

How to select and use a Blueprint persona

WHAT is a Blueprint persona?

A Blueprint persona is a **tool** for promoting **person-centred care**. It identifies **patient profiles** with different personal, socio-economic, health and environment (especially the home setting), and needs. It also considers the potential **benefits** that can be derived from **digital resources** for the patient and associated stakeholders such as carers (informal or formal), healthcare professionals, healthcare providers, researchers etc. The Blueprint personas can be found here: https://ec.europa.eu/eip/ageing/news/12-personas-have-been-developed-enable-eip-aha-envison-realistic-health-and-care-needs-certain_en

The Blueprint personas were developed as part of the [Blueprint on Digital Transformation of Health and Care for the Ageing Society](#) by a team of experts with varied backgrounds coordinated by [empirica](#). Don't forget to reference us when you use the personas.

WHY use a Blueprint persona?

The Blueprint personas help with the visualisation of users and can be used for multiple purposes. For example, they are useful for designing digital solutions, remodelling care delivery, teaching or obtaining a more in-depth evaluation of needs involving multiple stakeholders. The Blueprint personas represent a wide array of different population segments and conditions and cultural situations (see the matrix of personas below). However, they are also fully modifiable to enable them to best fit your specific purpose.

Possible uses for personas in digital health:

- *Improve care pathways.*
- *Create and explain new care pathways.*
- *Act as a basis for discussion with patients, informal carers and care professionals: identify needs of a community and think about new solutions – personas can be adapted for different projects and discussions, if necessary.*
- *Develop new user scenarios, for more information on user scenarios please see: https://ec.europa.eu/eip/ageing/news/11-blueprint-scenarios-have-been-developed-illustrate-personal-interactions-and-ict-solutions_en.*
- *Help to analyse processes, data, roles, and financial flows.*
- *Train and educate tool healthcare professionals and other health and care actors*
- *Elicit patient views on strengths and weaknesses of their care systems - e.g., patients asked to imagine how a given persona is a friend whose satisfaction and concerns about their shared system of care services they will give a voice.*













HOW to use the Blueprint personas

1. Specify your goals:
 - ✓ What are you going to use the personas for?

- ✓ What is the objective and the target group?
- ✓ What outcome do you want to achieve?
- ✓ Do you have a standard of care or clinical goal you want to reach?
- ✓ What outcome do you want to achieve?
- ✓ Is it possible to assess your success in reaching your goal?
- ✓ Can you measure the change before and after?

The personas could help you to measure these different goals by applying them in a 'before and after' style (to examine what needs have been met or not met, and how well or poorly their needs were met before and after the introduction of an intervention or service redesign). Outcomes could be compared with the reference /standard of care for the clinical goal (if available).

2. Set up a multi-disciplinary/cross sectoral group of stakeholders for design, consideration, and validation of the personas (it is advisable to involve patients).
3. Use the persona matrix to identify the personas that best match your target users. Note that the personas can be tweaked or modified to better serve your purpose - more information on this follows in the next step (step 4).

Life course Needs	Children/ Young adults	Working age adults	Retired persons below 80	Persons aged 80+
Generally well/ good wellbeing	 Rose, 10	 Leila, 51	 Randolph, 65	 Teresa, 83
Chronic conditions and/or social needs	 Millie, 18	 Nikos, 50	 Eleni, 73	 Maria, 84
Complex needs	 Ben, 9	 Antonio, 33	 Procolo, 79	 Jacqueline, 87

Matrix of Blueprint personas

Here is an overview of the Blueprint personas' issues and conditions, classified into five categories as a starting point¹:

¹ For more insight into individual personas, detailed persona descriptions can be found here: https://ec.europa.eu/eip/ageing/news/12-personas-have-been-developed-enable-eip-aha-envision-realistic-health-and-care-needs-certain_en

Life course / Needs	Children / Young adults	Working age adults	Retired persons below 80	Persons aged 80+	
Generally well / good wellbeing	Rose, 10 Social isolation, Inappropriate food intake, Overweight Occasional aggressive behaviour Emotional eating	Leila, 51 Worsening eyesight, Light back pain, Provides support for own children and an elderly female neighbour, Due to her various family responsibilities, she may overlook her own needs, She may be experiencing "winter depression" (SAD), which is as yet undiagnosed	Randolph, 65 Worsening eyesight, Strong peer group, cares for and supports his wife (who has early stage dementia), Aware of and concerned about his wife's growing needs and wants to do something about them	Teresa, 83 Occasional joint pain Difficulty climbing stairs Heavily supporting her husband Scared of being alone and not being able to live an active life	
Chronic conditions and/ or social needs	Millie, 18 Pre-diabetes, Attention deficit hyperactivity disorder -ADHD Aggressive outbursts, Obesity, Worried about being teased due to obesity, wants an independent, fulfilled life while being supported with her conditions, Asperger's syndrome, Echolalia	Nikos, 50 Metabolic syndrome (diabetes, hyper-tension), Mild chronic obstructive pulmonary disease (COPD), Unable to afford professional lifestyle support services, work routine goes against healthy lifestyle intervention, Trying to stop smoking Stressed due to economic and health issues	Eleni, 73 Hypertension, Poor medication adherence, Lives alone, lack of nearby family members Stressed due to challenges of dementia and worried about having accidents alone at home Early stage dementia	Maria, 84 Diabetes, retinopathy, Heart failure, Atrial fibrillation, Chronic kidney disease (CKD), Osteoarthritis: all currently under control but with occasional relapses. Feels isolated (no friends), Huge financial struggles, Poor adherence & hygiene Fear of being sent to nursing home and leaving family unprotected	
Complex needs	Ben, 9 Cataracts, Hearing loss, Delayed motor skills, Goes to respite care centre, Unhealthy diet, eating too much, Change or unpredictability negatively affects his behaviour, visual learner Down's syndrome	Antonio, 33 Diabetes, Hypertension, Below-waist paralysis Strong support by girlfriend, Rejects social support, Heavy alcohol and tobacco use, Fear of losing his job and social connections, Depression	Procolo, 79 Sight and balance problems, Benign prostate hypertrophy, Hypertension, Diabetes, Bladder epithelium cancer, Needs attendance, Goes to work via taxi, Diet to avoid hyperglycaemia Fear of hospitals, Trust issues towards care professionals	Jacqueline, 87 Chronic obstructive pulmonary disease (COPD), Hypertension, Falls, Osteoarthritis, Osteoporosis, Incontinence, Rejects social support; only accepts support by stressed husband, Will need oxygen at home, Memory, Cognitive disorders, Hallucinations, Mixed dementia, Fears visitors, Suspects people stealing her	
Legend:	Health issues	Social & economic aspects	Lifestyle risks	Personality aspects	Mental issues

Overview of Blueprint personas' characteristics

For further details on the personas, you can find the full persona posters here:

https://ec.europa.eu/eip/ageing/news/12-personas-have-been-developed-enable-eip-aha-environment-realistic-health-and-care-needs-certain_en

4. Modify a persona: Consider if the selected persona needs adaptation in order to better fit your user group, for example:
 - ✓ You might want to change the names of the personas, so they are more aligned with typical names in your country or region.
 - ✓ You may want to change co-morbidities and the levels of well-being to better match your user group.
 - ✓ Depending on the infrastructure of your country/region, you may want to modify factors such as the means of access to health infrastructure, etc.

Consider the digital solutions which may best fit the personas needs. Below is a mapping of the types of supportive technologies which meet the 12 personas' needs.

Persona Unmet need	Generally well				Chronic conditions and/or social needs				Complex needs			
	Rose	Leila	Randolph	Teresa	Millie	Nikos	Eleni	Maria	Ben	Antonio	Procolo	Jacqueline
ICT support to health & wellbeing, health & social care delivery / EHRs, management of health data / health information exchange												
Telehealth / Telecare / Home care / Tele-monitoring												
Education, including gamification or serious games; health and digital health literacy, empowerment												
Smart homes and age-friendly environments (e.g., home sensors, Internet of Things (IoT), Ambient Assisted Living (AAL), Independent Living (IL) solutions)												
Social or peer support / social networks, messaging												
Other: Assistive technology/wearable robotics (exoskeleton)												

Mapping of types of supportive technology to meet the personas' needs

See this breakdown of the existing technologies that fit into the ICT solution categories described in the table above.

ICT solution category	Examples of ICT solutions / tools / services
ICT support to health & wellbeing, health & social care delivery / EHRs, management of health data / health information exchange	Interoperable Electronic Health Records (EHRs), Patient Portals Electronic consultations and appointments Secure and reliable search portals for health information Booking solutions for care support Health data management solutions Personal health folder apps 24/7 eHealth call centre (e.g., run by nurses) ICT for integrated care supporting e.g., shared care plan, multi-disciplinary team (MDT), etc.
Telehealth / Telecare / Home care / Tele-monitoring	Teleconsultations with child and mental health services Monitoring of health parameters (weight, blood pressure, blood glucose, etc.) Internet of (medical) Things Telecare personal alarms <ul style="list-style-type: none"> • Panic button service • Medication reminders / smart medication dispensers • Access to assistance during emergencies Vibrating carer alerts linked to movement sensors in the house Electronic diary with visual and auditory reminders Physical training solutions e.g., to monitor running or other sports or activities Self-monitoring of frailty

ICT solution category	Examples of ICT solutions / tools / services
	Tele-assistance subscription service – supervising daily activity trends of elderly people, notifications of potential risk situations Wearables
Education, including gamification or serious games; health and digital health literacy, empowerment	Web platform for digital and health literacy Massive Open Online Courses (MOOCs) Information on relevant support infrastructures in the region Healthier lifestyle management <ul style="list-style-type: none"> • Games for physical exercise • Computerised anger management • Management of chronic conditions Healthy cooking and eating (including fun apps targeting children) Tutorials (for e.g., dancing, fashion, lifestyle, music, and other hobbies) Educational tools (memory exercises, reading, speech and languages) Online libraries (e.g., for reading newspapers) Virtual reality (e.g., virtual museum visits for people with mobility difficulties)
Smart homes and age-friendly environments (e.g., home sensors, IoT, AAL, IL)	Home or property sensors Internet of (non-medical) Things Regulated heating systems Food shopping support Home health / wellbeing monitoring (see also Telehealth) Support for daily routines Wearables
Social or peer support / social networks, messaging	Networking apps (e.g., sports or cooking clubs, social events, healthy lifestyle groups) Discussion fora (e.g., to exchange similar experiences) Easy phone / video connections (e.g., to connect with children or neighbours) Platforms to put care givers and patients in touch (e.g., in case of urgent needs) Online services e.g., shopping, banking, meal delivery, travel
Other	Assistive technology / wearable robotics – exoskeletons

Typology of supportive technologies for person-centred integrated care

- Do not forget to reference us when you use the personas: The personas originate from the Blueprint stream of work lead by [empirica GmbH](#) as part of the WE4AHA project coordinated by [Funka Nu AB](#). The project received funding from the [EU's Horizon 2020](#) research and innovation programme.

Examples of how the Blueprint personas have been used

- [Campania Region in Italy](#), one of the EIP on AHA Reference Sites, developed new personas. Campania used them for internal meetings and training sessions in the framework of Campania regional ProMIS network, specifically in the working group on integrated care. Patient feedback was also incorporated in modifying the personas. For more information please see: <https://www.policlinico.unina.it/siti/eip-aha/en/indexen.html>
- [Health Centre Zagreb – Centar in Croatia](#) is another EIP on AHA Reference Site. It used the Blueprint personas in the search for innovative monitoring solutions to improve people's health and optimise hypertension care. The Blueprint personas were used to assess the end-users needs and helped to

outline different change management strategies. For more information see:

https://ec.europa.eu/eip/ageing/news/blueprint-task-personas-asset-blueprint_en

- For an illustrative case study of how digital solutions can be mapped against the personas' needs, and how well these needs are met, see the example of the assessment of digital services and how well they met the personas' needs at the EIP on AHA Reference Site in Zagreb, Croatia:
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6581491/>
- AFEdemy have used the personas in learning modules for facilitators wanting to implement smart healthy age-friendly environments as part of their Hands-on SHAFE initiative. The personas enable facilitators to better understand who they are working or volunteering for as well as aiding navigation of online learning modules. For more information see: <https://hands-on-shafe.eu/en>

Creating a new persona

It may be that the existing Blueprint personas don't fit your target group and you would like to heavily edit an existing persona or create a new persona. Here are some practical tips for using and completing the persona template to create a new persona.

(the persona template can be found here: insert link)

- ✓ Be consistent about the information given.
- ✓ Be succinct so as to increase the readability and usability of the persona.
- ✓ Keep the information as concise as possible (avoid repetitive descriptions).
- ✓ Keep the vocabulary simple: avoid using medical terminology or provide a glossary of terms.
- ✓ Under the section "Needs", describe the reasons behind the persona's needs.

Coming soon!

Further resources on how to use a persona and other Blueprint tools to further your digital health innovations will soon be made available:

- Blueprint Scenarios- an acute or chronic event or episode experienced by one or more of the Blueprint personas. The scenarios outline the persona's path through the care system: the services available, the enabling digital solutions and the interactions between different actors.
- A starter kit of guides for digital health implementation and innovation.
- Enabling technologies



Image: Pixabay.com

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