The R5 release of FHIR introduces the Citation Resource which is structured to support FAIR principles. When the Citation Resource is applied to knowledge artifacts (including FHIR Resources), the Citation is a distinct digital object containing the metadata about the cited artifact.

The Citation Resource contains a *citedArtifact* element to clearly distinguish data about the cited artifact (metadata of the cited artifact) from data about the citation (metadata of the Citation).

### Metadata of the cited artifact

The *citedArtifact* element contains the following elements:

1. An *identifier* element can include any number of identifiers, including a persistent unique identifier for the cited artifact.
2. A *relatedIdentifier* element can include any number of identifiers and can be used in situations where it is important to provide an identifier for a related concept that is not the cited artifact itself. For example, a PubMed Identifier (PMID) may be used as an identifier for an article about a research study published in a journal and it may have a related identifier from a National Clinical Trials registry (NCT) that denotes the research study described in the article.
3. A *title* element can include any number of labels and each title may be classified with *type* and *language* elements.
4. An *abstract* element can include any number of summaries or descriptions and each abstract may be classified with *type* and *language* elements, as well as a *copyright* element if desired to report rights management data specific to the abstract.
5. A *version* element can be used to represent a specific version of the cited artifact.
6. A *part* element can be used to represent a specific part of the cited artifact, such as a section, table, figure, supplement, or lines of code.
7. A *classification* element can include any number of classifications which can be used extensively to support the findability of the cited artifact. To support wide use and re-use of classifications, the *classification* element contains *type*, *classifier*, and *whoClassified* elements.

7.a) A type element can be used to describe the kind of classification. Expressing the classification type as a classification.type value enables extensive re-use of the structure without requiring separate structural elements for keywords, conditions, domains, severity, certainty, geographic categories, and many other commonly used types of classification.

7.b) A classifier element can be used to include any number of classification values.

7.c) A whoClassified element can be used to include attribution, ownership, and rights management data for the classification.

1. A publicationForm element can include any number of publication forms for the cited artifact and each publication form can be represented with any of:

8.a) a publishedIn element to represent the collection in which the cited artifact is published;

8.b) a periodicRelease element to represent the specific issue within the collection, such as a journal or newspaper that is released in periodic packages;

8.c) articleDate and lastRevisionDate elements for dates related to the cited artifact itself;

8.d) accessionNumber, pageString, firstPage, lastPage, and pageCount elements that can be used to identify the specific location or position within the collection;

8.e) a language element; and

8.f) a copyright element to report rights management data specific to the publication form.

1. A webLocation element can include any number of web locations (often called URLs for Uniform Resource Locators) and each url element can be paired with a classifier element to distinguish among multiple web locations.
2. A relatesTo element can include any number of relations to other artifacts. The RelatedArtifact datatype includes elements to classify the type of relationship, to classify the related artifact, and to identify the related artifact.
3. A dateAccessed element can document when the cited artifact was accessed.
4. A currentState element can include any number of status classifications for the cited artifact.
5. A statusDate element can include any number of status classifications for the cited artifact paired with the timing of these status classifications.
6. A contributorship element can be used to report attribution of any type of contribution to the creation of the cited artifact.

14.a) The contributorship element includes a summary element that can include any number of strings used to summarize contributorship, such as author lists, contributorship statements, and acknowledgement statements.

14.b) The contributorship element includes an entry element that can include any number of entities that contributed to the cited artifact. The entry element may include:

14.b.i. name, initials, collectiveName, and identifier elements to identify the entity;

14.b.ii. affiliationInfo, address, and telecom elements to provide additional information about the entity;

14.b.iii. contributionType, role, contributionInstance, and correspondingContact elements to report specific contributions by the entity; and

14.b.iv. a rankingOrder element to provide a rank order among contributing entities.

1. A note element can include any number of annotations for data that does not fit other elements.

### Metadata of the Citation

The Citation itself includes *classification*, *note*, *currentState*, *statusDate*, and *relatesTo* elements that can be used to apply similar concepts to the Citation as described for the cited artifact.

The Citation includes a *summary* element that can include any number of summary expressions for display of the citation.

The Citation contains elements useful to identify the Citation including *url* (for canonical identifier), *identifier*, *version*, *name* (for machine-friendly label) and *title* (for human-friendly label) elements.

The Citation contains elements useful for attribution, rights management, and technical management of the Citation including *status*, *experimental*, *date*, *publisher*, *contact*, *useContext*, *jurisdiction*, *copyright*, *approvalDate*, *lastReviewDate*, *effectivePeriod*, *author*, *editor*, *reviewer* and *endorser* elements.

The Citation contains *description* and *purpose* elements for natural language descriptions of the citation.