

FHIR R5

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FHIR Release History

- R1: Sept 2014
- R2: Oct 2015 (13 months)
- R3: April 2017 (18 months)
- **R4: Dec 2018 (20 months) – First Normative Content**
- R5: Oct 2020? (22 months?)

What does Normative mean?

- In theory, Normative means: “No Breaking Change”
- In practice:
 - “forwards compatible”
 - An application that is conformant will remain conformant
 - Limit: rejecting unknown elements
 - Some aspects of specification: unknown
- Qualification: “unless no one is using feature, and no one objects”
- Rules do not apply to external content
- Further Clarification expected in R5

FHIR Maturity Model

- Level 0 = first draft
- Levels 1 – 3: working through HL7's review / testing process
- Level 4 – 5: trailing in real world implementations
- Normative: No longer subject to breaking change
 - Reflects Tuckman's stages of group development: Forming, Storming, Norming, Performing
- General R5 Plan: move everything along this list.
- Cull what doesn't move ?

Normative Candidates

- AllergyIntolerance
- AuditEvent
- CareTeam
- Claim
- ClaimResponse
- ConceptMap
- Condition
- Consent
- CoverageEligibilityRequest
- CoverageEligibilityResponse
- Device
- DiagnosticReport
- DocumentReference?
- Encounter
- ExplanationOfBenefit
- ImagingStudy
- ImplementationGuide
- Location
- Medication
- MedicationRequest
- MedicationStatement
- Organization
- PaymentNotice
- PaymentReconciliation
- Practitioner
- PractitionerRole
- Procedure
- Provenance
- Questionnaire
- QuestionnaireResponse
- SearchParameter
- Subscription
- VisionPrescription
- Some Documentation Pages

R5 Agenda

- Moving more content to formal Normative status
- Further improving the support for publishing implementation guides
- Adding additional content in newly developing domains
- Improving support for applications using multiple FHIR releases seamlessly, and also multi-language support and federated servers
- Adding new facilities for migrating data to and from v2 messages and CDA documents

R5 Survey

- We will survey the market in August 2019
- How are you using FHIR?
- What resources are you using?
 - Profiles and Extensions...
- Do you have an opinion on when we should publish R5?
- Question about renaming MedicationStatement to MedicationUsage and DocumentReference to ContentReference(?) + any FMM required questions

Definition Process

- A lot of work around workflow patterns
- Elevate W5 to a formal logical model
 - Generate Code for logical models as façades on resources
- Additional quality and consistency work in the resource definitions
 - Leverage RDF definitions in this work
- More mappings to definitional resources
 - Including SNOMED CT
- Develop Patterns

Patterns

- Two uses for Patterns:
 - Design Time consistency
 - Run time code re-use
- <http://build.fhir.org/patterns.html> - work in progress

Implementation Support

- Deep investment in Implementation Guides & Eco-system
- Multiple Versions, Multiple Languages, Data Transformation
- Domain Areas identified:
 - Imaging related workflows
 - Bio-surveillance and morbidity/mortality reporting
 - Prior authorization / financial processes
 - Genomic reporting specifications
 - Translational science → operational healthcare
 - Provide access to the complete medical record

Further Development

- Smart App Launch (v2)
- CDS Hooks
- FHIRCast
- CQL
- (Bulk Data)

FHIR Community Process

- Basic Open Development Process for all public IGs to follow
 - HL7 + Affiliates
 - IHE, SNOMED, National Standards Organizations
 - Argonaut, Carin Alliance, Carequality
- Basic principles HL7 works under
 - open, transparent, comment from anyone, ongoing maintenance/escrow
 - Publish through standard publishing mechanism / registries
- Participants get a set at a coordination council (national variants)
- Participants can use a FHIR Community Process trademark
 - Both Specifications and marketing material

Personal Todo List

- Clinical Safety
- Consent (Server API)
- Subscription
- Custom Resources
- registry.fhir.org
- More FHIR x-version support
- Tx Service support for CDA/v2
- CapabilityStatement rework
- Technical Corrections R2/R3/R4
- Package rework
- Pattern & definition work
- Observation Pattern
- UTG implementation
- Order in Code systems/value sets
- Javascript Mapping Sandbox
- CDA IG publishing
- Finish with OpenAPI
- Finish Q/QR support in tools

Summary

- Work on the core specification is now mainly about maturity, and new domains
- Most focus moves towards implementation support
- More Implementation Guides, better eco-system
- Hatching new related communities

The FHIR Agenda

- Refactor Healthcare IT standards Checked
- Refactor Healthcare IT... in progress
- Refactor Healthcare.... Just beginning
 - – More focus starting now!