USCDI Lab Terms

Andrea Pitkus, PhD, MLS(ASCP)CM

Laboratory Informaticist

Support USCDI Inclusion Of:

- **Specimen Type:** What is Collected? and sent to lab for analysis. (e.g. Serum, Swab, Urine, Tissue, Arterial Blood)
  - Messaged in HL7 2.51 **SPM 4**. Encoded with **SNOMED CT Specimen** Hierarchy Codes

- **Specimen Source** (Site): Where is Specimen Collected? (e.g. Left Lobe of Lung, Oropharyngeal, Ear) Vital for Microbiology and Pathology.
  - Messaged in HL7 2.51 **SPM 8**. Encoded with **SNOMED CT Anatomic Body Site** Hierarchy Codes

- Specimen Type **Qualifier** / Specimen Source **Qualifier**: Modify Specimen Type or Source. (e.g. Pre/Post Transfusion, Convalescent, Fasting / Left, Right, Upper, Lower, 3 O'Clock)
  - Messaged in HL7 2.51 **SPM 5 / SPM 9.** Encoded with **SNOMED CT Qualifier** Codes

- CDC Specimen Cross mapping Table (avail 2022) provides preferred terms and code maps for Public Health and pathology. Those collecting specimens (i.e. providers, nurses, surgeons) should use standardized terms and codes so they flow / are interoperable with laboratories and able to be reported to PH.

Support USCDI Inclusion Of:

- **Collection Procedure for Specimen:** How is the Specimen Collected? (e.g. bi… resection, urine clean catch vs. catheter, venipuncture vs. fingerstick or heelstick)
  - Messaged in HL7 2.51 **SPM 7**. Encoded with **SNOMED CT Procedure** Hierarchy Codes

- Often Specimen Type, Source and Collection Procedure are pre-coordinated (i.e. Breast Fine Needle Aspiration, Urine Clean Catch) and mapped to SNOMED CT pre-coodinated codes

- CDC Specimen Cross mapping Table (avail TBD 2022) provides preferred terms and code maps for Public Health and pathology.

- Those collecting specimens (i.e. providers, nurses, surgeons) should use standardized terms and codes so they flow / are interoperable with laboratories, pathology, others and able to be reported to PH. It's been a challenge getting these data from those collecting specimens as it is difficult to determine these details by looking at a specimen received downstream (especially tissue).

Support USCDI Inclusion of:

- **Lab Result Values**
  - **Qualitative (e.g. detected, not detected, indeterminate)**
    - Messaged in HL7 2.51 **OBX-5**. Encoded with **SNOMED CT Qualifier** Codes.
  - **Organisms (e. g. Staphylococcus aureus (MRSA), Enteroccocus faecalis, C. difficile)**
    - Messaged in HL7 2.51 **OBX-5**. Encoded with **SNOMED CT Organism** Codes.

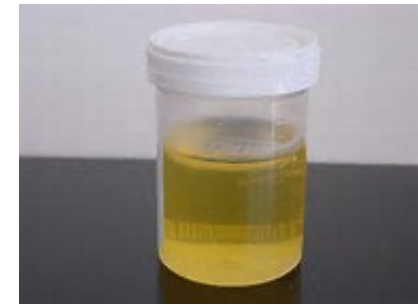- Specimen Info and Lab Result Values Required by Law and/or Used in:

- Test Menus: **CLIA Specimen Collection Manual**/ Lab Compendiums; Electronic Directory of Service (eDOS),

- **Orders**: Laboratory Orders Interfacing (LOI) Implementation Guide (IG),

- **Results**: CLIA Lab Test Report ; Laboratory Results Reporting Interfacing (LRI) IG,

- **PH Reporting**: Electronic Lab Reporting to Public Health (ELR) IG, Healthcare Associated Infection Reporting (HAI), HHS COVID Reporting,

- **Cancer Reporting**: College of American Pathologists electronic Cancer Checklists (CAP eCC), American Joint Commission on Cancer (AJCC) Cancer Data Elements, NAACCR Cancer Reporting (NIH SEER / CDC NPCR)

Support USCDI Inclusion of:

- Universal Device Identifiers (UDI) for In Vitro Diagnostics(IVD) Instrument / Test Platforms

- Universal Device Identifiers (UDI) for In Vitro Diagnostics(IVD) Test Kits
  - Reagents
  - Cartridges used on test instruments
  - Manually performed test cards, dipsticks, etc.

- HHS Required COVID Reporting Data Element

- FDA / Other requests for Pre / Post Market Surveillance (i.e. Recalls)