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**Medizinische Informatik –
Kommunikation von Patientendaten in elektronischer Form –
Teil 3: Referenzarchetypen und Begriffslisten (ISO 13606-3:2019);
Englische Fassung EN ISO 13606-3:2019**

Health informatics –
Electronic health record communication –
Part 3: Reference archetypes and term lists (ISO 13606-3:2019);
English version EN ISO 13606-3:2019

Informatique de santé –
Communication du dossier de santé informatisé –
Partie 3: Archétypes de référence et listes de termes (ISO 13606-3:2019);
Version anglaise EN ISO 13606-3:2019

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Nationales Vorwort

Dieses Dokument (EN ISO 13606-3:2019) wurde in der WG 1 „Architecture, Frameworks and Models“ des Technischen Komitees ISO/TC 215 „Health Informatics“ und mit dem Technischen Komitee CEN/TC 251 „Medizinische Informatik“, dessen Sekretariat von NEN (Niederlande) gehalten wird, erarbeitet.

Der Arbeitsausschuss NA 063-07-02 AA „Interoperabilität“ des Fachbereichs 7 „Medizinische Informatik“ des DIN-Normenausschusses Medizin (NAMed) hat an der Erarbeitung ebenfalls mitgewirkt.

Dieses Dokument enthält unter Berücksichtigung des Präsidialbeschlusses 1/2004 nur die englische Originalfassung von EN ISO 13606-3:2019.

Für die in diesem Dokument zitierten internationalen Dokumente wird im Folgenden auf die entsprechenden deutschen Dokumente hingewiesen:

ISO 11615:2012	siehe	DIN EN ISO 11615:2013-03
ISO 11616:2017	siehe	DIN EN ISO 11616:2018-04
ISO 11238:2012	siehe	DIN EN ISO 11238:2013-03
ISO 11239:2012	siehe	DIN EN ISO 11239:2013-03
ISO 11240:2012	siehe	DIN EN ISO 11240:2013-03
ISO 13606-1	siehe	DIN EN ISO 13606-1
ISO 13606-4	siehe	DIN EN ISO 13606-4
ISO 13940:2015	siehe	DIN EN ISO 13940:2016-07
ISO 21090:2011	siehe	DIN EN ISO 21090:2011-06
ISO/TS 13972:2015	siehe	DIN CEN ISO/TS 13972 (DIN SPEC 32987):2016-03
ISO/TS 18530:2014	siehe	DIN CEN ISO/TS 18530 (DIN SPEC 13229):2016-04

Änderungen

Gegenüber DIN EN 13606-3:2008-06 wurden folgende Änderungen vorgenommen:

- a) Übernahme der Internationalen Norm;
- b) der Norminhalt wurde mit ISO 13940 *Medizinische Informatik — Begriffssystem zur Unterstützung der Kontinuität der Versorgung* und der Normenreihe ISO 12967 *Medizinische Informatik — Servicearchitektur* harmonisiert;
- c) die Teile dieser Normenreihe wurden untereinander harmonisiert.

Frühere Ausgaben

DIN V ENV 13606-2: 2000-09
DIN EN 13606-3: 2008-06

Zusammenfassung

Dieses Dokument legt fest, wie die elektronische Gesundheitsakte (eGA) von einem identifizierten Behandelten oder mehreren identifizierten Behandelten zwischen eGA-Systemen oder zwischen eGA-Systemen und einem zentralen eGA-Repository vollständig oder teilweise übermittelt werden kann.

Sie kann auch verwendet werden für die eGA-Übermittlung zwischen einem eGA-System oder -Repository und klinischen Anwendungen bzw. Middleware-Komponenten (wie z. B. Entscheidungsunterstützungskomponenten), wenn diese Zugriff auf eGA-Daten benötigen oder diese bereitstellen, oder als Darstellung von eGA-Daten innerhalb eines verteilten (föderierten) Datensatzsystems.

Dieses Dokument definiert Begriffslisten, die jeweils den Satz von Werten spezifizieren, den bestimmte Attribute des Referenzmodells, das in ISO 13606-1 definiert ist, annehmen können. Sie definiert auch normative und informative Referenz-Archetypen, die es ermöglichen, häufig auftretende Instanzen von eGA-Daten in einer konsistenten Struktur darzustellen, wenn sie mithilfe dieses Dokuments übermittelt werden.

Nationaler Anhang NA (informativ)

Begriffe

Die Benummerung der folgenden Begriffe und Abkürzungen sind identisch mit der Benummerung in der englischen Fassung.

3 Begriffe

Für die Anwendung dieses Dokuments gelten die Begriffe nach ISO 13606-1 und die folgenden Begriffe.

ISO und IEC stellen terminologische Datenbanken für die Verwendung in der Normung unter den folgenden Adressen bereit:

- ISO Online Browsing Platform: verfügbar unter <http://www.iso.org/obp>
- IEC Electropedia: verfügbar unter <http://www.electropedia.org/>

3.1

Gesundheitsdienstleistung

(en: healthcare activity)

Dienstleistung, die mit dem Ziel erbracht wird, die Gesundheit der betreffenden Person oder Personengruppe direkt oder indirekt zu verbessern

Anmerkung 1 zum Begriff: Jede Spezifizierung dieses Konzepts stellt *Gesundheitsdienstleistungen* dar, die durch eine Spezifizierung des *Handlungsträgers im Gesundheitswesen* durchgeführt werden.

Anmerkung 2 zum Begriff: Verschiedene Arten von *Gesundheitsdienstleistungselementen* (z. B. *Gesundheitsuntersuchung* oder *Gesundheitspflegebehandlung*) können während einer *Gesundheitsdienstleistung* durchgeführt werden.

Anmerkung 3 zum Begriff: Siehe die *Konzepte Gesundheitsdienstleistungen durch Anbieter, gesundheitliche Selbstversorgung, Gesundheitsdienstleistungen durch Dritte und automatisierte Gesundheitsdienstleistungen*, wenn es um die Aufzeichnung von *Informationen* geht, die das Ergebnis von *Gesundheitsdienstleistungen* (z. B. ratifizierte Beobachtungen) sind.

BEISPIEL Eine Blutdruckmessung, die von einer qualifizierten Krankenschwester abgeschlossen wurde, einschließlich der *Gesundheitsdienstleistungselemente* der Aufnahme, Dokumentation und Evaluation.

[QUELLE: ISO 13940:2015]

3.2

Referenz-Archetyp

(en: reference archetype)

Archetyp, der als Grundlage für die Archetyp-Spezialisierung dient

Nationaler Anhang NB (informativ)

Literaturhinweise

DIN CEN ISO/TS 13972 (DIN SPEC 32987):2016-03, *Medizinische Informatik — Detaillierte klinische Modelle, Charakteristika und Prozesse (ISO/TS 13972:2015)*; Englische Fassung CEN ISO/TS 13972:2015

DIN CEN ISO/TS 18530 (DIN SPEC 13229):2016-04, *Medizinische Informatik — Automatische Identifikation und Datenerfassungskennzeichnung und -beschriftung — Identifikation von Behandelten und individuellen Anbietern (ISO/TS 18530:2014)*; Englische Fassung CEN ISO/TS 18530:2015

DIN EN ISO 11238:2013-03, *Medizinische Informatik — Identifikation von Arzneimitteln — Struktur und kontrollierte Vokabularien zur Identifikation und Beschreibung von Substanzen und Inhaltsstoffen (ISO 11238:2012)*; Deutsche Fassung EN ISO 11238:2012

DIN EN ISO 11239:2013-03, *Medizinische Informatik — Identifikation von Arzneimitteln — Struktur und kontrollierte Vokabularien zur Identifikation von pharmazeutischen Darreichungsformen, pharmazeutischen Konventionseinheiten, Anwendungsarten und Verpackungen (ISO 11239:2012)*; Deutsche Fassung EN ISO 11239:2012

DIN EN ISO 11240:2013-03, *Medizinische Informatik — Identifikation von Arzneimitteln — Datenelemente, Struktur und kontrolliertes Vokabular für Maßeinheiten (ISO 11240:2012)*; Deutsche Fassung EN ISO 11240:2012

DIN EN ISO 11615:2013-03, *Medizinische Informatik — Identifikation von Arzneimitteln — Datenelemente und -strukturen zur Identifikation von Arzneimitteln für den Austausch von behördlich genehmigten Arzneimittelinformationen (ISO 11615:2012)*; Deutsche Fassung EN ISO 11615:2012

DIN EN ISO 11616:2018-04, *Medizinische Informatik — Identifikation von Arzneimitteln — Datenelemente und Strukturen zur eindeutigen Identifikation und zum Austausch von vorgeschriebenen pharmazeutischen Produktkennzeichen (ISO 11616:2017)*; Deutsche Fassung EN ISO 11616:2017

DIN EN ISO 13606-1, *Medizinische Informatik — Kommunikation von Patientendaten in elektronischer Form — Teil 1: Referenzmodell*

DIN EN ISO 13606-4, *Medizinische Informatik — Kommunikation von Patientendaten in elektronischer Form — Teil 1: Sicherheit*

DIN EN ISO 13940:2016-07, *Medizinische Informatik — Begriffssystem zur Unterstützung der Kontinuität der Versorgung (ISO 13940:2015)*; Englische Fassung EN ISO 13940:2016

DIN EN ISO 21090:2011-06, *Medizinische Informatik — Harmonisierte Datentypen für den Datenaustausch im Gesundheitswesen (ISO 21090:2011)*; Englische Fassung EN ISO 21090:2011, nur auf CD-ROM

— Leerseite —

English Version

Health informatics - Electronic health record
communication - Part 3: Reference archetypes and term
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listes de termes (ISO 13606-3:2019)

Medizinische Informatik - Kommunikation von
Patientendaten in elektronischer Form - Teil 3:
Referenzarchetypen und Begriffslisten
(ISO 13606-3:2019)

This European Standard was approved by CEN on 2 July 2019.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

European foreword

This document (EN ISO 13606-3:2019) 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 January 2020, and conflicting national standards shall be withdrawn at the latest by January 2020.

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

This document supersedes EN 13606-3:2008.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 13606-3:2019 has been approved by CEN as EN ISO 13606-3:2019 without any modification.

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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.

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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 215, *Health Informatics*.

This second edition cancels and replaces the first edition (ISO 13606-3:2009), which has been technically revised. The main changes compared to the previous edition are summarised in the Introduction.

A list of all parts in the ISO 13606 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.

Introduction

0.1 General

This document is part of a five-part series of standards, published jointly by CEN and ISO through the Vienna Agreement. In this document, dependency upon any of the other parts of this series of standards is explicitly stated where it applies.

0.2 Preface

ISO 13606-3 defines two kinds of specifications.

- 1) A normative set of (coded) term lists that each defines a controlled vocabulary for a Reference Model attribute that is defined in ISO 13606-1;
- 2) A set of Reference Archetypes that specify how the ISO 13606-1 Reference Model should be applied for communicating information for:
 - null_flavor;
 - access policies;
 - demographic entities;
 - example clinical reference archetypes, conforming to ISO 13940 (Contsys).

0.3 Term Lists

Each term list is referenced by its corresponding attribute as an invariant constraint in ISO 13606-1, by referring to its term list name. For each term list, every code value is accompanied by a phrase and description; however, in each case it is the code that is used as the Reference Model attribute value. Language translations of the phrase and description will therefore not affect the instances of RECORD_COMPONENT that are communicated using this document.

Should any revision prove necessary in the future to these term lists, a technical revision to this document will be required. Such a revised document should specify an updated Reference Model identifier that should then be used as the value of the rm_id of an EHR_EXTRACT, to inform the recipient of the version of this document that was used in its creation.

0.4 Reference archetypes

An archetype, sometimes known as a clinical model, specifies a pattern for representing an aspect of clinical documentation within an electronic health record. An archetype defines the structural and semantic relationships between fine-grained data items, including the domains of content each data item may contain in order to be a valid component of that archetype. The concept of archetypes is outlined in the introduction of ISO 13606-1, and the formal representation of archetypes is specified in ISO 13606-2. Archetypes are used in this document to shape parts of an EHR extract, in order to provide predictability of the way in which clinical information is represented within it.

Given the vast domain of health and healthcare, there might eventually be hundreds of archetypes covering its many different documentation and communication needs. Because archetypes might be created by different communities in different countries and settings, there is a risk that archetypes for similar areas of documentation will be made differently by different groups, and therefore hamper interoperability. *Reference archetypes* are archetypes that represent very fundamental areas of clinical documentation, which might be used as they are or may serve as a kind of *base pattern* for more specialised archetypes. By acting as the base pattern for a set of specialised archetypes, the members of the set are likely to be better structurally and semantically aligned with each other. Their use will facilitate semantic interoperability by making it easier for EHR extracts that have used different members of that set to be interpreted collectively.

A reference archetype is a starting point for archetype specialisation (using a sub-set of properties and/or constraints on the ELEMENT value domains), or localised by adding natural language or local terminology mappings, or may be extended with additional properties. In all such cases the reference archetype should be specified as the underlying “specialisation parent”, in accordance with ISO 13606-2. Some reference archetypes may be implemented directly. A reference archetype is therefore a conventional archetype that has been designated as a recommended (informative) or mandated (normative) basis for developing commonly required archetypes.

This document defines several categories of reference archetypes, some of which have been designated as normative and others informative. The decision of which to make normative is based on the information source used to create each reference archetype: if the underlying source is itself part of this document or is required to implement it then it has been designated as normative. If it is an external source such as another standard, which might be revised at a different time point to this document, then the reference archetype has been made informative.

In this document, a normative null_flavor reference archetype is defined to be used for the corresponding property in ISO 13606-1. A normative access policy rule reference archetype is specified in accordance with the corresponding information model for an access policy rule specified in ISO 13606-4. Informative reference archetypes are defined for the most frequently needed demographic entities. An informative archetype is specified for medicinal product, which has been defined in accordance with the ISO IDMP standard series.

The examples of clinical reference archetypes presented in Clause 11 are based on the clinical reference information structures in Clause 12. The clinical reference information structures in Clause 12 are developed out from the clinical concepts as they are defined in ISO 13940:2015 (Contsys).

Each selected clinical concept in Contsys has been elaborated based on the definition, relations and explanations in notes given in ISO 13940. The attributes of the clinical reference information structures are thus mainly based on ISO 13940. Some further attributes are added to harmonize the structures with e.g. FHIR resources or openEHR.

The result is information structures representing basic clinical concepts including a gross list of attributes for each concept. The gross list is intended to be comprehensive and cover all needs for clinical information in different specializations and applications. This approach reflects the general idea to include all needed types of characteristics/attributes and constrain the number applied when specializing clinical archetypes for instantiation.

The level of granularity/abstraction of the classes/selected concepts in the clinical reference information structures in Clause 12 and in the examples of clinical reference archetypes in Clause 11 is explained by the purpose of being general at the conceptual level for all clinical situations where information about this type of concept is relevant (content as well as context) but still specific for that clinical concept.

One example of the chosen level of abstraction is healthcare activity element as the concretized specialization of healthcare activity with a specific purpose (e.g. investigation or treatment). Another example could be that the method of performing activity elements are specified at a general level common for surgical treatments, pharmacological treatments (including administration routes) and laboratory tests as investigations.

Clause 12 includes clinical reference information models, conformant to ISO 13940(Contsys), to be used as bases for specifying clinical reference archetypes. These are aimed for further specializations as clinical archetypes in an EHR. The clinical reference information models are also aimed for further use as a basis for harmonizing between coexisting standards for specifying clinical content. A future possibility could be to develop FHIR resources based on these reference models. Another possibility for future development is that CIMI archetypes could accept the same bases as a “middle layer” between their reference model and specific archetypes. Altogether such approaches could result in harmonization of the different information specification standards/approaches to the common conceptual basis of Contsys. These resources are offered in an informative Clause to indicate the direction of ongoing work to develop a portfolio of Reference Archetypes that align with Contsys and with corresponding FHIR resources, but which are not yet mature enough to include here as normative specifications.

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Health informatics — Electronic health record communication —

Part 3: Reference archetypes and term lists

1 Scope

This document specifies a means for communicating part or all of the electronic health record (EHR) of one or more identified subjects of care between EHR systems, or between EHR systems and a centralised EHR data repository.

It can also be used for EHR communication between an EHR system or repository and clinical applications or middleware components (such as decision support components), or personal health applications and devices, that need to access or provide EHR data, or as the representation of EHR data within a distributed (federated) record system.

This document defines term lists that each specify the set of values for the particular attributes of the Reference Model defined in ISO 13606-1. It also defines normative and informative Reference Archetypes that enable frequently-occurring instances of EHR data to be represented within a consistent structure when communicated using this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 13606-1, *Health informatics — Electronic health record communication — Part 1: Reference model*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 13606-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

healthcare activity

activity intended directly or indirectly to improve or maintain a health state

Note 1 to entry: Each specialization of this concept represents *healthcare activities* performed by a specialization of *healthcare actor*.

Note 2 to entry: Different types of *healthcare activity elements* (e.g. *healthcare investigation* or *healthcare treatment*) may be performed during a *healthcare activity*.

Note 3 to entry: See the *concepts healthcare provider activity, self-care activity, healthcare third party activity* and *automated healthcare* when it comes to the recording of *information* that are the result of *healthcare activities* (e.g. ratified observations).

EXAMPLE A blood pressure measurement completed by a qualified nurse including the *healthcare activity elements* of taking, documenting and evaluation.

[SOURCE: ISO 13940:2015]

3.2

reference archetype

archetype serving as a base pattern for archetype specialisations

4 Abbreviations

For the purposes of this document, the following abbreviations apply.

EHR	Electronic Health Record
EU	European Union
GP	General Practitioner
HL7	Health Level Seven
ISO	International Organization for Standardization
OID	Object Identifier
UML	Unified Modelling Language

5 Conformance

When electronic health record information is to be communicated using ISO 13606 (all parts) and where an attribute of the Reference Model defined in ISO 13606-1 requires a value to be taken from a bounded set of codes from a named term list, the code shall be one of those defined in Clause 6 for the correspondingly-named term list.

An archetype that is used to organize the structure and semantics of part of an electronic health record that is communicated using this standard series shall be a logical transformation or specialization of a normative reference archetype defined in Clauses 7 or 8, if the archetype is intended to communicate information corresponding to the scope of one of those reference archetypes. This document does not prescribe the structure or semantics of any other archetypes used to communicate electronic health record information.

6 Term lists

6.1 Introduction

The Reference Model defined in ISO 13606-1 defines several attributes whose values are to be selected from a fixed list of values. This clause defines those value lists (term lists) for each of those attributes. Attributes not included in this clause (or defined in ISO 13606-4) may take any value that conform to the data type and invariant specifications defined in ISO 13606-1.

There are no attributes in the Reference Model to specify the clinical content being communicated, except for the identifier of the archetypes that specify its overall structure and semantics and the term list defining semantic linkage between RECORD_COMPONENTS. Clinical concepts as they are defined in ISO 13940:2015, and a reference information structure as the informative basis for developing clinical reference archetypes, are presented in Clause 12.

6.2 Termlist SUBJECT_CATEGORY, Class ENTRY, attribute subject_of_information_category

This attribute provides a coarse-grained definition of the person who is the subject of an ENTRY. The default value is DS00 (the patient, or subject of care). A more fine-grained definition of the information subject (such as the precise relative with a family history) can be specified through the ENTRY.subject_of_information.relationship attribute.

Code	Meaning	Description
DS00	subject of care	<i>healthcare actor</i> with a <i>person role</i> ; who seeks to receive, is receiving, or has received healthcare
DS01	relative of subject of care	<i>person role</i> being any human relative, without limitation to biological or adoptive relatives
DS02	next of kin	<i>person role</i> being either the closest living relative of <i>the subject of care</i> or identified as the one he has a close relationship with
DS03	foetus or neonate or infant	the baby or babies being described by an ENTRY in the EHR of the mother
DS04	mother	the mother of a foetus or neonate, if being described in the EHR of a baby (e.g. during pregnancy)
DS05	donor	<i>person role</i> being the donor of an organ or body specimen being described by an ENTRY in the EHR of the recipient
DS06	unrelated person	<i>person role</i> being any other person not related to the subject of care, such as an employer, friend, carer
DS07	healthcare third party	<i>healthcare actor</i> (organization or person) other than a <i>health-care provider</i> or the <i>subject of care</i>
DS08	subject of care proxy	<i>healthcare third party</i> having person role with the right to take decisions on behalf of the subject of care

NOTE If ENTRY.subject_of_information_category is null, the value DS00 is assumed.

The original list has been extended and revised to align with terms and concepts used in ISO 13940 (Contsys).

6.3 Termlist VERSION_STATUS, Class BASE_COMPONENT, attribute version_status

This attribute is used to indicate the status of a particular version of a RECORD_COMPONENT. This attribute is optional, and if no value is provided it is to be assumed that the RECORD_COMPONENT is the first definitive version corresponding to code value VER01. **In all cases, the new version of a RECORD_COMPONENT shall replace the former version, as specified in ISO 13606-1.**

Code	Meaning	Description
VER00	Draft	The version is known at the time of committal to be incomplete (because additional information is expected later) or if the necessary authorisations have not been made : VER00 implies that the EHR recipient might in future expect to receive a more definitive updated version of this RECORD_COMPONENT
VER01	Finished	The version is committed with the intention of being a final version, with no anticipated reason for revision
VER02	Updated	The version is an update of the previous version, usually by adding supplementary information that was not available at the time of committal. Revision is intended for additions usually to be made by the original author within a short time frame, and not for recoding an evolving clinical story

Code	Meaning	Description
VER03	Correction	The version corrects errors made in the recording of the previous version
VER04	Deletion (in error)	The version logically deletes the previous version to correct an error of documentation (e.g. if the RECORD_COMPONENT had been placed in the wrong patient's EHR)
VER05	Legal deletion	The version logically deletes the previous version because the removal is the outcome of a legal or policy matter (e.g. if the subject of care has exercised rights to have the information removed)
VER06	Encoded	The version updates the previous version through the addition of coded terms to which content in the previous version has been mapped, without replacing any of the original content of the previous version

NOTE If BASE_COMPONENT.version_status is null, the value VER01 is assumed.

6.4 Termlist MODE, Reference Archetype Healthcare activity participation

Code	Description
MODE01	Participation in person
MODE02	Participation using remote control to perform healthcare activity elements
MODE03	Participation via videoconference or similar electronics means (sound and video)
MODE04	Participation via telephone or similar electronics means (sound only)
MODE05	Participation using on-line communication of text and possibly also pictures
MODE05	Contributing by providing text and/or pictures ahead of the healthcare activity

NOTE If MODE is null, the value MODE01 is assumed.

6.5 Class LINK, attribute link_description

Six separate term lists are defined for this Reference Model property, reflecting the main purposes for which links may need to be communicated between EHR systems. The main advantage of sub-dividing the set of link terms into these six categories is to enable archetypes or other constraints and profiles of the Reference Model to specify if only a particular category of link terms is relevant to a given situation.

The six categories are:

- **Related to:** a generic category for linking parts of the EHR.
- **Authorised by or confirmed by:** links that connect the documentation of the legal or authoritative basis for an activity documented in another part of the EHR, including mandates for care and attestations of EHR content.
- **Related to the same health condition or health problem:** links that connect two health or health care situations, events or activities that pertain to the same healthcare matter, such as defining a health problem for which the linked component is a manifestation (as an inclusion criteria), specifying the health condition being the motivation/indication for a healthcare activity, asserting a cause and effect relationship, relates to specified phases of a clinical process, linking stages in an evolving clinical history, or connecting different interpretations of an observation.
- **Related to the same clinical process, care plan, healthcare activity or episode of care:** linking parts of the same health condition (as criteria for a health condition and/or as a motivation for healthcare activities), clinical process (as a clinical process concern), care plan, healthcare activity or episode of care.

- **Related documentation:** linking alternative documentary forms, such as re-use of pre-existing EHR content in another part of the EHR, the re-expression of the same clinical information, additional supplementary explanatory information or a summary.
- **Plays a role:** linking EHR content to a demographic entity that has played a (structural) role in the information that is documented.

The list from the previous version of this document has now been divided into subgroups for easier specification in archetypes and for easier maintenance. It has been extended by adding terms identified in previous implementer feedback, terms to align with changes to ISO 13606-1, terms to link a RECORD_COMPONENT to an attestation or to link two attestations, and terms corresponding to Consys associations that were not covered in the original term list.

6.5.1 Termlist RELATED_TO, Class LINK, attribute link_description

Code	Meaning	Description
LINK-A1	concerns, or unspecified link	The term is used when no semantic information is available for the Link in the EHR system from which the EXTRACT has been created.
LINK-A2	suggests/considered (tentatively related to)	The interpretation expressed in the target component is assessed to be a possible (considered) cause or outcome of the findings documented in the source component.
LINK-A2i	is considered/suggested by	The inverse relationship of LINK-A2.
LINK-A3	re-occurrence or repeat of	The source component documents a clinical situation which, in the opinion of the composer, is a repeat occurrence of the clinical situation documented in the target. This is intended for re-occurrences of real world situations, not repeated documentation of the same real-world event.

6.5.2 Termlist AUTHORISED_BY, Class LINK, attribute link_description

Code	Meaning	Description
LINK-B1	endorses/concluded (agrees with, confirms, verifies)	The interpretation expressed in the source component provides confirmatory evidence or a confirmatory opinion of the interpretation expressed in the target component. An example of this is where specified observed conditions documented in source component are considered being inclusion criteria for a health condition expressed in the target component.
LINK-B2	disagrees with (e.g. another opinion)	The interpretation expressed in the source component disproves or disagrees with or excludes the interpretation expressed in the target component. An example of this is where specified observed conditions in the source component are considered being exclusion criteria for a health condition in the target component.
LINK-B3	permits (sanctions, authorises)	The source component documents a permission or an authorization of an action documented in the target component. A permission can include an informed consent from a subject of care or an authorization by law.
LINK-B3i	permitted by	The inverse relationship of LINK-B3.
LINK-B4	assumes responsibility for	The participant (e.g. composer) identified in the source component is taking responsibility for the care acts documented in the target component (accepting a healthcare mandate). A mandate includes a commitment to perform an activity and a permission to perform it.
LINK-B5	declines (refuses, cancels)	The participant (e.g. composer) identified in the source component is declining or withdrawing consent to take responsibility for the care acts documented in the target component. Refusal to accept a healthcare mandate.

Code	Meaning	Description
LINK-B6	consents to	The participant identified in the source component is proving consent to care actions documented in the target component. A subject of care gives an informed consent to a commitment for provision of healthcare given by a healthcare provider.
LINK-B6i	consented by	The inverse relationship of LINK-B6.
LINK-B7	countersigns	The source component is a countersignature of the information contained in the target component
LINK-B8	revokes attestation	The source component contains information or an attestation that effectively revokes the validity of the target attestation, or the source attestation that revokes the validity of the target attestation
LINK-B9	removes attestation	The source component contains information or an attestation that logically deletes the target attestation because the original attestation had been added in error, or the source attestation logically deletes the target attestation because the original attestation had been added in error.
LINK-B10	unspecified reference to an attestation	The target of the LINK is an attestation, but its relationship to the source component is not otherwise specified
LINK-B11	regulates	The source component specifies a regulation or policy or procedure or rule that governs activities or decisions documented within the target component
LINK-B11i	is regulated by	The activities or decisions documented within the source component are governed by a regulation or policy or procedure or rule specified in the target component
LINK-B12	commissions	The source component specifies the commissioning basis for care documented within the target component
Link-B12i	is commissioned by	The care documented in the target commitment has been commissioned as specified in the target component

6.5.3 Termlist SAME_HEALTH_ISSUE, Class LINK, attribute link_description

Code	Meaning	Description
LINK-C1	cause (interpretation)	The clinical situation documented in the source component is considered by the author to be the cause of the clinical situation documented in the target component. This is commonly an association between health conditions (e.g. an observed condition in the source component is assessed to be the cause of a professionally assessed condition in the target component), but could also be an association between an activity or an event and a health condition.
LINK-C1i	caused by	The inverse relationship of LINK-C1.
LINK-C2	revised interpretation	The interpretation documented in the source component is a revision of or difference in clinical thinking compared to that documented in the target component.
LINK-C3	evidence for	The observation or interpretation documented in the source component provides confirmatory evidence of the interpretation expressed in the target component. This is an association between health conditions where one observed condition by knowledge is an inclusion criterion for a more composite health condition.
LINK-C3i	justified by	The inverse relationship of LINK-C3.

Code	Meaning	Description
LINK-C4	evidence against	The observation or interpretation documented in the source component provides evidence against the interpretation expressed in the target component. This is an association between health conditions where one observed condition by knowledge is an exclusion criteria for a more composite health condition.
LINK-C4i	countered by	The inverse relationship of LINK-C4.
LINK-C5	Indicated/motivated by	The target component documents a clinical indication for the care action documented in the source component. This is an association between a health condition being the motivation for a healthcare activity element.
LINK-C5i	Indication/motivation for	The inverse relationship of LINK-C5.
LINK-C6	contraindicated by	The target component documents an observation or interpretation that is a contraindication for a care action documented in the source component. This is commonly an association between a health condition and a healthcare activity but could also be an association between two healthcare activities.
LINK-C6i	contraindication for	The inverse relationship of LINK-C6.
LINK-C7	trigger for	The source component is the trigger event or situation for the clinical situation documented in the target component. This is e.g. a component of a clinical risk describing the trigger for an event that could have consequences for the health state of a subject of care (a risk condition).
LINK-C7i	triggered by	The inverse relationship of LINK-C7.
LINK-C8	manifestation of	The source component documents a clinical manifestation of the phenomenon documented in the target component.
LINK-C8i	manifested by	The inverse relationship of LINK-C8.
LINK-C9	sequel (consequence, progression)	The source component documents a clinical situation that is a temporal successor to the target component (expected or unexpected, intended or unintended). Health condition evolution is an example of a sequel.
LINK-C10	intended (aim, goal, target, hoped for, desired)	The clinical situation documented in the target component is an intended consequence, sequel or outcome of the situation documented in the source component. A target condition is an example of "intended".
LINK-C11	anticipated (predicted)	The clinical situation documented in the target component is an anticipated consequence, sequel or outcome of the situation documented in the source component (desirable or undesirable). A prognostic condition is an example of "anticipated".
LINK-C12	to be avoided (at risk of, fear of, prophylaxis against)	The clinical situation documented in the target component is an undesirable but possible consequence, sequel or outcome of the situation documented in the source component. A risk condition is an example of "to be avoided".

Recognising that it is desirable to represent uncertainty and negation for 'clinical links' ('possibly caused by', 'is not a contraindication for'), such advanced expressivity is not supported by the current vocabulary and class. Work continues to explore this topic.

6.5.4 Termlist SAME_PLAN, Class LINK, attribute link_description

Code	Meaning	Description
LINK-D1	outcome	The clinical situation documented in the target component is the direct outcome of the situation documented in the source component. A resultant condition is an example of "outcome".
LINK-D2	has pre-condition	The clinical situation (possibly an objective or criterion) documented in the target component is a pre-condition of the situation documented or intended action in the source component.
LINK-D3	healthcare evaluation (assessment, milestone)	The source component documents a clinical evaluation/assessment or milestone of the care activity, clinical process, objective or clinical condition documented in the target component.
LINK-D4	contributes to or fulfils goal, plan or act	The source component documents a care activity or clinical situation that makes some positive contribution towards the achievement of a plan of care or objective. This is e.g. an association between a healthcare activity and a health condition.
LINK-D5	revised state of the same act	The source component is a revised status of a care activity documented in the target component; e.g. the source might be a completed or cancelled state of a planned healthcare activity documented in the target. This is e.g. an association between a health condition and a healthcare activity.
LINK-D6	sub-task of	The healthcare activity documented in the source is a part of or sub-routine of an activity (e.g. a planned activity) documented in the target.

6.5.5 Termlist RELATED_DOCUMENTATION, Class LINK, attribute link_description

Code	Meaning	Description
LINK-E1	documented by (is documented within)	A clinical situation documented in the source component is more formally, documented in the target component.
LINK-E1i	documents (describes, reports)	The inverse relationship of LINK-E1.
LINK-E2	summarises	The source component documents in summary form the clinical situation documented by the target component.
LINK-E3	supplements	The source component provides supplementary information to the situation documented by the target.
LINK-E4	excerpts	The source component is an extract (copy) of part or all of information contained within the target component.
LINK-E5	derived from	The source component contains information that has been derived (e.g. calculated) from information documented in the target component.
LINK-E6	has reference ranges	The target component provides a reference basis for the interpretation of the values in the source component.
LINK-E7	identified within (study product)	The source component is an observation or interpretation taken directly from information contained within the target component.
LINK-E8	copied from	The source component is an exact copy of the target component, including its child components
LINK-E8i	copied to	The source component and its child components have been directly copied to the target component
LINK-E9	included by reference	The target components are not explicitly included as part of the source components but the source components should be interpreted as if the target components were included
LINK-E10	unspecified reference to a link	The target component is itself a LINK that is relevant to the interpretation of the source component LINK, but not otherwise specified

6.6 Termlist, Class EXTERNAL_LINK, attribute target_information_type

Code	Meaning	Description
ELINK-1	External data relating to this subject of care	The linked material is external to this EHR_EXTRACT, about the subject of care, and is relevant to the full interpretation and use of the source components referencing this external data. It may be externally-held clinical data, such as data in another EHR systems or large volume multimedia data, or relevant non-health data
ELINK-2	Part or all of the EHR of another subject of care	The linked material is EHR data or healthcare related data about another subject of care, which is relevant to the full interpretation and use of the source components referencing this external data
ELINK-3	Clinical guideline, protocol or clinical pathway	The linked material is a guideline, protocol or clinical pathway that is relevant to the clinical data contained in the source component, usually because the source components document a step in planning/pursuing the care pathway or the grounds for choosing or not choosing to adhere to it
ELINK-4	Study protocol	The linked material is a research study protocol that is relevant to the clinical data contained in the source component, because the source components document a step in pursuing the protocol or the eligibility criteria for adopting it, or the exclusion criteria for not adopting it
ELINK-5	Policy or operating procedure	The linked material is a policy, operating procedure or other rules that are relevant to the clinical documentation in the source components, usually because these were applicable to the activities documented. This can be e.g. a method specification of healthcare activity.
ELINK-6	Safety report	The linked material is a patient safety report to which the source components are an affirmation (i.e. the patient has experienced this safety issue) or the grounds for not pursuing a particular care activity (such as avoiding a particular drug)
ELINK-7	Educational resource	The linked material is educationally relevant to the health matter reflected in the source components and is potentially for use by the subject of care
ELINK-8	Research publication	The linked material is published research that has informed the care activities all decisions reflected in the source components
ELINK-9	Standard, profile or publicly available specification	The linked material is a published specification that may have a health or a health ICT relevance to the EHR information in the source components
ELINK-10	Clinical model	The linked material is a clinical model that may have relevance to the EHR information in the source components. This external link should not be used to identify the archetype to which the source component conforms
ELINK-11	Terminological resource	The linked material is a terminological resource that may have relevance to the EHR information in the source components. This external link should not be used to identify the terminology from which a data value contained within an ELEMENT has been used, but it may be used to reference a resource that facilitates further interpretation or cross mapping of an ELEMENT data value
ELINK-12	Algorithm or derivation rule	The linked material is the logical / mathematical basis on which values within the source components have been derived or calculated or inferred
ELINK-13	Product or service specification	The linked material is the specification of a product or service that is relevant to, may have been used as part of, or may have contributed as the cause of, the health or care activities documented in the source components
ELINK-14	Other external resource	The relevance of the linked material to the source components needs to be inferred from the content and context

6.7 Termlist, Classes ELEMENT and DEMOGRAPHIC_ELEMENT, attribute null_flavour

Code	Rubric	Description	ISO 21090
NI	No information	The value is exceptional (missing, omitted, incomplete, improper). No information as to the reason for being an exceptional value is provided. This is the most general exceptional value. It is also the default exceptional value	NI
INV	Invalid	The value as represented in the instance is not a member of the set of permitted data values in the constrained value domain of a variable	INV
UNK	Unknown	A proper value is applicable, but not known	UNK
MSK	Masked	There is information on this item available but it has not been provided by the sender due to security, privacy or other reasons. There may be an alternate mechanism for gaining access to this information. Warning: Using this null flavor does provide information that may be a breach of confidentiality, even though no detail data is provided. Its primary purpose is for those circumstances where it is necessary to inform the receiver that the information does exist without providing any detail	MSK
NA	Not applicable	No proper value is applicable in this context (e.g., last menstrual period for a male)	NA

6.8 Termlist, Class ATTACHMENT, attribute IntegrityCheckAlgorithm

The algorithm used to compute the IntegrityCheckAlgorithm value. If populated, the value of this attribute shall be taken from the HL7 IntegrityCheckAlgorithm code system. OID: 2.16.840.1.113883.5.1010

Code	Meaning	Description
SHA1	secure hash algorithm - 1	This algorithm is defined in FIPS PUB 180-4: Secure Hash Standard. As of August 2015.
SHA256	secure hash algorithm - 256	This algorithm is defined in FIPS PUB 180-4: Secure Hash Standard. As of August 2015.

7 Reference archetype for null_flavor

7.1 Archetype name: Null_flavor

Identifier:

Scope: This ELEMENT archetype shall be added by an archetype developer to any relevant archetype for which it is foreseen that information might be missing or unavailable to include in some instances of EHR data. This reference archetype provides a standardized way of communicating that this information is missing. This reference archetype effectively enables the archetype developer replicate the function of the null_flavour property of an ELEMENT or DEMOGRAPHIC_ELEMENT to other higher-level of the RECORD_COMPONENT hierarchy.

Standards incorporated: ISO 13606-3, 6.7

Method for applying the standard(s):

This ELEMENT reference archetype replicates the term list given in 6.7.

Mind map:



URL: <http://en13606.org/specifications.html>

Attribute description:

This is given in 6.7.

8 Reference archetype for the access policy COMPOSITION

8.1 Archetype name: Access_policy_rule

Identifier: ISO-EN13606-PART4_COMPOSITION.Access_policy_rule.v1

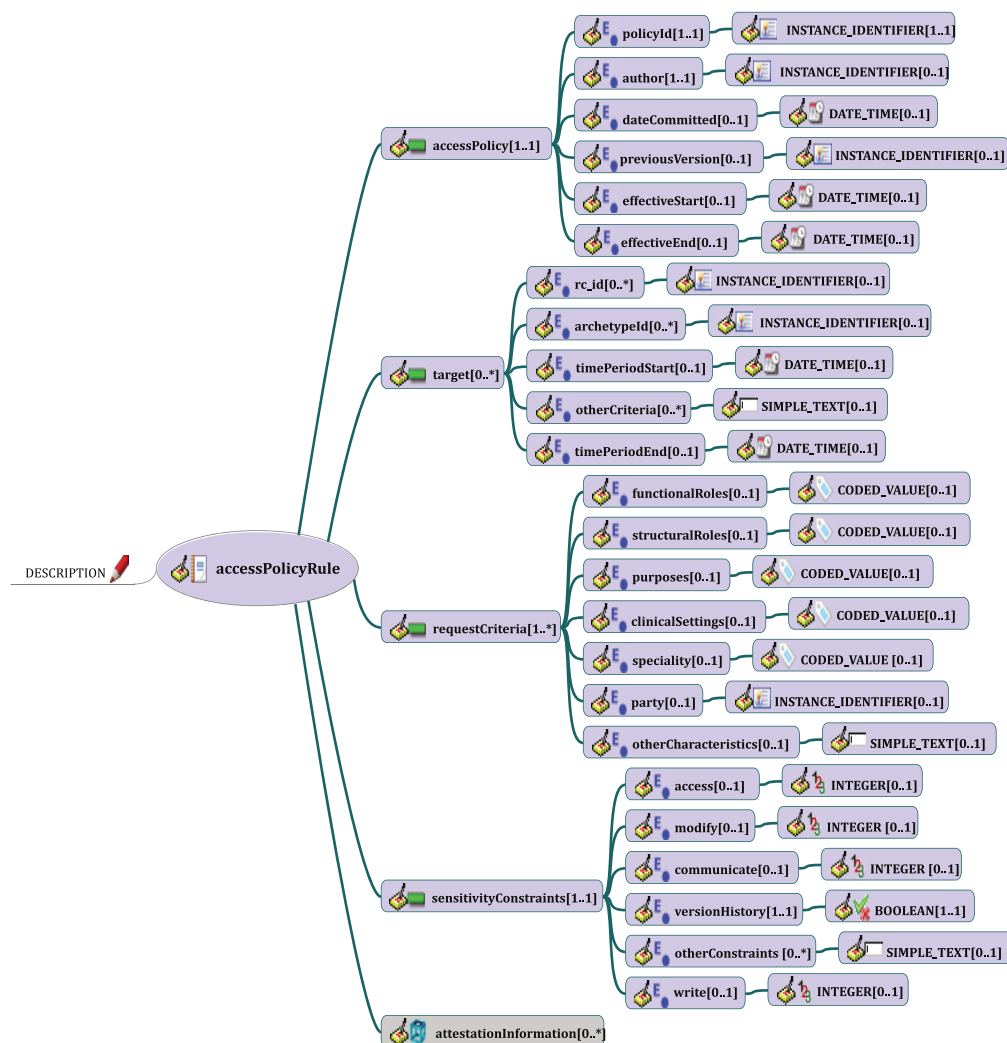
Scope: A COMPOSITION reference archetype for communicating access policy information as part of an EHR_EXTRACT. This reference archetype shall be used or specialized for representing an access policy COMPOSITION.

Standards incorporated: ISO 13606-4, 7.2

Method for applying the standard(s):

This reference archetype, when used to structure the RECORD_COMPONENT hierarchy of a COMPOSITION according to ISO 13606-1, conforms to the UML access policy model defined in 7.2 of ISO 13606-4.

Mind map:



URL: <http://en13606.org/specifications.html>

Attribute description:

This is given in 7.2 of ISO 13606-4.

9 Reference archetypes for demographic entities

The datatypes for each ELEMENT node of the reference archetypes included in this clause are shown in the mind map diagrams. These datatypes correspond to those defined in ISO 13606-1.

9.1 Archetype name: EntityIdentifier

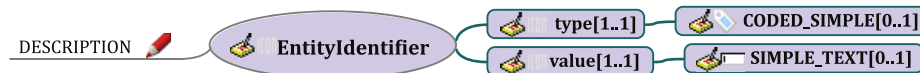
Identifier: ISO-EN13606-DEMOGRAPHIC_CLUSTER.EntityIdentifier.v1

Scope: A cluster for identifiers of an entity. This reference archetype may be used or specialized to represent EntityIdentifier within appropriate demographic archetypes.

Standards incorporated: None

Method for applying the standard(s): n/a

Mind map:



URL: <http://en13606.org/specifications.html>

Attribute description:

Attribute	Description
type	Signifying the identifier of an entity
value	Value of the identifier

9.2 Archetype name: useablePeriod

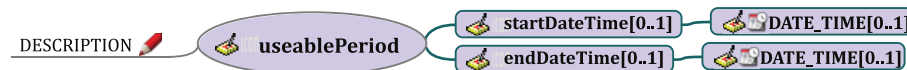
Identifier: ISO-EN13606-DEMOGRAPHIC_CLUSTER.useablePeriod.v2

Scope: A cluster for period of use of a property. This reference archetype may be used or specialized to represent useablePeriod within appropriate demographic archetypes.

Standards: -

Method: -

Mind map:



URL: <http://en13606.org/specifications.html>

Attribute description:

Attribute	Description
startDateTime	Start time and date of use of a property
endDateTime	End time and date of use of a property

9.3 Archetype name: LocationAddress

Identifier: ISO-EN13606-DEMOGRAPHIC_CLUSTER.LocationAddress.v3

Scope: Home or office address. It is primarily used to communicate data that will allow a person to physically visit that address. This reference archetype may be used or specialized to represent LocationAddress within appropriate demographic archetypes.

Standards incorporated: ISO 21090

Method for applying the standard(s)

This reference archetype conforms to the following properties.

XP (Name or Address Part)

A part of a name or an address. Each part is a character string that may be coded, and that also may have a nullFlavor. The string content shall always be provided whether a code is provided or not.

ADXP (Address Part)

A part that may have a type-tag signifying its role in the address. Typical parts that exist in about every address are street, house number, or post box, postal code, city, country but other roles may be defined regionally, nationally, or on an enterprise level (e.g. in military addresses).

Addresses are usually broken up into lines, which may be indicated by special line-breaking delimiter elements (e.g., DEL).

The possible values of the “type” attribute are (AL, ADL, UNID, UNIT, DAL, DINST, DINSTA, DINSTQ, DMOD, DMODID, SAL, BNR, BNN, BNS, STR, STB, STTYP, DIR, INT, CAR, CEN, CNT, CPA, CTY, DEL, POB, PRE, STA, ZIP)

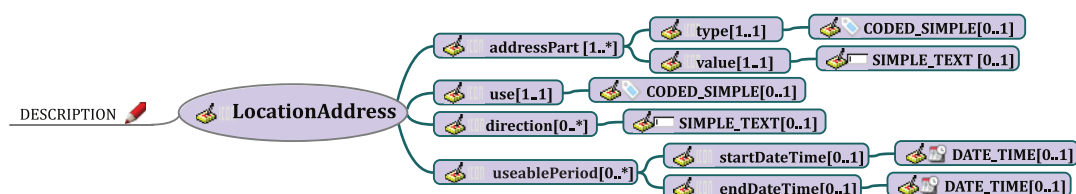
AD (Address)

Mailing and home or office addresses. AD is primarily used to communicate data that will allow printing mail labels, or that will allow a person to physically visit that address. The postal address datatype is not supposed to be a container for additional information that might be useful for finding geographic locations (e.g., GPS, coordinates) or for performing epidemiological studies. Such additional information should be captured by other, more appropriate data structures.

Addresses are essentially sequences of address parts, but add a “use” code and a valid time range for information about if and when the address can be used for a given purpose.

The possible values of the “use” attribute are (H, HP, HV, WP, DIR, PUB, BAD, TMP, ABC, IDE, SYL, PHYS, PST, SRCH, SNDX, PHON).

Mind map:



URL: <http://en13606.org/specifications.html>

Attribute description:

Attribute	Description
use	Identifies the purpose of this address. Location address use (Home address, work place, direct, temporary address, physical visit address, postal address, postal and physical address)
useablePeriod	A valid time range for information about if and when the location address can be used for a given purpose
direction	A textual description how to get the specific location address
address part	A part that may have a type-tag signifying its role in the address. Typical parts that exist in about every address are street, house number, or post box, postal code, city, country but other roles may be defined regionally, nationally, or on an enterprise level
type	Address part type (Address line, additional locator, unit identifier, street address line, building number, country, municipality, post box, state or province, district, city, postal code, C/O (care off))
value	Textual representation of the address

9.4 Archetype name: TelecommunicationAddress

Identifier: ISO-EN13606-DEMOGRAPHIC_CLUSTER.TelecommunicationAddress.v3

Scope: A locatable resource that is identified by a URI, such as a web page, a telephone number (voice, fax or some other resource mediated by telecommunication equipment), an e-mail address, or any other locatable resource that can be specified by a URL. Details for all kinds of technology mediated contact points for a person or organization. This reference archetype may be used or specialized to represent TelecommunicationAddress within appropriate demographic archetypes.

Standards incorporated: ISO 21090

Method for applying the standard(s)

This reference archetype conforms to the following properties.

TEL (Telecommunication Address)

A locatable resource that is identified by a URI, such as a web page, a telephone number (voice, fax or some other resource mediated by telecommunication equipment), an e-mail address, or any other locatable resource that can be specified by a URL.

The intent of this datatype is to be a locator, not an identifier; this datatype is used to refer to a locatable resource using a URL, and knowing the URL allows one to locate the object. However, some use cases have arisen where a URI is used to refer to a locatable resource. Though this datatype allows for URIs to be used, the resource identified SHOULD always be locatable. A common use of locatable URI's is to refer to SOAP attachments.

The possible values for the “use” attribute are (H, HP, HV, WP, DIR, PUB, BAD, TMP, AS, EC, MC, PG).

The possible values of the “capabilities” attribute are (voice, fax, data, tty, sms).

TEL.URL

TEL.URL constrains TEL so that it shall point to a locatable resource that returns binary content. No use codes. The URL scheme shall be file, nfs, ftp, cid (for SOAP attachments), http, or https.

TEL.PERSON

TEL.PERSON constrains TEL so that it shall refer to a method of communication with a person. The URL scheme shall be tel, x-text-fax, x-text-tel or mailto.

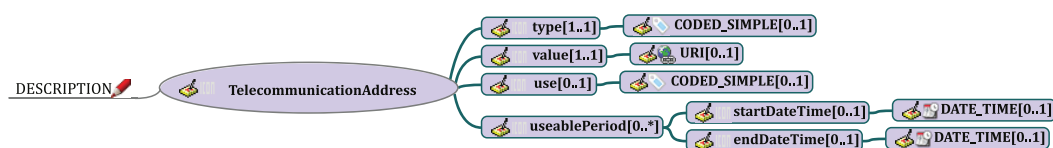
TEL.PHONE

TEL.PHONE constrains TEL.PERSON so it shall refer to some telephone based communication system with a person. The URL scheme shall be tel, x-text-fax, or x-text-tel.

TEL.EMAIL

TEL.EMAIL constrains the TEL.PERSON type to be an email address. The URL scheme shall be mailto.

Mind map:



URL: <http://en13606.org/specifications.html>

Attribute description:

Attribute	Description
value	A textual representation of the value
use	Telecommunication address use (Home address, work place, direct, temporary address, answering service, emergency contact)
type	The type of telecommunication device for which the information is being captured e.g. whether it is a fax, mobile, landline, pager etc.
useablePeriod	A valid time range for information about if and when the telecommunication address can be used for a given purpose

9.5 Archetype name: Address

Identifier: ISO-EN13606-DEMOGRAPHIC_CLUSTER.Address.v3

Scope: An email address, telephone number and home or office addresses. This reference archetype may be used or specialized to represent Address within appropriate demographic archetypes.

Standards incorporated: ISO 21090

Method for applying the standard(s)

This reference archetype conforms to the following properties.

TEL (Telecommunication Address)

A locatable resource that is identified by a URI, such as a web page, a telephone number (voice, fax or some other resource mediated by telecommunication equipment), an e-mail address, or any other locatable resource that can be specified by a URL.

The intent of this datatype is to be a locator, not an identifier; this datatype is used to refer to a locatable resource using a URL, and knowing the URL allows one to locate the object. However, some use cases have arisen where a URI is used to refer to a locatable resource. Though this datatype allows for URIs to be used, the resource identified SHOULD always be locatable. A common use of locatable URI's is to refer to SOAP attachments.

The possible values for the “use” attribute are (H, HP, HV, WP, DIR, PUB, BAD, TMP, AS, EC, MC, PG).

The possible values of the “capabilities” attribute are (voice, fax, data, tty, sms).

TEL.URL

TEL.URL constrains TEL so that it shall point to a locatable resource that returns binary content. No use codes. The URL scheme shall be file, nfs, ftp, cid (for SOAP attachments), http, or https.

TEL.PERSON

TEL.PERSON constrains TEL so that it shall refer to a method of communication with a person. The URL scheme shall be tel, x-text-fax, x-text-tel or mailto.

TEL.PHONE

TEL.PHONE constrains TEL.PERSON so it shall refer to some telephone based communication system with a person. The URL scheme shall be tel, x-text-fax, or x-text-tel.

TEL.EMAIL

TEL.EMAIL constrains the TEL.PERSON type to be an email address. The URL scheme shall be mailto.

XP (Name or Address Part)

A part of a name or an address. Each part is a character string that may be coded, and that also may have a nullFlavor. The string content shall always be provided whether a code is provided or not.

ADXP (Address Part)

A part that may have a type-tag signifying its role in the address. Typical parts that exist in about every address are street, house number, or post box, postal code, city, country but other roles may be defined regionally, nationally, or on an enterprise level (e.g. in military addresses).

Addresses are usually broken up into lines, which may be indicated by special line-breaking delimiter elements (e.g., DEL).

The possible values of the “type” attribute are (AL, ADL, UNID, UNIT, DAL, DINST, DINSTA, DINSTQ, DMOD, DMODID, SAL, BNR, BNN, BNS, STR, STB, STTYP, DIR, INT, CAR, CEN, CNT, CPA, CTY, DEL, POB, PRE, STA, ZIP)

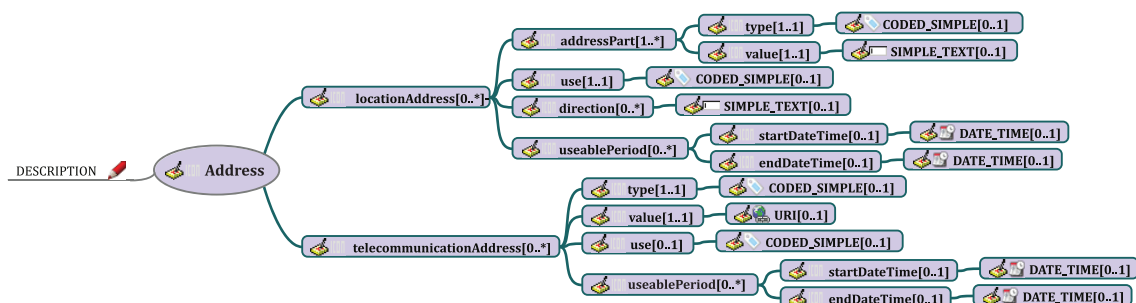
AD (Address)

Mailing and home or office addresses. AD is primarily used to communicate data that will allow printing mail labels, or that will allow a person to physically visit that address. The postal address datatype is not supposed to be a container for additional information that might be useful for finding geographic locations (e.g., GPS, coordinates) or for performing epidemiological studies. Such additional information should be captured by other, more appropriate data structures.

Addresses are essentially sequences of address parts, but add a “use” code and a valid time range for information about if and when the address can be used for a given purpose.

The possible values of the “use” attribute are (H, HP, HV, WP, DIR, PUB, BAD, TMP, ABC, IDE, SYL, PHYS, PST, SRCH, SNDX, PHON).

Mind map:



URL: <http://en13606.org/specifications.html>

Attribute description:

Attribute	Description
location address	Home or office address. It is primarily used to communicate data that will allow a person to physically visit that address
telecommunication address	A locatable resource that is identified by a URI, such as a web page, a telephone number (voice, fax or some other resource mediated by telecommunication equipment), an e-mail address, or any other locatable resource that can be specified by a URL. Details for all kinds of technology mediated contact points for a person or organization

9.6 Archetype name: Namepart

Identifier: ISO-EN13606-DEMOGRAPHIC_CLUSTER.Namepart.v3

Scope: A part that is signifying the role of the part in the whole entity name. This reference archetype may be used or specialized to represent Namepart within appropriate demographic archetypes.

Standards incorporated: ISO 21090

Method for applying the standard(s)

This reference archetype conforms to the following properties.

XP (Name or Address Part)

A part of a name or an address. Each part is a character string that may be coded, and that also may have a nullFlavor. The string content shall always be provided whether a code is provided or not.

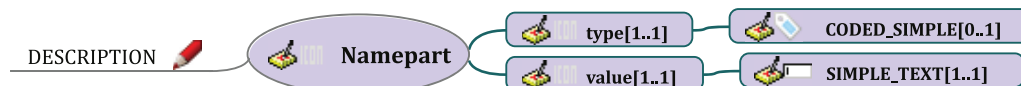
ENXP (Entity Name Part)

A part that may have a type code signifying the role of the part in the whole entity name, and qualifier codes for more detail about the name part type. (Typical name parts for person names are given names, and family names, titles, etc).

The possible values of the “use” attribute are (FAM, GIV, TITLE, DEL).

The possible values of the “qualifier” attribute are (LS, AC, NB, PR, HON, BR, AD, SP, MID, CL, IN, PFX, SFX).

Mind map:



URL: <http://en13606.org/specifications.html>

Attribute description:

Attribute	Description
type	Signifying the role of the part in the whole entity name. Entity name part type (family name, given name, middle name)
value	A textual representation of the name part

9.7 Archetype name: PersonName

Identifier: ISO-EN13606-DEMOGRAPHIC_CLUSTER.PersonName.v2

Scope: A name of the person. This reference archetype may be used or specialized to represent PersonName within appropriate demographic archetypes.

Standards incorporated: ISO 21090

Method for applying the standard(s)

This reference archetype conforms to the following properties.

EN (Entity Name)

A name for a person

Entity names are essentially sequences of entity name parts, but add a "use" code and a valid time range for information about when the name was used and how to choose between multiple aliases that may be valid at the same point in time.

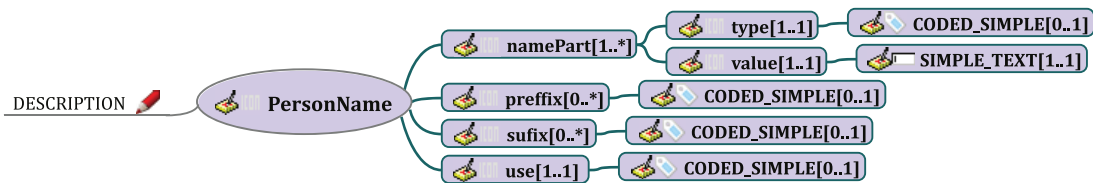
The possible values of the “use” attribute are (C, OR, T, I, P, A, R, OLD, DN, M, SRCH, PHON, ABC, SYL, IDE).

EN.PN (Person Name)

A restriction of EN used when the named Entity is a Person. A sequence of name parts, such as given name or family name, prefix, suffix, etc.

A name part is a restriction on entity name part that only allows those entity name parts qualifiers applicable to person names.

Mind map:



URL: <http://en13606.org/specifications.html>

Attribute description:

Attribute	Description
namePart	A part that is signifying the role of the part in the whole entity name
use	Person name use (Customary, official registry name, temporary, anonymous, maiden name, academic, nobility, professional, birth, acquired, spouse)
preffix	Mr, Ms
suffix	PhD, Senior

9.8 Archetype name: Person

Identifier: ISO-EN13606-DEMOGRAPHIC_ENTITY.Person.v3

Scope: Human being regarded as an individual. This reference archetype may be used or specialized to represent Person within appropriate demographic archetypes.

Standards incorporated: ISO 13940, ISO 21090

Method for applying the standard(s)

This reference archetype conforms to the following properties.

EN (Entity Name)

A name for a person

Entity names are essentially sequences of entity name parts, but add a "use" code and a valid time range for information about when the name was used and how to choose between multiple aliases that may be valid at the same point in time.

The possible values of the "use" attribute are (C, OR, T, I, P, A, R, OLD, DN, M, SRCH, PHON, ABC, SYL, IDE).

EN.PN (Person Name)

A restriction of EN used when the named Entity is a Person. A sequence of name parts, such as given name or family name, prefix, suffix, etc.

A name part is a restriction on entity name part that only allows those entity name parts qualifiers applicable to person names.

Mind map: