



PAAs in Specialty Practice

An Analysis of Need, Growth and Future

a Whitepaper by the
National Commission on Certification of Physician Assistants

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About NCCPA

Established in 1975, NCCPA serves the interest of the public by providing rigorous certification programs for PAs. All states require graduates of PA programs to pass NCCPA's Physician Assistant National Certifying Exam, to obtain a license to practice medicine. To maintain certification, PAs must also pass rigorous assessments every 10 years and complete substantial CME every two years. Certified PAs are distinguished by the PA-C credential after their name. Annually, NCCPA provides in-depth information about Certified PAs in 23 different specialties. This data is provided by over 90 percent of the nation's 123,000 certified PAs who update their professional profiles. NCCPA aggregates this comprehensive data which accurately details where PAs work and the services they perform.



INTRODUCTION

The year 2013 marked the first time Americans had more office visits to specialists than primary care physicians, prompting Dr. Atul Grover, chief public policy officer for the Association of American Medical Colleges (AAMC), to observe in a Twitter message, “Demographics = destiny.”¹

As the U.S. population ages, more patients suffer from chronic diseases and complex medical conditions, spurring a greater need for specialty care.² According to a 2017 *Medscape* report, “people age 65 years or older comprise 14 percent of the population, but account for 34 percent of inpatient procedures and 37.4 percent of diagnostic treatments and tests.”³

These demographic shifts and increased health demands are exacerbating the overall physician shortage, especially in specialty medicine. The challenges are even more acute in rural and remote areas. Experts predict the problem will worsen. According to the AAMC, non-primary care specialties are expected to experience a shortfall between 33,500 and 61,800 physicians by 2030.

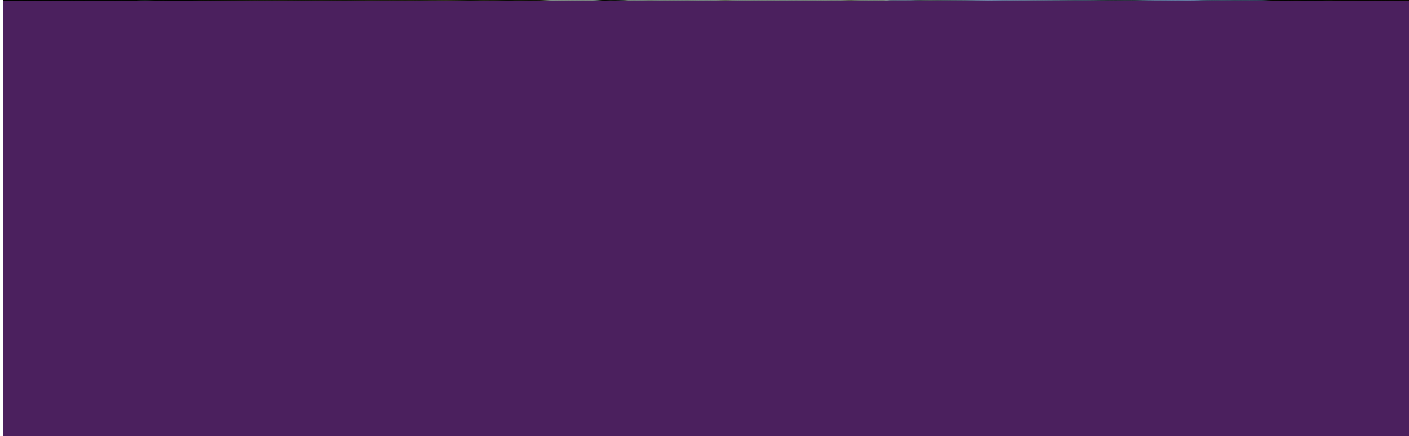
Fortunately, new data, and a growing body of academic research, show that physician assistants (PAs) are helping address physician shortages and improve care quality and efficiency. This paper examines the growth of PAs in specialty medicine, sharing fresh insights from new data collected by the National Commission on Certification of Physician Assistants (NCCPA). It then takes a closer look at the data and experiences of PAs practicing in three of the fastest growing specialty fields: Surgical Specialties, Emergency Medicine and Hospital Medicine.

The Growing Demand for Specialty Care



In addition to the aging population, geographic shifts are impacting the demand for more specialty care providers. For example, as more Americans move to cities, a specialist shortage persists in rural regions of the country. According to experts, while almost 20 percent of Americans live in rural areas, only 10 percent of physicians practice in those areas. As a result, those patients often face long travel distances to see a specialist, and may even wait months for an appointment.⁴

The growth in technology influences the need for specialists as well. As medicine becomes more advanced and more reliant on new technological innovations, specialty training is needed to help physicians keep abreast of the latest knowledge and treatments. For example, experts report human knowledge used to double every century. In today's world, clinical knowledge doubles every 18 months.⁵



An increasing number of PAs help meet the need for specialty care

Many experts, including the Institute of Medicine (IOM), point out that while the physician shortage is real, it can be solved by creating greater efficiencies in our health care system. One solution is to rely more heavily on PAs...⁶

Fortunately, Certified PAs are already filling gaps. According to the NCCPA, the percentage of PAs working in all practice specialties has grown 13 percent over the last three years. Furthermore, the number of PAs per 1,000 physicians has increased over 23 percent in that same period.



More PAs are earning additional credentials in speciality fields and working in specialty practices

PAs are educated and certified as generalists, ensuring that they possess a deep fund of core medical knowledge, and giving them the flexibility to practice in a range of areas from primary care to highly-complex surgical specialties.

PAs stay up-to-date in their practice area through ongoing continual medical education. Over 70 percent of PAs are in non-primary care specialties. However, because they must also stay up-to-date in core medical knowledge to remain certified, they are well equipped to evaluate the whole patient - a key to health promotion, disease prevention, early detection and treatment.

In addition, PAs may earn a Certificate of Added Qualifications (CAQ) credential in seven specialty areas. This requires a PA to acquire specialty experience, complete substantial Continuing Medical Education (CME) in the specialty, obtain a physician attestation and pass a national specialty exam.

PAs can earn a CAQ in one or more the following seven specialties: Cardiovascular and Thoracic Surgery, Emergency Medicine,



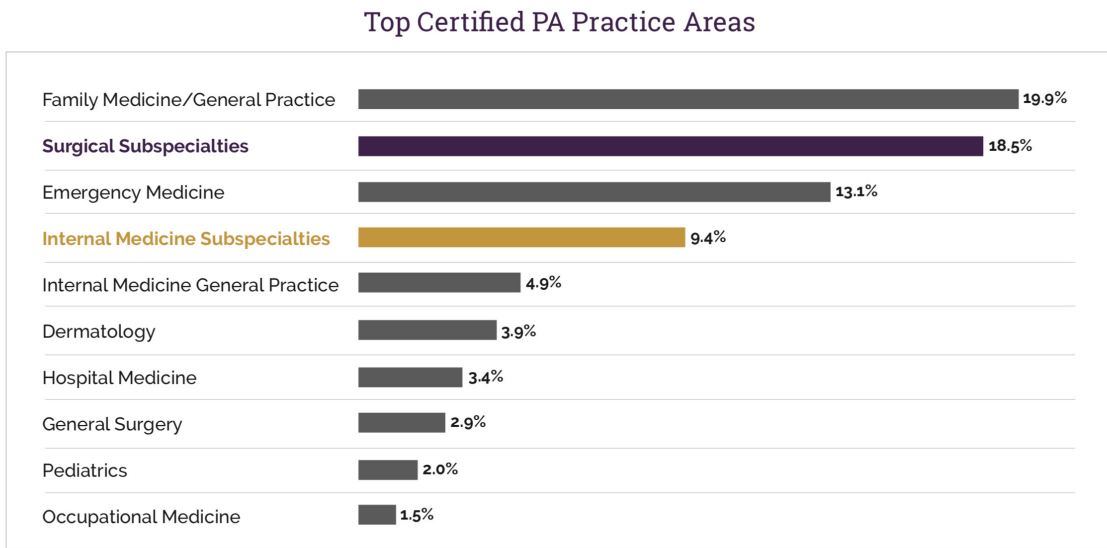
Hospital Medicine, Nephrology, Orthopaedic Surgery, Pediatrics and Psychiatry. The CAQ credential allows PAs to document their specialty experience, skills and knowledge.

Patients' growing need for specialty care, coupled with the availability of these highly-skilled, credentialed providers, means patients are more likely to encounter a PA in a specialty area than ever before. According to a report in *JAMA Internal Medicine*, about one in four specialty medical practices employs PAs or nurse practitioners today, and nearly half of multispecialty practices use them as well.⁷

Moreover, PAs continue to be in high-demand as specialty practices hire. Merritt Hawkins' *2018 Review of Physician and Advanced Practitioner Recruiting Incentives* report tracked a sample of 3,045 physician and advanced practitioner recruiting assignments going through the firm between April 1, 2017, and March 31, 2018. The analysis revealed that 74 percent of recruiting assignments were for medical specialists, up from 67 percent just three years ago.⁸

Surgical Specialties Growing the Fastest for PAs

The Health Resources and Services Administration (HRSA) projects that by 2025 nine of the 10 surgical specialties the organization analyzes will have national-level physician shortages, and PAs will be crucial to fill this void.⁹ Data from NCCPA's *2017 Statistical Report by Specialty* shows that surgical subspecialties are one of the fastest growing practice areas in the profession (see Graph 1).¹⁰ The number of Certified PAs practicing in a surgical subspecialty has increased 70.1 percent since 2013.¹¹



Graph 1

“I spend approximately 50% of my time in the operating room assisting in surgery. The rest of my day is spent in all aspects of clinical care, from admission through the period of outpatient follow up.”

--Steven Zurlinden, PA-C, Cardiovascular Surgery

Two of the most popular surgical subspecialties for PAs are orthopaedic surgery and cardiothoracic surgery.¹² In orthopaedic surgery practices, PAs can play a valuable role in pre-ops and post-ops, performing procedures and assisting in surgery. In cardiothoracic surgery, PAs provide similar services such as educating patients and families, performing vein harvesting and assisting in surgery. Certified PAs who take on these responsibilities free up busy surgeons so they can focus on the most complicated cases.

In addition to helping meet workforce needs, PAs help surgical specialty practices improve both the quality and efficient delivery of care. A recent study of the addition of PAs to orthopaedic surgery practices in Canada found that their presence allowed practices to significantly increase the number of patients they cared for while increasing other efficiencies such as care coordination and patient hand-offs back to their primary care physician.¹³

PAs role in expanding emergency room access to care

Emergency medicine is another field with a growing number of PAs, as they help to address critical workforce shortages and improve care quality. A recent study in the *Annals of Emergency Medicine*, showed emergency departments (EDs), especially in rural areas, are strained by a shortage of physicians and other health care providers.¹⁴ Researchers involved in the study stated, “Our analysis revealed that more than one-third of emergency department clinicians are someone other than an emergency physician...health systems have unique needs, and hospitals, particularly in rural areas, will continue to be challenged to harness the provider mix in their regions.”¹⁵

According to the 2017 NCCPA statistics, 12,519 PAs worked in emergency medicine, an almost 16 percent increase in the last two years. While they are filling staffing needs, PAs are also helping emergency departments in several other ways. A 2011 literature review shared in the *Academic Emergency Medicine Journal* states, “It appears that the use of PAs in EDs can favorably affect patient care. This may be through patient flow, differentiation of patients, offloading resident work hours, or augmenting staffing patterns. Improved clinical and financial outcomes are essential findings in a few studies. Other studies have demonstrated additional areas of influence such as quality of care.”¹⁶

Dr. Linda Lawrence, former Board President of the American College of Emergency Physicians and current NCCPA Board member, has seen an expansion of PAs’ knowledge and skills in recent years. “This has resulted in an expanded scope of practice, making them extremely valuable partners in the emergency department,” she said. “Certified PAs will continue to be in high demand in this specialty to meet the increasing needs of both patients and health systems.”

PAs are taking on leadership roles in many EDs, helping create process improvements that bolster efficiency and outcomes. For example, PAs are being called on to head up observation units, and help create and staff telemedicine programs.



“As part of a pilot program, I brought my expertise as a PA to the process of how telemedicine triage should operate, what resources would we needed, and what could be done by removing physical barriers. This will lead to improved access and decreased patient waiting times.”

--Dave Hieber, PA-C, Emergency Medicine

PAs in hospital medicine increase by 21 percent in three years

With a significant physician shortage, many hospitals are already experiencing a dearth of doctors.¹⁷ According to NCCPA's most recent Statistical Report of Certified PAs by Specialty, over 3,200 PAs now work in hospital medicine, a 21 percent increase over three years.¹⁸ PAs are often in charge of patients throughout their hospital stay, with a physician available to see the patient on an as-needed basis.

Having additional Certified PAs in the hospital setting may help organizations reduce their labor costs and expand staffing with no decrease in care quality. A recent study comparing two hospitalist groups -- one with a high PA-to-physician ratio (the "expanded PA" model) and one with a low PA-to-physician ratio ("conventional") -- has found no significant differences in important clinical outcomes achieved by both groups.¹⁹ This means that hospitals with provider shortages can hire PAs to fill staffing needs, at a lower cost, without compromising quality of care. Another recent study based in the Netherlands indicated that integrating PAs in the inpatient team may lead to improved patient experience, according to quality metrics.²⁰

PAs working in hospital medicine are proving their worth in today's value-based care paradigm. As hospitals move to new payment models, it is important to manage patients across the entire care continuum. PAs play a role in coordinating care, collaborating with multiple providers and assisting with care transitions and discharge. This can help lower readmission rates and length of stay in the hospital, outcomes typically tied to payment in new value-based payment models.

Certified PA Services Provided

Services Provided in Principal Clinical Position	Percent Who Indicated Service Provided for "Most Patients"
Diagnosis, treatment, and management of acute illnesses	75.6%
Diagnosis, treatment, and management of chronic illnesses	56.7%
Conduct physical examinations and obtain medical histories	88.4%
Order, perform, and interpret lab tests, X-rays, EKGs, and other diagnostic studies	80.9%
Prescribe medications for acute and chronic illnesses	81.9%
Provide preventive care, including screening and immunizations	40%
Perform procedures	33.7%
Counsel and educate patients and families	79.4%
Provide care coordination	49.4%
Make referrals	40.6%

“An observation unit should be closed because you can control your metrics better. It’s more than outcomes metrics. With the inclusion and exclusion criteria, you have dedicated people in the observation unit who understand exactly what is going on in the unit and understand how it needs to be run. Using this approach, we have been able to reduce length of stay by eight hours.”

--Kim Baker, PA-C, Hospital Medicine

PAAs are stepping up to meet the need for PAAs in mental health

The growing shortage of psychiatrists and increasing need for providers in mental health and addiction is leading to an increase of PAAs in the psychiatric field. Certified PAAs are increasingly providing mental health services to patients, diagnosing and managing a range of mental disorders in both inpatient and outpatient settings.

“As a PA working with psychiatrists, I enable additional patients to be seen, diagnosed and managed. I see patients as young as five and as old as 100 for a range of mental disorders including ADHD, depression, anxiety, bipolar disorder and schizophrenia.”

--Kristi Kincheloe, PA-C, who has a CAQ in psychiatry

What's ahead?

Primary care is critical to a strong health care system and PAs continue to play a major role in expanding access to primary care providers. Traditionally, PAs have been a big part of primary care, particularly in underserved areas. Certified PAs have a long history of providing care everywhere from islands off Alaska to Native American reservations, to rural and frontier communities across America, to prisons, to inner city free clinics, to extended care facilities, and to nursing homes.

However, health care is changing, and patient expectations are increasing. New disease variants present daily and the complexities of today's health care system demand specialization. New studies have found that a team-based approach to care that includes specialists is typically associated with better health outcomes,²¹ and PAs are valuable members of these health care teams.

Specialty health care also requires that providers stay up to date on current clinical knowledge. That means patients and employers will rely on PAs to be proven and prepared to bring those skills to the health care delivery process.

Today, 97 percent of PAs show that preparation by maintaining certification throughout their career, including formal continuing education and an objective assessment every 10 years.

The future of the nation's health care system will include medical breakthroughs and increased innovation. The industry is already struggling to improve access and outcomes for all patients. Certified PAs will continue to be in great demand in all specialties and a critical part of the health care workforce.

For additional information on how today's PAs are helping patients in a range of settings, please visit www.pasdothat.net.

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