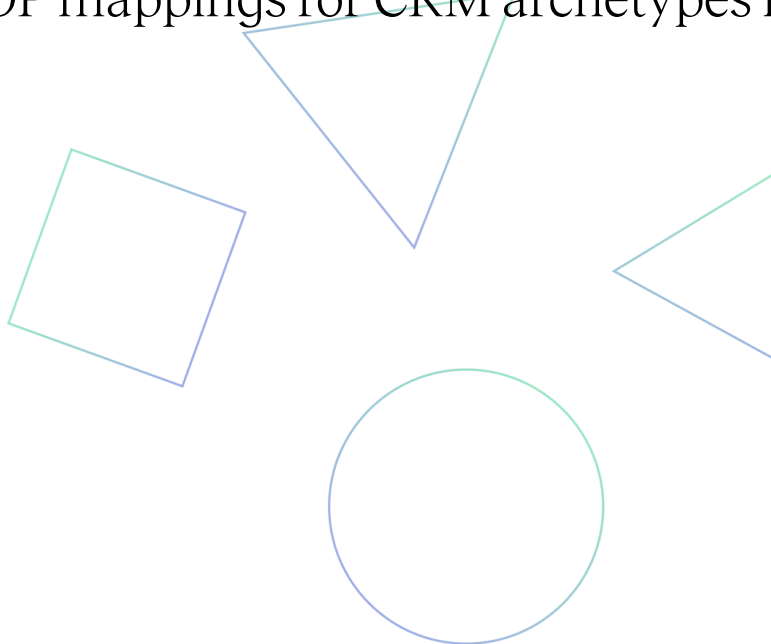


openEHR-OMOP mappings

OMOP mappings for CKM archetypes report



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Version	Date	Summary
V1	2024-11-26	Initial version
V1.1	2025-01-21	Updates after OMOCL generation

Introduction

This document summarizes the mapping of published CKM archetypes available in the international CKM at May 30th 2024. Currently, this covers 66 CLUSTER archetypes, 12 COMPOSITION archetypes, 4 ACTION archetypes, an ADMIN_ENTRY archetype, 36 EVALUATION archetypes, 2 INSTRUCTION archetypes, 84 OBSERVATION archetypes, and a SECTION archetype, setting the total count of mapped archetypes to 206

The analysis is divided in sections representing each one of the reference model archetyable structures available in CKM. Inside each section all the archetype identifiers are listed. For each archetype, the following fields are filled if applicable:

- Text: Contains archetype text for root node
- Description: Contains archetype description for root node
- Archetype root binding: Bindings of the archetype root node to terminologies such as SNOMED-CT or Loinc (if applicable)
- OMOP Binding: Code in OMOP corresponding to the archetype node or interesting Element/s
- OMOP Table: Expected OMOP table where the row would be generated
- Value path: Path or paths from the archetype that contain information to be put into omop, typically in the *_concept_id. If archetype contains an internal valueset it would also be mapped (these mappings would end in the value_as_concept_id)
- Date path: Path or paths from the archetype that contain information to be used as dates for the OMOP row. These paths on source are usually optional, so several paths can be stated in order of adequacy, usually defaulting to the context information coming from openEHR reference model.
- Comment: Comment regarding the selected mapping or alternative approaches that could be applied for a specific archetype
- Units: If applicable, mapping to the archetype units to OMOP

Methodology

We used OHDSI tooling extensively for terminology mappings, both USAGI (<https://github.com/OHDSI/Usagi>) for a first automatic batch coding and Athena (<https://athena.ohdsi.org>) for fine tune and review of ELEMENT labels in archetypes. Archetypes were reviewed to look for paths which would be useful for research purposes and have standard codes available in the OMOP vocabularies. It is possible for a single archetype to generate mor than a row in OMOP, as usually several data elements have clinical significance or can be translated into OMOP (specially true in Observation archetypes).

Archetypes by type

CLUSTER

Cluster archetypes usually lack a date path, so if we want to map them we have to consider them as inside of other archetypes or that the date information will be available in Composition context information

openEHR-EHR-CLUSTER.address.v1

- Text: Address
- Description: Details about the location of a person, physical building or landmark.
- Archetype root binding:
- OMOP binding: 40759918 Address [LOINC::56799-0]
- OMOP Table: Observation
- Value path: Postal code [ELEMENT] /items[at0005]
- Date path: parent archetype/context
- Comment: Could be a concatenation of values, but probably for research purposes postal code is one of the most useful to have

openEHR-EHR-CLUSTER.adverse_reaction_event.v1

- Text: Adverse reaction event
- Description: Information about a specific adverse reaction event caused by exposure to a specific substance.
- Archetype root binding:
- OMOP binding: 43530807 Allergic disposition [SNOMED-CT::609328004] (Allergy unspecified, Allergy to substance, and hypersensitivity NOS were remapped to this code)
- OMOP Table: Observation
- Value path: Specific substance [ELEMENT] /items[at0001]
- Date path:

- Onset of reaction [ELEMENT] /items[at0008]
- Initial exposure [ELEMENT] /items[at0015]
- Comment: Both certainty (confirmed, unconfirmed, etc.) and severity of reaction (mild, moderate, severe) could end in qualifier_concept_id

openEHR-EHR-CLUSTER.anatomical_location.v1

- Text: Anatomical location
- Description: A physical site on or within the human body.
- Archetype root binding:
- OMOP binding: 42539300 Anatomical location (property) [SNOMED-CT::758637006]
- OMOP Table: Observation
- Value path: look for Specific site [ELEMENT] /items[at0065] , else Body site name [ELEMENT] /items[at0001]
- Date path: parent archetype/context
- Comment:

openEHR-EHR-CLUSTER.anatomical_location_circle.v1

- Text: Circular anatomical location
- Description: A physical site on or within the human body that is described in terms of the direction, and optionally the distance, of the site from a central landmark.
- Archetype root binding:
- OMOP binding: 42539300 Anatomical location (property) [SNOMED-CT::758637006]
- OMOP Table: Observation
- Value path: Description [ELEMENT] /items[at0023]
- Date path: parent archetype/context
- Comment: Could be a combination of the center, circular, and reference directions

openEHR-EHR-CLUSTER.anatomical_location_relative.v2

- Text: Relative anatomical location

- Description: A physical site on or within the human body that is described in terms of its relationship to other body parts.
- Archetype root binding:
- OMOP binding: 42539300 Anatomical location (property) [SNOMED-CT::758637006]
- OMOP Table: Observation
- Value path: Description [ELEMENT] /items[at0023]
- Date path: parent archetype/context
- Comment:

openEHR-EHR-CLUSTER.boston_bowel_preparation_scale.v1

- Text: Boston Bowel Preparation Scale
- Description: An assessment score used to record the quality of bowel cleanliness during colonoscopy.
- Archetype root binding: SNOMED-CT [SNOMED-CT::722818007]
- OMOP binding: 36717586 BBPS - Boston bowel preparation scale
- OMOP Table: Measurement
- Value path: Total score [ELEMENT] /items[at0012]
- Date path: parent archetype/context
- Comment:

openEHR-EHR-CLUSTER.clinical_evidence.v1

- Text: Clinical evidence
- Description: Details about findings that support a clinical assertion.
- Archetype root binding:
- OMOP binding: 4089880 Evidence of [SNOMED-CT::18669006]
- OMOP Table: Observation
- Value path: Finding [ELEMENT] /items[at0003]
- Date path: parent archetype/context

- Comment:

openEHR-EHR-CLUSTER.ctcae.v1

- Text: Common Terminology Criteria for Adverse Events (CTCAE)
- Description: A framework for recording the CTCAE classification for an unfavourable and unintended sign, symptom or disease.
- Archetype root binding:
- OMOP binding: Term [ELEMENT] /items[at0002] ideally contains a medDRA code, which could be mapped to OMOP, but probably won't. The only code related to this scale is 763788 National Cancer Institute common terminology criteria for adverse events, which is a Measurement and points to the scale itself, not the result of the evaluation of the scale.
- OMOP Table: Observation
- Value path: Grade category [ELEMENT] /items[at0003] no real mappings exist for the grades, so realistically value concept id will be 0 and source value will have the integer value of the specific grade
- Date path: parent archetype/context
- Comment: Term contains potentially a MedDRA code that can be translated to OMOP, Grade category is an ordinal with grades from 0 to 5

openEHR-EHR-CLUSTER.device.v1

- Text: Medical device
- Description: An instrument, apparatus, implant, material or similar, used in the provision of healthcare. In this context, a medical device includes a broad range of devices which act through a variety of physical, mechanical, thermal or similar means but specifically excludes devices which act through medicinal means such as pharmacological, metabolic or immunological methods. The scope is inclusive of disposable devices as well as durable or persisting devices that require tracking, maintenance activities or regular calibration, recognising that each type of device has specific data recording requirements.
- Archetype root binding:
- OMOP binding: Should use code from value path
- OMOP Table: Device

- Value path: Device name [ELEMENT] /items[at0001]
- Date path: parent archetype/context
- Comment: Can have no code, preferable as Device class, but could be an Observation with code 763153 Medical device origin and the corresponding value

openEHR-EHR-CLUSTER.dosage.v2

- Text: Dosage
- Description: The combination of a medication amount and administration timing for a single day, in the context of a medication order or medication management.
- Archetype root binding:
- OMOP binding: 4118853 Dosage
- OMOP Table: Observation (usually part of Drug exposure)
- Value path: Dose [ELEMENT] /items[at0144]
- Date path: parent archetype/context
- Comment: Probably not as its own mapping but included into the medication OMOCL files (the question this archetype does not answer is “dosage of what?”)

openEHR-EHR-CLUSTER.education_record.v1

- Text: Education record
- Description: Record of a period of education or training undertaken by an individual.
- Archetype root binding:
- OMOP binding: 3032639 Education note [LOINC::34895-3]
- OMOP Table: Measurement
- Value path: Description [ELEMENT] /items[at0008]
- Date path: parent archetype/context
- Comment: Could be a Note, value limited to 50 characters

openEHR-EHR-CLUSTER.electronic_communication.v1

- Text: Electronic communication

- Description: Details about a specified type of electronic communication.
- Archetype root binding:
- OMOP binding: Type [ELEMENT] /items[at0001] ideally coded, if not 0 Unmapped and Observation name is root text “Electronic communication”
- OMOP Table: Observation
- Value path: Value [ELEMENT] /items[at0002]
- Date path: parent archetype/context
- Comment:

openEHR-EHR-CLUSTER.embryo_specimen.v1

- Text: Embryo specimen
- Description: To document detailed information about one or more zygotes or embryos.
- Archetype root binding:
- Path 1:
- OMOP binding: 0 Embryo development stage
- OMOP Table: Observation
- Value path: Embryo development stage [ELEMENT] /items[at0001]
- Date path: parent archetype/context
- Path 2:
- OMOP binding: 0 Embryo preservation day
- OMOP Table: Observation
- Value path: Embryo preservation day [ELEMENT] /items[at0003]
- Date path: parent archetype/context
- Comment:

openEHR-EHR-CLUSTER.exam.v2

- Text: Examination findings

- Description: Findings observed during the physical examination of a body system or anatomical structure.
- Archetype root binding: SNOMED-CT[[SNOMED-CT::5880005]]
- OMOP binding: 4152364 Examination finding [SNOMED-CT::271906008]
- OMOP Table: Observation
- Value path: Clinical description [ELEMENT] /items[at0003]
- Date path: parent archetype/context
- Comment: If we use the SNOMED-CT code directly (Physical examination procedure) this would be a Procedure and would lose the ability to store the finding, so we selected an observation instead. Could use something inside of Examination findings [CLUSTER] /items[at0004]

openEHR-EHR-CLUSTER.exam_blastocyst.v1

- Text: Examination of a blastocyst
- Description: Morphological findings obtained by microscopy of a human blastocyst.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table: Procedure
- Value path:
- Date path:
- Comment: There are no codes in either snomed or loinc to represent these gradings

openEHR-EHR-CLUSTER.exam_embryo.v1

- Text: Examination of a cleavage-stage embryo
- Description: Morphological findings obtained by microscopy of the human cleavage-stage embryo.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table:

- Value path:
- Date path:
- Comment: Terminologies missing Embryo development stage (answers should be children of [SNOMED-CT::308764001]). There is a Screening for child development [SNOMED-CT::710075007] which could be used. Nothing for Embryo preservation day.

openEHR-EHR-CLUSTER.exam_oocyte.v1

- Text: Examination of an oocyte
- Description: Morphological findings obtained by microscopy of a human oocyte.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table:
- Value path:
- Date path:
- Comment:

openEHR-EHR-CLUSTER.exam_zygote.v1

- Text: Examination of a zygote
- Description: Morphological findings obtained by microscopy of the human zygote.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table:
- Value path:
- Date path:
- Comment: No specific codes for the measurements or observations found

openEHR-EHR-CLUSTER.exclusion_exam.v1

- Text: Exclusion of examination

- Description: Positive statement to record that a physical examination or clinical test was not performed.
- Archetype root binding:
- OMOP binding: 45879795 Exclusion of
- OMOP Table: Meas Value
- Value path:
- Date path:
- Comment: Code is not an Observation. No Element in Cluster archetype to state what was excluded, just the reason. As it is, not useful. If it ends inside of any other measurement or observation could end up as qualifier_concept_id

openEHR-EHR-CLUSTER.family_prevalence.v1

- Text: Family prevalence
- Description: Summary information about the prevalence of a risk factor, problem or diagnosis in all family members.
- Archetype root binding:
- OMOP binding: 4167217 Family history of clinical finding
- OMOP Table: Observation
- Value path: Description [ELEMENT] /items[at0030]
- Date path: parent archetype/context
- Comment: Can be related to genetic predisposition

openEHR-EHR-CLUSTER.genomic_conversion_variant.v1

- Text: Genomic conversion variant
- Description: A human genetic sequence change where, compared to a genomic reference sequence, a range of nucleotides are replaced by a sequence from elsewhere in the genome.
- Archetype root binding:
- OMOP binding: 0 Unmapped

- OMOP Table:
- Value path:
- Date path:
- Comment: All genomic archetypes would probably need the Genomic OMOP extension

openEHR-EHR-CLUSTER.genomic_copy_number_variant.v1

- Text: Genomic copy number variant
- Description: A human genetic sequence change where, compared to a genomic reference sequence, a DNA segment, usually larger than 1 kilobase (kb), was deleted or duplicated.
- Archetype root binding:
- OMOP binding: 21493324 Genomic structural variant copy number
- OMOP Table: Observation
- Value path:
 - Start [ELEMENT] /items[at0001]
 - End [ELEMENT] /items[at0002]
 - Total copy number [ELEMENT] /items[at0003]
- Date path:
- Comment: All genomic archetypes would probably need the Genomic OMOP extension

openEHR-EHR-CLUSTER.genomic_deletion_insertion_variant.v1

- Text: Genomic deletion-insertion variant
- Description: A human genetic sequence change where, compared to a genomic reference sequence, one or more nucleotides are replaced by one or more other nucleotides and which is not a substitution, inversion or conversion.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table:
- Value path:

- Date path:
- Comment: All genomic archetypes would probably need the Genomic OMOP extension

openEHR-EHR-CLUSTER.genomic_deletion_variant.v1

- Text: Genomic deletion variant
- Description: A human genetic sequence change where, compared to a genomic reference sequence, one or more nucleotides are not present (deleted).
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table:
- Value path: Deleted sequence /items[at0008]
- Date path:
- Comment: All genomic archetypes would probably need the Genomic OMOP extension

openEHR-EHR-CLUSTER.genomic_duplication_variant.v1

- Text: Genomic duplication variant
- Description: A human genetic sequence change where, compared to a genomic reference sequence, a copy of one or more nucleotides are inserted directly 3' of the original copy of that sequence.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table:
- Value path:
- Date path:
- Comment: All genomic archetypes would probably need the Genomic OMOP extension

openEHR-EHR-CLUSTER.genomic_insertion_variant.v1

- Text: Genomic insertion variant

- Description: A human genetic sequence change where, compared to the genomic reference sequence, one or more nucleotides are inserted and where the insertion is not a copy of a sequence immediately 5'.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table:
- Value path:
- Date path:
- Comment: All genomic archetypes would probably need the Genomic OMOP extension

openEHR-EHR-CLUSTER.genomic_inversion_variant.v1

- Text: Genomic inversion variant
- Description: A human genetic sequence change where more than one nucleotide replaces the original sequence with the reverse complement of the original sequence, compared to a genomic reference sequence.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table:
- Value path:
- Date path:
- Comment: All genomic archetypes would probably need the Genomic OMOP extension

openEHR-EHR-CLUSTER.genomic_repeated_sequence_variant.v1

- Text: Genomic repeated sequence variant
- Description: A human genetic sequence change where, compared to a genomic reference sequence, a segment of one or more nucleotides (the repeat unit) is present several times, one after the other.
- Archetype root binding:
- OMOP binding: 0 Unmapped

- OMOP Table:
- Value path:
- Date path:
- Comment: All genomic archetypes would probably need the Genomic OMOP extension

openEHR-EHR-CLUSTER.genomic_substitution_variant.v1

- Text: Genomic substitution variant
- Description: A human genetic sequence change where, compared to a genomic reference sequence, one nucleotide is replaced by one other nucleotide.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table:
- Value path:
- Date path:
- Comment: All genomic archetypes would probably need the Genomic OMOP extension

openEHR-EHR-CLUSTER.genomic_variant_result.v1

- Text: Genomic variant result
- Description: Findings and annotations related to one variant found in a human individual by a sequencing test.
- Archetype root binding:
- OMOP binding: 40772043 Genetic variant assessment
- OMOP Table: Measurement
- Value path: Variant [ELEMENT] /items[at0101]
- Date path:
- Comment: All genomic archetypes would probably need the Genomic OMOP extension

openEHR-EHR-CLUSTER.housing_record.v1

- Text: Housing record

- Description: Details about a single home or other residential setting of an individual during a specified period of time.
- Archetype root binding:
- OMOP binding: 44804219 Housing, if coded can use Name/label [ELEMENT] /items[at0005]
- OMOP Table: Observation
- Value path: Description [ELEMENT] /items[at0016]
- Date path:
- Comment:

openEHR-EHR-CLUSTER.imaging_exam-cervix.v1

- Text: Imaging examination of the cervix
- Description: Findings on radiological examination of the cervix.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table: Procedure/Observation
- Value path: Imaging findings [ELEMENT] /items[at0004]
- Date path:
- Comment: Could be mapped to generic 443441 Imaging finding [SNOMED-CT::365853002]

openEHR-EHR-CLUSTER.imaging_exam-fallopian_tube.v1

- Text: Imaging examination of a fallopian tube
- Description: Findings on radiological examination of a single fallopian tube.
- Archetype root binding:
- OMOP binding: 4059199 Hysterosalpingography
- OMOP Table: Procedure/Observation
- Value path: Imaging findings [ELEMENT] /items[at0004]

- Date path:
- Comment:

openEHR-EHR-CLUSTER.imaging_exam-foetus.v1

- Text: Imaging examination of a foetus
- Description: Findings on radiological examination of a single foetus or embryo in utero.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table: Procedure/Observation
- Value path: Imaging findings [ELEMENT] /items[at0004]
- Date path:
- Comment: Could be mapped to generic 443441 Imaging finding [SNOMED-CT::365853002]

openEHR-EHR-CLUSTER.imaging_exam-gestational_sac.v1

- Text: Imaging examination of a gestational sac
- Description: Findings on radiological examination of a single gestational sac.
- Archetype root binding:
- OMOP binding: 4104311 Finding of gestational sac [SNOMED-CT::300571009]
- OMOP Table: Observation
- Value path: Imaging findings [ELEMENT] /items[at0004]
- Date path:
- Comment: Code is from condition domain, but for storing the finding we need the observation or code the Imaging finding

openEHR-EHR-CLUSTER.imaging_exam-ovary.v1

- Text: Imaging examination of an ovary
- Description: Findings on radiological examination of a single ovary.
- Archetype root binding:

- OMOP binding: 0 Unmapped
- OMOP Table: Procedure/Observation
- Value path: Imaging findings [ELEMENT] /items[at0004]
- Date path:
- Comment: Could be mapped to generic 443441 Imaging finding [SNOMED-CT::365853002]

openEHR-EHR-CLUSTER.imaging_exam-rectouterine_pouch.v1

- Text: Imaging examination of the rectouterine pouch
- Description: Findings on radiological examination of the rectouterine pouch.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table:
- Value path: Imaging findings [ELEMENT] /items[at0004]
- Date path:
- Comment: Could be mapped to generic 443441 Imaging finding [SNOMED-CT::365853002]

openEHR-EHR-CLUSTER.imaging_exam.v1

- Text: Imaging examination of a body structure
- Description: Findings on radiological examination of a specified body structure or region.
- Archetype root binding:
- OMOP binding: 443441 Imaging finding [SNOMED-CT::365853002]
- OMOP Table: Observation
- Value path: Imaging findings [ELEMENT] /items[at0004]
- Date path:
- Comment:

openEHR-EHR-CLUSTER.information_resource.v1

- Text: Information resource
- Description: Information, instructional or educational material supplied to an individual, or their carer, as part of the provision of healthcare.
- Archetype root binding:
- OMOP binding: 35631115 Resource
- OMOP Table: Observation
- Value path: Resource name [ELEMENT] /items[at0002]
- Date path:
- Comment: It could be possible to code the Resource name [ELEMENT] /items[at0002]

openEHR-EHR-CLUSTER.inspired_oxygen.v1

- Text: Inspired oxygen
- Description: The amount of oxygen being delivered, or to be delivered, to the patient given as a fraction, percentage or indirectly as a flow rate.
- Archetype root binding:
- Path 1:
- OMOP binding: 4141684 #Delivered oxygen flow rate [SNOMED-CT::427081008]
- OMOP Table: Observation
- Value path: Flow rate [ELEMENT] /items[at0051]
- Date path: parent archetype/context
- Path2:
- OMOP binding: 4353936 #Inspired oxygen concentration [SNOMED-CT::250774007]
- OMOP Table: Observation
- Value path: FiO₂ [ELEMENT] /items[at0052]
- Date path: parent archetype/context
- Path 3:

- OMOP binding: 3020716 #Inhaled oxygen concentration [LOINC::3150-0]
- OMOP Table: Measurement
- Value path: Percent O₂ [ELEMENT] /items[at0053]
- Date path: parent archetype/context
- Comment:

openEHR-EHR-CLUSTER.interpreter_request.v1

- Text: Interpreter request
- Description: Requirements and preferences for appropriate interpretation to assist with communication.
- Archetype root binding:
- OMOP binding: 40482038 Request for language interpreter service
- OMOP Table: Observation
- Value path: Comment [ELEMENT] /items[at0003]
- Date path:
- Comment: could be per language (Per language [CLUSTER] /items[at0039])

openEHR-EHR-CLUSTER.item_transport.v1

- Text: Transportation of an item
- Description: Details about the transportation process of an identified item between two or more sites.
- Archetype root binding:
- OMOP binding: 0, potentially could be 4213718 Cargo handling
- OMOP Table: Observation
- Value path: Item transported [ELEMENT] /items[at0028]
- Date path: Delivery date/time [ELEMENT] /items[at0007] and Pick up date/time [ELEMENT] /items[at0004] if delivery is null
- Comment: Not very relevant for research

openEHR-EHR-CLUSTER.knowledge_base_reference.v1

- Text: Knowledge base reference
- Description: A citation of a digital resource used as an source of authoritative or expert information, and/or to items contained within the resource.
- Archetype root binding:
- OMOP binding: 4205679 Reference documentation [SNOMED-CT::308910008]
- OMOP Table: Observation
- Value path: Knowledge base name [ELEMENT] /items[at0001]
- Date path:
- Comment: Not relevant for research

openEHR-EHR-CLUSTER.laboratory_test_analyte.v1

- Text: Laboratory analyte result
- Description: The result of a laboratory test for a single analyte value.
- Archetype root binding:
- OMOP binding: extracted from Analyte name [ELEMENT] /items[at0024], if not could be 4034850 Laboratory test
- OMOP Table: Measurement
- Value path: Analyte result [ELEMENT] /items[at0001]
- Date path:
 - Validation time [ELEMENT] /items[at0025]
 - Result status time [ELEMENT] /items[at0006]
- Comment:

openEHR-EHR-CLUSTER.language.v1

- Text: Language
- Description: A collection of words, their pronunciation and methods for combining them, understood by a specific community and used as a form of communication.

- Archetype root binding:
- OMOP binding: 4267143 Language
- OMOP Table: Observation
- Value path: Language name [ELEMENT] /items[at0001]
- Date path:
- Comment:

openEHR-EHR-CLUSTER.media_file.v1

- Text: Media file
- Description: A media file that is acquired or used as part of the healthcare process, and associated metadata.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table:
- Value path: Content name [ELEMENT] /items[at0002]
- Date path:
- Comment: No use for research purposes

openEHR-EHR-CLUSTER.medication.v2

- Text: Medication details
- Description: Details about a medication or component of a medication, including strength, form and details of any specific constituents.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table:
- Value path:
- Date path:
- Comment: Mapped as part of Medication entries

openEHR-EHR-CLUSTER.occupation_record.v1

- Text: Occupation record
- Description: A single job or role carried out by an individual during a specified period of time.
- Archetype root binding:
- OMOP binding: 4033543 Occupation
- OMOP Table: Observation
- Value path: Job title/role [ELEMENT] /items[at0005]
- Date path:
- Comment:

openEHR-EHR-CLUSTER.oocyte_specimen.v1

- Text: Oocyte specimen
- Description: To document detailed information about one or more harvested oocytes.
- Archetype root binding:
- OMOP binding: 0, must be a maturity grade related to 4313283 Oocyte
- OMOP Table: Observation
- Value path: Oocyte maturation stage [ELEMENT] /items[at0018]
- Date path:
- Comment:

openEHR-EHR-CLUSTER.organisation.v1

- Text: Organisation
- Description: An entity comprising one or more people and having a particular purpose.
- Archetype root binding:
- OMOP binding: 44803897 Organisation
- OMOP Table: Observation

- Value path: Name [ELEMENT] /items[at0001]
- Date path:
- Comment:

openEHR-EHR-CLUSTER.person.v1

- Text: Person
- Description: An individual human being.
- Archetype root binding:
- OMOP binding: 4129409 Person
- OMOP Table: Observation
- Value path: Name [ELEMENT] /items[at0001]
- Date path:
- Comment: Even if we can doesn't mean we should, probably define it and create a comment so it is used carefully

openEHR-EHR-CLUSTER.problem_qualifier.v2

- Text: Problem/Diagnosis qualifier
- Description: Contextual or temporal qualifier for a specified problem or diagnosis.
- Archetype root binding:
- OMOP binding:
- 4021918 #Qualifier for type of diagnosis [SNOMED-CT::106229004]
- 3171086 #Current or past [SNOMED-CT::410511007]
- OMOP Table: Observation
- Value path:
- /items[at0004] #Diagnostic status
- /items[at0060] #Current/Past?
- Date path:

- Comment: part of problem/diagnosis

openEHR-EHR-CLUSTER.range_of_motion.v1

- Text: Range of motion of a joint
- Description: Measurement of the extent of motion for a specified simple or complex movement around an identified joint or section of the spine.
- Archetype root binding:
- OMOP binding: 4264818 Range of joint movement
- OMOP Table: Observation
- Value path: Range of motion [ELEMENT] /items[at0027]
- Date path:
- Comment:

openEHR-EHR-CLUSTER.reference_sequence.v1

- Text: Reference sequence
- Description: A sequence file that is used as a reference to describe genetic variants that are present in an analysed sequence.
- Archetype root binding:
- OMOP binding: 3050111 Genomic reference sequence [ID]
- OMOP Table: Measurement
- Value path: Reference genome assembly [ELEMENT] /items[at0048]
- Date path:
- Comment:

openEHR-EHR-CLUSTER.religion.v1

- Text: Religious affiliation
- Description: Identification of the individual's religious or non-religious beliefs and/or practices by which people order the conduct of their lives both practically and in a moral sense.

- Archetype root binding:
- OMOP binding: 4052017 Religious affiliation
- OMOP Table: Observation
- Value path: Religious affiliation [ELEMENT] /items[at0001]
- Date path:
- Comment:

openEHR-EHR-CLUSTER.service_direction.v1

- Text: Service direction
- Description: Structured details of a complex direction for an ordered or requested service.
- Archetype root binding:
- OMOP binding: 0 unmapped
- OMOP Table: Observation
- Value path: Direction sequence [ELEMENT] /items[at0001]
- Date path:
- Comment: We have also total amount, which could be more interesting than the sequence itself

openEHR-EHR-CLUSTER.specimen.v1

- Text: Specimen
- Description: A physical sample collected from, or related to, an individual for the purpose of investigation, examination or analysis.
- Archetype root binding:
- OMOP binding:
- Specimen type [ELEMENT] /items[at0029]
- Specimen label [ELEMENT] /items[at0098]
- OMOP Table: Specimen

- Value path:
- Date path: Date/time received [ELEMENT] /items[at0034]
- Comment:

openEHR-EHR-CLUSTER.specimen_container.v1

- Text: Specimen container
- Description: Details of a container used to hold, transport and/or archive a specimen for laboratory examination.
- Archetype root binding:
- OMOP binding: 44787027 Specimen container [Type]
- OMOP Table: Measurement
- Value path: Container type [ELEMENT] /items[at0005]
- Date path:
- Comment:

openEHR-EHR-CLUSTER.specimen_processing.v1

- Text: Specimen processing
- Description: Details about the processing or preparation of a specimen.
- Archetype root binding:
- OMOP binding: 4243140 Specimen processing
- OMOP Table: Procedure
- Value path: Process name [ELEMENT] /items[at0094]
- Date path: Start date/time [ELEMENT] /items[at0096]
- Comment:

openEHR-EHR-CLUSTER.structured_name.v1

- Text: Structured name of a person
- Description: Discrete components of an individual's name.

- Archetype root binding:
- OMOP binding: 37116951 Person name (property)
- OMOP Table: Observation
- Value path:
- Date path:
- Comment: It should be possible to concatenate all parts of the structured name, but in reality full name is already in the parent CLUSTER archetype Person if needed

openEHR-EHR-CLUSTER.symptom_sign.v2

- Text: Symptom/Sign
- Description: Reported observation of a physical or mental disturbance in an individual.
- Archetype root binding:
- OMOP binding: Symptom/Sign name [ELEMENT] /items[at0001] (or else 46234710 Symptom in Observation table with corresponding value)
- OMOP Table: Condition
- Value path: Onset timing [ELEMENT] /items[at0164]
- Date path:
- Comment:

openEHR-EHR-CLUSTER.therapeutic_direction.v1

- Text: Therapeutic direction
- Description: Structured details of a single therapeutic direction for an ordered item, such as a medication or blood transfusion order.
- Archetype root binding:
- OMOP binding: 0 unmapped
- OMOP Table: Observation
- Value path:
- Date path: Order start date/time [ELEMENT] /items[at0178]
Order stop date/time [ELEMENT] /items[at0179]

- Comment: Part of medication, also includes dosage

openEHR-EHR-CLUSTER.timing_daily.v1

- Text: Timing - daily
- Description: Structured information about the intended timing of a therapeutic or diagnostic activity within any 24 hour period.
- Archetype root binding:
- OMOP binding: 0 unmapped
- OMOP Table: Observation
- Value path:
- Date path:
- Comment: Not mapped, needs to be included in another archetype

openEHR-EHR-CLUSTER.timing_nondaily.v1

- Text: Timing - non-daily
- Description: Structured information about the intended timing pattern for a therapeutic or diagnostic activity occurring over days, weeks, months or years.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table: Observation
- Value path:
- Date path:
- Comment: Not mapped, needs to be included in another archetype

openEHR-EHR-CLUSTER.tnm-pathological.v1

- Text: TNM pathological classification
- Description: A framework for the pathological classification and stage grouping of malignancies using the TNM system.
- Archetype root binding:

- OMOP binding: 4233793 Pathologic TNM stage [SNOMED-CT::405979002]
- OMOP Table: Observation
- Value path: pTNM assessment [ELEMENT] /items[at0030.1]
- Date path:
- Comment: These tnm contain lots of interesting values to code, such as primary tumour, residual tumour, etc. Probably worth generate a mapping for all those paths.

openEHR-EHR-CLUSTER.tnm.v1

- Text: TNM clinical classification
- Description: A framework for the clinical classification and stage grouping of malignancies using the TNM system.
- Archetype root binding:
- OMOP binding: 4219422 TNM category
- OMOP Table: Observation
- Value path: TNM assessment [ELEMENT] /items[at0030]
- Date path:
- Comment: These tnm contain lots of interesting values to code, such as primary tumour, residual tumour, etc. Probably worth generate a mapping for all those paths.

COMPOSITION

Composition archetypes have no explicit structure and act as categorizations for templates. Mappings are provided expecting text content

openEHR-EHR-COMPOSITION.adverse_reaction_list.v1

- Text: Adverse reaction list
- Description: A persistent and managed list of adverse reactions experienced by the subject that may influence clinical decision-making and care provision.
- Archetype root binding:

- OMOP binding: 4105886 Adverse reaction
- OMOP Table: Condition
- Value path:
- Date path:
- Comment: Archetype contains no structure

openEHR-EHR-COMPOSITION.encounter.v1

- Text: Encounter
- Description: Interaction, contact or care event between a subject of care and healthcare provider(s).
- Archetype root binding:
- OMOP binding: 4084058 Site of encounter
- OMOP Table: Observation
- Value path:
- Date path:
- Comment: Archetype contains no structure

openEHR-EHR-COMPOSITION.health_certificate.v1

- Text: Health certificate
- Description: A formal statement about the health status or situation related to an individual.
- Archetype root binding:
- OMOP binding: 706414 Certificate
- OMOP Table: Meas Value
- Value path:
- Date path:
- Comment: Archetype contains no interesting structure

openEHR-EHR-COMPOSITION.health_summary.v1

- Text: Health summary
- Description: Generic document containing a summary of health information about an individual.
- Archetype root binding:
- OMOP binding: 44803948 Summary health
- OMOP Table: Observation
- Value path:
- Date path:
- Comment: Archetype contains no structure. A note-like element is expected

openEHR-EHR-COMPOSITION.medication_list.v1

- Text: Medication list
- Description: A persistent and versioned list of medicines for an individual.
- Archetype root binding:
- OMOP binding: 36310779 Medication
- OMOP Table: Drug exposure
- Value path:
- Date path:
- Comment: Archetype contains no structure

openEHR-EHR-COMPOSITION.problem_list.v2

- Text: Problem list
- Description: A persistent and managed list of any combination of diagnoses, problems and/or procedures that may influence clinical decision-making and care provision for the subject of care.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table: Condition occurrence

- Value path:
- Date path:
- Comment: Archetype contains no structure

openEHR-EHR-COMPOSITION.report-procedure.v1

- Text: Procedure report
- Description: Document to communicate information to others about any stand-alone procedure or operation performed.
- Archetype root binding:
- OMOP binding: 4203889 Report procedure
- OMOP Table: Observation
- Value path:
- Date path:
- Comment: Archetype contains no useful structure. A Note-like content is expected

openEHR-EHR-COMPOSITION.report-result.v1

- Text: Result report
- Description: Document to communicate information to others about the result of a test or assessment.
- Archetype root binding:
- OMOP binding: 46272695 Informing health care professional of test result
- OMOP Table: Observation
- Value path:
- Date path:
- Comment: Archetype contains no useful structure. A Note-like content is expected

openEHR-EHR-COMPOSITION.report.v1

- Text: Report

- Description: Document to communicate information to others, commonly in response to a request from another party.
- Archetype root binding:
- OMOP binding: 706371 Report
- OMOP Table: Meas Value
- Value path:
- Date path:
- Comment: Archetype contains no useful structure. A Note-like content is expected

openEHR-EHR-COMPOSITION.request.v1

- Text: Request for service
- Description: Document sent from one treating healthcare provider or organisation to another, for the purpose of requesting advice, a service or transfer of care.
- Archetype root binding:
- OMOP binding: 4013713 Request for
- OMOP Table: Observation
- Value path:
- Date path:
- Comment: Archetype contains no structure

openEHR-EHR-COMPOSITION.self_reported_data.v1

- Text: Self-reported data
- Description: Generic container for information provided by an individual.
- Archetype root binding:
- OMOP binding: 764573 Self-reported
- OMOP Table: Observation
- Value path:
- Date path:

- Comment: Archetype contains no relevant structure. Information source can be used to determine the Note type (probably using 32865 Patient self-report)

openEHR-EHR-COMPOSITION.transfer_summary.v1

- Text: Transfer of care summary
- Description: Summary document to support transfer of critical clinical information from the sending healthcare organisation/provider to the receiving healthcare organisation/provider.
- Archetype root binding:
- OMOP binding: 3014057 Transfer summary note
- OMOP Table: Measurement
- Value path:
- Date path:
- Comment: Archetype contains no useful structure. A Note-like content is expected

ACTION

openEHR-EHR-ACTION.health_education.v1

- Text: Health education
- Description: Communication to improve health literacy and life skills.
- Archetype root binding:
- OMOP binding: 44803962 Health education
- OMOP Table: Observation
- Value path: Topic name [ELEMENT] /description[at0001]/items[at0002]
- Date path:
- Scheduled date/ time [ELEMENT] /description[at0001]/items[at0026]
- Context
- Comment:

openEHR-EHR-ACTION.medication.v1

- Text: Medication management
- Description: Any activity related to the planning, scheduling, prescription management, dispensing, administration, cessation and other use of a medication, vaccine, nutritional product or other therapeutic item.
- Archetype root binding:
- OMOP binding:
- OMOP Table: Drug exposure
- Value path: Medication item [ELEMENT] /description[at0017]/items[at0020]
- Date path:
 - Original scheduled date/time [ELEMENT] /description[at0017]/items[at0043]
 - context
- Comment: Drug quantity can be extracted from Amount [CLUSTER] /description[at0017]/items[at0131], explicitly from openEHR-EHR-CLUSTER.dosage.v2 items[at0144] Dose

openEHR-EHR-ACTION.procedure.v1

- Text: Procedure
- Description: A clinical activity carried out for screening, investigative, diagnostic, curative, therapeutic, evaluative or palliative purposes.
- Archetype root binding:
- OMOP binding:
- OMOP Table: Procedure
- Value path: Procedure name [ELEMENT] /description[at0001]/items[at0002]
- Date path:
 - Scheduled date/time [ELEMENT] /description[at0001]/items[at0066]
 - Final end date/time [ELEMENT] /description[at0001]/items[at0060]
- Comment:

openEHR-EHR-ACTION.service.v1

- Text: Service
- Description: A simple health-related service or activity delivered by a clinician, organisation or agency.
- Archetype root binding:
- OMOP binding: 4075820 Services
- OMOP Table: Observation
- Value path: Service name [ELEMENT] /description[at0001]/items[at0011]
- Date path:
 - Planned date/time [ELEMENT] /description[at0001]/items[at0032]
 - Scheduled date/time [ELEMENT] /description[at0001]/items[at0025]
 - context
- Comment: Planned and scheduled dates will only have value if the pathway step is the current one, by default get the context date. If coded and carried out could end up in procedure

ADMIN_ENTRY

openEHR-EHR-ADMIN_ENTRY.translation_requirements.v1

- Text: Translation requirement
- Description: The need for language translation in order to provide delivery of health care or related services.
- Archetype root binding:
- OMOP binding: If language name is coded, then use mapping table from Annex 1
- OMOP Table: Observation
- Value path: Administrative language/Language name [CLUSTER] /data[at0001]/items[openEHR-EHR-CLUSTER.language.v1]/items[at0001]
- Date path: Composition context
- Comment: Map ISO 639-3 terminology to [interpreter needed](#) [SNOMED-CT:: 315594003] children

EVALUATION

openEHR-EHR-EVALUATION.absence.v2

- Text: Absence of information
- Description: Statement that specified health information is not available for inclusion in the health record or extract at the time of recording.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table:
- Value path:
- Date path:
- Comment: Not really useful for research purposes. There is a code for “Patient medical record not available” [SNOMED-CT::405681002] but does not refer to the reason. It is possible that archetype can be improved with some subset of the children of its snomed parent “patient record status” [SNOMED-CT::307892003].

openEHR-EHR-EVALUATION.advance_care_directive.v2

- Text: Advance care directive
- Description: A framework to communicate the preferences of an individual for future medical treatment and care.
- Archetype root binding:
- OMOP binding: 46234705 Advance directive
- OMOP Table: Observation
- Value path: Type of directive [ELEMENT] /data[at0001]/items[at0005]
- Date path:
- Extract from context, could use Valid period start [ELEMENT] /protocol[at0010]/items[at0053] as a date, however the information about ending time (Valid period end [ELEMENT] /protocol[at0010]/items[at0054]) would be lost
- Comment: The coded status path at Status [ELEMENT] /data[at0001]/items[at0004] could be put into qualifier_concept_id

- Present [The individual has an advance care directive.]
[\[SNOMED-CT::410515003 | Known present\]](#) 4253628
- Absent [The individual does not have an advance care directive.]
[\[SNOMED-CT::410516002 | Known absent\]](#) 4253629
- Unknown [It is not known whether the individual has an advance care directive.] [\[SNOMED-CT::261665006 | Unknown\]](#) 4129922

openEHR-EHR-EVALUATION.advance_intervention_decisions.v1

- Text: Advance intervention decisions
- Description: Anticipatory decisions about the overall intent of care and possible interventions (including treatments, activities, and diagnostic or therapeutic procedures), asserted by a clinician.
- Archetype root binding:
- OMOP binding: 4287648 Finding related to care planning [SNOMED-CT::397608007]
- OMOP Table: Observation
- Value path:
- CPR decision [ELEMENT] /data[at0001]/items[at0009]
 - Full CPR [All appropriate cardiopulmonary resuscitation treatments should be attempted to save or prolong life.] "Use all resuscitation measures available" 3172879 (from Nebraska lexicon)
 - Limited CPR [Cardiopulmonary resuscitation treatments should be attempted, as specified in the 'Decisions description' narrative or as structured data in the 'Per intervention' cluster.] Code for "for attempted cardiopulmonary resuscitation" was remapped to "For cardiopulmonary resuscitation" [SNOMED-CT::450475007] 42872484
 - No CPR [No cardiopulmonary resuscitation treatments should be attempted to save or prolong life. Also known as 'Do not resuscitate (DNR)'; 'Do not attempt resuscitation (DNAR)'; 'Not for resuscitation (NFR)' or similar.]
[\[SNOMED-CT::450476008 | Not for cardiopulmonary resuscitation\]](#) 42872485
 - Unknown [The CPR decision is not known.] [SNOMED-CT::261665006 | Unknown] 4129922
- Intervention [ELEMENT] /data[at0001]/items[at0014]/items[at0015] (archetype is not exhaustive) Look at children of 'Procedure categorized by device involved' [SNOMED-CT::363691001] or children of 'Clinical equipment and/or device' [SNOMED-CT::272181003]. Decision [ELEMENT] /data[at0001]/items[at0014]/items[at0034] should go alongside the intervention.

- Chest compressions [Technique used to manually pump blood around the body during a cardiac arrest.]
 - Defibrillation [Use of electric shock to reset the electrical state of the heart.]
 - Intubation [Placement of a tube into the trachea to maintain an open airway, including a tracheostomy.]
 - Invasive ventilation [Artificial ventilation where invasive means are used to assist or replace spontaneous breathing.]
 - Non-invasive ventilation [Artificial ventilation where non-invasive means are used to assist or replace spontaneous breathing.]
 - Peripheral intravenous line [Insertion of a peripheral intravenous line.]
 - Central venous line or any arterial line [Insertion of a central venous line or any arterial line.]
 - Parenteral fluids [Maintenance of hydration by means other than eating or drinking.]
 - Parenteral or artificial nutrition [Provision of nutrients by means other than eating or drinking.]
 - Arrest medications [Medications used during an emergency resuscitation to prolong life. For example: adrenaline, atropine, sodium bicarbonate, calcium, other vasoactive medications.]
 - Circulatory regulation medications [Medication that supports heart function, including but not limited to: vasopressors, inotropes and chronotropes.]
 - Antibiotics, antiviral or antifungal agents [Medications to treat infections.]
 - Blood products [Therapeutic substance prepared from human blood including, but not limited to: whole blood; blood components; and plasma derivatives.]
 - Chest tube insertion [Insertion of a tube into the pleural space.]
 - Cardiac pacemaker [Insertion of an artificial pacemaker to control the heart beat.]
 - Dialysis [Process of removing excess water, solutes, and toxins from the blood.]
 - Transfer to hospital [Transfer to hospital for assessment or admission.]
 - Transfer to Intensive Care [Transfer and admission to an intensive care or high dependency unit.]
- Date path: context
 - Comment: Apart from the CPR decision, all the other interventions are really triplets assessing that it is a finding related to care planning, the intervention, and the decision. In those cases the decision ends probably in the qualifier_concept_id. For example, Intent of care /data[at0001]/items[at0002] has potential values of :
 - at0003: 4162591 # Curative --> Curative - procedure intent [SNOMED-CT::373808002]

- at0004: 44808034 # Restorative --> Rehabilitation - intent [SNOMED-CT::827911000000105]
- at0005: 4161275 # Supportive --> Supportive - procedure intent [SNOMED-CT::399707004]
- at0006: 4179711 # Terminal --> Palliative intent [SNOMED-CT::363676003]
- at0007: 4129922 # Unknown --> Unknown [SNOMED-CT::261665006]

openEHR-EHR-EVALUATION.adverse_reaction_risk.v2

- Text: Adverse reaction risk
- Description: Clinical assessment of the propensity for an individual to experience a harmful or undesirable physiological response if exposed, or re-exposed, to a substance.
- Archetype root binding:
- OMOP binding: 43530807 Allergic disposition [SNOMED-CT::609328004] (Allergy unspecified and hypersensitivity NOS were remapped to this code)
- OMOP Table: Observation
- Value path: Substance [ELEMENT] /data[at0001]/items[at0002]
- Date path:
 - Onset of last reaction [ELEMENT] /data[at0001]/items[at0117]
 - Onset of first reaction [ELEMENT] /data[at0001]/items[at0133]
 - context
- Comment: Multiple archetypes attributes could end up in the qualifier_concept_id: the active status (active, inactive), the verification status (unconfirmed, confirmed...), the criticality (low, high...), the category (food, medication...). Only one can be represented into OMOP

openEHR-EHR-EVALUATION.alcohol_consumption_summary.v1

- Text: Alcohol consumption summary
- Description: Summary or persistent information about the typical alcohol consumption of an individual.
- Archetype root binding:
- OMOP binding:
- 4074035 Current drinker [SNOMED-CT::219006]

- 35810395 Former alcohol drinker [UK biobank]
- 4022664 Non – drinker [SNOMED-CT::105542008]
- OMOP Table: Observation
- Value path: Overall status [ELEMENT] /data[at0001]/items[at0089]
- Date path:
 - Regular consumption commenced [ELEMENT] /data[at0001]/items[at0015]
 - Daily consumption commenced [ELEMENT] /data[at0001]/items[at0080]
 - context
- Comment: <<228273003 'Finding relating to alcohol drinking behavior' has very specific codes that could be useful for overall status

openEHR-EHR-EVALUATION.art_cycle_summary.v1

- Text: Assisted reproduction treatment cycle summary
- Description: Summary or persistent information about a single cycle of assisted reproduction treatment.
- Archetype root binding:
- OMOP binding:
 - 4138741 Intrauterine artificial insemination [SNOMED-CT::265064001]
 - 4199599 In vitro fertilization [SNOMED-CT::52637005]
 - 4138633 In vitro fertilization with intracytoplasmic spermatozoa injection [SNOMED-CT::425901007]
 - 4072862 Oocyte recovery [SNOMED-CT::177037000]
 - 44806861 Specimen collection by surgical resection [SNOMED-CT::803271000000107] (not specifically sperm)
 - 4142402 IVF - In vitro fertilization with pre-implantation genetic diagnosis [SNOMED-CT::426417003]
 - 4327048 Embryo transfer [SNOMED-CT::75456002]
 - 4032737 Frozen embryo transfer [SNOMED-CT::236894009]
- OMOP Table: Procedure
- Value path: Activities [ELEMENT] /data[at0001]/items[at0012]
- Date path: Start date [ELEMENT] /data[at0001]/items[at0004]

- Comment: Element counts (oocytes collected, attempted fertilized, etc.) are in archetype and not in terminologies

openEHR-EHR-EVALUATION.cause_of_death.v1

- Text: Cause of death
- Description: Details about specific diseases, conditions or injuries that caused or contributed to the death of an individual.
- Archetype root binding:
- OMOP binding: 21492656 Cause of death
- OMOP Table: Observation
- Value path: if coded, Direct cause [ELEMENT] /data[at0001]/items[at0002]
- Multiple antecedent cause(s) in Cause [ELEMENT] /data[at0001]/items[at0003]/items[at0004]
- Date path: context
- For multiple antecedent cause(s) Duration [ELEMENT] /data[at0001]/items[at0003]/items[at0009] allows date/time
- Comment: One direct cause, multiple antecedent causes

openEHR-EHR-EVALUATION.clinical_synopsis.v1

- Text: Clinical synopsis
- Description: Narrative summary or overview about a patient, specifically from the perspective of a healthcare provider, and with or without associated interpretations.
- Archetype root binding:
- OMOP binding: 40771187 Summary note
- OMOP Table: Measurement
- Value path: Synopsis [ELEMENT] /data[at0001]/items[at0002]
- Date path: context
- Comment: OMOP texts in observation limited to 50 characters. Could (should) be note.

openEHR-EHR-EVALUATION.communication_capability.v1

- Text: Communication capability
- Description: The ability of an individual to communicate.
- Archetype root binding:
- OMOP binding: 4120746 Ability to perform functions related to communication
- OMOP Table: Observation
- Value path:
 - Language [CLUSTER] /data[at0001]/items[at0015]/items[at0003]
 - Capability details [CLUSTER] /data[at0001]/items[at0015]/items[at0018] is a slot, but not specific archetype is chosen
- Date path: context
- Comment: Can be coded with << 161139007 Language spoken. A similar table as the annex 1 but specifically for Language spoken can be created

openEHR-EHR-EVALUATION.contraceptive_summary.v1

- Text: Contraceptive use summary
- Description: Summary and persistent information about the use of methods to prevent pregnancy.
- Archetype root binding:
- OMOP binding: 4314454 Contraceptive use behavior [SNOMED-CT::424136002]
 - Combination pill [A combination oral contraceptive pill containing both an oestrogen and progestin.] 4149367 [SNOMED-CT::268458002]
 - Progestogen-only pill [Progestogen-only form of oral hormonal contraception.] 4061668 [SNOMED-CT::169467008]
 - Combination skin patch [A combination skin patch containing both an oestrogen and progestin.] 765426 [SNOMED-CT::450881000124106]
 - Depot progestogen injection [Progestogen-only injectable of hormonal contraception.] 46271351 [SNOMED-CT::709457002]
 - Hormone implant [Hormonal contraception inserted under the skin.] 3661581 [SNOMED-CT::860691008]
 - Vaginal ring [Hormone impregnated ring inserted into the vagina.] 42872855 [SNOMED-CT::450850003]
 - IUD with hormone [Device inserted into the uterus to prevent implantation.] 40492989 [SNOMED-CT::449038007]

- IUD without hormone [Device inserted into the uterus to prevent implantation.] 4207158 [SNOMED-CT::312081001] (not specifically without hormone)
- Female sterilisation [Procedure intended to permanently prevent pregnancy, usually by tubal ligation.] 4246185 [SNOMED-CT::60890002]
- Male sterilisation [Procedure intended to permanently prevent pregnancy, usually by vasectomy.] 4163273 [SNOMED-CT::399141000]
- Diaphragm [A shallow, dome shaped barrier placed in the vagina to cover the cervix.] 4069548 [SNOMED-CT::20359006]
- Vaginal douching [Intravaginal cleansing with a liquid solution.] 4036554 [SNOMED-CT::228483001]
- Female condom [A barrier worn inside the vagina to physically block ejaculated sperm from entering the cervix.] 37165062 [SNOMED-CT::1237408007]
- Male condom [A barrier covering the penis to physically block ejaculated sperm from entering the vagina.] 4077524 [SNOMED-CT::275831001]
- Withdrawal [Withdrawing the penis from the vagina and away from a woman's external genitals before ejaculation.] 4059972 [SNOMED-CT::169513000]
- Fertility awareness method [Cyclical use of abstinence or barrier methods during likely fertile periods.] 765686 [SNOMED-CT::455501000124105]
- Abstinence [Avoidance of vaginal intercourse or intimate activities which may result in pregnancy.] 4012376 [SNOMED-CT::162171002] Currently not sexually active (non-standard codes such as “sexual abstinence” are mapped to this one)
- OMOP Table: Observation
- Value path: Type [ELEMENT] /data[at0001]/items[at0029]/items[at0151]
- Date path: context
- Comment: Status element (current user, not current user, never user) should be encoded into qualifier_concept_id
 - at0003: 4034855 # Current user --> Current [SNOMED-CT::15240007]
 - at0005: 4132507 # Not current user --> Past [SNOMED-CT::410513005]
 - at0006: 763692 # Never user --> Never [SNOMED-CT::444841000124107]

openEHR-EHR-EVALUATION.contraindication.v1

- Text: Contraindication
- Description: A clinical intervention (including, but not limited to, use of a treatment or performance of a test or procedure) that should not be carried out due to the likelihood, or possibility, of harm being caused to an individual.
- Archetype root binding:

- OMOP binding: 40766816 Contraindication
- OMOP Table: Observation
- Value path: Contraindicated intervention [ELEMENT] /data[at0001]/items[at0002]
- Date path: context
- Comment: Both *Status* [ELEMENT] /data[at0001]/items[at0014] and *Criticality* [ELEMENT] /data[at0001]/items[at0007] can end in qualifier_concept_id, have to choose one

openEHR-EHR-EVALUATION.death_summary.v1

- Text: Death summary
- Description: Summary information about the circumstances and context of the death of an individual, excluding the cause(s) of death.
- Archetype root binding:
- OMOP binding:
- OMOP Table: Death
- Value path: Date/time of death [ELEMENT] /data[at0001]/items[at0092]
- Date path: NA
- Comment: This should end in death table

openEHR-EHR-EVALUATION.differential_diagnoses.v1

- Text: Differential diagnoses
- Description: One or more possible conditions, problems or diagnoses that may be responsible for a clinical presentation, examination findings and/or test results.
- Archetype root binding:
- OMOP binding:
- OMOP Table: Condition occurrence
- Value path: if coded Diagnosis name [ELEMENT] /data[at0001]/items[at0003]/items[at0004]
- Date path: context

- Comment: encode *Status [ELEMENT] /data[at0001]/items[at0003]/items[at0005]* into condition_status_concept_id

openEHR-EHR-EVALUATION.education_summary.v1

- Text: Education summary
- Description: Summary or persistent information about an individual's current and past education or training.
- Archetype root binding:
- OMOP binding: 4171617 Details of education
- OMOP Table: Observation
- Value path: Description [ELEMENT] /data[at0001]/items[at0018]
- Date path: context
- Comment: Not useful as it is

openEHR-EHR-EVALUATION.ethnicity.v1

- Text: Ethnic identity
- Description: Affiliation, kinship or connection with one or more groupings of people, according to common origins or background.
- Archetype root binding:
- OMOP binding: 44803968 Ethnicity
- OMOP Table: Observation
- Value path: Ethnicity [ELEMENT] /data[at0001]/items[at0003]
- Date path: context
- Comment: Ethnicity is not coded, will need a mapping table if we want to provide a value_as_concept_id

openEHR-EHR-EVALUATION.exclusion_global.v1

- Text: Exclusion - global

- Description: An overall statement of exclusion about all Problems/diagnoses, Family history, Medications, Procedures, Adverse reactions or other clinical items that are either not currently present, or have not been present in the past.
- Archetype root binding:
- OMOP binding: 3454241 Absence of
- OMOP Table: Observation
- Value path: Global exclusion statement [ELEMENT] /data[at0001]/items[at0002]/name
 - Global exclusion of problems/diagnoses [Overall statement of exclusion of all problems or diagnoses at the time of recording.] 4234469 [SNOMED-CT::439401001] Diagnosis
 - Global exclusion of family history [Overall statement of exclusion of all significant health-related problems in relatives or family members of the individual at the time of recording.] 4167217 [SNOMED-CT::416471007] Family history of clinical finding
 - Global exclusion of medication use [Overall statement of exclusion about the use of all medications at the time of recording.] 44788358 [SNOMED UK extension 163111000000100] Medication Record
 - Global exclusion of procedures [Overall statement of exclusion about all procedures at the time of recording.] 4322976 [SNOMED-CT::71388002] Procedure
 - Global exclusion of adverse reactions [Overall statement of exclusion about all adverse reactions at the time of recording.] 4105886 [SNOMED-CT::281647001] Adverse reaction
- Date path: context
- Comment: This is a runtime constraint probably needs some tweaking. In general not useful for research, as patient will just have no data.

openEHR-EHR-EVALUATION.exclusion_specific.v1

- Text: Exclusion - specific
- Description: A statement of exclusion of a specific Problem/diagnosis, Family history, Medication, Procedure, Adverse reaction or other clinical item that is either not currently present, or have not been present in the past.
- Archetype root binding:
- OMOP binding: 3454241 Absence of

- OMOP Table:
- Value path: Excluded concept [ELEMENT] /data[at0001]/items[at0003]/name
- Date path: context
- Comment: Similar to global, not useful for research. Similar mapping table could be used

openEHR-EHR-EVALUATION.financial_summary.v1

- Text: Financial summary
- Description: Summary information about the financial situation of an individual.
- Archetype root binding:
- OMOP binding: 4072605 Financial circumstances
- OMOP Table: Observation
- Value path: Financial security status [ELEMENT] /data[at0001]/items[at0003]
 - Secure [The individual has a sense of certainty and peace of mind about their financial situation - their income is stable and/or adequate to cover their expenses.] 4072606 [SNOMED-CT::224165005] Financially secure
 - At risk [The individual has a sense of uncertainty about their financial situation - their income may vary and/or sometimes may not be adequate to cover their expenses.] (An exact code does not exist)
 - Insecure [The individual has a sense of worry and concern about financial hardship - their income is not stable and/or not adequate to cover their expenses.] [SNOMED-CT::1184702004] Financial insecurity
- Date path: context
- Comment: See interpretations of 4072605 Financial circumstances to complete archetype valueset

openEHR-EHR-EVALUATION.gender.v1

- Text: Gender
- Description: Details about the gender of an individual.
- Archetype root binding:
- OMOP binding: 4135376 Gender

- OMOP Table: Observation
- Value path:
 - Sex assigned at birth [ELEMENT] /data[at0002]/items[at0019]
 - Administrative gender [ELEMENT] /data[at0002]/items[at0022]
- Date path: context
- Comment: As per OMOP mapping recommendations, birth sex should be preferred

openEHR-EHR-EVALUATION.goal.v1

- Text: Goal
- Description: A desired health, or well-being, outcome for the subject of care.
- Archetype root binding:
- OMOP binding: 4253630 Goal
- OMOP Table: Observation
- Value path: Goal name [ELEMENT] /data[at0001]/items[at0002]
- Date path: context
- Comment: Goal name probably text which reduces usefulness. Goal outcome in qualifier_concept_id

openEHR-EHR-EVALUATION.health_risk.v1

- Text: Health risk assessment
- Description: Assessment of the potential and likelihood of future adverse health effects as determined by identified risk factors.
- Archetype root binding:
- OMOP binding: 37154027 Finding of increased risk level
- OMOP Table: Observation
- Value path: Risk factor [ELEMENT] /data[at0001]/items[at0016]/items[at0013]
- Date path:
 - If date can be extracted, Time period [ELEMENT] /data[at0001]/items[at0023]
 - context

- Comment:

openEHR-EHR-EVALUATION.housing_summary.v1

- Text: Housing summary
- Description: Summary or persistent information about an individual's current and past housing or accommodation situation.
- Archetype root binding:
- OMOP binding: 42869557 Housing status
- OMOP Table: Observation
- Value path: Description [ELEMENT] /data[at0001]/items[at0002]
- Date path: context
- Comment: Limited to 50 characters. Can be a note

openEHR-EHR-EVALUATION.last_menstrual_period.v1

- Text: Last menstrual period
- Description: Identification of the first day of the most recent menstrual cycle for the individual.
- Archetype root binding:
- OMOP binding: 4072438 Date of last menstrual period
- OMOP Table: Measurement
- Value path: Date of onset (LMP) [ELEMENT] /data[at0001]/items[at0002]
- Date path:
- Comment: OMOP does not have date as data type

openEHR-EHR-EVALUATION.medication_summary.v1

- Text: Medication summary
- Description: Summary or persistent information about the use of a single medication or group of medications, especially where the pattern of use or cumulative dosage needs to be monitored.

- Archetype root binding:
- OMOP binding:
- OMOP Table: Drug exposure
- Value path: Medication name [ELEMENT] /data[at0001]/items[at0002]
- Date path:
 - Onset of use [ELEMENT] /data[at0001]/items[at0009]
 - Cessation of use [ELEMENT] /data[at0001]/items[at0010]
 - context
- Comment: Also Cumulative dose [ELEMENT] /data[at0001]/items[at0015] for quantity

openEHR-EHR-EVALUATION.menstruation_summary.v1

- Text: Menstruation summary
- Description: Summary or persistent information about an individual's menstruation history.
- Archetype root binding:
- OMOP binding: 4172857 Menopause finding
- OMOP Table: Observation
- Value path: /data[at0001]/items[at0003] Menstrual status
 - at0026::Premenarchal → 0 Unmapped
 - at0005::Premenopausal → 4331463 Premenopausal state [SNOMED-CT::22636003]
 - at0006::Perimenopausal → 45757505 Perimenopausal state [SNOMED-CT::161541000119104]
 - at0007::Postmenopausal → 4295261 Postmenopausal state [SNOMED-CT::76498008]
- Date path: context
- Comment: There is Episode start date inside of CLUSTER, if interesting a set of “Date of last menstrual period” could be added

openEHR-EHR-EVALUATION.obstetric_summary.v1

- Text: Obstetric summary

- Description: Summary or persistent information about the numbers of key obstetric events.
 - Archetype root binding:
 - OMOP binding:
 - Gravidity [ELEMENT] /data[at0001]/items[at0002] 4060186 [SNOMED-CT::161732006] Gravida
 - Parity [ELEMENT] /data[at0001]/items[at0003] 4264419 [SNOMED-CT::364325004] Parity
 - Term births [ELEMENT] /data[at0001]/items[at0015] 4209211 [SNOMED-CT::440425000] Number of births at term
 - Preterm births [ELEMENT] /data[at0001]/items[at0016] 4208183 [SNOMED-CT::440013005] Number of preterm births
 - Abortions [ELEMENT] /data[at0001]/items[at0017] 4090055 [SNOMED-CT::252113007] Number of miscarriages or induced terminations of pregnancy
 - Miscarriages [ELEMENT] /data[at0001]/items[at0004] 4095945 [SNOMED-CT::248989003] Number of miscarriages
 - Terminations [ELEMENT] /data[at0001]/items[at0005] 4091280 [SNOMED-CT::252114001] Number of induced terminations of pregnancy
 - Ectopic pregnancies [ELEMENT] /data[at0001]/items[at0011] 4209345 [SNOMED-CT::440537001] Number of ectopic pregnancies
 - Live births [ELEMENT] /data[at0001]/items[at0006] 4088444 [SNOMED-CT::248991006] Number of live deliveries
 - Multiple births [ELEMENT] /data[at0001]/items[at0018] 0 unmapped
 - Stillbirths [ELEMENT] /data[at0001]/items[at0012] 4092786 [SNOMED-CT::252112002] Number of stillbirths
 - Neonatal deaths [ELEMENT] /data[at0001]/items[at0028] 44790512 [UK Extension::203431000000102] Number of previous neonatal deaths
 - Caesarean sections [ELEMENT] /data[at0001]/items[at0027] 4092787 [SNOMED-CT::252115000] Number of cesarean sections
 - OMOP Table: Measurement
 - Value path: Each one of the measurements has its path
 - Date path: context
 - Comment:
- openEHR-EHR-EVALUATION.occupation_summary.v1
- Text: Occupation summary

- Description: Summary or persistent information about an individual's current and past jobs and/or roles.
- Archetype root binding:
- OMOP binding: 4073163 [SNOMED-CT::224362002] Employment status
- OMOP Table: Observation
- Value path: Employment status [ELEMENT] /data[at0001]/items[at0004]
- Date path: context
- Comment:

openEHR-EHR-EVALUATION.precaution.v1

- Text: Precaution
- Description: A condition or state of the individual that is clinically significant and unique or idiosyncratic for this individual, and is considered vital information when making treatment decisions.
- Archetype root binding:
- OMOP binding: 4303554 Surveillance: safety
- OMOP Table: Observation
- Value path: Condition [ELEMENT] /data[at0001]/items[at0002]
- Date path:
- Comment:

openEHR-EHR-EVALUATION.problem_diagnosis.v1

- Text: Problem/Diagnosis
- Description: Details about a single identified health condition, injury, disability or any other issue which impacts on the physical, mental and/or social well-being of an individual.
- Archetype root binding:
- OMOP binding:
- OMOP Table: Condition occurrence

- Value path: If coded, Problem/Diagnosis name [ELEMENT] /data[at0001]/items[at0002]
- Date path:
 - Date/time of onset [ELEMENT] /data[at0001]/items[at0077]
 - context
- Comment: Condition status at data[at0001]/items[openEHR-EHR-CLUSTER.problem_qualifier.v1]/items[at0004]

openEHR-EHR-EVALUATION.reason_for_encounter.v1

- Text: Reason for encounter
- Description: The reason for initiation of any healthcare encounter or contact by the individual who is the subject of care.
- Archetype root binding:
- OMOP binding: 441482 Administrative reason for encounter
- OMOP Table: Observation
- Value path: If coded, Presenting problem [ELEMENT] /data[at0001]/items[at0004]
- Date path: context
- Comment:

openEHR-EHR-EVALUATION.recommendation.v2

- Text: Recommendation
- Description: A suggestion, advice or proposal for clinical management.
- Archetype root binding:
- OMOP binding: 4310149 Recommendation - action
- OMOP Table: Observation
- Value path: if coded, Recommendation [ELEMENT] /data[at0001]/items[at0002]
- Date path: context
- Comment:

openEHR-EHR-EVALUATION.smokeless_tobacco_summary.v1

- Text: Smokeless tobacco summary
- Description: Summary or persistent information about smokeless tobacco use by an individual.
- Archetype root binding:
- OMOP binding:
- 36305168 Smokeless tobacco status [LOINC::88031-0]
- 4151768 Pack years [SNOMED-CT::315609007]
- 44786668 Date quit tobacco smoking [LOINC::74010-0]
- OMOP Table: Observation
- Value path:
- Overall status [ELEMENT] /data[at0001]/items[at0089]
- Overall description [ELEMENT] /data[at0001]/items[at0043]
- Overall pack years [ELEMENT] /data[at0001]/items[at0074]
- Overall quit date [ELEMENT] /data[at0001]/items[at0016]
- Date path: context
- Comment: Similar to tobacco summary use

openEHR-EHR-EVALUATION.social_network.v1

- Text: Social network
- Description: Group of individuals connected by social interactions and personal relationships.
- Archetype root binding:
- OMOP binding: 4237480 Social network analysis
- OMOP Table: Observation
- Value path: If coded, Partnership status [ELEMENT] /data[at0001]/items[at0002]
- Date path: context

- Comment:

openEHR-EHR-EVALUATION.social_summary.v1

- Text: Social summary
- Description: Summary information about social circumstances or experiences that may have a potential impact on an individual's health.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table:
- Value path:
- Date path:
- Comment: Container of CLUSTER.education, CLUSTER.housing, CLUSTER.household, CLUSTER.employment, which seems to have been renamed, requires slot update in archetype as points to non-existing archetype ids.

openEHR-EHR-EVALUATION.specimen_summary.v1

- Text: Specimen summary
- Description: Summary or persistent information about a single specimen.
- Archetype root binding:
- OMOP binding:
- OMOP Table: Specimen
- Value path: If coded, Specimen label [ELEMENT] /data[at0001]/items[at0032]
- Date path:
- Storage started /data[at0001]/items[at0018]
- context
- Comment: In general, specific information is included in the CLUSTER.specimen archetype. Can use Number remaining /data[at0001]/items[at0030] for quantity

openEHR-EHR-EVALUATION.substance_use_summary.v1

- Text: Substance use summary
- Description: Summary or persistent information about typical use of a specific substance or class of substances that may harm an individual's health or social well-being.
- Archetype root binding:
- OMOP binding: 37162238 [SNOMED-CT::1187057000] Substance use behavior
- OMOP Table: Observation
- Value path: Substance name [ELEMENT] /data[at0001]/items[at0002]
- Date path:
 - First ever use [ELEMENT] /data[at0001]/items[at0008]
 - Regular use commenced [ELEMENT] /data[at0001]/items[at0009]
 - Daily use commenced [ELEMENT] /data[at0001]/items[at0010]
- Comment: Overall status [ELEMENT] /data[at0001]/items[at0003] can be stored in qualifier_concept_id

INSTRUCTION

openEHR-EHR-INSTRUCTION.medication_order.v3

- Text: Medication order
- Description: An order for a medication, vaccine, nutritional product or other therapeutic item for an identified individual.
- Archetype root binding:
- OMOP binding:
- OMOP Table: Drug exposure
- Value path: Medication item [ELEMENT] /activities[at0001]/description[at0002]/items[at0070]
- Date path:
 - Order start date/time [ELEMENT] /activities[at0001]/description[at0002]/items[at0113]/items[at0012]
 - Order stop date/time [ELEMENT] /activities[at0001]/description[at0002]/items[at0113]/items[at0013]

- Comment: Optional route at Route [ELEMENT]
/activities[at0001]/description[at0002]/items[at0091]

openEHR-EHR-INSTRUCTION.therapeutic_item_order.v1

- Text: Therapeutic item order
- Description: An order for a therapeutic item, including a medical device, used by the individual or a carer as part of direct provision of healthcare or to mitigate a healthcare risk.
- Archetype root binding:
- OMOP binding:
- OMOP Table: Procedure
- Value path: Item name [ELEMENT]
/activities[at0001]/description[at0002]/items[at0070]
- Date path:
- Start date/time [ELEMENT] /activities[at0001]/description[at0002]/items[at0012]
- Stop date/time [ELEMENT] /activities[at0001]/description[at0002]/items[at0013]
- Comment: Ideally the code would create a new Procedure, if Item name doesn't describe a procedure then an Observation 4172515 Therapeutic procedure with the corresponding Item name code could be used.

OBSERVATION

openEHR-EHR-OBSERVATION.acvpu.v1

- Text: ACVPU scale
- Description: Simple scale used as part of an assessment to measure and record an individual's level of consciousness.
- Archetype root binding:
- OMOP binding: 37208386 ACVPU (Alert Confusion Voice Pain Unresponsiveness) scale
- OMOP Table: Measurement

- Value path: /data[at0001]/events[at0002]/data[at0003]/items[at0004]
 - at0005: 45878452 # Alert [LOINC::LA9340-6]
 - at0015: 45881443 # Confusion [LOINC::LA7530-4]
 - at0006: 46237777 # Voice [LOINC::LA22670-6]
 - at0007: 45881352 # Pain [LOINC::LA7460-4]
 - at0008: 45880051 # Unresponsive [LOINC::LA9343-0]
- Date path: /data[at0001]/events[at0002]
- Comment:

openEHR-EHR-OBSERVATION.adverse_reaction_monitoring.v1

- Text: Adverse reaction monitoring
- Description: Information about the outcome of monitoring for adverse reactions, during or after the administration of a substance.
- Archetype root binding:
- OMOP binding: 4105886 Adverse reaction
- OMOP Table:
- Value path:
- Date path: /data[at0001]/events[at0002]
- Comment: Not really an easy way of encoding this into omop, should be an administered substance /data[at0001]/events[at0002]/data[at0003]/items[at0004] + If the reaction happened or not /data[at0001]/events[at0002]/data[at0003]/items[at0005]. It's usually a triplet (reaction, substance, outcome). Outcome could go to qualifier_concept_id

openEHR-EHR-OBSERVATION.age_assertion.v1

- Text: Age assertion
- Description: A statement about the age of an individual at a point in time.
- Archetype root binding:
- OMOP binding: 4265453 Age
- OMOP Table: Observation

- Value path: Adjusted age [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0005]
- Date path: Point in time event [POINT_EVENT] /data[at0001]/events[at0002]
- Comment: Use adjusted age as potentially is actually being able to be put as number
- Units:
 - 9450 a_j
 - 9448 yr ('a' in UCUM included in OMOP)

openEHR-EHR-OBSERVATION.apgar.v2

- Text: Apgar score
- Description: A tool to assess the clinical status of the newborn infant immediately after birth and their response to resuscitation.
- Archetype root binding:
- OMOP binding:
- 3016704 1 minute Apgar Score
- 3017235 2 minute Apgar Score
- 0 3 minute Apgar Score
- 3004221 5 minute Apgar Score
- 3016162 10 minute Apgar Score
- OMOP Table: Measurement
- Value path:
 - Total [ELEMENT] /data[at0002]/events[at0003]/data[at0001]/items[at0025]
 - Total [ELEMENT] /data[at0002]/events[at0026]/data[at0001]/items[at0025]
 - Total [ELEMENT] /data[at0002]/events[at0027]/data[at0001]/items[at0025]
 - Total [ELEMENT] /data[at0002]/events[at0028]/data[at0001]/items[at0025]
 - Total [ELEMENT] /data[at0002]/events[at0031]/data[at0001]/items[at0025]
- Date path:

- 1 minute [POINT_EVENT] /data[at0002]/events[at0003]
- 2 minute [POINT_EVENT] /data[at0002]/events[at0026]
- 3 minute [POINT_EVENT] /data[at0002]/events[at0027]
- 5 minute [POINT_EVENT] /data[at0002]/events[at0028]
- 10 minute [POINT_EVENT] /data[at0002]/events[at0031]
- Comment: Five different apgar scores, one for each path

openEHR-EHR-OBSERVATION.asa_status.v1

- Text: ASA physical status classification system
- Description: Classification system adopted by the American Society of Anesthesiologists (ASA) as part of a pre-surgical risk assessment.
- Archetype root binding: [SNOMED-CT::273270000]
- OMOP binding: 4199571 American Society of Anesthesiologists physical status class
- OMOP Table: Measurement
- Value path: Classification [ELEMENT]
/data[at0015]/events[at0016]/data[at0017]/items[at0001]
- Date path: Any point in time event [POINT_EVENT] /data[at0015]/events[at0016]
- Comment: Current ASA class mappings are invalid in OMOP, for responses the valid codes are:
 - class 1 4119373 at0003
 - class 2 4120210 at0004
 - class 3 4123169 at0005
 - class 4 4131479 at0006
 - class 5 4080722 at0007
 - class 6 4130868 at0008

openEHR-EHR-OBSERVATION.blood_pressure.v2

- Text: Blood pressure
- Description: The local measurement of arterial blood pressure which is a surrogate for arterial pressure in the systemic circulation.

- Archetype root binding: SNOMED-CT[[SNOMED-CT(2003)::364090009]]
- Path 1:
- OMOP binding: 4152194 Systolic blood pressure
- OMOP Table: Measurement
- Value path: Systolic [ELEMENT]
/data[at0001]/events[at0006]/data[at0003]/items[at0004]
- Date path: Any event [EVENT] /data[at0001]/events[at0006]
- Path 2:
- OMOP binding: 4154790 Diastolic blood pressure
- OMOP Table: Measurement
- Value path: Diastolic [ELEMENT]
/data[at0001]/events[at0006]/data[at0003]/items[at0005]
- Date path: Any event [EVENT] /data[at0001]/events[at0006]
- Comment: Already defined in OMOCL, can also add 37168599 Mean arterial pressure [SNOMED-CT::1285244000] in Mean arterial pressure [ELEMENT]
/data[at0001]/events[at0006]/data[at0003]/items[at1006] and 4314539 Arterial pulse pressure [SNOMED-CT::87179004] in Pulse pressure [ELEMENT]
/data[at0001]/events[at0006]/data[at0003]/items[at1007]

openEHR-EHR-OBSERVATION.body_mass_index.v2

- Text: Body mass index
- Description: Calculated measurement which compares a person's weight and height.
- Archetype root binding:
- OMOP binding: 4245997 Body mass index
- OMOP Table: Measurement
- Value path: Body mass index [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]

- Comment: Element is mapped to [SNOMED-CT::60621009 | Body mass index] or [LOINC::39156-5 | Body mass index (BMI) [Ratio]]
- Units:
 - 9531 kg/m2
 - 9389 [lb_av]/[in_i]2 (Should be [psi])

openEHR-EHR-OBSERVATION.body_segment_area.v1

- Text: Body segment area
- Description: Calculation of the cross-sectional area of an identified part of the body, usually identified in relation to points of surface anatomy.
- Archetype root binding:
- OMOP binding: Body surface area 4201235 (no code for specific Upper arm muscle area or segment)
- OMOP Table: Measurement
- Value path: Area [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0008]
- Date path: [EVENT] /data[at0001]/events[at0002]
- Comment: Encoding Body segment name [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004 and Laterality [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0005] could be interesting, but Measurement table in OMOP doesn't have qualifier_concept_id as Observation has. If interesting we should create an Observation instead.
- Units:
 - 9572 mm2
 - 9483 cm2
 - 9404 [sin_i]

openEHR-EHR-OBSERVATION.body_segment_circumference.v1

- Text: Body segment circumference
- Description: Measurement of the distance around an identified part of the body, usually identified in relation to points of surface anatomy.
- Archetype root binding:

- OMOP binding: 4086996 Circumference measurement
- OMOP Table: Measurement
- Value path: Circumference [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0008]
- For the coded alternatives proposed codes are
 - Arm circumference [at0017] Mid upper arm circumference 4111666
 - Tight circumference [at0018] Lower limb circumference 4131519
 - Calf circumference [at0019]
 - Right calf circumference 4136051
 - Left calf circumference 4131516
 - Forearm circumference [at0041] 0 unmapped
- Date path: [EVENT] /data[at0001]/events[at0002]
- Comment: Encoding Body segment name [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004 and Laterality [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0005] could be interesting, but Measurement table in OMOP doesn't have qualifier_concept_id as Observation has. If interesting we should create an Observation instead.
- Units
 - 8533 in
 - 8582 cm
 - 8588 mm

openEHR-EHR-OBSERVATION.body_segment_discrepancy.v1

- Text: Body segment discrepancy
- Description: The difference in length or circumference between paired body segments.
- Archetype root binding:
- OMOP binding:
- OMOP Table: Observation
- Value path: Discrepancy [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0008]
- For the coded alternatives proposed codes are

- at0049::Upper arm length →Length discrepancy between upper limbs
37312755
- at0050::Leg length →Lower limb length discrepancy 45773566
- at0051::Upper leg length→Lower limb length discrepancy 45773566
- at0052::Foot length→Lower limb length discrepancy 45773566
- at0053::Knee height→Lower limb length discrepancy 45773566
- at0054::Forearm length→ Length discrepancy between upper limbs
37312755
- at0055::Lower leg length→Lower limb length discrepancy 45773566
- at0056::Shoulder height→Length discrepancy between upper limbs
37312755
- at0057::Sitting shoulder height→Length discrepancy between upper limbs
37312755
- at0058::Calf circumference→Lower limb length discrepancy 45773566
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Encoding more specific Body segment measurement [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004] could be interesting, but
Measurement table in OMOP doesn't have qualifier_concept_id as Observation has. If
interesting we should create an Observation instead. Longest side [at0046] could be even
harder to codify inside of qualifier.
- Units
 - 8533 in
 - 8582 cm
 - 8588 mm

openEHR-EHR-OBSERVATION.body_segment_length.v1

- Text: Body segment length
- Description: Measurement of the distance between two points of surface anatomy.
- Archetype root binding:
- OMOP binding: 4214536 Length of segment
- OMOP Table: Measurement
- Value path: Length [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0008]

- For the coded alternatives proposed codes are
 - at0017::Sitting height → Sitting height 4093976
 - at0024::Armspan → Arm span 764566
 - at0018::Upper arm length → Arm length 4097012
 - at0019::Leg length → Leg length 4093177
 - at0020::Upper leg length → Leg length 4093177 (no specific code)
 - at0021::Foot length → Foot length 4092582
 - at0022::Crown-rump length → Crown rump length of fetus 4172711
 - at0023::Knee height → Knee height 4224119
 - at0041::Forearm length → Arm length 4097012 (could be length of ulna or radius, but not exactly, so a generic one is chosen)
 - at0042::Lower leg length → Leg length 4093177 (no specific code)
 - at0043::Shoulder height → 0 Unmapped
 - at0044::Sitting shoulder height → 0 Unmapped
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Encoding more specific Body segment name [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0004] could be interesting, but Measurement table in OMOP doesn't have qualifier_concept_id as Observation has. If interesting we should create an Observation instead. Longest side [at0046] could be even harder to codify inside of qualifier.
- Units
 - 8533 in
 - 8582 cm
 - 8588 mm

openEHR-EHR-OBSERVATION.body_surface_area.v1

- Text: Body surface area
- Description: The measured or calculated surface area of a human body.
- Archetype root binding:
- OMOP binding: 4201235 Body surface area
- OMOP Table: Measurement
- Value path: Area [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0008]
- Date path: [EVENT] /data[at0001]/events[at0002]

- Comment: Encoding Body segment name [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004 and Laterality [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0005] could be interesting, but Measurement table in OMOP doesn't have qualifier_concept_id as Observation has. If interesting we should create an Observation instead.
- Units:
 - 9572 mm2
 - 9483 cm2
 - 9404 [sin_i]

openEHR-EHR-OBSERVATION.body_temperature.v2

- Text: Body temperature
- Description: A measurement of the body temperature, which is a surrogate for the core body temperature of the individual.
- Archetype root binding:
- OMOP binding: 3020891 Body temperature
- OMOP Table: Measurement
- Value path: Temperature [ELEMENT]
/data[at0002]/events[at0003]/data[at0001]/items[at0004]
- Date path: Any event [EVENT] /data[at0002]/events[at0003]
- Comment: Data element has bindings to both [LNC205::8310-5] and [SNOMED-CT::386725007 | Body temperature]
- Units:
 - 9289 [degF]
 - 586323 Cel

openEHR-EHR-OBSERVATION.body_weight.v2

- Text: Body weight
- Description: Measurement of the body weight of an individual.
- Archetype root binding:
- OMOP binding: 3025315 Body weight

- OMOP Table: Measurement
- Value path: Weight [ELEMENT]
/data[at0002]/events[at0003]/data[at0001]/items[at0004]
- Date path: Any event [EVENT] /data[at0002]/events[at0003]
- Comment: Element has mapping to [LOINC::29463-7 | Body weight]

openEHR-EHR-OBSERVATION.braden_scale.v1

- Text: Braden scale
- Description: The Braden scale is a tool used to assess the risk of pressure ulcer development in adults and children over the age of five years.
- Archetype root binding:[LOINC::38228-3] and [SNOMED-CT::413139004]
- OMOP binding: 36683325 Braden Scale for Predicting Pressure Sore Risk
- OMOP Table: Measurement
- Value path: Total score /data[at0001]/events[at0002]/data[at0003]/items[at0022]
- Date path: event /data[at0001]/events[at0002]
- Comment: Snomed mapping in archetype points to inactive concepts

openEHR-EHR-OBSERVATION.bvc.v1

- Text: Brøset Violence Checklist (BVC)
- Description: A checklist which assists in the prediction of imminent violent behaviour.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table: Observation
- Value path: Total score /data[at0001]/events[at0002]/data[at0003]/items[at0017]
- also Total score /data[at0001]/events[at0088]/data[at0003]/items[at0017]
- Total score /data[at0001]/events[at0113]/data[at0003]/items[at0017]
- Total score /data[at0001]/events[at0138]/data[at0003]/items[at0017]
- Date path:

- day shift event /data[at0001]/events[at0002]
- Evening shift /data[at0001]/events[at0088]
- Night shift /data[at0001]/events[at0113]
- Any event /data[at0001]/events[at0138]
- Comment: Four possible events, could generate up to 4 mappings from the same archetype

openEHR-EHR-OBSERVATION.capillary_refill.v1

- Text: Capillary refill time (CRT)
- Description: Measurement of the time taken for color to return to an external capillary bed after pressure is applied to cause blanching.
- Archetype root binding:
 - [SNOMED-CT::15527001 | Capillary filling]
 - [LOINC::44971-0 | Capillary refill [Time]]
- OMOP binding: 3045676 Capillary refill [Time]
- OMOP Table: Measurement
- Value path: Refill time /data[at0001]/events[at0002]/data[at0003]/items[at0009]
- Date path: /data[at0001]/events[at0002]
- Comment: Unit fixed to seconds (OMOP::8555)

openEHR-EHR-OBSERVATION.cgas.v1

- Text: Children's Global Assessment Scale
- Description: Children's Global Assessment Scale (CGAS) to score a subject's most impaired level of emotional and behavioural functioning in a specified period of time.
- Archetype root binding: SNOMED-CT::450740006]
- OMOP binding: 42872748 Children's global assessment scale
- OMOP Table: Measurement
- Value path: Score [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004]

- Date path: Unspecified event [EVENT] /data[at0001]/events[at0002]
- Comment:

openEHR-EHR-OBSERVATION.charlson_comorbidity_index.v2

- Text: Charlson Comorbidity Index (CCI)
- Description: An assessment tool used to predict the risk of death from comorbid disease.
- Archetype root binding:
- OMOP binding: 42538860 Charlson Comorbidity Index
- OMOP Table: Measurement
- Value path: CCI total score [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0072]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Some questions could be interesting to code

openEHR-EHR-OBSERVATION.clinical_frailty_scale.v1

- Text: Clinical Frailty Scale (CFS)
- Description: An assessment scale used to screen for frailty and to broadly stratify degrees of fitness and frailty in an older adult.
- Archetype root binding: SNOMED-CT[[SNOMED-CT::445414007]]
- OMOP binding: 35621967 CSHA (Canadian Study of Health and Aging) Clinical Frailty Scale score
- OMOP Table: Measurement
- Value path: Assessment [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004]
- Date path: Any point in time event [POINT_EVENT] /data[at0001]/events[at0002]
- Comment: Answers could be coded, however no direct code exists. Use atcodes as source value

openEHR-EHR-OBSERVATION.clinical_frailty_scale2.v1

- Text: Clinical Frailty Scale (CFS 2.0)
- Description: An assessment scale used to screen for frailty and to broadly stratify degrees of fitness and frailty in an individual over the age of 65.
- Archetype root binding:
- OMOP binding: 40483383 Canadian Study of Health and Aging clinical frailty scale
- OMOP Table: Measurement
- Value path: Assessment [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004]
- Date path: Any point in time event [POINT_EVENT] /data[at0001]/events[at0002]
- Comment: Answers could be coded, however no direct code exists. Use atcodes as source value

openEHR-EHR-OBSERVATION.cormack_lehane.v1

- Text: Cormack-Lehane classification
- Description: The Cormack-Lehane system classifies views obtained by direct laryngoscopy based on the structures seen.
- Archetype root binding:
- OMOP binding: 37398987 Cormack and Lehane system
- OMOP Table: Observation
- Value path: Grading [ELEMENT]
/data[at0007]/events[at0008]/data[at0009]/items[at0001]
- Date path: Any point in time event [POINT_EVENT] /data[at0007]/events[at0008]
- Comment: for values mapping (they are conditions in omop)
 - at0002::Grade 1 → [Cormack and Lehane grade 1](#) 4219400 [SNOMED-CT::417548001]
 - at0003::Grade 2 → [Cormack and Lehane grade 2](#) 4221760 [SNOMED-CT::417666002]
 - at0004::Grade 3 → [Cormack and Lehane grade 3](#) 4212073 [SNOMED-CT::416876007]
 - at0005::Grade 4 → [Cormack and Lehane grade 4](#) 4166735 [SNOMED-CT::416141007]

openEHR-EHR-OBSERVATION.cpac.v1

- Text: Chelsea Critical Care Physical Assessment (CPAx) tool
- Description: A scoring system to measure physical morbidity in critical care.
- Archetype root binding:
- OMOP binding: 42537352 CPax - Chelsea Critical Care Physical Assessment tool
- OMOP Table: Measurement
- Value path: Total score [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0076]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Questions could be also coded, but no specific codes exist yet

openEHR-EHR-OBSERVATION.crb_65.v1

- Text: CRB-65 score
- Description: An assessment score used within a community or primary care setting to estimate the severity of community-acquired pneumonia.
- Archetype root binding:
- OMOP binding: 40480608 Confusion, Respiratory Rate, Blood Pressure, 65 years of age or older score [SNOMED-CT::443259004]
- OMOP Table: Measurement
- Value path: Total score [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0017]
- Date path: Any point in time event [POINT_EVENT] /data[at0001]/events[at0002]
- Comment: Questions could be coded, Yes/no answers (4188539 and 4188540 in OMOP)

openEHR-EHR-OBSERVATION.curb_65.v1

- Text: CURB-65 score
- Description: An assessment score used within an acute hospital setting to estimate the severity of community-acquired pneumonia.

- Archetype root binding:
- OMOP binding: 40481976 Confusion, urea, respiratory rate, blood pressure, 65 years of age or older score [SNOMED-CT::445019007]
- OMOP Table: Measurement
- Value path: Total score [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0017]
- Date path: Any point in time event [POINT_EVENT] /data[at0001]/events[at0002]
- Comment: Questions could be coded, Yes/no answers (4188539 and 4188540 in OMOP)

openEHR-EHR-OBSERVATION.demo.v1

- Text: Demonstration
- Description: Demonstration archetype with descriptions and explanations.
- Archetype root binding:
- OMOP binding: 4004596 Demonstrator
- OMOP Table: Observation
- Value path: Several data points
- Date path: Any Event [EVENT] /data[at0001]/events[at0002]
- Comment: This is a demonstration archetype, could be useful for testing purposes

openEHR-EHR-OBSERVATION.ecg_result.v1

- Text: ECG result
- Description: Measurement of the electrical activity generated by the heart.
- Archetype root binding:
- OMOP binding:
 - 4156045 ECG finding [SNOMED-CT::271921002]
 - 4092015 P wave axis [SNOMED-CT::251192001]
 - 45770409 T wave axis [SNOMED-CT::928081000000109]
 - 4089466 QRS Axis [SNOMED-CT::251196003]

- OMOP Table: Measurement
- Value path:
 - Finding [ELEMENT] /data[at0001]/events[at0002]/data[at0005]/items[at0101]
 - P axis [ELEMENT] /data[at0001]/events[at0002]/data[at0005]/items[at0020]
 - T axis [ELEMENT] /data[at0001]/events[at0002]/data[at0005]/items[at0022]
 - QRS axis [ELEMENT] /data[at0001]/events[at0002]/data[at0005]/items[at0021]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Very detailed archetype, no codes for some of the detailed measurements such as atrial heart rate, ventricular heart rate, or specific to the global wave measurements (codes exist for non-global, which is also present in a very detailed subtree in the archetype)

openEHR-EHR-OBSERVATION.ecog.v1

- Text: ECOG performance status
- Description: A scale used by clinicians to assess the functional performance status of a patient with a diagnosis of cancer. Also known as the WHO performance status or Zubrod performance status.
- Archetype root binding:
- OMOP binding: 4308014 ECOG performance status
- OMOP Table: Observation
- Value path: ECOG performance status [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0004]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment:

openEHR-EHR-OBSERVATION.embryo_assessment.v1

- Text: Oocyte and embryo assessment
- Description: Assessment of morphological features and development of a single oocyte or embryo.
- Archetype root binding:

- OMOP binding: 0 Unmapped
- OMOP Table: Observation
- Value path: /data[at0001]/events[at0002]/data[at0003]/items[at0036] Developmental stage
- Date path: Any event /data[at0001]/events[at0002]
- Comment: Not really suiting codes in terminology for subtree. Only non-standard CDISC code (C79386 EMBRYO FETAL DEVELOPMENT) exists, but cannot be used

openEHR-EHR-OBSERVATION.esas_r.v1

- Text: Edmonton Symptom Assessment System Revised (ESAS-r)
- Description: Self-reporting tool used to assess the intensity of symptoms in palliative care patients.
- Archetype root binding:
- OMOP binding: 42873028 Edmonton symptom assessment system
- OMOP Table: Measurement
- Value path:
- Date path: /data[at0001]/events[at0002]
- Comment: Terminology has no total or individual questions, code each one of the with the binding + qualifier for the question

openEHR-EHR-OBSERVATION.exam.v1

- Text: Physical examination findings
- Description: Findings observed during the physical examination of a subject of care.
- Archetype root binding:
- OMOP binding: 4152364 Examination finding
- OMOP Table: Observation
- Value path:
 - Interpretation [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0006]

- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Interpretation can be coded

openEHR-EHR-OBSERVATION.exposure_screening.v1

- Text: Exposure screening questionnaire
- Description: Series of questions and associated answers used to screen for potential exposure to a chemical, physical or biological agent which has caused or may cause harm to an individual.
- Archetype root binding:
- OMOP binding: 4096560 Exposure to
- OMOP Table: Observation
- Value path: Agent name [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0020]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment:

openEHR-EHR-OBSERVATION.fetal_biometry.v1

- Text: Foetal biometry
- Description: Ultrasound and Doppler measurements of the dimensions of an embryo or foetus.
- Archetype root binding:
- OMOP binding: 4141511 Fetal biometry using ultrasound
 - 3354812 Crown rump length
 - 3292132 Biparietal diameter
 - 608126 Occipitofrontal diameter of fetal head
 - 608485 Head circumference of fetus (deprecated, use head circumference instead)
 - 3027950 Fetal Cerebellum Diameter transverse US
 - 3013597 Fetal Head Binocular distance US
 - 608484 Abdominal circumference of fetus
 - 37167832 Femur length of fetus
 - 3037788 Fetal Humerus diaphysis [Length] US

- OMOP Table: Measurement
- Value path:
 - Crown-rump length (CRL) [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004]
 - Biparietal diameter (BPD) [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0006]
 - Occipito-frontal diameter (OFD) [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0007]
 - Head circumference (HC) [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0008]
 - Trans-cerebellar diameter (TCD) [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0009]
 - Interocular distance (IOD) [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0010]
 - Binocular distance (BOD) [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0011]
 - Abdominal circumference (AC) [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0012]
 - Femur length (FL) [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0013]
 - Humeral length (HL) [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0014]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Root code is too unspecific, ok for archetype binding

openEHR-EHR-OBSERVATION.fluid_balance.v1

- Text: Fluid balance
- Description: The difference between fluid input and output during a specified interval of time.
- Archetype root binding:
- OMOP binding: 1259832 Cumulative fluid balance
 - 4092501 Total fluid input [SNOMED-CT::251852001]
 - 4090193 Total fluid output [SNOMED-CT::251841007]
 - 4264210 Insensible fluid loss [SNOMED-CT::47301008]
 - 4269275 Fluid balance observable [SNOMED-CT::364396009]
- OMOP Table: Measurement/Observation
- Value path:
- Date path: Any interval event [INTERVAL_EVENT] /data[at0001]/events[at0002]

- Comment:
- Units:
 - 8587 ml
 - 8519 l
 - 4086541 fl oz

openEHR-EHR-OBSERVATION.fluid_input.v1

- Text: Fluid input
- Description: The amount of fluid ingested or administered to the individual.
- Archetype root binding:
- OMOP binding: 4092501 Total fluid input
- OMOP Table: Measurement
- Value path: Volume [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0035]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: If Fluid name [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0036] is coded then an additional Observation with concept_id 4140681 Liquid substance and value_as_concept_id with the code could be created
- Units:
 - 8587 ml
 - 8519 l
 - 4086541 fl oz

openEHR-EHR-OBSERVATION.fluid_output.v1

- Text: Fluid output
- Description: The measurement of fluid lost or excreted from the body via any mechanism.
- Archetype root binding:
- OMOP binding: 4090193 Total fluid output
- OMOP Table: Measurement

- Value path: Volume [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0035]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: If Fluid name [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0036] is coded then an additional Observation with concept_id 4140681 Liquid substance and value_as_concept_id with the code could be created
- Units:
 - 8587 ml
 - 8519 l
 - 4086541 fl oz

openEHR-EHR-OBSERVATION.four_a_test.v1

- Text: 4AT
- Description: A screening tool used for rapid initial assessment of delirium and cognitive impairment.
- Archetype root binding:
- OMOP binding: 3662219 4AT - 4 A's Test
- OMOP Table: Measurement
- Value path: Total score [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0019]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment:

openEHR-EHR-OBSERVATION.glasgow_coma_scale.v1

- Text: Glasgow Coma Scale (GCS)
- Description: Fifteen point scale used to assess impairment of consciousness in response to defined stimuli.
- Archetype root binding:
- OMOP binding: 4296538 Glasgow coma scale
- OMOP Table: Measurement

- Value path: Total score [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0026]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment:

openEHR-EHR-OBSERVATION.glasgow_outcome_scale_extended.v1

- Text: Glasgow Outcome Scale - Extended (GOSE)
- Description: A scale for assessing outcome after head injury and non-traumatic acute brain insults.
- Archetype root binding:
- OMOP binding: 46237002 Functional outcome score GOSE
- OMOP Table: Measurement
- Value path: Category /data[at0001]/events[at0002]/data[at0003]/items[at0036]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Category can be coded

openEHR-EHR-OBSERVATION.head_circumference.v1

- Text: Head circumference
- Description: The measurement of the longest distance around the head.
- Archetype root binding:
- OMOP binding: 4181669 Head circumference
- OMOP Table: Measurement
- Value path: Head circumference [ELEMENT]
/data[at0001]/events[at0010]/data[at0003]/items[at0004]
- Date path: Any event [EVENT] /data[at0001]/events[at0010]
- Comment: version on OMOCL github must be updated (measurement_date)
- Units:
 - 8582 cm
 - 8533 in

openEHR-EHR-OBSERVATION.height.v2

- Text: Height/Length
- Description: Height, or body length, is measured from crown of head to sole of foot.
- Archetype root binding:
- OMOP binding: 3036277 Body height
- OMOP Table: Measurement
- Value path: Height/Length [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: version on OMOCL github must be updated (measurement_date)
- Units:
 - 8582 cm
 - 8533 in

openEHR-EHR-OBSERVATION.hip_circumference.v1

- Text: Hip circumference
- Description: The measurement of the distance around the hips.
- Archetype root binding:
- OMOP binding: 4111665 Hip circumference
- OMOP Table: Measurement
- Value path: Hip circumference [ELEMENT]
/data[at0001]/events[at0010]/data[at0003]/items[at0004]
- Date path: Any event [EVENT] /data[at0001]/events[at0010]
- Comment:
- Units:
 - 8582 cm
 - 8533 in

openEHR-EHR-OBSERVATION.hirsutism_scales.v1

- Text: Hirsutism scales
- Description: A grouping of related assessment scales used to quantify distribution and growth of body hair in women.
- Archetype root binding:
- OMOP binding: 4200651 Hirsutism score
- OMOP Table: Observation
- Value path: Total score [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0079]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Also two additional scores Ferriman-Gallwey score [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0089] and Modified Ferriman-Gallwey score [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0090] with no corresponding code in terminology. All measurements have code in terminology except for perineum hair score.

openEHR-EHR-OBSERVATION.imaging_exam_result.v1

- Text: Imaging examination result
- Description: The result of an imaging examination performed on an individual, using radiological techniques.
- Archetype root binding:
- OMOP binding:
- OMOP Table: Condition
- Value path:
- Imaging differential diagnosis [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0058]
- Imaging diagnosis [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0020]
- Date path: Study date [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0070]

- Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Omop limitation, cannot distinguish between imaging differential diagnosis and imaging diagnosis. Neither condition_type can be specified to image or status to differential/non-differential. There are observation codes for differential diagnosis 4172950 Differential diagnosis and diagnosis 4234469 Diagnosis, but cannot be specified as coming from image. Other codes such as Imaging observable are more related to measurements. Both differential diagnosis and diagnosis are mutually exclusive in the archetype

openEHR-EHR-OBSERVATION.investigation_screening.v1

- Text: Diagnostic investigation screening questionnaire
- Description: Series of questions and associated answers used to screen whether diagnostic investigations have been carried out.
- Archetype root binding:
- OMOP binding: If coded Investigation name [ELEMENT]
/data[at0022]/events[at0023]/data[at0001]/items[at0026]/items[at0021]
- OMOP Table: Depends on the investigation name mapping
- Value path: Conclusion [ELEMENT]
/data[at0022]/events[at0023]/data[at0001]/items[at0026]/items[at0002]
- Date path: Timing [ELEMENT]
/data[at0022]/events[at0023]/data[at0001]/items[at0026]/items[at0003]
- Any event [EVENT] /data[at0022]/events[at0023]
- Comment: Conclusion is not interesting. This is a case where CLUSTER in additional details could be interesting (Imaging exam, laboratory test analyte, organization, laboratory test serology, laboratory strain findings, microbiology parasitology)

openEHR-EHR-OBSERVATION.ipss.v1

- Text: International prostate symptom score (IPSS)
- Description: An assessment score used to screen for, diagnose, and track symptoms of benign prostatic hyperplasia (BPH).
- Archetype root binding:
- OMOP binding: 4324046 International Prostate Symptom Score

- OMOP Table: Measurement
- Value path: Total score (S) [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0023]
- Date path: Any point in time event [POINT_EVENT] /data[at0001]/events[at0002]
- Comment: Additional detailed questions with no codes available

openEHR-EHR-OBSERVATION.karnofsky_performance_status_scale.v1

- Text: Karnofsky Performance Status (KPS) scale
- Description: An assessment scale used to quantify functional capacity in an individual.
- Archetype root binding: SNOMED-CT[[SNOMED-CT::273546003]]
- OMOP binding: 4169154 Karnofsky performance status
- OMOP Table: Measurement
- Value path: Karnofsky performance status [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004]
- Date path: Any point in time event [EVENT] /data[at0001]/events[at0002]
- Comment: Element archetype binding is correct, but it is pointing to a non-standard code, use new binding instead. Value is an ordinal, check if it works as intended

openEHR-EHR-OBSERVATION.laboratory_test_result.v1

- Text: Laboratory test result
- Description: The result, including findings and the laboratory's interpretation, of an investigation performed on specimens collected from an individual or related to that individual.
- Archetype root binding:
- OMOP binding: if coded Test name [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0005], else could use generic 4034850 Laboratory test or 0 unmapped
- OMOP Table: Measurement

- Value path: Test result [CLUSTER]
/data[at0001]/events[at0002]/data[at0003]/items[at0097], includes the different CLUSTER archetypes
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Already available, review

openEHR-EHR-OBSERVATION.lenke_classification.v1

- Text: Lenke classification system
- Description: A system for classification of adolescent idiopathic scoliosis.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table: Measurement/Observation
- Value path: Classification [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0019]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Scale not available in terminology

openEHR-EHR-OBSERVATION.malnutrition_screening_tool.v1

- Text: Malnutrition Screening Tool (MST)
- Description: An assessment tool used to identify if an individual is at risk of malnutrition.
- Archetype root binding:
- OMOP binding: 4214546 Malnutrition universal screening tool [SNOMED-CT::414648004]
- OMOP Table: Measurement
- Value path: MST score [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0019]
- Date path: Any point in time event [POINT_EVENT] /data[at0001]/events[at0002]
- Comment:

openEHR-EHR-OBSERVATION.management_screening.v1

- Text: Management screening questionnaire
- Description: Series of questions and associated answers used to screen for clinical management including, but not limited to treatments, therapies and hospitalisation.
- Archetype root binding:
- OMOP binding: Management name [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0022]/items[at0004]
- OMOP Table: Measurement
- Value path: Specific management? [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0022]/items[at0005]
- Date path: Timing [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0022]/items[at0037] (if Date or period)
- Comment: This is a “framework archetype” to be used as a basis for other PROM archetypes. As it is now, there is not much can be specified on the mapping.

openEHR-EHR-OBSERVATION.mayo_score.v1

- Text: Mayo score
- Description: An assessment score used to estimate the severity of ulcerative colitis.
- Archetype root binding:
- OMOP binding: 0 Unmapped, mapped to generic Severity score 4175713 [SNOMED-CT::278305009]
- OMOP Table: Observation
- Value path: Total Mayo score [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0029]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: also partial mayo score and simplified mayo score, none of them coded in terminologies. Store Ulcerative colitis 81893 [SNOMED-CT:: 64766004] in qualifier

openEHR-EHR-OBSERVATION.medication_screening.v1

- Text: Medication screening questionnaire
- Description: Series of questions and associated answers used to screen for the use of medications.
- Archetype root binding:
- OMOP binding: if coded Medication name [ELEMENT]
/data[at0022]/events[at0023]/data[at0001]/items[at0026]/items[at0021]

For Observation use Medication administration surveillance [SNOMED-CT::410398001]

- OMOP Table: Drug exposure / Observation
- Value path:
- Date path: if date time
 - Latest dose [ELEMENT]
/data[at0022]/events[at0023]/data[at0001]/items[at0026]/items[at0003]
 - Timing [ELEMENT]
/data[at0022]/events[at0023]/data[at0001]/items[at0026]/items[at0002]
- Comment: PROM, Could be used to populate the Drug exposure table with the ones with Used [ELEMENT]
/data[at0022]/events[at0023]/data[at0001]/items[at0026]/items[at0024] = '[SNOMED-CT::373066001 | Yes]' or Boolean = 'True'. An Observation to 46272990 Exposure to drug or medicament with the value concept id of the Medication name could be created for the Used = 'Yes' answers. For the Used = 'No' answers an Observation to 4145650 Drugs not taken/completed could be used. For the Used = 'Unknown' answers an Observation to 4057545 Drug treatment unknown could be created. In any case PROMs will require specific omop custom codes (above 2 billion) to be created, as templates should be created beforehand with the questions

openEHR-EHR-OBSERVATION.menstrual_diary.v1

- Text: Menstrual diary
- Description: Details about menstrual bleeding and associated symptoms within a specified day.
- Archetype root binding:
- OMOP binding: 4150646 Menstrual data
- 364312007 Menstrual bleeding character

- 4270150 Quantity of menstrual blood loss
- OMOP Table: Observation
- Value path: Flow [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004]
- Volume [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0010]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Menstrual flow can be mapped to specific observations e.g. Heavy flow → Heavy menstrual period → 4302555 Menorrhagia. Other questions such as “Blood clots” = ‘Present’ could mean the creation of specific Observations if code is found (4192740 Blood clot, 4181412 Present, 4132135 Absent).

openEHR-EHR-OBSERVATION.menstruation.v1

- Text: Menstrual cycle
- Description: Details about one single menstrual cycle.
- Archetype root binding:
- OMOP binding:
 - 4058443 Duration of menstrual flow
 - 35626259 Onset of menstrual cycle
 - 4192740 Blood clot, 4181412 Present, 4132135 Absent.
 - 4072438 Date of last menstrual period
- OMOP Table: Measurement
- Value path:
 - Duration of menses [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0005]
 - Blood clots [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0013]
 - Start of menses [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Code selected is ‘last menstrual period’, which would mean potentially multiple “last menstrual period” on same patient.

openEHR-EHR-OBSERVATION.modified_rankin_scale.v1

- Text: Modified Rankin Scale (mRS)
- Description: An assessment tool used to measure the degree of disability and level of assistance required after a stroke or another neurological event.
- Archetype root binding:
- OMOP binding: 3654838 Modified Rankin Scale
- OMOP Table: Measurement
- Value path: Modified Rankin Scale [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0007]
- Date path: Any point in time event [POINT_EVENT] /data[at0001]/events[at0002]
- Comment: Should be possible to encode the ordinal
 - at0008::No symptoms → 43022003 Disability absent
 - at0009::No significant disability → 0 Unmapped
 - at0010::Slight disability → 4052765 Disability - slight
 - at0011::Moderate disability → 4052766 Disability - moderate
 - at0012::Moderately severe disability → 0 Unmapped
 - at0013::Severe disability → 4059038 Disability - severe
 - at0014::Death → 4306655 Death

There is also a hierarchy with Disability percentage that we can use to fill the missing ones(ECL <116149007)

openEHR-EHR-OBSERVATION.msfc_score.v1

- Text: MSFC-Wert
- Description: Das Multiple Sclerosis Functional Composite (MSFC) ist ein dreiteiliges, quantitatives und standardisiertes Beurteilungsinstrument für klinische Untersuchungen und Studien zur Multiplen Sklerose.
- Archetype root binding:
- OMOP binding: 44788732 Multiple sclerosis review
- OMOP Table: Observation
- Value path: MSFC-Wert [ELEMENT]
/data[at0001]/events[at0010]/data[at0003]/items[at0004]

- Date path: Jedes Ereignis [EVENT] /data[at0001]/events[at0010]
- Comment: Not fitting code for the score, update when available. Codes to other multiple sclerosis questionnaire exist. Note: original language of archetype is German

openEHR-EHR-OBSERVATION.news2.v1

- Text: National Early Warning Score 2 (NEWS2)
- Description: A simple assessment score used to identify clinical deterioration in a patient.
- Archetype root binding:
- OMOP binding: 37208353 Royal College of Physicians NEWS2 (National Early Warning Score 2) total score
- OMOP Table: Measurement
- Value path: Total score [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0028]
- Date path: Any point in time event [POINT_EVENT] /data[at0001]/events[at0002]
- Comment:

openEHR-EHR-OBSERVATION.news_uk_rcp.v1

- Text: National Early Warning Score (NEWS)
- Description: NEWS (National Early Warning Score) is a simple score used to provide an objective indication of a patient's degree of clinical deterioration. This version follows guidance issued by the UK Royal College of Physicians.
- Archetype root binding:
- OMOP binding: 44808550 National Early Warning Score - Royal College of Physicians
- OMOP Table: Measurement
- Value path: Total score [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0028]
- Date path: Point in time [POINT_EVENT] /data[at0001]/events[at0002]
- Comment:

openEHR-EHR-OBSERVATION.nine_hole_peg_test.v1

- Text: Nine Hole Peg Test
- Description: Der Nine Hole Peg Test ist eine quantitative Messung der Funktion der oberen Extremitäten und dient zur schnellen Beurteilung der Fingerfertigkeit eines Probanden. Er bildet die zweite Komponente des Multiple Sclerosis Functional Composite (MSFC), einer Testreihe zur Verlaufsdokumentation von Multipler Sklerose. Er ist auch als NHTP, als 9-Hole Peg Test oder 9-HPT bekannt.
- Archetype root binding:
- OMOP binding: 4165291 Nine hole peg test
- OMOP Table: Measurement
- Value path:
 - Gesamtzeit [ELEMENT]
/data[at0001]/events[at0074]/data[at0003]/items[at0017]
 - Gesamtzeit [ELEMENT]
/data[at0001]/events[at0075]/data[at0003]/items[at0017]
 - Gesamtzeit [ELEMENT]
/data[at0001]/events[at0076]/data[at0003]/items[at0017]
 - Gesamtzeit [ELEMENT]
/data[at0001]/events[at0077]/data[at0003]/items[at0017]
- Date path:
 - Dominante Hand - Test 1 [POINT_EVENT] /data[at0001]/events[at0074]
 - Dominante Hand - Test 2 [POINT_EVENT] /data[at0001]/events[at0075]
 - Nichtdominante Hand - Test 1 [POINT_EVENT] /data[at0001]/events[at0076]
 - Nichtdominante Hand - Test 2 [POINT_EVENT] /data[at0001]/events[at0077]
- Comment: Original language is German. Not specific codes for each test or hand

openEHR-EHR-OBSERVATION.nyha_heart_failure.v1

- Text: New York Heart Association functional classification
- Description: A simple method of classifying the extent of heart failure, as defined by the New York Heart Association.
- Archetype root binding:
- OMOP binding:

- 36305765 Functional capacity NYHA [LOINC::88020-3]
 - at0005::Class I --> Class I 36307969 LA28404-4
 - at0006::Class II --> Class II 36309052 LA28405-1
 - at0007::Class III --> Class III 36307909 LA28406-9
 - at0008::Class IIIa --> Class III 36307909 LA28406-9
 - at0009::Class IIIb --> Class III 36307909 LA28406-9
 - at0010::Class IV --> Class IV 36307855 LA28407-7
- 36304558 Objective assessment of cardiovascular disease NYHA
 - at0012::Class A --> No objective evidence of cardiovascular disease 36307588
 - at0013::Class B --> Objective evidence of minimal cardiovascular disease 36309704
 - at0014::Class C --> Objective evidence of moderately severe cardiovascular disease 36309238
 - at0015::Class D --> Objective evidence of severe cardiovascular disease 36308301
- OMOP Table: Measurement
- Value path:
 - Functional capacity [ELEMENT]
 - /data[at0001]/events[at0002]/data[at0003]/items[at0004]
 - Objective assessment [ELEMENT]
 - /data[at0001]/events[at0002]/data[at0003]/items[at0011]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Same code for Class III and Class IIIa / Class IIIb used, as no specific code exists in Loinc

openEHR-EHR-OBSERVATION.paced_auditory_serial_addition_test.v1

- Text: Paced Auditory Serial Addition Test
- Description: Der Paced Auditory Serial Addition Test (PASAT) misst die kognitive Verarbeitungsfähigkeit auditiver Informationen hinsichtlich Geschwindigkeit und Flexibilität, sowie die Fähigkeit zum Kopfrechnen eines Patienten. Er bildet die dritte Komponente des Multiple Sclerosis Functional Composite (MSFC), einer Serie von drei Tests zur Verlaufsdokumentation von Multipler Sklerose.
- Archetype root binding:
- OMOP binding: 4151973 Paced auditory serial addition test
- OMOP Table: Measurement
- Value path:

- Anzahl korrekter Ergebnisse [ELEMENT]
/data[at0002]/events[at0064]/data[at0001]/items[at0015]
- Anzahl korrekter Ergebnisse [ELEMENT]
/data[at0002]/events[at0065]/data[at0001]/items[at0015]
- Date path:
 - PASAT-3" [POINT_EVENT] /data[at0002]/events[at0064]
 - PASAT-2" [POINT_EVENT] /data[at0002]/events[at0065]
- Comment: Original language in German

openEHR-EHR-OBSERVATION.pasi_score.v1

- Text: Psoriasis Area Severity Index (PASI)
- Description: A quantitative rating scale for measuring the severity of psoriatic lesions based on area coverage and plaque appearance.
- Archetype root binding:
- OMOP binding: 44809997 Psoriasis area and severity index
- OMOP Table: Measurement
- Value path: Total PASI-score [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0035]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Very detailed questionnaire, but no codes for the different question exist in terminologies

openEHR-EHR-OBSERVATION.pf_ratio.v1

- Text: $\text{PaO}_2/\text{FiO}_2$ ratio
- Description: Ratio between the partial pressure of oxygen in blood (PaO_2) and the fraction of oxygen in the inhaled air (FiO_2).
- Archetype root binding:
- OMOP binding: 4233883 Ratio of arterial oxygen tension to inspired oxygen fraction
- OMOP Table: Measurement
- Value path: Ratio [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004]

- Date path: Any point in time event [POINT_EVENT] /data[at0001]/events[at0002]
- Comment:

openEHR-EHR-OBSERVATION.problem_screening.v1

- Text: Problem/Diagnosis screening questionnaire
- Description: Series of questions and associated answers used to screen for issues, problems or diagnoses.
- Archetype root binding:
- OMOP binding: 4234469 Diagnosis [SNOMED-CT::439401001]
- OMOP Table: Observation
- Value path: Problem/diagnosis name [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0022]/items[at0004]
- Date path: Timing [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0022]/items[at0040]
- Comment: PROMs. Presence? [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0022]/items[at0005] ends up in qualifier
 - Yes 4188539
 - No 4188540
 - Unknown 4129922

openEHR-EHR-OBSERVATION.procedure_screening.v1

- Text: Procedure screening questionnaire
- Description: Series of questions and associated answers used to screen for procedures that has been carried out in the past.
- Archetype root binding:
- OMOP binding: Procedure name [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0022]/items[at0004]
- OMOP Table: Procedure
- Value path:

- Date path: Timing [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0022]/items[at0037]
- Comment: PROMs

openEHR-EHR-OBSERVATION.progress_note.v1

- Text: Progress note
- Description: Narrative description of health-related events at a specific point-in-time about an individual, specifically from the perspective of a healthcare provider.
- Archetype root binding:
- OMOP binding: 3000735 Progress note
- OMOP Table: Measurement
- Value path: Progress Note [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Probably better as Note, as value_source_value is capped to 50 chars

openEHR-EHR-OBSERVATION.pulse.v2

- Text: Pulse/Heart beat
- Description: The rate and associated attributes for a pulse or heart beat.
- Archetype root binding:
- OMOP binding: 4224504 Pulse
- OMOP Table: Observation
- Value path: Rate /data[at0002]/events[at0003]/data[at0001]/items[at0004]
- Date path: Any event /data[at0002]/events[at0003]
- Comment:

openEHR-EHR-OBSERVATION.pulse_oximetry.v1

- Text: Pulse oximetry

- Description: Blood oxygen and related measurements, measured by pulse oximetry or pulse CO-oximetry.
- Archetype root binding:
- OMOP binding:
 - 4196147 Peripheral oxygen saturation
 - 40760909 Oxygen content in Blood by calculation
 - 36305056 Carboxyhemoglobin/Hemoglobin.total in Arterial blood by Pulse oximetry
 - 3007930 Methemoglobin/Hemoglobin.total in Blood
- OMOP Table: Measurement
- Value path:
 - SpO₂ /data[at0001]/events[at0002]/data[at0003]/items[at0006]
 - SpOC /data[at0001]/events[at0002]/data[at0003]/items[at0044]
 - SpCO /data[at0001]/events[at0002]/data[at0003]/items[at0045]
 - SpMet /data[at0001]/events[at0002]/data[at0003]/items[at0046]
- Date path: Any event /data[at0001]/events[at0002]
- Comment: Bindings from archetype, probably worth checking

openEHR-EHR-OBSERVATION.qsofa_score.v1

- Text: qSOFA score
- Description: Quick Sepsis-related Organ Failure Assessment (qSOFA) is a simplified version of the SOFA score, which is used outside intensive care units to quickly assess sepsis risk in adults.
- Archetype root binding:
- OMOP binding: 506600 qSOFA - quick Sequential Organ Failure Assessment
- OMOP Table: Measurement
- Value path: qSOFA score [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0005]
- Date path: Any point in time event [POINT_EVENT] /data[at0001]/events[at0002]
- Comment:

openEHR-EHR-OBSERVATION.respiration.v2

- Text: Respiration
- Description: The characteristics of spontaneous breathing by an individual.
- Archetype root binding:
- OMOP binding: 4154772 Rate of spontaneous respiration
- OMOP Table: Measurement
- Value path: Rate [ELEMENT] /data[at0003]/items[at0004]
- Date path: Any event /data[at0001]/events[at0002]
- Comment:

openEHR-EHR-OBSERVATION.revised_cardiac_risk_index.v1

- Text: Revised cardiac risk index
- Description: The Revised Cardiac Risk Index (RCRI) is a preoperative prediction tool to estimate the perioperative risk of major cardiac complications during non-cardiac surgery.
- Archetype root binding: [SNOMED-CT::448236008]
- OMOP binding: 40488922 Revised cardiac risk index
- OMOP Table: Measurement
- Value path: Total score [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0026]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment:

openEHR-EHR-OBSERVATION.simplified_tanner_whitehouse_3.v1

- Text: Simplified Tanner-Whitehouse III assessment
- Description: A classification for the skeletal maturity stage in children, based on radiological assessment of the hand and wrist.
- Archetype root binding:
- OMOP binding: 0 unmapped

- OMOP Table: Measurement
- Value path: Stage [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: 1001931 Bone age assessment - Tanner-Whitehouse (TW2) associated observations panel exists, but no TW III

openEHR-EHR-OBSERVATION.social_context_screening.v1

- Text: Social context screening questionnaire
- Description: Series of questions and associated answers used to screen about the social environment and social situation which may impact the health and well-being of the individual, especially to identify potential issues or risks.
- Archetype root binding:
- OMOP binding: 4028922 Social context finding [SNOMED-CT:: 108329005]
- OMOP Table: Observation
- Value path: Context [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0022]/items[at0004]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Context can either be TEXT or CODED_TEXT, if coded can be either
 - Homeless [The individual does not have a stable place to live.]
[\[SNOMED-CT::32911000 | Homeless\]](#) (4139934)
 - Interpreter needed [The individual needs assistance with language translation.]
[\[SNOMED-CT::315594003 | Interpreter needed\]](#) (4151762)

openEHR-EHR-OBSERVATION.spirometry_result.v2

- Text: Spirometry result
- Description: Pulmonary function test results using a spirometer or peak flow meter.
- Archetype root binding: Each Cluster name must be coded
- OMOP binding:
- Volume as measurement

- FVC [Forced vital capacity (FVC) is the maximal volume of air that can be forcibly exhaled from a position of full inspiration.] [\[SNOMED-CT::50834005 | Forced vital capacity\]](#) (4176265)
- SVC [Slow vital capacity (SVC) is the maximal volume of air that can be slowly exhaled from a position of full inspiration. Also known as Expiratory vital capacity (EVC). Equal to IRV + TV + ERV.] [\[SNOMED-CT::83411002 | Slow vital capacity\]](#) (4308122)
- FIVC [Forced inspiratory vital capacity (FIVC) is the maximal volume of air that can be forcibly inhaled from a position of full expiration.] No standard code. [Found in CDISC](#)
- IVC [Inspiratory vital capacity (IVC) is the maximal volume of air that can be slowly inhaled from a position of full expiration. Equal to ERV + TV + IRV.] [\[SNOMED-CT::251913009 | Inspiratory vital capacity\]](#) (4092629)
- IC [Inspiratory capacity (IC) is the maximal volume of air that can be inhaled after exhalation of normal tidal volume. Equal to TV + IRV.] [\[SNOMED-CT::29533001 | Inspiratory capacity\]](#) (4105475)
- FEV0.5 [Forced expiratory volume at 0.5 seconds (FEV0.5) is the volume of air that has been exhaled during the first half second of forced exhalation, during the performance of FVC.] No code found
- FEV0.75 [Forced expiratory volume at 0.75 seconds (FEV0.75) is the volume of air that has been exhaled during the first three quarters of a second of forced exhalation, during the performance of FVC.] [\[SNOMED-CT::251910007 | Forced expired volume in 0.75 seconds\]](#) (4089936)
- FEV1 [Forced expiratory volume at 1 second (FEV1) is the volume of air that has been exhaled during the first second of forced exhalation, during the performance of FVC.] [\[SNOMED-CT::59328004 | Forced expired volume in 1 second\]](#) (4241837)
- FEV2 [Forced expiratory volume at 2 seconds (FEV2) is the volume of air that has been exhaled during the first two seconds of forced exhalation, during the performance of FVC.] No code found
- FEV3 [Forced expiratory volume at 3 seconds (FEV3) is the volume of air that has been exhaled during the first three seconds of forced exhalation, during the performance of FVC.] Available standard code from UK extension SNOMED-CT(UK)::829801000000106 (44808420)
- FEV6 [Forced expiratory volume at 6 seconds (FEV6) is the volume of air that has been exhaled during the first six seconds of forced exhalation, during the performance of FVC.] [\[SNOMED-CT::878869001 | Forced expired volume in six seconds\]](#) (618885)

- FIV1 [Forced inspiratory volume at 1 second (FIV1) is the volume of air that has been inhaled during the first second of forced inhalation, during the performance of FIVC.] [\[SNOMED-CT::251912004 | Forced inspired volume in 1 second\]](#) (4090663)
- TV [Tidal volume (TV) is the normal volume of air that can be inhaled or exhaled during one respiratory cycle when no extra effort is applied. Also known as V_T .] [\[SNOMED-CT::13621006 | Tidal volume\]](#) (4029625)
- ERV [Expiratory reserve volume (ERV) is the maximal volume of air that can be forcibly exhaled after exhalation of normal tidal volume.] [\[SNOMED-CT::55532004 | Expiratory reserve volume\]](#) (4207980)
- IRV [Inspiratory reserve volume (IRV) is the maximal volume of air that can be forcibly inhaled after a inhalation of normal tidal volume.] [\[SNOMED-CT::55562005 | Inspiratory reserve volume\]](#) (4206339)
- MVV [Maximum voluntary ventilation (MVV) is the maximum volume of air the individual can breathe during a period of time specified by an interval event.] New code from SNOMED-CT, [SNOMED-CT::251901004](#) (4089932)
- Pressure as Measurement
- MEP [Maximal expiratory pressure (MEP) is the maximal expiratory pressure during a forced vital capacity (FVC) maneuver.] [\[SNOMED-CT::17202005 | Peak expiratory pressure\]](#) (4066034)
- MIP [Maximal inspiratory pressure (MIP) is the maximal inspiratory pressure during a forced inspiratory vital capacity (FIVC) maneuver.] [\[SNOMED-CT::27913002 | Peak inspiratory pressure\]](#) (4101694)
- SNIP [Sniff nasal inspiratory pressure (SNIP) is the maximal inspiratory pressure in one occluded nostril during a maximal sniff performed from relaxed end-expiration through the other patent nostril.] No code available
- Flow rate as Measurement
- PEFR [Peak expiratory flow rate (PEFR) is the peak flow rate during a forced vital capacity (FVC) maneuver. Also known as forced expiratory flow at maximum effort (FEFmax).] [\[SNOMED-CT::18491006 | Peak expiratory flow rate\]](#) (4087260)
- PIFR [Peak inspiratory flow rate (PIFR) is the peak flow rate during a forced inspiratory vital capacity (FIVC) maneuver.] [\[SNOMED-CT::251923000 | Maximum inspiratory flow rate\]](#) (4090328)

- FEF25-75% [Forced expiratory flow 25-75 % (FEF25-75%) is the mean forced expiratory flow of air measured during the expiration of 25-75 % of the volume of the forced vital capacity (FVC).] [\[SNOMED-CT::251932003 | Forced expiratory flow rate between 25+75% of vital capacity\]](#) (4090668)
- FEF25-50% [Forced expiratory flow 25-50 % (FEF25-50%) is the mean forced expiratory flow of air measured during the expiration of 25-50 % of the volume of the forced vital capacity (FVC).]. No code available. [Found in CDISC](#)
- FIF25-75% [Forced inspiratory flow 25-75 % (FIF25-75%) is the mean forced inspiratory flow of air measured during the inspiration of 25-75 % of the volume of the forced inspiratory vital capacity (FIVC).] No code available. [Found in CDISC](#)
- FIF25-50% [Forced inspiratory flow 25-50 % (FIF25-50%) is the mean forced inspiratory flow of air measured during the inspiration of 25-50 % of the volume of the forced inspiratory vital capacity (FIVC).] No code available. [Found in CDISC](#)
- FEF25% [Forced expiratory flow 25 % (FEF25%) is the maximal instantaneous expiratory flow when 25 % of the of the volume of the forced vital capacity (FVC) has been expired. Also known as maximal voluntary flow 75% (MEF75%).] [\[SNOMED-CT::251921003 | Maximum expiratory flow rate at 75% of vital capacity\]](#) (4089939)
- FEF50% [Forced expiratory flow 50 % (FEF50%) is the maximal instantaneous expiratory flow when 50 % of the of the volume of the forced vital capacity (FVC) has been expired. Also known as maximal voluntary flow 50 % (MEF50%).] [\[SNOMED-CT::251920002 | Maximum expiratory flow rate at 50% of vital capacity\]](#) (4090667)
- FEF75% [Forced expiratory flow 75 % (FEF75%) is the maximal instantaneous expiratory flow when 75 % of the of the volume of the forced vital capacity (FVC) has been expired. Also known as maximal voluntary flow 25 % (MEF25%).] [\[SNOMED-CT::251919008 | Maximum expiratory flow rate at 25% of vital capacity\]](#) (4092630)
- FIF25% [Forced inspiratory flow 25 % (FIF25%) is the maximal instantaneous inspiratory flow when 25 % of the of the volume of the forced inspiratory vital capacity (FIVC) has been inspired. Also known as maximum inspiratory flow 75% (MIF75%).] [\[SNOMED-CT::251927004 | Maximum inspiratory flow rate at 75% of vital capacity\]](#) (4089942)
- FIF50% [Forced inspiratory flow 50 % (FIF50%) is the maximal instantaneous inspiratory flow when 50 % of the of the volume of the forced inspiratory vital capacity (FIVC) has been inspired. Also known as maximum inspiratory flow 50% (MIF50%).] [\[SNOMED-CT::251926008 | Maximum inspiratory flow rate at 50% of vital capacity\]](#) (4089941)

- FIF75% [Forced inspiratory flow 75 % (FIF75%) is the maximal instantaneous inspiratory flow when 75 % of the of the volume of the forced inspiratory vital capacity (FIVC) has been inspired. Also known as maximum inspiratory flow 25% (MIF25%).] [\[SNOMED-CT::251924006 | Maximum inspiratory flow rate at 25% of vital capacity\]](#) (4089940)
- Ratio as Measurement
- FEV1/FVC ratio [The ratio of 'Forced expiratory volume in 1 second (FEV1)' to 'Forced vital capacity (FVC)'. Also known as FEV1%FVC or FEV1%F.] [\[SNOMED-CT::251944000 | Forced expired volume in one second/forced vital capacity ratio\]](#) (4090331)
- FEV1/SVC ratio [The ratio of 'Forced expiratory volume in 1 second (FEV1)' to 'Slow vital capacity (SVC)'.] No standard code, [found in CDISC](#)
- FEV1/FEV6 ratio [The ratio of 'Forced expiratory volume in 1 second (FEV1)' to 'Forced expiratory volume in 6 seconds (FEV6)'.] [\[SNOMED-CT::702534005 | Forced expiratory volume in one second/Forced expiratory volume in six seconds ratio\]](#) (45765566)
- FEV1/IVC ratio [The ratio of 'Forced expiratory volume in 1 second (FEV1)' to 'Inspired vital capacity (IVC)'.] No standard code
- OMOP Table: Measurement
- Value path:
- (Volume) Result [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0052]/items[at0053]
- Forced expiratory time /data[at0001]/events[at0002]/data[at0003]/items[at0013 as Observation 37037833 Forced expiratory time [LOINC::LP121206-9]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment:
- Units:
- Value
 - l 8519
 - ml 8587
- Flow rate
 - L/s 32700
 - mL/s 44777614

- L/min 8698
- Pressure
 - cmH₂O 44777590
 - mmHg 8876
- Ratio
 - Percent 8554

openEHR-EHR-OBSERVATION.story.v1

- Text: Story/History
- Description: The subjective clinical history of the subject of care as recorded directly by the subject, or reported to a clinician by the subject or a carer.
- Archetype root binding:
- OMOP binding: 4181664 Clinical history/examination observable [SNOMED-CT::363788007]
- OMOP Table: Observation
- Value path: Story [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0004]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: Can be structured with other included archetypes

openEHR-EHR-OBSERVATION.substance_use_screening.v1

- Text: Substance use screening questionnaire
- Description: Series of questions and associated answers to screen for use of any substances or a specific grouping, class or individual substance/s that may harm an individual's health or social well-being.
- Archetype root binding:
- OMOP binding: 37162238 Substance use behavior [SNOMED-CT::1187057000]
- OMOP Table: Observation
- Value path:

- If coded, translate Substance name [ELEMENT]
/data[at0022]/events[at0023]/data[at0001]/items[at0026]/items[at0021]

Would still need to generate a specific mapping to specific substance use codes instead of the substance itself (i.e. it would be more fitting to use 903652 “Findings of tobacco or its derivatives use or exposure” than “tobacco”. Codes should be children of [Health-related behavior finding](#))

- In qualifier: Used? [ELEMENT]
/data[at0022]/events[at0023]/data[at0001]/items[at0026]/items[at0024]
 - Yes 4188539
 - No 4188540
 - Unknown 4129922
- Date path:
- Last used [ELEMENT]
/data[at0022]/events[at0023]/data[at0001]/items[at0026]/items[at0003]
- Timing [ELEMENT]
/data[at0022]/events[at0023]/data[at0001]/items[at0026]/items[at0002]
- Comment: ‘Used?’ can also be Boolean, use the same Yes/No coding

openEHR-EHR-OBSERVATION.symptom_sign_screening.v1

- Text: Symptom/sign screening questionnaire
- Description: Series of questions and associated answers used to screen for symptoms or signs.
- Archetype root binding:
- OMOP binding: 4303401 Finding reported by subject or history provider [SNOMED-CT::418799008]
- OMOP Table: Observation
- Value path: If coded, translate Symptom/sign name [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0022]/items[at0004]
- In qualifier: Presence? [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0022]/items[at0005]
 - Yes 4188539
 - No 4188540

- Unknown 4129922
- Date path: Timing [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0022]/items[at0037]
- Comment: 'Presence?' can also be Boolean, use the same Yes/No coding

openEHR-EHR-OBSERVATION.tanner.v1

- Text: Tanner stages
- Description: A scale to describe the onset and progression of pubertal changes.
- Archetype root binding:
- OMOP binding: 4092491 Puberty stage
- 4090183 Tanner boys genital development stage [SNOMED-CT::251805007]
- 4089836 Tanner girls breast development stage [SNOMED-CT:: 251811005]
- 4090187 Pubic hair stage [SNOMED-CT::251817009]
- OMOP Table: Observation
- Value path:
- Genitals [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0004]
 - [Genitalia Tanner Stage 1](#) 4089835 [SNOMED-CT::251806008]
 - [Genitalia Tanner Stage 2](#) 4090184 [SNOMED-CT::251807004]
 - [Genitalia Tanner Stage 3](#) 4090185 [SNOMED-CT::251808009]
 - [Genitalia Tanner Stage 4](#) 4090641 [SNOMED-CT::251809001]
 - [Genitalia Tanner Stage 5](#) 4092492 [SNOMED-CT::251810006]
- Breasts [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0005]
 - [Breasts Tanner Stage 1](#) 4090186 [SNOMED-CT::251812003]
 - [Breasts Tanner Stage 2](#) 4089837 [SNOMED-CT::251813008]
 - [Breasts Tanner Stage 3](#) 4092493 [SNOMED-CT::251814002]
 - [Breasts Tanner Stage 4](#) 4092494 [SNOMED-CT::251815001]
 - [Breasts Tanner Stage 5](#) 4089838 [SNOMED-CT::251816000]
- Pubic hair [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0006]
 - Stage 1 [Prepubertal (the pubic area may have vellus hair, similar to that of forearms).] 4090188 [Prepubertal - no pubic hair](#) [SNOMED-CT::251818004]

- Stage 2 [Sparse growth of long, slightly pigmented hair, straight or curled, at base of penis or along labia.] 4089839 [Sparse growth of downy pubic hair](#) [SNOMED-CT::251819007]
- Stage 3 [Darker, coarser and more curled hair, spreading sparsely over junction of pubes.] 4090642 [Growth of darker, thicker, curled pubic hair](#) [SNOMED-CT::251820001]
- Stage 4 [Hair adult in type, but covering smaller area than in adult; no spread to medial surface of thighs.] 4090189 [Pubic hair adult in type, area covered still smaller than adult](#) [SNOMED-CT::251821002]
- Stage 5 [Adult in type and quantity, with horizontal upper border.] 4090643 [Adult pubic hair in type and quantity with spread to medial surface of thigh](#) [SNOMED-CT::251822009]
- Date path: Any point in time event [POINT_EVENT] /data[at0001]/events[at0002]
- Comment: Archetype does not have information about Axillary hair, which is available in terminologies

openEHR-EHR-OBSERVATION.testicular_volume.v1

- Text: Testicular volume
- Description: The estimated or calculated volume of a testicle.
- Archetype root binding:
- OMOP binding:
- 4091204 Testicular finding
- 4092495 Testicular volume
- OMOP Table: Observation
- Value path: Testicle examined [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0020]
- Testicular volume [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0010]
- Date path: Any event [EVENT] /data[at0001]/events[at0002]
- Comment: This mapping provides a challenge, as the correct Measurement code would be “volume of left/right testicle”, but that differentiation of meaning is in another element, and the testicular volume does not differentiate left or right. The easier way of dealing with this is creating just a testicular volume Observation and putting which testicle

was measured in the qualifier_concept_id (4268604 [SNOMED-CT::63239009 | Structure of left testis] or 4048865 [SNOMED-CT::15598003 | Structure of right testis], which would be enough for this specific mapping but would need multiple fields if source data is closer to the terminologies. If not, this would be a perfect use case for Fact_relationship, but it could be complex to query if we ended up creating a “laterality” Observation to relate it

openEHR-EHR-OBSERVATION.timed_25_foot_walk.v1

- Text: Timed 25-Foot Walk
- Description: Der Timed 25-Foot Walk ist eine quantitative Messung der Beweglichkeit und Motorik der unteren Extremitäten. Dieser Test bildet die erste Komponente des Multiple Sclerosis Functional Composite (MSFC), eine Reihe von drei Tests zur Verlaufsdokumentation der Multiplen Sklerose.
- Archetype root binding:
- OMOP binding: No standard code, [CDISC code exists](#). Codes in terminology refer to meters instead of foot
- OMOP Table: Observation
- Value path:
- Zeit [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0004]
- Zeit [ELEMENT] /data[at0001]/events[at0007]/data[at0003]/items[at0004]
- Date path:
- Test 1 [POINT_EVENT] /data[at0001]/events[at0002]
- Test 2 [POINT_EVENT] /data[at0001]/events[at0007]
- Comment: Two trials, no code for either

openEHR-EHR-OBSERVATION.urinalysis.v1

- Text: Urinalysis
- Description: Qualitative and semi-quantitative test array using reagent test strips to indicate possible abnormalities in a sample of urine, often performed as part of Point of Care Testing (POCT).
- Archetype root binding:
- OMOP binding: 4099313 Urinalysis [SNOMED-CT::27171005]

- 3020650 [Glucose \[Presence\] in Urine](#) [LOINC::2349-9]
 - 40761551 [Bilirubin \[Presence\] in Urine by Confirmatory method](#) [LOINC::58450-8]
 - 3028893 [Ketones \[Presence\] in Urine](#) [LOINC::33903-6]
 - 3033543 [Specific gravity of Urine](#) [LOINC::2965-2]
 - 3051227 [Blood \[Presence\] in Urine by Visual](#) [LOINC::53963-5]
 - 3015736 [pH of Urine](#) [LOINC::2756-5]
 - 3037185 [Protein \[Presence\] in Urine](#) [LOINC::2887-8]
 - 3016360 [Urobilinogen \[Presence\] in Urine](#) [LOINC::13658-0]
 - 3042812 [Nitrite \[Presence\] in Urine](#) [LOINC::32710-6]
 - 3045414 [Leukocytes \[Presence\] in Urine](#) [LOINC::33052-2]
 - OMOP Table: Measurement
 - Value path:
 - Glucose [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0050]
 - Bilirubin [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0062]
 - Ketones [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0037]
 - Specific gravity [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0151]
 - Blood [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0032]
 - pH [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0126]
 - Protein [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0095]
 - Urobilinogen [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0056]
 - Nitrite [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0043]
 - Leukocytes [ELEMENT] /data[at0001]/events[at0002]/data[at0003]/items[at0068]
 - Date path: Point in Time [POINT_EVENT] /data[at0001]/events[at0002]
 - Comment: Clinical interpretation could also be inserted as a condition if coded.
- Answers like [Negative](#) [Positive](#) [1+](#) [2+](#) [3+](#) [4+](#) [Small](#) [Moderate](#) [Large](#) [Trace](#) can be coded

openEHR-EHR-OBSERVATION.waist_circumference.v1

- Text: Waist circumference
- Description: The measurement of the distance around the waist.
- Archetype root binding:
- OMOP binding: 4172830 Waist circumference
- OMOP Table: Measurement
- Value path: Waist circumference [ELEMENT]
/data[at0001]/events[at0010]/data[at0003]/items[at0004]
- Date path: [EVENT] /data[at0001]/events[at0010]
- Comment:
- Units
 - 8582 cm
 - 9327 [in_i]

openEHR-EHR-OBSERVATION.ygtss_revised.v1

- Text: Yale Global Tic Severity Scale - Revised (YGTSS-R)
- Description: Assessment tool used to quantify the severity of tic symptoms.
- Archetype root binding:
- OMOP binding: 36684883 Yale global tic severity scale
- OMOP Table: Measurement
- Value path: Global severity score [ELEMENT]
/data[at0001]/events[at0002]/data[at0003]/items[at0107]/items[at0151]
- Date path: Over the past week [INTERVAL_EVENT] /data[at0001]/events[at0002]
- Comment: A mapping for each one of the specific tics could be created, children of SNOMED-CT::568005 Tic disorder or SNOMED-CT::267078001 Involuntary movement should be chosen (not very specific still e.g. eye movements → SNOMED-CT::267078001 Involuntary movement, which is a condition)

SECTION

openEHR-EHR-SECTION.adhoc.v1

- Text: Ad hoc heading
- Description: A generic section header which should be renamed in a template to suit a specific clinical context.
- Archetype root binding:
- OMOP binding: 0 Unmapped
- OMOP Table:
- Value path:
- Date path:
- Comment: Not mapped

Non-mapped archetypes

Some of the presented archetypes could not be map to specific OMOP concepts or tables for various reasons, here is a summary table of the unmapped archetypes. Note that most of the archetypes that were not mapped are mostly due to lacking good mappings in current OMOP supported terminologies

Archetype	Reason	Comment
CLUSTER.exam_blastocyst.v1	Specific exam not available in terminology	Use generic exam
CLUSTER.exam_embryo.v1	Specific exam not available in terminology	Use generic exam
CLUSTER.exam_oocyte.v1	Specific exam not available in terminology	Use generic exam
CLUSTER.exam_zygote.v1	Specific exam not available in terminology	Use generic exam
CLUSTER.genomic_conversion_variant.v1	Specific genomic information not	Map to OMOP genomics

	available in terminology	extension
CLUSTER.genomic_copy_number_variant.v1	Specific genomic information not available in terminology	Map to OMOP genomics extension
CLUSTER.genomic_deletion_insertion_variant.v1	Specific genomic information not available in terminology	Map to OMOP genomics extension
CLUSTER.genomic_deletion_variant.v1	Specific genomic information not available in terminology	Map to OMOP genomics extension
CLUSTER.genomic_duplication_variant.v1	Specific genomic information not available in terminology	Map to OMOP genomics extension
CLUSTER.genomic_insertion_variant.v1	Specific genomic information not available in terminology	Map to OMOP genomics extension
CLUSTER.genomic_inversion_variant.v1	Specific genomic information not available in terminology	Map to OMOP genomics extension
CLUSTER.genomic_repeated_sequence_variant.v1	Specific genomic information not available in terminology	Map to OMOP genomics extension
CLUSTER.genomic_substitution_variant.v1	Specific genomic information not available in terminology	Map to OMOP genomics extension
CLUSTER.genomic_variant_result.v1	Specific genomic information not available in terminology	Map to OMOP genomics extension
CLUSTER.imaging_exam-foetus.v1	Specific imaging exam not available in terminology	Use generic imaging exam
CLUSTER.imaging_exam-ovary.v1	Specific imaging exam not available in terminology	Use generic imaging exam
CLUSTER.imaging_exam-rectouterine_pouch.v1	Specific imaging exam not available	Use generic imaging exam

	in terminology	
CLUSTER.media_file.v1	Has mapping, Multimedia not supported in OMOP	Ignore
CLUSTER.person.v1	Has mapping, personal information	Mapping should not end in OMOP
CLUSTER.structured_name.v1	Has mapping, personal information	Mapping should not end in OMOP
CLUSTER.timing_daily.v1	Only part of another archetype	
CLUSTER.timing_nondaily.v1	Only part of another archetype	
COMPOSITION.problem_list.v2	Container of conditions	Process at problem/diagnosis level
EVALUATION.absence.v2	Absence of information should not end in OMOP	
EVALUATION.social_summary.v1	Container of education, housing, etc.	Process at their respective archetype
OBSERVATION.bvc.v1	Scale not available in terminology	
OBSERVATION.embryo_assessment.v1	Specific codes not available in terminology	
OBSERVATION.lenke_classification.v1	Scale not available in terminology	
OBSERVATION.mayo_score.v1	Scale not available in terminology	
SECTION.adhoc.v1	Archetype has no specific semantics	Ignore

Conclusion and discussion

This mapping work aims to be the first comprehensive analysis of all published openEHR archetypes available at international CKM. Several key lessons have been learnt in this process:

1. Archetypes contain usually more precise and up to date knowledge than terminologies do. While this was suspected beforehand, this work has demonstrated the agile

incorporation of new models and subsets into the archetypes. While some terminologies such as SNOMED-CT have improved drastically they release of new versions of the terminology (from 6 months to a single month, although some versions and extensions are still being released each 6 months) the time needed for propagate those concepts from local extensions to international releases and then putting them into OMOP terminology is far from negligible. This becomes even worse when considering the time it takes to update the vocabularies on source data.

- a. The knowledge gap is especially true in specific domains such as ob-gyn, genomics, or scales. In this way archetypes are really frontiers of knowledge.
 - b. As future work, there could be merit into supporting mappings from genomic archetypes to the Genomics OMOP extension
2. One notable thing is that the coverage of mappings to standard terminologies such as SNOMED-CT or LOINC on archetype labels and valuesets is relatively low. If they were to exist, this mapping work could be almost trivial. We hope our proposal helps in the evolution of these archetypes so they have better semantics associated.
3. There is information not being able to be represented into OMOP. The problem arises when there are several data elements that end up in the same attribute (e.g. condition_status_concept_id field in Condition_occurrence contains codes that mix several elements in the Problem/diagnosis qualifier archetype, but not all combinations). This also applies for qualifier_concept_id in Observation class, which allows any code and some data could need more than one “qualifier” to be defined. Fact_relationships or attributes such as observation_event_id could help solve this problem, but would need to reach consensus on how to use them across databases (and are redundant in a way)
4. Context is lost. Related to last one, we have archetypes with several interesting data points that are different flavors of a similar concept (e.g. date when first appeared, date when last appeared, onset, etc.). There are cases where a priority of which one to use has been defined, but it is not possible to tell which one was chosen in the ETL as they can be optional. By default in these cases we always use a mandatory value as last option (e.g. context date for dates)

ANNEX 1: Interpreter language

Language Interpreter Needed	OMOP Code	ISO 639-3 Code
Abkhazian language interpreter needed	44792604	abk
Afar language interpreter needed	44792603	aar
Afrikaans language interpreter needed	44792593	afr
Akan language interpreter needed	44789403	aka
Albanian language interpreter needed	44789404	sqi
Amharic language interpreter needed	44790494	amh
Arabic language interpreter needed	44789405	ara
Aragonese interpreter needed	46285538	arg
Armenian language interpreter needed	44792539	hye
Assamese language interpreter needed	44792538	asm
Avaric interpreter needed	46285539	ava
Avestan interpreter needed	46285540	ave
Aymara language interpreter needed	44792592	aym
Azerbaijani language interpreter needed	44803253	aze
Bambara interpreter needed	46287244	bam
Bashkir interpreter needed	46287124	bak
Basque language interpreter needed	44804247	eus
Belarusian language interpreter needed	44792516	bel
Bengali language interpreter needed	44789406	ben
Bihari language interpreter needed	44803231	bih
Bislama language interpreter needed	44792527	bis
Bosnian interpreter needed	46285541	bos
Brawa language interpreter needed	44792736	
Breton language interpreter needed	44792526	bre
British Sign Language interpreter needed	44789508	bfi
Bulgarian language interpreter needed	44792530	bul
Burmese language interpreter needed	44792554	mya
Cantonese language interpreter needed	44789429	yue
Catalan language interpreter needed	44792515	cat
Central Khmer language interpreter needed	44792552	khm
Chamorro interpreter needed	46285542	cha
Chechen interpreter needed	46285543	che
Chinese interpreter needed	46287245	zho

Church Slavic interpreter needed	46285544	chu
Chuvash interpreter needed	46285545	chv
Cornish interpreter needed	46287125	cor
Corsican language interpreter needed	44792502	cos
Cree interpreter needed	46287246	cre
Croatian language interpreter needed	44789430	hrv
Czech language interpreter needed	44789431	ces
Danish language interpreter needed	44792503	dan
Dhivehi interpreter needed	46285546	div
Dutch language interpreter needed	44789432	nld
Dzongkha language interpreter needed	44792612	dzo
English language interpreter needed	44792374	eng
Esperanto language interpreter needed	44803094	epo
Estonian language interpreter needed	44803103	est
Ethiopian language interpreter needed	44792735	
Ewe interpreter needed	46285547	ewe
Faroese language interpreter needed	44803125	fao
Farsi language interpreter needed	44789433	fas
Fijian language interpreter needed	44792478	fij
Finnish language interpreter needed	44801342	fin
Flemish language interpreter needed	44792375	nld
French Creole language interpreter needed	44789439	cpf
French language interpreter needed	44790513	fra
Frisian language interpreter needed	44792690	fry
Fulah interpreter needed	46285548	ful
Gaelic language interpreter needed	44801343	gla
Galician language interpreter needed	44792479	glg
Ganda language interpreter needed	44789460	lug
Georgian language interpreter needed	44792689	kat
German language interpreter needed	44789442	deu
Greek language interpreter needed	44789443	ell
Guarani language interpreter needed	44792688	grn
Gujarati language interpreter needed	44790419	guj
Haitian interpreter needed	46287247	hat
Hakka language interpreter needed	44790420	hak
Hands-on signing interpreter needed	46286961	
Hausa language interpreter needed	44789444	hau
Hebrew language interpreter needed	44789445	heb

Herero interpreter needed	46285549	her
Hindi language interpreter needed	44789446	hin
Hiri Motu interpreter needed	46285550	hmo
Hungarian language interpreter needed	44792536	hun
Iban language interpreter needed	44792476	iba
Icelandic language interpreter needed	44792535	isl
Ido interpreter needed	46285551	ido
Igbo language interpreter needed	44789440	ibo
Indonesian language interpreter needed	44792518	ind
Interlingua interpreter needed	46285552	ina
Interlingue language interpreter needed	44792533	ile
Inuktitut language interpreter needed	44792524	iku
Inupiaq language interpreter needed	44792523	ipk
Irish interpreter needed	46287248	gle
Italian language interpreter needed	44789428	ita
Japanese language interpreter needed	44790456	jpn
Javanese language interpreter needed	44803241	jav
Kalaallisut language interpreter needed	44803067	kal
Kannada language interpreter needed	44792513	kan
Kanuri interpreter needed	46287126	kau
Kashmiri language interpreter needed	44792521	kas
Kazakh language interpreter needed	44792522	kaz
Kikuyu interpreter needed	46285553	kik
Kinyarwanda language interpreter needed	44803151	kin
Kirghiz language interpreter needed	44792737	kir
Komi interpreter needed	46285555	kom
Kongo interpreter needed	46287249	kon
Korean language interpreter needed	44789450	kor
Kuanyama interpreter needed	46285556	kua
Kurdish language interpreter needed	44789451	kur
Kutchi language interpreter needed	44792377	
Lao language interpreter needed	44792534	lao
Latin interpreter needed	46285557	lat
Latvian language interpreter needed	44792511	lav
Limburgan interpreter needed	46285558	lim
Lingala language interpreter needed	44789452	lin
Lithuanian language interpreter needed	44789453	lit
Luba-Katanga interpreter needed	46287250	lub

Luganda language interpreter needed	44792734	lug
Luxembourgish interpreter needed	46287127	ltz
Macedonian language interpreter needed	44792499	mkd
Makaton Sign Language interpreter needed	44789509	
Malagasy language interpreter needed	44792501	mlg
Malay language interpreter needed	44792514	msa
Malayalam language interpreter needed	44789461	mal
Maltese language interpreter needed	44792713	mlt
Mandarin language interpreter needed	44789462	cmn
Manx interpreter needed	46285559	glv
Maori language interpreter needed	44792477	mri
Marathi language interpreter needed	44792712	mar
Marshallese interpreter needed	46285560	mah
Moldavian language interpreter needed	44792711	ron
Mongolian language interpreter needed	44792710	mon
Nauru language interpreter needed	44792906	nau
Navajo interpreter needed	46287128	nav
Ndebele language interpreter needed	44792487	nde
Ndonga interpreter needed	46285561	ndo
Nepali language interpreter needed	44811854	nep
North Ndebele interpreter needed	46285562	nbl
Northern Sami interpreter needed	46285563	sme
Norwegian Bokmål interpreter needed	46285564	nob
Norwegian Nynorsk interpreter needed	46285565	nno
Norwegian language interpreter needed	44789463	nor
Nuosu interpreter needed	46285572	iii
Nyanja interpreter needed	46285566	nya
Occitan language interpreter needed	44792904	oci
Ojibwa interpreter needed	46285567	oji
Oriya language interpreter needed	44792876	ori
Oromo language interpreter needed	44792936	orm
Ossetian interpreter needed	46285568	oss
Pali interpreter needed	46285569	pli
Panjabi language interpreter needed	44789472	pan
Pashto language interpreter needed	44789464	pus
Polish language interpreter needed	44789468	pol
Portuguese language interpreter needed	44790520	por
Quechua language interpreter needed	44792850	que

Romanian language interpreter needed	44792529	ron
Romansh language interpreter needed	44792930	roh
Romany language interpreter needed	37395448	rom
Rundi language interpreter needed	44792951	run
Russian language interpreter needed	44789475	rus
Samoan language interpreter needed	44792830	smo
Sango language interpreter needed	44792851	sag
Sanskrit interpreter needed	46285570	san
Sardinian interpreter needed	46286933	srd
Scottish Gaelic interpreter needed	46285571	gla
Serbian language interpreter needed	44789476	srp
Serbo-Croatian interpreter needed	46287130	hbs
Shona language interpreter needed	44789477	sna
Sign Supported English interpreter needed	45770809	
Sindhi language interpreter needed	44792812	snd
Sinhala language interpreter needed	44789478	sin
Slovak language interpreter needed	44792486	slk
Slovenian language interpreter needed	44792795	slv
Somali language interpreter needed	44789479	som
South Ndebele interpreter needed	46285573	nbl
Southern Sotho language interpreter needed	44792797	sot
Spanish language interpreter needed	44789480	spa
Sundanese language interpreter needed	44811507	sun
Swahili language interpreter needed	44789481	swa
Swati language interpreter needed	44792796	ssw
Swedish language interpreter needed	44790440	swe
Sylheti language interpreter needed	44790460	
Tagalog language interpreter needed	44789486	tgl
Tahitian interpreter needed	46285574	tah
Tajik language interpreter needed	44792811	tgk
Tamil language interpreter needed	44789488	tam
Tatar language interpreter needed	44792974	tat
Telugu language interpreter needed	44792753	tel
Thai language interpreter needed	44789490	tha
Tibetan language interpreter needed	44792971	bod
Tigrinya language interpreter needed	44789493	tir
Tongan language interpreter needed	44792776	ton
Tsonga language interpreter needed	44792973	tso

Tswana language interpreter needed	44812109	tsn
Turkish language interpreter needed	44789494	tur
Turkmen language interpreter needed	44792794	tuk
Twi language interpreter needed	44812628	twi
Uighur language interpreter needed	44812065	uig
Ukrainian language interpreter needed	44789495	ukr
Urdu language interpreter needed	44789496	urd
Uzbek language interpreter needed	44792629	uzb
Venda interpreter needed	46285575	ven
Vietnamese language interpreter needed	44789497	vie
Visual frame sign language interpreter needed	46284417	
Volapük interpreter needed	46285576	vol
Walloon interpreter needed	46285577	wln
Welsh language interpreter needed	44789498	cym
Western Frisian interpreter needed	46285578	fry
Wolof interpreter needed	46287131	wol
Xhosa language interpreter needed	44792931	xho
Yiddish language interpreter needed	44812368	yid
Yoruba language interpreter needed	44789499	yor
Zhuang language interpreter needed	44792627	zha
Zulu language interpreter needed	44792614	zul