

# Investing in Primary Care: The Nurse Practitioner Will See You Now

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## ABSTRACT

Nurse practitioners (NPs) are now the fastest growing health profession in the United States and comprise 47% of all US primary care clinicians. Decades of research confirms the safety, quality, and effectiveness of care provided by NPs, including care for complex patients, and their acceptance and approval by patients. Yet challenges remain in recruiting and retaining NPs in primary care. In addition to barriers reported by primary care clinicians in most settings, NPs in particular face (1) variation in state practice regulations and institutional policies; (2) inadequate reimbursement rates from Medicare and many private insurers; and (3) a lack of federal financing for training, support, and mentoring. Cultural norms about roles, responsibilities, and authority in health care may exacerbate these challenges. This report offers opportunities to support the continued advancement of preparation and growth for NPs to meet the population's primary care needs. State policymakers should partner with advanced practice nurses, physicians, and others to bridge these divides and fully realize the potential of NPs to provide high-quality and effective team-based care.

## EXECUTIVE SUMMARY

Nurse practitioners (NPs) have been an essential component of the US primary care workforce since the late 1960s.<sup>1</sup> The most recent data show that NPs comprise 47% of all US primary care clinicians and, together with physician assistants/associates (PAs) and certified nurse midwives (CNMs), comprise 52% of primary care clinicians working in community health centers.<sup>2,3</sup> Decades of research confirms the safety, quality, and effectiveness of care provided by NPs, including care for complex patients, and patients' acceptance and approval of them.<sup>4-6</sup>

At the same time, the United States is facing a worsening shortage of primary care clinicians. This shortage has many inputs: an aging physician workforce, inadequate financial support for primary care, and more physicians, NPs, and PAs choosing specialty practice areas.<sup>7,8</sup> It is imperative that the US invest in strategies to prepare, attract, and retain the best, brightest, most committed primary care clinician workforce; support them with satisfying and highly effective practice settings; and make those settings models of innovation, collaboration, and teamwork that enhance patient outcomes and provider satisfaction.

More than 60 years since the NP role was created, challenges and variations in reimbursement and practice authority persist. Medicare still sets NP reimbursement at 85% of the physician fee schedule (other than for institutional billers such as community health centers), a practice adopted by many insurers/payers, even when the service, complexity, and time is identical to care provided by a physician. Consequently, provider practices may opt to bill NP services "incident to" a physician in the practice, generally resulting in higher payment to the

practice. While this approach may be financially advantageous, it works against transparency, accountability, and data integrity. Another challenge is state-level variation in scope of practice and practice authority for NPs. There is a trend toward full practice authority, with 28 states and Washington, DC, allowing full NP practice, but there are still 12 states with “reduced” authority (requiring supervision for at least one domain of practice) and 11 states with restricted practice.<sup>9</sup> The Department of Veterans Affairs (VA) sought and achieved full practice authority nationally for all VA NPs in 2016.<sup>10</sup>

Notably, community health centers and the VA, along with some private and public health systems, have been leaders in the development of formal postgraduate training programs in primary care, akin to what graduate medical education (GME) funding has supported for new physicians since 1965. New NPs have access to 12- to 24-month accredited postgraduate residency or fellowship training programs in primary care that provide a depth and intensity of clinical experience and the confidence that comes with it,<sup>11,12</sup> but federal dollars to support such training are limited and may be eliminated under the Trump administration’s budgets.

At the same time, virtually all primary care practices, and certainly those caring for underserved populations, face enormous pressures to provide optimum primary care that addresses the full range of health care challenges and social needs. This is occurring in a still predominantly fee-for-service environment, with the unrelenting pressures of time, documentation, care coordination and management, and patient volume. These stressors are faced by all primary care providers, not just NPs, and call for increased practice-level support in the form of team-based care that includes behavioral health support, use of emerging technology to decrease clinician documentation burden, and fair compensation for all team members.

The persistent belief by some that physicians must be in charge of primary care teams may exacerbate these challenges for NPs, even though many NPs practice independently, often in NP-owned practices, and in some of the most underserved areas of the country. Team-based care, with leadership based on clinician expertise, experience, and ability – regardless of discipline – offers perhaps the best solution to enhance productive collaboration and support staff expertise and development.

People with a usual source of care are healthier, use fewer expensive services, and report fewer disparities than those without. Ensuring that everyone has access to a usual source of care requires the recognition that primary care is most effectively delivered in a team-based model.\* In this report, we seek to synthesize evidence to address three foundational questions: (1) What is the current and future role of NPs in delivering high-quality primary care, and how is this influenced by policies governing who can treat patients and under what circumstances? (2) What reimbursement and data collection issues must be resolved to realize this role? and (3) How can additional investments in postgraduate training for NPs committed to primary care benefit patients and support new clinicians? As we answer these questions, we highlight regulatory, payment, policy and training barriers and opportunities to create a future where the answer is “Yes, your primary care provider can see you now.”

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\*While this report focuses on advanced primary care clinicians, we acknowledge that all members of effective teams — including behavioral health providers, registered nurses, clinical pharmacists, and medical assistants — warrant training attention.

## BACKGROUND

According to the latest Health of US Primary Care Scorecard, as reported in *The Health of US Primary Care: 2025 Scorecard Report – The Cost of Neglect*, the portion of adults in the US lacking a usual source of care is at an all-time high and the country is experiencing a shortage of primary care clinicians. The number of primary care physicians per 100,000 people was 67 in 2022, compared with nearly double that (124 per 100,000) in Canada.<sup>8,13</sup> When NPs and PAs are included, the nation still only has 103.8 primary care clinicians per 100,000 people. And the problem is getting worse: The proportion of the clinician workforce in primary care is decreasing.<sup>8</sup> The Scorecard also suggests that, for the first time, NPs and PAs may be joining physicians in the trend of moving to other specialties.

The same issues that may drive physicians to pursue specialties outside primary care, like higher compensation and improved work-life balance, likely contribute to this shift. Additionally, other factors, including underinvestment in postgraduate training and practice limitations, also contribute to NPs and PAs opting for other specialties.<sup>14</sup> This shift away from primary care is occurring alongside growth in the overall number of NPs in the US; the increase of postgraduate residency/fellowship training for new primary care NPs; and the creation of new medical and nursing schools.<sup>15</sup> While those developments are promising, the current level of investment and policy and practice barriers present challenges to improving primary care access and quality.

Concerns about the size and adequacy of the US primary care workforce predate the Scorecard. The Affordable Care Act (ACA) started to address drawing more primary care physicians (and psychiatrists and dentists) into community health centers by establishing the Teaching Health Center Graduate Medical Education program. While this program was reauthorized by the recently passed HR 1 (The Big Beautiful Bill Act),<sup>†</sup> the GME funding system overall is producing more specialty physicians than primary care physicians at an increasing rate.<sup>8,16</sup> The ACA also authorized demonstration grants for postgraduate NP residency training in safety net settings, but these were not appropriated. Other federal grants for postgraduate NP training were not funded until 2018 under the Advanced Nursing Education–Nurse Practitioner Residency (ANE–NPR) program of the Health Resources and Services Administration (HRSA).<sup>17,18</sup> The ANE–NPR program and 14 other health workforce programs were not recommended for funding in President Trump’s proposed fiscal year 2026 budget. However, ANE–NPR funding was restored in the Senate bill, with final determination pending congressional approval in October 2025.<sup>19</sup>

The future of widely available high-quality primary care depends on making primary care attractive to advanced practice clinicians like NPs and PAs. Research demonstrates that NPs are more likely than physicians to provide primary care in rural areas, underserved communities, and in health professional shortage areas (HPSAs).<sup>4,20</sup> The number of NPs choosing to deliver primary care in rural areas is increasing: The percentage of rural primary care practices employing NPs rose from 31.4% in 2008 to 43.4% in 2016.<sup>21</sup> Moreover, primary care practices with NPs are more likely to accept Medicaid than those without NPs, and are more likely to be located in socioeconomically disadvantaged areas.<sup>22,23</sup>

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<sup>†</sup> HR 1, also known as the One Big Beautiful Bill Act, was signed into law on July 4, 2025.



There is strong evidence for the safety and quality of NP care. A large-scale study on primary care delivered to Medicare patients found that primary care NPs effectively prevent hospitalizations and adverse outcomes, with other research showing that NP-delivered primary care is between 21% and 34% less expensive than physician-delivered primary care.<sup>24–26</sup> Multiple systematic reviews show similar results. A global systematic review of NP care found 29 indicators in which NP and advanced nursing care was comparable or superior to physician-led care, five indicators with mixed results, and no indicators in which physician care outperformed NP care.<sup>6</sup> Other systematic reviews focused on NP-delivered mental health services in primary care settings found that NP-delivered care was comparable to physician care, yielding positive patient outcomes and self-management.<sup>27</sup> A systematic review on NP-delivered primary care for patients with multiple chronic conditions found that NP care models were associated with similar or reduced spending, comparable or higher quality care, and fewer hospitalizations and emergency department visits compared with primary care delivered without NP involvement.<sup>28</sup> A systematic review of randomized controlled trials (RCTs) found that NPs “enhance patient care, service cost-effectiveness, efficiency and general patient satisfaction.”<sup>6</sup> Another systematic review of RCTs found NP-led primary care to be superior to physician-led primary care for health outcomes (e.g., blood pressure, blood glucose, lipids), satisfaction, and cost, and NPs spent more time with patients (without increasing cost).<sup>29</sup> The same study found comparable outcomes for NP- and physician-led care regarding mortality, body mass index, cholesterol, and asthma control, and mixed results for diagnostic test orders.<sup>29</sup> Despite this body of evidence, the media has reported concerns about the adequacy of training, including, most recently, the proliferation of for-profit education programs.<sup>30</sup>

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*Since 2016, the VA has granted qualifying NPs full practice authority across all 50 states based on research demonstrating that NP-led primary care is cost-effective and comparable in quality to physician-led primary care.*

## Questions to Consider When Developing Policies to Support NPs in Primary Care

### I. What is the current and future role of NPs in delivering high-quality primary care, and how is this influenced by policies governing who can treat patients and under what circumstances?

The National Academies of Sciences, Engineering, and Medicine (NASEM) report *Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care* describes high-quality primary care as “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.”<sup>31</sup> The NASEM report also stresses that “allowing NPs and PAs to practice at the top of their licensure would also help facilitate team-based care, alleviate some of the burden on physicians, and improve access to services.”<sup>31</sup> However, practice limitations continue to present barriers to the full actualization of NP care.

**Practice Authority.** Since 2016, the VA has granted qualifying NPs full practice authority across all 50 states based on research demonstrating that NP-led primary care is cost-effective and comparable in quality to physician-led primary care.<sup>10,32</sup> As of October 2024, only 28 states and Washington, DC, allow full practice, while 11 states restrict practice and 12 allow reduced practice.<sup>9</sup> According to the American Association of Nurse Practitioners, full practice allows NPs to “evaluate patients; diagnose, order and interpret diagnostic tests; and initiate and manage treatments, including prescribing medications and controlled substances.”<sup>9</sup> Reduced practice refers to restraints such as collaborative agreement requirements or

limitations on at least one of the elements of NP practice listed above, while restricted practice places limitations on NP practice elements and requires career-long supervision.<sup>9</sup> As with all licensed independent health care providers, the scope and independence of one's practice is determined at multiple levels, including state licensure, board certification, institutional credentialing/privileging, and insurer credentialing. Beyond that, all health care providers have an ethical responsibility to refrain from delivering any care they are not competent to provide and to refer patients to other sources of care when necessary.

State legislation sets NP practice authority rules, which are then overseen by state boards of nursing.<sup>33</sup> Research shows that states allowing full NP practice authority have healthier populations, offer higher quality of care, have greater proportions of primary care providers, and achieve higher levels of childhood immunization compared with states with reduced or restricted practice.<sup>34</sup> Accordingly, states that transition to full NP practice can improve access to care, particularly for Medicaid patients.<sup>35,36</sup> Since 2014, seven states (Delaware, Kansas, Maryland, Nebraska, New York, South Dakota, and Utah) have moved from reduced practice to full NP practice authority, citing workforce shortages, increased patient choice, and the need to increase access to care in underserved communities.<sup>9,37</sup> Additionally, prompted by COVID-related workforce shortages, Massachusetts transitioned from restricted to full practice authority in 2021, with preliminary research showing improved timeliness of care and increased efficiency.<sup>35</sup> The state has also shifted to a Medicaid model that rewards quality, team-based primary care that includes physicians, NPs, PAs, and community health workers.<sup>8</sup>

Several states with restricted NP practice are among those with a majority of counties designated as HPSAs.<sup>38,39</sup> Research indicates that full practice authority for NPs is associated with increased primary care access in HPSAs.<sup>40</sup>

**Team-Based Care.** A significant body of literature supports the value and benefits of team-based primary care.<sup>41</sup> While the roles and disciplines of team members may vary by primary care setting, teams are generally composed of physicians, NPs, and PAs, who are all recognized as primary care clinicians, as well as nurses and medical assistants. Multiple studies suggest that patients with chronic conditions have better outcomes, including fewer hospitalizations and emergency department visits, when cared for by primary care teams that include NPs, compared with teams without NP involvement.<sup>28</sup> In some models, teams may also include community health workers and outreach staff. Settings may also include referral coordinators, care managers, and educators, who may be shared across multiple teams. Moreover, integration of behavioral health specialists into primary care teams is often a priority, particularly in community health centers.<sup>42</sup> Even in the presence of primary care teams and multiple primary care clinicians in a practice, the designation or assignment of a primary care provider continues to be a bedrock of primary care in the US today. The person in this important role — an individual primary care clinician who is assigned responsibility for a panel of patients — is expected to have a relationship with each patient on their panel and maintain responsibility for the patient's overall primary care. In turn, patients expect to know their primary care provider and reasonably count on that individual, as well as their team, to know and care for and about them. Amid primary care clinician shortages, the ensuing large panel sizes, and the pressure to accomplish the value-based measures expected by insurers (and demonstrated to be of value), this vital role requires great support.

Excellent team-based models exist in many community health centers and throughout the VA and other health systems.<sup>41,43</sup> These models can also be found in practices owned, staffed, and governed by physicians, and in NP-owned private practices or nurse-managed

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health centers exclusively staffed by NPs. While there is no official definition of the optimal team arrangement, research shows that team composition and physician-to-NP ratios do not influence patient outcomes nearly as much as a patient’s medical complexity.<sup>44</sup> Team leadership and composition both vary depending on the practice structure, discipline, title, experience, institutional knowledge, or background.

**Leadership.** Medical practices define their leadership structure based on size, ownership, state licensing requirements, and range of clinical services offered, and the team leader, whether an NP, PA, MD, or DO, should be an expert primary care clinician who aspires to, enjoys, and is willing to accept the task of leading the team. Well-composed teams with qualified leaders are those that best support role clarity, allow for adequate onboarding time, and create satisfying, supportive environments that facilitate not only the recruitment of the next generation of primary care clinicians, but also their retention, resilience, and satisfaction. As groundbreaking NP researcher Jean Johnson stated, as quoted in the NASEM report, “rather than NPs and [family physicians] continuing to focus on issues of who is the captain of the team...the overriding principle for continued dialogue should keep the patient at the center of our efforts.”<sup>31</sup>

Investing in leadership development for individuals who demonstrate the willingness, skills, and desire to lead such teams is worthwhile for practices large and small.<sup>47,48</sup> Policies should support the most feasible, efficient, effective, and high-quality models, particularly when using public dollars. At the same time, appropriate supervision and mentoring, as well as management of the size and complexity of patient panels, is essential to workforce retention and leader development.

Opportunities:

- State policies allowing full NP practice authority, which usually entails evaluating patients, ordering and interpreting diagnostic tests, and initiating and managing treatments, including prescribing medications,<sup>9</sup> would increase access to high quality, cost-effective primary care.
- States with full practice authority can closely collaborate with health care stakeholders so that licensure and credentialing standards align with state regulations.
- Policymakers and payers can look to innovative team-based models, including those in community health centers and the VA, to improve patient outcomes and lower costs.

Benefits of Team-Based Care in Vermont

Vermont’s health system is guided by a “Blueprint for Health,” which includes Community Health Teams that proactively provide primary and maternity care, behavioral health services, and social supports to Vermont’s most vulnerable populations.<sup>45</sup> The teams include NPs, PAs, and physicians, as well as social workers, community health workers, and more, and have been shown to improve patient outcomes and reduce health care spending.<sup>46</sup>

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## 2. What reimbursement and data collection issues must be resolved to realize the potential of NPs?

**Medicaid payment.** Medicaid reimbursement parity for NPs varies widely by state. Research shows that in states with Medicaid NP-physician pay parity, NPs are more likely to work in primary care, and practices are more likely to accept Medicaid.<sup>49,50</sup> Among the states that do not practice payment parity, NP reimbursement is as low as 75% of physician reimbursement.<sup>49</sup> Further complicating the matter, the majority of states funnel Medicaid payments through managed care insurers that set rates based on regulations and contract terms.<sup>51</sup>

**Medicare and commercial payment.** Community health centers and other institutional providers are paid an “all-inclusive” rate for services regardless of the type of primary care clinician providing the service. However, for patients enrolled in traditional Medicare, the Medicare rate for NPs is reduced to 85% of the physician payment for the same service outside of community health centers or other institutional settings.<sup>52</sup> Medicare Advantage plans may establish their own fee schedules. Commercial carriers often follow Medicare’s lead. As a result, medical practices may choose to bill Medicare or commercial insurers indirectly for NP-delivered services. Indirect billing attributes these NP-delivered services to a physician – even if the physician never saw or reviewed the visit – to yield 100% of a physician’s reimbursement rate. Studies indicate that between 24% and 51% of NP visits are indirectly billed, though this tends to be higher in states with more NP practice restrictions, such as mandatory on-site physician supervision or limited ability to review charts or prescribe certain medications.<sup>53</sup> The Medicare Payment Advisory Commission (MedPAC) recommends the elimination of indirect billing due to its administrative burden and extra costs, which can present barriers to care.<sup>54,55</sup>

Indirect billing has additional drawbacks. As the largest payer in the US, Medicare generates a wealth of valuable health system information, including financial and clinical outcomes data. Without direct billing, there is a missed opportunity to quantify the contributions of NPs.<sup>56</sup> In states that reimburse Medicaid-funded physician- and NP-led services at the same rate, usually for care in settings like community health centers, direct billing yields accurate data on practice patterns, outcomes, and costs for both NPs and physicians. Without such data, researchers and policymakers are unable to make data-driven decisions regarding NP training and scope of practice.

In 2013, Oregon passed the first NP pay parity act in the US (and made it permanent in 2016), mandating that both Medicaid and commercial insurers reimburse NPs at the same rate as physicians for primary care and behavioral health services.<sup>57</sup> While the Oregon Nurses Association reports that pay parity has enabled NPs to see more patients, offer additional types of care, and open additional clinics, more research is needed regarding pay parity’s association with health outcomes and access. Generally, research indicates that salary satisfaction is associated with NP retention and service to vulnerable populations.<sup>4</sup>

Another promising option for creatively funding NP care while leveraging primary care teams is shifting to capitated payment models. One study estimates that these per-patient, per-month payments could incentivize team-based care (in this study, physicians, nurses, and medical assistants) and enable practices to care for more patients.<sup>58</sup> Moreover, the nature of capitated payments promotes NPs as cost-effective primary care providers while addressing health equity and health-related social needs.<sup>59</sup> Many states are using hybrid payments to incentivize team-based care. These efforts range from a focus on Medicaid to aligning

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payment models across multiple payers. For example, the Maryland Primary Care Program has a capitated payment program that gives practices across payers the funding and flexibility to hire and support nonphysician team members. In Maine, the Primary Care Plus program is a tiered payment model offered through the state's Medicaid program that emphasizes whole-person, team-based care. Other initiatives utilizing hybrid payment models that can support team-based care include North Carolina's Advanced Medical Home program, Massachusetts' Primary Care Sub-Capitation Program, and Washington's Primary Care Transformation Model.

#### Opportunities:

- States could mandate Medicaid pay parity for NPs, enabling cost savings, fewer workforce gaps, and more quality care for publicly insured populations.
- Elimination of "incident-to" or indirect Medicare billing could reduce costs while yielding a robust body of transparent data on the true contributions of primary care NPs and other providers.
- Shifting from fee-for-service to hybrid or capitated payment models in the context of value-based care could simultaneously promote NP care and improve health equity.

### 3. How can additional investments in postgraduate training for NPs committed to primary care benefit patients and support new clinicians?

In order to practice, NPs must hold a minimum of a master's degree in nursing from an accredited college or university (which includes 750 direct patient care hours – up from 500 since 2022), pass national advanced practice registered nurse (APRN) board certification exams, and achieve licensure as an APRN or advanced practice nurse in the state of practice.<sup>60</sup> Moreover, many of today's NPs hold a Doctor of Nursing Practice (DNP) degree. Hiring institutions, practices, and insurers also vet quality and safety using their own stringent additional credentialing and privileging processes, and NPs must renew all required certifications and credentials at specified intervals.

Although not required for licensure, NPs also have the opportunity to pursue formal postgraduate residency or fellowship training. In this report, "residency" and "fellowship" refer only to postgraduate training programs for newly licensed advanced practice providers. Programs may define themselves using either term, but most programs using the term "residency" focus on primary, not specialty, care and are predominantly nested in organizational settings like the VA and community health centers. Primary care residencies and fellowships immerse new NPs in the primary care practice setting, often with diverse and complex populations; use intensive preceptor and mentor support along with continued didactic education; and, importantly, focus on a high-performance, team-based model of care. These models of postgraduate training provide NPs with the opportunity to acquire the necessary depth of training and experience in a setting that ensures full readiness for practice.

The first formal postgraduate training program focused on NPs intending primary care practice careers was established in 2007 at Community Health Center, Inc. (CHC) in Connecticut as a replicable model for other organizations.<sup>61</sup> As of April 2025, 179 new-to-practice NPs have completed the CHC program, and CHC has expanded from family and pediatric specialties to include a psychiatry/mental health NP residency. Since 2007, the number of NP postgraduate programs across all specialties has grown to over 500, many of which are joint NP/PA programs, with 271 offering training in primary care.<sup>61,62</sup> These programs are sponsored by community health centers, the VA, and major health systems.<sup>61</sup>

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Programs now can be accredited by two federally recognized accreditation bodies: the Consortium for Advanced Practice Providers and the Commission on Collegiate Nursing Education. Completion of these programs, which meet vigorous accreditation standards such as those developed by the Consortium for Advanced Practice Providers,<sup>63</sup> is associated with retention in primary care, long-term career satisfaction, and reduced occupational stress.<sup>11,64</sup>

Federal funding for these programs pales in comparison to the billions of federal dollars spent on physician residencies and fellowships, also known as GME. Federal payments for GME through Medicare total around \$20 billion annually; this number does not include funding for other programs, such as the Teaching Health Center Graduate Medical Education Program, which allocates around \$175 million primarily to community health centers for the training of physicians and dentists.<sup>15,65</sup> By comparison, HRSA's Bureau of Health Workforce awarded around \$30 million through the 2023 Advanced Nursing Education Nurse Practitioner Residency and Fellowship Program, which supports postgraduate NP programs in community-based settings.<sup>66</sup>

Expanding the opportunities for high-quality, accredited NP postgraduate training programs focused on serving medically vulnerable populations is integral to keeping America healthy. Such training, which expands the volume and depth of clinical practice experience under the guidance of experts and includes the 135 postgraduate training programs hosted by community health centers, is associated with long-term service to medically underserved populations.<sup>11</sup> Primary care stakeholders, including NASEM, are calling on funders like HRSA and state Medicaid agencies to increase the availability of these programs.<sup>31,67</sup> At the state level, 10 state Medicaid programs allocate funding to community-based postgraduate training for NPs, and innovations like California's Song-Brown program have combined state general funds with philanthropic contributions to fund NP primary care fellowships and other training programs in underserved communities.<sup>68</sup>

As stated earlier, NPs are highly likely to serve populations that experience barriers to health care, including people living in rural areas, racial and ethnic minority populations, or people with public or no health insurance.<sup>69</sup> Moreover, NPs who choose to undergo postgraduate training are more likely to identify as a member of racial or ethnic minority group than NPs who do not pursue postgraduate training and are more likely to go on to care for underserved populations in their career.<sup>12</sup> Additional NP postgraduate training opportunities will continue to diversify the primary care workforce in terms of race and ethnicity, resulting in better outcomes and more coverage in underserved areas.<sup>11</sup>

### Opportunities:

- Federal and state policies that allocate additional dollars for postgraduate NP training would allow more NPs to access these high-quality programs and fill primary care workforce gaps.
- Creating or augmenting innovative postgraduate training programs in community settings would strengthen the NP workforce and increase access to care for the most vulnerable and medically complex populations.
- State partnerships like California's Song-Brown program are creatively funding community-based NP training, including fellowships in primary care.

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# CONCLUSION

Primary care clinicians of all types, including physicians, NPs, and PAs, have a role in delivering high-quality primary care. To realize this vision, all primary care stakeholders, including state policymakers, would do well to focus on collaboration, recognizing and appreciating differences between disciplines and training pathways, to create the most effective and satisfying primary care practices for patients and providers alike. NPs play a vital role in delivering high-quality primary care to all populations, particularly in underserved environments, yet, in many cases, their potential is limited by state practice restrictions. Additionally, the lack of physician-NP pay parity across settings and the use of indirect billing further limit the potential of NPs to provide care. Finally, accredited post-graduate training for NPs is associated with long-term retention in primary care, workforce diversity, and improved team collaboration, yet a lack of funding sources restricts accessibility. Attention to the depth and rigor of this clinical training and experience in preparation for taking on the role of primary care provider is essential. Addressing these issues will support a future where, indeed, your primary care provider and team can see you now.

## POLICY RECOMMENDATIONS

### **For state policymakers:**

- Remove unnecessary practice restrictions for primary care NPs
- Institute Medicaid payment parity for services rendered
- Shift from fee-for-service to hybrid or capitated payment models to creatively fund team-based care
- Support state partnerships like California's Song-Brown program to creatively fund community-based NP training, including fellowships in primary care

### **For federal policymakers:**

- Institute Medicare payment parity for services rendered, eliminating "incident-to" or indirect billing

### **For federal and state policymakers:**

- Increase funding availability and innovative opportunities for high-quality NP primary care postgraduate training (these programs embrace adult, family, pediatric, women's and psychiatric/mental health NP specialties)
- Create or augment innovative postgraduate training programs in community settings to strengthen the NP workforce and increase access to care for the most vulnerable and medically complex populations

# NOTES

- <sup>1</sup>. Pohl JA, Hanson CM, Newland JA. Nurse practitioners as primary care providers: history, context, and opportunities. In: Culliton B, Russell, S, eds. *Who Will Provide Primary Care and How Will They Be Trained? Proceedings of a Conference Sponsored by the Josiah Macy, Jr. Foundation*. Josiah Macy, Jr. Foundation; 2010. [https://macyfoundation.org/assets/reports/publications/jmf\\_primarycare\\_monograph.pdf](https://macyfoundation.org/assets/reports/publications/jmf_primarycare_monograph.pdf)
- <sup>2</sup>. *State of the Primary Care Workforce 2024*. Health Resources and Services Administration; 2024. <https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/state-of-the-primary-care-workforce-report-2024.pdf>
- <sup>3</sup>. *Community Health Centers: Providers, Partners and Employers of Choice: 2024 Chartbook*. National Association of Community Health Centers; 2024. <https://www.nachc.org/wp-content/uploads/2024/07/2024-2022-UDS-DATA-Community-Health-Center-Chartbook.pdf>
- <sup>4</sup>. Kueakomoldej S, Turi E, McMenamin A, Xue Y, Poghosyan L. Recruitment and retention of primary care nurse practitioners in underserved areas: a scoping review. *Nurs Outlook*. 2022;70(3):401-416. doi:10.1016/j.outlook.2021.12.008
- <sup>5</sup>. Htay M, Whitehead D. The effectiveness of the role of advanced nurse practitioners compared to physician-led or usual care: a systematic review. *Int J Nurs Stud Adv*. 2021;3:100034. doi:10.1016/j.ijnsa.2021.100034
- <sup>6</sup>. Kilpatrick K, Savard I, Audet LA, et al. A global perspective of advanced practice nursing research: a review of systematic reviews. *PLoS One*. 2024;19(7):e0305008. doi:10.1371/journal.pone.0305008
- <sup>7</sup>. Bazemore AW, Petterson SM, McCulloch KK. US primary care workforce growth: a decade of limited progress, and projected needs through 2040. *J Gen Intern Med*. 2025;40(2):339-346. doi:10.1007/s11606-024-09121-x
- <sup>8</sup>. Jabbarpour Y, Jetty A, Byun H, Siddiqi S, Park J. *The Health of US Primary Care: 2025 Scorecard Report – The Cost of Neglect*. Milbank Memorial Fund; 2025. <https://www.milbank.org/publications/the-health-of-us-primary-care-2025-scorecard-report-the-cost-of-neglect/>
- <sup>9</sup>. State Practice Environment. American Association of Nurse Practitioners; 2024. Accessed February 25, 2025. <https://www.aanp.org/advocacy/state/state-practice-environment>
- <sup>10</sup>. VA Grants Full Practice Authority to Advance Practice Registered Nurses - VA News. U.S. Department of Veterans Affairs. 2016. Accessed February 25, 2025. <https://news.va.gov/press-room/va-grants-full-practice-authority-to-advance-practice-registered-nurses/>
- <sup>11</sup>. Hart AM, Seagriff N, Flinter M. Sustained impact of a postgraduate residency training program on nurse practitioners' careers. *J Prim Care Community Health*. 2022;13:21501319221136938. doi:10.1177/21501319221136938



12. Park J, Faraz Covelli A, Pittman P. Effects of completing a postgraduate residency or fellowship program on primary care nurse practitioners' transition to practice. *J Am Assoc Nurse Pract.* 2021;34(1):32-41. doi:10.1097/JXX.0000000000000563
13. Yang J. Family medicine physician density in Canada from 1978 to 2023. Statista; 2024. Accessed February 1, 2025. <https://www.statista.com/statistics/496680/density-of-family-medicine-physician-in-canada-by-type/>
14. Kona M, Clark J, Walsh-Aiker E. *Improving Access to Primary Care for Underserved Populations: A Review of Findings from Five Case Studies and Recommendations.* Milbank Memorial Fund; 2023. [https://www.milbank.org/wp-content/uploads/2023/11/CaseStudy-AccessPrimaryCare\\_final.pdf](https://www.milbank.org/wp-content/uploads/2023/11/CaseStudy-AccessPrimaryCare_final.pdf)
15. Teaching Health Center Graduate Medical Education (THCGME) Academic Year 2023–2024 Awardees. HRSA Bureau of Health Workforce; 2023. <https://bhw.hrsa.gov/funding/apply-grant/teaching-health-center-graduate-medical-education/ay2023-2024-awardees>
16. *One Big Beautiful Bill Act.* 2025. <https://www.congress.gov/bill/119th-congress/house-bill/1>
17. Congressional Research Service. Discretionary Spending Under the Affordable Care Act (ACA). U.S. Congress; 2017. Accessed May 14, 2025. <https://www.congress.gov/crs-product/R41390>
18. Cosgrove J, DeMots K, Tam T, McGrath SL. *Health Care Workforce: Views on Expanding Medicare Graduate Medical Education Funding to Nurse Practitioners and Physician Assistants.* U.S. Government Accountability Office; 2019. <https://www.gao.gov/assets/gao-20-162.pdf>
19. *Fiscal Year 2026 Budget in Brief.* U.S. Department of Health and Human Services; 2025. <https://www.hhs.gov/sites/default/files/fy-2026-budget-in-brief.pdf>
20. Buerhaus PI, DesRoches CM, Dittus R, Donelan K. Practice characteristics of primary care nurse practitioners and physicians. *Nurs Outlook.* 2015;63(2):144-153. doi:10.1016/j.outlook.2014.08.008
21. Barnes H, Richards MR, McHugh MD, Martsolf G. Rural and nonrural primary care physician practices increasingly rely on nurse practitioners. *Health Aff (Millwood).* 2018;37(6):908-914. doi:10.1377/hlthaff.2017.1158
22. Barnes H, Richards MR, Martsolf GR, Nikpay SS, McHugh MD. Association between physician practice Medicaid acceptance and employing nurse practitioners and physician assistants: a longitudinal analysis. *Health Care Manage Rev.* 2022;47(1):21-27. doi:10.1097/HMR.0000000000000291
23. O'Reilly-Jacob M, Featherston KG, Barnes H, Xue Y, Poghosyan L. Socioeconomic characteristics of communities with primary care practices with nurse practitioners. *JAMA Netw Open.* 2025;8(2):e2462360. doi:10.1001/jamanetworkopen.2024.62360
24. Razavi M, O'Reilly-Jacob M, Perloff J, Buerhaus P. Drivers of cost differences between nurse practitioner and physician attributed Medicare beneficiaries. *Med Care.* 2021;59(2):177-184. doi:10.1097/MLR.0000000000001477

25. DesRoches CM, Clarke S, Perloff J, O'Reilly-Jacob M, Buerhaus P. The quality of primary care provided by nurse practitioners to vulnerable Medicare beneficiaries. *Nurs Outlook*. 2017;65(6):679-688. doi:10.1016/j.outlook.2017.06.007
26. Barnett M, Balkissoon C, Sandhu J. The level of quality care nurse practitioners provide compared with their physician colleagues in the primary care setting: a systematic review. *J Am Assoc Nurse Pract*. 2022;34(3):457-464. doi:10.1097/JXX.0000000000000660
27. Turi E, McMenamin A, Kueakomoldej S, Kurtzman E, Poghosyan L. The effectiveness of nurse practitioner care for patients with mental health conditions in primary care settings: a systematic review. *Nurs Outlook*. 2023;71(4):101995. doi:10.1016/j.outlook.2023.101995
28. McMenamin A, Turi E, Schlak A, Poghosyan L. A systematic review of outcomes related to nurse practitioner-delivered primary care for multiple chronic conditions. *Med Care Res Rev*. 2023;80(6):563-581. doi:10.1177/10775587231186720
29. Swan M, Ferguson S, Chang A, Larson E, Smaldone A. Quality of primary care by advanced practice nurses: a systematic review. *Int J Qual Health Care*. 2015;27(5):396-404. doi:10.1093/intqhc/mzv054
30. Melby C, Mosendz P, Buhayar N. Is the nurse practitioner job boom putting US health care at risk? Bloomberg Business Week. 2024. <https://www.bloomberg.com/news/features/2024-07-24/is-the-nurse-practitioner-job-boom-putting-us-health-care-at-risk>
31. National Academies of Sciences, Engineering, and Medicine. *Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care*. National Academies Press; 2021. <https://nap.nationalacademies.org/catalog/25983/implementing-high-quality-primary-care-rebuilding-the-foundation-of-health>
32. Liu CF, Hebert PL, Douglas JH, et al. Outcomes of primary care delivery by nurse practitioners: utilization, cost, and quality of care. *Health Serv Res*. 2020;55(2):178-189. doi:10.1111/1475-6773.13246
33. Brom HM, Salsberry PJ, Graham MC. Leveraging health care reform to accelerate nurse practitioner full practice authority. *J Am Assoc Nurse Pract*. 2018;30(3):120-130. doi:10.1097/JXX.0000000000000023
34. Dunbar-Jacob J, Rohay JM. State health and the level of practice authority for nurse practitioners. *Nurs Outlook*. 2025;73(1):102319. doi:10.1016/j.outlook.2024.102319
35. O'Reilly-Jacob M, Mayanja-Sserebe R, Zwilling J. Continued restrictions on nurse practitioners: a qualitative study of the early implementation of full practice authority in Massachusetts. *Nurs Outlook*. 2024;72(5):102249. doi:10.1016/j.outlook.2024.102249
36. *Issues at a Glance: Full Practice Authority*. American Association of Nurse Practitioners; 2024. <https://www.aanp.org/advocacy/advocacy-resource/policy-briefs/issues-full-practice-brief>
37. Van Vleet A, Paradise J. *Tapping Nurse Practitioners to Meet Rising Demand for Primary Care*. KFF; 2015. <https://www.kff.org/medicaid/issue-brief/tapping-nurse-practitioners-to-meet-rising-demand-for-primary-care/>

38. III.B. Overview of the State - Mississippi - 2024. HRSA Maternal & Child Health Bureau; 2024. <https://mchb.tvisdata.hrsa.gov/Narratives/Overview/df43de25-ef21-42ab-89a3-53210e20d7d8>
39. Health Center Program GeoCare Navigator. Health Resources and Services Administration. <https://geocarenavigator.hrsa.gov/>
40. DePriest K, D'Aoust R, Samuel L, Commodore-Mensah Y, Hanson G, Slade EP. Nurse practitioners' workforce outcomes under implementation of full practice authority. *Nurs Outlook*. 2020;68(4):459-467. doi:10.1016/j.outlook.2020.05.008
41. Thies K, Angers M, Flinter M, Schiessl A. *Team-Based Primary Care in Health Centers*. National Training and Technical Assistance Partners (NTTAP) on Clinical Workforce Development, at Community Health Center, Inc.; 2024. <https://www.weitzmaninstitute.org/wp-content/uploads/2024/09/Team-BasedPrimaryCareinHealthCenters.pdf>
42. Nguyen AM, Klege RA, Menders T, Verma C, Marcello S, Crabtree BF. Strategies for implementing integrated behavioral health into health centers. *J Am Board Fam Med*. 2024;37(5):833-846. doi:10.3122/jabfm.2023.230417R1
43. Chuang E, Brunner J, Mak S, et al. Challenges with implementing a patient-centered medical home model for women veterans. *Womens Health Issues*. 2017;27(2):214-220. doi:10.1016/j.whi.2016.11.005
44. Bernard ME, Laabs SB, Nagaraju D, et al. Clinician care team composition and health care utilization. *Mayo Clin Proc Innov Qual Outcomes*. 2021;5(2):338-346. doi:10.1016/j.mayocpiqo.2021.01.002
45. Department of Vermont Health Access. *Vermont Blueprint for Health Manual*. Agency of Human Services; 2025. <https://blueprintforhealth.vermont.gov/sites/bfh/files/documents/Blueprint%20Manual%202025%20Final%20.pdf>
46. Jones C, Finison K, McGraves-Lloyd K, et al. Vermont's community-oriented all-payer medical home model reduces expenditures and utilization while delivering high-quality care. *Popul Health Manag*. 2016;19(3):196-205. doi:10.1089/pop.2015.0055
47. Coleman K, Wagner EH, Ladden MD, et al. Developing emerging leaders to support team-based primary care. *J Ambul Care Manage*. 2019;42(4):270-283. doi:10.1097/JAC.0000000000000277
48. Bhatti S, Bale S, Gul S, Muldoon L, Rayner J. The impact of leadership style in team-based primary care - staff satisfaction and motivation. *BJGP Open*. 2024;8(3):BJGP0.2023.0246. doi:10.3399/BJGP0.2023.0246
49. Harrison JM, Kranz AM, Chen AYA, et al. The impact of nurse practitioner-led primary care on quality and cost for Medicaid-enrolled patients in states with pay parity. *Inquiry*. 2023;60:469580231167013. doi:10.1177/00469580231167013
50. Barnes H, Maier CB, Sarik DA, Germack HD, Aiken LH, McHugh MD. Effects of regulation and payment policies on nurse practitioners' clinical practices. *Med Care Res Rev*. 2017;74(4):431-451. doi:10.1177/1077558716649109

51. Harkless G, Vece L. Systematic review addressing nurse practitioner reimbursement policy: part one of a four-part series on critical topics identified by the 2015 nurse practitioner research agenda. *J Am Assoc Nurse Pract*. 2018;30(12):673-682. doi:10.1097/JXX.0000000000000121
52. 45 CFR 46. U.S. Department of Health and Human Services, Office for Human Research Protections. Accessed July 22, 2024. <https://www.hhs.gov/ohrp/regulations-and-policy/regulations/45-cfr-46/index.html>
53. Patel SY, Huskamp HA, Frakt AB, et al. Frequency of indirect billing to Medicare for nurse practitioner and physician assistant office visits. *Health Aff (Millwood)*. 2022;41(6):805-813. doi:10.1377/hlthaff.2021.01968
54. *Issues in Medicare Beneficiaries' Access to Primary Care*. MedPAC; 2019. Accessed February 25, 2025. [https://www.medpac.gov/wp-content/uploads/import\\_data/scrape\\_files/docs/default-source/reports/jun19\\_ch5\\_medpac\\_reporttocongress\\_sec.pdf](https://www.medpac.gov/wp-content/uploads/import_data/scrape_files/docs/default-source/reports/jun19_ch5_medpac_reporttocongress_sec.pdf)
55. Beck MS. Direct versus "incident to" billing for nurse practitioners and physician associates: understanding billing knowledge and options. *J Nurse Pract*. 2024;20(5):104978. doi:10.1016/j.nurpra.2024.104978
56. Medicare Payment. Centers for Medicare & Medicaid Services; 2024. <https://www.cms.gov/cms-guide-medical-technology-companies-and-other-interested-parties/payment>
57. ONA Report on the 2016 Oregon Legislative Session. Oregon Nurses Association. Accessed March 3, 2025. <https://www.oregonrn.org/page/2016LegReport/ONA-Report-on-the-2016-Oregon-Legislative-Session.htm>
58. Basu S, Phillips RS, Song Z, Bitton A, Landon BE. High levels of capitation payments needed to shift primary care toward proactive team and nonvisit care. *Health Aff (Millwood)*. 2017;36(9):1599-1605. doi:10.1377/hlthaff.2017.0367
59. Flaubert JL, Menestrel SL, Williams DR, Wakefield MK. Paying for equity in health and health care. In: *The Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity*. National Academies Press (US); 2021. Accessed July 29, 2025. <https://www.ncbi.nlm.nih.gov/books/NBK573911/>
60. National Task Force. *Standards for Quality Nurse Practitioner Education: A Report of the National Task Force on Quality Nurse Practitioner Education*, 6th ed. National Task Force on Quality Nurse Practitioner Education; 2022. <https://www.aacnnursing.org/Portals/42/CCNE/PDF/NTFS-NP-Final.pdf>
61. About Us. Consortium for Advanced Practice Providers. 2024. <https://www.appostgradtraining.com/about-us/faq/>
62. Flinter M. Yes, we can see you now! Making the case for implementing and sustaining postgraduate NP and NP-PA training programs as a critical workforce strategy for FQHCs and the country. Presented at: NACHC Policy and Issues Forum; 2024; Washington, DC.
63. Standard 2 - Curriculum. Consortium for Advanced Practice Providers. 2024. <https://www.appostgradtraining.com/wp-content/uploads/2024/11/Accreditation-Standards-2024.pdf>

- <sup>64.</sup> McDonough KE. Outcomes of postgraduate fellowships and residencies for nurse practitioners: an integrative review. *J Prof Nurs*. 2024;53:95-103. doi:10.1016/j.profnurs.2024.05.005
- <sup>65.</sup> Wagner MJ, Frazier HA, Berger JS. Navigating the rapids: how government funds flow to graduate medical education. *J Grad Med Educ*. 2024;16(3):339-340. doi:10.4300/JGME-D-24-00378.1
- <sup>66.</sup> Advanced Nursing Education Nurse Practitioner Residency and Fellowship (ANE-NPRF) Program. [Grants.gov](https://www.grants.gov). 2023. <https://www.grants.gov/search-results-detail/342771>
- <sup>67.</sup> Graduate Medical Education Funding. Accessed March 26, 2025. <https://www.ncsl.org/health/graduate-medical-education-funding>
- <sup>68.</sup> Rittenhouse D, Ament A, Grumbach K. *Graduate Medical Education Funding in California – The Song-Brown Program*. California Health Care Foundation; 2019. <https://www.chcf.org/wp-content/uploads/2019/02/GMEFundingCASongBrown.pdf>
- <sup>69.</sup> Poghosyan L, Courtwright S, Flandrick KR, et al. Advancement of research on nurse practitioners: setting a research agenda. *Nurs Outlook*. 2023;71(5):102029. doi:10.1016/j.outlook.2023.102029



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