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Health informatics - Terminological resources - Part 1: Characteristics (ISO 17117-1:2018)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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**Health informatics - Terminological resources - Part 1:
Characteristics (ISO 17117-1:2018)**Informatique de santé - Ressources terminologiques -
Partie 1: Caractéristiques (ISO 17117-1:2018)Medizinische Informatik - Terminologische Ressourcen
- Teil 1: Merkmale (ISO 17117-1:2018)

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EN ISO 17117-1:2023 (E)

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European foreword

The text of ISO 17117-1:2018 has been prepared by Technical Committee ISO/TC 215 "Health informatics" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 17117-1:2023 by Technical Committee CEN/TC 251 "Health informatics" the secretariat of which is held by NEN.

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INTERNATIONAL STANDARD

ISO 17117-1

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Health informatics — Terminological resources —

Part 1: Characteristics

*Informatique de santé — Ressources terminologiques —
Partie 1: Caractéristiques*



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ISO 17117-1:2018(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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.

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.

Health informatics — Terminological resources —

Part 1: Characteristics

1 Scope

This document defines universal and specialized characteristics of health terminological resources that make them fit for the purposes required of various applications. It refers only to terminological resources that are primarily designed to be used for clinical concept representation or to those parts of other terminological resources designed to be used for clinical concept representation.

This document helps users to assess whether a terminology has the characteristics or provides the functions that will support their specified requirements. The focus of this document is to define characteristics and functions of terminological resources in healthcare that can be used to identify different types of them for categorization purposes. [Clauses 4](#) and [5](#) support categorization according to the characteristics and functions of the terminological resources rather than the name.

NOTE Categorization of healthcare terminological systems according to the name of the system might not be helpful and has caused confusion in the past.

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/academic reviews of terminological resources;
- e) terminology Registration Authorities.

This document contains general characteristics and criteria with which systems can be evaluated.

The following considerations are outside the scope of this document.

- Evaluations of terminological resources.
- Health service requirements for terminological resources and evaluation criteria based on the characteristics and functions.
- The nature and quality of mappings between different terminologies. It is unlikely that a single terminology will meet all the terminology requirements of a healthcare organization: some terminology providers produce mappings to administrative or statistical classifications such as the International Classification of Diseases (ICD). The presence of such maps would be a consideration in the evaluation of the terminology.
- The nature and quality of mappings between different versions of the same terminology. To support data migration and historical retrieval, terminology providers can provide maps between versions of their terminology. The presence of such maps would be a consideration in the evaluation of the terminology.
- Terminology server requirements and techniques and tools for terminology developers.
- Characteristics for computational biology terminology. Progress in medical science and in terminology science will necessitate updating of this document in due course.

ISO 17117-1:2018(E)**2 Normative references**

There are no normative references in this document.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN