



HVERFORD
COLLEGE

Health Professions Advising

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Introduction to Health Professions Advising

Haverford College is an exciting place in which to lay the foundation for a career in the health professions because of our academic excellence, rich opportunities for research and service, and humanistic values. Medical schools and other schools of the health professions look for applicants who have demonstrated success in a rigorous liberal arts curriculum during their undergraduate education.

Health professional schools do not require that students major in a science discipline as long as students demonstrate excellent work and passion for their science courses.

Successful applicants are well-rounded, mature, motivated, curious, intellectually and socially engaged individuals, with a strong capacity for hard work, and a demonstrated commitment to service and to working with diverse populations. Applicants with a broad liberal arts education are, therefore, at an advantage in the admissions process.

OTHER RESOURCES

[Health Professions Advising Website.](#)

This site provides updated information about the application process to medical and dental school and useful information as it relates to the health professions.

Pre-Health Email List.

This is the primary source of communication for Pre-Health for information related to campus programs, volunteer activities, internships, announcement, application reminders. Email [Jennifer Barr](#) to join.

[Pre-Health Society.](#)

This student group serves to advocate for pre-health students by working closely with the Health Professions Advising staff, communicating the needs of underrepresented students, connecting with alumni, and providing opportunities to explore medicine and health-related issues.

[Health Studies Minor.](#)

The multidisciplinary bi-college Health Studies Minor offers a diverse set of courses across the curriculum. These courses are perfect for students planning to go into health fields.

[Center for Career & Professional Advising \(CCPA\).](#)

The CCPA has rich resources for career planning, summer internship opportunities and resume and cover letter review.

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Academic Planning

There is no preferred major for pre-medical students, and many students find it not just possible, but advantageous to major outside the sciences while preparing for medical school.

Students at Haverford have the autonomy to develop their own academic plans in consultation with their advisors. Ultimately, you should major in a subject that is at the intersection of your interests and your demonstrated ability to shine in the subject, taking full advantage of the rich curricular options while simultaneously completing the traditional core pre-medical requirements.

It is a good idea to make a tentative master schedule in order to visualize when you need to take certain courses in order to achieve your personal goals. The planning template in this guide will assist.

Core Pre-Medical Courses

Most medical, dental, and veterinary schools require the following core courses:

Core Course	Haverford Equivalent
2 semesters of Biology w/ Lab	Bio 200A and Bio 201B
2 semesters of General Chemistry w/ Lab	Chem 111, 113 OR 115 and Chem 112 OR 114 (depending on Chemistry placement test results)
2 semesters of Organic Chemistry w/ Lab	Chem 222 and Chem 225
2 semesters of Physics w/ Lab	Phys 101, 105 OR 115 and Phys 102 OR 106 (depending on Physics placement test results)
2 semesters of English	Writing seminar + an additional reading and writing intensive course that meets our general education requirements

There are additional courses that are required or recommended for some schools.

The Medical School Admissions Requirements (MSAR), published online annually by the American Association of Medical Colleges (AAMC), includes information about course prerequisites for individual medical schools.

Many medical schools may also require or recommend the following additional courses:

- One or two additional science courses, especially if you do not major in science, one of which should be **Biochemistry** (Haverford: Bio 300A or 300B / Bryn Mawr: Bio 354). Note: Science students are able to cover topics in Biochemistry in multiple 300 level science courses.
- **Statistics** (Math 103 or 203) or **Calculus** (Math 105 or 118) if no AP credit depending on the results from the math placement test and their intended major
 - Approximately 40% of U.S. medical schools require some type of math; they typically prefer statistics.
 - Schools may accept AP/IB math credits listed on the Haverford transcript in lieu of taking math.
 - Students may also take statistics courses through the Economics, Psychology, Sociology departments or the Health Studies minor.
- A related **Social Science** course such as psychology, sociology, or health studies.

Course Sequencing: Factors to Keep in Mind While Planning Your Coursework

- Consider taking chemistry in your first year. The chemistry courses need to be taken in sequence.
- Students should consult with the Math and Physics departments before deciding what, if any, math classes they should take in their first year. Although calculus is not a required course for most medical schools, it is a requirement for physics and several science majors. Statistics is a preferred course for medical schools and is offered through several departments.
- You are not permitted to take the biology requirements until you have completed a laboratory course. Most students take biology in their sophomore year after having taken a year of chemistry or physics.
- It is not recommended to take two lab sciences during the first semester of your first year. Extremely rare exceptions to this norm are advisable only with the strong support of the science department chairs in those two departments.
- While students have taken Biology 200 and Organic Chemistry during their sophomore year in the past, many find that taking these courses together extremely time consuming and challenging. Try not to rush through the requirements and overextend yourself academically especially if you are not a science major, or you have not performed well in Chemistry during your first year.
- Science and math courses should be taken for a grade instead of pass/fail. Medical schools look for applicants who have consistently challenged themselves throughout the undergraduate years.
- In addition to the biochemistry courses mentioned above, if you are a science major, there are multiple ways to cover topics in biochemistry in upper-level biology and chemistry courses.
- Although students may decide to take a premedical course in the summer, please seek advising first.

AP/IB Credits in the Sciences

Medical schools want to see that students can handle college level science and laboratory work. At minimum, you should take as many college level science courses as are listed in the core pre-medical courses. If you have AP/IB credits, consult with that department to see if you can enroll in upper-level science courses instead of introductory courses.

Study Abroad

- Medical schools appreciate applicants who are culturally sensitive, and welcome study abroad experiences.
- Medical schools prefer that students take all core premedical courses at Haverford (or at Bryn Mawr), not while studying abroad or during the summer.
- It is possible to study abroad, complete the core premedical courses, and apply to medical school, especially if you do not go to medical school directly from college. Students who study abroad usually use senior year as a time to complete their remaining premedical course requirements.

State Residency

- Your **state or country of legal residence** is a key factor in medical, dental, and veterinary school admissions processes; many schools reserve the majority of their seats for in-state residents. Plan your pre-medical course work around the requirements for *your* state medical school, as the costs may be more reasonable, and your chances of being accepted there may be much better than your chances of being accepted to other schools.
- NOTE: International students should review the information at the end of this guide.

Haverford College
Pre-Health Academic Planning Template

Name, class year: _____ Possible Major: _____

AP/IB or Transfer Credits: _____ Interest in Studying Abroad? _____

Course Requirements

- 2 Semesters of Biology w/ Lab
 - Bio 200A and Bio 201B
- 2 Semesters of General Chemistry w/ Lab
 - Chem 111, 113 **OR** 115 and Chem 112 **OR** 114 (depending on Chemistry placement test)
- 2 Semesters of Organic Chemistry w/ Lab
 - Chem 222 and Chem 225
- 2 Semesters of Physics w/ Lab
 - Phys 101, 105 **OR** 115 and Phys 102 **OR** 106 (depending on Physics placement test)
- 2 Semesters of English
 - Writing Seminar + an additional reading and writing intensive course that meets our general education requirements

Additional Recommended Courses (*NOT required*)

- 1 Semester of Biochemistry
 - Bio 300A, 300B **OR** Bryn Mawr Bio 354
- 1 Semester of related Social Science: Psychology **OR** Sociology **OR** Health Studies
- 1 Semester of Math (if no AP credit)
 - Statistics - Math 203 **OR** 103 **OR** Statistics in Econ, Psych, Soc or Health Studies
 - OR**
 - Calculus - Math 118 **OR** 105
 - All dependent on math placement tests

First Year Fall

- 1.
- 2.
- 3.
- 4.

First Year Spring

- 1.
- 2.
- 3.
- 4.

Sophomore Fall

- 1.
- 2.
- 3.
- 4.

Sophomore Spring

- 1.
- 2.
- 3.
- 4.

Junior Fall

- 1.
- 2.
- 3.
- 4.

Junior Spring

- 1.
- 2.
- 3.
- 4.

Senior Fall

- 1.
- 2.
- 3.
- 4.

Senior Spring

- 1.
- 2.
- 3.
- 4.

EXPERIENCE

Medical schools are looking for more than a strong academic record. Physicians have to be smart, but they should also be good listeners, capable leaders, team players, altruistic, flexible, compassionate, and culturally sensitive. Schools look for well-rounded candidates who have explored the field, therefore it is important to incorporate clinical and research exposure into your undergraduate career, both during the academic year and summer.

Study

Taking advantage of the courses offered through the Health Studies Minor is a great way to demonstrate your involvement in and understanding of the health field. Many of these courses examine the important intersection between public health and social justice. Several courses provide hands-on exposure.

Research

Haverford College provides motivated students with opportunities for research on- and off-campus. Apply for funding through the KINSC or speak with a professor about working in their lab during the school year, or over the summer.

Intellectually curious individuals are ideal candidates for medical school, and having research experience is a great way to demonstrate this characteristic. If you are interested in the sciences, plan to spend time in a laboratory setting, with an eye toward working in a biomedical laboratory. If you are unsure of your career path—MD, MD-PhD, or PhD—spending a year or two after graduation in a research lab may help clarify your goals.

Note: Individuals interested specifically in earning a **MD-PhD** need to demonstrate a serious interest in and exposure to research, and will need to be very familiar with their research projects.

Leadership and Service

Clubs, athletics, and part-time jobs can all help improve your ability to work collaboratively, or offer an opportunity to assume a leadership role. Consider your non-academic activities as learning opportunities, however, be careful not to become overextended. Depth and continuity is more valuable than casual participation in a multitude of activities. It is always best to focus on something you feel passionate about.

Medically Related Patient Centered Experience

Medical schools look for individuals with a history of engaging in patient-centered experiences, and an ability to demonstrate your insight gained through work with patients in a clinical setting.

First-hand experience—either as an employee, volunteer, or intern—also demonstrates that you can make a knowledgeable career choice. Therefore, exploring medicine from as many perspectives as possible is very important.

Volunteer and Service

Medicine is a service-based career. You can strengthen your ability to communicate with people from different backgrounds and cultures through community service activities. There are many ways you can serve the community around you.

- Participate in one of the many established community service, public health research, and clinical opportunities that are available in the US and abroad through the Center for Global Peace and Citizenship (CPGC).
- Familiarize yourself with the volunteer opportunities provided by the Marilou Allen Office of Service & Community Collaboration (OSCC) throughout the academic year and during college breaks.
- Familiarize yourself with the OSCC website, as well as the Bryn Mawr College Civic Engagement Office (CEO) directory of health care volunteer opportunities in the Main Line and Philadelphia area.

Work

The Center for Career and Professional Advising (CCPA) offers a variety of resources including career advising, information on summer internships, listings of gap year opportunities, and resume/cover letter reviews.

- Many pre-health students participate in the CCPA's extern program, in which alumni invite current students to shadow them at work during winter or spring break.
- There are two health-related summer funding self-design opportunities:
 - [Primary Care Pre-Medical Fellowship](#) provided by Dr. Steven Jaharis
 - [Gertrude Albert Heller Memorial Grant](#) to work with patients with developmental disabilities or neurological disorders.

Applying to Medical School

There is no rush to apply to medical school. In fact, **the average age of students entering medical school is 24**, which signifies a national trend of students applying to medical school after graduation.

Most Haverford students choose to apply to medical school after graduation, which allows them to focus on their studies while taking advantage of the opportunities afforded from a liberal arts college education. This enables students to prepare a successful study plan for the MCAT, enrich clinical and work experiences, and to determine if a career in medicine is a good fit.

You will be a stronger applicant and a better medical student if you take the time to enjoy your undergraduate career, reach your full potential in your science courses, and get quality medically-related experience. Medical schools appreciate individuals with the maturity and experience that comes from working in challenging jobs, volunteering with underserved populations, and/or gaining more exposure to the medical field.

The medical school application process generally takes over 18 months from the start of the application process to matriculation in medical school. Approximately 18 months before matriculating in medical school, students usually request letters of recommendation, and meet with Jennifer Barr to strategize about the medical school application process.

Most U.S. medical schools utilize the online, centralized [American Medical School Application Services \(AMCAS\)](#) or [American Colleges of Osteopathic Medical School Application Services \(AACOMAS\)](#). Applicants submit their application in the mid-summer one year prior to intended matriculation. After submitting their application, applicants receive supplemental/or secondary applications from individual medical schools.

MCAT

The [Medical College Admission Test \(MCAT\)](#) is the standardized test required for medical school admission. It's a computer-based test that is offered during select dates from January to September at testing centers throughout the U.S.

A liberal arts education is excellent for laying the foundations needed for this exam. Reflecting the recently suggested changes to medical education, the MCAT has four sections, each with a separate score:

1. Biological and Biochemical Foundations of Living Systems
2. Chemical and Physical Foundations of Biological Systems
3. Psychological, Social and Biological Foundations of Behavior
4. Critical Analysis and Reasoning Skill

Ideally, you should plan to take the MCAT when you are fully prepared and can reach your full potential but no later than early summer of the year you are applying. For most schools, MCAT scores are valid for two to three years.

Familiarize yourself with the free resources that are available on the MCAT website, in the Health Professions Advising Office and in the OAR.

Dental Medicine

Dentists lead teams to provide preventive and restorative care to treat people's oral health needs. Dentists are instrumental in the early detection of oral cancers and systemic conditions that manifest in the mouth and that can affect the overall health of the patient. The dental profession has many exciting career paths to explore, from family practice, to teaching and research, to specialty fields.

Most Haverford students choose to apply to dental school after graduating from college. **The average age of students entering dental school is 24**, which signifies a national trend of students applying to dental school after graduation.

Course Requirements

The core pre-dental course requirements are the same as the core pre-medical course requirements. The ADEA Official Guide to Dental Schools, published online annually by the ADEA (American Dental Education Association), includes information about course prerequisites and admission criteria for individual dental schools in the U.S. and Canada. Common additional courses that are recommended or required by dental schools may include:

- One semester of Biochemistry
- One semester of Microbiology
- One semester of Calculus
- One semester of Psychology
- One advanced Biology course especially for non-science majors

Gaining Experience

An excellent way to gain exposure to the profession is by observing a dentist. In fact, **nearly all dental schools require applicants to have 50-100 hours of observation at a dental practice prior to applying to dental school.** You should reach out to your dentist to see if you can spend time observing at their office during your breaks from college. It is a good idea to set up a process for the dental office to track your hours because many dental schools require a letter from the dentist documenting the total number of hours as part of your application.

Demonstrating “manual dexterity”: If you enjoy creative arts and working with your hands, dentistry may be a good career for you. Dentists need to have great manual dexterity as well as good “3-D” perception. In fact, the dental school application asks questions about hobbies involving manual dexterity.

Summer programs for pre-dental students: There are a few state dental schools that have summer programs for pre-dental students; check the websites of your home state dental schools to see if they sponsor any summer programs.

Dental Admission Test (DAT)

All dental school applicants are required to take the [Dental Admission Test \(DAT\)](#) that is sponsored by the ADA. The computer-based test is 5 hours in length and consists of four parts:

- Natural Sciences (introductory biology, general and organic chemistry)
- Perceptual Ability (PAT)
- Reading Comprehension
- Quantitative Reasoning

Applying to Dental School

Most U.S. dental schools utilize the online, centralized Associated [American Dental Schools Application Service \(AADSAS\)](#).

Veterinary Medicine

Veterinarians improve the health and well-being of the animals they serve. Preparing for veterinary school involves completing science prerequisite courses in addition to gaining extensive experience working with a diversity of animal species: large animals, small animals, and wildlife or exotic species.

The AACVM annually produces the [Veterinary Medical School Admission Requirements \(VMSAR\)](#), which provides profiles of all of the veterinary schools, prerequisite course information, and criteria for admission.

[Dr. Eric Miller](#) is a Haverford Biology Professor who advises Haverford students that are interested in the veterinary profession. He has experience working in veterinary research and has contact with professors at veterinary colleges. emiller3@haverford.edu

Course Requirements

The basic core pre-veterinary course requirements are similar to the core pre-medical course requirements. Common additional courses that are recommended or required by veterinary schools may include:

- One semester of Biochemistry
- One semester of Genetics
- One semester of Microbiology
- One semester of Animal Physiology
- One semester of Animal Nutrition

While most pre-veterinary students major in biology or chemistry, it is possible, with careful planning, to pursue another major and still complete all the required courses. Detailed information about veterinary school course requirements is outlined in the [College Prerequisites Comparison Chart](#) on the AAVMC website.

Gaining Experience

All veterinary schools require that applicants have extensive experience working with animals; some schools specify that applicants complete several hundred hours of experience. Most successful veterinary applicants will have experience working with several different species including both large and small animals. **For application purposes, most veterinary schools require at least one letter of recommendation from a veterinarian who has supervised the applicant working with animals, preferably for a significant length of time.**

GRE

Most veterinary schools require applicants to take the Graduate Record Exam (GRE) general test. You should plan to take the GRE no later than July of the year before you plan to start veterinary school.

Applying to Veterinary School

Most U.S. veterinary schools utilize the online, centralized [Veterinary Medical College Application Service \(VMCAS\)](#). Most vet schools require three letters of recommendation, including one from a veterinarian.

State Residency

Your state of residence is an extremely important factor in the veterinary school admissions process. Most veterinary schools reserve the majority of their seats for in-state residents. States without a veterinary school usually arrange for schools in other states to accept a certain number of their residents. The VMSAR lists the contract schools for states that have no veterinary school of their own.

Haverford students who are residents in other states have the option to become Pennsylvania State residents, if you wish. Although it is wise to plan your pre-veterinary coursework around the requirements of your state's veterinary school, it is also important to recognize that more and more students are successfully applying to a variety of vet schools.

Public Health

Public health is an interdisciplinary field that seeks to promote the health and well-being of populations. Public health practice is distinct from clinical medicine in its focus on communities rather than individuals and on prevention rather than treatment.

Because the public health field encompasses a wide range of services and responsibilities, graduate schools of public health are interested in applicants with a variety of undergraduate majors. Almost any undergraduate course of study will prepare you to enter at least one of the public health specialties.

Most often, public health professionals complete a master's degree. The Master of Public Health (MPH) is an interdisciplinary degree that includes courses from health administration, epidemiology, environmental health, and behavioral health. There are also other graduate degrees with a specific focus on individual fields of public health such as Master of Health Services Administration or a Master of Science in Epidemiology.

The American Public Health Association (APHA) provides the following examples as specific fields of public health:

- Behavioral and Social Science
- Biostatistics and Informatics
- Community Health
- Environmental Health
- Epidemiology
- Global Health
- Health Policy and Management
- Health Promotion and Communication
- Maternal and Child Health
- Minority Health and Health Disparities

Course Requirements

There are no standard course requirements for MPH programs although it is useful to take an undergraduate course in statistics and one year of biology.

Gaining Experience

Seeking out health-related experience through internships and externships will strengthen your application and demonstrate an understanding of public health practice. Experiences outside the classroom are also vitally important for discerning and refining your specific areas of interest within this very broad field. Visit the Center for Global Peace and Citizenship (CPGC) and the Marilou Allen Office of Service & Community Collaboration (OSCC) to learn how to participate in one of their many established public health related opportunities that are available in the US and abroad. Although some MPH programs will accept applications from college seniors who have acquired significant experience, most graduate programs firmly prefer that applicants work for one-two years after graduating from college before applying.

GRE

Applicants to graduate programs in public health take the Graduate Record Exam (GRE) general exam. Students interested in epidemiology or biostatistics may wish to inquire with specific departments regarding minimum percentile scores on the quantitative portion of the GRE.

Applying to MPH Programs

Most U.S. schools and programs of public health utilize the online, centralized Schools of [Public Health Application Service \(SOPHAS\)](#). Deadlines vary, depending upon when matriculation can take place, but most schools have fall deadlines.

Physician's Assistant

Physician Assistants (PAs) are healthcare professionals who are licensed to practice medicine under the supervision of a physician. PAs conduct physical exams, diagnose and treat illnesses, order and interpret tests, counsel on preventive health care, assist in surgery, and write prescriptions.

Becoming a PA requires completion of a PA graduate program. The first half of any program involves didactic learning while the second is comprised of rotations in hospitals, clinics, and offices. PAs take a national certifying exam. Upon passing, students can enter any specialization and switch specialties without additional education.

Course Requirements: The majority of PA programs have the following prerequisites:

- Two semesters of Chemistry with lab
 - Note: Schools can be particular about which chemistry courses they prefer. Be sure to check the individual school websites.
- One semester of Human Anatomy and Physiology with lab
- One semester of Microbiology with lab
- One semester of Statistics
- One semester of Psychology

Other frequently required or recommended courses include:

- One or two semesters of General Biology
- One or two semesters of Organic Chemistry
- One semester of Genetics
- One semester of Biochemistry
- One semester of a Language (some schools require coursework in Spanish)
- One semester of Medical Terminology
- One semester of Public Speaking
- One or two additional courses in Social/Behavioral Sciences

Gaining Experience

PA schools want applicants to be committed to becoming a physician assistant, rather than to use their degree as a stepping-stone into medical school. Therefore, **PA schools require between 500-2000 hours of clinical exposure prior to application.** It is important to check the websites of the schools you are interested in for more specific information. Many students complete these hours after they have graduate by working in emergency services or healthcare facilities.

GRE

The majority of PA schools require the Graduate Record Exam (GRE) general exam; however some schools will accept the MCAT instead. Be sure to check the websites of the schools you are interested in to find out which test they accept or prefer.

Applying to PA School

Most U.S. physician assistant schools and programs utilize the online [Central Application Service for Physicians Assistants \(CASPA\)](#).

Nursing

Nurses are primary providers of patient care. They can practice independently but collaborate with all members of a health care team to provide individual patient care. Nurses serve as advocates for patients, families, and communities and sometimes go into research or healthcare management.

Haverford doesn't have a Bachelor of Science in Nursing program, therefore students who are interested in the field complete an accelerated Bachelor of Science in Nursing program after earning their undergraduate degree with an option to earn a master's degree as a nurse practitioner (NP). Nurse practitioners are trained to take medical histories, diagnose and manage illness, order and diagnose tests, write prescriptions, and order tests. They may specialize and have the option of opening their own practice without the supervision of a physician.

Course Requirements

Although the requirements vary from school to school, most accelerated Bachelor of Science in Nursing programs require the following courses:

- One to two semesters of Introductory Biology
- Two semesters of Anatomy and Physiology
- One semester of Microbiology
- Two semesters of Chemistry
- Two semesters of Psychology
- One semester of Statistics
- One semester of English
- One semester of Nutrition

Gaining Experience

Nursing schools do not require clinical experience, however seeking out some related experience will strengthen your application and demonstrate interest in the field of nursing.

GRE

Many schools require the Graduate Record Exam (GRE); however others may ask for the Test of Essential Academic Skills (TEAS), Health Education Systems Incorporated Admissions Assessment (HESI-A2), or the SATs/ACTs.

Applying to Nursing School

- Most U.S. nursing programs utilize the online [Centralized Application Service for Nursing Programs \(NursingCAS\)](#).
- The deadlines to apply vary from school to school but most have a fall deadline.

Additional Health Professions

While these health professions are less common, they play an equally important role in the delivery of patient care. The prerequisite courses for acceptance into a graduate level program vary extensively from profession to profession. For a comprehensive list with detailed descriptions, visit ExploreHealthCareers.Org.

Profession	Description	Education
Acupuncture and Oriental Medicine ccaom.org	Acupuncturists identify patterns of energetic imbalance and remedy that imbalance with the use of acupuncture needling, acupressure, and Chinese herbal preparations.	Master's in Acupuncture and/or Oriental Medicine
Art Therapy arttherapy.org	Art therapists use art media, the creative process, and the resulting artwork to explore and manage a patient's psychological status.	Master's in Art Therapy
Audiology saa.audiology.org	Audiologists diagnose, treat, and manage hearing loss and balance disorders for adults and children. This includes selecting and fitting assistive technologies and monitoring them surgically.	Doctor of Audiology
Child Life Specialist childlife.org	Child Life Specialists help children and their families cope with challenging experiences through play, preparation, education, and self-expression.	Certification
Chiropractic Medicine chirocolleges.org	Chiropractors focus on the relationship between the body's main structures – the skeleton, the muscles and the nerves – and the patient's health	Doctor of Chiropractic Medicine
Genetic Counseling nsgc.org	Genetic counselors help people understand and adapt to the medical, psychological and familial implications of genetic contributions to disease.	Master's in Genetics Counseling
Naturopathic Medicine aanmc.org	Naturopaths diagnose, treat, and manage patients through a holistic approach in search of an underlying cause.	Doctor of Naturopathic Medicine
Nutrition nutritionED.org	Nutritionists and dieticians advise and educate clients about the nutritional values of food.	Education and licensing requirements vary by state
Occupational Therapy aota.org	Occupational Therapists (OTs) help improve a client's ability to perform daily activities by adapting the environment to fit the client.	Master's in Occupational Therapy
Optometry opted.org	Optometrists treat, and manage diseases, injuries, and disorders of and affecting the eye.	Doctor of Optometry

Profession	Description	Education
Pharmacy aacp.org	Pharmacists are drug specialists who manage and dispense medication while communicating proper medication practices, interactions, and potential side effects to patients.	Doctor of Pharmacy
Physical Therapy apta.org	Physical Therapists (PTs) diagnose and treat individuals who have health-related conditions that limit their abilities to move and perform functional activities.	Masters or Doctor of Physical Therapy
Podiatric Medicine aacpm.org	Podiatrists diagnose and treat conditions associated with the foot and ankle.	Doctor of Podiatric Medicine
Speech-language Pathology asha.org	Speech-Language Pathologists assess, diagnose, and treat speech, language, social communication, cognitive-communication, and swallowing disorders.	Master's in Communication Sciences and Disorders

Diversity, Equity, and Inclusion (DEI) Resources

If you are from a group that is underrepresented in the health professions or from a financially disadvantaged background, there may be specific opportunities available to you, including summer academic and/or research programs or post-baccalaureate programs designed to help students prepare for the MCAT and to provide opportunities to further demonstrate ability in the sciences.

The American Association of Medical Colleges (AAMC) “leads and supports initiatives and projects to advance equity, diversity, and inclusion in the academic medicine community.”

The following list offers programs and resources specifically aimed at increasing diversity among health care professionals.

[Action Collaborative for Black Men in Medicine](#)

“The **Action Collaborative** will be a network community that will focus on systemic solutions to increase the representation and success of Black men interested in medicine sponsored by the AAMC and the [National Medical Association](#) (NMA)”

[Creating and Sustaining a Diverse and Culturally Responsive Workforce](#)

[DiVersity Matters Initiative](#)

Sponsored by the Association of American Veterinary Medical Colleges to foster diversity within the veterinary professions.

[Holistic Review](#)

Holistic Review refers to “mission-aligned admissions or selection processes that take into consideration applicants’ experiences, attributes, and academic metrics as well as the value an applicant would contribute to learning, practice, and teaching.” The core principles of holistic review are outlined at this [link](#).

[Health Equity Research and Policy](#)

[Minorities in Medicine](#)

An AAMC website featuring information related to medical student preparation, the medical education pipeline, and financial aid opportunities for students underrepresented in medicine.

[Population Health Education](#)

“The AAMC seeks to improve the integration of public health concepts into medical education, and enhance and expand a diverse and culturally prepared health workforce.”

[Sexual and Gender Harassment Resources](#)

[Summer Enrichment Pipeline Programs:](#)

Database resource to help students locate enrichment programs.

[Summer Health Professions Education Program \(SHPEP\)](#)

A free six-week summer medical and dental school preparatory program for first- and second-year college students. The program includes students from a wide variety of backgrounds who demonstrate a commitment to service, issues affecting underserved populations, and careers in health care.

International Students

While admission to U.S. medical, dental, and veterinary school can be challenging for even the best students, international students who are not U.S. permanent residents face additional challenges.

One difficulty is the limited number of medical school seats available to international applicants. Some medical schools do not accept international students at all while others limit the number of seats for non-U.S. students. Some U.S. medical schools will accept Canadian applicants considering them equally within their applicant pool, but not other international applicants.

In recent years, only 1% of the 19,000 students entering medical school in the U.S. were non-U.S. citizens. Information about which U.S. medical schools accept [international students](#) can be found in Medical School Admissions Requirements.

Another challenge is how to pay for medical school. Some medical schools ask international students to put the full cost of tuition in escrow before beginning medical school. International applicants are not eligible for U.S. financial aid and will likely need a U.S. citizen to co-sign any private loans. The cost of a four-year U.S. medical education may range from \$150,000-\$250,000. An exception to this may be applying to funded M.D./Ph.D. programs.

International students interested in applying to medical schools in the U.S. should work closely with Jennifer Barr and their major advisors, and should keep alternate career paths in mind. Knowing the challenges ahead of time will help you with making realistic plans for your future. Note: For admissions purposes, most U.S. medical schools do not differentiate between U.S. citizens and non-citizens who are permanent residents.