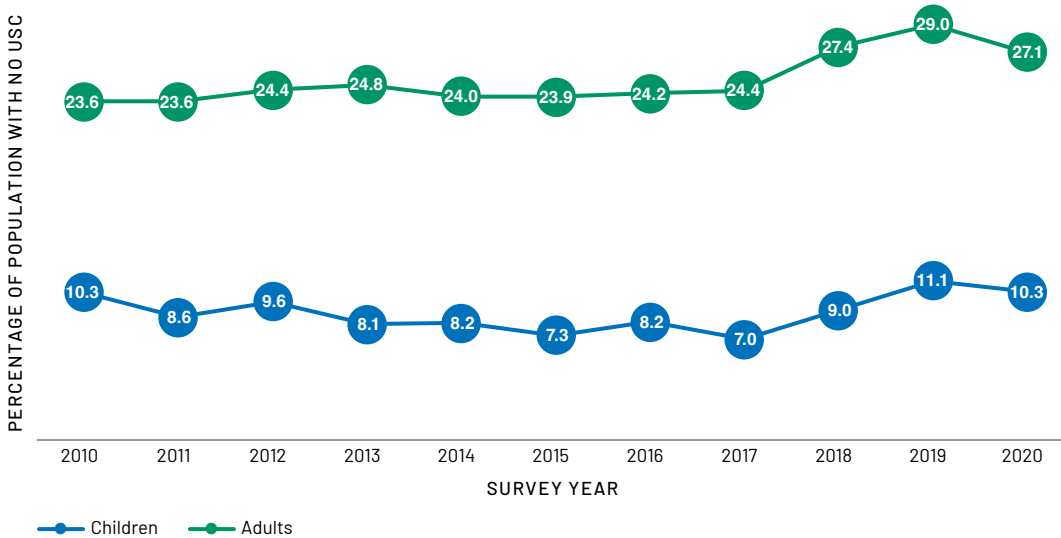
III. Access: The percentage of adults reporting they do not have a usual source of care is increasing.

Sustained, personal relationships between patients, their families, and their primary care team are considered foundational to high-quality primary care. Studies have repeatedly shown that having this regular, or usual, source of health care improves patient outcomes and reduces unnecessary utilization of emergency rooms and hospitals.^{22,23}

Despite the value of relationships in patient care, 27% of US adults reported no usual source of care or reported that the emergency room was their usual source of care in 2020, up from less than one-quarter (23.6%) in 2010. The percentage of children with no usual source of care was flat for most of the time period (Figure 5). There was a decrease in reports of no usual source of care for both groups from 2019 to 2020, but this one-year trend should be tracked over time before any conclusions can be made about the impact of the COVID-19 pandemic on usual source of care.

Despite the value of relationships in patient care, 27% of US adults reported no usual source of care or reported that the emergency room was their usual source of care in 2020.

Figure 5. Percentage of the US Population Without a Usual Source of Care



Data Source: Analyses of Medical Expenditure Panel Survey (MEPS) Data 2010-2020.

Notes: Usual source of care (USC) ascertained whether there is a particular doctor's office, clinic, health center, or other places that the individual usually goes when sick or in need of health advice. No usual source of care includes those who reported no usual source of care and those who indicated the emergency department as their USC.

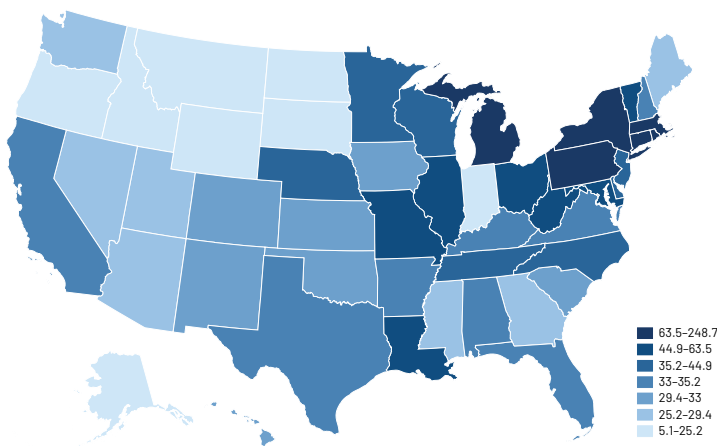
It is notable that this trend occurred in spite of steadily decreasing rates of uninsurance, due to Affordable Care Act coverage expansions.²⁴ Their source could be underinsurance, inadequate physician supply, or changing patient behavior. Regardless of the cause, there appear to be fewer of the long-term clinician-patient relationships considered intrinsic to the NASEM definition of high-quality primary care.

IV. Training: Too few physicians are training in community settings – where most primary care takes place.

While the workforce measures in this report are focused on primary care, the training measures are focused on all physician trainees as recommended by the NASEM committee. Seeing the entire physician training picture, and not just the primary care picture, is important when considering how graduate medical education in the United States may be contributing to primary care workforce shortages or maldistribution.

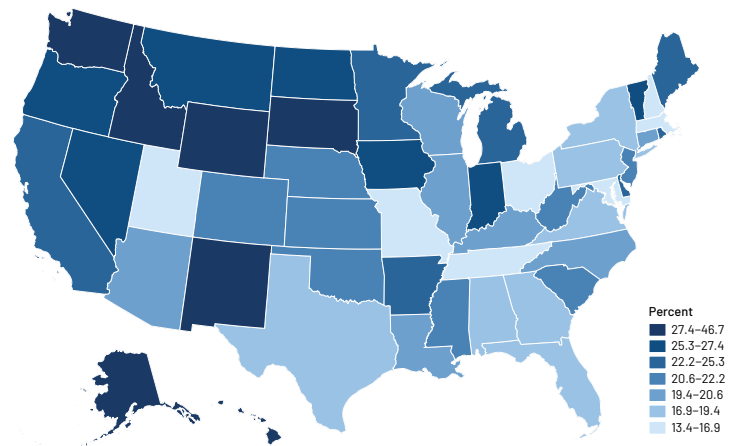
The distribution of physician residents does not match the areas where physicians are entering primary care. In 2022, the Northeast had the highest density of physicians-in-training (residents) overall, and the western states and Alaska had the lowest (Figure 6). Yet in much of the Northeast, the proportion of physicians entering primary care is among the lowest in the country (Figure 2).

Figure 6. Medical Residents per 100,000 People by State in 2020



Data Source: Analyses of Accredited Council for Graduate Medical Education program-level data to get counts for medical residents and Area Health Resource File for the population data (2017–2020, 2022).

Figure 2. Percentage of Physicians Entering Primary Care by State in 2020



Data Source: Analyses of Accredited Council of Graduate Medical Education data in American Medical Association Masterfile, 2020.

Notes: Primary care specialties included family medicine, general practice, internal medicine, and pediatrics.

The mismatch between training opportunities and PCP supply signals that graduate medical education (GME) funding is not set up to support the growth of primary care but instead encourages subspecialty fields. In fact, most GME funding is allocated to the sponsoring institution (usually a hospital)²⁵ even though primary care occurs in the community rather than the inpatient setting.²⁶

Although less is known about the distribution of NP and PA training programs, the largest proportion of postgraduate NP training also occurs within hospitals or large health systems.²⁷

Community-based training initiatives, such as the Teaching Health Center (THC) program, have been shown to produce graduates who are more likely to care for underserved patients and work in rural areas.²⁸ The NASEM report recommended that these alternative training and funding models for GME continue to be supported.

High-Quality Primary Care in Focus: Authority Health’s Teaching Health Center

By Emily M. Hawes, Jacob Rains, Candice Chen, and Erin Fraher

Authority Health’s Teaching Health Center (THC) is transforming primary care delivery in urban and rural Michigan. Seventy-eight medical residents across four specialties (internal medicine, family medicine, pediatrics, and psychiatry) have increased access to primary care, providing 80,000 patient visits a year that would not exist without the THC program. Residents deliver primary care to patients through a multidisciplinary group-practice model integrating doctors with nurses, social workers, and other health professionals in community-based settings. Through preventive health and chronic disease management, Authority Health specializes in training residents to meet the needs of populations at risk for conditions such as opioid use disorder and diabetes. In addition, the THC residency program has allowed Authority Health to expand the availability of evening care, assist patients with

insurance enrollment, and integrate residents into nonclinical settings via a community medicine rotation.

The THC program specializes in growing the primary care workforce in underserved areas and retaining graduates to continue to provide whole-person care to patients. Since the Authority Health THC’s inception in 2013, 49% of graduates have stayed in Michigan and 62% are practicing in a medically underserved area. These data align with recent nationwide findings showing that THC graduates are more likely than other graduates to care for medically underserved populations (35.2% vs. 18.6%) and practice in federally qualified health centers (26.70% vs. 11.69%). THC graduates are also more likely to provide behavioral health care, buprenorphine prescribing, and outpatient gynecological procedures to their patients.

Sources:

Authority Health. Graduate Medical Education (GME). 2023. <https://authorityhealth.org/graduate-medical-education-2/>

Davis CS, Roy T, Peterson LE, Bazemore AW. Evaluating the Teaching Health Center graduate medical education model at 10 years: practice-based outcomes and opportunities. *J Grad Med Educ.* 2022;14(5):599-605. doi:10.4300/JGME-D-22-00187.1

There is large state variation in the availability of training in medically underserved areas and rural counties, which are more likely to offer community-based training. To build a robust and evenly distributed primary care workforce, the NASEM report called for primary care teams in all states to have training in community-based settings where most primary care occurs. Yet, some states train only 5.9% of physician residents in MUAs or rural counties, while other states expose all physician residents to these settings (Figure 7).

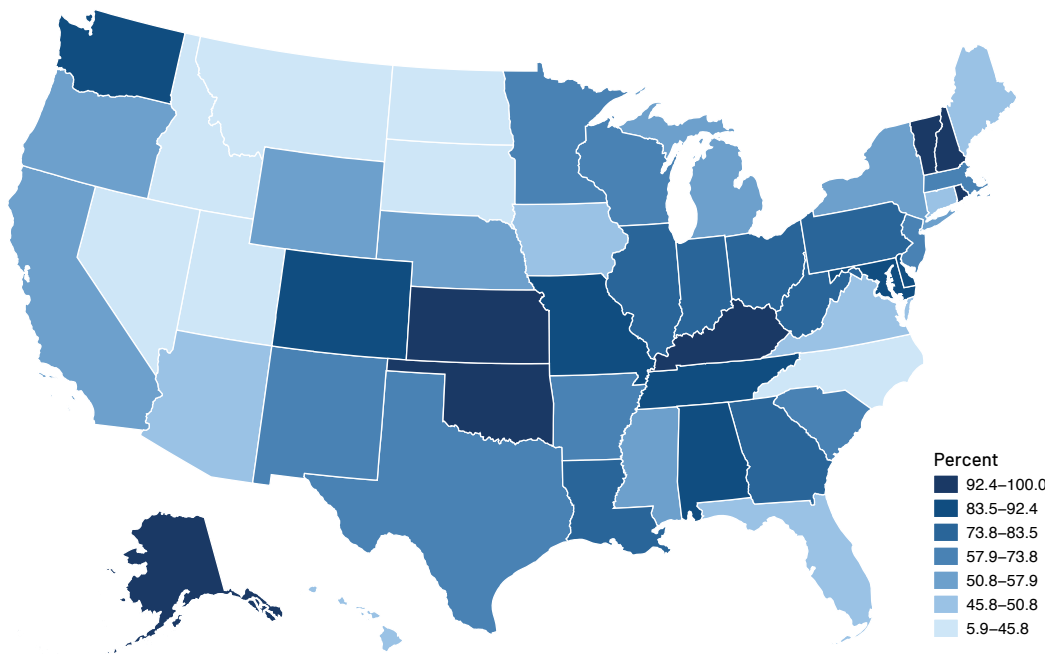
Johns Hopkins' Urban Health Residency Program Diversifies Pipeline, Keeps PCPs Local

Johns Hopkins University runs two urban health residency programs – a combined internal medicine–pediatrics program and a primary care track internal medicine program – that are based out of a local federally qualified health center (FQHC). Over 90% of the graduates of these programs have stayed in primary care, and about 75% of them have stayed in Baltimore. Program officials attribute the program's success in retaining students in primary care to (1) conducting a rigorous interview process to ensure they are picking people who are committed to primary care, (2) building a community around these residents that fosters their interest in primary care, (3) focusing on the wellness of their

residents, and (4) giving them an enjoyable primary care experience. Being a part of an FQHC has served as a draw in terms of recruiting residents who are interested in the mission of urban health for underserved populations. The residency programs were also able to make strides in recruiting residents underrepresented in medicine by creating an associate program director position dedicated to diversity, equity, and inclusion to help recruit these residents and support them once they are in the program. As a result, in recent years, about half the class of residents has been made up of those who are underrepresented in medicine.

Reprinted from: Kona M, Houston M, Clark J, and Walsh-Alker E. Assessing the Effectiveness of Policies to Improve Access to Primary Care for Underserved Populations: A Case Study Analysis of Baltimore, Maryland. Milbank Memorial Fund. August 15, 2022.

Figure 7. Percentage of Physician Residents Trained in a Medically Underserved Area or Rural County by State in 2020



Data Source: Analyses of site-level information from publicly available Accredited Council for Graduate Medical Education data, MUA HRSA Data Warehouse, Medically Underserved Area Dataset (2020), and United States Department of Agriculture Rural-Urban Continuum Codes.

Community-based training locations such as community health centers contribute to the training of residents as well but are not represented in these maps given limitations of the data. According to 2021 HRSA national data reports, approximately 572 PAs, nearly 2,000 NPs, and nearly 6,000 physicians a year receive some postgraduate training in community health centers.²⁹

The Primary Care Physician's Perspective on a Changing Field

By Christine Haran

Like many other primary care physicians, family medicine physician Nicole Henry-Dindial, MD, of New Jersey, has worked for larger and larger organizations over time. Her independent physician association (IPA) of 23 family medicine physicians merged with Summit Medical Group, a multispecialty organization encompassing over 200 physicians.

Summit Medical Group later merged with CityMD through the help of a private equity investor, to form Summit Health, employing over 1,500 providers. Less than three years later, they are undergoing an acquisition by another entity, VillageMD, which is financed by Walgreens and CIGNA.

Twenty-five years ago, Dr. Henry-Dindial attended CUNY Medical–Sophie Davis School of Biomedical Education in New York City, which offers positions to about 70 medical students from historically underrepresented groups who, like her, want to go into primary care. She was drawn to family medicine because of the diversity of the practice. “I like being able to go in one room and manage someone’s mental health problem, go into another room and take care of an infant and talk about milestones, and then see another patient for GYN care.”

As a student, she trained at an academic medical center, but because it was difficult for her as a nonspecialist to gain experience with then-common family-medicine procedures like placing central lines to assist with surgery, she chose a community-based residency at Overlook Medical Center.

Dr. Henry-Dindial’s original IPA had a patient-centered medical home model, and as a part of Summit Health, further evolved into team-based care. She and her fellow physicians now draw on the organization’s resources such as case managers and pharmacy and behavioral health departments. Her office also has a transition of care program with care management nurses that reach out to patients within two or three days of a hospital discharge. They help patients with discharge instructions, coordinating follow-up care and helping avoid medication errors.

Still, Dr. Henry-Dindial struggles with what she calls the “trifecta” of low reimbursement; administrative hurdles like “never-ending” charting and preauthorization for medications, tests, and procedures; and the loss of autonomy associated with being an employed doctor.



Nicole
Henry-Dindial,
MD

“When we called the shots in our practice, we could make the decision to say, ‘Okay, I’m going to see fewer patients and spend more time with each one,’ but owning the decisions that affect our revenue,” she says. “Now, when you’re employed, you’re told you need to see a certain number of patients within a certain time frame.”

Dr. Henry-Dindial also observes that prior to the pandemic, physicians could exchange some patient hours for teaching medical students and residents as part of the tradition of physicians teaching the next generation. But as individual practices become incorporated into larger entities, they dissuade non-revenue-generating activities, says Dr. Henry-Dindial, who was directed to “volunteer to teach on her own time.”

In addition, the company stopped her office from serving as a clinical family medicine site for first- and third-year students initially due to safety concerns with the pandemic but now because they don’t see the value in it to their profits. The dwindling availability of clerkship sites for students to rotate through adversely affects the ability to recruit new primary care doctors. In addition, it’s the loss of an activity that can help prevent physician burnout, she argues.

Dr. Henry-Dindial sees the need for more investment in primary care medical education, particularly for students from historically underrepresented groups – and in primary care practices. “Resources need to be spent to help the family physician, pediatrician, and the internal medicine physician, be they solo practitioners or in large groups, be able to care for the increased needs of patients,” Dr. Henry-Dindial said. “Because when we send them to the specialist, it costs both the patient and the health care system more money.”

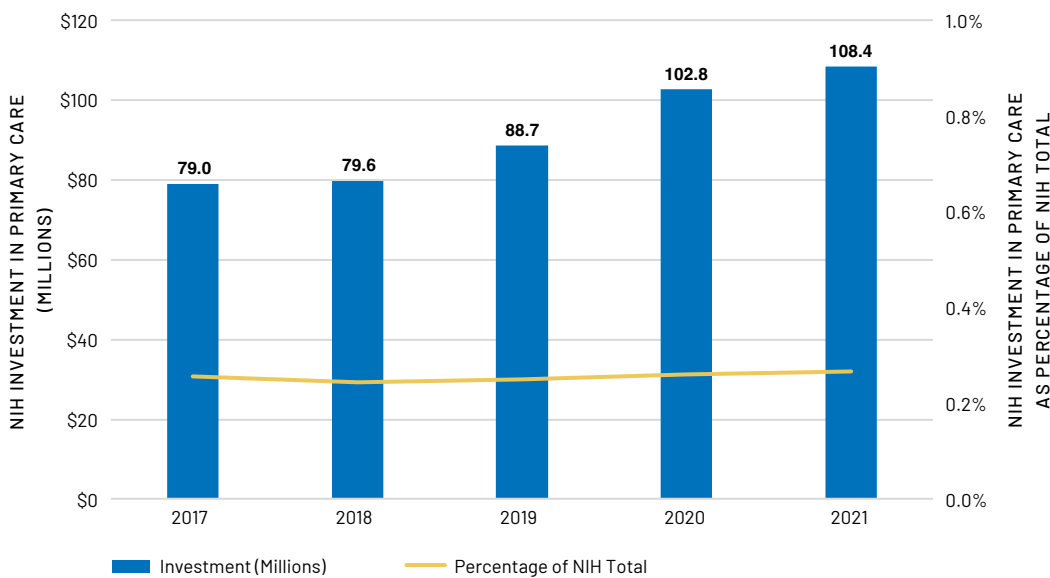
V. Research: There are few federal funding opportunities for primary care research, with only 0.2% of National Institutes of Health funding allocated to primary care.

To implement high-quality primary care, it is important to identify the components of high-quality care, study how best to implement the components, and measure its impact on outcomes. To this end, the NASEM report said research on primary care systems, delivery models, and quality of primary care must be supported. Traditionally, funding dedicated to primary care research has been limited, and investments in federal agencies that are tasked with researching primary care have been tenuous and inadequate.^{30, 31}

From 2017 to 2021, the percentage of National Institutes of Health (NIH) research funding allocated to family medicine has remained flat at just above 0.2% (Figure 8). Although family medicine is not the only primary care specialty, we chose it for this measure because it is the specialty with the highest number of health care encounters in the United States.³² Moreover, tracking research funding related to primary care for internal medicine and pediatrics is difficult because some of that research covers subspecialties and/or focuses on inpatient settings. It's also important to acknowledge that agencies other than the NIH support primary care research. Still, an in-depth analysis conducted by RAND using a more complex methodology to define primary care research and looking at more federal agencies found similar results.³³

From 2017 to 2021, the percentage of National Institutes of Health research funding allocated to family medicine has remained flat at just above 0.2%.

Figure 8. NIH Investment in Primary Care in Millions of Dollars and as a Percentage of Total Funding



Data Source: NIH RePORTER, 2017-2021.
Notes: Family medicine as proxy for primary care, unadjusted dollars.

Tracking the research dollars that are invested in studying primary care will allow for accountability and should result in a shift of federal research dollars toward studying the only specialty that has been shown to decrease morbidity and mortality and improve the health of the population.³⁴

CONCLUSION

Achieving high-quality primary care for all will require purposeful steps guided by evidence and data. The results from this first national scorecard suggest the need for dramatic improvements in all categories covered in the NASEM report. While performance on the metrics in this first report are not likely to change dramatically in a year or two, they point to the need to enact policies that support high-quality primary care now and sustain them to see improvements over time.

The goal of this scorecard is to give the nation a starting point both for policy advocacy and accountability measures to help ensure that the United States builds a strong foundation of primary care. Today's primary care clinicians struggle with insufficient payment, not enough trainees entering the workforce, and inadequate funding for community-based training and research needed to sustain and advance the field. Examining performance on each of the measures can inform federal and state official decisions about relative weaknesses and strengths – and help identify policy priorities. (See Strategies for Implementing High-Quality Primary Care below.)

The ideal number or percentage for any of these measures – the percentage of health care dollars going to primary care spending, the percentage of primary care payment based on capitation, the supply of primary care clinicians, and the percentage of research funding going to primary care – is not fully understood. However, it's abundantly clear that, in each circumstance, there is a need for improvement and reduced variation in performance across regions and populations, as well as more research.

In addition, the report highlights the need for improved data collection and analytics to better assess support for high-quality primary care at the national and state levels. As outlined in [Appendix B](#), additional data are needed to provide a complete and accurate picture of the supply and training of all members of the primary care workforce (not just physicians); the percentage of primary care payment that combines fee-for-service and capitation in ways that support high-quality, whole-patient care; or the impact of information technology on the patient and the provider. Given data gaps and limitations, more progress in measurement will need to be made to fully track progress toward the NASEM report's objectives. Over time, as the measures included in the scorecard are refined, subsequent scorecards will be able to assess noteworthy trends and score performance nationally and, for some measures, across states.

The United States spends more per capita on health care than any other developed nation yet has the worst health outcomes.³⁵ To move from an inefficient health care system to one that meets everyone's needs, we need to build a stronger foundation of high-quality primary care. Monitoring and reporting on national and state progress toward achieving high-quality primary care is an essential step toward accountability and positive change.

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The goal of this scorecard is to give the nation a starting point both for policy advocacy and accountability measures to help ensure that the United States builds a strong foundation of primary care.

STRATEGIES FOR IMPLEMENTING HIGH-QUALITY PRIMARY CARE

Along with recommending a primary care scorecard to ensure accountability for the implementation of high-quality primary care, the NASEM report offered recommendations to help strengthen support for primary care. Some of these recommendations are listed at right.



Reform Payment

- The Centers for Medicare and Medicaid Services (CMS) and states should increase the overall portion of spending going to primary care.
- Payers should use payment models that promote the delivery of high-quality primary care, rather than focusing on short-term cost savings.
- Payers using a fee-for-service (FFS) model should shift primary care payment toward hybrid (part FFS, part capitated) models, and make them the default over time.



Ensure Access

- Payers should ask all covered individuals to declare a usual source of primary care annually and should assign nonresponding enrollees to a source of care. When community health centers, hospitals, and primary care practices treat people who are uninsured, they should assume and document an ongoing clinical relationship with them.
- The US Department of Health and Human Services (HHS) should target sustained investment in creating new health centers in areas with a shortage of primary care.
- CMS should revise and enforce its access standards for primary care for Medicaid beneficiaries and assist state Medicaid agencies in attaining these standards.
- CMS should permanently support the COVID-era rules that have facilitated integrated team-based care, enabled more equitable access to and payment for telephone and virtual visits, and eliminated other barriers to high-quality primary care.



Train Primary Care Teams

- Health care organizations and local, state, and federal government agencies should expand and diversify the primary care workforce, particularly in areas that are medically underserved and have a shortage of health professionals, to strengthen interprofessional teams and better align the workforce with the communities they serve.
- CMS, the US Department of Veterans Affairs, the Health Resources and Services Administration, and states should increase accountability for or increase funding to support interprofessional training in community-based, primary care practice environments.
- Organizations that train, hire, and finance primary care clinicians should ensure that the demographic composition of their primary care workforce reflects the communities they serve and that the care delivered is culturally appropriate.



Ensure Implementation

- The HHS secretary should establish a Secretary's Council on Primary Care and a more permanent Office of Primary Care to support access to high-quality primary care for everyone.
- HHS should form an Office of Primary Care Research at the National Institutes of Health and prioritize funding of primary care research at the Agency for Healthcare Research and Quality, via the National Center for Excellence in Primary Care Research.

Source: National Academies of Sciences, Engineering, and Medicine. *Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care*. The National Academies Press; 2021. doi:10.17226/25983

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