MEDINFO Panel: Do we need a Common Ontology between ICD 11 and SNOMED CT to ensure seamless re-use and semantic interoperability?

Organization of the panel

- Introduction: Jean Marie Rodrigues: common ontology between the Foundation Component (FC) of ICD 11 and SNOMED CT (7 min)
- Internal panelists:
  - Kent Spackman IHTSDO (7 min)
  - Chris Chute WHO (7 min)
- External panelists
  - Dipak Kalra EHR (7 min)
  - William Hogan Ontology (7 min)
- Panel Discussion (15 min)
- Questions from audience (15 min)
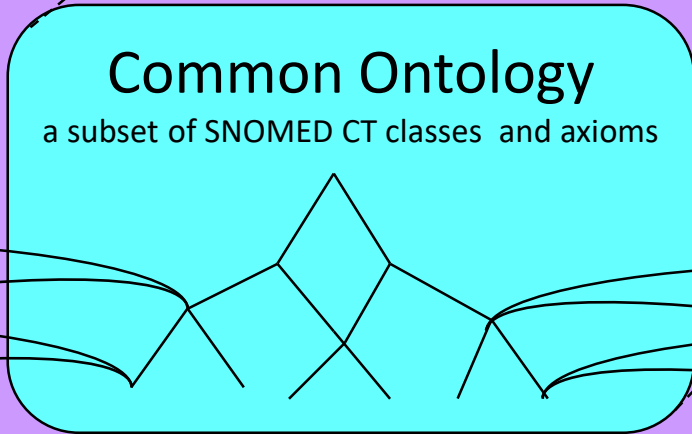- Concluding remarks: Alan Rector (7 min)

ICD 11 Revision Architecture

SNOMED CT

Common Ontology (definitions)

Foundation Component

shares ontological core with SNOMED CT and contains additional non-ontological knowledge (signs, symptoms, causes, linkage entities, exclusion statement)
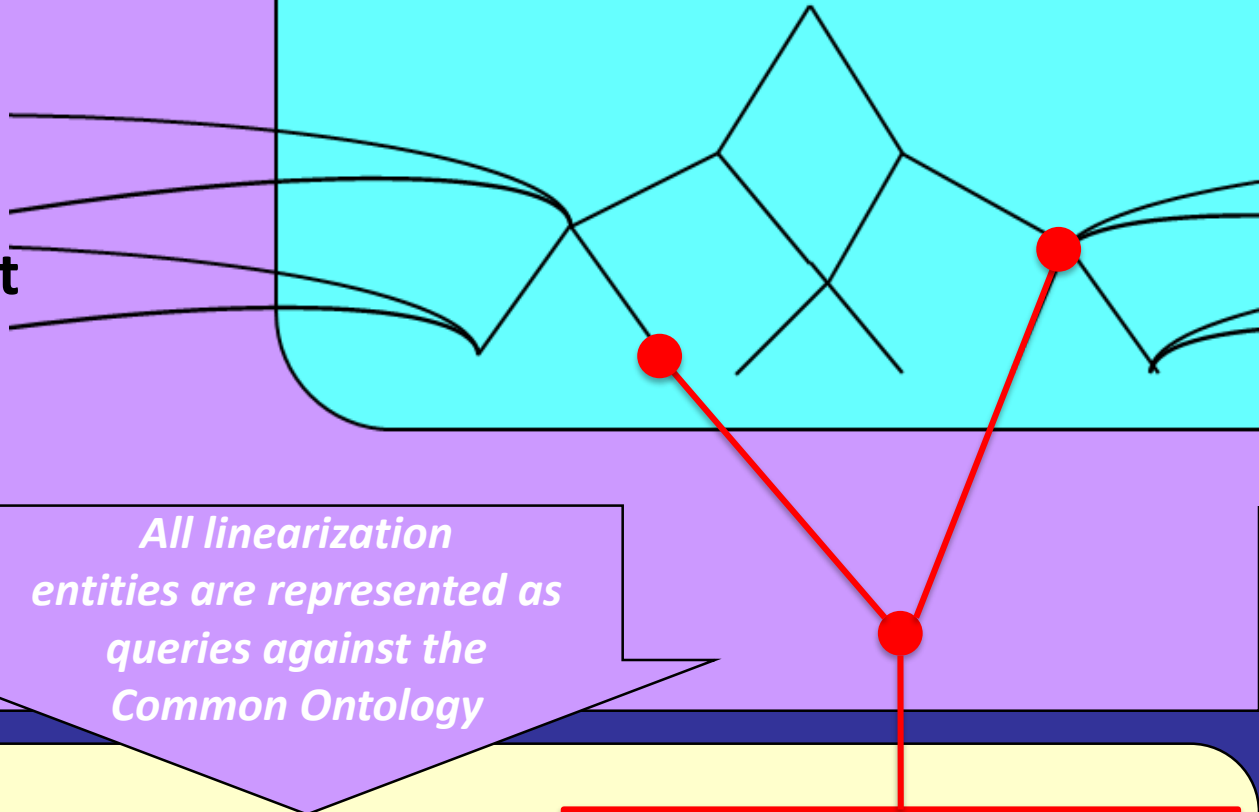
Common Ontology
a subset of SNOMED CT classes and axioms

Mortality   Morbidity   Primary Care   ...

Linearizations, derived from Foundation component

ICD 11 Revision Linkage Queries:

Common Ontology
a subset of SNOMED CT

Links between Foundation Component and Linearizations

All linearization entities are represented as queries against the Common Ontology

Morbidity Linearization

Example:

"Hypertension excluding Pregnancy"

*SELECT **?CN** WHERE*
  (**?CN** *SubClassOf* **Hypertension**)
  MINUS
  (**?CN** *SubClassOf*
      Disorders of Pregnancy)

Nodes:

- In ICD / SNOMED common ontology (CO)
- IN SNOMED, not in CO
- Residuals, only in linearizations
- ICD Headings

Links:

- is-a
- aggregation