



## **Interreg Europe HoCare PROJECT - PGI01388**

“Delivery of Innovative solutions for Home Care by strengthening quadruple-helix cooperation in regional innovation chains”

# **ACTION PLAN**

**IDERAM Business Development Institute of the  
Autonomous Region of Madeira  
Portugal**



**March 2018**



## INTRODUCTION

Interreg Europe HoCare project (PGI01388, <https://www.interregeurope.eu/hocare/>) tackles the challenge of ageing population and the related opportunity for new potential innovations in home care. It's overall objective is to boost generation of innovative Home Care solutions in regional innovation chains by strengthening of cooperation of actors in regional innovation ecosystems using Quadruple-helix approach.

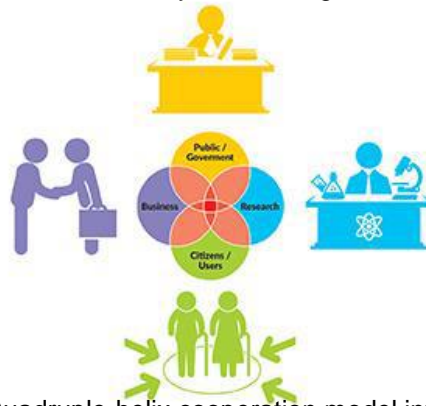










Figure 1 - Quadruple-helix cooperation model involving 4 helixes:  
Business, Research, Public/Government, and Citizens/Users

Quadruple-helix is an innovation cooperation model in which users (citizens), businesses (industry), research actors (academia) and public authorities (government) cooperate in order to produce innovations. They work together to co-create the future and drive structural changes far beyond the scope of what any one organization or person could do alone. "Compared to triple-helix model, this model "encompasses also user-oriented innovation models to take full advantage of ideas' cross-fertilisation leading to experimentation and prototyping in real world setting", - European Commission, Digital Single Market, Open Innovation 2.0: <https://ec.europa.eu/digital-single-market/en/policies/open-innovation>

HoCare project has run extensive international exchange of experience process to reach various levels of improvements - both strategical level improvements (by governance improvement of relevant Operational Programmes supporting R&I – their strategic focus and management practices) as well as practical level improvements (by support of transfer of high quality projects financed through these Operational Programmes) supporting high quality projects, instruments' efficiency and partially also wider usage of available instruments in partner countries.

One Action Plan has been prepared by every partner of HoCare project. The objective of the Action Plans is to provide details on how the lessons learnt from the project's cooperation will be implemented in order to improve the Policy Instrument identified by each HoCare project partner in the Application Form. This document specifies the nature of the actions to be implemented, their time frame, the players involved, the costs and funding sources per region.

## Project Partners

1	Nicosia Development Agency (ANEL)	 CY
2	Development Centre of the Heart of Slovenia	 SI
3	Business Agency Association	 BG
4	National Institute for Research and Development in Informatics	 RO
5	Lithuanian Innovation Centre	 LT
6	National Healthcare Service Center	 HU
7	IDERAM Business Development Institute of the Autonomous Region of Madeira	 PT
8	DEX Innovation Centre	 CZ

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## Part I – General information

Project: Delivery of Innovative solutions for Home Care by strengthening quadruple-helix cooperation in regional innovation chains (PGI01388)

Partner organisation: IDERAM Business Development Institute of the Autonomous Region of Madeira (PP7).

Other partner organisations involved (if relevant): N/A

Country: Portugal

NUTS2 region: Região Autónoma da Madeira

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### **SPERO (SLOVENIA):**

This GP was identified, with potential for transferability, by the following stakeholders:

- Health Service of the Autonomous Region of Madeira (SESARAM);
- High School São José Cluny (ESSJC).

Despite the interest expressed by our stakeholders, we did not have a favorable response from the responsible of this GP, and it was even mentioned that he was already in another project and do not have availability for the SPERO project.

Considering this answer we **exclude** this GP for the purposes of transferability.

### **Carer Support (Romania):**

This GP was identified, with potential for transferability, by the following stakeholder:

- Social Security Institute of Madeira (ISSM);

Despite the interest expressed by our stakeholder, we never receive an answer from the platform owner (Maggioli) to the questions made. He just received general clarification from the Romanian partner. It was also told us that the solution is still in development, both in terms of content and commercial terms.

Considering this we **exclude** this GP for the purposes of transferability.

### **Incentive systems:**

The Incentive system to entrepreneurship in the Autonomous Region of Madeira was recently changed to include the activity in home support with the objective of promoting the development of new innovative ideas in this area of activity.

We also intend to change the others incentive systems in order to include the activity in homecare.

## Part II – Policy context

- The Action Plan aims to impact:
- Investment for Growth and Jobs programme
  - European Territorial Cooperation programme
  - Other regional development policy instrument

Name of the policy instrument addressed: Operation programme Madeira 2014-2020

## Part III – Details of the actions envisaged

### ACTION 1 – WEBNURSE (HUNGARY)

Solution: Support informal caregivers in daily care and nursing tasks through an online portal (<http://www.webnurse.eu/>) with training videos and other sources of information tailored to their needs.

- Support caregivers to carry out day-to-day tasks;
- Prevent situations of exhaustion and physical injuries;
- Provide professional help for the performance of volunteer work;
- Make everyday tasks easier through an easy-to-search database;
- Develop and improve the capacities of informal caregivers.

1. **The background** (please describe the lessons learnt from the project that constitute the basis for the development of the present Action Plan).

The objective of HoCare project is to boost delivery of home care innovative solutions in regional innovation chains by strengthening of cooperation of actors in regional innovation system using Quadruple-helix approach and the aim is to do it by improvement of relevant Structural Funds thanks to the international policy learning. These improvements at strategic level will be complemented at policy level inspired by policy learning and good practice exchange inside HoCare partnership.

Quadruple-helix is an innovation cooperation model or innovation environment in which users, businesses, research actors and public authorities cooperate in order to produce innovations. HoCare aims to (1) improve OP Madeira14-20 at strategical level (by management or strategic focus improvements of OP Madeira14-20) as well as to (2) improve its practical level (by support of submitting more and high quality projects to OP Madeira14-20 for innovation financing from innovation actors).

The “Structural funds programme” in Autonomous Region of Madeira, Operational Programme Madeira 14-20, has as priority supporting R&I.

The “regional innovation ecosystem in Home Care R&I” provides a view of the regional innovation ecosystem in Home Care R&I including a general description overview of the ecosystem followed by a list and a description of the most important projects carried out already and most significant actors in all 4 helixes of quadruple-helix cooperation approach – formal and informal providers of health care, businesses, research and public institutions – who might work together to drive new innovations in Home Care.

**Attitude of main R&I actors from all 4 helixes towards using quadruple-helix model based R&I cooperation**

The informal health care providers and elderly care recipients are fully available to cooperate in quadruple helix R&I cooperation. From the first stakeholders meeting we were able to have information that state this availability. Also it was identified all of the good things that each organization does, and there are common problems identified namely:

- lack of money to empower the services needed in the region;
- Lack of resources – more funds needed ;
- Difficult access to homes;
- The region needs home health care each time more specialized;
- More need for specialized training for health providers;
- Customized services are needed then standard;
- Creation/recruitment of a health care providers inside each local area and not from outside;
- Creation of 3rd sector network involving all 3rd sector organizations.

This approach using quadruple-helix is reflected in HoCare project through our Multi-Stakeholder group. The engagement of the local stakeholders through the regional multi-stakeholders, several meetings were organized in Madeira Island offered the opportunity for draw the local situation, as well for identifying Good Practices in Homecare for transferability.

Through the exchange of experience process of the project, all partners identified several Good Practices from their region which were presented in the 3 International Thematic Workshops. One GP promoted by the Hungarian partner entitled “Webnurse” attracted the interest of the Portuguese partner and theirs stakeholders. Were made several contacts with the owner of this GP: Hungarian Charity Service of the Order of Malta (HCSOM).

The Hungarian Charity Service of the Order of Malta (HCSOM) provides various services in the field of elderly and disabled care, as well as health care. As HCSOM truly promotes quality ageing at home, so it has been seeking innovative tools to support informal carers in their everyday care and nursing tasks by way of launching and running an online internet portal ([webnővér.hu](http://webnővér.hu)) containing video training materials and other information sources tailored to their needs. The WebNurse as a pilot project (through implementation, development and its maintenance is managed by the project team of HCSOM assigned to this task. The professional background of the site is partially also provided by HCSOM's own staff. Besides several external experts have been involved in content development webdesign, programming, filming) and updating the website. Special emphasis is put on obtaining feedback from target groups, elderly people, elderly care institutions, professionals, as well as the members of HELPS project. Building on these reflections HCSOM attempts to make the site even more useful and user friendly. Users' feedback means a lot has been and will be incorporated in the future development of the site.

Informal carers are of crucial importance in promoting independent, quality domestic life of elderly and/or disabled people (in some cases for sick children or adults). Informal carers providing home care hardly get any practical support in Hungary. Regarding simple care tasks (like feeding, personal hygiene) or more difficult errands (like treating decubitus or changing diapers), there was no simple, easy-to-access training material (including audio-visual elements), which could be offered to informal carers as a basis source of support.

Support informal carers in their everyday care and nursing tasks by way of an online internet portal ([webnővér.hu](http://webnővér.hu)) containing video training material and other information sources tailored to their needs: supporting carers in carrying out their day-to-day tasks, preventing burn-out and physical injuries, providing professional help to carry out voluntary work, making every day errands easier by way of an easy-to-search database, and building up and enhancing capacities of informal carers. A new service has been developed for informal carers, basing the content and format of the portal on feedback from target groups, including elderly people, elderly care institutions and formal healthcare provider professionals. All were part of both user-centred design for the portal development, as well as its testing through user acceptance testing (UAT).

This GP was identified, with potential for transferability, by the following stakeholders:

- Health Service of the Autonomous Region of Madeira (SESARAM);
- Social Security Institute of Madeira (ISSM);
- High School São José Cluny (ESSJC).

The lessons learnt were:

- Skills development, knowledge development, home care service support systems updated and efficient;
- Continuous training systems for continuous learning. It uses an online platform to disseminate training content to informal care providers, offering various advice and levels of support;
- Possibility of integration with other systems improving health and home care;
- Platform on line, easily access, with technical content in the form of video, which allows to obtain knowledge and technical specifications to improve the performance of caregivers in the provision of care to homeless people;
- The project demonstrates that, this need seems to be common / transversal at European level (Portugal, Romania, Hungary) and, that the professionals / providers it is addressing show openness to this type of content and knowledge.

### **What are the GP project strengths?**

WebNurse is a unique initiative (not only in Hungary), and it provides an easy to access and easy to understand, instant support for informal carers. It is a source of information that can easily be updated, extended and tailored to the users' needs.

### **What are the key weaknesses of the GP project?**

Informal carers (as they are informal) are an extremely hard-to-reach target group both during planning and then the evaluation of the invention. Therefore the needs on which this GP has been built could not have been assessed with the involvement of many target group member. The same way, the evaluation of the usefulness and effectiveness of the GP cannot be efficiently measured and monitored.

## **2. Action** (please list and describe the actions to be implemented)

For this action to be succeed is necessary to:

- Partnership between the main public actors in home care;
- Proper adaptation of contents and proper language translation as well with the needed socio-cultural adaptation;
- Validation of contents;
- Specialized human resources;
- Identification of the needs at regional level that can be supplied by this GP;
- Creation of a multidisciplinary team with agents from the various players to validate the needs and plan of action;
- Formal definition of the consortium's requirements, objectives and financing / training sources;
- Development of the solution adapted to the regional reality, monitoring, testing with users and corrections, if requires software development.

At this stage, the Social Security Institute of Madeira is in contact with the Hungarian partner responsible for the Webnurse platform, to analyze the possibility of transferability of the platform to the context of the Autonomous Region of Madeira, free of charge and with a proper translation into Portuguese. At the same time, this Institute is analyzing the possibility of partnerships with other social agents for the implementation of this project in the Autonomous Region of Madeira.

So, it is important to maintain contact with the partner, allowing us to translate into Portuguese and we can also, if necessary, sign an agreement for the dissemination and use of the same platform.

The implementation of this GP will only be possible after a detailed analysis of the GP and depends on several factors, namely the legal issues to its transferability, the necessary partnerships, the costs involved and the existence of financing, situations that are also being analyzed.

See more at: <http://www.webnurse.eu/>



**3. Players involved** (please indicate the organisations in the region who are involved in the development and implementation of the action and explain their role)

The partners who showed interest in the implementation of this GP were: Health Service of the Autonomous Region of Madeira (SESARAM), Social Security Institute of Madeira (ISSM) and High School São José Cluny (ESSJC).

Health Service of the Autonomous Region of Madeira by proximity to the population, Social Service of the Autonomous Region of Madeira for the provision of home care of a practical nature in their daily life and proximity to their respective caregivers (formal and informal) and Nursing Schools in the improvement of the videos developed and creation of new ones.

**4. Timeframe**

At this stage, setting the deadline is difficult to quantify, since we are still analysing how this GP will be transferred: translation of the contents of the platform into the Portuguese language or Software development.

If the transferability of this GP implies only the translation of the contents of the platform into the Portuguese language, situation that is being analyzed with the partner of Hungary, between 6 months and 1 year.

If software development is involved, it may imply more time and bigger costs, which may hinder the transferability of this GP.

**5. Costs** (if relevant)

In analysis.

- Possibility of free access. Availability of the partner in assigning for free all the project already developed.
- The existence of an online platform, of practical teaching to the caregivers, is an added value since it does not need its initial development.

But it is expected cost with the time of the human resources involved in these partnerships, translation of the contents of the platform into the Portuguese language, development of software, if necessary, cost with the creation of specific formative content (videos) and costs with the implementation of the plan training.

**6. Funding sources** (if relevant):

The Managing Authority is analysing the framework of this project in the Operational Program of the Autonomous Region of Madeira.

Without funding reduces the chances of transferability of this GP.

**ACTION 2 – ITHEALTH PROJECT (based on the GRACE, SPERO, PSIPROF and WEBNURSE GP)**

**7. The background** (please describe the lessons learnt from the project that constitute the basis for the development of the present Action Plan)

Portugal, as many of the others HoCare partners, is still coping with the introduction of the Quadruple Helix approach. Although there is openness between the majority of the entities to talk and work together, in practice this isn't happening at a level it should be.

The HoCare project has had the benefit of gathering in Madeira several of the main regional actors from the four sectors (SMEs, Public, Academic and Informal Carers) and foster the discussion about the local needs on

the topics of health, home care and informal carers.

Several international GP were analysed, including the ones that IDERAM submitted and interest shown by several of the actors in transferring these or creating new ones.

The following GP were praised by the regional stakeholders:

- WebNurse
- SPERO
- E-FALLS
- GRACE
- PsiProf

The stakeholders believe that these GP fit most of the needs that are underlined in Madeira and that they could complement each other. Since there are significant differences between the identified GP and the needs that are to be addressed are quite vast, the stakeholders decided that the best action plan would be the creation of a consortium that would research, develop, test and deployed in Madeira as part of a new R&D project.

This project would address the following needs:

- a. Formation/education of informal carers;
- b. Centralized tech platform that combined information's of patients, nurses, doctors, carers, administrative, emergency services, families;
- c. Monitoring of remote patients or people who need some sort of care – as a prevention action and fore more effective reply in emergency situations;
- d. Telemedicine solution for consultations and registry;
- e. Promotion of independence of elderly and active well-being;
- f. Increase of collaboration and communication between regional stakeholders;
- g. Position of Madeira as an E-Health player and increase of Health-related tourism.

The project will strictly follow a Quadruple Helix phase, specially during WP1 – Requirements definition – in which every stakeholder will identify their current and future needs and all together through combined diagrams and processes define the final requirements of the platform and monitor devices but also during WP4 – Test Pilots – in which the solution will be deployed in selected home cares, health centres and hospitals for validation.

The following SWOT analysis has been written as an outcome of the first stakeholder's project meeting.

Strengths:

1. The project combines all the major health-players in Madeira as well as top IT SMEs and Academics;
2. There's already some work done through the regional GP Grace and Psiprof;
3. All stakeholders are eager to take the project ahead and motivated
4. There are EU regional funds that could easily finance the project
5. There is political support for this project

Weaknesses:

1. Stakeholders don't have much experience with the Quadruple-Helix approach;
2. Access to EU funds needs call and proposal, process which can easily take more than 6 months;

Opportunities:

1. Links of the regional SMEs and Academics/universities with international R&D Centres can boost the development;



2. Health Tourism is growing in Madeira which could help validation with patients and users with different cultural contexts, not just people who live and were born in Madeira/Portugal;
3. Sensors are becoming extremely more precise nowadays which could increase the efficiency and added-value of the monitor device.

**Threats:**

1. Difficulty in attracting top international researchers to Madeira – which is an Outermost Region of Europe – despite local university being a good source of Engineers;
2. If EU regional funding is not approved, the several stakeholders most likely won't be able to support all the costs making the project inviable.

**8. Action** (please list and describe the actions to be implemented)

On the 16th March, the regional stakeholders gathered for the national HoCare event and discussed what the action plan for this project could be. There were several approached on how the project could go ahead but it tuned out to be reduced to two, both co-related with the regional EU funding scheme that would support such a project.

IDERAM as the responsible entity for managing European funds in Madeira proposed “ProCiência2020” (which as also a GP submitted in HoCare) as the most suitable scheme for this effort/project. After an initial analysis, the stakeholders established two possible ways that should now be analysed in-depth in order for a decision to be made:

1. A new SME is created having as shareholders other regional IT firms (such as WowSystems which was responsible for the Grace and Psiprof projects) and this company submits to the Prociência2020 call in order to obtain the needed financial support. Other stakeholders, being the majority public entities, would participate in the project but not as direct beneficiaries. They would contribute with requirements definition, some expertise and serve as test pilots of the platform and devices on their own institutions. A R&D Centre could participate directly in order to fulfil the scientific research requirements of ProCiência2020 and increase the added-value of the project;
2. A consortium with all the stakeholders being direct beneficiaries would be created and this consortium would propose to ProCiência2020. Every stakeholder would be able to directly participate in the project and allocate human resources but they would also need to cover the 15% of the non-financed part of the project – which could be tricky for some of the public institutions.

**9. Players involved** (please indicate the organisations in the region who are involved in the development and implementation of the action and explain their role)

IDERAM Business Development Institute of the Autonomous Region of Madeira (as an Advisor for the funding schemes and for monitoring the Quadruple-Helix approach)  
WowSystems Lda. (SME)  
Psiprof Clinic Unipessoal Lda. (SME)  
M-ITI Madeira Interactive Technologies Institute (R&D Centre)  
Regional Health Service of Madeira - SESARAM (Public health actor)  
Institute for Administration of Health and Social Affairs - IASAUDE (Public health actor)  
Social Security Institute of Madeira – ISSM (Public institution)  
S. José Cluny Higher Education Nursing School - ESSJC (University)  
Dilectus (SME)

**10. Timeframe**

Next steps will include the decision by the stakeholders of the best model for this project from the two available options. This is expected to be made by the end of April 2018.

Afterwards, partners will prepare a submission to the ProCiência2020 call. The submission process is expected to be concluded by July 2020. Analysis of the submission and grant proposition should take around 4 months, making it possible to know a final decision about the financing and viability of this project by the end of November 2018, with signing December 2018.

Project would start on January 2019 and end December 2020 – 24 months.

The project is divided into Working Packages as follows:

WP	Activity	Duration	Indicative Time-plan
1	Project Management	24 months	January 2019 – December 2020
2	Requirements Definition	3 months	January 2019 – March 2019
3	Platform Structure and Design	4 months	February 2019 – May 2019
4	Development of platform and devices	16 months	April 2019 – August 2020
5	Test pilots, validation and bug fixing	8 months	May 2019 – December 2020
6	Scientific Dissemination and promotion	24 months	January 2019 – December 2020

#### 11. Costs (if relevant)

The new project's budget is allocated to the above mentioned WPs as below. Includes needed equipments/materials, human resources, indirect costs, travel, marketing, third-party expenses, IP protection.

WP	Activity	Budget
1	Project Management	€52.000
2	Requirements Definition	€13.000
3	Platform Structure and Design	€43.500
4	Development of platform and devices	€273.000
5	Test pilots, validation and bug fixing	€85.600
6	Scientific Dissemination and promotion	€50.000
	<b>TOTAL</b>	<b>€517.100</b>

#### 12. Funding sources (if relevant):

The project will be financed by the ESI Funds of the programming period 2014-2020 for the Madeira Region (M1420 Programme) specifically through the grant call ProCiência2020

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**Date:** 28/03/2018

**Signature:**

**Stamp of the organisation (if available):** \_\_\_\_\_