

R O S I A

ROSLA

REMOTE REHABILITATION SERVICE FOR ISOLATED AREAS



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 101017606

"This communication/publication reflects only the author's view. It does not represent the view of the European Commission and the European Commission is not responsible for any use that may be made of the information it contains."

INDEX

- WHAT IS ROSIA?
- ROSIA: WHO WE ARE
- ROSIA IS A PCP: WHAT IS IT AND HOW IT IS PERFORMED
- OMC: WHAT DO WE EXPECT TO OBTAIN?
- ROSIA CHALLENGE
- ROSIA NEXT STEPS AND KEYS



WHAT IS ROSIA?

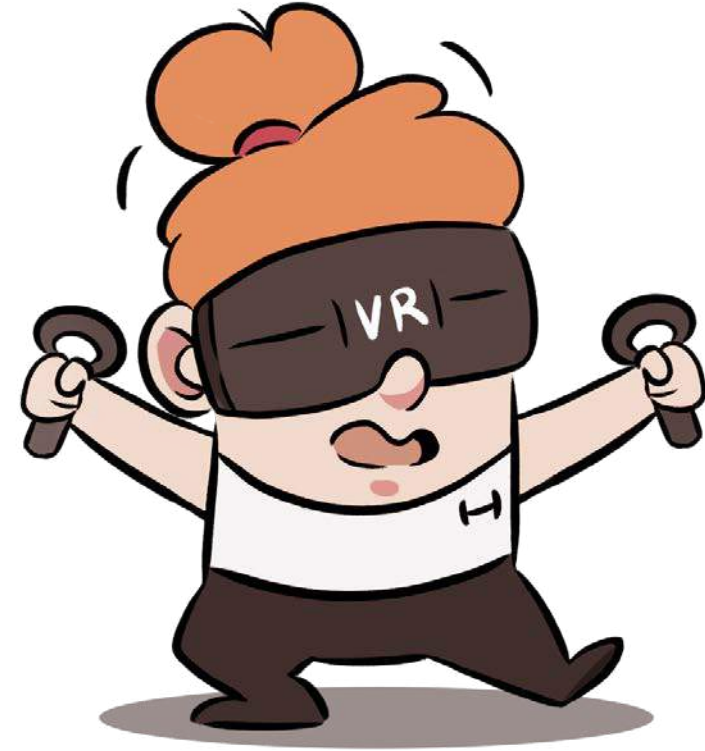


WHAT IS ROSIA?

ROZIA is a European project funded through the Horizon 2020 program, in topic SC1-DTH-14-2020 - Pre-commercial Procurement for Digital Health and Care Solutions and Grant agreement ID: 101017606.

It has an execution period of 54 months, from 1-1-2021 to Jun 30, 2025

ROZIA is coordinated by the lead procurer, IACS from Aragón.



Problem

- **Rehabilitation** has **been clinically validated to reduce, and even reverse the impact of some pathologies** like stroke, heart attack, COVID-19 or hip-replacement, which could be dramatic and disabling.
- Rehabilitation is a **long, intensive in clinical resources, demanding, and painful process.**
- Rehabilitation is already **insufficiently used**, and the ageing population is increasing its demand.
- In **remote areas** as **ageing increases so rehabilitation needs do.** But public rehabilitation resources (human and material) are often scarce and inequally distributed in those areas.
- Vendors & innovators seem to face a range of challenges either regulatory, data interoperability, access to develop and test innovations and ability to share data in a safe and ethical way
- Professionals do not have access to instruments that integrate information of the patient , neither to those that allow their adequate follow up nor to the specific resources that he/she may have available

ROSIA solution:

- Supervised self and community care of **rehabilitation at the patient environment**
- Flexible and scalable **value-based model of care**.
- Tailored **integrated care** model.
- **Motivation** by strong implication of the **community** and **virtual coaching** tools.

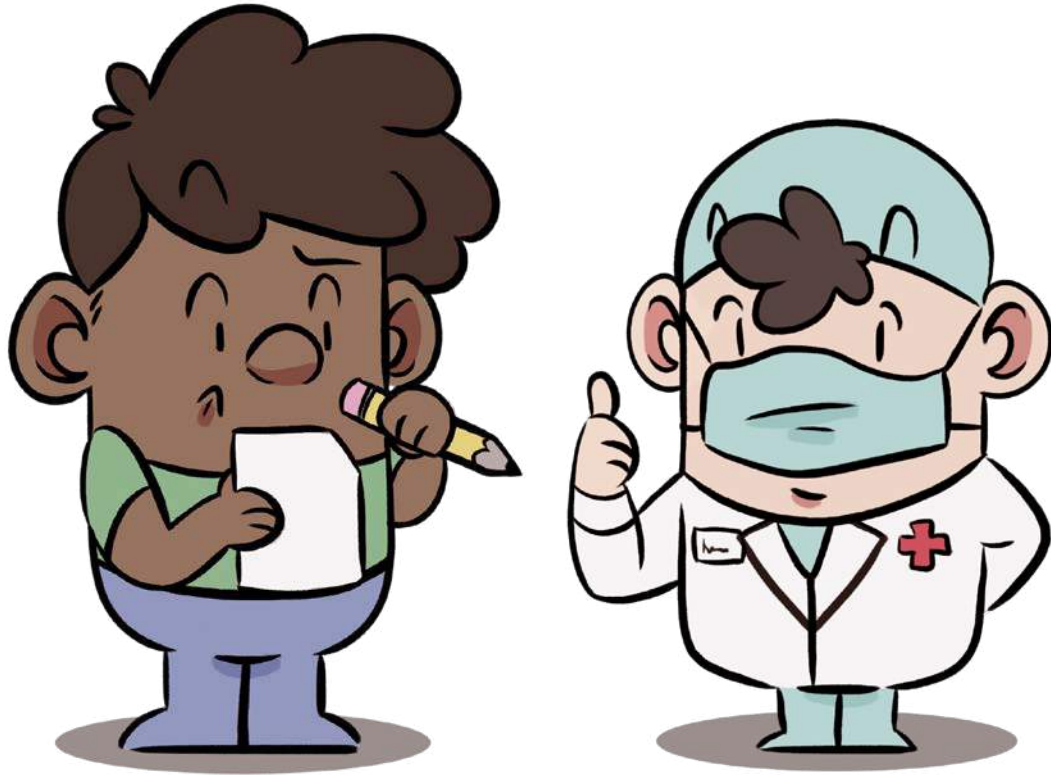
This model of care is intensive in its use of technology:

- Disruptive solutions to be used remotely.
- **Data driven** interventions.
- An **open platform** for **third party solutions** and **timely and effective communication**.

How ROSIA will make it feasible?

Unlocking the current market of disruptive solutions for **home rehabilitation** by the

- Development of the **ROSIA Innovation Ecosystem**.
- Enabling clinicians prescribing certified solutions from the **ROSIA catalogue**.



ROSIA is ready to purchase the design of a **technology-enabled all-in-one service**, flexible enough to adapt to a large variety of European health-care systems, and which allows the full development of the ROSIA model - complementing existing public resources with a public-private partnership

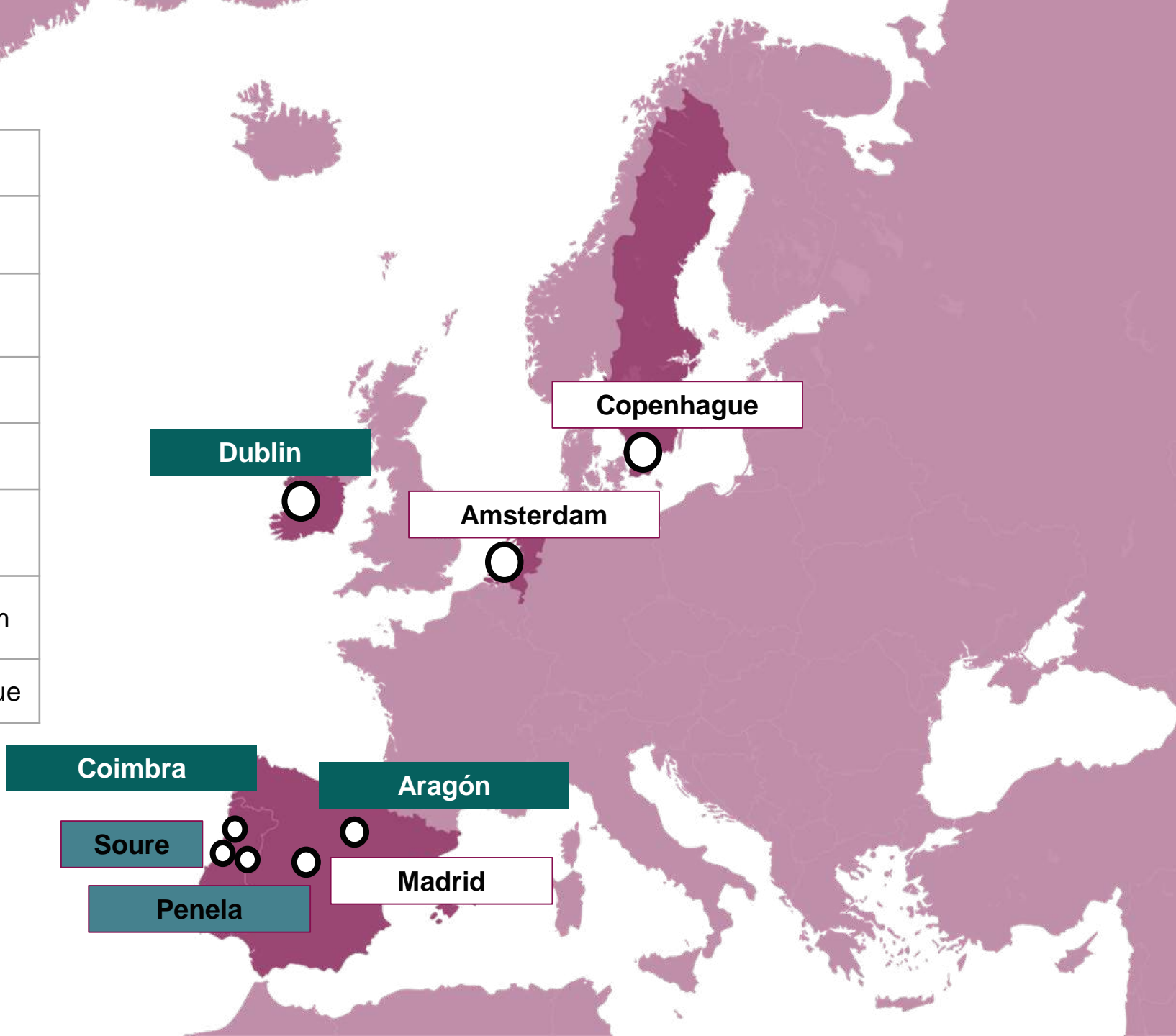
ROSIA will initially focus on seven pathologies:


- Chronic spinal cord injury
- Acquired brain injury
- Pneumology
- Arthroplasty
- Cardio-vascular disease
- Hip fracture
- COVID

ROSIA: WHO WE ARE



| | | |
|-----------------|---|------------|
| Spain |   | Aragón |
| |   | Madrid |
| Portugal |   | Coimbra |
| |  | Soure |
| |  | Penela |
| Ireland |  | Dublin |
| The Netherlands |   | Amsterdam |
| Denmark |  | Copenhagen |



 Procurer location

**PROJECT
COORDINATOR**



Instituto Aragonés de
Ciencias de la Salud
(Spain)

**PROCUREMENT
COORDINATOR**



VALDE
(Spain)

LOCAL VALIDATION



Barbastro Healthcare
Sector
(Spain)



Teruel
Healthcare Sector
(Spain)



Município
de Penela
(Portugal)



Município
de Soure
(Portugal)



Ireland

PROCURERS



Servicio
Aragonés de
Salud
(Spain)



National
Rehabilitation
Hospital
(Ireland)



Centro
Hospitalar e
Universitário
de Coimbra
(Portugal)

KNOWLEDGE PARTNERS



The Decision
Group
(Nederlands)



Instituto
Experiencia
del Paciente
(Spain)



Instituto Pedro
Nunes Associação
para a Inovação.
(Portugal)



Stichting International
Foundation for
Integrated Care
(Nederlands)



PPCN.xyz
(Denmark)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 101017606

ROSIA IS A PCP: WHAT IT IS AND HOW IT IS PERFORMED



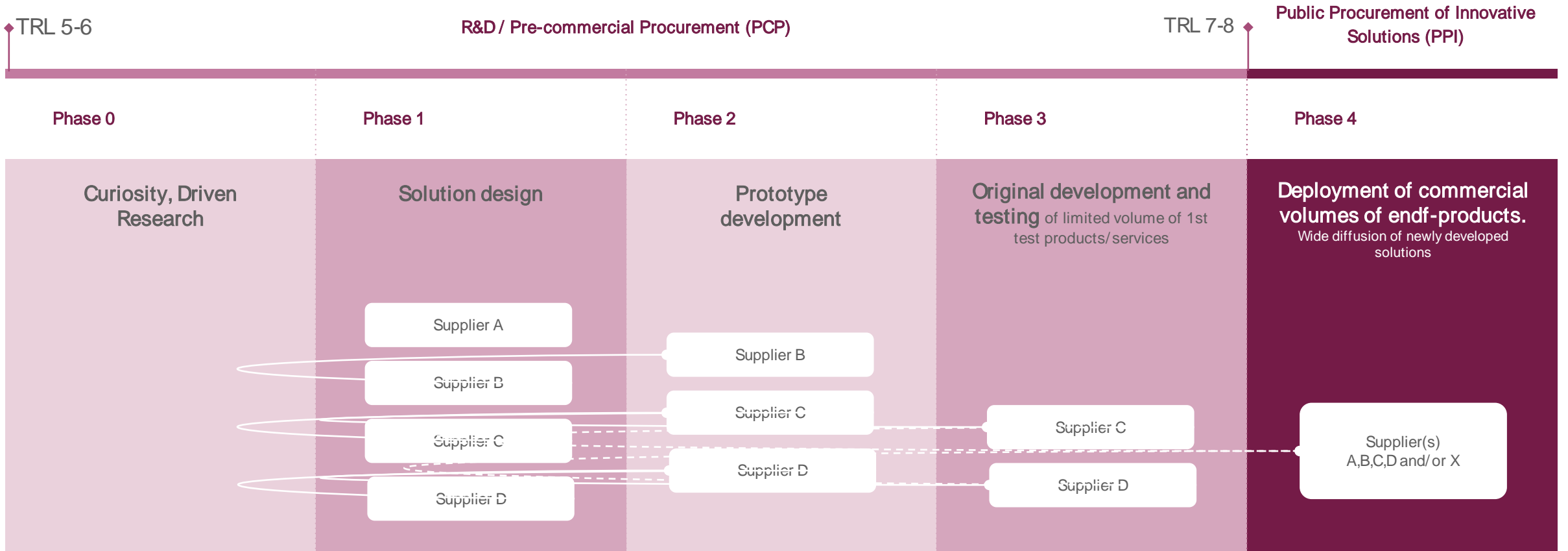
Innovation procurement can deliver solutions to challenges of public interest and ICTs can play a major role in this.

<https://ec.europa.eu/digital-single-market/en/innovation-procurement>

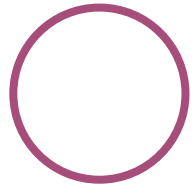
ROSIA Process & PCP Process



R O S I A
REMOTE REHABILITATION SERVICE FOR ISOLATED AREAS



ROSIA PCP Process

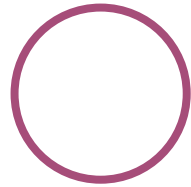


PHASE 0

Preparation STAGE PCP

Cover Prior Information Notice and setup the Open Market Consultation

January 2021-March 2022



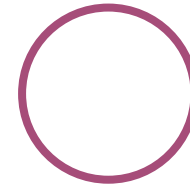
PHASE I

Solution Design

Develop the feasibility study of selected solutions from awarded bidders

September- November 2022

**100.000€
5 potential bidders ***



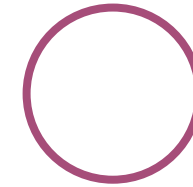
PHASE II

Prototype Development

Prototype development of most promising solutions from Phase I

January- August 2023

**900.000€
3 potential bidders ***



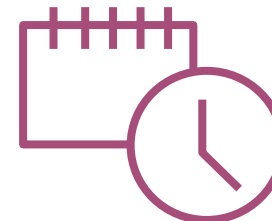
PHASE III

Validation

Validation of best prototyped solutions in real life scenario at each procurer site

October 2023- March 2025

**2.900.000€
2 potential bidders***

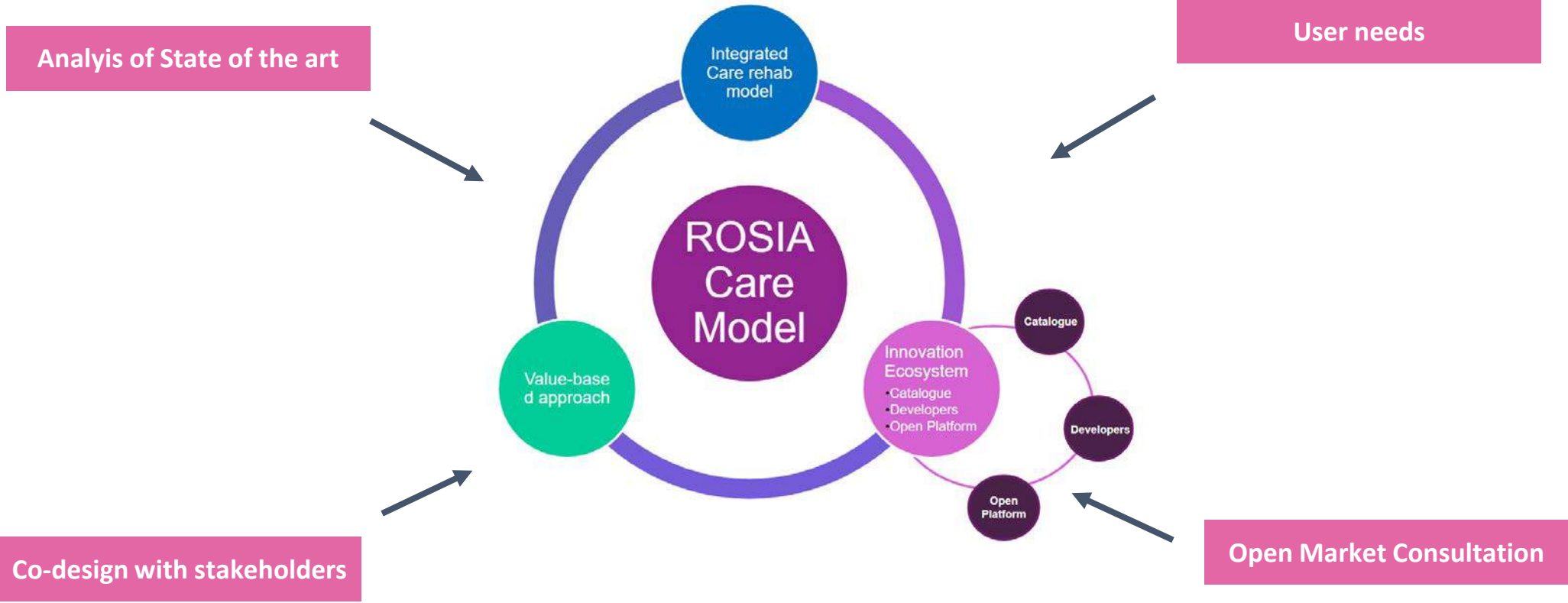


2022/2025

3,9 millions €

* Note: Proposed distribution. It could change. Final one in the call for tender VAT included, if applicable

ROSIA PCP Phase 0



WORK IN PROGRESS

OMC: WHAT DO WE EXPECT TO OBTAIN?



Why?

WHY
the OMC?

- To encourage possible suppliers to participate in Rosia OMC and future PCP!!!
- To inform them about ROSIA PCP opportunities and process
- To open a dialogue about scope, budget, functionalities, requirements, business model, DPI...of the future PCP
- To facilitate matchmaking among suppliers: WE NEED CONSORTIA TO ADDRESS FULLY ROSIA CHALLENGES!!!

Who?

WHO
can participate in the OMC?

How?

HOW
can you participate?

What?

WHAT
are the outcomes of the OMC?

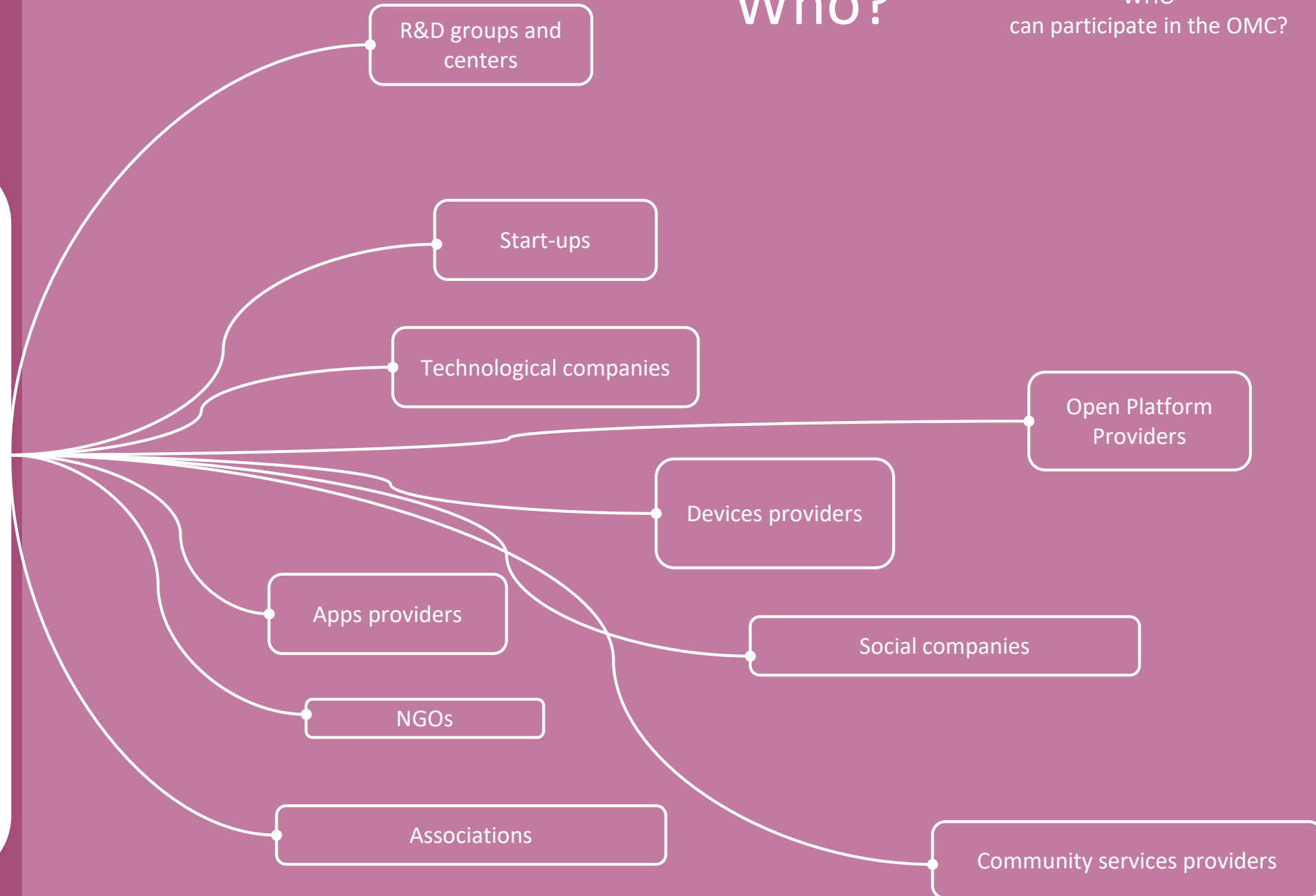
Why?

WHY
the OMC?

- To encourage possible suppliers to participate in Rosia OMC and future PCP!!!
- To inform them about ROSIA PCP opportunities and process
- To open a dialogue about scope, budget, functionalities, requirements, business model, DPI...of the future PCP
- To facilitate matchmaking among suppliers: WE NEED CONSORTIA TO ADDRESS ROSIA CHALLENGES!!!

Who?

WHO
can participate in the OMC?



Why?

- To encourage possible suppliers to participate in Rosia OMC and future PCP!!!
- To inform them about ROSIA PCP opportunities and process
- To open a dialogue about scope, budget, functionalities, requirements, business model, DPI...of the future PCP
- To facilitate matchmaking among suppliers: WE NEED CONSORTIA TO ADDRESS ROSIA CHALLENGES!!!

Who?

R&D groups
R&D centres
Start-ups

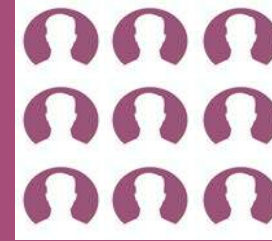
Technological companies
Open platform providers
Devices providers
Apps providers

Associations
NGOs
Social companies
Community services providers

How?

HOW
can you participate?

0



4 PRE OMC
EVENTS

Spain --- 16th June

International --- 25th June

Ireland --- 28th June

Portugal --- 30th June

1



R O S I A
RESEARCH ORIENTED SUPPLY CHAIN INNOVATION

OMC LAUNCHING:
QUESTIONNAIRE

From July 12nd - September
3rd

2



BILATERAL
MEETINGS

September

Why?

- To encourage possible suppliers to participate in Rosia OMC and future PCP!!!
- To inform them about ROSIA PCP opportunities and process
- To open a dialogue about scope, budget, functionalities, requirements, business model, DPI...of the future PCP
- To facilitate matchmaking among suppliers: WE NEED CONSORTIA TO ADDRESS FULLY ROSIA CHALLENGES!!!

Who?

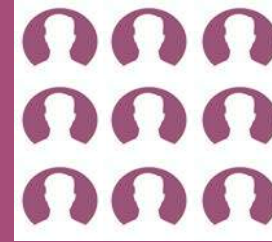
R&D groups
R&D centres
Start-ups

Technological companies
Open platform providers
Devices providers
Apps providers

Associations
NGOs
Social companies
Community services providers

How?

0



4 PRE- OMC
EVENTS

1



OMC LAUNCHING:
QUESTIONNAIRE

2



BILATERAL
MEETINGS

What for?

FOR PROVIDERS:

- Interaction with 3 Rosia procurers to know needs and priorities
- Obtain information about future PCP
- Meeting possible partners or competitors
- Making procurers knowing your entity as a player in the Rosia market

FOR PROCURERS:

- To cross-check and clarify their assumptions for the call for tender
- Obtain new information from the market
- To make potentially interested bidders aware

Confidentiality Clause

Participants will include in the information to facilitate their express consent so that the contracting authority can disseminate their participation and the issues and/or solutions raised in the consultation process.

However, the contracting authority **may not disclose any** technical or commercial **information** that may have been provided by the participants, **which they have designated and reasoned as confidential.**

It is the participants who must identify the documentation or the technical or commercial information that they consider to be confidential, and it is not permissible for them to make a generic declaration or declare that all documents or all information is confidential. Participants may designate some of the documents submitted as confidential.

This circumstance should be clearly reflected (in any form or in the margin) in the document itself designated as such.

ROSIA CHALLENGE



R O S I A

Initial Use case:
Person living with a cardiovascular condition



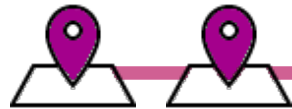
Francisco

- 62 years old
- Living in Bisaurri (Huesca)
- Farmer
- Married (two sons)
- Lives with her wife (59)
- Ex-smoker
- High Blood Pressure (medication)
- Heart attack

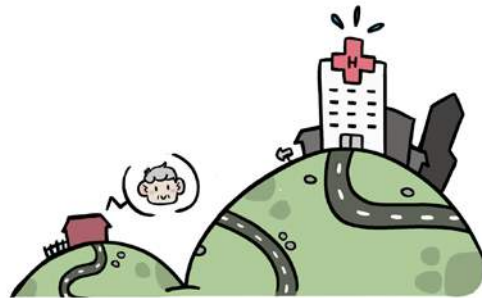


BISAURRI
Home

CASTEJON DE SOS
Healthcare center



3,8 km



98,2 km

BARBASTRO
General Hospital

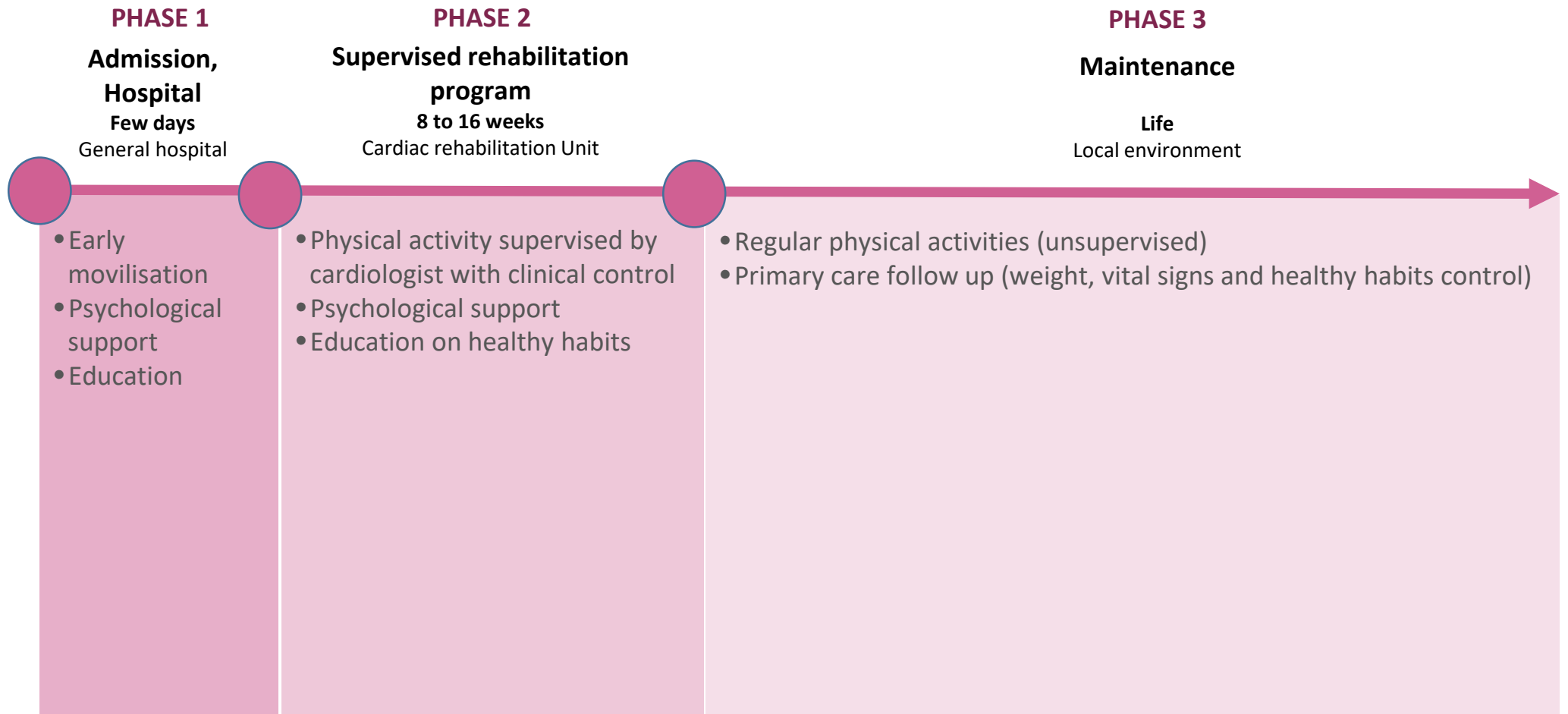


127 km

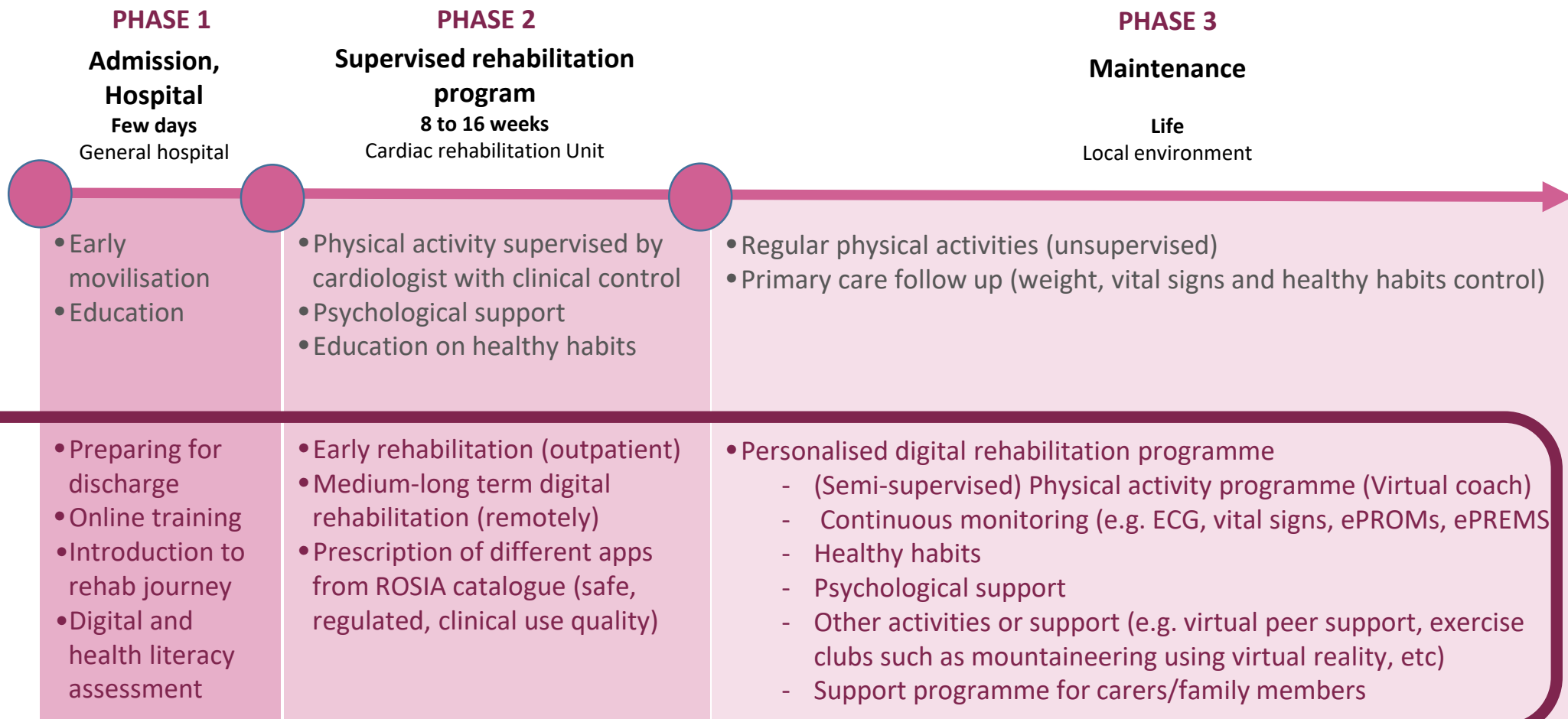
ZARAGOZA
Cardiac Rehabilitation Unit



TRADITIONAL REHABILITATION PATHWAY



TRADITIONAL REHAB vs DIGITAL REHAB PATHWAY WITH ROSIA



ROSIA PLATFORM OF SERVICES AND SUPPORT

The care team can offer different apps, devices or digital tools to support remote digital rehabilitation, such as:

- An intelligent training shirt
- An Augmented Reality device (Smart glasses) with built-in walking exercise (gaming)
- A Remote monitoring app allowing communication via video and messaging; access to a questionnaire to collect ePROMs and ePREMs.
- Other medical devices collecting physical measures are connected via Bluetooth, data is stored in the ROSIA Open Platform and accessible to the care team
 - A smartwatch with BP/HR/HRV/Spo2/Glucose measurement
 - A connected medical weight, scale

VALUE-BASED CARE

- ROSIA improves value for Francisco: **better quality of life, better quality of care, better outcomes**
- ROSIA **lowers total healthcare costs** by the optimization of healthcare delivery and making use of e-health solutions.
- ROSIA engages Francisco in his health management by providing him with insights in the relation between his needs, lifestyle, health status and therapy.
- By making use of smart algorithms, the ROSIA solution becomes a **scalable affordable** concept aiming to increase Francisco's **empowerment** and quality of life at lower costs.
- The care team feels the quality of the care offered to is better using the ROSIA solution by forming an **integrated practice unit**.

ROSIA CHALLENGE

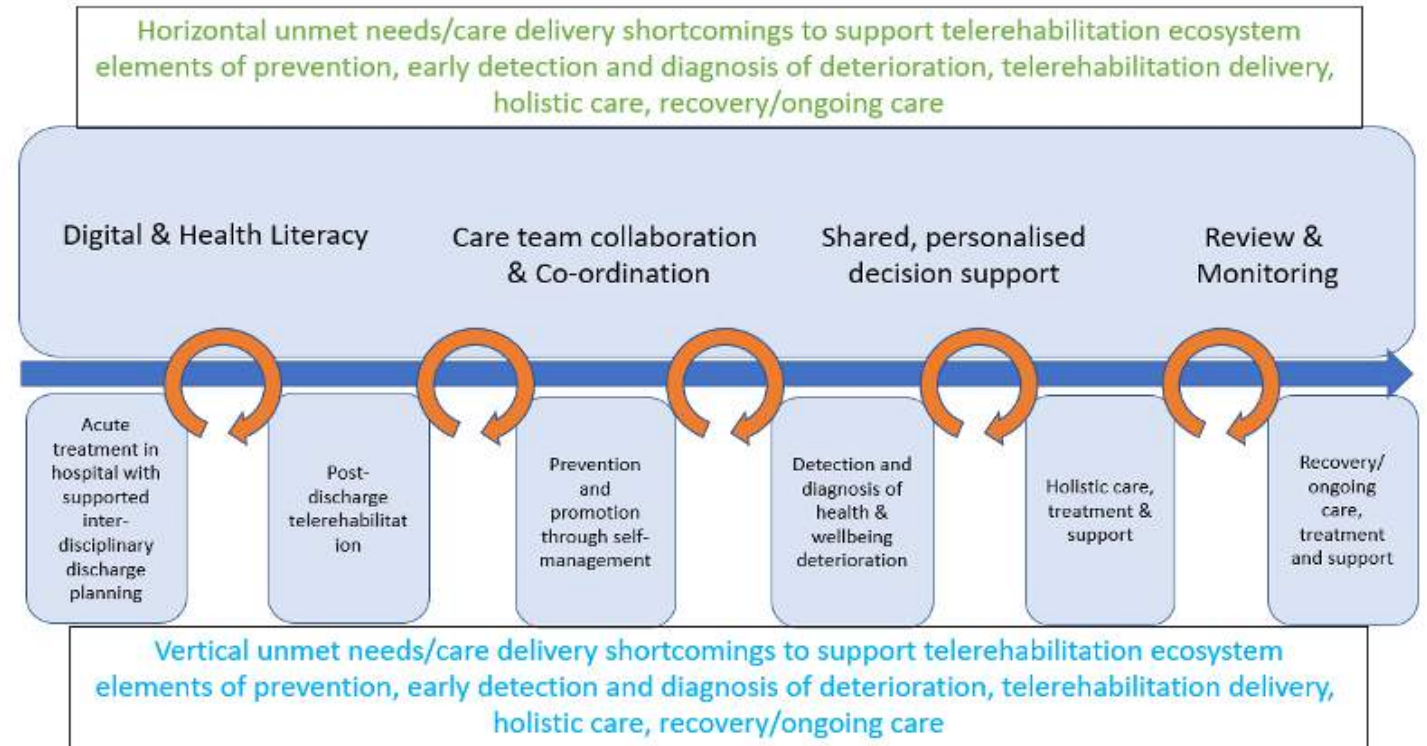
- INTEGRATED CARE
- MOTIVATED AND ACTIVATED PATIENT SUPPORTED BY THE COMMUNITY
- ROSIA TECHNOLOGICAL ECOSYSTEM
- A VALUE BASED MODEL



INTEGRATED CARE



Integrated generic telerehabilitation pathways: from acute sector discharge planning to recovery/ ongoing care



A rehabilitation programme is delivered by an **interdisciplinary team:**

- who requires close cooperation and collaboration
- provides patients with integrated and coordinated care;
- exchange information between the care team members, patient and their caregivers



MOTIVATED AND ACTIVATED PATIENT
SUPPORTED BY THE COMMUNITY



Motivation and empowerment plays a key role in tele-rehabilitation.

Some ways to achieve it:

- **Community** intervention.
- **Personal services.**
- **Virtual coaching.**
- **Personalized advice** based on insight data.



ROSIA CHALLENGE: ROSIA TECHNOLOGICAL ECOSYSTEM





ROSIA CHALLENGE:

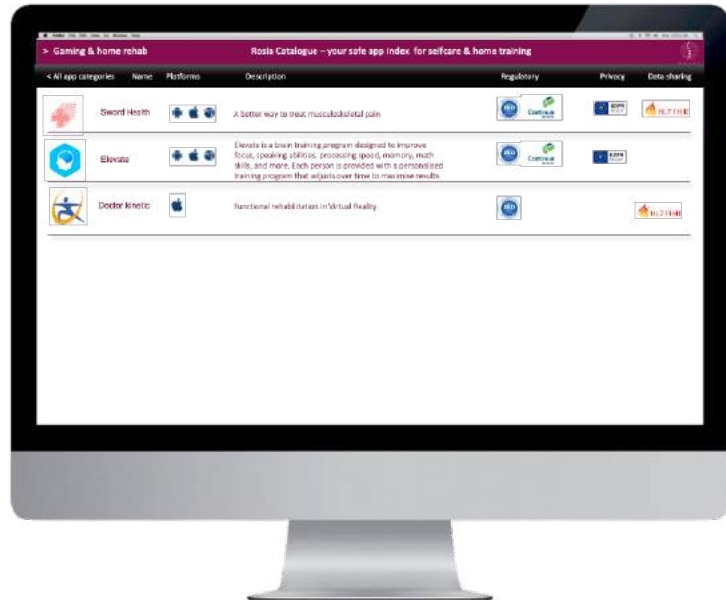
How to create a safe innovative tele-rehabilitation ecosystem & open marketplace that empowers patients and healthcare professionals?



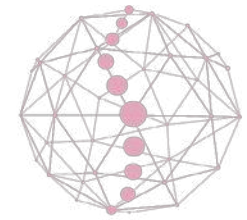
R O S I A

Development of an ICT Innovation Ecosystem for telerehabilitation able to integrate technology from third parties addressing needs of patients, healthcare professionals and caretakers (evaluation, vital signs, training programs, exercises performance, compliance, motivation, broad range of pathologies, interaction with clinicians, devices).

But the ROSIA Catalogue for app & devices is only the tip of iceberg



ROSLA Developer: The development of an architecture to define interoperable APIs, which will allow building up solutions based on existing modules, will aid existing research projects in becoming market solutions. Cooperation with any other related initiatives will be prioritized in order to aggregate demand.

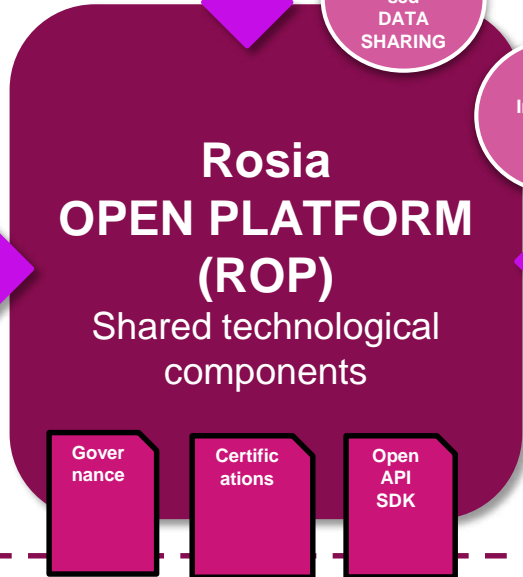


R O S I A
REMOTE REHABILITATION SERVICE FOR ISOLATED AREAS



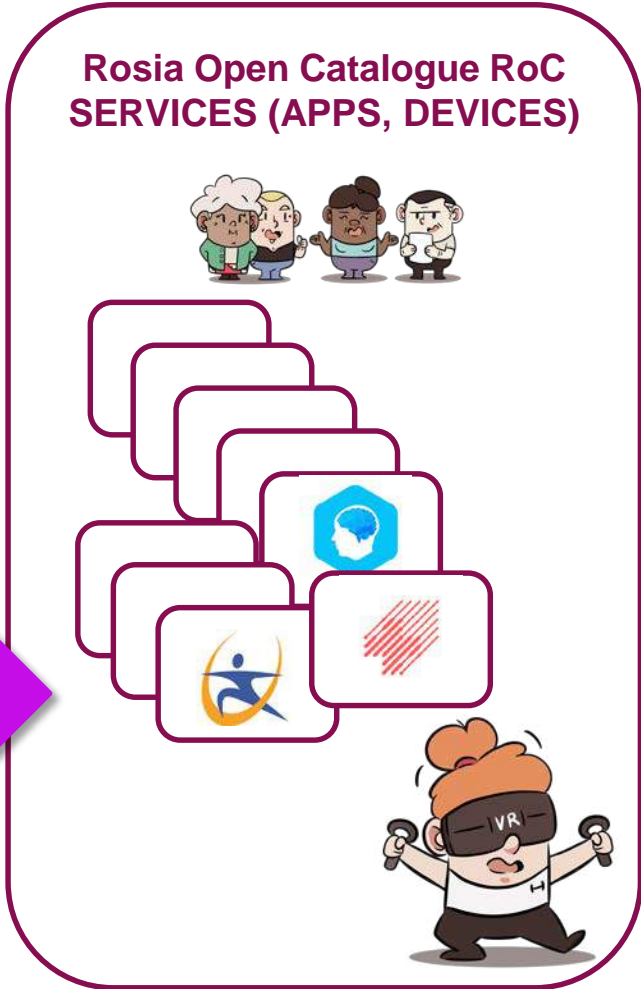
SECURE
Pseudonymi
sed
DATA
SHARING

Individual
Data
Control



Social / community agent 1

Social / community agent 2



The catalogue of Devices and Apps

Examples: Some examples of catalogues could be found in European mhealth hub | Health apps repositories in Europe



Wishlist

That Rosia Open platform is

- built with a high degree of flexibility
- have the ability to share data across sectors and facilitate involvement of patients
- To ensure a high degree of automation
- To facilitate light user interfaces relying on a “heavy” infrastructure
- To support BYOD (Bring Your Own (medical) Device) where feasible
- To have existing EU, national and/or regional infrastructure components as first choice
- To be based on standards
- Not to accept proprietary solutions
- To be developed using proven cloud native platform tools
- to let the citizens be able to share their data for research securely and without being able to be identified
- to give the citizens full control of their data and with whom they share it with



ROSIA CHALLENGE: A VALUE BASED MODEL



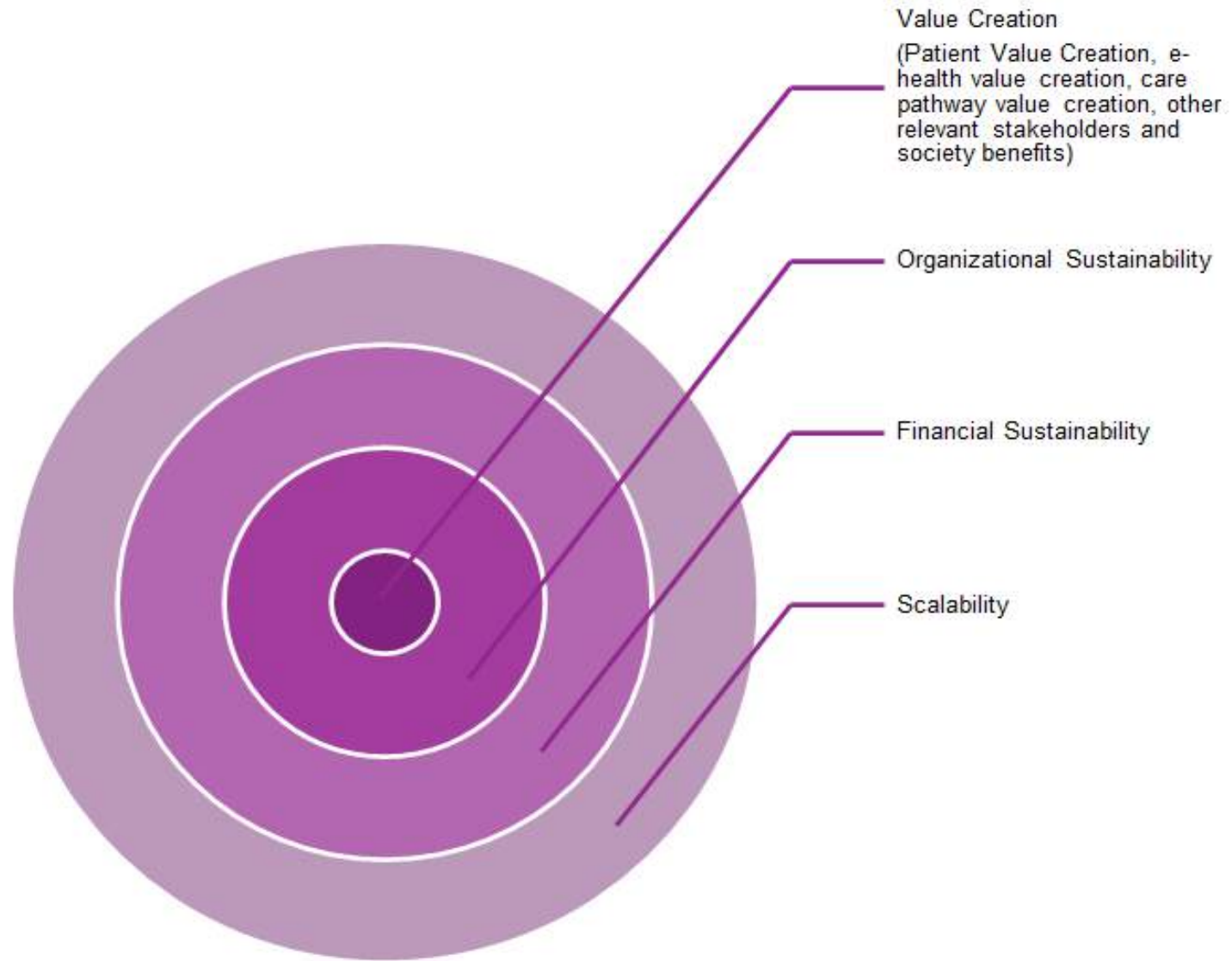
Achieving value for patients is the overarching goal of health care delivery, with value defined as the health outcomes divided by costs.

In the Rosia Value Based (RVB) Model, the value depends on results, not inputs, and it is measured by the outcomes achieved, not the volume of services delivered. Nor is the value measured by the process of care used; process measurement and improvement are tactics but not substitutes for measuring outcomes and costs.

The solutions formulated according to the RVB Tele-rehabilitation Model will result sustainable thanks to three components:

- Their capacity to **generate and create value** according to the above definition.
- Their **organizational strengths and capabilities**.
- Their **financial plan and their potential to scale up**.

The four RVB Model pillars



ROSIA NEXT STEPS AND KEYS



ROSIA PARTNERS WILL LAUNCH OMC ON JULY 12TH

What Interested Entities will have to do?

Complete OMC questionnaire

Add complementary documentation (not compulsory)

BEFORE 3rd SEPTEMBER

**Next pre-OMC informative events
could be a good showcase!**

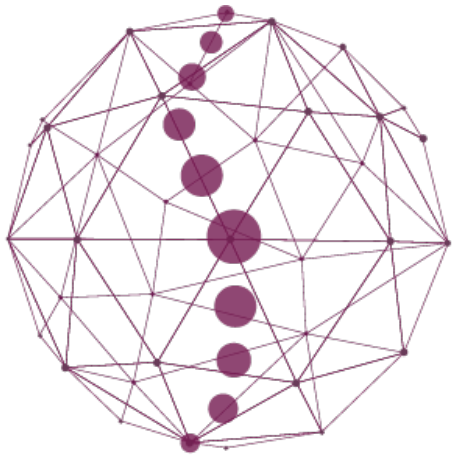
**From July 12, a matchmaking space
will be available in ROSIA website**

**Search for possible good allies for
the tender phase!**

We are looking for integral solutions.

In September, ROSIA partners could schedule some
bilateral meeting with those who have answered
the questionnaire

**BY THE END OF OCTOBER ROSIA
PARTNERS WILL PUBLISH THE OMC
REPORT**



R O S I A
REMOTE REHABILITATION SERVICE FOR ISOLATED AREAS

If you are interested in presenting your particular solution during the OMC Information event please fill this **FORM**. Once you register, you will receive all the information you need regarding setting up your presentation (depending of the number of presenters, speakers will have between 5 and 10 minutes for their presentation. **Registration for presenters closes** five days before launch day.

OMC Information Events

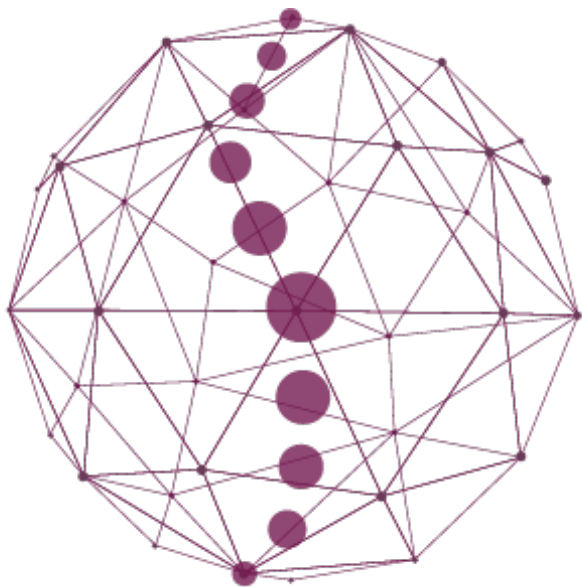
SPAIN
June 16th 2021
10:00-12:30
(LOCAL TIME)

INTERNATIONAL
June 25th 2021
10:00-12:30
(CEST)

IRELAND
June 28th 2021
10:00-12:30
(LOCAL TIME)

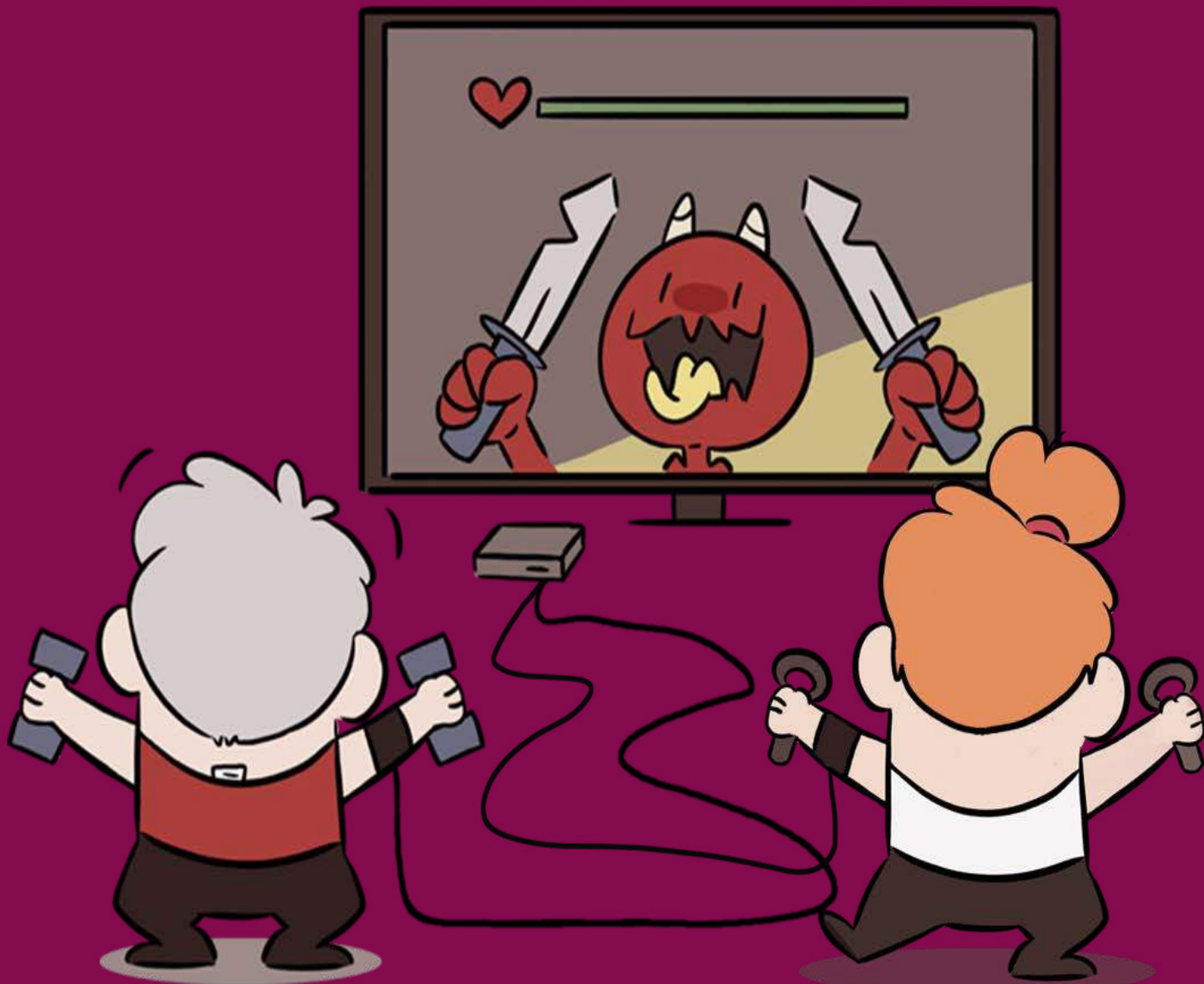
PORTUGAL
June 30th 2021
14:30-17:00
(LOCAL TIME)





R O S I A

REMOTE REHABILITATION SERVICE FOR ISOLATED AREAS



ROSIA: WHO WE ARE



IACS (Instituto Aragonés de Ciencias de la Salud) is an independent public entity under the umbrella of the Regional Health Department. The Institute organises its activity in two main areas: Knowledge Transfer and Research&Innovation

Main Coordinator

IACS is the coordinator of the Project and the lead procurer

[WEB](#)



The NRH National Rehabilitation University Hospital is the only hospital in Ireland providing comprehensive, specialist neuro-rehabilitation to patients following acquired brain injury, spinal cord injury or amputation

Procurer

NRH is a procurer and part of the buyers group within the partnership

[WEB](#)



VALDE is a consulting company based in Spain integrated by a network of senior collaborators with specialized profiles in innovation procurement (PPI and PCP) in Healthcare.

Supporting Partner

VALDE will act as procurement coordinator.

[WEB](#)



Aragonese regional Health Service-Servicio Aragonés de Salud (SALUD) is the public health provider for Aragón, having the responsibilities of overall management and coordination of the existing healthcare resources in the territory.

Procurer

SALUD is a procurer and part of the buyers group within the partnership

[WEB](#)



The Centro Hospitalar e Universitário de Coimbra, EPE (CHUC) is the most prominent Portuguese hospital having comprehensive research, teaching, and patient-centered care approach

Procurer

CHUC is a procurer and part of the buyers group within the partnership

[WEB](#)



Instituto Pedro Nunes (IPN) is a non-profit private organization, which aims to contribute to the transformation of the business environment and organizations based on innovation, quality, rigor and entrepreneurship.

Supporting Partner

IPN will lead the co-creation and co-design with end-users.

[WEB](#)

ROSIA: WHO WE ARE



IFIC is a not-for-profit network. IFIC's mission is to cross organisational and professional boundaries in order to bring people together to advance the science, knowledge and adoption of integrated care in policy and practice.

Supporting Partner

IFIC will lead the design of the telerehabilitation model.

[WEB](#)



IEXP is the first organization specifically dedicated to patient experience in Spain and one of Europe's reference organizations

Supporting Partner

IEXP will engage patients in the solution co-creation.

[WEB](#)



The Municipality of Penela is a small territory of about 135 km², where the area of forest occupies most of the territory, located in the Central Region of Portugal within the subregion Pinhal Interior Norte.

Pilote Partner

The Municipality of Penela will be involved in supporting the piloting activities.

[WEB](#)



The Decision Group is a consultancy firm pioneering in Value-Based Healthcare and its methodology and is implementing and educating VBHC in the Netherlands since 2006

Supporting Partner

TDG will be responsible of the Evaluation Framework

[WEB](#)



PPCN is a health and care tech consultancy company based in Copenhagen and Bangkok, that help Scale-ups develop their markets of new business development.

Supporting Partner

PPCN is responsible of the ICT functional specification

[WEB](#)



The Municipality of Soure is a territory of about 260 km², located in the Central Region of Portugal within the subregion Região de Coimbra

Pilote Partner

The Municipality of Soure will be involved in supporting the piloting activities.

[WEB](#)