

OMOP and FHIR Workshop

September 2021

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Agenda

- Introductions (10-10:15am EDT)
- Presentation of objectives (10:15-10:30am)
- Polls (10:30-10:45am)
- Breakout sessions (10:45-11:30am)
- Summary and action items (11:30am-Noon)

Objectives

- Identify priority use cases to advance the OHDSI-HL7 collaboration on utilizing FHIR and OMOP
- Begin the process of setting up initial projects within OHDSI and HL7

Breakout sessions/groups

Session topic	Session lead(s)	Planning team facilitator
Data harmonization between FHIR and OMOP	Ben Smith and Guy Tsafnat	Wayne Kubick
Terminologies	Davera Gabriel	Grahame Grieve
Oncology	May Terry	Christian Reich
Digital Quality Measures	Ben Hamlin	Ben Hamlin
Registries and Applications	Jon Duke	Jon Duke

Report Outs

- Key observations and findings
- Suggested priority use cases
- Which projects should come first?

“Integrating HL7 FHIR and the OHDSI OMOP CDM”



Health Level Seven® International

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**HL7 International and OHDSI Announce Collaboration to Provide
Single Common Data Model for Sharing Information in Clinical Care
and Observational Research**

Leading organizations will integrate products to create a single source for the sharing and tracking of data

Ann Arbor, Mich. and New York City, N.Y. – March 1, 2021 – [Health Level Seven International \(HL7®\)](#) and the [Observational Health Data Sciences and Informatics \(OHDSI\)](#) today announced a collaboration to address the sharing and tracking of data in the healthcare and research industries by creating a single common data model. The organizations will integrate HL7 Fast Healthcare Interoperability Resources (FHIR®) and OHDSI’s Observational Medical Outcomes Partnership (OMOP) common data model to achieve this goal.

Common Data Model Harmonization Project



Common Data Models Harmonization Implementation Guide (Release 0.1.0)



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Common Data Models Harmonization, published by HL7 International - Biomedical Research and Regulation Work Group. This is not an authorized publication; it is the continuous build for version 0.1.0). This version is based on the current content of <https://github.com/HL7/cdmh/> and changes regularly. See the [Directory of published versions](#)

1 Common Data Models Harmonization FHIR Implementation Guide

1.1 Introduction

The Common Data Models Harmonization (CDMH) FHIR Implementation Guide (IG) will focus on mapping and translating observational data extracted for Patient Centered Outcome Research (PCOR) purposes into FHIR format. Research data is extracted from the different research networks each of which may use a different data model for their data representation. The project focuses on research networks using the following four Common Data Models (4 CDMs)

- Patient Centered Outcome Research Network (PCORNet) Common Data Model (CDM)
- Informatics for Integration Biology and Bedside (i2b2) model
- Observational Medical Outcomes Partnership (OMOP) model
- Federal Drug Administration's Sentinel model

The larger CDMH project led by FDA in collaboration with other Federal Agencies and specific research networks tackles the various aspects such as querying the data and getting the results back from the queries; however, the CDMH FHIR IG only focuses on mapping and translating the results obtained from queries to a FHIR format. The following benefits are expected from translation of research data into a FHIR format

- The data can be published using FHIR format using well defined RESTful APIs for other authorized researchers
- Leveraging FHIR tools, techniques and apps being developed using FHIR formats.
- Provide a roadmap where by the mappings and translations created can be re-used for data extraction from clinical systems which is elaborated as part of Data Access Framework Research (DAF-Research) Implementation Guide.

Table of Contents:

- [Introduction](#)
- [Guidance to the readers](#)

Getting Involved with OMOP and FHIR

- HL7 Home Page: www.hl7.org
- The **CDM Builders** OHDSI Forum Page:
<https://forums.ohdsi.org/c/cdm-builders/9>
- FHIR Chat Stream:
<https://chat.fhir.org/#narrow/stream/286658-omop-.2B.20fhir>
- Confluence Page (Links to prior and current work in progress):
<https://confluence.hl7.org/display/OOF/OMOP+on+FHIR+Home>

Status Update: OMOP and FHIR

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