

## Track B: Public Health Informatics 101: “Meaningful” Interoperability and Standards for Disease Surveillance

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### Primary Instructors

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### General description

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In this workshop, you will be introduced to a variety of standards used in public health systems to support “interoperability” of data, ensuring that you understand both the format and meaning of data your public health department may receive under Meaningful Use. You will also learn how those standards are integrated into disease surveillance systems, and where gaps between adopted standards and practice currently exist. In addition, you will be introduced to the HL7 development framework and current methods for using standards to support interoperability within public health and between the clinical and public health setting. Students will be presented with a case study to review various potential data sources that could be used by a health department to monitor their community. Students will assess the benefits and limitations of a data source, map concepts to the standard vocabularies, and consider options for transporting the information using standard messages or documents. This workshop will be useful for the novice and intermediate-level practitioner.

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### Objectives

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By the end of this workshop participants should be able to:

- Describe key public health standards (e.g., LOINC, SNOMED CT, and HL7), and the benefits and challenges with using standards and a public health value set repository.
  - Be familiar with the Clinical Document Architecture and the HL7 reference information model.
  - Be familiar with the HL7 development framework.
  - Use the HL7 development framework to develop a storyboard and glossary.
  - Identify standard vocabulary for information exchange.
  - Become familiar with the ISO SDMX-HD standard for indicator/summarized data reporting, as well as alternative approaches such as QRDA and GIPSE.
  - Understand appropriate standards for reporting visit-level, clinical summary, and aggregate or population level data.
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### Outline

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9:00 a.m. Background information

1. Review standards commonly used in public health informatics for terminology, messaging, and documents
2. Review HL7 method to create a storyboard and glossary to describe information exchange.

10:30 a.m. Break

10:45 a.m. - 12:00 p.m. Case Study

1. Briefly describe Distribute
2. Present scenario whereby state public health officer wants a new data source to monitor community health, such as poison control data, ambulatory clinical data, a new syndrome from the Emergency Dept data, immunization data, or non-clinical data.
3. Students will work in teams to refine a storyboard describing the information to be exchanged from the new data source, create a glossary for the content to be sent in the exchange, and discuss issues about whether to send individual- or aggregate-level information.
4. Each group will present their assessment back to the class.