



Report

Nurse practitioners: A solution to America's primary care crisis

American Enterprise Institute

POVERTY STUDIES

Peter Buerhaus

September 18, 2018

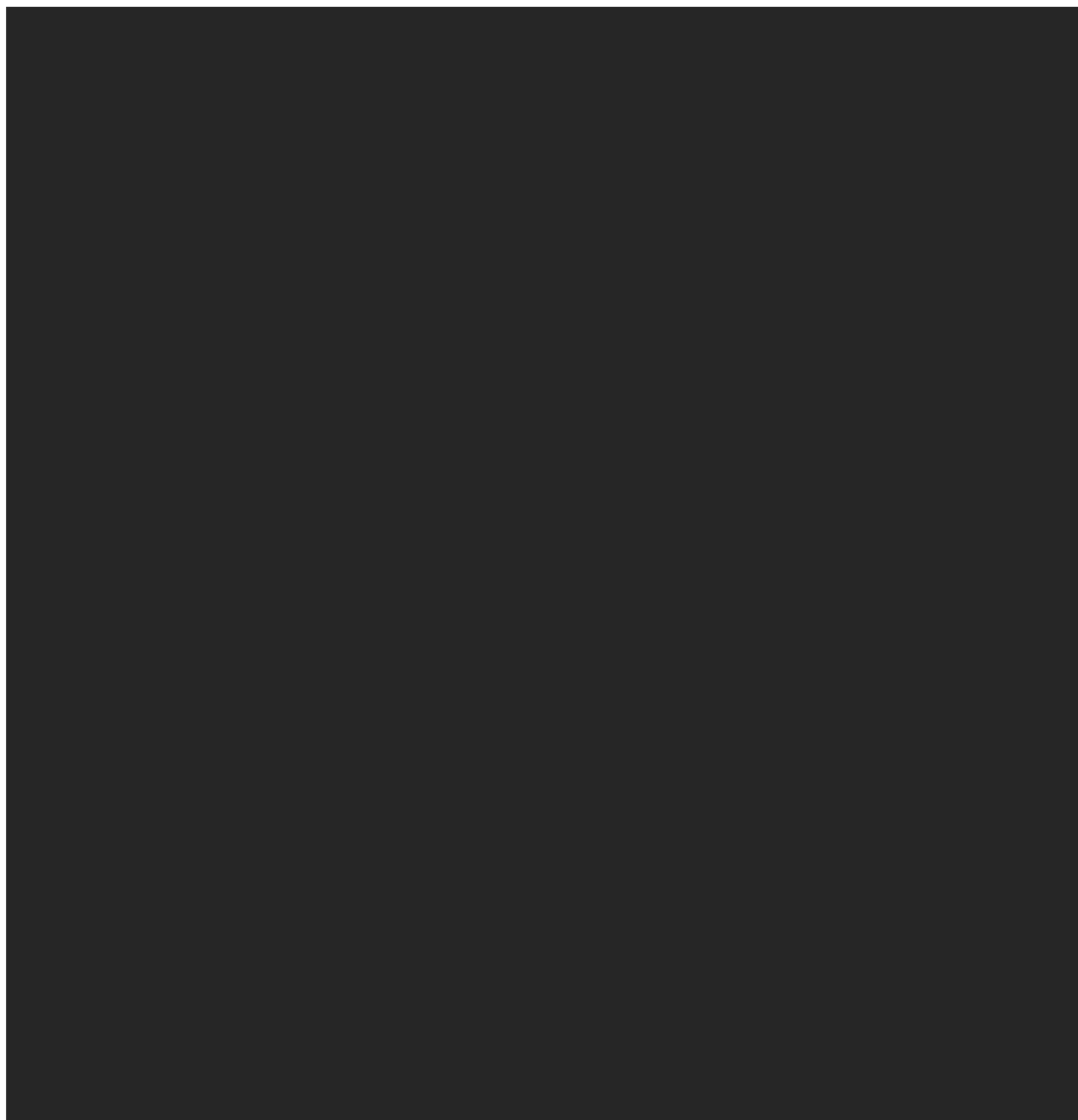
Key Points

- Despite decades of spending, tens of millions of Americans do not have adequate access to primary care (particularly in rural areas), a number that is projected to continue growing.
- A large and growing body of research shows that the quality of care provided by nurse practitioners is as good and, in some cases, even better than the care provided by primary care physicians. But in many states, nurse practitioners are

held back by laws that restrict their scope-of-practice.

- Lawmakers, hospital administrators, health care systems, and others involved in assuring access to primary care should remove restrictions on nurse practitioners that limit their scope-of-practice, and physicians should work with nurse practitioners to build a workforce that is more responsive to communities' health needs.

[Read the full PDF.](#)



Executive Summary

For the past few decades, the United States has not produced enough primary care physicians. Moreover, too few physicians practice in rural and medically underserved areas, and the number of people lacking adequate access to primary care has increased. Meanwhile, studies have piled up pointing to the high quality of care that nurse practitioners (NPs) provide, and increasing numbers of policy-influencing bodies have recommended expanding the use of NPs in primary care. Yet, barriers to the expanded use of NPs persist, and, consequently, tens of millions of Americans lack adequate access to primary care services. This report describes and integrates new evidence from a research program focused on the primary care workforce, NPs' role in primary care, and the potential for NPs to help solve the problem of Americans' access to quality primary care.

Among other things, the research summarized in this report establishes that it is unrealistic to rely on the physician workforce alone to provide the primary care Americans need, particularly for Americans in rural areas, who are generally older, less educated, poorer, and sicker. Many primary care physicians are expected to retire over the next decade, while demand is increasing for primary care. So current shortages of primary care are projected to worsen, with even fewer physicians practicing in rural areas. And as the proportion of physicians who are married to highly educated spouses increases, the already formidable

challenges of attracting physicians to Health Professional Shortage Areas will become even more daunting.

Our findings examine trends in the supply of NPs and physicians, showing that the NP workforce has increased dramatically and is projected to continue growing while the physician workforce will grow minimally. Further, we find, as do other studies, that compared to primary care medical doctors, primary care nurse practitioners (PCNPs) are more likely to practice in rural areas, where the need for primary care is greatest.

Our research shows that people living in states with laws that reduce or restrict NPs' scope-of-practice had significantly less access to PCNPs. This finding indicates that such state regulations have played a role in impeding access to primary care. This alone should be cause for concern among policymakers seeking to improve public health.

Using different data and methods, the studies described in this report consistently show that NPs are significantly more likely than primary care physicians to care for vulnerable populations. Nonwhites, women, American Indians, the poor and uninsured, people on Medicaid, those living in rural areas, Americans who qualify for Medicare because of a disability, and dual-eligibles are all more likely to receive primary care from NPs than from physicians. NPs, whether they work independently of primary care physicians or with them, are more likely to accept Medicaid recipients, provide care for the uninsured, and accept lower payments than are physicians who do not work with NPs.

Another major finding is that, after controlling for differences in patient severity and sociodemographic factors, the cost of care provided to Medicare beneficiaries by NPs was significantly lower than primary care provided by physicians. Even after accounting for the lower payment NPs receive relative to physicians, the cost of NP-provided care was still significantly lower.

However, the viability of increased reliance on NPs still depends on the simple

However, the viability of increased reliance on NPs still depends on the simple question at the core of this project: Can NPs provide health care of comparable quality to that provided by primary care physicians? Our studies showed that beneficiaries who received their primary care from NPs consistently received significantly *higher-quality* care than physicians' patients in several respects. While beneficiaries treated by physicians received slightly better services in a few realms, the differences were marginal. These results held when vulnerable populations of Medicare beneficiaries were analyzed separately and compared to those cared for by physicians, aligning with the findings of many other studies conducted over the past four decades.

Furthermore, state-level NP scope-of-practice restrictions do not help protect the public from subpar health care. Analysis of different classifications of state-level scope-of-practice restrictions provided no evidence that Medicare beneficiaries living in states that imposed restrictions received better-quality care. Some physicians and certain professional medical associations have justified their support for state regulations to limit NP scope-of-practice on the grounds that they are necessary to protect the public from low-quality providers and to assert that physicians must be the leaders of the health care team. We found no evidence to support their claim.

Further, our analysis showed that Medicare beneficiaries living in states with reduced or restricted NP scope-of-practice were more likely to use more resources than were beneficiaries in states without such restrictions. This indicates that these beneficiaries had less access to the positive contributions of NPs.

Despite this body of evidence, our national survey of primary care clinicians revealed that around one-third of primary care physicians believe increasing the number of NPs would impair the safety and effectiveness of care. This could indicate that physicians are not aware of the findings of research. Or alternatively, it is an excuse for a barrier to entry, meant to protect some physicians' narrow interests at the expense of accessible primary care for many Americans who need

it

it.

The evidence leads to three recommendations that can help overcome the growing challenges facing the delivery of primary care in the US. First, private policymakers such as hospital boards and credentialing bodies should allow NPs to practice to the fullest extent of their training and ability.

Second, physicians must understand that NPs provide quality health care to those in need. NPs and physicians should work together to build relationships that allow for their respective roles and practices to evolve, respecting each other's strengths and ultimately leading to a workforce that is more responsive to communities' health needs. Third, public policymakers should remove restrictions on NPs that limit their scope-of-practice.

Introduction

The doctors are fighting a losing battle. The nurses are like insurgents. They are occasionally beaten back, but they'll win in the long run. They have economics and common sense on their side. —Uwe Reinhardt, Professor of Economics at Princeton University¹

Nearly 30 years ago, in 1991, well-known physician and thought leader Gordon Moore wrote in the *Journal of the American Medical Association*: "Primary care is the most affordable safety net we can offer our citizens."² The National Academy of Medicine defines primary care as "the provision of *integrated, accessible health care services* by clinicians who are *accountable* for addressing a large *majority of personal health care needs*, developing a *sustained partnership* with *patients*, and practicing in the *context of family and community*."³

Primary care clinicians typically treat a variety of conditions, including high blood pressure, diabetes, asthma, depression and anxiety, angina, back pain, arthritis, thyroid dysfunction, and chronic obstructive pulmonary disease. They provide basic maternal and child health care services, including family planning and vaccinations. Primary care lowers health care costs, decreases emergency department visits and hospitalizations, and lowers mortality.⁴

department visits and hospitalizations, and lowers mortality.

Primary care is a crucial component of American health care, but it faces steep challenges, beginning with ever-increasing demand for primary care services. Demand for primary care has been growing for decades and is expected to increase.⁵ The Affordable Care Act (ACA) expanded the number of people with health insurance and increased access to primary care services by eliminating patient cost sharing for a wide array of preventive services and screenings.⁶

Demand for primary care will continue to increase as the 76 million baby boomers age into the Medicare program. Currently, 54 million people are enrolled in Medicare, the nation's health insurance program for citizens 65 and older and those with end-stage renal disease and other qualifying disabilities. As baby boomers age, Medicare enrollment is expected to increase to 80 million by 2030.⁷

Not only are baby boomers expected to live longer than previous generations, but also the prevalence of multiple chronic diseases is increasing. By 2030, four in 10 baby boomers are expected to have heart disease or diabetes, and 25 percent will have cancer. The percentage of those enrolled in Medicare with three or more chronic diseases will increase from 26 percent in 2010 to 40 percent in 2030.⁸ Add to this the increasing number of people with Alzheimer's disease (a leading cause of death in the US) and other dementias, and it is clear that the demand for primary care will increase in coming decades, especially the need for care geared toward the elderly.⁹

If the growth in demand for primary care is a challenge, the current and projected shortages of primary care physicians only make matters worse. The Association of American Medical Colleges (AAMC) estimates that by 2030 we will have up to 49,300 fewer primary care physicians than we will need (an even-larger estimate than the AAMC reported in 2016).¹⁰ Many specialist physicians also provide considerable primary care, but projected shortages of such physicians (by as many as 72,700 by 2030) only adds to concerns over the adequacy of the

primary care physician workforce.¹¹ Despite decades of effort, the graduate medical education system has not produced enough primary care physicians to meet the American population's needs.¹²

When geographic distribution of primary care medical doctors (PCMDs) is taken into account, the problem begins to feel like a crisis. In 2018 the federal government reported 7,181 Health Professional Shortage Areas in the US and approximately 84 million people with inadequate access to primary care, with 66 percent of primary care access problems in rural areas.¹³

Thankfully, there is a solution. Increasingly, researchers, workforce analysts, and organizations that influence health policy support expanding the role of nurse practitioners (NPs) to fill the void left by the lack of primary care physicians and to improve the uneven geographic distribution of primary care. This report presents results from original research projects that support this view and document the evidence base for an expanded role for NPs in remedying these pressing and growing access problems.

Read the full report.

Notes

1. Sabrina Tavernise, "Doctoring, Without the Doctor," *New York Times*, May 25, 2015, <https://www.nytimes.com/2015/05/26/health/rural-nebraska-offers-stark-view-of-nursing-autonomy-debate.html>.
2. Gordon T. Moore, "Let's Provide Primary Care to All Uninsured Americans—Now!" *Journal of the American Medical Association* 319, no. 21 (June 5, 2018): 2240, <https://jamanetwork.com/journals/jama/article-abstract/2683207>.
3. Molla S. Donaldson et al., eds., *Primary Care: America's Health in a New Era* (Washington, DC: National Academies Press, 1996), 32, <https://www.ncbi.nlm.nih.gov/books/NBK232643/>. Italics in the original. 4. Barbara Starfield, Leiyu Shi, and James Macinko, "Contribution of

Original. 4. Barbara Starfield, Lelyu Shi, and James Macinko, "Contribution of Primary Care to Health Systems and Health," *Milbank Quarterly* 83, no. 3 (September 2005): 457–502, <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-0009.2005.00409.x>; and Mark W. Friedberg, Peter S. Hussey, and Eric C. Schneider, "Primary Care: A Critical Review of the Evidence on Quality and Costs of Health Care," *Health Affairs* 29, no. 5 (May 2010): 766–72, <https://www.healthaffairs.org/doi/10.1377/hlthaff.2010.0025>.

4. Elbert S. Huang and Kenneth Finegold, "Seven Million Americans Live in Areas Where Demand for Primary Care May Exceed Supply by More Than 10 Percent," *Health Affairs* 32, no. 3 (March 2013): 614–21, <https://www.healthaffairs.org/doi/10.1377/hlthaff.2012.0913>; Leighton Ku et al., "The States' Next Challenge—Securing Primary Care for Expanded Medicaid Populations," *New England Journal of Medicine* 364, no. 6 (February 2011): 493–95, <https://www.nejm.org/doi/10.1056/NEJMp1011623>; and Adam N. Hofer, Jean Marie Abraham, and Ira S. Moscovice, "Expansion of Coverage Under the Patient Protection and Affordable Care Act and Primary Care Utilization," *Milbank Quarterly* 89, no. 1 (March 2011): 69–89, <https://www.ncbi.nlm.nih.gov/pubmed/21418313>.
5. Howard K. Koh and Kathleen G. Sebelius, "Promoting Prevention Through the Affordable Care Act," *New England Journal of Medicine* 363, no. 14 (September 2010): 1296–99.
6. Medicare Payment Advisory Commission, *Report to the Congress: Medicare and the Health Care Delivery System*, June 2015, 35–57, <http://www.medpac.gov/docs/default-source/reports/june-2015-report-to-the-congress-medicare-and-the-health-care-deliverysystem.pdf>.
7. Dana Goldman and Étienne Gaudette, *Strengthening Medical Care for 2030: Health and Health Care of Medicare Beneficiaries in 2030*, Leonard D.

Schaeffer Center for Health Policy & Economics and Center for Health Policy at Brookings, June 2015, <https://www.brookings.edu/research/strengthening-medicare-for-2030-a-working-paper-series/>.

8. US Department of Health and Human Services, National Institutes of Health, National Institute on Aging, "Alzheimer's Disease Fact Sheet," <https://www.nia.nih.gov/health/alzheimers-disease-fact-sheet>.
9. Tim Dall et al., "The Complexities of Physician Supply and Demand: Projections from 2016 to 2030," Association of American Medical Colleges, March 2018, https://aamc-black.global.ssl.fastly.net/production/media/filer_public/85/d7/85d7b689-f417-4ef0-97fbecc129836829/aamc_2018_workforce_projections_update_april_11_2018.
10. Dall et al., "The Complexities of Physician Supply and Demand."
11. Jill Eden, Donald Berwick, and Gail Wilensky, eds., *Graduate Medical Education That Meets the Nation's Health Needs* (Washington, DC: National Academies Press, 2014).
12. US Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Workforce, "Designated Health Professional Shortage Areas Statistics," <https://datawarehouse.hrsa.gov/tools/hdwreports/reports.aspx>.
13. American Association of Nurse Practitioners, "What's an NP?," <https://www.aanp.org/all-about-nps/what-is-an-np#educationand-training>.

Thomas stated that, although 80 million Americans lack access to adequate primary care and the primary care workforce is shrinking, there is good news: more than 270,000 NPs are licensed in the United States. She described NPs as an "under-utilized asset in the struggle to strengthen and expand primary care access." "NPs are qualified to assess patients, order and interpret diagnostic tests, develop treatment plans, and prescribe medications in all 50 states," she wrote. "More than three-quarters of NPs are trained in primary care focus areas including family care, adult and geriatric care, wo..." Buerhaus P. Nurse practitioners: a solution to America's primary care crisis . American Enterprise Institute . September, 2018. America needs more doctors. Nurse practitioners can't replace them. Nurse practitioner autonomy is a viable solution to the primary care shortage. However, it shouldn't be viewed as the panacea or part of an overarching goal for nurse practitioners to serve as permanent substitutes to physicians. Ultimately, nurse practitioners are trained to fill a distinct role, and it's detrimental to patients as well as physicians if we decide to blur these boundaries. Kevin Hu is a sophomore physiology and neurobiology major. He can be reached at k evxhu@gmail.com. Nurse Practitioners. A solution to america's primary care crisis. Peter Buerhaus. SEPTEMBER 2018. collaborative practice with primary care nurse practitioners (PCNPs) and 77 percent agreed that NPs should practice to the full extent of their education and training. Additionally, 72.5 percent said having more NPs would improve timeliness of care, and 52 percent reported it would improve access to health services. So who will see the primary care patients, especially in rural areas? To fill this growing gap and potential crisis of approximately 58 million Americans in need of primary care services, the nurse practitioner is the professional that can be the solution to meet our nation's healthcare needs over the next 10 years and beyond. In fact, the U.S. Bureau and Labor Statistics finds that demand for nurse practitioners is expected to increase by nearly 26% through 2028. Demand Continues to Grow. Nurse practitioners are trained to meet all of the needs of patients, such as ordering, performing and in