

VA sets national policy for robotic legs for paralyzed vets

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U.S. paralyzed Army veteran Gene Laureano sits in his wheelchair Wednesday, Dec. 16, 2015, in Bronx, N.Y. The Department of Veterans Affairs has agreed to pay for robotic legs that could allow scores of paralyzed veterans, like Laureano, with spinal cord injuries to walk again. (AP Photo/Mel Evans)

Paralyzed Army veteran Gene Laureano cried when he first walked again with robotic legs at a New York clinic as part of research sponsored by the Department of Veterans Affairs. But when the study

ended, so did his ability to walk.

Now he may get the chance to walk everyday: The VA has agreed to pay for the powered exoskeleton for eligible paralyzed veterans with spinal cord injuries—marking the first federal coverage policy for robotic legs in the United States.

Veterans have been petitioning the VA to do this because many cannot afford the \$77,000 needed to pay for the device called the ReWalk. The electronic leg braces were approved by the U.S. Food and Drug Administration in 2014 for individuals to use at home. VA officials told The Associated Press that the agency sent a memorandum Dec. 10 outlining its plans to train staff to be able to provide the ReWalk.

Florida Republican Rep. Jeff Miller, chairman of the House Committee on Veterans' Affairs, said his committee has been pushing for the VA to use "innovative private sector technologies and products in order to better serve veterans, and we hope to see more of this in the future."

"In an era where the department is much too fixated on defending its lack of accountability for misbehaving employees and providing services that are far outside the scope of its original mission, it's refreshing to see the VA focusing on something that strikes at the core of what it was set up to do," Miller said in an email.

News of the VA's decision sent shares for ReWalk Robotics up over 100 percent Thursday. Sales have been sluggish since the FDA approval of the system, with few private insurers agreeing to cover it. Most of the 36 individuals who bought the ReWalk in the United States so far paid for it through fundraising or out of pocket.

But the company hopes the VA's policy will prompt more private insurers to follow suit.

"The VA is leading the world with this," CEO Larry ReWalk Robotics said. "It's fabulous. It really gives individuals a much better life, and makes them much healthier to be able to walk again."



Paralyzed Army veteran Gene Laureano wears an Army veteran cap Wednesday, Dec. 16, 2015, in Bronx, N.Y. Laureano is praying his application for robotic legs will go through soon. (AP Photo/Mel Evans)

The company said it has evaluated 45 paralyzed veterans who meet the height and weight requirements for the technology—which consists of leg braces with motion sensors and motorized joints that respond to subtle changes in upper-body movement and shifts in balance.

Laureano, 53, is praying his application will go through soon. The former Army corporal remembers the day he first tried the ReWalk at New York's James J. Peters VA Medical Center in the Bronx two years ago.

"The tears came down," said Laureano, who was left paralyzed five years ago after falling off a ladder. "I hadn't spoken to somebody standing up in so long."

"I just kept remembering the doctor told me it was impossible for me to walk, and then I crossed that threshold from the impossible to the possible," he added.

The ReWalk was invented by Israeli entrepreneur Amit Goffer, who was paralyzed in an accident in 1997. Several competing products that use similar technology—nicknamed "electronic legs"—are also being tested in U.S. rehab hospitals.

None, including the ReWalk, are fast enough or can be worn long enough to replace wheelchairs.

VA pilot studies found paraplegics who used the exoskeleton as little as four hours a week for three to five months experienced better bowel and bladder function, reduced back pain, improved sleep and less fatigue.



U.S. paralyzed Army veteran Gene Laureano sits in his wheelchair Wednesday, Dec. 16, 2015, in Bronx, N.Y. The Department of Veterans Affairs has agreed to pay for robotic legs that could allow scores of paralyzed veterans with spinal cord injuries to walk again. (AP Photo/Mel Evans)

"The research support and effort to provide eligible veterans with paralysis an exoskeleton for home use is a historic move on the part of the VA because it represents a paradigm shift in the approach to rehabilitation for persons with paralysis," said Dr. Ann Spungen, who led VA research on the system.

About 42,000 veterans are paralyzed. Of them, a fraction would meet the requirement for an exoskeleton. The apparatus requires specific height and weight requirements and works for paraplegics but not for quadriplegics. A supportive belt around the patient's waist keeps the suit in place, and a backpack holds the computer and rechargeable battery.

Crutches are used for stability, and the FDA requires an assistant be nearby.

A dozen VA centers are expected to start training staff to provide the system. The program will likely be expanded in the future, according to ReWalk.

Former Army Sgt. Terry Hannigan, a 62-year-old paralyzed Vietnam veteran, was the first veteran to get the robotic legs as part of a test of the system. She uses them to walk through the mall and shop at the grocery store.



ReWalk Robotics service engineer Tom Coulter prepares a ReWalk device to allow paralyzed Army veteran Gene Laureano to walk Wednesday, Dec. 16, 2015, in Bronx, N.Y. The Department of Veterans Affairs has agreed to pay for robotic legs that could allow scores of paralyzed veterans with spinal cord injuries to walk again. (AP Photo/Mel Evans)

"It definitely is a show stopper, especially in the mall with kids. Some say things like 'Wow, look at Robocop!' They ask a lot of questions, but I don't mind," Hannigan said.

When she was in a wheelchair she said she had to ask people to pass her things out of her reach.

"To be able to hear the conversation, not miss half of what's being said because it's over your head, that in itself is a big plus," she said.



Paralyzed Army veteran Gene Laureano's sneakers are mounted on a ReWalk device as he prepares to use the machine to walk Wednesday, Dec. 16, 2015, in Bronx, N.Y. ReWalk Robotics CEO Larry Jasinski said a dozen VA centers are expected to start training staff to provide the system. The program will likely be expanded in the future. (AP Photo/Mel Evans)



ReWalk Robotics service engineer Tom Coulter, right, moves paralyzed Army veteran Gene Laureano's wheelchair, as Laureano prepares to walk using a ReWalk device Wednesday, Dec. 16, 2015, in Bronx, N.Y. ReWalk Robotics CEO Larry Jasinski said about a dozen VA centers are expected to start training staff to provide the system. The program will likely be expanded in the future. (AP Photo/Mel Evans)



While ReWalk Robotics service engineer Tom Coulter, right, looks on, paralyzed Army veteran Gene Laureano smiles as he walks using a ReWalk device Wednesday, Dec. 16, 2015, in Bronx, N.Y. The Department of Veterans Affairs has agreed to pay for robotic legs that could allow scores of paralyzed veterans with spinal cord injuries to walk again. (AP Photo/Mel Evans)

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