FHIR 101
For the
Policy Community

Viet Nguyen, MD
Chief Standards Implementation Officer

March 30, 2023

HL7®
International

HL7 International

- A not-for-profit organization, founded in 1987
- ANSI-accredited standards development organization
- Dedicated to providing a comprehensive framework and related standards for the exchange, integration, sharing, and retrieval of electronic health information
- Three Product Families: FHIR, V3/CDA, V2.x

HL7's Global Reach

- 50+ Countries
- 500+ Corporate Members
- 1600+ Individual Members
- Thousands of contributors

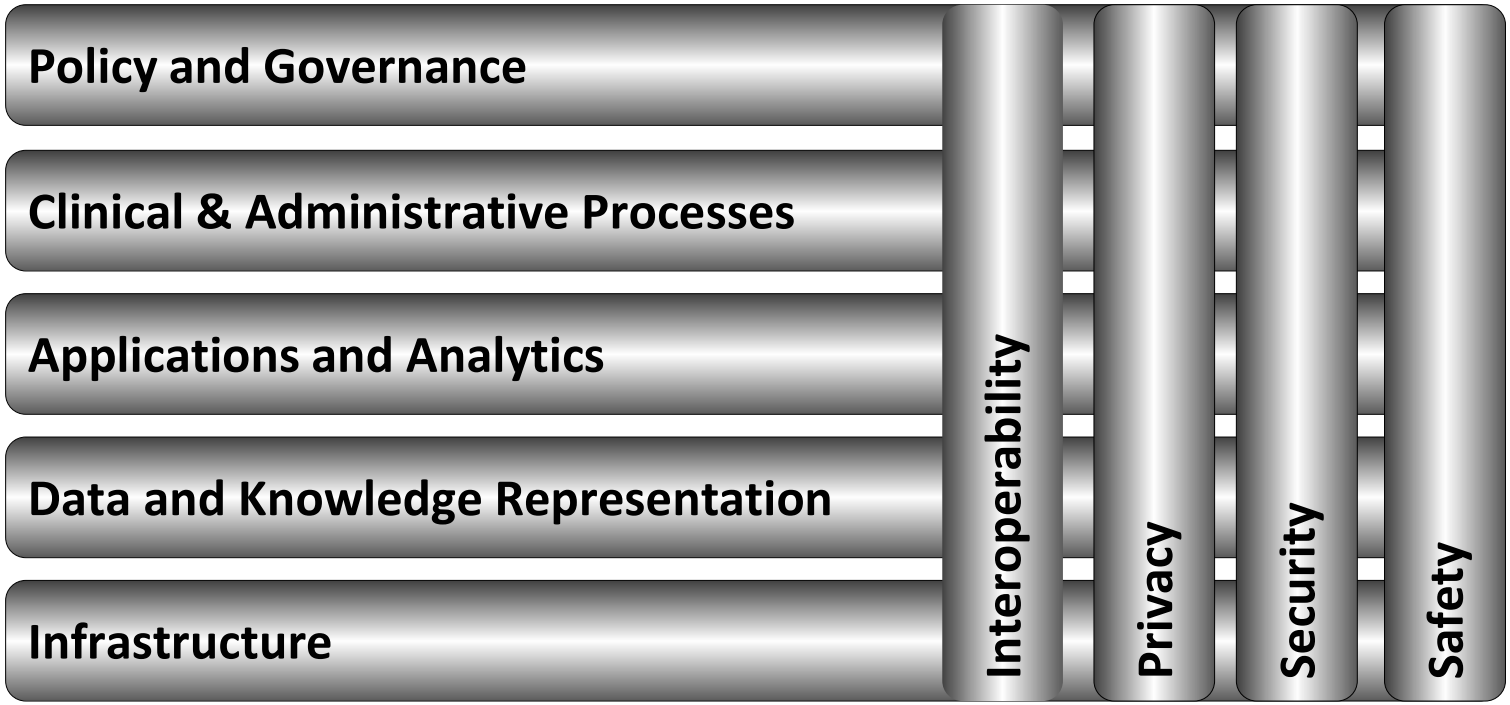
What are health care data standards?

In the context of health care, the term data standards encompasses *methods, protocols, terminologies, and specifications* for the *collection, exchange, storage, and retrieval of information* associated with health care applications, including medical records, medications, radiological images, payment and reimbursement, medical devices and monitoring systems, and administrative processes (Washington Publishing Company, 1998).

https://www.ncbi.nlm.nih.gov/books/NBK216088

What do YOU mean by interoperability?

Health IT Stack©



HL7 International

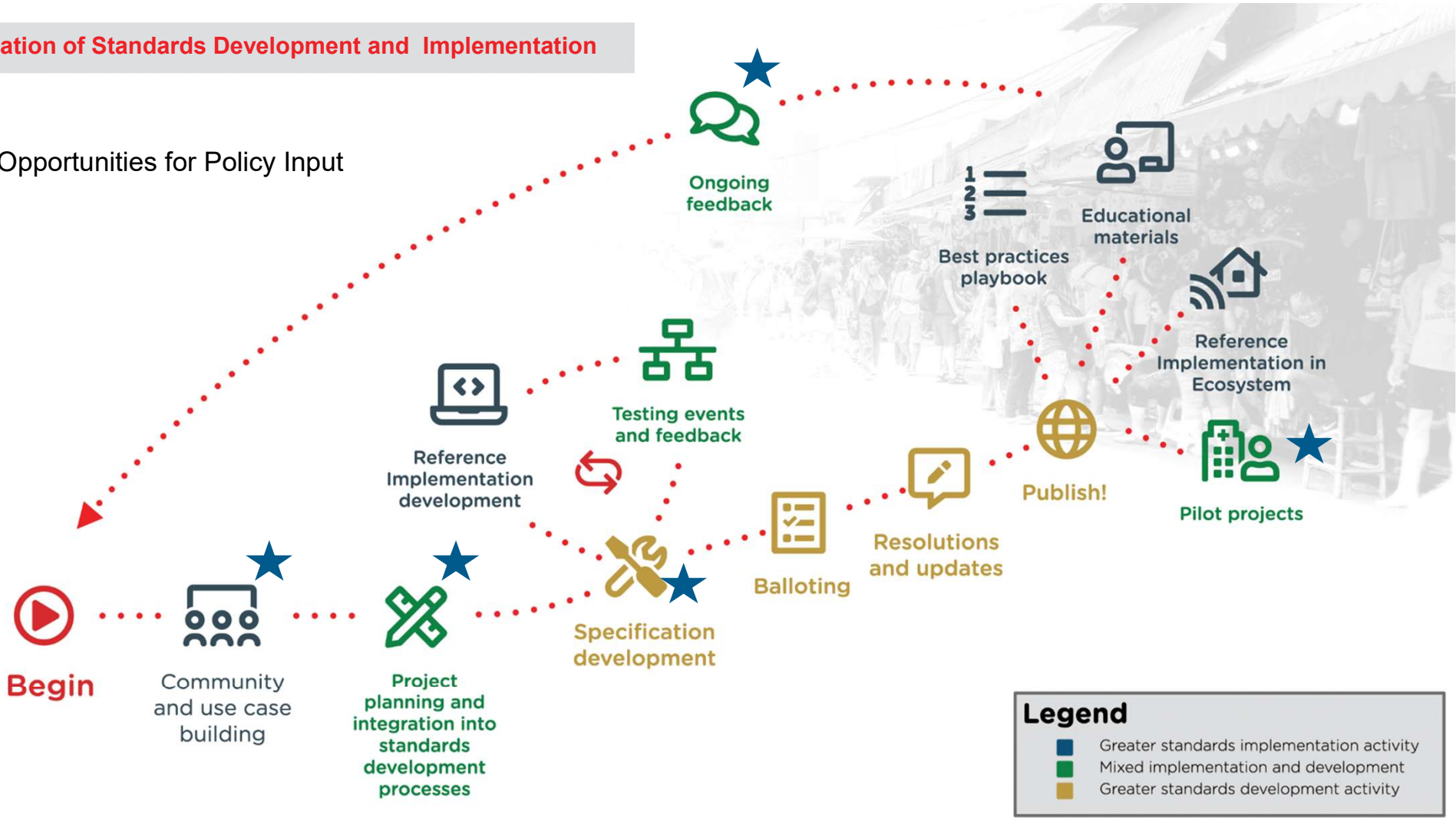
Standards Stakeholders

How does policy drive standards development and adoption?

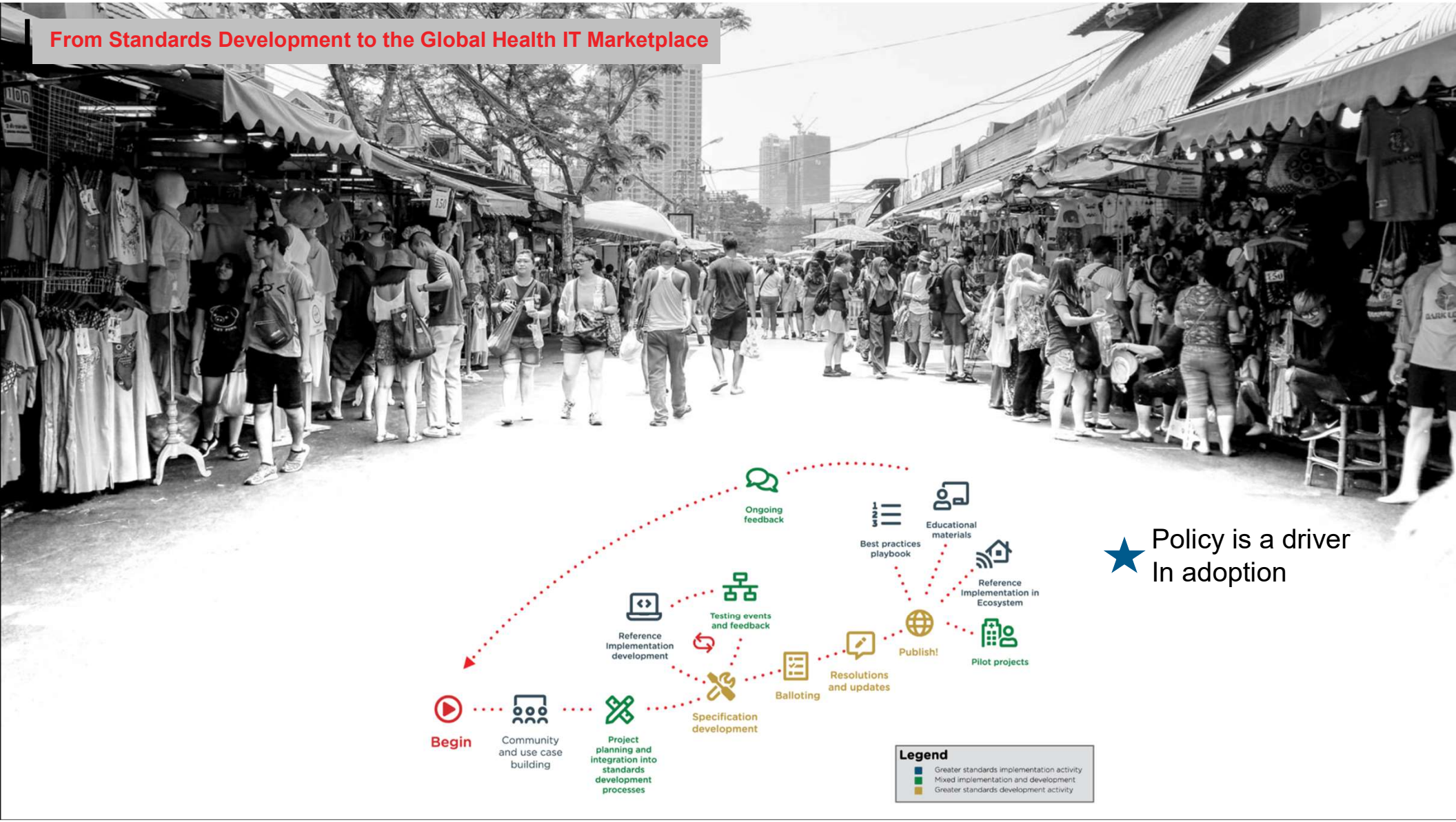
- Listening to stakeholder needs
- Direct support of standards development and adoption
- Setting of standards directly – e.g. HIPAA, ONC Cures Act
- Adoption by agencies

Coordination of Standards Development and Implementation

★ Opportunities for Policy Input



From Standards Development to the Global Health IT Marketplace



★ Policy is a driver
In adoption

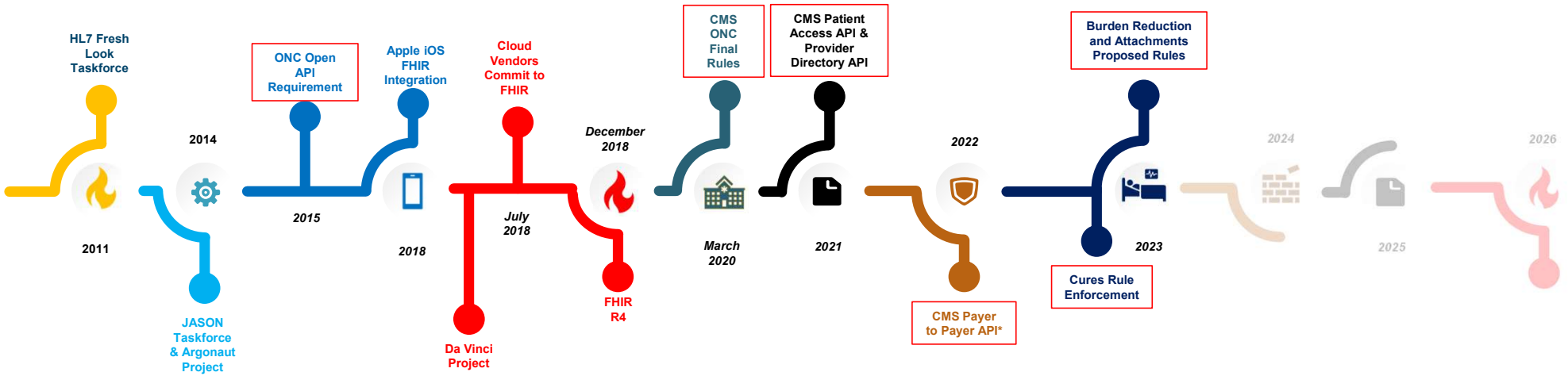
Why are policies important to implementers?

- Legal and regulatory requirements and compliance
- Standards and guidelines for implementation for certification
- Privacy and security
- Data governance
- Consent management
- Collaboration and partnerships
- Technological infrastructure
- Education and training
- Continuous improvement

Interoperability must move from a compliance activity to a strategic initiative.

FHIR Timeline and Federal Regulations

CMS and ONC have identified FHIR as the foundational standard to support data exchange via secure application programming interfaces (APIs).



CMS identified FHIR in their final rules to establish a future where data flows freely and securely between payers, providers, and patients and to achieve truly coordinated care, improved health outcomes, and reduced costs.

FHIR 101

The World Has Been Changed By Application Programming Interfaces (APIs)…

What is an API and what is healthcare's API?

What is FHIR?

F – Fast

H – Healthcare

I – Interoperability

R - Resources

Overview of FHIR

- Consistent, simple to use content model resources
  - Controlled extensibility
- Supports all paradigms of exchange
  - Real-time APIs
  - Documents, Messages & Operations
- Designed with implementers in mind
- Freely available
- Detailed on-line, hyperlinked specification
- Freely available tooling, servers, libraries
- Massive supporting community

Benefits of FHIR

For Patients

- Improved patient engagement, enabled through FHIR-enabled applications

For Organizations

- Major vendor commitment
- Faster deployment
- Standards based API to support internal application development
- Data standards to support analytics and population management

For Clinicians

- Access to a more complete patient record and improved decision-making tools, leading to:
  - Better decision making
  - More efficient diagnosis and treatment
  - Higher quality care

For Implementers

- Familiar tooling and technologies
- Predefined resources and APIs
- Validation services
- Active and supportive community
- Open source code libraries

Scenario

55 y.o. AA male with hypertension and diabetes

Encounter 1

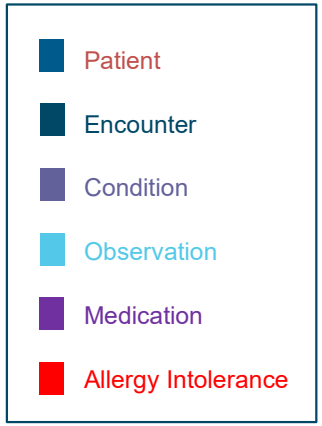
History: Patient is seen at and afterhours urgent care for a sore throat for 3 days. He has had a mild fever up to 101 Fahrenheit. He denies any other respiratory or gastrointestinal symptoms.
Medications: metoprolol and glipizide. Allergies: none. Social History: non-smoker. Married. 3 adult children.

Vital signs: temperature 100.5 F, BP 110/75, RR 12, HR 70, O2 Sat 97% on room air
On exam he has pus over his tonsils. His neck lymph nodes are enlarged. The rest of the exam is normal
Lab: Rapid strep test is positive
Assessment and Plan: Streptococcal sore throat. Patient is prescribed amoxicillin

Encounter 2

History: Patient returns with a rash over his chest that began after he started the amoxicillin. He admits that he has never taken amoxicillin before. He has no other respiratory symptoms. His fever and sore throat have resolved.

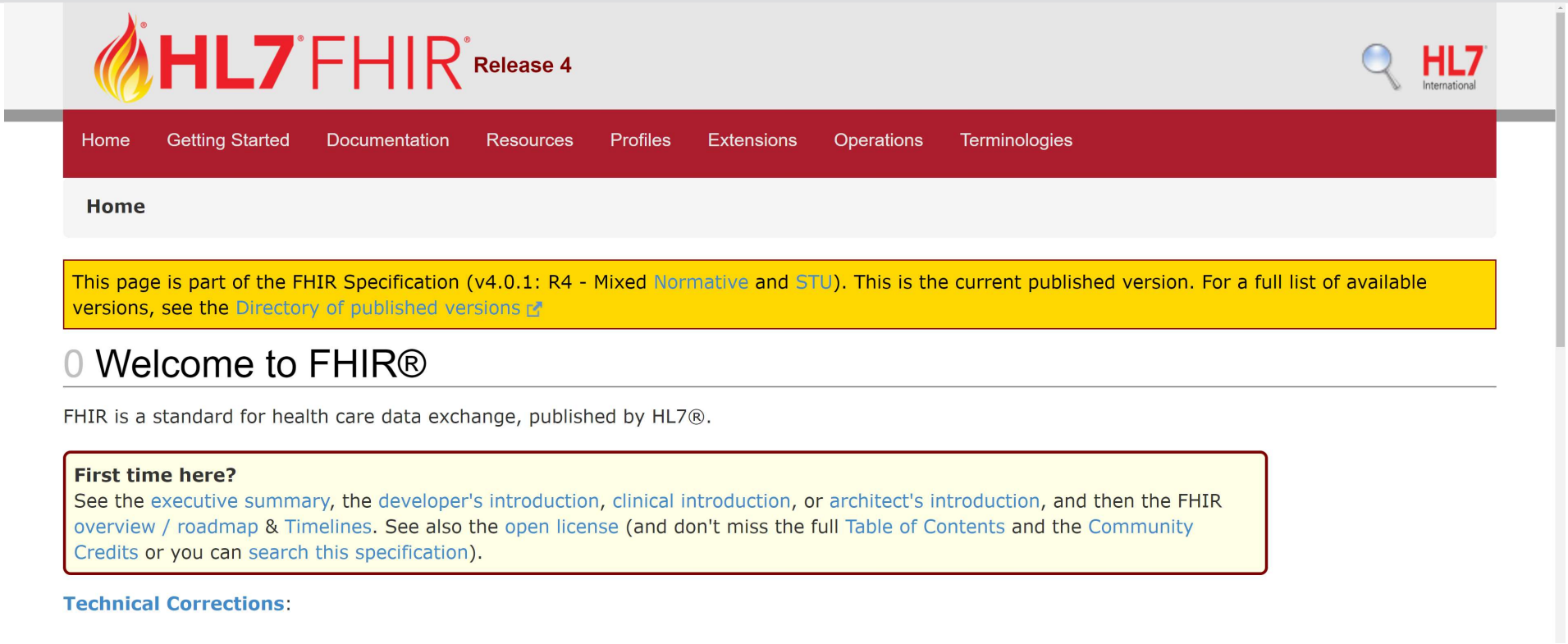
Vital signs are normal.
Exam shows a raised rash over patient's chest and arms
Assessment: penicillin allergy. Strep throat resolving
Plan: Patient was switched to azithromycin



FHIR Essential Concepts

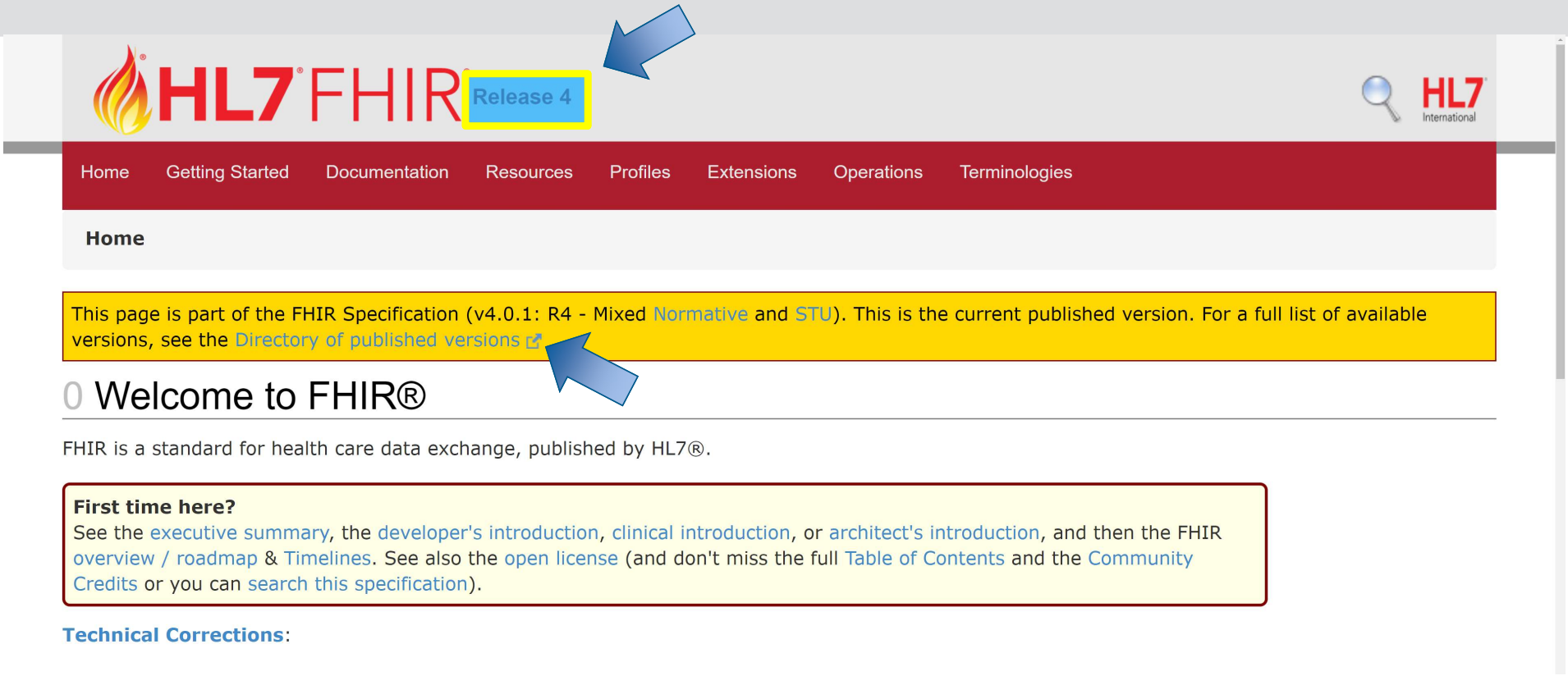
- Navigating the Specification
- FHIR Versioning
- Resources
- Profiles
- Operations
- Implementation Guides
- Key FHIR Technologies – SMART on FHIR, CDS Hooks, Bulk FHIR, and CQL

FHIR Homepage



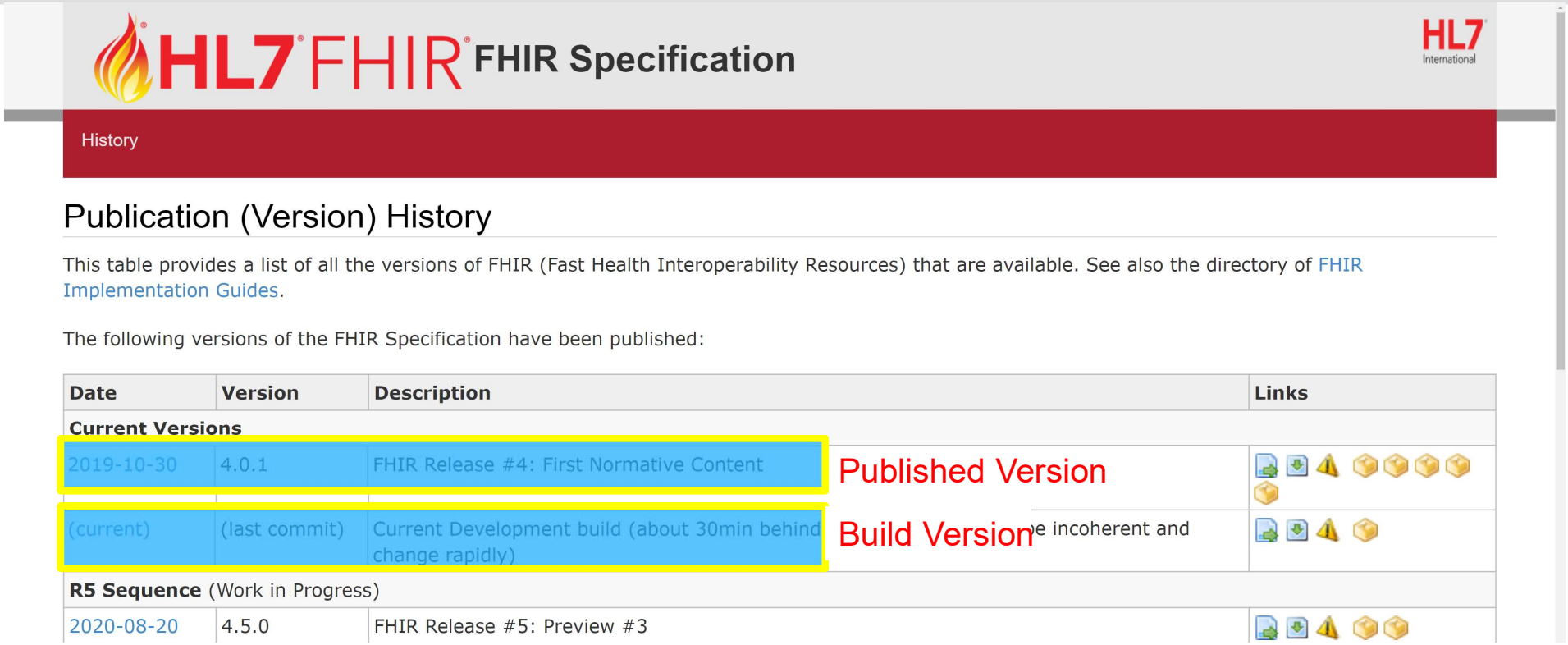
http://hl7.org/fhir/index.html

FHIR Version



http://hl7.org/fhir/index.html

Published vs Build Versions



HL7 FHIR FHIR Specification

HL7 International

History

Publication (Version) History

This table provides a list of all the versions of FHIR (Fast Health Interoperability Resources) that are available. See also the directory of FHIR Implementation Guides.

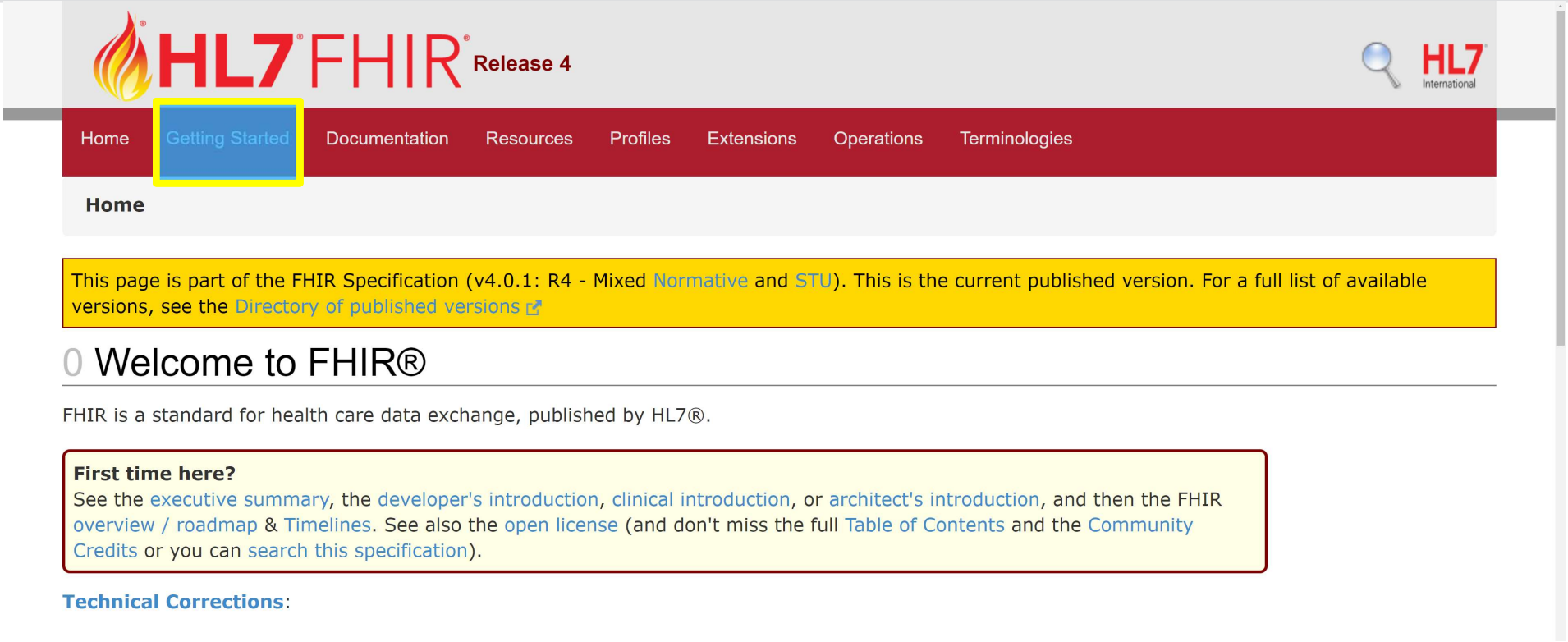
The following versions of the FHIR Specification have been published:

Date	Version	Description	Links
Current Versions			
2019-10-30	4.0.1	FHIR Release #4: First Normative Content	
(current)	(last commit)	Current Development build (about 30min behind change rapidly)	
R5 Sequence (Work in Progress)			
2020-08-20	4.5.0	FHIR Release #5: Preview #3	

Published Version

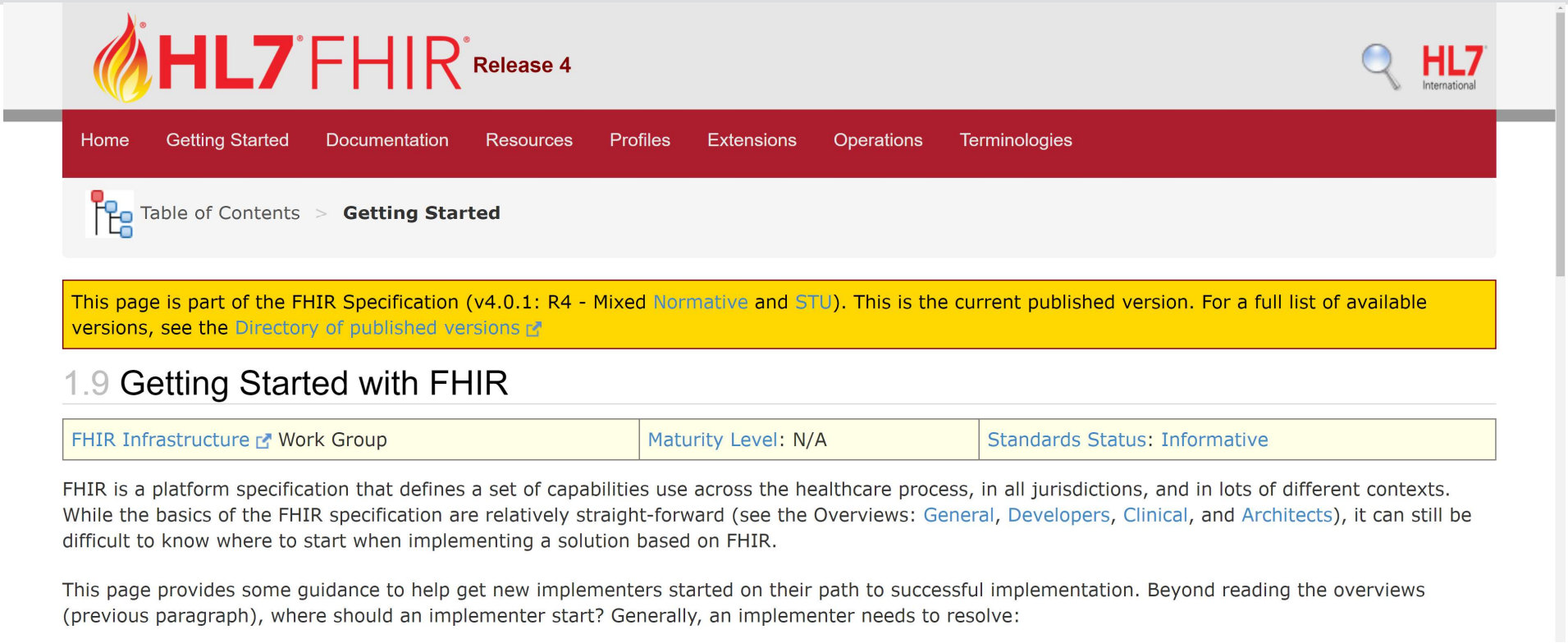
Build Version

FHIR Getting Started

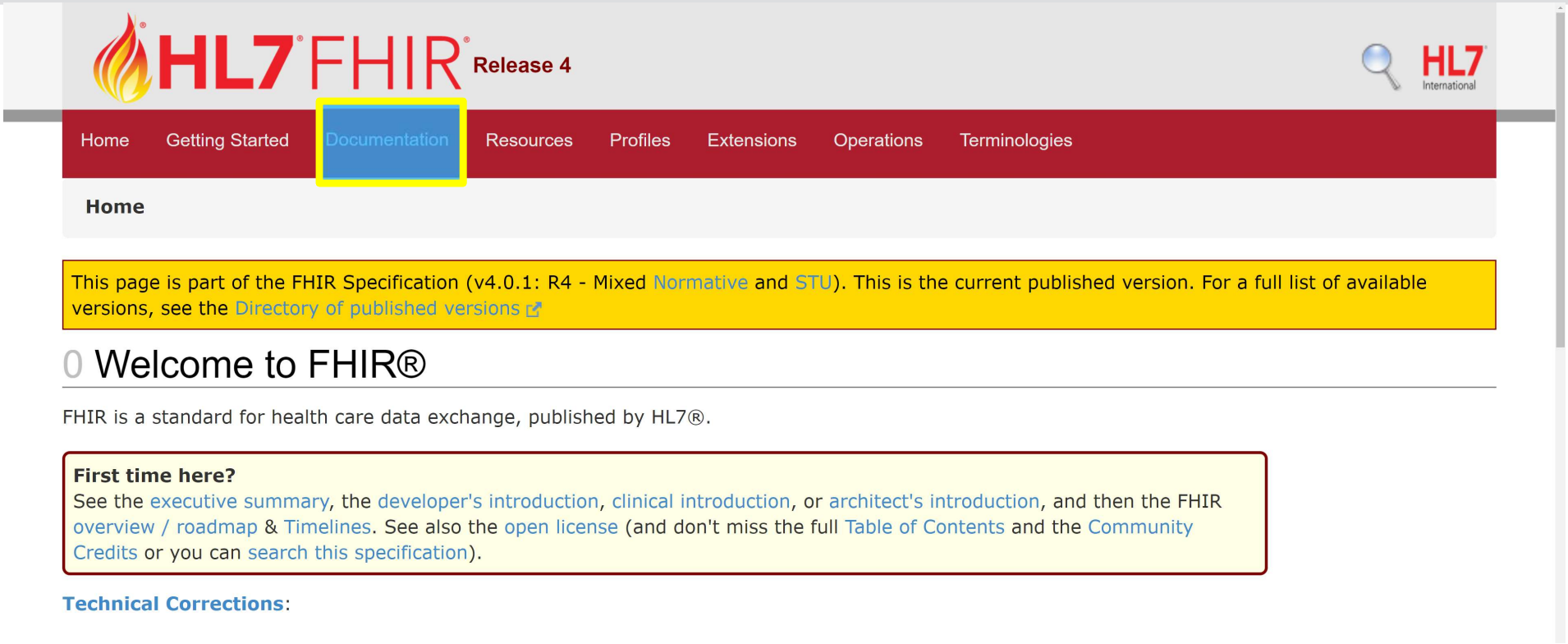


http://hl7.org/fhir/index.html

FHIR Getting Started



FHIR Documentation



http://hl7.org/fhir/index.html

FHIR Documentation

1.1 Documentation Index

FHIR Infrastructure Work Group	Maturity Level: N/A	Standards Status: Informative

This page provides an index to the key commonly used documentation pages for FHIR.

Framework

- Conformance Rules N
- Resource Life Cycles
- References between Resources N
- Compartments
- Narrative N
- Extensibility N
- Formats: N XML N, JSON N, & RDF
- Terminologies N (Code Systems, Value Sets)
- FHIRPath N
- Mappings to other standards

Version Management

- Change Management & Versioning N

Exchanging Resources

- **RESTful API (HTTP)** N
  - Search N (Search Param Registry)
  - Operations N
  - Asynchronous Use
  - Using GraphQL
- Documents
- Messaging
- Services
- Persistence/Data bases

Base Types

- Data Types (Base) N
- Metadata Types N

Adopting & Using FHIR

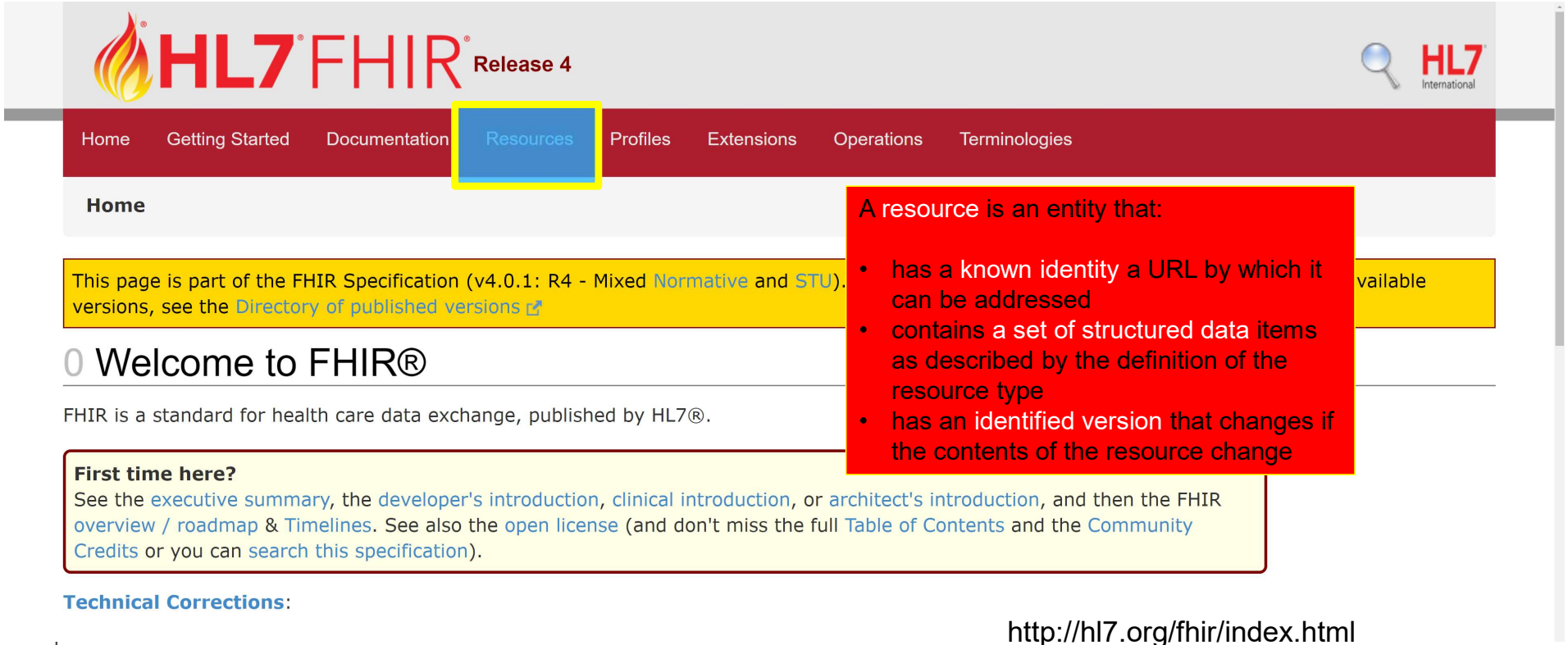
- Profiling FHIR N
- FHIR Workflow
- Downloads - Schemas, Code, Tools
- Managing Multiple FHIR Versions
- Validating Resources
- Best Practices for Implementers
- Mapping Language (tutorial)
- Testing Implementations

Safety & Security

- Security, Security Labels & Signatures
- Clinical Safety

http://hl7.org/fhir/index.html

FHIR Resources



A resource is an entity that:

- has a known identity a URL by which it can be addressed
- contains a set of structured data items as described by the definition of the resource type
- has an identified version that changes if the contents of the resource change

http://hl7.org/fhir/index.html

FHIR Resources

1.2 Resource Index

FHIR Infrastructure Work Group	Maturity Level: N/A	Standards Status: Informative

This page is provided to help find resources quickly. There is also a more detailed classification, ontology, and description. For background to the layout on the layers in this page, see the Architect's Overview. See also the abstract Base Resources Resource and DomainResource.

Categorized | Alphabetical | R2 Layout | By Maturity | Security Category | By Standards Status | By Committee

	Conformance	Terminology	Security	Documents	Othe
Foundation	• CapabilityStatement N • StructureDefinition N • ImplementationGuide 1 • SearchParameter 3 • MessageDefinition 1 • OperationDefinition N • CompartmentDefinition 1 • StructureMap 2 • GraphDefinition 1 • ExampleScenario 0	• CodeSystem N • ValueSet N • ConceptMap 3 • NamingSystem 1 • TerminologyCapabilities 0	• Provenance 3 • AuditEvent 3 • Consent 2	• Composition 2 • DocumentManifest 2 • DocumentReference 3 • CatalogEntry 0	• Basic 1 • Binary N • Bundle N • Linkage 0 • MessageHeader 4 • OperationOutcome • Parameters N • Subscription 3

FHIR Resources – Alphabetical

1.2 Resource Index

FHIR Infrastructure Work Group	Maturity Level: N/A	Standards Status: Informative

This page is provided to help find resources quickly. There is also a more detailed classification, ontology, and description. For background to the layout on the layers in this page, see the Architect's Overview. See also the abstract Base Resources Resource and DomainResource.

Categorized | Alphabetical | R2 Layout | By Maturity | Security Category | By Standards Status | By Committee

Alphabetical

A-D:

- Account 2
- ActivityDefinition 2
- AdverseEvent 0
- AllergyIntolerance 3
- Appointment 3
- AppointmentResponse 3
- AuditEvent 3
- Basic 1
- Binary N

D-L:

- DeviceMetric 1
- DeviceRequest 1
- DeviceUseStatement 0
- DiagnosticReport 3
- DocumentManifest 2
- DocumentReference 3
- EffectEvidenceSynthesis 0
- Encounter 2
- Endpoint 2

M-P:

- Measure 2
- MeasureReport 2
- Media 1
- Medication 3
- MedicationAdministration 2
- MedicationDispense 2
- MedicationKnowledge 0
- MedicationRequest 3
- MedicationStatement 3

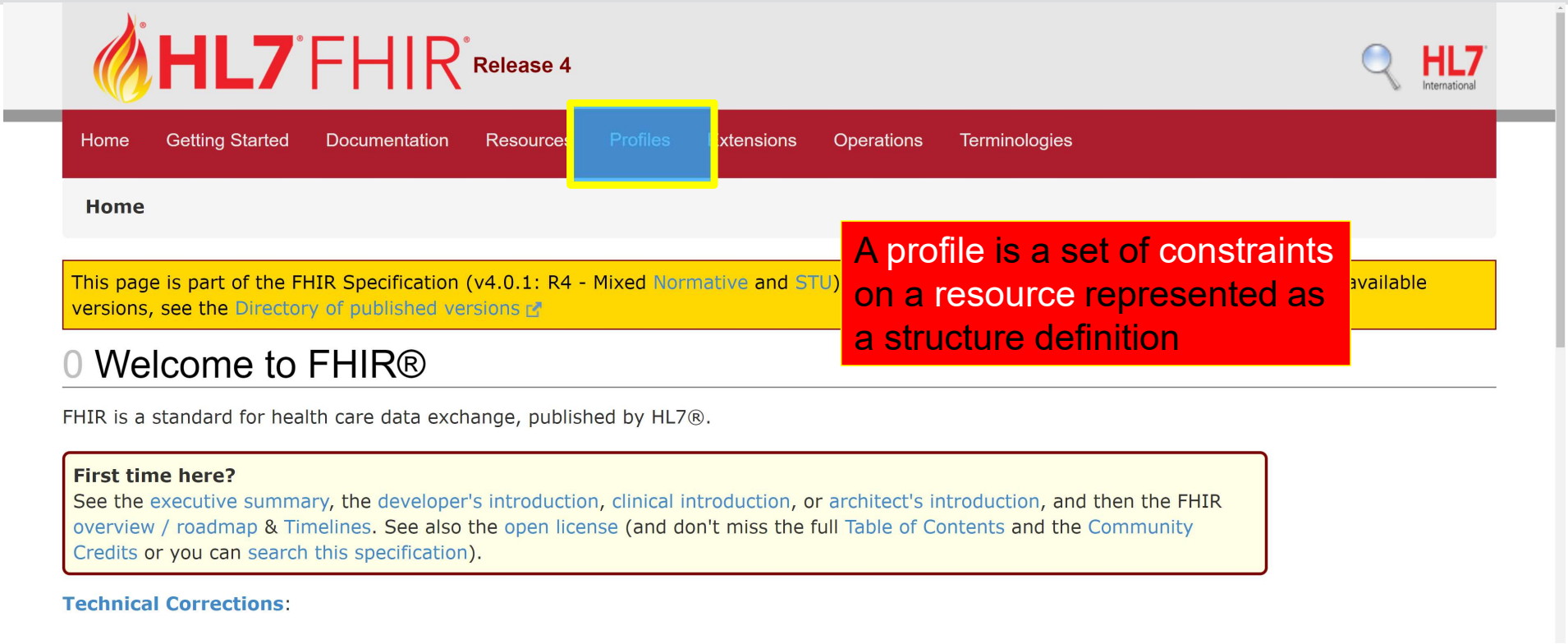
P-Z:

- PractitionerRole 2
- Procedure 3
- Provenance 3
- Questionnaire 3
- QuestionnaireResponse 3
- RelatedPerson 2
- RequestGroup 2
- ResearchDefinition 0
- ResearchElementDefinition 0

FHIR Maturity Model

- Draft
  - FMM0 = the artifact has been published on the current build. This level is synonymous with Draft.
- STU
  - FMM1 = FMM0 + the artifact produces no warnings during the build process and the responsible WG has indicated that they consider the artifact substantially complete and ready for implementation. For resources, profiles and implementation guides, the FHIR Management Group has approved the underlying resource/profile/IG proposal.
  - FMM2 = FMM1 + the artifact has been tested and successfully supports interoperability among at least three independently developed systems leveraging most of the scope (e.g. at least 80% of the core data elements) using semi-realistic data and scenarios based on at least one of the declared scopes of the artifact (e.g. at a connectathon). These interoperability results must have been reported to and accepted by the FMG
  - FMM3 = FMM2 + the artifact has been verified by the work group as meeting the Conformance Resource Quality Guidelines; has been subject to a round of formal balloting; has at least 10 distinct implementer comments recorded in the tracker drawn from at least 3 organizations resulting in at least one substantive change
  - FMM4 = FMM3 + the artifact has been tested across its scope (see below), published in a formal publication (e.g. STU), and implemented in multiple prototype projects. As well, the responsible work group agrees the artifact is sufficiently stable to require implementer consultation for subsequent non-backward compatible changes.
  - FMM5 = FMM4 + the artifact has been published in two formal publication release cycles at FMM1+ (i.e. STU level) and has been implemented in at least 5 independent production systems in more than one country
- Normative
  - FMM6 = FMM5 + the responsible work group and the FMG agree the material is ready to lock down and the artifact has passed HL7 normative ballot

FHIR Profiles



http://hl7.org/fhir/index.html

FHIR Profiles

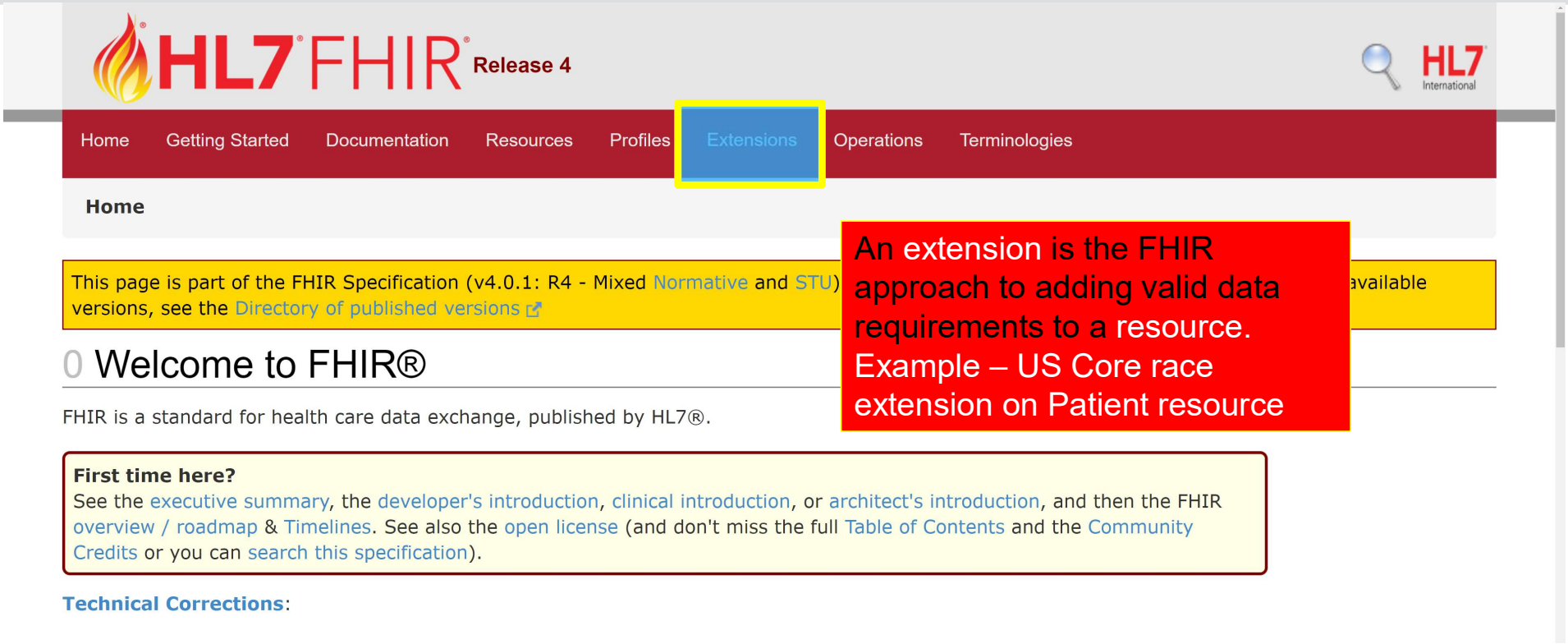
1.3 Profiles defined as part of FHIR

FHIR Infrastructure Work Group	Maturity Level: N/A	Standards Status: Informative

This specification is a common platform standard that must be adapted to particular use cases. Some particular use cases are common or important enough to be described as a part of the specification itself. These are published as groups of Structure Definitions (profiles or extensions), which are often found in implementation guides, along with Value Sets, newly defined search parameters and examples that are all defined with a common purpose. Additional profiles and extensions may be registered on the HL7 FHIR registry at http://registry.fhir.org

Name	Description	Kind	FMM
General			
EHRS FM Record Lifecycle Event - Audit Event	Defines the elements to be supported within the AuditEvent resource in order to conform with the Electronic Health Record System Functional Model Record Lifecycle Event standard	profiles	
Clinical Reasoning Extensions	Defines common extensions used by the Clinical Reasoning Module.	extensions	
Common extensions for Coding data type	Defines "common" extensions for use with the DataElement data type	extensions	
Common extensions for ContactPoint data type	Defines "common" extensions for use with the ContactPoint data type	extensions	
Element-definition Extensions for use by FHIR Implementers	A set of extensions that constrain data elements, whether used in DataElements, StructureDefinitions or Questionnaires	extensions	
ISO 11179 Element Definition Profile	A profile showing how to use ElementDefinition to express 11179 Data_Element and Concept_Elements. At present, the profile is a partially complete place holder	extensions	

FHIR Extensions



An extension is the FHIR approach to adding valid data requirements to a resource. Example – US Core race extension on Patient resource

http://hl7.org/fhir/index.html

FHIR Extensions

1.4 FHIR Core-defined Extension Registry

FHIR Infrastructure Work Group	Maturity Level: N/A	Standards Status: Informative

All extensions in this list are defined in this specification and have a base URI of `http://hl7.org/fhir/StructureDefinition/`. Additional extensions can be registered on the HL7 FHIR registry at http://hl7.org/fhir/registry.

Identity	Conf.	Type	Context	FMM
capabilities	0..*	code	CapabilityStatement.rest.security	1
oauth-uris	0..1	(complex)	CapabilityStatement.rest.security	1
11179-objectClass	0..1	Coding	ElementDefinition.mapping	1
11179-objectClassProperty	0..1	Coding	ElementDefinition.mapping	1
11179-permitted-value-conceptmap	0..1	canonical	StructureDefinition.snapshot.element.binding.valueSet, StructureDefinition.differential.element.binding.valueSet, Questionnaire.item.answerValueSet	1
11179-permitted-value-valueset	0..1	canonical	StructureDefinition.snapshot.element.binding.valueSet, StructureDefinition.differential.element.binding.valueSet, Questionnaire.item.answerValueSet	1
DiagnosticReport-geneticsAnalysis	0..*	(complex)	DiagnosticReport	1
DiagnosticReport-geneticsAssessedCondition	0..*	Reference	DiagnosticReport	1

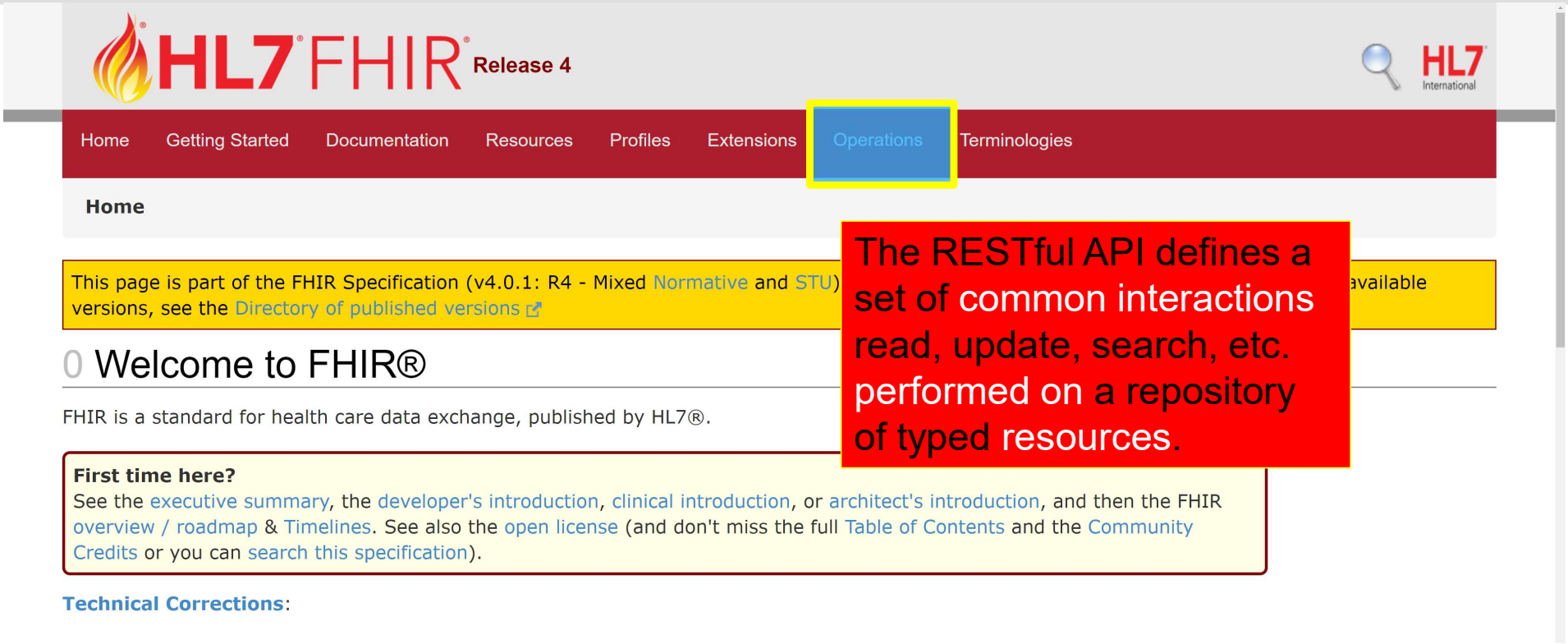
US Core Patient Profile

This profile builds on Patient

Text Summary | **Differential View** | Full View | All Views

Name	Flags	Card.	Type	Description & Constraints
Patient		0..*	Patient	Information about an individual or animal receiving health care services
us-core-race	S	0..1	(Complex)	US Core Race Extension **URL:** http://hl7.org/fhir/us/core/StructureDefinition/us-core-race
us-core-ethnicity	S	0..1	(Complex)	US Core ethnicity Extension **URL:** http://hl7.org/fhir/us/core/StructureDefinition/us-core-ethnicity
us-core-birthsex	S	0..1	code	Extension **URL:** http://hl7.org/fhir/us/core/StructureDefinition/us-core-birthsex **Binding:** Birth Sex (required)
identifier	S	1..*	Identifier	An identifier for this patient
system	S	1..1	uri	The namespace for the identifier value
value	S	1..1	string	The value that is unique within the system.
name	S I	1..*	HumanName	A name associated with the patient **us-core-8:** Either Patient.name.given and/or Patient.name.family SHALL be present or a Data Absent Reason Extension SHALL be present.
family	S I	0..1	string	Family name (often called 'Surname')
given	S I	0..*	string	Given names (not always 'first'). Includes middle names
telecom	S	0..*	ContactPoint	A contact detail for the individual

FHIR Operations



The RESTful API defines a set of common interactions read, update, search, etc. performed on a repository of typed resources.

http://hl7.org/fhir/index.html

FHIR Operations

1.5 Defined RESTful API Operations

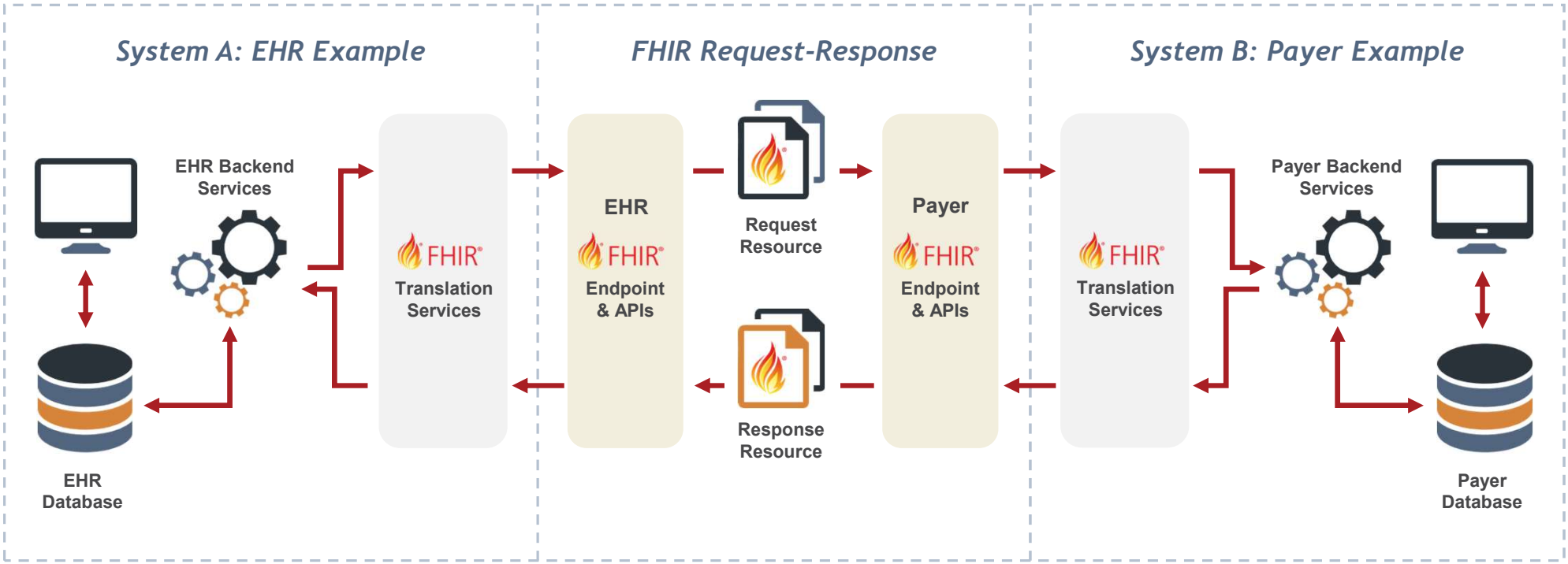
FHIR Infrastructure Work Group	Maturity Level: N/A	Standards Status: Informative

The RESTful API defines a set of common interactions (read, update, search, etc.) performed on a repository of typed resources. For further information concerning how operations are defined and invoked, see Extended Operations on the RESTful API.

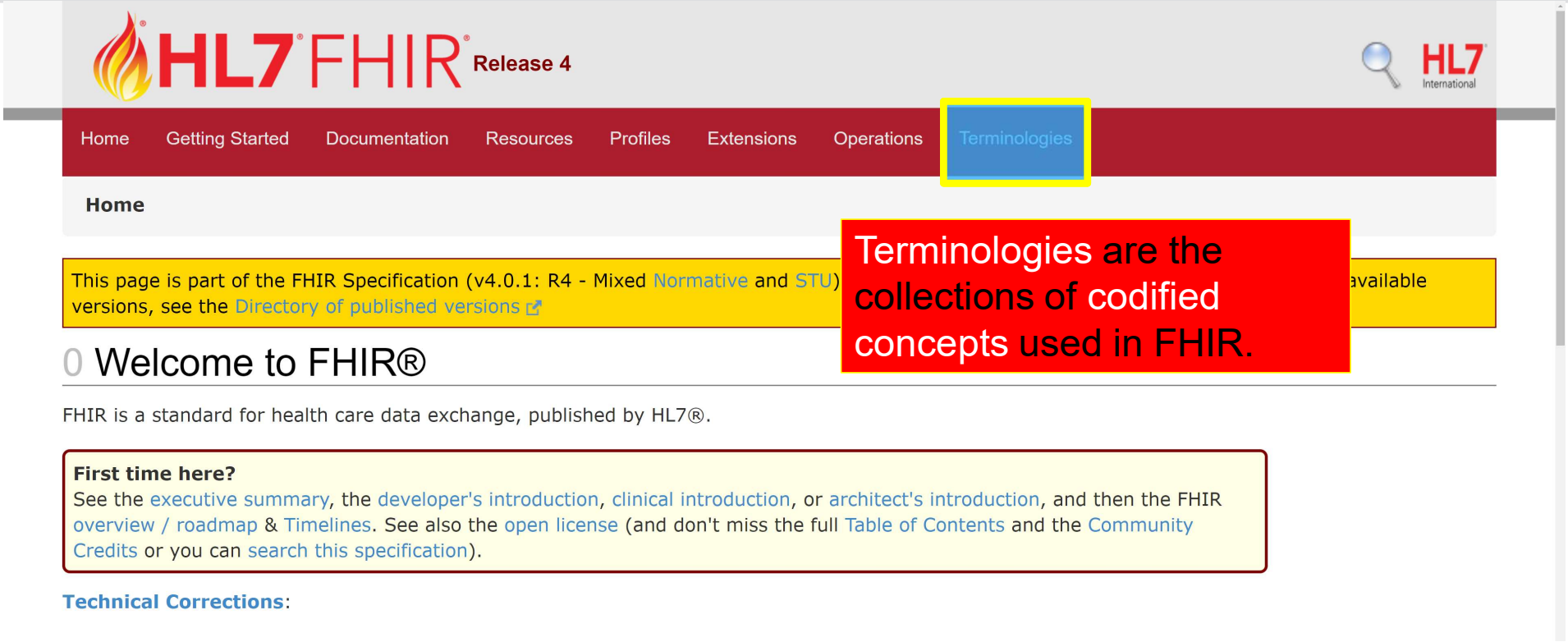
This is a full list of the operations defined by this specification:

Base Operations (All resource types)	
Validate a resource	[base]/[Resource]/$validate \| [base]/[Resource]/[id]/$validate
Access a list of profiles, tags, and security labels	[base]/$meta \| [base]/[Resource]/$meta | [base]/[Resource]/[id]/$meta
Add profiles, tags, and security labels to a resource	[base]/[Resource]/[id]/$meta-add
Delete profiles, tags, and security labels for a resource	[base]/[Resource]/[id]/$meta-delete
Convert from one form to another	[base]/$convert
Execute a graphql statement	[base]/$graphql \| [base]/[Resource]/[id]/$graphql
Return a graph of resources	[base]/[Resource]/[id]/$graph
Operations Defined by Resource Types	
Apply	[base]/ActivityDefinition/$apply \| [base]/ActivityDefinition/[id]/$apply
Data Requirements	[base]/ActivityDefinition/[id]/$data-requirements
Fetch a subset of the CapabilityStatement resource	[base]/CapabilityStatement/$subset \| [base]/CapabilityStatement/[id]/$subset

Reference/Pilot Implementation
RESTful Architecture Model



FHIR Terminologies



http://hl7.org/fhir/index.html

FHIR Terminologies

4.3.0 Code Systems

Vocabulary Work Group	Maturity Level: 3	Standards Status: Trial Use

The following names (URIs) may be used in the *system* element of the Coding data type. If a URI is defined here, it SHALL be used in preference to any other identifying mechanisms. If a code system is not listed here, the correct URI may be determined by working through the following list, in order:

- the HL7 OID Registry
- the documentation associated with the code system
- consulting the owner of the code system
- asking on the HL7 vocabulary mailing list

See also the list of known identifier systems that can be used in the *system* element of the Identifier data type. Additional identifier systems may be registered on the HL7 FHIR registry at http://hl7.org/fhir/registry.

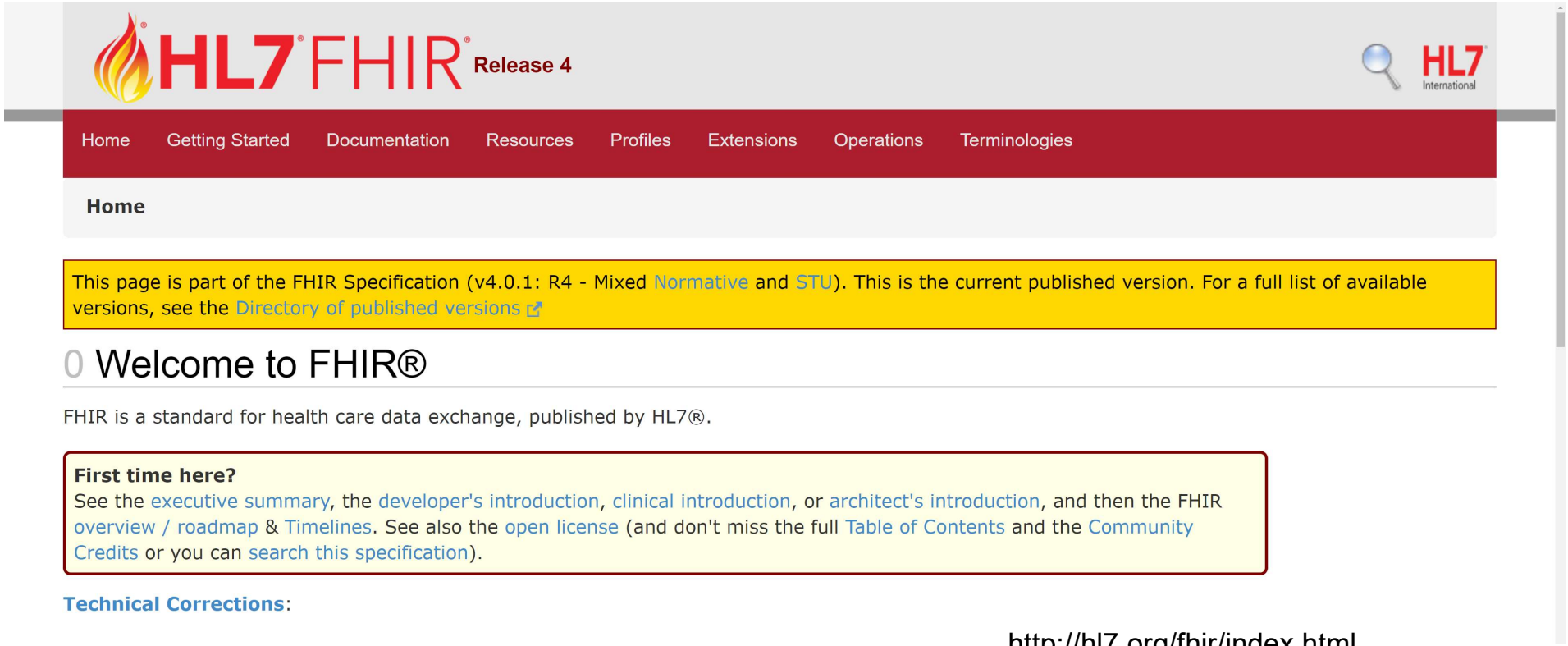
Important Notes:

- This list of names is incomplete and subject to change. Some values may be dropped, and others will likely be added in the coming months as HL7 institutes formal processes around URIs in vocabulary
- Note that some of the URNs in this list follow the URN specification in RFC 5141 for referring to standards published by ISO, such as urn:iso:std:iso:11073:10101. Where ISO standards define codes with meanings, and there is no entry in the list above, and they are not registered in the HL7 OID registry, the default URN for the code system is that defined by the RFC 5141.
- For several of the code systems in this list, multiple systems are given. This means that the variants identified are different code systems, not just

External | Internal (FHIR) | External (FHIR) | HL7 v3 | HL7 v2

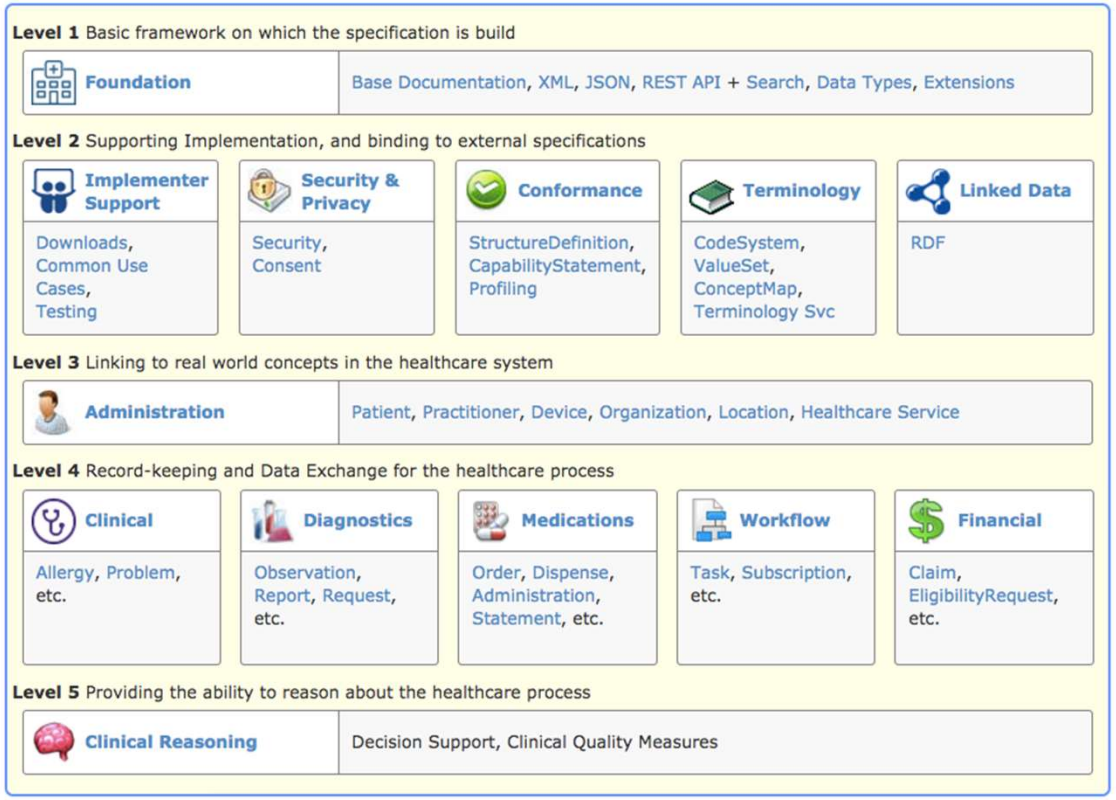
URI	Source	Comment	OID (for non-FHIR systems)
Externally Published code systems			
http://snomed.info/sct	SNOMED CT (IHTSDO)	See Using SNOMED CT with FHIR	2.16.840.1.113883.6.96
http://www.nlm.nih.gov/research/umls/rxnorm	RxNorm (US NLM)	See Using RxNorm with FHIR	2.16.840.1.113883.6.88
http://loinc.org	LOINC (LOINC.org)	See Using LOINC with FHIR	2.16.840.1.113883.6.1
http://unitsofmeasure.org	UCUM: (UnitsOfMeasure.org) Case Sensitive Codes	See Using UCUM with FHIR	2.16.840.1.113883.6.8
http://ncimeta.nci.nih.gov	NCI Metathesaurus	See Using NCI Metathesaurus with FHIR	2.16.840.1.113883.3.26.1.2
http://www.ama-assn.org/go/cpt	AMA CPT codes	See Using CPT with FHIR	2.16.840.1.113883.6.12
http://hl7.org/fhir/ndfrt	NDF-RT (National Drug File – Reference Terminology)	See Using NDF-RT with FHIR	2.16.840.1.113883.6.209
http://fdasis.nlm.nih.gov	Unique Ingredient Identifier (UNII)	See Using UNII with FHIR	2.16.840.1.113883.4.9
http://hl7.org/fhir/sid/ndc	NDC/NHRIC Codes	See Using NDC with FHIR	2.16.840.1.113883.6.69
http://hl7.org/fhir/sid/cvx	CVX (Vaccine Administered)	See Using CVX with FHIR	2.16.840.1.113883.12.292

FHIR Modules



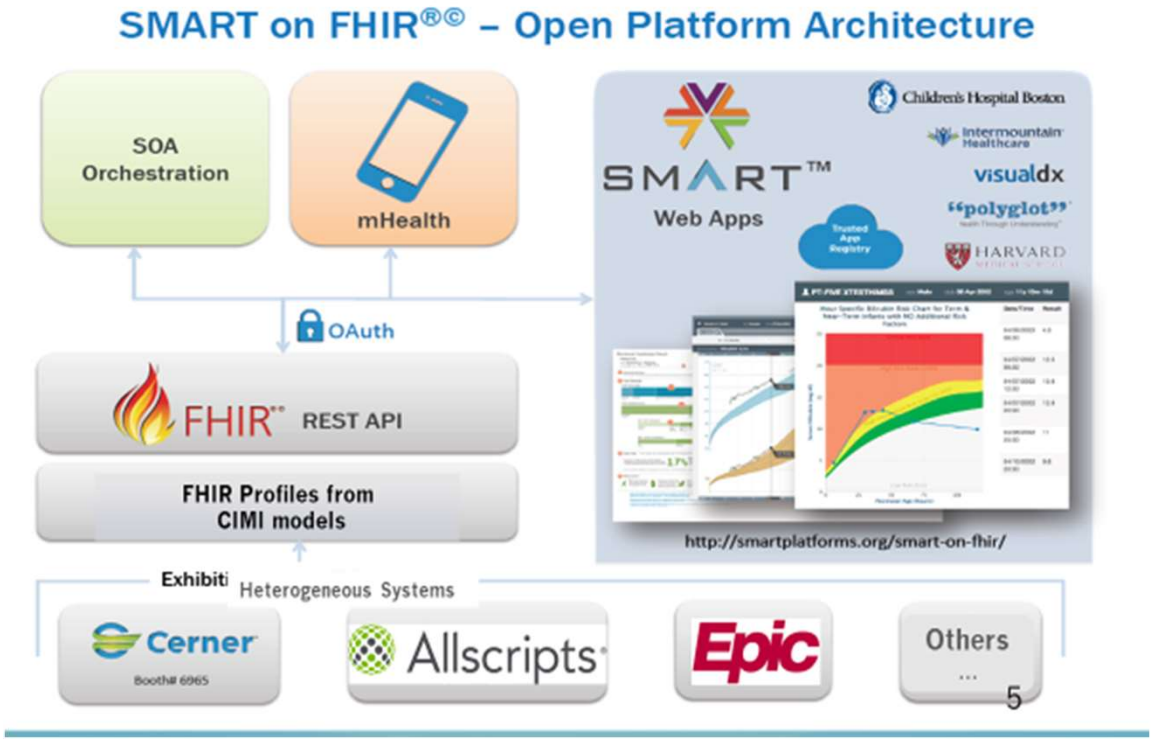
http://hl7.org/fhir/index.html

Levels



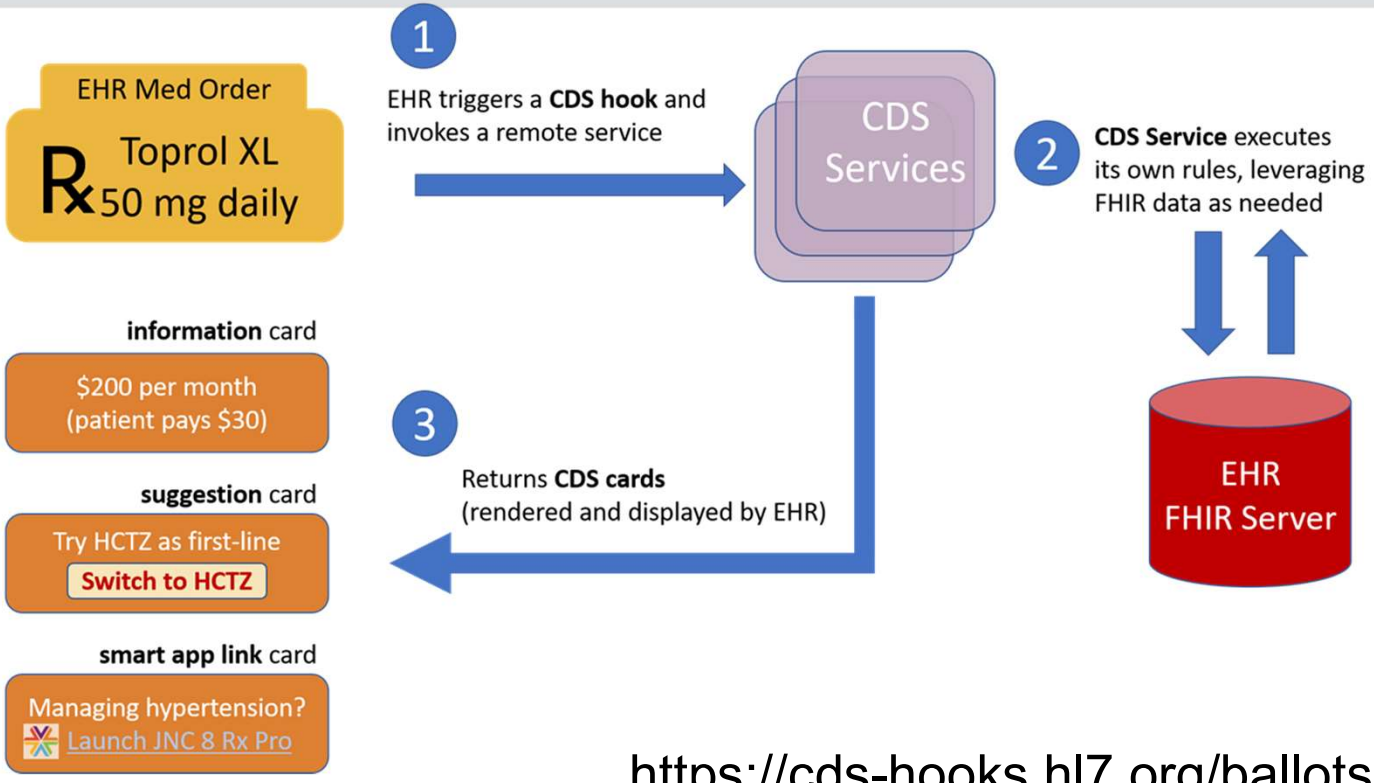
http://hl7.org/fhir/index.html

SMART on FHIR



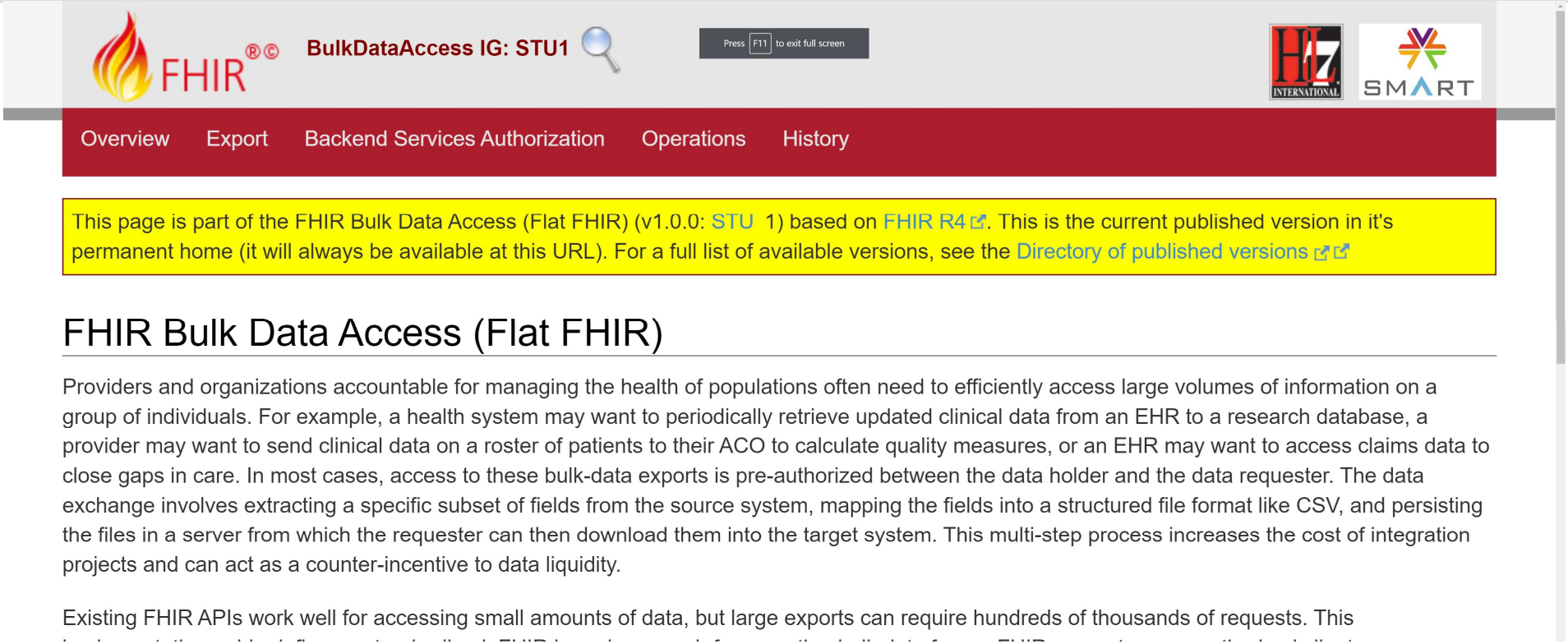
http://hl7.org/fhir/smart-app-launch/1.0.0/

CDS-Hooks

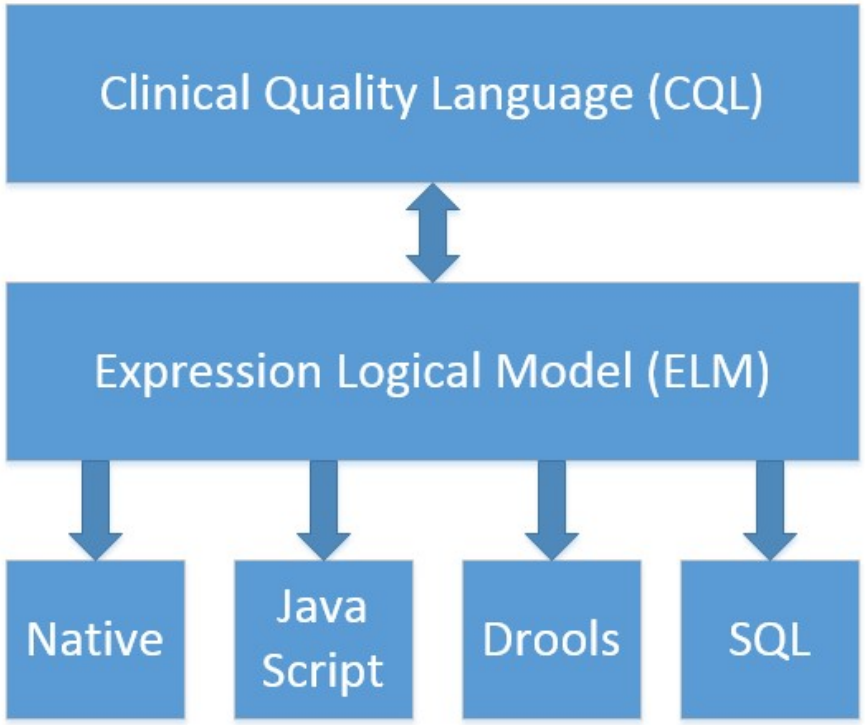


https://cds-hooks.hl7.org/ballots/2020Sep/

FHIR Bulk Data Access



Clinical Quality Language CQL



Authors use CQL to produce libraries containing human-readable yet precise logic.

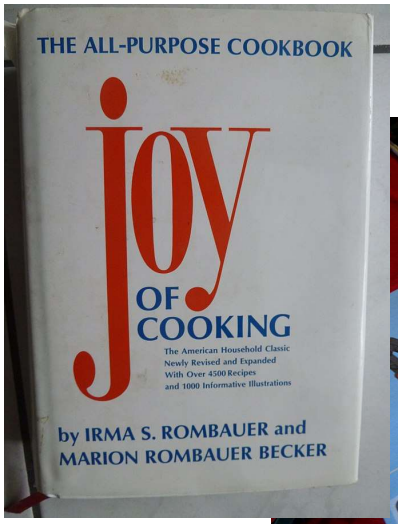
ELM XML documents contain machine-friendly rendering of the CQL logic. This is the intended mechanism for distribution of libraries.

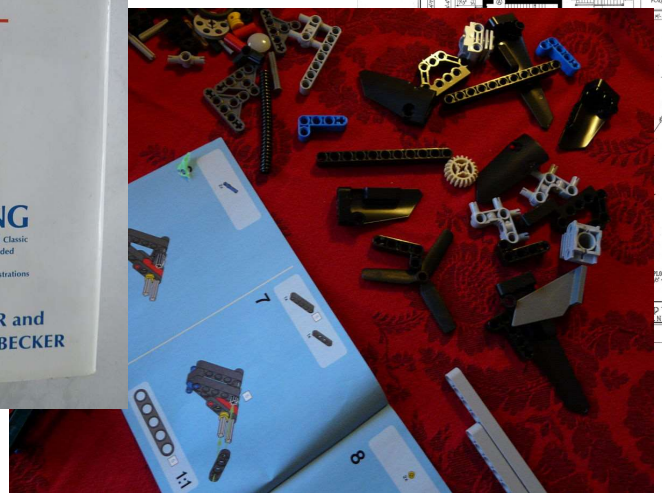
Implementation environments will either directly execute the ELM, or perform translation from ELM to their target environment language.

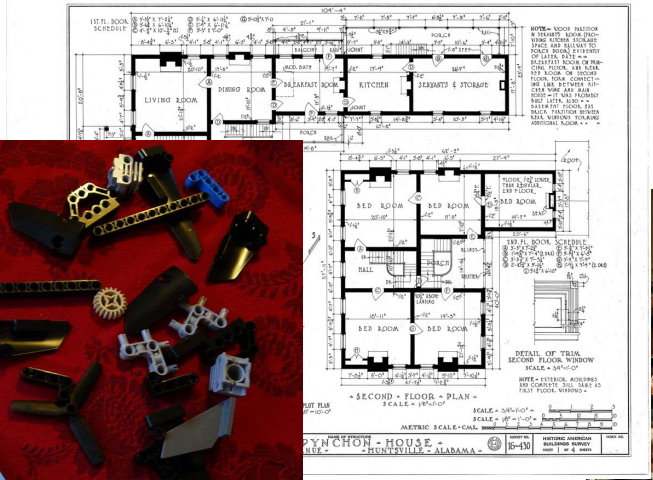
https://cql.hl7.org/index.html

Implementation Guides

Why do we need Implementation Guides?







What is a FHIR Implementation Guide?

An implementation guide (IG) is a 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. Classically, FHIR implementation guides are published on the web after they are generated using the FHIR Implementation Guide Publisher.

Major Components of an Implementation Guide

- Framework/Guidance
- Use cases and examples
- FHIR Artifacts – e.g. profiles, operations, terminology
- Conformance language and CompatibilityStatement
- Some variation between guides

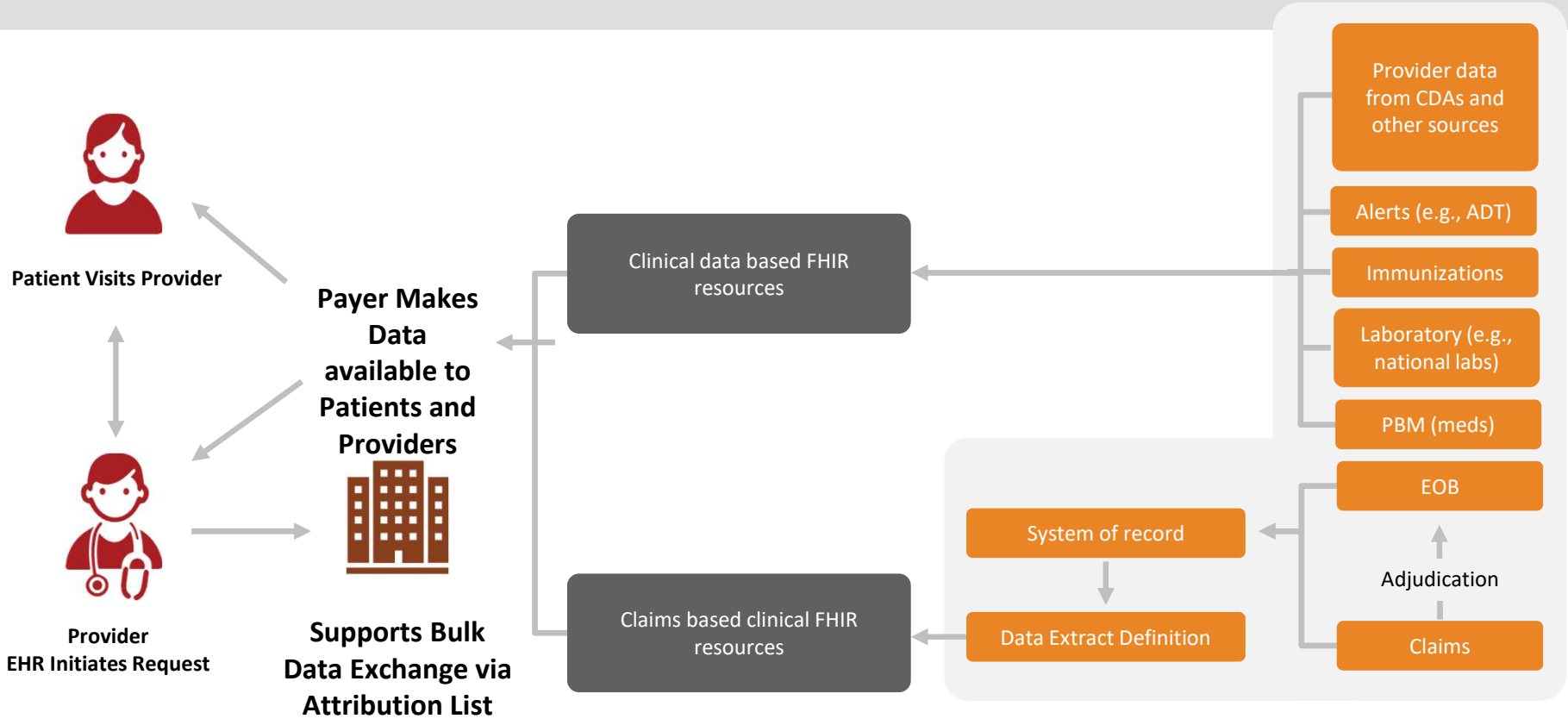
Business → Technical

Reviewing an IG

- Workflow context
- Required resources, profiles, data elements, value sets, etc.
- Technical and exchange interactions
- Additional required technologies
- Dependencies on other IGs
- Conformance and CapabilityStatement

Example Scenarios

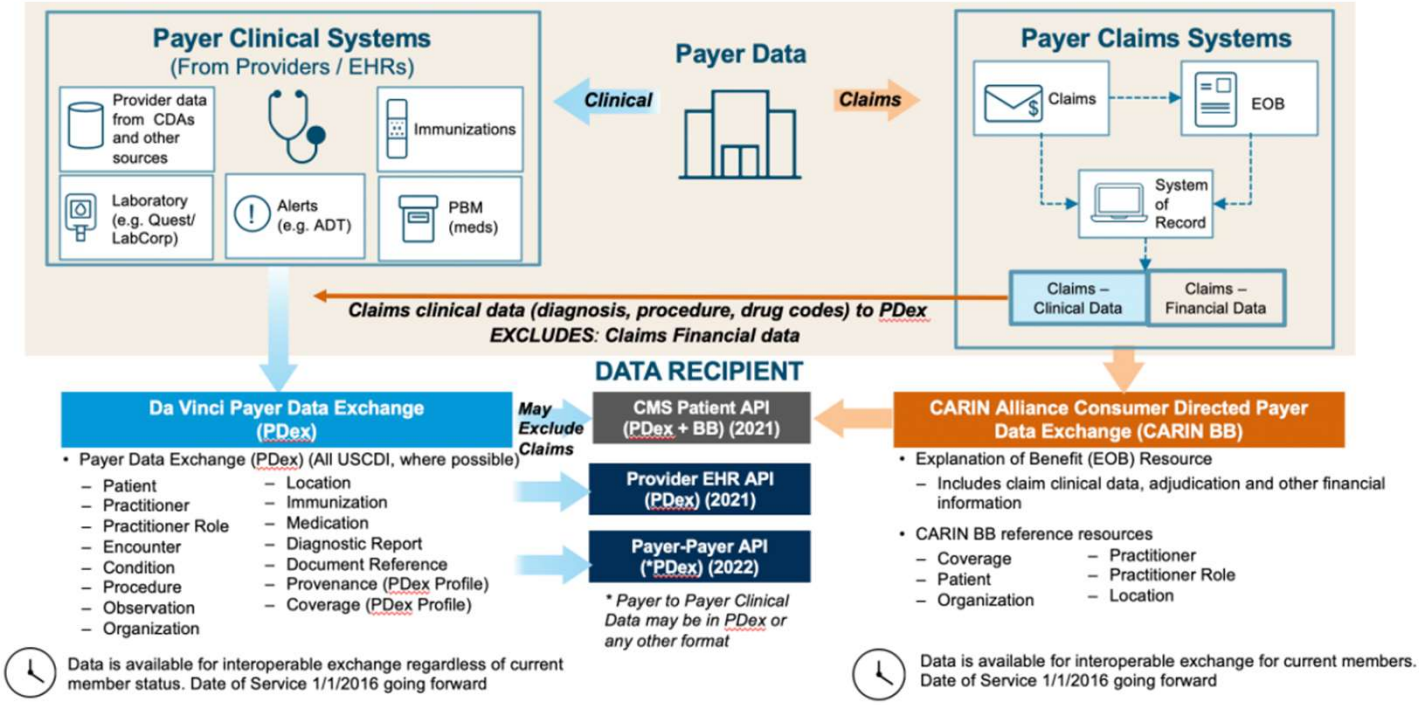
Patient and Provider Access APIs (PDex)



PDex Information Sources/Flow

PAYER DATA EXCHANGE (PDex)

Data Associated With Payers Meeting the Administrative/Financial and Clinical Requirements of the Interoperability Exchange



Why should the policy community understand FHIR?

Structured vs Unstructured Data

Question. Are impacted payers required to **convert** large unstructured documents like portable document formats (**PDF**) to Fast Healthcare Interoperability Resources (FHIR) to support the clinical data exchange requirements of the Patient Access API? In other words, are impacted payers required to convert documents to FHIR to **identify clinical data elements** that may or may not be present on a PDF or fax?

Response. …Patient Access API must meet the technical standards as finalized by HHS in the ONC 21st Century Cures Act final rule…CMS does not require payers to manually go through large files that cannot be parsed into data elements efficiently for the purposes of this API. The final rule did not require payers to include these large files as data available via the API.

https://www.cms.gov/files/document/faqs-interoperability-patient-access-and-cop-event-notifications-may-2021.pdf

Authorization

Question: Does the final rule allow payers impacted by the payer-to-payer data exchange requirements to accept another payer's requests for a payer-to-payer data exchange on behalf of a member? Can a health plan be considered the enrollee's personal representative for the purpose of payer-to-payer data exchange?

Response: ..final rule (CMS-9115-F) imposes a requirement for certain impacted payers to send, at a current or former enrollee's request (or at the request of a personal representative)… Per the … (HIPAA) privacy regulations at 45 CFR § 164.502(g), a personal representative is someone authorized under state or other applicable law to act on behalf of the individual in making health care related decisions (such as a parent, guardian, or person with a medical power of attorney). … However, a health plan cannot be considered an enrollee's personal representative

https://www.cms.gov/files/document/faqs-interoperability-patient-access-and-cop-event-notifications-may-2021.pdf

Compliance and Testing

Question: Does CMS require certification to determine if a payer's APIs comply with the requirements of the Interoperability and Patient Access final rule?

Response: No, CMS does not require that payers certify their APIs as part of the requirements… However, these impacted payers are required to conduct routine testing and monitoring, and update their systems as appropriate, to ensure the API functions properly, including conducting assessments to verify that the API is fully and successfully implementing privacy and security features such as those required to comply with HIPAA requirements…

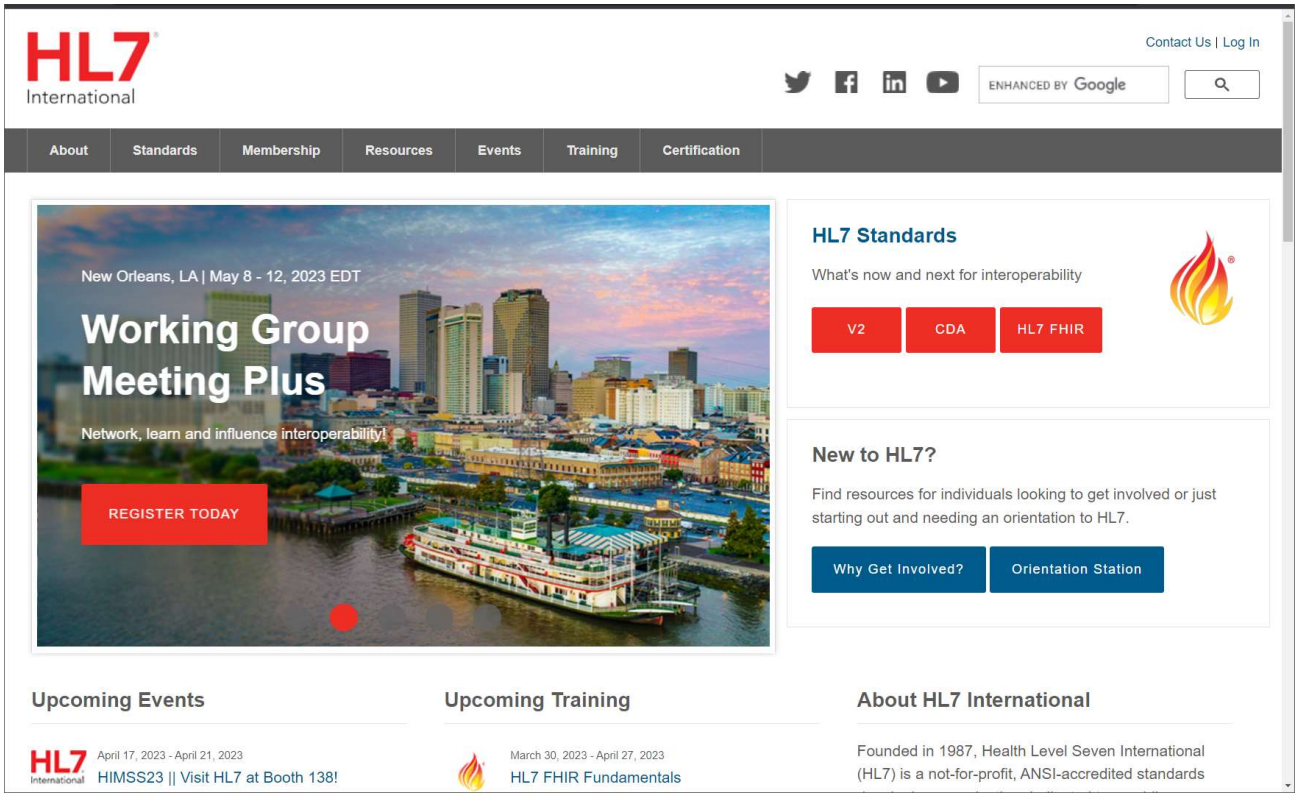
Maintained Data

Question. What is the requirement for impacted payers to maintain their data? Please clarify the intended meaning of the word “maintain.”

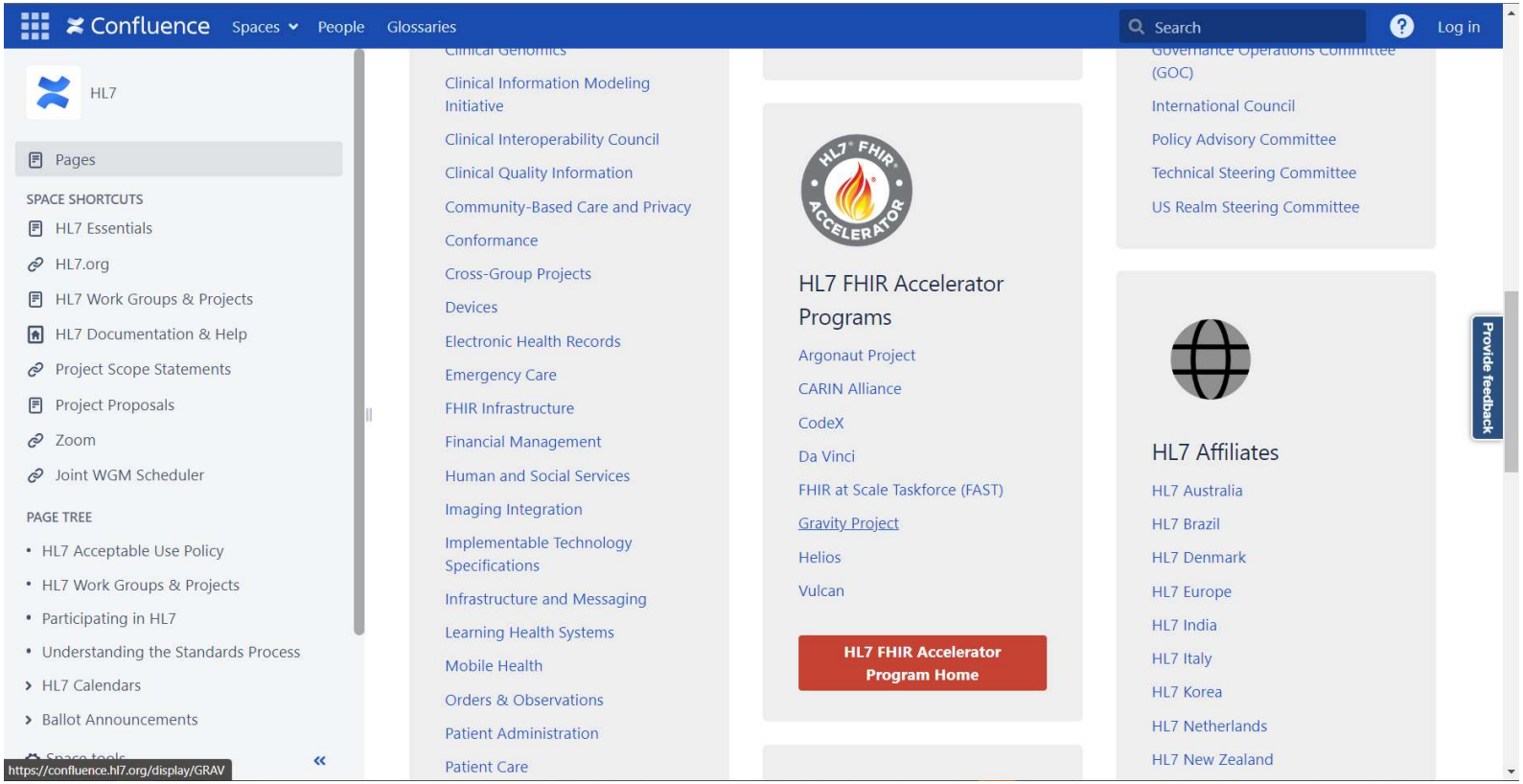
Response. The Interoperability and Patient Access final rule (CMS-9115-F) defines ‘‘maintain’’ to mean the impacted payer has access to the data, control over the data, and authority to make the data available through the API (85 FR 25538). Payers are only required to make the data that they maintain in their systems available through the Patient Access API and for exchange with other payers. If a payer does not maintain clinical information for covered patients in its systems, the payer will not have to share clinical information through the Patient Access API or for exchange with other payers.

How to Participate in the HL7 Community

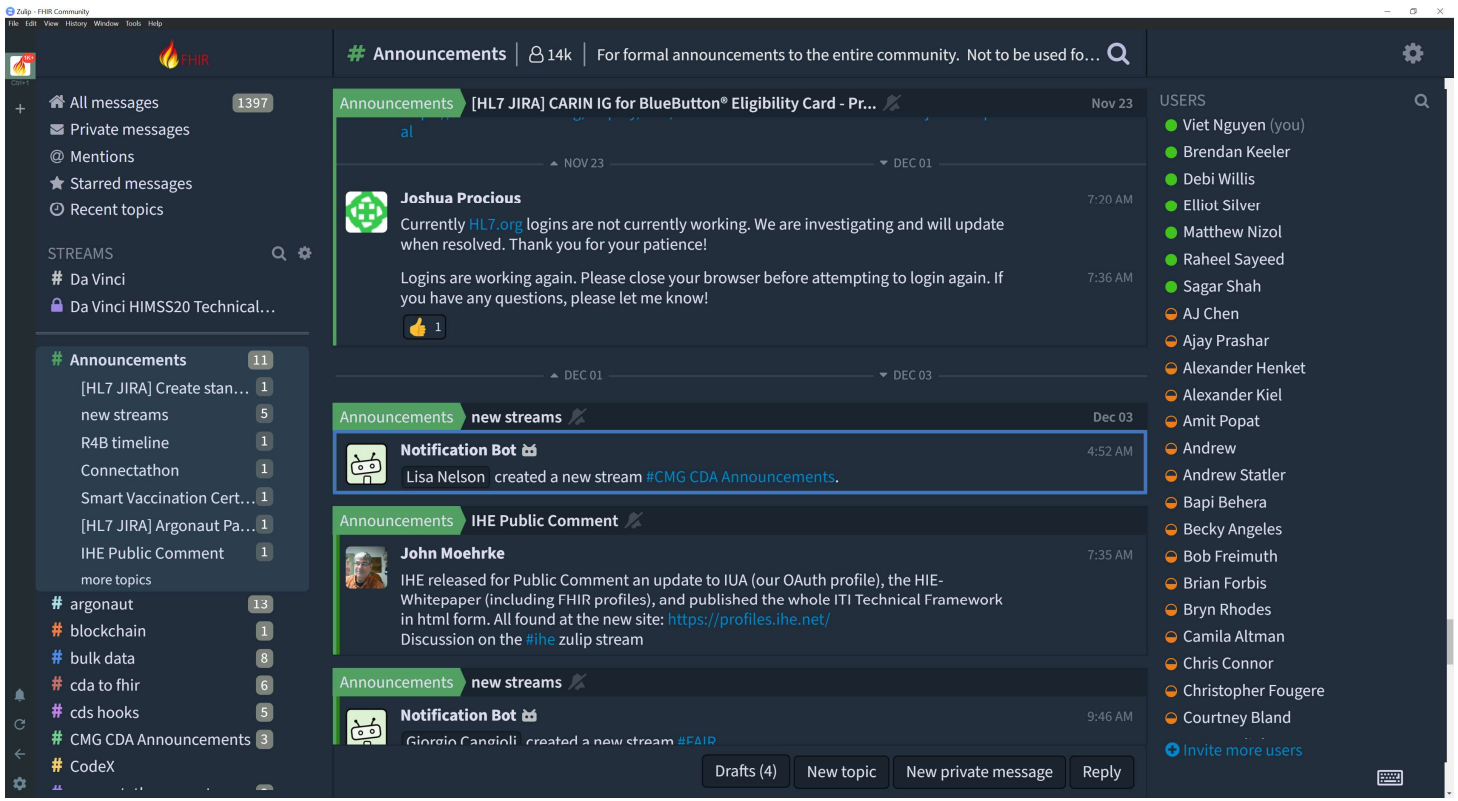
HL7.org


HL7
International
Contact Us | Log In
ENHANCED BY Google
About
Standards
Membership
Resources
Events
Training
Certification
New Orleans, LA | May 8 - 12, 2023 EDT
Working Group Meeting Plus
Network, learn and influence interoperability!
REGISTER TODAY
HL7 Standards
What's now and next for interoperability
V2
CDA
HL7 FHIR
New to HL7?
Find resources for individuals looking to get involved or just starting out and needing an orientation to HL7.
Why Get Involved?
Orientation Station
Upcoming Events
April 17, 2023 - April 21, 2023
HIMSS23 || Visit HL7 at Booth 138!
Upcoming Training
March 30, 2023 - April 27, 2023
HL7 FHIR Fundamentals
About HL7 International
Founded in 1987, Health Level Seven International (HL7) is a not-for-profit, ANSI-accredited standards

Confluence.HL7.org



Chat.fhir.org – FHIR Implementers



The Role of Policy in the Advancement of Healthcare Interoperability Standards Development and Adoption

Whatever your role is, the WGM+ has content for you!

- Keynotes from policy leaders
- Accelerator updates and working sessions
- Expanded education and demo sessions
- Implementation Guide deep dives
- Hot topics in the FHIR community
- And more!

More Info

HL7 International

Thank you!