

2020-05 COVID-19 Knowledge Accelerator (and Evidence-Based Medicine)

[Full summary of track results can be found here](#)

Submitting WG/Project/Implementer Group - Clinical Decision Support (CDS) WG, EBMonFHIR Project

Justification and Objectives

The evidence-based medicine community (including systematic review producers) created the Evidence and EvidenceVariable Resources and Statistic and OrderedDistribution Datatypes to support standard expressions of evidence and statistics. Major attention shifted March 30, 2020 to create the COVID-19 Knowledge Accelerator (https://www.gps.health/covid19_knowledge_accelerator.html) to implement these resources and enable immediate application to COVID-19 evidence. To support this effort new Resources (EvidenceReport and Citation) need to be created, and numerous implementers urgently need to establish interoperability.

This track will use R5 version of FHIR.

Clinical input requested (if any)

Not needed, but clinicians are welcome and clinical input has helped shape the Evidence Resource to be more relevant for supporting clinical care.

Related tracks

Clinical Reasoning

Proposed Track Lead

Brian Alper, balper@ebSCO.com

Expected participants

EBSCO Information Services

Evidence Partners

Evidence Prime

MAGIC

Duodecim

PICO Portal

Johns Hopkins University

McMaster University

University of Colorado

Sejong University (Seoul, South Korea)

Track Orientation

[Introduction Video to EBMonFHIR and COVID-19 Knowledge Accelerator Project](#)

We will use the Zulip Stream <https://chat.fhir.org/#narrow/stream/237951-COVID-19-Knowledge.20Accelerator> to communicate before, during and after the Connectathon.

System Roles

Citation Manager - a system that aggregates citation data for articles and documents

Systematic Review Developer - a system that supports the selection of articles (inclusion/exclusion decision), documentation of data extraction and article assessment, evidence synthesis, and reporting of findings

Evidence Variable Classifier - a system that describes the evidence variables (such as populations, exposures, and outcomes) in computable form

Evidence Classifier - a system that describes the evidence (evidence variables, statistics and certainty) in computable form

Scenarios

Share a list of selected research articles about COVID-19

Action: The Citation Manager will transmit a list of selected research articles as a bundle of Citation Resources.

Precondition: None

Success Criteria: A different Citation Manager will reliably display the list of selected research articles.

Bonus point: Transfer of multiple identifiers related to an article that were not previously used in the Citation Manager (for example COVID-19 unique ID)

Share a series of COVID-19 related EvidenceReport resources

Action: The Citation Manager or Systematic Review Developer will receive a series of COVID-19 related EvidenceReport Resources (a profile of Composition).

Precondition: None

Success Criteria: A Citation Manager or Systematic Review Developer will reliably display the list of selected research articles.

Bonus point: The EvidenceReport Resources will have COVID-19 Knowledge Accelerator (COKA) identifiers and be available at gps.health/coka/resources

Bonus Scenario: Create computable expressions for the evidence variables related to COVID-19 clinical research

Action: The Evidence Variable Classifier will create EvidenceVariable Resources including resources expressing the population, exposures and outcomes for a clinical research article.

Precondition: None

Success Criteria: Valid EvidenceVariable Resources created that are understood and agreed by other Evidence Variable Classifiers.

Bonus point: Association of EvidenceVariable Resources with EvidenceReport Resources and Evidence Resources.

TestScript(s)

None expected, but JSON Tree Writer and the EvidenceVariable Data Entry Form will be available to facilitate resource construction.

Security and Privacy Considerations

None