

# Project idea form - small projects

Version 2.1

Registration no. (filled in by MA/JS only) \_\_\_\_\_

## Project Idea Form

Date of submission 05/06/2025

### 1. Project idea identification

Project idea name	Applicable and Efficient Home Rehabilitation Model for the Baltic Sea Region
Short name of the project	HOMEREHAB
Previous calls	yes <input type="radio"/> no <input checked="" type="radio"/>
Seed money support	yes <input type="radio"/> no <input checked="" type="radio"/>

### 2. Programme priority

1. Innovative societies
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### 3. Programme objective

1.2. Responsive public services
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### 4. Potential lead applicant

Name of the organisation (original)	Põlva Haigla AS
Name of the organisation (English)	Põlva Hospital Ltd
Website	www.polvahgl.ee
Country	EE



Type of Partner	Hospital and medical centre
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Which organisation(s) in the planned partnership take part in a project within the Interreg Baltic Sea Region Programme for the first time? Please list the respective partners.

Põlva Hospital Ltd

### 5.1 Specific challenge to be addressed

Almost everyone is likely to experience some form of disability – temporary or permanent – at some point in life. Currently, over one billion people live with some form of disability in the world, and every third has an illness or injury after which rehabilitation may be needed. These numbers will dramatically increase due to the ageing population and growing prevalence of non-communicable diseases. Rehabilitation has a crucial role in helping these people due to its unique contribution to health in that it reduces disability and optimises functioning. Rehabilitation is seen as an investment with cost benefits for both people with disabilities and society: it reduces disability and optimises the functioning of these individuals, minimises the need for financial or caregiver support, helps to avoid costly hospitalisations, reduces hospital length of stay, and prevents readmissions.

Despite rehabilitation being a key health strategy of the 21st century and should be a core part of universal health coverage, its need is largely unmet and dramatically increasing. This also applies to all the countries in the Baltic Sea region. Different studies have reported unmet rehabilitation needs in Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, and Sweden.<sup>1,2,3</sup> In Estonia, the largest rehabilitation system audit reported that only 19% received rehabilitation, and only half of the

receivers received it on time<sup>4</sup>, and the problem is ongoing.<sup>5</sup> There is a clear need for a solution that helps to tackle the unmet and dramatically increasing rehabilitation need in the Baltic Sea Region, including its small places and rural areas.

#### REFERENCES:

1. Kamenov, Kaloyan, et al. "Needs and unmet needs for rehabilitation services: a scoping review." *Disability and rehabilitation* 41.10 (2019): 1227-1237.
2. Andelic, Nada, et al. "Unmet rehabilitation needs after traumatic brain injury across Europe: results from the CENTER-TBI study." *Journal of clinical medicine* 10.5 (2021): 1035.
3. Tistad, Malin, et al. "Unfulfilled rehabilitation needs and dissatisfaction with care 12 months after a stroke: an explorative observational study." *BMC neurology* 12 (2012): 1-7.
4. Suits, Siiri. "Taastusravi korraldus ja tõhusus." *Eesti Arst* (2006).
5. Prommik, Pärt, et al. "Causal variation modelling identifies large inter-and intra-regional disparities in physical therapy offered to hip fracture patients in Estonia." *Disability and Rehabilitation* 44.17 (2022): 4729-4737.

## 5.2 Focus of the call

Home rehabilitation is a good solution for improving rehabilitation's accessibility, especially in small places and rural areas where outpatient and inpatient rehabilitative services are unavailable. It increases cost-effectiveness when multiple times more costly inpatient rehabilitation is replaced with home services. It is more convenient and comfortable for its users as there's no need to travel. It also decreases logistics-related bureaucracy for all associated parties since rehabilitation pathways often last months, including several care episodes in different settings and facilities. Such pathways require careful planning. Home rehabilitation is a "single-episode" solution, replacing logistically complex care pathways. Home itself provides a more relevant environment for rehabilitation as it supports a quicker return to daily routines and to perform person- and home-specific meaningful activities required for her/his independent living. Importantly, the home rehabilitation model will be developed with applicability and efficiency in focus, meaning that it has to lead to faster recovery with minimal costs. Efficiency is achieved by implementing strategies such as increasing patients' self-efficacy, implementing patient-motivation-specific goal-setting, adapting digital technologies, and their relatives' involvement in rehabilitation provision.

## 6. Transnational relevance

All the Baltic Sea Region countries and project partners face a similar challenge – the already unmet and dramatically increasing demand for rehabilitation. These countries need a solution to tackle the challenge. A much more effective way to deal with the challenge would be to join forces, use the shared knowledge derived from research, use the experience from already implemented practices, and collaboratively develop a universal, applicable, and efficient solution for tackling the challenge. Transnational cooperation is inevitable when different and necessary home rehabilitation-related expertise is spread in the Baltic Sea Region, and its countries' care, health, and social systems have different capabilities. Therefore, transnational cooperation is the best way to develop a universally applicable solution.



Swedish and Finnish partners from four different universities have been actively researching home rehabilitation, home as a healthcare environment, person-centred rehabilitation, support needed for self-care, the perspectives of patients, their families, and rehabilitation professionals, digital technologies that can be used in rehabilitation, adherence to self care and mobility in old age. It also should be noted that all three participating countries have varying experience in home rehabilitation provision, meaning that experience can be used to improve the model's applicability. The University of Tartu from Estonia has researched real-world, long-term rehabilitation pathways of many patient populations, meaning it has a necessary big picture for understanding the service users' profiles. Põlva Hospital from Estonia provides a rehabilitation capability and a rural service area for piloting the model in collaboration with the social service providers of the Põlva Rural Municipality. In summary, transnational cooperation joins the forces of motivated partners to tackle a common challenge facing all the countries of the Baltic Sea Region.

## 7. Specific aims to be addressed

### Building trust that could lead to further cooperation initiatives

The project's preparation phase has already united parties from different countries with a mutual interest in improving citizens' health, well-being, and functioning by enhancing rehabilitation in health and care systems. The collective development of a universal, applicable and efficient home rehabilitation model and its piloting will further increase trust between the partners, which in turn empowers them to collaborate further.

### Initiating and keeping networks that are important for the BSR

The project's preparation phase has already initiated a network with a mutual interest in improving citizens' health, well-being, and functioning by enhancing rehabilitation in health and care systems. Such a network that is interested in developing necessary strategies for tackling the challenges is important for the Baltic Sea Region and its prosperity.

### Bringing the Programme closer to the citizens

The project aims to bring rehabilitation as an essential health service closer to the citizens. (1) It helps to cover the overall unmet need for rehabilitation. (2) It makes rehabilitation more accessible in rural areas. (3) It is more convenient and comfortable for its users. (4) It makes rehabilitation more efficient, leading to faster recovery. (5) The home provides a more relevant environment for rehabilitation as it supports a quicker return to daily routines and to perform patient- and home-specific meaningful activities required for independent living. (6) Cost-effectiveness also increases, as it aims to maximise the use of efficient home rehabilitation instead of more costly inpatient rehabilitation. Finally, (7) it decreases bureaucracy for medical personnel planning rehabilitation pathways and for patients by being more convenient.

### Allowing a swift response to unpredictable and urgent challenges

Rehabilitation is recognised as being an integral part of a patient's recovery in disaster and conflict situations. Starting in acute care, access to rehabilitation has been shown to help prevent complications, speed up recovery, enable early discharge, and ensure continuity of care. As this projects strengthens available rehabilitation systems, it also improves the systems' capability through



more efficient strategies to face unpredictable and urgent challenges, where the rehabilitation need may increase exponentially.

## 8. Target groups

The unmet and increasing rehabilitation needs challenge primarily affects three target groups: (1) interest groups or patients requiring rehabilitation, (2) hospitals and medical centres that have competencies for providing rehabilitative services and (3) local public authorities that have competencies for providing other public services, including social care. The three target groups must collaborate closely to help citizens with disabilities regain their functional level and independence. This also applies to home rehabilitation delivery. Patient perspective is needed for developing a patient-centered home rehabilitation model. A prerequisite for providing home rehabilitative services is the fact that a person must be able to live independently or with the help of others in her/his home. A person may need support in different areas while living at home, including bringing food, cooking, bathing or toileting. Sometimes, it also involves small rebuildings to modify certain living conditions, e. g. adding safety frames and rails. Commonly, local authorities provide such services. When a person can live at home, hospitals and medical centres can start by providing home rehabilitation. The project provides an applicable solution for the three target groups to collaboratively improve rehabilitation accessibility by increasing the provision of efficient home rehabilitative services. Hospitals and local public authorities will be interested in using the model as they will get better strategies for rehabilitating more patients, and local public authorities will also win as better rehabilitation leads to decreased need for social support.

Please use the drop-down list to define up to five target groups that you will involve through your project's activities.	Please define a field of responsibility or an economic sector of the selected target group	Specify the countries and regions that the representatives of this target group come from.
1. Higher education and research institution	Providing expertise for developing a model and studying the piloting.	Sweden, Stockholm County; Sweden Dalarna Province; Finland, Jyväskylä; Finland, Oulu; Estonia, Tartu County
2. Hospital and medical centre	Provision of health care, including rehabilitation and home rehabilitative services.	Sweden, Stockholm County; Estonia, Põlva County
3. Local public authority	Provision of supportive social services	Estonia, Põlva County
4. Interest group	Adding client/patient perspective	Estonia, Põlva County

## 9. Contribution to the EU Strategy for the Baltic Sea Region

Please indicate if your project idea has the potential to contribute to the implementation of the Action Plan of the EU Strategy for the Baltic Sea Region (<https://eusbsr.eu/implementation/>).

yes ☒ no ☐

Please select which policy area(s) of the EUSBSR your project idea contributes to most.

PA Health

The MA/JS may share your project idea form with the respective policy area coordinator(s) of the EUSBSR. You can find contacts of PACs at the EUSBSR website (<https://eusbsr.eu/contact-us/>).

☐ If you disagree, please tick here.

## 10. Partnership

The partners for the project were chosen based on their expertise and capabilities, which will jointly result in the composition needed to carry out the project successfully.

Swedish partners from Karolinska Institutet, Karolinska University Hospital and Dalarna University and Finnish partners from the University of Jyväskylä and the University of Oulu have been actively researching home rehabilitation, home as a healthcare environment, person-centred rehabilitation, support needed for self-care, the perspectives of patients, their families, and rehabilitation professionals, digital technologies that can be used in rehabilitation, adherence to self care and mobility in old age. It also should be noted that all three participating countries have varying experience in home rehabilitation provision, meaning that experience can be used to improve the model's applicability.

Estonian patient organisation provides the perspective needed to develop a model that enables the provision of patient-centred home rehabilitation. Also, a local public authority, Põlva Rural Municipality of Estonia, provides supportive services for patients, making a living at home and providing home rehabilitation possible.

Estonian partner Põlva Hospital (also the lead partner) provides the capability of piloting the developable model in its service area in Põlva County (1,823 km<sup>2</sup>), where 70% (16 882/24 036) of its citizens live in rural areas and disability prevalence is the highest in the country. Põlva Hospital's special niche is rehabilitation. It provides outpatient and inpatient rehabilitation and is motivated to start providing home rehabilitation services since access to inpatient rehabilitation is limited, and many patients have problems attending outpatient services. Currently, the provision of home rehabilitation is negligible in Estonia, even though the Estonian Health Insurance Fund has created

such readiness since the beginning of 2016.

And finally, the University of Tartu from Estonia has developed a methodology to use administrative health data to analyse real-world, long-term rehabilitative pathways. The same methodology will be used to analyse the effect of piloting the model.

In summary, the project has partners whose expertise and capabilities make this project feasible. Transnational expertise is implemented into an applicable and efficient home rehabilitation model that will be piloted in a rural area where such a service is currently missing.

## 11. Workplan

The project has five activities.

### ACTIVITY 1: MAPPING OF CURRENT PRACTICES IN DIFFERENT REGIONS (months 1-6)

The aim of the first activity is to visit partner countries and learn about their in-use home rehabilitation practices. The activity includes networking, mapping regional currently used solutions and generating new ideas through shared learning. All target groups are involved in the activity. At the end of the first activity, regional home rehabilitation practices and their pros and cons are mapped and documented. The documented output will be used as input in the next activity, where an applicable and efficient home rehabilitation model will be developed.

### ACTIVITY 2: DEVELOPING AN EFFICIENT HOME REHABILITATION MODEL (months 3-12)

The aim of this activity is to develop a universally applicable and efficient home rehabilitation model according to the knowledge obtained during ACTIVITY 1. All target groups will be involved in the development process. Different aspects of home rehabilitation provision will be divided between project partners according to their expertise, meaning that the model will be compiled simultaneously through collaborative and individual contributions.

### ACTIVITY 3: TRAINING OF REHABILITATION PERSONNEL (months 6-14)

The aim of this activity is to prepare for using the model, which means that personnel involved in the service provision will be trained to provide home rehabilitative services according to the best practices described in the model. This involves both theoretical and practical training, including the observation of real-world service delivery in partner countries.

### ACTIVITY 4: PILOTING THE MODEL (months 14-20)

The model will be piloted in real-world practice for 7 months, meaning that the suitability of the home rehabilitation and setting will be carefully considered for all patients requiring rehabilitative services. The 7-month period was chosen to include sufficient number of patients in the study to achieve the necessary statistical power.

### ACTIVITY 5: ANALYSING AND PRESENTING THE RESULTS (months 19-24)

The piloting of the home rehabilitation model will be evaluated using the analysis of real-world rehabilitation pathways and home services provision. For the analysis, the pre- and post-piloting data



of the Estonian Health Insurance Fund will be used. The lead partner has all the necessary analytical know-how for doing such analysis. The results will be presented to all the project partners at the closing meeting.

## 12. Planned budget

ERDF budget (planned expenditure of partners from the EU)	EUR 473,151.00
Norwegian budget (planned expenditure of partners from Norway)	EUR 0.00
<b>Total budget (including preparatory costs)</b>	<b>EUR 473,151.00</b>

## 13. Project consultation

Please indicate if you wish to have a consultation (online meeting) with the MA/JS to discuss your project idea

yes ☒ no ☐

## 14. Questions to the MA/JS

Questions related to the content of the planned project	All comments are more than welcome to improve the idea. We have a question about the closure phase. May it also be used for analysing and presenting the results in a partners' meeting?
Questions related to budgeting and expenditure	A prerequisite of home rehabilitation provision is necessary equipment like foldable walkers and/or digital gadgets and a suitable car that allows for transporting all the necessary equipment. Are these allowed within other costs that may be up to 40% of staff costs?
Any other questions	We may have a few late responding partners from other countries of the Baltic Sea Region. If they can provide valuable input for this project, may we include them in the next phase?

## 15. Additional information

(max. 1.000 characters incl. spaces)





### **Your account in BAMOS+**

Please remember that to officially submit your application you need to access our electronic data exchange system BAMOS+. More information about the process of applying for your account in BAMOS+ you will find here:

<https://interreg-baltic.eu/gateway/bamos-account>