

Colleagues,

Please find below the National Notifiable Diseases Surveillance System (NNDSS) Modernization Initiative (NMI) Technical Assistance (TA) Coordination Team Update for October 23, 2015. These e-mail updates are a collaboration among the Centers for Disease Control and Prevention (CDC), Council of State and Territorial Epidemiologists (CSTE), and the Association of Public Health Laboratories (APHL) and are sent biweekly in an effort to keep reporting jurisdictions and other partners and stakeholders updated on the progress of NMI.

For more information on NMI, please see the NMI FAQs at <http://www.cdc.gov/nmi/faq.html>. If you have questions not answered in the FAQs, please send them to [edx@cdc.gov](mailto:edx@cdc.gov).

## **NNDSS Modernization Initiative Biweekly Update**

**October 23, 2015**

### NMI Overall Updates

- **NMI Provided Update on Recent Epidemiology and Laboratory Capacity (ELC) Call:** On the 10/14/15 ELC Cooperative Agreement call, NMI reviewed the project intent, provided an update on the status of the message mapping guides (MMGs) in progress, and suggested how jurisdictions can prepare to implement MMGs when they are final. All funding recipients (all state and most territorial health departments) were invited to participate.
- **Combined Summary of Notifiable Infectious, Noninfectious Diseases Released:** CDC and CSTE collaborated to prepare two companion disease summary reports from data sent through case notifications to NNDSS. Released on 10/23/15, the two reports, *Summary of Notifiable Infectious Diseases and Conditions—United States, 2013*, and *Summary of Notifiable Noninfectious Conditions and Disease Outbreaks—United States* may be found at [http://www.cdc.gov/mmwr/mmwr\\_nd/index.html](http://www.cdc.gov/mmwr/mmwr_nd/index.html).

### Message Mapping Guide Development Updates

- **Six Priority Guides Undergoing Final Quality Assurance (QA) Review:** The MMG development team continues to make minor updates to the MMGs, test scenarios, and test messages for Generic v2, Hepatitis, STD, Congenital Syphilis, Mumps, and Pertussis to improve consistency in format and wording across these documents.
  - The team is finalizing QA peer review checklists for all artifacts, which will be used during the QA process.
  - The team also is finalizing the plan for the QA review of the six priority MMGs.
  - Once the QA process is complete, the team expects to post updated pilot test-ready versions of the six priority MMGs and their associated artifacts to the [Draft MMG Web Site](#) in November.
- **MMG Status Updates:**
  - **Arboviral MMG (Message Design and Development)**
    - The program plans to include the laboratory template in the draft Arboviral MMG.
    - The National Electronic Disease Surveillance System Base System (NBS) team will review the Arboviral MMG once they review the Varicella MMG.
  - **Varicella MMG (Message Design and Development)**

- The program has reviewed both sections of the draft MMG and provided feedback.
  - The NBS team is reviewing the Varicella MMG.
- **Mumps and Pertussis MMGs** ([Stage I—Draft Phase](#))
  - The program is currently reviewing a proposal to include three additional vaccine-preventable disease (VPD)-specific data elements in the interpretive lab sections of the Mumps and Pertussis MMGs to support linkage of case notification messages to lab findings that the CDC programs receive directly from the reference labs funded to provide testing for VPDs.
- **Congenital Syphilis and STD MMGs** ([Stage II—Pilot Test-ready Draft Phase](#))
  - The team completed updates to the test scenarios and test messages for the lab and vaccine templates.
  - The CDC Message and Vocabulary Team (M&V) provided updated Congenital Syphilis test messages, which contain the new Generic v2 LOINC codes.
- **Generic v2 and Hepatitis MMGs** ([Stage II—Pilot Test-ready Draft Phase](#))
  - The team completed updates to the Hepatitis test scenarios and test messages to show how data would appear in the lab and vaccine templates. Although the templates are not currently in use for these messages, population of the templates was requested by the Message Validation, Processing, and Provisioning System (MVPS) developer to provide insights into use of the templates.
- No guides are in [Stage III—Final MMG Phase](#) at this time.

### Message Validation, Processing, and Provisioning System Updates

- **Requirements Being Gathered for Enhancements to Message Evaluation and Testing Service (METS) and Development of MMG Requirements Repository:**
  - The MVPS requirements team conducted a meeting on 10/14/15 to identify potential METS enhancements.
    - Participants included team members from the pilot jurisdictions, APHL, TA, CDC Surveillance Operations, M&V, NBS, and MVPS.
    - The goal was to use the MMG pilot testing experience to identify METS enhancements needed to support the jurisdiction testing when MMGs reach final status and to capture others that would benefit the jurisdictions but can wait for future implementation.
    - The MVPS team will use this information to create METS mockups and propose a roadmap.
  - The MVPS requirements team also met on 10/15/15 with the MMG team to begin defining the features needed in an MMG requirements repository that will facilitate MMG development.
- **MVPS Planning for Transition of Requirements Vendor:** Requirements work by the current contractor will end on 10/21/15, and the new contractor will begin work on 10/23.
  - CDC held a kick-off meeting for the new requirements contract on 10/6/15.
  - An extension for the outgoing contract has been requested to allow for the completion of tasks before the end of the period and then knowledge transfer to CDC after the new contractor is working with NMI. The MVPS team is planning for a 1–2-month transition period if the extension is approved.

- The MVPS team has identified deliverables and the general timeframe for transition and is developing a more detailed timeline.
- In addition, the MVPS requirements team met on 10/20/15 with the MVPS developer, vendor performing the MVPS Analysis of Alternatives (AoA), and new requirements vendor to review the MVPS requirements documentation developed to date.
- **MVPS Prepping for More Testing:**
  - The MVPS team loaded the 9/9/15 MVPS build to the development environment for technical acceptance testing.
  - The team loaded the Generic v2 and Hepatitis test messages to the development environment and is triaging defects for resolution.
  - The team is developing additional test cases to fully test the changes delivered in the most recent code deliveries.
  - User acceptance testing for jurisdictions is on hold until these activities are complete.
- **New MVPS Developer Continues Code Review:**
  - The MVPS developer continues to familiarize themselves with the MVPS code and expects to provide CDC in November with an assessment of the code base prior to committing to schedules for necessary updates to the code or delivery of new code.
  - As part of the new process, the MVPS developer will conduct two sprints a month: 1) from the 1st to the 15th and 2) from the 16th to the end of the month. Their first learning sprint kicked off on 10/16/15 with the resolution of several defects as top priority.
- **MVPS Continues Data Provisioning and MMG Support:** The MVPS team continues to work on the data provisioning requirements and develop the message processing guides for Congenital Syphilis, Mumps, and Pertussis; the team also is participating in development of the Arboviral and Varicella MMGs.

### Technical Assistance Updates

- **Updated Rhapsody and MIRTH Validation Channels Released:** The APHL TA Team has released updated Rhapsody and MIRTH validation channels to pilot jurisdictions. The validation channels incorporate minor bug fixes, updated LOINC codes for Generic v2 messages, and updated OBX3 and OBX5 validation of value sets for CWE data types.
- **Update on Jurisdiction Implementation:** The NBS team provides technical assistance for NBS pilot jurisdictions, and the APHL TA team provides technical assistance for non-NBS pilot jurisdictions.
  - **Alabama:**
    - Alabama is testing STD messages by using METS and migrating STD data.
  - **Arkansas:**
    - Arkansas is ready to conduct end-to-end testing with CDC for Hepatitis when MVPS is ready.
  - **California:**
    - California is currently creating the data extract for Generic v2 to accompany their completed draft data extracts for Hepatitis and STD.
    - APHL is currently building a customized Rhapsody route for California that will create HL7 messages based on their data extract. The route will incorporate the updated validation route released on 10/12/15.
  - **Florida:**

- APHL is reviewing the initial suite of Hepatitis test messages and will provide feedback.
    - Florida is currently working on generating Generic v2 test messages.
  - **Idaho:**
    - Idaho is testing STD messages by using the METS tool.
  - **Kentucky:**
    - Kentucky is ready to conduct end-to-end testing with CDC for Hepatitis when MVPS is ready.
  - **Louisiana:**
    - Louisiana is ready to conduct end-to-end testing with CDC for Hepatitis when MVPS is ready.
  - **Michigan:**
    - Michigan is making minor revisions (i.e., LOINC codes for Generic v2) to the full suite of Hepatitis, STD, and Generic v2 test messages. Once these revisions are made, they will be ready for end-to-end testing.
  - **Minnesota:**
    - Minnesota has produced a draft data extract for Hepatitis, STD, and Generic v2.
    - APHL is working with the jurisdiction to finalize detailed requirements for a data warehouse that will be used to generate HL7 messages.
    - APHL is currently building a customized Rhapsody route for Minnesota that will create HL7 messages based on their data extract. The route will incorporate the updated validation route released on 10/12/15.
  - **New York State:**
    - New York provided an initial suite of Generic v2 messages to APHL for review. APHL has scheduled a conference call on 10/26/2015 to provide high-level feedback on the message suite and schedule the start of active technical assistance.
  - **Oregon:**
    - Oregon is making minor revisions (i.e., LOINC codes for Generic v2) to the full suite of Generic v2 and Hepatitis test messages. Once these revisions are made, they will be ready for end-to-end testing.
    - APHL is working with Oregon to provide feedback on the STD test messages.
  - **Tennessee:**
    - Tennessee is porting their legacy hepatitis data to the new template.
  - **Texas:**
    - Texas is ready to conduct end-to-end testing with CDC for Hepatitis when MVPS is ready.
- CSTE will work with all of the pilot jurisdictions to evaluate the NMI TA efforts.
- Reminder about MMG status:
  - MMGs in Stages I and II are considered draft and may be revised until the time they are finalized.
  - Those jurisdictions selected for pilot testing of the test-ready versions (Stage II) of the MMGs should wait until contacted by the NMI TA team before using the test-ready MMGs, before implementing surveillance information system changes, and before submitting test messages to CDC.

- All other jurisdictions should not plan to submit data to CDC or implement MMG-based updates to their surveillance information systems until the final MMGs (Stage III) have been posted.
- For more information about technical assistance:
  - Please see the NMI FAQs at <http://www.cdc.gov/nmi/faq.html>.
  - For pilot jurisdictions: If you have questions specific to NMI TA, please contact Laura Carlton, APHL, at [laura.carlton@aphl.org](mailto:laura.carlton@aphl.org).
  - For non-pilot jurisdictions: If you have questions or would like to request TA through the Epidemiology and Laboratory Capacity for Infectious Diseases (ELC) Cooperative Agreement, please email [edx@cdc.gov](mailto:edx@cdc.gov).

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