



Meeting a critical

healthcare workforce need



How providers can create a successful Advanced Practice Provider strategy

In the face of physician shortages, rising healthcare costs, and patient dissatisfaction with long wait times, health systems are increasingly turning to Advanced Practice Providers (APPs) as a solution. However, simply hiring more APPs is not enough. To benefit from APPs' potential to improve care delivery, health systems should implement an enhanced APP strategy that addresses key challenges, promotes top-of-license contributions, and leverages data-driven strategies to optimize performance across the health system.

Growing demand for APPs



Before implementing an enhanced APP strategy, it is helpful to lay the groundwork and have a common definition. APPs are sometimes referred to as non-physician practitioners, physician extenders, and mid-level providers or practitioners, although these terms can be misinterpreted and / or inaccurate. The umbrella term of APP is most commonly used in reference to Advanced Practice Registered Nurses ("APRN") and Physician Assistants ("PA"), but other providers sometimes fall into this category as well. In 2023, the numbers of APPs in the US across four common categories approached half a million.

Number of providers
(per US Bureau of Labor Statistics – May 2023¹)

Advanced Practice Provider Type

Advanced Practice Registered Nurses (APRNs)

Nurse Practitioner (NP)	280,140
Certified Registered Nurse Anesthetists (CRNA)	47,810
Certified Nurse Midwives (CNMs)	6,960
Physician Assistants (PAs)	145,740

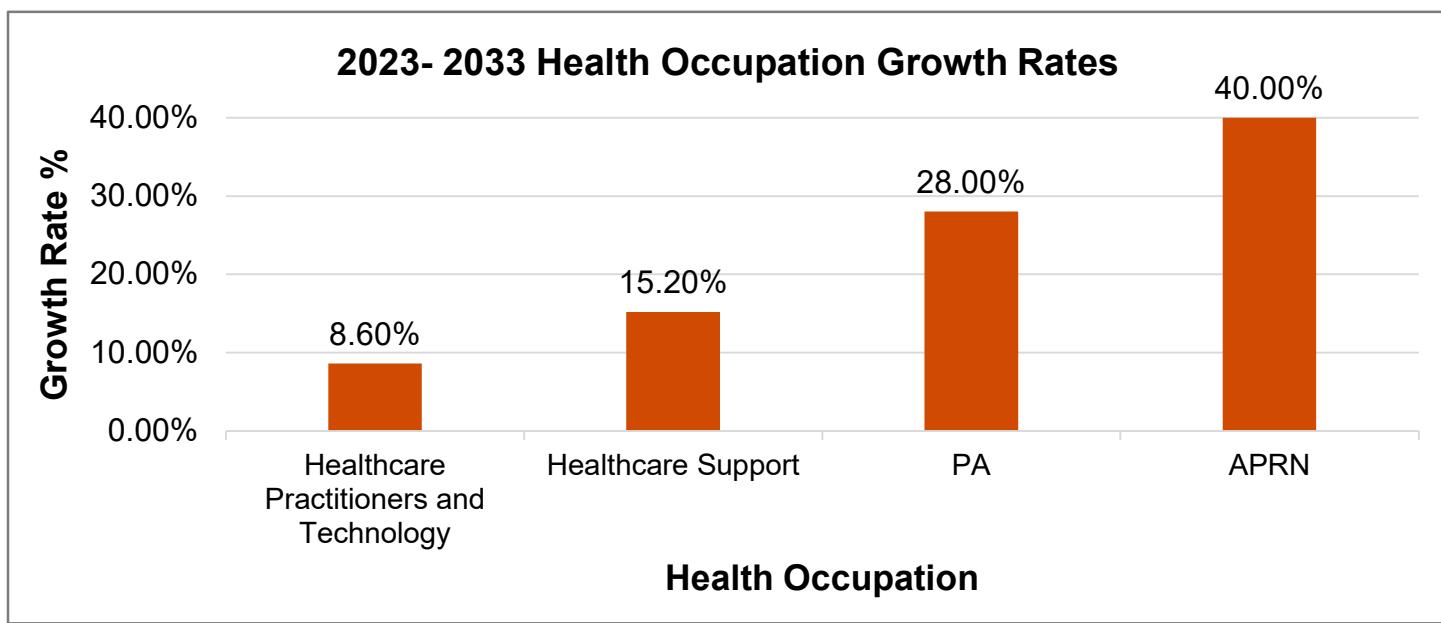
¹ U.S. Bureau of Labor Statistics. January 16, 2025. Accessed January 17, 2025. <https://www.bls.gov/>.



APPs are important to modern healthcare teams due to their extensive training, clinical expertise, and ability to provide high-quality patient care across many clinical settings, often at a reduced cost compared to physicians.

Macroeconomic forces are driving demand for APPs. Of primary importance is the continuing workforce shortage, highlighted by the AAMC's projected shortage of 86,000 physicians by 2036. Contributing factors to this deficit include the growing US population, projected to increase from 334 million in 2023 to 363 million by 2036. Additionally, the aging population approaching retirement age – both patients and providers – exacerbates the demand and supply challenges.

The rise in population and accompanying physician shortages is leading to disproportionate APP demand and job growth, compared to overall health care job growth as illustrated below.²



The proliferation of APPs is not simply to offset physician shortages – economic, access, and quality data suggest significant revenue and cost advantages for health systems. For example, a PA and a physician may provide the same primary care services at a health care system. From the health system's perspective, the average PA compensation (\$121,000) or NP compensation (\$114,000) is less than half the compensation of the average primary care physician (\$260,000), whereas the reduced reimbursement for the PA or NP conducting similar services as the physician is only approximately 15% according to Medicare's reimbursement guidelines.³

² KE. A comparison of nurse practitioners, physician assistants, and Primary Care Physicians' patterns of practice and quality of care in health centers. Medical care. Accessed January 17, 2025. <https://pubmed.ncbi.nlm.nih.gov/28234756/>.

³ <https://www.cms.gov/medicare/payment/fee-schedules/physician-fee-schedule/advanced-practice-nonphysician-practitioners/advanced-practice-registered-nurses-aprns>



From a patient access perspective, a health system with unmet demand, long wait times, and patients leaving due to inefficient referral processes can benefit from effective use of APPs to streamline patient access, increase patient volumes, and create capacity for new patient volumes that tend to have high ancillary and surgical yields.⁴

APPs also can maintain a quality of care comparable to that of physicians. A comprehensive research study that evaluated the quality of care and practice behaviors of

APPs compared to primary care physicians found that APPs effectively managed patient groups similar to those seen by physicians and achieved outcomes that were on par with quality indicators and resource utilization.² The comprehensive training that APPs undergo, combined with supportive regulations that facilitate collaboration with physicians, fosters a focus on delivering efficient, patient-centered care through the sharing of knowledge and resources.

By leveraging their extensive clinical expertise and proficiency in managing healthcare resources, APPs can effectively complement the healthcare workforce, thereby ensuring that patients continue to receive high-quality care even in the face of growing physician shortages. Their ability to seamlessly integrate into healthcare teams enhances the delivery of comprehensive care, ensuring that patients' needs are consistently met with the same high standards of excellence, even in challenging environments where healthcare demand is high, and resources may be limited.



⁴ Eswaramoorthy V, Eswaramoorthy V. Revenue lost due to patient leakage in hospitals and Health Systems. HealthViewX. August 28, 2020. Accessed January 22, 2025. <https://www.healthviewx.com/revenue-lost-patient-leakage-hospitals-health-systems/>.



Common challenges affecting APP care model



While the potential financial, quality and access benefits of APPs are clear, growing and integrating APPs into care delivery teams can pose several significant challenges for health systems.



The scope of practice for APPs varies significantly across the United States, largely due to state-specific laws. As of 2023, 27 states and the District of Columbia allow full practice authority for NPs, enabling them to evaluate patients, diagnose conditions, interpret diagnostic tests, and initiate treatment plans independently. In contrast, the remaining states require supervision and collaboration with a physician – limiting a NPs' ability to provide care independently.⁵ Similarly, PAs face varying levels of practice autonomy, with some states offering more flexibility under a supervisory model, while others impose stringent supervision requirements. State laws can influence the practice environment and employment opportunities for APPs and states with more restrictive laws may limit where and how APPs can work, impacting job availability and practice settings. These variations can influence the accessibility and delivery of healthcare services, impacting both APPs and the patient population they serve.



An APP's prescriptive authority is generally more limited compared to a physician's, largely due to state regulations and the need for collaborative or team-based models. As of 2023, NPs have full prescriptive authority, including the ability to prescribe controlled substances in 25 states and the District of Columbia and reduced prescriptive authority in other states.⁴ PAs typically have prescriptive authority that is contingent upon supervision of a physician, and the extent of this authority can vary depending on state laws. These regulatory differences mean that while APPs can often prescribe a wide range of medications, they may face more limitations compared to physicians, affecting their autonomy in managing patient treatment plans.

⁵ <https://www.aanp.org/practice/practice-related-research/research-reports>



Reimbursement and compensation

discrepancies between APPs and physicians can be attributed to differences in training, scope of practice, and payer policies. In addition to the previous example outlining compensation and Medicare reimbursement differences, some private insurers may have policies that further differentiate payment rates between APPs and physicians, contributing to the overall compensation disparities. Reports indicate that 79% of organizations use different compensation methodologies for Advanced Practice Providers (APPs) compared to physicians, which can influence healthcare delivery by affecting practice dynamics, load balancing among providers and potentially impacting patient access to care.⁶ These compensation differences can significantly impact role definitions, incentive structures, patient care models, and billing practices. Pay model disparities may lead to misaligned priorities and affect job satisfaction and retention, ultimately influencing the quality of patient care and the sustainability of practice operations.



Inadequate role definitions within a care team can lead to duplication of efforts, gaps in patient care, confusion among team members, and inefficiencies in workflows. Ineffective communication within a care team can lead to misinterpretations, delays in patient care, and errors in treatment plans. Limited access to resources can impede their ability to make informed clinical decisions or coordinate care efficiently. In states where APPs face restrictive practice regulations requiring extensive supervision by a physician, their ability to contribute independently and efficiently to patient care may be limited. When healthcare organizations do not fully leverage the skills and expertise of APP, it can result in increased burnout, diminished job satisfaction and higher turnover rates. Survey research and industry analyses estimate that the total direct cost of turnover for a single APP ranges from \$85,832 to \$114,919. This underscores the financial and operational impact of underutilizing APPs, highlighting the importance of optimizing their roles within healthcare teams.⁷



⁶ Five strategies to utilize, support and retain advanced practice providers. Accessed January 17, 2025. <https://www.vizientinc.com/insights/articles/2024/five-strategies-to-utilize-support-and-retain-advanced-practice-providers>.

⁷ Quantifying the cost of advanced practice provider turnover. Accessed January 17, 2025. <https://sullivancotter.com/wp-content/uploads/2020/02/Quantifying-the-Cost-of-Advanced-Practice-Provider-Turnover.pdf>.



Inability to measure the productivity of an APP accurately and completely in a care team creates significant challenges, as their varied roles often include direct patient care, administrative duties, and education. These contributions may not align with traditional productivity metrics such as patient volume and revenue generation, making it difficult to quantify their overall impact. A study published on measuring APP productivity at the National Comprehensive Cancer Networks Member Institutions highlights that although 54% of responding centers reported using work relative value units ("wRVU") targets for independent APP visits, 88% of APPs are either unsure or do not believe that wRVUs effectively measure their

overall productivity. This underscores the need for more comprehensive evaluation methods that truly capture the diverse contributions of APPs within healthcare teams.⁸ Many activities performed by APPs (e.g., patient education, care coordination, follow-ups, etc.) are crucial for quality of care but may not be directly billable or easily quantified, leading to underrepresentation of their contributions in productivity assessments. Similarly, when APPs practice in a team-based care models, it may be harder to isolate individual contributions and/or inflating physician wRVU productivity and related incentive compensation without corresponding APP recognition.



In addition, APPs work in a widely variable and complex range of healthcare settings such as hospitals, out-patient clinics, specialty practices, rural health clinics. Each setting presents a different patient population, care-team expectation, and set of productivity metrics to be met – complicating the ability to standardize these measures. The complexity of patients treated by APPs in different healthcare settings can influence the time and resources needed for care and the traditional productivity metrics may not adequately reflect the effort required to manage complex cases. While APPs often contribute significantly to patient outcomes, current productivity metrics often focus more on volume (e.g., number of patient visits or procedures), rather than quality of care and successful patient outcomes. To effectively measure an APP's productivity, it is essential to develop metrics that capture a broad range of activities and outcomes, including quality of care, patient satisfaction, and contributions to team-based care, alongside traditional volume-based measures.

⁸ Krause D, Sharrah K, Gross A, et al. Measuring advanced practice provider productivity at the National Comprehensive Cancer Network's member institutions. Journal of the advanced practitioner in oncology. July 2022. Accessed January 17, 2025. <https://pmc.ncbi.nlm.nih.gov/articles/PMC9328455/>.



Enhancing your APP strategy

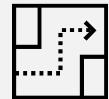
With an increasingly optimistic business case for APP growth, but faced with real organizational challenges, health systems can position themselves for success by considering the following strategies:

1

Engage with your physician and APP workforce to collaboratively plan an enhanced APP strategy.

Physicians and APPs offer valuable insights into how care teams can collaborate effectively and integrate smoothly. Their perspective is essential for aligning strategies with clinical goals, identifying potential challenges like overlapping responsibilities or workflow disruptions, and ensuring that APPs' roles complement physicians' expertise and enable top-of-license practice. They also provide critical feedback on what aspects of the healthcare system functions well and which areas require improvement, allowing for targeted interventions that enhance patient care and operational efficiencies.

Positioned on the frontline of care, APPs can identify new opportunities for expanding services, improving patient care, and streamlining processes. Their input can reveal untapped potential and innovative approaches to be integrated into the strategic plan. Involving APPs in planning fosters a sense of ownership and commitment to strategic goals, crucial for successful implementation. These providers become champions for the strategy, helping to drive adoption and adherence within the organization.



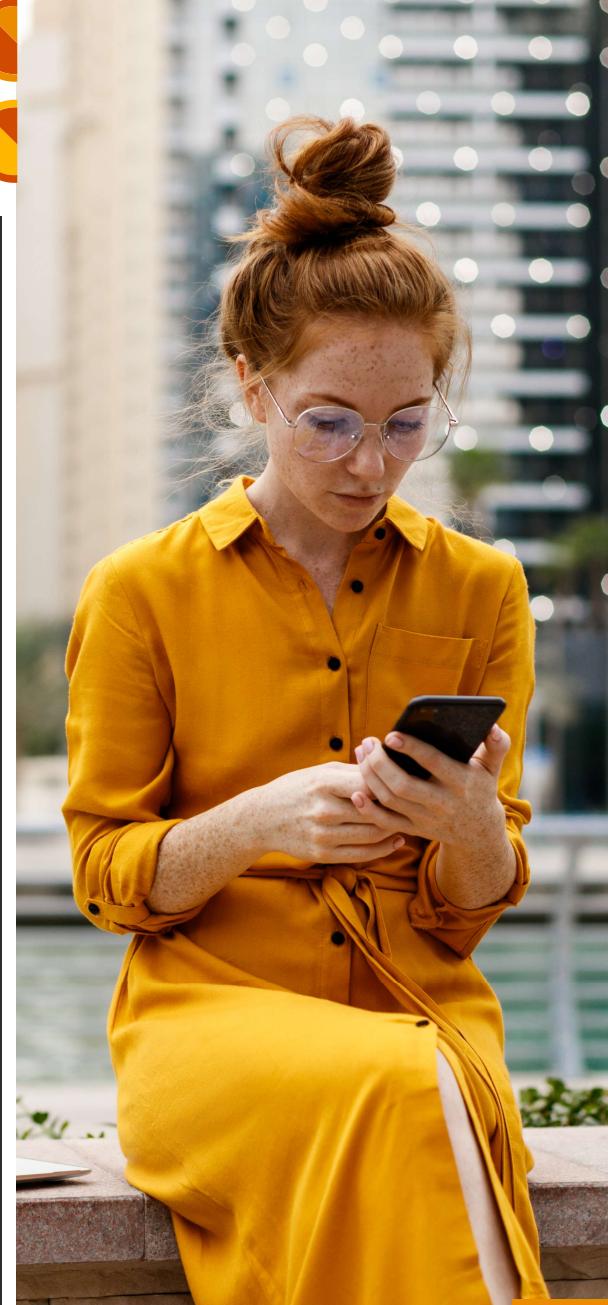


2

Identify APP high impact areas and build from there.

Effective utilization of APPs results in improved patient access, increased procedural volumes, enhanced provider productivity, elevated patient satisfaction and/or reduced cost of care.

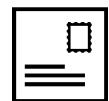
Focusing on those areas and specialties of greatest need can drive the ROI necessary to support further investment and growth in APPs. In a 2021 case study focused on optimizing the utilization of the APP workforce, an academic medical center achieved a 17% increase in overall APP patient visits by employing a data-driven approach.⁹ This strategy involved analyzing patient demand and workflow patterns to strategically schedule and allocate APPs, ensuring they were utilized in areas with the highest impact and need. By doing so, the center maximized the efficiency and effectiveness of APPs in patient care delivery, thereby enhancing team performance and optimizing resources. Incorporating advanced analytics to strategically deploy APP's and increase patient volumes, health systems can optimize the return on investment for each service line by analyzing data to identify which service lines would benefit most from increased patient volumes, thereby enabling informed resource allocation decisions.



3

Promote top-of-license care within varying care models.

Whether the APP is practicing independently or part of a multi-disciplinary care team, establishing clear performance expectations that leverages an APP's expertise will have significant quality and financial implications along with improving patient, physician, and APP satisfaction. By enabling APPs to fully leverage their training and skills, healthcare systems can maintain high-quality care, allowing physicians to concentrate on more complex cases, thereby promoting a more efficient and effective healthcare delivery model.¹⁰ As with any high functioning care team, ensuring that the necessary training / practice support is critical to maintaining an ability to practice at top-of-license.



⁹. Healthcare Advisory & Analytics - Workforce Strategies. SullivanCotter. August 13, 2024. Accessed January 17, 2025. <https://sullivancotter.com/>.

¹⁰. Kidd VD, Amin A, Bhatia N, et al. Optimal use of advanced practice providers at an Academic Medical Center: A First-year retrospective review. Cureus. January 31, 2023. Accessed January 17, 2025. <https://pmc.ncbi.nlm.nih.gov/articles/PMC9889205make/>.



4

Incentives matter – align productivity and compensation expectations accordingly.

While work relative value unit (wRVU) metrics used by the Center for Medicare and Medicaid Services (CMS) to calculate provider reimbursement rates are important for measuring productivity, it is also important to incorporate additional team-based metrics that align with health system priorities—such as increasing new patient visit volume, enhancing patient satisfaction, and reducing the cost of care—to encourage APPs to contribute more effectively. When APPs manage both new and existing patients, healthcare organizations experience a 163% improvement in ROI, demonstrating the value of aligning APP roles with broader system goals.¹¹ Further, considering incorporating individual or group incentives depends greatly on how APPs are being utilized within the health system. Well-aligned incentives drive the contribution margins necessary to fund competitive compensation and improve retention.



5

Develop APP pipeline through academic partnerships.

As higher education responds to increasing APP demand to create a more robust APP recruitment pipeline, securing strong academic alliances and partnerships can create competitive advantages for health systems. These collaborations not only foster innovation and enhance patient care through joint research initiatives but also offer continuous professional development opportunities that help APPs maintain and refine their skills. By investing in such partnerships, healthcare systems bolster their reputation and demonstrate a strong commitment to advancing education. Ultimately, these alliances ensure long-term success by cultivating a skilled and loyal workforce.



¹¹. Five strategies to utilize, support and retain advanced practice providers. Accessed January 17, 2025. <https://www.vizientinc.com/insights/articles/2024/five-strategies-to-utilize-support-and-retain-advanced-practice-providers>.

**6**

Track and report APP performance celebrating successes and adjusting along the way.

Increasing access, quality, satisfaction, and financial performance are all reasons to celebrate the impact APPs can have on a health system. In cases where expectations are not being met, it becomes crucial to re-evaluate the existing strategy to identify areas requiring improvement, which may involve reviewing workflows or reallocating resources.

Conducting regular performance reviews, whether quarterly or bi-annually, and utilizing data analytics allows for an objective assessment of APP contributions, ensuring that their impact is accurately understood. Moreover, providing platforms for APPs to offer feedback ensures that their valuable insights are incorporated into strategic planning, while continuous professional development is supported through ongoing training opportunities. Transparent reporting of performance metrics and fostering collaboration among APPs, physicians, and administrators build a culture of collective accountability, ultimately optimizing APP contributions and enhancing overall healthcare delivery.



By implementing an enhanced APP strategy, health systems can address critical issues, improve patient care and achieve significant economic benefits. Health systems that effectively engage with the APP community, focus on high-impact areas and align incentives as they integrate APPs into their care delivery teams can position themselves for success in the evolving healthcare landscape.

To learn more about how PwC could help your organization enhance its APP strategy, please contact:

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Thank you

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