Interreg
Euregio Meuse-Rhine
European Regional Development Fund

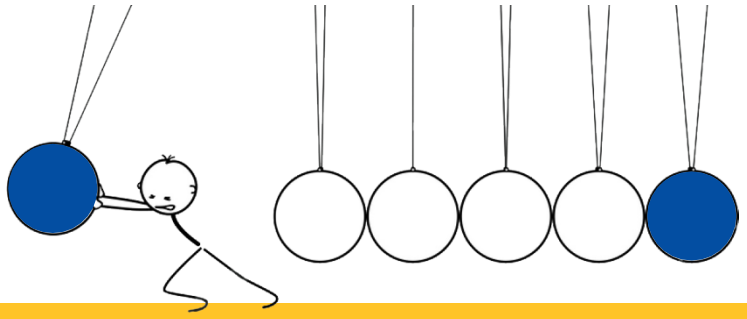
EUROPEAN UNION

i2CoRT
innovation and implementation accelerator for complex rehabilitation technology

PUBLIC REPORT i2-CoRT (2018-2021)

"Accelerating Innovation and Implementation of Complex Rehabilitation Technology."

START PROJECT **2018**



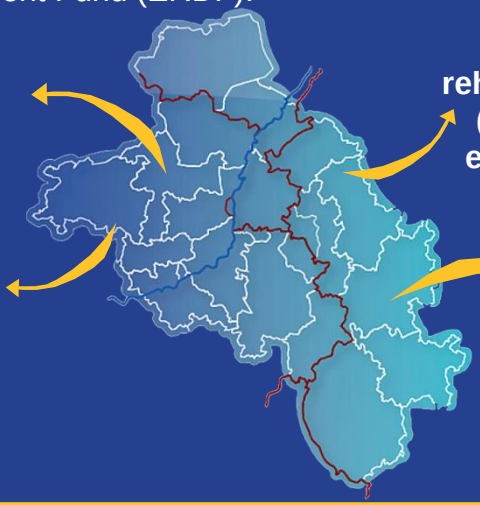
END PROJECT **2021**

1 INTRO

This project has received a EUR 3,794,332 grant, of which EUR 1,897,166 from the European Regional Development Fund (ERDF).

Rehabilitation care is under pressure due to population aging, increase in healthcare costs and staff shortages

Currently, RT **innovation** and **actual use** of new RT in daily rehabilitation is **(too) slow**



The **use of (new) rehabilitation technologies (RT)** may **improve (cost-) effectiveness** and delivery of treatments

Knowledge on RT and the adequate use of RT in rehabilitation care is **scattered**

Ambitions of i2-CoRT:

Optimize RT development & implementation

Create EUregional RT network and infrastructures

Bring together state-of-the-art knowledge & experience on RT

To make substantive improvements in the **development** of novel rehabilitation technology (RT) and to intensify **actual use** of such RT in daily care, rehabilitation centres, universities, colleges, living labs, companies and patient-experts have joined forces, resulting in **i2-CoRT**.

2 OUR ROUTE TO RESULTS: 18 work packages

1

Develop 3 clinical testing centres for complex rehabilitation technology (RT)

WP-i1-WP-i3: Development of 3 new innovation-friendly infrastructures / test centres in the vicinity of a rehabilitation centre:

- Adelante, Hoensbroek, NL
- Jessa Hospital, Herk-de-Stad, B
- University Medical Centre, Esneux, B

These test centres will serve as:

- a platform for advice
- a source of information & expertise
- an inspiring environment near to clinical expertise for companies and knowledge centres to develop, test, investigate, show, validate new RT
- a location for multidisciplinary collaboration and co-creation
- an access point to an (inter-)national network of patients, healthcare institutes & professionals, students, universities, companies and other stakeholders

WP1-WP4: Development of 'Standard Operations Procedures' (SOPs) within test centres on, among others:

- quality assurance
- development & testing of RT
- ethical approval procedures
- how to stimulate active involvement of companies in RT (product) co-creation
- risk evaluation and CE mark processes
- implementation of RT products

2

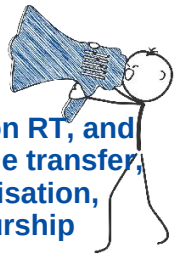
Improve co-creation of new RT products and RT-based treatment

WP5-WP9: Development of new rehabilitation technologies and treatment concepts, i.e.:

- a technology-assisted training protocol to improve arm skill performance in patients with a moderately to severely affected arm due to stroke. So-called 'remote handling technology' (popularly called 'robotics') is used to manipulate the sense of movement of the arm
- sensor-based technology to identify and assess arm-hand skill performance and to objectively measure the quality of arm-hand skill performance
- sensor technology and applications to prevent sitting and seating problems in wheelchair-bound people
- technical aids and concepts to assist training of complex (bimanual task oriented) skills in rehabilitation.
- innovative hand / wrist orthosis (splint) which actively supports the opening and closing of the fingers

3

Develop a network on RT, and enable knowledge transfer, product valorisation, entrepreneurship



WP10-WP11: Development of plans for implementation and valorisation of:

- the test centre concept:
- new technologies and RT training concepts designed in WP5-WP9

WP12-WP13: Development of follow-up plans beyond i2-CoRT project:

- business plans for continuation of test centres
- action plan for the continuation of the i2-CoRT network

WP14: Plan for optimisation of business climate and stimulating entrepreneurship

- policy papers on integrating each test centre into the regional business ecosystem

WP-C: Communication, public awareness and information dissemination

- i2-CoRT website
- a web portal for companies to contact the i2-CoRT network and partners
- social media activities
- i2-CoRT symposia
- scientific papers, workshops
- congress presentations, demos
- contributions to guidelines
- contributions to education curricula

3 RESULTS AND DELIVERABLES

3 most important results

1. Clinical test centres for rehabilitation technology (TC-RT):

Three collaborating EUregional TC-RTs have been set up; Standard Operation Procedures for all TC-RT processes have been developed, including a web portal for companies to contact / interact with the i2-CoRT network.

2. EUregional RT network:

A cross-border RT knowledge network has been set up, aimed at attracting RT innovations, facilitating cooperation between EUregional partners and companies, combining complementary, trans-disciplinary expertise.

3. Novel RT concepts:

Five novel technology-assisted rehabilitation training and evaluation concepts have been developed.

Supporting materials for raising awareness and provision of information

1. i2-CoRT website for general public and a portal for companies
2. i2-CoRT executive summary and flyer

Milestones

28-05-2019: First ACTiCON (ACTive i2-CoRT Company & Organisation Network) member has formally signed a collaboration agreement with all i2-CoRT partners; more ACTiCON members follow

02-12-2019: i2-CoRT portal for attracting companies goes live

16-04-2021: Securing the continuation of the 3 test centres and i2-CoRT network, through business plans and embedding in clinics

20-04-2021: Online closing symposium: presentations of i2-CoRT results regarding RT concepts; test centre demos; other RT-related activities from partners and collaborating companies; vision on future

CO-FINANCIERS

Interreg Euregio Meuse-Rhine European Regional Development Fund

EUROPEAN UNION

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Wallonie

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provincie Limburg

AGENTSCHAP INNOVEREN & ONDERNEMEN

Vlaanderen is ondernemen

provincie limburg

<www.i2-CoRT.eu>

PROJECT PARTNERS

LEAD PARTNER:

adelante haal het beste uit jezelf

PARTNERS:

RPE AME | RWTH AACHEN UNIVERSITY

Jessa Ziekenhuis

WeLL Wallonia e-health Living Lab

Zuyd University of Applied Sciences

Maastricht University

Liège université

CHU de Liège

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