

Virtual reality is quickly becoming the go-to tool for many doctors who work with pediatric patients. One of our recent success stories exemplifies the reasons for this movement.

Evan Slazak was born with an extra bone in his leg, and at eleven years old, he and his family decided he was ready to have it surgically removed. After his recovery, the time finally came to have the cast taken off, but the excitement over his imminent freedom was mixed with anxiety over the upcoming procedure; after all, even with the reassurances of a doctor, having a small, noisy saw so close to your leg can be scary for anyone, especially a child.

Fortunately, Dr. Bernstein, an orthopedic surgeon, had recently begun using virtual reality with his patients, and Evan's cast removal was the perfect opportunity for this new technology.

A True Game Changer

On the big day, Evan put the headset on as soon as he walked into the office. He was immediately enthralled, excitedly declaring, "(This) feels different, like you're actually in the game." Dr. Bernstein fired up the saw and began to cut into Evan's cast. The loud noise and vibrations were nerve-wrecking, but Evan was unfazed as he continued his mission to knock over as many virtual bears as possible. "It felt like I was just playing, I didn't pay attention to the cast at all!"

After the cast was off and Dr. Bernstein announced that he had to remove some stitches from Evan's foot, Evan continued to play and showed no signs of the discomfort usually associated with the removal of stitches.

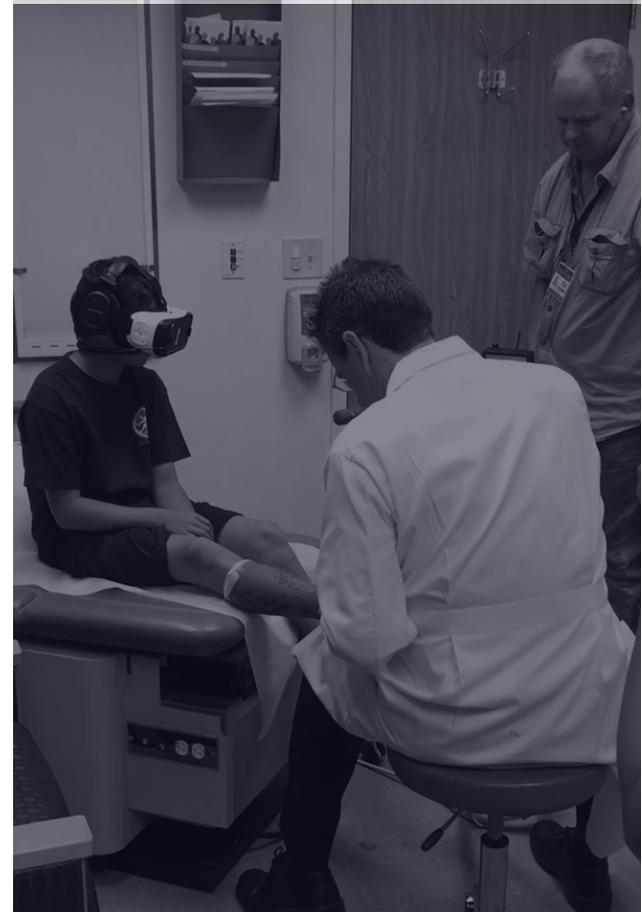
After the procedure was over, when asked about his experience, Evan was a big fan, stating: "It didn't hurt at all. I'm going to tell my friends that this was really fun and they should all try it out!"

Improving Provider Satisfaction, Too

But Evan wasn't the only one who experienced relief thanks to virtual reality. Dr. Bernstein revealed he was excited about the ability to decrease the anxiety children often experience during procedures like this. "It really distracts the child and decreases their anxiety quite a bit. For instance, today Evan was really playing attention to the game and wasn't paying any attention to me removing the cast, which can be a very anxiety provoking procedure for most children. That is exactly what happened the last time also, which is why we are very enthusiastic about utilizing this in our clinic," said Dr. Bernstein.

Prior to using virtual reality, Dr. Bernstein tried other methods of reducing anxiety but they weren't entirely effective. "We have used headphones to have the child at least not hear the vibrations from the saw, but other than that it's pretty much trying to do it as quickly as possible to try to decrease the length of time of the procedure, but it doesn't really mask the procedure. But in this case, (VR) really does seem to distract the child quite a bit."

From a provider standpoint, virtual reality reduced the stress involved in performing anxiety-producing procedures. Dr. Bernstein reflected, "I think that I am more comfortable when using (VR) and it certainly made it easier to remove the cast from him. In some ways, actually, it may make it safer for us to remove the cast because he's paying attention to something else and he is less likely to pull away, and we're not as hurried when we are removing it."



Overall, a process that often produces stress and fear ended in smiles and fun instead, thanks to virtual reality. Cases like Evan's are a strong start to transforming the experience of both the patient and the doctor—one that Dr. Bernstein is excited to continue, "We're planning on utilizing virtual reality as much as possible in the future!"

