

2. Holistic Health

Evidence-based personalized healthcare

GRAND CHALLENGES :

C1. Health, demographic change and wellbeing

C6. Europe in a changing world - inclusive, innovative and reflective societies

C7. Secure societies - protecting freedom and security of Europe and its citizens



CHALLENGE

Today, almost everyone gets a “standard” treatment for a specific symptom and not a personalised one, whilst new technologies may realise healthcare for all which is more equal, of higher quality and more personalised. Additionally, e-health can secure digitalised medical documentation and facilitate common policies overcoming the issue of fragmented data, which hinders linkages across countries/sectors/systems. This can enable faster diagnostics, and therapy can be more effective, whilst saving resources. This needs to go together with a redefinition of responsibilities and duties of every type of medical staff in order to avoid misunderstanding and confusion, while increasing the capacity of the doctors to humanise the relationship with the patient and the way in which information is shared. Finally, this

can bring about a more holistic approach to healthcare, that is considering patients' symptoms in the context of overall health conditions and curtail treatments that concentrate merely on symptoms. This should help building trust between patients and doctors.

SCOPE

Research should explore the conditions for evidence-based, personalised and human-centric services for health promotion, prevention, treatment and rehabilitation. Reliable user lifestyle profiling methods and technologies should be developed, in order to achieve personalised holistic data-based health services. For this purpose, large amounts of data provided by miniaturised, environmentally friendly (wearable or distributed) systems could be combined with existing data from other sources (e.g. EHR7, insurance data). This needs to go together with research on skill training programs for both doctors and citizens in order to:

- For doctors to complement the curriculum with social psychology (i.e empathy training) on one hand, and digital literacy and data mining on the other
- For the citizens to be trained on health and digital literacy

Research should finally explore ways to make health-related data from diverse sources and destinations interoperable, and to investigate new processing techniques for personalised analysis and reporting.

EXPECTED IMPACT



- Effective use of data for personal health
- Individuals enabled to take care of themselves
- Contributing to treat patients comprehensively, not only to solve an acute problem
- More satisfied patients and among health staff
- New economic and financial indicators of effectiveness
- Reduction in primary care in the long term
- Awareness of personal health through data
- More human relationship between the doctor and the patient

3 Evidence-based personalized healthcare

Research topic:
Evidence-based personalized healthcare

#4.a

Grand Challenges :

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6. Europe in a changing world - inclusive, innovative and reflective societies
7. Secure societies - protecting freedom and security of Europe and its citizens

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Online consultation rating: average importance: 4,1/5

Nations prioritizing this research area: Slovakia, Estonia, Ireland

CITIZENS' VISIONS

[ITA] Vision 4: A school beyond times – a new education model

"The social security system uses smart watches both to monitor the health status and to help individuals to take care of themselves"

[CZE] Vision 3: Free citizens in the secure world of data

"Effective use of data on personal health"

[DK] Vision 1: Physical and mental health

"... healthy as whole – both lifestyle, mental and physical health"

[ROU] Vision 1: Let's be humans through technology

"Advanced technology for health and education"

[HUN] Vision 3: Snapshots - Fragments of conversation in a community house

"Epidemic prevention: hygiene, lifestyle, awareness-raising, not just through vaccination"

[UK] Vision 6: Citizen Empowerment

"People feel empowered to look after their health and well-being themselves. The highest levels of available health/care/education/resources are available for all".

[MAL] Vision 3: Education leading to a new way of life

"With education come healthier lifestyles"

[ITA] Vision 6: Technology at the service of man

"An easier access to advanced technologies, with more intuitive and functional interfaces"

[EST] Vision 6: Life in your age

“People can live up to 100 years old without any problems because they are taught from childhood to make the right choices concerning their health.”