



The *openEHR* Architecture

Support Terminology

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| <i>Revision:</i> 1.0 | <i>Pages:</i> 27 | <i>Date of issue:</i> 08 Apr 2007 |
|----------------------|------------------|-----------------------------------|

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Amendment Record

| Issue | Details | Raiser | Completed |
|----------------------|---|---|-------------|
| RELEASE 1.0.1 | | | |
| 1.0 | <p>CR-000219: Use constants instead of literals to refer to terminology in RM.</p> <p>CR-000221. Add <i>normal_status</i> to DV_ORDERED. Add new “normal status” terminology group.</p> <p>CR-000217: Additional math function.</p> <p>CR-000235: Make attestation-only commit require a Contribution. Add ‘attestation’ code to audit-change type.</p> <p>CR-000246: Correct <i>openEHR</i> terminology rubrics.</p> | <p>R Chen</p> <p>H Frankel</p> <p>S Heard A Patterson</p> <p>B Verhees M Forss</p> | 08 Apr 2007 |
| RELEASE 1.0 | | | |
| 0.9 | <p>CR-000184. Separate out terminology from Support IM.</p> <p>CR-000182: Rationalise <i>VERSION.lifecycle_state</i> and <i>ATTESTATION.status</i>. Add new term set for attestation reason, deprecate attestation state term set.</p> <p>CR-000162. Allow party identifiers when no demographic data. Deprecate some terms from version lifecycle status group, add some new terms.</p> <p>CR-000140. Redevelop Instruction, based on workflow principles. Add term sets for Instruction State machine.</p> <p>CR-000192: Add display-as-absolute facility to delta Events in History</p> | <p>T Beale T Beale, D Kalra</p> <p>S Heard H Frankel</p> <p>S Heard T Beale S Heard</p> | 22 Oct 2005 |
| RELEASE 0.96 | | | |

Acknowledgements

The work reported in this paper has been funded by The University College, London and Ocean Informatics, Australia.

Contents

| | | |
|----------|----------------------------------|----------|
| 1 | Introduction | 7 |
| 1.1 | Purpose..... | 7 |
| 1.2 | Related Documents | 7 |
| 1.3 | Status..... | 7 |
| 1.4 | Peer review | 7 |
| 1.5 | Conformance..... | 7 |
| 2 | Terminology | 9 |
| 2.1 | Overview..... | 9 |
| 2.2 | Code Sets | 9 |
| 2.2.1 | Countries..... | 10 |
| 2.2.2 | Character Sets | 10 |
| 2.2.3 | Compression algorithms | 10 |
| 2.2.4 | Integrity check algorithms | 11 |
| 2.2.5 | Languages | 11 |
| 2.2.6 | Media Types..... | 11 |
| 2.2.7 | Normal Status..... | 12 |
| 2.3 | The openEHR Terminology..... | 12 |
| 2.3.1 | Attestation Reason | 12 |
| 2.3.2 | Audit Change Type | 13 |
| 2.3.3 | Composition Category | 13 |
| 2.3.4 | Event Math Function | 14 |
| 2.3.5 | Instruction States..... | 15 |
| 2.3.6 | Instruction Transitions | 15 |
| 2.3.7 | Null Flavours | 17 |
| 2.3.8 | Participation Function..... | 17 |
| 2.3.9 | Participation Mode..... | 18 |
| 2.3.10 | Property..... | 19 |
| 2.3.11 | Setting | 22 |
| 2.3.12 | Subject relationship..... | 22 |
| 2.3.13 | Term Mapping Purpose..... | 24 |
| 2.3.14 | Version Lifecycle State | 25 |

1 Introduction

1.1 Purpose

This document describes the *openEHR* Support Terminology and code sets, which define the vocabulary and codes needed for the *openEHR* Reference, Archetype and Service models. The *openEHR* terminology is not considered to be in the same space as externally defined terminologies such as SNOMED-CT, ICDx etc, since it is not an ontology of real facts, but of informational classifiers needed by the *openEHR* models. The code sets are generally a means of interfacing external codes such as ISO language identifiers, with *openEHR*.

The audience of this document includes:

- Standards bodies producing health informatics standards;
- Software development organisations developing EHR systems;
- Academic groups studying the EHR;
- The open source healthcare community.

1.2 Related Documents

Prerequisite documents for reading this document include:

- The *openEHR* Architecture Overview
- The *openEHR* Reference Model documents.

1.3 Status

This document is under development, and is published as a proposal for input to standards processes and implementation works.

This document is available at <http://svn.openehr.org/specification/TAGS/Release-1.0.1/publishing/architecture/terminology.pdf>.

The latest version of this document can be found at <http://svn.openehr.org/specification/TRUNK/publishing/architecture/terminology.pdf>.

Blue text indicates sections under active development.

1.4 Peer review

Areas where more analysis or explanation is required are indicated with “to be continued” paragraphs like the following:

To Be Continued: more work required

Reviewers are encouraged to comment on and/or advise on these paragraphs as well as the main content. Please send requests for information to info@openEHR.org. Feedback should preferably be provided on the mailing list openehr-technical@openehr.org, or by private email.

1.5 Conformance

Conformance of a data or software artifact to an *openEHR* Reference Model specification is determined by a formal test of that artifact against the relevant *openEHR* Implementation Technology

Specification(s) (ITSs), such as an IDL interface or an XML-schema. Since ITSs are formal, automated derivations from the Reference Model, ITS conformance indicates RM conformance.

2 Terminology

2.1 Overview

This document provides a documentary expression of the *openEHR* Support Terminology, consisting of code sets and vocabulary that provide values for the coded attributes in the *openEHR* Reference Model. The computable form of this terminology is available in the ‘computable’ part of the *openEHR* specification repository, and should always be considered the definitive expression, rather than this document. Access to the terminology in the *openEHR* reference model is via the classes defined in the package `rm.support.terminology`.

There are two types of coded entities used in *openEHR*. The first is that of codes that are self-defining, and which do not have separate rubrics, i.e. the code ‘stands for itself’. The ISO country and language codes are examples of this, as are code groups for such concepts as ‘integrity check algorithm names’. These are modelled in *openEHR* by the `CODE_PHRASE` type (found in the `rm.data_types.text` package). Value sets that cannot meaningfully be translated into other languages and which do not have definitions beyond their code value are usually candidates for being a code set rather than a terminology group. The code sets described in this document are mostly internet vocabularies defined by ISO or IETF. This document does not change the definition, it merely a) indicates which codes sets are used for what purpose in *openEHR* and b) assigns them a logical name by which they are referred to in the *openEHR* models.

The second category of coded entities are ‘proper’ coded terms, where each code is a concept identifier, for which there is a rubric and description, potentially in multiple languages. In other words, the way of ‘saying’ the concept is dependent on the language one is working in. Most clinical terminologies are in this category, e.g. ICD10, ICPC, as well as the *openEHR* Terminology. Terms in this category are modelled by the *openEHR* data type `DV_CODED_TEXT`, which uses the `CODE_PHRASE` type to contain its defining code, as well as any mapped codes. The *openEHR* Terminology is a lexicon of terms required for various attributes in the *openEHR* Reference and Archetype Models, arranged into groups, each identified by a logical name such as “audit change type”. This document describes only the *openEHR* terms; the contents of other terminologies are described by the relevant publications.

The *openEHR* Terminology groups provide mappings to other recognised terminologies or vocabularies where available. Given that the attributes defined here are mostly coded attributes (i.e. predefined in the *openEHR* Reference Model), mappings tend to be to terms in vocabularies defined by standards organisations such as CEN and HL7, rather than large clinical vocabularies such as ICD10 (WHO). *openEHR* does not specify the use of these latter vocabularies.

2.2 Code Sets

Code sets whose codes are derived from resources published by external authorities are not shown in full here; the definitive resource is referenced instead. The *openEHR* code-set databases contain the full set of codes in each case. In the header of each table:

- the issuer is the name of the issuing organisation;
- the “*openEHR* code set id” is the identifier used for code sets by the *openEHR* Reference Model;
- the “external identifier” is an identifier assumed by *openEHR* to be the identifier of this code set, based on its published name, with spaces replaced by underscores.

2.2.1 Countries

This ISO code set defined by the ISO 3166-1 standard consists of 2-character names of countries and country subdivisions. For a definitive online rendition see <http://www.unicode.org/unicode/online-dat/countries.html>.

| Issuer: <i>ISO</i> openEHR code set id: “ <i>countries</i> ” External identifier: “ <i>ISO_3166-1</i> ” | | |
|---|---------------|----------|
| Code | Description | Mappings |
| “af” | “Afghanistan” | |
| “al” | “Albania” | |
| ... | ... | |

2.2.2 Character Sets

This IANA (Internet Naming Authority) code set consists of the names of recognised character sets. See <http://www.iana.org/assignments/character-sets> for authoritative source.

| Issuer: <i>IANA</i> openEHR code set id: “ <i>character sets</i> ” External identifier: “ <i>IANA_character-sets</i> ” | | |
|--|-------------|----------|
| Code | Description | Mappings |
| ISO-10646-UTF-1 | | |
| ... | | |
| ISO_8859-3:1988 | | |
| ... | | |

2.2.3 Compression algorithms

This code set consists of the names of algorithms used to compress data, and is drawn from HL7’s CompressionAlgorithms domain.

| Issuer: <i>openehr</i> openEHR code set id: “ <i>compression algorithms</i> ” External identifier: “ <i>openehr_compression_algorithms</i> ” | | |
|--|---|---------------------------------|
| Code | Description | Mappings |
| “compress” | Original UNIX <i>compress</i> algorithm and file format using the LZC algorithm (a variant of LZW). | HL7_CompressionAlgorithm::10624 |
| “deflate” | The <i>deflate</i> compressed data format as specified in RFC 1951. See ftp://ftp.isi.edu/in-notes/rfc1951.txt . | HL7_CompressionAlgorithm::10621 |
| “gzip” | A compressed data format that is compatible with the widely used GZIP utility as specified in RFC 1952. See ftp://ftp.isi.edu/in-notes/rfc1952.txt . | HL7_CompressionAlgorithm::10622 |
| “zlib” | A compressed data format that also uses the deflate algorithm. Specified as RFC 1950 See ftp://ftp.isi.edu/in-notes/rfc1950.txt | HL7_CompressionAlgorithm::10623 |
| “other” | Some other type of compression; might be retrievable upon direct inspection of data. | |

2.2.4 Integrity check algorithms

This code set consists of the names of algorithms used to generate hashes for the purpose of integrity checks on data; its initial values are drawn from the HL7 IntegrityCheckAlgorithm domain.

| Issuer: openehr openEHR code set id: “integrity check algorithms” External identifier: “openehr_integrity_check_algorithms” | | |
|--|---|------------------------------------|
| Code | Description (en) | Mappings |
| “SHA-1” | Secure hash algorithm - 1. Defined in FIPS PUB 180-1: Secure Hash Standard. As of April 17, 1995. | HL7_IntegrityCheckAlgorithm::17386 |
| “SHA-256” | secure hash algorithm - 256. Defined in FIPS PUB 180-2: Secure Hash Standard | HL7_IntegrityCheckAlgorithm::17387 |
| ... | ... | |

2.2.5 Languages

This ISO code set defined by the ISO 639-1 standard consists of the “alpha-2” form of names of languages. This does not cover all languages, whereas ISO 639-2 “alpha-3” covers many more languages of cultural or indigenous interest, but which nevertheless are unlikely to be supported by current software or operating systems. See <http://www.loc.gov/standards/iso639-2/lang-home.html>.

| Issuer: ISO openEHR code set id: “languages” External identifier: “ISO_639-1” | | |
|--|-------------|----------|
| Code | Description | Mappings |
| “ab” | “Abkhazian” | |
| ... | ... | |
| “bg” | “Bulgarian” | |
| ... | ... | |
| “zh” | “Chinese” | |
| ... | ... | |

2.2.6 Media Types

This IANA (Internet Naming Authority) code set consists of the names of MIME media types. See <http://www.iana.org/assignments/media-types/text/> for authoritative source.

| Issuer: IANA openEHR code set id: “media types” External identifier: “IANA_media-types” | | |
|--|--|----------------------|
| Code | Description | Mappings |
| “text/plain” | Plain text encoded according to RFC3676 | HL7_MediaType::14826 |
| “text/html” | HTML text encoded according to RFC2854 | HL7_MediaType::14828 |
| “text/richtext” | Rich text encoded according to RFC2046 | |
| “text/rtf” | Rich text encoded according to ftp://indri.pri-mate.wisc.edu/pub/RTF/RTF-Spec.rtf . | HL7_MediaType::14831 |
| “text/sgml” | | HL7_MediaType::14829 |
| “text/rfc822-headers” | | |

| Issuer: IANA openEHR code set id: "media types" External identifier: "IANA_media-types" | | |
|--|-------------|----------------------|
| Code | Description | Mappings |
| "text/xml" | | HL7_MediaType::14830 |
| | | |
| "audio/basic" | | HL7_MediaType::14836 |
| "audio/mpeg" | | HL7_MediaType::14837 |
| | | |
| "application/pdf" | | HL7_MediaType::14833 |
| "application/msword" | | HL7_MediaType::14834 |
| | | |
| ... | ... | ... |

2.2.7 Normal Status

This code set codifies statuses of quantitative values with respect to a normal range for the measured analyte or phenomenon. Use generally restricted to laboratory results. Maps to some codes in HL7v2 User-defined table 0078 - Abnormal flags and to the HL7v3 ObservationInterpretation vocabulary. The HL7v3 mappings are shown below.

| Issuer: openehr openEHR code set id: "normal statuses" External identifier: "openehr_normal_statuses" | | |
|--|---|---|
| Code | Description (en) | Mappings |
| "HHH" | Value is critically high; requires urgent intervention. | HL7_ObservationInterpretation::C10227 (>) |
| "HH" | Value is abnormally high. | HL7_ObservationInterpretation::C10213 |
| "H" | Value is borderline high. | HL7_ObservationInterpretation::S10210 |
| "N" | Value is normal (in the normal range). | HL7_ObservationInterpretation::C10207 |
| "L" | Value is borderline low. | HL7_ObservationInterpretation::S10209 |
| "LL" | Value is abnormally low. | HL7_ObservationInterpretation::C10212 |
| "LLL" | Value is critically low; requires urgent intervention. | HL7_ObservationInterpretation::C10226 (<) |

2.3 The openEHR Terminology

Within the *openEHR* terminology, terms are identified in groups, each with its own identifier. The identifiers of the groups is defined in the Support Information Model, Terminology package. Each set of terms is described below on a per-group basis.

2.3.1 Attestation Reason

This vocabulary codifies attestation statuses of Compositions or other elements of the health record,

and is drawn from the HL7 ParticipationSignature domain, as used in CDA.

| Terminology: <i>openehr</i> Group_name("en"): " <i>attestation reason</i> " | | | |
|--|-------------|--|-----------------------------------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 240 | "signed" | The attested information has been signed by its signatory. | HL7_ParticipationSignature::10284 |
| 648 | "witnessed" | This attested information has been witnessed by the signatory. | |

2.3.2 Audit Change Type

This vocabulary codifies the kinds of changes to data which are recorded in audit trails.

| Terminology: <i>openehr</i> Group_name("en"): " <i>audit change type</i> " | | | |
|---|----------------|--|------------------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 249 | "creation" | Change type was creation. | HL7_CDA: CEN: |
| 250 | "amendment" | Change type was amendment, i.e. correction of the previous version. | HL7_CDA: CEN: |
| 251 | "modification" | Change type was update of the previous version. | HL7_CDA: CEN: |
| 252 | "synthesis" | Change type was creation synthesis of data due to conversion process, typically a data importer. | HL7_CDA: CEN: |
| 523 | "deleted" | Change type was logical deletion. | HL7_CDA: CEN: |
| 666 | "attestation" | Existing data were attested. | HL7_CDA: CEN: |
| 253 | "unknown" | Type of change unknown. | HL7_CDA: CEN: |

2.3.3 Composition Category

This vocabulary codifies the values of the *category* attribute of the COMPOSITION class in the `rm.composition` package.

| Terminology: <i>openehr</i> Group_name("en"): " <i>composition category</i> " | | | |
|--|--------------|---|----------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 431 | "persistent" | This Composition contains information which remains valid for (more or less) the life of the EHR. Typical persistent Compositions include "family history", "problem list", "current medications", and "vaccination history". The usual change type when creating a new version of a persistent composition is "modification". | |

| Terminology: <i>openehr</i> Group_name("en"): " <i>composition category</i> " | | | |
|--|-------------|--|----------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 433 | "event" | This composition pertains to a point in time or brief episode. Change types may usually be "modification" or " | |

2.3.4 Event Math Function

This vocabulary codifies mathematical functions of non-instantaneous events.

| Terminology: <i>openehr</i> Group_name("en"): " <i>event math function</i> " | | | |
|---|-------------|---|----------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 145 | "minimum" | Value of the interval-event is the minimum value of the discrete events which the interval-event summarises. | |
| 144 | "maximum" | Value of the interval-event is the maximum value of the discrete events which the interval-event summarises. | |
| 267 | "mode" | Value of the interval-event is the modal (most common) value of the discrete events which the interval-event summarises. | |
| 268 | "median" | Value of the interval-event is the median (centre value in sorted series) value of the discrete events which the interval-event summarises. | |
| 146 | "mean" | Value of the interval-event is the average value of the discrete events which the interval-event summarises. | |
| 147 | "change" | Value of the interval-event is the net change over the period which the interval-event summarises. | |
| 148 | "total" | Value of the interval-event is the sum of the values of the discrete events which the interval-event summarises (typically differential flow measurements, e.g. blood loss). | |
| 149 | "variation" | Value of the interval-event is difference between the point maximum and point minimum over the period, in other words the value band into which all sample during a period fit. Useful for specifying a maximal allowed variation in a datum to still be considered the same (approximate) value. | |
| 521 | "decrease" | This is a change - as in 147 - except indicates that the value, while a positive number, is actually a negative change. Typically used for negative changes like "weight loss: 5kg" or "blood pressure postural drop of 10 mm[Hg]". | |

| Terminology: <i>openehr</i> Group_name("en"): "<i>event math function</i>" | | | |
|---|--------------------|--|-----------------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 522 | "increase" | This is also a change, but is only a positive change and cannot be expressed as a negative. This can be used for positive changes like "Weight gain: 2.5kg". | |
| 640 | "actual" | Value of the datum was the value indicated during the entire time of the event, i.e. it is not an averaged or other computed value. | |

2.3.5 Instruction States

This vocabulary codifies the names of the states in the standard Instruction state machine, documented in the *openEHR* EHR Information model (Entry section).

| Terminology: <i>openehr</i> Group_name("en"): "<i>Instruction states</i>" | | | |
|--|--------------------|--|-----------------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 524 | "initial" | The instruction is recorded but no state is determined | |
| 526 | "planned" | The instruction is planned | |
| 527 | "postponed" | The instruction has been postponed - it had not be commenced | |
| 528 | "cancelled" | The instruction has been cancelled - it had not been commenced and will not commence in the future | |
| 529 | "scheduled" | The instruction has been scheduled to be carried out at a particular time | |
| 245 | "active" | The instruction is currently being carried out | |
| 530 | "suspended" | The instruction is suspended, it has been activated but is not active at present. It could be active again in the future. | |
| 531 | "aborted" | The instruction is aborted, it has been activated but ceased before it has been completed and will not be restarted in the future. | |
| 532 | "completed" | The instruction has been completed | |
| 533 | "expired" | The instruction has expired, timed out - and assumed to have either been cancelled, aborted or completed | |

2.3.6 Instruction Transitions

This vocabulary codifies the names of the transitions in the standard Instruction state machine, docu-

mented in the *openEHR* EHR Information model (Entry section).

| Terminology: <i>openehr</i> Group_name("en"): "<i>Instruction transitions</i>" | | | |
|---|--------------------|---|----------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 535 | "initiate" | Initiate the planning of the Instruction. | |
| 536 | "plan step" | Any step in the planned state of the Instruction, e.g. signing, approving. | |
| 537 | "postpone" | Put a planned Instruction on hold, while still in the planning stage, i.e. before it has been booked or started. | |
| 538 | "restore" | Restore a previously postponed Instruction back to the planned state. | |
| 166 | "cancel" | Cancel a planned Instruction, before it is booked or started. | |
| 542 | "postponed step" | Any step in the postponed state of the Instruction. | |
| 539 | "schedule" | Where booking is required, book the activities in the Instruction in a scheduling system. | |
| 540 | "start" | Start executing the activities in the Instruction, e.g. commence drug administration course. | |
| 541 | "do" | Do the activities in the Instruction in one go, taking the state machine directly from the planned to the completed state. Used for Instructions whose activities are instantaneous in the practical sense, e.g. a single vaccination, single tablet. | |
| 543 | "active step" | Any step taken during the active phase of the Instruction, e.g. nurse's observation, adjustment of dose. | |
| 544 | "suspend" | Suspend the activities from the active phase, with the possibility of later resumption. | |
| 545 | "suspended step" | Any step taken in the suspended state, e.g. nurse's observation, pathology test to determine if the Instruction should be resumed, remain suspended or aborted. | |
| 546 | "resume" | Resume the Instruction from the suspended state. | |
| 547 | "abort" | Abort the Instruction, i.e. stop its execution permanently after it has started. | |
| 548 | "finish" | Finish performing the Instruction, taking it to the completed state. | |
| 549 | "time out" | Time out has occurred, taking the Instruction from some previous state into the expired state. | |
| 540 | "notify aborted" | Occurs when notification of Instruction having been aborted is received after expiry. | |
| 551 | "notify completed" | Occurs when notification of Instruction having been completed is received after expiry. | |

| Terminology: <i>openehr</i> Group_name("en"): <i>"Instruction transitions"</i> | | | |
|---|--------------------|---|----------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 552 | "notify cancelled" | Occurs when notification of Instruction having been cancelled is received after expiry. | |

2.3.7 Null Flavours

This vocabulary codifies "flavours of null" for missing data items.

| Terminology: <i>openehr</i> Group_name("en"): <i>"null flavours"</i> | | | |
|---|------------------|---|------------------------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 271 | "no information" | No information provided; nothing can be inferred as to the reason why, including whether there might be a possible applicable value or not. | HL7_NullFlavor::V10610 |
| 253 | "unknown" | A possible value exists but is not provided. | HL7_NullFlavor::V10612 |
| 272 | "masked" | The value has not been provided due to privacy settings. | HL7_NullFlavor::17932 |
| 273 | "not applicable" | No valid value exists for this data item. | HL7_NullFlavor::10611 |

2.3.8 Participation Function

This vocabulary codifies functions of participation of parties in an interaction (used in PARTICIPATION class).

| Terminology: <i>openehr</i> Group_name("en"): <i>"participation function"</i> | | | |
|--|-------------|------------------|----------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 253 | unknown | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

2.3.9 Participation Mode

This vocabulary codifies modes of participation of parties in an interaction (used in PARTICIPATION class). The initial set has been defined to be the same as HL7's ParticipationMode vocabulary domain.

| Terminology: <i>openehr</i> Group_name("en"): " <i>participation mode</i> " | | | |
|--|--|--|---|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 193 | "not specified" | Mode of participation is not specified; use only for legacy data. | |
| 216 | "face-to-face communication" | Face to face communications between parties in the same room. | HL7_ParticipationMode::16545 |
| 223 | "interpreted face-to-face communication" | Face to face communications between parties in the same room with an interpreter | HL7_ParticipationMode::16545 |
| 217 | "signing (face-to-face)" | Live face-to-face communication using a recognised sign language. | |
| 195 | "live audiovisual; videoconference; videophone" | Any audio-visual communication in real time | |
| 198 | "videoconferencing" | Live audio-visual communication over videoconferencing or other similar equipment. | HL7_ParticipationMode::16548 |
| 197 | "videophone" | Live audio-visual communication | |
| 218 | "signing over video" | Live video communication using sign language. | |
| 224 | "interpreted video communication" | Live audio-visual communication involving an interpreter | |
| 194 | "asynchronous audiovisual; recorded video" | Audio-visual communication that is not live | |
| 196 | "recorded video" | Recorded video or video mail | |
| 202 | "live audio-only; telephone; internet phone; teleconference" | Any live audio-only communication. | HL7_ParticipationMode::V16544 (includes live) |
| 204 | "telephone" | Live verbal communication over a telephone. | HL7_ParticipationMode::16546 |
| 203 | "teleconference" | Live verbal communication over teleconference | HL7_ParticipationMode::16546 |
| 204 | "internet telephone" | Live verbal communication over a the internet. | HL7_ParticipationMode::16546 |
| 222 | "interpreted audio-only" | Any live audio-only communication using an interpreter. | HL7_ParticipationMode::V16544 (includes live) |
| 199 | "asynchronous audio-only; dictated; voice mail" | Audio-only communication that is not live. | |
| 200 | "dictated" | Non-interactive audio-only information recorded on some medium, such as cassette tape. | HL7_ParticipationMode::16547 |
| 201 | "voice-mail" | Audio messaging system | |

| Terminology: <i>openehr</i> Group_name("en"): "<i>participation mode</i>" | | | |
|--|--|---|---|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 212 | "live text-only; internet chat; SMS chat; interactive written note" | Any live text-only communication | |
| 213 | "internet chat" | Live text-only communication over the internet | |
| 214 | "SMS chat" | Live text-only chat over mobile/cell phone | |
| 215 | "interactive written note" | Live text-only communication using written notes | HL7_ParticipationMode::16550 |
| 206 | "asynchronous text; email; fax; letter; handwritten note; SMS message" | Any text-only communication including email, written text, SMS message etc. | HL7_ParticipationMode::V16549 |
| 211 | "handwritten note" | Written communication by handwritten document. | HL7_ParticipationMode::16550 |
| 210 | "printed/typed letter" | Written communication by typewritten document. | HL7_ParticipationMode::16551 |
| 207 | "email" | Written communication by email. | HL7_ParticipationMode::16553 [include HL7_ParticipationMode::16554 (electronic data)] |
| 208 | "facsimile/telefax" | Non-interactive written communication using a fax machine. | HL7_ParticipationMode::16552 |
| 221 | "translated text" | Non-interactive written communication requiring translation | HL7_ParticipationMode::V16549 |
| 209 | "SMS message" | Messages sent via mobile/cell phone | |
| 219 | "physically present" | Participation by actions, where the participant is physically present. | HL7_ParticipationMode::16556 |
| 220 | "physically remote" | Participation by actions, where the participant is not physically present, and the actions are transmitted by electronic means. | HL7_ParticipationMode::16557 |

2.3.10 Property

This vocabulary codifies purposes for physical properties corresponding to formal unit specifications, and allows comparison of Quantities with different units but which measure the same property. The vocabulary values are taken from:

- CEN ENV 12435 - "Medical Informatics - Expression of results of measurements in health sciences"
- HL7 "Unified Codes for Units of Measure"

| Terminology: <i>openehr</i> Group_name("en"): "<i>property</i>" | | | |
|--|--------------------|-------------------------|-----------------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 339 | Acceleration | | |

| Terminology: <i>openehr</i> Group_name("en"): "property" | | | |
|---|---------------------------|------------------|----------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 342 | Acceleration, angular | | |
| 381 | Amount (Eq) | | |
| 384 | Amount (mole) | | |
| 497 | Angle, plane | | |
| 500 | Angle, solid | | |
| 335 | Area | | |
| 350 | Density | | |
| 362 | Diffusion coefficient | | |
| 501 | Electrical capacitance | | |
| 498 | Electrical charge | | |
| 502 | Electrical conductance | | |
| 334 | Electrical current | | |
| 377 | Electrical field strength | | |
| 121 | Energy | | |
| 366 | Energy density | | |
| 508 | Energy dose | | |
| 365 | Energy per area | | |
| 347 | Flow rate, mass | | |
| 352 | Flow rate, mass/force | | |
| 351 | Flow rate, mass/volume | | |
| 126 | Flow rate, volume | | |
| 348 | Flux, mass | | |
| 355 | Force | | |
| 357 | Force, body | | |
| 382 | Frequency | | |
| 373 | Heat transfer coefficient | | |
| 505 | Illuminance | | |
| 379 | Inductance | | |
| 122 | Length | | |
| 499 | Light intensity | | |
| 123 | Loudness | | |
| 504 | Luminous flux | | |
| 378 | Magnetic flux | | |

| Terminology: <i>openehr</i> Group_name("en"): "property" | | | |
|---|----------------------------|--|----------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 503 | Magnetic flux density | | |
| 124 | Mass | | |
| 385 | Mass (IU) | | |
| 349 | Mass per area | | |
| 344 | Moment inertia, area | | |
| 345 | Moment inertia, mass | | |
| 340 | Momentum | | |
| 346 | Momentum, flow rate | | |
| 343 | Momentum, angular | | |
| 369 | Power density | | |
| 368 | Power flux | | |
| 367 | Power, linear | | |
| 125 | Pressure | | |
| 507 | Proportion | | |
| 380 | Qualified real | This is a number with an arithmetic qualification (which may be no units, 10^3 etc) allowing integers to be expressed as reals raised to a nominated power, or for real numbers alone. | |
| 506 | Radioactivity | | |
| 375 | Resistance | | |
| 370 | Specific energy | | |
| 371 | Specific heat, gas content | | |
| 337 | Specific surface | | |
| 336 | Specific volume | | |
| 356 | Surface tension | | |
| 127 | Temperature | | |
| 128 | Time | | |
| 338 | Velocity | | |
| 341 | Velocity, angular | | |
| 360 | Velocity, dynamic | | |
| 361 | Velocity, kinematic | | |
| 374 | Voltage, electrical | | |
| 129 | Volume | | |
| 130 | Work | | |

2.3.11 Setting

This vocabulary codifies broad types of settings in which clinical care is delivered. It is not intended to be a perfect classification of the real world, but instead a practical coarse-grained categorisation to aid querying.

| Terminology: <i>openehr</i> Group_name("en"): "setting" | | | |
|--|--------------------------------|---|----------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 225 | "home" | Care delivered in the patient's home by patient or health professional. | |
| 227 | "emergency care" | Care delivered in emergency situation, e.g. by ambulance workers. | |
| 228 | "primary medical care" | Care delivered by a doctor within a primary care framework (generalist, non-referred). | |
| 229 | "primary nursing care" | Care delivered by nurses within a primary care framework (community based, generalist clinic). | |
| 230 | "primary allied health care" | Care delivered by allied health practitioners such as physiotherapists, osteopaths, chiropractors, optometrists, chiropodist/pediatrist etc. within a primary care framework (community based, generalist clinic) | |
| 231 | "midwifery care" | Midwifery care in any framework | |
| 232 | "secondary medical care" | Care delivered in an institutional or specialist setting - usually as a result of a referral. | |
| 233 | "secondary nursing care" | Care delivered by nurses within a secondary care framework (inpatient, specialist clinic). | |
| 234 | "secondary allied health care" | Care delivered by allied health care professionals within a secondary care framework (inpatient, specialist clinic). | |
| 235 | "complementary health care" | Care delivered by chinese, ayurvedic, naturopath, homeopath etc practitioner. | |
| 236 | "dental care" | Care delivered in a dental practitioner setting. | |
| 237 | "nursing home care" | Care to the needs of patients in nursing homes, delivered in an institutional setting. | |
| 238 | "other care" | Care delivered in setting not described by other terms in this vocabulary. | |

2.3.12 Subject relationship

This vocabulary codifies the relationship between the subject of care and some other party mentioned in the health record.

| Terminology: <i>openehr</i> Group_name("en"): "subject relationship" | | | |
|---|----------------|---------------------------------|------------------------|
| Concept id | Rubric (en-uk) | Description (en) | Mappings |
| 0 | "self" | The party is the subject of EHR | HL7_RoleCode:: CEN: |

| Terminology: openehr Group_name("en"): "subject relationship" | | | |
|--|------------------------|---|-----------------|
| Concept id | Rubric (en-uk) | Description (en) | Mappings |
| 3 | "foetus" | The party is a foetus | HL7: CEN: |
| 10 | "mother" | The party is the mother of the subject of EHR | HL7: CEN: |
| 9 | "father" | The party is the father of the subject of the EHR | HL7: CEN: |
| 6 | "donor" | The party is a donor of organs or other body products to the EHR subject. | HL7: CEN: |
| 253 | "unknown" | Relationship to party is unknown. | HL7: CEN: |
| 261 | "adopted daughter" | Relationship of adopted daughter to subject of EHR | HL7: CEN: |
| 260 | "adopted son" | Relationship of adopted son to subject of EHR | HL7: CEN: |
| 259 | "adoptive father" | Relationship of adoptive father to subject of EHR | HL7: CEN: |
| 258 | "adoptive mother" | Relationship of adoptive mother to subject of EHR | HL7: CEN: |
| 256 | "biological father" | Relationship of biological father to subject of EHR | HL7: CEN: |
| 255 | "biological mother" | Relationship of biological mother to subject of EHR | HL7: CEN: |
| 23 | "brother" | Relationship of brother to subject of EHR | HL7: CEN: |
| 28 | "child" | Relationship of child to subject of EHR | HL7: CEN: |
| 265 | "cohabitee" | Lives with the subject of EHR | HL7: CEN: |
| 257 | "cousin" | Relationship of cousin to subject of EHR | HL7: CEN: |
| 29 | "daughter" | Relationship of daughter to subject of EHR | HL7: CEN: |
| 264 | "guardian" | Relationship of guardianto subject of EHR | HL7: CEN: |
| 39 | "maternal aunt" | Relationship of maternal aunt to subject of EHR | HL7: CEN: |
| 8 | "maternal grandfather" | Relationship of maternal grandfather to subject of EHR | HL7: CEN: |
| 7 | "maternal grandmother" | Relationship of maternal grandmother to subject of EHR | HL7: CEN: |
| 38 | "maternal uncle" | Relationship of maternal uncle to subject of EHR | HL7: CEN: |
| 189 | "neonate" | Relationship of neonate to subject of EHR | HL7: CEN: |
| 254 | "parent" | Relationship of parent to subject of EHR | HL7: CEN: |
| 22 | "partner/spouse" | The husband or wife or life partner of the subject of EHR | HL7: CEN: |
| 41 | "paternal aunt" | Relationship of paternal aunt to subject of EHR | HL7: CEN: |

| Terminology: <i>openehr</i> Group_name("en"): " <i>subject relationship</i> " | | | |
|--|------------------------|--|--------------|
| Concept id | Rubric (en-uk) | Description (en) | Mappings |
| 36 | "paternal grandfather" | Relationship of paternal grandfather to subject of EHR | HL7: CEN: |
| 37 | "paternal grandmother" | Relationship of paternal grandmother to subject of EHR | HL7: CEN: |
| 40 | "paternal uncle" | Relationship of paternal uncle to subject of EHR | HL7: CEN: |
| 27 | "sibling" | Relationship of sibling to subject of EHR | HL7: CEN: |
| 24 | "sister" | Relationship of sister to subject of EHR | HL7: CEN: |
| 31 | "son" | Relationship of son to subject of EHR | HL7: CEN: |
| 263 | "step father" | Relationship of step father to subject of EHR | HL7: CEN: |
| 262 | "step mother" | Relationship of step mother to subject of EHR | HL7: CEN: |
| 25 | "step or half brother" | Relationship of step or half brother to subject of EHR | HL7: CEN: |
| 26 | "step or half sister" | Relationship of step or half sister to subject of EHR | HL7: CEN: |

2.3.13 Term Mapping Purpose

This vocabulary codifies purposes for term mappings as used in the class `TERM_MAPPING`. The use-case for this vocabulary is yet to be determined.

| Terminology: <i>openehr</i> Group_name("en"): " <i>term mapping purpose</i> " | | | |
|--|------------------|---|----------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 669 | "public health" | Public health related term mapping. | |
| 670 | "reimbursement" | Reimbursement / billing related term mapping. | |
| 671 | "research study" | Term mapping for research study | |

2.3.14 Version Lifecycle State

This vocabulary codifies lifecycle states of Compositions or other elements of the health record.

| Terminology: <i>openehr</i> Group_name("en"): "version lifecycle state" | | | |
|--|--------------|---|----------|
| Concept id | Rubric (en) | Description (en) | Mappings |
| 532 | "complete" | Item is complete at time of committal. | |
| 553 | "incomplete" | Item is incomplete at time of committal, in the view of the author. Further editing or review needed before its status will be set to "finished". | |
| 523 | "deleted" | Item has been logically deleted. | |

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