



# SMARTBEAR

THE INTEGRATED TECHNOLOGICAL  
SOLUTION SUPPORTING MULTI-MORBID  
SENIOR CITIZENS



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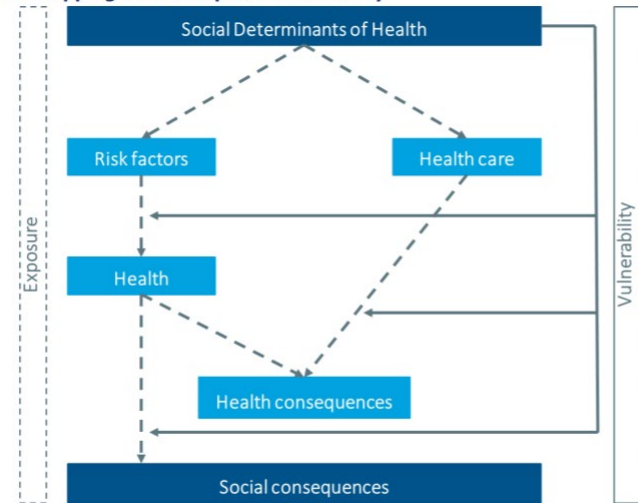
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 857172 (SMARTBEAR).



## Vulnerability and Ageing

- A complex social phenomenon that both influences, and is influenced by, a range of processes and risk factors that can lead to or result from poor health:
  - Personal factors (e.g. biological, inborn or acquired)
  - External factors (e.g. the social determinants of health).
- The more personal resources (good mental and physical health, good coping skills, etc.) and the more environmental support a person has, the less likely that person is to be at risk of vulnerability (Rogers, 1997).

Figure 1. Mapping the concept of vulnerability

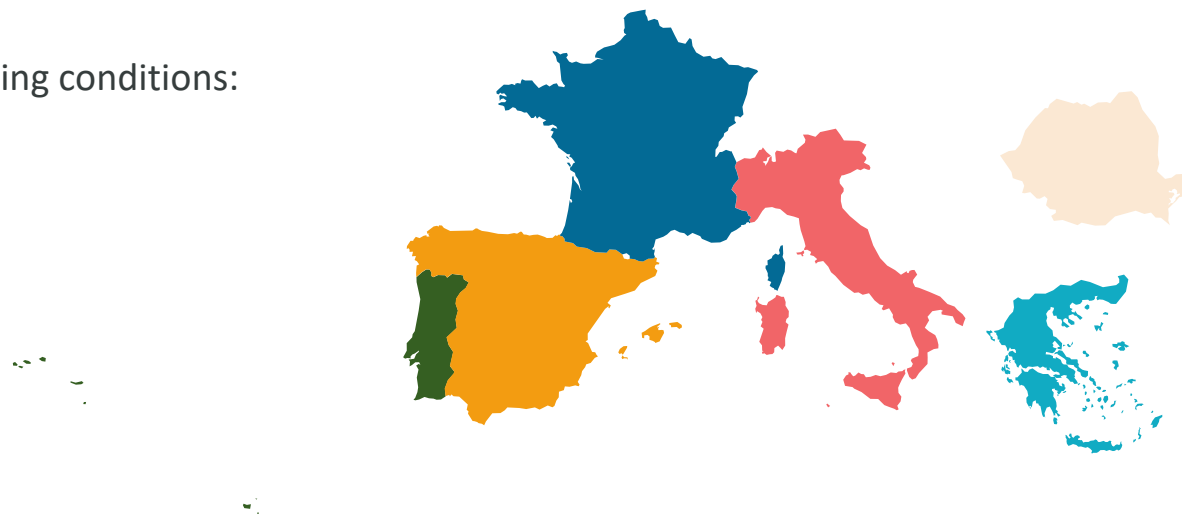


Source: Giuseppe Costa, 8th November 2017- vulnerABLE conference "Addressing the social determinants of health", [PowerPoint presentation]



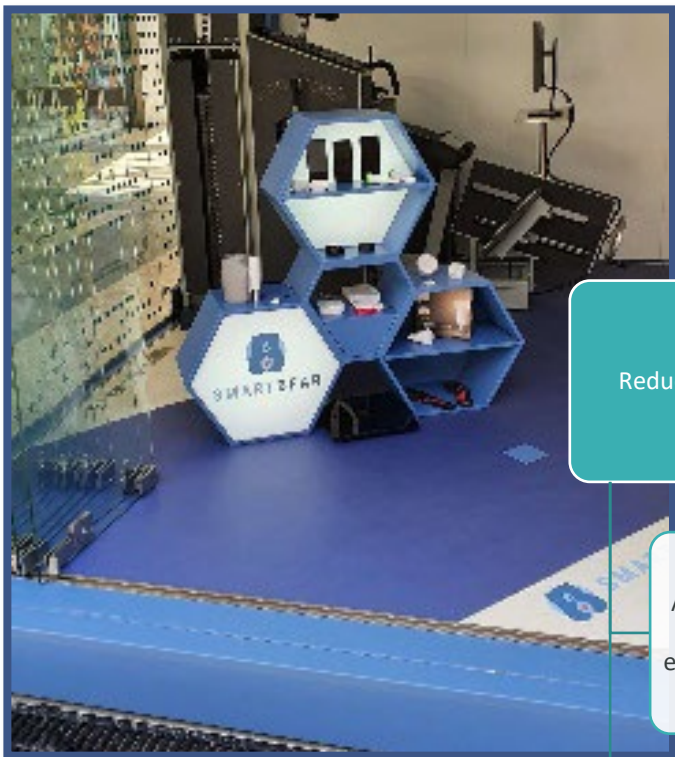
## EU funded Big Data Research Project SMART BEAR

- 5000 seniors > 67 years old
- With at least 2 of the following conditions:
  - CVDs
  - Hearing loss
  - Frailty
  - Mild cognitive disorders
  - Mild depression
  - Balance disorders
  - Low back pain
  - Covid-19
- Will receive at least 5 smart devices which will communicate and interoperate through SMART BEAR platform and App





## SMART BEAR Objectives



Reducing morbidity through

Active monitoring of vital,  
behavioral and  
environmental parameters

Integrated care

Improving quality of life through

Active prevention through  
proactive lifestyle and  
wellbeing activities

Support at home



## SMART BEAR Methods summary

### All Pilots



ANA facilities, Bucharest,  
Quirosnsalud's hospitals  
NKUA Facilities, candidates  
home  
Geriatric lab, University  
Hospital Ca' Granda in  
Milan and District of Crema



4240 elderly  
living at  
home



670 elderly  
living in  
collective  
structures

~5,000  
Seniors



Face to face meetings  
Remote meetings

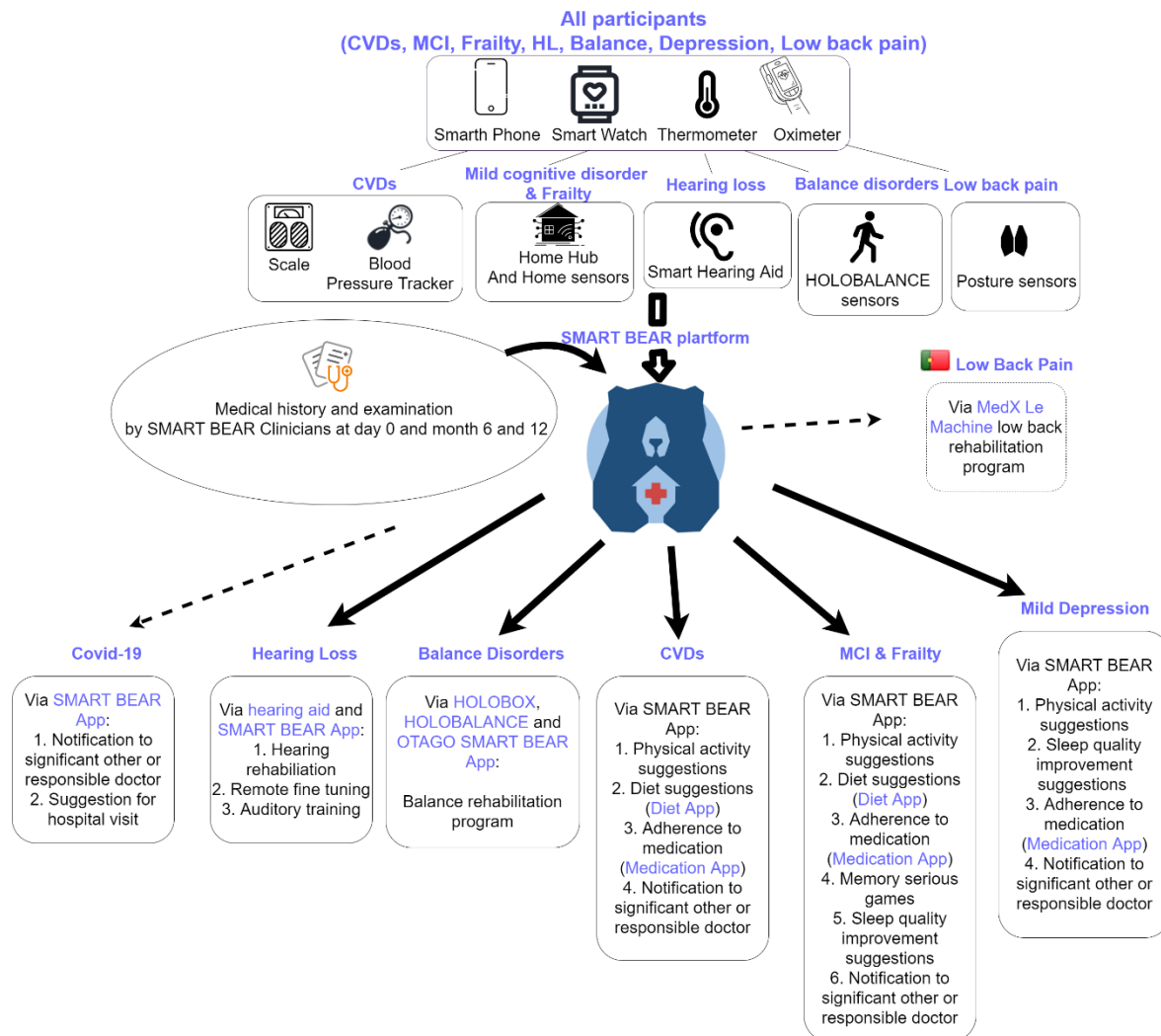


Online campaigning  
GPs network  
Advertisement  
Open events  
Existing databases



Multi-disciplinary  
dedicated SMART BEAR  
team

# SMART BEAR Methods summary





SMARTBEAR

Smart4Health

## Synergies

Smart Big Data Platform to Offer Evidence-based Personalised Support for Healthy and Independent Living at Home

Citizen-centred EU-EHR exchange for personalized health enabling users to collect, manage, share and donate their health-related data throughout the EU.

HOLoGrams for personalized virtual coaching and motivation in an ageing population with BALANCE disorders.

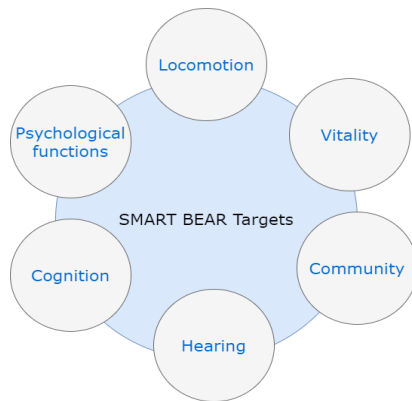
- Inclusion of 2 more conditions and rehabilitation programs
- Amplification of impact
- Economy of resources



## Pilot of Pilot Initiatives

- **Objectives:**

- Identification of the key points to scale the initiative up to the target, vulnerable, population (Figure 2).



*Figure 2. Targets of SMART BEAR according to Intrinsic Capacity model (WHO, Healthy Ageing clinical consortium 2017). Patients over 67 years old with comorbidities (**hearing loss, cardio vascular diseases, cognitive impairments, balance disorders and mental health + COVID19 impact.***

- Demonstration of technical and clinical solutions and identify possible conflicts at the earliest possible.
- Preparation of the full scale project starting in 2022





## PILOT OF PILOTS INITIATIVE



SMART BEAR

### Pilot of Pilots

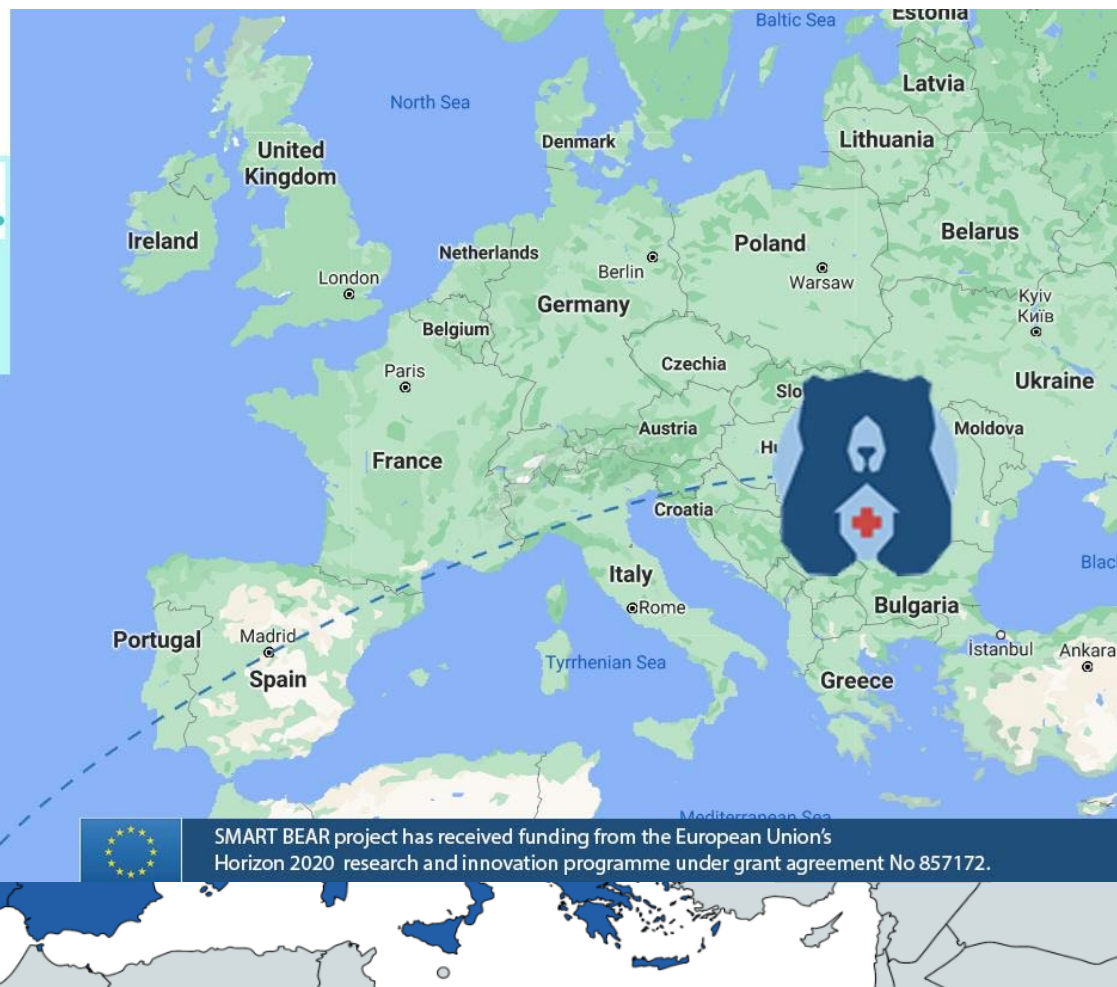
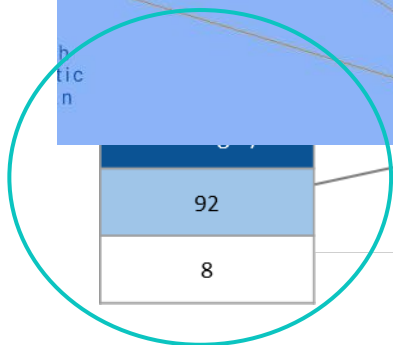
Site: Madeira Island

When: June - Aug 2021

What: Demo stand, equipment

Synergies:

Smart4Health  
Building today a healthier tomorrow

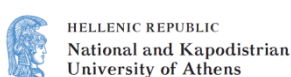




# SMARTBEAR

# THANK YOU

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