

LIZZ-TRANSCARE

Rehabilitation Assistance: An embodied companion to facilitate the rehabilitation of patients in the transition from hospital to home

ABSTRACT

This project aims to support the transition from hospital or rehabilitation centre to home, by providing stroke survivors with a robotic therapy companion system with which they will use both in-clinic and at home through their rehabilitation process. Currently, there is a gap between the primary and secondary healthcare sector, so when patients are discharged, there is a lack of support and structure. LIZZ-TRANSCARE fills this gap by providing a digital tool that eases the transition in multiple ways: 1) Providing technological support to encourage daily movement, particularly for frail and older adults; 2) Supporting patient, family, and healthcare worker engagement in the rehabilitation process; and 3) Enabling safe and efficient data transfer to relevant healthcare professionals.

The project centres on integrating and deploying Lizz and SENS in two European healthcare settings. Lizz, a social companion robot designed specifically for stroke survivors, offers personalized support in clinical and home environments (www.lizz.health). It assists with medication management, therapy adherence and provides companionship throughout the rehabilitation journey. SENS complements Lizz by leveraging motion-sensing technology to monitor and enhance patient movement and activity, facilitating personalized therapy programs (www.sens.dk).

Two parallel Randomised Controlled Trials (RCT) will be conducted where the Lizz Intervention combined with the SENS sensor will be tested against standard of care for stroke survivors during the early (Denmark) and later (Netherlands) stages of recovery, when discharged from the hospital or rehabilitation centre, respectively.

The primary outcome is for the patients to be more physically active. Secondly, we anticipate improvements in quality of life, activities of daily living, mood, and self-efficacy for those receiving the intervention. We also expect that the intervention will be cost- and resource-effective for healthcare services.

KEYWORDS

- Rehabilitation
- Adherence
- Social robot
- Prevention
- Homecare
- Transition

DURATION

36 months

PARTNERS

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