

Home rehab goes hi-tech



Kelly Liyakasa | Aug-13-10, 04:26 PM |

5 Votes

Topics: [Health Care](#)



From the stroke patient to the sports injury rehabilitee, White Plains-based Andante Medical Devices Inc. is bringing treatment home.

The company, which maintains manufacturing facilities in Israel, will release iSmartStep, a residential version of the SmartStep Clinic, an FDA-approved biofeedback and lower limb weight-monitoring system, this fall.

Clients of the clinical version range from Kessler Rehabilitation Center in New Jersey to Yale University Hospital.

One doctor said that for gait analysis, or to essentially monitor the way a patient walks, results have been quite useful for therapeutic treatment.

“The SmartStep is designed to measure how much time we spend on the forefoot and on the hindfoot and it does it in a very unique and clever way,” said Dr. Mark Young, chairman of the Department of Physical Medicine and Rehabilitation at the Maryland Rehabilitation Center and faculty member at Johns Hopkins University. “Up until now, I’d have to send my patients to a gait analysis laboratory, which was a very expensive process. But after I got one of these devices, it’s portable and it remains in my clinic and, most importantly, it allows me to take very sensitive measurements of how my patients are walking and helps me determine improvements in treatment after an intervention.”

Young, through his Maryland-based practice Oasis Center for Natural Pain Management, said measuring patient pain – often related to movement and a Young subspecialty – was once very subjective, but that the device “really added a measure of objectivity.”

An insertable insole is placed in the patient's shoe and creates an imprint of the foot.

"No two people walk the same way," Young said.

By recording the "signature" of the limb, post-intervention movement can be tracked and analyzed.

The price of the SmartStep clinic is "around \$5,000," said Reynald Bonmati, chairman and CEO of Andante Medical Devices Inc., a subsidiary of Andante Medical L.P.

The company lowered the cost to "around \$2,900" when developing the home version.

"My interest was mainly to take the product that is in the clinic and hospital, finalize it to U.S. standards, but more importantly, go into the home market for stroke patients and the protection of surgeries," Bonmati said.

The investment to develop the SmartStep technology platform was in excess of \$8 million, he said.

The iSmartStep function allows a miniature control unit to monitor movement and links it to the user's PDA for real-time monitoring via a software application.

The PDA can hook up to a TV and clinical training games can be used in a Wii-like capacity.

The brainstorm for the iSmartStep was born partly from a noticed need for continued care.

Bonmati said that patients with neurological ailments like Parkinson's disease and those who are recovering from stroke often face limited reimbursement on rehabilitation sessions and there is often no reimbursement after a 12-week standard program.

"What we're thinking of doing is renting the unit to the patient," he said. "We did a market survey and we think \$50 a week is a good way to start. If you need the unit for eight to 10 weeks on a sports injury, you're not going to buy the unit. But if you're a stroke or Parkinson's disease patient and you need it for four or five years, then it makes a lot of sense to buy the unit."

Bonmati said the company has been approached by the U.S. Army for an amputee application and is now in negotiations with the U.S. Veterans Healthcare Administration.

The company has begun selling to major U.S. rehabilitation groups including Accelerated Rehabilitation Centers and Genesis Healthcare.

SmartStep units are now present in Sweden, Belgium, Spain, Italy and the U.K.

The website is andantemedical.com.



Email this page to a friend.

0 Comments
