1.12 Revision of PHIN Messaging Guide, Release 2.2

The following decisions were made by the Implementation Guide Workgroup:
- Removed references to laboratory data
- Removed ICD 9-CM references
- Removed references to HL7 v2.3.1
- Changed references of encounter to visit. Also, clarified guidance to state that visit ID (PV1-19) and visit time (PV1-44) should remain constant throughout the visit.
- Reworded 2.1 Business Rules, Transmission Timeliness to "Electronic transmission to the PHA shall occur at the time of the visit if feasible, but not later than 12 hours from the start of the visit. Any subsequent updates to a patient's record must also be transmitted within 12 hours of the update. Real-time transmission and frequent batching are allowed as long as delivery to the PHA is within 12 hours of the trigger event. A delay in transmission should only come into effect in unusual circumstances, such as a system failure or power outage."
- Reworded patient name guidance to "Patient name may be submitted according to applicable jurisdiction or PHA regulations and specifications. If the PHA does not require patient name to be submitted, Visit or Patient ID, as specified within this guide, shall NOT be used by PHAs to join related visit data and for working with hospitals to find additional visit information for syndromic surveillance signal confirmation or investigation. Since, however, HL7 requires the patient name, the field must be populated even when data patient name shall not be sent. In such an instance (i.e., patient name is not sent), patient name shall be presented in a pseudonymized manner."

- Added new or Updated Value Sets
  - Discharge disposition (PV1-36) - PHVS_DischargeDisposition_HL7_2x
  - Patient Class (PV1-2) - PHVS_PatientClass_SyndromicSurveillance
  - Diagnosis Code (DG1-3) - PHVS_AdministrativeDiagnosis_CDC_ICD-10CM and PHVS_Disease_CDC
  - Admit Reason (PV2-3) - PHVS_AdministrativeDiagnosis_CDC_ICD-10CM and PHVS_Disease_CDC
  - Procedure Codes (PR1-3) - PHVS_AdministrativeProcedure_CDC_ICD-10PCS
  - Medication List - PHVS_MedicationClinicalDrugName_HITSP and PHVS_MedicationBrandName_HITSP
  - Patient Service Location - PHVS_HealthcareServiceLocation_Syndromic
  - Initial Acuity - PHVS_EmergencySeverityIndexAcuity_CDC

- Updated OBX Usage, elevating the following from O to RE
  - Pregnancy Status
  - Travel History
  - Triage Notes
  - Acuity
  - Admit Reason
  - Smoking status
  - BMI (Body Mass Index)

Updated and corrected messaging examples to pass NIST conformance testing. To access this tool go to https://hl7v2.gvt.nist.gov, then select "Syndromic Surveillance" from the "Tool Scopes" drop down.

Reorganized the guide to reduce redundancy:
- Section 5 - Syndromic surveillance data elements of interest into Message Infrastructure
- Appendix A - Code Tables incorporated into Message Infrastructure

- Appendix B - Message Examples has become section 2.6
- Appendix C - Conformance Statements incorporated into Message Infrastructure
- Appendix D - Future data elements was removed
- Appendix E - Translation to 2.3.1 was removed
- Appendix F - Useful Resources has become section 1.11
- Appendix G - Discharge Disposition incorporated into Message Infrastructure
- Appendix H - A08 Message Triggers has become section 2.5
- Appendix I - Background has become sections 1.7 and 1.8
- Appendix J - Revision History has become section 1.12

1.13 Snapshot Mode

Messages for a given visit shall always be sent in snapshot mode, indicating information related to the smallest individually identifiable unit are complete. For syndromic messages, that would be the OBX segments. If a correction and/or update to one of the OBX segments is necessary, all OBX segments, even if previously sent, shall be resent with the correction and/or current status and/or current values. If a previously sent OBX is missing from a subsequent message, then that indicates the OBX should be deleted.

1.14 Flavors

Flavor is a specialization of the base. For example, when a data type (as defined in the base HL7 v2.x standard) is constrained for a particular use, it is given an identifier ending in _SS and deemed a data type flavor. An example of a data type flavor identifier is XAD_SS. The same is true of segment flavors. In this guide, any segment or data type identifier with the suffix _SS is a flavor of the base segment or data type. An example of a segment flavor identifier is MSH_SS.

1.15 Binding Strength and Location

Binding is the association of a coded data element with a vocabulary (see the PHIN VADS site for more information: https://phinvads.cdc.gov/vads/downloads/PHINVADS_Guide.pdf). Depending on the level of the specification, a coded data element may be bound to a concept domain, code system, or value set. The HL7 v2 tables can represent any of these three vocabulary types, depending on how the data element is defined and used. At each specification (profile) level, the binding becomes increasingly specific, refining the data semantics of the element by limiting its content to a particular set of coded values.

Binding strength indicates the conformance of the binding, that is, whether the vocabulary must be used or not. There are two possible values: Required ("R") and Suggested ("S," which is recommended).

Binding location defines the element location of the vocabulary binding for composite-coded element data types. For example: a field with a CWE data type and binding location of 1 restricts the vocabulary to CWE.1 (i.e., the first triplet). A location of 1 or 4 indicates that the vocabulary binding is either in element 1 or element 4 (i.e., either the first or second triplet in the CWE data type).

1.16 Usage

Segment and Field Usage: Usage of O does not require sending of receiving system support; rather, the guide only shows how to support the concept if data-trading partners agree to exchange specific data elements For more information on segment and field usage, see http://wiki.hl7.org/index.php?title=Conformance_Implementation_Manual 2.B.7.2.

Value Set Usage: Required (R) usage indicates that the code must be supported (and thus can be used); Permitted (P)