FHIMS WG Terminology Modeling Sub-Project Meeting

Summary of Call

Date/time of call: Wednesday, October 31, 2011, 2:00 - 3:30 PM

|  |  |
| --- | --- |
| **Attendees** | **Invited, but Unable to Attend** |
| Steve Wagner - FHA PMO | Dave Collins - VA/VHA |
| Jay Lyle - FHA PMO | Doug Hopler - VA/VHA |
| Galen Mulrooney - VA/VHA | Maryann Niesen - IHS |
| Holly Miller - VA/VHA | Mike Fitch - DoD |
| Pam Banning – 3M | Mike Lincoln - VA/VHA |
| Susan Matney – 3M | Neelima Chennamaraja - VA/VHA |
| Jim Case - NLM | Senthil Nachimuthu - Dod |
| Sean Muir - VA/VHA | Xingfang Li - FDA |
| Bill Hess - FDA/OC | Yiyting (Coco) Tsai - FDA/OC |
| John Kilbourne - NIH/NLM | Nikolay Lipskiy – CDC |
| Kevin Coonan - DoD | Neal Richards – FHA |
| Rob McClure - VA/VHA | Steve Hufnagel - DoD |
| Cindy Vinion - CDC | Ling Qiu - VA/VHA |
| Ioana Singureanu - FHA | Rob Savage - CDC |
|  | Anand Shukla - VA/VHA |
|  |  |

**Agenda**

1. Agenda review
2. Review 10/17 minutes
3. Updates
   1. Materials: EPA, FDA
   2. Regenstrief data
4. Lab Value sets
   1. Lab.SpecimenAssessment.appropriateness
      1. HL7 User-defined Table 0492, already in PHIN VADS
      2. Recommend use of “Appropriate,” “Inappropriate,” “Preferred”
      3. Recommend removal of “Inappropriate due to . . .”?
   2. Lab.SpecimenAssessment.containerCondition
      1. HL7 User defined table 0544, not in PHIN VADS
      2. Recommend adoption if no alternate found
         1. Not Body temperature
         2. Not Ambient temperature
         3. Not Critical ambient temperature
         4. Not Refrigerated temperature
         5. Not Critical refrigerated temperature
         6. Not Frozen temperature
         7. Not Critical frozen temperature
         8. Not Deep frozen
         9. Not Ultra frozen
         10. Not Liquid nitrogen
         11. Not Protected from light
         12. Exposed to Air
         13. Not Dry
         14. Exposed to shock
         15. Shaken
         16. Not Upright
         17. Metal Exposed
         18. Seal Broken
         19. Container Cracked
         20. Container Torn
         21. Container Leaking
   3. Lab.SpecimenAssessment.rejectReason
      1. HL7 Defined table 0490, in PHIN VADS; or PHLIP set, also in PHIN VADS
      2. Compare
         1. PHLIP set is smaller, SCT encoded, consolidates several labeling errors
         2. HL7 set includes more sample-specific reasons

|  |  |
| --- | --- |
| **HL7** | **PHLIP** |
| Broken container | Sample broken (finding) |
| Clotting |  |
| Contamination |  |
| Expired |  |
| Hemolysis |  |
| Identification problem |  |
| Improper storage |  |
| Labeling |  |
| Missing collection date | Sample incorrectly labeled (finding) |
| Missing patient ID number |
| Missing patient name |
| Missing phlebotomist ID |
| Name misspelling |
|  | Sample unlabeled (finding) |
| Quantity not sufficient |  |
|  | Form and specimen details different (finding) |
|  | No sample received (finding) |
|  | Other (qualifier value) |
|  | Sample leaked (finding) |

* + - 1. PHLIP set contains null (“Other”)
  1. Lab.SpecimenAssessment.specimenCondition
     1. HL7 User-defined Table 0493; already in PHIN VADS
        1. Autolyzed
        2. Clotted
        3. Contaminated
        4. Cool
        5. Frozen
        6. Hemolyzed
        7. Live
        8. Room temperature
        9. Sample not received (Is this a flavor of Null?)
     2. Or CDISC: about 55% overlap
        1. Frozen Specimen
        2. Hemolysis in Specimen
        3. Lipemic Specimen
        4. Refrigerated Specimen
        5. Ambient Temperature; Specimen at Room Temperature
        6. Calcified Specimen
        7. Clotted Specimen
        8. Autolized Specimen
        9. Icteric Specimen
  2. Lab.DefinedPatientEvent.eventType
     1. Use values extracted from LOINC?
        1. baseline
        2. calorie fast
        3. challenge NOS
        4. chelation (or substance administration?)
        5. excision
        6. exercise
        7. fluid fast
        8. meal
        9. specimen count (use a serial identifier?)
        10. specimen time (use collection time?)
        11. standing
        12. substance administration
        13. supine
  3. Lab.SpecimenContainer.additiveType
     1. HL7 Table 0371, already in PHIN VADS
     2. Recommendation: Create a new version without the “NONE” null flavor
        1. 10% Formalin
        2. 3.2% Citrate
        3. 3.8% Citrate
        4. 6N HCL
        5. ACD Solution A
        6. ACD Solution B
        7. Acetic Acid
        8. Amies transport medium
        9. Ammonium heparin
        10. Bacterial Transport medium
        11. Borate Boric Acid
        12. Bouin's solution
        13. Buffered 10% formalin
        14. Buffered Citrate (Westergren Sedimentation Rate)
        15. Buffered skim milk
        16. Carson's Modified 10% formalin
        17. Cary Blair Medium
        18. Chlamydia transport medium
        19. CTAD (this should be spelled out if not universally understood)
        20. Enteric bacteria transport medium
        21. Enteric plus
        22. Jones Kendrick Medium
        23. Karnovsky's fixative
        24. Lithium iodoacetate
        25. Lithium/Li Heparin
        26. M4
        27. M4-RT
        28. M5
        29. Michel's transport medium
        30. MMD transport medium
        31. Nitric Acid
        32. None
        33. Pages's Saline
        34. Phenol
        35. Potassium Oxalate
        36. Potassium/K EDTA
        37. Potassium/K EDTA 15%
        38. Potassium/K EDTA 7.5%
        39. PVA (polyvinylalcohol)
        40. Reagan Lowe Medium
        41. Serum Separator Tube (Polymer Gel)
        42. Siliceous earth, 12 mg
        43. Sodium Fluoride
        44. Sodium Fluoride, 100mg
        45. Sodium Fluoride, 10mg
        46. Sodium polyanethol sulfonate 0.35% in 0.85% sodium chloride
        47. Sodium/Na Heparin
        48. Sodium/Na EDTA
        49. SPS(this should be spelled out if not universally understood)
        50. Stuart transport medium
        51. Thrombin
        52. Thrombin NIH; soybean trypsin inhibitor (Fibrin Degradation Products)
        53. Thymol
        54. Thyoglycollate broth
        55. Toluene
        56. Ureaplasma transport medium
        57. Viral Transport medium
  4. Common.Specimen.dangerCode
     1. HL7 User-defined Table 0489, in PHIN VADS
        1. Confirm need for ‘biological’ (any biological material) & ‘biohazard’ (known pathogen)
           1. Aggressive
           2. Biohazard
           3. Biological
           4. Corrosive
           5. Escape Risk
           6. Explosive
           7. Injury Hazard
           8. Material Danger Infectious
           9. Material Danger Inflammable
           10. Poison
           11. Radioactive
  5. Lab.specimenProcessingEvent.processCategory
     1. No HL7 or SCT candidates
     2. Derived from HL7 SPM-29 (HL7 table 494) specimen child role (aliquot, component, modified)
     3. Possibility of removing specimen processing from model
        1. If scope is reporting only, a candidate for removal
        2. Confirm removal and alternate approach for “aliquot,” “component,” etc.
        3. Or conform use of processing, and approach for determining values
        4. Values to account for:
           1. Aliquot (should this require explicit record of fraction?)
           2. Component (does this categorically imply sedimentation?)
           3. Pool
           4. Group (? From role)
           5. Isolate
           6. Added chemical
           7. Modified (frozen, acidified, others?)
  6. Common.Specimen.specimenRole
     1. SPM-11; HL7 User-defined table 69
     2. Two values seem to overlap with process (Group and Pool)
     3. Many values associated with testing and calibration
     4. Some values unclear
     5. Review for need and semantics
        1. Blind Sample
        2. Calibrator
        3. Control specimen
        4. "Electronic QC, used with manufactured reference providing signals that simulate QC results"
        5. "Group (where a specimen consists of multiple individual elements that are not individually identified)"
        6. Patient (default if blank component value)
        7. "Pool (aliquots of individual specimens combined to form a single specimen representing all of the components.)"
        8. Replicate (of patient sample as a control)
        9. Specimen used for testing Operator Proficiency
        10. "Specimen used for testing proficiency of the organization performing the testing (Filler)"
        11. Verifying Calibrator, used for periodic calibration checks
  7. Lab.SpecimenCollectionPromise.status
     1. Same as test promise—V3 with OBR-25 modifiers
  8. Lab.LabTest.code
     1. Should separate ordered from resulted test
     2. Does Promise need a third property, or should it use one of the other two?
     3. Resulted: assume this should be LOINC
     4. Ordered: CDC mirrors HITSP recommendation (LOINC order starter set)
  9. Common.CommentEvent.commentCategory
     1. Dated comment on a result
     2. No candidates
  10. userDefinedAccessCheck
      1. Based on OBX-13, which HL7 defines as a String value
         1. HL7 Definition: This field permits the producer to record results-dependent codes for classifying the observation at the receiving system. This field should be needed only rarely, because most classifications are fixed attributes of the observation ID and can be defined in the associated observation master file (see description in Chapter 8). However, there are a few cases when such controls vary with the value of the observation in a complex way that the receiving system would not want to re‑calculate. An example is an antimicrobial susceptibility result. Some systems prefer to display only the susceptibility results of inexpensive antimicrobials depending upon the organism, the source of the specimen and the patient’s allergy status. The sending service wants to send all of the susceptibilities so that certain privileged users (e.g., Infectious Disease specialists) can review all of the results but non-privileged users would see only the "preferred" antimicrobials to which the organism was susceptible. We expect that other cases also occur.
         2. Confirm need; confirm need for code; identify candidate values
  11. Lab.ReferenceRangeCriterion.criterion
      1. Based on OBX-10. Classification of reference range values; indicates why a particular range was used.
      2. HL7 table 0080:
         1. An age-based population
         2. None - generic normal range
         3. A race-based population
         4. A sex-based population
         5. Species
         6. Breed
         7. Strain
  12. Lab.InterpretationEvent.interpretation
      1. HL7 user defined table 78
      2. Includes antimicrobial susceptibility as well as reference-relative values
         1. Below low normal
         2. Above high normal
         3. Below lower panic limits
         4. Above upper panic limits
         5. Below absolute low-off instrument scale
         6. Above absolute high-off instrument scale
         7. Normal (applies to non-numeric results)
         8. Abnormal (applies to non-numeric results)
         9. Very abnormal (applies to non-numeric units, analogous to panic limits for numeric units)
         10. No range defined, or normal ranges don't apply
         11. Significant change up
         12. Significant change down
         13. Better-use when direction not relevant
         14. Worse-use when direction not relevant
         15. Susceptible. Indicates for microbiology susceptibilities only.
         16. Resistant. Indicates for microbiology susceptibilities only.
         17. Intermediate. Indicates for microbiology susceptibilities only.
         18. Moderately susceptible. Indicates for microbiology susceptibilities only.
         19. Very susceptible. Indicates for microbiology susceptibilities only.
         20. Positive
         21. Negative
         22. Indeterminate
         23. Detected
         24. Not Detected
         25. Anti-complementary substances present
         26. Cytotoxic substance present
         27. Quality Control Failure
         28. Reactive
         29. Weakly reactive
         30. Non-reactive
         31. Interpretation qualifiers in separate OBX segments
         32. Hold for Medical Review
  13. Common.Ingredient.code
      1. No longer common product model (UNII codes too granular)
      2. Use additives? Antimicrobials not included.
  14. Lab.Organism.organism
      1. No candidates
      2. Recommend SCT < 264395009 microorganism
  15. Lab.Parasite.stage
      1. No table
      2. Recommend SCT < 278306005 life-cycle form

Summary of Discussions

**Schedule of Future Meetings**

1) The weekly general Information Modeling (IM) project call is held each Friday from 2:30 to 4:30 PM Eastern Time.

Information for participating in the calls:

Name: FHIMS WG Information Modeling Project Call

Recurring Weekly Call Every Friday

Time of Call: 2:30 to 4:30 PM Eastern Time

Dial-in Information: 1-866-502-8312, participant code 981771

Web Meeting URL: <https://webmeeting.nih.gov/imp/>

2) The weekly Terminology Information modeling calls are held on Wednesdays from 2-3:30 PM Eastern Time.

Information for participating in the calls:

Name: FHIMS WG Information Modeling Project Call

Recurring Weekly Call Every Wednesday

Time of Call: 2:00 to 3:30 PM Eastern Time

Dial-in Information: 1-866-502-8312, participant code 981771

Web Meeting URL: <https://webmeeting.nih.gov/imp/>

**Action Items**

| Item Description | Responsible Individual | Due Date |
| --- | --- | --- |
| Assess how closely we can align with APHL work   * We agree on current state; happy to work with/wait on abnormality & device | Jay | 4/11 |
| Acquire sample messages   * In process: values, not messages, which have not been scrubbed | Jay | 4/11 |
| Reach out to ICLN contacts in agency | Pam, Susan  Bill  Anne | 4/25 |