

E DIN EN ISO 13972:2020-11 (E)

Erscheinungsdatum: 2020-09-25

Health informatics - Clinical information models - Characteristics, structures and requirements (ISO/DIS 13972:2020); English version prEN ISO 13972:2020

Contents

Page

Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms, definitions, abbreviations and synonyms	1
3.1 Terms and definitions	1
3.2 For the purposes of this document, the following abbreviations apply.	7
3.3 Synonyms	8
4 Definition, purpose, contexts and position of health and care information models [informative]	8
4.1 Definition of Clinical Information Models	8
4.2 Purpose for Clinical Information models	10
4.3 Context of Health and Care Information models	10
4.4 Architectural Considerations for Clinical Information Models	12
4.4.1 General	12
4.4.2 CIMS in an architectural view	13
4.4.3 CIMS placed in the Generic Component Model	13
4.4.4 The ISO/DIS 23903 Interoperability and Integration Reference Architecture	15
4.4.5 Representation of Re EIF through the ISO Interoperability and Integration Reference Architecture Framework	16
5 Quality Management System for Clinical Information Models	17
5.1 General	17
5.2 CIMS quality management system	17
5.3 CIMS Requirements	19
5.4 CIMS acceptance, adoption, and use	19
5.5 Achieving quality CIMS	19
5.6 Governance of CIMS	20
5.7 Repositories of CIMS	20
5.8 CIMS Development Processes	21
6 Clinical Information Model content, structure and requirements	22
6.1 General	22
6.2 Clinical Information Model content and context	22
6.3 Concept specification of a Clinical Information Model	22
6.4 Purpose of the Concept	23
6.5 Patient Population for which the Clinical Information Model is intended	23
6.6 Evidence Base for the Clinical Information Model topic	23
6.7 Description of the information model and its data elements in CIMS	24
6.7.1 General requirements for the information model	24
6.7.2 Data Elements	25
6.7.3 Data Element Name and Identifier	27
6.7.4 Data Element descriptions	27
6.7.5 Semantic coding of data elements	28
6.7.6 Datatype	28
6.7.7 Value	29
6.7.8 Value set expression	30
6.7.9 Relationships in CIMS	31
6.7.10 Localization of CIMS	31

6.8	Example instances.....	32
6.9	Interpretation	32
6.11	Instructions for use of CIMs.....	34
6.12	Care process / dependence.....	34
6.13	Issues.....	35
6.14	Example of the use of a CIM	35
6.15	References.....	36
6.16	Legal issues around Clinical Information Models.....	36
7	Metadata for clinical information models.....	37
7.1	General.....	37
7.2	The metadata elements of the Clinical Information Models.....	38
8	Version management of clinical information models.....	41
Annex A	(informative) Release and maintenance process example the Netherlands	43
Annex B	(informative) Version management backwards compatibility	44
Annex C	(informative) Guidelines and principles for Clinical Information Modelling	45
Annex D	(informative) Example mapping a CIM to ADL specification: Glasgow Coma Scale	51
Annex E	(informative) Datatype profile used for the logical model parts for Clinical Information Models.....	59
Annex F	(informative) Example Clinical Information Model in UML and Table format	60
Annex G	(informative) Example Clinical Information Model transformation in HL7 FHIR.....	65
Bibliography		74