

The EksoNR Is Here

\$150,000 Auxiliary Gift Supports Purchase of Robotic Rehabilitation Device

After much excitement and anticipation, the EksoNR device, or “Ekso,” has arrived at Hartford Hospital’s 26-bed Inpatient Rehabilitation Unit (IRU). With a gift of \$150,000 from the proceeds of the 2020 Auxiliary Golf Tournament, the IRU was able to fully fund the purchase of the wearable robotic exoskeleton designed to help patients with stroke, traumatic spinal cord injuries, acquired brain injuries, or other types of lower body weakness or paralysis relearn to walk.

IRU staff say the innovative technology will enhance the care therapists provide, helping patients achieve the best possible outcomes. Hartford Hospital joins over 300 rehabilitation centers around the world in helping restore quality, speed, and independence with walking. Hartford Hospital’s IRU is the only inpatient rehabilitation unit in the state with an EksoNR.

Hartford Hospital’s IRU admits over 700 patients a year. Approximately 70%, or nearly 500, have a neurological diagnosis and could potentially use the exoskeleton to assist with gait training. While the device is dedicated to the IRU, the long-term strategy is to acquire multiple devices that could be used in the outpatient clinic setting.

The Ekso enables patients to take many more steps earlier in their rehabilitation stay, even before they are able to move their legs on their own. This results in faster recovery and better outcomes.

Shantel Szymanski, manager with the Neurological Rehabilitation Program at the IRU, says that staff will use the Ekso during a patient’s one-hour treatment sessions and that patients are averaging 600 steps per session. How often a patient uses the device is based on that patient’s ability and individual goals. Some patients might use it daily, while others may use it twice a week and work on other aspects of their recovery on the other days.

Staff members undergo extensive training in using the device as it has numerous capabilities. Szymanski was extremely encouraged in the weeks after Ekso’s arrival.

“It has been great,” she said. “We are still in the learning phase but have had some great experiences so far. The whole team, including doctors, nurses, personal care assistants, food service, and environmental services, get excited

when they see someone walk down the hall with it. Everyone cheers the patient on!

“The last few patients we used it with showed some significant changes to their walking pattern once they got out of the Ekso,” she said. “That’s what it’s all about. We are trying to improve neural connections and maximize nervous system plasticity, or the ability to change. The last man I worked with told me, ‘I can feel my brain rewiring’ as he was learning a new way to walk.”

This amazing new device will be an important member of the IRU team, so staff members want to give it a proper name. Because it is clearly reminiscent of Ironman, Szymanski said, some hospitals actually name their Ekso “Jarvis.” Stay tuned for the final decision!



David MacDonald uses the Ekso to relearn to walk properly with the assistance of Shantel Szymanski, Neurological Rehabilitation Program manager, left, and student Kelsey Kreminec, right.

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