



## PA<sup>s</sup> in Pediatrics

PA<sup>s</sup> are versatile providers of medical care, and many choose to care primarily for children. PA<sup>s</sup> practice in many settings, including outpatient practices and clinics, emergency departments, urgent care centers, and inpatient departments, including intensive care units. Within these settings, PA<sup>s</sup> perform well-child care, monitor developmental milestones, order and interpret laboratory and diagnostic tests, diagnose and treat acute and chronic conditions, perform procedures, and assist in surgeries.

### EDUCATION AND CERTIFICATION

Master's degree programs provide PA<sup>s</sup> with an intensive generalist medical education. Programs typically last 27 months<sup>1</sup> and employ curriculum modeled on medical school. The classroom phase covers basic medical sciences, including anatomy, physiology, pharmacology, physical diagnosis, behavioral sciences and ethics. PA students take more than 75 hours in pharmacology, 175 hours in behavioral sciences, more than 400 hours in basic sciences, and nearly 580 hours of clinical medicine. This is followed by rotations in pediatrics, family medicine, internal medicine, general surgery, obstetrics and gynecology, emergency medicine, and psychiatry. PA students complete at least 2,000 hours of supervised clinical practice by graduation.<sup>2,3</sup>

#### PA education by the numbers

27 months

75 hours of pharmacology

175 hours in behavioral sciences

400+ basic sciences

580 hours clinical medicine

2,000+ hours in clinical rotations

After graduation, PA<sup>s</sup> must pass a national certifying exam and obtain a state license. To maintain certification, PA<sup>s</sup> complete 100 hours of continuing medical education (CME) every two years and pass a national recertification exam every 10 years.<sup>4</sup>

PA<sup>s</sup> are lifelong learners who seek additional training for varied reasons such as practicing in a new specialty, demonstrating competence for credentialing, or gaining expertise in a clinical subject. For example, PA<sup>s</sup> can take courses in pediatric ultrasound, pediatric pain management, neurology, pediatric advanced life support (PALs), and neonatal resuscitation (NRP). While PA<sup>s</sup> are not required to attend a postgraduate residency, there are at least nine postgraduate programs in pediatrics—including emergency medicine, primary care, urgent care, neonatology, surgical specialties and neurology—available to PA<sup>s</sup> who want additional structured education.<sup>†</sup>

### PA WORKFORCE

Three-fourths of the PA<sup>s</sup> in general pediatrics work in office-based private practices. The remaining one-fourth practice in settings including community health centers, hospitals, school-based clinics, and college health centers.<sup>5</sup> Of 150,000 nationally certified PA<sup>s</sup>, 3.5 percent (5,250 PA<sup>s</sup>) practice in general pediatrics and pediatric subspecialties.<sup>6</sup> More than half of the 21,000 PA<sup>s</sup> in family medicine (56%) treat babies, children and adolescents.<sup>7</sup> These numbers are expected to increase over the next decade.<sup>8,9</sup>

<sup>†</sup> Orthopedic surgery—Texas Children's Hospital; neonatology—University of Pittsburgh Medical Center, Children's Hospital of Philadelphia, Nationwide Children's Hospital, and University of Kentucky College of Medicine; pediatric medicine or neurology—Carolinas HealthCare System; and pediatric urgent care—Eastern Virginia Medical School and PM Pediatrics.

## PA SCOPE OF PRACTICE IN PEDIATRICS

PAs provide a broad range of care to pediatric patients; duties depend on subspecialty and setting. PAs take medical histories, perform physical exams, order and interpret laboratory and diagnostic tests, diagnose and treat acute and chronic illnesses, develop and manage treatment plans, prescribe medications, provide patient education, perform procedures, and assist in surgery. Medical literature illustrates the range of PAs roles.

| Services provided by PAs in pediatrics  | Provided “for most patients” |
|---|------------------------------|
| Perform physical exams and obtain medical histories                           | 95.8%                        |
| Diagnose, treat and manage acute illnesses                                    | 95.5%                        |
| Counsel and educate   | 93.9%                        |
| Provide preventive care   | 86.8%                        |
| Prescribe medications for acute and chronic illnesses                         | 86.7%                        |
| Order, perform and interpret diagnostic studies                               | 64.7%                        |
| Provide care coordination   | 51.4%                        |
| Diagnose, treat and manage chronic illnesses                                  | 45.6%                        |
| Make referrals  | 44.9%                        |
| <i>Source: 2019 Statistical Profile of Certified PAs by Specialty, NCCPA.</i> |                              |

### *Primary care in Community Health Centers*

Community Health Centers (CHCs) deliver comprehensive primary care to medically underserved populations. A 2017 study of CHC patient health outcomes found that PAs and nurse practitioners (NPs) delivered similar quality of care, services, and referrals as physicians.<sup>10</sup> An earlier study of 104 CHCs found PAs and NPs conducted one-third of patient visits, 90 percent of them without physician involvement. One-third of visits to PAs were with patients under 18 years of age.<sup>11</sup>

### *PAs at Children’s National Medical Center*

Children’s National Medical Center compared outcomes on a hospital medicine service staffed by hospitalists and residents with one staffed by hospitalists, PAs, and NPs. Patients were 10 percent more likely to be discharged each day on the PA/NP service than the resident service. The PA/NP service had 13 percent fewer hospital charges with no increase in ICU transfers. Patients with bronchiolitis on the PA/NP service were one-sixth as likely to be readmitted within three days and half as likely within 30 days. The hospitalist/PA/NP service performed at least as well on length of stay, readmissions, ICU transfers, and charges as the service staffed by hospitalists and residents.<sup>12</sup>

### *PA and NPs enhance pediatric surgery practices*

Nearly all of the 266 surgeon members of the American Pediatric Surgical Association who were surveyed in 2018 had PAs or NPs in their practices. Analysis of the information found that most PAs/NPs covered general surgery and trauma. Most worked equal amounts of time in inpatient and outpatient settings; about half spent time in the neonatal or pediatric intensive care unit. Fifteen percent said PAs/NPs provided 24/7 coverage. They reported that PAs/NPs had a very positive (75%) or positive (21%) impact on their practices, and on patient satisfaction. The most significant impact was on continuity of care, efficiency of service, and education of parents and patients.<sup>13</sup>

### *PAs in the PICU*

The first PICU in the United States opened in 1967 at the Children’s Hospital of Philadelphia.<sup>14</sup> By the mid-1970s, most hospitals with pediatric residencies had PICUs staffed by residents. By the 1980s, PAs were integrated medical providers in PICUs and NICUs.<sup>15-17</sup> After five years of staffing its PICU with PAs and medical residents, the State University of New York Downstate Medical Center described their resident/PA combined staffing model as “fruitful and productive,” noting that PAs enhance continuity of patient care and are cost-effective medical providers.<sup>18</sup>

### *Pediatric emergency care by PAs*

A study in an urban community hospital found PAs to be qualified providers of pediatric emergency care. Children ( $\leq 6$  years old) treated by PAs in the ED at Our Lady of Lourdes Medical Center, Camden, New Jersey, had the lowest return rate and lowest admission rate on second visit among children seen by physicians or PAs. This “real world model” demonstrates that PAs deliver pediatric care “comparable to that of physician providers in a general community ED.”<sup>19</sup> In addition, American Academy of Pediatrics guidelines recognize PAs as ED providers.<sup>20</sup>

## THIRD PARTY REIMBURSEMENT

Medical and surgical services delivered by PAs are covered by Medicare, Medicaid, TRICARE, and nearly all commercial payers. All 50 states and the District of Columbia cover medical services provided by PAs under Medicaid. Nearly all commercial payers reimburse for services provided by PAs, however, they do not necessarily follow Medicare guidelines. Because of variation in claims submission, it is important to verify each payer’s specific coverage policies for PAs. For more information about third party coverage, visit <https://www.aapa.org/reimbursement>.

## PA VALUE

The value PAs bring to the healthcare system cannot be measured by direct billings alone. When a PA bills for care using his or her own National Provider Identifier (NPI), resulting revenue is easily tracked and credited to the PA, but many private insurers require PAs to bill under a physician’s name and NPI, and Medicare allows “incident-to” billing.<sup>21,22</sup>

PAs are particularly valuable to pediatric practices. In addition to conducting their own clinics, they can provide much of the needed wellness care, patient education, anticipatory guidance, and coordination of medical care with consultants, hospitals and families. In pediatric surgical practices, in addition to seeing patients and generating revenue in their own right, they provide preoperative and postoperative care—covered by global fees—that surgeons would otherwise have to provide, freeing the physicians to perform more surgeries or see new patients. PA contributions open access to more patients while maintaining high-quality care and improving patient satisfaction.<sup>23-25</sup> They are providers with high contribution margins who are less expensive to employ than physicians.<sup>26,27</sup>

## CONCLUSION

Many studies attest to the high quality of care PAs provide, favorably comparing it to physician care.<sup>28-31</sup> PAs increase patient access and contribute to improved quality by providing medical care and care coordination. They are a cost-effective resource for meeting patients’ medical needs. With a PA on staff, access to the care team improves, wait times decrease, and patient satisfaction rises.

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