Owning work group name:
Clinical Decision Support

Committee Approval Date:
Initial PSS: June 22, 2018

Contributing or Reviewing Work Groups:
Clinical Decision Support, Biomedical Research and Regulation, Clinical Quality Information

FHIR Resource Development Project Insight ID:
1422

Scope of coverage:
The scope of the Citation Resource is to describe any aspect of identification, location, authorship and contributorship to a journal article, report, document or resource. Citations are used extensively in scholarly communication and important for documenting the evidence or source behind statements of fact, opinion and interpretation. Citations are also used for acknowledgement of the contributions of individuals and groups to the creation and advancement of knowledge.

RIM scope:

Resource appropriateness:
Across the academic and scientific community citations are used extensively to reference the knowledge artifacts contributing to current work. For any community searching for reports of research or scholarly publications (such as searching MEDLINE) the citations contain the metadata used for such searches. Standardization of citations is necessary for interoperability across citation managers and adaptation to current needs, such as reports being available on preprint servers before "final" peer-reviewed published form, need to cite datasets or other alternative forms of expression, or the ability to support citation of FHIR Resources where the FHIR Resource represents research or scholarly publication.

Expected implementations:
Immediate implementation is expected with the COVID-19 Knowledge Accelerator project and initial implementers include EBSCO Information Services, Evidence Partners (DistillerSR), and PICO Portal. Fast followers are expected to include Agency for Healthcare Research and Quality (AHRQ), Cochrane, Duodecim Medical Publications Ltd (from the Finnish Medical Society), MAGIC (a project in Norway), and multiple consortia coordinating evidence processing for COVID-19 such as COVID-END.

Content sources:
1. Direct experience communicating citations for the COVID-19 Knowledge Accelerator project including citations for journal articles, preprint server entries, and news releases
2. MEDLINE XML DTD [https://www.nlm.nih.gov/bsd/licensee/elements_descriptions.html] - as MEDLINE is an extensively used schema for citation data for journal articles
3. Contributor Roles Taxonomy (CRediT) [https://casrai.org/credit/]

Example Scenarios:
A clinical decision support vendor needs to provide the "evidence" supporting their recommendation or factual knowledge presented so the user of the decision support can independently determine the basis for the knowledge. The citation resource is used to precisely represent the source article.
A researcher desires to find evidence published on COVID-19 so they can obtain the full-text reports for analysis. The citation resources contain the identification and access information to find the full-text. Without a citation resource that can handle the needs from different citation collections (such as MEDLINE limited to peer-reviewed publications and medRxiv limited to pre-prints) the researcher needs to search multiple datasets and manage a large amount of duplicate results.

Resource Relationships:

The Citation Resource can reference Citation Resource.

The Citation Resource can be referenced by:

1. the EvidenceFocus Resource (to express the Citation as a characteristic of specific focus for searches and reports)
2. any resource using a RelatedArtifact datatype (for which a common use was to describe citations)
3. any resource for which citation of the resource is desired (using a citeAs element)

Resource Boundaries:

Any resource may have common metadata including authors, contributors, identifiers and location concepts for the resource. The Citation Resource is expected to be used primarily for citing things that are not FHIR Resources. There is NOT an expectation to provide Citations for most FHIR Resources. However, FHIR Resources can be the subject of Citation Resources when there is additional needs beyond common metadata to use the FHIR Resource as the cited source in other contexts or to support scholarly and scientific contribution attribution to the FHIR Resource content.

Timelines:

Pre-applied (http://build.fhir.org/citation.html) for Connectathon 24. May be considered for September 2020 ballot.

gForge Users:

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When Resource Proposal Is Complete:

When you have completed your proposal, please send an email to FMGcontact@HL7.org

FMG Notes