

NMI Evaluation Assessment - TEST

Start of Block: Demographics and General Questions

S1 Thank you for participating in the NNDSS Modernization Initiative (NMI) project evaluation. This assessment asks a series of questions about your experiences with the entire NMI process which includes Message Mapping Guide (MMG) implementation, onboarding, and technical assistance. This assessment should take approximately 15-25 minutes to complete.

Your feedback is important to help improve the future of NMI technical assistance, and MMG implementation and onboarding processes. All information submitted will be kept confidential. If you have any questions about the evaluation, please contact CSTE Senior Evaluation Program Analyst, Elandis Miller at emiller@cste.org.

Q1 Please provide your name. Your email is optional and will only be used if we need to contact you with potential follow-up questions:

☐ Name _____

☐ Email _____

Q2 In which jurisdiction do you currently work?

▼ Alabama ... New York City

Q3 Please indicate the surveillance system(s) used for NMI - **select all that apply**.

☐

NBS

☐

PRISM

☐

MAVEN

☐

STC

☐

Sunquest

☐

eHARS

☐

STDMIS

☐

TriSano / EpiTrax

☐

Custom / other (please specify):

Q4 Please indicate which MMG(s) are in production for HL7 case notification messages (Message Mapping Guides) - **select all that apply.**

- ☐ Arboviral v1.3
- ☐ Generic V2
- ☐ Hepatitis
- ☐ Congenital Syphilis
- ☐ STD
- ☐ Mumps
- ☐ Pertussis
- ☐ Varicella
- ☐ Foodborne Diarrheal Disease
- ☐ Malaria
- ☐ Trichinellosis
- ☐ Babesiosis
- ☐ RIBD
- ☐ Lyme / TBRD
- ☐ HAI / MDRO
- ☐ Rubella
- ☐ CRS

☐

Measles

☐

TB / LTBI

End of Block: Demographics and General Questions

Start of Block: System-level Barriers

S2 The questions in this section will address system-level challenges to MMG implementation and onboarding. Specifically we are looking to obtain data about changes made to data elements in surveillance systems, or additions made to surveillance systems to produce MMG-compliant messages, and any other technical challenges with surveillance system readiness.

Note:

'MMG Implementation' processes include: Gap analysis, data mapping, HL7 test message creation, message transport set up, CDC Message Validation, Processing, and Provisioning System User Acceptance Testing (MVPS UAT)

'MMG Onboarding' processes include: Test message validation, migration to production environment, limited production message validation, accessing MVPS Dashboard and CDC onboarding environment

Q5 Please select all surveillance system-level changes your jurisdiction made for MMG implementation and then rank the top 3 challenging changes made - 1 is the highest ranking

	Surveillance system-level changes	If the change posed a challenge, please rank the top 3 challenges.
	Select all that apply	Ranking

Data mapping between legacy and MMG formats	☐	
Add questions that were not being collected in surveillance system	☐	
Edit/change existing questions/value sets to match what is requested by CDC	☐	
Program data transformations	☐	
Change auditing processes so that cases are triggered/updated for transmission appropriately	☐	
Add form building functionality to collect more complex, relational data	☐	
Edit forms to accommodate element type, repeating groups or elements	☐	

Edit existing vocabularies to match the PHVS vocabulary	☐	
Other (please specify):	☐	



Q6 Please select all other system related changes made for MMG implementation/ onboarding and then rank the top 3 challenging changes made - 1 is the highest ranking

	Other system related changes	If the change posed a challenge, please rank the top 3 challenges.
	Select all that apply	Ranking

Integration engine configuration (e.g. Rhapsody, Mirth)	☐	
PHINMS connectivity / PHINMS changes to handle sending test messages to MVPS production	☐	
Data mapping methods (E.g. Hard-coding, a mapping interface, etc.)	☐	
Add routes, stored process to transport messages to correct location (such as NND Case Note vs MVPS)	☐	
Changes to XML files (transform, schema) to accommodate repeating groups or elements	☐	

Q7 Did your jurisdiction experience any other challenges with overall system-readiness for MMG implementation?

- ☐ Yes, list challenges: _____
- ☐ No
-

Display This Question:

If Q7 = Yes, list challenges:

Q8 How did your jurisdiction address challenges listed?

End of Block: System-level Barriers

Start of Block: Organization-level Barriers

S3 The questions in this section will address challenges to MMG implementation and/ or onboarding at the organizational level such as time, resources, staff, etc.

Note:

'MMG Implementation' processes include: Gap analysis, data mapping, HL7 test message creation, message transport set up, CDC Message Validation, Processing, and Provisioning System User Acceptance Testing (MVPS UAT)

'MMG Onboarding' processes include: Test message validation, migration to production environment, limited production message validation, accessing MVPS Dashboard and CDC onboarding environment



Q9 Please rank the top three organization-level challenges for MMG implementation. - **1 is the highest ranking.**

- _____ Time
- _____ Cost
- _____ Project management expertise
- _____ Staff
- _____ Onboarding issues (e.g. MVPS)
- _____ Onboarding availability
- _____ Bureaucratic / approval
- _____ Competing agency priorities
- _____ Other (please specify):

End of Block: Organization-level Barriers

Start of Block: Technical Assistance (TA)

S4 The questions in this section assess the usefulness of technical assistance (TA) received by jurisdictions for MMG implementation and/ or onboarding. We are also seeking suggestions for input on recommended improvements for TA received for MMG implementation and / or onboarding.

Q10 Have you received any of the following types of TA? - **select all that apply.**

- ☐ Pilot jurisdiction-specific TA
- ☐ TA received by pilot jurisdiction participating in MMG cohort
- ☐ Non-pilot jurisdiction TA
- ☐ Did not use TA

Skip To: End of Block If Q10 = Did not use TA

Q11 For those jurisdictions receiving TA, please rate the usefulness of the TA received:

	Not useful	Slightly useful	Useful	Very useful
Q10 = Pilot jurisdiction-specific TA Pilot Jurisdiction-specific TA	☐	☐	☐	☐
Q10 = TA received by pilot jurisdiction participating in MMG cohort TA received by pilot jurisdiction participating in MMG cohort	☐	☐	☐	☐
Q10 = Non-pilot jurisdiction TA Non-pilot Jurisdiction TA	☐	☐	☐	☐

Display This Question:

If Q10 = Pilot jurisdiction-specific TA

Q12 Please provide any suggestions for improvement for pilot jurisdiction-specific TA:

Display This Question:

If Q10 = TA received by pilot jurisdiction participating in MMG cohort

Q13 Please provide any suggestions for improvement for MMG cohort TA:

Display This Question:

If Q10 = Non-pilot jurisdiction TA

Q14 Please provide any suggestions for improvement for non-pilot jurisdiction TA:

End of Block: Technical Assistance (TA)

Start of Block: Input for Any Other Resources

S5 The questions in this section seek input on the usefulness or suggested improvements for any other resources used and/ or needed for MMG implementation and/ or onboarding.

Q15

Of the resources, tools, or trainings you utilized, please rate the usefulness of each:

	Did not use	Was not aware of the resource	Not useful	Slightly useful	Useful	Very useful
edx@cdc.gov mailbox ((i.e. one on one communication with CDC)	☐	☐	☐	☐	☐	☐
CDC NMI homepage (https://www.cdc.gov/nmi/)	☐	☐	☐	☐	☐	☐
CDC NMI Technical Assistance and Training Resource Center homepage	☐	☐	☐	☐	☐	☐
NMI Notes Newsletters	☐	☐	☐	☐	☐	☐
eSHARE calls / information	☐	☐	☐	☐	☐	☐
Implementation Guidebook	☐	☐	☐	☐	☐	☐
Implementation Spreadsheet	☐	☐	☐	☐	☐	☐
Onboarding Guidebook	☐	☐	☐	☐	☐	☐
Test case scenario worksheet	☐	☐	☐	☐	☐	☐
PHIN guide	☐	☐	☐	☐	☐	☐
State Reportable Condition Checklist	☐	☐	☐	☐	☐	☐
METS Tool and related trainings	☐	☐	☐	☐	☐	☐
MVPS Dashboard and related trainings	☐	☐	☐	☐	☐	☐

Rhapsody route and related trainings	☐	☐	☐	☐	☐	☐
NBS Checklist	☐	☐	☐	☐	☐	☐
NBS data porting tool	☐	☐	☐	☐	☐	☐
NBS page template(s)	☐	☐	☐	☐	☐	☐
NBS Onboarding Documentation on NBS Central	☐	☐	☐	☐	☐	☐

Q16 Please provide any suggestions for improvement for resources used?

Q17 Did your jurisdiction need resources other than the ones listed above?

- ☐ Yes
- ☐ No

Display This Question:

If Q17 = Yes

Q18 Please list other resources needed?

End of Block: Input for Any Other Resources

Start of Block: Sustainability

S6 The questions in this section address the overall sustainability of MMG implementation, onboarding and maintenance efforts. Questions are related to investments (staff/ resource/ time/ system/ other) made in the MMG implementation and onboarding process, and whether these investments are sustainable.

Q19 What is the type of support needed to sustain NMI efforts at your jurisdiction? - **select all that apply**.

- ☐ Training
 - ☐ Staff: IT
 - ☐ Staff: Epidemiologist / Disease specific subject matter experts
 - ☐ Staff: Informaticians (combined roles across IT & epi)
 - ☐ System enhancements
 - ☐ IT infrastructure
 - ☐ Funding
 - ☐ Stakeholder buy-in
 - ☐ Prioritization of resources
-

Q20 Would your jurisdiction participate in a sustainability assessment for NMI?

☐ Yes

☐ No

End of Block: Sustainability

Start of Block: Satisfaction

S7 The questions in this section assess jurisdictional satisfaction with the overall NMI processes such as MMG implementation and onboarding, and technical assistance.

Q21 Please indicate your jurisdiction's level of satisfaction with the following NMI processes:

	Not at all satisfied	Slightly dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied
Overall MMG implementation process	☐	☐	☐	☐	☐
Onboarding process	☐	☐	☐	☐	☐
Q10 = Pilot jurisdiction- specific TA Or Q10 = TA received by pilot jurisdiction participating in MMG cohort Or Q10 = Non- pilot jurisdiction TA	☐	☐	☐	☐	☐
TA support received for MMG implementation					
Communications about changes to MMG implementation / onboarding processes	☐	☐	☐	☐	☐
Experience in working with CDC to onboard messages to the MVPS System	☐	☐	☐	☐	☐
Experience with using MVPS Tools for onboarding	☐	☐	☐	☐	☐
Experience with using MVPS tool for ongoing monitoring of production	☐	☐	☐	☐	☐

messages					
Overall experience with using MVPS tools	☐	☐	☐	☐	☐

Q22 Please provide any suggestions for improvements in the MMG implementation / onboarding steps and services listed below:

	Click to write Column 1
	Suggestion(s) for Improvement

Gap Analysis	
Data Extraction (non-NBS only)	
Disease Page Implementation (NBS only)	
Legacy Data Porting/Migration Completion (NBS only)	
HL7 Message Creation	
METS Validation	
Completing Approved Onboarding Package (including iterative steps)	
Submission and Validation of Year-to-Date File (until CDC confirmed beginning of Cutover to Production)	
Limited Production Message Validation (sending to CDC Onboarding Environment)	

Migration from PHA Test Environment to PHA Production Environment	
Test Message Validation (including revisions until CDC confirmed successful submission to Onboarding Environment)	
Project Planning and Coordination	
Standards/Coding	
Page and Vocabulary Metadata	
Knowledge Management and Training	
Technical architecture/Integration	
Technical Configuration/Environment Setup (NBS only)	

End of Block: Satisfaction

Start of Block: MMG Development and Piloting

S8 The questions in this section assess jurisdictional satisfaction with their involvement in MMG development and piloting, and timing of MMG roll-out.

Q23 Did your jurisdiction provide feedback during MMG development?

☐ Yes

☐ No

Display This Question:

If Q23 = Yes

Q24 What type of feedback was provided for MMG development?

☐

Structure

☐

Vocabulary

☐

Content

☐

Data Element Prioritization

☐

Process Improvement

☐

Other (please specify):

Display This Question:

If Q23 = Yes

Q25 In your opinion, was your jurisdiction's feedback during MMG development incorporated into MMG refinement by CDC?

- ☐ Yes
- ☐ No
- ☐ Unknown

Q26 Did your jurisdiction provide feedback during MMG piloting?

- ☐ Yes
- ☐ No
- ☐ N/A

Skip To: Q29 If Q26 = No

Skip To: Q29 If Q26 = N/A

Display This Question:

If Q26 = Yes

Q27 What type of feedback was provided for MMG piloting?

- ☐ Structure
- ☐ Vocabulary
- ☐ Content
- ☐ Data Element Prioritization
- ☐ Other (please specify):
-

Display This Question:

If Q26 = Yes

Q28 In your opinion, was your jurisdiction's feedback during MMG piloting incorporated into MMG refinement by CDC?

- ☐ Yes
- ☐ No
- ☐ Unknown
-

Q29 Please provide any suggestions for improvement in methods to provide feedback during MMG development/ piloting?

Q30 Do you think that CDC program (s) are sufficiently involved in the MMG piloting/ implementation/ onboarding processes?

- ☐ Yes
- ☐ No, (please specify when they should be involved)
-

Q31 Do you think CDC programmatic expectations for MMG content and timelines are realistic?

☐ Yes

☐ No, (please explain) _____

Page Break _____

End of Block: MMG Development and Piloting

Start of Block: Standardization Efforts across Message Mapping Guides

S9 The questions in this section address the standardization of message structure, common data elements, ability to leverage work done across guides, and CDC discrepancies on priority of condition-specific data elements.

Q32 In your opinion, how well are common variables or group elements standardized across guides?

	Very poorly	Poorly	Adequately	Well	Very well
Laboratory template	☐	☐	☐	☐	☐
Epidemiology interpretive lab section / repeating block	☐	☐	☐	☐	☐
Travel history	☐	☐	☐	☐	☐
Treatment	☐	☐	☐	☐	☐
Vaccination	☐	☐	☐	☐	☐
Hospitalization information	☐	☐	☐	☐	☐
Symptoms / complications	☐	☐	☐	☐	☐
Other (please specify):	☐	☐	☐	☐	☐

Q33 Describe your jurisdiction's experience/ challenges with repeating blocks and/ or repeating elements?

End of Block: Standardization Efforts across Message Mapping Guides

Start of Block: Onboarding, MVPS

S10 The questions in this section are related to MMG onboarding and utilization of CDC's Message Validation, Processing, and Provisioning System (MVPS).

Q34 If your jurisdiction has implemented > 2 MMGs, does your jurisdiction become faster, more efficient in the implementation / onboarding process?

- ☐ Yes
- ☐ No
- ☐ N/A (jurisdiction implemented < 2 guides)

Display This Question:

If Q34 = Yes

Q35 What are some reasons for becoming more efficient?

- ☐ More familiar with the process
- ☐ Leverage work on previous guides/implementation
- ☐ Other (please specify):

Q36 Is your jurisdiction planning on implementing all requested variables (required, priority and optional) for every MMG implemented?

- ☐ Yes
- ☐ No

Display This Question:

If Q36 = No

Q37 If no, what are some reasons you choose to not include all variables? - **select all that apply.**

- ☐ Costly/Time consuming surveillance system changes
- ☐ Mapping challenges
- ☐ Data collection challenges
- ☐ Perceived usefulness of the data
- ☐ Challenges with standardization in similar fields across MMGs
- ☐ Other (please specify):

Page Break

Q38 What are some suggestions for other uses of MVPS? - **select all that apply.**

- ☐ Dashboards (MVPS) with data elements that could be added to already onboarded MMGs
- ☐ Dashboards (MVPS) to access the data that was sent to CDC, perform analysis, generate reports on standardized datasets
- ☐ Verify publishing and printing
- ☐ API to automate data extraction for monitoring case notifications sent to CDC
- ☐ Reconciliation tables/line listings generated on demand
- ☐ Other (please specify):

Q39 What is a good mechanism for jurisdictions to suggest improvements to MVPS?

Q40 Please identify any challenges experienced with MVPS and NETSS? - **select all that apply.**

☐

Challenges with maintaining two separate surveillance reporting systems, with some diseases going via MVPS in HL7 format and some diseases going via NETSS in the old flat file format.

☐

Challenges because cases for some diseases are being reported in near real-time and can be updated or revoked, but for other diseases they have to wait until year end closing to reconcile.

☐

Challenges with year- end closing due to data flowing through two systems

☐

Other (please specify):

S11 Thank you for your participation in the NMI Evaluation Assessment. If you have any questions, please contact Elandis Miller at emiller@cste.org. When you finish, you will be redirected to the NMI Homepage.

End of Block: Onboarding, MVPS
