

# International Interdisciplinary Network on Smart Healthy Age-friendly Environments

**NET4**  
Age-Friendly

The logo for NET4 Age-Friendly features the text "NET4" in a bold, dark blue font, with "Age-Friendly" in a smaller, lighter blue font below it. To the right of the text is a stylized number "4" composed of several colored segments (blue, green, yellow, orange, red, purple) arranged in a circular pattern.

**D4 Report on SHAFE policies,  
strategies and funding**

**WG 4 Leader D4 -  
Luiza Spiru, MD , PhD**



## Working group 4 mission and Objectives

- To examine existing policies, advocacy, and funding opportunities
- To build up relations with policy makers and funding organisations
- To synthesize and improve existing knowledge and models to business models
- To guarantee quality and education, proper dissemination and ensure the future of the Action.
- To enable the capacity building
- To improve the interdisciplinary participation
- To promote the knowledge exchange
- To foster a cross-European interdisciplinary research capacity,
- To improve the cooperation and the co-creation with cross-sectors stakeholders
- To introduce and educate students on SHAFE's implementation and sustainability



## What is SHAFE ?

This new concept was created since 2017, based on the desire to implement **Smart Healthy Age-Friendly Environments (SHAFE)** across Europe, fostering happier and healthier people in all communities.

This idea took shape and became a solid movement.

**Smart, adaptable and inclusive solutions** can help improve and support **independent life throughout the course of life, regardless of age, gender, disabilities, cultural differences and personal choices.**

**A holistic approach** that optimizes social and physical environments, supported by digital tools and services, provides **better health and social care**, promoting not only **independent living**, but also **equity and active participation in society.**

The community is the **physical, social and cultural ecosystem** closest to people



## SHAFE's Short History

SHAFE began as a **Thematic Network**, approved by the European Commission, to draw policy makers, organisations and citizens' attention to the need of better alignment between health, social care, built environments and ICT, both in policy and funding and delivered a Joint Statement and a Framing Paper in December 2018 to the European Commission and Member States.

SHAFE evolved to a **European Stakeholders Network**, which currently has over 170 partner organisations and is coordinated by ***Carina Dantas and Willeke van Staalduinen***.

SHAFE aims to achieve a better *COOPERATION and IMPLEMENTATION*, as the major challenges for the next period, as stated in the Position Paper released in 2020, with recommendations that aim to promote healthier environments for all citizens and make environments accessible, sustainable and reachable for all, with the support of ICT.

<https://en.caritascoimbra.pt/shafe/>



From the early concept, several projects have been implementing SHAFE in the field: NET4Age-Friendly is the most recent.

## Health and Community Services

In the area of Health and Community Services several needs exist, namely the:

Humanisation of health services, in particular the increase of medical appointments duration, better interaction between patient and professional, good adherence habits and more human and equipment resources;

New healthcare delivery concepts that prevent isolation and lack of access, namely those that are sustainable and of high-quality; promote physical activity; that can provide solutions for pandemic or emergency situations; and reduce virus spreading to staff and other patients;

The reinforcement of workers and services in general, and in the area of mental health in particular, especially for children and the ageing population;



## Further integration of citizen-centered care

Integration of SHAFE key elements in built healthcare assets:

***Person-centered life-course approach of health promotion.***

Better ***and greater articulation between primary and community care*** partners must be addressed for ***prevention for less treatment.***

Regarding ***palliative and long-term care***, with a view to facilitating the adequate environment with ***less waiting lists.***





# SHAFE / NET4Age-Friendly recognised by the United Nations as a good practice



## NOW AVAILABLE: SDG GOOD PRACTICES

The outcomes of the “Second Open Call for Good Practices, Success Stories and Lessons Learned in the Implementation of the 2030 Agenda and the SDGs” are now available!

### SUSTAINABLE DEVELOPMENT GOALS



Check the 400+ SDG Good Practices approved by UN experts:  
<https://sdgs.un.org/sdg-good-practices>



## SHAFE / NET4Age-Friendly recognised by the United Nations as a good practice

### SHAFE / NET4Age-Friendly recognised by the United Nations as a good practice

The United Nations launched an Open call for good practices, success stories and lessons learned by all stakeholders in the implementation of the Sustainable Development Goals and the 2030 Agenda.

More than 700 submissions were reviewed by a team of experts from United Nations entities and **“SHAFE implemented through NET4Age-Friendly” was one of the recognized good practices from all over the world.**

<https://sdgs.un.org/partnerships/shafe-implemented-through-net4age-friendly>





The current Covid-19 pandemic has been increasing the risk of exclusion, poverty, inequalities in the access to health, social care, other public services and, moreover, increasing the digital divide.

### ***The Direct effect:***

Older adults have a higher risk of developing severe complications, with mortality rates increasing by up to 8% in patients aged 70-79 years, and up to 14.8% in those aged 80 years and above (Sanchez et al., 2020).

Limited access to healthcare: Isolation measures have reduced the availability of primary care and led to the postponement or cancellation of interventions

Increased risk of decompensation of patients with chronic diseases, accelerating the increase in fragility (independent of COVID-19 infection).



The same approach is reflected in the EU4Health 2021-2027 strategy: **the SHAFE vision for a healthier Union**, the response to improve the resilience of European Health systems.

The support for international cooperation through its 10 objectives, that focus on ***disease prevention and health promotion***, preparedness for cross border health threats, strengthen health data and accelerate the digital transformation.

The pillars of the European planning for ***2021-2027, focusing on the “twin transitions”***: **green and digital**, where advances in robotics and smart tech are going to speed up the circular economy and implement the European Green Deal from recovery to social innovation [https://ec.europa.eu/health/funding/eu4health\\_en](https://ec.europa.eu/health/funding/eu4health_en)



# The “Ageism” Pandemic

## ***Indirect effect:***

Exacerbation of loneliness and social isolation.

Loneliness and / or social isolation of the elderly has multiple negative effects on their physical and mental health (e.g., reduced quality of life, cognitive decline, stress, and depression, decreased sleep quality, etc.).

The pandemic triggered a parallel epidemic of ***“ageism”***.

The ***media coverage*** describes that more and more those over 70 years of age are helpless, fragile, and unable to contribute to society.

Prior to the COVID-19 pandemic, worldwide it had been proclaimed that ***loneliness and social isolation of the elderly had become a global epidemic*** (Murthy



# The “Ageism” Pandemic

This is problematic for several reasons:

Older adults are an extremely heterogeneous group (Fingerman & Trevino, 2020), and “ageism” leads to *stereotyping*.

Age-related stereotypes influence the perception of older people about their own aging, having a *negative impact on their health* (Levy, 2009).

“Ageism”, in terms of the costs associated with health care, the aging of the population imposes significant economic costs on society, costs that will accentuate the *economic constraints caused by the pandemic* (Levy, Slade, Chang, Kanno and Wang, 2020).

The impact on the elderly will vary worldwide, and the influencing factors will be different for those in *low- and middle-income countries* compared to those in *developed countries* (Lloyd-Sherlock, Ebrahim & Geffen, 2020).

A recent global crisis is evolving rapidly, and very little is currently known about its wider impact on *physical and mental health*.



# The Pandemic risk over the Elderly

## Higher risk among the elderly

*66% of people aged 70 and over have at least one underlying condition.*

Older people may face ***age-related discrimination in decisions about health care***, triage, and life-saving therapies.

***Global inequalities*** mean that, even before COVID-19, half of the elderly in some developing countries did not have access to essential health services.

## Non-COVID-19 curative treatment suffers greatly

*53% of countries worldwide have partially or completely discontinued services for the treatment of hypertension 42% fo; 49% for the treatment of diabetes and diabetes-related complications; 43% cancer treatment and*

*Rehabilitation services have been discontinued in almost two-thirds (63%) of countries, even though rehabilitation is essential for a healthy recovery.*

Disadvantaged and marginalized people face health inequalities, exacerbated by difficult choices made by hospitals in response to the pandemic.

# Working on the realisation of SHAFE

## ERASMUS Projects :

“Hands-on SHAFE”

“Educational game BIG”

“Bridge the Gap!”

“DESIgn

cREate age-friendly housing”

(DESIRE)

[www.hands-on-shafe.eu](http://www.hands-on-shafe.eu)

[www.big-game.eu](http://www.big-game.eu)

[www.bridgethegap-project.eu](http://www.bridgethegap-project.eu)

[www.projectdesire.eu](http://www.projectdesire.eu)





# SHAFE mid-term goals

## CITIZENS

- To be digitally skilled
- To be aware and understand the benefits and challenges on the sharing of their data
- To be engaged in healthier lifestyles (including through increased health literacy)
- To participate and engage (in the democratic life)
- To maintain or improve as much as possible their social networks and relationships

## ENVIRONMENTS

- To retrofit and adapt the housing stock
- To foster accessible and adapted public spaces and transport
- To implement climate neutral solutions
- To promote health & wellbeing in the workplace

## HEALTH AND CARE

- To promote reliable, safe and accessible big data
- To implement robust and interoperable digital infrastructures
- To foster integrated, personalized, affordable and person-centered solutions (new pathways)
- To implement guidelines and long-term funding solutions/business models
- To train care professionals on digital skills.



## SHAFE mid-term goals

By 2022, the Stakeholders Network on SHAFE aims to achieve mainly **COORDINATION** and **IMPLEMENTATION** of SHAFE solutions including dealing with public health emergencies such as pandemic outbreaks, specifically the following higher-level goals:

Promote *training of formal and informal caregivers* (communities) on SHAFE, creating a toolkit and implementing training actions in multiple countries (building on the Erasmus+ project hands- on-SHAFE main outputs);

*Raise awareness on the need to enhance prevention, social care, building infrastructure and environment conditions in order to move Health and Wellbeing provision to the home and towards community and personalized prevention — to a Health and Wellbeing value-based approach (through COST Action NET4Age-Friendly)*



## SHAFE mid-term goals

Jointly develop ***sustainable business cases*** with insurance companies and investors health and social care providers on implementing SHAFE, especially regarding building or restructuring the built environment to include ICT solutions with integrated health and care provision and safe human interrelations, to foster future investments on ***smart healthy environments***

***Organise education and raise awareness of urban planners, architects and ICT-developers in general to focus on PEOPLE and PLACES and focus research on lifelong learning, evidence-based design, smart healthy environments and empowerment, and social distancing (with SHAFE and EIPonAHA stakeholders).***



## Mapping SHAFE

Every EU country develops policies of single or multiple outcomes of SHAFE, to promote independent living, foster participation and social inclusion and secure healthy ageing .

The concerted, multifaceted approach of SHAFE is not clear yet to find in most countries, however some cross-sectoral developments are already taking place.

Partners describe the involvement of Ambient Assisted Living solutions in projects, funding and pilots to promote independent living.



# Mapping relevant business models and sustainability means

Most of the contributors did not mention any model. Other contributors sometimes doubted what is meant by business models.

Most common business model is the CANVAS model. This model invites organisations to identify the main partners, key activities, human and financial capital, value propositions, network, business channels and co-creators.

**SWOT analyses (Strengths, Weaknesses, Opportunities and Threats)** are additional models that can be used to (jointly) define the organisational or departmental strategy and tactics.

**An extended SWOT analysis is the so-called SWOART: Strengths, Weaknesses, Opportunities, Aspirations, Results and Threats. Making use of data delivery it becomes feasible to identify the results that come out of Weaknesses and**



## Mapping partners' ecosystems interesting for NET4 and Mapping relevant stakeholders and policy makers

*Half of the countries report to have one or more ecosystems that are related to SHAFE and/or interesting for NET4.*

**Most of the ecosystems are local or regional.**

To improve the capacity of NET4Age-Friendly members on building and maintaining ecosystems, a webinar was organised by Action members from the ECHAlliance: How to build and nurture a regional/national ecosystem. The webinar gathered around 70 participants, on the 29th April 2021.

**Mapping funding opportunities interesting for NET4 consortium**





## Conclusions and further actions

***Partners invest in the creation of networks with the quadruple helix and maintain ecosystems:***

the building of networks and ecosystems at local, regional or national level.

to learn how to build up networks with citizens, housing companies, urban planning, health and social care.

***Each MC member is asked to report once per year about the progress.***

***Create small groups of buddy or mentor system for creating ecosystems.***

Deliver support to members to build and maintain local, regional or national ecosystems or networks and jointly explore opportunities from holistic approaches  
***This will be coordinated by the training school organiser and will become part of training schools.***



## Conclusions and further actions

***Business modelling to identify opportunities on SHAFE.*** In the second year of the Action we pay much attention to the capacity building on business modelling in the field of SHAFE. We will start with webinars about the topic, and organise training schools on this theme.

***Funding opportunities will be further sustained.*** The initial inventory of partners' knowledge of funding opportunities will be further exploited in the second year of the Action. We will organise webinars on the topic and funding will become part of the training schools.



## On a positive note- SHAFE 's Solutions

The COVID-19 pandemic will give us the opportunity to assess our current approach, to quantify the lessons learned during this period and to develop strategies and new approaches to combat loneliness and social isolation among older adults.

### How?

1. Teaching social workers, Health Professionals and the elderly to use new technology - interactions with people in non-traditional ways can become part of the practice of social and medical assistance.
2. Considering the needs that will arise in the post-pandemic era for our patients and their families, who may experience increased depression, anxiety, and financial challenges, and finding innovative ways to address these challenges, which will underpin the development of new policies in the field.
3. Development of better tools for assessing loneliness and social isolation - as it is essential to have tools that can be administered easily and quickly determine whether the older adult is single or socially isolated.



The concepts of **interprofessional skills** have "infiltrated" the health sciences and human services.

The artificial barriers that have too often separated science into closed, "stifling" compartments, unnecessarily hindering innovation, have now been overcome.

This development has been partly stimulated by the application of technological innovations in computer science, informatics, engineering and the like, to the requirements of the health and social services sector.

The notion of **translational research** has helped in this regard.



**Evidence-based practices** - not a new idea, but a new "empowering" terminology related to reimbursement policies and decisions.

This is happening at a good time in terms of **Gerontechnology**, as market forces encourage entrepreneurs to bring products to market that obviously benefit older users. This paradigm requires evidence of efficiency and effectiveness.

***Aging in Place - assistive technologies are embedded in a meaningful paradigm that encourages ease of use and interconnection with the specific goal of enhancing well-being and quality of life without the need for residential relocation.***



Medically Home draws on its health system partners and community resources, including local paramedics and equipment suppliers, to build a virtual hospital

# Medically Home® Virtual Hospital Structure



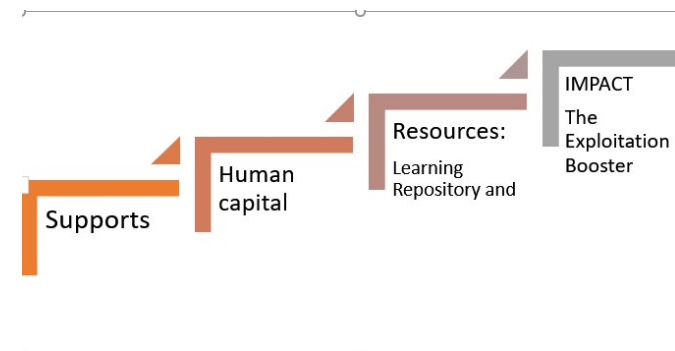


DIGI WORLD



With the support of VM grant, we have harmonized our work and built-up new mechanisms for further exploitation of the so far results. We have also contributed to activate our collaboration across 46 countries by employing two tools:

- 1) The NET4Age-Friendly Learning Repository and
- 2) the NET4Age-Friendly Exploitation Booster.



**The Learning Repository** is built based on our experience with guiding and developing the Annexes of D4. (See Annex 1)

General Objective: Developing an online Learning Repository to exploit the outcomes from the mapping of the age-friendly country ecosystems:

Cluster 1: It comprises the evidence-based strategies, programs and platforms at national level

Cluster 2: It comprises evidence of a strong dialogue between science and technology, having as points of focus: smart housing, centres of expertise, specific support tools and others as such.

Cluster 3: Mechanisms which increase social participation and inclusion of the older adult communities.

Specific objectives:

SO1. To build up a repository where relevant information on the ecosystem exists.

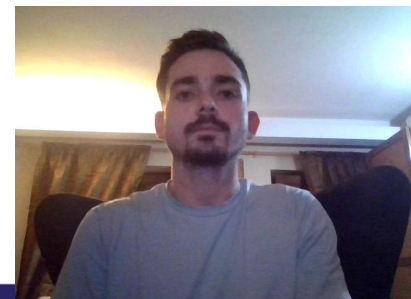
SO2 The possibility to add more relevant research reports, studies and analyses relevant to SHAFE and in a coherent manner.



**is a mechanism to provide an overview** of the age-friendly universe existent at the European level. Through this support tool, we will help the 46 country members of the NET4Age-Friendly to boost their initiatives for ageing-friendly and to support qualitative networking and collaboration at European level and beyond.

**The NET4Age-Friendly Exploitation Booster** is meant to connect the SHAFE learners who are advanced on the path of building age-friendly ecosystems and those who are at the start of the process. Hence, The Exploitation Booster bridges the gap between those who have the knowledge and expertise of developing strategies and implementing actions and those who do not have the same capacity in specific fields. Their collaboration will be based on the Learning Repository and a series of online events which will ease the knowledge transfer.

**Specific objective:** Raising awareness and encouraging research on the topic by providing access to a) our Learning Repository, b) dissemination over the 46 countries and c) creating opportunities for partnership.



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# NET 4

Age-Friendly

**Luiza Spiru MD, PhD, Professor of Gerontology  
Longevity Medicine and Gerontechnology**

[www.anaaslanacademy.ro](http://www.anaaslanacademy.ro)

[lsaslan@brainaging.ro](mailto:lsaslan@brainaging.ro)

