

Physician

Professional Activities

Physicians and surgeons serve a fundamental role in our society and have an effect upon all our lives. They diagnose illnesses and prescribe and administer treatment for people suffering from injury or disease. Physicians examine patients, obtain medical histories, and order, perform, and interpret diagnostic tests. They counsel patients on diet, hygiene, and preventive healthcare.

There are two types of physicians: The M.D. -- Doctor of Medicine -- and the D.O. -- Doctor of Osteopathic Medicine. M.D.s also are known as allopathic physicians. While both M.D.s and D.O.s may use all accepted methods of treatment, including drugs and surgery, D.O.s place special emphasis on the body's musculoskeletal system, preventive medicine, and holistic patient care.

About a third of M.D.s -- and more than half of D.O.s -- are primary care physicians. They practice general and family medicine, general internal medicine, or general pediatrics and usually are the first health professionals patients consult. Primary care physicians tend to see the same patients on a regular basis for preventive care and to treat a variety of ailments. General and family practitioners emphasize comprehensive healthcare for patients of all ages and for the family as a group.

D.O.s are more likely to be primary care providers than M.D.s, although they can be found in all specialties. Over half of D.O.s practice general or family medicine, general internal medicine, or general pediatrics. Common specialties for D.O.s include emergency medicine, anesthesiology, obstetrics and gynecology, psychiatry, and surgery.

Family and general practitioners are often the first point of contact for people seeking health care, acting as the traditional family doctor. They assess and treat a wide range of conditions, ailments, and injuries, from sinus and respiratory infections to broken bones and scrapes. Family and general practitioners typically have a patient base of regular, long-term visitors. Patients with more serious conditions are referred to specialists or other healthcare facilities for more intensive care.

Many physicians work in small private offices or clinics, often assisted by a small staff of nurses and other administrative personnel. Increasingly, physicians practice in groups or healthcare organizations that provide back-up coverage and allow for more time off. These physicians often work as part of a team coordinating care for a population of patients; they are less independent than solo practitioners of the past.

Family and general practitioners must be accurate and thorough, and their work requires a great deal of social interaction. The consequences of their making an error can be serious, since they often play a large role in others' health. They frequently come into contact with diseases and infections.

Almost one-third of physicians worked 60 hours or more a week in 2006. They must travel frequently between office and hospital to care for their patients. Physicians who are on-call deal with many patients' concerns over the phone, and may make emergency visits to hospitals or nursing homes.

People who wish to become physicians must have a desire to serve patients, be self-motivated, and be able to survive the pressures and long hours of medical education and practice. Physicians also must have a good bedside manner, emotional stability, and the ability to make decisions in emergencies. Prospective physicians must be willing to study throughout their career to keep up with medical advances. They also will need to be flexible to respond to the changing demands of a rapidly evolving healthcare environment.

Educational Requirements

It takes many years of education and training to become a physician -- 4 years of undergraduate school, 4 years of medical school, and 3 to 8 years of internship and residency, depending on the specialty selected. A

few medical schools offer a combined undergraduate and medical school program that lasts 6 years instead of the customary 8 years.

Premedical students must complete undergraduate work in physics, biology, mathematics, English, and inorganic and organic chemistry. Students take courses in the humanities and the social sciences. Some students also volunteer at local hospitals or clinics to gain practical experience in the health professions. Acceptance to medical school is very competitive. Applicants must submit transcripts, scores from the Medical College Admission Test, and letters of recommendation. Schools also consider character, personality, leadership qualities, and participation in extracurricular activities. Most schools require an interview with members of the admissions committee.

Students spend most of the first 2 years of medical school in laboratories and classrooms taking courses such as anatomy, biochemistry, physiology, pharmacology, psychology, microbiology, pathology, medical ethics, and laws governing medicine. They also learn to take medical histories, examine patients, and diagnose illness. During the last 2 years, students work with patients under the supervision of experienced physicians in hospitals and clinics to learn acute, chronic, preventive, and rehabilitative care. Through rotations in internal medicine, family practice, obstetrics and gynecology, pediatrics, psychiatry, and surgery, they gain experience in the diagnosis and treatment of illness.

Following medical school, almost all M.D.s enter a residency -- graduate medical education in a specialty that takes the form of paid on-the-job training, usually in a hospital. Most D.O.s serve a 12-month rotating internship after graduation before entering a residency, which may last 2 to 6 years. Physicians may benefit from residencies in managed care settings by gaining experience with this increasingly common type of medical practice.

A physician's training is costly, and, although education costs have increased, student financial assistance has not. More than 80 percent of medical students borrow money to cover their expenses.

To practice medicine as a physician, all States, the District of Columbia, and U.S. territories require licensing. All physicians and surgeons practicing in the United States must pass the United States Medical Licensing Examination (USMLE) or, for osteopathic physicians, the Comprehensive Osteopathic Medical Licensing Exam (COMLEX). To be eligible to take the USMLE or COMLEX, physicians must graduate from an accredited medical school. Although physicians licensed in one State usually can get a license to practice in another without further examination, some States limit reciprocity. Graduates of foreign medical schools generally can qualify for licensure after passing an examination and completing a U.S. residency. For specific information on licensing in a given State, contact that State's medical board.

M.D.s and D.O.s seeking board certification in a specialty may spend up to 7 years in residency training, depending on the specialty. A final examination immediately after residency or after 1 or 2 years of practice is also necessary for certification by a member board of the American Board of Medical Specialists (ABMS) or the American Osteopathic Association (AOA). The ABMS represents 24 boards related to medical specialties ranging from allergy and immunology to urology. The AOA has approved 18 specialty boards, ranging from anesthesiology to surgery. For certification in a subspecialty, physicians usually need another 1 to 2 years of residency.

Academic Programs

[Loyola University Chicago](#)

[Midwestern University](#)

[Northwestern University](#)

[Rosalind Franklin University of Medicine and Science](#)

[Rush University](#)

[Southern Illinois University](#)

Employment/Salary Outlook

Employment of physicians and surgeons is projected to grow 22 percent from 2008 to 2018, much faster than the average for all occupations. Job growth will occur because of continued expansion of healthcare-related industries. The growing and aging population will drive overall growth in the demand for physician services, as consumers continue to demand high levels of care using the latest technologies, diagnostic tests, and therapies. Many medical schools are increasing their enrollments based on perceived new demand for physicians.

Despite growing demand for physicians and surgeons, some factors will temper growth. For example, new technologies allow physicians to be more productive. This means physicians can diagnose and treat more patients in the same amount of time. The rising cost of healthcare can dramatically affect demand for physicians' services. Physician assistants and nurse practitioners, who can perform many of the routine duties of physicians at a fraction of the cost, may be increasingly used. Furthermore, demand for physicians' services is highly sensitive to changes in healthcare reimbursement policies. If changes to health coverage result in higher out-of-pocket costs for consumers, they may demand fewer physician services.

Opportunities for individuals interested in becoming physicians and surgeons are expected to be very good. In addition to job openings from employment growth, openings will result from the need to replace the relatively high number of physicians and surgeons expected to retire over the 2008-18 decade.

Job prospects should be particularly good for physicians willing to practice in rural and low-income areas because these medically underserved areas typically have difficulty attracting these workers. Job prospects will also be especially good for physicians in specialties that afflict the rapidly growing elderly population. Examples of such specialties are cardiology and radiology because the risks for heart disease and cancer increase as people age.

State and National Wages

Location	Pay Period	2009				
		10%	25%	Median	75%	90%
United States	Hourly	\$39.73	\$58.69	\$77.18	\$80.00+	\$80.00+
	Yearly	\$82,600	\$122,100	\$160,500	\$166,400+	\$166,400+
Illinois	Hourly	\$38.69	\$58.85	\$77.53	\$80.00+	\$80.00+
	Yearly	\$80,500	\$122,400	\$161,300	\$166,400+	\$166,400+

State and National Trends

Employment Trends are for **Physicians and surgeons**, which includes Anesthesiologists ; **Family and General Practitioners** ; Internists, General ; Obstetricians and Gynecologists ; Pediatricians, General ; Physicians and Surgeons, All Other ; Psychiatrists ; Surgeons .

United States	Employment		Percent Change	Job Openings ¹
	2008	2018		
Physicians and surgeons	661,400	805,500	+22%	26,050
Illinois	Employment		Percent Change	Job Openings ¹
	2008	2018		

United States	Employment		Percent Change	Job Openings ¹
	2008	2018		
Physicians and surgeons	25,710	30,010	+17%	880

¹Job Openings refers to the average annual job openings due to growth and net replacement.

Professional Organizations

American Medical Association
515 N. State Street
Chicago, IL 60654
(800) 621-8335
<http://www.ama-assn.org/>

American Osteopathic Association
142 E. Ontario St.
Chicago, IL 60611
(312) 202-8000
<http://www.osteopathic.org>

References

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2010-11 Edition, Physicians and Surgeons, on the Internet at <http://www.bls.gov/oco/ocos074.htm>

O*NET OnLine, on the Internet at <http://online.onetcenter.org/link/summary/29-1062.00>

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