sunfrail

the project at the end

challenges, synergies, outcomes
and tools

THE CHALLENGE

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Population ageing is accelerating rapidly worldwide, from 461 million people older than 65 years in 2004 to an estimated 2 billion people by 2050, which has profound implications for the planning and delivery of health and social care. Two of the most problematic expressions of population ageing are the conditions of frailty and multimorbidity.

Frailty is generally a condition characterized by increased vulnerability and sensitivity to physical, psychological and social stressors. The current operationalized definitions are mostly based on physical and clinical or multidomain (physical, cognitive and social) models. However, all these approaches have not generally translated in easy-to-use instruments nor in subsequent proactive care pathways and interventions.

WHAT IS SUNFRAIL?

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Sunfrail (Reference Sites Network for Prevention and Care of Frailty and Chronic Conditions in community dwelling persons of EU Countries) is a European project with a duration of 30 months, which started in May 2015. The project is funded by the EU Health Programme 2014-2020 and brings together 11 partners from 6 EU Member States.

The project aimed at improving the identification, prevention and management of frailty and care of multimorbidity in community dwelling persons (over 65) in subnational settings of EU countries, through the following steps:

- Designing an innovative, integrated model for the prevention and management of frailty and care of multimorbidity;

- Validating the model on the basis of existing systems and services;

- Assessing the potential for the adoption/replication of the model in different European organisational contexts;

- Promoting the dissemination of the results with a focus on strategic decision-makers at regional, national and EU level to support the adoption of effective policies for the prevention and management of frailty and care of multimorbidity.

SUNFRAIL EU SYNERGIES

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Sunfrail has constantly involved the **EIP-AHA network** (A3 and B3 action groups), and the **European Union Geriatric Medicine Society (EUGMS)** working group on "Frailty in older persons" in each step of the project, thus ensuring full synergy with ongoing EC initiatives and full support from the scientific community.

Part of the Sunfrail project partners are also Affiliated Entities of the **Joint Action on Prevention of Frailty (AdvantAGE)**. The two initiatives show a great potential for synergies, due to the similarity of objectives and expected results. Sunfrail works also in close contact with the **Joint Action on Chronic Diseases (Chrodis)**.

The project collaborates also with other European Projects, as the **EU CoNSENSo project (COmmunity Nurse Supporting Elderly iN a changing Society)**, especially in primary care and community settings.

At **national level**, the Italian Reference Sites participating in Sunfrail are also involved in **PRO.M.I.S.** - Programma Mattone Internazionale Salute, a program co-funded by the Italian Government that gathers all Italian Regions. PRO.M.I.S. represents a good synergy practice with a great potential in terms of dissemination and adoption of the results at national level.

FIGURE 1. SUNFRAIL EU SYNERGIES
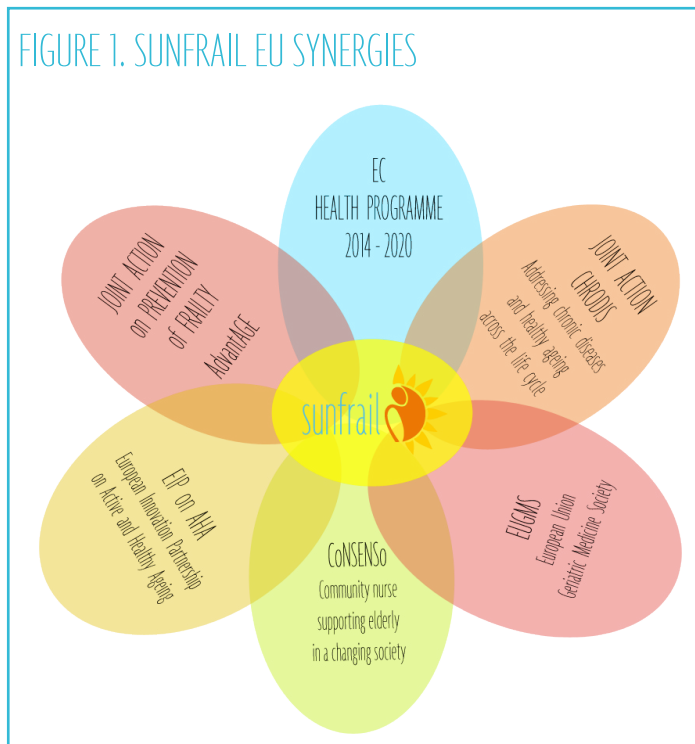
SUNFRAIL OUTCOMES

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Frailty has been defined according to the bio-psycho social paradigm, considering the physical, psychological, social and economic dimensions. This definition was developed through a process of literature review and in-depth discussions with major stakeholders from the scientific community, policy makers and services providers.

Frailty is a reversible condition.

An assessment was conducted in Reference Sites' Health and Social Systems and Services to map good practices and analyze beneficiaries' perceptions of frailty, awareness of risk factors and barriers to care. It allowed to obtain an overall view on the available models of care, leading to the design of the *Sunfrail Model of Care*.

In particular, the assessment highlighted the need to work on strategies and tools to bridge the gap between beneficiaries' needs and services provision (Figure 2).

The review of Reference Sites pointed out that a systematic assessment of frailty risk factors as well as the availability of specific tools for its early identification are missing, especially in primary care and community settings.

FIGURE 2. PERCEPTION OF FRAILTY AND BARRIERS TO CARE: BRIDGING THE GAP

need for independence   FRAILTY?   state of …

• playing with grandsons
• driving • dancing • walking

… life decline and extreme vulnerability

During the 30 months of project implementation, the following achievements were reached:

- Mapping of good practices
- Design of Sunfrail Model of Care
- Design of Sunfrail Tool Conceptual Frame
- Development of the Sunfrail Tool for the early identification of frailty and multimorbidity
- Design of the Sunfrail Tool for Human Resources.

Thirty-three EU *good practices* were identified.

A further assessment on good practices focusing on population risk's stratification (eg. Risk-ER) allowed to identify the population at high and very high risk for hospitalization and disability, and the management of those cases in primary care settings. Sunfrail model promotes the overall replicability of European good practices.

The *Sunfrail Model of Care* integrates the biological, neuro-psychological and socio-economical dimensions of frailty and multimorbidity (Figure 3). It focuses on frailty early identification, especially in primary care and community-based settings, allowing proactive and preventive responses.

Sunfrail good practices and tools allow to identify the population risk for hospitalization and disability.

The integration between different levels of care, health, social and community services enhances intersectoral collaboration and sustainability.
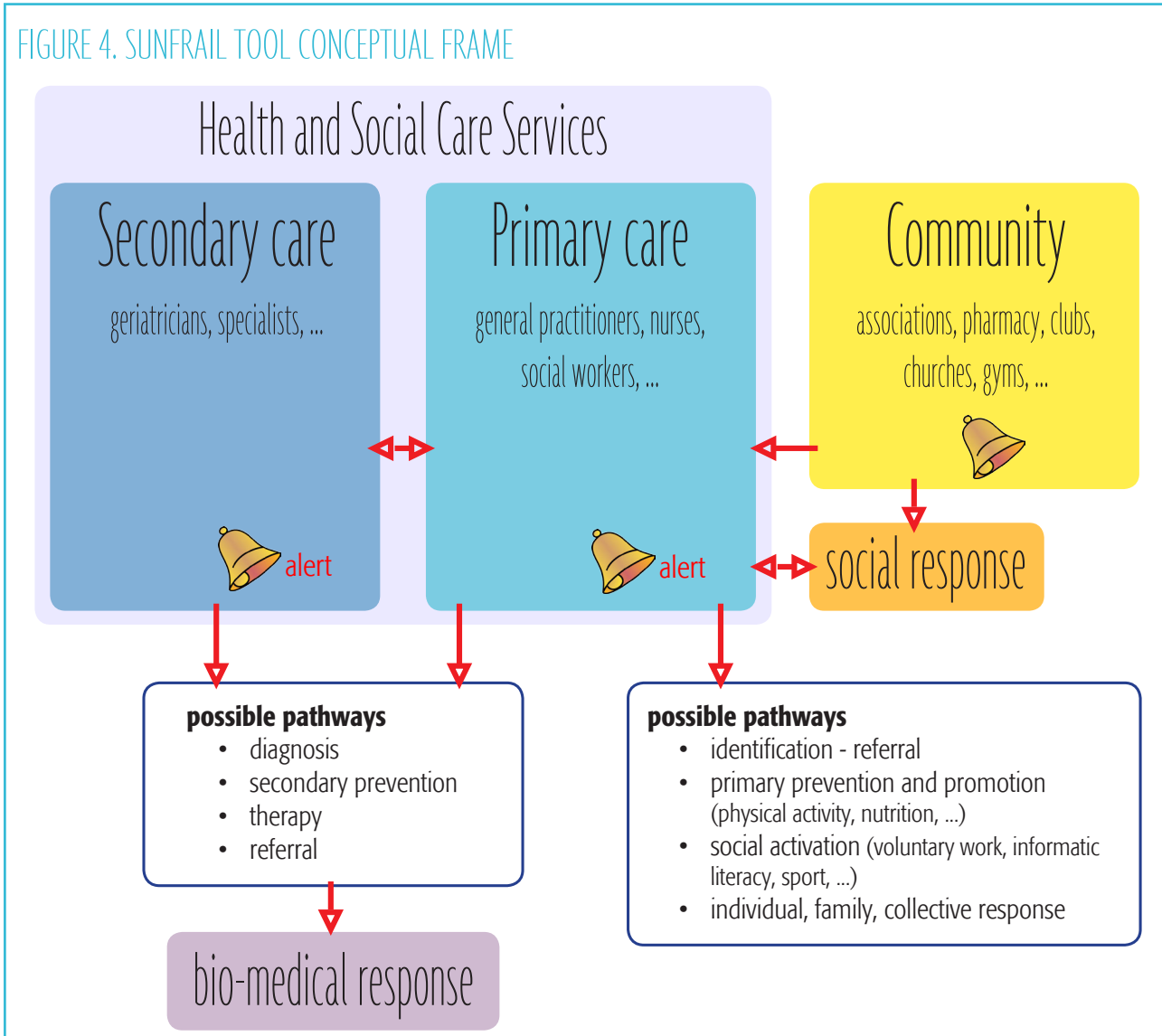
FIGURE 3. SUNFRAIL MODEL OF CARE
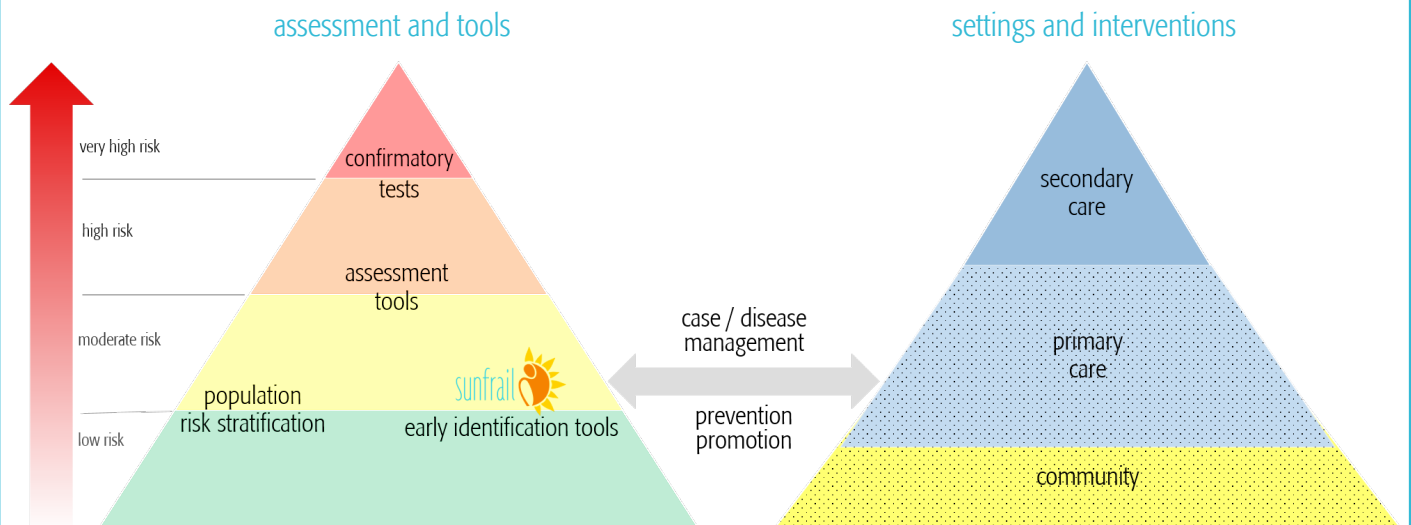
The *Sunfrail Tool Conceptual Frame* (Figure 4) implies that the early identification of frailty and its risk factors can be done through a "multiple entry door system", in which professionals and community actors may trigger an initial "alert" for further professional/specialist and diagnostic investigation, or for activation of care pathways within the health, social and community-informal systems.

FIGURE 4. SUNFRAIL TOOL CONCEPTUAL FRAME

Health and Social Care Services

Secondary care
geriatricians, specialists, ...

alert

Primary care
general practitioners, nurses, social workers, ...

alert

Community
associations, pharmacy, clubs, churches, gyms, ...

social response

possible pathways
- diagnosis
- secondary prevention
- therapy
- referral

possible pathways
- identification - referral
- primary prevention and promotion (physical activity, nutrition, ...)
- social activation (voluntary work, informatic literacy, sport, ...)
- individual, family, collective response

bio-medical response

The *Sunfrail Tool for early identification of frailty and multimorbidity* (Figure 5) has been designed by a multidisciplinary team of experts. It includes nine questions selected from evidence based tools already adopted in health services in the European Union and in the US, to identity frailty according to the bio (physical), psycho (cognitive and psychological) and social domains.

The Project has also designed a *Tool for Human Resources Development* (Figure 6): it is a short, multidisciplinary training programme on frailty and multimorbidity, enabling social and health care professionals to apply the Sunfrail Tool according to the bio-psychosocial model.

FIGURE 5. SUNFRAIL TOOL FOR EARLY IDENTIFICATION OF FRAILTY AND MULTIMORBIDITY

BIOLOGICAL	Q1. Do you regularly take 5 or more medications per day?
	Q2. Have you recently lost weight such that your clothing has become looser?
	Q3. Your physical state made you walk less during last year?
	Q4. Have you been evaluated by your general practitioner during last year?
	Q5. Have you fallen one or more times during last year?
PSYCHOLOGICAL	Q6. Have you experienced memory decline during last year?
SOCIAL	Q7. Do you feel lonely most of the time?
	Q8. In case of need, can you count on someone close to you?
	Q9. Have you had any financial difficulties in facing dental care and health care costs during last year?

FIGURE 6. TOOL FOR HUMAN RESOURCES DEVELOPMENT

the challenge

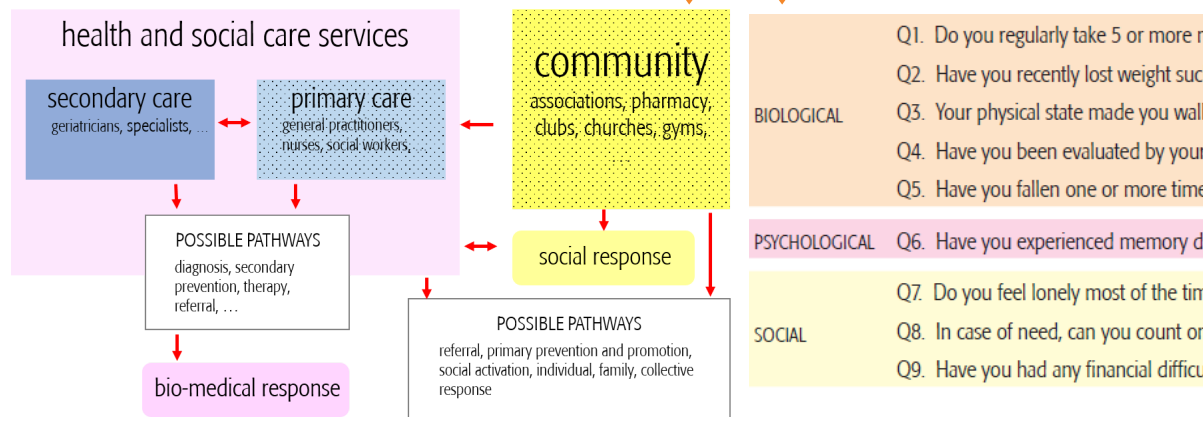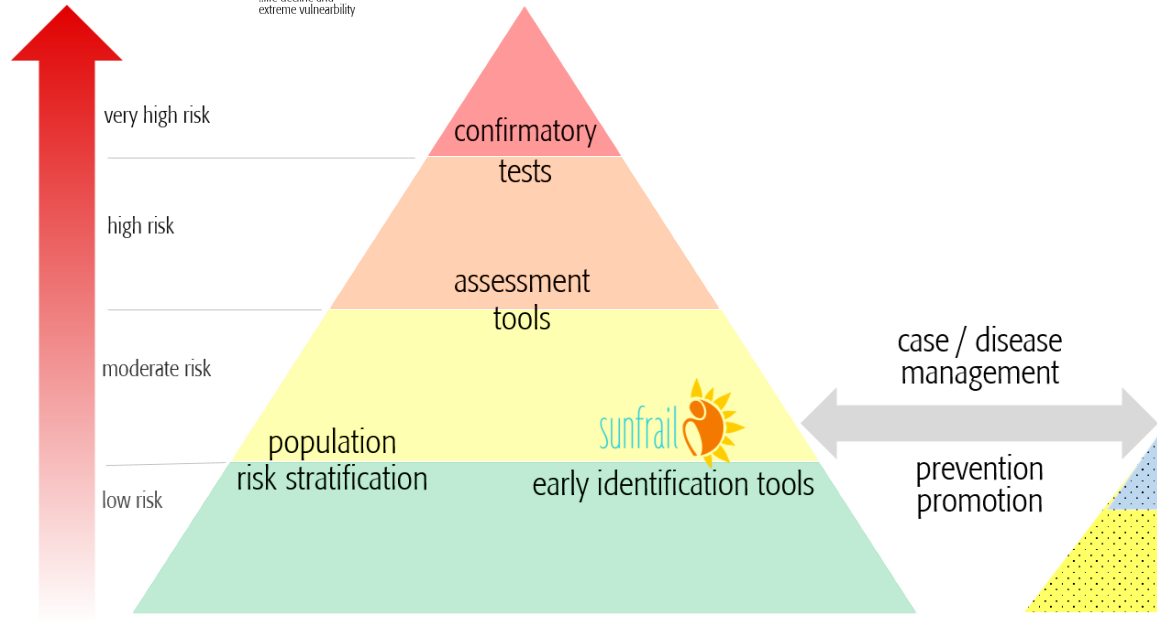need for independence

FRAILTY?

state of…

..life decline and
extreme vulnearbility

• playing with grandsons
• driving • dancing • walking

The Sunfrail Model facilitates the integration between Referen
It will allow bridging the gap between beneficiaries' needs an
community settings. This can be reached by enhancing bene
and by connecting services.

## 33 EU good practices

on frailty and
multimorbidity
identified by the Project

assessment and tools

very high risk

high risk

moderate risk

low risk

confirmatory
tests

assessment
tools

population
risk stratification

sunfrail

early identification tools

case / disease
management

prevention
promotion

health and social care services

secondary care
geriatricians, specialists, …

primary care
general practitioners,
nurses, social workers,

POSSIBLE PATHWAYS
diagnosis, secondary
prevention, therapy,
referral, …

bio-medical response

community
associations, pharmacy,
clubs, churches, gyms,

social response

POSSIBLE PATHWAYS
referral, primary prevention and promotion,
social activation, individual, family, collective
response

BIOLOGICAL

Q1. Do you regularly take 5 or more
Q2. Have you recently lost weight suc
Q3. Your physical state made you wal
Q4. Have you been evaluated by you
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PSYCHOLOGICAL

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SOCIAL

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Q8. In case of need, can you count on
Q9. Have you had any financial difficu

nce Sites' strategies and good practices.
d services' provision especially in primary care and
ficiaries' involvement and professionals' capacities

settings and interventions

secondary
care

primary
care

community
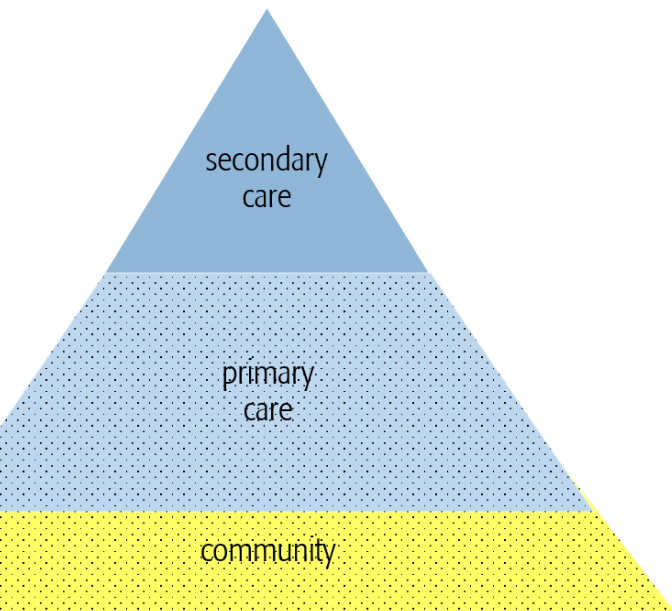
medications per day?

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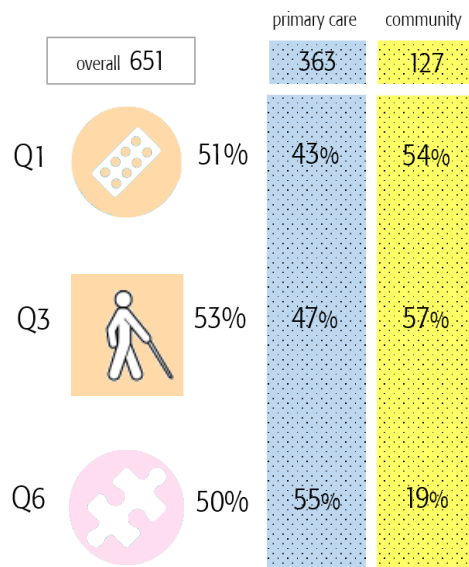
Sunfrail tool
for human resources
a multiprofessional short
training programme

The Sunfrail Tool allows to identify frailty
risk in the population over 65:

- 651 beneficiares detected in
  community/primary and secondary
  care settings
- A higher proportion of frailty alerts for
  polypharmacy, functional and cognitive
  decline
- Frailty alerts in community - primary
  care settings in population without
  clear signs of disability or not known
  by services
- Citizens with lower education level
  and financial difficulties have a higher
  prevalence of frailty alerts
- Frailty alerts to some Sunfrail Tool
  items are confirmed by specialists's
  tests

answers to the questionnaire

		primary care	community
overall 651		363	127
Q1	51%	43%	54%
Q3	53%	47%	57%
Q6	50%	55%	19%

SUNFRAIL APPLICABILITY AND REPLICABILITY

An *assessment on professionals' and community actors' opinion* on the application of the Sunfrail Tool showed that:

- The tool is user-friendly and easy to apply. It is non-invasive and suitable for everyday practice

- It can help identifying early frailty conditions, promoting further interventions by connecting existing services

- The tool can improve beneficiaries' awareness, encouraging them to move from a "disease"-oriented vision to a proactive and preventive approach.

The *Sunfrail Tool is applied* in other EU countries/Regions through the EU CoNSENSo project, confirming its adaptability and replicability, especially in primary care settings.

Requests for adoption of the Sunfrail Tool were made from Italian general practitioners and Local Health Trusts and from European Partners of the EIP-AHA. Further pilot studies on the application of the Sunfrail Tool are currently ongoing, in the Netherlands and in Emilia-Romagna Region (Italy).

The collaboration with the Joint Action on Frailty (AdvantAGE) promotes a further adoption and replication of model and tools in other EU countries.

KEY RECOMMENDATIONS

- Frailty is a reversible condition, and needs to be addressed through its main dimensions and early identification of risk factors, to orient proactive and preventive strategies.

- Frailty alerts can be identified especially in community and primary care settings, targeting a population that may be unknown by services.

- Frailty risk factors are found especially in citizens with lower educational level; this may influence their access to care. Equity and affordability of preventive services need to be carefully addressed by policy makers and services planners.

- Frailty requires operational multi-professional and integrated strategies connecting existent health, social and community services. This will help to provide more efficient and cost-effective responses across services and sectors, bridging the gap between peoples' needs and services provision.

SUNFRAIL PARTNERS

Regione Emilia-Romagna

Agenzia sanitaria e sociale regionale

REGIONE PIEMONTE

Azienda Ospedaliera Universitaria Federico II
Integrata con il Servizio Sanitario Regionale

REGIONE LIGURIA

Hôpitaux de Toulouse

CHU MONTPELLIER
CENTRE HOSPITALIER UNIVERSITAIRE

Universidad de Deusto
University of Deusto
Deusto

euregha
European Regional and Local Health Authorities

HSC Health and Social Care

Carsat Retraite & Santé au travail
Languedoc-Roussillon

um MEDICAL UNIVERSITY OF LODZ

AFFILIATED ENTITIES

30 anni di | ASTER innovazione attiva

Ente Ospedaliero Ospedali Galliera Genova
Ospedale di rilievo nazionale e di alta specializzazione

WEBSITE

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More information on the project, the partners and
the concept and dimensions of frailty is available at: www.sunfrail.eu