

# The use of telerehabilitation for patients with Parkinson's disease: A three-arm pilot randomized clinical trial protocol

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## Background

- Individuals with Parkinson's disease (PD) benefit from sustained specific exercise programs.
- Patients with PD may face individual-level barriers to accessing physical therapy:
  - Distance to an appropriate clinic
  - Lack of transportation
  - Social and physical challenges navigating clinics
- System-level barriers also exist:
  - Few specialty-trained clinicians
  - Reimbursement practices for ongoing access to skilled care
- Telerehabilitation may be a useful alternative to clinic-based rehabilitation in order to overcome these barriers.

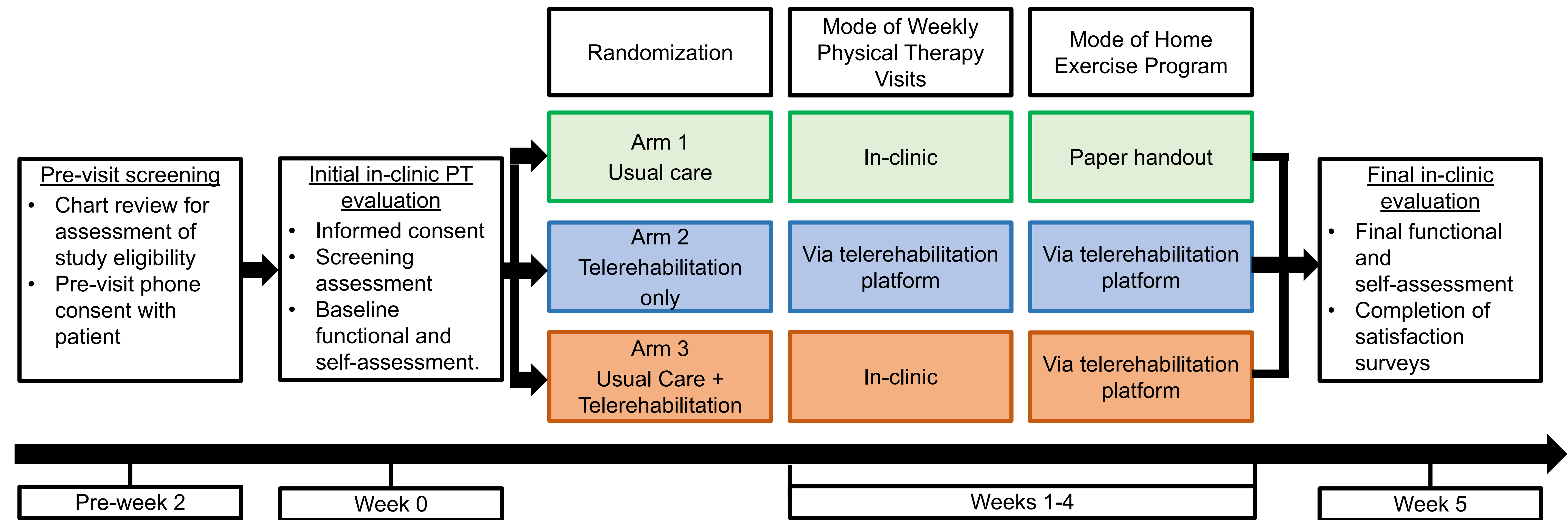
## Objective

To conduct a pilot study to test the feasibility of telerehabilitation for patients with PD.

## Population

- 30 patients from two neurological rehabilitation clinics in one health system.
- Basic inclusion criteria:
  - Newly referred for physical therapy or no physical therapy in prior 6 weeks
  - Absent dizziness, epilepsy, other progressive neurological disease
  - Low falls risk
  - Reliable caregiver in the home
  - Reliable internet at home

## Methods



## Outcomes

- Feasibility
  - Recruitment success
  - Participant retention
  - Patient satisfaction (compared by group)
  - Therapist satisfaction (compared by group)
- Clinical effectiveness (compared by group)
  - Timed-up-and-go test
  - Five-time sit-to-stand test
  - 10-meter gait speed
  - 6-minute walk test
  - Mini Balance Evaluation Systems Test
  - Parkinson's Disease Questionnaire-39
  - Activities-Specific Balance Confidence Scale

## Conclusions & Significance

- First study to examine telerehabilitation as direct treatment and for use with a home exercise program for patients with PD
- Results will contribute to designing a larger clinical effectiveness trial
- Positive findings will lend promise to the prospect of providing telerehabilitation for patients with PD who may have poor access to physical therapy otherwise

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