



WE4AHA

The Blueprint for digital transformation of health and care

Webinar with Italian Reference Sites – ProMIS Network
Tuesday, 19th of March 2020, 11:30 – 12:30



BLUEPRINT

DIGITAL TRANSFORMATION OF HEALTHCARE FOR THE AGEING SOCIETY



The Blueprint for digital transformation of health and care – brief overview and outlook for 2020

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Overview of content

- Brief introduction to the Blueprint and previous work done
- Outlook for 2020
 - Overview of ongoing work
 - Outlook for the Blueprint personas
 - Concrete example using Blueprint personas from Italy
- How to get involved

Introduction: The Blueprint 2017

- **Strategic policy vision** developed by various stakeholders: European policy makers, civil society, professional organisations, and industry
- To **mobilise investments and guarantee commitment from stakeholders** for transformation of health and care in the ageing society
- Outlined key **“enablers”** supporting the transformation of health and care delivery in Europe:
 - Development of common strategies and frameworks for **citizen empowerment and health literacy**
 - Strong focus on **digital skills, development of health and social care workforce**
 - **Interoperability standards**



January 2017

Evolving the Blueprint 2018 - 2020

Objectives:

- To support the further co-development, promotion and implementation of the Blueprint
- To identify and specify key digital health and care technologies and high-impact user scenarios in AHA
- To mobilise various stakeholders [...] and to encourage them to commit to concrete actions in support of the Blueprint goals up to 2020

Expected outputs:

- engaged stakeholders,
- set of user scenarios and digital health and care technologies,
- policy recommendations and action points



BLUEPRINT

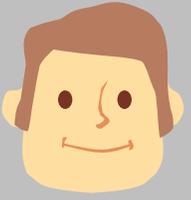
DIGITAL TRANSFORMATION OF HEALTHCARE FOR THE AGEING SOCIETY



 **BLUEPRINT**
DIGITAL TRANSFORMATION OF HEALTHCARE FOR THE AGEING SOCIETY

The Blueprint personas 2018

- Personas represent **types of persons**, not concrete persons - but **characteristics that are based on real persons & situations**
- Developed to **identify realistic needs** (*e.g. health & social care needs*) of certain segments in the population
- “Starting point” to **look for existing digital solutions** that target the personas’ needs

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

The Blueprint persona posters and reports



Web: https://ec.europa.eu/eip/ageing/blueprint_en
Contact: WE4AHA@empirica.com

Meet Leila



Name: Leila Country: UK Internet usage: Low High
Age: 51 Area: residential (rural) Mobile device skills: Low High
Life course: working adult Affinity to new tech: Low High
Need: generally well / good wellbeing Digital Health Literacy: Low High
Connectivity: broadband, smart phone Assistance (ICT use): No Yes

Leila is in good health and works as manager in a senior home. She lives in a small village, 13 km from the nearest city, together with her sons, Sammy (10) who has type 1 diabetes and Ed (20), as well as Ed's girlfriend. Leila is sporty and active and does not experience any special difficulties going through menopause, but her divorce 4 years ago has complicated her life. She also provides moderate support as an informal carer to 3 elderly adults in her life: her father, who lives in a different town; her ex-mother-in-law, who has dementia and lives in a care home, and her 93-year old neighbour, who lives alone in a bungalow.

What's Important to Leila

- Staying in good health; attending a weekly Tai Chi class and running 2x/week; keeping a small garden in shape.
- Family-oriented but keen to become more independent (e.g. moving home once eldest son and girlfriend graduate).
- Being socially conscientious and people-focused.
- Being good at multi-tasking.

Daily living

- Leila balances well her multiple responsibilities.
- Leila and her family are highly dependent on her income.
- Both her job and family require her to stay healthy and mobile (able to travel).

Own resources & assets / support

- Leila remains economically independent until retirement age.
- Her 2 sons are helpful around the house and in the garden and she has a cleaner who comes twice a week.
- Leila, her son Ed and his girlfriend are all able to drive.
- She is well-informed about the local care services on offer.

Events, issues and personal concerns

- Winters can sometimes be tough, especially because of the amount of car driving Leila does. She wonders whether she could be experiencing winter depression ("Seasonal Affective Disorder - SAD") and would like to bring this up with her GP.

Health and lifestyle concerns

- She has no immediate health concerns, but her eyesight is potentially worsening; she had occasional back problems in the past due to work that required heavy lifting.
- She had several short-term relationships in the past. On one occasion, she experienced bladder inflammation (cystitis).
- She is menopausal but experiencing no side-effects.

Health tests

- Regular breast cancer tests and cervical smears.
- Regular blood pressure tests.
- In the future when Leila turns 60, she will be able to have a general comprehensive health check/test.

Treatment: medications, therapies, etc.

- Still taking oral contraceptives, which are free with her country's health service.
- Keeps a standard "first aid kit" in the house, filled with aspirin and paracetamol just in case they are needed.

Concerns as a carer

- Leila is less concerned with the situation of her father and ex-mother-in-law, but is considering getting in touch with her elderly neighbour's family about potential future care needs.
- Due to her own family responsibilities, she may overlook her own needs as an individual.

Needs

- Food shopping service for herself and her neighbour.
- Potential insulin training for her son, Sammy, so that he can start monitoring his insulin himself.
- Information on SAD and/or potential check-up with doctor.
- Because Leila is a member of the Asian community, with particular health development needs, she is aware of people close to her who are developing or who are at risk of developing diabetes.
- Leila is aware of elderly members of her community who have language difficulties when talking about their health situations and needs.

This persona was developed by Diane Whitehouse, EHTEL and Soo Hun, Public Health Agency, Northern Ireland with the kind support of the WE4AHA Blueprint expert team.

The Blueprint's further development is led by empirica GmbH as part of the EU project WE4AHA co-ordinated by Punita Nu AB. The project receives funding from the EU's Horizon 2020 research and innovation programme under the Grant Agreement No. 768705. The content of this flyer does not reflect the official opinion of the European Union. Responsibility for the information and views expressed therein lies entirely with the author(s).

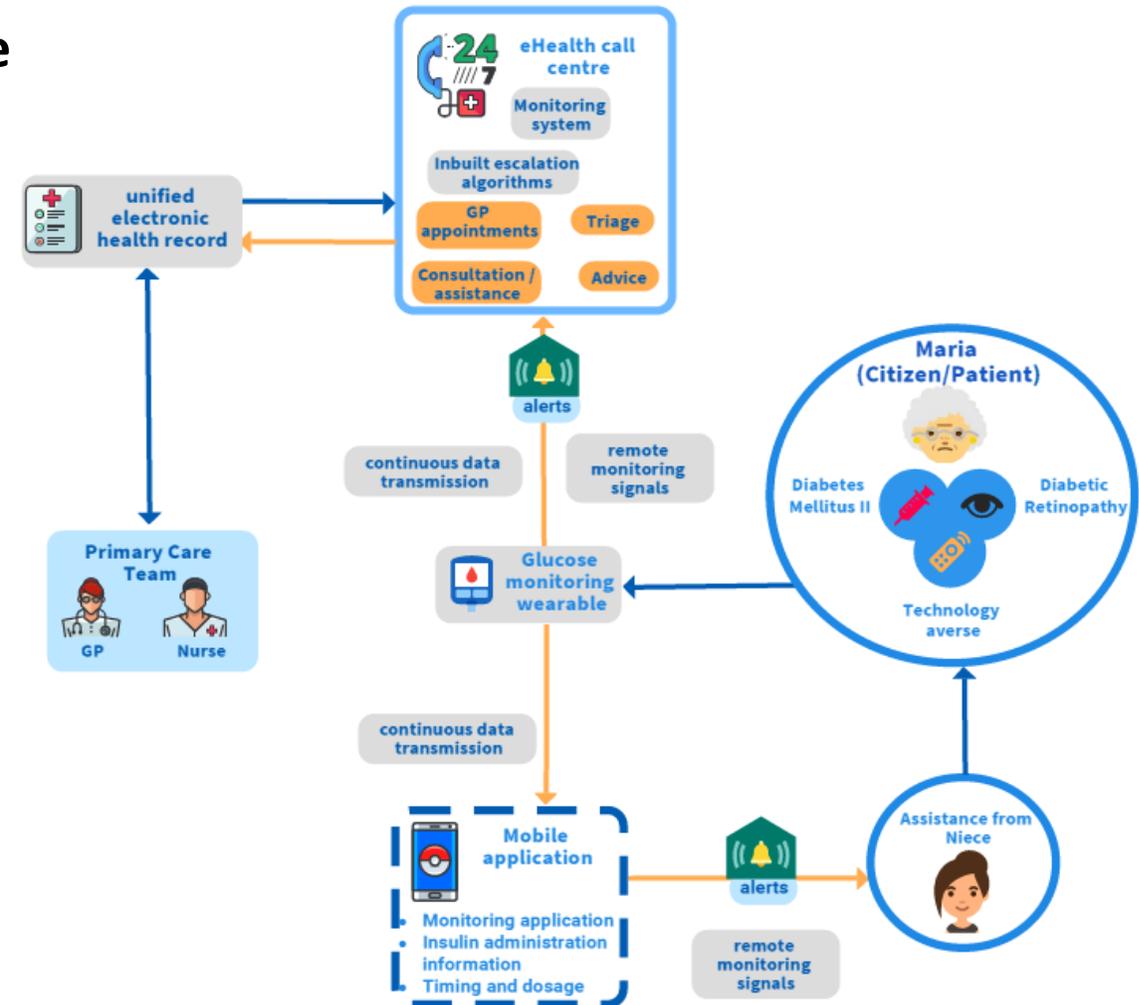
Blueprint website:

https://ec.europa.eu/eip/ageing/blueprint_en

- Blueprint persona posters
- Blueprint reports 2018 and 2019 – summarized work of the Blueprint group

Blueprint scenarios 2019

- Narratives describing an **event experienced by the persona** – “scenario”
 - **Available best practices/solutions/ICT tools** targeting personas’ identified needs.
 - **Regions with strong experience**, willing to provide the necessary knowledge and support to scale up and deployment across Europe
 - **Needs of other key actors** such as GPs, nurses, social carers, public health authorities, etc.
 - **Key interactions:** personas with solutions, personas with other key actors, solutions with other solutions
 - **Data & information flow, interoperability**



Outlook for 2020

- **Guidance documents** elaborating on key elements for **advancing better person-centred health and care delivery**
- Guidelines on the **use of the Blueprint personas for different stakeholders**
- Online repository of personas

Outlook for 2020

- Continuous monitoring and dissemination of the Blueprint personas
- Final reports to be published in December 2020

Blueprint guidance documents

3 published in the last
Blueprint report (Dec 2019)

- Ensuring interoperability
- Supporting informal carers
- Implementing integrated care

Ensuring interoperability – draft building blocks for use in scenarios, implementation plans, procurements, etc.

To analyse the interoperability needs for each scenario, several supporting interoperability use cases have to be identified. Examples include:

- ▶ **Access** by healthcare professionals to the persona's clinical information stored in a "dedicated platform" (e.g., EHR/PHR, ...)
- ▶ **Connecting sensors or devices for monitoring** the blood pressure and blood glucose or any other biological parameters to applications such as mobile applications related/linked to the "dedicated platform"
- ▶ **Prescription** of medication by GP that can be dispensed in the community pharmacy
- ▶ Displaying the next clinical appointments that are registered in the appointment server to the persona in his/her patient portal

An interoperability architecture has to be designed to consolidate all the use cases and will be used for their implementation. This architecture will include national/regional or local infrastructure (identification of healthcare professional, patient identification/identifiers (eIDAS Regulation on electronic identification and trust services for electronic transactions in the internal market³², and security (Directive on security of network and information systems - NIS Directive³³).

A **selection of a set of profiles and standards** needs to be performed to fit to this architecture which is dependent on

- ▶ The scale: is it for local, regional or national needs?
- ▶ The existing IT environment and its maturity
- ▶ The existing terminologies in use or expected to be used
- ▶ The existing IHE profiles, standards³⁴ and Continua Design Guidelines³⁵

Several references shall be taken into consideration to **support the choice** of the selected IHE profiles and standards:

- ▶ Refined eHealth European Interoperability Framework from the eHealth Network³⁶ and the Antilope project³⁷ and IHE use case data repository³⁸
- ▶ European EHR exchange format³⁹ (cf. European Commission Recommendation C(2019) 800 final⁴⁰)

Blueprint guidance documents

Ongoing work (2020)

- Value-based innovation procurement
- Evaluation & socio-economic impact assessment,
- Approaches to certification of digital health applications
- Nutrition
- Age-friendly environments, other aspects of integrated care e.g., risk stratification

Outlook for the Blueprint personas

Collecting feedback from stakeholders who used the personas

- Do you have experiences using the personas in your organisation?
- How are personas implemented in the Reference Sites?
- Why/How are personas useful for e.g., doctors? Other health and care providers? Technology providers? Educators? Policy makers?



Blueprint guidance document: Nutrition

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Blueprint guidance document: nutrition

Why is nutrition important?

A healthy diet helps us **prevent and treat chronic diseases and conditions** such as overweight and obesity, high blood pressure, cardiovascular and metabolic diseases, type 2 diabetes, some forms of cancer. A healthy diet also **strengthens the immune system**, which contributes to protecting the body from many diseases.

Focus of the guidance document - importance of nutrition on:

1. **Obesity**
2. **Social care: Depression & Isolation**



Impact of nutrition to obesity and social care

Obesity

- **Obesity became a critical topic in the world.**
- Overweight and obesity are major **risk factors for several NCD** (chronic diseases, including diabetes, cardiovascular diseases and cancer).
- They result from an **imbalance** between energy consumed (too much) and energy expended (too little).
- Paradoxically, an obese patient presents a **clinical picture of malnutrition or nutrition deficiencies** higher than people in normal weight. This could be defined an effect of the so called “**obesogenic diet**” which is rich in carbohydrate, **sugar, saturated fat and sodium** and **deficient in, folate, copper, iron, calcium, protein and Vitamins.**



Impact of nutrition to obesity and social care

Social care

- Obese patients stated that **they felt better emotionally and physically** after dietary counseling sessions and **felt an increased sense of control over their disease.**
- It has been demonstrated that **symptoms of depression dropped significantly after a Mediterranean-style pattern** of eating for three weeks together with anxiety and stress.



Examples of Blueprint personas: Rose



Name: Rose **Country:** Italy
Age: 10 **Area:** suburban
Life course: child
Need: generally well / good wellbeing
Connectivity: broadband, smart phone

Internet usage Low High
Mobile device skills Low High
Affinity to new tech Low High
Digital Health Literacy Low High
Assistance (ICT use) No Yes

- Rose is **overweight** and goes through routine health checks with her pediatrician. His advice was **limited to caloric restriction and physical activity**.
- Rose lives in a neighborhood where **there is little opportunity** for children to go outside and play.
- **Out-of-school activities are rarely organized**.
- There are **a few activities organized by her school**, but Rose has recently **preferred to hide from her classmates**, who sometimes **made fun of her because of her weight**.
- Because of this, Rose has been feeling **more and more socially isolated**.



Examples of Blueprint personas: Rose

What is important for Rose?

- **Integrating in the social life** of her class
- Dancing with her girl friends
- Looking nice and **losing weight**
- Becoming an electronics engineer

Rose's needs

1. **Empowerment** so she can actively participate in **managing her lifestyle** (for example, **avoiding unhealthy eating habits**)
2. **Build an environment** to support her in adoption of a healthy lifestyle (e.g. supporting anti-obesity policies; support when **she is feeling anxious or frustrated**, etc.)
3. **Access to extracurricular activities** (cooking, media and education, school activities, etc.) to reduce her isolation at school
4. **Social support for her parents** so they can build a **stronger relationship with Rose** and together be actively involved in the management of her health and wellbeing



Examples of Blueprint personas: Matilde



Name: Matilde **Country:** Italy
Age: 60 **Area:** Suburn of city
Life course: Retired people
Need: Chronic condition and social needs
Connectivity: broadband, smart phone

Internet usage Low High
Mobile device skills Low High
Affinity to new tech Low High
Digital Health Literacy Low High
Assistance (ICT use) No Yes

- She lives alone in a small apartment with no family living nearby.
- She is already retired because she is **unable to work** because **she is overweight**. She practiced sport in her childhood but during **adolescence she was abused**.
- Starting from this episode **she fell in a state of depression and she felt better only eating in uncontrollably way**
- She tried to react moving in another city at 26 years old to find a job but her unhealthy lifestyle got worse because she was completely alone.
- She fell in love with Andrea, a bricklayer, who tried to help her. Unfortunately, Andrea died for an untreated pneumonia and Matilde falls in a deep state of depression which affected again her weight.
- **She is no longer able to take care of herself as to dress or bathe.**



Examples of Blueprint personas: Matilde

What is important for Matilde?

- Staying in good health.
- **Being active**, walking by the sea or in a park.
- **Staying in touch online with her family** and visiting them.
- Being able to **be self-sufficient**.
- Being able to participate in **social events**, such as guided tours in museum and local festivals.

Matilde's needs

1. **Empowerment so she can** participate in **managing her lifestyle** (for example, **avoiding unhealthy eating habits or** motivation) and understanding of her health risks.
2. **Building a friendly environment** supporting her in the adoption of a healthy lifestyle and help Matilde in take care of your self (cooking, hygiene and physical activities).
3. **Social support** as psychological and nutritional programmes in order to help her in the management of obesity and depression.



Importance of nutrition - applied to the personas

Overweight or obese people **tend to be marginalized and subjected to a real social stigma**. One of their biggest challenges is to maintain a positive mental health through social activities as they also develop skills.



Rose, 10

Social isolation,
Inappropriate food intake,
overweight

Occasional aggressive behaviour
Emotional eating



Matilde, 60

Social isolation,
Obesity, Depression

Scared of being alone and not
being able to take care of herself
Emotional eating

How can Rose and Matilde be supported with their needs and issues?

- Pharmacological and nonpharmacological treatment.
- A **healthy diet**, combined with an **active lifestyle**, which includes daily physical activity, helps to maintain adequate body weight and a good psychological state.
- **Social support** and development of a **friend-healthy environment** and **educational program** on healthy nutrition should help Matilde and Rose in the management of their emotions and relationship with the food, respectively.



Get involved

Please send an inquiry to WE4AHA@empirica.com if you want to contribute to the Blueprint:

- **Giving feedback** to the guidance documents (after they are finalised).
- **Sharing your experiences** with using the Blueprint personas or developing a persona based on the Blueprint personas - what is the relevance, how did it help your organisation?
- Any other questions:
 - Christianne Lavin, christianne.lavin@empirica.com
 - <https://www.linkedin.com/in/christianne-lavin-15240880/>

A close-up photograph of an elderly couple smiling warmly. The woman, on the left, has short blonde hair and is wearing a light-colored top. The man, on the right, has short grey hair and is wearing a light blue shirt. They are both looking towards the camera with bright, genuine smiles. The background is a soft, out-of-focus light blue.

Thank you!

https://ec.europa.eu/eip/ageing/home_en