Feasibility of a Physiotherapy–Caregiver Led Program for Hospitalized Geriatric Rehabilitation Patients

#### Authors:

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Author Biography: Margaretha van Dijk

Dr. Margreet van Dijk is a physiotherapist at the geriatric rehabilitation department at UZ Leuven (Pellenberg campus), balancing clinical work with research. She earned her PhD on April 19, 2024, focusing on improving functional capacity and daily activity levels in hospitalized geriatric rehabilitation patients.

Dr. van Dijk co-developed the Geriatric Activation Program Pellenberg (GAPP) in 2021. A modified version, GAPP@Home, is currently being tested in primary care through the KCE trial Recover@HOME. She also created a UZ Leuven guideline for physiotherapy management of (partial) weight-bearing restrictions, in collaboration with geriatrics and traumatology clinicians. Recently, her department has adopted Blood Flow Restriction (BFR) training for geriatric patients, including those with joint issues and stroke.

# Background

Promoting physical activity in older adults is essential to maintain their health and independence. The GAPP program was designed to follow WHO guidelines for daily physical activity in adults aged 65+, aiming to enhance the functional independence of hospitalized geriatric patients.

Despite this, many patients remain inactive outside of formal therapy sessions and continue to experience functional limitations after discharge.

## Purpose

To address these gaps, a caregiver-led extension of GAPP, called GAPP+Care, was developed. Semi-structured interviews helped explore the acceptability of involving informal caregivers in rehabilitation. The main objective of this study was to assess the feasibility of implementing GAPP+Care through an observational study.

## Methods

The feasibility study was conducted over one year in the geriatric rehabilitation ward at UZ Leuven, Belgium.

# GAPP+Care consisted of two phases:

- 1. Hospitalization Phase:
  - Five 45-minute physiotherapy sessions/week (GAPP)
  - Three 30-minute caregiver-led exercise sessions/week (+Care)
- 2. Post-Discharge Phase (6 weeks):
  - Three 30-minute private physiotherapy sessions/week
  - Three caregiver-led sessions/week (+Care)

## Researchers tracked:

- Eligibility and participation rates
- Program fidelity
- Perceptions of feasibility and acceptability through semi-structured interviews with patients and caregivers

#### Results

- Participants: 13 patients (mean age: 82.5 years)
- Participation Rate: Low (4.6%) due to strict inclusion criteria and caregiver availability
- Average Enrollment: 16 days after admission
- In-Hospital Program Duration: 30 days

## Fidelity:

- In-hospital +Care participation was consistently high (2–5 sessions/week)
- Post-discharge adherence fell into three groups:
  - No participation (n=3)
  - Occasional/sparse participation (n=4)
  - High adherence (2–4 sessions/week; n=4)

# Barriers Identified:

- Hospital visitation restrictions
- Time constraints at home

Despite these barriers, most participants found the program feasible and acceptable.

#### Conclusion

While participation was limited by inclusion criteria and caregiver availability, high inhospital adherence suggests strong feasibility when physiotherapists, patients, and caregivers collaborate effectively.

GAPP+Care appears to be an acceptable and feasible intervention for hospitalized geriatric patients, particularly when caregiver involvement is supported.

# **Implications**

This study supports the inclusion of informal caregivers in physical activity programs for older adults. However, broader implementation will require:

- Adjustments to inclusion criteria
- Solutions for caregiver availability challenges