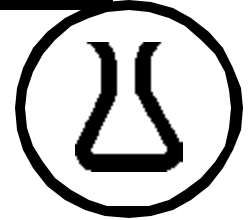


General Internists



Occupational Brief Title Codes:

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Work Classification Based Related

D.O.T. Occupations:

- Anesthesiologists
- Cardiologists
- General Practitioners
- Pathologists
- Pediatricians

Interests Based Related

G.O.E. Occupations:

- Dermatologists
- Podiatrists
- Registered Nurses
- Surgeons
- Veterinarians

Skills Based Related

O*NET Occupations:

- Physician Assistants
- Podiatrists
- Registered Nurses
- Surgeons
- Veterinarians

Noteworthy Quote:

"Some general internists now work exclusively in hospitals, caring for patients during the time in which they are admitted. These internists are known as 'hospitalists.' Hospital-based general internal medicine is a growing and distinct field. For more information contact the Society of Hospital Medicine <www.naiponline.org>."

) American College of Physicians, Internal Medicine: Doctors for Adults, Philadelphia, Pennsylvania

General internists (gen-er-al`in-ter-nists) diagnose, treat, and work to prevent diseases, disorders, and injuries of human adult internal organ systems, including the heart, blood, kidneys, joints, and digestive, respiratory, and vascular systems.

As medical doctors, general internists help people suffering from illness or injury. They, like general and family practice physicians and pediatricians, are what is known as primary care physicians. As primary care physicians, they are usually the first health professionals patients consult for preventive care and treatment of a variety of ailments.

General internists should not, however, be confused with general or family practitioners or pediatricians. General and family practitioners emphasize comprehensive healthcare for patients of all ages, while pediatricians focus on the whole range of children's health issues. General internists, on the other hand, provide care mainly for adults.

Work Performed

General internists, or *doctors of internal medicine*, focus on the prevention, diagnosis, and treatment of diseases, disorders, and injuries that affect adolescents, adults, and the elderly. The basis of their training is the diagnosis and treatment of cancer, infections, and diseases affecting the heart, blood, kidneys, joints, and digestive, respiratory, and vascular systems.

However, internists are also trained in the essentials of primary care, including overall wellness through both disease prevention and the promotion of health; women's health; substance abuse; mental health; as well as effective treatment of common problems of the eyes, ears, skin, nervous system, and reproductive organs. This allows internists to deal with illnesses, disorders, and injuries ranging from the most common or simple ailments to the most rare or complex disorders. In fact, they are often called on by other health professionals to help solve puzzling diagnostic problems.

As primary care physicians, general internists provide their patients with long-term, comprehensive (complete) care. That is, they tend to see the same patients on a regular basis, and often care for the same patients throughout their (the patients') entire adult lives. Because their training equips them to handle severe chronic illnesses, and situations where several different illnesses may strike at the same time, internists can care for patients not only during routine office visits, but during any hospitalization and intensive care. Often, even when other medical specialists are involved, such as surgeons or obstetricians, general internists still coordinate their patient's care. They also help manage any medical problems associated with that specialized care.

When seeing patients for the first time, internists take a medical history that includes questions on past health problems, allergies, lifestyle, medications they may be taking, and the kinds of disease patterns present within their family history. These types of factors may have a bearing on the diagnosis and treatment.

General internists then examine the patient to determine the nature and extent of the illness or injury. They listen to their patients describe and talk about their health concerns and ailments. In examining patients, internists may use medical instruments or equipment such as a stethoscope or blood pressure gauge. They may use their

hands to detect any structural defects in the body, such as lumps. They may order or perform diagnostic tests or procedures, such as ultrasounds, x-rays, or blood tests.

After diagnosing an illness or disorder, internists discuss with the patient the diagnosis, treatment, and prognosis (outlook) of the illness or condition. They may administer or prescribe medication or other treatment such as bandaging or stitches. They may also give advice on diet, activities, hygiene, and other treatment or prevention methods. They may also immunize patients against communicable diseases.

When a patient has an advanced or serious condition requiring special treatment, the internist may arrange for the patient to see a specialist, such as a surgeon or cardiologist, for further consultation and possible treatment. However, general internists will continue to observe and monitor their patients' progress as needed.

General internists spend about 75 percent of their working day seeing patients. The rest of the time is spent completing patient records, supervising office or department staff, conferring with other health professionals, and keeping up-to-date on the latest medical research and technology. Because of their ongoing interactions with patients, internists are also often the best qualified to serve as advocates for their patients in the appropriate use of consultants, health services, and community resources.

Working Conditions

The work environment for internists is generally clean and comfortable. Many work in small private offices or clinics, or on hospital staffs. Internists are also increasingly working in group practices and for healthcare organizations, often working as part of a team coordinating care for a large group of patients. They may also care for patients in community outpatient clinics, or nursing homes and other assisted living settings.

Although the work is not especially dangerous, it can be emotionally and physically draining. Emergency situations and complex ailments can be especially stressful. General internists, like any other physician, are also at risk of contracting communicable illnesses from infected patients. However, these risks are lowered by taking appropriate health and sanitation precautions, such as wearing gloves, lab coats, and face masks, and using proper disinfecting and disposal practices.

Hours and Earnings

Most general internists work long, irregular hours, often working up to 60 hours a week. They may work evenings, weekends, and holidays. Some spend a considerable amount of time traveling between their office and the hospital. Internists on call may also deal with many patients' concerns over the phone, and may make emergency visits to hospitals or nursing homes.

Although general internists, like other physicians, have among the highest earnings of any occupation, earnings vary according to number of years in practice, hours worked, number of patients, employer, and skill, personality, and professional reputation. In general, internists working in medical and diagnostic laboratories, outpatient care centers, offices of physicians, and hospitals tend to have the highest average incomes. Those who own or are part owners of their medical practice also tend to have higher earnings than those who are salaried.

According to the Bureau of Labor Statistics, in 2002, general internists earned an average of \$158,350 a year. Overall, earnings ranged anywhere from about \$70,000 a year to well over \$240,000 a year. Approximately half earned between \$116,000 and \$190,000 a year.

Self-employed internists, however, have substantial expenses. They must furnish and maintain a suite of offices and treatment rooms, employ and pay staff, pay liability/malpractice insurance, and provide for their own health and life insurance, and retirement benefits. Salaried internists, on the other hand, generally receive benefits such as health and life insurance, pension, and paid holiday, vacation, and sick time.

Education and Training

Prospective internists must be willing to commit to the long and demanding educational and training requirements of this career. They must also be willing to continue studying throughout their career to keep up with medical advances. After graduating from high school, students must complete 3 to 4 years of undergraduate school, 4 years of medical school, and 3 years of internship and residency in internal medicine. A few schools offer a combined undergraduate and medical school program lasting 6 years.

High school students should take courses which prepare them for admission into the college or university they wish to attend. Once enrolled, premedical students must complete undergraduate work in physics, biology, mathematics, English, and inorganic and organic chemistry, in addition to other courses in the humanities and social sciences. Students should also volunteer at local hospitals or clinics to gain practical experience in the health professions.

There are over 124 medical schools in the United States, but acceptance remains very competitive. The minimum educational requirement for entry is 3 years of college, however, most applicants have at least a bachelor's degree, and many have advanced degrees. Applicants must submit their transcripts, scores from the Medical College Admission Test, and letters of recommendation. Most schools also require an interview with members of the admissions committee to assess the applicant's character, personality and leadership qualities, and participation in extracurricular activities.

The first two years of medical school are mostly laboratory and classroom work. Students take courses in 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 two 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 diagnosis and treatment of a variety of illnesses.

Following medical school, students enter a residency in internal medicine. A residency is basically graduate medical education in a specialty, taking the form of paid on-the-job training. All residency programs in internal medicine are hospital based with 1/3 of the training time spent in ambulatory settings. During the residency, general internists work in-depth in all the subspecialties of internal medicine. They do not, however, unlike family and general practice physicians, obtain further training in obstetrics and gynecology, orthopedics, and pediatrics.

General internists may go on to take additional training to subspecialize in one of 13 areas of internal medicine. Subspecialty training (often called a fellowship) usually requires an additional one to three years beyond the standard three year general internal medicine residency. Subspecialties that require preliminary training in internal medicine include cardiology; endocrinology, diabetes, and metabolism; hematology; medical oncology; rheumatology; gastroenterology; infectious disease; nephrology; and pulmonary disease.

Licensing and Certification

All states, the District of Columbia, and U.S. territories require physicians to be licensed. Requirements include graduation from an accredited medical school, passing the United States Medical Licensing Examination offered by the National Board of Medical Examiners, and completion of 1 year of postgraduate medical education. A practitioner must apply for a license in the state in which they will practice, but most states also have reciprocity agreements which allow physicians licensed in one state to get a license to practice in another without further examination.

General internists may also obtain board certification in internal medicine from the American Board of Internal Medicine (ABIM) after completing residency training and passing an examination. Although it is not required by law, most health plans and hospitals require board certification. For certification in a subspecialty, internists usually need another 1 to 2 years of fellowship training and to successfully complete another examination. Once certified, internists must "re-certify" every 10 years.

ABIM also offers certificates of added qualifications which recognize special expertise in the areas of adolescent medicine, clinical cardiac electrophysiology, clinical and laboratory immunology, critical care medicine, geriatric medicine, interventional cardiology, and sports medicine. To receive a certificate of added qualification generally requires an additional 1-2 years of training after residency or fellowship.

Personal Qualifications

To survive the pressures and long hours of medical education and practice, general internists must have a strong desire to serve patients, and be highly self-motivated and responsible. Stamina, emotional stability, flexibility, a good bedside manner, and excellent communication skills are important. Internists must also have sound judgement, and be able to make informed decisions quickly in emergencies.

Occupations can be adapted for workers with disabilities. Persons should contact their school or employment counselors, their state office of vocational rehabilitation, or their state department of labor to explore fully their individual needs and requirements as well as the requirements of the occupation.

Where Employed

In 2002, general internists held around 50,380 jobs throughout the United States. Although a growing number are working in small cities and towns and in rural areas, the highest concentrations are generally located in more populous areas (close to hospitals).

Around 70 percent of all internists worked in office-based practices, including partnership and group practices, and outpatient care centers. More than 20 percent were employed by hospitals. Others were employed by federal and state governments, most practicing in U.S. Department of Veterans Affairs hospitals and clinics, the Public Health Service Department of Health and Human Services, and the military.

Employment Outlook

Due to continued expansion of the health care industries, the Bureau of Labor Statistics expects employment of physicians and surgeons to grow about as fast as the average for all occupations through the year 2012. Based on the projected average growth for all physicians and surgeons (19.5 percent), current employment of general internists should increase by nearly 10,000 jobs. An additional 6,700 positions are also expected to become available due to replacement needs.

Driving this overall growth is a growing and aging population and new technologies which permit more intensive care. The demand for general internists should be especially strong as they tend to attract patients with more

complex conditions and ailments, like those of the elderly and patients needing intensive care.

Opportunities will be best for general internists who are flexible enough to respond to the changing demands of a rapidly evolving health care environment. Future physicians may be more likely to work fewer hours, retire earlier, have lower earnings, or have to practice in under-served, rural, and low income areas. As a result, a growing number of internists are taking salaried jobs in group medical practices, clinics, and integrated healthcare systems. The role of general internists will be especially significant, as hospitals integrate more physician practices into healthcare networks that provide a continuum of care both inside and outside the hospital setting.

Entry Methods

During their residency, general internists have a chance to explore their employment options once they are licensed. After the three-year residency, some physicians stay on an extra year as a chief resident who oversees/manages the junior residents. Some residents receive offers from attending staff who are looking for younger partners. Many medical organizations offer job and resume posting services. There are also medical employment agencies that will help internists find positions for a fee.

Newly licensed general internists may choose to set up a private practice. However, most internists today start in salaried positions in group medical practices, clinics, or integrated healthcare systems. These positions offer them greater security, a regular income, paid vacations and other benefits, more time off, and the opportunity for peer consultation. At the same time they can avoid the long period of low income and the heavy expenses facing any physician who starts a solo practice.

Advancement

Like most other physicians, general internists generally remain in their field until retirement. Most advance by building up their practice and increasing their income and stature, or continuing their studies to qualify for a subspecialty. Salaried internists may buy a solo practice from an established physician, or set-up their own. Those working in hospitals and clinics may become department heads or move into other administrative positions. Some internists may also choose to get more involved in the research and testing aspect of internal medicine.

For Further Research

American College of Physicians, 190 N. Independence Mall West, Philadelphia, PA 19106-1572. Web Site: www.acponline.org

American Medical Association, 515 N. State Street, Chicago, IL 60610. Web Site: www.ama-assn.org

American Osteopathic Association, 142 East Ontario Street, Chicago, IL 60611. Web Site: www.osteopathic.org

Society of General Internal Medicine, 2501 M Street, N.W., Suite 575, Washington, DC 20037. Web Site: www.sgim.org

Acknowledgments

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American College of Physicians, Internal Medicine:
Doctors for Adults, 190 N. Independence Mall
West, Philadelphia, PA 19160-1572.

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