



HSAFP

Aspiring Physicians, Inspired Futures



THE PRE-MED JOURNEY

**WHAT EVERY HIGH SCHOOL STUDENT
NEEDS TO KNOW ABOUT THE JOURNEY
TO A CAREER IN MEDICINE**

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I Want To Be A Doctor

So here you are as a high school student. Maybe it's your freshman year, maybe it's your senior year. But you've made up your mind. **YOU WANT TO BE A DOCTOR.** Your parents are proud, and your grandparents are beaming from ear to ear. "My little girl is going to be a doctor! She's going to cure cancer, save lives, and make a difference in the world."

You, the high school student, have started your journey toward a future in medicine. You've committed to exploring a career you've been dreaming about ever since you put on your first toy stethoscope and pretended to help a loved one feel better. The world needs you! But... before you put on that white coat and take out that reflex hammer, you have a long way to go. This guide from HSAFP is designed to help you every step of the way, from today until you can walk into a patient's room and proudly say, "I'm your doctor."

Being a physician is an incredible calling! You get to learn every day, work closely with others, and most importantly, make a meaningful difference in people's lives. However, the road to becoming a physician is also a long one. One of the best things you can do in high school to prepare yourself is to understand what it takes and what the process really looks like.

The first step in pursuing medicine—or any career, really—is making sure it's something **YOU** are passionate about. The worst reason to become a physician is because your parents expect it, or because everyone else in your family is a doctor. If you choose medicine for those external reasons, the journey can feel twice as long and twice as hard.

Personal interest should always be the driving force behind the career path you choose!

This guide will give you an overview of the physician pathway and ways you can start building toward your goals now.

Overview Of The Process Of Becoming A Physician

If you are reading this, you probably have some idea of what the path to becoming a physician entails. We've already noted that it is a long path. But just how long is it? Let's start counting: 4 years of high school, 4 years of college, maybe 1-2 gap years, 4 years of medical school, another year of research, 3-7 years of residency, 1-2 years of fellowship, and then... BAM! Just like that, you are a doctor! A full-fledged doctor! And all it took was 22 years of your adult life to get there. Not bad! Okay, so you may think that this is an exaggeration, but it's really not. The absolute minimum amount of time you have post-middle school is typically around 15 years. More likely, you are looking at 18+ years from when you enter high school to when you start practicing medicine. This is a long time.

Why does it take so long? Let's look at some of the steps in detail.

High School

Yes, you must complete high school to become a doctor. There are no high school dropouts performing surgery (although, just 200 years ago this wasn't the case. It was only in the 1800s that dentists, barbers, and surgeons were separated as professions – before then, barbers were who you would go to if you needed a leg sawed off or a tumor removed). Okay, but back to the point. You need to graduate high school, and do so with great grades, to even consider medicine as a career. There's a lot that goes into picking the right college as a pre-med.



College

Physicians in the United States (U.S.) must complete a bachelor's degree at a U.S. accredited university. The type of degree can be whatever the student desires (more to come about this later), but students have to complete specific course requirements to enter medical school. In addition, students must complete the Medical College Admission Test (MCAT) before applying.

In addition to the academic requirements, students should participate in certain extracurricular activities such as hospital volunteering, physician shadowing, research, community service, and leadership activities. Pre-med students have to study and work hard, but college is also fun! This will likely be your first time living away from your parents and having a life on your own. It's an important time to learn how to balance both your learning and social life in a constructive and effective way.

Students wanting to start medical school directly after college should apply to medical school during their junior year of college. The application process takes about a year (actually a little more than a year!); with the application opening in Spring and starting medical school the following Fall.

The alternative path to medical school is through a combined college and medical school (BS/MD or BA/MD) program. This is a dual-degree program constructed by undergraduate schools in partnership with some local medical schools to provide high school seniors with conditional acceptance into medical school. The two degrees, Bachelor of Science (BS) or Bachelor of Arts (BA) and Doctor of Medicine (MD), are offered to students who successfully graduate from both the undergraduate school as well as the medical school. These programs are tough but they can be very good for some students!

Typically, these programs last anywhere from 6-8 years (in contrast to the traditional 4 years of undergraduate + 4 years of medical school), and they're specifically targeted towards students who've shown a great deal of interest in medicine throughout their entire high school career. These programs are known to be some of the most competitive in the country, and there are a great number of things to know in order to be a competitive applicant, so someone interested in this route should prepare early in high school.

Medical School

Medical school lasts for at least four years and is one giant party... at the library. You will learn more than you can ever imagine, more than you thought your brain could hold. For example, which nerve makes my tongue move? The answer is the 12th cranial nerve, the hypoglossal nerve, which arises from the hypoglossal nucleus in the brainstem and passes through the hypoglossal canal. Got it? Now memorize it. That's the first two years of medical school—fact after fact that you just have to know as a doctor (or at least that's what you're told, then you forget much of it soon after you graduate).

The structure of most medical schools is such that the first two years are didactic or classroom learning, where students master subjects such as anatomy, physiology, biochemistry, pathophysiology, and pharmacology.

The final two years of medical school are typically composed of clinical rotations (you finally get to see patients and act like a doctor!). You'll witness your first surgery (and maybe pass out at the sight of bowel contents spilling on the operating table—if this is the case, cross surgery off your list). You'll interact with your first patients (including the psychiatric patient who swears that Casper the Ghost is in the room with you). It's an incredible time, full of learning from attending physicians and residents, as well as nurses and ancillary staff. You'll be overwhelmed, you'll be exhausted, but you'll love it. This is what you've always wanted to do!

During the fourth year of medical school, students typically take 'elective' courses where they spend time in clinical settings that interest them.

Also, in the fourth year, students apply for residency—a process similar to applying to medical school, but this time, students get 'matched' to a particular program. This means students apply to programs of their choice, interview at various places, and then both the program and the student rank each other based on their preferences. In March of the fourth year, students find out which program they will be attending on 'Match Day'.



Residency

Following graduation from medical school, students are now doctors! But in reality, the only person who will consider you a doctor is your mom. You graduated from medical school just one day ago! No one can trust you (nor should they) to perform surgery, prescribe medicine, or see patients independently. Medical school has been great for laying the foundation of medicine, but the field is so broad that it can't cover every detail. A pathologist does things very differently from a neurosurgeon, who does things very differently from a radiologist! Residency is when you hone your craft and truly learn what you will need to know on a day-to-day basis as a doctor.

The first year of residency is referred to as an 'internship.' Interns begin their residency program in their chosen specialty. Most doctors complete their internship at the same program where they will complete their residency, while some will have a 'transitional year' at a different program.

After the internship is completed, doctors go on to finish their residency. Residencies vary in length depending on the type of specialty. For instance, family medicine is three years, whereas neurosurgery is seven years. At the end of residency, physicians take their board certification, which is a test designed to demonstrate their proficiency in their chosen specialty.



Fellowship

After all that work, it doesn't end for everyone. Residency has been great! You've worked 80 hours a week (for very little pay), but you've mastered the basics of your field. But what if you want to specialize? Well, you need even more time. For instance, you may have learned the basics of internal medicine in a residency, but if you want to be a cardiologist, you have to undergo another 4 years of training! And if you want to be a cardiologist who deals exclusively with heart failure patients, you may need another 2 years after that! Yes, it's a long, long road. We'll outline some specialties in later chapters to give you an idea.

Attending Physician

After residency (and possibly fellowship), physicians are known as 'attendings'—this is when physicians are fully licensed and board certified in their specialty and ready to practice on their own! Woohoo. You've made it. Finally.



Tests, Tests, And More Tests

You may have heard that part of becoming a doctor involves taking tests. Obviously, society needs doctors who are trustworthy and competent. If there was no testing, it would be hard to determine who really knows anything about medicine versus who is just Googling random symptoms (“what is this weird spot on my arm?” “I stubbed my toe and now it hurts.” “Could this be cancer?”). In all seriousness, medicine involves a great amount of trust from the public in their physician. So while the tests you take along the road to becoming a practicing physician can seem like an unending amount, the reality is that many (maybe not all) are needed to weed out who has the stamina, drive, and intelligence to become a doctor and who does not. Here are the standardized tests you have to take before becoming a doctor:

SAT and ACT

You'll likely need to take the SAT or ACT to get into college. These tests assess your readiness for higher education and are crucial for college admissions. While they may not be directly related to medicine, they are essential first steps on your academic journey towards becoming a doctor. Excelling in these exams demonstrates your ability to handle challenging coursework, a skill that will be invaluable as you progress through your medical education.

MCAT

The MCAT is the Medical College Admission Test®. This is the test that you probably have heard your friends and siblings who are interested in medicine talking about. It consists of 4 sections (Chemical and Physical Foundations of Biological Systems Critical Analysis and Reasoning Skills Biological and Biochemical Foundations of Living Systems Psychological, Social, and Biological Foundations of Behavior). Basically, that's chemistry & physics, bio, psych and sociology and a verbal section.

Each of the four sections of the MCAT is scored from 118 to 132, with the mean and median at 125. This means the total score ranges from 472 to 528, with the mean and median at 500. On average, a score of around 510 or higher is considered competitive.

“The Boards”

USMLE Step 1:

This is the first of three USMLE tests (United States Medical Licensing Exams) that medical students/residents take to be able to practice medicine in the U.S. Step 1 is a pass/fail test, usually taken during your 2nd year of medical school. The test material consists of a lot of basic medical science material (pharmacology, physiology, anatomy, pathophysiology) - the subjects you'll be learning in years 1 and 2 in medical school.

USMLE STEP 2 CK:

Step 2 is a scored exam that builds upon the knowledge you learned for Step 1, plus the year of clinical training you just undertook as a medical student. The questions and topics are more related towards actual disease and diagnosis versus just basic sciences.

USMLE STEP 3:

Step 3 is the final exam in the USMLE series, assessing your ability to manage patient care. This test focuses on advanced clinical decision-making, covering scenarios such as emergency responses to cardiac arrest and managing complex conditions like diabetic ketoacidosis. It evaluates your readiness to practice medicine independently, integrating both the medical knowledge and clinical skills required for patient management.



Speciality Boards

You may think you are done with the tests listed before here, but you aren't. If you want to be "Board Certified" (and the reality is that you have to be board certified in most cases), you need to take at least one additional test, maybe more, depending on your chosen specialty. Let's consider two quick examples.

If you want to become an internal medicine doctor and not specialize any further, then you would take your internal medicine boards after your third year of residency. Every 10 years after that, you would have to take a refresher board exam for the rest of your life.

If you want to be an interventional radiologist, then you would take three different written exams: one at the end of your fourth year of residency, one after your fellowship, and one after you start practicing to become board certified.

What is the bottom line? If you want to be a doctor, you better love taking tests, or at the very least, you need to tolerate them!



WHAT IS A DOCTOR EXACTLY?

So your current perspective of what a doctor does on a day to day basis may be shaped by TV, your parents, your own physician or any number of other factors. The reality is, what one doctor does on a daily basis is VERY different than what another one may do. There are some doctors who don't even see patients. There are some who just see patients for one small problem, others who take care of entire families. You don't have to know what type of doctor you want to be as a high school student, but it's good to have some familiarity with different specialties.

Pathologist

If you love looking in a microscope, this maybe the specialty for you. A pathologist may go entire weeks without actually seeing a patient (at least a live one) but that doesn't mean they aren't essentially to the practice of medicine. Other doctor's rely on pathologists to help diagnose patients with ailments. When a surgeon takes a biopsy, they send the specimen down to pathology who look at it under a microscope to determine what that odd looking thing actually is. Is it cancer? Or just a mole? Only the pathologists knows the answer!

Neurosurgery

It's not like its brain surgery? Yep, it is! Neurosurgeons primarily perform surgery on the brain and spinal cord. The training is long and tough, but most neurosurgeons are incredibly passionate about their field!

Plastic Surgery

You've seen them on TV. They exist in real life. While tummy tucks and breast implants maybe what makes plastic surgeons famous on TV, in real life they deal with a huge variety of cosmetic issues. From burn victims to reconstructions of parts of the body after cancer surgery, plastic surgeons help people look their best.

Dermatology

Pimple Popper MD, but so much more. From cosmetic issues of the skin to live threatening skin cancer and reactions, dermatologists are the masters of understanding what is going on with the largest organ in your body!

Pediatrics

Taking care of kids is the bread and butter of pediatrics! Pediatricians can provide routine care for kids, or they can specialize into almost any field for children, including oncology, surgery, and neurology!

Psychiatry

Psychiatrists work with patient's mental health. They can work in a hospital setting or in clinics. They often work alongside other physicians to take care of the entire patient. Mental health is just as important as physical health!

Orthopedic Surgery

Known as the jocks of the hospital, orthopedic surgeons deal with the bones and muscles of the body. Have a broken bone? These are the ladies and gentlemen who will put it back in place, drill a nail through it or repair a torn ligament.

Family Medicine

Babies to oldies. Family medicine doctors deal with everyone and everything. They typically work in outpatient settings and see patients who are well and need routine checkups or those who are sick and need some more urgent care. They can even perform minor surgeries and deliver babies.

Radiologist

Love being in dark rooms? Radiology may be the job for you! Radiologists examine and find diagnoses in x-rays, CT scans, MRIs, and other imaging modalities. Radiologists also perform procedures on patients with the assistance of x-rays or ultrasound.

Radiation Oncologist

These guys zap cancer, literally. Radiation oncologists use x-ray energy to target cancer in the body and eradicate it.

Internist

Similar to a family medicine doctor, an internal medicine physician sees patients for routine care, however, they concentrate on adult medicine. Also, an internist can choose to specialize after finishing their residency- from cardiology to infectious disease to gastrointestinal medicine, there are many specialty options to choose from!

Anesthesiology

If you love sleep, or more specifically, putting people to sleep, this maybe your specialty. Anesthesiologists serve an important role in medicine to keep people from feeling pain during surgeries and taking care of the most vital organs (e.g., heart, lungs) while the surgeon focuses on what they are doing.



High School Extracurriculars Toward Becoming a Doctor

Although by no means necessary, one of the things you may want to consider doing is getting first-hand experience in the healthcare world.

Reading about what a physician does is important, but nothing beats first-hand experience. So if you have some time during winter, spring or summer vacation, you may want consider one or a few of the following:

Clinical Exposure

One of the best ways to gain insight into what a physician does is through clinical exposure. This can include (but is not limited to):

- Hospital volunteering
- Clinic volunteering
- Nursing home volunteering

Start thinking about local opportunities by considering the following: Do you have a local hospital you can contact about volunteering opportunities? Do you know a physician that would let you volunteer in his or her office?

Organizations like HSAFP can also connect you with volunteer opportunities at hospitals, clinics, and community health programs.



Physician Shadowing

Shadowing is an activity distinct from clinical experience in that it involves visiting a physician's practice and observing their day-to-day activities. This can occur in an outpatient clinic or in an inpatient hospital setting. Finding shadowing opportunities requires persistence, often necessitating multiple emails or phone calls to various physician offices. Here are some ways to find opportunities:

- Start by looking for local doctors' offices or hospitals and reach out to them to discuss shadowing possibilities.
- Use family or friend contacts! If you know a physician willing to let you shadow, it's perfectly acceptable to take advantage of this opportunity!

Research

Being a physician isn't solely about patient care. For those working in an academic (i.e., university) setting, conducting research is also a significant responsibility. If you enjoy science experiments, consider seeking out research opportunities. Finding such opportunities can be challenging, especially for high school students, but persistence is crucial. Here are some tips:

- Talk to your guidance counselor and science teachers to see if they know of any research opportunities where high school students might be considered.
- Research local university professors online to find projects of interest and contact them directly.

Get Involved with HSAFP

One of the best ways to start building your extracurricular profile is through the High School Alliance of Future Physicians (HSAFP). HSAFP gives students access to physician mentors, leadership roles, and hands-on medical experiences. Whether you start a chapter at your school, join an existing one, or become a national member, you'll gain valuable clinical exposure and community service opportunities that colleges and medical schools value.

Special Programs

For those of you wanting a more formal experience geared for high school students, consider university-sponsored summer programs. Here is a sampling of a few such programs:

Georgetown Medical Academy

Georgetown University's 3-Week Medical Academy offers high school students the chance to experience a snapshot of a first-year medical school curriculum through one of three specialized tracks (Anatomy & Physiology, Neuroscience, or Emergency Medicine), featuring hands-on projects, case studies, and lab work under the guidance of medical faculty and students. [\[Learn more.\]](#)

USC Summer Programs for High School Students

The University of Southern California's Summer Programs provide high school students with a four-week academic experience, where they can earn college credits while engaging in hands-on workshops, labs, and lectures taught by USC faculty, all designed to be interactive and more challenging than traditional high school classes. [\[Learn more.\]](#)

University of Michigan Math and Science Scholars Program

The University of Michigan offers a summer enrichment program for high school students, focusing on introducing them to current developments and research in the sciences and math, fostering a lasting interest and passion in these fields.

[\[Learn more.\]](#)

National Youth Leadership Forum: Medicine

This eight-day program at the National Youth Leadership Forum on Medicine provides high school students with hands-on medical experiences, clinical skills rotations, and insights into medical careers, all while learning from practicing doctors and visiting an accredited medical school. [\[Learn more.\]](#)

Also check to see if your local university has similar programs for high school students.



HOW TO DO WELL **ACADEMICALLY IN HIGH SCHOOL**

Find A Reason To Enjoy Studying

The people who are generally the most successful are the people who actually do not mind studying all that much. Of course, there are probably a million other things they could be doing instead of studying, but when it's something they have to do, they choose to make the best of it. The most effective way to do that is to find something about studying that excites you. It'll be different for everyone, and so it might require a bit of trial-and-error, but that's okay!

Choose Your Friend Group Carefully

Now before you think “Wow this sounds exactly like something my parents preach to me”, try to understand the relevance of this statement. Sure, it's good advice for the whole “don't do drugs!” conversation, but it's equally as important in regards to your GPA.

In high school, everybody wants to fit in; the only problem is it's a lot harder to fit in when none of your friends have the same priorities as you. So why not make it easier on yourself and associate yourself with people who understand why you spend so much time doing what you do.

Don't completely shut off the possibility of being friends with someone just because they don't have similar goals or interests as you – it's never smart to be closed-minded. Just be conscious of the factor of influence that comes with friendships. Having the right group of friends will motivate you and keep you on track towards your goals.

Find A Study Buddy/Study Group

The benefit of having a study buddy is the variation in perspective. Perhaps your friend caught a detail that you didn't, or maybe they didn't understand a topic that you can now explain to them. Teaching is one of the best forms of confirming that you really know what you're talking about, so by studying with a study buddy, you'll be testing your own knowledge.

The only tricky part to this is identifying which person or group of people to include as part of your study group. Not everyone studies in the same way or has the same work ethic. Thus, to create a study group with just all of your friends might not be the most effective study group. Instead, find people with similar study styles as you so that you can bounce ideas off each other in the most productive way possible.

Make It An Expectation Not A Goal

By making a high GPA an expectation as opposed to a goal, what you essentially do is transform your mindset from “I want it” to “I need it”. When you're thinking more along the lines of the “I want it” mentality, it's easier for obstacles to get in the way of achieving your goal. If, however, you maintain an “I need it” mindset, then you are more likely to dig deep and find the inner motivation to overcome any obstacles that may try to hinder your success. You might still fall short, but your motivation will then only increase to make sure you avoid slipping up again.



Don't Take Shortcuts

In high school, depending on your teacher, it's possible to sometimes get away with not doing your homework or barely studying for an exam and still doing well. While this may seem ideal at the time, it will actually hurt you in the long run. When finals week arrives at the end of the semester and you have to take four or five huge tests simultaneously, there is no way you can cram an entire semester's worth of material into one night. No matter how easy the teacher is or how lenient the curve, if you put off the work until the last minute, it will come back to bite you.

In college, if you were to implement the same strategy of putting off all your work until the last week of the semester, you would most likely fail the class, as opposed to high school, where you would probably just get a slightly lower grade. In college, the difficulty of the content is much greater, and the pace of learning is much quicker. As a result, students are expected to take initiative and keep up with the material in a consistent and timely manner.

So even though you may not realize it now or feel the pressure to do so, try to be thorough and consistent in keeping up with lecture material. It will pay off in the long run not only with your GPA but also with your success in college.

Remove All Distractions

In today's world, social media is one of the greatest distractions facing younger generations. With just a click, you can log on and see all the exciting things others are doing while you're stuck at home studying. It's one of the worst feelings: feeling like you're missing out while all your friends are having fun. That's why, when studying, one of the best things to do is to completely disconnect from any social media.

There's a lot of science and research that highlights the importance of limiting distractions while working. Of course, it's much easier to read about and accept than to actually implement such strategies in your work routine. It takes time to train yourself to have the necessary discipline to eliminate all distractions. Given some time and willpower, though, you will start to see the vast benefits of unplugging yourself. This requires a certain level of maturity and sacrifice. Ultimately, both are essential for success in the field of medicine, so if not now, you will need to implement these strategies later on.

Figure Out What Works Best For You

There isn't much to say on this topic other than the fact that different people thrive in different environments, so figure how/where you work best and stick to it.

Hard work and effort never go to waste, so just put in the work and you'll appreciate it when you later ace that test (and even more when you come to college already aware of what study habits work best for you).



CHOOSING YOUR COLLEGE

Now that you have an overview of what is required to become a physician and ways to better understand what a physician does, let's focus on a very important step: picking a college! Some readers may have chosen their college, but for those still deciding, we will discuss how to pick a college so that you can be a successful pre-med!

Where Will You Be The Happiest?

College is a fun experience, but as a pre-med, college can be stressful at times. You will have to achieve great grades, participate in stellar extra-curricular activities, and score well on the MCAT. One of the most important aspects of being able to do all of the above well is finding a college that you will be happy and comfortable at.

If your personal life is taken care of, then you will be able to focus more intensely on the academic aspects of school. So think about choosing a college where you know you will be comfortable and have support through the next few years. Some additional questions to ask yourself about this are:

- Where will I have optimal support from family/friends? Is the environment at this college collaborative?
- Is there support from the faculty?
- Would I feel more comfortable at a large or small university? One that's in a large city, small city or a rural setting?
- Does the campus feel inviting?

Does The College Offer A Program That Interests You?

As mentioned previously, students can major in anything that they want to (again, this will be expanded on later) so try to think about what you are most interested in. If you're reading this book, you are likely set on pursuing medicine. But what would you like your studies to be focused in?

How Much Does The Specific College Cost?

Let's face it: college is expensive and although cost hopefully is not a prohibitive factor, most students need to consider how much a particular university charges for tuition, room and board, and other expenses. Have a discussion with your family to see what you can afford. Ask different colleges about scholarships and financial aid that they offer. Using this information, you can determine if you have enough funds to attend a specific university.

How Prestigious Is The School?

Many people think that in order to get accepted to medical school, they need to attend an Ivy League or top-tier university. However, this is not true. Attending a prestigious college can be a factor that admissions committees consider in reviewing an applicant, but usually this is a small factor. More important will be your grades, MCAT score, and extracurricular activities.

Consider this example: An applicant with a 4.0 GPA from a state college will most likely be looked more favorably upon than an applicant with a 3.5 GPA from an Ivy League school.

Prestige can make a small difference if an identical applicant with a 4.0 GPA from a state school is compared with one that has a 4.0 GPA from an Ivy League school - in this case, the admissions committee may favor the applicant from the Ivy League.

Bottom line: don't go to a school only based on its prestige. Use the other tips to pick a school that will help ensure your success as a pre-med.

What Extracurricular Opportunities Are Available?

This is a significant factor that should be considered when deciding what college to attend. As mentioned previously (and to be discussed in more detail later), pre-meds must have a variety of extra-curricular activities. At some colleges, these opportunities are hard to come by. Peruse the school's website to find out about community service activities, research opportunities and clinical work (including shadowing). Often, it can be helpful to attend a college that is affiliated with a medical school as these universities tend to have many opportunities for pre-meds.

If you're already involved with HSAFP in high school, look for colleges where you can continue your involvement or build on the leadership and service experiences you've gained. These opportunities will help you stand out when applying to medical school.

Other Considerations

Above are the major things you should consider when choosing a college, but there are some other items to consider as well. These include:

- Class size
- Co-ed vs. only men's or only women's
- Collegiate sport opportunities
- Distance learning opportunities



What About Direct Medical (BS/MD) Programs?

The college application season is no doubt one of the most arduous parts of any high school student's career. It requires intense dedication and time to be spent on essays, interviews, financial aid applications, and much more. And the worst part? Doing everything you possibly can and still somehow feeling like you haven't done enough. So why would anyone voluntarily decide to go through such a grueling process all over again? Well, unfortunately, for any undergraduate student who's decided to pursue a career in medicine, there isn't much of a choice. Applying to medical school follows the same general outline as applying to college but is a far more time-intensive process to go through.

Not just that, but the average acceptance rate to medical school is also much lower than any undergraduate school; according to the American Association of Medical Colleges, the acceptance to medical school is about 41%.

The intensity of the medical school application process is perhaps one of the greatest strengths as well as one of the greatest weaknesses of the medical field. On one hand, it ensures that only the brightest and most capable students proceed forward to have the honor of taking care of real people. Alternatively, though, the process is often so demanding that students get burnt out to the point where they reconsider going into the profession altogether, potentially causing the field to miss out on some great candidates.

Over the years, universities have recognized that one of the downsides to the rigor of pre-med life is that it unfortunately drains the creative energy out of the students. Everyone becomes so focused on getting the necessary grades and building up the ideal resume that the passion for medicine and for helping others slowly seeps away. And ultimately, this has major downstream implications. Because without any fresh, creative energy coming from incoming medical students, there will be no overall advances in the field. The youth sets the tone of the advancement for the next generation, but if the youth are already burnt out when they enter the workforce, how will they contribute?

Combined bachelor and medical degree or BS/MD programs were created to address the increasingly important concern of developing humane doctors. The medical field today wants doctors who can effectively communicate and connect with their patients, and the only way to develop that skill is to practice with real-world exposure.

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Ultimately, that is why BS/MD programs were developed. Without the pressure of having to apply and impress medical schools, students can focus more of their energy on other creative endeavors that focus on developing their ability to connect with other humans.

Obviously, the intent of BS/MD programs is to select few high school seniors and provide them with early, conditional acceptance into medical school. But why? If these students really are as exceptional as the programs advertise, then why do they even need that early acceptance? Shouldn't they easily be able to get into medical school four years down the road through the traditional route?

Indeed, most of the students who get selected into these programs have already developed the study habits and strong work ethic required to be successful in the classroom as traditional pre-med students, but that is only part of what it takes to be a successful physician. The best physicians are those who can make human connections. BS/MD programs thus select students who have already shown academic promise and can better use their time to experience the world and sharpen their social skills. This can occur through a variety of activities, such as volunteering, taking on leadership roles, studying abroad, etc.

Too many students apply to these programs simply because they're looking for the easy way into medical school. And if we're being realistic, having an "easy route" into medical school is of course a strong motivation for anybody to apply. However, what will be critical to your success in the application process is that that isn't your only reason for applying. If it is, then perhaps you should reconsider applying because any experienced BS/MD professional will be able to easily see through that.

Thus, the purpose of BS/MD programs is to provide intellectually curious students with the opportunity to explore their interests and enhance their education, rather than to waste countless hours burdened by traditional pre-medical hurdles.

Benefits of a BS/MD Program

When someone thinks about the pros of a BS/MD program, the obvious perks usually have to do with the conditional acceptance to medical school. There are, however, numerous other perks that are in some sense more valuable than the conditional acceptance itself. They're important because they help widen your insight into medicine and open up your field of opportunity, which will provide you with a more fulfilling college experience. To help shed some light on those topics, here is a summary of some of perks to help you get a better understanding of their value.

Extensive Connections

When you join a BS/MD program, you are opting to join a group of some of the most talented and accomplished students across the country. Knowing and interacting with these students is going to provide you with some great connections that can come in handy whenever you need any help or advice.

Not only are the students a great resource, but so are the faculty of the program. Most program coordinators are extremely well qualified professionals who themselves have extensive connections in the medical field. It's not easy navigating your way through college and finding opportunities in your field of study, but with these BS/MD programs, you've got a great support system that's always there to help you through the process.

Great For Scholarships, Grants, And Summer Programs

If you mention in any application you write, whether that be for a special scholarship, grant, or summer program, that you're a BS/MD student, it will definitely benefit your application. It's not every day you find someone who's committed to medical school before they've even entered undergrad, so that conditional acceptance carries a lot of weight and value. In the selection committee's eyes, your enrollment into this program is indicative of your value. If you also add on a letter of recommendation from one of your program advisors, it'll be the perfect "cherry on top." It's one thing for you to mention the honor of being a BS/MD student, but it's another for a qualified professional to confirm the unique qualities and capabilities that got you selected into such a prestigious program and that will also be of use in your scholarship, grant, or internship.

Personal Attention And Moral Support

The program faculty is personally invested into the well-being and success of you as a student (since they basically hand-picked you from hundreds of students), so they'll always find a way to make extra time for you. Whether it's helping out with scheduling issues or calming you down after a bad grade, the faculty goes above and beyond to help you feel at ease. They're exactly the moral support you need when you're away from home and don't have family to rely on for that same sense of comfort and relief.

This same idea of personal attention, though perhaps less of the moral support aspect, also applies over to other staff members of the university and medical school. Say that you're interested in shadowing a specific surgeon or getting involved with research under a renowned professor. Many times, these well-known professionals don't allow undergraduates to work under them simply due to their lack of experience. If, however, you mention that you're a BS/MD student, they might just make an exception for you. They will at least take the time to respond to your email or interview you because they know that BS/MD students are some of the most hardworking, committed, and passionate students, and don't want to let such a outstanding student slip through the cracks without at least taking the time to get to know them.

Special Seminars

While special seminars may not be a something that every single program offers, many do, and it's definitely one of the most rewarding parts of joining a BS/MD program. Through these seminars, not only do you get to meet and form connections with renowned medical professionals, but you also get to learn more about the field of medicine.

There are so many different paths available to you when you enter into medicine; not everyone sticks strictly to clinical practice, but as a freshman just entering college, you may not know that. The typical image of a doctor is of someone in a white coat who sees multiple patients from day to day. And while this is the starting point for nearly all doctors, this isn't necessarily the only thing they do for the entirety of their career.

Several doctors shift part time to clinical work and at other times take on more administrative responsibilities or research efforts. Others completely leave clinical work and move on to study the involvement of medicine in fields such as public health, government, law, business, or computer science. Regardless of the specifics, the point is that these special seminars will provide you with better insight into the field of medicine by giving you a chance to talk to doctors who have all taken different paths. Who knows, you may hear of a field you never even knew existed and then suddenly find yourself going down that path!

More Academic Flexibility

Even though you technically have the freedom to pursue any major or any activity you want to, most pre-meds tend to stick to science majors and science activities. Why? Because they think it'll easier help them later with the MCAT, look better for medical school resumes, or simply because it's just easier to plan out for scheduling purposes. As a BS/MD student, though, you don't have that same strain of having to apply and having to look impressive for medical schools. Thus, you are more likely to take a risk and try out classes in other subjects or get involved with different clubs. Undergrad is the time to take advantage of such flexibility and try out different disciplines so you can get better understanding of what path in medicine you might want to specifically pursue.

Sometimes high school students look at the daunting task of applying to BS/MD programs as ask themselves “is it even worth it?”. Granted, the application process to BS/MD programs is far more strenuous than any normal undergraduate school and the chances of getting accepted are relatively slim, but hopefully the benefits outlined above are valuable enough to convince you to apply.



Mastering the BS/MD Application Process

When narrowing down your potential list of colleges, one of the most important factors to consider is the number of schools you're applying to. Most guidance counselors recommend applying to anywhere from 8-12 colleges. Any number beyond that, they warn, can cause unnecessary stress and anxiety for students. And while this may be a valid point for any normal high school senior, any student looking to apply to BS/MD programs has to be cautious of such advice.

Students tend to apply to around 25 different BS/MD programs. And while students who do their research are aware and ready to dedicate all the time, effort, and money required into these applications, guidance counselors often do not have the same confidence. Counselors will often warn students that this many applications are unnecessary, but unless they are well-versed in the BS/MD application process, it may be best to neglect their advice in this specific circumstance.

First, you have narrow down a list of regular undergraduate schools that you'd like to apply to. This considers your safety schools, target schools, and reach schools. But in addition to that, you must make another list of all the BS/MD programs that you want to apply to. Now the unfortunate part of BS/MD schools is that even if you're only interested in the school for their program, you still must complete their entire regular undergraduate application. The upside, however, is that if you're interested in both the undergraduate school on its own as well as with their BS/MD program, then there is only slightly extra effort you must put in to apply to the program. This sort of overlap is extremely convenient and is the best way to get your total number of colleges down.

I've decided to apply directly as a BS/MD applicant. What do I do?



Planning Ahead

One of the best ways to set yourself up for success with regards to BS/MD programs is by planning. People who know from early on (sometimes even as early as middle school!) that medicine is a potential field of interest are the ones who end up building the thorough resumes and writing the most convincing essays for BS/MD application committees. The strongest piece of advice when it comes preparing a strong BS/MD application is do not wait for opportunities to come to you.

Applying to medical school as a high school student is an ambitious goal to set, and to achieve it, you have to be willing go out of your way and seek out ambitious opportunities. Failure is inevitable; there will be times when you apply for an internship or research position and don't get it, but do not let that determine the future course of your high school career.

To maximize your chances at getting into one of these BS/MD programs, it is best to strategically plan out your high school career as early on as possible. Of course, things will never go 100% according to plan, but if you have at least an outline of how to approach each year of high school, it will be greatly beneficial to you in the future.

What To Do In 9th Grade: Narrow Down Your Interests

If you've already entered high school and are still somewhat unsure about your academic interests, don't worry – you've still got time! In fact, in some ways, it's actually advantageous to be uncertain of your interests in high school as opposed to middle school. There's a plethora of elective courses to choose from that will help you better narrow down your academic interests.

But what if there's a subject you want to further explore, and your high school doesn't offer any classes on it? Try checking out your local community college. The benefit of being a high school student is that, given the proper permission, you can usually take classes at your local community college.

Below, are some courses that you can at least try out when looking to narrow down your academic interests. At first glance, some of these courses may seem to have no application to medicine, but in fact, medicine is quite an interdisciplinary field that has the potential for application is pretty much all disciplines; in fact, that's one of the things about medicine that makes it such a dynamic and interesting field! Try out some, or all, of the suggested subjects below and try to figure out what's most appealing to you. From there, you can start to build an application that is centered around some interdisciplinary academic theme.

SUGGESTED ADDITIONAL COURSES:

- Computer Science
- Economics Government
- App Design
- Philosophy/Medical Ethics

In addition to identifying your academic interests, it is equally important to use freshman year to narrow down your extracurricular interests. The first few months of the year might seem a bit overwhelming, with every club trying to shove a flyer in your face and trying oh-so-hard to get you to come to their new member meeting. But don't let that pressure get to you; in fact, embrace it! The best way to deal with this seemingly overwhelming position is to welcome it with open arms. When each club stops you and asks you to sign up for their email list, go ahead and do it. This is the best time for you to exhaust all your potential extracurricular options and to really figure out which activities you want to fully commit to.

If you've already got one or two activities that you've been pursuing since you were a child (for many students that is sports or music), then decide whether you love it enough to commit another four years to it. But don't choose to do so if you're going to be a passive participant in those activities. Just because you've been involved with it for so long doesn't mean you have to continue, especially if you're not willing to do so with all your passion and energy. In fact, that holds true for just about anything you decide to pursue in high school. One of the most common misconceptions students have about getting into college is having a to join every possible club on campus to be a competitive applicant. But colleges are looking for quality over quantity. If you've got 2 or 3 main activities that you're heavily involved with and have the experiences, awards, and leadership positions to back up that claim, then you're in a much better position than another student who simply has a laundry list of activities written down as their resume.

The final, but perhaps the most important, note to make about freshman year is about your grades: do not let them slip! Your grades are going to be the one of most important factors of consideration by BS/MD selection committees, so do everything in your power to maintain a high GPA. Classes are only going to get tougher, and your schedule is only going to get more hectic as you progress through high school, so the best way to set yourself up for success in the future is by laying down a strong foundation in freshman year with a high GPA.

What To Do In 10th Grade: Plan Out The Rest Of Your High School Schedule, Find Research And Volunteer Positions, Start Preparing For Sat/Act

By the end of freshman year, you should most definitely know whether or not you're serious about pursuing medicine as a future field of study. If you're still hesitant about it, then perhaps BS/MD programs are not ideal for you. If, however, you can confidently say that you have health-related interests and want to become a physician in the future, then now's really going to be the time to buckle down and get serious. Tenth grade is going to be the most telling year in terms of setting yourself up for future BS/MD success. Time management is going to be your greatest asset; with everything that you're trying to juggle all at once, staying on task is going to require a strong level of discipline and commitment.

First, Figure Out Your Plans For The Rest Of High School.

Planning ahead is going to be critical for success. By now, you should know your academic and non-academic interests, so the next step is to really figure out how you're going to incorporate those interests into the rest of your high school career. The easiest way to start doing so is by planning out your course schedule for the next three years.

Secondly, Find Research!

In order to be a competitive applicant for some of the best BS/MD programs in the country, it is absolutely essential for you to have some sort of research experience. The most impressive type of research is that which students conduct at university labs, but of course, it's not all that easy-to-get access to them as a high school student.

If you're unable to find research at a lab, then even conducting independent research at your high school is sufficient. But with that said, it definitely is not impossible to find research at universities. It will require a great deal of effort and persistence, but that's exactly why BS/MD programs place so much value on it (again, it's an indicator of work ethic!).

So how exactly do you find research at a university lab? First off, if you know anyone who works at a university lab, then the best thing you can possibly do is showcase your interest to him or her. Having connections is probably the only shortcut to getting research at a lab. If you don't have any personal connections, though, then unfortunately you're stuck having to go about it the old-fashioned way: emailing professors and applying for internships.

Thirdly, Start Volunteering.

BS/MD programs are really looking for students who have been committed to the field of medicine for several years. One of the easiest and most common ways to show this interest is by volunteering at a local hospital, hospice, private practice, or just about any other place where you can get some health-related exposure. These activities are going to be meaningful not only because they'll give you a glimpse into your future, but also because they'll help confirm within you whether medicine is really the field for you.

Fourthly (And Finally): Prepare For (And Maybe Even Complete) The Sat/Act

One of the best things you can do to open some free time for yourself in the future is to kick the SAT/ACT out of the way as soon as possible.

Most students take these standardized tests in their junior year, but there's really no logic behind that. Between your sophomore year and junior year, there isn't going to be any one class that will suddenly prepare you to master the SAT/ACT. In fact, there is no such class at all. The secret to mastering these standardized tests is just learning the strategies and practicing them over and over repeatedly. Some students take more time to internalize the techniques while others take less time. If you're in the first category, then it's best to start early so you've got more time for practice. If, on the other hand, you're in the second category, then you should go ahead and take the test in 10th grade itself. That will only open more time later for you to focus on your grades, activities, and subject SAT tests.

What To Do In 11th Grade: Finish All Standardized Tests And Narrow Down your College List.

Hopefully, by the end of 10th grade, you've taken measures to ensure both volunteer positions and research opportunities (if not, then keep working at it!). If so, then your focus in junior year should now shift from activities to academics. Some of you may have finished your SAT/ACT in 10th grade, but if not, then that should be your biggest priority coming into junior year. Spend some extra time the summer before your junior year to really prepare for this test so that hopefully you'll be ready to take it by October or November. It's best to try and take it during first semester of your junior year for two main reasons: (1) either you're happy with your score and you can focus second semester on SAT subject tests/AP exams, or (2) you're not happy with your score but you still have some time left in junior year to retake the test and improve.

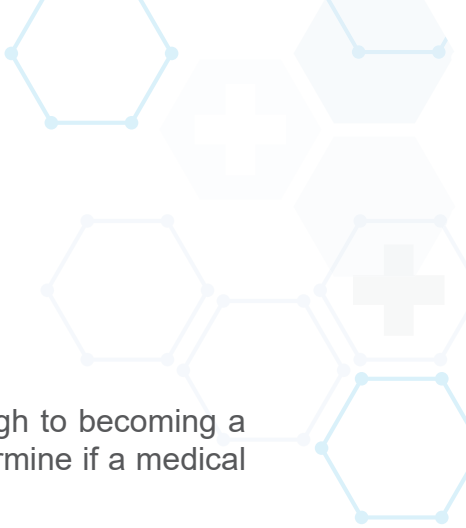
Having to deal with the SAT/ACT in your first semester of senior year is a huge burden, since it'll take time away from your college essays and applications, so do all you can to complete it by junior year.

What To Do In 12th Grade: Complete The College Application Process And Prepare For Bs/Md Interviews

After finishing up all your standardized tests, it's time to get serious about application season. In the summer between your junior and senior year, try to secure some sort of research or health-related internship. On top of doing all that, though, it's important to find some time to start working on your essays. As a BS/MD applicant, you are going to be writing nearly twice as many essays as any traditional college applicant, so start writing early. Hopefully you've already got at least a short list of colleges you're planning to apply to, but if not, then do that first. Once that is settled, you can really start to focus on the prompts that each individual school asks for.

After finishing up all your essays and applications, you can finally take a huge sigh of relief. For the next weeks, you can take a bit of breather and relax before interview invitations for BS/MD programs start to come out. Successful applicants will usually be notified anytime from late January to early March about the interview process. If you've applied to several BS/MD programs and successfully get interview invitations from many of them, then get ready for a lot of traveling (and a lot of preparation for what you must do before, during, and after your interview). If, on the other hand, you're not successful in getting interview invitations from some or all of the BS/MD programs that you applied to, then don't worry too much about it. Remember that these programs are some of the most competitive programs in the country, and by having gone through the entire BS/MD process in the first place, you've already got an advantage for four years down the road when you apply to medical school. Everybody hates rejection, but just know that that is part of the college application process. If you are truly passionate about pursuing medicine, then don't worry because you've still got plenty of time to achieve that dream!





HELPFUL RESOURCES

Association of American Medical Colleges (AAMC)

This comprehensive website is valuable from high school through to becoming a physician, offering numerous resources and guides to help determine if a medical career is right for you. [Learn more.](#)

Choosing a Medical Career

Get familiar with the basics of being a pre-med student. [Learn more.](#)

Aspiring Docs Fact Sheets

Understand the fundamental aspects of the pre-med pathway. [Learn more.](#)

Anatomy of an Applicant

Learn about the core competencies that medical schools value most. [Learn more.](#)

Paying for Medical School

Considering the high costs, it's wise to start financial planning early. [Learn more.](#)

Aspiring Docs Diaries

Follow the experiences of pre-meds, medical students, and residents. Consider applying to share your own journey. [Learn more.](#)

American Medical College Application Service (AMCAS)

Used by most U.S. medical schools, AMCAS serves as the primary application method. Familiarize yourself with this service early, even though you won't use it until your junior year. [Learn more.](#)

American Medical Student Association (AMSA)

This student-governed, national organization addresses the concerns of physicians-in-training. Explore its resources early, and check if your college has an AMSA chapter to join. [Learn more.](#)

High School Alliance of Future Physicians (HSAFP)

A national organization for students interested in medicine, HSAFP offers mentorship from physicians, workshops, clinical experiences, leadership opportunities, and community service projects. Whether or not your school has a local chapter, you can join nationally and start accessing resources to strengthen your pre-med journey. [Learn more.](#)

ProspectiveDoctor

This site provides free resources for those considering or pursuing a career in medicine. [Learn more.](#)

The Student Doctor Network (SDN)

SDN offers extensive resources suited for students interested in medicine, especially useful for upperclassmen. If time permits, exploring this site can be very beneficial. [Learn more.](#)

Medical School Websites

To understand what medical schools seek in applicants, visit and review the websites of various institutions. [Learn more.](#)







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