



## **Dermatology: Supply, Demand, Compensation and Recruiting Trends**

## Introduction

AMN Healthcare Physician Solutions (formerly Merritt Hawkins) is the nation's leading physician search and consulting firm.

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

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

## What Dermatologists Do

Dermatologists are physicians who have expertise in the care of the body's largest and fastest growing organ – the skin. This includes treatment of normal skin and diagnosis and treatment of diseases of the skin. Dermatologists also specialize in skin appendages, such as hair and nails. These physicians are also responsible for helping patients with the improvement of their physical appearance as it relates to the skin, hair, and nails; for example, lessening the appearance of wrinkles or scars.

Dermatologists may have training and experience in areas such as electrosurgery (surgical use of high-frequency electric current for cutting or destroying tissue), cryosurgery (which involves freezing tissue), laser surgery, and excision surgery (involving removal by cutting) with appropriate closures (including skin grafts).



Dermatologists treat approximately 3,000 skin conditions and diseases. Among the conditions they treat are:

- **Vitiligo:** The skin loses melanin, leading to patches of lighter colored skin.
- **Acne:** One of the most common diseases in the U.S., acne is a disease affecting the oil glands of the skin.
- **Dermatitis and eczema:** Dermatitis is inflammation of the skin.
- **Fungal infections:** Fungus can infect the skin, nails, and hair.
- **Hair disorders:** Including hair loss caused by alopecia, head lice and others.
- **Nail problems:** Including fungal infections and ingrowing toenails.
- **Psoriasis:** This is a chronic, autoimmune skin disorder that speeds up the growth of skin cells.
- **Rosacea:** Rosacea causes redness in the face, similar to blushing.
- **Skin cancer:** Almost 5 million people receive treatment for skin cancer in the U.S. every year, and one in five people in the U.S. will develop a form of skin cancer in their lifetime.
- **Shingles, or herpes zoster:** This viral infection affects the nerve endings in the skin and causes a painful rash.
- **Warts:** These are contagious, benign skin growths that appear when a virus infects the top layer of skin.

## Medical Procedures Used

Dermatologists use a range of medical and cosmetic surgical procedures when treating patients, including:

- Allergy testing
- Biopsies
- Chemical peels
- Cosmetic injections
- Cryotherapy
- Dermabrasion
- Excisions of lesions
- Hair removal and restoration
- Laser surgery/tattoo removal
- Mohs surgery (Mohs surgery is only performed by Mohs surgeons and requires additional medical training).
- Psoralen combined with ultraviolet A (PUVA)
- Skin grafts and flaps
- Tumescant liposuction
- Vein therapy





## Practice Settings

Dermatologists may work in any healthcare institution. Hospitals employ dermatologists to assist patients in the acute phase of skin injury. Medical office suites may keep dermatologists on staff to expand their health care services. Some dermatologists choose to work in laboratories, researching new dermatological conditions and coming up with plausible treatment theories. A dermatologist may also work in academia, spending their time training up-and-coming dermatologists in a medical school.

However, dermatology is almost always an outpatient function, meaning dermatologists typically work in clinics or group practices, though dermatologists do sometimes complete rounds, caring for hospital inpatients or completing emergency assessments. Dermatology practices may be owned by dermatologists themselves or owned by hospitals or private equity groups. Typically, board certified dermatologists spend the majority of their time in outpatient clinics or completing related surgeries.

On occasion, dermatologists work as part of a team of consultants with plastic and maxillofacial surgeons and oncologists in order to best aid patients suffering from diseases such as skin cancer. Dermatology is a medical specialty that often features a set schedule and requires very few weekends as compared to other types of physicians.

## History of Dermatology

Treating the skin with chemicals dates back to the ancient Egyptians who used arsenic on the skin to kill cancer.

They also used animal oils, salt, alabaster, and sour milk to improve the appearance of skin. Cleopatra was reputed to take milk baths, enjoying the cosmetic benefits of lactic acid, an alpha-hydroxy acid, for softer, smoother skin.

One of the earliest known sources documenting skin ailments is the Ebers Papyrus, a medical document from ancient Egypt dating to around 1500 BC. It describes various skin diseases, including ulcers, rashes, and tumors, and prescribes surgery and ointments to treat the ailments.

The Greeks and Romans used mixtures of pumice, frankincense, myrrh, and tree resins to lighten the skin, remove freckles, and smooth wrinkles. Turkish treatments used fire to lightly singe the skin for exfoliation. And, in India, women sought soft, smooth skin from a mixture of urine and pumice applied to their faces.

According to Wikipedia, “In 1572, Geronimo Mercuriali of Forlì, Italy, completed *De morbis cutaneis* (translated “On the diseases of the skin”), which is known as the first scientific work to be dedicated to dermatology. In 1799, Francesco Bianchi wrote the book *Dermatologia* which is the first comprehensive textbook of modern dermatology written for the students of medicine. ”

“Scientific dermatology began on Nov. 27, 1801, when the Hôpital Saint-Louis, in Paris, was officially dedicated to the treatment of cutaneous diseases, with Jean Louis Alibert at its head. It was Alibert and later teachers who were responsible for directing American physicians toward dermatologic study.”

Today, dermatology is a firmly established medical specialty in which physicians can be board-certified and in which they can subspecialize.



## Education and Training

Completion of a bachelor's degree is the first higher-education step toward becoming a dermatologist. Although candidates complete a broad range of undergraduate majors, students should complete the courses that the American Association of Medical Colleges found most medical schools require as prerequisites: biology, physics, and chemistry, along with written and oral communication course study.

College graduates next must graduate from an accredited medical school and then complete a three-year dermatology residency. Once accepted and matched with a residency program, residents will spend 36 months seeing patients, learning to treat and diagnose skin, hair, and nail conditions, and receiving surgical training, such as skin and nail biopsies, cryotherapy, injections, and excisions.

Dermatology is one of the most competitive medical specialties. Only 61% of graduating medical students who select dermatology as their first choice of residency are typically matched with a position in the field. By contrast, 98% of those pursuing internal medicine and 99% seeking family medicine as their first choice typically are matched.

To practice as a dermatologist, residents must:

1. Secure a license. Licensing requirements vary by state, and dermatologists must sit for a state exam in each state in which they plan to practice medicine.
2. Become board certified. In order to become board certified in dermatology, medical doctors must meet all of the following requirements:
  - Graduate from an accredited medical school in the U.S., Canada or an international school approved by World Health Organization (WHO).
  - Hold an unrestricted license to practice in at least one state.
  - Complete required training for dermatology specialty, as dictated by the American Board of Dermatology.
  - Test for and pass American Board of dermatology (ABOD) exam for dermatology.

3. Dermatologists should be aware some maintenance of certification (MOC) activity should be completed every three years and physicians must pass the MOC exam in their specialty or specialties every 10 years, per ABOD requirements.

## Subspecialty Options

Dermatologists interested in specializing even further can apply for and complete fellowships in one of the three American Board of Dermatology-approved sub-specialties. These include Dermatopathology, Pediatric Dermatology, and Procedural Dermatology. Following the successful completion of a fellowship, Dermatologists may apply to sit for their respective sub-specialty exams.

Dermatology subspecialties focus on specific treatment areas or procedures, including:

### Dermatopathology

A dermatopathologist is a pathologist or dermatologist who specializes in the pathology of the skin. This field is shared by dermatologists and pathologists. Usually, a dermatologist or pathologist will complete one year of dermatopathology fellowship.

### Procedural Dermatology

A procedural dermatologist can perform various types of excision surgeries, including Mohs surgery. Physicians trained in this technique must be comfortable with both pathology and surgery, and dermatologists receive extensive training in both during their residency. Physicians who perform Mohs surgery can receive training in this specialized technique during their dermatology residency, but many will seek additional training either through preceptorships to join the American Society for Mohs Surgery or through formal one-to-two-year Mohs surgery fellowship training programs administered by the American College of Mohs Surgery.



## Pediatric Dermatology

Physicians can qualify for this subspecialty by completing both a pediatric residency and a dermatology residency. Or they might elect to complete a post-residency fellowship. This field encompasses the complex diseases of the neonates, hereditary skin diseases or genodermatoses, and the many challenges of working with the pediatric population.

## Teledermatology

Teledermatology is a form of dermatology where telecommunication technologies are used to exchange medical information via various forms of media (audio, visual and also data communication, but typically photos of dermatologic conditions) usually made by non-dermatologists for evaluation off-site by dermatologists). This practice type deals with options to view skin conditions over a large distance to provide knowledge exchange, to establish second-opinion services for experts or to use this for follow-up of individuals with chronic skin conditions. Teledermatology can reduce wait times by allowing dermatologists to treat minor conditions online while serious conditions requiring immediate care are given priority for appointments.

## Professional Organizations

Dermatologists may be members of several medical societies, including:

- American Academy of Dermatology
- American Dermatological Association
- American Society of Dermatology.

## Supply and Demand Trends

Supply and demand trends in dermatology reflect those of the wider physician workforce, in which pervasive shortages are emerging. The Association of American Medical Colleges (AAMC) in its June 2021 study projected a shortage of up to 124,000 physicians by 2034. This includes a shortage of up to approximately 48,000 primary care physicians, but an even more severe shortage of up to 78,000 specialists.

As in many other specialties, demand for dermatologists is being driven by population aging and patient lifestyle choices, which for many people includes prolonged exposure to the sun or to sunlamps. Though senior citizens 65 or older represent only 14% of the population, they account for 37% of diagnostic tests and procedures, according to the CDC. The population of people 65 and older is expected to reach 83.7 million by 2050, according to the U.S. Census Bureau, up from 44 million today, a demographic trend that will significantly increase demand for dermatologists and many other types of specialists.

Already today, skin cancer is the most commonly diagnosed form of cancer in the U.S. and its incidence is expected to rise due to the factors referenced above.

- Each year, 5.4 million cases of non-melanoma skin cancer are detected.
- More new cases of skin cancer are detected every year than the combined cases of breast, prostate, lung, and colon cancer.
- Approximately 87,110 cases of invasive melanoma were diagnosed in 2017 (*Skin Cancer Foundation*).

## Cosmetic procedures driving demand

Demand for dermatologists also has increased due to the growing number of cosmetic procedures and treatments that dermatologists perform (derm abrasions, laser hair removal, etc.), some of which did not exist or were rarely performed 20 years ago, but which are very much in demand today.

Meanwhile, the supply of dermatologists remains limited, as illustrated by the chart below.

### SPECIALTY DEMOGRAPHIC: Dermatology

Total Dermatologists	13,500
Total In Patient Care	11,110
Last-year residents	470
Board Certified	82%
IMG	4%
Male	57%
Female	43%
Under 45	39%
Over 55	38%

Source: AMA 2023 Physician Masterfile.

As these numbers indicate, there are only about 11,500 dermatologists in the U.S. today in active patient care roles. Of these, about 43% are women, though women comprise only about 36% of all physicians. This affects total physician FTEs in the specialty, as female physicians typically work fewer hours and see fewer patients on average than do male physicians, while often retiring earlier (see AMN Healthcare 2019 Survey of Women Physicians).

In addition, 38% of dermatologists are 55 years old or older and a wave of retirements in the specialty can be anticipated. Though retirements are likely to accelerate, the number of newly trained dermatology residents entering the field is relatively fixed at around 470, due in part to the cap Congress placed on graduate medical education (GME) funding in 1997 (the cap was removed in 2020 by the COVID-19 relief bill, but only 1,000 new residency positions were funded over five years).

It also should be noted that only 4% of dermatologists are international medical graduates (IMGs) compared to about 25% of all practicing doctors. This limits the number of dermatologists on J-1 visas who are more likely to practice in rural or other traditionally underserved areas as a means of obtaining permanent U.S. residence.





Shortages of dermatologists are therefore likely to become more pronounced. A Health Resources and Services Administration (HRSA) workforce analysis projects shortages in a variety of internal medicine subspecialties, including dermatology, as the chart below indicates:

### National Estimates of Physician Supply, Demand and Deficits/Internal Medicine Subspecialties by 2025

Specialty	Supply 2015	Demand	Deficit/2025
Allergy and Immunology	4,140	4,620	-480
Cardiology	28,560	35,460	-7,080
<b>Dermatology</b>	<b>13,100</b>	<b>13,530</b>	<b>-430</b>
Gastroenterology	15,540	17,170	-1,630
Hematology/Oncology	18,100	19,500	-1,400
Pulmonology	14,110	15,510	-1,400
Rheumatology	6,330	6,610	-280

Source: HRSA Regional Projections of Supply and Demand for Internal Medicine Subspecialty Practitioners

The shortage of dermatologists is reflected in the wait times required to schedule a new patient appointment as tracked in AMN Healthcare's *Survey of Physician Appointment Wait Times and Medicare and Medicaid Acceptance Rates* (see chart below).

### Average Dermatology Appointment Wait Times/15 Major Metro Markets/In Days

Year	Days
2022	34.5
2017	32.3
2014	28.8
2009	22.1
2004	24.3
% Growth 2004-2017	33.0%

Source: AMN Healthcare 2022 Survey of Physician Appointment Wait Times and Medicare and Medicaid Acceptance Rates

As the survey indicates, only one-third of dermatologists in top metro areas included in the survey accept Medicaid patients, though the great majority (91%) accept Medicare patients.

The average wait time to schedule an appointment with a dermatologist increased by 7% from 2017 to 2022, according to AMN's survey. It should be considered that this reflects appointment wait times in 15 top metro areas in which the number of dermatologists per population is relatively high. It can be presumed that wait times are considerably longer in smaller communities which are frequently medically underserved. As the survey indicates, only one-third of dermatologists in the top metro areas included in the study accept Medicaid patients, though the great majority (91%) accept Medicare patients.



## Dermatologists Needed Per 100,000 Population

There are a variety of sources that indicate the number physicians in various specialties required to serve a population of 100,000 people, including ratios compiled by the Graduation Medical Education National Advisory Committee (GMENAC), which now are 40 years old, ratios compiled by academic researchers Hicks and Glenn, and ratios compiled by the consulting firm Solucient.

However, the most recent of these ratios of which AMN Healthcare is aware were developed by the late Richard “Buz” Cooper, M.D., a nationally recognized expert in physician supply and utilization studies based at the University of Pennsylvania. Dr. Cooper’s ratios are “demand-based” and reflect the number of people required to economically sustain a medical practice by specialty based on historic usage patterns nationally, regionally and at the community level. We believe these are real world numbers and are the most current and useful of the most commonly referenced physician-to-population ratios.

According to Dr. Cooper, on a national level, a population of 100,000 people can support 3.6 dermatologists, or one dermatologist per approximately 28,000 people. This is a general number and is likely to vary depending on the economic, social, and health profiles of particular populations. Ratios from various sources are listed below.

### Dermatologists Required Per 100,000 Population

GMENAC	Hicks & Glen	Solucient	Richard Cooper, MD
2.9	2.1	3.1	3.6

Source: AMN Healthcare 2023 Review of Physician and Advanced Practitioner Recruiting Incentives

## Dermatology Compensation

AMN Healthcare 2023 Review of Physician and Advanced Practice Professional Recruiting Incentives. The competitive nature of dermatology recruiting is reflected in rising starting salaries for dermatologists. The chart below illustrates the increase in starting salaries for dermatologists over the last 10 years as tracked by AMN Healthcare’s 2023 Review of Physician and Advanced Practitioner Recruiting Incentives.

### Dermatology Low Average High

Dermatology	Low	Average	High
2022/23	\$340,000	\$427,000	\$600,000
2021/22	\$250,000	\$368,000	\$450,000
2020/21	\$200,000	\$378,000	\$1,000,000
2019/20	\$300,000	\$419,000	\$850,000
2018/19	\$250,000	\$420,000	\$700,000
2017/18	\$280,000	\$425,000	\$650,000

2016/17	\$250,000	\$421,000	\$1,000,000
2015/16	\$250,000	\$444,000	\$650,000
2014/15	\$265,000	\$398,000	\$550,000
2013/14	\$300,000	\$394,000	\$500,000

Listed below are average compensation numbers for dermatologists as tracked by various other sources. Note that AMN Healthcare tracks average starting salaries, exclusive of signing bonuses or production bonuses, while other sources track total gross compensation physicians would report on their tax returns.

### Average Dermatology Compensation

Sullivan Cotter	\$531,923
AMGA	\$523,356
ECG	\$484,529
AMN Healthcare	\$427,000 (average starting salary)

Physician contracts today also usually feature a relocation allowance, CME allowance, signing bonus, paid health and malpractice insurance, health insurance and a 401k or other retirement vehicle.

## Recruiting Recommendations

Recruiting dermatologists is one of the most difficult challenges in the field of physician recruiting today. One of the reasons dermatologists are so difficult to recruit is related to the style of dermatology practice itself. For the most part, dermatology practice is entirely outpatient, with little to no hospital inpatient work or call/coverage required. Dermatologists do not typically generate significant inpatient or outpatient revenue for hospitals, and dermatologists tend to own their own lasers and other ancillaries, deriving revenue from them directly.

## A Coveted Practice Style

Dermatology also is extremely remunerative, in large part because many dermatology practices focus on cosmetic procedures and treatments that usually are elective and paid for directly by patients, in full, and often in advance. For this reason, dermatologists can work four-day weeks or even three-day weeks and still earn among the highest percentages of all physicians.





Not surprisingly, dermatology attracts some of the top physicians in the country. Dermatology residency programs get to pick the highest rated medical school graduates – many of them from Ivy League schools. As indicated above, very few dermatologists are international medical graduates – the great majority are graduates of U.S. allopathic medical schools, and only a relative few are graduates of osteopathic schools.

It therefore is important to be flexible when recruiting dermatologists, particularly regarding schedules. The majority of offers dermatologists receive feature four-day weeks at the most, and often three-day weeks. It also is important to be flexible on candidate parameters, but this is difficult because virtually all dermatologists are cream of the crop when it comes to education and training.

## Competitive Compensation

As in all hard-to-recruit specialties, it is important to be competitive in regard to compensation. Dermatology is one specialty where the private practice model is still pervasive. Private practices generally can offer a base salary that may be less than the averages cited above, but the potential usually is much higher given ancillary income and other benefits of partnership. Hospitals, by contrast, usually must offer a much higher base because they do not offer revenue from ancillaries.

## Rural Challenges

Rural or mid-market dermatology searches are particularly challenging. In rural settings, dermatologists generally diagnose and treat serious skin problems such as cancer and fungal infections, rather than providing cosmetic services. They must spend more time with each patient treating difficult cases that have a much higher chance of leading to malpractice suits than dermatologists providing mostly cosmetic care.

By contrast, dermatologists in large metro areas may have completely cosmetic-focused practice, providing Botox treatments, tattoo removal, hair removal and related services. Nurses, PAs, or aestheticians often work up the patients and provide treatments, while dermatologists supervise and sign charts, much like in a dentist's office.

Dermatologists in urban areas therefore can see 50 or 60 patients a day, many of them paying directly for services in the full amount, rather than the discounted amount third parties pay for covered procedures and treatments. Given current demand, dermatologists can virtually pick any city in which to practice and find a job that offers favorable work conditions.

It is very difficult for rural and mid-market communities to compete for dermatologists under these conditions. Often, it may be preferable to recruit a dermatologic PA or NP or recruit a primary care physician who has some training or experience with dermatology.

## Pediatrics

The most difficult type of search in dermatology is for pediatric dermatology subspecialists. There are very few of these and even the top pediatric hospitals in the country vie for their services, often without success.

Today, an ideal dermatology practice likely to draw candidate interest would include a \$500,000 base salary or more with a blend of general dermatology, cosmetics, and the opportunity to perform Mohs surgery. A three or four day a week schedule would be offered, with a high and immediate signing bonus that is paid quickly. Offering an “ideal” practice is difficult, but it is useful to understand how high the bar is today in dermatology when it comes to practice styles and settings.

## Conclusion

As with all difficult searches, it is important in dermatology search to be flexible, creative, and committed to quick turnarounds, accommodating the schedules of candidates, responding with information as needed, and making an offer as soon as an appropriate candidate is found. Know the market, know what is needed to be successful, and execute the search with the maximum amount of commitment and efficiency possible.

## About AMN Healthcare Physician Solutions

AMN Healthcare Physician Solutions was originally established in 1987 as Merritt Hawkins. AMN Healthcare provides permanent physician, locum tenens, advanced practitioner, plus, leadership, language services, nursing, and allied staffing and search services to hospitals, medical groups, community health centers, telehealth providers and many other types of entities nationwide.

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