



**Joint Health Committee Budget Hearing
January 23, 2024**

Albany, New York – The New York State Society of Physician Assistants (NYSSPA) represents the 20,000 PAs licensed to practice in New York State. We appreciate the opportunity to address the Senate and Assembly Health Committee Hearing on the 2024-25 Budget.

We thank Governor Hochul for including provisions in her proposed FY 2024-25 budget that would modernize PA practice in NY by removing the administrative barriers that often hinder our ability to provide for the health care needs of our patients. We kindly urge the legislature to include the Governor’s proposal as it relates to PAs in the final budget. Inclusion will eliminate administrative barriers impacting PA practice to improve patient choice and access to care.

- *Allow PAs to practice without physician supervision where:*
 - *(1) the PA has 8000 hours and (a) practices in primary care, or (b) is employed by and is credentialed and has privileges with an Art. 28 hospital or healthcare system; or (2) when a PA has completed a program approved by DOH, in consultation with SED.*
 - *Would remove limitations on how many PAs a physician can supervise in a private practice or hospital setting.*
 - *Would clarify prescribing privileges, including allowing PAs to write non-patient-specific orders and order durable medical equipment.*
 - *Would allow a school district to select a PA as a director of school health services. Makes other conforming amendments.*

It is crucial to emphasize that the provisions in the Governor’s proposed budget focus on removing arbitrary regulatory obstacles, enabling PAs to provide comprehensive care to patients within the bounds of our existing scope and in alignment with our education, training, knowledge, and experience.

We believe these measures are essential for recognizing, supporting, and optimizing the contributions of PAs in addressing the healthcare challenges facing the state.

The shortage of primary care clinicians is a critical issue, with repercussions for patients, especially in marginalized communities. This scarcity negatively impacts patient access, quality of services, and overall health outcomes. It is imperative to address this crisis to ensure a robust healthcare system that caters to diverse patient needs. PAs offer a ready source of highly educated clinicians to help fill New York’s healthcare needs.

PA Education:

Physician Assistants (PAs) receive a comprehensive and rigorous education, blending academic coursework with hands-on clinical training. The typical educational path for PAs involves the following steps:

Prerequisite Education: A bachelor's degree with a strong focus on science courses, particularly biology and chemistry.

PA Program Admission: Admission is competitive and commonly necessitates relevant healthcare experience, letters of recommendation, and the fulfillment of prerequisite coursework.

Master's Program: This is the minimum level of education for entry into practice as a PA. These programs adhere to a standardized curriculum and receive accreditation from the Accreditation Review Commission on Education of Physician Assistants (ARC-PA). These programs typically span an average of twenty-eight consecutive months. During this period, students engage in both on-campus didactic (classroom-based) and clinical training.

- The **Didactic Phase** encompasses a diverse range of medical subjects, including anatomy, physiology, pharmacology, and clinical medicine.
- **Clinical Rotations:** Following the completion of initial classroom-based instruction, PAs participate in clinical rotations across core medical specialties. These rotations offer practical, hands-on experience under the guidance of experienced healthcare professionals, enabling students to apply their knowledge in real-world settings. Mandatory rotations encompass medicine, surgery, psychiatry, pediatrics, women's health (OB/Gyn), and emergency medicine, while elective options provide opportunities for exposure to specific areas of interest.

Examinations and Certification: Upon completing PA programs, individuals are eligible to sit for the Physician Assistant National Certifying Exam (PANCE), conducted by the National Commission on Certification of Physician Assistants (NCCPA). Successfully passing this exam results in national certification and is a mandatory prerequisite for obtaining licensure in all U.S. states and territories.

State Licensure: PAs must apply for state licensure to practice. Providing evidence of passing the PANCE and submitting proof of education and clinical training.

Continuing Medical Education (CME): To maintain certification, PAs must complete a minimum of 100 continuing medical education (CME) hours every two years and undergo recertification by examination every ten years.

The education and training of Physician Assistants (PAs) are designed to furnish them with the knowledge and skills essential for delivering high-quality medical care collaboratively with physicians and other healthcare professionals. The focus on both didactic and clinical aspects ensures that PAs are thoroughly prepared to tackle the diverse challenges within healthcare practice.

Doctorate programs: Although not required for entry into practice, many PAs seek additional education at the doctoral level. These programs offer advanced education and training, equipping Physician Assistants (PAs) for broader roles in healthcare and leadership positions. PAs can opt for a doctoral program tailored to their interests and career goals, whether it focuses on clinical specialties, administration, education, research, public health, or other relevant areas.

Governor Hochul acknowledged the vital role of PAs during the joint pandemic and workforce crises, advocating for the removal of unnecessary barriers through reforms in her SFY 2023-24 budget proposal, and again in her FY 2024-25 budget proposal. We kindly urge the legislature to include the Governor's proposal as it relates to PAs in the final budget. Inclusion will eliminate administrative barriers impacting PA practice to improve patient choice and access to care.

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Barriers to Practice:

At the health system level, PAs undergo credentialing and are granted Medical Staff privileges like physicians. The oversight bodies responsible for monitoring patient outcomes and quality of care are the same for both PAs and physicians. However, despite these measures, PAs frequently face impediments in their practice, including:

- In New York State (NYS), Medicaid does not designate PAs as Primary Care Providers (PCPs) in their contracts, preventing Medicaid patients from enrolling in a PA panel. Although many commercial third-party payors do recognize PAs as PCPs.
- Numerous medical and health forms at the State, county, and local levels do not include PAs as signatories, leading to confusion and disruptions in patient care.
- Several NYS websites inaccurately classify PAs as registered rather than licensed, creating unnecessary confusion about their professional status.
- PAs receive education in pharmacology and are eligible to hold their own DEA license. However, when it comes to outpatient prescriptions by PAs, the requirement for physician identification on the prescription can lead to confusion, often causing delays in patients obtaining necessary medications.
- We received a request from a PA with over 30 years of experience practicing at a Federally Qualified Health Center (FQHC) in the Buffalo area. He is unable to sign OPWDD forms for patients to whom he has been providing care for many years. Instead, he must rely on a recently graduated Nurse Practitioner to sign these forms.

- In the Finger Lakes region, another PA working in a university health clinic cannot sign confirmation of immunization forms or immunization waivers for students.
- A PA serving as the medical director for a rural volunteer ambulance service in the southern tier region faces a challenge: he cannot order supplies for the squad without obtaining a letter from a physician granting him explicit permission to do so.
- In the Adirondack Region, A PA who is the sole night-shift provider covering the emergency department and hospital at this critical access hospital was informed her contract would not be renewed due to restrictions on PAs supervising radiologic technologists (RT) administering IV contrast. While she can order and administer the contrast, and respond to any allergic reaction that may occur, she cannot supervise the RT. She was uncomfortable leaving the emergency room patients during the time she was away in the radiology department to inject contrast.
- In Western NY, a PA employed in forensic psychiatry, alongside three other PAs, expresses concern that their 8,000 patients may be left without mental health care if their physician supervisor (psychiatrist) decides to retire. Despite actively searching for a psychiatrist for the past four years, they have been unsuccessful.

Over the 28 months of the joint pandemic and workforce crisis, New York PAs practiced without the mandatory need for physician supervision under Executive Order 202, and subsequently by Executive Order 4. EO 202 was necessary in March 2020 when PAs served as frontline healthcare providers directly confronting the challenges posed by COVID-19. PAs specializing in emergency medicine and critical care were complemented by others who transitioned from their usual work settings to the front lines. The extensive and robust clinical training PAs undergo provided them with the flexibility to shift specialties and serve as the healthcare heroes New York needed. It is crucial to note that PAs already possess this capability within our established scope; the executive orders merely facilitated a more agile response from the healthcare system.

Through EO 202 and EO 4, PAs played a vital role in offering the flexibility and ability to bridge gaps in the healthcare workforce by eliminating the mandate for physician supervision. This de facto demonstration project has unequivocally demonstrated that PAs contribute to enhanced access to high-quality care, effectively address workforce shortages, and broaden access for underserved populations in New York State.

PAs provide increased access to cost-effective, high-quality care.

PAs significantly enhance access to cost-effective, high-quality care, a fact consistently validated by numerous studies. These studies consistently demonstrate that PAs deliver care of comparable quality to physicians, focusing on preventive health and contributing to substantial

reductions in healthcare costs.²⁻⁸ Here are key findings from various studies:

- PAs working in community health centers demonstrate performance on par with physicians and additionally provide a greater extent of health education and counseling services.²
- PAs serving as Primary Care Providers (PCPs) at the Veterans Affairs (VA) achieve comparable outcomes for adult patients living with diabetes, including those in the early stages of the disease, managing chronic conditions, and on medication. This encompasses the control of key metrics such as hemoglobin A1C, blood pressure, and lipids.³⁻⁴
- PAs managing complex patients with diabetes were shown to reduce the utilization of acute care services, resulting in lower overall healthcare costs.⁵
- Patients receiving care from PAs following a myocardial infarction (heart attack) exhibit comparable rates across all measured metrics, including medication adherence, risk of readmission, mortality, and major adverse cardiovascular events.⁶
- PAs providing care after adult cardiac surgery contribute to a significant 41% reduction in the 30-day readmission rate, leading to substantial cost savings.⁷
- A review of publicly available data from the National Practitioner Data Bank and the NY Office of Professional Medical Conduct for the last 6 years shows no change in the number of reports processed against PAs for the period the Executive Orders were in place.⁸

PAs Address Gaps in the Healthcare Workforce, and Must Be Allowed to Participate in Loan Forgiveness Programs

Healthcare workers have and continue to suffer significant trauma during the public health crisis. As the most affected state, New York's healthcare workforce bore the brunt of mental, emotional, and physical strain from the onset of the pandemic. Increasing rates of burnout have led to 1 in 5 physicians and 2 in 5 nurses intending to leave practice within two years.⁹ Healthcare workers in NY continue to face these mental, emotional, and physical challenges, further intensified by shortages of qualified care providers. This situation will worsen in the upcoming years as more individuals depart from the field. PAs have been and will remain instrumental in bridging these gaps, minimizing the impact on access and care for New Yorkers.

In 2022 US News and World Report ranked the PA profession as the 2nd best healthcare career, and 3rd best career overall, citing PA's training in medicine, versatility, and cost-effectiveness.¹⁰

Job growth for PAs is predicted to be much faster than average job growth at 31% by 2030.¹¹ New York is home to 29 PA programs, with 2 more slated to open within the year, accounting for 10% of all programs nationwide. The New York State Education Department adds over 1,300 new PA licenses per year. An informal review of NY PA schools revealed that 25-30% of graduates leave NY after graduation.

By allowing PAs to practice to the fullest extent of their education, training, and experience, Adopting the Governor's proposal in the final budget will encourage PAs to stay in NY State and enhance the state's workforce. PAs, like other professionals, would be encouraged to stay if included in the existing and proposed loan repayment and tax credit incentive programs provided to other healthcare professionals. ***Accordingly, any student loan repayment and tax credit incentives should specifically identify PAs as eligible.***

PAs expand access to care for underserved populations in NYS including rural, immigrant, and LGBTQ populations.

In NYS, most counties include an HPSA, and 96% of PAs work in a county with an HPSA (Health Provider Shortage Area). According to the AAPA November 2021 PA Practice Survey, 46% of PAs said that a lack of a physician to fulfill state-required supervision requirements is a moderate to severe barrier to working in an HPSA.¹³ Within NY, with 96% of PAs already in the location of the HPSA, it may be a matter of changing the practice environment to increase access to care for those in HPSAs and medically underserved areas. For instance, data from the NY SED, seven physicians and 2 PAs practice in Hamilton County, NY. 66% (five) of those physicians are over the age of 80.

HPSA data from the Primary Care Development Corporation (PCDC) emphasizes the profound impact PAs have in providing primary in the underserved regions of New York State:¹³

- A higher proportion of PCP PAs (40%) practice in HPSAs compared to PCP physicians (36%).¹³
- In rural areas of NYS, PAs make up a greater proportion of the total practitioners (13.5%) compared to metropolitan (5.6%).¹³
- PAs represent 8.7% of PCPs in upstate counties, 6% of PCPs on Long Island, and 3.8% of PAs in New York City.¹³

PAs in states with prescriptive authority not restricted by physician supervision are twice as likely to prescribe HIV preexposure prophylaxis (PrEP) which carries a USPSTF Grade "A" recommendation and significantly impacts HIV which disproportionately affects New York State.¹⁴ PAs' focus on preventive health and impact on underserved populations is recognized by GLMA: Health Professionals Advancing LGBTQ Equality, the leading authority on LGBTQ health advocacy. GLMA identifies the essential role PAs play in interdisciplinary healthcare which is necessary for achieving health equality.¹⁵

PAs are the Solution.

The most up-to-date practice laws allow healthcare teams to decide at the practice level how they will collaborate to best meet the needs of patients. Evidence demonstrates the most successful clinical teams are those that utilize the skills and abilities of each team member most fully. The team approach supports efficient patient-centered healthcare.¹⁶⁻¹⁸ The PA profession is just over 50 years old and many of the laws governing PA practice have not been updated in over 20 years. Six states (North Dakota, Utah, Wyoming, Iowa, Arizona, and Montana) recognizing the PA's value, have removed the requirement for supervision, and several other states have legislation pending.

The Federal government, including Congress,¹⁹ the US Department of Health and Human Services, the US Department of the Treasury, and the US Department of Labor²⁰ value the vital role PAs play in the healthcare system, support removing practice barriers, and recognize parity in the services provided by PAs as compared to physicians. The National Governors Association²¹ encourages evaluation of laws and regulations governing PAs to ensure they are sufficiently broad to allow PAs to work to the full scope of their professional training.

The pandemic demonstrated how well our healthcare system can function with an efficient set of laws and regulations that enhance patients' access to highly educated and qualified healthcare providers. PAs are the solution to the NYS healthcare workforce shortage. Permanently removing PA supervision by physicians will ensure that your constituents and our patients can access the high-quality care provided by PAs.

Stories throughout New York State

- At the epicenter of the COVID-19 pandemic, Northwell Health was able to optimally redeploy PAs due to the flexibility provided by the Executive Orders, keeping ahead of surge needs. This included the utilization of PAs to lead teams of providers and the ability to quickly pivot PAs into positions as needed to meet the needs of patients.
- On Long Island, a major hospital system deployed non-critical care PAs (including many surgical PAs) to support Critical Care services while Orthopedic PAs supported infection control, employee health, and critical care. "With the removal of the supervising physician requirement per the Governor's multiple Executive Orders, in what could be considered a state-wide pilot program, PAs were asked to and readily provided quality care, including critical care, to help the many COVID patients. The lack of a formal, rigid supervising physician supporting line did not negatively affect patient care or outcomes."
- Further upstate, a primary care PA in New Rochelle who serves as the sole clinician for approximately 5,000 patients was better able to care for his patient due to the executive order. He reflects "It is all hands on deck during this crisis. It will be the same for future public health emergencies, there is no reason to leave perfectly qualified PAs standing on the sidelines when the country needs us, our state needs us, our patients need us. and our physician colleagues are counting on us."

- In Orange County, an urgent care PA appreciates the fundamentals of his PA training as he deploys with a wife and 1-year-old at home “I’m thankful that being a PA allowed me to maintain my employment during this pandemic, but more importantly I’m proud to say that it allowed me to help during a time when patients needed it the most.”
- In the Finger Lakes region, a PA at a major hospital system shares his pride in his profession. “The time of crisis brought out the best in our team as PAs across the system assumed various roles and provided excellent patient care. They worked collaboratively across the operational leadership structure, human resources, medical staff, and executive leadership.

Summary

PAs have played and continue to play an essential and indispensable role in the provision of healthcare and the protection of public health.

We kindly urge the legislature to include the Governor’s proposal as it relates to PAs in the final budget. Inclusion will eliminate administrative barriers impacting PA practice to improve patient choice and access to care.

Allowing PAs to practice without physician supervision after the PA has 8000 hours of clinical practice in primary care or is employed by and is credentialed and has privileges with an Art. 28 hospital or healthcare system, or PA has completed a program approved by DOH; remove limitations on how many PAs a physician can supervise in a private practice or hospital setting. Clarify prescribing privileges, including allowing PAs to write non-patient specific orders and orders for durable medical equipment; and a school district to select a PA as a director of school health services and other conforming changes, are measures essential for recognizing, supporting, and optimizing the contributions of PAs in addressing the healthcare challenges facing the state.

The provisions in the Governor’s proposed budget focus on removing arbitrary regulatory obstacles, enabling PAs to provide comprehensive care to patients within the bounds of our existing scope and in alignment with our education, training, knowledge, and experience.

About NYSSPA and PA Practice in New York

NYSSPA is a constituent organization of the American Academy of PAs (AAPA), and the representative organization for PA practice in New York State which has successfully advocated for a PA's ability to provide quality, cost-effective, patient-centered care.

Respectfully submitted.

Edward J. Mathes, PA-C, DFAAPA President
NYSSPA - New York State Society of PAs



Email: president@nysspa.org
Cell: 585.747.0728

References

1. New York State Office of the Governor. State of the State Book 2022: A New Era for New York, at p. 4. <https://www.governor.ny.gov/sites/default/files/2022-01/2022StateoftheStateBook.pdf>. January 5, 2022.
2. Kurtzman ET, Barnow BS. A Comparison of Nurse Practitioners, Physician Assistants, and Primary Care Physicians' Patterns of Practice and Quality of Care in Health Centers. *MedCare*. 2017;55(6):615-622. doi:10.1097/MLR.0000000000000689.
3. Jackson GL, Smith VA, Edelman D, et al. Intermediate Diabetes Outcomes in Patients Managed by Physicians, Nurse Practitioners, or Physician Assistants: A Cohort Study. *Ann Intern Med*. 2018;169(12):825-835. doi:10.7326/M17-1987.
4. Yang Y, Long Q, Jackson SL, et al. Nurse Practitioners, Physician Assistants, and Physicians Are Comparable in Managing the First Five Years of Diabetes. *Am J Med*. 2018;131(3):276-283.e2. doi:10.1016/j.amjmed.2017.08.026.
5. Morgan PA, Smith VA, Berkowitz TSZ, et al. Impact of physicians, nurse practitioners, and physician assistants on utilization and costs for complex patients. *Health Aff*. 2019;38(6):1028-36.
6. Rymer JA, Chen AY, Thomas L, et al. Advanced Practice Provider Versus Physician-Only Outpatient Follow-Up After Acute Myocardial Infarction. *J Am Heart Assoc*. 2018;7(17):e008481. doi:10.1161/JAHA.117.008481.
7. Nabagiez JP, Shariff MA, Molloy WJ, Demissie S, McGinn JT Jr. Cost analysis of physician assistant home visit program to reduce readmissions after cardiac surgery. *Ann Thorac Surg*. 2016;145(1):225-33.
8. U.S. Department of Health and Human Services, Health Resources and Services Administration. (2022). National Practitioner Data Bank Data Analysis Tool. A review of data for the last 6 years shows no change in the number of reports processed against PAs for the time period the Executive Orders were in place. Available at: <https://www.npdb.hrsa.gov/analysistool/>.

9. Sinsky CA, Brown RL, Stillman MJ, Linzer M. COVID-Related stress and work intentions in a sample of US health care workers. *Mayo Clinic Proceedings: Innovations, Quality & Outcomes*. 2021 Dec 1;5(6):1165-73.

10. US News and World Report. 100 Best Jobs. 2022. <https://money.usnews.com/careers/best-jobs/rankings/the-100-best-jobs>. Physician Assistant - Career Rankings, Salary, Reviews and Advice | US News Best Jobs

11. Bureau of Labor Statistics, U.S. Department of Labor. Occupational Outlook Handbook, Physician Assistants. <https://www.bls.gov/ooh/healthcare/physician-assistants.htm>. Accessed 1/10/2022.

12. HSPA data from AAPA

Social Determinants of Health Database (Beta Version). Content last reviewed June 2021. Agency for Healthcare Research and Quality, Rockville, MD. Accessed February 2, 2022.

<https://www.ahrq.gov/sdoh/data-analytics/sdoh-data.html>

Nov 2021 PA Practice Data

American Academy of Physician Associates. November 2021 PA Practice Survey. Unpublished data. Accessed February 2, 2022

13. Primary Care Development Corporation. Characteristics of Primary Care Providers in New York State. Points on Care. December 2021. "One solution to increasing the availability of PCPs has been Nurse Practitioners (NPs) and Physician Assistants (PAs). [...] Higher proportions of [...] PAs (40%) practice in Health Professional Shortage Areas compared to Physicians (36%). In rural areas, [...] PAs make up a greater proportion of the total practitioners [13.5%] when compared to metropolitan [5.6%]."

14. Carnes N, Zhang J, Gelaude D, Ya-lin AH, Mizuno Y, Hoover KW. Restricting access: a secondary analysis of the scope of practice laws and pre-exposure prophylaxis prescribing in the United States, 2017. *Journal of the Association of Nurses in AIDS Care*. 2022 Jan 1;33(1):89-97.

15. GLMA: Health Professionals Advancing LGBTQ Equality. GLMA Position Statement on Scope of Practice for Primary Healthcare Clinicians. December 2021.

<https://www.glma.org/index.cfm?fuseaction=Page.ViewPage&PageID=1242>. Accessed 1/29/2022.

("GLMA further recommends the removal of restrictions on the scope of practice that prevent all culturally competent primary care clinicians from practicing to the full extent of their discipline's education, experience, and training.")

16. Mitchell PM, Wynia R, Golden B, et al. Institute of Medicine. Core principles and values of effective team-based health care. <https://nam.edu/perspectives-2012-core-principles-values-of-effective-team-based-health-care>. Published October 2, 2012. Accessed November 2, 2020.

17. Doherty RB, Crowley RA; Health and Public Policy Committee of the American College of Physicians. Principles supporting dynamic clinical care teams: an American College of Physicians position paper. *Ann Intern Med.* 2013;159(9):620-626. doi:10.7326/0003-4819-159-9-201311050-00710.

18. Jabbarpour Y, DeMarchis E, Bazemore A, Grundy P. The impact of primary care practice transformation on cost, quality, and utilization: A systematic review of research published in 2016. Washington, DC: Patient-Centered Primary Care Collaborative. https://www.pcpcc.org/sites/default/files/resources/pcmh_evidence_report_08-1-17%20FINAL.pdf. Published July 2017. Accessed November 2, 2020.

19. U.S. Congress, Office of Technology Assessment. Nurse Practitioners, Physician Assistants, and Certified Nurse Midwives: A Policy Analysis. Health Technology Case Study 37. OTA-HCS-37. Washington, DC: U.S. Government Printing Office; December 1982:39. <https://www.princeton.edu/~ota/disk2/1986/8615/8615.PDF>. Accessed 1/8/2022. (“Most observers conclude that most primary care traditionally provided by physicians can be delivered by [physician assistants].”)

20. US Department of Health and Human Services, US Department of the Treasury, US Department of Labor. Reforming America’s Healthcare System Through Choice and Competition. HHS Press Office. Washington, DC; December 3, 2018. <https://www.hhs.gov/sites/default/files/Reforming-Americas-Healthcare-System-Through-Choice-and-Competition.pdf>. Accessed 1/8/2022. (“Physician assistants (PAs) [...] can safely and effectively provide some of the same healthcare services as physicians, in addition to providing complementary services.”)

21. Dunker A, Krofah E, Isasi F. The Role of Physician Assistants in Health Care Delivery. Washington, D.C.: National Governors Association Center for Best Practices. September 22, 2014.

<https://www.nga.org/wp-content/uploads/2019/08/1409TheRoleOfPhysicianAssistants.pdf>

22. New York State Office of the Governor. State of the State Book 2022: A New Era for New York, at p. 4. <https://www.governor.ny.gov/sites/default/files/2022-01/2022StateoftheStateBook.pdf>. January 5, 2022.

23. Kurtzman ET, Barnow BS. A Comparison of Nurse Practitioners, Physician Assistants, and Primary Care Physicians’ Patterns of Practice and Quality of Care in Health Centers. *MedCare.* 2017;55(6):615-622. doi:10.1097/MLR.0000000000000689.

24. Jackson GL, Smith VA, Edelman D, et al. Intermediate Diabetes Outcomes in Patients Managed by Physicians, Nurse Practitioners, or Physician Assistants: A Cohort Study. *Ann Intern Med.* 2018;169(12):825-835. doi:10.7326/M17-1987.

25. Yang Y, Long Q, Jackson SL, et al. Nurse Practitioners, Physician Assistants, and Physicians Are Comparable in Managing the First Five Years of Diabetes. *Am J Med.* 2018;131(3):276-283.e2. doi:10.1016/j.amjmed.2017.08.026.

26. Morgan PA, Smith VA, Berkowitz TSZ, et al. Impact of physicians, nurse practitioners, and physician assistants on utilization and costs for complex patients. *Health Aff.* 2019;38(6):1028-36.

27. Rymer JA, Chen AY, Thomas L, et al. Advanced Practice Provider Versus Physician-Only Outpatient Follow-Up After Acute Myocardial Infarction. *J Am Heart Assoc.* 2018;7(17):e008481. doi:10.1161/JAHA.117.008481.

28. Nabagiez JP, Shariff MA, Molloy WJ, Demissie S, McGinn JT Jr. Cost analysis of physician assistant home visit program to reduce readmissions after cardiac surgery. *Ann Thorac Surg.* 2016;145(1):225-33.

29. U.S. Department of Health and Human Services, Health Resources and Services Administration. (2022). National Practitioner Data Bank Data Analysis Tool. A review of data for the last 6 years shows no change in the number of reports processed against PAs for the time period the Executive Orders were in place. Available at: <https://www.npdb.hrsa.gov/analysistool/>.

30. Sinsky CA, Brown RL, Stillman MJ, Linzer M. COVID-Related stress and work intentions in a sample of US health care workers. *Mayo Clinic Proceedings: Innovations, Quality & Outcomes.* 2021 Dec 1;5(6):1165-73.

31. US News and World Report. 100 Best Jobs. 2022. <https://money.usnews.com/careers/best-jobs/rankings/the-100-best-jobs>. Physician Assistant - Career Rankings, Salary, Reviews and Advice | US News Best Jobs

32. Bureau of Labor Statistics, U.S. Department of Labor. Occupational Outlook Handbook, Physician Assistants. <https://www.bls.gov/ooh/healthcare/physician-assistants.htm>. Accessed 1/10/2022.

33. HSPA data from AAPA

Social Determinants of Health Database (Beta Version). Content last reviewed June 2021. Agency for Healthcare Research and Quality, Rockville, MD. Accessed February 2, 2022.

<https://www.ahrq.gov/sdoh/data-analytics/sdoh-data.html>

Nov 2021 PA Practice Data

American Academy of Physician Associates. November 2021 PA Practice Survey. Unpublished data. Accessed February 2, 2022

34. Primary Care Development Corporation. Characteristics of Primary Care Providers in New York State. Points on Care. December 2021. "One solution to increasing the availability of PCPs has been Nurse Practitioners (NPs) and Physician Assistants (PAs). [...] Higher proportions of [...] PAs (40%) practice in Health Professional Shortage Areas compared to Physicians (36%). In rural areas, [...] PAs make up a greater proportion of the total practitioners [13.5%] when compared to metropolitan [5.6%]."

35. Carnes N, Zhang J, Gelaude D, Ya-lin AH, Mizuno Y, Hoover KW. Restricting access: a secondary analysis of the scope of practice laws and pre-exposure prophylaxis prescribing in the United States, 2017. *Journal of the Association of Nurses in AIDS Care*. 2022 Jan 1;33(1):89-97.

36. GLMA: Health Professionals Advancing LGBTQ Equality. GLMA Position Statement on Scope of Practice for Primary Healthcare Clinicians. December 2021. <https://www.glma.org/index.cfm?fuseaction=Page.ViewPage&PageID=1242>. Accessed 1/29/2022. ("GLMA further recommends the removal of restrictions on the scope of practice that prevent all culturally competent primary care clinicians from practicing to the full extent of their discipline's education, experience, and training.")

37. Mitchell PM, Wynia R, Golden B, et al. Institute of Medicine. Core principles and values of effective team-based health care. <https://nam.edu/perspectives-2012-core-principles-values-of-effective-team-based-health-care>. Published October 2, 2012. Accessed November 2, 2020.

38. Doherty RB, Crowley RA; Health and Public Policy Committee of the American College of Physicians. Principles supporting dynamic clinical care teams: an American College of Physicians position paper. *Ann Intern Med*. 2013;159(9):620-626. doi:10.7326/0003-4819-159-9-201311050-00710.

39. Jabbarpour Y, DeMarchis E, Bazemore A, Grundy P. The impact of primary care practice transformation on cost, quality, and utilization: A systematic review of research published in 2016. Washington, DC: Patient-Centered Primary Care Collaborative. https://www.pcpcc.org/sites/default/files/resources/pcmh_evidence_report_08-1-17%20FINAL.pdf. Published July 2017. Accessed November 2, 2020.

40. U.S. Congress, Office of Technology Assessment. Nurse Practitioners, Physician Assistants, and Certified Nurse Midwives: A Policy Analysis. Health Technology Case Study 37. OTA-HCS-37. Washington, DC: U.S. Government Printing Office; December 1982:39. <https://www.princeton.edu/~ota/disk2/1986/8615/8615.PDF>. Accessed 1/8/2022. ("Most observers conclude that most primary care traditionally provided by physicians can be delivered by [physician assistants].")

41. US Department of Health and Human Services, US Department of the Treasury, US Department of Labor. Reforming America's Healthcare System Through Choice and Competition. HHS Press Office. Washington, DC; December 3, 2018.

<https://www.hhs.gov/sites/default/files/Reforming-Americas-Healthcare-System-Through-Choice-and-Competition.pdf>. Accessed 1/8/2022. ("Physician assistants (PAs) [...] can safely and effectively provide some of the same healthcare services as physicians, in addition to providing complementary services.")

42. Dunker A, Krofah E, Isasi F. The Role of Physician Assistants in Health Care Delivery. Washington, D.C.: National Governors Association Center for Best Practices. September 22, 2014. <https://www.nga.org/wp-content/uploads/2019/08/1409TheRoleOfPhysicianAssistants.pdf>

