

# Standardization activities in Europe

**...and how does this affect the use of eHealth standards in Norway?**

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# European Health Data Space

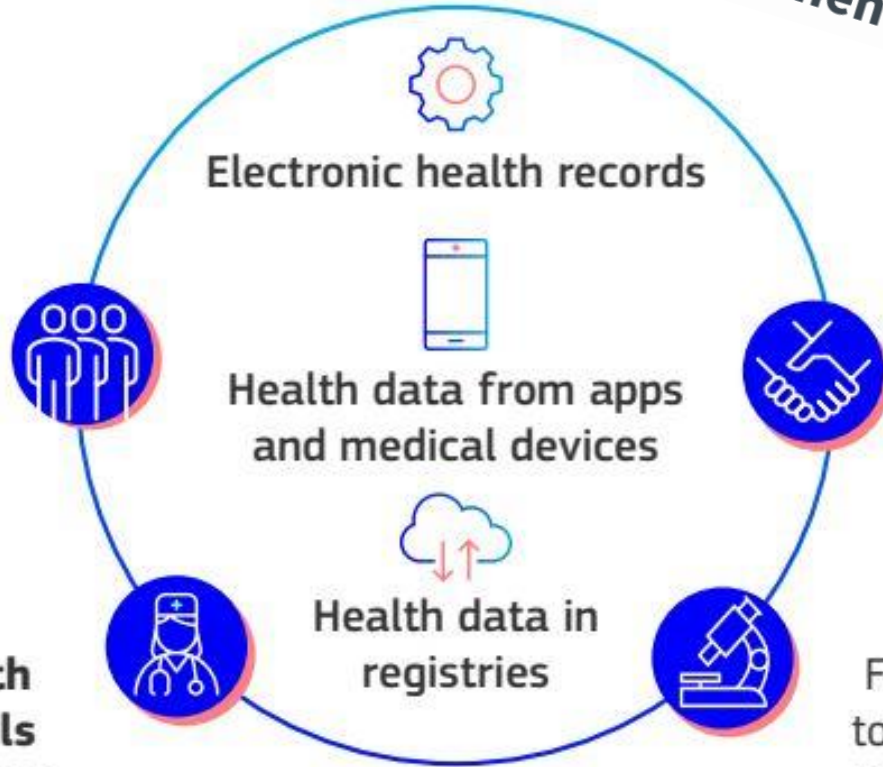
## European Health Data Space: Council and Parliament strike deal

Better diagnosis and treatment:

- improved patient safety
- continuity of care
- improved healthcare efficiency

Empower **individuals** to have control over their health data

Enable **health professionals** to have access to relevant health data

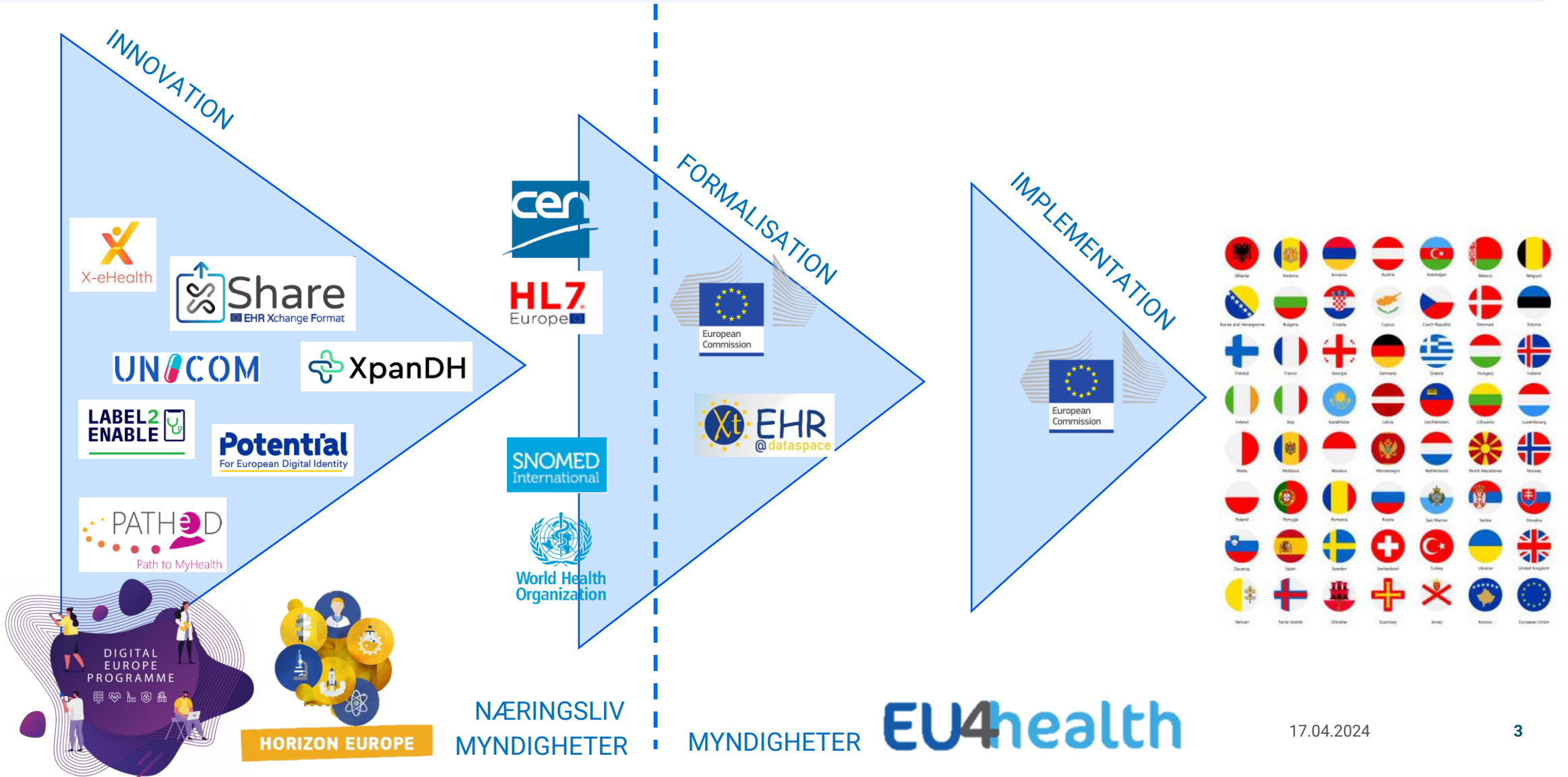


Assist **policy makers and regulators** in accessing relevant health data

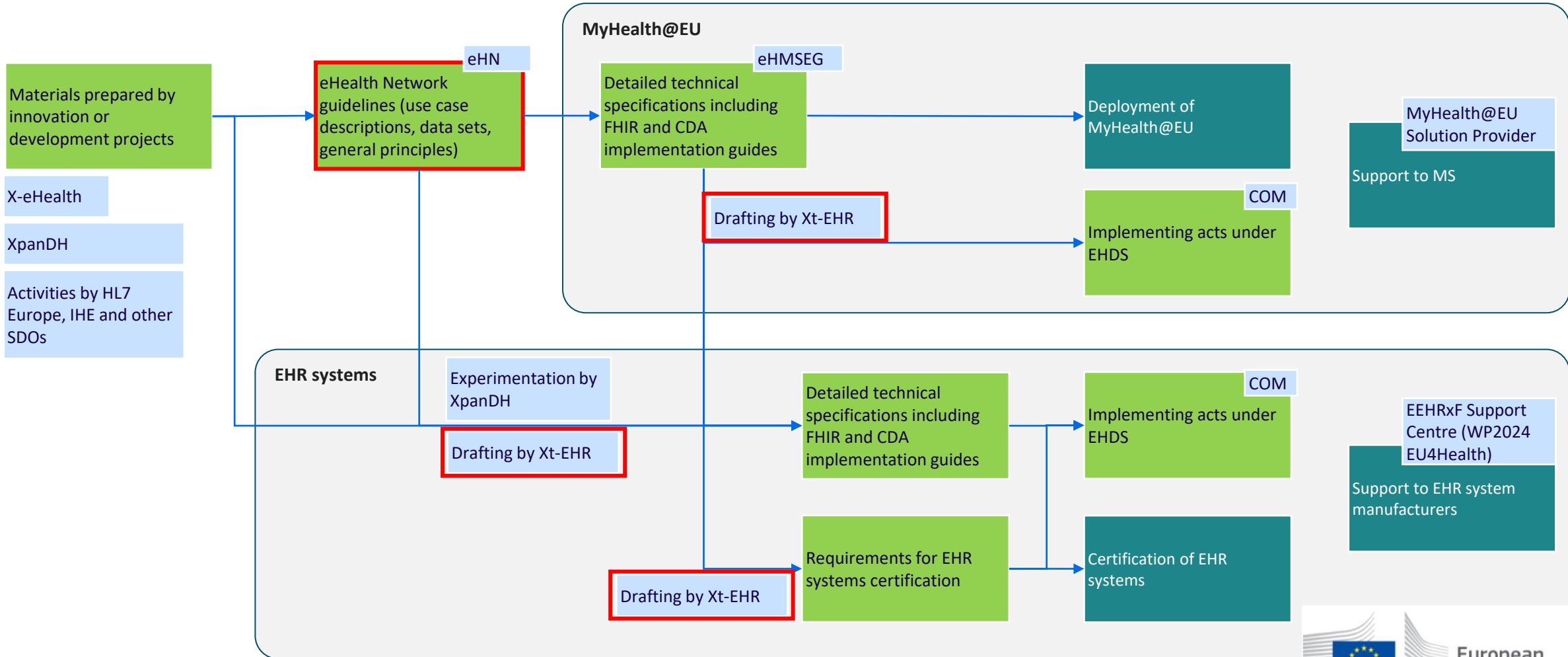
Facilitate access to health data for **researchers and innovators**

Better health policy, greater opportunities for research and innovation

# Development of eHealth specifications in EU-funded projects



# Development of eHealth specifications at EU-level



# Our role as public authorities



**Participate and contribute to development of international standards / specifications**

**Improve standardisation and interoperability within Norway**

# How do we combine what's happening in Norway with what's happening in the EU?



# Experiences from other countries



## U.S. Core Data for Interoperability (USCDI)

- Information models
- Code systems / Terminology
- Sorted by Applications and Main Areas

USA



## NHS – Pathology

- High level Information model
- Mandatory code systems
- Exchange format - FHIR

UK



## ZIBS - Zorg informatie bouwstenen

- Information model in table form
- Code systems and value sets
- Technology independent
- Reference to FHIR profiles

The Netherlands



## MIO – Medical information objects

- Logical information models
- Code systems/ terminology and value sets
- Reference to FHIR profiles

Germany




Information models



## What is a Helse-NIM?

- A Helse-NIM is a high-level national information model for health
- Merge international demands and safeguarding national needs
- For healthcare personnel
- A response to growing needs in the Norwegian health sector for faster development of standards and normative guidelines
- Objective: create a **predictable framework** and **contribute to innovation and business development**



## What do we do in a Helse-NIM?

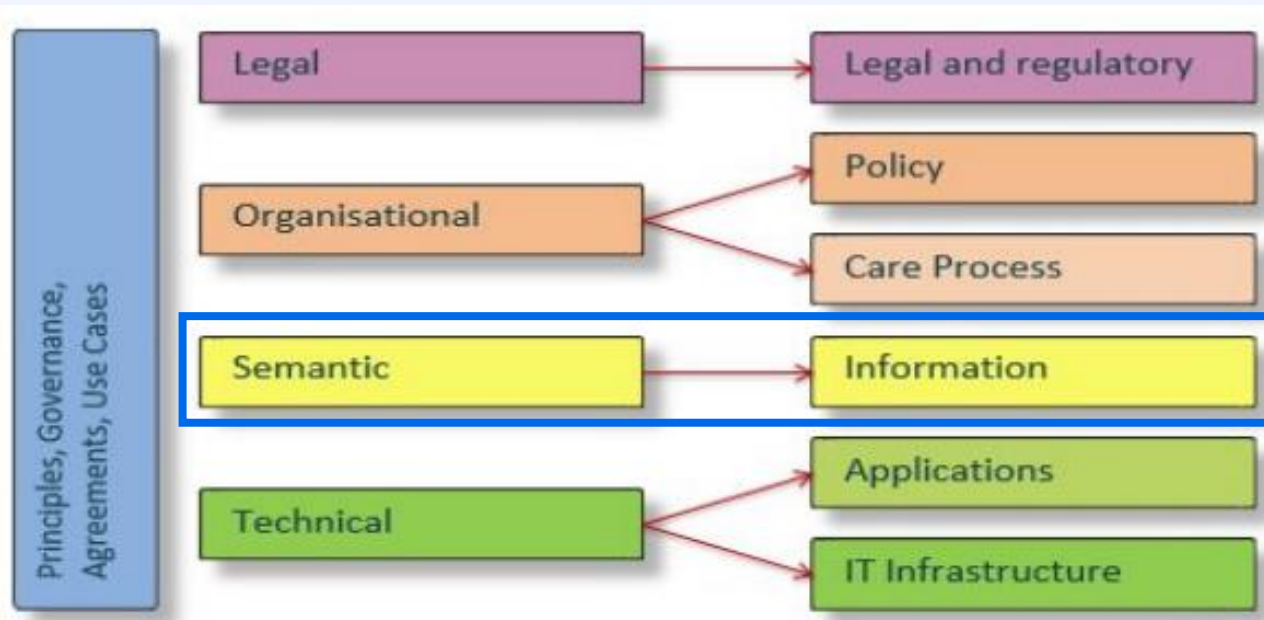
- Prepare information models for various areas where either
  - the area is not digitized today **or**
  - the digital solutions that exist are differently structured **or**
  - there will be new international requirements for the information to be shared
- We try to find out which **information needs** are **common**, regardless of what the information is **to be used for** and **in what context**



## Which Helse-NIMs are currently in progress?

- Maternity health record
- Smoking status
- Administrative variables for health records and registries
- Critical information
  - Problems:
    - Infections
    - Critical medical conditions
    - Complications of anesthesia
  - Current treatments / implants
  - Allergies and intolerances
  - Advanced directives

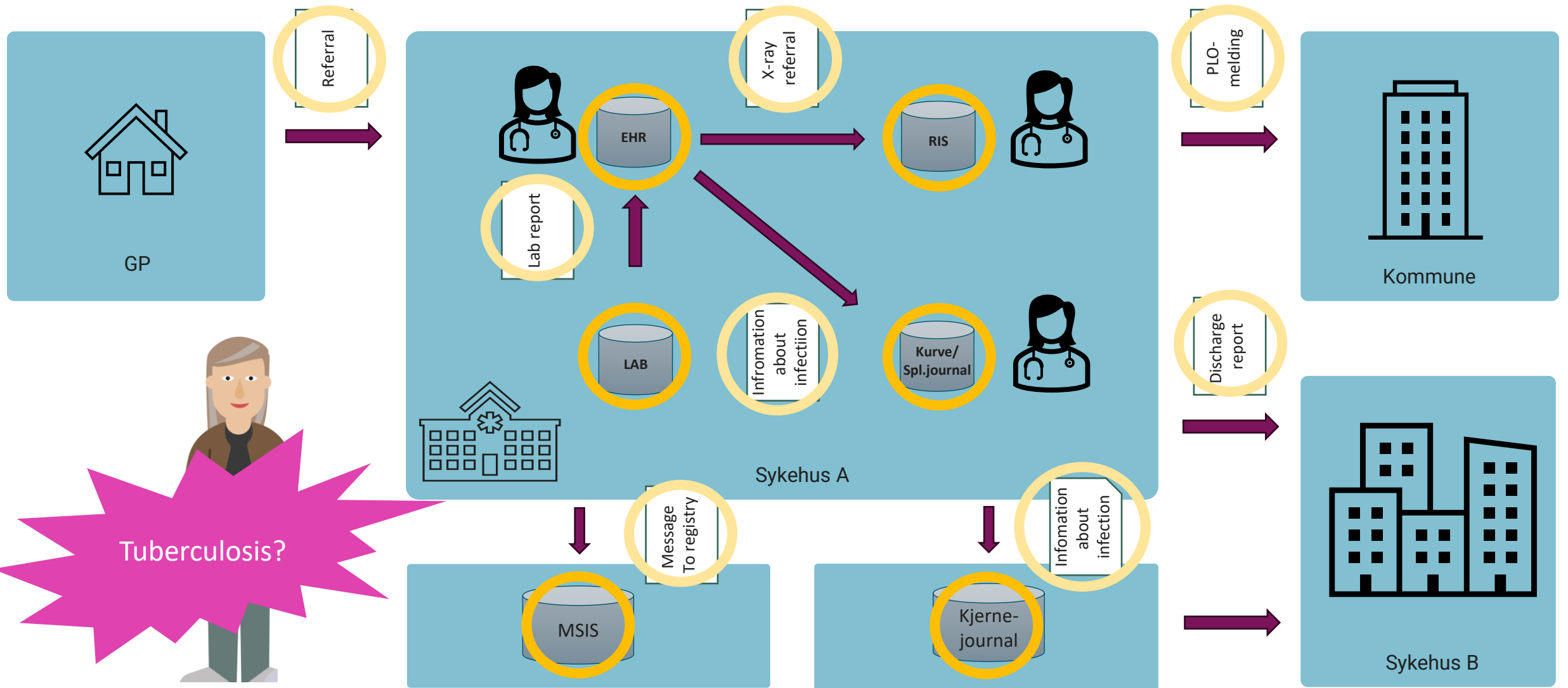




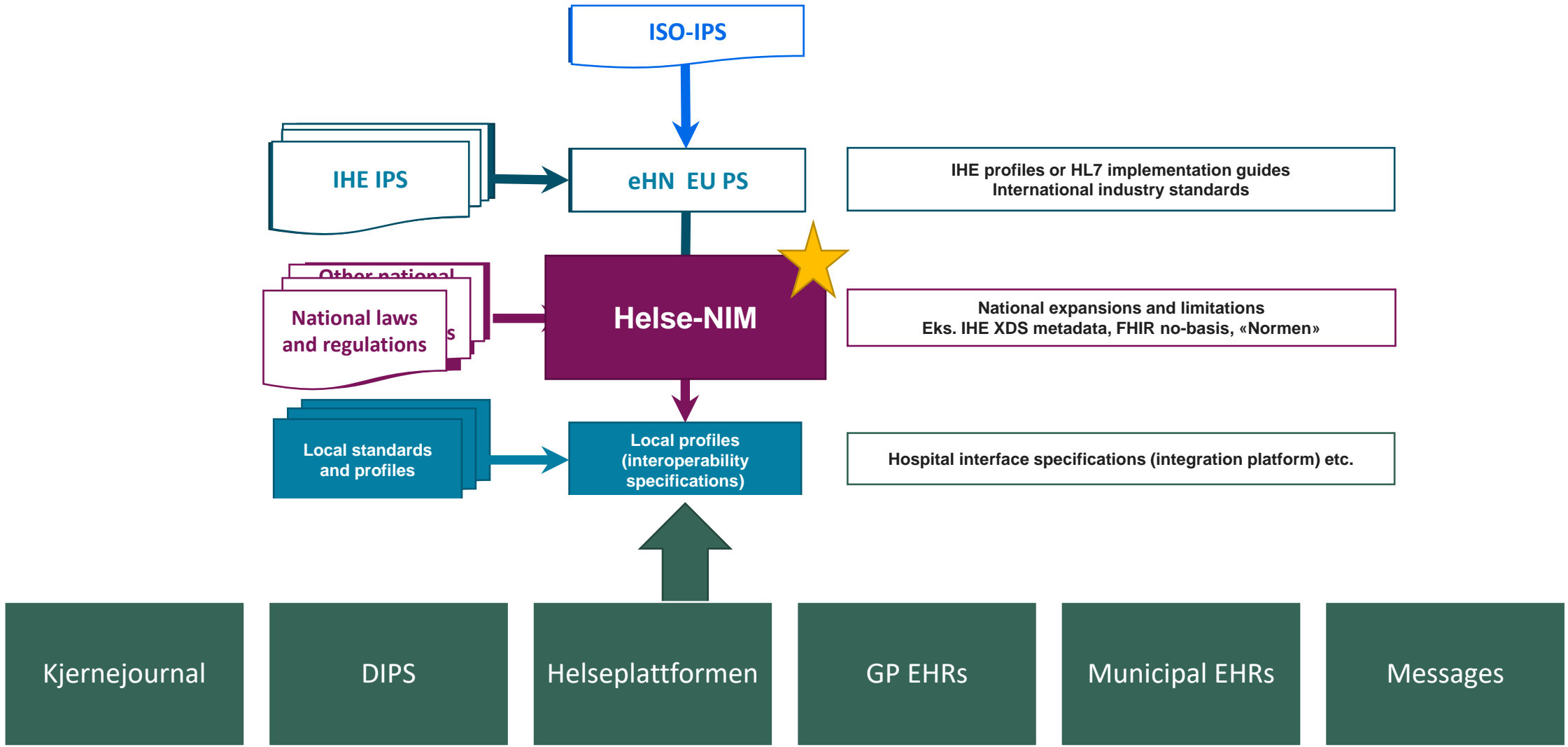
## In a Helse-NIM, we only look at semantics

- We look at
  - which **information elements** are common
  - which **definitions, codes** and / or **terminology** can cover clinical needs
- This means that **we do not look** at what is required **legally, organizationally** and **technically** to share information within and between businesses
- We are not looking at how this will be technically implemented in specific solutions, such as electronic health records systems (EHR) or kjernejournal

# Helse-NIM must take into account many areas of use

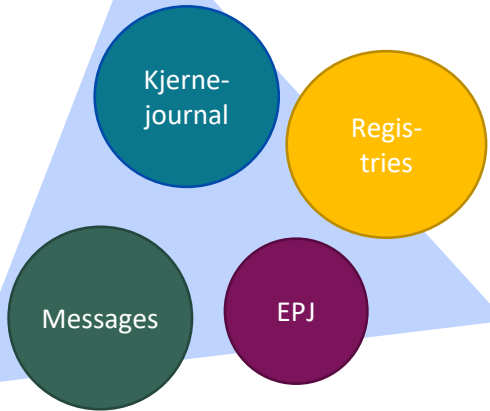


# How does what we do in Norway relate to international standards?

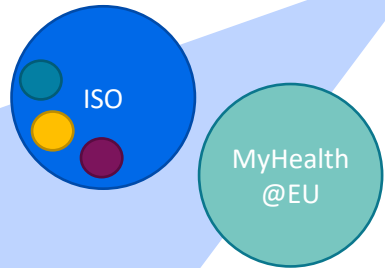


# Our strategy

Multiple implementations



Ex. National projects, businesses, EHR providers assess how the changes from the new Helse-NIM can be implemented in their systems – consequences are considered

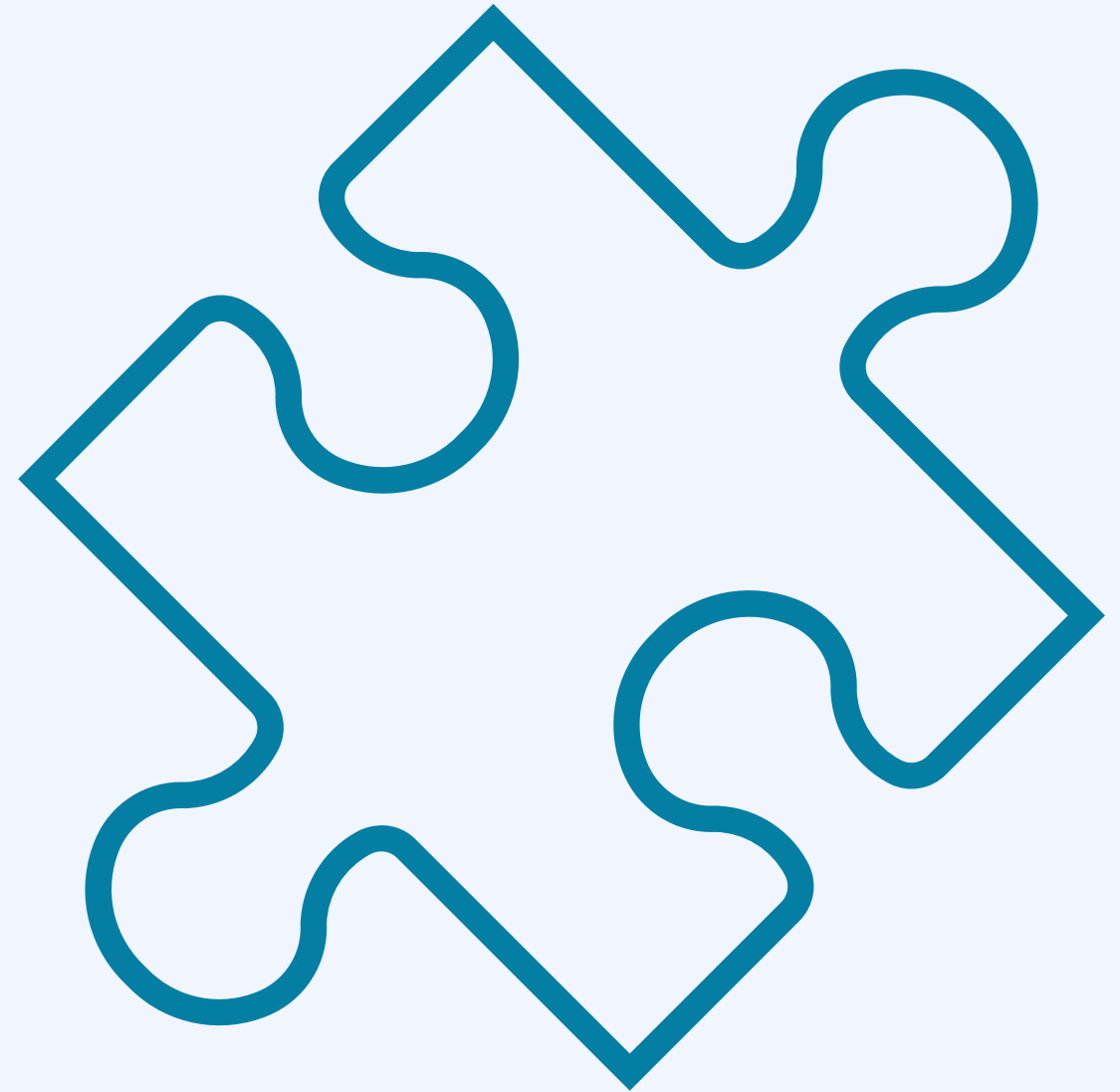


External requirements

# Why only high-level information models?

Helse-NIM:

- addresses the "difficult" questions about code systems / value sets
- Focuses on the content of meaning in health information
- Provides a broad process with strong involvement of clinicians - without going too much into the technical details
- Is stable across FHIR versions
- Can just as easily be used for other technical implementations such as OpenEHR or proprietary data models





HelseDirektoratet