

# Reducing falls in older adults by 70%

Led to fewer ER visits and hospitalization days

## The Collaboration

GaitBetter was selected by the Israel Ministry of Health to deliver a pilot with Maccabi Health Services, Israel's second largest HMO, to reduce falls in older adults enhance care, and help lower associated costs.

GaitBetter's unique evidence-based digital-therapeutic solution for gait rehabilitation and fall prevention was chosen to help serve patients identified at fall risk.

## The Problem

Today, about 28% of Israel's 65 age or older population living in the community fall at least once a year. With more patients at risk of falls than ever before as the population ages, PT clinics and rehabilitation centers struggle with increasing volumes of patients seeking help. Furthermore, this high fall rate results in increased hospitalizations, emergency visits, and cost of care as well as a deterioration in the adult's health and mental condition.

## The Solution

GaitBetter was chosen for both its clinical efficacy and usability effectiveness in terms of providing an innovative evidence-based motor-cognitive intervention for fall prevention that seamlessly integrated into existing therapists' and clinics' workflows.

Using GaitBetter, Maccabi therapists were able to:



personalize patient care with pre-built and validated training programs and tailored protocols



optimize care during the course of the program by analyzing patient's progress with GaitBetter's intuitive easy-to-operate dashboard system



attend to other patients in parallel with GaitBetter's safety harness, helping save time and improve clinic efficiency



quickly set-up patients in under 2 minutes ensuring patients received the maximum therapy during each visit



add GaitBetter's small footprint to existing treadmills, meaning there was no need for a dedicated space or a change to the clinic floor layout



GaitBetter adds cognitive engagement to treadmill training, by adding a semi-immersive virtual reality experience to existing treadmills

## Method

200 older adults that were considered in the 'medium-to-high-risk' category for falls, participated in the pilot. Patients participated in a 15-visit training program averaging 40 minutes per visit, for 6~7 weeks. This included multitasking exercises involving negotiating virtual obstacles, while attending to cognitive demands. Seven GaitBetter's systems were added to existing treadmills in six clinics.

## Results

Comparing 6 months before to after intervention:



### Clinical

- 28%** reduction in FES (Fall Efficacy Scale)
- 19%** reduction in TUG (Timed Up and Go)
- 9%** improvement in BBS (Berg Balance Scale)



### Financial

- 71%** reduction in the number of falls
- 46%** reduction in emergency room visits
- 34%** reduction in hospitalization days

*"Highly positive results were achieved despite the challenges of running the program during COVID-19. In a satisfaction survey conducted among physiotherapists, the system received an overall score of 5.35 (out of 6)."*

## Summary

Following the success of the pilot program, Maccabi has now rolled GaitBetter to dozens of sites throughout the country, and GaitBetter was selected to also serve the largest HMO provider in Israel, Clalit Health Services.

Together, more than 80% of Israel's adult population now have access to GaitBetter's digital therapeutic gait rehabilitation and fall prevention solution.

The GaitBetter system is currently being rolled out in the USA.



Real Time Feedback



Multitask Training



Fun and Engaging