

HL7v2-to-FHIR Track

Justification and Objectives

HL7 V2 is the current workhorse of healthcare interoperability. However, FHIR has become an increasingly popular standard and is already being utilized very heavily by stand-alone healthcare apps/ services as well as external services such as governmental agencies to obtain and share information with EMRs. The fundamental differences between the two standards in terms of their philosophy as well as representation of data gives rise to a need to map from HL7 V2 messages to appropriate FHIR resources and perhaps even vice versa. This particularly assumes importance in the Indian context because use of FHIR in India is still very limited but is expected to grow in the near future.

This track will use R4 version of FHIR.

Related tracks

FHIR Starter Track

Proposed Track Lead

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Track Orientation

A webinar will be hosted on **June 20, 2020** to share further participation information about this track.

System Roles

FHIR server: (This is applicable when the participant chooses to work with scenario 1 below.) A FHIR server would be needed to post or update FHIR resources based on V2 data. This could be a test server or the participant's proprietary server with perhaps an EMR or app front-end to view the data.

HL7 V2 interface: (This is applicable when the participant chooses to work with scenario 2 below and wishes to verify posting of the data to an EMR or app.) A V2 interface would be needed to post V2 data. This could be interfacing to an EMR or an app with a front-end to display the data.

Scenarios

Scenario 1 – Convert HL7 V2 messages of interest to FHIR resources

Action: Build and test V2-to-FHIR mappings for V2 event types of interest including various case scenarios. Mappings available on FHIR website could be a good starting point.

Precondition: The participants have a set of HL7 V2 messages to work with, and they possess an understanding of these messages.

Success Criteria: The FHIR resources generated with data from V2 messages successfully post to the FHIR server. The participant can verify that the resources carry the appropriate content, either manually or by viewing the data on the app or EMR front-end.

Bonus point: Use of a code to do automatic conversion based on given mappings would make this process faster.

Scenario 2 – Generate HL7 V2 messages from FHIR resources

Action: Build and test FHIR-to-V2 mappings for V2 event types of interest including various case scenarios. Mappings available on FHIR website could be a good starting point.

Precondition: The participants have a set of FHIR resources to work with, and they possess an understanding of these resources as well as the V2 messages they wish to generate.

Success Criteria: The V2 messages generated with data from FHIR resources are verified either manually or by successfully posting to an EMR or app via a V2 interface and then viewing the data.

Bonus point: Use of a code to do automatic conversion based on given mappings would make this process faster.

Security and Privacy Considerations

The starting HL7 V2 messages (or FHIR resources) the participants work with should be de-identified when working on a test server, or if working with real data on proprietary server, the data should not be shared.