..*set your hospital on FHIR..*
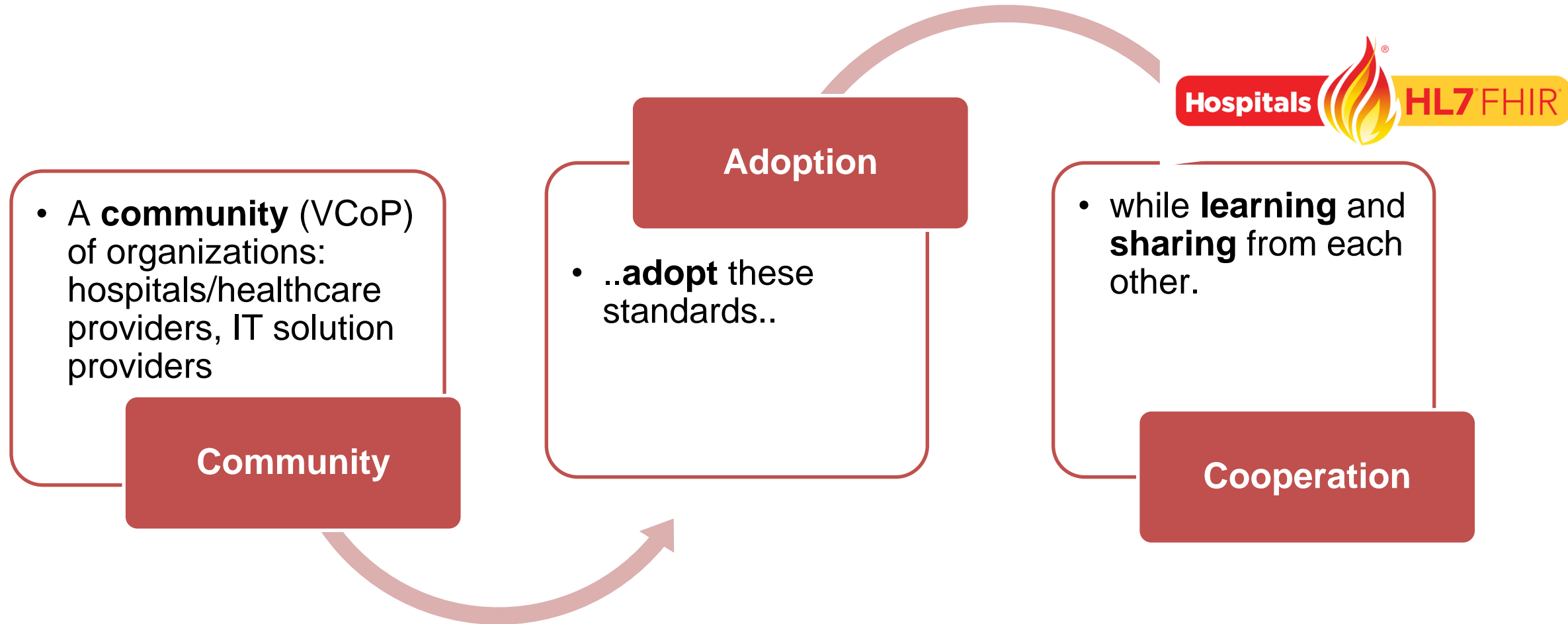
Hospitals On FHIR

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WHAT – Hospitals-on-FHIR is

Community

- A **community** (VCoP) of organizations: hospitals/healthcare providers, IT solution providers

Adoption

- ..**adopt** these standards..

Cooperation

- while **learning** and **sharing** from each other.

What Hospitals-on-FHIR is not

A playground for technical geeks

Just another infrastructure

A consultancy program

An award system

What Hospitals-on-FHIR is

- top-notch Community of Practice

- Reduce costs and effort to implement HL7 FHIR by benefiting of learning exchanges and decrease time to scale

- Place your hospital in a privileged position to participate in large scale pilots and projects once reached level 6 or more

- Understand how hospitals and other healthcare providers evolve in interoperability desires, needs and capabilities, moving toward the acquisition of interoperable services and systems.

- Serve as a networking space for future business opportunities.

- Evolve business models, intercompany partnerships around the provision of combined IT services based on FHIR while knowing which clients are ready for them

Your HL7 FHIR partner in a glance
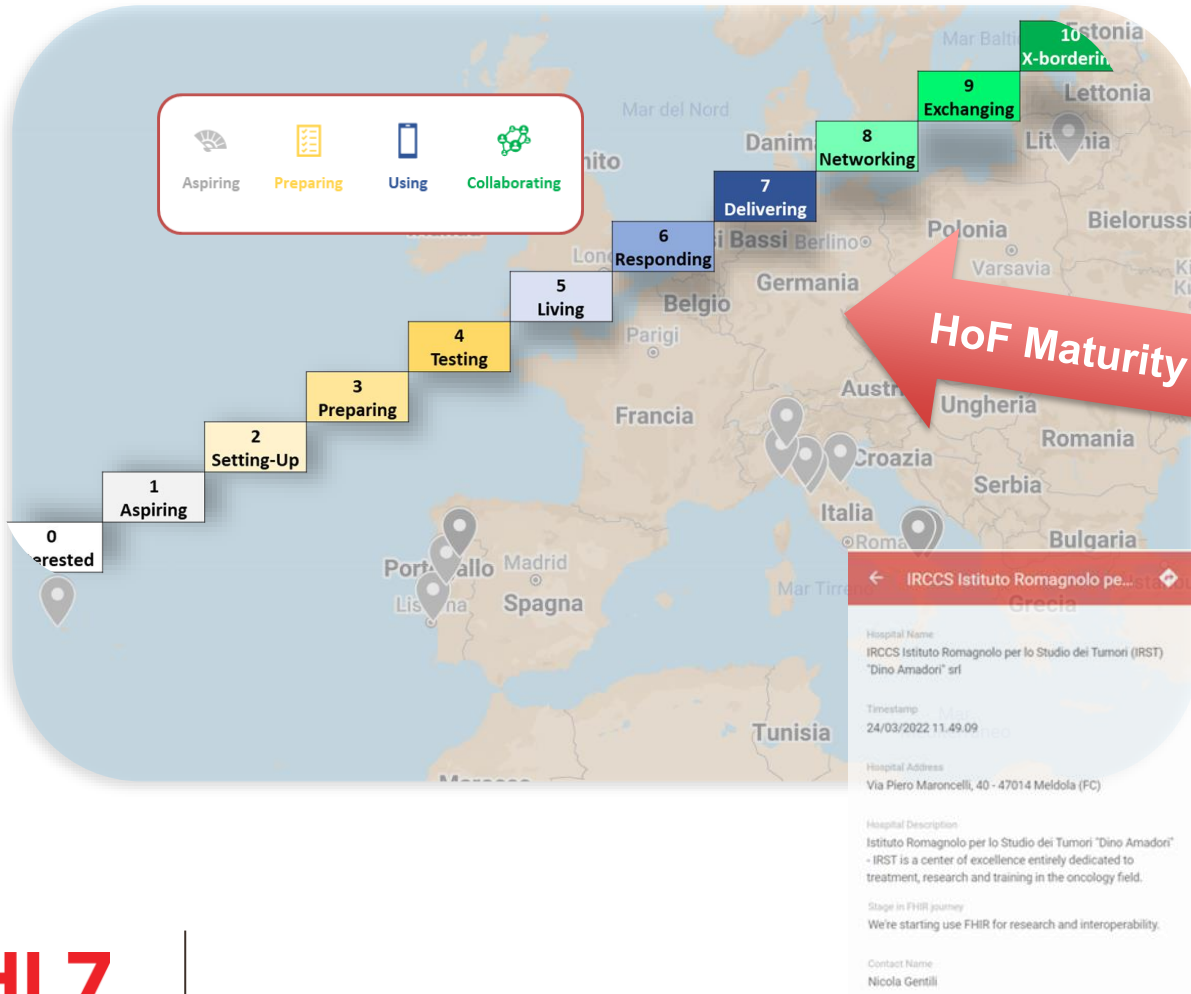
HoF Maturity Model
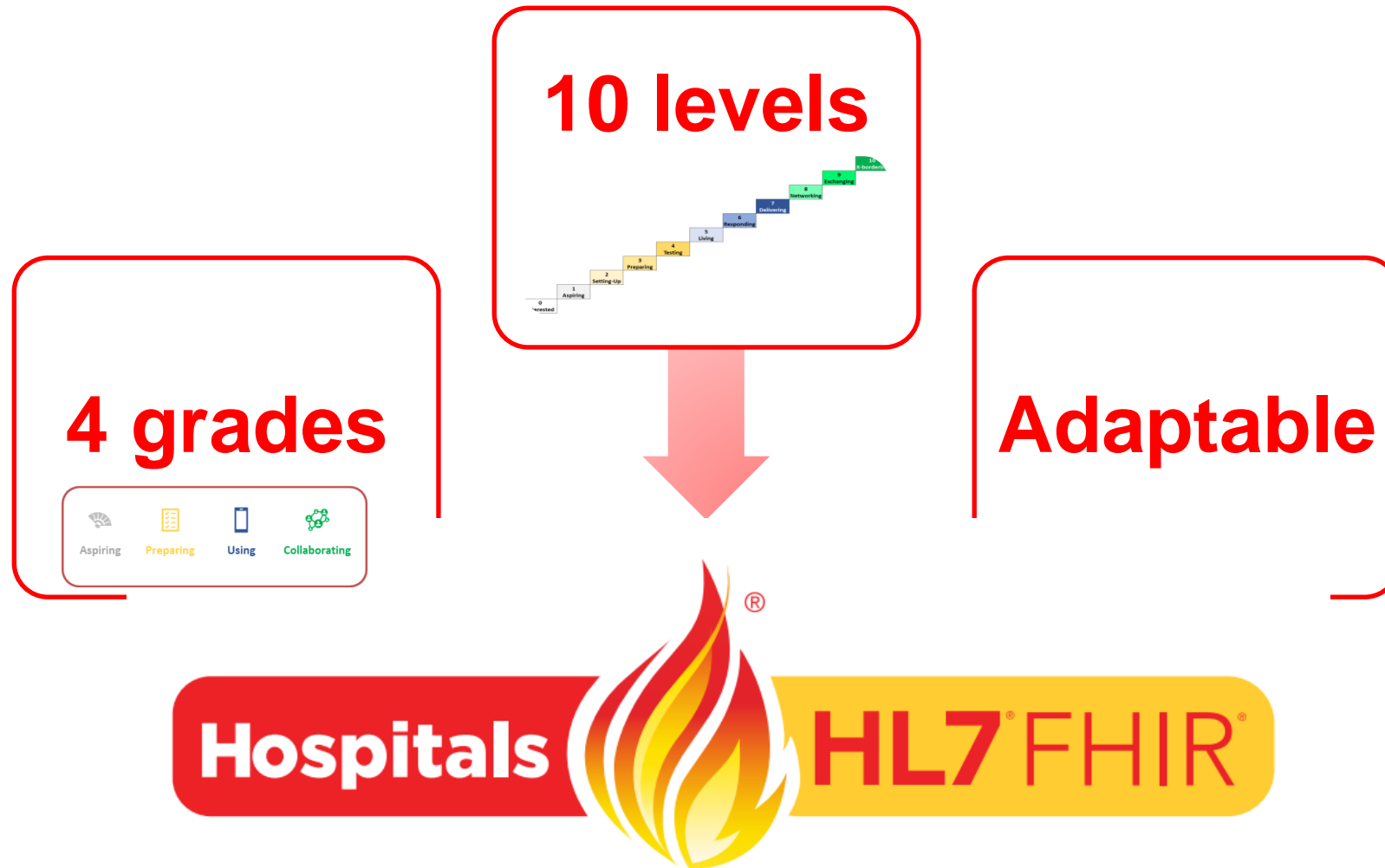
- Who is using HL7 FHIR ?
- What are they doing ?
- How advanced are they?
- What can we learn from / do with them ?
- Who should I contact ?

The Maturity Model in a nutshell

10 levels

4 grades

Adaptable

The **Hospitals** **HL7 FHIR** maturity levels

Beyond your hospital

Real Patients

Work started

Intention to work

Preparing

Aspiring

Collaborating

Using

10	X-bordering
9	Exchanging
8	Networking
7	Delivering
6	Responding
5	Living
4	Testing
3	Preparing
2	Setting-Up
1	Aspiring
0	Interested

Aspiring   Preparing   Using   Collaborating

HL7 Europe
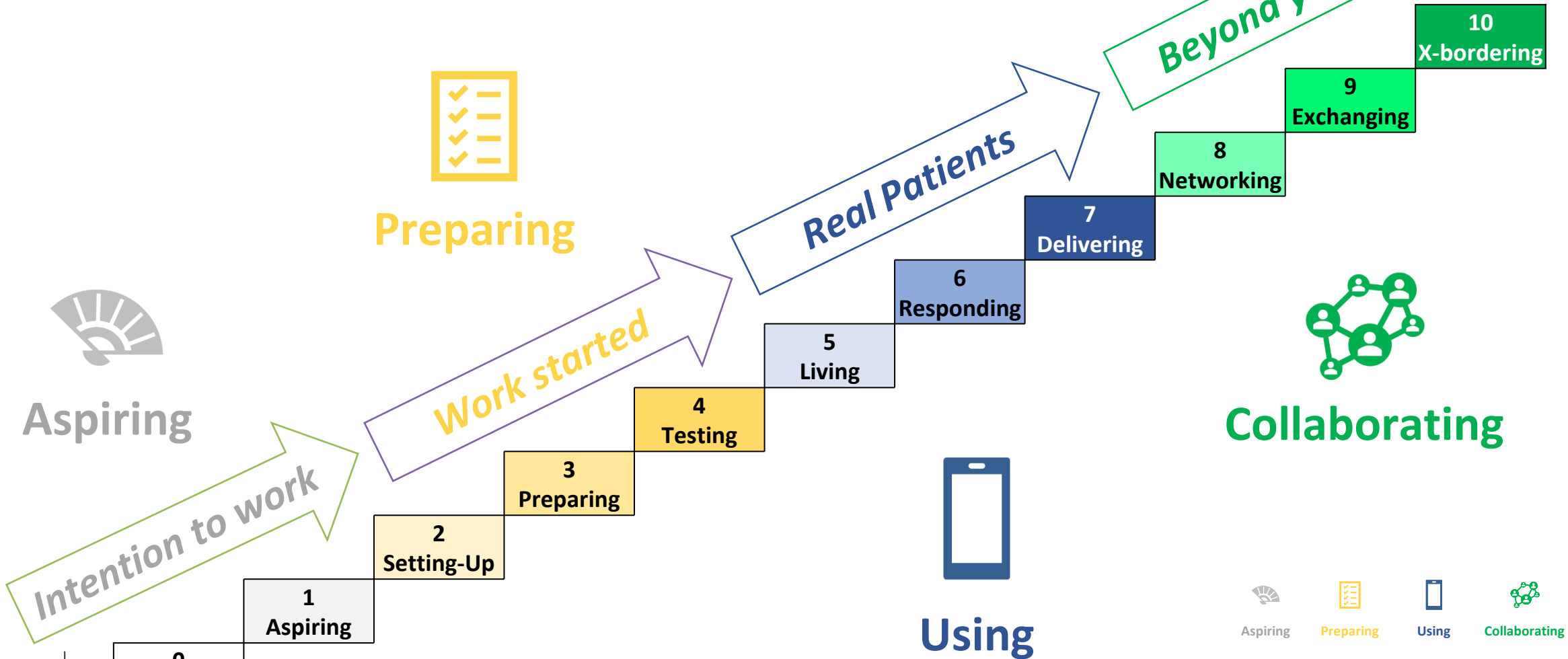
	Aspiring	
0	***Interested to be On-Fhir***	*The hospital agreed/expressed an **interest to participate** in Hospitals-On-Fhir*
1	**Aspiring to be On-Fhir**	The hospital **has filled** in the participation and consent **form** - basic information necessary

HL7 Europe

The Hospitals HL7 FHIR levels

	Preparing	
2	**Setting-Up to be On-Fhir**	The hospital has performed a **self assessment** on conditions to establish and operate HL7 FHIR-based services.
3	**Preparing to be On-Fhir**	The hospital is **preparing** to technically have functional HL7 FHIR-based services
4	**Testing to be On-Fhir**	The hospital is engaging in internal and/or external **testing** also with external (e.g., HL7 affiliate/HL7 Europe) support

HL7 Europe

📱	Using	
5	**Living On-Fhir**	The hospital is **piloting** or has **gone LIVE** and has at least one HL7 FHIR-based services is regularly used (minimum once/day).
6	**Responding On-Fhir**	The hospital **formalized the capabilities** offered by its HL7 FHIR-based services. *This is technically done by means of HL7 FHIR CapabilityStatement(s) and providing access to them.*

HL7 Europe

📱	Using	
7	**Delivering On-Fhir**	The hospital **implements** at least one of the relevant selected HL7 FHIR-based services. *That is, your HL7 FHIR-based service **conforms** to **selected Implementation Guides** (e.g., EEHRxF Lab, IPS.)*

	Collaborating	
8	Networking On-Fhir	The hospital is **networking** with other hospitals about offered HL7 FHIR-based services. This includes also mentoring activities.
9	Exchanging On-Fhir	The Hospital is using HL7 FHIR-based services to **exchange** health data with entities (e.g. hospitals , citizens, regions..) **inside the country.**

HL7
Europe

	Collaborating
10 X-bordering On-Fhir	The Hospital is using HL7 FHIR-based services to **exchange** health data with other entities (e.g., hospitals , citizens,) **cross-border**. *(a) Europe (e.g., European EHRxF)* *(b) Global (e.g., IPS)*

Hospitals On FHIR

- Typology of Healthcare Organization wanting to use FHIR :
    - Hospitals
    - Clinics
    - Cancer centers
    - Retirement homes

- /!\ We are missing primary care

Hospitals On FHIR

- All have the same issues !

- What is FHIR ?
- How do I use it ?
- Is someone else working on the same subject ?

- Community is the answer !

Hospitals On FHIR

- ## What is FHIR ?

  – Data exchange are built from a set of modular components called "Resources".

  – Resources are the basic building blocks in FHIR

  – Resources can easily be assembled into working systems that solve real world clinical and administrative problems

  – 157 different resource types are currently defined in FHIR latest release
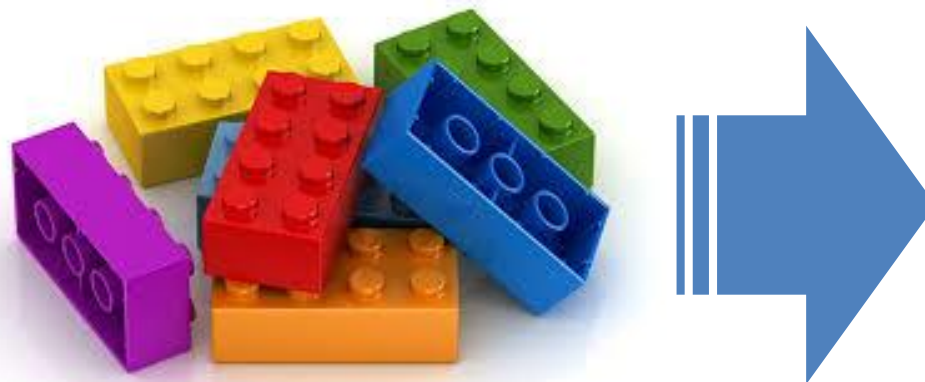
Hospitals On FHIR

- HL7 FHIR Resource levels
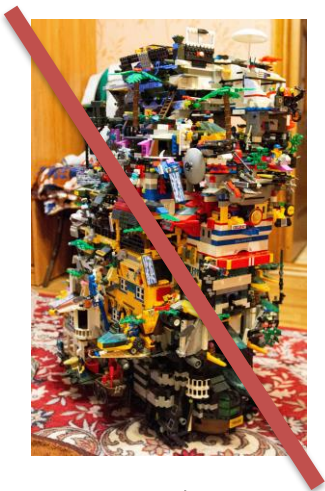
Level 1 Basic framework on which the specification is built	
Foundation	Base Documentation, XML, JSON, Data Types, Extensions

Level 2 Supporting implementation and binding to external specifications				
Implementer Support	**Security & Privacy**	**Conformance**	**Terminology**	**Exchange**
Downloads, Version Mgmt, Use Cases, Testing	Security, Consent, Provenance, AuditEvent	StructureDefinition, CapabilityStatement, ImplementationGuide, Profiling	CodeSystem, ValueSet, ConceptMap, Terminology Svc	REST API + Search Documents Messaging Services Databases

Level 3 Linking to real world concepts in the healthcare system	
Administration	Patient, Practitioner, CareTeam, Device, Organization, Location, Healthcare Service

Level 4 Record-keeping and Data Exchange for the healthcare process				
Clinical	**Diagnostics**	**Medications**	**Workflow**	**Financial**
Allergy, Problem, Procedure, CarePlan/Goal, ServiceRequest, Family History, RiskAssessment, etc.	Observation, Report, Specimen, ImagingStudy, Genomics, Specimen, ImagingStudy, etc.	Medication, Request, Dispense, Administration, Statement, Immunization, etc.	Introduction + Task, Appointment, Schedule, Referral, PlanDefinition, etc	Claim, Account, Invoice, ChargeItem, Coverage + Eligibility Request & Response, ExplanationOfBenefit, etc.

Level 5 Providing the ability to reason about the healthcare process	
Clinical Reasoning	Library, PlanDefinition & GuidanceResponse, Measure/MeasureReport, etc.

Hospitals On FHIR

- Different usages :
  - Care
  - Research

- Different methods :
  - FHIR façade
  - FHIR repositories

Hospitals On FHIR

- What use cases ?

Every use case can be the occasion to use FHIR

- – Laboratory
- – Pharmacy
- – Buildings
- – Transport
- – ...

Thank You

More information, joining Hospitals-on-FHIR, or suggestions – email us info@hospitalsonfhir.eu

- Let's build people interoperability around technical interoperability
- Beyond a technical standard to higher standards of Care

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Europe