NNDSS Modernization Initiative Technical Assistance Coordination Team Update
November 21, 2014

Colleagues,

Please find below the National Notifiable Diseases Surveillance System (NNDSS) Modernization Initiative (NMI) Technical Assistance (TA) Coordination Team Update for November 21, 2014. 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 will be 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://wwwn.cdc.gov/nndss/script/faqs.aspx. If you have questions not answered in the FAQs, please send them to edx@cdc.gov.

Message Mapping Guide Development Updates

- **Message Mapping Guide (MMG) Status Updates:**
  - The CDC NNDSS and Message and Vocabulary (M&V) teams updated the policy document “Best Practices Recommendations for Unknown or Missing Values in Case Notification Messages” with implementation guidelines for HL7 mapping of the indicator elements as “virtual” indicators. The proposed next steps include the following:
    - The CDC Division of Health Informatics and Surveillance (DHIS) shared the document with CDC program subject matter experts (SMEs) on 11/17/2014 and will gather their feedback.
    - DHIS will clear the policy and then e-mail it to jurisdictions and post it on the Draft MMG Web site for a 2-week external review.
    - Within 3 weeks of the end of the review period, the CDC MMG Development Team will reconcile the feedback, incorporate the indicators into the MMGs, and post the revised MMGs on the Draft MMG Web site.
  - **Mumps and Pertussis MMGs (Stage I–Draft Phase):**
    - The MMG Development Team has accommodated the request from the CDC National Center for Immunization and Respiratory Diseases (NCIRD) for indicator elements for “unknown” values for selected date/numeric data elements in the MMGs.
    - The MMG Development Team will post the revised MMGs for a second external review period of 6 weeks after close of the review period for the
“Best Practices Recommendations for Unknown or Missing Values in Case Notification Messages” policy.

- During the external review period, the Message Validation, Processing, and Provisioning System (MVPS) Team will develop draft internal data provisioning requirements. (“MVPS” was formerly known as the “CDC Platform-Message Validation and Processing System” or “CDCP-MVPS”; see MVPS section below for more information.)

- **Congenital Syphilis and STD MMGs** *(Stage II—Reconciled Draft Phase)*
  - The MMG Development Team has addressed the CDC STD Program’s requests to add indicator data elements for selected date/numeric data elements and one expanded value set for a coded data element through additional implementation notes to describe the HL7 mapping guidelines for identifying unknown or missing values.
    - The MMG Development Team submitted reconciled versions of the STD test scenario and STD test messages for the current pilot with Michigan.
    - These versions of the artifacts do not include additional program requirements, such as unknown indicators/values and implementation notes.
  - The MMG Development Team has revised the Congenital Syphilis MMG to identify the infant as the focus of the case investigation rather than the mother and to address the addition of indicator elements.
  - The MMG Development Team will revise and post the STD and Congenital Syphilis MMGs as soon as possible as **Stage III—Pilot Test-ready Draft Phase** versions of the MMGs, along with their artifacts. As the MMGs are updated, the MMG Development Team will provide them to the MVPS Team for implementation purposes.

- **Generic v2 and Hepatitis MMGs** *(Stage III—Pilot Test-ready Draft Phase)*
  - CDC program requests for indicator data elements will affect the Generic v2 MMG but **NOT** the Hepatitis MMG.
  - The MMG Development Team has revised the Generic v2 test scenarios due to minor inconsistencies and will create new test messages from the revised test scenarios.
  - The MMG Development Team also is revising the Hepatitis test scenarios and test messages.
  - The MMG Development Team will post updated versions of the Generic v2 and Hepatitis artifacts to the Draft MMG Web site as soon as possible.

- No guides are in **Stage IV—Final MMG Phase** at this time.

- For more information about MMG development, please see the NMI FAQs at [http://www.cdc.gov/nndss/script/faqs.aspx](http://www.cdc.gov/nndss/script/faqs.aspx).

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

- The MVPS technical development team in DHIS is currently focused on developing and implementing the Message Validation, Processing, and Provisioning System to support core functions of receiving, processing, and provisioning data at CDC.
  - To reduce confusion, the development team will be referred to as the **MVPS Team**, rather than the **CDC Platform**, **CDCP**, or **CDCP-MVPS Team**.
  - The MVPS is a component of a broader vision for the CDC Platform.
The MVPS is software that will validate and process data messages sent by jurisdictions before provisioning those data to the CDC programs. MVPS is a component of the CDCP but it is not a platform.

The CDCP is a broader data and software platform that will enable the receipt, processing, and provisioning of health-related data at CDC. The long-term vision for the CDCP, which is expected to evolve over several years in several phases, is a platform that will ultimately enhance reporting and analytics and continue expansion of shared services.

The MVPS Team will continue to work with CSTE and APHL to facilitate beta testing with Michigan, which is currently in progress.

- Beta testing is designed to identify any gaps that can be remediated before testing with the other pilot jurisdictions is initiated.
- Pilot testing will expand to other jurisdictions post-beta testing.
- As part of the beta with Michigan, the MVPS Team will document best practices, which will help determine an optimal transition approach for future pilot jurisdictions.

The MVPS Team has developed and provided data provisioning requirements to AgileX for Generic v2, Hepatitis, STD, and Congenital Syphilis. Data provisioning documents are developed by disease condition. Following is the status of specific requirements provided to AgileX:

- Generic v2: The MVPS Team received the software build for Generic v2 from AgileX.
- Hepatitis: The MVPS Team received the software build for Hepatitis from AgileX.
- STD:
  - The MVPS Team received the software build for STD from AgileX.
  - The NMI Technical Assistance (TA) Coordination Team will work with Michigan to develop the STD MMG when the guide reaches Stage III—Pilot Test-ready Draft Phase. As a result, testing of STD is targeted for December 2014.
- Congenital Syphilis:
  - The Congenital Syphilis MMG has been revised to identify the infant as the focus of the case investigation rather than the mother and to address the addition of indicator elements.
  - The MVPS Team is defining a new date for the software build to be provided by AgileX due to changes in the Congenital Syphilis MMG.
  - Due to changes in the Congenital Syphilis MMG, testing of these messages is targeted for early 2015.
- Mumps and Pertussis:
  - The MVPS Team will not define dates for MVPS activities related to Mumps and Pertussis until those MMGs are finalized and posted for external partner review.
  - The MMGs for Mumps and Pertussis have been redeveloped and will go through external partner review for a second time.
  - The MVPS Team will then develop technical requirements and support software development.

For more information about the MVPS, please see the NMI FAQs at http://wwwn.cdc.gov/nndss/script/faqs.aspx.
Technical Assistance Updates

- Michigan Pilot Updates:
  - NMI Technical Assistance Coordination Team representatives from APHL continue to work virtually with Michigan to complete independent validation with Hepatitis test messages.
    - The team received minor changes to the Hepatitis test scenarios on 11/13/2014 from CDC and these have been incorporated with Michigan.
    - The team expects end-to-end testing with Michigan for Hepatitis to begin in early December 2014.
  - NMI TA Coordination Team representatives from APHL continue to hold initial calls with pilot sites, prioritizing states that will be working on Hepatitis messaging. The team expects to begin implementation work with Hepatitis in pilot states within the next few weeks.
  - Jurisdictions selected for pilot testing of the test-ready versions of MMGs should wait until they are contacted by the NMI TA Coordination Team before using the test-ready MMGs and submitting test messages to CDC. All other jurisdictions should not plan to submit data to CDC until the final MMGs have been posted to the Public Health Information Network (PHIN) Web site.
  - For more information about technical assistance:
    - For pilot jurisdictions: If you have questions specific to NMI TA, please contact Laura Carlton, contractor to APHL, at lcarlton@TSJG.com.
    - For non-pilot jurisdictions: If you have questions or would like to request TA for MMG implementation through the Epidemiology and Laboratory Capacity for Infectious Diseases (ELC) Cooperative Agreement, please email edx@cdc.gov.

For more information on NMI, please see the NMI FAQs at http://wwwn.cdc.gov/nndss/script/faqs.aspx. If you have questions not answered in the FAQs, please send them to edx@cdc.gov.