



Semantic interoperability is a must for cross-border care

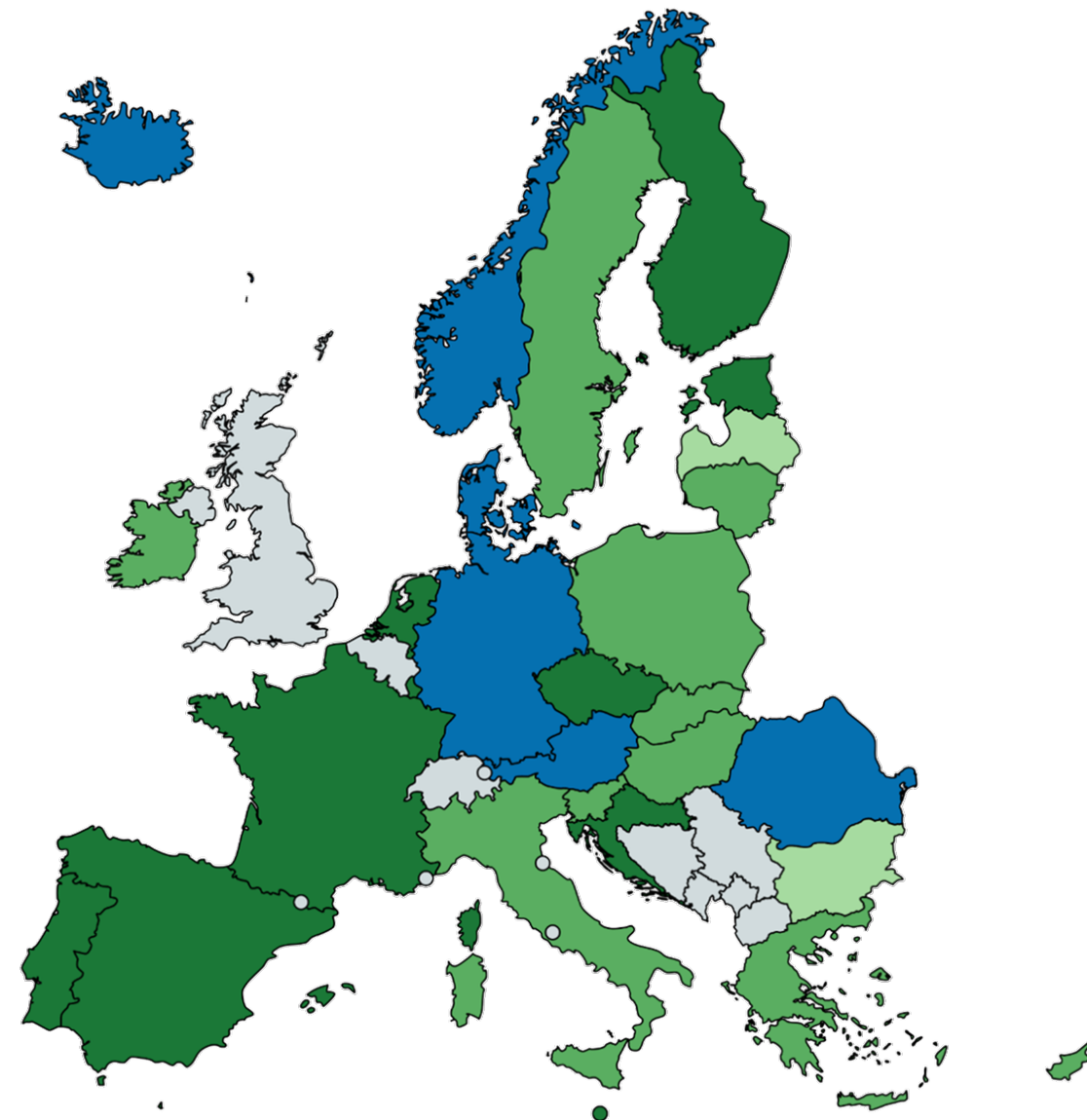
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European Commission



MyHealth@EU

- MyHealth@EU is the existing infrastructure that connects healthcare providers in 10 Member States. It allows them to exchange health data such as Patient Summaries and ePrescription. These services will be expanded to include lab results and other types of health data.

■ Live now: CZ EE ES FI FR HR
LU MT NL PT
■ Go-live planned 2022: CY GR
HU IE IT LT PL SE SI SK
■ Go-live planned 2023: BG LV
■ Application under review: AT
DE DK IS NO RO





Some common goals of MyHealth@EU



To support continuity of care when people exercise their right of freedom of movement



To provide appropriate and usable tools to health professionals and to patients



To ensure data protection and security




















To ensure stability and further development of services, and make people aware of them

Example: ePrescription in action – a Finnish patient purchasing medication in a pharmacy abroad



EP

- EST 
- FI 
- PT 
- HR 

- SW 
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- BE 

PS



Key Performance Indicators:

- Number of eP transactions since 2019: 26.098
- Number of PS transactions since 2019: 426
- Number of Hospitals connected (PS-B): 3.207
- Number of Pharmacies connected (eP-B): 24.981
- Citizens able to benefit from MyHealth@EU: 5.749.635

* Data are from the KPI's Q4 2021



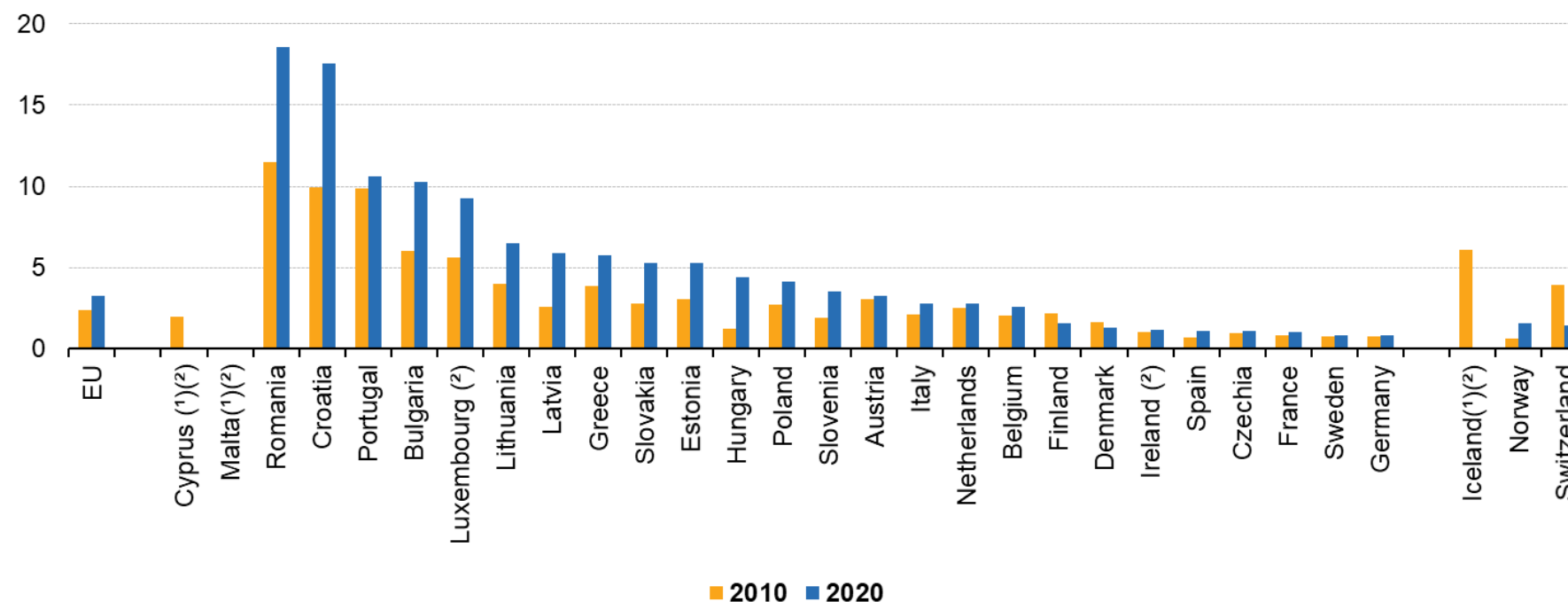
Coverage of HCPs in the MS

MS	Hospitals	Pharmacies	Other POC
CZ	15%		
EE		100%	
ES	3.4%		
FI		100%	
FR	100%	100%	100%
HR	100%	100%	100%
LU	100%		
MT	94%		
PT	2%	0.03%	



What is the scale?

EU mobile citizens of working age (20-64) by country of citizenship, % of their home-country resident population



EUROPEAN HEALTH DATA SPACE

Use of data for healthcare (primary use of data)

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



My Health @ EU
eHealth Digital Service Infrastructure
A service provided by the European Union



X-eHealth

Exchanging Electronic Health Records
in a common framework



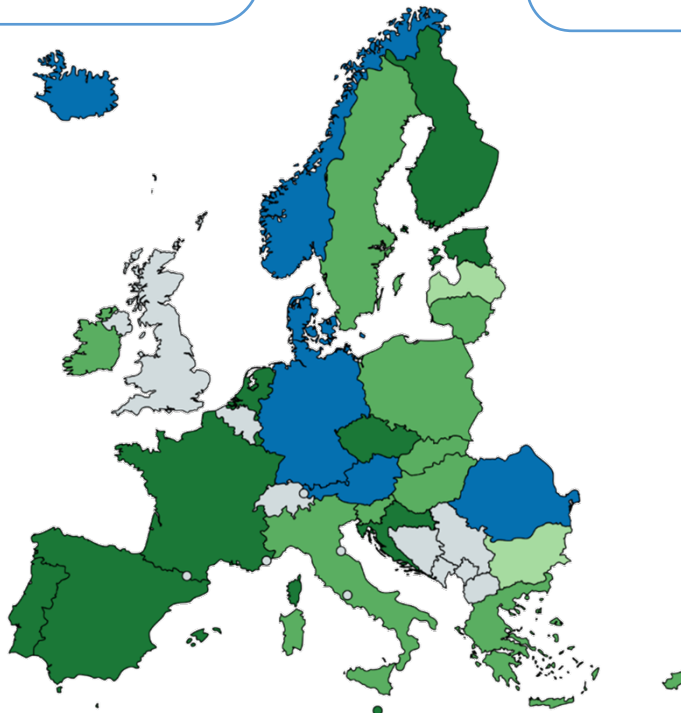
From 2019 exchange of:
ePrescriptions
Patient Summaries
Access by health professionals in
their native language

**From 2022
exchange of:**
**Original Clinical
Documents**

From 2024 exchange of:
Laboratory results and reports
Medical images and reports
Hospital discharge reports
in health professional's language

As in Recommendation on an
Electronic Health Record exchange
format
in cooperation with DG CNECT

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**From 2022: pilot on
Patients' access to their
translated health data**



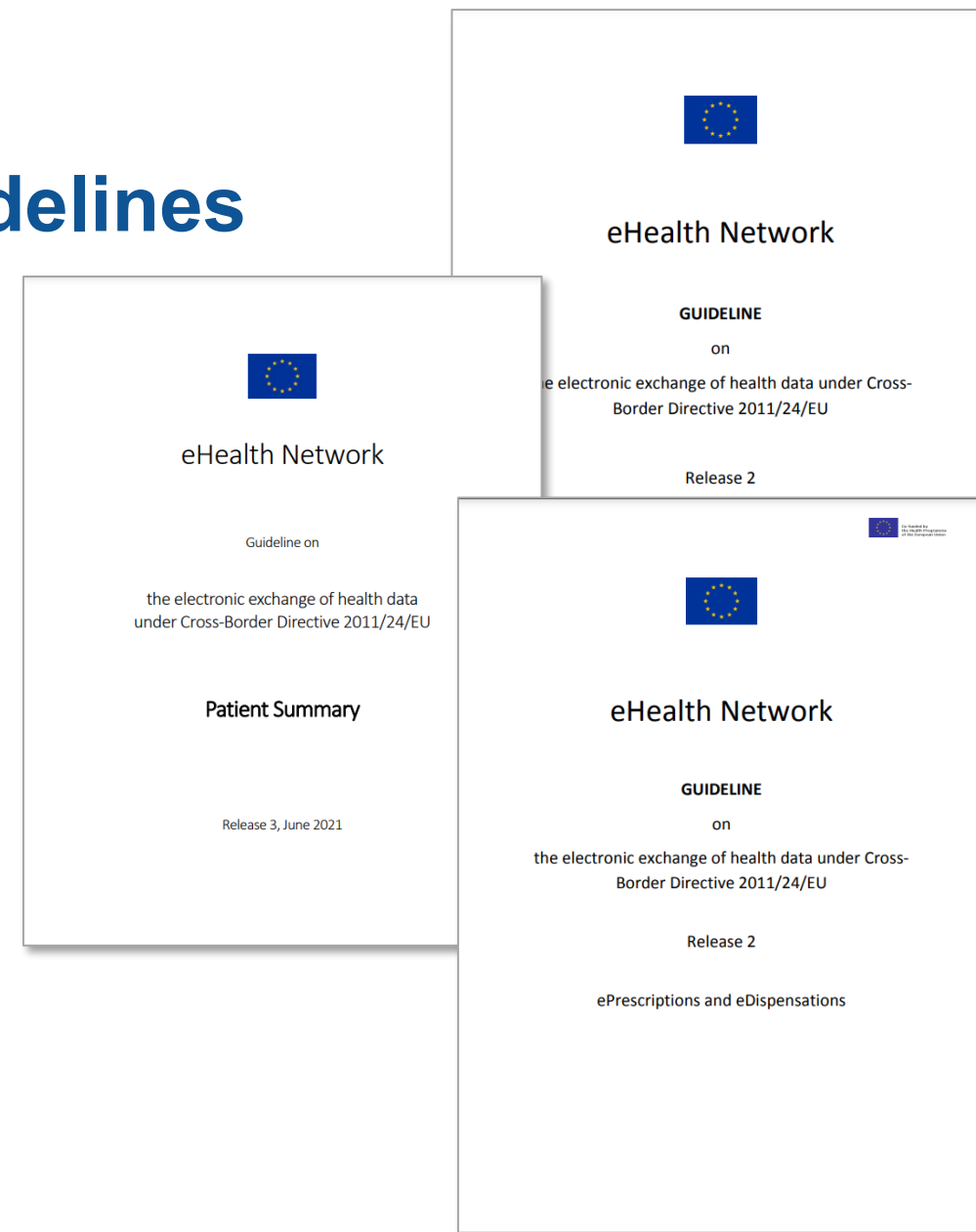
How does a country go live in MyHealth@EU?

- Preparation phase
 - *Implement + fix bugs*
 - *Test – Preparatory, Formal, Re-Testing if needed*
 - *Compliance Check + Follow-Up Compliance Check and any fixes*
- Decision phase
 - *eHealth Member States Expert Group issues a recommendation*
 - *eHealth Network makes the final decision*
 - *Go live*

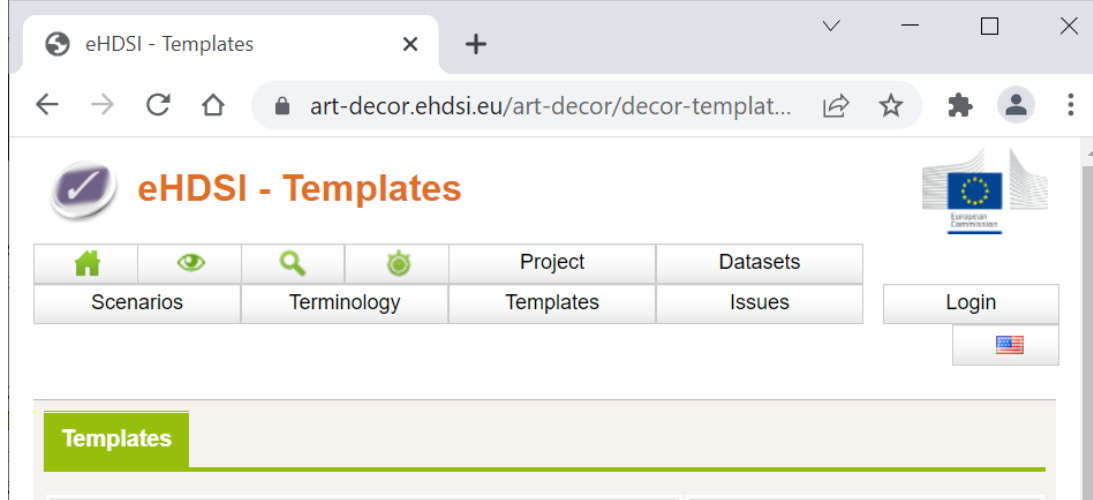


Groundwork: eHealth Network guidelines

- [Guideline on the electronic exchange of health data under Cross-Border Directive 2011/24/EU](#) – undergoing revision
- [Guidelines on Patient Summary](#) – updated in June 2021
- [Guidelines on ePrescription](#) – undergoing revision
- Guidelines on laboratory results and reports – in preparation



Tooling



art-decor.ehdsi.eu/art-decor/decor-templat...

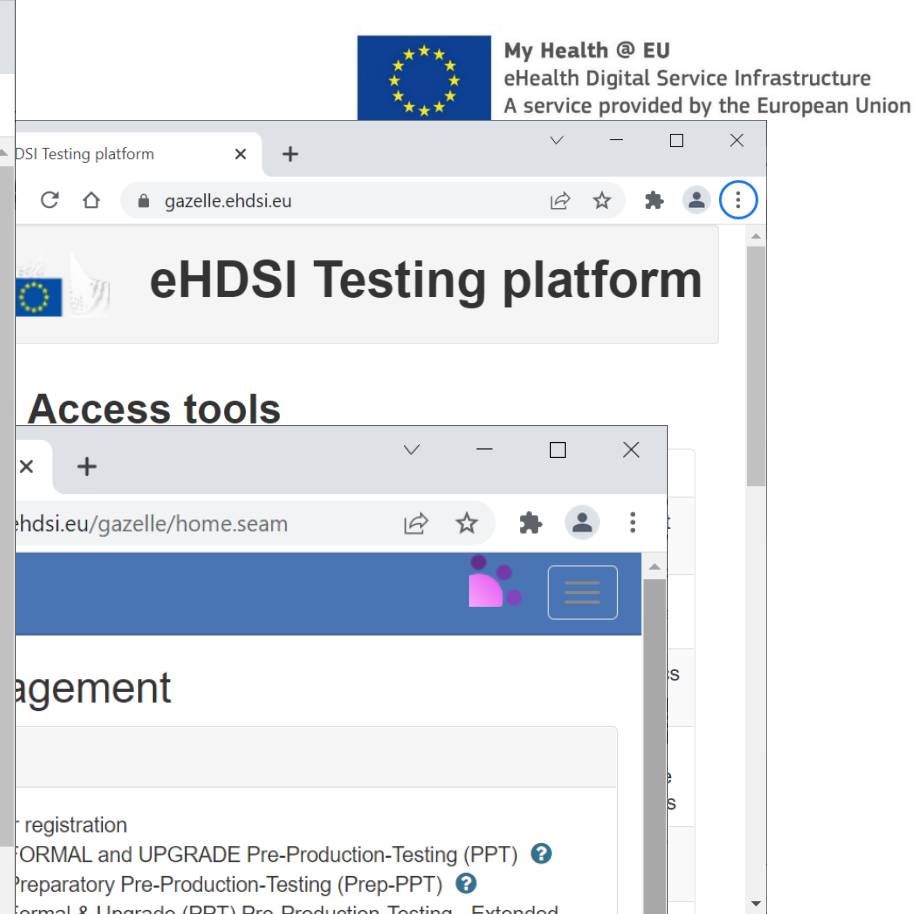
eHDSI - Templates

Scenarios Terminology Templates Issues

Project Datasets

Login

Templates



My Health @ EU
eHealth Digital Service Infrastructure
A service provided by the European Union

gazelle.ehdsi.eu

eHDSI Testing platform

Access tools

ehdsi.eu/gazelle/home.seam

Management

registration

FORMAL and UPGRADE Pre-Production-Testing (PPT) ?

Preparatory Pre-Production-Testing (Prep-PPT) ?

ormal & Upgrade (PPT) Pre-Production-Testing - Extended

Preparatory Pre-Production-Testing (Prep-PPT) ?

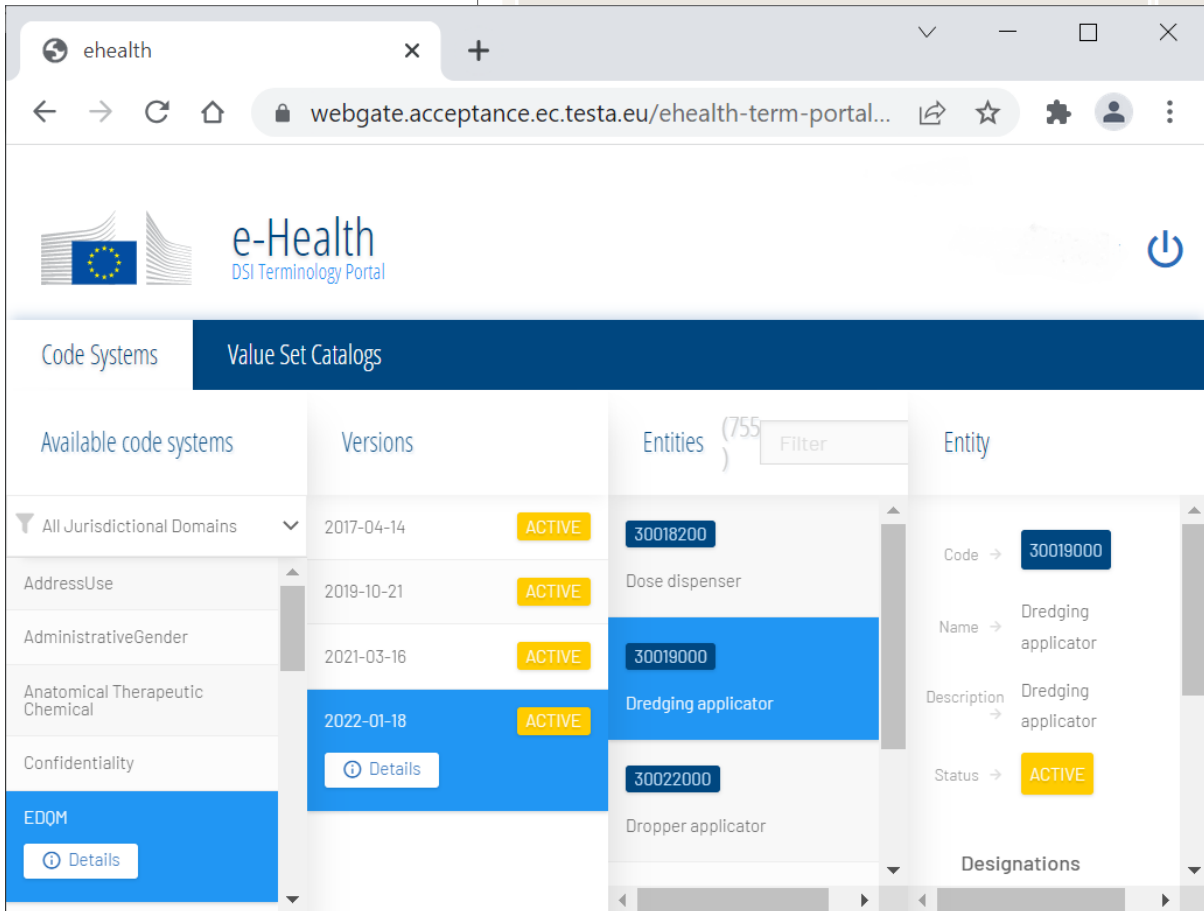
ORMAL and UPGRADE Pre-Production-Testing (PPT) ?

tinuous Testing (PPT) ?

- eHDSI - 2020-02 Wave 3 Formal and Upgrade Pre-production Testing ?
- eHDSI - 2019-10 Wave 3 Preparatory (PPT) Pre-Production-Testing ?
- eHDSI - 2019-06 FORMAL Re-Testing - Wave 1 (upgrade), Wave 2 (re-test), Wave 3 (Connectivity) ?
- eHDSI - 2019-05 Technical OpenNCP Boot-Camp ?
- eHDSI - 2019-02 FORMAL Pre-Production-Testing - Wave 2 ?
- eHDSI - 2018-09 Preparatory Pre-Production-Testing - Wave 2 ?
- eHDSI - 2018-06 FORMAL Re-Testing - Wave 1 ?
- eHDSI - 2018-01 FORMAL Pre-Production-Testing - Wave 1 ?
- eHDSI - 2017-09 Preparation Pre-Production Testing Event - Wave 1 ?

About

Englis



ehhealth

webgate.acceptance.ec.testa.eu/ehhealth-term-portal...

e-Health
DSI Terminology Portal

Code Systems Value Set Catalogs

Available code systems	Versions	Entities (755)	Entity
All Jurisdictional Domains	2017-04-14	ACTIVE	30018200
AddressUse	2019-10-21	ACTIVE	Dose dispenser
AdministrativeGender	2021-03-16	ACTIVE	30019000
Anatomical Therapeutic Chemical	2022-01-18	ACTIVE	Dredging applicator
Confidentiality			30022000
EDQM			Dropper applicator

Entity

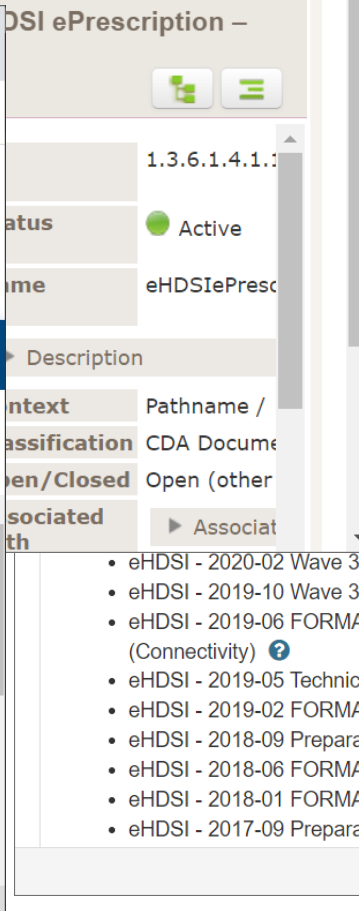
Code → 30019000

Name → Dredging applicator

Description → Dredging applicator

Status → ACTIVE

Designations



DSI ePrescription -

1.3.6.1.4.1.0...

status Active

name eHDSIePresc

Description

Context Pathname /

Classification CDA Docume

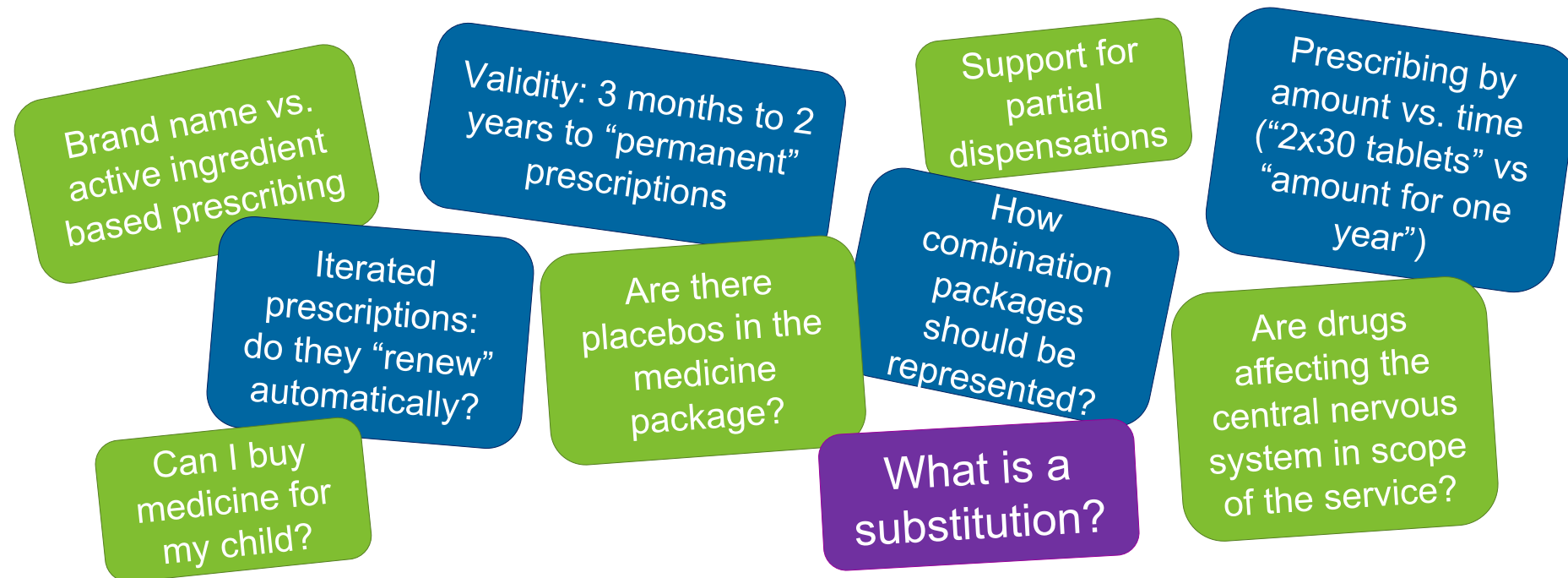
Open/Closed Open (other

Associated Associat

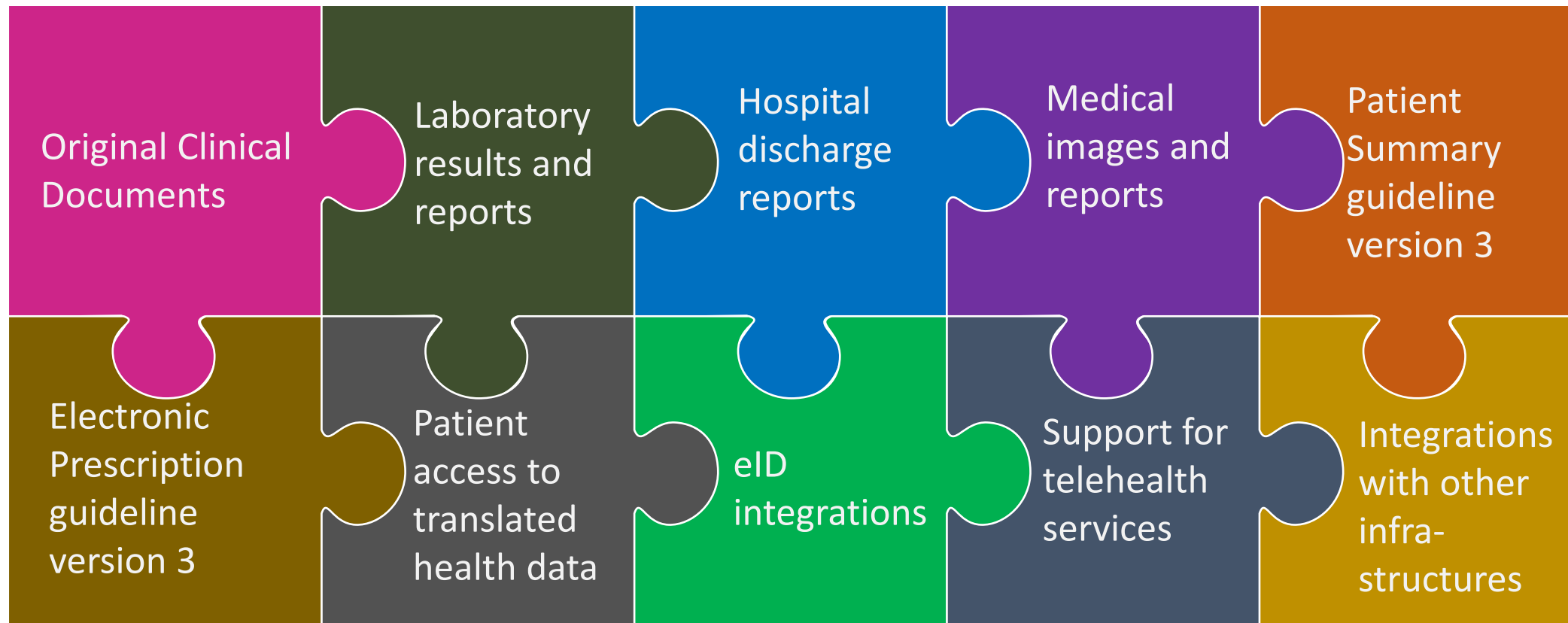


Semantics and business rules





- Semantic specifications may be flexible but there is significant complexity in business rules sometimes leading to a "least common denominator" principle.
- Examples from ePrescription:



Next possible steps for MyHealth@EU



Additional elements that could or should be considered

<h3>Further mobile elements</h3> <ul style="list-style-type: none">• Patient Access on mobile• eID Wallet or Citizen wallet integrations			<h3>Use of non-structured data</h3> <ul style="list-style-type: none">• Extensions to Original Clinical Documents• Links from PS to underlying data
<h3>Quicker development</h3> <ul style="list-style-type: none">• Further streamlining of testing arrangements			<h3>Ethical principles</h3> <ul style="list-style-type: none">• Ensure sufficient coverage of existing services• Children and elderly not to be forgotten

European Health Data Space

Primary use of health data

Sharing of health data for healthcare

Problems

- Limited control of patients over their health data
- Limited interoperability between health care providers

Areas of work

- Control of patients over their data
- Interoperability
- Role of e-health agencies
- Reinforced EU governance (eHealth Network)
- Reinforced MyHealth@EU

Single market for digital health products and services

Problems

- Uneven national legislative frameworks
- Uneven quality framework
- Uneven procedures for prescriptions, reimbursement, liability

Areas of work

- Eliminate barriers to free movement
 - Labelling
- Interoperability
- Reimbursement
- Liability

Secondary use of health data

Access to health data for research, innovation, public health policy making

Problems

- Low re-use of health data
- Cumbersome cross-border access to health data
- Fragmented digital infrastructures

Areas of work

- Governance and rules for access to health data
- Data FAIR-ification
- Digital infrastructure (EHDS2)

Artificial Intelligence

Problems

- Limited provision of data for training of AI
- Difficulties for regulators to evaluate AI algorithms
- Uncertainty on AI liability in health

Areas of work

- Support for development and rollout of AI
- Data for AI
- Support for regulators