The HL7 EU FHIR Implementation Guide for laboratory report: what it is, why it matters, and how to become involved

Webinar, 24 November 2023

16.00-17.00 CET

Online on Zoom

HL7® Europe

The HL7 FHIR Implementation Guide for laboratory results
Agenda

16.00 Welcome (Michael Strübin, *HL7 Europe*)

16.05 The policy context (Henrique Martins, *former chair of the eHealth Network*)

16.15 The HL7 EU Lab Report FHIR IG (Giorgio Cangioli, *HL7 Europe*)

16.30 Q&A with stakeholders and the audience

- Hynek Kružík, *National eHealth Center, Czech Republic*
- Patrizio Fonzi, *Sogei (Ministry of Economy and Finance), Italy*
- Manel Domingo Falcón, *Ministry of Health, Spain*
- George Karapetakos, *Computer Control Systems, Greece*

16.50 Next steps on the Lab Report FHIR IG (Catherine Chronaki, *HL7 Europe*)

17.00 End

Welcome and ground rules

- Thank you for joining the webinar
- The webinar will be recorded
- To help ensure a successful webinar please
  - Mute yourself
  - Feel free to use emojis during the presentations
  - Use the chat to make comments or raise your questions
  - Raise your hand if you'd like to speak
  - If you are invited to speak, please turn on your video and say who you are

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European electronic health record exchange format (EEHRxF) in context of the European Health Data Space (EHDS) Regulation

Funded by
the European Union

X-border interoperability “legal, project and service” brief history

Jan 09 | Jan 18 | Jan 21 | Jan 24 | Jan 30

Legal

…. Directive on Cross-Border care 2011

… Reg. EHDS

Implementing Acts (5+ domains)

…. EEHRxF Comm 2018; Recomm 2019 (5 domains)

Projects /Specs/testing

EpSOS; Expand; Trilium Bridge I&II HealthID; eSENS

X-eHealth

XpanDH

eHNetwork SubGroups/ eHMSEG; eHOMB

Services (G1 2serv)

Services (G2 +3serv)

…. PatS (as Int. Pat Summary?); eP/eD (+ePI?); Lab Reports; Imaging Reports; Hospital Discharge

Services (G3 +?serv)

New domains (from XpanDH suggestions/other projects

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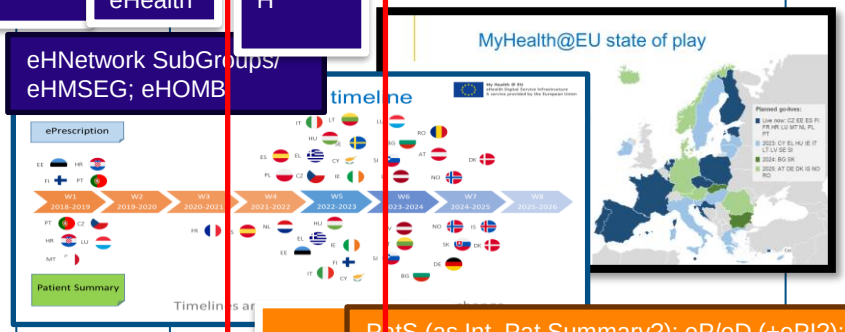

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Services (G3 +?serv)

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XpanDH introduction& Context

Jan 23 | Jan 24 | Jan 25

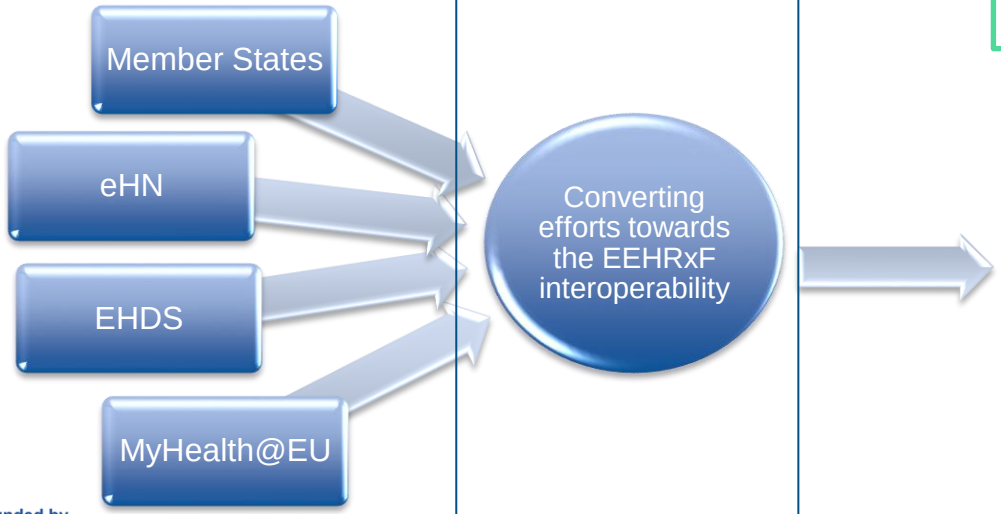
European Electronic Health Record Exchange Format (EEHRxF): Communication 2018 | Recommendation 2019 + **X-eHealth**

European Health Data Space Preparation/Regulation proposal (3/5/2022)

TEHDAS JA ; XpanDH ; JA-09

EHDS Era (2024-beyond)
(note: EEHRxF articles in EHDS Regulation)

TEHDAS 2 JA ; JA-09 + RIA on EEHRxF



XpanDH

XpanDH is aware about the current eHealth scenario and is developing a network of health communities that build-up and uses the EEHRxF

Funded by the European Union

XpanDH landscape and project vision

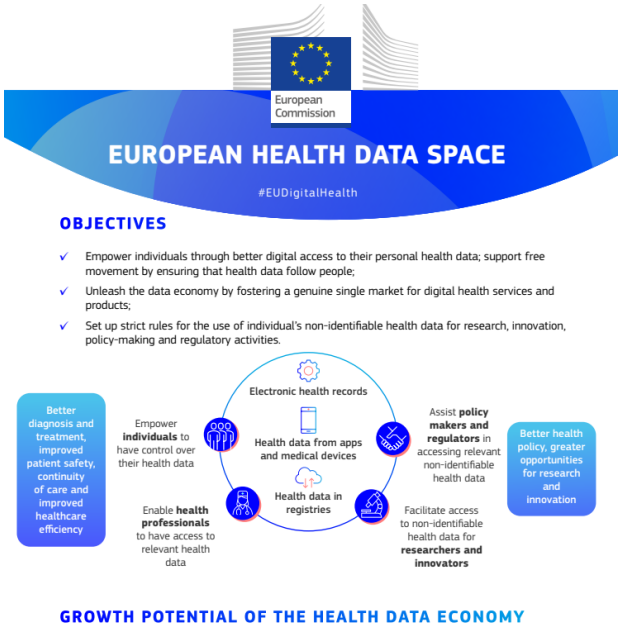
In that context the **EC is building up a regulation proposal** about the ***European Health Data Space*** **- EHDE** with some key statements:

- "**requirements** that have been imposed on **software** through the **Medical Devices** Regulation"
- "regulatory gap has been identified when it comes to **information systems used in the health domain**, also called electronic health record systems (**EHR systems**)"
- "the EDHS sets **essential requirements specifically for EHR systems** in order to **promote interoperability and data portability**"

Specifically, to **EEHRxF**:

- **datasets defining structures**, such as data fields and data groups for the content representation
- **coding systems** and values sets
- **technical specifications** for the exchange of electronic health data

EC is empowered to **adopt delegated acts** to amend the list of **priority categories by adding, modifying or removing** the main characteristics of the **priority categories of electronic health data** deferred application date.



EHDS proposal Article 6

Article 6

European electronic health record exchange format

1. The Commission shall, by means of **implementing acts**, lay down the **technical specifications** for the **priority categories** of personal electronic health data referred to in Article 5, setting out the European electronic health record exchange format. The format shall include the following elements:

(a) **datasets** containing electronic health data and defining structures, such as data fields and data groups for the content representation of clinical content and other parts of the electronic health data;

(b) **coding systems** and **values** to be used in datasets containing electronic health data;

(c) **technical specifications** for the **exchange** of electronic health data, including its **content representation**, **standards** and **profiles**.

2. Those implementing acts shall be adopted in accordance with the advisory procedure referred to in Article 68(2). Member States shall ensure that where the priority categories of personal electronic health data referred to in Article 5 are **provided by a natural person directly** or **transmitted to a healthcare provider** by automatic means in the format referred to in paragraph 1, such data shall be **read** and **accepted** by the data recipient.

3. Member States shall ensure that the priority categories of personal electronic health data referred to in Article 5 are **issued** in the format referred to in paragraph 1 and such data shall be read and accepted by the data recipient.

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EHDS proposal Article 12 and 23

Article 12

MyHealth@EU

...
3. Each national contact point for digital health shall enable the exchange of the personal electronic health data referred to in Article 5 with all other national contact points. **The exchange shall be based on the European electronic health record exchange format**.

Article 23
Common specifications

1. The Commission shall, by means of implementing acts, adopt common specifications in respect of the essential requirements set out in Annex II, including a time limit for implementing those common specifications. Where relevant, the common specifications shall take into account the specificities of medical devices and high risk AI systems referred to in paragraphs 3 and 4 of Article 14.

Those implementing acts shall be adopted in accordance with the advisory procedure referred to in Article 68(2).

Article 23
Common specifications (cont.)

2. The common specifications referred to in paragraph 1 shall include the following elements:

(a) scope;
(b) applicability to different categories of EHR systems or functions included in them;
(c) version;
(d) validity period;
(e) normative part;
(f) explanatory part, including any relevant implementation guidelines.

3. The common specifications may include elements related to the following:

(a) datasets containing electronic health data and defining structures, such as data fields and data groups for the representation of clinical content and other parts of the electronic health data;
(b) coding systems and values to be used in datasets containing electronic health data;
(c) other requirements related to data quality, such as the completeness and accuracy of electronic health data;
(d) technical specifications, standards and profiles for the exchange of electronic health data;
(e) requirements and principles related to security, confidentiality, integrity, patient safety and protection of electronic health data;
(f) specifications and requirements related to identification management and the use of electronic identification.

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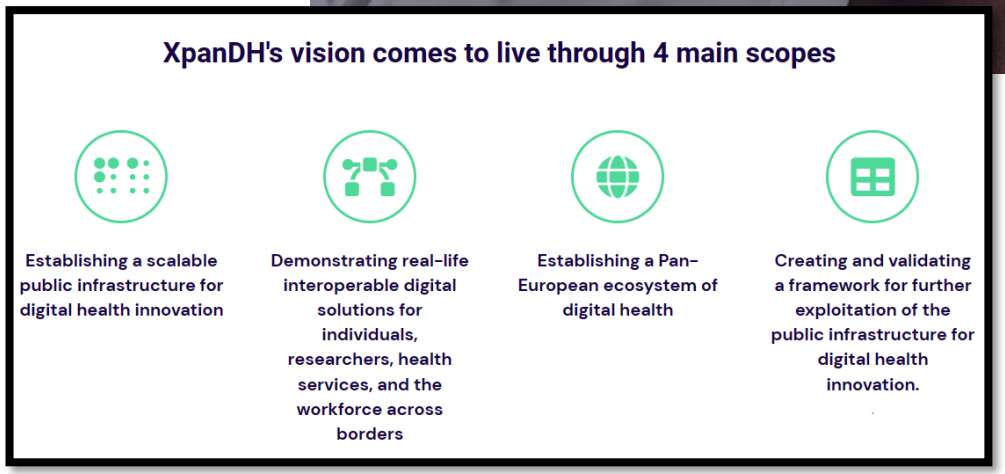
Thank you from our XpanDH expanding consortium AND PLEASE JOIN OUR INDUSTRY X-NET Summit

edha - european digital health academy gGmbH

Funded by the European Union

XpanDH Project

Coordinator:
Henrique Martins
Project manager:
Anderson Carmo
2023-2024



https://xpandh-project.iscte-iul.pt/

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The HL7 EU Lab Report FHIR IG: an introduction

Webinar, November 24th, 2023

Giorgio Cangioli, HL7 Europe, Technical Lead

HL7 Europe Laboratory Report FHIR IG, facilitator

eHMSEG STF, Architecture WG co-chair

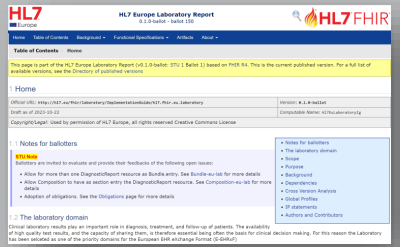
The HL7 EU Laboratory Report FHIR IG

THE FIVE Ws

GUIDE OVERVIEW

GETTING INVOLVED

THE FIVE Ws



THE FIVE Ws

GUIDE OVERVIEW

GETTING INVOLVED

The HL7 EU Laboratory Report FHIR IG

THE FIVE Ws | GUIDE OVERVIEW | GETTING INVOLVED

WHAT.. IT IS

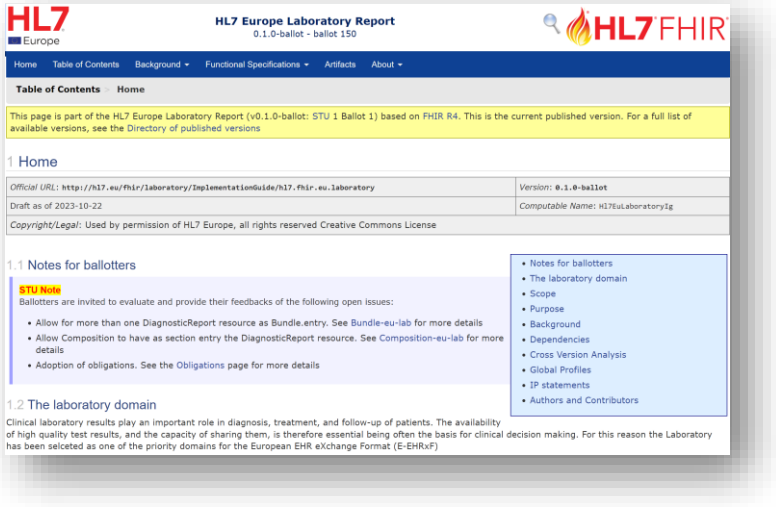
WHY ..AND WHY NOW

WHEN .. TIMELINE

WHO ..IS INVOLVED

WHERE ..TO START

The HL7 EU Laboratory Report FHIR IG



WHAT.. IT IS

WHY ..AND WHY NOW

WHEN .. TIME PLAN

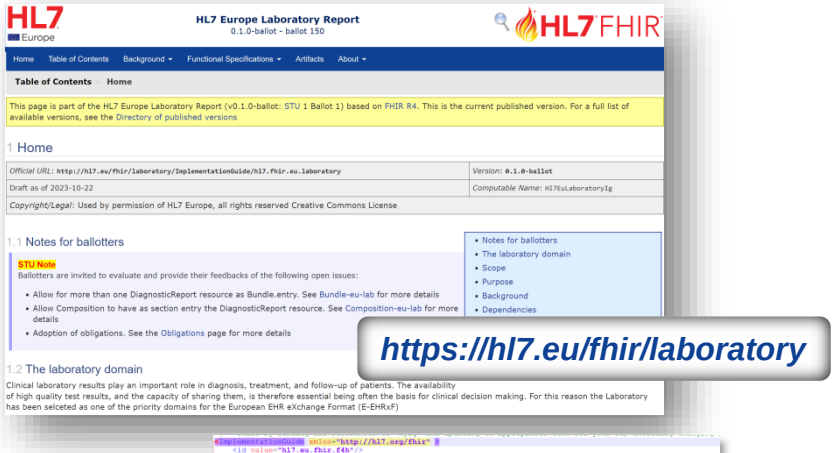
WHO ..IS INVOLVED

WHERE ..TO START

What is a FHIR Implementation Guide (IG)

HL7 FHIR IG

- **Human Readable (Web Browsable)**
- **Formal Computable (FHIR Resources)**

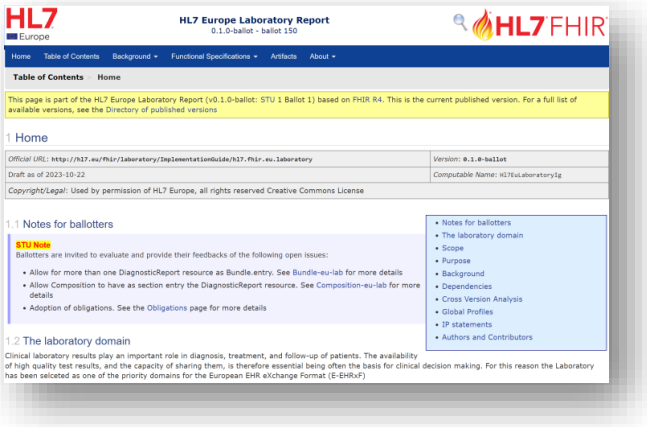


Set of rules about how FHIR resources are used (or should be used) to solve a particular problem, with associated documentation to support and clarify the usage.

HL7 Europe

What this guide is about..

Laboratory Results



Laboratory Report

- No Pathology or Genetic Laboratory Report
- Lab results as by product

Only the content !

- Not how reports/results are searched and exchanged

European context

- Not only cross-border
- Reusable nationally for different use cases

Not only human beings

- Human Subjects can be “recognized” persons or not

Why and Why now

European EHRxF

Medical Imaging and reports

Laboratory Results

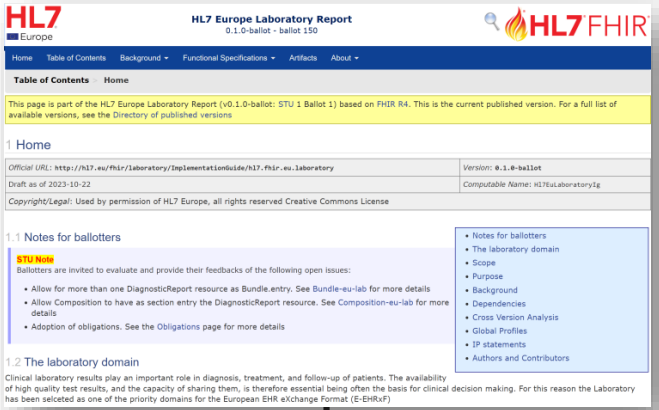
Hospital Discharge report

Patient Summary

ePrescription

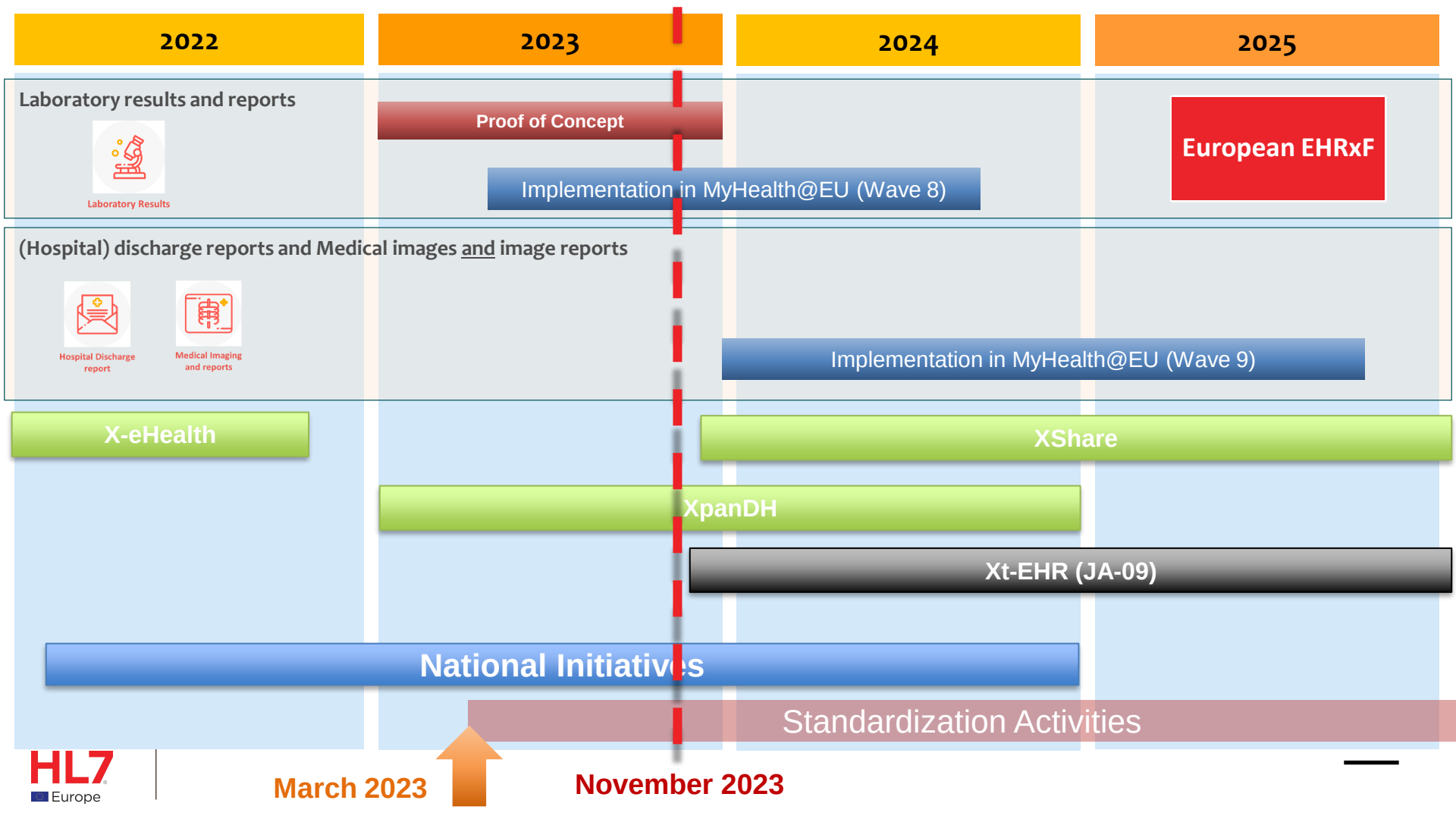
EHDS - Art 5 Priorities

Common rules for representing a Laboratory Report in the European context



Facilitate the harmonization among the national initiatives

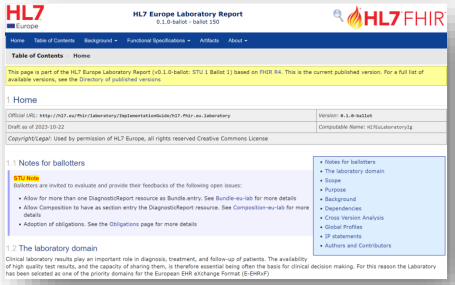
Support the development of the European-EHRxF


2022
2023
2024
2025
Laboratory results and reports
Laboratory Results
Proof of Concept
European EHRxF
Implementation in MyHealth@EU (Wave 8)
(Hospital) discharge reports and Medical images and image reports
Hospital Discharge report
Medical Imaging and reports
Implementation in MyHealth@EU (Wave 9)
X-eHealth
XShare
XpanDH
Xt-EHR (JA-09)
National Initiatives
Standardization Activities
March 2023
November 2023

Who is involved

Laboratory Results

The result of a participatory multi-stakeholders effort



Experts from several countries

European projects and initiatives engaged (e.g. XpanDH, MyHealth@EU)

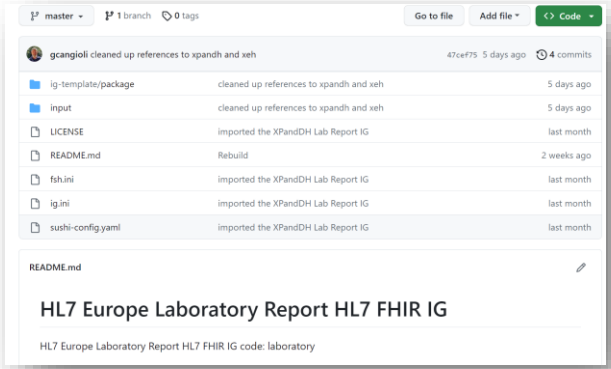
HL7 Europe Standard

Two collaborating focused sub-groups:

- functional requirements /semantic
- HL7 FHIR specifications

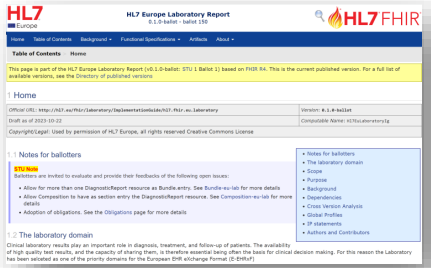
Where to start with

https://hl7.eu/fhir/laboratory/history.html



https://github.com/hl7-eu/laboratory

When .. the timeline



Balloting

Mar ‘23
- Kick Off

Oct ‘23
- 1st frozen version
- STU ballot open

Nov ‘23
- STU ballot end

Dec ’23
- Ballot reconciliation

Jan ’24
- HL7 FHIR Connectathon
- STU Publication

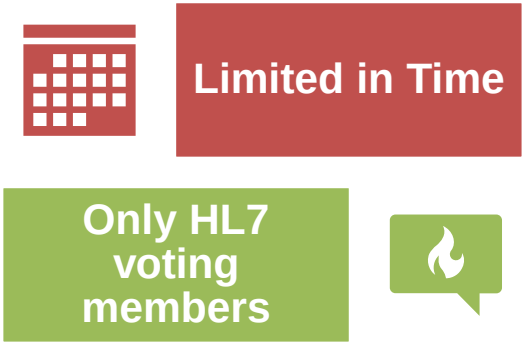
….
- STU ballot and updates (as needed)
- Normative ballot and publication

Continue **Specification Feedback**

Two distinct processes

Balloting

the formal process that HL7 uses to get feedback and comments on specifications prior to publication



Specification Feedback

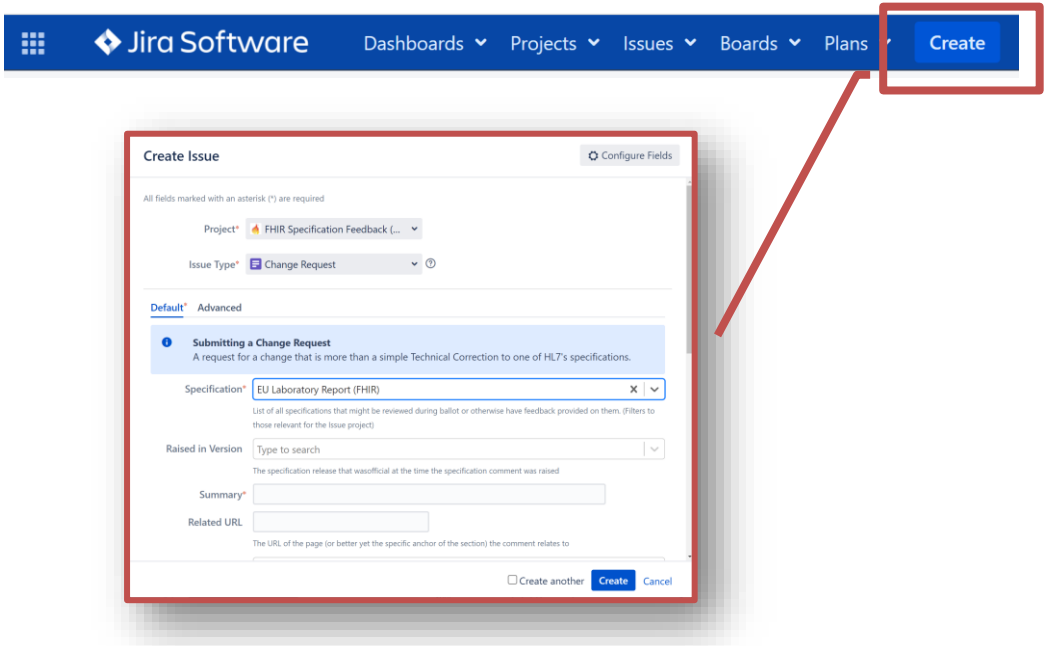
the official mechanism for providing feedback about any HL7 specification

Specification Feedback

Any Time

Anyone (registered user)

https://jira.hl7.org/



https://confluence.hl7.org/display/HL7/Specification+Feedback#SpecificationFeedback-submitting

GUIDE OVERVIEW



THE FIVE Ws | **GUIDE OVERVIEW** | WHAT'S NEXT

The HL7 EU Laboratory Report FHIR IG

THE FIVE Ws

GUIDE OVERVIEW

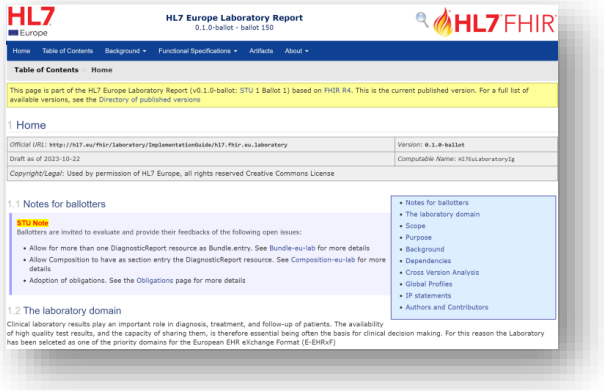
WHAT'S NEXT

WHAT IS IN

DESIGN CHOICE

THE ENVISIONED GUIDES ECOSYSTEM

What is in..



HL7 FHIR

HL7 FHIR Logical Models

The data set

How data are represented in HL7 FHIR

Models to Profiles Mapping

HL7 FHIR Profiles

How to use HL7 FHIR

Obligations

Guideline data set formalization

eHealth Network

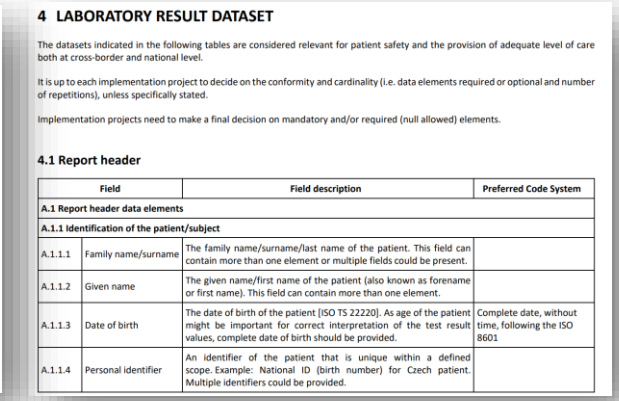
GUIDELINE

on

the electronic exchange of health data under Cross-Border Directive 2011/24/EU

Laboratory Results

Release 1.1



4 LABORATORY RESULT DATASET

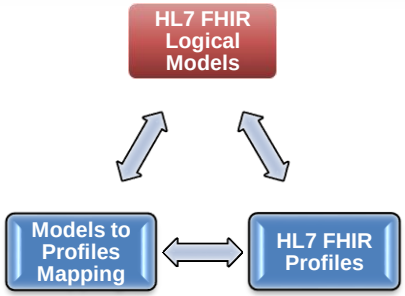
The datasets indicated in the following tables are considered relevant for patient safety and the provision of adequate level of care both at cross-border and national level.

It is up to each implementation project to decide on the conformity and cardinality (i.e. data elements required or optional and number of repetitions), unless specifically stated.

Implementation projects need to make a final decision on mandatory and/or required (null allowed) elements.

4.1 Report header

Field		Field description	Preferred Code System
A.1 Report header data elements			
A.1.1 Identification of the patient/subject			
A.1.1.1	Family name/surname	The family name/surname/last name of the patient. This field can contain more than one element or multiple fields could be present.	
A.1.1.2	Given name	The given name/first name of the patient (also known as forename or first name). This field can contain more than one element.	
A.1.1.3	Date of birth	The date of birth of the patient [ISO TS 22220]. As age of the patient might be important for correct interpretation of the test result values, complete date of birth should be provided.	Complete date, without time, following the ISO 8601
A.1.1.4	Personal identifier	An identifier of the patient that is unique within a defined scope. Example: National ID (birth number) for Czech patient. Multiple identifiers could be provided.	



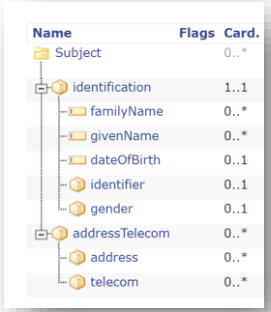
HL7 Europe

HL7 FHIR

Logical Model

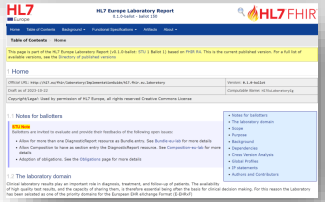
LabReport	0..*	Base	Laboratory Report
header	1..1	BackboneElement	A.1 Report header data elements
subject	1..1	Subject	A.1.1 - A1.2 Patient/subject
payer	0..1	Payer	A.1.3 Health insurance and payment information
informationRecipient	0..1	Recipient	A.1.4 Information recipient
author	0..*	Author	A.1.5 Author
legalAuthenticator	0..*	LegalAuthenticator	A.1.6 Legal authenticator
validator	0..*	Validator	A.1.7 Result validator
metadata	1..1	BackboneElement	A.1.8 Laboratory report metadata
type	1..1	CodeableConcept	A.1.8.1 Document type
status	1..1	CodeableConcept	A.1.8.2 Document status
dateTime	1..1	dateTime	A.1.8.3 Report date and time
title	0..1	string	A.1.8.4 Document title
custodian	0..1	BackboneElement	A.1.8.5 Report custodian
order	0..*	Order	A.2-A.3 Order
specimen	0..*	SpecimenLab	A.4 Specimen information
result	0..*	Result	A.5 Results data elements

Guideline data set formalization



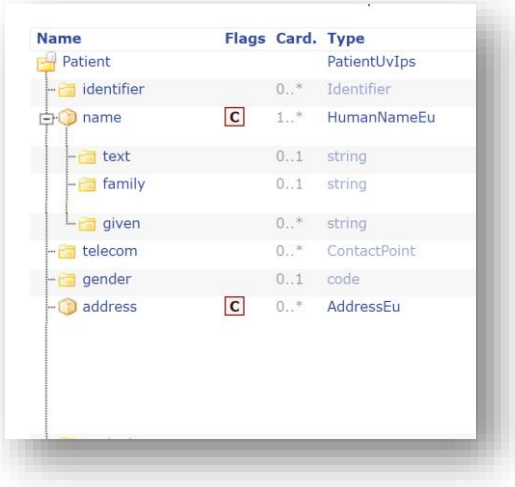
Group 1 Mapping from A1.1, A1.2 - Subject of care to Patient: Identified Person

Source Code	Relationship	Target Code
Subject.identification (A.1.1 Identification of the patient/subject)	is related to	Patient
Subject.identification.familyName (A.1.1.1 Familyname/surname)	is equivalent to	Patient.name.family
Subject.identification.givenName (A.1.1.2 Given name)	is equivalent to	Patient.name.given
Subject.identification.dateOfBirth (A.1.1.3 Date of birth)	is equivalent to	Patient.birthDate
Subject.identification.identifier (A.1.1.4 Personal identifier)		
Subject.identification.gender (A.1.1.5 Gender)		
Subject.addressTelecom (A.1.2 Patient/subject related conta		
Subject.addressTelecom.address (A.1.2.1 Address)		
Subject.addressTelecom.telecom (A.1.2.2 Telecom)		



Obligations

NEW



Structural constraints

- e.g. Patient.birthdate 0..
- Observation.code derived from the Value Set XYZ (extensible)
- ….

Functional constraints

- e.g. The sender shall populate the Patient.birthdate if known
- Observation.code.text shall be displayed by the consumer if applicable
- ….

It describes the capabilities that each Actor may, should, or shall support

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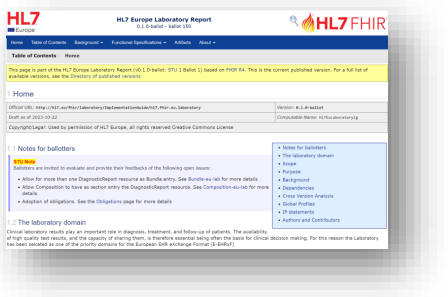

THE FIVE Ws

GUIDE OVERVIEW

WHAT'S NEXT

WHAT IS IN

DESIGN CHOICE

THE ENVISIONED GUIDES ECOSYSTEM

Balancing different (EU) requirements

Legally signed documents

Often structured and including different kinds of test results

Still HL7 CDA and document exchange infrastructures in use

HL7 FHIR REST consumers expect to get Laboratory Reports by **searching per DiagnosticReport**

In R5 the DiagnosticReport refers the Composition

Balancing different (EU) requirements

Legally signed documents

Often structured and including different kinds of test results

Still HL7 CDA and document exchange infrastructures in use

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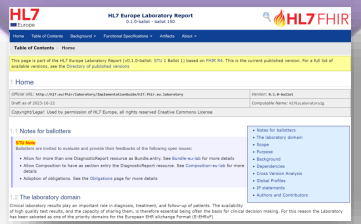
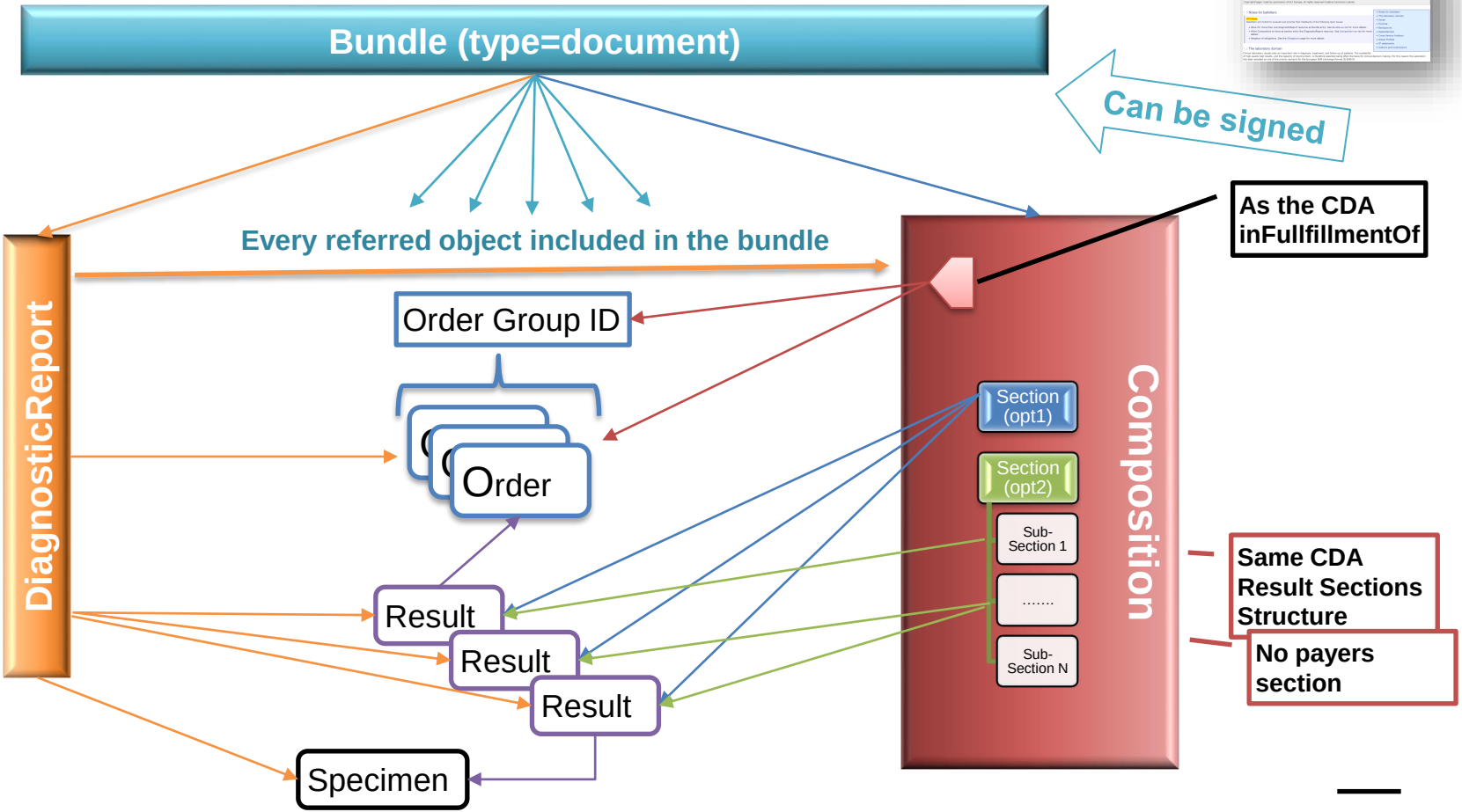
In R5 the DiagnosticReport refers the Composition

Document Bundle

Diagnostic Report

Document Bundle always including a DiagnosticReport




Bundle (type=document)
Can be signed
As the CDA inFullfillmentOf
Every referred object included in the bundle
DiagnosticReport
Order Group ID
Order
Result
Result
Result
Specimen
Composition
Section (opt1)
Section (opt2)
Sub-Section 1
.....
Sub-Section N
Same CDA Result Sections Structure
No payers section

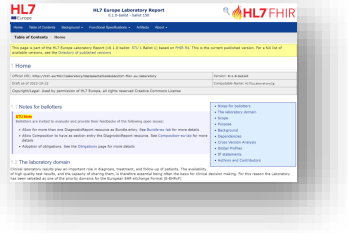
The HL7 EU Laboratory Report FHIR IG

Laboratory Results

THE FIVE Ws

GUIDE OVERVIEW

WHAT'S NEXT

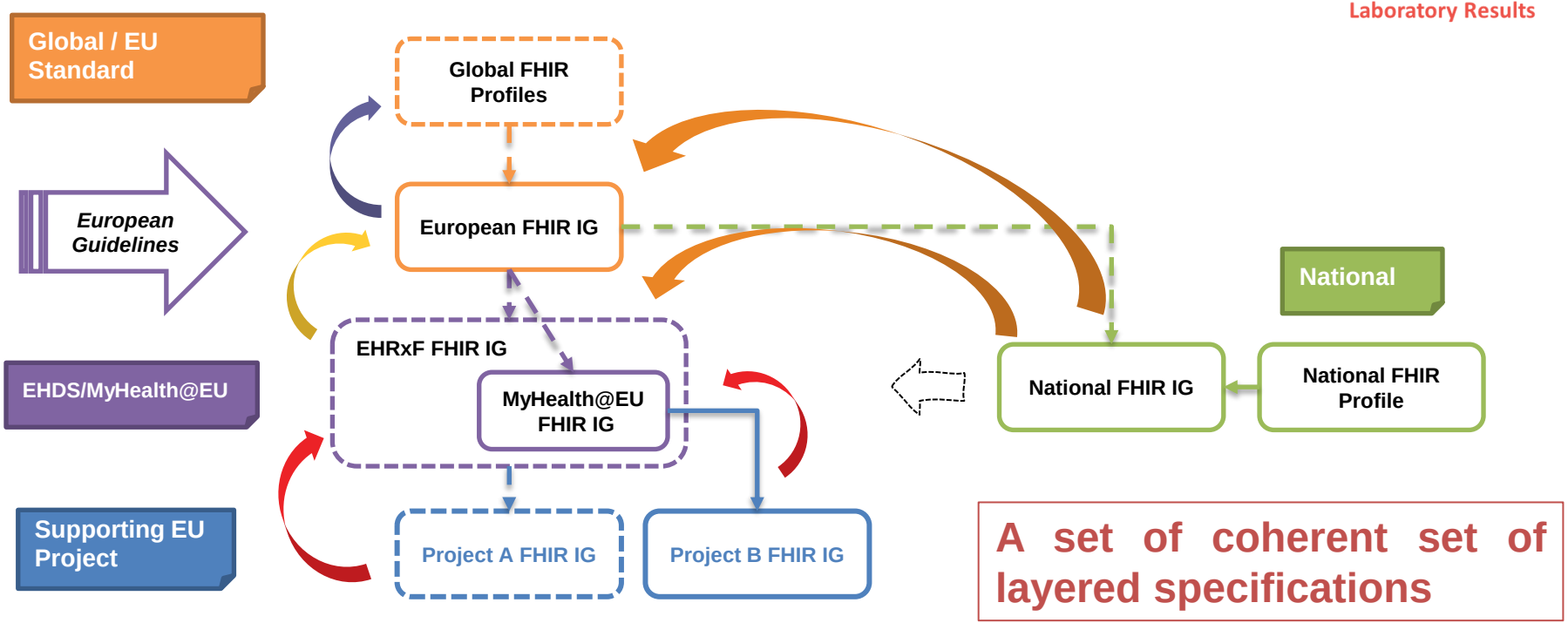


WHAT IS IN

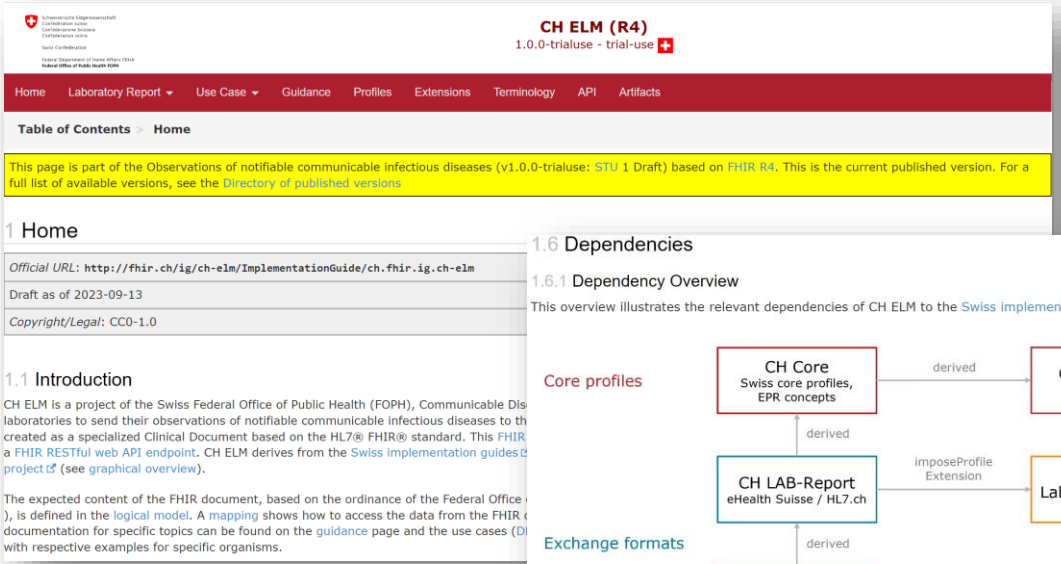
DESIGN CHOICE

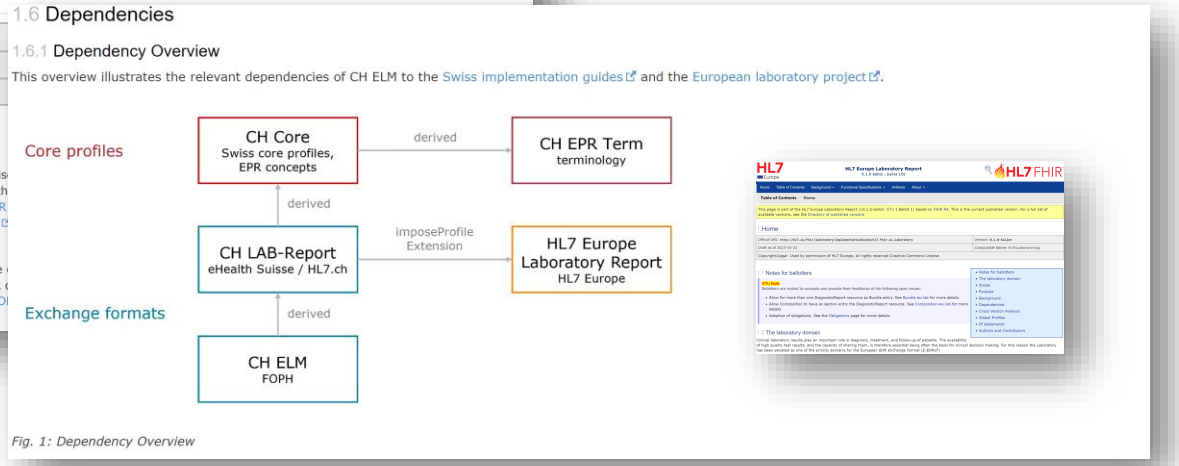
THE ENVISIONED GUIDES ECOSYSTEM

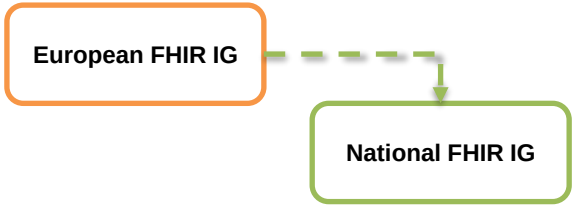
The envisioned IG ecosystem



Layered Specifications: a concrete example

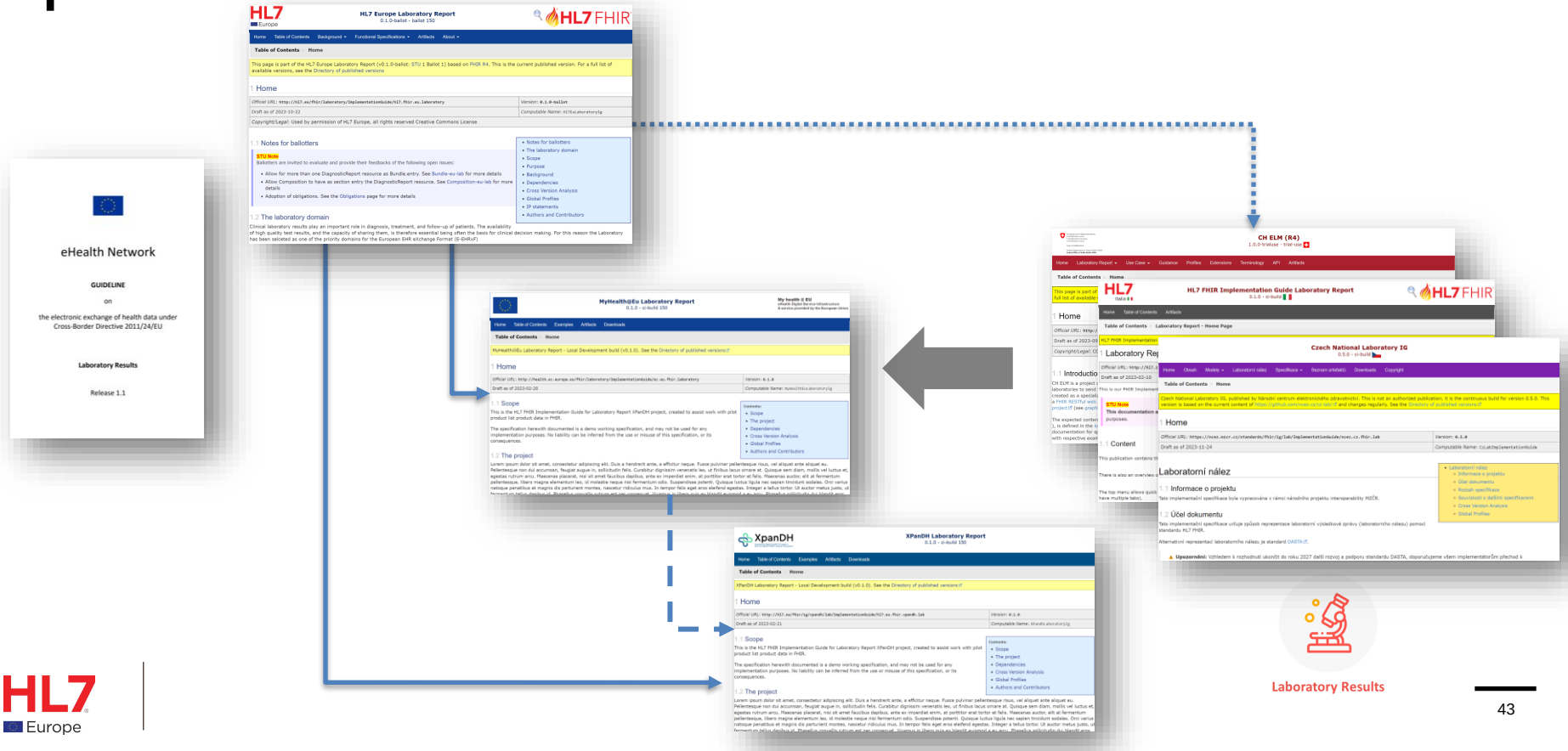






Laboratory Results

Layered Specifications: a concrete example



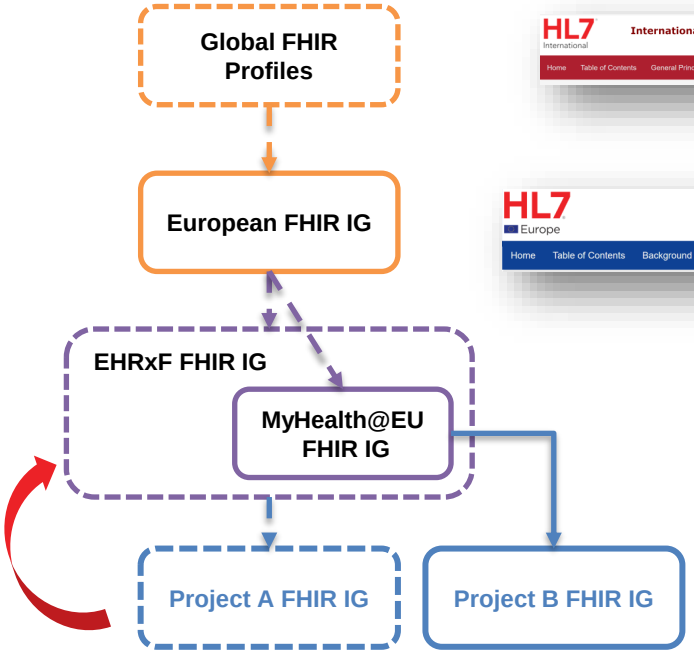
The envisioned ecosystem: the added value

Laboratory Results

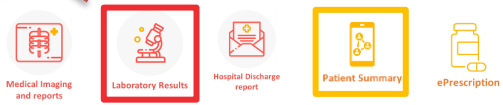
Global / EU Standard

EHDS/MyHealth@EU

Supporting EU Project



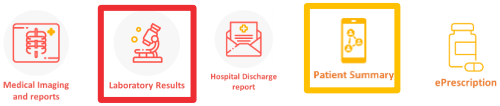
European EHRxF



EHDS - Art 5 Priorities

Layered Specifications: advantages

European EHRxF

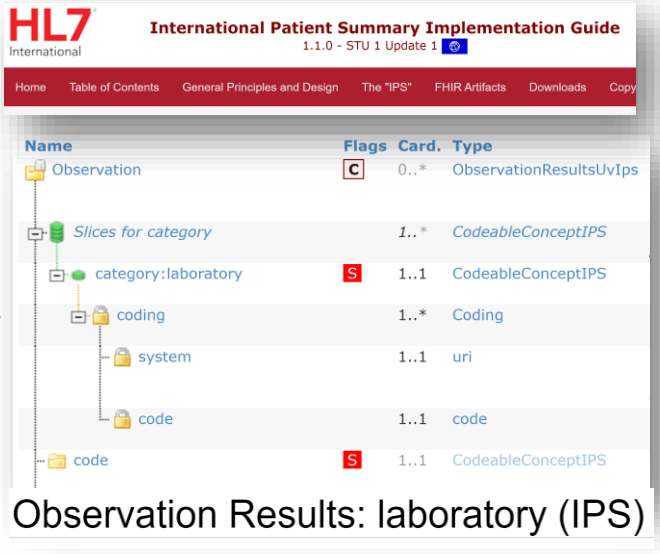


EHDS - Art 5 Priorities

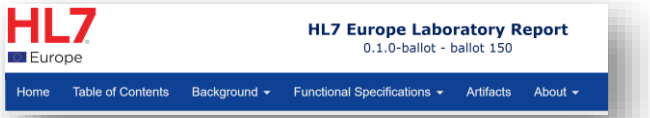
It is not derived from .....

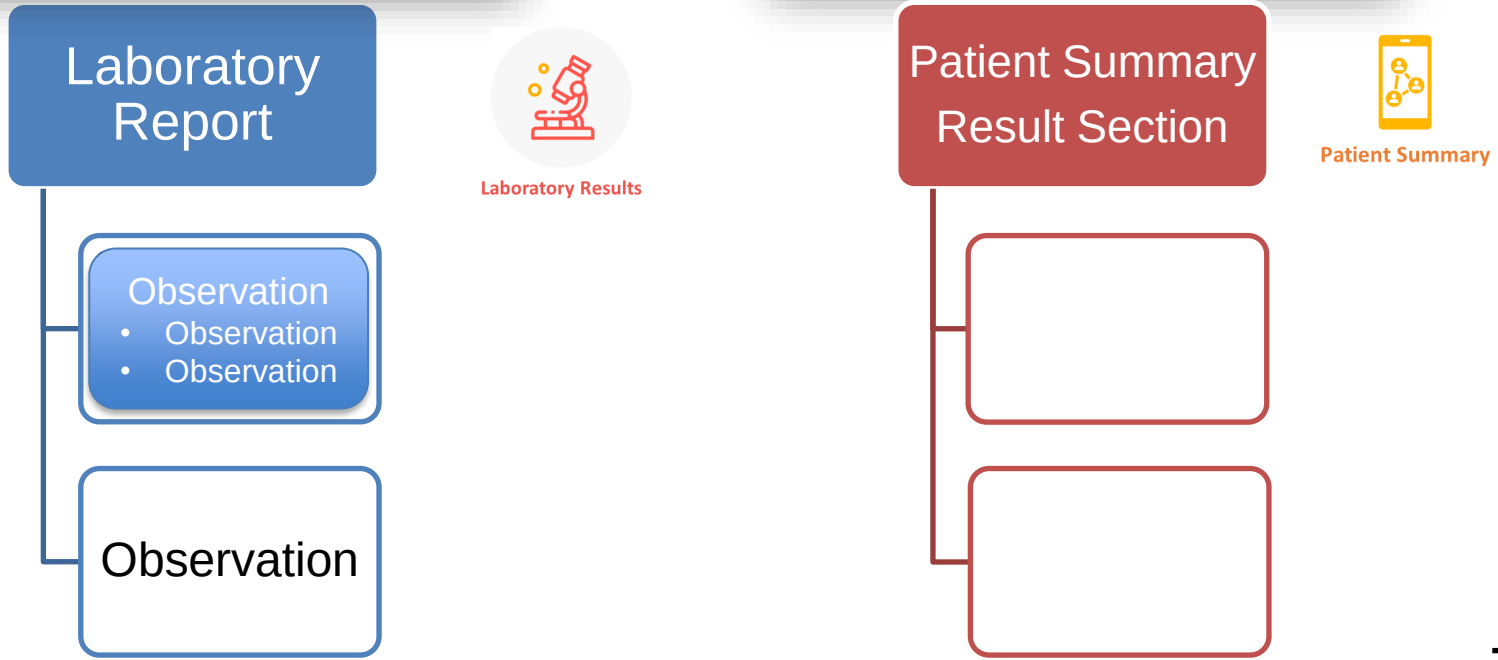
...but, when the subject is recognized and human

It is conformant with



Layered Specifications: advantages





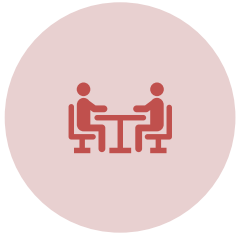
GETTING INVOLVED

HL7 Europe

How to be engaged …

STAYING TUNED (WEBINARS, TUTORIALS)

PROVIDING YOUR FEEDBACK (JIRA)



ATTENDING THE HANDS-ON EVENTS (HL7 FHIR CONNECTATHON)

JOINING THE MEETINGS

HL7 Europe

Thank you !

The HL7 FHIR Implementation Guide for laboratory results
Agenda

16.00 Welcome (Michael Strübin, *HL7 Europe*)

16.05 The policy context (Henrique Martins, *former chair of the eHealth Network*)

16.15 The HL7 EU Lab Report FHIR IG (Giorgio Cangioli, *HL7 Europe*)

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- Patrizio Fonzi, *Sogei (Ministry of Economy and Finance), Italy*
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16.50 Next steps on the Lab Report FHIR IG (Catherine Chronaki, *HL7 Europe*)

17.00 End

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- *Audience Q&A*

MINISTERSTVO ZDRAVOTNICTVÍ
ČESKÉ REPUBLIKY

Czech National Interoperability Project

Hynek Kružík,
Interoperability Lead
Czech National eHealth Center (NCEZ)
Ministry of Health

NÁRODNÍ CENTRUM
ELEKTRONICKÉHO
ZDRAVOTNICTVÍ

About Czech National eHealth Center

- Section of the MoH, responsible for
  - Conceptual, strategic and program management of the digital health
  - Support of legislation in the digital health
  - Overall responsibility for digitization of the healthcare sector
    - Develop national digital health architecture
    - Preparation and management of implementation projects
    - Management of a national digital health infrastructure
  - Manage interoperability assets
    - Standards
    - Terminologies etc.

NÁRODNÍ CENTRUM ELEKTRONICKÉHO ZDRAVOTNICTVÍ

About Myself

- 25+ years of experience in digital health, 16+ years in lab field
- National Interoperability Program Manager
- Head of the interoperability standards department at NCEZ
- HL7 Czech Republic Technical Lead
- Member of the eHN SGS and TIO
- X-eHealth laboratory functional specification task leader
- HL7 Europe laboratory FHIR IG Project facilitator

Czech National Interoperability project

- New eHealth act (325/2021)
  - MoH can published preferred and mandatory eHealth standards
- EU Funded project (2022 - 2025)
- Strategic decision to implement all new services based on HL7 FHIR
- Development and implementation of EEHRxF based (derived) national standards in all priority areas
- Draft guidelines (for trial use) developed and published in spring 2023
  - Final standards to be gradually published 2024+
- National roll-out projects will start in 2024

https://build.fhir.org/ig/ncez-cz/cz-lab/

Laboratorní nález

- Laboratorní nález
  - Informace o projektu
  - Účel dokumentu
  - Rozsah specifikace
  - Souvislosti s dalšími specifikacemi
  - Cross Version Analysis
  - Global Profiles

1.1 Informace o projektu

Tato implementační specifikace byla vypracována v rámci národního projektu interoperability MZČR.

1.2 Účel dokumentu

Tato implementační specifikace určuje způsob reprezentace laboratorní výsledkové zprávy (laboratorního nálezu) pomocí standardu HL7 FHIR.

Alternativní reprezentací laboratorního nálezu je standard DASTA.

> ⚠ **Upozornění:** Vzhledem k rozhodnutí ukončit do roku 2027 další rozvoj a podporu standardu DASTA, doporučujeme všem implementátorům přechod k mezinárodnímu standardu HL7 FHIR.

1.3 Rozsah specifikace

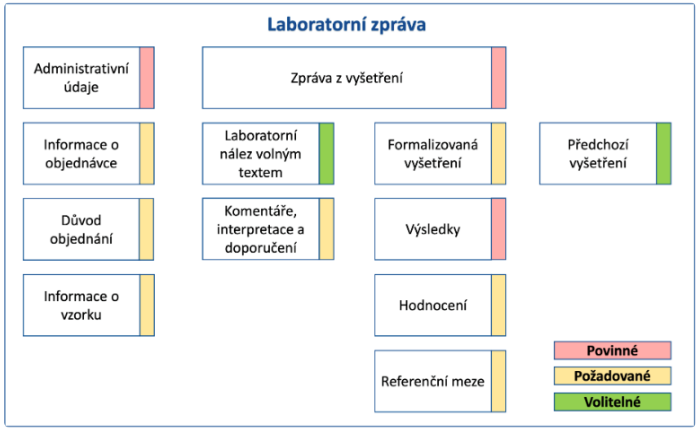
Tato implementační specifikace vychází z dokumentu **Funkční specifikace laboratorního nálezu**, který stanovuje základní požadavky, obsah a strukturu laboratorního nálezu.

ZAHRNUTÉ OBLASTI: Laboratorní výsledky v rámci stěžejních oborů in vitro diagnostiky jako jsou klinická biochemie, hematologie, transfuzní lékařství, mikrobiologie a imunologie.

NEZAHRNUTÉ OBLASTI: Specializované laboratorní oblasti vyžadující specifickou strukturu výsledkových zpráv jako jsou histopatologie nebo lékařská genetika.

Následující obrázek vyjadřuje základní informační bloky laboratorního nálezu.

Obrázek 1: Obsah laboratorního nálezu



Round of stakeholders

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  Ministry of Health, Spain
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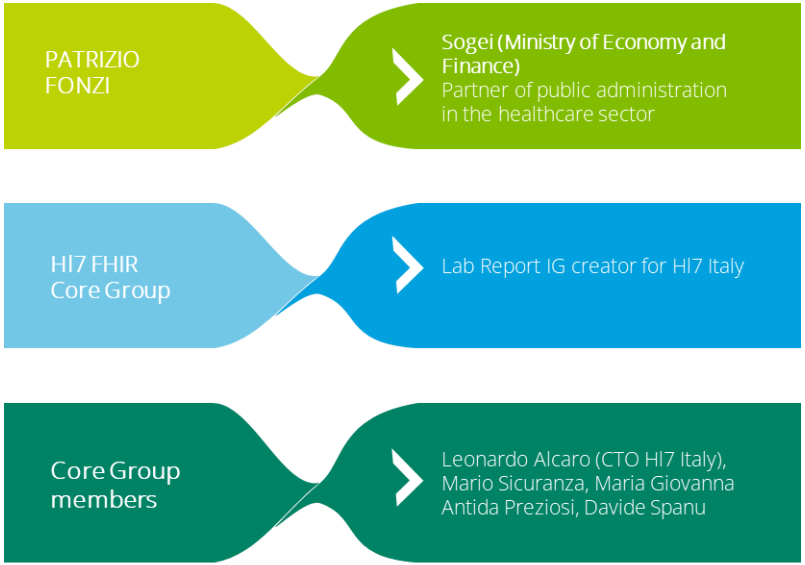
  Computer Control Systems, Greece
- *Audience Q&A*

Lab report FHIR IG, Hl7 Italy - Organization

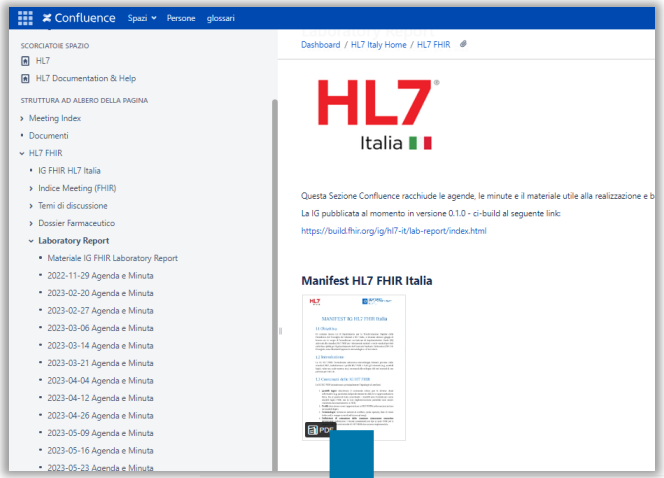


Development

GitHub: development environment for all the artifacts necessary to generate the IG HL7 FHIR.
Input files:

- File Word e XHTML for IG templates;
- JPEG o PNG for logos and images;
- File in **FHIR Shorthand** (FSH) for the artifacts
- All input files will be processed by the FHIR Implementation Guide Publisher (FSH+SUSHI)

https://github.com/hl7-it/lab-report



Publication

The publication of the artefacts produced for the IG HL7 FHIR involves three different environments:

- a test environment (sandbox)
- a development environment (build)
- a release environment after ballot procedure (production)

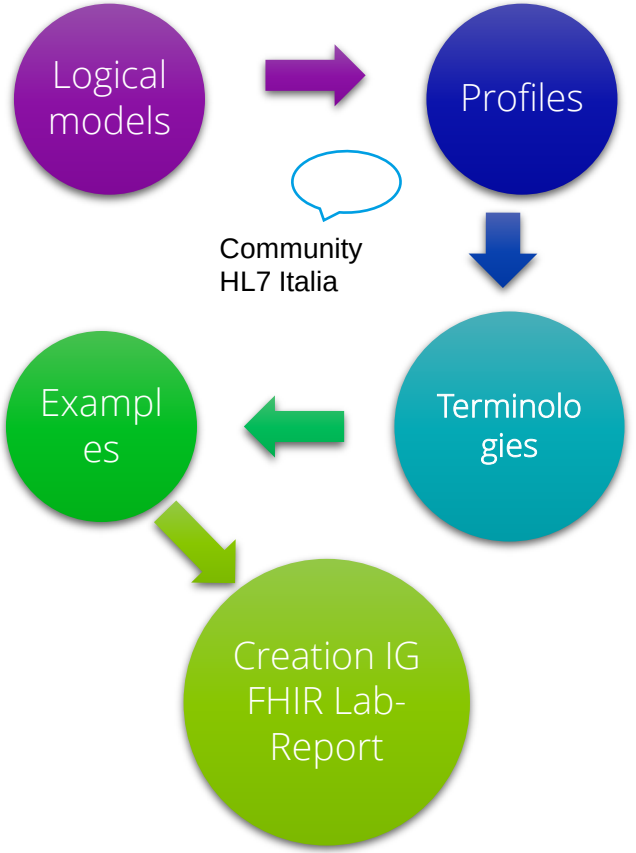
https://build.fhir.org/ig/hl7-it/lab-report

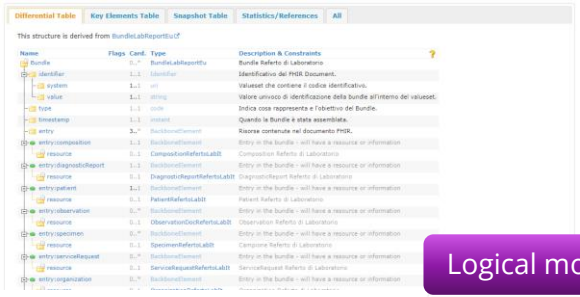
Ballot

The ballot procedure, which began on 06/30/2023, follows the Jira Balloting standard of HL7 international FHIR, which involves the use of GitHub Issues.

Dependency HL7 Europe Laboratory Report FHIR IG

Workflow

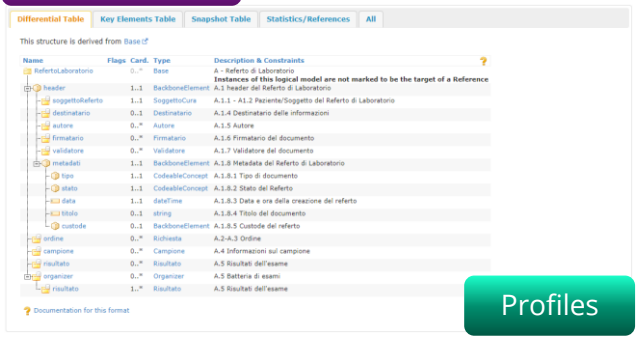




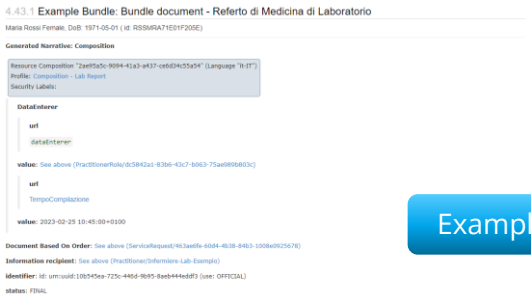
Logical models are intended for non-technical users to express and validate functional requirements for information exchange, from a functional or clinical perspective. These support a stable and common understanding of interoperability data needs.

Logical models

A profile is an extension of existing FHIR resources used in a specific use case. Depending on the information content of the logical models identified, it was necessary to make some FHIR resources more specific.



Profiles



Example

To verify that the identified profiles conformed to the use case, instances of them were created.

Round of stakeholders

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PRESIDENCIA ESPAÑOLA CONSEJO DE LA UNIÓN EUROPEA

Laboratory Results FHIR IG

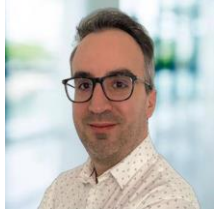
- Manel Domingo -

GOBIERNO DE ESPAÑA
MINISTERIO DE SANIDAD

European Projects Technical Office
Vice-directorate of Digital Health Services
Directorate General of Digital Health and Information Systems for the National Health System

24/11/2023

Personal Introduction



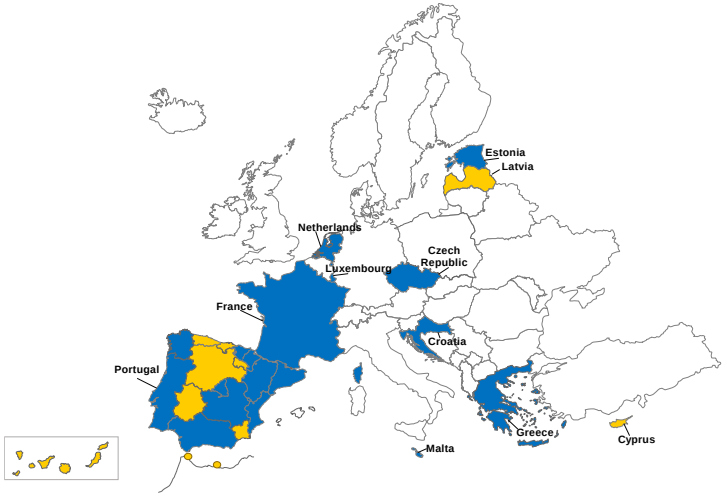
1. Spanish Ministry of Health - Interoperability EU Office
2. Roche – Building a Global Data Platform based on FHIR and AWS
3. Public Health Government of Catalonia – Defining regional standards based on HL7
4. HL7 Spain – Former Technical Director, Proctor and Educational courses professor
5. Interoperability Office of Catalonia – Defining regional PHR, EHR and IGs
6. Public Hospital – Leading the interoperability of each service

Summary. MyHealth@EU/eHDSI Services

European Health Data Space

#EHDS
#HealthUnion
#EUDigitalHealth

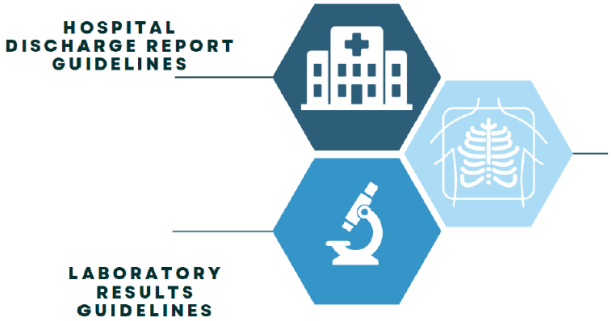
My health @ EU
eHealth Digital Service Infrastructure
A service provided by the European Union

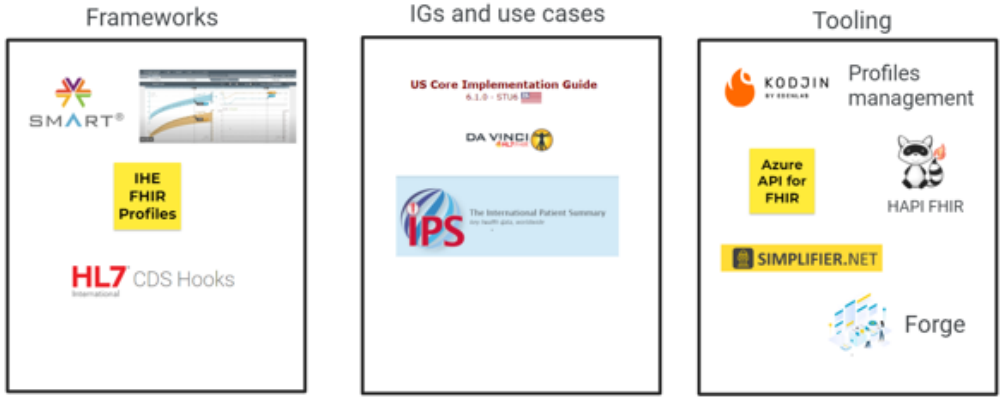


MyHealth@EU/eHDSI new services. Implications

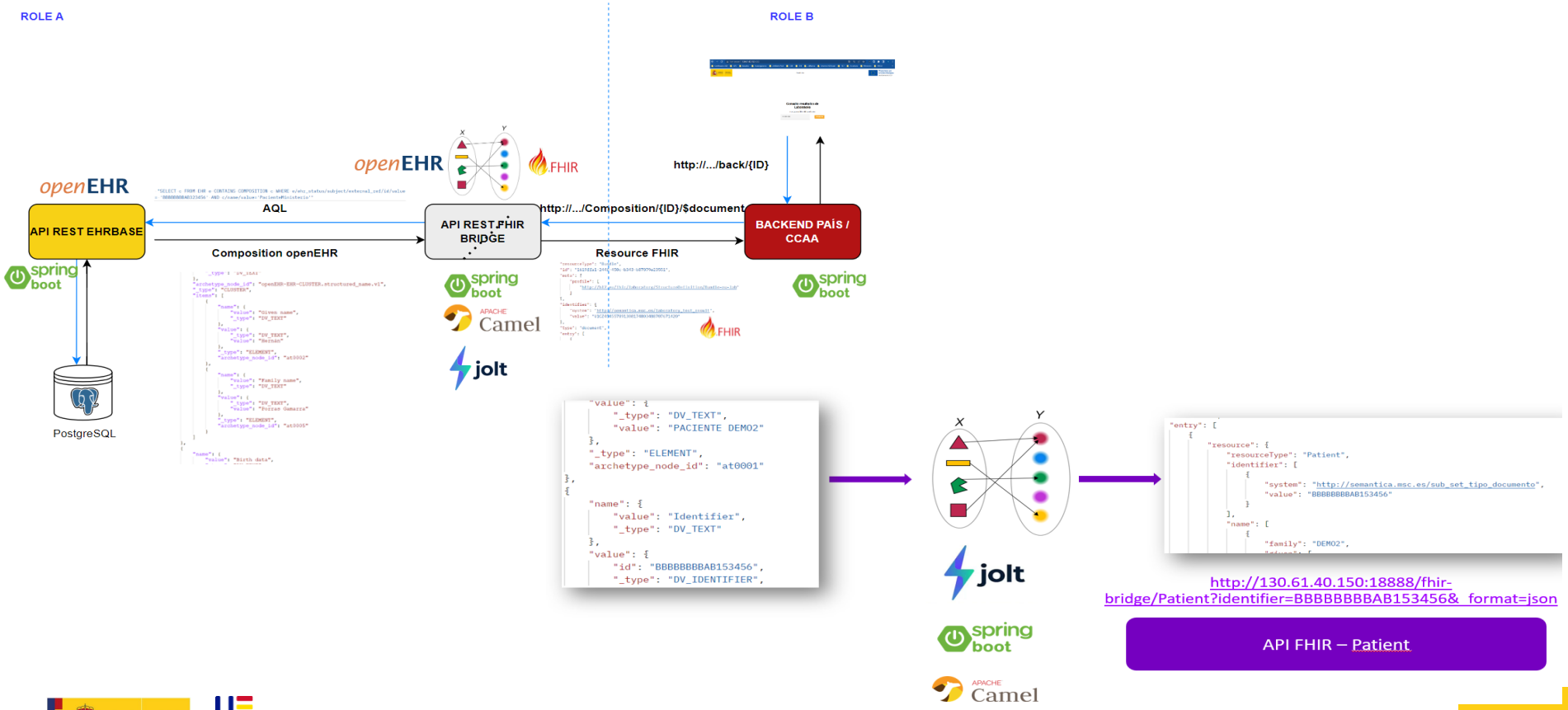
Working on:

HL7® FHIR®





MyHealth@EU/eHDSI Laboratory Report new service. Prototype.



THANK YOU!


GOBIERNO
DE ESPAÑA
MINISTERIO
DE SANIDAD


UE23
PRESIDENCIA ESPAÑOLA
CONSEJO DE LA UNIÓN EUROPEA

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- *Audience Q&A*

About CCS

With over a 30-year history, CCS is leading the healthcare informatics sector in Greece, driving improved care across Public, Military and Private Hospitals. CCS software, as well as e-Health and m-Health solutions, are currently implemented in more than 80 hospitals and a plethora of other sites (Insurance Funds, Diagnostic Centers, Microbiology Labs) across SE Europe and Middle East.

CCS main products are
MediLab LIS, e-AIMA (Blood Bank) and H-C LIS (Anatomic Pathology)

ISO CERTIFIED

Certified with **ISO 9001:2015** and **ISO 27001:2013** for the «design, development, installation, support of software products, solutions and services».

Why FHIR?

- It offers easier integration with various other systems.
- It is designed to be flexible, scalable, and easily extensible.
- It reduces development time.
- It encourages innovation.

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HL7 Working Group Meeting

HL7 Europe

HL7 FHIR MARATHON

VULCAN HL7 FHIR

HOSTED BY HL7 Hellas

HL7 Europe WGM and HL7 FHIR Marathon
Preliminary program

HL7 Working Group Meeting
Athens 15-19 January 2024
HL7 FHIR MARATHON
VULCAN HL7 FHIR
HOSTED BY HL7 Hellas

- Sunday January 14, 2024: Joint Initiative Council
- Monday January 15, 2024
  - Q1: Athens Digital Health Week Opening
  - Q2, Q3: HL7 European Strategic Advisory Board
  - Lunch meeting: JIC listening Session
  - Q4, Q5: HL7 Europe Board Meeting
  - 19:30 Joint Dinner
  - Tutorials
- Tuesday January 16, 2024
  - Q1: Plenary
  - Tutorials
  - HL7 FHIR Marathon
  - HL7 WGM Thematic Workshops
- Wednesday January 17, 2024
  - Q1: Plenary
  - Tutorials
  - HL7 FHIR Marathon
  - Gravitate-Health Hackathon
  - HL7 WGM Thematic Workshops
  - xShare/xt-EHR Launch Event
- Thursday January 18, 2024
  - Q1 Plenary Joint with 2nd EuroVulcan
  - EuroVulcan conference
  - HL7 WGM Thematic Workshops
  - HL7 FHIR Marathon
  - Gravitate-Health Hackathon
  - Joint launch event xt-EHR & xShare (under ADHW)
- Friday January 19, 2024
  - Q1 Closing Plenary
  - Gravitate-Health Hackathon
  - HL7 WGM Thematic Workshops

Register now: HL7 Europe Working Group Meeting and FHIR Marathon January 15 to 19, 2024

We are happy to announce our first event of this kind. From January 15 to 19, 2024, we will hold an **HL7 Europe Working Group Meeting** along with an **HL7 FHIR Marathon**.

Register for the conference here | **Book a room in the conference hotel**

During Tuesday to Thursday before lunch, a EU centric HL7 FHIR Marathon will be conducted. Topics/tracks planned are the European Lab Report, International Patient Summary IPS, European Cancer Mission, Electronic Product Information (ePI) and Identification of Medicinal Products (IDMP).

During Wednesday to Friday afternoons, a Gravitate-Health Hackathon and Thursday the EU edition of the Vulcan Accelerator is planned.

There will be plenaries with with outstanding Keynote speakers and Roundtables on:

- Monday January 15, 2024

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17.00 End

Wrap up

- HL7 will share with all registered attendees:
  - Link to HL7 FHIR lab report (https://hl7.eu/fhir/laboratory/)
  - Webinar slides and recording
  - Jira instructions and other relevant information and links

- All attendees are invited to
  - Become or stay involved
  - Offer feedback in Jira
  - Follow HL7 Europe on LinkedIn

HL7 Europe

Thank you !