

ISO/TR 12310:2015-05 (E)

Health informatics - Principles and guidelines for the measurement of conformance in the implementation of terminological systems

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Objective	1
3	Terms and definitions	1
4	Purposes for conformance	3
4.1	Interoperability	4
4.2	Data analysis	4
4.3	Consistency of user experience	4
4.4	Application functionality	4
4.5	Acceptance filter	4
5	Conformance process	4
5.1	Documenting expectations	4
5.1.1	Optionality	5
6	Terminology artefact conformance considerations	6
6.1	Code system considerations	6
6.1.1	What is the code system being referenced?	6
6.1.2	What version(s) of the code system are supported?	6
6.1.3	How are codes represented?	7
6.1.4	What are the version migration expectations, if any?	7
6.1.5	What is the authoritative source that will be used for processing updates to a given terminology?	7
6.1.6	What status must usable code system elements have?	8
6.1.7	Which codes and concepts are usable for what purpose?	8
6.1.8	What representations are allowed for what purposes?	8
6.1.9	What code system relationships must be understood and navigated?	8
6.1.10	Are the semantics clearly defines?	9
6.1.11	What are the expectations for post-coordination?	9
6.1.12	What partitions are included?	9
6.1.13	What code system supplements are supported?	10
6.2	Reference sets: sets of codes that are allowed	10
6.2.1	What code systems are drawn from?	10
6.2.2	How is the reference set defined?	10
6.2.3	Which representations are allowed from a code system?	11
6.2.4	What constraints are there on post-coordinated concepts?	11
6.2.5	What is post-coordinated vs. Pre-coordinated?	11
6.2.6	What happens if the concept exists more than once in the reference set?	11
6.3	Reference set bindings	11
6.3.1	Is the binding to the reference set static or dynamic?	12
6.3.2	What reference set representation capabilities are supported?	12
6.3.3	Is the reference set extensible?	12
6.3.4	What expectation is there to support all codes within the bound reference set? 12 6.4	12
	What is the reference set bound to?	13
6.5	When and where does the binding apply?	13

7	Terminology usage conformance considerations	13
7.1	Data capture	14
7.1.1	Are the code system contents expected to be exposed directly?	14
7.1.2	What aspects may be or must be exposed to users?	14
7.1.3	Are the available codes to be displayed in a particular order?	14
7.1.4	Are there constraints on how the codes are to be navigated?	14
7.1.5	Are deprecated, retired, or pending codes expected to be presented differently?	14
7.1.6	Shall the reference set or version be captured?	14
7.1.7	Can external knowledge be applied to the selection of codes?	14
7.2	Data exchange	15
7.2.1	Identification of code systems	15
7.2.2	Identification of code system versions	15
7.2.3	Syntax for post-coordination	15
7.2.4	Presence and representation of translations between code systems	16
7.2.5	Presence of original text	16
7.2.6	Terminology specifications	16
7.3	Data analysis and searching	17
7.3.1	Are subsumed codes included?	17
7.3.2	What mathematical support is expected?	17
7.3.3	How are post-coordinated results handled?	17
7.3.4	How is cross code-system analysis managed?	17
7.3.5	Unknown data	18
8	Sharing and persisting conformance expectations	19
9	Asserting conformance	19
9.1	Conformance and non-conformance	19
9.2	Why conformance statements?	20
9.3	What is conforming?	20
9.4	What is being conformed to?	20
9.5	Assumptions	21
9.6	Support for optional elements	21
9.7	Variations	22
9.8	Completeness	22
10	Evaluating conformance statements	23
11	Verifying conformance	23
11.1	What is verified?	23
11.2	Who verifies?	24
11.3	Can verification be automated?	24
12	Other considerations	24
12.1	Comparing conformance statements	24
12.2	Conformance with conflicting terminology specifications	25
12.3	What IP considerations are associated with the code system?	25
12.4	Terminology services	25
	Bibliography	27