Components for the Integration of Blended Use of mHealth to Support Rehabilitation of Older Adults After an Acute Event: A Scoping Review and Expert Consultation

Aurélie PG Oosterlynck, MSc, Dr. Marije S Holstege, Dr. Ineke G Stolte, Dr. Laurence L Alpay, Prof. Dr. Robbert JJ Gobbens

BACKGROUND

mHealth shows potential to help make geriatric rehabilitation (GR) future proof, with an aging population. However, a comprehensive implementation strategy for mHealth in GR is currently lacking.

AIM

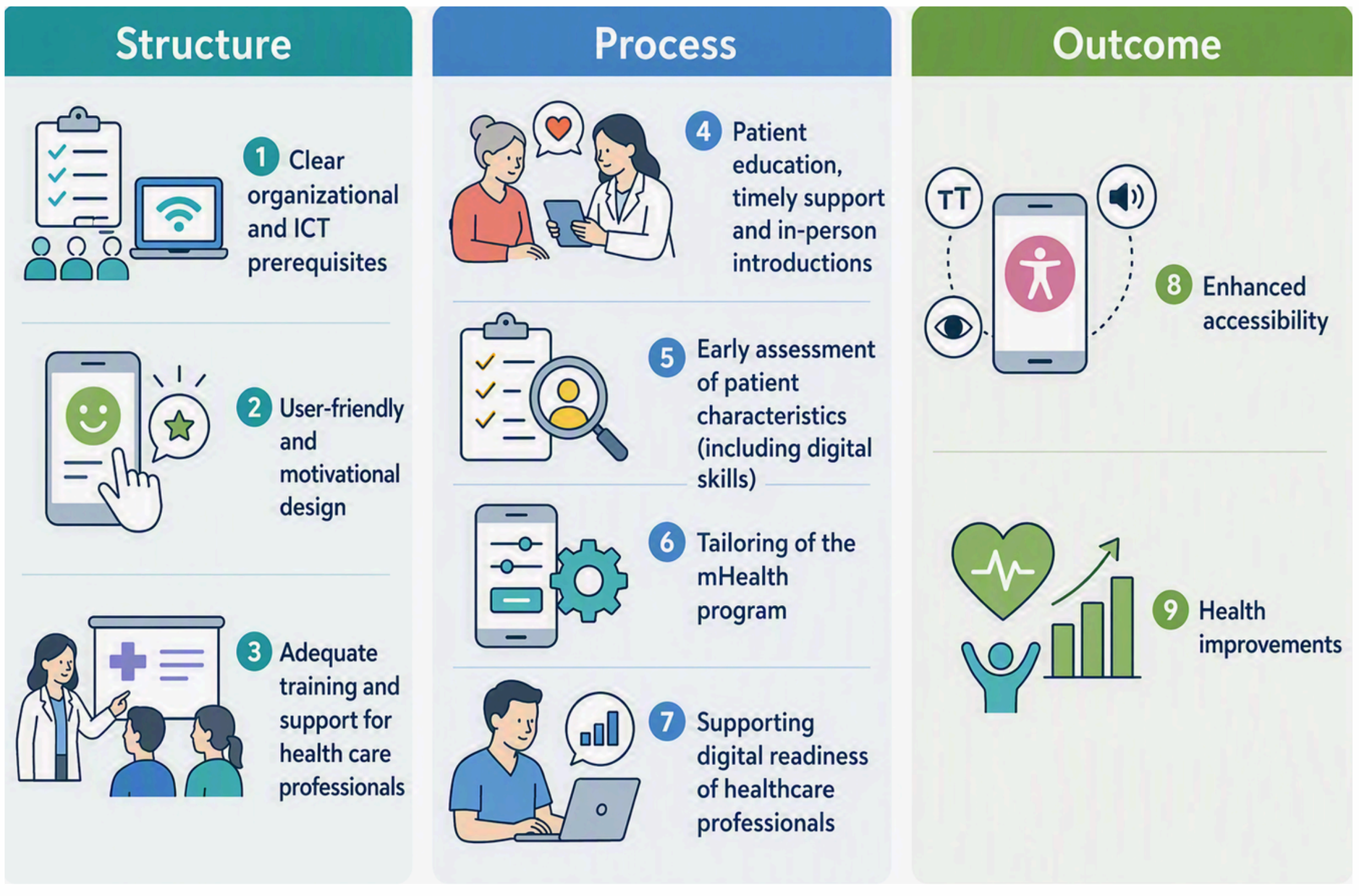
To ascertain the structure, process, and outcome components, known from literature and expert consultation, for the integration of blended use of mHealth to support the rehabilitation of older adults after an acute event.

METHODS

1. Expert consultation
- 10 stakeholders (including a discharged GR patient)
- 3 main themes:
  - Perceived need for mHealth in GR
  - Key requirements for blended mHealth implementation
  - Organizational support for blended care delivery

2. Scoping review
- Four databases were searched from 2016 - 2026
- Key words: older adults (≥65yo), mHealth, geriatric rehabilitation, post-acute care
- Analysis: Hybrid Healthcare Quality Assessment[1]-guided deductive content analysis → inductive identification of subthemes and overarching components

9 ESSENTIAL COMPONENTS IDENTIFIED



RESULTS

- Articles screened: 3176
- Articles included: 17
- Most common types of blended mHealth
  - 8x mobile/web-based application
  - 6x independent training program with regular video or telephone calls
- Study settings: Hospital (n=3), (geriatric-) Rehabilitation (n=4); Outpatient (n=10)
- 9 essential components identified, supported by both the scoping review and expert consultation

CONCLUSIONS & FUTURE RESEARCH

- Successful blended care implementation requires **redesigning existing care pathways into blended care pathways**. The nine identified components provide a foundation for stakeholder co-creation.
- **Informal caregiver support** and healthcare professionals' **digital readiness** are crucial for successful implementation, yet effective strategies for integration and support remain unclear and warrant further investigation.

A.P.G.Oosterlynck@tilburguniversity.edu

[1] Tossaint-Schoenmakers R, et al. Development of a Quality Management Model and Self-assessment Questionnaire for Hybrid Health Care: Concept Mapping Study. JMIR Form Res. 2022;6:e38683.