
Sports Medicine Orthopedic Surgeon: The Features Of Work

The start of sports medicine dates back to the 5th century, where Ancient Greek physicians educated athletes on how important it was to protect their body while exercising. Sports medicine continued to develop, with different scientists and physicians studying how exercise affects the body. In 1928, the first committee was formed to help individuals prevent sports injuries. Then, the American Orthopedic Society for Sports Medicine was established to treat and prevent injuries. The American Medical Society for Sports Medicine was also established to research and educate those about sports injuries. In 1992, sports medicine was approved as a specialty under the American Board of Emergency Medicine. Sports medicine is very relevant in the modern age. From 2011-2016, there were 8.6 million sports injuries. Athletes are benefited by these specialized physicians because they understand the effect of sports on an athlete's bodies, and they can give deep insight on the most effective ways to prevent injuries. They also use the latest biotechnology products like stem cell therapy to help restore function to the damaged areas. I chose to write about the career of a sports medicine orthopedic surgeon because it is my personal career goal. I believe it is a rewarding career because you are able to help athlete's return to the game they love.

Sports medicine surgeons treat athletes of all ages. They are by the athlete's side throughout their whole injury journey. An important aspect of their job is to educate athletes on how to live a healthy life, and how to prevent injuries from occurring again. They also oversee the patient's rehabilitation process alongside physical therapists. They diagnose injuries by first performing a physical exam and assessing the range and motion of the injured joint. If this is inconclusive, the surgeon will order different tests like X-rays and MRI's. Once a diagnosis is made, treatment options will be discussed between the patient and the doctor. The surgeon will recommend what they believe to be the best treatment plan, but it is ultimately the patient's decision about how they wish to treat their injury. If surgery is chosen, the surgeon will inform the patient on how the surgery will be performed. After the patient and the doctor are in agreement about a treatment plan, the surgeon will perform the surgery, and see them through rehabilitation. Sports medicine is a relatively new, yet fast growing specialty. Over the past few years, biotechnology has been a huge part of this exponential growth. For example, stem cells have been used to heal professional athletes' knees. Bonesport is a biotechnology company that produces an injectable cerament that promotes the healing of broken bones by filling the gaps in it. This biotechnology product has benefited countless athletes who suffer from broken bones. A recent innovation in sports medicine is a newly developed treatment for active adults who have arthritis. Because the pain of the arthritis is severe enough to affect them on a daily basis, but not enough for a total joint transplant, new methods of treatment were needed. Through research, they determined PRP therapy was a good fit. Plasma-rich plasma (PRP) therapy is when PRP's are injectionected into the affected joint. The blood naturally promotes healing to the damaged area. Some benefits of being a sports medicine surgeon is it pays well (\$650,000), there is a positive career outlook, and you can work in many different professional settings, including a private practice, hospital, or sports team. However, some drawbacks are it takes many years of study (around 15) to become this surgeon, there are irregular work hours, and these physicians may be exposed to infectious diseases.

Preparing for this career should start in high school. Your primary goal is to get into medical school first, then specialize in sports medicine. Biology, chemistry, anatomy, physics, calculus, statistics, and physiology are all important classes to take in high school to prepare for the required college pre-med courses. In college, you must complete all of pre-med courses, and take the MCAT before you can apply to medical school. Furthermore, your grades in these classes must be exceptional, because medical school is very competitive to get into. Pre-med courses include one year of biology with lab, one year of chemistry with lab, one year of organic chemistry with lab, one year of english, one year of physics with lab, and one semester of biochemistry. After you obtain your bachelor's degree, the next step is medical school. After medical school, a 5 year residency in orthopedic surgery is required. Then, to specialize in sports medicine, you must complete a 1-2 year fellowship. 3 colleges or universities where I may study are a BSDO program, University of Arizona, and Duke. A BSDO program is a combined 6-8 year bachelor program and doctor of osteopathic school. Because DO schools focus on therapeutic ways to heal issues to the musculoskeletal system, you will often learn more about bones, tendons, and ligaments, which is what orthopedic surgeons perform surgery on. Also, if you were to attend a regular college and then apply for medical school, it would take a minimum of 8 years, assuming you don't have setbacks. But, if you attend a combined BSDO program, you would be in school for 6-8 years. UVA will also help prepare me for this career because of their wide range of majors and opportunities. Some opportunities they offer are a pre-health integrated experiential learning course (volunteering at a local health care facility, with mentorship programs), and a preMD ambassadors program (working with the Admissions Office on a wide variety of projects). Because of how competitive medical school is, having these special programs will help you stand out. Duke is another school with a great pre-med program. Their class sizes are very small, and therefore it is easy to get to know your professors, which means they can write you a better recommendation letter, which will really help you get into a good medical school. They also get plugged into a pre-med advising program very early in college, which guides students on how to get accepted into a medical school. To practice medicine as a sports medicine orthopedic surgeon, you must be a board certified sports medicine orthopedic surgeon, and you must be a licensed medical professional in your state.

Gaining employment as a sports medicine surgeon takes many years of hard work and training. After you graduate from your bachelor's degree and medical school, you are matched into a residency program. There is a chance if your MCAT or medical school grades aren't high enough that you will not be matched into the residency program of your choice. After 5 years of orthopedic surgery residency, you must take a general exam in order to practice medicine in the state you desire. However, because sports medicine is a specialty, you must complete a sports medicine fellowship. After completing this fellowship, you will become board certified. Many patients and hiring hospitals and practices prefer board certified surgeons because it shows that they have gone through more training than non-board certified surgeons. 3 institutions that employ sports medicine orthopedic surgeons are hospitals, private practices, and sport teams. Hospital for special surgery in New York and Mayo Clinic in Minnesota are the 2 best orthopedic surgery hospitals. If you choose to work at a hospital, you will receive the same amount of money no matter the number of patients you see, you will have an immediate patient base, and you won't have any administrative duties to complete. However, you have almost no autonomy of your work. Hospital executives control where to perform your surgery, what materials are available for use, and what devices you can use. In private practice, it is almost the opposite. There is no one telling you the limitations of your work. However, money is very unstable. Your salary is determined by how many patients you see, so if you were to not receive as many

patients, you wouldn't make as much money. It is also hard to make a profit from your business if it is new, because there will be external factors like a building mortgage to pay off. Another institution that employs sports medicine surgeons are sports teams. This can range from a high school tennis team, to the team doctor of a NBA team. These jobs are not full time, and most still obtain a job at the hospital or a practice. However, if you do become employed as a professional athletic league's team doctor, you are required to travel to all games with them. Some of the roles of a team doctor include providing medical documentation and educating the athletes on prevention and healthy lifestyles. The average salary of a sports medicine orthopedic surgeon is \$650,000. Some benefits these surgeons receive are malpractice and liability insurance, 401(k) plans, paid vacation, paid sick leave, life and disability insurance, private medical insurance (PMI), and company pension plan.

Preparation to become a successful orthopedic sports medicine surgeon can start in high school. Shadowing these specialized surgeons is essential to determine if this is the correct career choice for you. But, it is also important to shadow other professionals in sports medicine, like nutritionists and physical therapists. There are limited sports medicine internship positions for high school students, but there are countless medical internships that will help you pursue this career in which medical school is required. One sports medicine internship is Sports Medicine South of Atlanta, which allows high school students to shadow the different professions of sports medicine, including surgeons. Some volunteering positions that can prepare you for this career would be volunteering at the hospital, helping out your school's athletic trainer, and coaching a recreational sports league. All of these can be done as high school, college, or medical school students.

Sports medicine started in the 5th century, and it gradually developed to finally be considered a specialty in medicine. Sports medicine orthopedic surgeons treat athletes of all ages, and they educate them on how to prevent these injuries and live a healthier life. In order to become this surgeon, you must obtain a bachelor's degree, attend medical school, apply for a 5 year residency of orthopedic surgery, and complete a 1-2 year sports medicine fellowship. However, all this hard work will pay off, because there are an abundance of jobs available in hospitals, private practices, and team doctors. They also get paid very well. Some unique facts about sports medicine orthopedic surgeons are that they get paid the most in New Jersey, they are the 9th most demanded physician, and men make up 91% of the field.