

# World's Smoothest Cross-Border Mobility and Daily Life Through Digitalisation

2<sup>nd</sup> Workshop of WP 2 Healthcare  
October 13, 2022  
Helsinki, Finland

30.11.-21

World's smoothest cross-border mobility and daily life through digitalisation

WORKSHOP DAY 1

Digital Compass



What about the market drivers?

• Political & Business



PEOPLE ARE THE DRIVER

No icebergs, icecube might be enough



Denmark

World's smoothest, this doesn't always go so smoothly  
New national strategy for the FUTURE



Iceland

• Linking health care and welfare  
• Looking forward for future participation



Finland



Going towards of utilization of DATA electronic ID-Wallet KANTA

Social & health care Reform



Lithuania

• Collecting more & more health data in national level  
• Developing digital identification



Norway

• Cross-bording development in Nordic countries



Sweden

we are representing Nordic council!



• There has been legal issues  
• Nordic e-health service

Lets put our brains together



Latvia

• New digital strategy

• Looking for the best experiences



Faeroe



Estonia



Åland

Could health care digitalization be like building the bridge?



Benefit analysis



e-prescription in northern countries

We need to remember to also save the world!

# Critical components

what have we learned from COVID?



Nordic Council of Ministers



Champion of transforming





1.12.-21

World's smoothest cross-border mobility and daily life through digitalisation

WORKSHOP  
DAY 2

Me, myself & I

BIG NORDIC  
ELECTRONIC  
PATIENT  
SUMMARY

People are  
the driver

HOW WE IDENTIFY  
IN DIFFERENT  
SYSTEMS?

How we make  
different  
systems work  
together

Digital  
Compass

Can't plan my  
heart attack

e-prescription  
travelling with you

Cross-border  
communication

Wider  
change  
of the  
society

individual  
health  
data

We need to get  
the numbers  
right!

So we know  
what lies ahead

Connecting?  
KANTA?

What possibilities

Nice to know  
who you are!

KILLER  
APP



Nordic Council  
of Ministers



Healthy  
Nordic  
competition

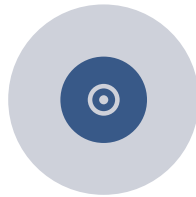


# Workshop Targets and Agenda 13.10.2021

## 13:30 – 15:30



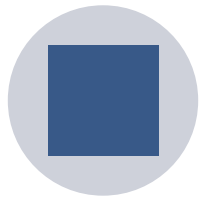
**13:30** Welcome,  
introductions of the  
participants



**13:45** Target 1 Analysis on  
use cases in the  
geographical areas of close  
cross-border cooperation



**14:15** Lessons from  
ePrescription  
implementation in Finland -  
finding solutions



**14:35** Target 2 Tackling  
barriers



**15:05** Wrap-up



**15:15** End of the workshop,  
back to plenary



# Target 1 Analysis on use cases in the geographical areas of close cross-border cooperation

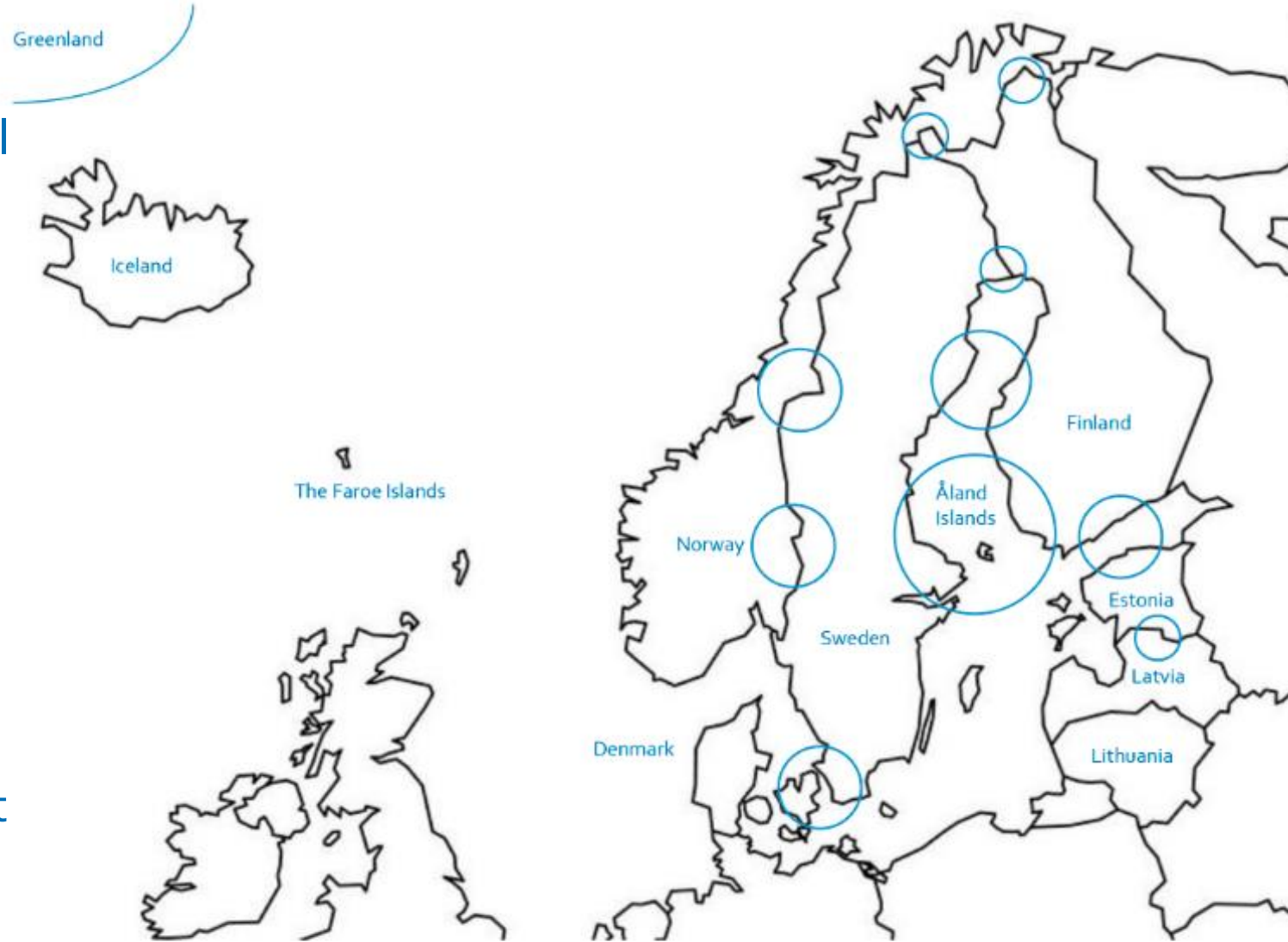




1) Have key geographical areas been identified for "hot points" for health information sharing?

2) How to find out more about this in your country?

3) Which areas would be beneficial to analyse this more as part of the project?



# Possibilities for further refinement of needs and solutions

- Specific use cases for patient summary and ePrescriptions in candidate regions
  - Denmark-Southern Sweden
  - Norway-Sweden
  - Sweden-Finland (across the Gulf of Bothnia + Åland)
  - Norway-Finland-Sweden / Lapland
  - Estonia – Southern Finland
- Specific demographics of mobile citizens?
- Reasons of increased mobility in these regions?
- More information through participants or participant organisations?
- Additional information sources?
- Could be used as pilots or justification of cross-border health information exchange?
- Other potential benefits / obstacles / considerations in these regions?



# Lessons from ePrescription implementation in Finland- finding solutions







# National development of digitalisation: current situation

- Electronic prescription and patient records are established well in Finland
- About 100% of prescriptions are electronic
  - Mandatory since 2017
- Over 95% of patient records are stored in Kanta
  - Mandatory to all but smallest private clinics
  - Over billion documents stored
- Over 200.000 different users in citizen service My Kanta(Omakanta) every month
- Approx 3 M visits in a year
- **Very high general acceptance among citizens**

\* Population of Finland 5,5 M

# Cross Border Prescriptions 2021

**14k**

foreign  
ePrescriptions  
fetched from  
Finnish  
pharmacies

**18k**

Finnish  
ePrescriptions  
fetched abroad in  
2021

**5900**

medicine  
dispensations  
for foreign  
ePrescriptions  
during 2021

**5700**

dispensations  
for Finnish  
ePrescriptions  
abroad during  
2021





# Current situation in cross border prescriptions

- Finland and Estonia were the first countries to introduce an European cross-border e-prescription in 2019
- On average, approx. 20 prescriptions are dispensed in Estonia and Finland per day
- Technical maintenance of National Contact Point (NCPeH-FI) is provided by Kela, as a part of Kanta -services
- National legislation was upgraded to cover cross border exchange
  - Act on Electronic prescription [Laki sähköisestä lääkemääräyksestä 61/2007 - Ajantasainen lainsäädäntö - FINLEX<sup>®</sup>](#) (in finnish)



# Lessons learned 1/3

## **The existing centralized Kanta-service has made implementation of cross-border services easier, but there still are challenges**

- Centralized Kanta –service makes it possible to implement the solution only once
- Currently not all data content is coded in Finland, which challenges translations
- The optimal solution requires changes in all EHRs in use, and current solution might compromise patient safety at times (e.g. what medical products are interchangeable).

## **Ensuring interoperability between national codes and the common EU code lists is difficult**

- At national level the latest version of ATC code system is adopted, but in eHDSI two years old version is being used = > requires mapping of the codes to a higher level of hierarchy within a code systems, which contributes to loss of information
- More semantic level issues problems are expected with PS implementation (the EU classification for procedures is rough in comparison to more extensive coding for procedures in Finland, and currently, Finland has not implemented code system for medical devices/implants or for allergens
- Translating and maintaining code lists between EU and local/national





# Lessons learned 2/3

## **Testing periods are challenging, require resources and time**

- finding testing partners is difficult (e.g. testing with the country in production but only four countries using ePrescription)
- dates are determined for testing, but not everyone stays on schedule
- the degree of preparedness of the implementations to be tested and the competence of the testers are not always at the expected level
- Reference specifications are not specific enough
- At national level motivation is a challenge



# Lessons learned 3/3

**The use of the service is quite limited, but it requires a lot of work to implement and maintain it.**

- Currently using the ePrescription is limited in Europe – no real usage
- In Finland, critical feedback is received: cross border services are not well known by pharmacists/citizens and there is discussions on wasting tax money on marginal services

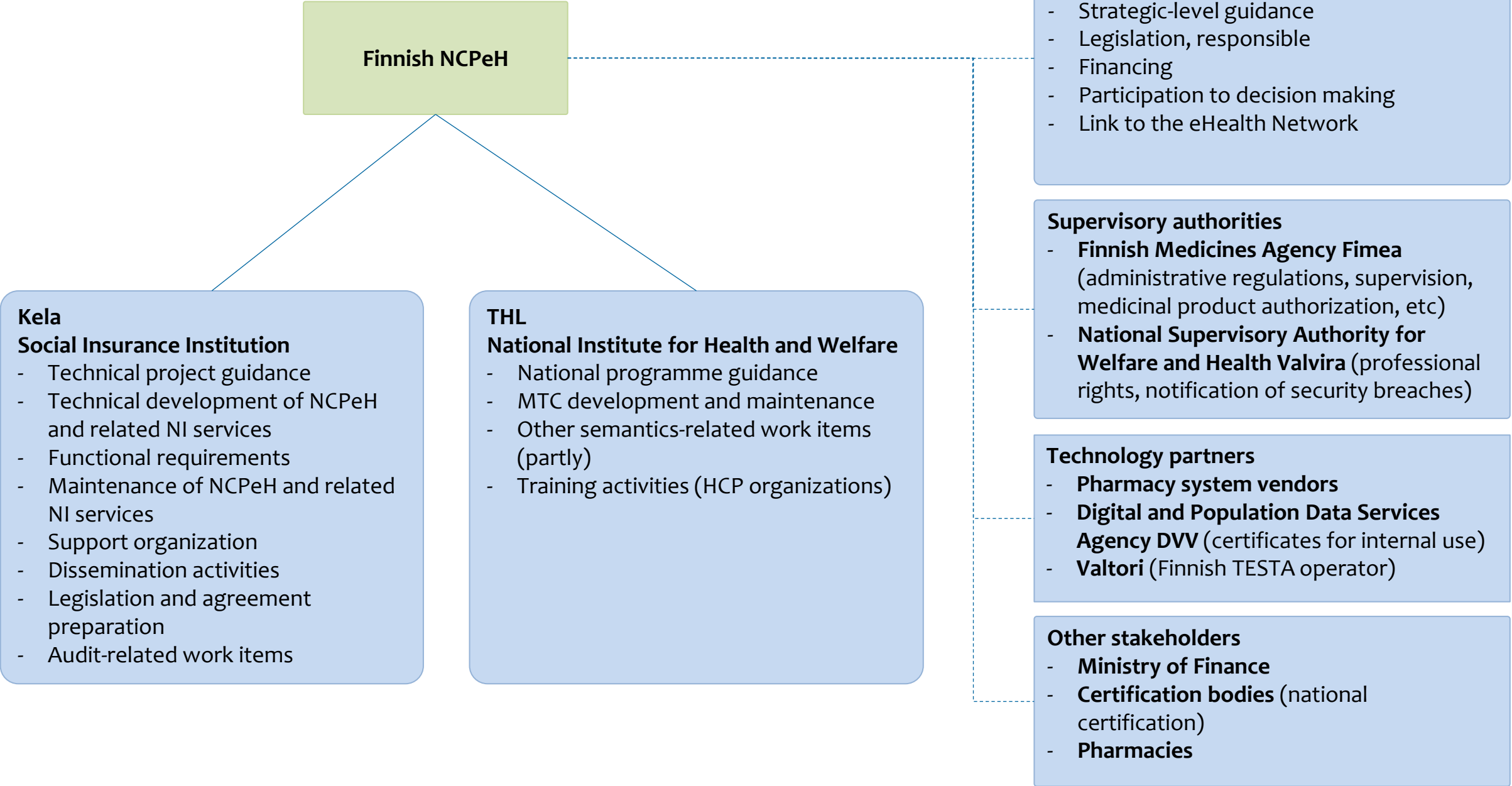
**Progress is slow, even minor changes take time and resources**

- Increase in individual fields of information take a lot of time
- Two years from proposed amendment to production: year to specification and year to implementation and testing

**Despite the slowness, the standardized development cycle enables controlled progress and the development of services**

- The governance model is rigid but effective
- Cooperation between representatives of other Member states has mainly worked well; assistance is available on request from the eHealth Network

# Finnish eHDSI organization



stm.fi ›  
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# Thank you

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# Target 2 Tackling barriers

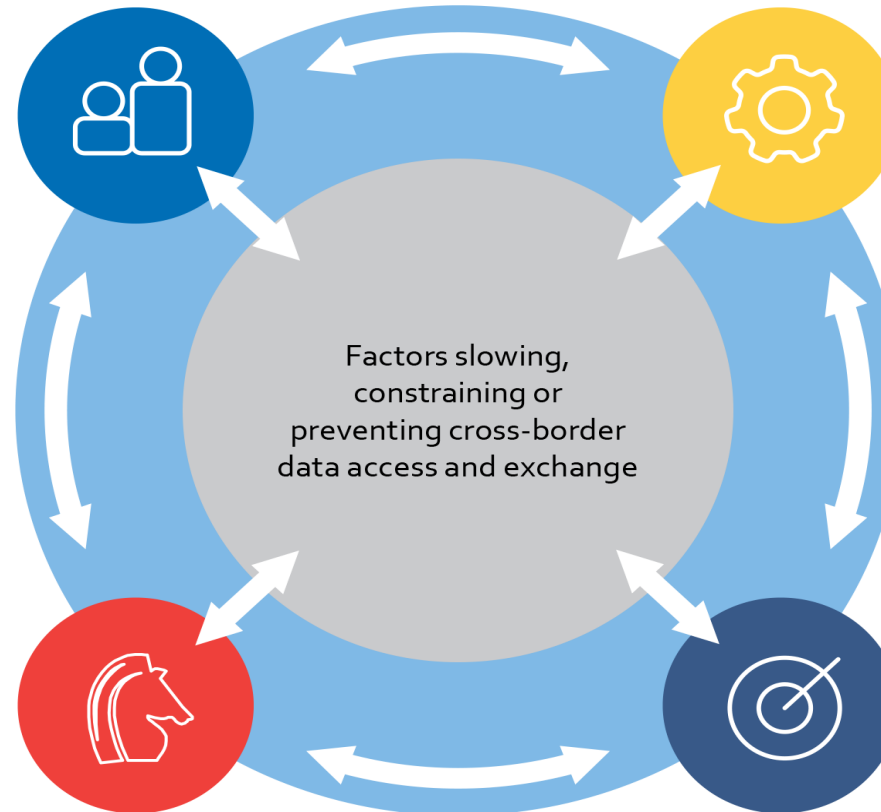


## Organisational barriers

- Lack of mainly financial resources
- International policies should support and co-finance practical development
- Innovation support for regional solutions needed
- Lack of interaction across borders and sectors, also with commercial actors and developers
- Need to implement national policies for interoperability (especially consent policy)
- New ways to share and use health data is needed (Covid-19 as the latest example)

## Legal barriers

- National legislation that would support cross-border health data sharing missing in many countries
- The data privacy protection and consent processes for health data exchange as well as the lack of different controlling mechanisms especially for cross-border prescriptions for narcotics
- Also agreements on specific issues like payment of drugs (the population of Greenland do not pay for medicines)



## Technical barriers

- The security of data, trust issues and encryptions used
- Different systems in different regions nationally
- Standards, privacy issues and technologies decided in eHDSI preferences for many but also raised questions
- Ability of national and local systems in different countries to produce and use internationally interoperable data

## Semantic barriers

- How different countries specify, collect and use health care data
- Sufficient alignment and translation of terminologies, code systems and mappings both nationally and internationally
- Data sets need to include sufficient level of detail in information, which can be used to improve the quality of care
- Some information is not coded and other information is coded with regional code systems or hospitals have their own additional specifications
- Patient identification across countries must be supported in all participating systems

# Learning lessons and overcoming barriers

## — Legal

- Mandatory vs. voluntary participation – innovators vs. laggards
- Obligations of health service providers (public / private?) vs. system vendors
- Sticks (supervision, sanctions) and carrots (funding, justification of obligations)

## — Organisational

- “Organisational sales points” for international data exchange – management and health professionals viewpoints
- Financial burden vs. expected benefits
- “Get the numbers right” – which numbers especially necessary?

## — Semantic

- National vs. international specifications, EEHRxF / EHDS?
- Information specifications, data models, code systems / terminologies
- Harmonisation vs. mapping
- Interoperability certification?

## — Technical

- To which extent can / should national architecture or international data exchange be isolated from design decisions of systems (vendors)
- Different aspects of security: data protection, PKI, cloud security, etc.
- Security certification?



# Thank you.

