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I.S. EN ISO 21090:2011

Health Informatics - Harmonized data types for information interchange (ISO 21090:2011)

I.S. EN ISO 21090:2011

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Health Informatics - Harmonized data types for information interchange (ISO 21090:2011)

Informatique de santé - Types de données harmonisées
pour une interchangeabilité d'informations (ISO
21090:2011)

Medizinische Informatik - Harmonisierte Datentypen für den
Datenaustausch im Gesundheitswesen (ISO 21090:2011)

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Foreword

This document (EN ISO 21090:2011) 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of an identical text or by endorsement, at the latest by August 2011, and conflicting national standards shall be withdrawn at the latest by August 2011.

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INTERNATIONAL
STANDARD

ISO
21090

First edition
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**Health informatics — Harmonized data
types for information interchange**

*Informatique de santé — Types de données harmonisées pour une
interchangeabilité d'informations*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 21090 was prepared by Technical Committee ISO/TC 215, *Health informatics*.

Introduction

Assistance from the Infrastructure and Messaging Committee in HL7 and the support of Connecting for Health have been instrumental in the preparation of this International Standard, which is a shared document between Health Level Seven (HL7) and ISO, and has been produced according the terms of the agreement between HL7, CEN and ISO (JIC, see <http://www.global-e-health-standards.org/>), which ensures that the content is fully available through ISO, CEN and HL7 publication channels.

Health informatics — Harmonized data types for information interchange

1 Scope

This International Standard

- provides a set of datatype definitions for representing and exchanging basic concepts that are commonly encountered in healthcare environments in support of information exchange in the healthcare environment;
- specifies a collection of healthcare-related datatypes suitable for use in a number of health-related information environments;
- declares the semantics of these datatypes using the terminology, notations and datatypes defined in ISO/IEC 11404, thus extending the set of datatypes defined in that standard;
- provides UML definitions of the same datatypes using the terminology, notation and types defined in Unified Modelling Language (UML) version 2.0;
- specifies an XML (Extensible Mark-up Language) based representation of the datatypes.

The requirements which underpin the scope reflect a mix of requirements gathered primarily from HL7 Version 3 and ISO/IEC 11404, and also from CEN/TS 14796, ISO 13606 (all parts) and past ISO work on healthcare datatypes.

This International Standard can offer a practical and useful contribution to the internal design of health information systems, but is primarily intended to be used when defining external interfaces or messages to support communication between them.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 4217, *Codes for the representation of currencies and funds*

ISO/IEC 8601, *Data elements and interchange formats — Information interchange — Representation of dates and times*

ISO/IEC 8824 (all parts), *Information technology — Abstract Syntax Notation One (ASN.1)*

ISO/IEC 11404:2007, *Information technology — General-Purpose Datatypes (GPD)*

ISO/TS 22220, *Health Informatics — Identification of subjects of health care*

IETF RFC 1738, *Uniform Resource Locators (URL)*

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