S H A P E S

Smart and Healthy Ageing through People Engaging in Supportive Systems

PROJECT DATA

PROGRAMME: *H2020-EU.3.1.4.1.* – Active ageing, independent and assisted living and *H2020-EU.2.1.1.3.* – Future Internet: Software, hardware, infrastructures, Technologies and services.

TYPE OF ACTION: Innovation Action

DURATION: 48 months (1 nov 2019 – 31 oct 2023)

PROJECT BUDGET: € 20 944 318,75

CONSORTIUM: 36 partners from 14 European countries

COORDINATOR: Maynooth University

THE CHALLENGE

At the same time that the European population is ageing, life expectancy is increasing. European Union citizens can remain productive and active far beyond the standard age of retirement. Sustaining longer and healthy lives requires solutions that prevent or minimise risks of injury, frailty and long-term chronic diseases.

SHAPES aims to create an open Ecosystem enabling the large-scale deployment of digital solutions for healthy and independent living addressed to older individuals who face reduced functionality and capabilities.

ABOUT SHAPES

The **SHAPES Innovation Action (IA)** intends to build, pilot and deploy a large-scale, EU-standardised open platform. The integration of a broad range of **technological**, **organisational**, **clinical**, **educational** and **societal solutions** seeks to facilitate long-term healthy and active ageing and the maintenance of a high-quality standard of life. Mediated by technology, in-home and local community environments interact with health and care (H&C) networks contributing to the reduction of H&C costs, hospitalisations and institutional care.

SHAPES Large-scale Piloting campaign engages more than **2000 older individuals in 15 pilot sites in 10 EU Member States**, including **6 Reference Sites of the European Innovation Partnership (EIP) on Active and Healthy Ageing (AHA)**, and involves hundreds of key stakeholders to bring forth solutions to improve the health, wellbeing, independence and autonomy of older individuals, while enhancing the long-term sustainability of health and care systems in Europe.

ABOUT SHAPES

SHAPES DIGITAL SOLUTIONS: Include assistive robots, eHealth sensors and wearables, Internet of Things (IoT)-enabled devices and mobile applications.

SHAPES ECOSYSTEM: A network of relevant users and key stakeholders working together to scale-up Platform and digital solutions.

SHAPES MARKETPLACE: Seeks to connect demand and supply across H&C delivery, and to facilitate the co-creation of affordable, effective and trustworthy solutions.

SHAPES RECOMMENDATIONS: Provide guidelines, a roadmap and an action plan, including a set of priorities dedicated to standardisation, to support key EU stakeholders to foster the large-scale deployment and adoption of digital solutions and new integrated care services in Europe.
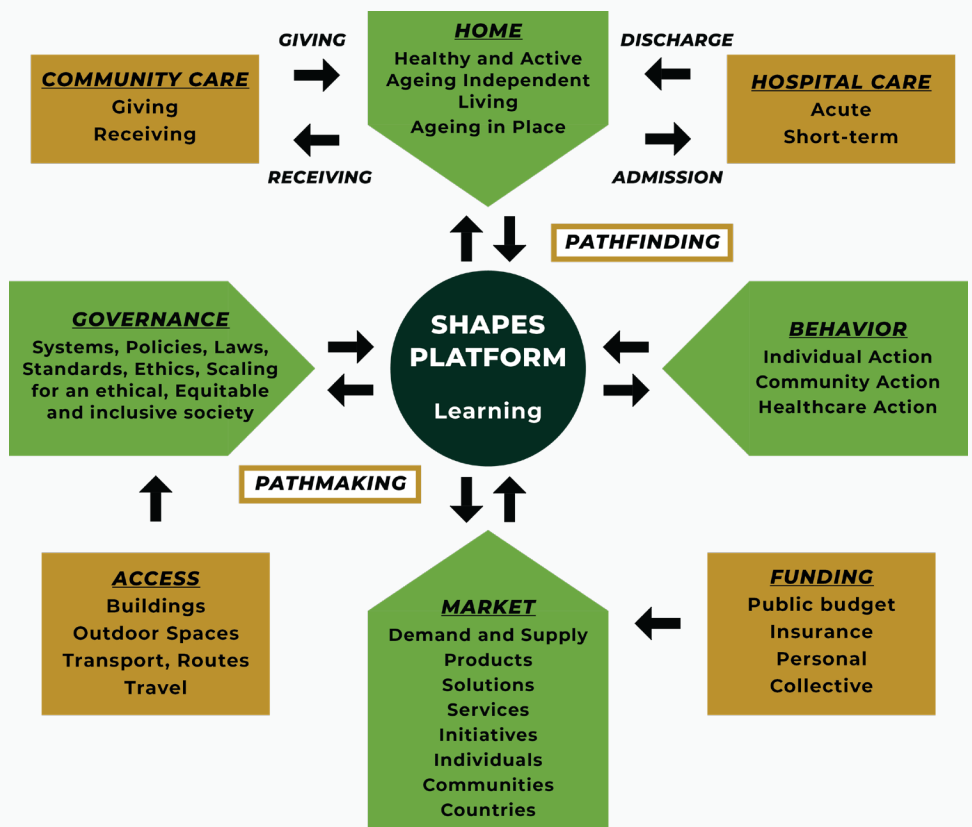
SHAPES OBJECTIVES

✓ To build and deliver the innovative European-led **SHAPES Platform**, providing a broad range of interoperable solutions to improve the health, wellbeing and independence of older individuals, while enhancing the long-term sustainability of H&C systems in Europe.

✓ To create, enlarge and consolidate the **SHAPES Ecosystem** for active and healthy ageing allowing stakeholders to exchange knowledge and expertise, identify current and future solutions for active and healthy ageing, provide mutual advice, training and support and exploit collective knowledge for social and comercial purposes.

✓ To promote the adoption of standards in the EU field of integrated care of older individuals, and the identification of standardisation priorities to facilitate the deployment of open and interoperable Platforms.

EXPECTED IMPACTS

- A European-led platform for smart, healthy and independent living at home.

- Increased competitiveness of the European ICT industry, through enhanced interoperability, best practices and financing models and scalable markets.

- Links and synergies between Member States and regional initiatives.

- Improved evidence-based efficiency of health and care systems with demonstrated added-value of underlying technologies.

- Improved quality of life and health for involved users and carers, with demonstrated added-value of underlying technologies.

- User-centered, validated and innovative solutions addressing accessibility, privacy, security, vulnerability, liability and trust in connected data spaces.
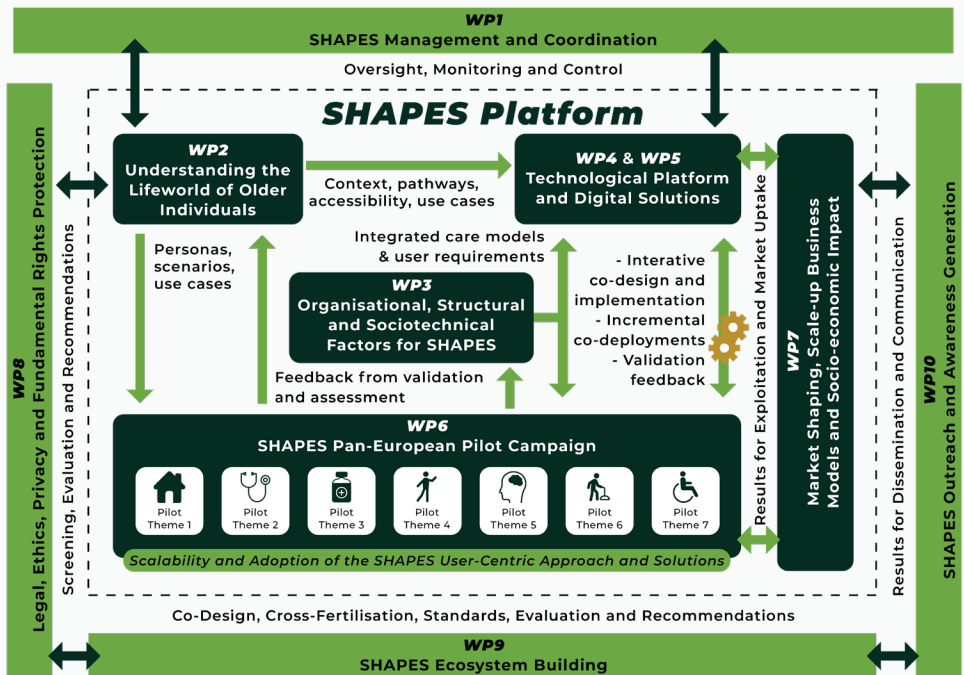
ABOUT THE PLATFORM

The **SHAPES Integrated Care Platform** is an open platform based on four factors: **home**, **behaviour**, **market** and **governance**. Big data analytics and artificial intelligence (AI) analyse information pertaining to health, environment and lifestyle and individual needs, create user profiles and deliver personalised solutions.

COMMUNITY CARE
Giving
Receiving

GIVING

RECEIVING

HOME
Healthy and Active
Ageing Independent
Living
Ageing in Place

DISCHARGE

ADMISSION

HOSPITAL CARE
Acute
Short-term

PATHFINDING

GOVERNANCE
Systems, Policies, Laws,
Standards, Ethics, Scaling
for an ethical, Equitable
and inclusive society

SHAPES PLATFORM
Learning

BEHAVIOR
Individual Action
Community Action
Healthcare Action

PATHMAKING

ACCESS
Buildings
Outdoor Spaces
Transport, Routes
Travel

MARKET
Demand and Supply
Products
Solutions
Services
Initiatives
Individuals
Communities
Countries

FUNDING
Public budget
Insurance
Personal
Collective

SHAPES STRUCTURE

The **SHAPES Project** is structured in ten thematic work packages (WPs), each subdivided into specific Tasks. The figure provides a graphical summary of the structure of the Project and of the relevant topics addressed by the different WPs and by the whole project.

WP1: Project Management

WP2: Understanding the Lifeworld of ageing individuals and Improving Smart and Healthy living

WP3: Organisational, Structural and Sociotechnical Factors for the SHAPES Ecosystem

WP4: SHAPES Technological Platform

WP5: SHAPES Digital Solutions

WP6: SHAPES Pan-European Pilot Campaign

WP7: Market Shaping, Scale-up Business Models and Socio-Economic Impact
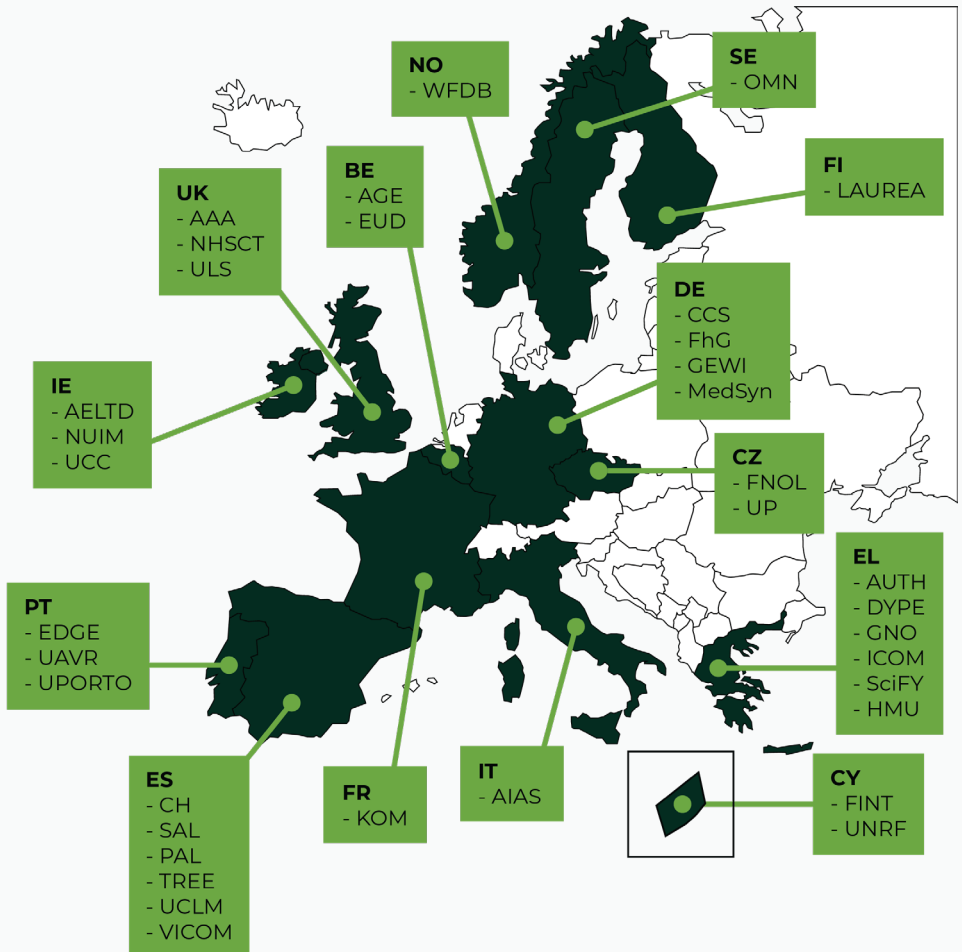
WP8: SHAPES Legal, Ethics, Privacy and Fundamental Rights Protection

WP9: SHAPES Ecosystem Building

WP10: SHAPES Outreach and Awareness Generation

SHAPES CONSORTIUM

The **SHAPES Project** brings together leading research groups, companies and experts from across Europe. The consortium of the **SHAPES Project** is formed by **36 partners** from **14 European countries**.

NO
- WFDB

SE
- OMN

BE
- AGE
- EUD

FI
- LAUREA

UK
- AAA
- NHSCT
- ULS

DE
- CCS
- FhG
- GEWI
- MedSyn

IE
- AELTD
- NUIM
- UCC

CZ
- FNOL
- UP

EL
- AUTH
- DYPE
- GNO
- ICOM
- SciFY
- HMU

PT
- EDGE
- UAVR
- UPORTO

ES
- CH
- SAL
- PAL
- TREE
- UCLM
- VICOM

FR
- KOM

IT
- AIAS

CY
- FINT
- UNRF