

Supplementary Table 1: The suitability of OBO principles used as FAIR Vocabulary Features

<p><b>OBO-1: The ontology MUST be openly available to be used by all without any constraint other than (a) its origin must be acknowledged and (b) it is not to be altered and subsequently redistributed in altered form under the original name or with the same identifiers.</b></p>	<p><b>Suitable as FAIR Vocabulary Feature?</b> <b>No</b></p>
<p>While it is highly desirable to have open source semantic artefacts, as it is to have open source code and ultimately open research. This is not a prerequisite for vocabularies to be FAIR, nor is it well aligned with the FAIR principles which require licensing information to be provided but do not mandate it be open source.</p>	
<p><b>OBO-2: The ontology is made available in a common formal language in an accepted concrete syntax.</b></p>	<p><b>Suitable as FAIR Vocabulary Feature?</b> <b>Yes</b></p>
<p>Common formats define minimum standards for accessing an ontology, support using ontologies in a FAIR capable resource, and are the foundation of interoperable vocabulary. Many common formal languages have been proposed during the development history of ontologies. OWL format is currently used as a W3C standard.</p>	
<p><b>OBO-3: Each class and relation (property) in the ontology must have a unique URI identifier.</b></p>	<p><b>Suitable as FAIR Vocabulary Feature?</b> <b>Yes</b></p>
<p>Identifiability is a core FAIR principle, and in order to be fulfilled, all elements of the ontology, such as classes and relationships, should be clearly and uniquely identified.</p>	
<p><b>OBO-4: The ontology provider has documented procedures for versioning the ontology, and different versions of ontology are marked, stored, and officially released.</b></p>	<p><b>Suitable as FAIR Vocabulary Feature?</b> <b>No</b></p>
<p>Proper versioning improves the findability and reusability of the vocabulary. We proposed a corresponding FVF to cover this aspect. Yet, this principle evaluates the development, especially the documentation process, of the ontology rather than FAIR vocabulary.</p>	
<p><b>OBO-5: The scope of an ontology is the extent of the domain or subject matter it intends to cover. The ontology must have a clearly specified scope and content that adheres to that scope.</b></p>	<p><b>Suitable as FAIR Vocabulary Feature?</b> <b>Yes</b></p>
<p>Users must be able to determine which ontologies meet their needs in order to implement these in FAIR capable resources and to be interoperable with other vocabularies. A clear specification of this aids in FAIR implementation; vocabularies do not exist in isolation.</p>	

<b>OBO-6: The ontology has textual definitions for the majority of its classes and for top level terms in particular</b>	<b>Suitable as FAIR Vocabulary Feature? No</b>
While textual definitions provide human-readable content and are generally desirable, this is not essential as an FVF as ontology content has definitions in terms of logical axioms (e.g., position in the hierarchy) and term labels.	
<b>OBO-7: Relations should be reused from the Relations Ontology (RO).</b>	<b>Suitable as FAIR Vocabulary Feature? Yes</b>
Relation standards promote interoperability across different ontologies. This principle focuses on the relationships within and across ontologies. It can be adapted and used in a broader range of FAIR vocabularies.	
<b>OBO-8: The owners of the ontology should strive to provide as much documentation as possible. The documentation should detail the different processes specific to an ontology life cycle and target various audiences (users or developers).</b>	<b>Suitable as FAIR Vocabulary Feature? Yes</b>
Rich metadata of the vocabulary, such as the purpose and status of the ontology, promotes the reuse of the ontology.	
<b>OBO-9: The ontology developers should document that the ontology is used by multiple independent people or organizations.</b>	<b>Suitable as FAIR Vocabulary Feature? No</b>
Usage of vocabularies depends on the content and there are strategies for interoperating ontologies in what is anyway a crowded semantic space. Evidence that an ontology is highly used - when measurable - assumes a level of maturity that is unlikely for some starting communities, and would not reflect fairness of the resource.	
<b>OBO-10: OBO Foundry ontology development, in common with many other standards-oriented scientific activities, should be carried out in a collaborative fashion.</b>	<b>Suitable as FAIR Vocabulary Feature? Yes</b>
Vocabularies should be implementable in FAIR data resources and should reflect community needs. Responsiveness to community needs comes via collaboration and development should therefore be collaborative.	
<b>OBO-11: There should be a person who is responsible for communications between the community and the ontology developers, for communicating with the Foundry on all Foundry-related matters, for mediating discussions involving maintenance in the light of scientific advance, and for ensuring that all user feedback is addressed.</b>	<b>Suitable as FAIR Vocabulary Feature? No</b>
Having a designed contact is important for the community to provide feedback and ensures someone is having an ongoing editorial responsibility for the ontology. While it does pertain to sustainability of the resource and its possible evolution, it doesn't	

directly speak to its level of fairness.	
<b>OBO-12: Naming conventions are used</b>	<b>Suitable as FAIR Vocabulary Feature?</b> <b>No</b>
Consistency of naming is a best practice feature of ontologies but does not detract from deployment in support of the FAIR principles.	
<b>OBO-16: The ontology needs to reflect changes in scientific consensus to remain accurate over time.</b>	<b>Suitable as FAIR Vocabulary Feature?</b> <b>Yes</b>
Vocabularies codify knowledge. To fulfil one of their primary functions, they must evolve. Dead ontologies fail to support FAIR capable resources to interoperate.	
<b>OBO-20: Ontology developers MUST offer channels for community participation and SHOULD be responsive to requests.</b>	<b>Suitable as FAIR Vocabulary Feature?</b> <b>No</b>
Having communication channels to collect and respond to community requirements supports the maintenance and evolution of the ontology. However, it is not directly linked to the FAIRness of the vocabulary.	

Supplementary Table 2: FAIR Vocabulary Features mapped to FAIR principles and FAIR vocabulary requirements

	Findability	Accessibility	Interoperability	Reusability
FAIR in terms of application to FAIR data.			FVF-11	FVF-2 FVF-6 FVF-9 FVF-10 FVF-11
FAIR in terms of serving as a FAIR data resource.	FVF-1 FVF-4 FVF-6	FVF-3 FVF-5 FVF-10	FVF-7	FVF-2 FVF-6 FVF-7 FVF-9
FAIR in the context of interacting with other vocabularies.			FVF-8	

## Supplementary Materials 3: VersionIRI analysis

We fetched ontologies indexed in the OLS repository and selected those that are successfully loaded and up-to-date. OLS contains 266 biomedical ontologies by the time we access the database (<https://www.ebi.ac.uk/ols/api/ontologies>). We filtered out ontologies which could not be indexed automatically (without a valid loaded timestamp), and removed inactive ontologies based on the date information in the versionIRI section. 200 ontologies are selected based on these criteria.

We recognise the limitations of the ontology selection approaches. The filtering relies on the metadata collected by OLS instead of the ontology itself, and therefore might not correctly reflect the ontology status. We filtered out some inactive ontologies based on the loading time (only ontologies with a loading timestamp after 2019-01-01 are chosen) and date information in the versionIRI (ontologies with date before 2019-01-01 in the versionIRI are removed). But these criteria do not ensure all vocabularies selected are up-to-date. For example, for ontologies using semantic versioning format where no date information is provided in the versionIRI, or some update information are collected in other metadata fields such as 'annotation' 'editor comments', etc.

Despite the constraints of the analysis, it still provides enough information to showcase the status of current vocabularies. A complete list of selected ontologies are provided in the table below.

Supplementary Table 4: RDA data maturity indicators that are not mapped to FAIR Vocabulary Features

<b>ID</b>	<b>Indicator</b>
RDA-F3-01M	Metadata includes the identifier for the data
RDA-I2-01M	Metadata uses FAIR-compliant vocabularies
RDA-I2-01D	Data uses FAIR-compliant vocabularies
RDA-I3-01M	Metadata includes references to other metadata
RDA-I3-01D	Data includes references to other data
RDA-I3-02M	Metadata includes references to other data
RDA-I3-04M	Metadata include qualified references to other data

Supplementary Table 5: FAIR assessment results of Gene ontology

<b>RDF FAIR indicators version</b>	<a href="#">v0.05</a>
<b>Project name</b>	FAIR assessment Gene Ontology
<b>Assessment date</b>	2021-08-02
<b>Dataset version</b>	Release 2021-07-02
<b>Dataset link</b>	<a href="https://github.com/geneontology/go-ontology">https://github.com/geneontology/go-ontology</a> and <a href="http://geneontology.org/">http://geneontology.org/</a>

<b>FAIR vocabulary feature summary</b>	
FVF, full compliance	90.91%
FVF, partial compliance	9.09%
FVF, no compliance	0.00%

<b>FAIR vocabulary Feature</b>	<b>RDA indicat or ID</b>	<b>Indicator</b>	<b>Asses sment - RDA</b>	<b>Assess ment - FVF</b>	<b>Assessment details</b>
FVF-1: Vocabulary and their terms are assigned globally unique and persistent identifiers.	RDA-F1-01M	Metadata is identified by a persistent identifier	1	Full Compliance	<a href="http://geneontology.org/docs/ontology-documentation/">Metadata are provided in <a href="http://geneontology.org/docs/ontology-documentation/">http://geneontology.org/docs/ontology-documentation/</a>. It can also be found in the OBO foundry repository <a href="https://github.com/OBOFoundry/OBOFoundry.github.io/edit/master/ontology/go.md">https://github.com/OBOFoundry/OBOFoundry.github.io/edit/master/ontology/go.md</a>. But they are not standard persistent identifiers.</a>
	RDA-F1-01D	Data is identified by a persistent identifier	1		<a href="http://purl.obolibrary.org/obo/go.owl">Gene ontology uses PURL identifiers <a href="http://purl.obolibrary.org/obo/go.owl">http://purl.obolibrary.org/obo/go.owl</a></a>
	RDA-F1-02M	Metadata is identified by a globally unique identifier	1		<a href="http://geneontology.org/docs/ontology-documentation/">http://geneontology.org/docs/ontology-documentation/</a> is globally unique identifier.
	RDA-F1-02D	Data is identified by a globally unique identifier	1		<a href="http://purl.obolibrary.org/obo/go.owl">http://purl.obolibrary.org/obo/go.owl</a> is globally unique identifier.

FVF-2: Vocabularies and their terms have rich metadata.	RDA-F2-01M	Rich metadata is provided to allow discovery	1	Full Compliance	<a href="http://geneontology.org">http://geneontology.org</a> . Rich metadata for indexing and reuse is provided in <a href="https://github.com/OBOFoundry/OBOFoundry.github.io/edit/master/ontology/go.md">https://github.com/OBOFoundry/OBOFoundry.github.io/edit/master/ontology/go.md</a> .
FVF-3: Vocabularies and their terms can be accessed using the identifiers, preferably by both human and machine.	RDA-A1-01M	Metadata contains information to enable the user to get access to the data	1	Full Compliance	<a href="http://geneontology.org/docs/download-ontology/">The metadata includes data download links http://geneontology.org/docs/download-ontology/</a>
	RDA-A1-02M	Metadata can be accessed manually (i.e. with human intervention)	1		The metadata can be accessed from the gene ontology website.
	RDA-A1-02D	Data can be accessed manually (i.e. with human intervention)	1		<a href="http://geneontology.org/docs/download-ontology/">Data can be downloaded from http://geneontology.org/docs/download-ontology/</a>
	RDA-A1-03M	Metadata identifier resolves to a metadata record	1		<a href="http://geneontology.org/docs/ontology-documentation/">http://geneontology.org/docs/ontology-documentation/</a> is resolvable and directs to the metadata.
	RDA-A1-03D	Data identifier resolves to a digital object	1		<a href="http://purl.obolibrary.org/obo/go.owl">The vocabulary identifier http://purl.obolibrary.org/obo/go.owl</a> resolves to the ontology source files. Identifiers such as <a href="http://purl.obolibrary.org/obo/GO_0098743">http://purl.obolibrary.org/obo/GO_0098743</a> resolves to ontology terms.
	RDA-A1-05D	Data can be accessed automatically (i.e. by a computer program)	1		Data can be downloaded using command line tools, such as curl, wget, etc.
FVF-4: Vocabularies and their terms are registered or indexed in a searchable engine or a resource.	RDA-F4-01M	Metadata is offered in such a way that it can be harvested and indexed	1	Full Compliance	Gene ontology has been indexed by EMBL OLS, BioPortal and other semantic repositories. Also it is indexed in Google search.



FVF-5: Vocabularies and their terms are retrievable using a standardised communications protocol, preferably open, free and universally implementable protocols. and allows for authentication and authorisation, where necessary.	RDA-A1-04M	Metadata is accessed through standardised protocol	1	Full Compliance	The metadata can be accessed through the HTTP protocol.
	RDA-A1-04D	Data is accessible through standardised protocol	1		Data can be accessed through HTTP protocol.
	RDA-A1.1-01M	Metadata is accessible through a free access protocol	1		HTTP is a free access protocol.
	RDA-A1.1-01D	Data is accessible through a free access protocol	1		HTTP is a free access protocol.
	RDA-A1.2-01D	Data is accessible through an access protocol that supports authentication and authorisation	NA		HTTP HTTP allows access control. But authentication and authorisation are not required by Gene Ontology.
FVF-6: Vocabularies and their terms are persistent over time and are appropriately versioned.	RDA-A2-01M	Metadata is guaranteed to remain available after data is no longer available	1	Partial Compliance	Metadata and data can be found in version controlled repositories on Github.
	RDA-R1.2-01M	Metadata includes provenance information according to community-specific standards	1		The metadata includes links to access different snapshots of the ontology. The snapshots are in owl/obo format and has PURL identifiers.
	RDA-R1.2-02M	Metadata includes provenance information according to a cross-community language	0		
FVF-7: Vocabularies and their terms use a formal, accessible and broadly applicable, and preferably machine-understandable language for knowledge representation.	RDA-I1-01M	Metadata uses knowledge representation expressed in standardised format	1	Full Compliance	The metadata is provided in a standard format and can be harvested by major vocabulary services, such as OLS and BioPortal.
	RDA-I1-01D	Data uses knowledge representation expressed in standardised format	1		The data uses OWL and OBO standards.
	RDA-I1-02M	Metadata uses machine-understandable knowledge	1		Basic metadata is provided in OWL.

		representation			
	RDA-I1-02D	Data uses machine-understandable knowledge representation	1		The GO data uses OWL and OBO formats, which are machine-readable community formats.
FVF-8: Vocabularies and terms use qualified references to other vocabularies.	RDA-I3-02D	Data includes qualified references to other data	1	Full Compliance	<a href="http://geneontology.org/docs/download-mappings/">The Gene ontology cross reference policy is here:</a> <a href="http://geneontology.org/docs/download-mappings/">http://geneontology.org/docs/download-mappings/</a> Data from other vocabularies are provided as 'xref/'
	RDA-I3-03M	Metadata includes qualified references to other metadata	1		<a href="http://geneontology.org/docs/download-mappings/">The Gene ontology cross reference policy is provided here:</a> <a href="http://geneontology.org/docs/download-mappings/">http://geneontology.org/docs/download-mappings/</a>
FVF-9: Vocabularies and terms are described with a plurality of accurate and relevant attributes.	RDA-R1-01M	Plurality of accurate and relevant attributes are provided to allow reuse	1	Full Compliance	<a href="http://geneontology.org/docs/GO-term-elements">Gene Ontology includes sufficient term attributes.</a> <a href="http://geneontology.org/docs/GO-term-elements">http://geneontology.org/docs/GO-term-elements</a>
FVF-10: Vocabularies are released with a standard data usage licence, preferably machine-readable licence.	RDA-R1.1-01M	Metadata includes information about the licence under which the data can be reused	1	Full Compliance	Gene Ontology Consortium data and data products are licensed under the Creative Commons Attribution 4.0 Unported License.
	RDA-R1.1-02M	Metadata refers to a standard reuse licence	1		
	RDA-R1.1-03M	Metadata refers to a machine-understandable reuse licence	1		
FVF-11: Vocabularies meet domain relevant community standards.	RDA-R1.3-01M	Metadata complies with a community standard	1	Full Compliance	
	RDA-R1.3-01D	Data complies with a community standard	1		
	RDA-R1.3-02M	Metadata is expressed in compliance with a machine-understandable community standard	1		

	RDA-R1.3-02D	Data is expressed in compliance with a machine-understandable community standard	1		
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Supplementary Table 6: FAIR assessment results of Experimental Factor Ontology

<b>RDF FAIR indicators version</b>	<a href="#">v0.05</a>
<b>Project name</b>	EFO assessment
<b>Assessment date</b>	2021-08-02
<b>Dataset version</b>	3.32.0
<b>Dataset link</b>	<a href="http://www.ebi.ac.uk/efo/releases/v3.32.0/efo.owl">http://www.ebi.ac.uk/efo/releases/v3.32.0/efo.owl</a>

<b>FAIR vocabulary feature summary</b>	
FVF, full compliance	81.82%
FVF, partial compliance	9.09%
FVF, no compliance	9.09%

<b>FAIR vocabulary Feature</b>	<b>RDA indicator ID</b>	<b>Indicator</b>	<b>Assessment - RDA</b>	<b>Assessment - FVF*</b>	<b>Assessment details</b>
FVF-1: Vocabulary and their terms are assigned globally unique and persistent identifiers.	RDA-F1-01M	Metadata is identified by a persistent identifier	1	Full Compliance	Both the data and metadata use identifier: <a href="http://www.ebi.ac.uk/efo/efo.owl">http://www.ebi.ac.uk/efo/efo.owl</a>
	RDA-F1-01D	Data is identified by a persistent identifier	1		
	RDA-F1-02M	Metadata is identified by a globally unique identifier	1		
	RDA-F1-02D	Data is identified by a globally unique identifier	1		
FVF-2: Vocabularies and their terms have rich metadata.	RDA-F2-01M	Rich metadata is provided to allow discovery	0	No Compliance	Description of EFO has been provided in ontology browsers, such as OLS and BioPortal. However, the descriptions are not included in the EFO source file.
FVF-3: Vocabularies and their terms can be accessed using the	RDA-A1-01M	Metadata contains information to enable the user to get access	1	Full Compliance	EFO and its terms has unique identifiers and can be accessed.

identifiers, preferably by both human and machine.		to the data			
	RDA-A1-02M	Metadata can be accessed manually (i.e. with human intervention)	1		
	RDA-A1-02D	Data can be accessed manually (i.e. with human intervention)	1		
	RDA-A1-03M	Metadata identifier resolves to a metadata record	1		
	RDA-A1-03D	Data identifier resolves to a digital object	1		
	RDA-A1-05D	Data can be accessed automatically (i.e. by a computer program)	1		
FVF-4: Vocabularies and their terms are registered or indexed in a searchable engine or a resource.	RDA-F4-01M	Metadata is offered in such a way that it can be harvested and indexed	1	Full Compliance	The metadata is provided in OWL format and has been harvested by both OLS and BioPortal
FVF-5: Vocabularies and their terms are retrievable using a standardised communications protocol, preferably open, free and universally implementable protocols. and allows for authentication and authorisation, where necessary.	RDA-A1-04M	Metadata is accessed through standardised protocol	1		EFO can be accessed using HTTP protocol, and it is an open-access ontology.
	RDA-A1-04D	Data is accessible through standardised protocol	1		
	RDA-A1.1-01M	Metadata is accessible through a free access protocol	1		
	RDA-A1.1-01D	Data is accessible through a free access protocol	1		
	RDA-A1.2-01D	Data is accessible through an access protocol that supports authentication and authorisation	NA	Full Compliance	
FVF-6: Vocabularies and their terms are persistent over time and are appropriately versioned.	RDA-A2-01M	Metadata is guaranteed to remain available after data is no longer available	1	Partial Compliance	EFO follows vocabulary release guidelines, and its versioned copies can be found on Github. But it doesn't strictly follows cross community language standards, such as rdfls, xmls

					standards.
	RDA-R1.2-01M	Metadata includes provenance information according to community-specific standards	1		
	RDA-R1.2-02M	Metadata includes provenance information according to a cross-community language	0		
FVF-7: Vocabularies and their terms use a formal, accessible and broadly applicable, and preferably machine-understandable language for knowledge representation.	RDA-I1-01M	Metadata uses knowledge representation expressed in standardised format	1	Full Compliance	EFO can be downloaded in OWL and OBO, which are standardised format and machine-understandable.
	RDA-I1-01D	Data uses knowledge representation expressed in standardised format	1		
	RDA-I1-02M	Metadata uses machine-understandable knowledge representation	1		
	RDA-I1-02D	Data uses machine-understandable knowledge representation	1		
FVF-8: Vocabularies and terms use qualified references to other vocabularies.	RDA-I3-02D	Data includes qualified references to other data	1	Full Compliance	EFO reuses terms from other vocabularies and provides sufficient reference, such as source of the external term.
	RDA-I3-03M	Metadata includes qualified references to other metadata	1		
FVF-9: Vocabularies and terms are described with a plurality of accurate and relevant attributes.	RDA-R1-01M	Plurality of accurate and relevant attributes are provided to allow reuse	1	Full Compliance	
FVF-10: Vocabularies are released with a standard data usage licence, preferably machine-readable	RDA-R1.1-01M	Metadata includes information about the licence under which the data can be reused	1	Full Compliance	

licence.	RDA-R1.1-02M	Metadata refers to a standard reuse licence	1		
	RDA-R1.1-03M	Metadata refers to a machine-understandable reuse licence	1		
FVF-11: Vocabularies meet domain relevant community standards.	RDA-R1.3-01M	Metadata complies with a community standard	1	Full Compliance	EFO uses the standard OWL format, complies with OBO principles and imports terms following the MIREOT standards.
	RDA-R1.3-01D	Data complies with a community standard	1		
	RDA-R1.3-02M	Metadata is expressed in compliance with a machine-understandable community standard	1		
	RDA-R1.3-02D	Data is expressed in compliance with a machine-understandable community standard	1		

Supplementary Table 7: FAIR assessment results of ICD-11

<b>Project name</b>	ICD-11 FAIR assessment
<b>Assessment date</b>	2021-08-02
<b>Dataset version</b>	05/2021
<b>Dataset link</b>	<a href="https://icd.who.int/en/print/version:https://icd.who.int/en/print/version:https://icd.who.int/browse11/Downloads/Download?fileName=print_en.zip">ICD-11 browser and ICD11 print version:https://icd.who.int/en print version:https://icd.who.int/browse11/Downloads/Download?fileName=print_en.zip</a>

<b>FAIR vocabulary feature summary</b>	
FVF, full compliance	27.27%
FVF, partial compliance	36.36%
FVF, no compliance	36.36%

<b>FAIR vocabulary Feature</b>	<b>RDA indicator ID</b>	<b>Indicator</b>	<b>Assessment - RDA</b>	<b>Assessment - FVF</b>	<b>Assessment details</b>
FVF-1: Vocabulary and their terms are assigned globally unique and persistent identifiers.	RDA-F1-01M	Metadata is identified by a persistent identifier	0	Partial Compliance	No metadata identifier.
	RDA-F1-01D	Data is identified by a persistent identifier	1		Example data identifier: 2C25.1 Small cell carcinoma of bronchus or lung.
	RDA-F1-02M	Metadata is identified by a globally unique identifier	0		
	RDA-F1-02D	Data is identified by a globally unique identifier	0		The identifiers in ICD-11 has been through several iterations. Currently, ICD-11 provides identifiers such as (1C60-1C62.Z), a more persistent identifier system, <a href="http://id.who.int/icd/entity/911707612">http://id.who.int/icd/entity/911707612</a> is still under development. This assessment is based on the 1C60-1C62.Z system



FVF-2: Vocabularies and their terms have rich metadata.	RDA-F2-01M	Rich metadata is provided to allow discovery	1	Full Compliance	
FVF-3: Vocabularies and their terms can be accessed using the identifiers, preferably by both human and machine.	RDA-A1-01M	Metadata contains information to enable the user to get access to the data	1	Partial Compliance	ICD-11 has provided API, web browser, and pdf documents for human and machine access.
	RDA-A1-02M	Metadata can be accessed manually (i.e. with human intervention)	1		
	RDA-A1-02D	Data can be accessed manually (i.e. with human intervention)	1		
	RDA-A1-03M	Metadata identifier resolves to a metadata record	0		
	RDA-A1-03D	Data identifier resolves to a digital object	1		
	RDA-A1-05D	Data can be accessed automatically (i.e. by a computer program)	1		
	FVF-4: Vocabularies and their terms are registered or indexed in a searchable engine or a resource.	RDA-F4-01M	Metadata is offered in such a way that it can be harvested and indexed		
FVF-5: Vocabularies and their terms are retrievable using a standardised communications protocol, preferably open, free and universally implementable protocols. and allows for authentication and authorisation, where necessary.	RDA-A1-04M	Metadata is accessed through standardised protocol	1	Full Compliance	ICD-11 uses HTTPS protocol. <a href="https://icd.who.int/browse11/l-m/en#http%3a%2f%2fid.who.int%2fid%2fentity%2f911707612">https://icd.who.int/browse11/l-m/en#http%3a%2f%2fid.who.int%2fid%2fentity%2f911707612</a>
	RDA-A1-04D	Data is accessible through standardised protocol	1		
	RDA-A1-1-01M	Metadata is accessible through a free access protocol	1		
	RDA-A1-1-01D	Data is accessible through a free access protocol	1		
	RDA-A1-2-01D	Data is accessible through an access protocol that supports authentication and authorisation	NA		

FVF-6: Vocabularies and their terms are persistent over time and are appropriately versioned.	RDA-A2-01M	Metadata is guaranteed to remain available after data is no longer available	1	Partial Compliance	Previous versions of ICD-11 can access at <a href="https://icd.who.int/browse11/l-m/en/releases">https://icd.who.int/browse11/l-m/en/releases</a> . However, the versioning style does not follow common community standards.
	RDA-R1.2-01M	Metadata includes provenance information according to community-specific standards	1		
	RDA-R1.2-02M	Metadata includes provenance information according to a cross-community language	0		
FVF-7: Vocabularies and their terms use a formal, accessible and broadly applicable, and preferably machine-understandable language for knowledge representation.	RDA-I1-01M	Metadata uses knowledge representation expressed in standardised format	0	No Compliance	ICD-11 is published mainly as a pdf document and doesn't use standard vocabulary formats.
	RDA-I1-01D	Data uses knowledge representation expressed in standardised format	0		
	RDA-I1-02M	Metadata uses machine-understandable knowledge representation	0		
	RDA-I1-02D	Data uses machine-understandable knowledge representation	0		
FVF-8: Vocabularies and terms use qualified references to other vocabularies.	RDA-I3-02D	Data includes qualified references to other data	0	Partial Compliance	Terms in ICD-11 doesn't refer to other terms.
	RDA-I3-03M	Metadata includes qualified references to other metadata	1		The ICD-11 description refers to other projects and publications.
FVF-9: Vocabularies and terms are described with a plurality of accurate and relevant attributes.	RDA-R1-01M	Plurality of accurate and relevant attributes are provided to allow reuse	0	No Compliance	ICD-11 contains only a minimum description of each disease.

FVF-10: Vocabularies are released with a standard data usage licence, preferably machine-readable licence.	RDA-R1.1-01M	Metadata includes information about the licence under which the data can be reused	1	Full Compliance	ICD11 provides licensing documentation. <a href="https://icd.who.int/en/docs/ICD11-license.pdf">https://icd.who.int/en/docs/ICD11-license.pdf</a> <a href="https://icd.who.int/browse11">https://icd.who.int/browse11</a> . Licensed under Creative Commons Attribution-NoDerivatives 3.0 IGO licence (CC BY-ND 3.0 IGO).
	RDA-R1.1-02M	Metadata refers to a standard reuse licence	1		
	RDA-R1.1-03M	Metadata refers to a machine-understandable reuse licence	1		
FVF-11: Vocabularies meet domain relevant community standards.	RDA-R1.3-01M	Metadata complies with a community standard	0	No Compliance	
	RDA-R1.3-01D	Data complies with a community standard	0		
	RDA-R1.3-02M	Metadata is expressed in compliance with a machine-understandable community standard	0		
	RDA-R1.3-02D	Data is expressed in compliance with a machine-understandable community standard	0		