Colleagues,

Please find below the National Notifiable Diseases Surveillance System (NNDSS) Modernization Initiative (NMI) Technical Assistance (TA) Coordination Team Update for December 4, 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.

NNDSS Modernization Initiative Biweekly Update
December 4, 2015

Message Mapping Guide Development Updates
- **Message Mapping Guide (MMG) Development Team Streamlining Vaccine Template:**
  - The MMG development team has evaluated duplication between data elements in the vaccine template and vaccine-related data elements that programs have requested be included separately and proposed a strategy to streamline the guides while supporting disease-specific data sets and processing rules.
  - A final decision on the strategy is expected this week.
- **Six Priority Guides Continue to Undergo 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.
  - When 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 revised Draft MMG Web Site, targeting December.
- **MMG Status Updates:**
  - **Arboviral MMG (Message Design and Development)**
    - The Arboviral MMG development team is awaiting feedback from developers regarding the draft Arboviral MMG.
  - **Varicella MMG (Message Design and Development)**
    - The team continues to update the draft Varicella guide per best practices and the QA review checklist.
  - **Mumps and Pertussis MMGs** (Stage I—Draft Phase)
    - The team received input from the CDC programs on 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. The team is incorporating changes as part of the MMG QA review.
    - The MMG development team will forward mock-ups of the Mumps and Pertussis MMGs that incorporate the proposed changes to the guides to the CDC

programs for review and approval after the QA review has been completed for these MMGs.

- o **Congenital Syphilis and STD MMGs** ([Stage II—Pilot Test-ready Draft Phase](#))
  - In planning for the provisioning of congenital syphilis data, the MMG development team identified a potential problem caused by the re-use of a test date field. Coordination with messaging and vocabulary experts identified a solution that supports the data elements requested by the program but resolves the database structure issue.
  - The team completed updates to the test scenarios and test messages for the lab and vaccine templates.
  - The Message and Vocabulary Team provided updated Congenital Syphilis test messages, which contain the new Generic v2 LOINC codes.
- o **Generic v2 and Hepatitis MMGs** ([Stage II—Pilot Test-ready Draft Phase](#))
  - The MMG development team completed updates to the Hepatitis test scenarios and test messages to show how data would appear in the lab and vaccine templates. The Message Validation, Processing, and Provisioning System (MVPS) developer requested population of the templates to provide insights into use of the templates.
- o No guides are in [Stage III—Final MMG Phase](#) at this time.

Message Validation, Processing, and Provisioning System Updates

- **MVPS Developer Completes Next Sprints and Works to Resolve Outstanding Defects:**
  - o The new MVPS developer completed their second development sprint on 11/15/15.
    - As part of this sprint, the developer released MPVS 2.0.1 in the development environment.
    - The sprint focused on the resolution of issues with previously developed data provisioning code for Generic v2 and Hepatitis, defect resolutions found during previous test cycles, and a high-priority change request.
    - The developer demonstrated the Rhapsody prototype with new functionality.
  - o The new developer completed Sprint 3 on 11/30/15 in support of the development of MVPS 2.0.2.
    - This sprint focused on fixes for data provisioning issues and processing bugs.
    - CDC is now preparing to test the delivered code.
- **MVPS Transfers Knowledge to New Requirements Vendor:**
  - o On 11/30/15, the new requirements contractor took over as the primary point of contact, with the outgoing requirements contractor in a supporting role. The transition period ends 12/21/15.
  - o The new requirements vendor has confirmed staff assignments for requirements management roles and responsibilities.
  - o Transition activities include weekly transition status updates, collaborative work efforts, and work demonstrations.
    - Each work stream is identifying milestones, tasks, and durations of efforts to support the initial MMG release of MVPS for Generic v2 and Hepatitis.
    - The MVPS team is updating an integrated MVPS project schedule to support the initial release, targeting end of December 2015 for project schedule completion.
- **MVPS Provides Requirements Management, Data Provisioning, and MMG Support:**

- The MVPS team continues to participate in development of the Arboviral and Varicella MMGs and also is supporting current Generic v2 and Hepatitis change requests and data provisioning activities.
- The MVPS requirements team has created interactive mockups for an enhanced user interface and landing page for the Message Evaluation and Testing Service (METS) based upon feedback from a METS analysis workshop on 10/14/15. Several jurisdictions participated in the workshop.
  - The new mockups provide recommended enhancements to the METS User Interface for the initial release for Generic v2 and Hepatitis and additional enhancements to the overall user interface for a future release.
  - The MVPS team will submit the requirements to the MVPS developer for an estimate of the level of effort required for implementation.

Technical Assistance Updates

- **Update on Jurisdiction Implementation:** The National Electronic Disease Surveillance System Base System (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 has completed the data extract for Generic v2 and is close to completion for Hepatitis.
    - APHL continues to build the customized Rhapsody route for California that will create HL7 messages based on their data extracts.
  - **Florida**:
    - APHL continues to work with Florida to refine their Hepatitis test messages.
    - Florida is currently working on generating Generic v2 test messages.
  - **Idaho:**
    - Idaho is ready to conduct end-to-end testing with CDC for STD conditions when MVPS is ready.
  - **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 has completed test message suites for Hepatitis and Generic v2 and is ready for end-to-end testing with CDC when MVPS is ready.
  - **Minnesota**:
    - Minnesota has produced a draft data extract for Hepatitis and Generic v2.

- APHL reviewed with the Minnesota team detailed requirements for a data warehouse that will be used to generate HL7 messages. These requirements are pending final approval.
- APHL is currently building a customized Rhapsody route for Minnesota that will create HL7 messages based on their data extract.
  - **New York State:**
    - New York provided an initial suite of Generic v2 messages and mapping documents to APHL for review.
    - APHL is conducting a gap analysis of both Generic v2 and Hepatitis data elements.
  - **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 with MVPS.
  - **Tennessee:**
    - Tennessee has completed porting their legacy Hepatitis data to the new template. They are currently testing creation of case notifications from the new module.
  - **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.
  - 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.

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