



EU4Health & 2022 Work Programme Stakeholders' Targeted Consultation

Key insights of the consultation's results – Digital health

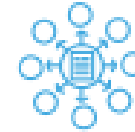
*Moderator: Martin Dorazil
Deputy Head of Unit
DG SANTE. B.3 Digital Health, European
Reference Networks*

EU4Health – Stakeholders’ Targeted Consultation

Digital in the EU4Health Programme

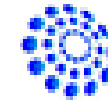
An **OBJECTIVE**

(f) strengthening the use and re-use of health data for the provision of healthcare and for research and innovation, promoting the uptake of digital tools and services, as well as the digital transformation of healthcare systems, including by supporting the creation of a European health data space;



A **STRAND** of **ACTION**

advance digital transformation of health systems; strengthen primary and secondary use of health data



Digital

A **EU POLICY PRIORITY** *A Europe fit for the digital age*

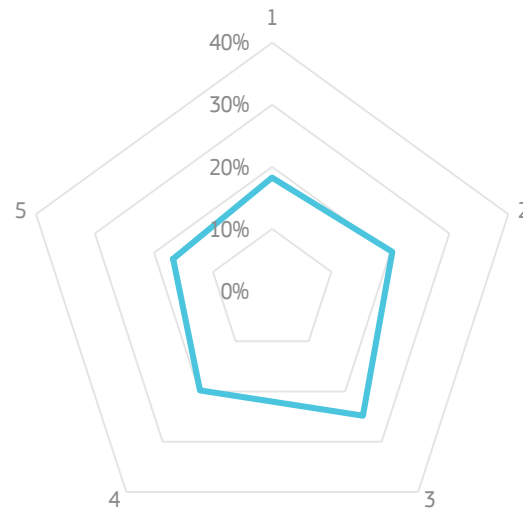
In synergy and complementarity with other EU Programme such as Digital Europe programme, Horizon Europe, European Regional Development fund, Resilience and Recovery Facility...



EU4Health – Stakeholders' Targeted Consultation

Is digitalization to be considered a priority EU4Health programming?

Digital Health		
1	61	18%
2	68	20%
3	83	25%
4	66	20%
5	56	17%
Total	334	100%



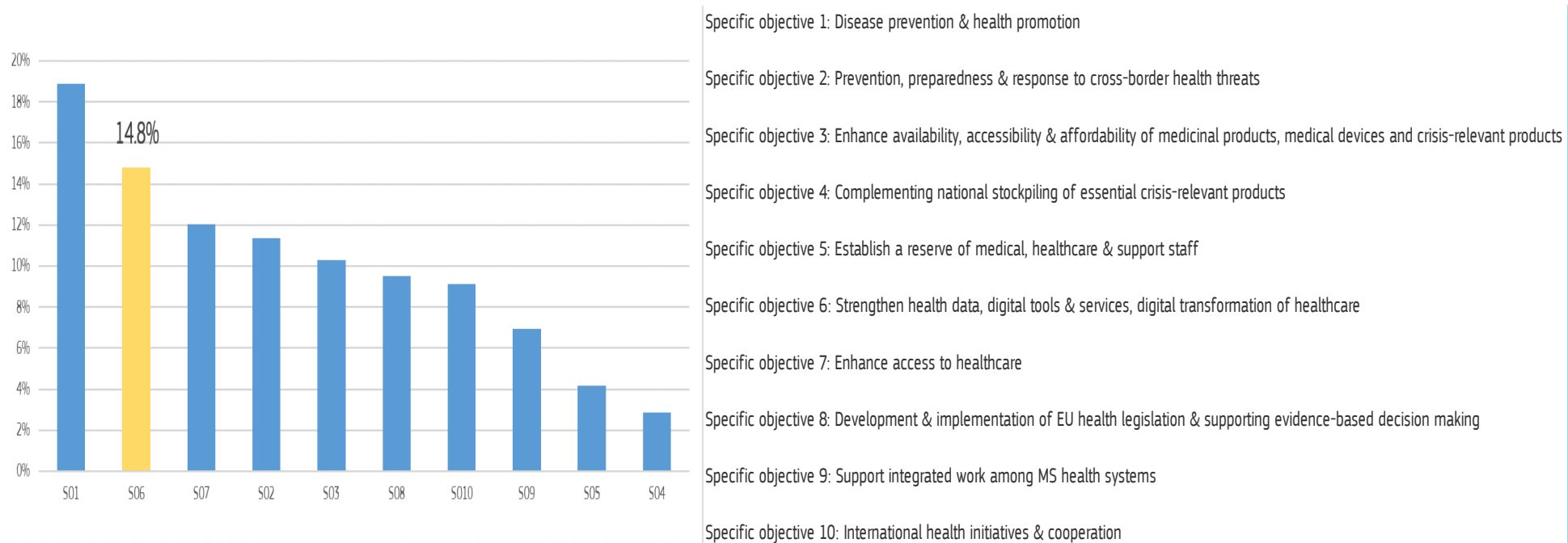
Question 1: In your opinion, what are the most urgent needs to be addressed in the next programming (2022 and beyond)?

Score from 1 (strand with fewest needs to be addressed) to 5 (strand with most needs to be addressed).



EU4Health – Stakeholders’ Targeted Consultation

Is digitalization a critical objectives of the EU4Health?



*Question 2:
According to
your knowledge
and relating to
your sector,
which are the
most important
objectives to be
addressed by
EU4Health
funding?
Please choose up to
five of the objectives*



EU4Health – Stakeholders’ Targeted Consultation

Which actions for digital health?

S06: Strengthen health data, digital tools & services, digital transformation of healthcare

	Answers	Ratio
Preparatory activities and projects for the European health data space.	21	3.6%
Support e-health, such as the transition to telemedicine and at-home administration of medication.	30	5.2%
Development, operation and maintenance of databases and digital tools and their interoperability, including already established projects, where appropriate, with other sensing technologies, such as space-based technologies and artificial intelligence.	31	5.3%
Establishment of interoperable electronic health records, in line with the European Electronic Health Record Exchange format in order to increase the use of e-health and improve the sustainability and resilience of healthcare systems.	33	5.7%
Deployment and interoperability of digital tools and infrastructure within and between Member States and with Union institutions, agencies and bodies.	36	6.2%
Strengthen citizens’ access to and control over their health data.	45	7.7%
Support the optimal use of telemedicine and telehealth, including through satellite communication for remote areas, fostering digitally-driven organisational innovation in healthcare facilities and promoting digital tools to support citizen empowerment and patient-centred care.	65	11.2%
Support a Union framework and the respective interoperable digital tools for cooperation among Member States and cooperation in networks, including those needed for Health Technology Assessment cooperation.	81	13.9%
Deployment, operation and maintenance of mature, secure and interoperable digital service infrastructure and data quality assurance processes for the exchange of, access to, and use and reuse of data; supporting cross-border networking, including through the use and interoperability of electronic health records, registries and other databases; developing appropriate governance structures and interoperable health information systems.	114	19.6%
Support the digital transformation of healthcare and health systems, including through benchmarking and capacity building, for the uptake of innovative tools and technologies such as artificial intelligence, and supporting the digital upskilling of healthcare professionals.	126	21.6%
Total	582	100.0%

*Question 3:
According to your experience, which possible actions (from Annex I of Regulation (EU) 2021/522) can be the most effective for achieving specific objectives?*



EU4Health – Stakeholders’ Targeted Consultation

Inputs from stakeholders

DIGITAL HEALTH contributions received touched upon:

- Digitalisation applied to specifically medical disciplines or health challenges (e.g. mental health, dentistry artificial intelligence)
- Digitalisation of medication management in EU hospitals, digital tools for chronic patients and patient care
- Increase the interoperability between services and networks in Member States, taking into account regional and local levels
- Strengthening digital health literacy of EU citizens; digital transformation of health(care); digital solutions for consumers; and improvement of MyHealth@EU



EU4Health – Stakeholders’ Targeted Consultation

World Health Organization

Topic: Digital Mental Health Platform (DMHP) for sustainable implementation into national health systems

Speaker: Sameer PUJARI Digital Health and Innovations, WHO HQ Geneva

Council of European Municipalities and Regions

Topic: Implementation of user-centred principles for the design & delivery of digital public services

Speaker: Leonardo Ebner Policy adviser – Employment and public services

SPMS - Shared Services of the PT Ministry of Health

Topic: Interoperability and security of national health systems

Speaker: Miguel Santinhos International Relations Consultant UPRI – International Projects and Affairs Directorate of Information Systems

Edwards Lifesciences SA

Topic: The role of digital in tackling the disease burden of this disease

Speaker: Professor Paolo Magni, Università degli Studi di Milano and Italian Heart Foundation

University Medical Centre Groningen

Topic: Development of connecting options to study cross border large health datasets between EU-countries

Speakers: Martijn Rofekamp - University Medical Center Groningen



EU4Health – Stakeholders’ Targeted Consultation

Topic: Digital Mental Health Platform (DMHP) for sustainable implementation into national health systems

Speaker: Sameer PUJARI Digital Health and Innovations, WHO HQ Geneva

Needs/Challenges: WHO has received a lot of expression of interest and requests from countries regarding which digital mental health interventions to use and how to deploy them. Requests have related to a wide array of digital mental health support, including guidance on digital mental health policy, financing and wider digital service delivery including self-help, tele-mental health, patient record systems, decision support tools and training. WHO Member State guidance in these areas is limited. EC push is key. digital mental health in increasing access to mental health care

Proposal for solution: There is substantial potential for digital mental health in increasing access to mental health care and as such, WHO has a published recommendation for guided and unguided self-help, including e-mental health, for depression, highlighting the role such interventions can play.

WP1 Guidance documents for DMHP (Design and development of a national DMHP, leveraging data and knowledge exchange - links with existent platforms; Research and ethical considerations; Digital Mental Health policy)

WP2 Create and/or disseminate existing evidence-based content that can be adapted and added to countries’ DMHP (white label products for adaptation and branding)

WP3 Digital Mental Health Community (HUB and spokes model grouping countries into similar maturity profiles)

WP4 Sustainable country implementation of the digitalization of mental health services and systems

WP5 Policy and DMHP



Global strategy on Digital Health

2020-2025

Sameer Pujari

Department of Digital health and innovations,
WHO
Pujaris@who.int



The timeline

WHA58.28 on eHealth

Consider drawing up a long-term strategic plan for developing and implementing eHealth services promote equitable, affordable and universal access to their benefits



WHA71.7 Digital health

Develop... in close consultation with Member States and with inputs from relevant stakeholders... a global strategy on digital health, identifying priority areas including where WHO should focus its efforts".



Triple billion targets



2030 SDGs

2005

05

2013

05

2018

05

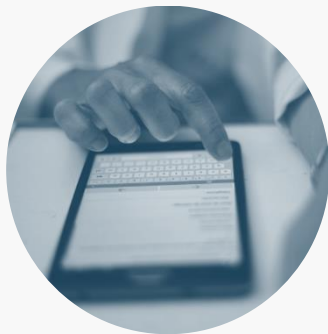
11

NOW

2023

2025

2030



WHA66.24 on eHealth standardization and interoperability

Consider developing... policies and legislative mechanisms linked to an overall national eHealth strategy

IMPLEMENTATION

Global Strategy on Digital Health 2020-2025



Global strategy on digital health

Improve health for everyone...affordable, scalable digital health and wellbeing...support equitable access to quality health services...implication for access, cost, quality of digital solutions



Global Strategy on Digital Health 2020 – 2025 :

Vision

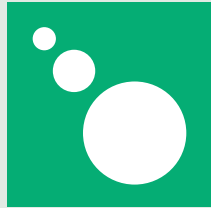
To improve health for everyone, everywhere by accelerating the development and adoption of appropriate digital health solutions to achieve the health related SDGs.



4 Strategic Objectives



SO1 Promote **global collaboration** and advance the **transfer of knowledge** on digital health



SO2 Advance the **implementation** of national digital health strategies



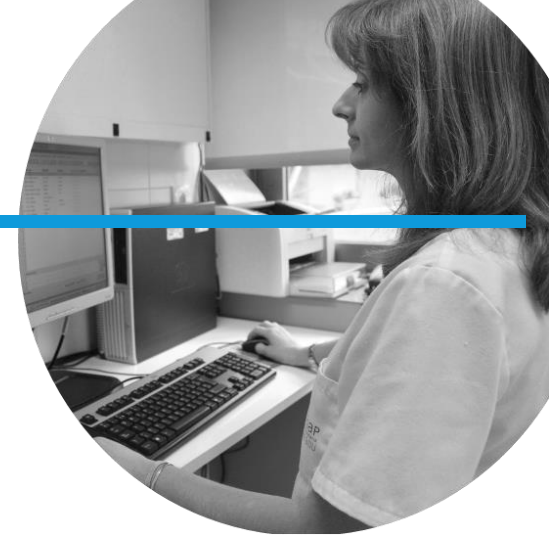
SO3 Strengthen **governance** for digital health at global, regional and national levels



SO4 Advocate **people-centred** health systems that are enabled by digital health



2 points take-away for today



1. Digital health as an enabler for **Mental health**

2. Benchmarking **Artificial Intelligence** for health





*We must ensure the
Digital Health
transformation is safe,
sustainable and leaves no
one behind.*

Thank you.



**World Health
Organization**

EU4Health – Stakeholders’ Targeted Consultation

Topic: Implementation of user-centred principles for the design & delivery of digital public services

Speaker: Leonardo Ebner Policy adviser – Employment and public services

Needs/Challenges:

1) The challenges of interoperability and cooperation between levels of government (vertically) and different sectors (horizontally) are one of the biggest obstacles to effective e-government.

2) Another element is that the main objective of local and regional governments remains to consult and engage citizens and local businesses in order to identify their needs.

Proposal for solution:

- 1) Open & international standards play an important role in enabling fair competition & interoperability of services.
 - Importance of the Single Digital Gateway initiative but it is essential that this portal takes into account the existing public portals at all administrative levels in order to avoid interoperability issues.
 - Ensuring a transparent transfer of data between different systems in accordance with the once-only principle will greatly increase the quality and efficiency of the service.
 - 2) CEMR supports the implementation of user-centered principles for the design & delivery of digital public services.
 - Accessibility, security, availability & usability of services must be guaranteed so that they can be used by all in a non-discriminatory manner.
 - Digital services must take into account economic & social barriers that may prevent access to services by certain groups of citizens.
- +EU4Health could look at developing further cross border cooperation at local & regional levels





**Local & Regional
Europe**

CEMR on EU4Health Work Programme 2022

13 September 2021

Who we are

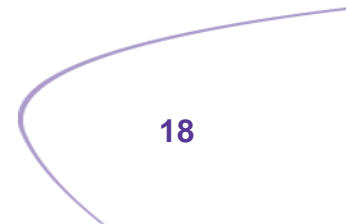
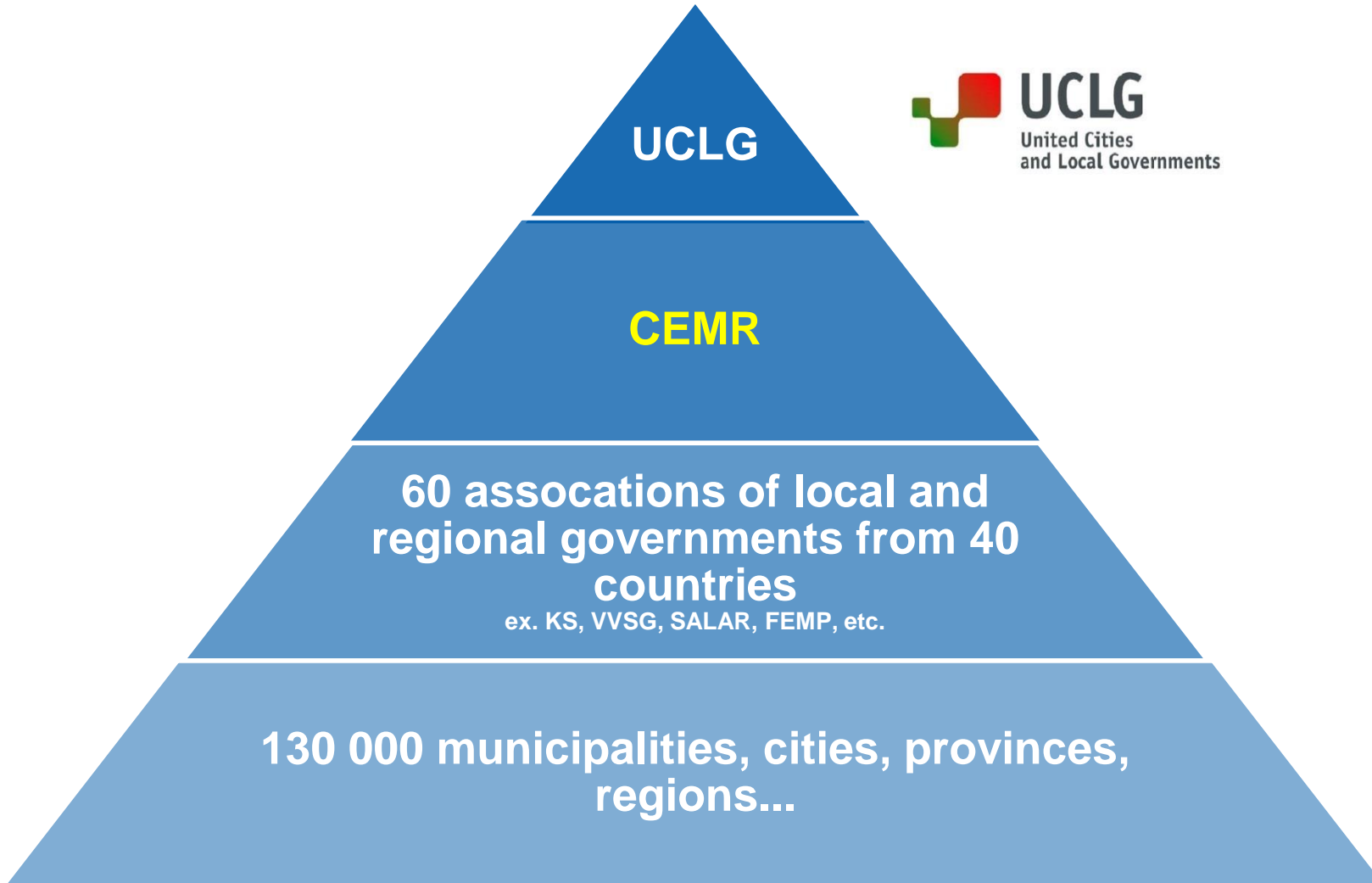
The Council of European Municipalities and Regions (CEMR) is the broadest European association of local and regional government.

CEMR promotes the construction of a united, peaceful and democratic

Europe founded on local self-government, respect for the principle of subsidiarity and the participation of citizens



- Founded in 1951
- 41 countries
- 60 associations
- 100 000 municipalities and regions



Priorities

Disease prevention & health promotion (Specific objective 1)

- Healthy environments
- Reduce inequalities
- Awareness-raising actions

Prevention, preparedness & response to cross-border health threats (Specific objective 2)

- Strengthen infrastructures
- Training and upskilling

Enhance access to healthcare (Specific objective 7)

- People with disabilities

E-government

- Interoperability
- Cooperation between levels of government (vertically) and different sectors (horizontally)
- Open and international standards
- Transparent transfer of data between different systems
- Once-only principle

Citizens

- Consult and engage citizens and local businesses
- Implementation of user-centred principles for the design and delivery of digital public services
- Accessibility, security, availability and usability of services must be guaranteed
- Non-discriminatory approach
- Digital services must take into account the economic and social barriers
- Intersectionality

EU4Health – Stakeholders’ Targeted Consultation

Title: Interoperability and security of national health systems

Organisation: SPMS - Shared Services of the PT Ministry of Health

Needs/Challenges:

Concept -Global pandemic- Even though the concept predates COVID-19, the current pandemic has demonstrated the urgent need to achieve a functioning and interoperable ecosystem in which data is effectively exchanged and support policy-making and research outcomes. The EHDS is a great solution. Nonetheless, the path towards it will be challenging. Organisational sustainability at the different levels is crucial - a 2-speed health Europe won't work. Capacity building and definition of roles is key.

Proposal for solution:

- Paving the way for Europe's Digital Decade: promoting organisational sustainability in (e)health cooperation in the EU EHRxF (2019, Commission Recommendation — establish National Digital Health Networks.
- To enhance the interoperability and security of national health systems and support the secure exchange of health data across borders, each Member State should set up a national digital health network involving representatives of the relevant competent national authorities and, where appropriate, regional authorities dealing with digital health matters and the interoperability of EHR, and security of networks and information systems, and the protection of personal data.
- This solution would result into a coordinated approach (between Member State) in capacity building, hence enhancing national (and also regional) ehealth ecosystems' networking.
- Organizational sustainability is key to streamline processes between actors at the different levels (systemic, operational)





SPMS_{EPE}

Serviços Partilhados do Ministério da Saúde

Promoting organizational sustainability in (e)health cooperation in the EU

[DIGITAL]
Alternative solutions
provided by stakeholders



Proposed Solution description:

1. Objectives

European EHRxF







(1) Paving the way for Europe's Digital Decade: promoting organizational sustainability in (e)health cooperation in the EU

→ Objective Specific 9: Support integrated work among MS health systems' [and between them] (Specific objective 9)



Communication: "2030 Digital Compass: the European way for the Digital Decade"

 Skills ICT Specialists: 20 millions + Gender convergence Basic Digital Skills: min 80% of population	 Digital transformation of businesses Tech up-take: 75% of EU companies using Cloud/AI/Big Data Innovators: grow scale ups & finance to double EU Unicorns Late adopters: more than 90% of SMEs reach at least a basic level of digital intensity
 Secure and sustainable digital infrastructures Connectivity: Gigabit for everyone, 5G everywhere Cutting edge Semiconductors: double EU share in global production Data - Edge & Cloud: 10,000 climate neutral highly secure edge nodes Computing: first computer with quantum acceleration	 Digitalisation of public services Key Public Services: 100% online e-Health: 100% of citizens having access to medical records Digital Identity: 80% citizens using digital ID



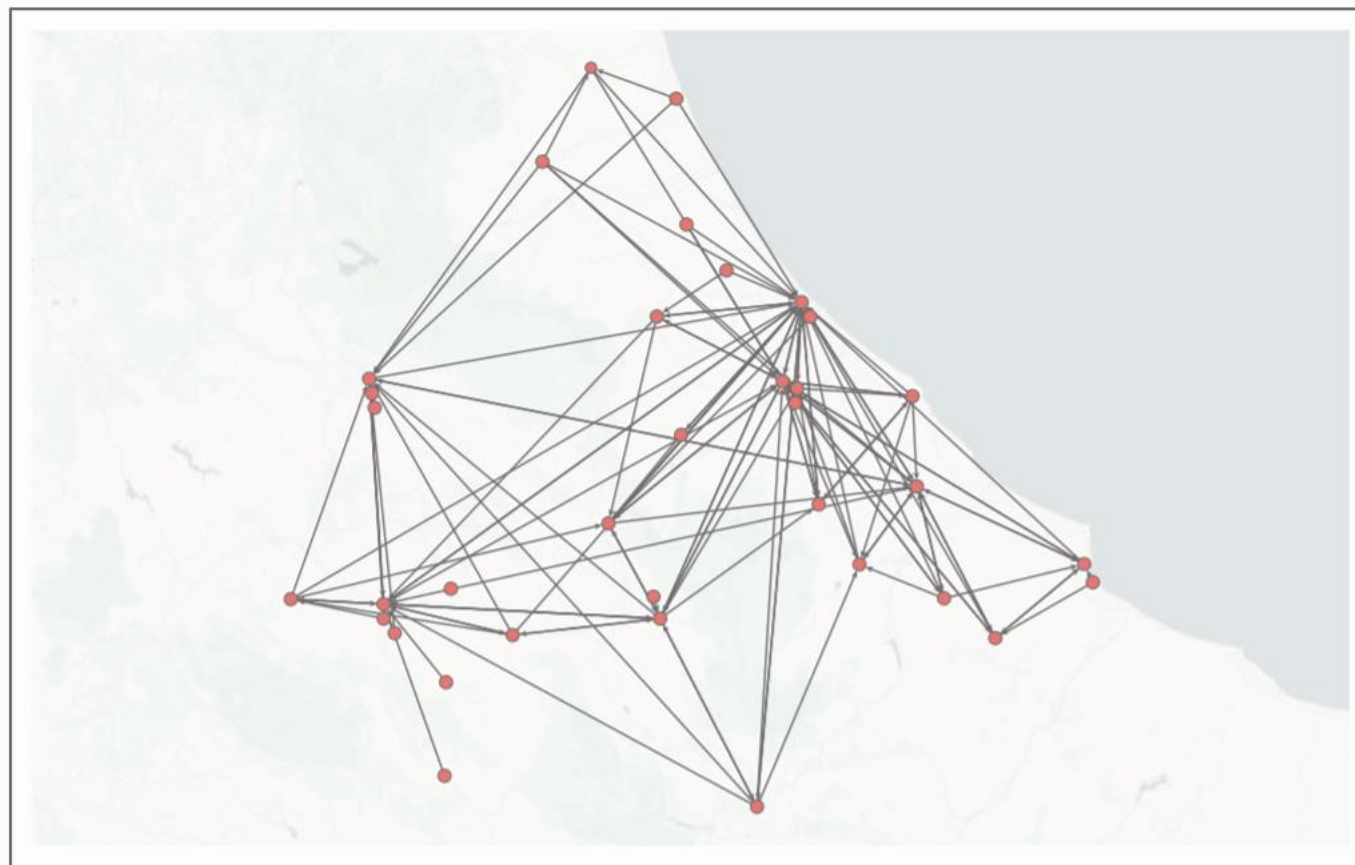
SPMS
EPE

Serviços Partilhados do Ministério da Saúde

Proposed Solution description:

1. Objectives
2. Outcomes
3. EU's added value

value



Viviana Amati et al. (2019) The Co-evolution of Organizational and Network Structure: The Role of Multilevel Mixing and Closure Mechanisms.

- **Networking**
- **Routine operation**
- **Ecosystem [and nodes]**
- **Organizational Sustainability**



SPMS
EPE

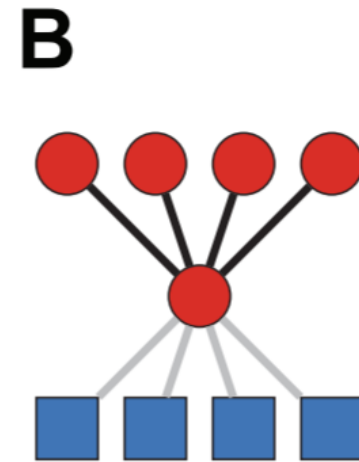
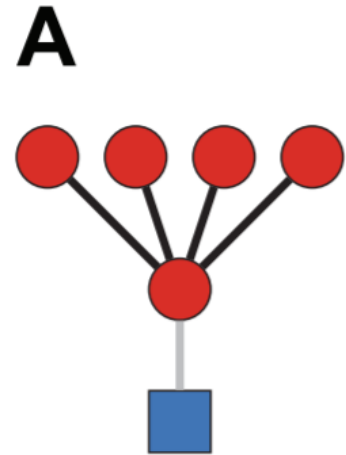
Serviços Partilhados do Ministério da Saúde

The Idea



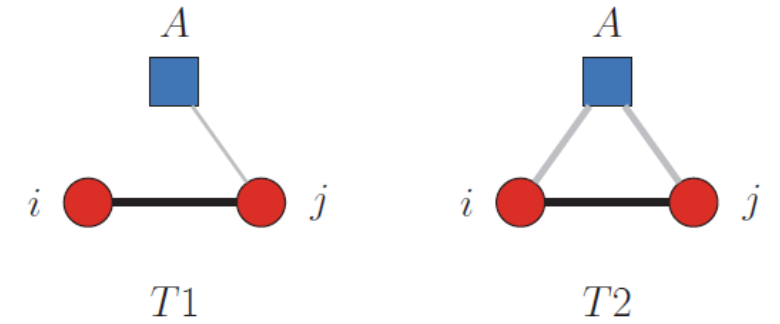
● Organization ■ Internal Activities — Inter-organizational — Internal function

Interorganizational networks

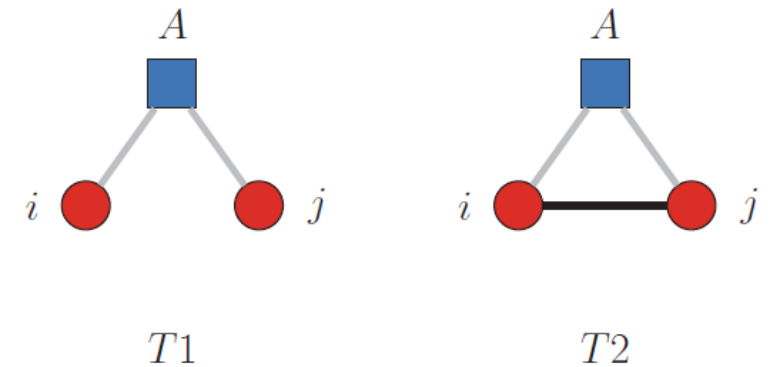


Social Networks and Clustering

Panel 1



Panel 2



The Background



The EHRxF recommendation (Fev. 2019):

- **(6) National Digital Health Network**

To enhance the interoperability and security of national health systems and support the secure exchange of health data across borders, each Member State should set up a national digital health network involving representatives of the relevant competent authorities [...].



eHealth Network recommendation

**for the Development of National Digital Health
Networks in the EU Member States**

(02 Aug 2019 – 05 Mai 2021)

The State of Play



eHealth Network recommendation

**for the Development of National Digital Health
Networks in the EU Member States**

Ecosystem evolution:

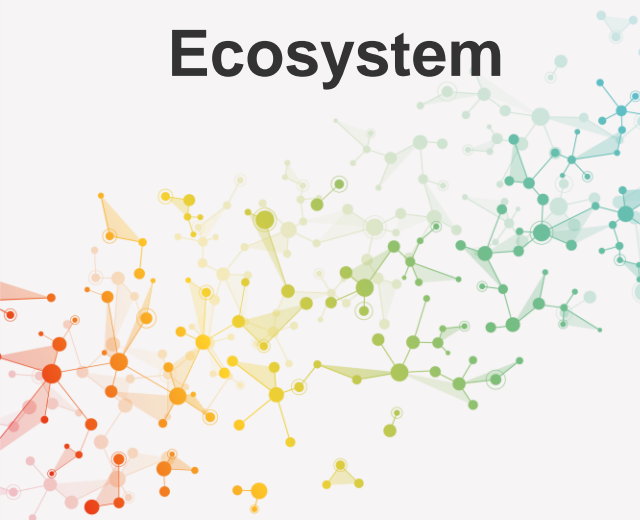
- Findata and Secondary Use of Data
- The Dutch Health Information Council
- Ireland and formalisation of partnerships with academia on eSkills for health professionals
- Portugal and local level engagement
- Estonia – a multi-stakeholder approach to eHealth strategic development plan



SPMS
EPE
Serviços Partilhados do Ministério da Saúde

The Solution:

National Health Information Ecosystem



To enhance the interoperability and security of national health systems and support the secure exchange of health data

We would need:

- 1. Ecosystem networking practices between nodes → establish routine processes**
 1. to better coordinate national activities,
 2. to advance evidence-based policymaking, and
 3. to stimulate the development of interoperability in eHealth so that new services could sustainably emerge (EEHRxF).
- 2. Capacity building is mandatory to streamline the potential of a National Health Information Ecosystem**
 1. determine any organizational challenge nationally,
 2. study and understand the differences between eHealth ecosystems,
 3. share best practices, develop guidelines and recommendations.
- 3. People, Process and Technology**
 1. networked health system
 2. digital tools acceleration
 3. involvement of the user in their own health



SPMS
EPE

Serviços Partilhados do Ministério da Saúde

EU4Health – Stakeholders’ Targeted Consultation

Title: AI to improve patient care in hospital and at home suffering of structural heart diseases

Organisation: Edwards Lifesciences SA - Private entities (profit or non-profit) in Switzerland

Needs/Challenges:

A global leader in patient-focused medical innovations for structural heart disease, as well as surgical monitoring for critically ill patients, we welcome this targeted public consultation and refer to MedTech Europe’s response as well as to the contribution of the EU Structural Heart Disease Coalition, to which Edwards is a contributor, and which calls for the set-up of a Joint Action on structural heart disease, a deadly disease affecting some 14 million people already today.

Proposal for solution:

CVDs continue to be the leading cause of death in Europe, exacerbated by C19. It is urgent to implement concrete action to reduce CVD burden.

Although various actions targeted at lifestyle and environmental factors to address the CVD burden exist, these cannot apply to those CVDs that cannot be prevented such as structural heart diseases, that are triggered by ageing and cannot be prevented. An EU Joint Action on age-related structural heart diseases - as proposed the EU SHD Coalition’s contribution - would be an important vehicle to directly address, understand its growing impact and promote health of EU's ageing population.

Furthermore, with digital and AI-based health technologies – including AI-based monitoring of patients - increasingly becoming part of the healthcare delivery pathway, there is an important role for EU4Health to invest smartly into initiatives that foster the secure uptake of such technologies so that they improve patient care in hospital and at home.





Proposal for a Joint Action
on Structural Heart Disease

2022 EU4Health Work Programme

10 September 2021

It's an investment in our own future

- 16% of those aged between 75-84, and 30% of the population above 85 have Structural Heart Disease (SHD);
- 2050 may be the year the EU goes carbon neutral, but it will also be the year 23 million people have SHD;
- Most SHDs are treatable; several barriers lead to premature mortality: poor awareness, under-detection, unequal access to treatment

To tackle this expression - "It's only older people who are dying"

- 40% of individuals in the EU believe that age discrimination is widespread in their country;
- Age discrimination is particularly prevalent in cardiovascular disease and directly impacts detection and outcomes;
- Almost 70% of people above 60y rarely get their heart checked.

Because digital solutions exist

- We just need to use them!

Objective: Improve understanding and early detection of age-related Structural Heart Diseases to reduce premature mortality and incidence

EU JA on SHD to enhance Member States cooperation and exchange on:

1. Better data collection and access to information on SHDs
2. Increase exchange and transfer of best practices
3. Support networks and capacity building



Role of Digital technologies in the EU JA on SHD:

- Digital patient registries
- Online repository of data and information
- Digital heart detection and monitoring technologies
- Digital awareness campaigns
- Digital detection trainings for health care professionals

Be a step forward in tackling CVDs – EU's number 1 killer

Find out more about action on SHD!

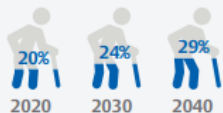
EUROPEAN MANIFESTO FOR A HEALTHIER EUROPE

Living longer, living better

FACTS:

Europe is Ageing¹

In 2040, **155M** Europeans will be aged over 65.



The ageing population is putting pressure on social and health systems

In 2040 **¼** of the healthcare demand will be for people over the age of 65¹.

The old-age dependency ratio² in 2016 was 30%, in 2040 this will be **46%**³.

Curing age-related diseases such as Structural Heart Disease protects the sustainability of our health and social care systems, preserves the autonomy of elderly citizens and allows them to make an active contribution to society

Structural Heart Disease is about to experience an exponential growth

✓ Age-induced cardiac defects such as aortic stenosis, mitral and tricuspid regurgitation, that demand repair and/or replacement of heart valves.

✓ Causing functional decline leading to dependency and social exclusion.

SHD affects a large proportion of elderly

Age	% with SHD
65-74	6%
75-84	16%
85+	30%

SHD is increasing in prevalence with population ageing



In 2040 the EU will have an estimated **20 million people** over 65 with SHD⁴.

¹ Eurostat (2017) People in the EU – population projections, http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&plugin=1&code=sdg_11_6_1, the EU – population projections (retrieved on: 25 July 2018)

² The old-age dependency ratio is defined as the ratio between the number of persons aged 65 years and over to the number of persons aged 15-64, expressed as a percentage

³ Eurostat (2017) Baseline projections: demographic balances and indicators, http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&code=sdg_11_6_1 (retrieved on: 21 July 2018)

⁴ Figures extrapolated based on projected demographic figures from Eurostat and the burden of Structural Heart Diseases provided to the GEMOIS Population Cohort Study, <https://www.ncbi.nlm.nih.gov/pubmed/27135484#>

CALL ON THE EU AND MEMBER STATES TO:

1. Prioritise

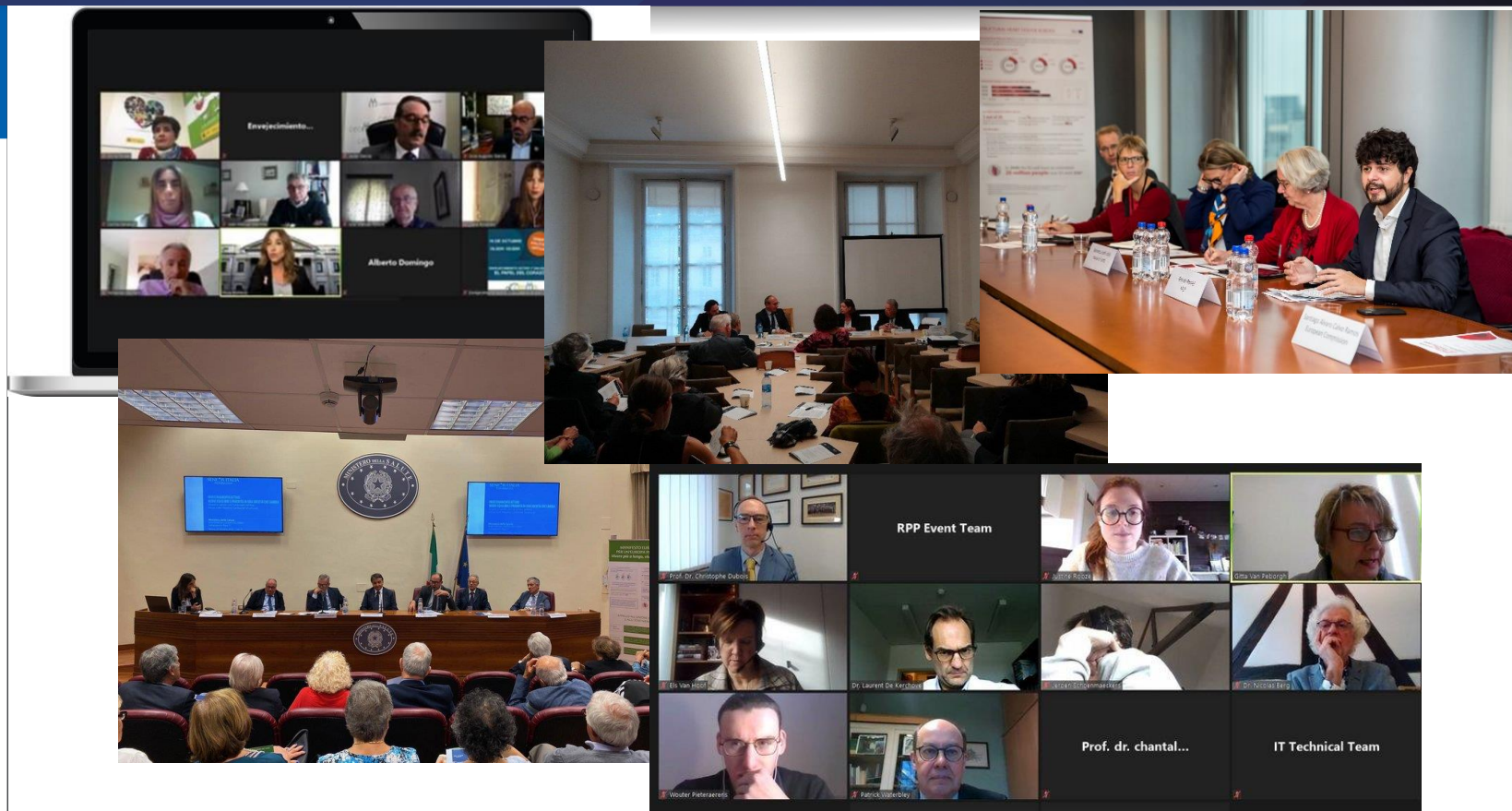
Set up a EU Joint Action (EU Commission & Member States) on Structural Heart Disease to prioritise and implement harmonised plans to ensure that no European citizen dies because of a lack of access to a heart health check.

2. Detect

Ensure that diagnosis for Structural Heart Disease is included in all health checks of people over the age of 65 across Europe.

3. Treat

Secure appropriate funding for early, proactive and curative treatment of Structural Heart Disease so that patients can return to normal life rapidly, and contribute actively to society.



A campaign across 6 countries – one goal!

Join us at <https://structuralheartdiseasecoalition.eu/>

EU4Health – Stakeholders’ Targeted Consultation

Title: Development of connecting options to study cross border large health datasets between EU-countries

Organisation: University Medical Center Groningen

Needs/Challenges:

Considering the need for solutions for sustaining maximum health of citizens and preventing disease and progression of existing disease, health research in large and diverse populations is needed, involving population and clinical data of multiple EU countries. Organizing such big data is a challenge on its own, but in particular with respect to protection of privacy after coupling datasets, avoiding duplicates of citizens moving across borders and to have all data in a uniform (FAIR) format.

Proposal for solution:

- Objective: connect large population and clinical datasets, allowing connection of all data belong to each individual while still protecting privacy. To reach this goal Virtual Workspaces should be created that allow study of big data within such workspaces with all software and hardware options needed, without the possibility to download such (combination of) data and without being able to connect such datasets to other datasets not present in the Workspace. Also in this context, measures should be taken to connect different datasets with uniform and FAIR data setup (and conversion when needed), to maximize statistical power.
- Outcome: development of connecting options to study cross border large health datasets between EU-countries.
- EU added value: enhances the development of cross-border data exchange, needed to support the Prevention, preparedness & response to cross-border health threats in the EU and beyond.





university of
groningen



University Medical Center Groningen



European
Commission

Challenge

Organizing population and clinical data of multiple EU countries in particular with respect to protection of privacy after coupling datasets, avoiding duplicates of citizens moving across borders and to have all data in a uniform (FAIR) format.

Objective

- Connect large population and clinical datasets, allowing connection of all data belonging to each individual while still protecting privacy.
- Creating Virtual Workspaces that allow study of big data in a secured system.

Outcome and EU added value

- **Outcome:** development of connecting options to study cross border large health datasets between EU-countries.
- **EU added value:** enhances the development of cross-border data exchange, needed to support the prevention, preparedness & response to cross-border health threats in the EU and beyond.

Contact information

For more information, please contact:

Martijn Röfekamp

EU Liaison Officer at University of Groningen and
University Medical Center Groningen

m.rofekamp@rug.nl

Thank you

Contact: SANTE-CONSULT-EU4HEALTH@ec.europa.eu



© European Union 2020

Unless otherwise noted the reuse of this presentation is authorised under the [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

