

# 2<sup>nd</sup> European EHR Exchange Format Expert Summit

Session 3: Looking at the EEHRxF from different perspectives



# Breakout Groups

## Group 1

**How to best  
support Healthcare  
Providers for the  
EHDS  
implementation**

Main Room  
(Second floor)

## Group 2

**Future proofing  
the industry: EHR  
Vendors and  
Innovators**

Room 1  
(First floor)

## Group 3

**How to best  
support Healthcare  
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Room 2  
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# Breakout Groups

Group 1

**How to best support Healthcare Providers for the EHDS  
implementation**

Main Room  
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# Breakout Groups

Group 2

**Future proofing the industry: EHR Vendors and Innovators**

Room 1

(First floor)

# Future proofing the industry: EHR Vendors and Innovators - Breakout Group 2



**Sofia Franconi**  
IHE-EUROPE



**Nathan Carvalho**  
DIGITALEUROPE



**Gonzalo Montesdeoca**  
NTT Data



**Jesús Pulgarín Paños**  
NTT Data

# Agenda for the session

1. Introduction and ice breaker
2. Liaison between Industry and Member States – the Andalusian example
3. EEHRxF Readiness Model
4. Supporting vendor planning and compliance: xShare Industry Label
5. Relevant groups to participate in the digital health landscape
6. Conclusion and final call to action

# Liaison between Industry and Member States – the Andalusian example

Analysis of the EEHRxF specification and its applicability to the reality of the Andalusian Health Service



## The Andalusian Health Service (SAS) in numbers

8,5 MM  
Population

1500  
Primary Centers

>100k  
Professionals

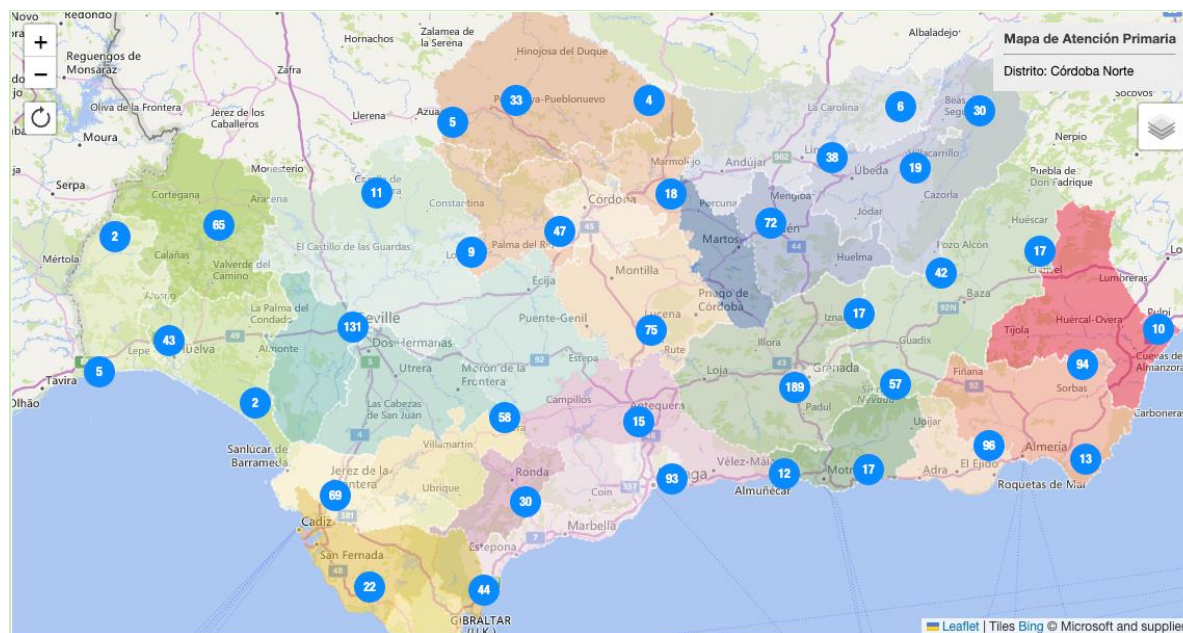
> 80 M  
Prim. care visits

> 4 M  
Hosp. Emerg. visits

50  
Hospitals

> 14 M €  
Budget 2023

> 500k  
Hospital admissions



## The Interoperability and Governance office at SAS

**Technical Office for Interoperability** to carry out various tasks, including the **control and operation of integration platforms**, the management of the life cycle of services, the development of services on ESB and the definition and implementation of an API consisting of more than 300 services with the **FHIR standard**, starting with the **DSTU2** version and subsequently upgrading to the **STU3, R4** and **R5 versions**.

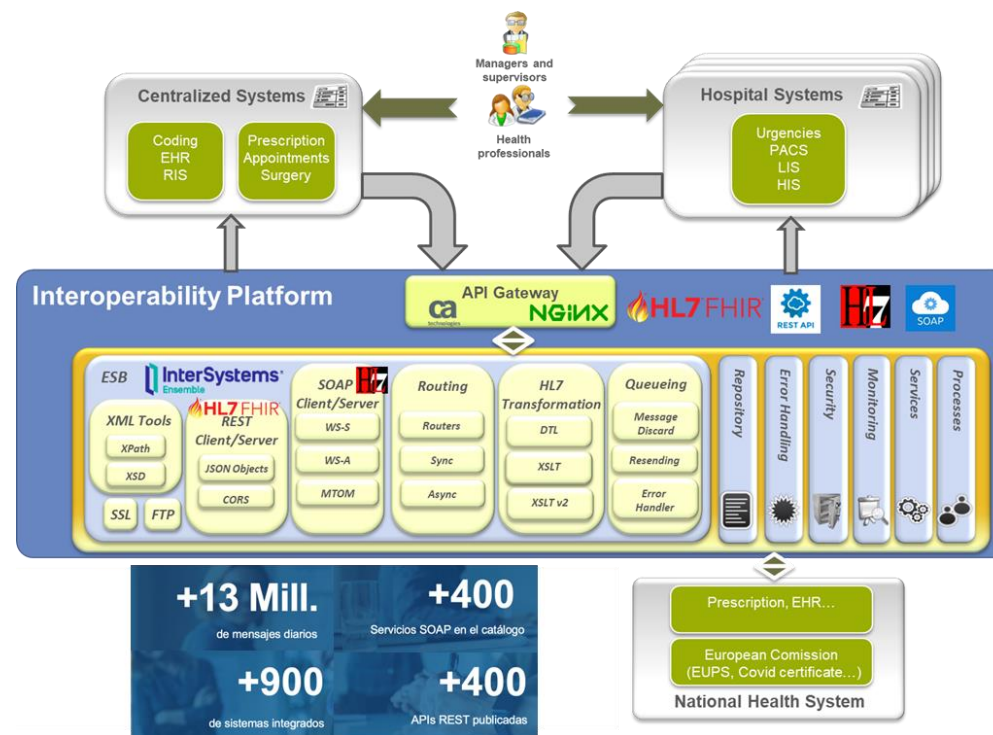
**29 hospitals, 1500 primary care centers** and more than **900 systems** integrated.

Services are provided for **platform governance, integration development and performance monitoring**. Guidelines and developments follow the main standards such as **HL7 FHIR, HL7 2.x, HL7 CDA** and **DICOM**.

FHIR services defined for care, administrative, human resources, logistics and social care areas. **The result is a single complete API for the entire Andalusian Health Service.**

It continues to develop the **FHIR API** to include more **features** of the standard such as the inclusion of the Messaging and Services paradigms.

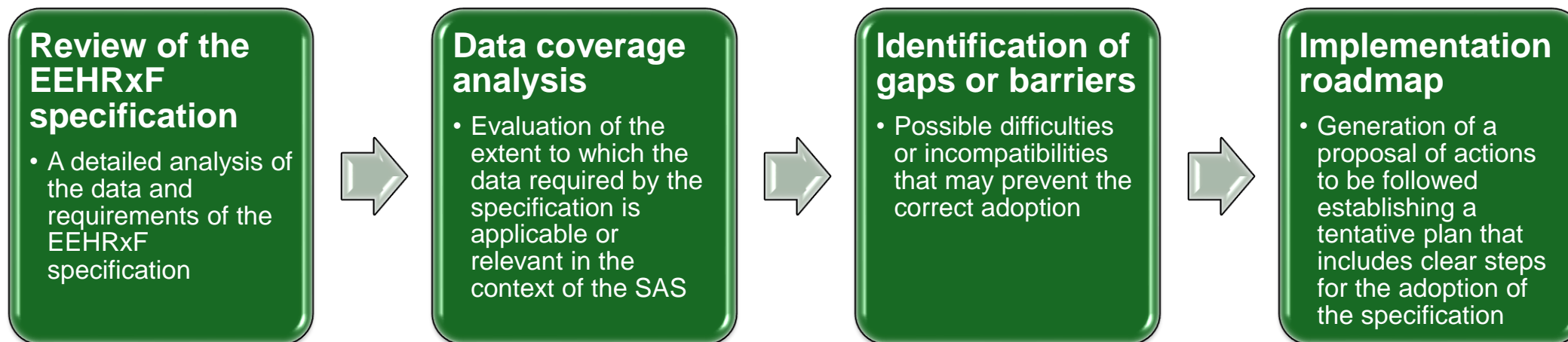
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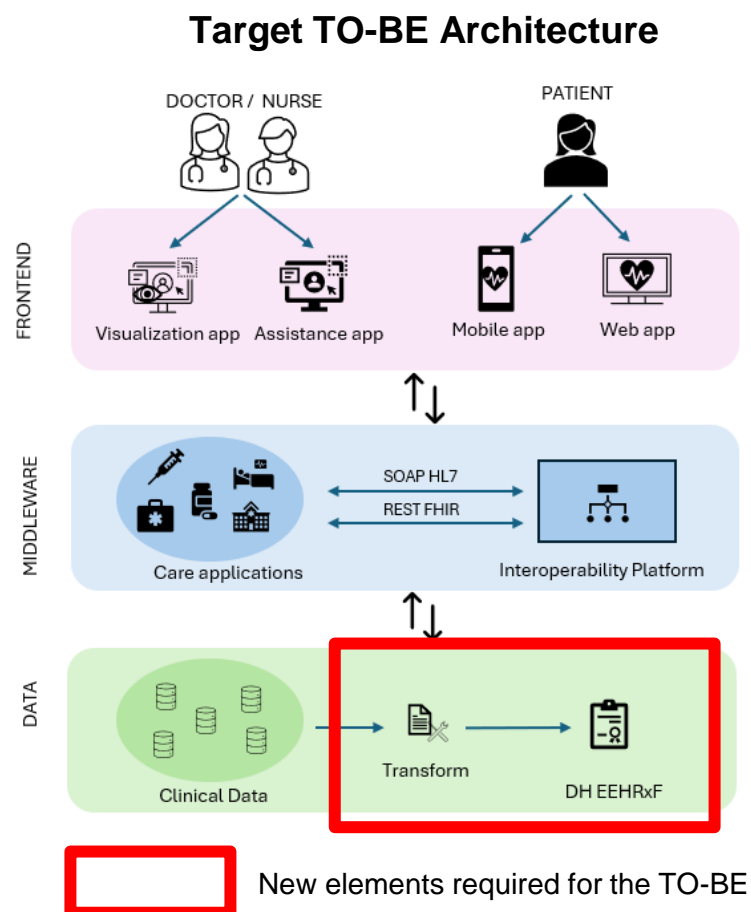
## Our approach for the exercise

**Main Objective:** Assess the applicability of the EEHRxF specification to the reality of the Andalusian Health Service (SAS)

The problem focuses on clarifying **whether the EEHRxF specification adequately covers the needs and particularities of SAS**, or whether its implementation would be feasible in the current environment. In addition, there **might be gaps or barriers that hinder its implementation in practice**, such as technological incompatibilities, differences in data management or local regulations



## Example of analysis: Discharge report



### AS-IS situation

- Current report structure not based on any standard but an **ad-hoc XML format**
- Hospital discharge information **generated by the interoperability platform, IRIS for health.**
- When a system needs to query the Hospital Discharge Report, the **interoperability platform queries the details of the clinical report and the nursing report** to the master information systems and combines the data to transfer the complete information into the discharge report

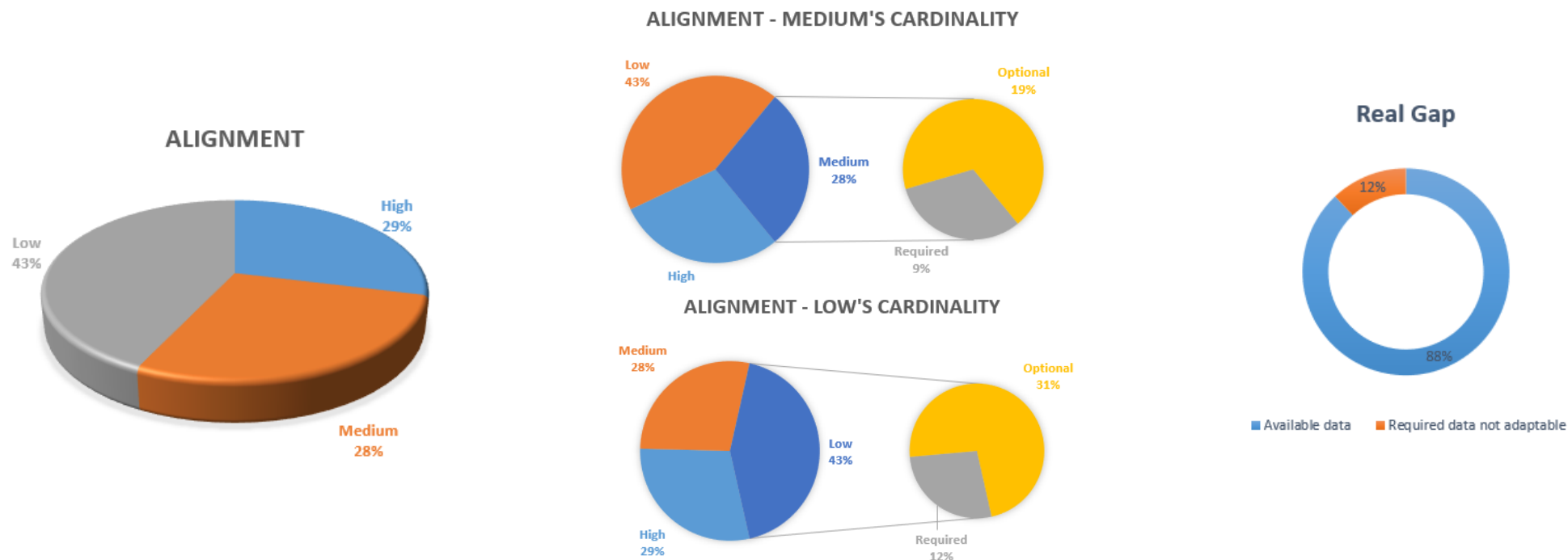
### TO-BE situation

- **Handle structured and coded information using EEHRx F.** Allow discharge report consultation in order to assure the continuity of care and help patients to better manage their disease.
- Discharge Report in **EEHRx F format generated from the clinical data repository via transformations**

## Example of analysis: Discharge report (II)

### Alignment criteria

- **High:** The information is accessible and sent according to the criteria of the guide
- **Medium:** The information is accessible but requires processing before it can be sent as required by the implementation guide
- **Low:** The information is not accessible or is inaccessible without the processing capacity to send it as required by the guide



## Barriers, Road for bridging the GAP

### Barriers

- Minor / medium localisation issues (e.g. use of 2<sup>nd</sup> surname common in Spain)
- Data gathering for those fields with “low” maturity could be complex since they have strong dependency with third party systems which are not always flexible or fast to be adapted
- The implementation guide has been found to be complex to carry out the existing alignment analysis with the organisation. A better mapping between the defined logical model and the FHIR information structuring model is suggested as future work

### Roadmap proposed



## Conclusions / observations on industry readiness

- Based on SAS example our counterparts at **Andalusia are willing to further explore and collaborate with the extension and adoption of the EEHRx<sub>F</sub> standard**, however this may vary depending on the organisation itself, strategies, priorities... Other organisations may be more reluctant to apply any change
- From our current analysis (100% completed for Discharge Report and ongoing for other reports) **the GAP is low, with availability of almost 90% of the data required** as per implementation guide
- **Depending on which additional data is required, their obtention could be more or less complex.** Usually, data coming from third party or commercial information systems not directly managed by the public entities (e.g. laboratory / pathology systems, pharmacy...) could be more difficult to retrieve if not available yet in the published versions of the IT systems
- **Modifications and evolutions of the system in general are subject to additional complexity caused by contractual matters** (multiple contracts with providers, different duration, different conditions on evolution or maintainability of the platforms...) and **changes on priorities at organizational level** (sometimes, political) which, in general, results into long time from the inception of the idea to the actual implementation in reality
- Financial capability of the organisations is likewise important, where **availability of potential funding to support IT systems evolution towards EEHRx<sub>F</sub> standard** (and others) is more than desirable

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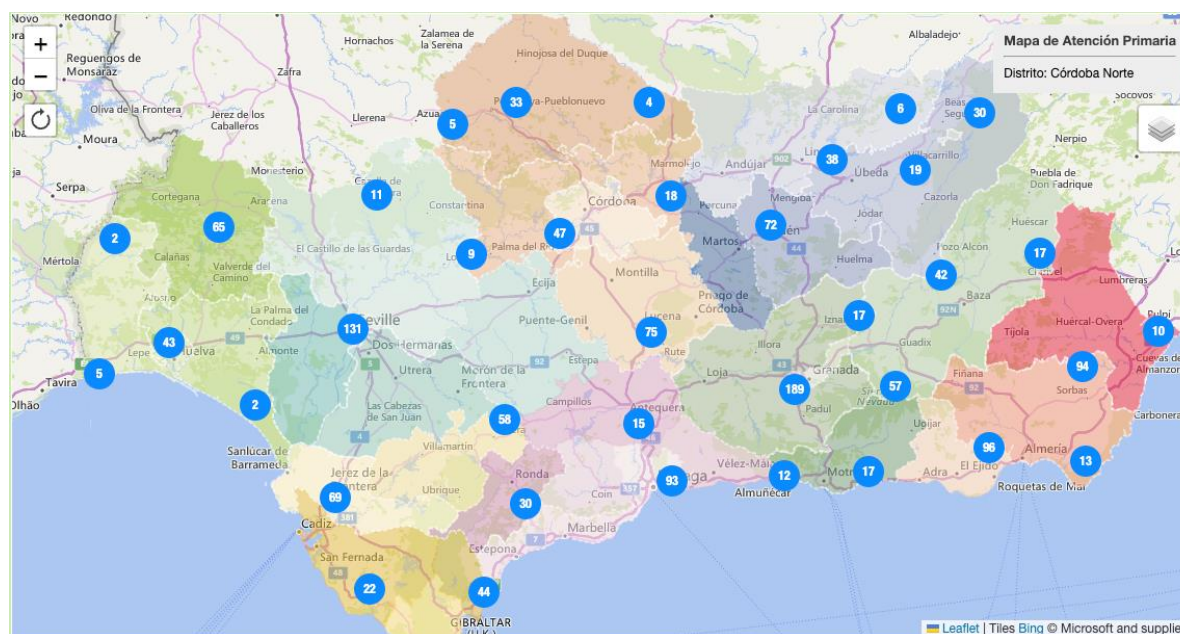
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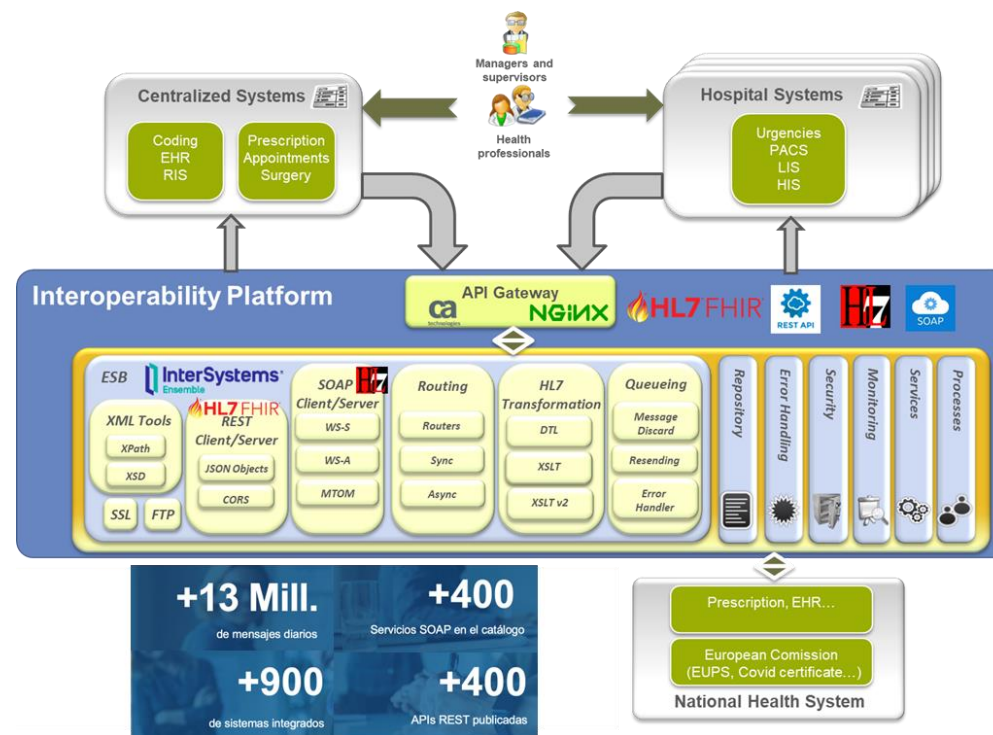
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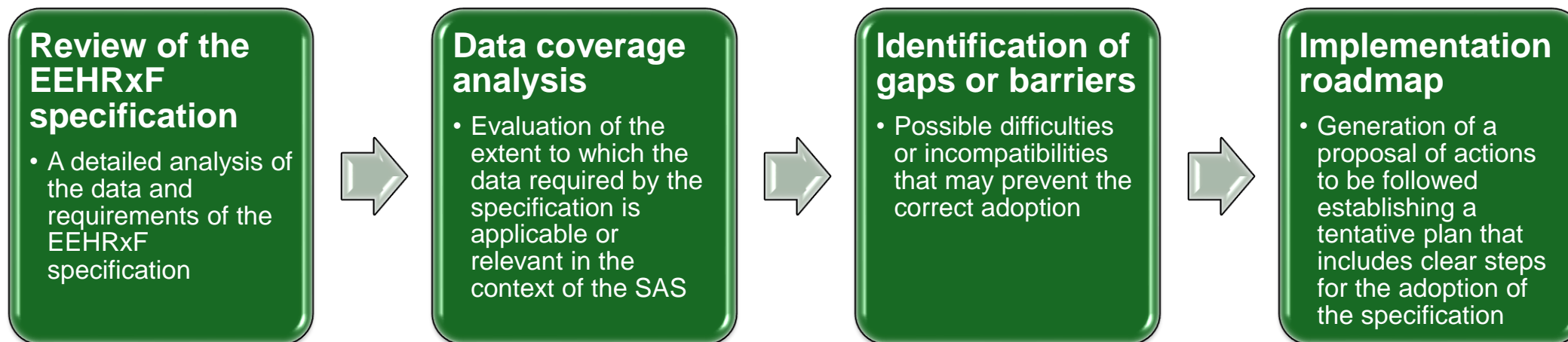
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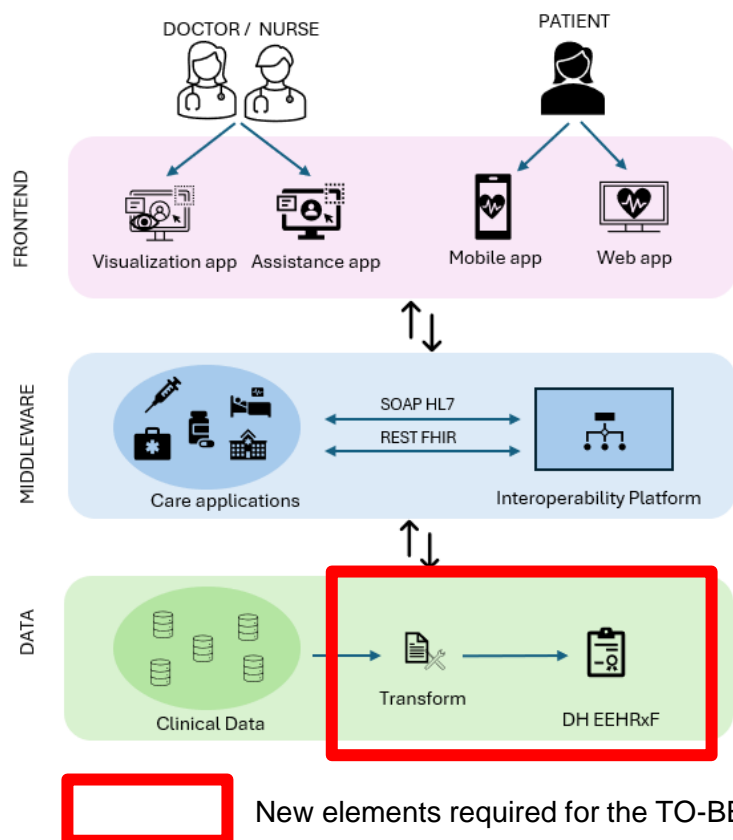
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### Target TO-BE Architecture



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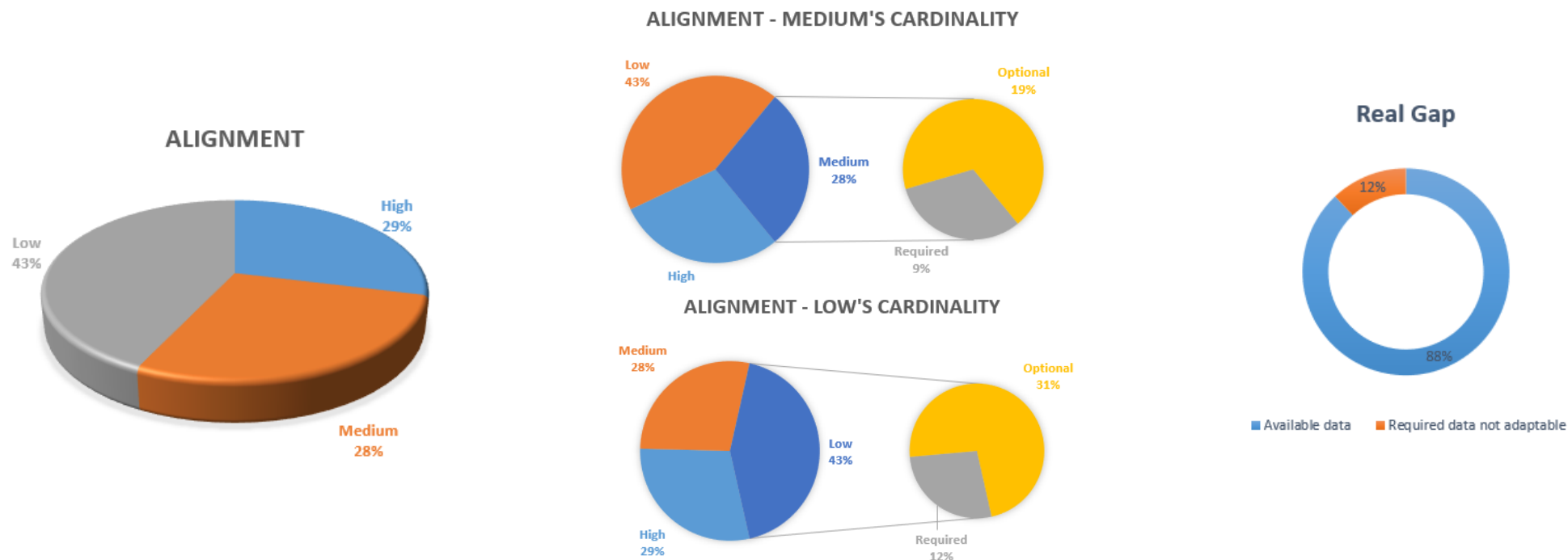
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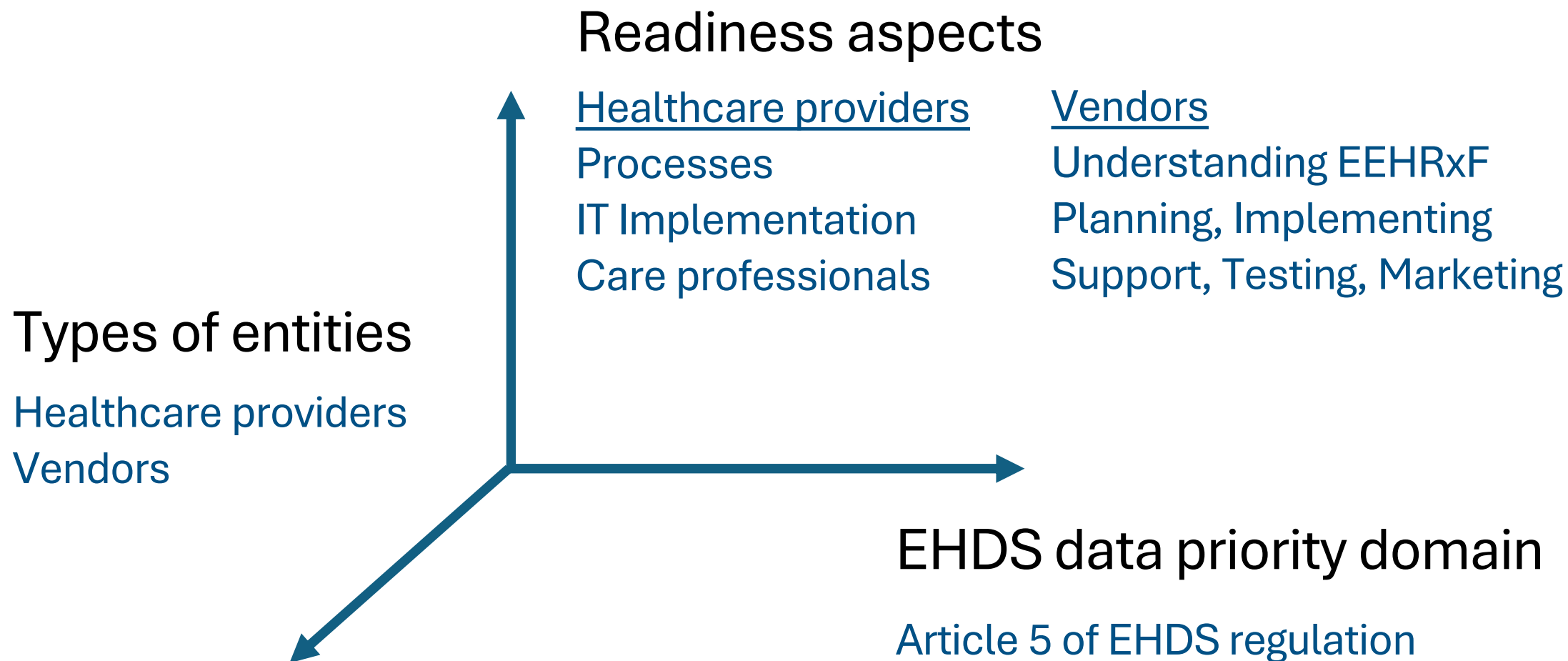
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# EEHRxF Readiness Model

- The purpose of the Readiness Model for vendors is to assess whether vendors are prepared to adopt the EEHRxF into their Health IT products.
- Based on 3 dimensions





## Readiness Model consists of ...

- ... general parts (use-case independent)
- ... use-case specific parts

“Generic” – can be extended by more use-cases

## Current domains covered:

- Laboratory Result Report (“medical test results”)
- Hospital Discharge Report (“discharge report”)
- Radiology Report (“medical imaging studies”)



**EHDS data priority domain**

Article 5 of EHDS regulation

## Readiness aspects



### Healthcare providers

Processes

IT Implementation

Care professionals

### Vendors

Understanding EEHRxF

Planning, Implementing

Support, Testing, Marketing

### **3 aspects (Processes, IT Implementation, Care professionals)**

- Policy, Finance and Change Management, Care processes, Clinical documentation, Availability of systems, Testing

**Structure supports completion by different people in the organization**

Resulted in 2  
Readiness  
Model surveys

## Types of entities

Healthcare providers

Vendors

### Healthcare providers

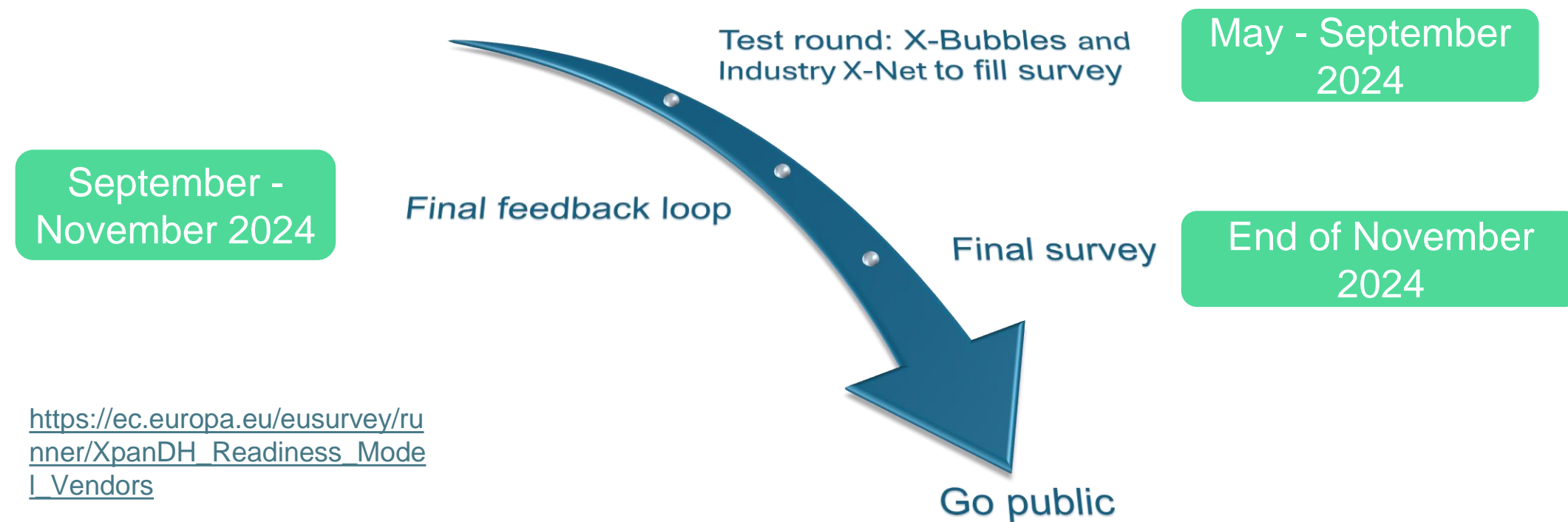
- Hospital or Hospital provider
- Daycare clinic
- Community Healthcare provider (General practitioner, Laboratory, Radiology department, ...)
- Community Pharmacy
- Nursing home
- Other

### Vendors

- Electronic Medical Record (EMR) vendors
- Hospital Information System (HIS) vendors
- Laboratory Information Systems (LIS) vendors
- Other



# RMV - Schedule and Milestone



[https://ec.europa.eu/eusurvey/runner/XpanDH\\_Readiness\\_Mode\\_I\\_Vendors](https://ec.europa.eu/eusurvey/runner/XpanDH_Readiness_Mode_I_Vendors)

# Questions:

- What essential requirements must vendors meet to ensure compliance with the EHDS?
- How can these requirements be integrated into EHR products from the design phase onward?
- Do you have a roadmap or development plan to make your products/solutions EHDS-compliant?

# An Industry Label for the EEHRxF?

- **Project vision:** xSHARE envisions that everyone can share their health data in EEHRxF with a click of a button. The xSHARE button will be featured across health portals and patient apps.
- **xShare label:** For that to happen, the project consortium is exploring the feasibility of the xSHARE industry label, indicating its **capability to work with EEHRxF data.**





# Vision for the xShare Industry Label



Patient portals



National health apps



EHR systems



When the EU-xSHARE label is featured in patient portals and trusted apps, individuals can **receive and reproduce their health data**. The label confirms that the system complies with the EHDS regulation.

# Supporting vendors: xShare Industry Label

## SEAMLESSLY INTEGRATED INTO OTHER LABELS:


The xShare Industry Label should effortlessly blend with other existing labels, acting as a "plug-in" that complements current labelling initiatives.

**UP!**  
**Minimise overhead:** The goal is to avoid additional burdens for the industry. The integration process should be simple and transparent, ensuring it's not perceived as "yet another label."

## COMPLIANCE LEVELS WITH SELF-CERTIFICATION OPTION:

Develop a **self-certification process** for easy dissemination throughout the EU, any company should be able to go online and certify their products via an online assessment and obtain the most basic level of EEHRxF compliance.

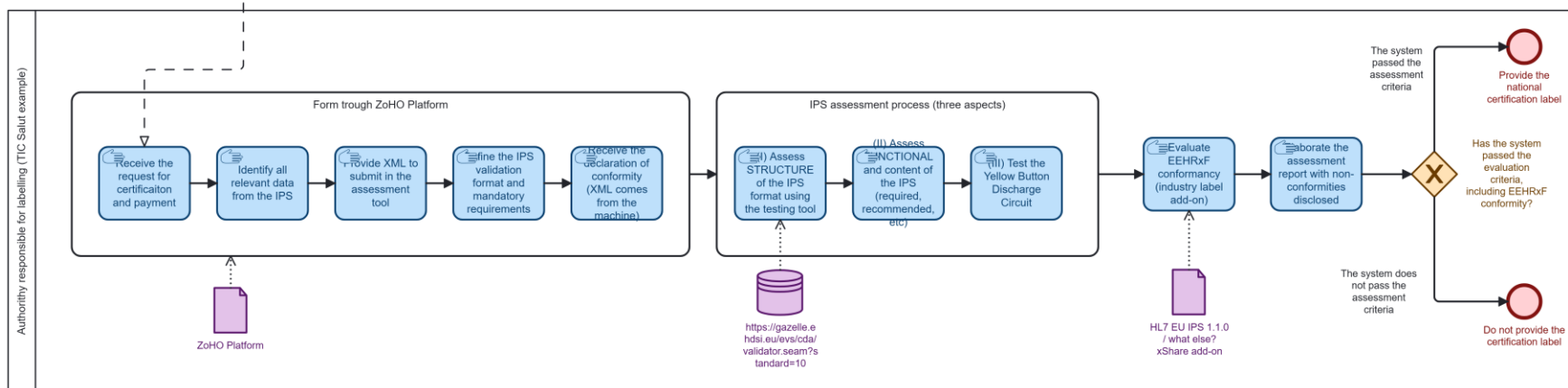
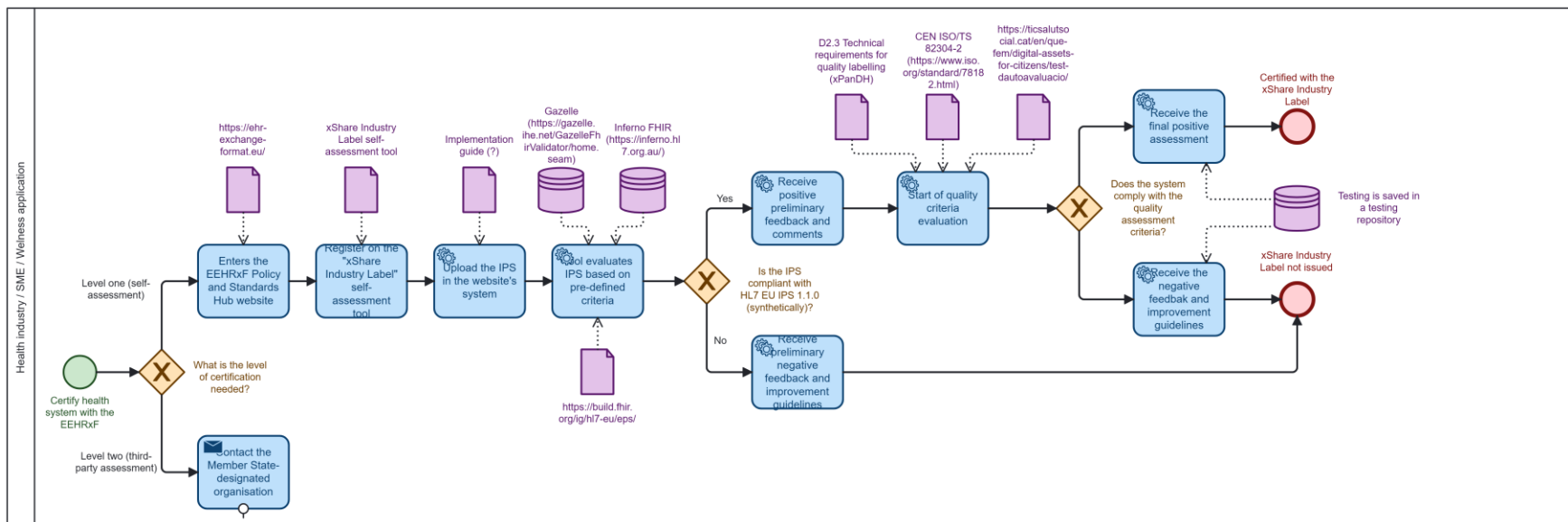


 More complex certification will be possible **via the national health authorities**. They will be the ones to plug the xShare Industry Label evaluation criteria into their own labelling processes. The national health authorities should provide their own labelling schemes, and the xShare industry label can be an optional add-on to these schemes.

## COST MANAGEMENT:

**The product owner is responsible for any costs** associated with labelling. The costs may vary between different Member States, and it should be noted that adding the xShare Industry Label to their assessment might make the process more expensive.

Connections with other labelling initiatives // complement CE marking for example



# Questions:

- Do you envision such a label helping you to comply with the upcoming EEHRxF? What challenges do you foresee regarding when adopting it?
- How to comply with the EEHRxF in the long term? Will it be sustainable? Is your organisation getting ready for it? How?
- How do envision envision to scale or support small vendor organisations to comply with the EEHRxF?

# Relevant groups to participate in the digital health landscape and help EEHRxF compliance

# Industry X-Net to support the EEHRxF

Currently working on the following **key points**:

- Agreement on both the **content exchanged** and the **transactions to exchange it**
- Clear definitions of **Electronic Health Record systems for Industry** (use case dependent)
- Relevant groups for Vendor organisations in the European landscape

# xShare Industry Forum

- **Purpose:** Unites EHR and PHR vendors, digital health organisations, and industry associations to collaboratively address EEHRxF compliance.
- **Key leadership:** Led by DIGITALEUROPE, in collaboration with key industry players.

## Why Join?

- **Influence Policy:** Contribute directly to EHDS regulatory discussions.
- **Access resources:** Exclusive tools, such as the xShare industry label and many other supporting materials to help with EEHRxF compliance.
- **Collaborate with peers:** Network and share knowledge with leading industry players across Europe.
- **Vision:** Establish a unified industry voice to drive interoperability and support EHDS's long-term goals.

Send your request for participation via email to [nathan.Carvalho@digitaleurope.org](mailto:nathan.Carvalho@digitaleurope.org)

Any other questions?



# Breakout Groups

Group 3

**How to best support Healthcare Providers for the EHDS  
implementation**

Room 2  
(First floor)

# Patients

Victoria Hedley (Newcastle University), Carola Schulz (empirica)

1. How can the EEHRxF deliver meaningful value to patients – regarding data access, control and usability?
2. What is required to empower patients in using their health data to improve care outcomes and personal health management?
3. What features or functionalities of the EEHRxF are most valuable from a patient’s perspective, and how can these be prioritised?
4. How can patients be supported and encouraged to actively engage with their health data through the EEHRxF?
5. What privacy, security, and transparency measures are essential for building trust among patients?
6. How can the EEHRxF promote better care outcomes, patient autonomy, and access to personalised healthcare?

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LUNCH BREAK

*Starts again at 14:00*

# Mentimeter Word Cloud

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Code: **3802 6006**

<https://www.menti.com/ali8yxecguu5>

