Innovative solutions for Home Care by strengthening quadruple-helix cooperation in regional innovation chains

Região Autónoma da Madeira, PT
REGIONAL REPORT

Elaborated in the framework of the additional activities' implementation (IE 5th Call)

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Contents

A) BACKGROUND

Interreg Europe HoCare project aimed at boosting the delivery of innovative home-care solutions. In line with the smart specialization strategies of the partner regions, the project contributed to the optimization of Structural Funds investments to strengthen regional innovation systems in the health care sector by fostering quadruple-helix cooperation in regional innovation chains.

The HoCare partnership is constituted by the Nicosia Development Agency (ANEL) - CY, Development Centre of the Heart of Slovenia - SI, Business Agency Association - BG, National Institute for Research and Development in Informatics - RO, Lithuanian Innovation Centre - LT, National Directorate General for Hospitals (former National Healthcare Service Center) - HU, IDERAM Business Development Institute of the Autonomous Region of Madeira - PT and DEX Innovation Centre - CZ.

The four-year project (01/04/2016-31/03/2020) was evenly divided into 2 phases. Phase 1 focused on capacity building through interregional exchange of experience. Core of the learning journey was sharing of 33 good practices (available at: https://www.interregeurope.eu/hocare/) with replication potential in other regional settings to improve the innovation delivery policies in the e-health sector. The HoCare project's main outcomes were specifically: 8 Regional Situation Analyses, 59 policy learning events (incl. 3 International Thematic Seminars and Workshops), 3 Joint Thematic Studies, 3 Policy Transfer Reports and regional Action Plans transforming the project learnings into implementation-oriented actions to improve the regional ecosystem by empowering citizens and contributing to a healthier society. Phase 2 concerned the monitoring of the Action Plans' implementation by the European Structural and Investment Funds (ESIF) Managing Authorities targeting the improvement of their regional Policy Instruments (ESIF OPs). Aim was to improve the strategic focus, management, or implementation of new projects of 8 ESIF Policy Instruments (PIs) to positively impact the regional utilization of a total of €22,500,000 for the benefit of the socio-economic sector (citizens & SMEs).

The extension of HoCare project was requested in the framework of IE's 5th Call for proposals to map the response of regional/national policies to the impact of COVID-19 crisis in the subject of the project (delivery of Innovative solutions for Home Care by strengthening quadruple-helix cooperation in regional innovation chains). As a result, the objectives set for this new initiative are:

- to further exchange experiences on the way the crisis impacts the issue addressed and on possible measures to face and recover from the crisis,

- to further improve regional development policies for better facing and faster recovering from this unprecedented situation.

Exchange of experience continues based on the flow of the HoCare project 1st Phase's activities to address the impact of the crisis on the topic of the project. To achieve this, a specific set of activities is planned to be implemented that (among others) includes the preparation of 1 regional report per PP to map the impact of the COVID-19 crisis on the project's subject.

B) OBJECTIVE

Through the present Regional Report information is collected from the region about a) the status of Home Care R&I and b) the status of quadruple-helix cooperation in R&I. The information included in Partners' Regional Reports as well as the identified Regional Good Practices will be the basis of the new exchange of experience process on the way the crisis impacts the issue addressed and on possible measures to face and recover from the crisis. Once again, the objective is to further improve regional development policies for better facing and faster recovering from this unprecedented situation.

C) METHODS / RESOURCES TO COLLECT INFORMATION FOR THE REPORT

➢ Meetings / Workshops with stakeholders
➢ Desk research
➢ Meetings / Workshops with the Managing Authority of your Policy Instrument
➢ Participation in regional events relevant to the subject
➢ Relevant recent reports, articles, strategies, or any other relevant document

D) TIPS & RECOMMENDATIONS: HOW TO PROPERLY FILL IN THE REPORT

✓ This report is a follow-up on the Regional Situation Analysis Report prepared by your organization during the implementation of the initial HoCare project (accessible at: https://www.interregeurope.eu/hocare/library/ in the folder entitled: "SEMESTER 2: WP3")

✓ Provide information to all questions (in the exceptional case of a not relevant question, or no available information, use "N/A")

✓ Be as specific as possible

✓ Provide as much quantitative information as possible

✓ Use references where required

✓ Be sure that the information you use is accurate and qualitative

✓ Respect the maximum limit for characters allowed per section

✓ The language of this report is English. Specific parts might be required to be filled-in in your national/regional language.

1) POLICY INSTRUMENT[1]

Please provide the information required for the Policy Instrument you identified, selected and used in the new HoCare Application Form in the framework of the IE 5th Call for proposals:

Name of the Policy Instrument addressed (in English)	Madeira Operational Program 2014-2020 "Madeira 14-20"
Name of the Policy Instrument addressed (in regional language)	Programa Operacional Madeira 1420
Name of the relevant thematic Priority Axis (supporting R&I activities)	Axis 1: Reinforce research, technological development and innovation
Specific objectives of the given Priority Axis	• Reinforcement of the research and innovation (R&D) infrastructure and the capacity to develop excellence in R&D and the promotion of centers of competence, namely those of European interest (FEDER). • Promotion of investment by companies in innovation and research, the development of links and synergies between companies, R&D centers and the higher education sector, in particular the promotion of the development of products and services, technology transfer, social innovation, and co-innovation and public interest applications, in stimulating demand, in networks, clusters and open innovation through smart specialization, support for applied technological research, pilot lines, early product validation actions, advanced production capabilities and first production, in particular with regard to it concerns essential enabling technologies and the diffusion of technologies of general interest (FEDER).
Geographical Coverage (National, Regional, if other please explain)	Regional (Madeira)
Managing Authority	IDE, IP-RAM
Is this the same Policy Instrument (PI) your organization addressed during the implementation of the initial HoCare project? (Yes / No)	Yes
If 'Yes', please explain why you have chosen to still	IDE, IP-RAM participation during the HoCare project resulted on an Action Plan as a final output. This Action Plan predicted the execution of two major

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[1] **Policy instrument**: a means for public intervention. It refers to any policy, strategy, or law developed by public authorities and applied on the ground in order to improve a specific territorial situation. In most cases, financial resources are associated with a policy instrument. However, an instrument can also sometimes refer to a legislative framework with no specific funding. In the context of Interreg Europe, operational programmes for Investment for Growth and Jobs as well as Cooperation Programmes from European Territorial Cooperation are considered to be policy instruments. Beyond EU cohesion policy, local, regional or national public authorities also develop their own policy instruments. https://www.interregeurope.eu/help/glossary/#index-P

address the same PI? (max. 1000 characters)	projects that would bring together stakeholders from private SMES, R&D Centers and public actors, following the quadruple-helix approach recommendation. Both projects were set in pace and financed via the Prociência2020 grant scheme and IDR's public grant schemes. Both of these schemes are entirely supported by the Operational Program of Madeira14-20, therefore the influence of HoCare and the current extension, still reflects on this PI and is largely influenced by it and as we'll see further ahead, the projects are still being executed. Furthermore, the current EU framework is still valid and being executed while the new framework (21-27) is being prepared and approved. This last one should still take a while to be concluded (at least not before the end of 2022) and therefore the HoCare extension wouldn't apply much to it as it still doesn't exist. However, please note that there are still some common points between the PIs and Frameworks and that HoCare findings are being considered on some aspects and points for the preparation of the new Madeira 21-27.
If 'No', please explain why you have chosen to change your PI? (max. 1000 characters)	N/A

2) OTHER RELEVANT POLICY INSTRUMENTS

Please provide information about any other relevant existing Policy Instrument(s) in your region (that support Home Care R&I and/or quadruple-helix cooperation)

Name of the Policy Instrument addressed (in English)	REACT-EU (Recovery Assistance for Cohesion and Territories of Europe)
Name of the Policy Instrument addressed (in regional language)	REACT-EU (Assistência à Recuperação da Coesão e Territórios da Europa)
Name of the relevant thematic Priority Axis (supporting R&I activities)	Axis 13 - Economic Recovery, Public Health Response and climate transition in the context of the COVID-19 pandemic; Axis 14 - Promotion of Employment and Social Inclusion as a result of the economic and social effects of the Covid-19 pandemic (ESF)
Specific objectives of the given Priority Axis	Axis 13 has the specific objective to establish a set of interventions related to the mitigation and direct combat of Covid-19 in the healthcare system. It also aims for the stimulus of energy efficiency within public infrastructures by promoting the continuous improvement of performance within those. Axis 14 aims to facilitate job creation and maintenance due to the economic and social constrains the pandemic has provoked in the regional market. It also aims to support businesses by providing and assuring liquidity and capital of the companies to face the constrains during pandemic and by

	supporting the digital transition and connectivity in companies as well as the formation of human resources on this topic.
Geographical Coverage (National, Regional, if other please explain)	Although REACT-EU is obviously an EU-level Program, the execution and policy definition is much left to national and regional-levels. Therefore, influence of REACT-EU measures for the HoCare project purpose, geographical coverage is regional
Managing Authority	IDE, IP-RAM
Please explain why this Policy Instrument is relevant to Home Care R&I and/or quadruple-helix cooperation? (max. 1500 characters)	REACT-EU is a new PI that has emerged due to the social and economic impact of the COVID-19 pandemic. It reinforces and is developed side-by-side with the OP M14-20 P. We do feel that this initiative is by itself relevant for the HoCare extension as several measures and projects were influenced and supported by the REACT-EU and given the HoCare extension was also justified due to the Covid19 impact.

*Please copy – paste the table above in case you would like to report any additional PIs

3) THE HOME CARE RESEARCH & INNOVATION ECOSYSTEM

Briefly describe the ecosystem in Home Care R&I in your region including the most significant main actors, infrastructure, resources, available public / private supporting services, networks, platforms and events) (max. 5000 characters)

As seen during Phase 1 of the HoCare project, Madeira's Home Care Research & Innovation Ecosystem has been greatly boosted by the EU funding programs that IDE, IP-RAM has been managing on the last 8 years. This has been made in accordance to the RIS3 Intelligent Specialization Strategy of Madeira and also the Economic and Social Development Plan of Madeira (PDES).

As main actors we can point out public and private entities and even companies, as below:

Public Actors:
IDR, IP-RAM as the top-level authority of the Operational Program Madeira1420 for the public sector;

IDE, IP-RAM as the managing authority of the Operational Program Madeira1420 for the private sector;

SESARAM (Regional Health Service), the main public entity in Madeira responsible for the Health Care system in the Region. It's an integrated unit for the provision of health care, functioning as an articulating device, on the basis of complementarity, of health centers and hospitals and as an instance of resource planning, being responsible for the provision of care to individuals, families and social groups;

Social Security Institute, as the main entity that provides support and coordinates all policies regarding formal and informal home care in Madeira;

IASAÚDE, as a public authority for Health policies. Its mission is to ensure the management of financial and human resources, professional training, facilities and equipment, information systems and technologies of the Regional Health Service and direct administration services in the field of SRS.

Universities/Faculties:
Madeira University, as the main academic player and provider of university degrees in the Region. It has a specific faculty for the Health and Nursing Areas;

Escola Superior de Enfermagem São José de Cluny, a private-owned University dedicated to Nursing and Home Care. It has a strong background on R&D projects and initiatives

R&D Actors:
ARDITI – The Regional Agency for Research and Innovation. Under it's "umbrella", ARDITI supports several regional labs such as ITI/Larsys or NeuroRehab as the main Labs who are involved on R&D projects within the health and home care areas;
Startup Madeira – as the regional association that promotes entrepreneurship. It has been supporting new companies on the health and home-care solutions providers.

Private Actors:
There are several SMEs and private entities that have been cooperating for the Home Care Innovation Ecosystem. The list below gives you a better glimpse of the most active and recently involved in Home Care projects.

WOWSystems – an ICT SME that has been developing solutions on health, well-being and home care area;
S4i – Another ICT SME that mostly develops solutions on telemedicine and assistance;
Psiprof – A local psychology clinic that provides online consultations and is currently participating on a home-care related project;
Causa Social - Association for the Promotion of Citizenship – is a private Institution of Social Solidarity that has been developing several initiatives related to Home Care.

As previously said, the R&D activities in Madeira on the Home Care area are greatly supported by the Policy Instrument Madeira 1420 Program with the main Axis Priority 1 "Strengthening Research, Technological Development and Innovation" and "*Investment Priority 1.b: Promoting business investment in innovation and research, developing links and synergies between companies, R & D centers and the higher education sector, in particular promoting product and service development, technology transfer, social innovation, and co-innovation and Applications in the public interest, in the stimulation of demand, in networks, clusters and open innovation through intelligent specialization, support to applied technological research, pilot lines, early product validation actions, advanced production capacities and first production, especially in Technologies and the diffusion of technologies of general interest*".

Several grant schemes have been made available for stakeholders, ranging from R&D schemes such as. "PROCIÊNCIA2020" to Covid19 related program "APOIAR.PT".

The main issues on the ecosystem that have been properly identified on the HoCare project, were directly related to the lack of communication and collaboration of the several stakeholders. Many really didn't knew about each other activities and projects and seldomly developed activities on the same research and support areas.
IDE, IP-RAM has tried to boost the quadruple-helix approach and promoted several meetings and studies between parties in order to get them to cooperate together. This is not a quick and easy task as much reflects

from internal burocracies and policies that some of the institutions (specially the public ones) have to deal with and respect.

Nevertheless, progress has been made and there are currently several identified good practices that IDE, IP-RAM is submitting to HoCare extension phase for validation and analysis.

What are the main changes/improvements in relation to what was described in the Regional Situation Analysis prepared in the framework of the initial HoCare project's implementation? (max. 3000 characters)

The main changes and improvements that we can identify are the following:

1. Raise of awareness on public society and institutions for the home care problems and the need to provide proper support to these;
2. It is objectively clear that the main stakeholders in this sector have been communicating more and better and developing projects together, including science and research and technological development projects;
3. The new RIS3 and the newest version of the Economic and Social Development Plan are taking into account the findings from the HoCare project, giving more support to R&D activities and quadruple-helix approach boost but also taking a special attention and focus on the Health, Well-Being and Home-Care sectors/areas;
4. More and more startups, new companies and new associations are emerging with a focus on telemedicine or home care solutions. Basically, the ecosystem begins to flourish and is now generating new economic results and new solutions on its own, in a self-sustaining way.

Which of these changes/improvements can be identified as an impact of the COVID-19 crisis or as measures the region applied to face and recover from the crisis? (max. 3000 characters)

It's a global fact that Covid-19 crisis boosted and accelerated digital transition processes along the many economic and social sectors. This has helped the Home Care Innovation Ecosystem to develop new projects and solutions to cope with the pandemic.

The REACT-EU initiative is an example of how the public authority repositioned itself to provide immediate support to economic agents but on a strict R&D perspective and after meeting with our stakeholders, we can conclude that Covid19 had a positive impact on the definition and execution of new projects related with the home care and ICT. Also as the new regional strategies and plans were being developd and written during this period, there was a greater sensibility to address and include the home care problematics and the teleassistance solutions needed due to Covid19 pandemic. These statements and evidence directly correlate with points 3 and 4 from the previous section.

However, there is still a long way to go. Several of the stakeholders complained that as soon as Covid19 restrictions started to be lifted up, there was a lack of pressure to adopt ICT solutions as people seemed "tired" on using these. Also, some stakeholders pointed out that despite a better cooperation and collaboration between parties, there's still a very large lack of real involvement between regional stakeholders, some even collaborate more with mainland or international partners than with regional ones. There was also noted a lack of proper infrastructures available for home care. Some stakeholders pointed out that the Government and political decisors could rehabilitate abandoned schools/buildings for this purpose.

4) MAIN REGIONAL ACTORS OF THE QUADRUPLE HELIX MODEL IN HOME CARE R&I

Please provide information about the main formal and informal providers, businesses & business supporting actors, research and public institutions acting in the sector of home health care in your region.

a) Citizens / users helix

Main formal + informal providers of healthcare, elderly care recipients / associations in Home Care R&I (Please list at least 6)		
Name (+ in local language in brackets)	**Website**	**Description of objectives and main activities** (max. 500 characters per line)
Alzheimer's Regional Delegation	alzheimerportugal.org	Created in order to promote the quality of life of people with dementia and their families and caregivers. It has about seven thousand members across the country.
Associação Causa Social	causasocialapc.blogspot.com	Creates the necessary social responses, in order to alleviate the problems of the people who suffer them, reducing the social risks that affect them and promoting their integral development.

*Please add new lines in case you would like to report any additional actors

b) Business helix

Main businesses and business' supporting actors in Home Care R&I? (Please list at least 6)		
Name (+ in local language in brackets)	**Website**	**Description of innovative solutions provided in the field** (max. 500 characters per line)
WOWSystems	www.wowsystems.pt	WOWSystems is an ICT company that provides software development and R&D services on many sectors such as tourism, health and well-being.
BClose/S4i	www.bclose.pt	Bclose is a digital company that simply and intuitively aggregates various technological devices in the safety, health, well-being and energy management components in a single software, thus avoiding the use of various software associated with each product purchased. It has been developing R&D solutions for home care
Psiprof	www.psiprof.pt	An online clinic that allows users book and make online psychology consultations and get access to many materials on mental well-being
Dilectus	www.dilectusmadeira.pt	It's an assisted living facility adapted to meet guests' needs and wishes, where they can find the ideal environment that combines the

		comfort and privacy of their own homes with the convenience of hotel services. It has a selected, dedicated, friendly and multidisciplinary staff team, including, of course, medical and nursing support services at disposal 24/7, ready to provide with all the support possibly needed
Atalaia Living Care	www.livingcare.pt	Living Care provides humanized health and well-being care that promotes the autonomy and comfort of users and enhances their quality of life. It's an organization that provides health care and well-being services, inspired by social and family values, increasing the capacity to respond to the needs in long-term health care

*Please add new lines in case you would like to report any additional actors

c) Research helix

Main research actors in Home Care R&I? (Please list at least 6)		
Name (+ in local language in brackets)	Website	Description of relevant research activities (max. 500 characters per line)
ARDITI	www.arditi.pt	With the mission of supporting research and experimental development activities, promoting the dissemination of technology, training and scientific and technical information, as well as actions that contribute to the modernization and development of the Autonomous Region of Madeira
StartupMadeira	www.startupmadeira.pt	Regional association that promotes entrepreneurship. It has been supporting new companies on the health and home-care solutions providers.
University of Madeira	www.uma.pt	The main academic entity in Madeira, provides degrees on several areas including health and nursing.

*Please add new lines in case you would like to report any additional actors

d) Public institutions / government helix

Main public actors in Home Care R&I (Please list at least 6)		
Name (+ in local language in brackets)	Website	Description of relevant activities (max. 500 characters per line)
SESARAM (Regional Health Service)	www.sesaram.pt	Provide health care, continued care and treatment, palliative care to the population, namely to beneficiaries of the Regional Health

		Service, through a network of easily accessible services, with a high level of technical and social efficiency that allows the achievement of health gains; Develop research and training activities, both in its services and in specific units; Guarantee technical and logistical support for the development of health programs
IASaúde	www.iasaude.pt	IASAÚDE, IP-RAM's mission is to ensure the management of financial and human resources, professional training, facilities and equipment, information systems and technologies of the Regional Health Service and direct administration services in the field of SRS.
Social Security of Madeira	www.seg-social.pt/instituto-de-seguranca-social-da-madeira	Its mission is to manage social security schemes, recognize rights and fulfil obligations arising from social security schemes, manage debt recovery and carry out social action, as well as ensure the application of international security instruments social in Madeira

*Please add new lines in case you would like to report any additional actors

Briefly describe the main changes to the main actors' synthesis in relation to what was described in the Regional Situation Analysis prepared in the framework of the initial HoCare project's implementation and their relevance to the COVID-19 crisis impact (max. 2000 characters)

The main changes that one can verify on the position and activities of these stakeholders since the initial HoCare project and after the impact suffered by the Covid-19 crisis are mainly:

1. The stakeholders are much more active in seeking cooperation and collaboration, common grounds for the development of new R&D projects and solutions and making use of the available funding schemes;
2. There's higher awareness of what is being developed regionally on this sector. Many meetings were held and this really help the boost of new synergies and proposals;
3. The Covid-19 made some of these stakeholders to really "race" and adapt ICT solutions internally. It also made them reorganize and think about out-of-the-box solutions to meet the Covid restrictions. This is mostly true in home care visits that were suspended presentially.

5) MAIN INNOVATIVE REGIONAL PROJECTS / RESEARCH INITIATIVES IN THE SECTOR OF HOME HEALTH CARE

Please provide information about significant projects or research initiatives in Home Care R&I implemented in the last two years (2020-2021). Please give emphasis to projects / research actions initiated as an impact of the COVID-19 crisis or as a response to face and recover from the pandemic's unprecedented situation.

Name of the Project / Research Initiative	**ETC - Research and Development of Tech Solutions for Home Caregivers**
Short description (main objectives, main actions) *(max. 1000 characters)*	The ETC project is a quasi-experimental study, in which it seeks to assess the added value arising for the mental health and well-being of informal caregivers of semi-dependent users, through the pre-assessment of the use of technological devices. wearables for remote monitoring of parameters associated with the physical and mental well-being of the person cared for and the caregiver, as well as the design of new technological experiences and adaptation and redesign of existing ones with a view to increasing the effectiveness and frequency of use of the same and, respective comparison and evaluation of the impact in the mental well-being of the informal caregiver.
Participating Organizations	WOWSystems, Psiprof, ARDITI, Madeira University
Does the Project / Research Initiative promote the Quadruple-Helix Approach? If yes, please explain how. (max. 1000 characters)	Yes. The project brings together SMEs from ICT and psychology with the main R&D Lab "ITI" (part of the regional entity ARDITI) as well as the Madeira University. Each one contributes on specific activities and tasks within the project and the outcome and R&D results are publicly available
Total budget and source of funding	538.475,54€ (public funding: 392.313,89€, private funding: 146.161,65€)
Main results of the activities (max. 1000 characters)	More than 20 home caregivers were included on the prototype testing and their feelings towards the experience and stress was monitored. The majority (~86%) has considered that the wearable and the new mobile app have helped them cope with stress and better monitor their loved ones while away. Users found quite useful the feature to receive an automatic notification in case the platform detected any significant change in hearth rate, sleep, activity and oxygen. The Covid-19 asymptomatic test monitoring feature was also praised. Some users and caregivers needed a bit more time to get used to the wearable and daily usage but with the right support team and a couple of hours spent explaining how to use side-by-side, the whole testing group achieved to use the platform and wearable for more than 30 days (the total period of testing). The team managed to get several international scientific papers published with the outcome of the project too. The project also produced new materials to help caregivers on how to provide the best care to the loved ones. These materials were provided via the app and website.

Website / Link or contact details for more information	www.ajudaracuidar.com
Please explain the relevance of this Project / Research Initiative with the impact of the COVID-19 crisis (max. 1000 characters)	One of the main difficulties was the Covid-19 pandemic. As the team was dealing with a quite vulnerable target population, the project suffered a delay. Testing involved close contact between team and users and only when these were fully vaccinated could the team proceed with proper full testing. However, it also represented an opportunity to enhance the prototype. As the wearable manufacturer was also conducting trials regarding detection of Covid19 using the same wearable, the team introduced a specific Covid19 monitoring feature that could potentially detect asymptomatic cases. By registering the Heart Rate Variability during sleep combined with oximetry values during night, one could detect that "something" could be going-on if a significant variation was detected within the last 8 days by comparing those values patterns.

Name of the Project / Research Initiative	**Projet: +Cuidador – Articulation between health and social area with the involvement of academia and the community**
Short description (main objectives, main actions) (max. 1000 characters)	Currently, the increase in the number of elderly people is an unavoidable reality. Thus, the professions related to the elderly care will have the greatest growth in the next decades. The elderly should live as long as possible in their homes, so the "Aging in Place" approach is necessary to promote their quality of life. In this context, are the family caregivers prepared for this increasingly complex care? Are health professionals well prepared to respond to new home care needs? Will there be an effective articulation between health and social stakeholders? Therefore, was created the project: +Cuidador with the stakeholder Santa Casa da Misericórdia da Calheta. This community intervention projet is co-financed by the European Social Fund. The aim is to support informal (family) and formal (home helpers) caregivers, training them to care for the elderly at home and also for that own self-care. Several needs evaluation, planning and interventions (group or individual) are being carried out over 18 months. The impact of the interventions and participation of all participants on this project are being investigated. The undergraduate nursing students actively participate in all project activities, under the professor's guidance and supervision. Thus, they develop skills at community context, learn to identify the real needs of caregivers, plan interventions and assess their impact. Soft skills are also developed, such as teamwork, innovation, problem solving and communication with civil society. We know from research that one of the great needs of ICs is the lack of time and lack of support in care, which is why a student grant was created to accompany the elderly at home while their family members participate in group training.
Participating Organizations	Escola Superior de Enfermagem São José de Cluny, Santa Casa da Misericórdia da Calheta
Does the Project / Research Initiative	The project follows a quadruple-helix approach as it brings together end-users from the society with researchers from the Nursing School and their training

promote the Quadruple-Helix Approach? If yes, please explain how. (max. 1000 characters)	students, alongside institutional and formal support from a social-security institution such as Santa Casa da Misericórdia da Calheta.
Total budget and source of funding	Co-financed by the European Social Fund: 118.370,53€.
Main results of the activities (max. 1000 characters)	Throughout the project, several evaluations have been carried out measuring its impact on the various stakeholders. Through an online questionnaire, students (n=40) report improvements in their skills (mean 1.2 in a 1-10 points scale) and a high satisfaction with this experience. Informal caregivers report a reducing of their difficulties in caring for their relatives, as well as professional home helpers.
Website / Link or contact details for more information	geral@scmcalheta.pt www.scmcalheta.pt
Please explain the relevance of this Project / Research Initiative with the impact of the COVID-19 crisis (max. 1000 characters)	The project aims to give proper training to home caregivers, enabling them to better provide help and support to their loved ones. Many times during Covid, caregivers were left alone and resist to transfer their relatives to health centers or to the hospital in order to address specific clinical immediate issues due to the fear of getting infected by Covid while going to those locations. The project therefore shows how cooperative measures in the home care sector can really capacitate caregivers and enable them to provide proper assistance when the context or specific situations – such as the Covid19 pandemic – do not allow them to reach out to professional help or such is not feasible/might create a side-risk to the patient.

Name of the Project / Research Initiative	**S-ALERT Citizens**
Short description (main objectives, main actions) *(max. 1000 characters)*	As the Covid19 infection numbers increased and the pandemic spread, the Regional Health Authorities of Madeira started getting tangled with too much contact-tracing and paperwork for sickness leaves, etc. In order to make the whole process much more efficient and reliable for the population and therefore decreasing response times, decreasing stress in the infected population and their respective contacts and what they should do. Therefore, a tech platform named S-Alert was developed with the following goals: - Communicate in a easier way the changes in law and covid-19 measures; - Make more efficient the emission of all paperwork related to work absences and sick leaves; - Release admin and medical staff from these kinds of duties to more urgent matters. The platform works via web and SMS. As soon as a citizen tests positive, that contact is automatically registered and he received a link with the test result and what to do. This leads to a website in which he can fill all the data for sick leaves, report symptoms and get the paperwork digitally processed. A security PIN sent by SMS guarantees the security during all the process. After 5 days

	reporting if he/she has symptoms, the system automatically informs the citizen if he is considered recovered or if he should continue to isolate himself.
Participating Organizations	IASaúde, SESARAM
Does the Project / Research Initiative promote the Quadruple-Helix Approach? If yes, please explain how. (max. 1000 characters)	The project didn't promoted a full quadruple-helix approach but just partial. It brought together two public stakeholders from the Health Sector alongside their on-fields teams (doctors, nursers, managers) and directly connected to the Regional Government and society as end-users.
Total budget and source of funding	Regional Budget Funding (amount unknown)
Main results of the activities (max. 1000 characters)	The platform has been launched early 2022. More than 15.000 contacts have been traced and 5.000 positive cases situations addressed. Given this spectrum, more than 100.000 SMS have been delivered with tokens (bear in mind that a positive case receives an SMS per day at least during 5 days so he can report symptoms). This allowed that waiting times in hospital and health centres reduced dramatically as the population no longer queued to report and get documentation. This was quite useful for home caregivers and people who really felt that going out was a risk due to their own illness, conditions and age.
Website / Link or contact details for more information	http://s-alerta.pt/cidadao/
Please explain the relevance of this Project / Research Initiative with the impact of the COVID-19 crisis (max. 1000 characters)	This project only comes up due to Covid-19 and is a direct reply to the crisis. This good practice correlates with Home Caregivers as it allows them to stay at home, request and get all the needed paperwork and documents related with the illness as well as getting daily monitoring from the health authorities, which speeds up the process in case the patient worsens, etc.

Name of the Project / Research Initiative	**Bclose – Tele Assistance and remote vital signs control**
Short description (main objectives, main actions) *(max. 1000 characters)*	The project is divided into two fundamental components, the first being focused on remote Teleassistance support to homes with people in need and the vulnerable to remotely support them and a second component in the process of optimisation and support to health professionals in IPSS clinics or in social support services. We developed a study and included good practices of self-measurement of biomedical parameters, while promoting vigilance in the population in a preventive and educational manner while instilling good regional health practices for each individual. The individual will now have the ability to measure and retain his complete clinical/ medical information in the comfort of their home, in order to provide citizens with new diagnostic tools and beneficial actions for improving their health.

	At present the medical and social support organizations still base their actions on manual processes such as physical measurements, the control of medicines, and the required daily care, among others.
	The Bclose solution introduces a digitization of processes, facilitating the operation of professionals during their daily support to those in need. Alarms and reminders introduce support for nurses during their daily routines.
Participating Organizations	S4i Lda., Atalaia Living Care - Madeira and Montepio Residências Lisboa
Does the Project / Research Initiative promote the Quadruple-Helix Approach? If yes, please explain how. (max. 1000 characters)	The project involves a quadruple-helix approach as ICT SME is involved as well as private and public home care providers. At last, it's publicly financed through grant scheme managed by public actor IDE, IP-RAM. Also on the field, the project is basically a multidisciplinary organization between the technological staff and the various clinical staff (doctors and nurses).
Total budget and source of funding	455.555,76€ (Public funding – FEDER/Regional Govt.: 318.958€ and Private funding: 136.597,76€)
Main results of the activities (max. 1000 characters)	The project is successfully refining clinical processes in biomedical data collection at Atalaia Living Care in Madeira with an initial study group of 40 individuals with a projection in 2nd Quarter of 2022 reaching 370 people. At Montepio Residencias, the project expects to reach 100,000 home subscribers for vital signs monitoring and good health practices during the next 2 years. This project started in January 2022 and has a 4-year timescope, therefore evidence of success and main results aren't yet much possible
Website / Link or contact details for more information	https://bhealth.bclose.pt/en/main_uk/
Please explain the relevance of this Project / Research Initiative with the impact of the COVID-19 crisis (max. 1000 characters)	The project idea sprung during the Covid19 crisis as a possible needed solution to address remote telemedicine in Madeira, in particular on home care institutions and homes.

Name of the Project / Research Initiative	**Multidisciplinary Team for Home Consultation - New perspectives and new challenges post COVID-19**
Short description (main objectives, main actions) (max. 1000 characters)	This project has set the following goals: Clearance of the number of dependent users who effectively benefit from the Home Consultation, seeking to promote the autonomy and quality of life of users in a situation of dependency, disability or with special support needs; Identification of professionals with greater availability to perform HC, ensuring the intersubstitution of those with limitations in this activity; Promotion of HC in a multidisciplinary team, ensuring the continuity of medical and/or nursing care; Improvement of the medical/nursing intranet portal (creation of specific separator/application for HC management);

	Identification of caregivers (informal), their training and articulation with the multidisciplinary team; Reorganization of the fleet of vehicles allocated to the HC (better management of the fleet and schedules of drivers, as well as acquisition / allocation of vehicles to this activity).
Participating Organizations	Regional Health Service of the Autonomous Region of Madeira - SESARAM, E.P.E.R.A.M.
Does the Project / Research Initiative promote the Quadruple-Helix Approach? If yes, please explain how. (max. 1000 characters)	Yes. Main stakeholders and beneficiaries of the practice: • Patients; • Patients' family; • Multidisciplinary team; • ACES – SESARAM; • Regional Health Secretariat (SRS).
Total budget and source of funding	703.851,85€ (Regional Government Budget)
Main results of the activities (max. 1000 characters)	The busy pace of office practice are the reasons commonly cited for not conducting house consultation. Sporadic visits may indeed interfere with clinical practice and the patient wellbeing. Hence, we found important to develop a systematic approach for planning HC. Most practices will benefit from using HC with patients who have difficulty accessing outpatient facilities. Removing such logistically difficult appointments from the office and performing them in the home setting, as we are trying to define in RAM, may actually enhance clinic functioning and reduce costs in 50%.
Website / Link or contact details for more information	https://sesaram.pt
Please explain the relevance of this Project / Research Initiative with the impact of the COVID-19 crisis (max. 1000 characters)	The COVID19 context has led to significant changes in the way health care units operate, with home visits having a particularly significant impact. The project impact with Covid19 was in order to: • Establish training/training actions of caregivers in order to ensure the resolution of less complex situations, avoiding the displacement of the team at these moments; • Establish moments of participation of all professionals in the visitation with adequacy of the periodicity of consultation of each team member; • Given the orographic conditions of the Region and the existence of hard-to-reach areas, it is important to adapt the vehicles; • In order to optimize the quality of registrations, it is proposed the acquisition of tablets / mobile device enabling registration on time; • Ensure a transition of safe care, with effective dialogue between the professionals of the Hospital and the Health Center, reviewing in particular the ongoing therapy and redefinition of the care plan; • Creation of a protocol with secondary care in the definition of priority criteria after hospital discharge, for short-term programming of this care activity.

6) EXPECTED RESULTS FROM THE EXCHANGE OF EXPERIENCE PROCESS WITH THE HOCARE PARTNERSHIP

Please provide information about potential improvements you would suggest for your Policy Instrument. What kind of information (Management of the Policy Instrument methods, Strategic Focus of the Policy Instrument or New Projects to be implemented through financing from the Policy Instrument) would you be interested to learn from the other HoCare participating regions? (max. 5000)

There are still many areas in which the Madeiran Home Care Innovation Ecosystem can improve. During this extension, IDE IP-RAM has been collecting feedback from the several regional stakeholders, holding meetings with them and presenting the regional good practices, trying to better understand how their own projects are going and the impact that Covid-19 had on each one of them.

Overall feedback points to several topics that need to be addressed by the PI:

- Better support infrastructure to home care activities and projects.
- Better involvement from R&D entities with the other stakeholders (currently, stakeholders just look for each other in case there's a potential prospect or funding, not simply just as a good daily practice to cope with daily problems and challenges)
- More specific policies for home care support and R&D activities on home caring;
- There are still too many barriers for one to be recognized as an informal home care giver, just too much bureaucracy.

Therefore, IDE IP-RAM aims to get a better insight from what other partners are doing and how they are dealing with these same challenges in order to see if it's feasible to transfer to Madeira those ideas and projects.

The main aim now is to collect that information in order to provide formal data-supported information to political and technical advisors who are currently drafting the new EU framework and support.

IDE IP-RAM would like to collect more info from partners on their Strategic Focus for their new Policy Instruments under the 2027 EU Framework and also regarding any new projects that correlate with Home care givers, ICT and R&D.

7) OTHER INFORMATION

Please provide any further information you consider relevant to this report (max. 5000 characters)

8) AUTHOR

The information included in this report is provided in the framework of the HoCare project's additional activities implemented under the Interreg Europe 5th Call for proposals.

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