

GENERAL 01

# SHAFE and me

Introduction to Smart Healthy Age-Friendly Environments

[Start course >](#)



Warsaw University  
of Technology



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## GENERAL MODULE 1

### SHAFE and me

Smart Healthy Age-Friendly Environments focus on people and places. They combine built environments (housing, public spaces and buildings) with smart information and communications technology (ICT) applications, social participation and healthy solutions. They enable more independent living, better participation in society and wellbeing for citizens.

## SHAFE in practice

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*“By working through the learning materials in this module, you will learn what SHAFE is in practical examples that we collected in Europe. SMART, HEALTHY and BUILT environments will be further explained. Enjoy the training!”*

Willeke van Staalduinen  
Co-founder AFEdeMy

# What will you learn in this module

- 1 You will learn what Smart Healthy Age-Friendly Environments (SHAFE) are
- 2 You will be able to detect the relationships between the different domains of SHAFE
- 3 You will learn what roles a facilitator in SHAFE can have
- 4 You will explore what the best role is for you



# Chapters in this module

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**1** Introduction to SHAFE

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**2** SMART environments

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**3** HEALTHY environments

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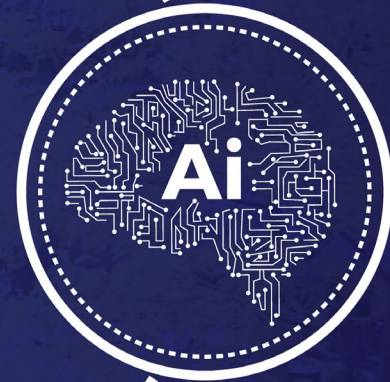
**4** BUILT environments

**5** SHAFE facilitator role

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# SMART HEALTHY AGE-FRIENDLY ENVIRONMENTS



**GENERAL | MODULE 1 | CHAPTER 1**

## Introduction to SHAFE

The next chapter will introduce the concept of Smart Healthy Age-Friendly Environments (SHAFE).

# What will you learn in this chapter

- 1 The origin of SHAFE
- 2 The overall concept of SHAFE
- 3 SHAFE and actual spin-offs



# Smart Healthy Age-Friendly Environments (SHAFE)

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The new concept of SHAFE was created by Carina Dantas (SHINE2Europe / Cáritas Coimbra) and Willeke van Staalduinen (AFEdemy) in 2017. It is based on the desire to realise SHAFE across Europe, fostering happier and healthier people everywhere. This idea took shape and became a solid movement with over 170 partner organisations and around 300 interested people and professionals involved.





## Video

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Webinar NET4Age:

What is SHAFE – January/February 2021

See <https://www.youtube.com/watch?v=axrlxqY2Qjl> or click on the image on the right.



**WEBINAR CYCLE**

**NET4**  
age-friendly

**SHAFE explained**  
18 February 2021



  
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  European Commission

This video is based upon work from COST Action NET4Age-Mentor, supported by COST (European Cooperation in Science and Technology) – [www.cost.eu/](https://www.cost.eu/) – for researchers and innovation networks. COST Actions help connect research institutions across Europe and enable scientists beyond their limits to change their role and join. This means more research, career and innovation opportunities.

# Smart Healthy Age-Friendly Environments – Concept and background

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**Smart Healthy Age-Friendly Environments focus on people and places. They combine built environments (housing, public spaces and buildings) with smart ICT applications, social participation and healthy solutions. To enable more independent living, better participation in society and wellbeing for citizens.**

SHAFE was approved by the European Commission. The Network presented a Joint Statement to the Commission in 2018.

The statement asked for more research for prevention and more attention to combine:

- Health and social care, with
- Built environments, and
- ICT.

For example: when building or retrofitting new houses, buildings or outdoor spaces, it is important to think from different perspectives. The planners and designers should think of the people who will live, work or walk there. They should imagine which ICT must be included. Also think of which healthy measures must be taken and how the house or street will support an active or healthy life.

# Smart Healthy Age-Friendly Environments – Follow up

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In 2020, the Network on SHAFE released a new political paper: the [Position Paper](#) on SHAFE.

The Position Paper focuses on:

## Citizens

- Digital skills
- Sharing data
- Healthy lifestyles
- Participate and engage
- Social networks

## Environments

- Retrofit and adapt housing
- Accessible public spaces and transport
- Climate neutral
- Health & wellbeing at work

## Health and care

- Reliable, safe and accessible data
- Robust digital infrastructures
- Integrated personalized care
- Guidelines and long-term funding solutions/business models
- Digital skills trainings for professionals

A better **COOPERATION** and **IMPLEMENTATION (ACHIEVEMENT)** of SHAFE across Europe is the ultimate pledge of the Position Paper.

The Paper was well received and published by the European Commission.

# Smart Healthy Age-Friendly Environments – projects and spin off

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New European projects based on SHAFE were granted.

SHAFE spin-off projects are:

- [Hands-on SHAFE](#) (2019-2022). This training is part of it
- [EU\\_SHAFE](#) (2019-2023) focuses on developing SHAFE policies and practices in several European regions
- COST Action [NET4Age-Friendly](#) (2020-2024) is a network of researchers from all European countries and beyond
- [BIG educational game](#) (2020-2022) brings SHAFE alive in a 2.5D online game





## ❖ Did you know?

SHAFE started in 2017 to address the political agenda in Europe.

- To focus attention for the wellbeing of people and places.
- To better combine health, ICT and built environments.

Since 2019 four projects have started to work on SHAFE.

# Chapter summary

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**1**

In this chapter you have learned what the overall concept of SHAFE is

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**2**

You have learned which projects have started based on SHAFE

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# Chapter completed!

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Congratulations! You have successfully completed this chapter!

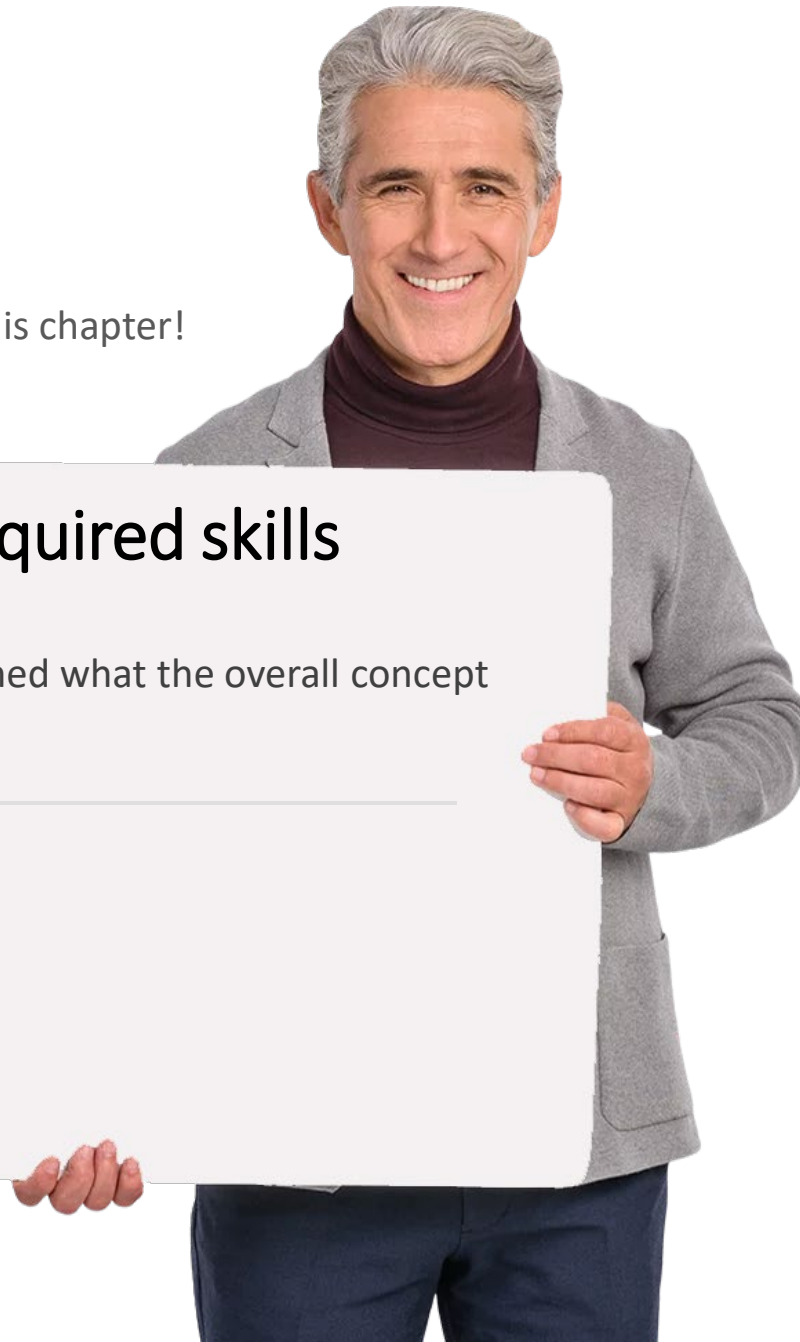
## Summary of acquired skills

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1

You have learned what the overall concept of SHAFE is

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## What is next?

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In the next chapter you can continue learning more about SMART environments

[Restart](#)

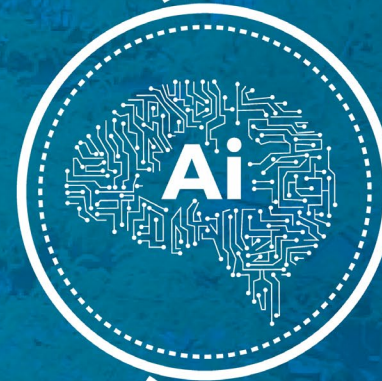
[Next](#)







# SMART HEALTHY AGE-FRIENDLY ENVIRONMENTS



 **GENERAL** | **MODULE 1** | **CHAPTER 2**

## SMART environments

The next chapter will focus on SMART environments. What are these environments and which examples exist in different European countries?

# What will you learn in this chapter

- 1 You will learn what SMART environments are



# SMART environments

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Digital or Information and Communication Technology (ICT) applications are everywhere. For example: smartphones, internet and WIFI at home, streaming services, and digital watches. The devices and software need to be designed to be user-friendly, safe to use, supportive to citizens and offer reliable data handling.



## Smartphones

Phones with iOS , Microsoft or Android (Google, Huawei, Samsung) provide many functionalities such as internet, data, social media, games.



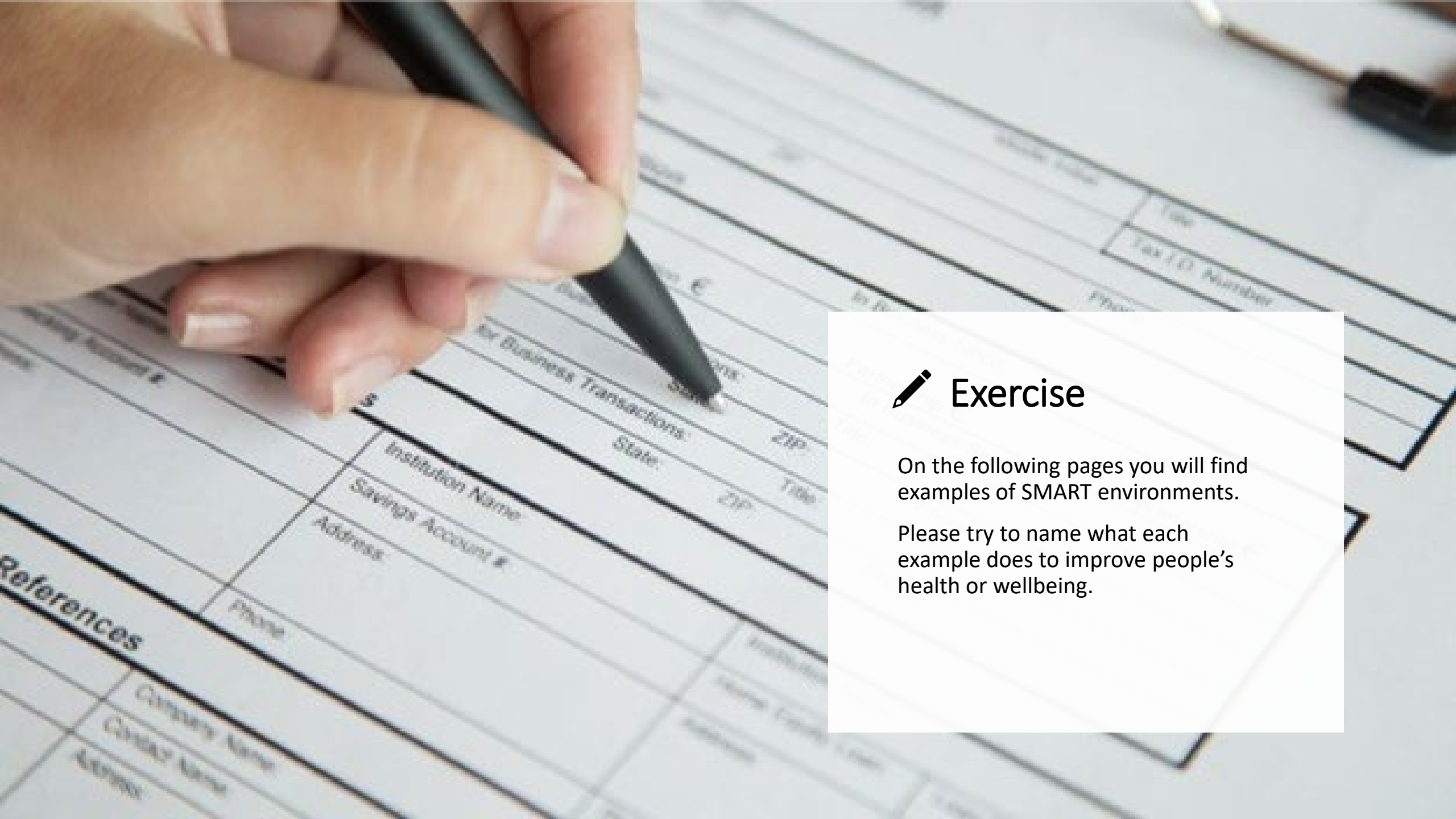
## Smart home technology

WIFI, home sensors, internet: comfort, health advice and monitoring, independent living support.



## Outdoor smart technology

Wearables, smart lighting, transport facilities support orientation and an active lifestyle.



## Exercise

On the following pages you will find examples of SMART environments.

Please try to name what each example does to improve people's health or wellbeing.

## E-Connection with doctor

The e-Connection with your doctor app can be freely downloaded in the App store or Google play. The doctor or nurse invites the user to use it. With the app, people can send a photo or a file to their doctor. Also you can consult the doctor while you are at home.

[Dutch](#)

[Irish](#)

[French](#)

[Polish](#)

[German](#)

[Portuguese](#)



## Smartphone for seniors

An affordable smartphone (EUR 90) with special age-friendly application that is accessible for all.

Examples:

[Dutch](#)

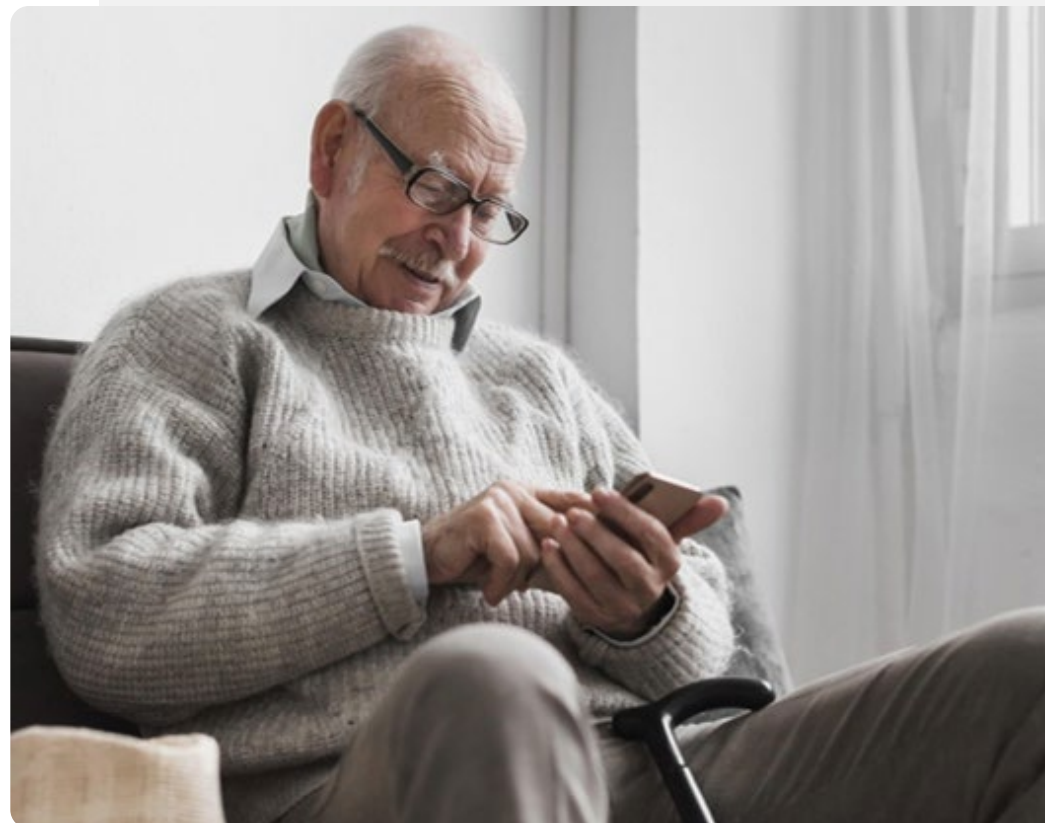
[French](#)

German

[Irish](#)

[Polish](#)

[Portuguese](#)



## Tablets

Tablets with large buttons and an easy-to-use interface are especially designed for seniors. For example:

- Acorn: a standalone tablet with integrated mobile data SIM to connect to internet (<https://myacorn.ie/>) or
- Grandpad: a tablet with large buttons and intuitive interface. ([www.grandpad.net](http://www.grandpad.net)) or
- Senior Tablet is a tablet for connection with caregivers ([www.mymemorylane.com](http://www.mymemorylane.com))

[Dutch](#)

Irish

[French](#)

[Polish](#)

German

[Portuguese](#)



## Wearables

Wristwatches and also smartphone apps to measure steps, report activity, monitor vital functions, or send an alarm, can support active and healthy ageing. Because they provide information on one's progress of walking, health and so on.

Apps may send encouraging messages e.g. "You are doing well! Keep up the good work!" This can provide encouragement to do a little better next time (e.g. go from 2000 steps, to 3000 steps and further) or it reassures because one sees the heart beat is okay and if needed, help is near.





## WhatsApp Neighbourhood watch

Neighbours in a street and volunteers in neighbourhoods or larger communities may create and/or join a WhatsApp group to share community related information and alert each other in case of emergencies, suspicious people or vehicles etc.. Sometimes the local police officer participates in the group.



## Social robots

To provide company, social robots are developed. One example is Tessa: Tessa is a social robot for people at a certain phase of dementia. It offers a time schedule, supports day structure, suggests activities and provides reminders

[Dutch](#)

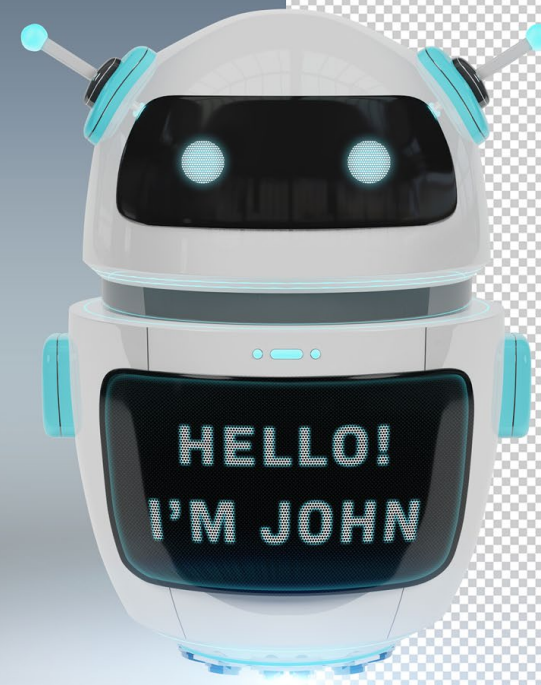
Irish

[French](#)

[Polish](#)

German

Portuguese



## Answers: Smart solutions and health and wellbeing

Did you think of benefits for each of the examples?

Here are some:

- Technology to connect online with other people
- Online consultation with a doctor
- Personalised training programme
- Personal advice
- Safety near the home and in the neighbourhood
- Games and training to relax and promote mental health

# Chapter summary

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**1**

In this chapter you have learned what SMART environments are

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**2**

You have seen some examples of SMART environments

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**3**

You have learned the benefits of SMART environments and applications

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**4**

You are recommended to go to the SMART modules to learn more

# Chapter completed!

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Congratulations! You have successfully completed this chapter!

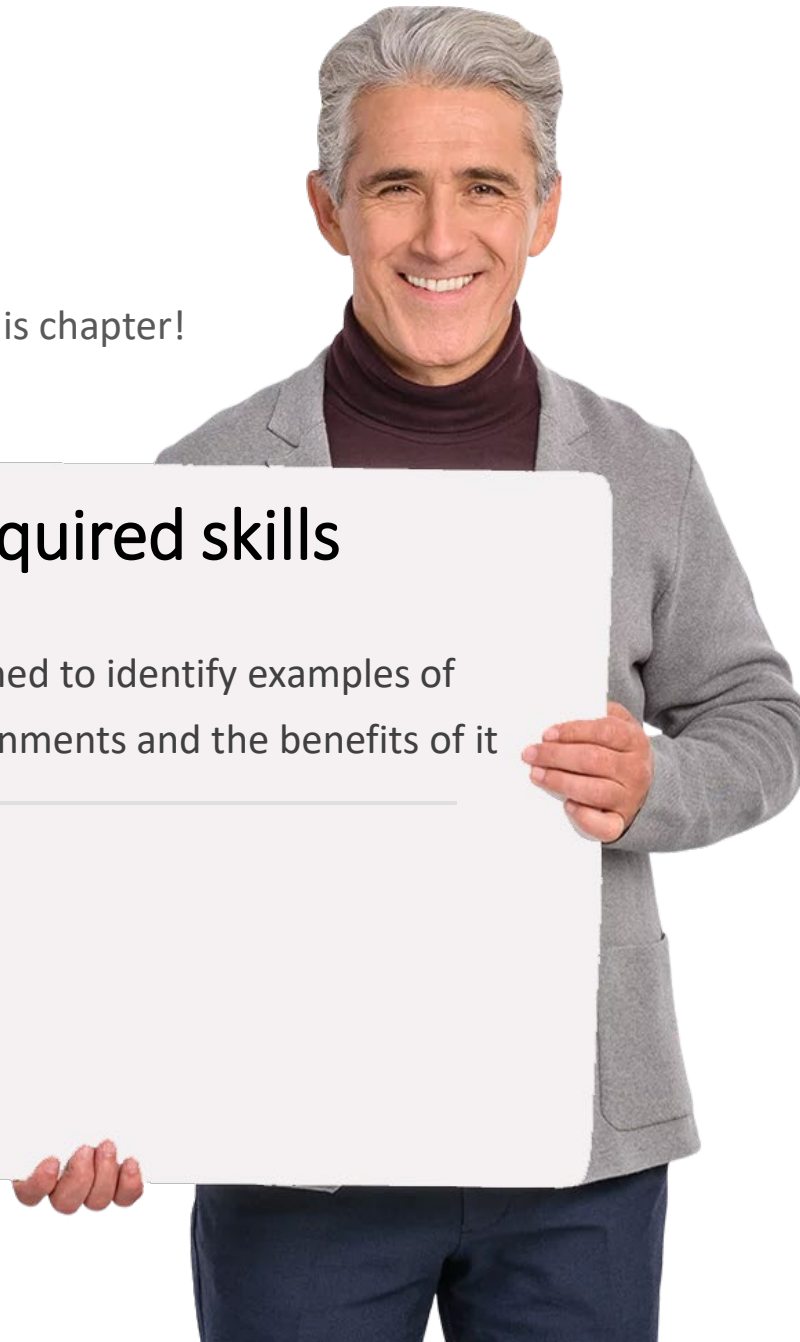
## Summary of acquired skills

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1

You have learned to identify examples of SMART environments and the benefits of it

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## What is next?

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You can continue to learn more about SMART environments in the modules of SMART or continue with HEALTHY environments

[Restart](#)

[Next](#)





# SMART HEALTHY AGE-FRIENDLY ENVIRONMENTS



**GENERAL** | **MODULE 1** | **CHAPTER 3**

## HEALTHY environments

The next chapter will focus on HEALTHY environments. What are these environments and which examples exist in different European countries?

# What will you learn in this chapter

- 1 You will learn what HEALTHY environments are
- 2 You will see and explore examples of HEALTHY environments
- 3 You will learn to define the benefits of HEALTHY environments





# HEALTHY environments

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Healthy environments support people to remain active and prevent certain diseases. Healthy environments are safe and inviting, and they promote physical activity and participation in society.



## Healthy lifestyle

Food, physical activity, moderate use of alcohol and tobacco, relaxation, good mental health support wellbeing and health.



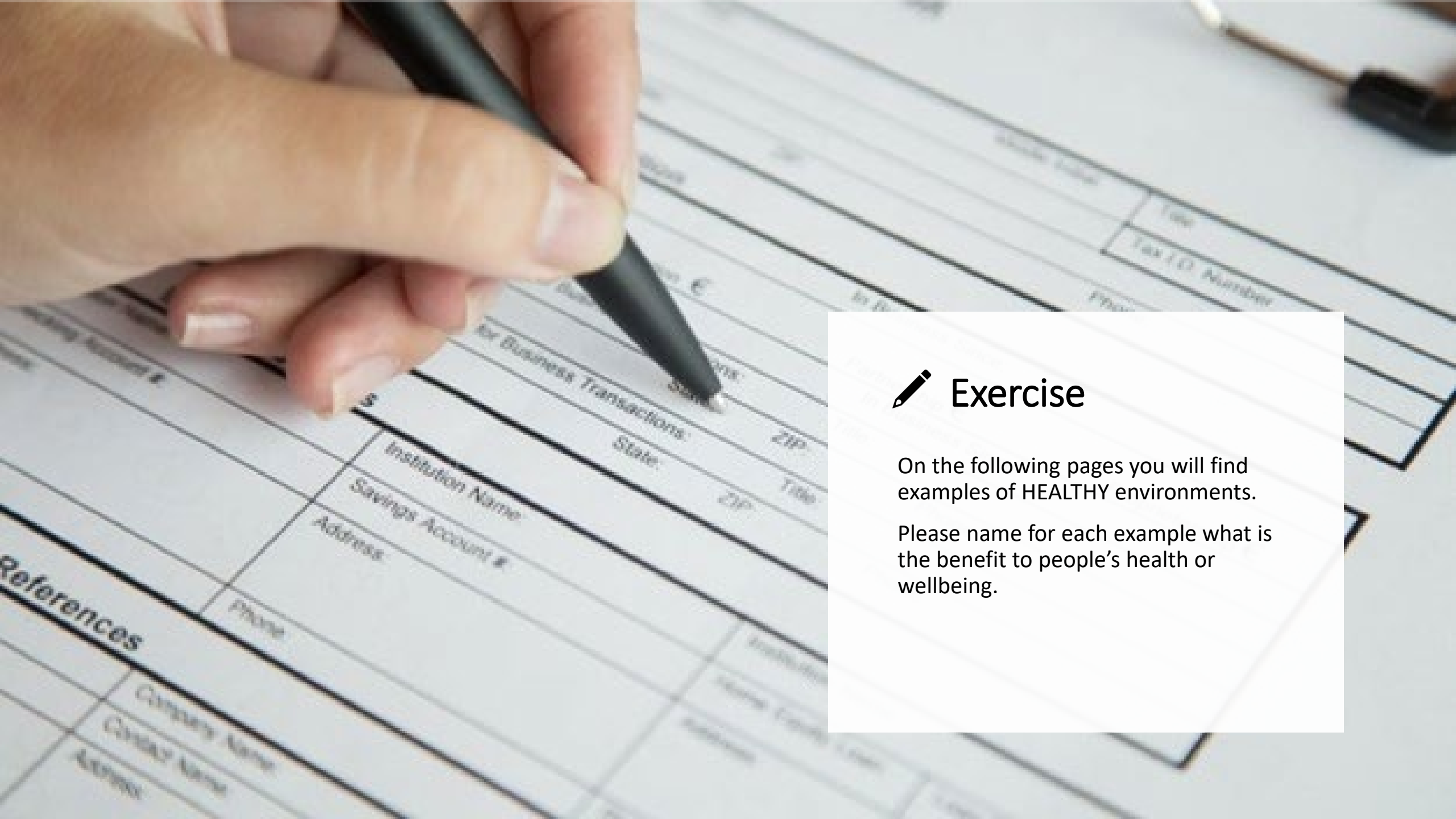
## Medicines and therapies

Pharmaceutical treatment, physical activity therapy, music therapy, rehabilitation and training supports to recover from or live with a disease or impairment.



## Caretaking

Taking care of people who struggle with chronic diseases or impairments, such as dementia, Parkinson's disease, mobility problems, mental health problems.



## Exercise

On the following pages you will find examples of HEALTHY environments.

Please name for each example what is the benefit to people's health or wellbeing.

## Walking, running, getting outdoors

Being outdoors for a walk, run or just sitting in a park is good for health. Physical activity supports the fitness of the body and is good for mental health and self-esteem

It is cheap and easy and can be done everywhere.



## Fitness training

Physical exercise supports your body muscles, bones and brain. It can also help with weight loss.

[Dutch](#)

[Irish](#)

[French](#)

[Polish](#)

[German](#)

[Portuguese](#)



## Meeting other people

In Ireland, a men's shed is a place where men can share their feelings in an incidental way, and in a secure, respectful and friendly atmosphere, while working on practical projects such as gardening, repair and refurbishment or community activities.

In The Hague, in every neighbourhood there are places to meet for a cup of coffee or talks.

[Dutch](#)

[Irish](#)

[French](#)

[Polish](#)

German

[Portuguese](#)



## Network for people with dementia

Dementia is a disease that mainly affects older people. The main symptoms are that it steals memories, decreases the ability to speak, decreases the ability to recognize people and people lose awareness of place and time.

There is no effective treatment for dementia yet. Some dementia networks:

[Dutch](#)

[Irish](#)

[French](#)

[Polish](#)

[German](#)

[Portuguese](#)



## Medicines and therapies

When someone is ill or has an impairment (permanent or temporary), medicines and therapies may be necessary, such as pills described by the doctor. Surgery or therapy from a psychologist or physiotherapist may also be needed.

In Kassel (Germany) they developed an online Stutter therapy (combination Health and ICT).

[Dutch](#)

[Irish](#)

[French](#)

[Polish](#)

[German](#)

[Portuguese](#)



## Rehabilitation innovation kit

ReHab is a multidimensional kit of innovative technologies and traditional materials to promote cognitive stimulation and functional rehabilitation, whether individually or collectively, at home or through remote interaction.

<https://en.caritascoimbra.pt/project/rehab/>

Dutch

Irish

French

Polish

German

Portuguese







## Answers: Healthy solutions and health and wellbeing

Did you think of benefits for each of the examples?

Here are some:

- Physical activity supports improved health and mood
- Medicines and therapies help to improve health and mood and/or to learn to live with a handicap
- Support for living with dementia helps improve wellbeing

# Chapter summary

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- 1 In this chapter you have learned what HEALTHY environments are

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- 2 You have seen some examples of HEALTHY environments and solutions

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- 3 You have learned which benefits come from HEALTHY environments

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- 4 You are recommended to go to the HEALTHY modules to learn more

# Chapter completed!

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Congratulations! You have successfully completed this chapter!

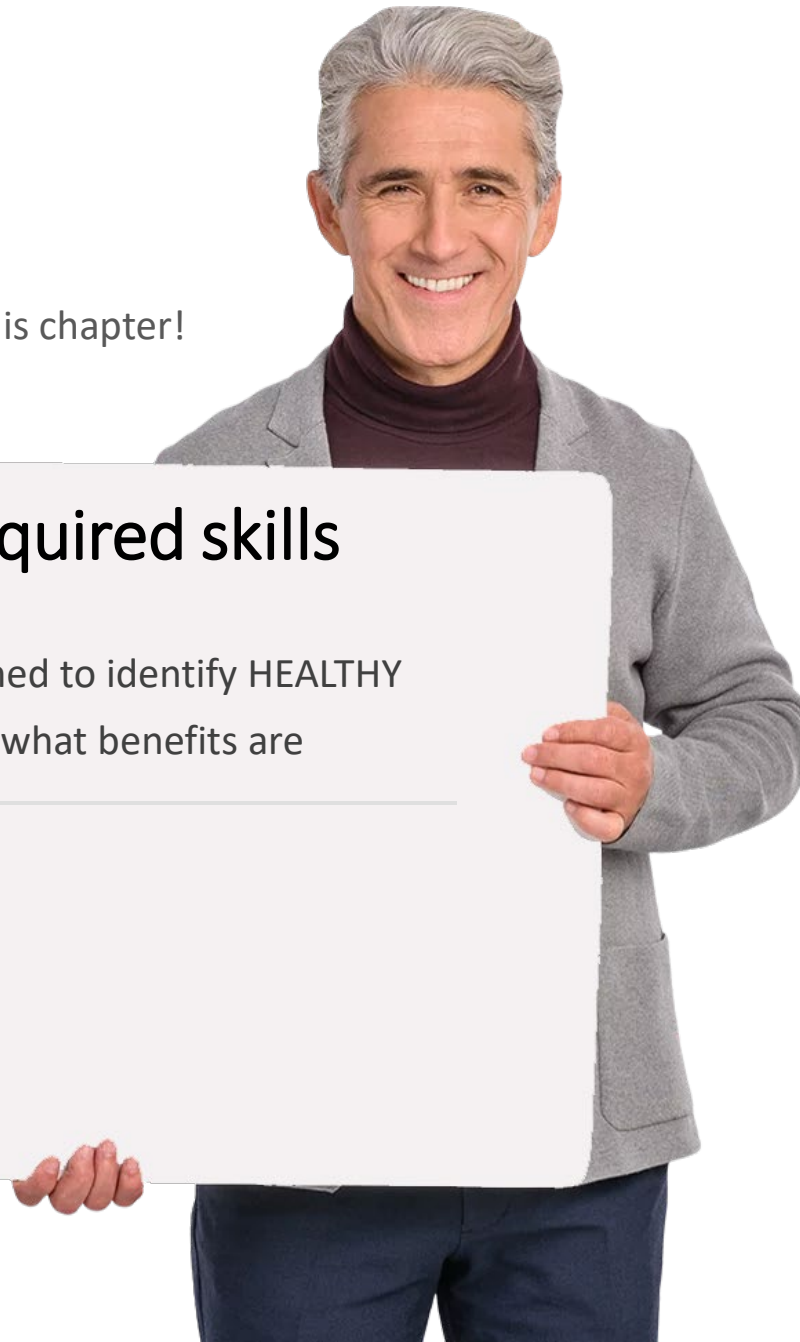
## Summary of acquired skills

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1

You have learned to identify HEALTHY examples and what benefits are

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## What is next?

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To learn more about HEALTHY environments you can go to the HEALTHY modules or you continue with the next chapter on BUILT environments

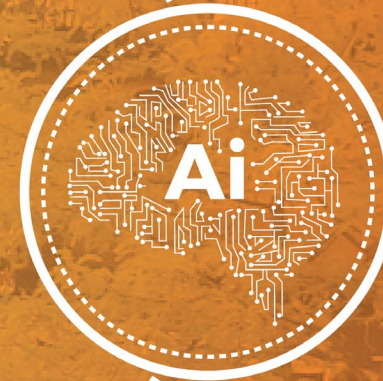
[Restart](#)

[Next](#)





# SMART HEALTHY AGE-FRIENDLY ENVIRONMENTS



**GENERAL | MODULE 1 | CHAPTER 4**

## BUILT environments

The next chapter will focus on BUILT environments. What are these environments and which examples exist in different European countries?

# What will you learn in this chapter

- 1 You will learn what BUILT environments are
- 2 You will see and explore examples of BUILT environments
- 3 You will learn to identify the benefits of BUILT environments



# BUILT environments

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Built environments that are accessible, user-friendly and inclusive support individuals to live, to work, to play and relax, to love, and promotes their wellbeing



## Housing

Apartments and houses where people live support wellbeing and health.



## Outdoor spaces and buildings

Public buildings, streets, pathways, motorways are examples of outdoor spaces that should support social inclusion and health.



## Mobility

Trains, buses, cars, bicycles are means of transport that are accessible and user-friendly.



## Exercise

On the following pages you will find examples of BUILT environments.

Please suggest for each example what it does to improve people's health and wellbeing.



## Age-friendly housing

Accessible age-friendly housing equipped with supporting digital solutions are being built everywhere across Europe.

Some examples with more information:

[Dutch](#)

[Irish](#)

[French](#)

[Polish](#)

German

Portuguese



## Mobile age-friendly housing advice

In Hanau (Germany) a mobile housing advice office is available. This informs the citizens about the possibilities of independent living and community support.

[Dutch](#)

[French](#)

[German](#)

[Irish](#)

[Polish](#)

[Portuguese](#)



## Dementia-friendly walkable shopping route

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To support the orientation of people with dementia, a dementia-friendly route was created in Rotterdam (Blokkie om). Two routes marked with yellow or green can be followed. Extra benches, sidewalk entries and exit ramps are available.

[Dutch](#)

[Irish](#)

[French](#)

[Polish](#)

German

Portuguese



## Outdoor safety and maintenance

Safe and well maintained outdoor places and buildings are explored and reported by older people and others. For example: the maintenance of sidewalks, traffic lights, slowing down the times of the walk signal to cross safely at street crossings.

[Dutch](#)

[French](#)

[German](#)

[Irish](#)

[Polish](#)

[Portuguese](#)



## Sustainable energy housing

Compared to younger people, older people have more difficulty in keeping themselves warm and often must turn on heating. To reduce the usage of fossil fuels and to save costs, people are informed and encouraged to consider switching to non-fossil fuel powered heating and electricity, such as solar panels on the roof of the house or wind energy.

[Dutch](#)

[Irish](#)

[French](#)

[Polish](#)

German

Portuguese



## Answers: BUILT environments and health and wellbeing

Did you think of benefits for each of the examples?

Here are some:

- Accessible and inclusive designed houses support independent living and wellbeing
- Safe transport enables visits to other people
- Accessible outdoor places enables outdoor activities, do shopping and visiting other people
- Safe environments support health and wellbeing and help to prevent disease

# Chapter summary

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**1**

In this chapter you have learned what BUILT environments are

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**2**

You have seen some examples of BUILT environments

---

**3**

You have learned more about the benefits from BUILT environments

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**4**

You are recommended to go to the BUILT modules to learn more

# Chapter completed!

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Congratulations! You have successfully completed this chapter!

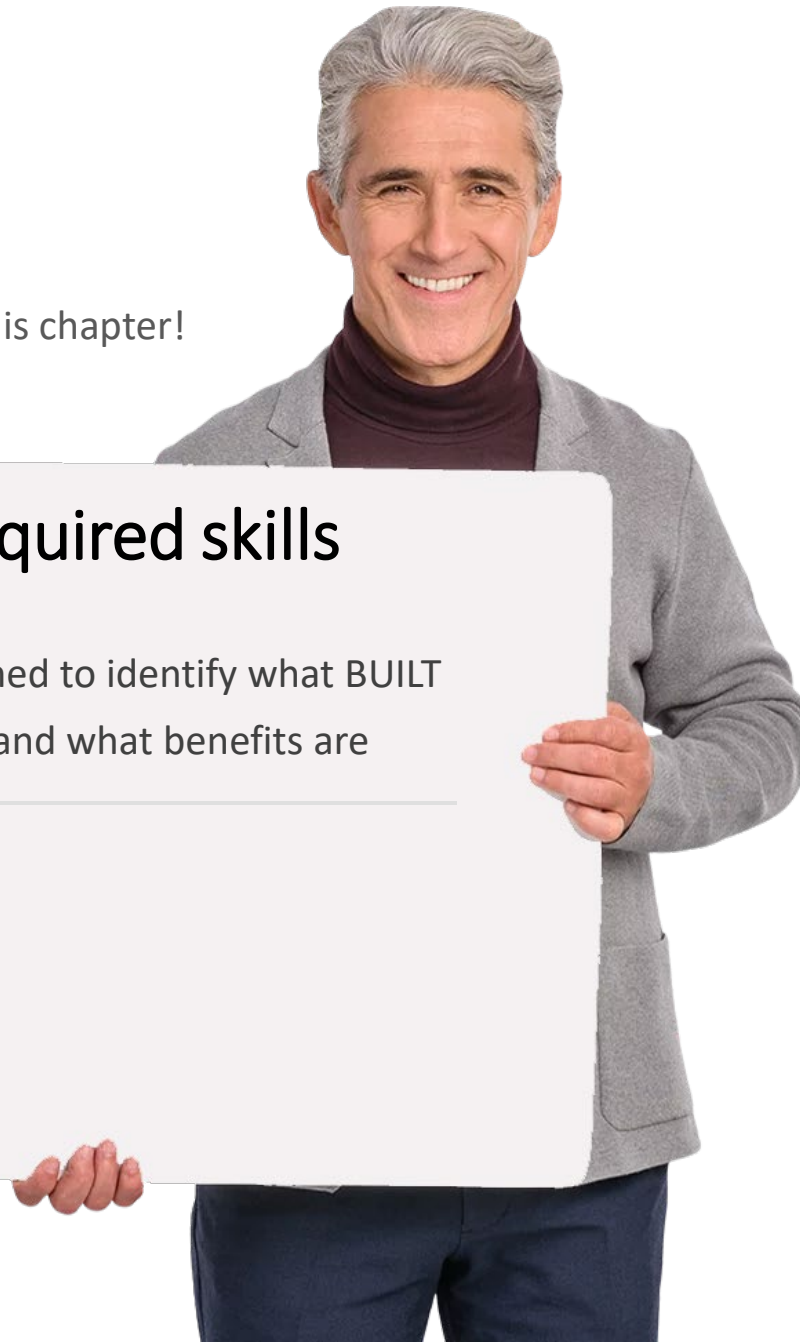
## Summary of acquired skills

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1

You have learned to identify what BUILT examples are and what benefits are

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## What is next?

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To learn more about BUILT environments you can go to the modules on BUILT or continue with the next chapter on SHAFE and the role of the facilitator.

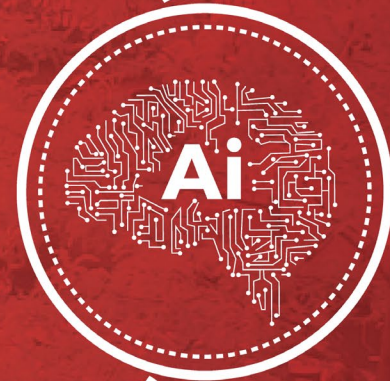
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# SMART HEALTHY AGE-FRIENDLY ENVIRONMENTS



**GENERAL | MODULE 1 | CHAPTER 5**

## SHAFE facilitator role

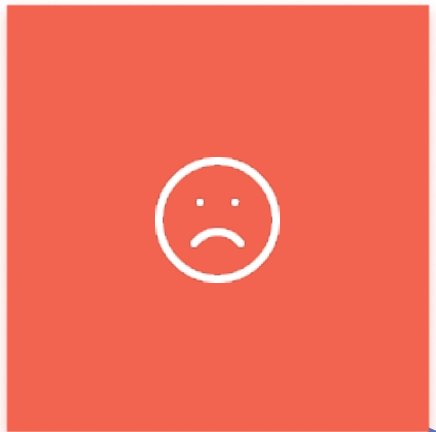
The next chapter will focus on your role in Smart Healthy Age-Friendly Environments. Will you act as volunteer to realise SHAFE, or is it part of your job? Or even can you build your own business with SHAFE? You can explore this in the next chapter.

## What will you learn in this chapter

- 1 You will learn about SHAFE facilitators roles
- 2 About volunteers, caregivers and entrepreneurs
- 3 You will be invited to assess your own role in SHAFE



# SHAFE Facilitator

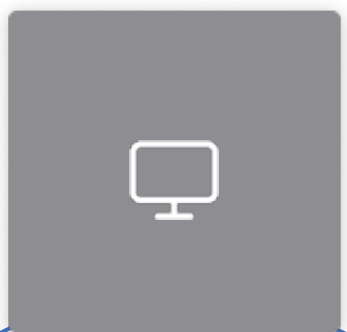


**What could my role be?**  
Now I know a little about SHAFE, what could **my** role be?

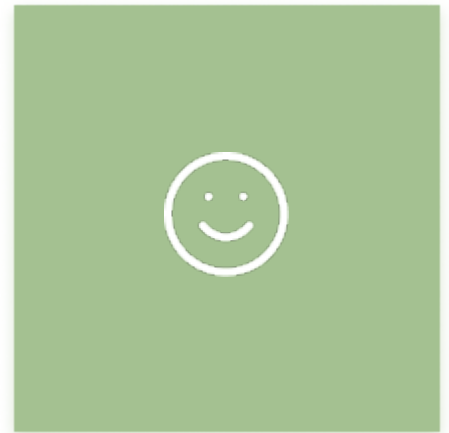
**I can be a volunteer**  
My parents, neighbours, or friends need help. I can support the neighbourhood



**I may earn money**  
I want to support people but I also may earn money to live



**Check and choose**  
Find out what the best role is for me



# SHAFE roles

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What would be the best role for you? Let us consider the different options. At first, the different roles are presented.



## Volunteer

A volunteer is a person who carries out activities benefiting society, by free will.



## (In)Formal caregiver

A caregiver gives care, generally in the home environment, for an ageing parent, spouse, other relative, or unrelated person, or for an ill, or disabled person.



## Entrepreneur

A business entrepreneur offers SHAFE services and products to clients and invoices the time and costs.

# Volunteer

A volunteer is a person who carries out activities benefiting society, by free will.

These activities are undertaken for a non-profit cause, benefiting the personal development of the volunteer, who commits their time and energy for the general good without financial reward.



# SHAPE Volunteer

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Volunteering activities are undertaken for a non-profit cause and does not replace paid staff. The activity can be organised by a volunteering provider or through a volunteer's own initiative.

Volunteers have rights that are described in the European Charter on the Rights and Responsibilities of volunteers. [[Link](#)] Examples of rights are: equal access to be a volunteer, informed about rights and responsibilities, social protection, certain amount of flexibility during the volunteering activity.

Volunteers have the right to receive support from various providers, such as reimbursement of expenses or clear description of tasks.

Responsibilities of volunteers are for example: respect the rules of law and non-discrimination, respect the integrity and values of the volunteering provider, respect the commitment of time and effort that has been agreed.

## Caregiver (formal and informal)

A caregiver gives care, generally in the home environment, for an ageing parent, spouse, other relative, or unrelated person, or for an ill, or disabled person.

Formal caregivers are professionals, paid to deliver care. Informal caregivers are children, neighbours, friends due to certain circumstances.





# SHAFE Caregiver

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SHAFE caregivers are referred to as either "formal" or "informal."

- "Formal" caregivers are paid for their services and have had training and education in providing care. This may include services from home health agencies and other trained professionals.
- "Informal" caregivers, also called family caregivers, are people who care for family or friends usually without payment. They give care, generally in the home environment, for an ageing parent, spouse, other relative, or unrelated person, or for an ill, or disabled person.

Tasks that SHAFE caregivers help with may include transportation, grocery shopping, housework, preparing meals, giving assistance with getting dressed, getting out of bed, help with eating, and incontinence.

Other SHAFE facilitators can support caregiving by providing for example, smart solutions (e.g. smartphones for remote monitoring, memory aids), or house adaptations (e.g. accessible bathroom, smooth tapestry on the floor)

## Entrepreneur

SHAFE entrepreneurs are people who offer paid services or products in the SHAFE space such as home, gardening, retrofitting the house or paid digital applications.

Entrepreneurs can be either self-employed or work together with others in a partnership or company.



# SHAPE Entrepreneur

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Perhaps people who want to start their own business (or are forced by certain circumstances, such as job loss) can choose to become a SHAPE entrepreneur.

In the module “BUSINESS” more information is available.

Starting your own business means that you ideally have the following attributes:

1. Entrepreneurial spirit: when launching a product or service you need to be prepared, but you can always get no for an answer.
2. Sufficient perseverance: continue to work, even if you are not successful yet.

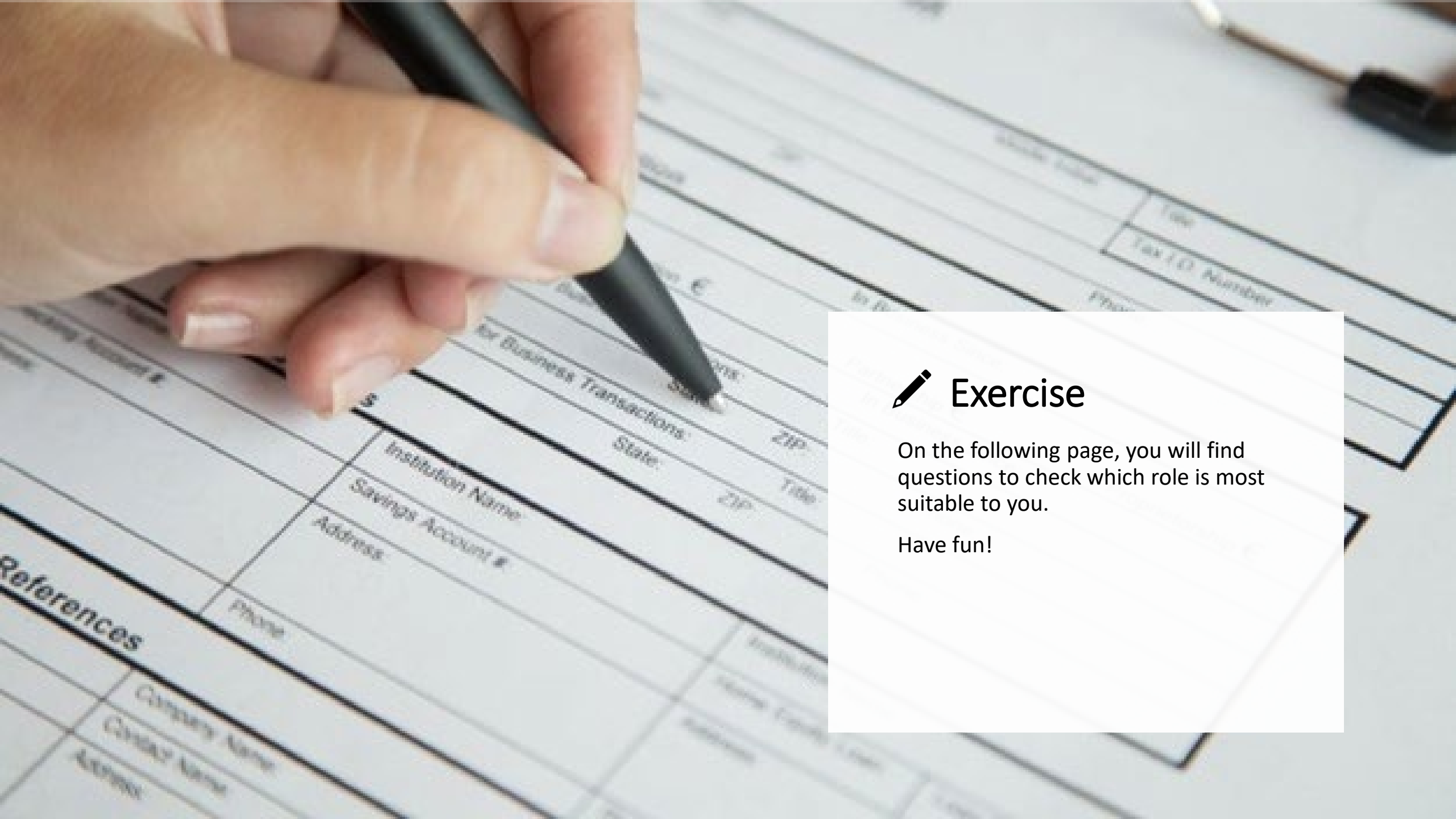
3. Creativity: be able to think out of the box to persuade others.

4. Persuasiveness: being able to outline a justifiable argument to persuade others of your good ideas, products and services.

5. Result oriented: keep focused on the results and act accordingly. Decide quickly and keep an eye on the bigger picture.

6. Financial skills: think well about the budget and profit and the means you have, such as money, time, knowledge and support.

To learn to develop those skills: check out the BUSINESS modules.



## Exercise

On the following page, you will find questions to check which role is most suitable to you.

Have fun!

# Quiz

Click the **Quiz** button to edit this object

 **GENERAL** | **MODULE 1** | **CHAPTER 5**

Are you interested to work with SHAFE?

Yes

No

# Chapter summary

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**1** In this chapter you have learned what SHAFE volunteers or informal caregivers can do

---

**2** In this chapter you have also learned what SHAFE business can be

---

**3** You have learned more about the conditions of SHAFE roles

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**4** You are recommended to go to the BUSINESS modules to learn more

# Chapter completed!

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Congratulations! You have successfully completed this chapter!

## Summary of acquired skills

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1

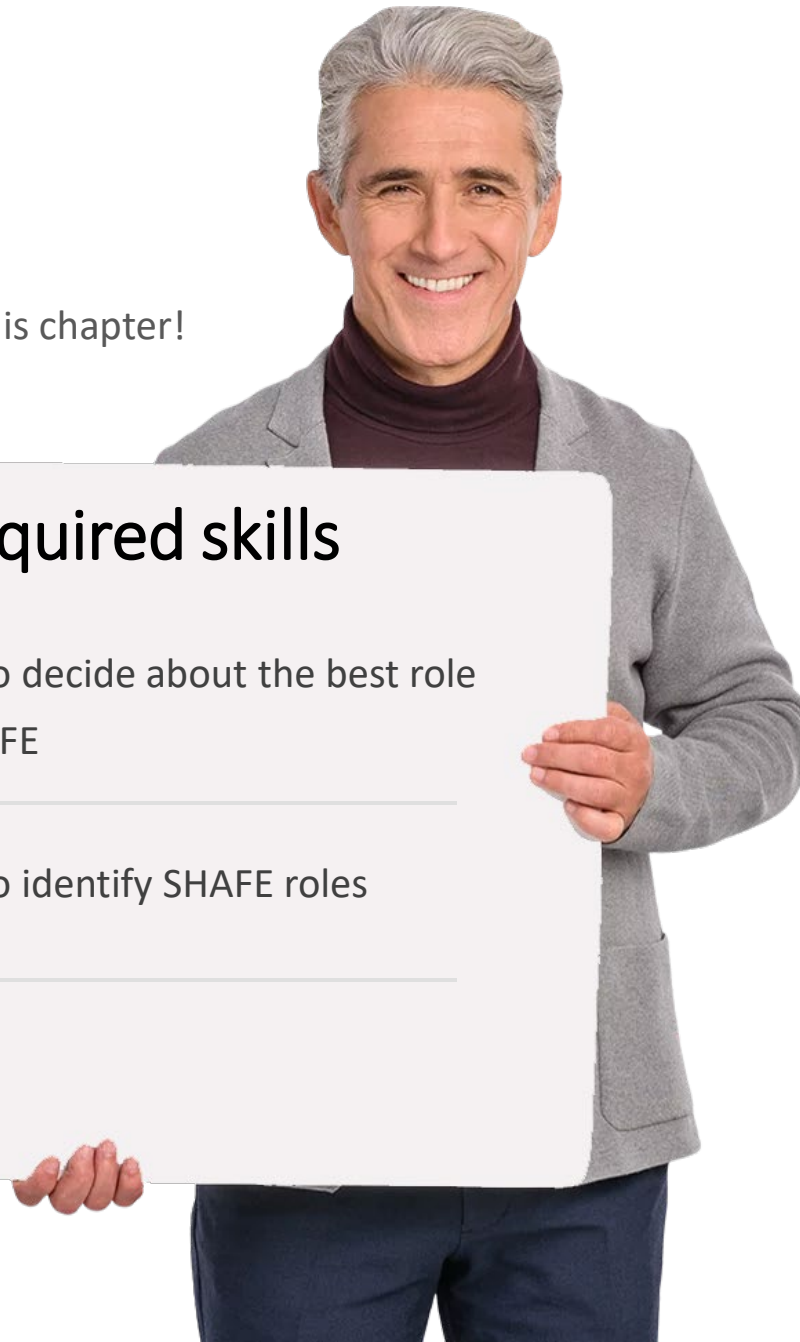
You are able to decide about the best role for you in SHAFE

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2

You are able to identify SHAFE roles

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## What is next?

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To learn more about BUSINESS you can go to the BUSINESS modules.

This module is completed now.

[Restart](#)

[Next](#)





## Suggestions for further reading

- [Position Paper on SHAFE](#)
- [International Interdisciplinary Network on Smart Healthy Age-Friendly Environments](#)
- [Educational game Building Inclusive environments for all Generations](#)



# Module completed!

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Congratulations! You have successfully completed this module!



## You have learned the following:

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**1**

What Smart Healthy Age-Friendly  
Environments are

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**2**

What your role is in SHAFE

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## What is next?

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Now you can either repeat this module or follow our study recommendation by clicking on one of the buttons below:

[Restart](#)[Next](#)