**Brad Poziembo, Dayton Artificial Limb**

My name is Brad Poziembo. I’m a Prosthetist with Dayton Artificial Limb Clinic. A prosthetist evaluates and treats people with limb loss or amputees with artificial limbs. The majority of the amputations are usually due to a non-healing wound or it could be from a traumatic injury.

My key responsibilities are basically, you know, caring for my patients, making sure everything’s in order, that we’re able to provide a quality and safe product. That involves evaluating the patient. We work under the orders of a physician, mainly a rehab physician. I’m very hands-on in the process in order to maintain that the prosthesis a proper fitting device.

Most of the products we use like the feet and those type of things are off the shelf. We order them from other manufacturers and then the main custom thing is the socket and the initial device that is attached to the limb.

We use some special measuring devices, scanners to help digitize the limb into a computerized file. We use CAD/CAM to help modify molds and designs before we convert that over through the 3D printer. Twenty, thirty years ago, the fabrication process was very tedious. It took about 130 different steps to make a final prosthesis. But with 3D printing, it has significantly reduced the steps to maybe 3 to 5 steps in order to make a prosthesis. It allows me to see and care for a lot more patients.

Typically, we’ll get a referral from a surgeon, and sometimes it can be right before an amputation. We can provide a prosthesis right in the operating room. And when they wake up from the anesthesia, psychologically, they see that they still have a foot. We probably look at 1 to 2 months for healing. And then we’ll take the impression of the limb, and we should have a test socket ready for ‘em within about 24 hours. And then, within 2 to 3 days, we should have them up and standing and walking. We typically like to see ‘em at least once a year to make sure that everything is aligned correctly. A lot of the alignment is just through visual observation and getting feedback from the patient.

B-roll conversation:

I think it looks good. Let’s walk back and forth one more time and we’ll….

We can’t see what’s going on inside the prosthesis, compared to what the patient can feel. We have them walk back and forth, and I’m looking at the shoulders, the hips, the knee and how the prosthesis is rolling over. The majority of adjustments can be done during the appointment. So if they’re feeling unstable, usually just a couple turns of a screw can make a dramatic difference.

Interpersonal skills is probably the biggest skill that I use.

B-roll conversation:

Hold on to the railing. And let’s ride this knee down.

We’re like the last people they see in terms of their healthcare. They’ve already seen all the wound care doctors, vascular surgeons, rehab doctors, orthopedic surgeons - everything they can do to help save their limb.

B-roll conversation:

Alright. Try that again for me, J.D.

So when all that fails, I’m the last person that they see, which can be very frustrating for them. When I first meet them, they could be very angry, depressed, upset, and I know that over time and with healing that attitude’s gonna change.

I went to school at the University of Minnesota Duluth. I got my Bachelor’s of Science in Biology, a minor in Chemistry and Psychology. I originally went to school to be a dentist. And it wasn’t until I travelled abroad in Guatemala that I had run across a volunteer prosthetist. And we started talking, and I’d never known a prosthetist. I’d actually never even known an amputee, so I didn’t really know that the profession was out there. And I started doing some research into it. All the challenges and problem solving skills really intrigued me. I ended up going to a technical school for prosthetics and orthotics. And then I went to practitioners’ school. I went the long route. The normal route: right now it’s a master’s program. So it’s 4 years of undergrad 2 years of master’s, and then 2 years of residency.

The occupation is not for the weak of heart, I should say. You see a lot of interesting things. We spend time in the operating room, so if you can’t handle blood this is probably not the occupation for you. It’s not a big deal to me. I’m not squeamish and nothing ever surprises me anymore.

I like my job because of the challenge that it provides. Being able to see someone come into my clinic, either in a wheelchair or on crutches, and being able to leave having the ability to stand, walk is very rewarding. It is good to know that I have an impact in these individual’s lives. My services help impact the quality of life that they have going forward.