



## **MEDICINE ALLOPATHIC AND OSTEOPATHIC**



A brief educational and career guide prepared by:

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### **What does a Physician do?**

Physicians treat and prevent human illness, disease and injury. 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: MD (Doctor of Medicine) and the DO (Doctor of Osteopathic Medicine). The practice of medicine includes prevention and health education, and the use of accepted methods of medical treatment, including pharmaceutical agents and surgical procedures. There are many specialty areas for physicians to pursue with some of the highest demand for physicians going into family practice, internal medicine, and geriatrics.

Osteopathic medicine is a distinctive form of medical care founded on the philosophy that all body systems are interrelated and dependent upon one another for good health. Osteopathic physicians can choose any specialty, prescribe drugs, perform surgeries, and practice medicine anywhere in the United States. D.O.'s are trained to use osteopathic manipulative treatment to help diagnose injury and illness, to alleviate pain, and to promote well being. Osteopathic medicine emphasizes helping each person achieve a high level of wellness by focusing on health promotion and disease prevention.

### **Programs**

There are 132 allopathic medical schools and 26 osteopathic medical schools in the United States, each taking four years to complete. The first two years are a continuation of classroom and laboratory work in the basic sciences; the final two years are devoted to clinical training in the various fields of medicine (i.e. family and general medicine, obstetrics and gynecology, surgery, psychiatry, pediatrics, etc.). M.D.s and D.O.s enter a residency program of three or more years directly after graduation. Licensure is granted at the state level and is contingent upon passage of the three step United States Medical Licensing Examination. In many cases, licensure is also contingent upon certification by a national specialty board.

Most medical schools also offer dual degree programs (i.e. MD/PhD, MBA, MPH) for students interested in combining medical study with advanced research or other areas of interest. Currently, many of these programs participate in the NIH-funded Medical Science Training Program (MSTP) which provides financial support for students pursuing careers in biomedical or clinical research.

## **Admissions Requirements**

Typically, MD and DO programs expect a BA or BS with the following undergraduate curriculum:

- 1 year Biology with lab (BIOL 411-412)
  - 1 year Chemistry with lab (CHEM 403-404)
  - 1 year Physics with lab (PHYS 401-402 or PHYS 407-408)
  - 1 year Organic Chemistry (CHEM 651-654 or CHEM 547-550)
  - 1 semester General Biochemistry (BMCB 658/659)
  - 1 year English Composition
  - 2 semesters Math (Calculus- \*MATH 424a, or 424b, or 425, and a statistics course)
- \*A very small number require 2 semesters of Calculus

An applicant's undergraduate major is not a factor in medical school admission, so students may complete these prerequisites as major requirements, general education requirements, or as electives

All MD and DO programs require that applicants take the Medical College Admissions Test ([MCAT](#)). Most programs will also expect applicants to have had significant exposure to the field of medicine, a record of service to the community, and research experience. DO programs prefer applicants to also have exposure to osteopathic medicine through shadowing or clinical experience.

## **The Application Process**

The application process for UNH students applying to medical programs begins a full two years before matriculation. Therefore, a student who wishes to begin a program the September after graduation from UNH needs to contact the Health Professions Advising office no later than September of their junior year to begin the process. For details of the application cycle see: [www.unh.edu/premed-advising/appprocess.html](http://www.unh.edu/premed-advising/appprocess.html)

## **Further Information**

Valuable sources of information are the Association of American Medical Colleges (AAMC), The American Medical College Application Service (AMCAS), and the American Association of Colleges of Osteopathic Medicine (AACOM).

[Association of American Medical Colleges](#)

[The American Medical College Application Service](#)

[American Association of Colleges of Osteopathic Medicine](#)

[Explore Health Careers](#)

[AspiringDocs.org](#)

[Medical College Admissions Test \(MCAT\)](#)

[MSAR](#)—Medical School Admission Requirements

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**Sources:** Most of the information in this brochure was taken from AAMC and AACOM literature.