Laboratory Committee meeting

Standardization of vocabularies for microbiology
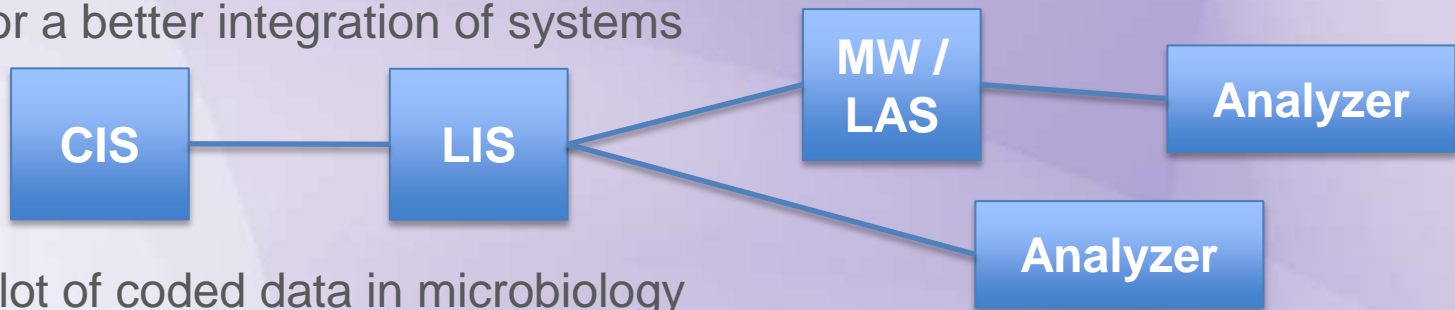Report on work in progress from French Work Group

Microbiology data exchanges French Work Group

❑ Goal: To provide structure &vocabulary guidelines for order/result messaging and CDA reporting, related to microbiology

  ➢ Launched in 2013, 1st meeting in March 2013
  ➢ Participants: LIS and LAS vendors, clinical biologists & pathologists

❑ Why should we standardize microbiology data?

  ➢ For a better integration of systems

CIS — LIS — MW / LAS — Analyzer
LIS — Analyzer

  ➢ A lot of coded data in microbiology

  ➢ For consolidation at the levels of hospital, region, country, continent

    ✓ surveillance of microorganisms and acquired resistance to antibiotics

    ✓ Monitoring of healthcare acquired infections

Microbiology data exchanges French Work Group

□ Focus on bacteriology, mycology and parasitology.

- ➢ Structure: Orders and results are specimen-centric (OML^O33, OUL^R22)

- ➢ Coded vocabularies needed for:

  - **Specimen**: type (SPM-4, 5) , collection method (SPM-7), source site (SPM-8, 9)

  - **Order**: ordered battery as well as child orders (OBR-4)

  - **Observation** code (OBX-3), value (OBX-5), interpretation (OBX-8), method (OBX-17)

- ➢ For terminologies France is using:

  - LOINC

  - the old version SNOMED 3.5 (translated into French). No decision has been made yet to move to SNOMED CT

Guidelines for France
Specimen characteristics

❑ Specimen type

We are building a two-level vocabulary (value set) of specimen types for microbiology

➢ Type of specimen → SPM-4 using a subset of HL7 table 0487

➢ Sub-type → SPM-5 building a specific vocabulary
(no suggested value in the HL7 standard user defined table 0541)
→ Change Proposal to allow the usage of SPM-5

❑ Specimen source site

We are building a two-level vocabulary (value set) of specimen source sites for microbiology

➢ Site of specimen → SPM-8 using SNOMED 3.5 topography axis ?

➢ Sub-site → SPM-9 using qualifiers (e.g.; right, left)

❑ Specimen collection method → SPM-7 with HL7 table 0488

Guidelines for France orders & observations

❑ Ordered service OBR-4:

  ➢ Study the path of either completing LOINC with order codes or building a national terminology. Includes codes for child orders such as AST.

❑ Observation code (OBX-3)

  ➢ LOINC, translated into French
  ➢ Includes AST: a tested antibiotic is a LOINC code

❑ Observation value (OBX-5), for coded observations

  ➢ Qualitative results (e.g.; class of count of germs) → investigate SNOMED and HL7 vocabularies

  ➢ Microorganism identification → The most accurate and up-to-date nomenclature is from ICSP (http://www.the-icsp.org/). But it is not coded.
    ▪ SNOMED CT → Filip
    ▪ NamesForLife
    ▪ WHO

❑ Observation interpretation (OBX-8) → HL7 table 0078

      → Riki and Laurent