Comparing the Effects of a Home-based Exercise Program Using a Gerontechnology to a Community-based Group Exercise Program on Functional Capacities in Older Adults After a Minor Injury.

Authors: Lauzé, M., Martel, D. Aubertin-Leheudre, M., et al

In this study of 48 previously independent older adults who had suffered a minor injury, researchers compared 12 weeks of in-home Jintronix use to 12 weeks of supervised community-based exercise program and a control group that was not given an intervention.

Jintronix participants showed improvement in gait speed, chair-to-stand test performance and balance compared to the control group, who showed no improvement. The in-home Jintronix technology provided similar results to the participants of the community-based group exercise program.

Read clinical study:
Link: https://www.sciencedirect.com/science/article/pii/S0531556517308343

A New Adaptive Home-based Exercise Technology Among Older Adults Living in a Nursing Home: A Pilot Study on Feasibility, Acceptability and Physical Performance

Authors: Valiani, V., Lauzé, M., Martel, D. et al.

In this pilot randomized, controlled trial, researchers examined the preliminary clinical efficacy of Jintronix as a telerehabilitation platform. The study found a significant increase in gait speed among older adults using the Jintronix technology from home compared to a control group of older adults participating in a community exercise program.

Read clinical study:
Link: https://link.springer.com/article/10.1007/sl2603-016-0820-0
Feasibility and Effects of a Physical Activity Program Using Gerontechnology in Assisted Living Communities for Older Adults

Authors: Lauzé, M., Martel, D. Aubertin-Leheudre, M., et al

In this randomized controlled trial, researchers examined Jintronix’s feasibility and impact on physical performance with 42 older adults in four assisted living communities. Participants performed approximately 45 min of light intensity Jintronix exercises twice a week for 12 weeks. The study found significant and clinically meaningful improvements in gait speed and chair-to-stand test performance, two leading indicators of functional decline and mortality. The intervention also led to the reduction of frailty. Effects were sustained 3 months post-intervention.

Read clinical study:
Journal of the American Medical Directors Association, Volume 18, Issue 12, 1 December 2017, Pages 1069-1075
Link: https://www.sciencedirect.com/science/article/abs/pii/S1525861017303730

Towards Establishing Clinical Guidelines for an Arm Rehabilitation Virtual Reality System

Authors: Archambault et al

This clinical study was designed to establish preliminary guidelines for the prescription by clinicians of Jintronix for upper-limb training. The study found a positive correlation between patient performance outcomes on Jintronix, and specific levels of impairment as measured using the Chedoke-McMaster Scale. 14 stroke patients performed Jintronix 3 times for 20 minutes with a clinician.

Over 80% of participants enjoyed the experience, felt that the system was easy to use, and that the difficulty level of the exercises were adequate. The results indicated a positive correlation between the Chedoke-McMaster Scale score and the maximal difficulty level reached by stroke patients.

Read clinical study:
Replace, Repair, Restore, Relieve – Bridging Clinical and Engineering Solutions in Neurorehabilitation (2014) 263-270
Link: https://link.springer.com/chapter/10.1007/978-3-319-08072-7_45