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Health informatics — Terminological resources —

Part 1: Characteristics

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This document was prepared by Technical Committee ISO/TC 215, Health informatics, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 251, Health informatics, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 17117-1:2018), which has been technically revised.

The main changes are as follows:

— The document has been updated to reflect the state of medical and technical practices at a time, and incorporating relevant new normative references.

A list of all parts in the ISO 17117 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Health terminology is complex and multifaceted. It has been estimated that up to 45 million different terms are needed to adequately describe health-related concepts such as conditions of patients and populations, actions in healthcare, and related concepts, such as medicines, biomedical molecules, genes, organisms, technical methods and social concepts (see ISO 17115). Many formal and less formal terminological resources exist to represent this complexity. These can be called terminological systems, coding systems, formal concept representation systems, classification systems, and others. Specific features of different terminological resources make them more or less useful for particular purposes and technological environments.

The need for formal terminological resources to support health information management has been widely recognized.[13][14][15] Such resources are required for precise data collection, accurate interpretation of data and interoperability among information systems that exchange such data.[14] National governments, healthcare organizations and others are currently concerned with the question of which of the available terminological resources will meet their requirements, i.e. they wish to 'assign value' to specific terminological resources to decide which are suitable for their purposes and healthcare contexts.

A set of criteria to support such evaluations was originally published in ISO/TS 17117:2002[1)]. The main purpose was to enable users to assess whether a terminological resource has the characteristics that will support their specified requirements, since the characteristics of a terminological resource influence its utility and appropriateness in applications. There has been much progress in the study and use of terminological resources since that time and some experience of formal evaluations.[16][17]

As the first part of the entire revision work, this document identifies the characteristics of terminological resources in healthcare (Clause 4) and functions or roles invoked by those characteristics (Clause 5). This document also provides a framework to identify different types of terminological resources using a combination of those characteristics and functions, which is essential for the development of criteria for the categorization of terminological resources in healthcare. Requirements for, and evaluation criteria of, terminological resources in healthcare, addressed in other parts of ISO 17117, are tightly related to the characteristics of terminological resources and functions that they can provide.

The target groups for this document are:

a) organizations wishing to select terminological systems for use in healthcare information systems;

b) developers of terminological systems;

c) developers of terminology standards;

d) those undertaking independent evaluations or academic reviews of terminological resources;

e) terminology Registration Authorities.

1) Withdrawn.