

FEET From front page

legs and stumps lying under an old pizza oven.

Kevin McGill crafts the prosthetics, Tina McGill handles the paperwork, and her son, Dylan Barr, 25, works as an apprentice technician.

Crafting a working leg is only the first step; because a person's residual limb shrinks and changes with time, patients must come in regularly for adjustments.

The amputee, Stephen Bendell, had come in for his fourth adjustment since the accident. His leg, amputated below the knee, was still healing.

"The leg has shrunk and each time I have to make adjustments," Bendell said. "It's fabulous what Kevin's done. He's been wonderful."

Besides prosthetic legs, HOPE also provides patients with partial feet and orthotic devices for ankles, knees, wrists, elbows and necks.

Kevin McGill begins the prosthetic fabrication process by making a plaster cast of a patient's residual limb. From that he forms a rigid plastic mold that perfectly fits the limb. That part is attached to a lower leg assembly that ends in a foam foot.

It can take "a couple of days" to build the socket and a whole week to build a leg.

"You try to design the whole leg as a system that best works for the individual," he said.

"The critical part of a prosthetic is how it's attached to the body," Tina McGill said.

Kevin McGill first got his feet wet — so to speak — in the family business when he was 5 years old and growing up in Canada. His uncle ran a prosthetic and orthotic business, and his parents would often leave him in the shop for hours. The family and the business moved to Arizona.

"Eventually I decided to do it full-time," he said. He received an American Board certification and, after moving to Honokaa, opened HOPE in 1999.

McGill works by appointment and tries not to turn anyone away, he said. He also serves both sides of the island:



Photos by WILLIAM ING/Tribune-Herald

Tina McGill, right, holds a plastic orthotic device, which was cut into shape by Dylan Barr. In background, Kevin McGill uses a glove as he reshapes a heated plexiglass socket to fit a patient's residual limb.



Dylan Barr holds the cutting tool he uses to cut into plastic to make an orthotic device. When finished, the orthotic will help correct a walking disability, often caused by a fracture or diabetic impairment of a limb.

Tuesdays and Thursdays, he meets with patients in Honokaa. Fridays, he's in Kailua-Kona.

"For someone who can't

walk right, if they get the proper fitting orthotic devices, it can be life-changing because you can't walk without a prosthetic and without falling," Tina McGill said.

It's a misleading notion, they said, that many amputees, once they get a well-fitted prosthetic leg, are able to run marathons and compete in athletic events. The vast majority just want to be able to walk, use the bathroom and drive again. The alternative to walking is a wheelchair.

"You've got to be patient. It's not an instantaneous thing," Kevin McGill said.

The McGills bill insurance companies on a per-leg basis, not per-visit. Most of their business, however, deals with orthotics, the braces used to allow people to walk again, whether because of diabetes or by a bone fracture.

The island's only other prosthetic business is Big Island Orthopedic Services in Hilo. Two more companies are in Honolulu.

"Anybody who's on Maui and Kauai has to fly over," Kevin McGill said.

"If you are a tsunami survivor and you had a limb amputated in the (Dec. 26) disaster," Tina McGill said, the

couple will provide orthotic and prosthetic services for free. The client just has to get to the Big Island. They don't know how many tsunami-related amputees are out there, but HOPE is willing to organize corporate support to provide materials for any custom fabrication needs. They can also reuse old prosthetics: "Some people donate them back to us when they pass away," Tina McGill said.

Kevin McGill split his time between giving the interview and working on Bendell's leg. He applied a "heat gun" — think of an industrial-strength hair dryer — to the plastic molding, and while it was soft, he donned mittens and pushed it into shape.

"When I left the hospital," Bendell said, "they told me probably November, Thanksgiving to have a prosthetic leg." He met Kevin McGill and was fitted in September.

After Bendell's leg was fitted, the Army veteran walked around, testing the leg. His foam foot was inside a regular Timberland shoe. He thanked the McGills, walked down the sloping driveway and drove away.

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