European Vision for Digital Health

Ioana Gligor (DG SANTE)
Ceri Thompson (DG CNECT)
Health Priorities in the Digital Single Market Strategy

Give citizens **better access** to their **health data**, everywhere in the EU

Use **digital** services for citizen empowerment and person-centred care

Connect and share health data for research, faster diagnosis and better health outcomes

25 April 2018: the "Data Package"

- Towards a common data space in the EU for new products and services based on data
  - Review of the Directive on re-use of public sector information
  - Results of the evaluation of the Database Directive
  - Sharing of private sector data
  - Artificial Intelligence
  - Simplifying legal framework for .eu
  - Transparency and fairness for platform users
  - Online disinformation – Code of Practice
  - Communication on digital health and care
Subsidiarity and cooperation

Patients’ rights in Cross-border Healthcare

Cross-border Healthcare Directive
The Directive – A major step towards a Europe for Health

1. clarifies the rights of patients who seek reimbursement for care received in another Member State; and enhances information to patients.

2. provides a legal framework for the cooperation of Member States:
   1. Recognition of prescriptions
   2. eHealth
   3. European Reference Networks
The European Commission has placed digital at the core of its strategy, by setting the Digital Single Market as one of its 10 priorities. The aim is to open up digital opportunities for people and business and to make the EU's single market fit for the digital age.
Secure access and exchange of health data

- Progressive exchange of e-prescriptions and patient summaries across EU Member States
- Increased interoperability & exchange of Electronic Health Records
- Implementing Decision and Commission Recommendation
Giving citizens better access to their health data

The eHealth Digital Service Infrastructure (eHDSI) enables exchange of patient data across borders

- **Patient Summary** provides access to health professionals to verified key health data of a patient during an unplanned care encounter while abroad
- **ePrescription** enables patients to receive equivalent medication while abroad to what they would receive in their home country
Clarify basis for the eHealth DSI and create new services, such as exchange of EHR
The patient feels sick and seeks healthcare in a country that is not his/her country of origin. The most frequent situation is that the health professional has no prior clinical information about that patient and it is not expected that his visit will be repeated. They will not normally have a language in common.
Single national v. multiple EHR Systems in place (N=29)

- One national EHR system
- Multiple EHR systems
- No EHR systems

Enable Citizen access and ability to use health data securely across-borders through the European electronic health record exchange format
"In order to:

• clarify the role of the eHealth Network in the governance of the eHealth digital service infrastructure and its operational requirements,

• as well as to improve the interoperability of patient data and access by the citizen. "
Electronic Health Record Exchange Format (EHRXF)

- Essential for interoperability of electronic health records

- Upcoming COM Recommendation
  - Developed with Member States and eHealth Network
  - Governance structure within eHN to adjust EHRXF
2 Health data pooled for research and personalised medicine

• Pooling EU data resources, mechanism for voluntary coordination
• Develop technical specifications for secure access and cross-border exchange of genomic and other health datasets
• Pilot actions for rare and infectious diseases, and real world data
Declaration for delivering cross-border access to genomic database

- 1 million genomes accessible in the EU by 2022
- Linking access to existing and future genomic database across the EU
- Providing a sufficient scale for new clinically impactful results in research
Global Personalised Medicine Initiatives (Genomic data)

**China**
- 100 million genomes and € 7.9 billion planned investment

**United States**
- 1 million genomes and € 3.8 billion planned investment

**France**
- 235,000 genomes

**UK**
- 100,000 genomes

**Estonia**
- Planned 50,000 genomes

**Denmark**

**Finland**

**PROPOSED EU ACTION**

1 million genomes **accessible** in the EU by 2022 through a secure and trusted data infrastructure **privacy & security by design**
Cross-Border Possibilities to Help Patients with a Rare Disease
The ERN

Networks of healthcare providers aiming at improving quality, and safety and access to highly specialised healthcare

Patients affected by rare or low prevalence and complex diseases

Multidisciplinary approach (different specialities/areas of knowledge)

Added value at EU level

Need of cooperation:
- Scarcity knowledge
- Need education
- Complexity / high cost
- Effectiveness in the use of resources

"The knowledge travels, not the patient"
24 Networks

European Reference Networks

26 Countries

300 Hospitals

Full Member

Affiliated partner

900 Healthcare Units

Health
ERN's IT Platform & tools

CLINICAL
Online patient management
*CPMS*

IT tools

CEF funded

- Web/video conferencing, Virtual clinical meetings
- Exchange of Images (Radiology), diagnostic tests & pictures (genetics, pathology etc., (PACS)
- Exchange of clinical information and patient data
European Reference Network's IT Tools

Knowledge sharing
  e-learning
  Training
  Website

Operational since:
  June 2017
  November 2018

Rare disease registries (ERNs, CHAFEA, JRC)

ERN Collaboration Platform
Clinical Patient Management System
Digital tools and data for citizen empowerment and person-centred healthcare

- Facilitate the wide deployment of digitally-enabled services
- Promote common principles for validating and certifying health technology
- Capacity building and technical assistance for health authorities
- Mobilising investment to support large-scale implementation of digitally enabled, integrated, person-centred care models
Funding opportunities digital health 2021-2027

Digital Europe Programme and Connecting Europe Facility
European Social Fund + and European Globalisation Adjustment Fund
Horizon Europe
European Regional Development Fund
InvestEU Programme
Funding: Digital Europe Programme

• First ever Digital Europe Programme
• Matching the Digital Single Market Strategy with robust funding to make most of new opportunities for digital transformation
• €9.2 billion for EU budget 2021-2027
• 5 specific objectives
5 specific objectives

- Supercomputing
  - 2.7 bn EUR
- Artificial Intelligence
  - 2.5 bn EUR
- Cybersecurity and Trust
  - 2 bn EUR
- Advanced Digital Skills
  - 700 mil EUR
- Ensuring the wide use of digital technologies across the economy and society
  - 1.3 bn EUR
(1) Boost EU’s technology and industrial capacity and AI uptake
(2) Address AI's socioeconomic impact
(3) Ensure an appropriate ethical and legal framework
Artificial Intelligence for Europe

Increase **investment**
Strengthen **R&I**
Make **data** available
Empower **people**
Nurture **talent**
Work **together**
Boost **competitiveness**
Maximise **use**
Funding: Connecting Europe Facility (CEF)

Supporting development of high-performance infrastructure in 3 areas

- Transport
- Energy
- DIGITAL (€3 billion for the EU budget 2021-2027)
Funding: Horizon Europe – Research & Innovation

• €94 billion for EU budget 2021-2027
• 3 objectives
• 5 clusters
  • Cluster I: Health (budget: €7.7 billion)
  • Cluster III: Digital and Industry (budget: €15 billion)
• Research missions
EU Programmes under main responsibility for national/regional/local authorities

- ESF+ (shared management)
- European Regional Development Fund
- InvestEU Programme
Investing in people

A new and improved European Social Fund (health – under shared and direct management)

Funding: European Social Fund +
€100 billion for the European Social Fund +
Funding: Regional Development and Cohesion

€242 billion for the ERDF and the Cohesion Fund for the EU budget 2021-2027

5 specific objectives

- A smarter Europe
- A more social Europe
- A greener and carbon-free Europe
- A Europe closer to citizens
- A more connected Europe
Funding: InvestEU

supporting 4 different policy areas, focusing on where the EU can add the most value by providing a budget guarantee to attract private investment

- **Sustainable infrastructure** (Budget €11.25 billion)
- **Research, innovation & digitisation** (Budget €11.25 billion)
- **Small businesses** (Budget €11.25 billion)
- **Social investment & skills** (Budget €4 billion)
An improved and stronger fund

To express solidarity with European workers who lost their jobs with broadened reasons for which Member States can apply: for instance when workers are displaced by restructuring events triggered by changing global trade patterns, automation, digitalisation, or the transition to a low-carbon economy.

Funding: European Globalisation Adjustment Fund

almost €1.6 billion for the EU budget 2021–2027
Thank you!

DigitalSingleMarket@DSMeu
EU_Health@EU_Health

DG Health and Food Safety

DG Connect