Syllabus: HL7 v2.5.1 Immunization Update (VXU) Messages

Description

This on-demand course provides an in-depth review of HL7 v2.5.1 unsolicited vaccination record update (aka VXU) messages and how they are used to exchange immunization information between immunization information systems (IIS) and other health information systems. The course covers:

- Use cases for VXU messages
- Key segments and fields in VXU messages
- VXU structure and examples by use case

The training also highlights VXU message conformance with the *HL7 Version 2.5.1 Implementation Guide for Immunization Messaging, Release 1.5 and Addendum* (National IG), profile Z22, and key information about VXU processing by jurisdictional IIS. The anticipated time commitment to complete is approximately three to four hours; note, this may be longer or shorter depending on participants' approach to moving through the content.

Target Audience

This course is designed for individuals with some prior exposure to concepts related to interoperability and HL7 immunization messaging and who are responsible for supporting HL7 v2 interfaces between IIS and other health information systems. New to interoperability and HL7? See the Preparation section for introductory training.

Sample jurisdictional IIS role descriptions[1] for which this course may be most applicable include IIS interoperability analyst and IIS data quality analyst. IIS managers and other IIS staff may also benefit from the course, given that VXU messaging serves as the foundation for data entry in IIS, although the content is technical.

Is this course for you? Register to enroll!

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[1] See Public Health Informatics Institute Sample IIS Role Descriptions at https://phii.org/resources/iis-workforce-classifications/.

Preparation

This course builds on the IIS-focused Interoperability and HL7 training offered by the Public Health Informatics Institute (PHII). Participants who are not familiar with HL7 are strongly encouraged to complete the following free, on-demand training before this course:

- Interoperability for IIS: As part of the Fundamentals of IIS course series, this course provides an introduction to interoperability and data flow between systems.
- HL7 Basics for IIS: As part of the Fundamentals for IIS course series, this course provides an introduction to the HL7 standard, the National IG, HL7 message types, HL7 message structure, and the relationship between HL7 messaging and IIS data quality and data use.
- Advanced HL7 for IIS: This course follows HL7 Basics by examining how conformance and constraints relate to interoperability and reviewing tools available to test HL7 functionality and conformance.

Objective

This course is designed to enhance the knowledge and skills of the IIS community in using VXU messages to support the interoperability of immunization information between systems in alignment with the National IG. The IIS core competencies[2] most closely associated with this course are interoperability and data quality.

Learning Outcomes

As a result of completing this course, participants will be able to:

- Describe use cases for VXU messages
- Identify segments used in VXU messages
- Describe the type of information conveyed in each segment of a VXU message
- Identify key fields within VXU messages and how IIS use the information conveyed
- Identify how the structure and contents of a VXU vary based on the use case and information being conveyed, in alignment with National IG specifications
- Relate National IG VXU specifications to jurisdictional IIS VXU processing

Participant Engagement

Participants are expected to access the course via the AIRA Learning Management System, RISE. All course activities are asynchronous and may be completed as participants' time allows, within 30 days from registration. Participants are encouraged to access the course

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[2] See Public Health Informatics Institute (IIS) Core Competency Model at https://phii.org/wp-content/uploads/2016/03/IIS-Core-Competency-Model.pdf.

via computer for an optimal learning experience. Course activities include viewing videos, completing knowledge checks, passing a final quiz, and completing a course evaluation.

Participants who complete the course and pass the final quiz will receive a Certificate of Course Completion.

Outline

Unit 1. Introduction
- Course Introduction
- Review of HL7 Messaging Resources

Unit 2. Uses of VXU Messages
- Uses of VXU Messages
- Submit Patient Demographic and Immunization Information
- Submit Patient Demographic Information Only
- Update or Delete Previously Submitted Information

Unit 3. VXU Message Segments and Fields
- VXU Message Segments and Fields
- MSH – Message Header Segment
- PID – Patient Identifier Segment
- PD1 – Patient Additional Demographic Segment
- NK1 – Next-of-Kin Segment

Unit 4. VXU Segments and Fields, continued
- ORC – Order Request Segment
- RXA – Pharmacy/Treatment Administration Segment
- RXR – Pharmacy/Treatment Route Segment
- OBX – Observation Segment

Unit 5. VXU Structure and Examples
- VXU Structure and Examples
- VXUs – Submit Patient and Demographic Immunization Information
- VXUs – Submit Patient Demographic Information Only
- VXUs – Update and Delete Messages

Unit 6. Wrap-up
- Course Recap and Key Takeaways
- Final Quiz
- Course Evaluation