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Health informatics — Terminological resources —

Part 1: Characteristics

Informatique de santé — Ressources terminologiques —

Partie 1: Caractéristiques



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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by ISO/TC 215, *Health informatics*.

This first edition of ISO 17117-1 cancels and replaces ISO/TS 17117:2002, which has been technically revised.

A list of all the parts of ISO 17117 is available on the ISO website.

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Introduction

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 like conditions of patients and populations, actions in healthcare and related concepts, such as medicines, biomedical molecules, genes, organisms, technical methods and social concepts^[3]. Many formal and less formal terminological resources exist to represent this complexity. These may 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^{[6][7][8]}. Such resources are required for precise data collection, accurate interpretation of data and interoperability among information systems that exchange such data^[7]. 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 by ISO in 2002 (ISO/TS 17117). 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^{[9][10]}. This revision updates the original Technical Specification with a revised scope and purpose commensurate with present and future healthcare and technology contexts, incorporating new definitional standards where relevant.

As the first part of the entire revision work, this document (ISO 17117-1) 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, which will be addressed in the future parts of ISO 17117, are tightly related to the characteristics of terminological resources and functions that they can provide.