

O&P Careers Script

1. Welcome to the exciting field of Orthotics and Prosthetics. You may never have heard of it, much less considered it as a potential career choice, but Orthotics and Prosthetics is a vibrant and growing profession with much to offer. This brief presentation is designed to introduce you to the field of orthotics and prosthetics and how you can become a Certified Orthotist/Prosthetist, where you can make a difference...every day!
2. An orthosis is an external support for the body. Orthotists fit an amazing variety of people, from infants to the elderly. Orthoses are fit on many different parts of the body. Orthoses, or braces, can help people regain lost function, like this young man who suffered an injury to his leg. He is returning to sports with the help of his orthosis. An orthosis can be made of many different materials, individually designed to best aid the specific needs of the patient.
3. A prosthesis is an artificial limb. Everything from a single finger to an entire limb is a prosthesis. Each prosthesis is specially crafted with a custom socket that perfectly contours to the shape of the remaining body portion and if the patient wants, to match the shape of the other limb. There are hundreds of different components to choose from— feet for sprinting, waterproof knees, or “hands” designed to act as vice grips for industrial workers. It is a team effort between the prosthetist and the patient to pick the ideal combination of products to best suit the person’s needs and desires. The process of optimally aligning the custom socket to these components can allow the person to feed himself or herself, catch a ball or walk with confidence.
4. There are three different career options available at the practitioner level. About one third of clinicians are prosthetists and one third are orthotists. The remaining third choose to become dually certified, as prosthetist-orthotists. Other career paths include pedorthists, assistants, fitters and technicians. These are covered in more detail on the career website at www.opcareers.org.
5. There is schooling required for certification. Some schools are undergraduate colleges. After completing some prerequisites in the first two years, there is a full time two-year program combining course work with patient interaction in both orthotics and prosthetics. There are also graduate schools in Orthotics and Prosthetics. These programs vary in length from a single intensive semester to a full school year for each discipline. Prerequisites for all of the schools will include science courses such as biology, chemistry, physics, anatomy, computers, and psychology. There is a movement to transition the entry-level education to a professional master’s-level program in the future.
6. Orthotics and prosthetics is a rewarding career. It is certainly a profession you don’t want to enter just for the money. In order to be successful, you have to truly enjoy working with patients. Please also note that this is just an average salary and can vary greatly based on experience, training and geographic location.

7. What does it take to be a good practitioner? Well, first and foremost you must have excellent communication skills. You will be working with people—patients, doctors, office staff, and technicians, all of the time. It is important that you enjoy speaking with and listening to people and genuinely like being around people. The ability to visualize objects in three dimensions is a big help as O&P professionals sculpt materials to create the necessary shapes for the orthosis or prosthesis. You will need to be good with your hands. Your hands will be used to assess fit, shape materials and handle an extensive array of both hand and power tools. Because you will be working with people, some of whom will be in distress, being a patient, compassionate person is essential. So is a desire to make a difference in the lives of individuals.
8. Orthotists and prosthetists work on a tremendous variety of devices. We make custom molded orthoses for the foot and leg to straighten or support the limb. A cast was taken of this boy's feet. Plastic was heated and then formed around these casts to create the orthosis on the bottom right. When the boy stands in the orthosis, his foot and ankle are much straighter. This decreased the pain he had in his legs.
9. Part of treating people is finding out what their hopes and dreams involve. This man has an upper extremity amputation. Getting back into the swing of things involved more than just returning to work. He was fit with a special golf prosthesis that lets him play on par with his friends again.
10. Part of what we do is decrease deformity. Sometimes a challenging delivery or pressure from car seats or mattresses can flatten areas of a baby's skull. Left untreated, this can lead to a misshapen head. A custom helmet, such as the one seen here, is contoured to push on specific regions of the cranium, or skull, while allowing room for growth in other areas. The orthotist can actually reshape the skull as the infant grows. The infant wears this for about 6 months or until the shape is normal. As you can see from the baby's expression, the helmet is not uncomfortable to wear.
11. Each person presents with a puzzle for us to solve. A practitioner must analyze the problem carefully, listening to input from doctors, family members, therapists and the patient. It is critical to observe the way this boy stands, and examine x-rays of his legs carefully. There is too much of an angle between the bones of his thighs and his shins. This creates too much pressure on one side of his knee and makes it difficult for him to balance.
12. By putting him in an Ankle Foot Orthoses, or leg braces, an orthotist can align his legs properly, letting him walk with less pain and fewer falls.
13. Orthotists can help children to walk. This boy's feet and ankles are in the wrong position to support him standing. Casts are taken to correct the shape of his feet and ankles. Custom orthoses are made to hold him in this new position. Now, he can stand on his own, with his feet in the right position.

14. There are 135,000 new people with amputations in the United States every year. Sometimes, prosthetists can provide input during surgery. This girl had cancer in her ankle. Immediately following surgical removal of her leg, a prosthesis was applied.
15. This man is walking for the first time on his post-op prosthesis. The prosthesis helps promote healing of his limb and protects it from injury. It allowed him to progress more quickly in his recovery.
16. Just as with the golfer seen earlier, many people have interests beyond just learning to walk again. Running is difficult and requires tremendous desire and perseverance, but it can be done, as can most activities. Many of the amputee world records, such as the 100m sprint, are not too far off Olympic world record times. As technology improves, the time difference shrinks.
17. Sometimes, we need to design specialized limbs and braces for specific activities. Devices for swimming need to be waterproof and allow the ankle to point down for strong kicking. Golfers may need special attachments to hold the club or rotators in their ankles for the twisting motion needed for a good swing. Skiers require more forward bend to their leg to balance over the ski. Bikers need to be able to bend their knee more than a normal prosthesis or orthosis allows. Free moving ankles are imperative for rowers.
18. It is our job as orthotists and prosthetist to find ways to help our patients reach their goals. Whether the goal is to walk their daughter down the aisle at her wedding or win a gold medal in the Paralympics, each goal is unique and personal.
19. If we do our jobs well, practitioners provide patients with the means of reaching their goals, and setting new, even higher ones. Technology has evolved since the first orthoses and prostheses were formed from tree limbs and hammered out of metal in the early years of O&P. Now, O&P devices can be developed through the use of Computer Aided Design, high strength fibers, computer-controlled knees, and myoelectrics arms to mimic muscle function. Every year, new inventions and ideas infuse the field, creating an ever-changing challenge for the clinician. More importantly, these advancements allow the people who use orthoses and prostheses to improve their lives.
20. Orthotists and prosthetists make a difference every day in the lives of those they treat. Opportunities abound throughout the country. The number of Americans over the age of 65 has tripled since 1950. Now, with the baby boomers starting to age and the increase in diabetes and obesity in the country, there is a need for more people in the field of Orthotics and Prosthetics. These statistics support a very positive employment outlook for new O&P graduates and most go on to make it a lifelong career. The rewards are tremendous, the smiles infectious.
21. Visit us at www.opcareers.org for more information on all O&P career options.
22. Thank you!

