Just Walk - A 6-Week Case Study

Building strength, balance, and walking confidence

Participant: Bob W. | Age 68 | Health condition — Parkinson Disease | Trial 2026

Background

Bob is a 68-year-old man diagnosed with Parkinson's disease about 2 years ago. He reports no other health concerns and recently passed a stress test. Bob currently walks without an assistive device about 1.5 miles, 3-4 times per week. He also uses the e-gym for lifting weights and attends a Parkinson's exercise class 1x/week. Prior to starting PD class (a few months ago), Bob required assistance with walking poles for confidence and to avoid falling. Bob would like to remain active so he can continue to travel and keep up with his grandkids.

At his baseline assessment, Bob's gait showed a clear side-to-side difference: his right side was the more functionally impaired, with a reduced heel strike (foot slap) and arm swing during gait. Bob catches his toe (bilaterally) and frequently trips / stumbles. Also of note, he frequently displays retropulsion when statically standing.

The Just Walk Protocol

Just Walk is a lightweight (about three pounds), fully mechanical wearable device for neuromotor gait rehabilitation. It assists with foot lift at the start of each step and applies adjustable resistance as the leg moves forward, integrating into the natural gait cycle to reinforce walking patterns. Over six weeks, Bob followed a consistent, self-logged routine, recording the timing and perceived difficulty of every walk.

Protocol element	Detail
Device	Just Walk neuromotor rehabilitation device
Duration	6 weeks prescribed (Aug 10 – Sept 21, 2026); follow-up assessment completed Sept 28, 2026 due to the participant being out of town
Frequency	Once daily (logs show a few sessions split into two shorter walks)
Session length	Approximately 20 minutes per session / day

Configuration	Resistance attached anterior, bilaterally
Progression	Device Level advanced over time: Level 0 (Week 1) to Level 1 (Week 2) to Level 2 (Week 4) to a brief trial at Level 3 (Week 6)
Location / Walking aids	Sessions completed at the indoor track at the local YMCA or outside on streets near home. No walking poles or assistive device used (poles used briefly on Day 1 only); walked independently for the remainder of the trial

The 6-Week Journey

Bob's daily logs trace a program with gradual improvements — improving confidence and reducing frequency of catching toes (stumbles).

Week	Level	Notes
1	**Level 0**	Settled into the daily routine, walking both on streets by home and at indoor track at local YMCA. Initially thought he would need poles to feel steady/safe but immediately transitioned to not using poles. Most sessions logged as steady or “good.” Wears shorts and cable rubs leg – mitigated by wearing an ACE bandage during sessions
2	**Level 0-1**	Able to mow the yard “for the first time in almost 2 years.” Advanced to Level 1.
3	**Level 1**	His strongest week of notes: “best day yet, no stumble,” walking upright and swinging his arms. Shifted his own focus from pace to “perfection” of form.
4	**Level 1-2**	Good, steady indoor and outdoor walks with very few stumbles; noted he walks better “as I seem to concentrate.” Not sure if he is experiencing carry over? Advanced to Level 2.
5	**Level 2**	A busier week with travel and family activities — a weekend volleyball tournament, time with grandkids — but walks were completed, including a strong session after time in the pool.
6	**Level 2-3**	Tried Level 3 — more stumbles and one fall early in the week — then dialed back to Level 2 before trying Level 3 again with better results, noting the higher tension helped his foot “lift more” and start to feel like

“memory.”

Outcome Measures in Detail

Measure	Baseline 8/10/26	Follow-up 9/28/26	Change
4-Square Step Test (dynamic balance & stepping)	9.33 sec	9.05 sec	3% faster
60-Second Sit-to-Stand (functional leg strength and endurance)	18 reps	27 reps	+9 reps (50%)
6-Minute Walk Test (walking endurance)	1,330 ft	1,494 ft	+164 ft (12%)

Referenced healthy adult norms: 60-Second Sit-to-Stand 29-44 reps (male, ages 65-69); 6-Minute Walk Test 1,876 ft (male, ages 60-69 with a Minimal Clinically Important Difference (MCID) of approximately 269 ft), 4 Square Step Test >15s = risk multiple falls.

Reading the results. The clearest gain was in functional leg strength and endurance: Bob's 60-Second Sit-to-Stand count rose from 18 to 27 repetitions — a 50% increase — moving him much closer to the normative healthy adult range for his age and sex (29-44 reps). Subjectively in the videos, he appeared less stiff and rigid during the post-test compared to the pre-test. His 4-Square Step Test time, a measure of dynamic balance and multidirectional stepping, was initially 12.05 sec and 9.33 sec with the test taking the best of two scores. That baseline 9.33 sec already placed him within the normal range and improved modestly to 9.05 sec during post assessment. With a cognitive dual-task version of the same test — stepping while saying months of years backwards — he actually improved his time over just performing the physical task. This is interesting based on his comments during the 6-week trial that he needed to concentrate a lot to avoid stumbling and on therapist’s observation of him tripping over an object when someone entered the room. Walking endurance on the 6-Minute Walk Test improved by 164 feet (12%) — a solid absolute gain, though short of the 269-foot benchmark the research shows as clinically significant for PD. Taken together, the data point most clearly to a real gain in functional strength, with balance and endurance trending positive as well.

Clinical Interpretation

Across six weeks of daily walking sessions, Bob demonstrated a clear improvement in endurance, functional leg strength and showed positive trends in dynamic balance and walking speed. Most notably, his 60-Second Sit-to-Stand performance improved by 50%, reflecting meaningful gains in not only lower-extremity strength but initiation speed, power, and reduced rigidity – all relevant to fall risk and everyday function.

Clinically, Bob's response to the device appeared to build over the course of the trial rather than emerge immediately. As he progressed through the device's levels, his logs increasingly

referenced a sense of his foot being “lifted more” and his body developing a “memory” for the movement pattern at higher resistance — a pattern consistent with the device's goal of reinforcing gait mechanics through repeated, resisted practice.

These objective gains lined up with what Bob reported in his own logs. He described his best sessions as feeling steady and upright, walking with swinging arms and no stumbles. He also tracked the number of trips on each side session to session, noting that “some days are harder to walk than others” — a realistic, day-to-day picture of progress that was not purely linear but improved over time.

From my perspective, the most notable observations over the past 6-weeks isare that he demonstrates reduced retropulsion and tripping when standing and moving around in class. The carryover he is experiencing from the Just Walk system has increased his confidence and overall quality of life.

Bob's Experience

> *“I can confidently walk further, mow my grass, and have noticeably reduced dancing/stumbling (retropulsion) in standing. I am very happy with my results so far.”*
>
> **BOB, Person with PD**

Bob has chosen to continue with the Just Walk system, determined to conquer Level 3 and discover just how far he can take his progress.

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