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**Health informatics - Semantic network framework of traditional  
Chinese medicine language system**

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### Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses the redrafting method to modify and adopt ISO /T S17938..2014 "Health Informatics Chinese Medicine Language System

frame".

Compared with ISO /T S17938..2014, this standard is structurally adjusted. The specific amendments are as follows.

--- Added a chapter on normative references, citing GB/T 7027-2002 (see Chapter 4);

--- The semantic type structure diagram was adjusted from Appendix A to Chapter 4, and the structure of the diagram was modified;

--- The semantic relationship structure diagram was adjusted from Appendix B to Chapter 4, and the structure of the diagram was modified.

The technical differences between this standard and ISO /T S17938..2014 are as follows.

--- Revised the definition of the term "Chinese medicine";

--- Modified the semantic types "Medicinal Animals and Plants", "Chemical Composition of Traditional Chinese Medicine", "Artificial Equipment", "Medical Equipment" and "Medicinal Equipment", and changed them respectively

"Traditional Chinese Medicine Resources" "Chemical Composition" "Traditional Chinese Medicine Devices" "Traditional Chinese Medical Devices" "Traditional Chinese Medicine Devices";

--- Added semantic types "Chinese patent medicines", "Chinese herbal medicines" and "Chinese medicine pieces";

--- Deleted the semantic types "medicine substance", "research equipment", "traditional Chinese medicine school", "compatibility of traditional Chinese medicine" and "analysis of traditional Chinese medicine preparations".

The following editorial changes have been made to this standard.

--- Tables 1 and 2 have added serial numbers;

--- References supplement the source literature with definitions of terms in this standard.

This standard was proposed and managed by China National Institute of Standardization.

This standard was drafted. Institute of Chinese Medicine Information, China Academy of Chinese Medical Sciences, China Institute of Standardization.

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## Introduction

Traditional Chinese medicine is a system that is constantly enriched and strengthened. It has different language application characteristics at different time stages and regions.

point. How to use a computer to comprehensively and accurately identify various terms and their relationships in TCM is the key to the current construction of TCM information.

Standards can promote the effective development and utilization of traditional Chinese medicine information systems.

The language system of Chinese medicine is based on the ontology and the introduction and improvement of the Unified Medical Language System in the United States (UnifiedMedicalLanguage

(UMLS) research method, according to the characteristics of traditional Chinese medicine linguistics, research and refine the concepts and terminology of traditional Chinese medicine.

A large-scale corpus database and a comprehensive language system of traditional Chinese medicine and related disciplines on the semantic network are terminology systems of traditional Chinese medicine

one.

This standard addresses the requirements for the establishment of a semantic network of Chinese medicine language systems, and builds a framework of semantic network of Chinese medicine language systems.

The semantic types and semantic relations of the language system of traditional Chinese medicine are introduced.

Health Informatics Chinese Medicine Language System

Semantic Web Framework

## 1 Scope

This standard specifies the semantic network framework of the traditional Chinese medicine language system. It is determined by describing the relationship between the concepts of the traditional Chinese medicine language system.

The conceptual structure of semantic web.

This standard applies to the semantic classification of Chinese medicine language system and the construction of Chinese medicine knowledge system.

## 2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this article

Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 7027-2002 Basic principles and methods of information classification and coding

## 3 terms and definitions

The following terms and definitions apply to this document.

### 3.1

Traditional Chinese medicine

Traditional medicine, which originated in China, is characterized by holism and dialectical governance.

A collective name for ethnic medicine.

### 3.2

Semantic network framework

A modeling framework that includes (1) a broad set of topic types or semantic types that provides all concepts in the language system of Chinese medicine

Consistent concept classification; (2) A set of semantic associations between semantic types.

### 3.3

Semantic type

The nodes of the semantic network used to organize the concept hierarchy. The semantic type is a property of the concept.

On a semantic type.

Note. This standard has 96 semantic types, and the top level is classified as entities and events.

### 3.4

Semantic relationship

Relationship between semantic types.

Note. This standard has 58 kinds of semantic relationships, which are divided into two categories. hierarchical relationships and related relationships.

## 4.1 Overview

TCM language system semantic network framework provides a consistent classification framework and concepts for all concepts of TCM terminology system