# TECHNICAL REPORT

### ISO/TR 20514

First edition 2005-10-15

## Health informatics — Electronic health record — Definition, scope and context

Informatique de santé — Dossier de santé informatisé — Définitions, domaine et contexte



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Published in Switzerland

#### **Contents** Page 1 Scope ..... ....... 1 2 3 Definitional approach .......6 3.1 The key role of interoperability .......7 3.2 3.3 The basic-generic EHR.......8 The non-shareable EHR ......9 3.4 The shareable EHR 10 10 3.5 The Integrated Care EHR (ICEHR) 10 Other common types of realth records 12 3.6 3.7 3.8 4.1 4.2 4.3 4.4 The Extended EHR..... Comparative features of the Extended HR and Core EHR......17 4.5 Context of the EHR 5 5.1 5.2 5.3 5.4 5.5 5.6 6 EHR systems..... 6.1 Survey of EHR system definitions ...... 6.2 6.3 Categorizations of EHR systems ...... 6.4 EHR directory service system ..... EHR system summary characteristics ..... Annex A (informative) Background to Technical Report ......

Bibliography.....

#### **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 Maison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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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.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO/TR 20514 was prepared by Technical Committee ISO/TC.215, Health informatics.

This Technical Report was prepared in order to establish a set of categories of, and definitions for, electronic health records in order to describe the scope of application of the family of EHR standards currently

The primary purpose of ISO's family of EHR standards is to maximize interoperability between electronic records and systems that are specifically intended to be shareable, irrespective of the technologies they use

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Intended for development by ISO.

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Ids and systems that are specifically intenditive platforms of phinicit they reside.

Jovever, a variety of platith information systems manaracterized as belonging to an EHR system. Similarly, output in the form of EHR system or entries, as described primary purpose or applications as a shareable EHR. However, a variety of health information systems may include features and functionality that could be characterized as belonging to an EHR system. Similarly, many health information systems may produce output in the form of EHR extracts or entries, as described in ISO/TS 18308, irrespective of whether their

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### Health informatics — Electronic health record — Definition, scope and context

### 1 Scope

This Technical Report describes a pragmatic classification of electronic health records, provides simple definitions for the main categories of EHR and provides supporting descriptions of the characteristics of electronic health records and record systems.

#### 2 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

#### 2.1

#### archetype

<descriptive</p>
model of a clinical or other domain-specific concept which defines the structure and business rules of the concept

NOTE Archetypes may define simple compound concepts such as "blood pressure" or "address", or more complex compound concepts such as "family history" or "microbiology result". They are not used to define atomic concepts such as anatomical terms. Archetypes use terms which may be derived from external terminologies to identify archetype components.

[Beale:2003<sup>[11]</sup>]

#### 2.2

#### archetype

(technical) computable expression of a domain-level concept in the form of structured constraint statements, based on some reference information model

NOTE 1 Archetypes are one-to-one with domain concepts, which can themselves have interior complexity.

NOTE 2 Archetypes all have the same formalism but can be either part of a standardized/shared ontology (i.e. definitional) or only used locally or regionally (i.e. not considered definitional).

[Beale:2003<sup>[11]</sup>]

#### 2.3

#### architecture

that set of design artefacts or descriptive representations that are relevant for describing an object such that it can be produced to requirements (quality) as well as maintained over the period of its useful life (change)

[Zachman:1996[24]]

#### 2.4

#### client

individual who is a subject of care

NOTE The terms "client" and "patient" are synonymous but the usage of one or other of these terms tends to differ between different groups of health professionals. Clinicians working in a hospital setting and medical practitioners in most settings tend to use the term "patient" whereas allied health professionals tend to use the term "client".