

PATIENT STORY · POST-ACUTE REHAB · DISCHARGE DECISIONS

Frank looked ready for discharge — but wasn't.

After a knee replacement, every clinic measurement said he had recovered. The walks he took when nobody was watching told a different story — and changed the decision.

1.0 m/s

gait speed in the clinic — inside the normal range for his age and sex

0.65 m/s

gait speed on his everyday walks — below normal, five months after surgery

35%

slower on his everyday walks than in the clinic — low fall risk on paper, high in life

Frank checked every box for discharge

PATIENT

Frank*, late seventies

PROCEDURE

Total knee replacement,
May 2025

CARE

Outpatient therapy with
routine check-ins;
OneStep app on his phone

MEASURED

Walks in the clinic (active)
and everyday walks at
home and outdoors
(background)

PERIOD

May – November 2025

Frank had his knee replaced in late May. He did what he was told: therapy, home exercises, check-ins with the team. At each visit he walked for the therapist with a phone in his pocket, and each time the numbers were better than the last. Over five months his gait speed climbed from well below normal to inside the normal range for his age and sex, and his fall-risk level moved from very high to low.

On the standard assessments he was a textbook recovery. The next step was discharge from therapy.

That is how most discharge decisions are made, and they are made on solid evidence: standardized gait tests, supervised walking assessments, periodic follow-ups. What those assessments measure is a patient's best effort, over a short distance, in a controlled environment, with a therapist watching. What they cannot measure is what happens when fatigue sets in, when the ground is uneven, when confidence is low, or when a patient compensates in ways that only show up over a hundred steps rather than ten.

What in-clinic measurement captures

Best-effort performance · short, supervised walks · a controlled environment · a snapshot on the day of the visit.

What it can't

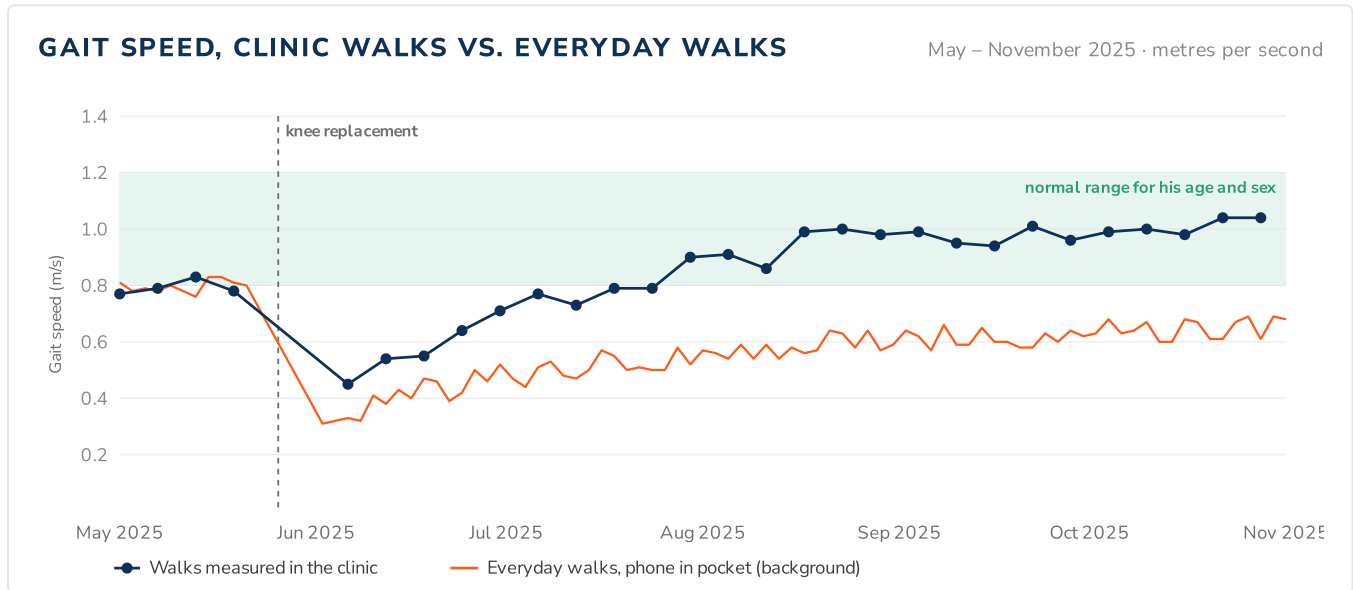
Fatigue and endurance · compensation patterns · confidence · stairs, carpets, curbs and crowds · the other 29 days of the month.

Frank's phone was also measuring the walks nobody watched — to the car, around the block, across the kitchen at night. OneStep records them in the background, with no action from the patient. That is where the discrepancy showed up.

TWO SETS OF NUMBERS

In the clinic he was normal. Everywhere else he wasn't.

The chart below shows every walk OneStep measured for Frank over six months. The navy line is the walks he did in the clinic. The orange line is the walks he did on his own, measured passively by the phone in his pocket. Both improved after surgery. Only one reached normal.



In the clinic

Gait speed around 1.0 m/s by September — inside the normal range, adjusted for age and sex. Fall risk: low. On this data alone, discharge was the right call.

Everywhere else

Gait speed around 0.65 m/s on everyday walks — a third slower, and below normal. Below about 0.8 m/s, fall risk and hospitalization risk rise sharply.

Frank could perform in the clinic. His real-world gait had not caught up. His care team read the two lines together, judged that he was still at risk of a fall and an injury at home, and kept him on caseload — with a plan aimed at the gap: endurance, confidence and the compensation patterns that disappeared when a therapist was watching.

Active measurement shows what a patient can do. Passive monitoring shows what they actually do. Discharge should be decided on both.

FOR PROVIDERS

What Frank's chart means for your organization

Passive monitoring doesn't replace clinical judgment. It gives it something to work with between visits — and it changes four things that cost providers money and patients their independence.

- 1 Discharge decisions you can defend**
A patient who walks normally in the clinic and abnormally at home is a fall waiting to happen after discharge. Seeing both lines lets you keep the patients who need it — and discharge the rest with confidence.
- 2 Extensions and referrals the payer accepts**
"Real-world gait speed 0.65 m/s against a clinic score of 1.0" is a reason to continue care that a reviewer can read. Partners use exactly this data to justify extensions and win back denials.
- 3 Fewer falls and readmissions after discharge**
The decline that leads to a post-discharge fall happens in exactly the hours no one measures. Background walks catch it while the patient is still yours to treat.
- 4 No extra work for staff — and it's reimbursable**
The patient does nothing but carry the phone. The background measurements qualify for Remote Therapeutic Monitoring, so the visibility pays for itself.

ASK YOURSELF

How many patients did we discharge last quarter on clinic performance alone?

How many of them fell, were readmitted, or came back to us within 90 days?

What would it have taken to see their everyday walks before we let them go?

About OneStep. OneStep turns any smartphone into a clinical-grade gait lab — 30+ validated parameters from supervised walks and from everyday walking in the background, no wearables — with fall-risk levels, alerts, RTM tracking and EMR documentation built in. info@onestep.co · www.onestep.co