FHIR Maturity Model

This page describes the 5 level FHIR maturity model for FHIR artifacts. It's based on the CMM (Capability Maturity Model) framework, and the intention is to give implementers a sense of how mature an artifact is based on the level and types of review it has been subject to. These criteria may evolve over time.

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

The FHIR Management Group may flag certain artifacts as widely used, which will impose expectations for implementer consultation prior to non-backward compatible change as per level 4 for lower maturity resources where there is significant early implementation.

Any of the criteria can be waived provided the sponsoring WG can convince the FMG that that criteria should not apply in the case of a specific artifact.

Tested across scope means:

- The FMG has signed off on the list of “example contexts” defined for the artifact: For each example context, the artifact has either been: reviewed and approved by a domain expert for that scope area, mapped to an existing implemented scope-area-specific standard or tested in an implementation.

In most cases, if an artifact is derived from or otherwise depends on another artifact, the derived artifact cannot be more mature than the artifact referenced. However, FMG may make general or specific exceptions to this rule.

In some cases, an artifact may have components or dependencies that are a lower level than the resource overall. For example, a resource may have been well tested, with the exception of one or two data elements which are “new” or that have limited production use due to the distribution of early adopters. In these cases, a “maturity note” will be provided that highlights areas of the resource that are considered “less mature” than the resource as a whole.