



European Union  
European Regional  
Development Fund

## **DELIVERABLE 2.2 - MINI-PILOTS IDENTIFIED, PROTOTYPED AND TESTED**

**“eHealth Territorial LAB - Local ecosystem as an  
instrument to scale up innovative local start-ups  
in eHealth topic”**

The **Deliverable 2.2** has been designed to provide an overview of the deployment of pilot activities.

- The most suitable eHealth service to be tested has been identified in the first semesters of the pilot action.
  
- The test phase has been conducted while considering the following relevant factors:
  - **economic sustainability**
  - **ecosystem readiness**
  - **public sector collaboration**
  - **user's community response**
  - **cooperation between all the involved stakeholders.**

Moreover, attention has been given to:

- assess the conditions allowing the concrete **replicability** of **Biodonostia methodology**
- evaluate the conditions for testing the **prototypes** on the **territorial ecosystem**
- provide beneficiaries with all the necessary **IT tools/devices**.

## OBJECTIVES

- **To improve** the supply of services to people, helping to **contrast the abandonment of territories by local communities**;
- **To enable** the territory with technologies and knowledge so that it can represent an attractive ecosystem to develop **innovative services** matching **needs of local communities**.

## ADDED VALUE

- **To demonstrate** the value of a well connected local ecosystem in **eHealth** field;
- **To demonstrate** the importance of a **linkage** between **service providers** and **SMEs, sanitary districts, business incubators and municipalities**.

# PILOT DEPLOYMENT

## WHERE

*Susa Valley*



*Panoramic view of the Susa Valley and of one of the Municipalities involved (Mompantero)*



*One of the remote and mountainous areas reached by the pilot action. 729 mt above s.l*







Col du Mont Cenis

2094

Pointe du Lamet

3504

du Mont Cenis

Variselle

**MONCENISIO**

S. Giorgio

S. Stefano

**NOVALESA**

Abbazia di Noalesa

Villaretto

**VENAUS**

S. Biagio

**MOMPANTERO**

**GIAGLIONE**

**SUSA**

San Giuseppe

Passengeri

Madonna del Rocclamelone

Urbiano

Chiodo

Madonna delle Grazie

**BUSSOLENO**

Grangia

Vindrolere

**SAN DIDER**

Cima

ntro Denti

2106

La Maddalena

**GRAVERE**

**MEANA DI SUSA**

Cattedrale

Area di S. Giusto

Traduervi

Sarette

**MATTIE**

Coldimosso

Tignai

**SAN GIORIO DI SUSA**

Malpasso

Pianverso

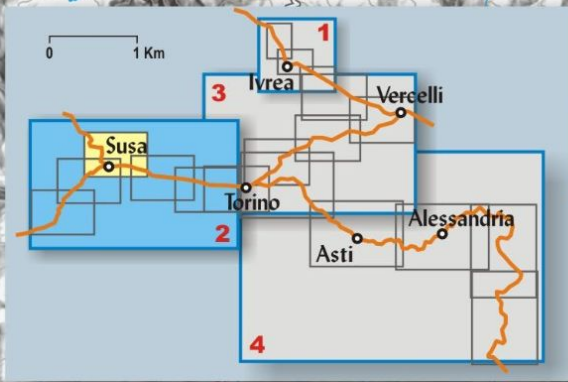
**CHIOMONTE**

Certosa Madonna della Losa

Citta

Certosa di Banda

S. Maria Assunta



0 1 Km

1

3

2

4

Ivrea

Vercelli

Susa

Torino

Asti

Alessandria

Rocclamelone

3538

Lago di Malciaussia

M. Palon

2965

Grand'Uja

Punta Lunel

2772

Punta Mulatera

2543

RISERVA NATURALE  
ORRIDO DI CHIANOCCO

**CHIANOCCO**

**BRUZOLO**

Falcemagna

Mole

Campasciutto

S. Pietro apostolo

548

Casatorre

Castello

S. Giov. Evangelista

434

Grangia

Vindrolere

428

Castello

449

Crotte

CHIANOCCO

SS 25

S. Maria Assunta

S. Giorgio

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Castello

S. Lorenzo

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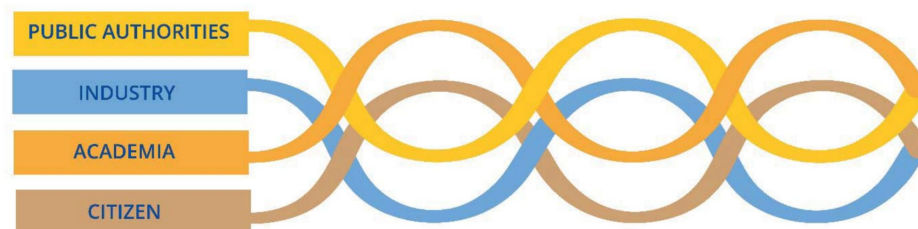
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# PILOT DEPLOYMENT

## WHO

### 4 HELIX HORIZONTAL PLACE-BASED APPROACH (as in ecoRIS3 project)



### Composition of local ecosystem

- Metropolitan City of Turin
- Municipality of Giaglione
- Municipality of Mompantero
- Municipality of Moncenisio
- Municipality of Novalesa
- Municipality of Venaus
- ASL TO3 - Local Health District
- Con.I.S.A - Social Welfare Consortium
- TOP-IX Consortium

Local stakeholders laid down the basis of mutual cooperation by means of a **MEMORANDUM OF UNDERSTANDING**

# PILOT DEPLOYMENT

## WHAT

The **SERVICE** deals with the **monitoring of health and physiological parameters**.

The main **TARGET** are **self-sufficient elderly people currently non-tracked by institutional social assistance services**.

The **GOAL** is to increase the **ability to identify situations of fragility** and to allow the **preventive identification** of anomalous degeneration in health.



# PILOT DEPLOYMENT

## HOW TO

- DEFINITION OF THE HEALTH PARAMETERS TO BE MONITORED ✓
- IDENTIFICATION OF TECHNOLOGY PROVIDER ✓
- LOCAL PUBLIC ADMINISTRATION ENGAGEMENT ✓
- LOCAL HEALTH AUTHORITY INVOLVEMENT ✓
- OTHER LOCAL STAKEHOLDERS INVOLVEMENT ✓
- BENEFICIARIES IDENTIFICATION ✓
- PRIVACY ISSUES MANAGEMENT ✓
- CONNECTIVITY ISSUES MANAGEMENT ✓
- MONITORING PLATFORM SET-UP ✓
- MEMORANDUM OF UNDERSTANDING SIGNED ✓
- **FIRST MONITORING May 21st** ✓

# IMPLEMENTATION OF THE MONITORING PHASE

## HOW TO ... Technical Requirements

**Backend infrastructure:** *the service must collect data from devices and store information in a dedicated database (on premise or in cloud). The system must offer the chance to proper set up rules and profiles for data access.*

**API Connection:** *The service must offer versatile APIs to manage integration with third parties' services and data consumption. APIs must follow standard best practices and ensure proper security levels.*

**Certified medical devices:** *the chosen device/service must comply with EU medical devices legislation and namely with the Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices.*

**Cost effective and scalability:** *the price of the device/service must be compatible with the available budget and it must enable a wider scale adoption for future systematization.*

**Privacy and Data Processing:** *the service deals with the monitoring of sensitive personal data related to the medical sphere. As such, for the test phase, it will be asked to all the beneficiaries to fill out a specific release.*

# MONITORING PHASE

## HOW TO ... Results

### Monitoring Platform

PAZIENTE: -  
CAREGIVER: -

SCHEDA: 300\_002.CARDIO IPERTENSIONE SATURAZIONE SMS Inviati: 2 TOTEM Inviati: 0  
DA: 18/05/2021  NASCONDI COLONNE VISTE SMS Ricevuti: 2 TOTEM Ricevuti: 0  
A: 25/05/2021  NASCONDI COLONNE SENZA MISURE %Ricevuti: 100 %Ricevuti: NaN

Data	18/05/2021	21/05/2021
Orario	15:42:44	10:25:29
Tipologia	SMS	SMS
PRESSIONE MASSIMA	129	141
PRESSIONE MINIMA	76	82
FC	77	75
BATTITO IRREGOLARE	NO	NO
PESO (KG)	57	57
TEMPERATURA	36	35.3
SATURAZIONE SANGUE	95	97
NOTE PAZIENTE		
Visto Da		Griffi Giuseppe
Visto Ruolo		Medico Chirurgo
Visto Raparto		
Visto Data Ora		21/05/2021 14:43
Visto Nota		parametri rilevati accettabili

The **general practitioner** has been fitted with a Personal Computer with the monitoring platform installed by the technology provider.

Once beneficiaries send the questionnaire filled out with all the parameters requested, the GP can check them and be sure that fall into the **control threshold**, **monitor** them and **compare** them **over time**.

Thanks to this system GP should be able to **prevent** eventual **worsening** in the **conditions** of patients.



# TEST PHASE

## HOW TO ... Results

### *Devices delivery and set-up*



To properly activate the action it has been crucial to reach the area of the implementation and to see **first-hand** which are the **difficulties** experienced by people living in **remote** and **mountainous areas**.

Participants have been equipped with the necessary **devices** for the **tracking** of the selected **parameters**.

**Twice a month** participants receive an sms that communicates them they have to detect the parameters and fill in the **questionnaire**.

# TEST PHASE

## HOW TO ... First Results

### Web App interface

- Easy to install app for both **Android** and **IOS** devices
- Possibility of using the patient's device
- Internet connection via **WIFI** or **mobile patient subscription**
- Collection of biometric parameters requested by the Specialist Doctor
- Possibility of large-scale dissemination
- Availability of **reports** and **graphs** for Healthcare workers

The screenshot displays the mobile web interface for 'BioCare - Demo Web Paziente'. At the top, the status bar shows the time 10:48 and LTE signal. The browser address bar shows 'biocare.evisus.it'. The app header includes the title 'BioCare - Demo Web Paziente' and navigation buttons for 'a', 'A', 'Compatta', and 'Estesa'. The patient's profile is shown as '300\_002 CARDIO' with an upward arrow. Below the profile, there are four data entry sections:

- REGISTRA LA PRESSIONE MASSIMA \***: Input field containing '90'.
- REGISTRA LA PRESSIONE MINIMA \***: Input field containing '50'.
- REGISTRA LA FREQUENZA CARDIACA \***: Input field containing '80'.
- BATTITO CARDIACO IRREGOLARE? \***: A dropdown menu with 'NO' selected (indicated by a checkmark) and 'SI' as an option.

Navigation arrows (up and down) are visible on the right side of the form, and a standard mobile browser navigation bar is at the bottom.

## NEXT STEPS

### End of the 3rd semester - 4th semester

- Onboarding of 2 additional families through Application
- Data acquisition (till August 2021)
- Process fine-tuning
- Feedback, from different stakeholders, acquisition





# ecoRIS3

Interreg Europe



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