



Supply, Demand and Recruiting Trends In Pediatrics

A resource provided by Merritt Hawkins, the nation's leading physician search and consulting firm and a company of AMN Healthcare (NYSE: AMN), the largest healthcare workforce solutions company in the United States.

SUPPLY, DEMAND AND RECRUITING TRENDS IN PEDIATRICS

INTRODUCTION

Merritt Hawkins is the nation's leading physician search and consulting firm and is a company of AMN Healthcare (NYSE: AMN) the largest healthcare staffing organization in the country and the innovator of healthcare workforce solutions.

As the thought leader in its field, Merritt Hawkins produces a series of surveys, white papers, speaking presentations and other resources intended to provide insight into physician supply and demand, physician compensation, physician practice patterns, recruiting strategies and related trends.

This white paper examines trends in the recruitment of pediatricians, including current supply and demand projections, compensation in the specialty, the role of pediatric subspecialists and recommendations for recruiting these sought-after health professionals.

HISTORY AND DEVELOPMENT OF PEDIATRICS

Dating back to at least the times of the ancient Greeks, physicians have provided care to children. The term pediatrics itself is derived from the Greek words *pias*, or child, and *iatros*, generally understood to mean physician or healer.

The first hospital dedicated to children was created in Paris in 1801. It was called Hôpital Necker-Enfants Malades, after Suzanne Necker, wife of the finance minister of Louis XVI. It was a public hospital, founded to care for children of both sexes under 15 years of age.

Great Ormond Street Hospital for Children was created in London in 1852. It opened with 10 beds and was the first hospital in Britain to offer dedicated care to children. In this hospital, Sir Thomas Smith was the first surgeon to attempt antiseptic surgery in 1875 (nursing.upenn.edu).

Abraham Jacobi, a German physician who emigrated to the United States in 1853, is considered to be the founder of modern pediatrics in America and offered the first medical lectures on the diseases of childhood in the U.S. in 1860. Prior to the Civil War, pediatrics was considered part of obstetrics in the United States.

In 1880, Jacobi and a few other interested physicians founded the American Medical Association's section on the diseases

of children. In 1888, they formed a new organization, the American Pediatric Society, which helped to solidify pediatrics as a distinct branch of medicine. Jacobi served as the first president of both groups.

Framers of the American Pediatric Society recruited prominent physicians into their ranks to advance the acceptance of pediatrics by the medical establishment. Early pediatricians such as Jacobi wrote prolifically in new journals and textbooks that focused exclusively on childhood diseases. They stressed the need for more children's hospitals, and for the expansion of pediatric content in medical school curricula. By 1900, ten schools of medicine had full-time pediatricians (nursing.upenn.edu).

Pediatric subspecialty care emerged in the U.S. in the early 1930s. Pediatric cardiology, pediatric endocrinology and child psychiatry were among the earliest pediatric medical subspecialties.

Today, there are over 250 children's hospitals in the U.S. providing 95% of transplants, cancer care and tertiary care received by children (ncbl.nlm.nih.gov). Children's hospitals play a major role in the care and treatment of underprivileged children.

SCOPE AND DUTIES OF PEDIATRICIANS

Pediatrics is the branch of medicine dealing with the health and medical care of infants, children, and adolescents from birth up to the age of 18.

A pediatrician is a child's physician who provides not only medical care for children who are acutely or chronically ill but also preventive health services for healthy children. Pediatricians manage the physical, mental, and emotional well-being of the children under their care at every stage of development, in both sickness and health.

The intent of pediatrics is to reduce infant and child mortality rates, control the spread of infectious disease, promote healthy lifestyles for a long disease-free life and help ease the problems of children and adolescents with chronic conditions.

Pediatricians diagnose and treat several conditions among children including:

- injuries
- infections
- genetic and congenital conditions
- cancers
- organ diseases and dysfunctions

Pediatrics is concerned not only with immediate management of the ill child but also the long-term effects on quality of life, disability and survival. Pediatricians are involved with the prevention, early detection, and management of illnesses and diseases. Duties to be performed by pediatricians include:

- Conduct regular thorough examinations on newborns and young children to check and record their health and normal physical development.
- Examine sick children to determine their condition and ask intuitive questions to gather information about symptoms.
- Reach an informed diagnosis based on scientific knowledge and individual medical history.
- Prescribe medications and give detailed instructions for administration.
- Prescribe and interpret appropriate lab tests to gain more information for possible infections or abnormalities.
- Prepare and administer vaccines according to the governmental vaccination plan.
- Examine and treat injuries and refer patients to physicians of other disciplines when necessary (e.g. surgeons, ophthalmologists, orthopedists etc.).
- Advise parents on children's diet, exercise and disease preventive measures.
- Keep updated records of patients' illnesses, surgeries or other medical episodes (allergic shocks, injuries etc.).
- Keep abreast of advancements in pediatrics and best practices by attending seminars and conferences.

Pediatrics is a collaborative specialty. Pediatricians need to work closely with other medical specialists and healthcare professionals and subspecialists of pediatrics to help children with problems.

PEDIATRICS VS. ADULT MEDICINE

Pediatrics is different from adult medicine in a variety of ways. The smaller body of an infant or neonate or of a child is substantially different physiologically from that of an adult. Therefore, treating a child is not the same as treating a miniature adult.

Congenital defects, genetic variance, and developmental issues are of greater concern to pediatricians than physicians treating adults. In addition, there are several legal issues in pediatrics. Children are minors and, in most jurisdictions, cannot make decisions for themselves. The issues of guardianship, privacy, legal responsibility and informed consent should be considered in every pediatric procedure.

EDUCATION AND TRAINING

A pediatrician must first graduate from medical school before going on to specialize in the field of pediatrics. Pediatricians must complete four years of college, four years of medical school, and then three years in an accredited pediatrics residency program.

In the United States, the American Board of Pediatrics is responsible for the board certification of pediatricians, which can be obtained after the residency has been completed. The certification requires individuals to pass a written examination about pediatrics. In order to remain certified, pediatricians need to undergo recertification every seven years.

A pediatrician may also choose to specialize further in a specific field of pediatric health, such as:

- Cardiology
- Critical care
- Dermatology
- Developmental pediatrics
- Endocrinology
- Gastroenterology
- Genetics
- Hematology
- Nephrology
- Neonatal medicine
- Oncology

This is not a complete list of pediatric subspecialties. A pediatrician may choose to study further in a variety of fields that can be applied to pediatric health if they have a particular interest in the area.

COMPOSITION OF THE PEDIATRICS WORKFORCE

Pediatrics is one of the larger medical specialties in the U.S. and includes more than 52,000 physicians in active patient care roles. The chart below provides data on the current composition of the pediatrics workforce.

PEDIATRICS SPECIALTY DEMOGRAPHICS		
In Active Patient Care	52,420	60%
International Medical School Graduates	13,339	13%
Board Certified	46,832	90%
Administrative/Teaching	1,678	3%
Last Year Residents	2,576	5%
Female	33,459	64%
Male	18,781	36%
45 and over	37,656	72%
55 and over	22,635	43%

Pediatricians are comparatively young on average relative to other types of physicians, as the chart below indicates:

PHYSICIANS 55 OR OLDER BY SPECIALTY	
Pulmonology	73%
Psychiatry	60%
Cardiology (Non-Inv.)	54%
Orthopedic Surgery	52%
Urology	52%
Ophthalmology	48%
General Surgery	48%
Pediatrics	43%

Pediatricians are less likely to be international medical graduates (IMGs) than are other types of physicians. Only 13% of pediatricians are IMGs compared to 25% of all physicians. Pediatricians also are considerably more likely to be female than other types of physicians. Sixty-four percent of pediatricians in active patient care are female compared to 34% of all physicians.

PEDIATRICS PRACTICE CHARACTERISTICS

Following are several pediatrics practice characteristics as tracked by the American Academy of Pediatrics.

Average hours worked per week by pediatricians in full-time practice: 53.7

Percent of pediatricians working full-time: 88%

Percent of pediatricians working part-time/other: 12%

PRACTICE STATUS OF PEDIATRICIANS BY GENDER

Full-time/male	96%
Part-time/male	4%
Full-time/female	76%
Part-time/female	24%

AVERAGE HOURS WORKED PER WEEK BY GENDER FOR FULL-TIME PEDIATRICIANS

Male	58
Female	54

PRACTICE SETTINGS OF PEDIATRICIANS

Office based	63%
Hospital/clinic based	17%
Medical school/teaching hospital	15%
Other	5%

Source: American Academy of Pediatrics

SUPPLY AND DEMAND TRENDS IN GENERAL PEDIATRICS

Pediatrics consistently ranks in the top ten most requested physician search engagements Merritt Hawkins conducts as ranked in our annual *Review of Physician and Advanced Practice Recruiting Incentives* (though in the 2020 Review it ranks 12th).

Demand for pediatricians is driven in part by birth rates, which have been in decline among U.S. women in the last several decades. In 1957, the U.S. averaged 123 births per 1,000 women of child-bearing age. That average declined dramatically to 63 births by 2015 (*Wall Street Journal, June 17, 2015*).

Nevertheless, there are still about 4 million births in the U.S. annually, and immigration adds to the number of children in the population. Physician demographics may be an additional factor driving demand for pediatricians. Approximately 73% of pediatric residents are women, and women now dominate the specialty. The 2018 *Survey of America's Physicians*, conducted by Merritt Hawkins on behalf of The Physicians Foundation, indicates that female physicians see 12% fewer patients than males and may be more likely to work part-time.

The numbers cited above from the American Academy of Pediatrics indicate that about one-quarter of female pediatricians work part-time, compared to just four percent of male pediatricians, while full-time male pediatricians work four hours a week more than full-time female pediatricians. These work patterns reduce overall FTEs in the specialty and may be one reason why demand for pediatricians remains strong.

Like other specialties, supply and demand for pediatricians varies by region. Demand is stronger in growing areas that are attracting families. An example is Frisco, Texas, a rapidly expanding suburb of Dallas with a population of approximately 178,000 in which there will soon be three children's hospitals, a very high ratio of children's hospital per population.

Demand also is strong in many rural areas, even though populations and birth rates are declining in some of these areas. The chart below illustrates the geographic variance in the number of pediatricians per childhood population, with states with largely rural populations generally showing fewer pediatricians per capita than states with large urban and suburban populations.

PEDIATRICIANS PER 100,000 CHILDREN BY STATE/MOST AND LEAST

1. Massachusetts	165	46. North Dakota	55
2. New York	123	47. Oklahoma	51
3. New Jersey	116	48. South Dakota	49
4. New Hampshire	110	49. Wyoming	44
5. Maine	102	50. Idaho	42

Source: American Board of Pediatrics

Though many rural areas are aging, they nevertheless have far fewer pediatricians per capita than they require.

The quality of care that children have access to, and their healthcare/well-being metrics, also vary by geographic region. The chart below ranks states based on a variety of factors, including infant death rates, child access to health insurance, pediatricians per capita, childhood obesity rates and others, and illustrates which states are the most and least favorable for children's health.

MOST AND LEAST FAVORABLE STATES FOR CHILDREN'S HEALTH

Most Favorable	Least Favorable
1. Massachusetts	46. Alaska
2. Vermont	47. Indiana
3. Rhode Island	48. Mississippi
4. New Jersey	49. Oklahoma
5. New York	50. Texas

Source: wallethub.com/edu/best-states-for-child-health

Demand for pediatricians is likely to be higher in those states that face pediatric care challenges than in those states in which children receive a relatively high standard of care.

Access to pediatric care is in part a function of the percent of the pediatric population covered by health insurance. In the U.S. today, approximately 95% of the nation's 74 million children are covered by private insurance, Medicaid or the Children's Health Insurance Program (CHIP). About 37 million children (approximately one-half) are covered by Medicaid or CHIP. These programs reimburse physicians at relatively low rates (sometimes less than the cost of providing care) which may limit access to pediatricians for some population groups.

THE SHORTAGE OF PEDIATRIC SUB-SPECIALISTS

Shortages in pediatric care are most acutely felt at the pediatric subspecialty level. There are very few pediatric subspecialists nationwide – only approximately 890 pediatric endocrinologists and approximately 1,360 pediatric hematologists/oncologists, for example – so the candidate pool is often very shallow. Even though they have completed three or more years of subspecialty training, some pediatric subspecialists earn about the same or even less compensation than general pediatricians. This is due in part to the relatively long periods of time they must spend with each patient and the fact that much of their compensation comes through Medicaid. This circumstance may limit the number of physicians interested in pediatric subspecialization.

The Children’s Hospital Association conducted a survey that asked children’s hospitals to highlight the pediatric subspecialties with the longest appointment wait times and vacancies at their institutions. The survey included responses from 40 children’s hospitals that illustrate the difficulty patients have in accessing pediatric subspecialty care (see chart below).

PEDIATRIC SUBSPECIALTIES WITH THE HIGHEST AVERAGE WAIT TIMES



Source: Children’s Hospital Association

As these numbers indicate, wait times to see a pediatric subspecialist can be as long as five months.

The survey also asked children’s hospitals to indicate if they have vacancies in a variety of pediatric subspecialties that have lasted more than 12 months (see chart below).

CHILDREN'S HOSPITALS EXPERIENCING VACANCY RATES OF MORE THAN 12 MONTHS FOR VARIOUS PEDIATRIC SUBSPECIALTIES

Child and Adolescent Psychiatry	47%
Developmental Pediatrics	47%
Dermatology	37.5%
Genetics	37.5%
Neurology	34.4%
Child Abuse	25%
Ophthalmology	25%

Due in part to the effect of Covid-19, Merritt Hawkins has seen demand accelerate for pediatric emergency medicine physicians, though shortages in this specialty are largely driven by burnout as the emotional toll of treating children in the ER can be high. Many pediatric emergency medicine physicians move into urgent care or into general pediatrics.

Demand also is particularly strong for pediatric endocrinologists as rates of childhood diabetes continue to grow. Other pediatric subspecialties in which Merritt Hawkins is seeing strong demand, and which remain searches that are very challenging to fill, include gastroenterology, nephrology, pulmonology and rheumatology.

The number of pediatric subspecialty search engagements Merritt Hawkins conducts has grown significantly over the last ten years. Given the limited number of these physicians, pediatric subspecialty vacancies are likely to be amongst the most challenging to fill for the foreseeable future.

PEDIATRICS SALARIES/INCENTIVES

Merritt Hawkins tracks the starting salaries our clients offer to recruit pediatricians and other types of physicians. The chart below indicates low, average and high starting salary numbers for pediatricians over the last several years.

	LOW	MEDIUM	HIGH
2019/20	\$170,000	\$221,000	\$300,000
2018/19	\$140,000	\$242,000	\$400,000
2017/18	\$189,000	\$230,000	\$355,000
2016/17	\$170,000	\$240,000	\$400,000
2015/16	\$165,000	\$224,000	\$308,000
2014/15	\$100,000	\$195,000	\$275,000

It is important to note that Merritt Hawkins' physician compensation numbers reflect average salaries offered to recruit physicians, not average total physician compensation, which, in addition to salaries, may include production bonuses or other sources of income. There are various surveys that track average physician total compensation in pediatrics, and these are indicated below:

AVERAGE COMPENSATION/PEDIATRICS

Sullivan Cotter	\$261,855
Integrated Healthcare Strategies (IHS)	\$255,064
ECG Management Consultants	\$247,747
American Medical Group Association	\$245,043
Medical Group Management Association (MGMA)	\$232,922

Signing bonuses are offered in the majority of recruiting contracts offered to pediatricians and to many other types of physicians. Low, average and high signing bonus amounts for pediatricians are indicated below:

LOW	MEDIUM	HIGH
\$2,000	\$24,000	\$65,000

Source: Merritt Hawkins 2020 Review of Physician and Advanced Practitioner Recruiting Incentives

A SOURCE OF REVENUE

Pediatricians, like other types of physicians, represent a source of revenue for hospitals that balance out the costs to recruit and employ them. Merritt Hawkins' Physician Inpatient/Outpatient Revenue Survey tracks the net revenue that physicians in various specialties generate for their affiliated hospitals annually. The chart below indicates these numbers for pediatrics, family medicine and internal medicine.

ANNUAL NET REVENUE GENERATED BY PHYSICIANS FOR HOSPITALS BY SELECTED SPECIALTIES	
Family Medicine	\$2,111,578
Internal Medicine	\$2,675,387
Pediatrics	\$1,612,500

Source: Merritt Hawkins 2019 Survey of Physician Inpatient/Outpatient Revenue

RECRUITING RECOMMENDATIONS

The recruiting market in pediatrics today is one in which there are more job openings for physicians than there are doctors to fill them. The mission for medical groups, hospitals and other facilities recruiting pediatricians, therefore, is finding ways to differentiate the practice opportunity from others that pediatricians may be considering.

If the practice is not located in an area perceived to be a popular destination, the need to stand out in some way increases.

In general, the recruiting facility will need to be flexible about the practice structure and characteristics to attract candidates. Today, all practice settings must have effectively responded to the Covid-19 pandemic, by putting in place worker and patient safety protocols and appropriate PPE and, where appropriate, implementing or expanding telehealth options.

Pediatrics is at the lower end of the physician compensation spectrum and most pediatricians are motivated by quality of life and quality of practice, rather than financial considerations, though the financial offer should be reasonably competitive.

A four-day work week, the option of part-time practice, or general schedule flexibility can be attractive incentives for

many pediatricians. Some pediatrics practices push for high patient volumes and some candidates are comfortable with this approach, but many prefer to spend more time with patients.

The requirement to attend deliveries and/or to resuscitate newborns will be a strong disincentive for many candidates, but may be unavoidable in rural and other typically underserved locations. In such locations, cases are fewer and can be more critical, presenting challenges that may be particularly unappealing to younger, inexperienced pediatricians. If these duties are required, compensation should be scaled upward accordingly.

Newborn roundings and well-baby checks are more widely accepted given a reasonable call schedule. Understanding the characteristics of the local obstetrics/gynecology group and the level of risk they take on is important and should be conveyed to pediatrics candidates during the recruiting process.

Pediatric subspecialty support is a strong preference for most pediatric candidates, many of whom are not comfortable "being on an island."

Ideally, the practice will be able to offer a variety of attractions, including good financials, a flexible schedule, an effective response to Covid-19 and minimal inpatient work. For younger pediatricians, educational loan forgiveness can be a compelling attraction.

The key is to make the practice environment – the physician’s “workshop” – as appealing as possible. Hospitals, medical groups and other facilities seeking physicians cannot control their location or the number of professional sports teams or other attractions in their area. However, they can take steps to ensure that the practice conditions under which the physician will work will be as positive as possible.

This may include staffing the practice with physician assistants to free up physician time, allowing physicians to play a leadership role and assist in the implementation of telehealth and of emerging delivery models such as population health management that are built around the team-based approach to care (for more information on this topic see Merritt Hawkins’ white paper Population Health Management and Physician Staffing). It also could include the use of locum tenens physicians to provide physicians with more schedule

flexibility or help during peak usage periods, thereby reducing stress and burnout. The use of scribes to assist with quality tracking and data entry is appealing to many physicians, as is access to subspecialists.

In today’s market, it is important to remain objective on candidate parameters. A newly minted resident may not be the most appropriate candidate. The right candidate may be an older physician with a proven track record who wants to be in your community or a candidate who requires the employer’s assistance in obtaining a work visa or green card. It is important to focus on practical qualities such as training, commitment, work ethic and bedside manner rather than seeking an idealized candidate from Central Casting. It also is important to make the recruiting process as easy and streamlined as possible. Given the Covid-19 pandemic, many medical groups and hospitals have transitioned to virtual interviews, which can reduce time and scheduling inconveniences.

The challenges inherent to recruiting pediatricians are unlikely to ease, but with maximum effort and a willingness to tailor the practice to the wants and needs of today’s doctors, recruiting success still is attainable.

ABOUT MERRITT HAWKINS

Established in 1987, Merritt Hawkins is the leading physician search and consulting firm in the United States and is a company of AMN Healthcare (NYSE: AMN), the largest healthcare workforce solutions organization in the nation. Merritt Hawkins' provides physician and advanced practitioner recruiting services to hospitals, medical groups, community health centers, telehealth providers and many other types of entities nationwide.

The thought leader in our industry, Merritt Hawkins produces a series of surveys, white papers, books, and speaking presentations internally and also produces research and thought leadership for third parties. Organizations for which Merritt Hawkins has completed research and analysis projects include **The Physicians Foundation, the Indian Health Service, Trinity University, the American Academy of Physician Assistants, the Association of Academic Surgical Administrators, The Maryland Medical Society, and the North Texas Regional Extension Center.**

This is one in a series of Merritt Hawkins' white papers examining a variety of topics directly or indirectly affecting the recruitment and retention of physicians and advanced practice professionals, including physician assistants (PAs) and nurse practitioner (NPs).

Additional Merritt Hawkins' white papers include:

- Supply, Demand and Recruiting Trends in Family Medicine
- Ten Keys to Enhancing Physician/Hospital Relations: A Guide for Hospital Leaders
- Rural Physician Recruiting Challenges and Solutions
- Psychiatry: "The Silent Shortage"
- Nurse Practitioners and Physician Assistants: Supply, Distribution, and Scope of Practice Considerations
- The Physician Shortage: Data Points and State Rankings
- Physician Supply Considerations: The Emerging Shortage of Medical Specialists
- Supply, Demand and Recruiting Trends in Internal Medicine
- The Economic Impact of Physicians
- Will There Be a Doctor in the House? Physician Supply, Demand in the Era of Covid-19
- Trends in Incentive-Based Physician Compensation

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