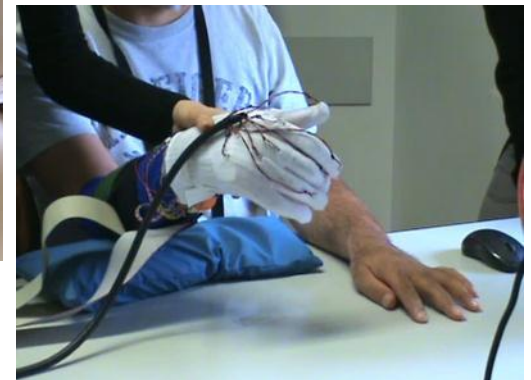


RETRAINER

REACHING AND GRASPING TRAINING BASED ON ROBOTIC HYBRID ASSISTANCE
FOR NEUROLOGICAL PATIENTS: END USERS REAL LIFE EVALUATION

RETRAINER *tunes* and *validates* advanced *hybrid-robotics* based technologies to facilitate the recovery of the arm and hand functions in post-stroke patients. RETRAINER *assesses usability* (both on *clinician* and *patient* side), *perceived benefits* and *impact on rehabilitation outcomes*.

- Full **technological transfer** to market of results of FP7 MUNDUS project
- High involvement of **companies** of the rehabilitation field
- Full **field validation** in clinics and at home
- High involvement of **end users** (patients, formal and informal career)



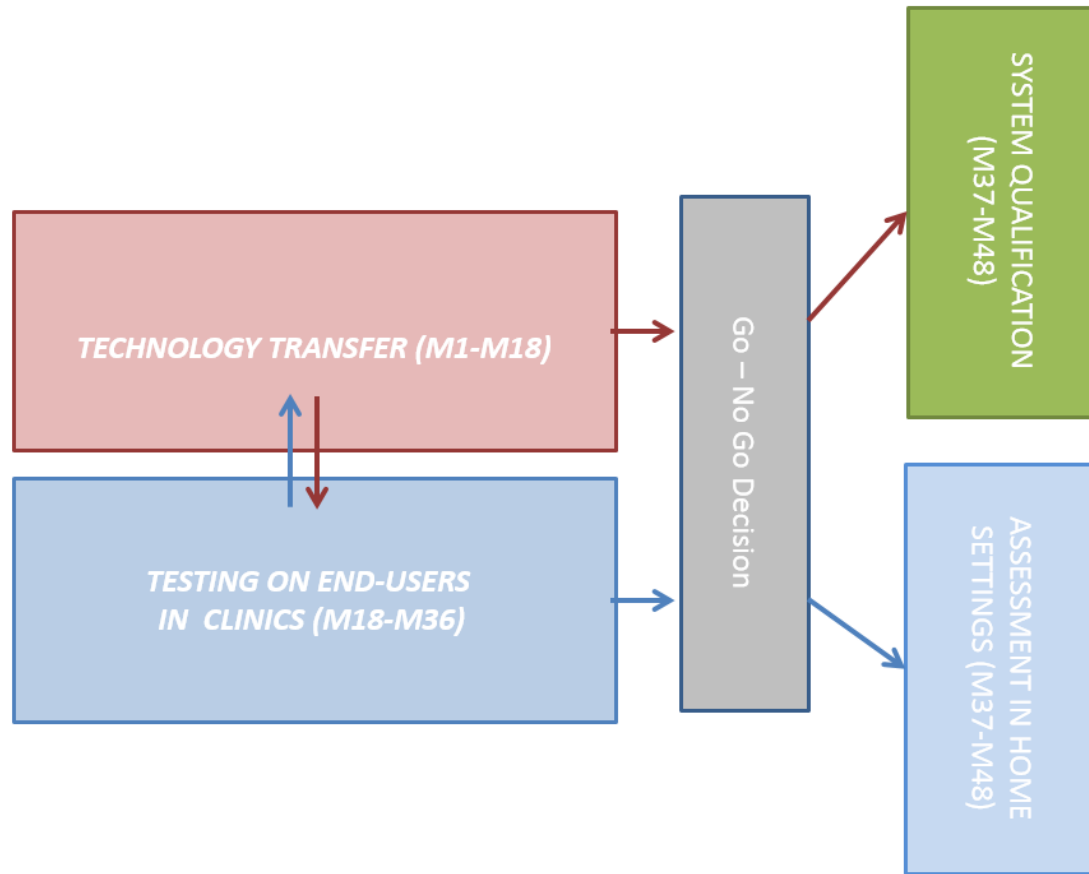
At the edge between «clinical pull» and «technology push»

This project has received funding from the *European Union's Horizon 2020 research and innovation* programme under grant agreement No 644721



Maria Bulgheroni – RETRAINER Coordinator

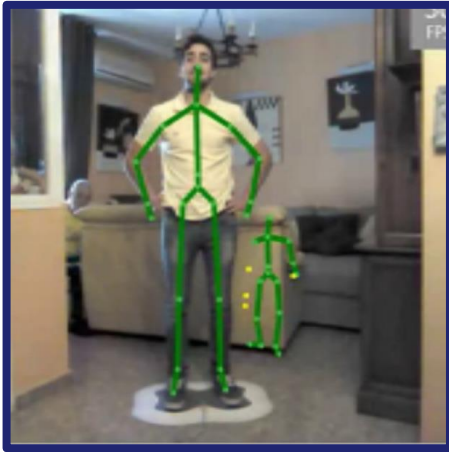
APPROACH



Two main lines of action:

1. Technological implementation:
Technology transfer (M1-M18)
System Qualification (M37-M48)
2. Testing in real life
Clinics (M18-M36)
Home (M37-M48)

ISSUES WITH "REAL LIFE"



Home is not a lab!

Clinicians and patients have to be part of the same design loop



Technology acceptance is a must when working with patients.

Technical & usability validation (M9-M18)

Reliable prototypes (15 pieces)

Validation in clinics (M18-M36)

Rehabilitation outcomes (136 patients)

Validation at home (M36-M48)

Indications for use at home