SHAPES

# Health & Care Cluster
of Large Scale Pilots

## RADICAL HEALTH FESTIVAL Helsinki
## 12 June 2023

**Creating an open ecosystem to bring** digital health services at scale **to support Active and Healthy Living policies**

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gewi Institut

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# Direct Digital interactions with older people: what are the conditions for upscaling in a rural area?

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# SHAPES Project

**SHAPES aims at creating uniform minimum standards in the care of older people**

- General objectives
  - Development of a European „**SHAPES Platform**“
  - Collection of digital solutions to be deployed in a **Pan-European Pilot Campaign**
- Individual level
  - Facilitate **active and healthy aging**
  - Maintain a **high-quality standard of life**

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## Context

# Germany

- 83 Million inhabitants with a large proportion of **aging population** (21,2% of people 65+ in 2023)
- **Increasing health and care costs** and willingness/pressure to reduce health expenses
- **Weak digital infrastructure** especially in rural areas
- **Data protection and data privacy** are of great importance to the population (data sharing skepticism)
- **Interoperability and integration issues** within national systems (electronic patient record is not widely distributed)

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## Pilot Site:
# Oberbergischer Kreis (OBK)

- Rural area
- 270,000 inhabitants, approx. 170,000 over 65 year older people
- Very low medical density (141.5 doctors per 100,000 inhabitants in 2019)

European Innovation Partnership on Active and Healthy Ageing
REFERENCE SITE

Gesundheitsregion KölnBonn
Gesundheitskompetenz im Rheinland

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# Use Case:
# Remote monitoring of key health parameters



## Who is it for?

- Older people (65+ years) were asked to monitor their health and wellbeing parameters in order to receive personalised recommendations concerning:
  - Heart rate
  - Physical activity
  - Sleep
  - Liquid and food intake
  - COVID-symptoms

- Raise awareness about the importance of physical activity, balanced nutrition, enough hydration and good sleeping habits
- Facilitate healthy ageing by enabling older people to manage their health

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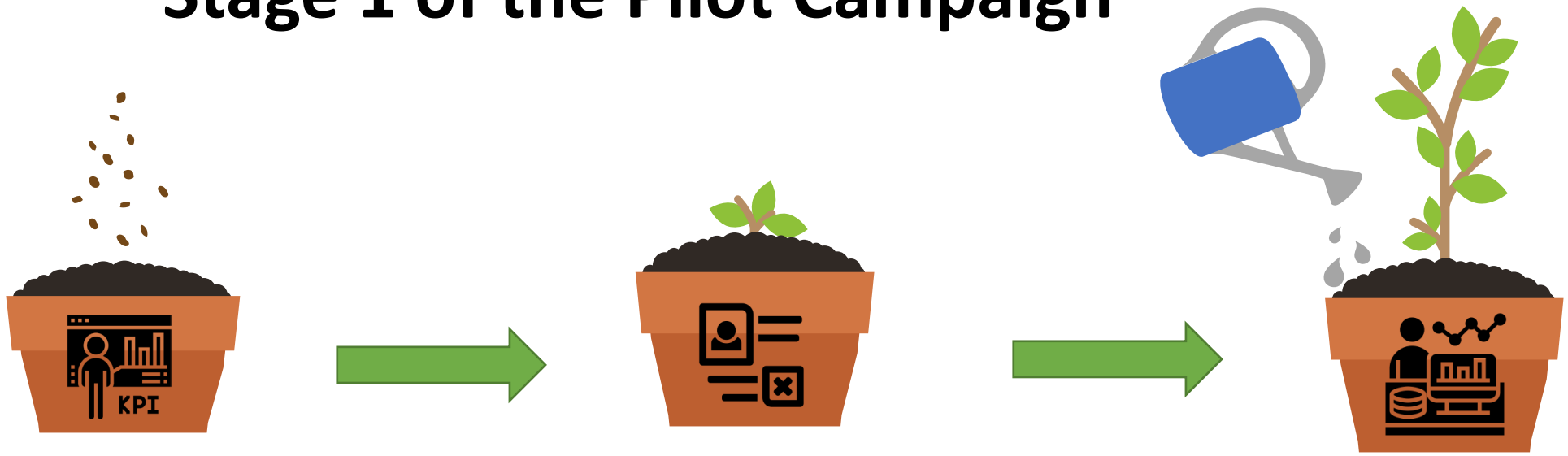
## Scalability by design:

# Stage 1 of the Pilot Campaign




### PHASE 1
**PLAN, DESIGN & KPIS**

Scenarios to validate initial concepts and approaches and adapt it to the specific regions

### PHASE 2
**MOCKUP OR PROTOTYPE VALIDATION**

Validation to assess user experience and acceptance

### PHASE 3
**HANDS ON EXPERIMENTS**

Validate functional elements and gather user feedback

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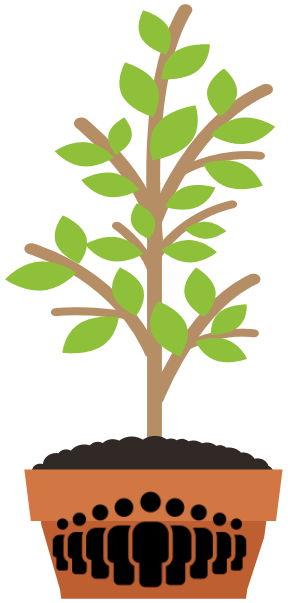
## Scalability by design:

# Stage 2 of the Pilot Campaign



### PHASE 4

### DEPLOYMENT IN CONTROLLED ENVIORNMENT

**Experimenting with a single SHAPES DS up to demonstrating (part of) the platform in a controlled environment.**

### PHASE 5

### DEPLOYMENT IN REAL LIFE USE CASES

**Demonstrations in real-life conditions involving targeted groups**

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## Scalability

# Technology: Project level

- sociological evaluation of needs and setting (phase 1)
- iterative testing, feedback and adjustment loops by involving end-users
- aspired technological readiness level (TLR) 5-7
- application of the GDPR

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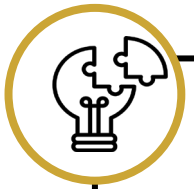
## Scalability

# Technology: real setting



high TLR (8-9)

- technical stabilisation of functioning (data transfer, sufficient database for ML, automization of data analysis and recommendations)

cloud computing to meet the increased system requirements

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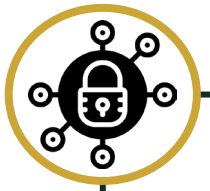
## Policies

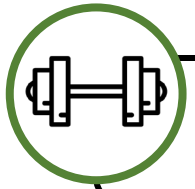
# Germany



- Legal obligation for **health insurance companies** to provide preventive services
- **Digitalisation strategy** of the Federal Ministry of Health to improve the quality and efficiency of medical and nursing care (DiGAs)
- **Research and Innovation Funds** as central health policy instrument for promoting new forms of health care and health services research in Germany

## Network of support

# Human support and training: project level



Provision of an introduction training and a manual

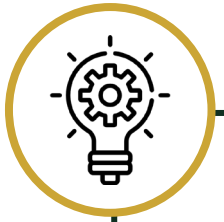
Regular contact with participants (once a week) by phone

Technical support via phone, home visit or remotely accessing the device

Optional exchange with other participants would have been beneficial for the participants to exchange their experiences

## Network of support

# Human support and training: real setting



- Doctors or pharmacies could recommend the DS to their patients
- Financed by **end-users** and / or **inssurance company** (DiGA)
- Purchased via the **marketplace** (device and app)
- **Human services**:
  - Introduction training (digitally or physically) in home
  - Technical support: to integrate the DS in existing systems and offer remote support

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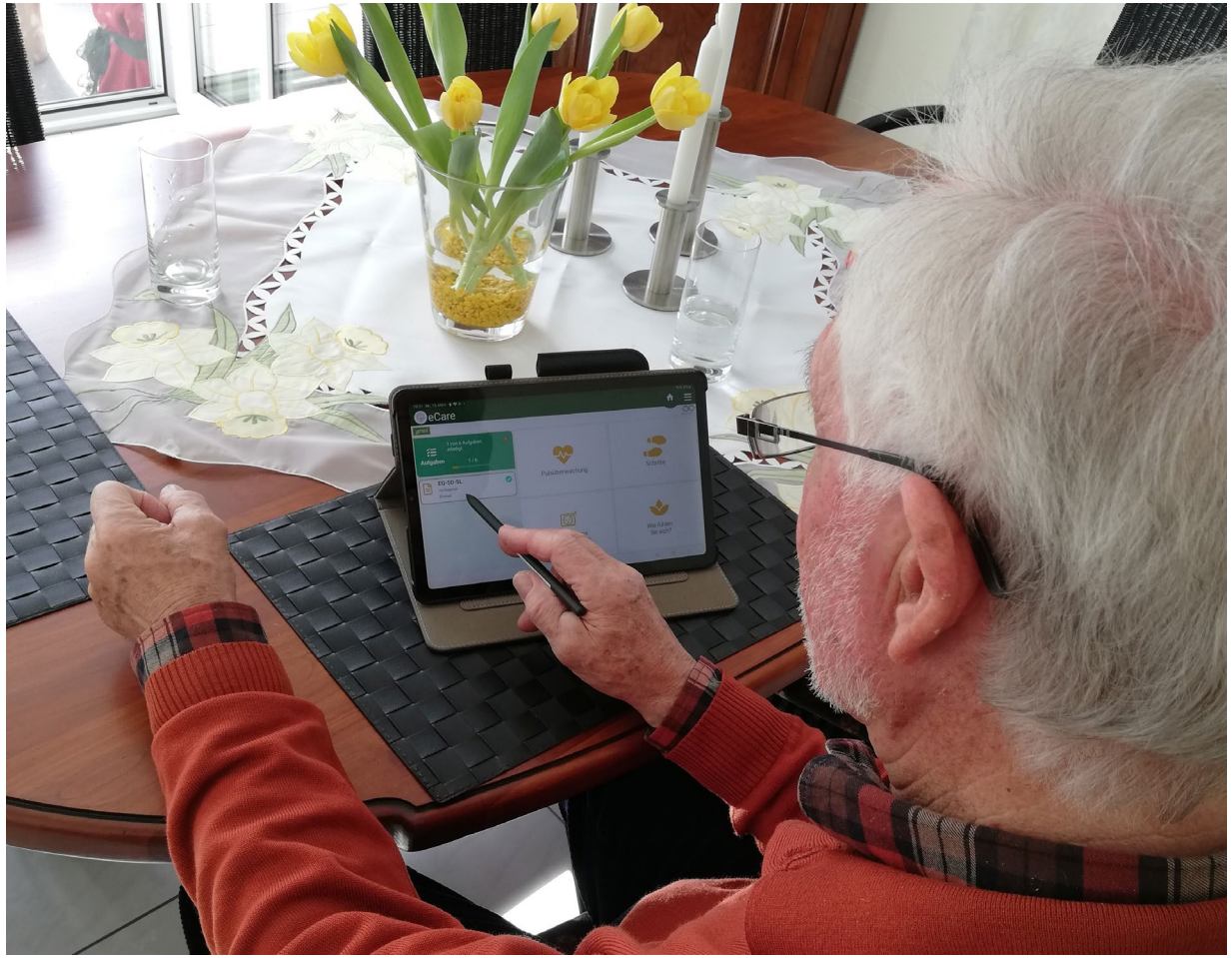
# User acceptance: project level





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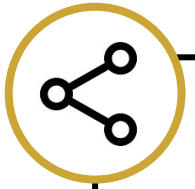
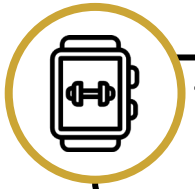
# User acceptance: real setting





DS would need to be connectable to the user's initial system (android and apple)



the fitness tracker would need to collect additional activity data other than steps

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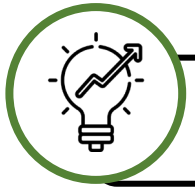
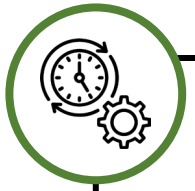
# Impact: project level



User saw a high potential in the DS



Most participants had already been using a fitness tracker and were aware of their health and wellbeing parameters

Self-care was perceived as satisfying

Using the app on a daily base affected the perceived importance of health and motivated them to keep healthy lifestyles up.

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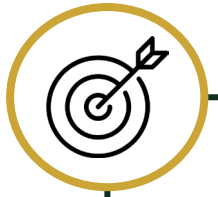
# Impact: real setting



- **Quality of life**
- Reduction of **intake of over the counter drugs** (sleeping aids, nutrition supplements, reflux)
- **Patient-Empowerment**
- Improvement of **information flow**, fewer calls to GP
- **Fewer doctor visits:** cost reduction at insurer level

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# Elements which require adaptation

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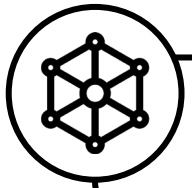
Reimbursement



Interoperability with local/national EHR

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# Thank you for your attention!

# Come and visit us at the booth!

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