# MEDICINE

Medicine, Dentistry, Podiatry, Optometry, Chiropracty, Pharmacy, Physician Assistant, and Veterinary Medicine

## AREAS

**MEDICINE**

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

**DENTISTRY**

Some Areas of Specialization
- Endodontics
- Oral Pathology
- Oral and Maxillofacial Radiology
- Oral and Maxillofacial Surgery
- Orthodontics
- Pediatric Dentistry
- Periodontics
- Prosthodontics
- Public Health
- Research

## EMPLOYERS

**MEDICINE**

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

**DENTISTRY**

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

## EDUCATION INFORMATION

**MEDICINE**

**Test Required:** MCAT

**Education Required:** After earning an undergraduate degree, the Doctor of Medicine (MD) 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 (DO) degree. DO'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**

**Test Required:** DAT

**Education 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

**Some Areas of Specialization**
- 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
- **Education 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). After completing the DPM, podiatrists must work a 3 year podiatric medical and surgical residency (PMSR).

### Optometry

**Some Areas of Specialization**
- Family Practice
- Pediatric Optometry
- Geriatric Optometry
- Vision Therapy
- Contact Lenses
- Hospital-Based Optometry
- Primary Care Optometry
- Ocular Disease
- Public Health
- Research

**Employers**
- Private practice
- Physicians' offices
- Retail optical centers
- Hospitals
- Armed services

**Education Information**
- **Test Required:** OAT
- **Education Required:** After earning an undergraduate degree, the Doctor of Optometry (OD) requires 4 academic years at optometry school. Some optometrists complete a residency; it is not required.

### Chiropractic Medicine

**Some Areas of Specialization**
- Sports Injuries
- Neurology
- Orthopedics
- Pediatrics
- Nutrition
- Internal Disorders
- Diagnostic Imaging
- Ergonomics

**Employers**
- Solo and group practices
- Hospitals or health clinics
- Physicians' offices

**Education Information**
- **Test Required:** GRE or MCAT
- **Education Required:** After earning at least 90 hours of undergraduate course work, the Doctor of Chiropractic (DC) requires 4 academic years at a chiropractic school.
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| **PHYSICIAN ASSISTANT** | | |
| Most Common Areas of Practice | Physicians' offices | Test Required: GRE or MCAT |
| General Internal Medicine | Hospitals | **Experience:** PA schools typically require extensive healthcare experience; research institutional requirements. |
| Family Medicine | Surgical facilities | **Education Required:** Complete an accredited physician assistant educational program. The majority of programs take at least 2 years to complete and result in a master's degree (e.g., MPA or MPAS). Clinical experience is gained during the second year. Some PA's pursue additional education to prepare for specialities. |
| Surgery | Public clinics | |
| Pediatrics | Federal, state, and local health departments | |
| Emergency Medicine | Government agencies | |
| Occupational Medicine | Colleges and universities | |
| Obstetrics and Gynecology | Nursing homes | |
| Dermatology | Armed services | |
| | Correctional facilities | |
| | | |

| **VETERINARY MEDICINE** | | |
| Areas of Specialization | Group or private practice | Test Required: GRE, VCAT, or MCAT |
| Small Animal Care, e.g., Companion Animals | Federal government including: Department of Agriculture | **Education Required:** After earning an undergraduate degree, the Doctor of Veterinary Medicine (DVM or VMD) requires 4 academic years at a college of veterinarian medicine. Veterinarians who plan to specialize will spend additional years in internships or residency programs. |
| Large Animal Care, e.g., Equine, Livestock | Department of Health and Human Services | |
| Food Safety | State and local government | |
| Preventative Medicine | Colleges of veterinarian medicine | |
| Surgery | Medical schools | |
| Laboratory Animal Medicine | Research laboratories | |
| Research | Animal food companies | |
| | Pharmaceutical companies | |
| | Zoos | |
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 excellent computer, mathematics, and verbal and written communication skills.
• Build good relationships with professors and/or employers in order to secure strong recommendations.
• Join related student organizations, such as Alpha Epsilon Delta pre-health honor society, and assume leadership roles.
• Obtain summer jobs, volunteer positions, research positions, or internships to test fields of interest and gain valuable experience. Participate in service-oriented organizations, medical missions, remote healthcare clinics, and the like.
• Develop a back up plan 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.
• Conduct informational interviews with professionals in your desired field regarding their backgrounds. Arrange a shadowing experience.
• Join professional associations and community organizations to stay abreast of current issues in the medical 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.
• Practice interview skills at your career center to prepare for admissions interviews.

GENERAL INFORMATION

• 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 professionals work long, irregular, sometimes overnight hours. Consider your tolerance for such a schedule.
• All fields require licensure that is generally regulated by the state of residency. Research requirements for your state and medical position.
• 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.