



The *openEHR* Architecture

## Support Terminology

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**Amendment Record**

<b>Issue</b>	<b>Details</b>	<b>Raiser</b>	<b>Completed</b>
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# 1 Introduction

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## 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](mailto:info@openEHR.org). Feedback should preferably be provided on the mailing list [openehr-technical@openehr.org](mailto: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

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### 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 <a href="ftp://ftp.isi.edu/in-notes/rfc1951.txt">ftp://ftp.isi.edu/in-notes/rfc1951.txt</a> .	HL7_CompressionAlgorithm::10621
“gzip”	A compressed data format that is compatible with the widely used GZIP utility as specified in RFC 1952. See <a href="ftp://ftp.isi.edu/in-notes/rfc1952.txt">ftp://ftp.isi.edu/in-notes/rfc1952.txt</a> .	HL7_CompressionAlgorithm::10622
“zlib”	A compressed data format that also uses the deflate algorithm. Specified as RFC 1950 See <a href="ftp://ftp.isi.edu/in-notes/rfc1950.txt">ftp://ftp.isi.edu/in-notes/rfc1950.txt</a>	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.

<b>Issuer: openehr</b> <b>openEHR code set id: “integrity check algorithms”</b> <b>External identifier: “openehr_integrity_check_algorithms”</b>		
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>.

<b>Issuer: ISO</b> <b>openEHR code set id: “languages”</b> <b>External identifier: “ISO_639-1”</b>		
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.

<b>Issuer: IANA</b> <b>openEHR code set id: “media types”</b> <b>External identifier: “IANA_media-types”</b>		
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 <a href="ftp://indri.pri-mate.wisc.edu/pub/RTF/RTF-Spec.rtf">ftp://indri.pri-mate.wisc.edu/pub/RTF/RTF-Spec.rtf</a> .	HL7_MediaType::14831
“text/sgml”		HL7_MediaType::14829
“text/rfc822-headers”		

<b>Issuer: IANA</b> <b>openEHR code set id: "media types"</b> <b>External identifier: "IANA_media-types"</b>		
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.

<b>Issuer: openehr</b> <b>openEHR code set id: "normal statuses"</b> <b>External identifier: "openehr_normal_statuses"</b>		
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]".	

<b>Terminology: <i>openehr</i></b> <b>Group_name("en"): "<i>event math function</i>"</b>			
<b>Concept id</b>	<b>Rubric (en)</b>	<b>Description (en)</b>	<b>Mappings</b>
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).

<b>Terminology: <i>openehr</i></b> <b>Group_name("en"): "<i>Instruction states</i>"</b>			
<b>Concept id</b>	<b>Rubric (en)</b>	<b>Description (en)</b>	<b>Mappings</b>
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, documented in the *openEHR* EHR Information model (Entry section).

<b>Terminology: <i>openehr</i></b> <b>Group_name("en"): "<i>Instruction transitions</i>"</b>			
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.	
550	"notify aborted"	Occurs when notification of Instruction having been aborted is received after expiry.	



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

<b>Terminology: <i>openehr</i></b> <b>Group_name("en"): "<i>null flavours</i>"</b>			
<b>Concept id</b>	<b>Rubric (en)</b>	<b>Description (en)</b>	<b>Mappings</b>
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).

<b>Terminology: <i>openehr</i></b> <b>Group_name("en"): "<i>participation function</i>"</b>			
<b>Concept id</b>	<b>Rubric (en)</b>	<b>Description (en)</b>	<b>Mappings</b>
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	

<b>Terminology: <i>openehr</i></b> <b>Group_name("en"): "<i>participation mode</i>"</b>			
<b>Concept id</b>	<b>Rubric (en)</b>	<b>Description (en)</b>	<b>Mappings</b>
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"

<b>Terminology: <i>openehr</i></b> <b>Group_name("en"): "<i>property</i>"</b>			
<b>Concept id</b>	<b>Rubric (en)</b>	<b>Description (en)</b>	<b>Mappings</b>
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:

<b>Terminology: openehr</b> <b>Group_name("en"): "subject relationship"</b>			
<b>Concept id</b>	<b>Rubric (en-uk)</b>	<b>Description (en)</b>	<b>Mappings</b>
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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