Challenges of Developing and Deploying Large-Scale Biomedical Terminologies

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Outline of this morning

◆ First Session (9:00 - 10:30)
- 10' - Introduction (Ronald Cornet)
- 30' - Vision, requirements, and plan for ICD11 (Bedirhan Üstün)
- 30' - SAGE project use of terminologies in guideline-based decision support (Samson Tu)
- 20' – Discussion

◆ Second Session (11:00 - 12:30)
- 30' - Auditing large-scale medical terminologies, with a focus on SNOMED CT (Ronald Cornet)
- 45' - NCI Thesaurus (Sherri de Coronado)
- 15' - Discussion

Challenges re. Large-Scale Biomedical Terminologies

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- Developing
  - Position & Focus
  - Quality assurance
- Deploying
  - Integration
  - Services

Position & Focus

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- How to draw the boundaries of terminological systems?
  - What content should and should not be included?
- What is the usage of the system?

- E.g., SNOMED is NOT ICD(9/10/11) and will NOT replace it!

Quality Assurance

Increase the size of your ontology

- How to ensure quality over quantity?
- How to validate terminological system?
- Which metrics are useful?
- How to reduce manual effort and increase automation?

Integration

- Integration of data and knowledge
  - Large terminological systems
  - Large data stores
  - Interaction between data model and terminology model
- Integration of various types of knowledge
  - Ontological knowledge, guidelines, classification rules
- Integration of various terminological systems
  - How to adequately map terminological system

Services

◆ Terminological systems require terminological services!

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