

Careers in Medicine



MEDICAL CAREERS

Are you interested in exploring a career in healthcare? What can you do with a professional degree in medicine? What are the variety of career options in the medical field? How can you learn more about careers in general medicine, dentistry, optometry, podiatry, pharmacy, chiropractic medicine, and veterinary medicine?

GENERAL STRATEGIES

What are the strategies for gaining admittance into professional programs?

Choose an appropriate undergraduate major and include prerequisite courses required by the professional program, e.g. biology, chemistry, and physics, if they are not a requirement of the chosen major. Meet with a pre-health advisor periodically to discuss curricular decisions. Maintain a high grade point average, particularly in the sciences, to improve chances of admission to graduate or professional school. Develop strong computer, mathematics, and verbal and written communication skills.

Build strong relationships with professors and employers in order to secure strong recommendations. Join related student organizations, such as Alpha Epsilon Delta, and assume leadership roles. Obtain summer jobs, volunteer positions, or internships to test fields of interest and gain valuable experience.

Develop a back-up plan (Plan B) in case medical/graduate school admission is denied.

Look at entrance requirements for desired institutions. Be aware of any standardized test requirements, minimum grade point averages, and prerequisites.

GENERAL TIPS

Talk to professionals already in your desired field regarding their backgrounds. Arrange a shadowing experience. Participate in mock interview sessions with medical practitioners and graduate school advisory sessions with admissions reps. Join professional associations and community organizations to stay abreast of current issues in the field and to develop networking contacts. Read scientific journals related to your area of interest. Research accredited institutions.

Check graduation rates, success rates on licensing exams, cost, location, etc. If possible, speak with current students.

Develop a desire to help people of all backgrounds and ages including various races and socioeconomic groups.

Gain an understanding of the rigorous education and training required in the medical professions to ascertain your willingness to complete the required experiences. Study the demands required by each of the medical fields. Many physicians work very long, irregular hours. Consider your tolerance for such a schedule.



All fields require licensure that is generally regulated by the state of residency. Plan for a lifetime of learning to stay abreast of new trends in the field and to fulfill continuing education requirements for licensure.

In some medical fields, additional training is necessary for advanced research and administrative positions, university teaching, and independent research. Some medical fields offer the opportunity for post-doctoral experiences which can allow one to gain additional training or specialize in a particular area.



MEDICINE

Allergology | Anesthesiology | Cardiology
Dermatology | Emergency Medicine
Family and General Practice | Gastroenterology
Internal Medicine | Obstetrics & Gynecology
Orthopedics | Pathology | Pediatrics
Psychiatry | Radiology | Surgery | Research
Public Health

EMPLOYERS

Hospitals | Clinics | Private or group practice
Health networks | Nursing homes
Rehabilitation centers | Mental health institutions
Federal, state & local health departments
Government agencies | Armed services
Correctional facilities | Colleges or universities
Medical schools | Large corporations

EDUCATION INFORMATION

Test Required: MCAT

Schooling Required: After earning an undergraduate degree, the Doctor of Medicine (M.D.) requires 4 years of medical school, followed by 3-8 years of internship and residency depending on specialization chosen. Some physicians pursue the Doctor of Osteopathic Medicine (D.O.) degree. D.O.s emphasize the body's musculoskeletal system, preventive medicine, and holistic patient care and often work in family and general practices, although they may be found in many specialties.

DENTISTRY

Endodontics | Oral Pathology
Oral & Maxillofacial Radiology
Oral & Maxillofacial Surgery | Orthodontics
Pediatric Dentistry | Periodontics
Prosthodontics | Public Health | Research

EMPLOYERS

Private practice (80% of dentists)
Armed services
Federal, state, & local health departments
Correctional facilities

EDUCATION INFORMATION

Test Required: DAT

Schooling Required: After earning an undergraduate degree, the Doctor of Dental Surgery (DDS) or Doctor of Dental Medicine (DMD) requires 4 years of dental school (last 2 years are clinical rotations).



PODIATRY

Surgery | Orthopedics | Primary Care
Sports Medicine | Pediatrics | Dermatology
Radiology | Geriatrics | Diabetic Foot Care

EMPLOYERS

Private practice | Community health clinics
Hospitals | Residential and nursing homes
National Health Service | Sports clubs
Some specialty retail chains

EDUCATION INFORMATION

Test Required: MCAT or GRE

Schooling Required: After earning at least 90 hours of undergraduate course work, the Doctor of Podiatric Medicine (DPM) requires 4 academic years (last 2 years are clinical rotations). One year of post-doctoral residency is required in most states.





OPTOMETRY

Family Practice | Pediatric Optometry
Geriatric Optometry | Vision Therapy
Contact Lenses | Hospital-Based Optometry
Primary Care Optometry | Ocular Disease
Public Health | Research

EMPLOYERS

Private practice | Vision care centers
Hospitals | Physicians' offices
Armed services | Government organizations

EDUCATION INFORMATION

Test Required: OAT
Schooling Required: After earning an undergraduate degree, the Doctor of Optometry (OD) requires 4 academic years at optometry school.



CHIROPRACTIC MEDICINE

Sports Injuries | Neurology | Orthopedics
Pediatrics | Nutrition | Internal Disorders
Diagnostic Imaging | Ergonomics

EMPLOYERS

Solo and group practices
Hospitals or health clinics

EDUCATION INFORMATION

Test Required: GRE or MCAT
Schooling Required: After earning at least 90 hours of undergraduate course work, the Doctor of Chiropractic (DC) requires 4 academic years at a chiropractic school.

PHARMACY

Clinical Pharmacy | Intravenous Nutrition Support
Oncology | Nuclear Pharmacy
Geriatric Pharmacy | Psychopharmacotherapy
Research | Public Health

EMPLOYERS

Hospitals | Nursing homes
Mental health institutions | Health clinics
Retail chains | Pharmaceutical companies
Health insurance firms | Universities

Government agencies: Food & Drug Admin, Public Health Service, Dept of Veteran's Affairs, Armed Services



EDUCATION INFORMATION

Test Required: PCAT
Schooling Required: After spending 2 to 3 years in undergraduate coursework, the Doctor of Pharmacy (PharmD) requires 4 academic years.

VETERINARY MEDICINE

Small Animal Care | Large Animal Care
Food Safety | Preventative Medicine
Surgery | Laboratory Animal Medicine | Research



EMPLOYERS

Group or private practice
Federal Govt: Dept Agriculture, Dept Health Human Srv
Zoos | State & local government
Colleges of veterinarian medicine
Medical schools | Research laboratories
Animal food companies | Pharmaceutical companies

EDUCATION INFORMATION

Test Required: GRE, VCAT, or MCAT
Schooling Required: After earning an undergraduate degree, the Doctor of Veterinary Medicine (D.V.M. or V.M.D.) requires 4 academic years at a college of veterinarian medicine. Veterinarians who plan to specialize will spend additional years in internships or residency programs.

GENERAL ADVICE

1. You don't have to be a lab rat. Back in the day, almost every undergraduate who wanted to go to med school majored in biology, chemistry, or physics. This is changing though as med schools realize the value of a liberal arts education, and there will be a variety of pre-med majors in the applicant pool. So, study what you love. You'll still need solid MCAT scores along with good grades and stellar extracurricular activities.

2. Science is still required. Bear in mind that each medical school has its own pre-med course requirements. Depending on where you plan to apply, courses in the following subjects may be required or recommended.

Basic Subject Requirements include: Biology (with Lab), General Chemistry (with Lab), Organic Chemistry (with Lab), Physics (with Lab), English, Biochemistry, Calculus, Psychology, Sociology, Statistics/Biostatistics, Genetics, Humanities, Behavioral Sciences, and Social Sciences.

By the time you have finished your prerequisites, you have already been exposed to most of the concepts and research principles tested on the MCAT.

3. Don't Procrastinate. By knocking out your medical school requirements in the first two years, pre-med students can use the last two years of college to take electives, study abroad, or pursue a non-science major or minor.

4. Invest Your Time Wisely. While you're still an undergrad, begin exploring various medical specialties. Considering pediatrics? You may want to take courses in development, child psychology, or family dynamics. If you're interested in becoming an obstetrician/gynecologist, enroll in human sexuality or gender studies courses. By demonstrating a long-term interest in a medical specialty you can enhance your chance of winning a competitive residency later.

5. Study hard but smart. Your grades ultimately matter more than your transcript. GPA is one of the most important criteria for medical school admission. Med schools will consider both your science GPA and your overall GPA. And while your science GPA is more important, both hold weight and both are heavily considered.

6. Get outside the classroom. Most med schools expect applicants to have some medical experience, either as a volunteer or paid worker. Primary care experience is particularly valuable. Many hospitals and clinics have volunteer positions that allow you to interact with patients. You can also consider finding a position at a hospice or a chronic-care facility, or assisting disabled children or nursing home residents.

7. Be professional. If you want to learn at a more depth level you can set up a preceptorship. In a preceptorship, you'll shadow a knowledgeable physician as an observer over an extended period of time. The best preceptors are doctors with great people skills, patience, and a passion for education. Medical research is another worthwhile extracurricular to pursue. A number of well-known universities, labs, and private companies run summer internship programs for undergraduates. Don't dismiss other volunteer experiences, even if they're not directly related to health care. Teaching, tutoring, peer counseling, or any activity that demonstrates your compassion, communication or leadership skills will be impressive to admissions committees.

INFO LINKS

Explore Health Careers

<http://explorehealthcareers.org/en/careers/careers>

US News: Best Healthcare Jobs

<http://money.usnews.com/careers/best-jobs/rankings/best-healthcare-jobs>

Exploring Medical Careers

<http://exploringmedicalcareers.com/>

Healthcare Management: Highest Paid Non-Physician Jobs in Healthcare

<http://www.healthcare-management-degree.net/highest-paid-non-physician-jobs-in-healthcare/>

US Dept of Labor: Healthcare Occupations

<http://www.bls.gov/ooh/healthcare/home.htm>