Faster use of new technologies in rehabilitation

BioRegio STERN Management GmbH is the German partner in the new RehAllianCE project that is being funded by the European Union under the Interreg CENTRAL EUROPE programme. The project focuses on the use of new technologies in rehabilitation, with the aim of bringing about extensive improvements in patient care. A total of six partners from six regions in Central Europe are collaborating on this project. In addition to the STERN BioRegion, there is also Poland, which is the lead partner in the project with the Śląskie region, plus the regions of Carinthia (Austria), Western Transdanubia (Hungary), Lombardy (Italy) and Veneto (Italy). The aim of the project is to boost the innovation capacities of SMEs in order to accelerate the market launch of aids such as rehabilitation robots, exoskeletons and telemetry systems for use in the healthcare sector.

Patients should be provided with the best available treatment, regardless of their place of residence – urban or rural – and financial status. Launched in May 2024, the project will run for 30 months. A total of 1.58 million euros is available, with 80 percent of this being provided through funding. Some 200,000 euros of this is going to the STERN BioRegion.

Needs in the healthcare sector have changed fundamentally for a number of reasons – demographic change due to increased life expectancy coupled with low birth rates, and the continuing trend of people relocating to rural regions where the infrastructure is less well developed. There are more and more older people who increasingly need support for longer. As a result, aids and assistive devices are very important in care and rehabilitation – tasks that are often taken on by family members. The RehAllianCE project is helping small and medium-sized enterprises (SMEs) in the medical technology sector to accelerate the market launch of innovations such as rehabilitation robots, exoskeletons and telemetry systems, thus relieving some of the pressure on both professional care workers and family members who are providing care.

Six partners from six regions in Central Europe are working on the RehAllianCE project under the European Union's Interreg CENTRAL EUROPE funding programme for transnational collaboration. Besides BioRegio STERN Management GmbH, which represents the Stuttgart and Neckar-Alb regions, including the cities of Tübingen and Reutlingen, the partners involved are lead partner Górnośląski Akcelerator Przedsiębiorczości Rynkowej sp. z o.o. from Silesia (Poland) and project partners Pannon Gazdasági Hálózat Egyesület from Western Transdanubia (Hungary), NSBPROJECT S.R.L. from Lombardy (Italy), Azienda ULSS n. 4 Veneto Orientale from Veneto (Italy) and FH-KAERNTEN gGmbH from Carinthia (Austria).

Pilot studies - supporting SMEs to establish new rehabilitation technologies

The partners will provide targeted support for SMEs, including help in accessing research in the area of new technologies for rehabilitation and support in finding digitally skilled workers. The German project partner BioRegio STERN Management GmbH and FH Kärnten from Austria are jointly responsible for designing the pilot studies. The aim of these studies is to test solutions – at both regional and international level – for using advanced technologies. Medical technology SMEs can take part in these pilot studies as external partners and use the services provided by the project to contribute to the development of new rehabilitation measures based on new technologies. These measures must offer high potential for improving quality of life for patients and care staff alike, as well as for enhancing the quality and development of rehabilitation services. These pilot studies will also help check whether staff and infrastructure in the medical sector are sufficiently well adapted to social and demographic changes. Solutions for the new rehabilitation options will be tried out by working in collaboration with SMEs in the region. Examples of these solutions are robotics, communication and information technologies, wearables and health apps.

Smart Rehab-INDEX - comparing and improving rehabilitation care

The aim is not only to increase the innovation capacities and competitiveness of SMEs, but also to offer patients in need the best available treatment, regardless of their place of residence – urban or rural – and financial status. The partners are therefore going to develop an overarching model – Smart Rehab-INDEX – for rehabilitation. This model will cover all patient groups (such as elderly patients after a fall, patients after a stroke or cardiac surgery, disabled children, and adolescents with spinal degeneration). The index will enable regions to assess the current situation and gauge the future need for rehabilitation

care options in a standardised and comparable way. This means it will be possible to review the effectiveness of the healthcare system, especially with regard to the latest rehabilitation technologies. It will be easier to identify not only strengths, but shortcomings, too, so that targeted action can be taken to improve care.

It is also envisaged that the available regional services and infrastructure in the rehabilitation sector will be shown on an online map. Patients and family members, as well as companies and facilities in the rehabilitation sector, will all be able to use the map to find and make use of suitable services. This will enable institutions and rehabilitation facilities to coordinate their activities more effectively.

"The integrated approach of RehAllianCE means that we specifically involve both patients and staff in the development and testing of new solutions," explains Dr. Klara Altintoprak, who is responsible for the project at BioRegio STERN Management GmbH. "We have already had success with ILDA-care, an ERDF project aimed at promoting intelligent logistics, digitalisation and automated workflows in the homecare and nursing homes sector. We can now leverage that experience for RehAllianCE," she continues.

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Press release

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Further information

- BioRegio STERN Management GmbH
- ► EU-Projekt RehAllianCE