

STN	Zdravotnícka informatika Terminologické zdroje Časť 1: Vlastnosti (ISO 17117-1: 2025)	STN EN ISO 17117-1 84 8001
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Health informatics - Terminological resources - Part 1: Characteristics (ISO 17117-1:2025)

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/26

Obsahuje: EN ISO 17117-1:2025, ISO 17117-1:2025

Oznámením tejto normy sa ruší
STN EN ISO 17117-1 (84 8001) z októbra 2023

141984

EUROPEAN STANDARD

EN ISO 17117-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2025

ICS 01.020; 35.240.80

Supersedes EN ISO 17117-1:2023

English Version

Health informatics - Terminological resources - Part 1: Characteristics (ISO 17117-1:2025)

Informatique de santé - Ressources terminologiques -
Partie 1: Caractéristiques (ISO 17117-1:2025)

Medizinische Informatik - Terminologische Ressourcen
- Teil 1: Merkmale (ISO 17117-1:2025)

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN ISO 17117-1:2025) has been prepared by Technical Committee ISO/TC 215 "Health informatics" in collaboration with Technical Committee CEN/TC 251 "Health informatics" the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2026, and conflicting national standards shall be withdrawn at the latest by June 2026.

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Endorsement notice

The text of ISO 17117-1:2025 has been approved by CEN as EN ISO 17117-1:2025 without any modification.



International Standard

ISO 17117-1

Health informatics — Terminological resources —

Part 1: Characteristics

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

**Second edition
2025-11**

ISO 17117-1:2025(en)**COPYRIGHT PROTECTED DOCUMENT**

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

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ISO 17117-1:2025(en)**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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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.

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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 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 17117:2002¹⁾. 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.

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 covers only 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. In order to do that, this document focuses on defining characteristics and functions of terminological resources in healthcare that can be used to identify different types of terminological resources for categorization purposes.

NOTE 1 Categorization of healthcare terminological systems according to the name of the system might not be helpful and has caused confusion in the past.

The following aspects are not covered in 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;

NOTE 2 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 classification systems 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;

NOTE 3 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.

2 Normative references

There are no normative references in this document.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN