The Office of the National Coordinator for Health Information Technology

CDC
Centers for Disease Control and Prevention

Department of Health & Human Services · USA

PRESENTATION 1: THE TRANSITION TO MEANINGFUL USE STAGE 3 FOR IMMUNIZATION INFORMATION SYSTEMS (IIS)

PUBLIC HEALTH - EHR VENDORS COLLABORATION INITIATIVE

NOVEMBER 15, 2016

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PUBLIC HEALTH – EHR VENDORS COLLABORATION INITIATIVE

URL: http://www.cdc.gov/ehrmeaningfuluse/public-health-ehr-vendors-collaboration-initiative.html

http://www.cdc.gov/ehrmeaningfuluse/public-health-ehr-vendors-collaboration- | Public Health – EHR Vendor...

Meaningful Use

- Meaningful Use
- Introduction
- Calendar
- Connect with Others
  - CDC Meaningful Use ListServ
  - Meaningful Use Community
    - **Public Health – EHR Vendors Collaboration Initiative**
    - Joint Public Health Forum & CDC Nationwide
    - Meaningful Use (MU) Public Health (PH) Reporting Requirements Task Force
    - Community of Practice (CoP)
- ELR Task Force
- Jurisdiction Meaningful Use Websites
- S & I Framework
- Reportable Conditions Knowledge Management System
- External Links

CDC > Meaningful Use > Connect with Others > Meaningful Use Community

Public Health – EHR Vendors Collaboration Initiative

In Focus

Special Session # 7-Zika Virus Disease Update

Coming Up! Special Session # 7: Zika Virus Disease Update for Electronic Health Record (EHR) Vendors, Health Information Technology Developers, Public Health, and Clinical Healthcare Partners on Nov 2, 2016 1:00 PM- 2:00 PM EDT

Please pre-register for the webinar by clicking the link below:

https://attendee.gotowebinar.com/register/3504905897385264131

Abstract

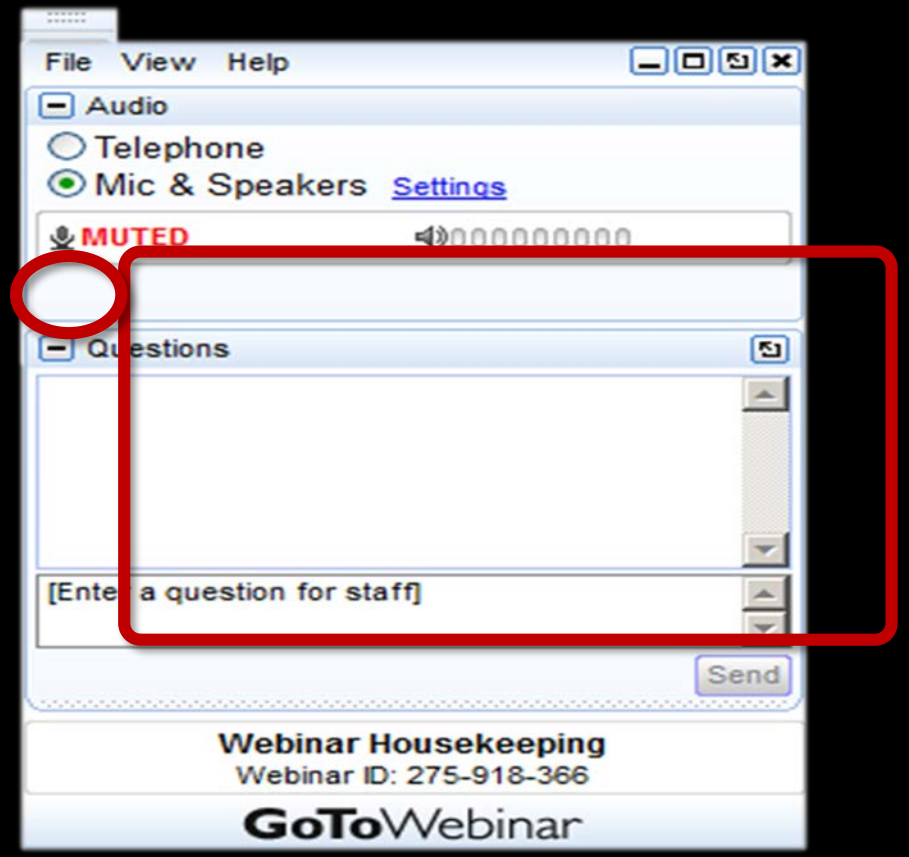
This webinar will be focused on the-recommendations around Ask at Order Entry (AOE)* for pregnancy status in Zika virus (ZIKV) laboratory test orders with the possibility of a broader discussion on the capture of pregnancy status in electronic health records, per the clinical workflow and an update on the algorithm for ZIKV risk assessment in pregnant women, based on the latest Centers for Disease Control and Prevention (CDC) guidelines.

Terms explained-

* Ask at Order Entry (AOE)-Some tests, such as microbiology cultures and those that determine heavy metal ion concentration, require additional

QUESTION AND ANSWER SESSION

HOW TO SUBMIT OR ASK QUESTIONS FOR THE PANEL MEMBERS?



Submit or Ask Questions

Submit your text question and comments using the Question Panel

Please raise your hand to be unmuted for verbal questions.

AIRA
AMERICAN IMMUNIZATION REGISTRY ASSOCIATION
Immunization Information Systems for a New Era

THE TRANSITION TO MEANINGFUL USE STAGE 3 FOR IMMUNIZATION INFORMATION SYSTEMS (IIS)

Mary Beth Kurilo
AIRA Policy and Planning Director
EHR Vendor Collaboration Call
November 15, 2016

OVERVIEW

What does Meaningful Use (MU) Stage 3 mean for Immunization Information Systems (IIS) and Electronic Health Record (EHR) vendors, and the providers who use them?

How are IIS preparing for the transition?

Note: Today's Webinar is part 1 of 2

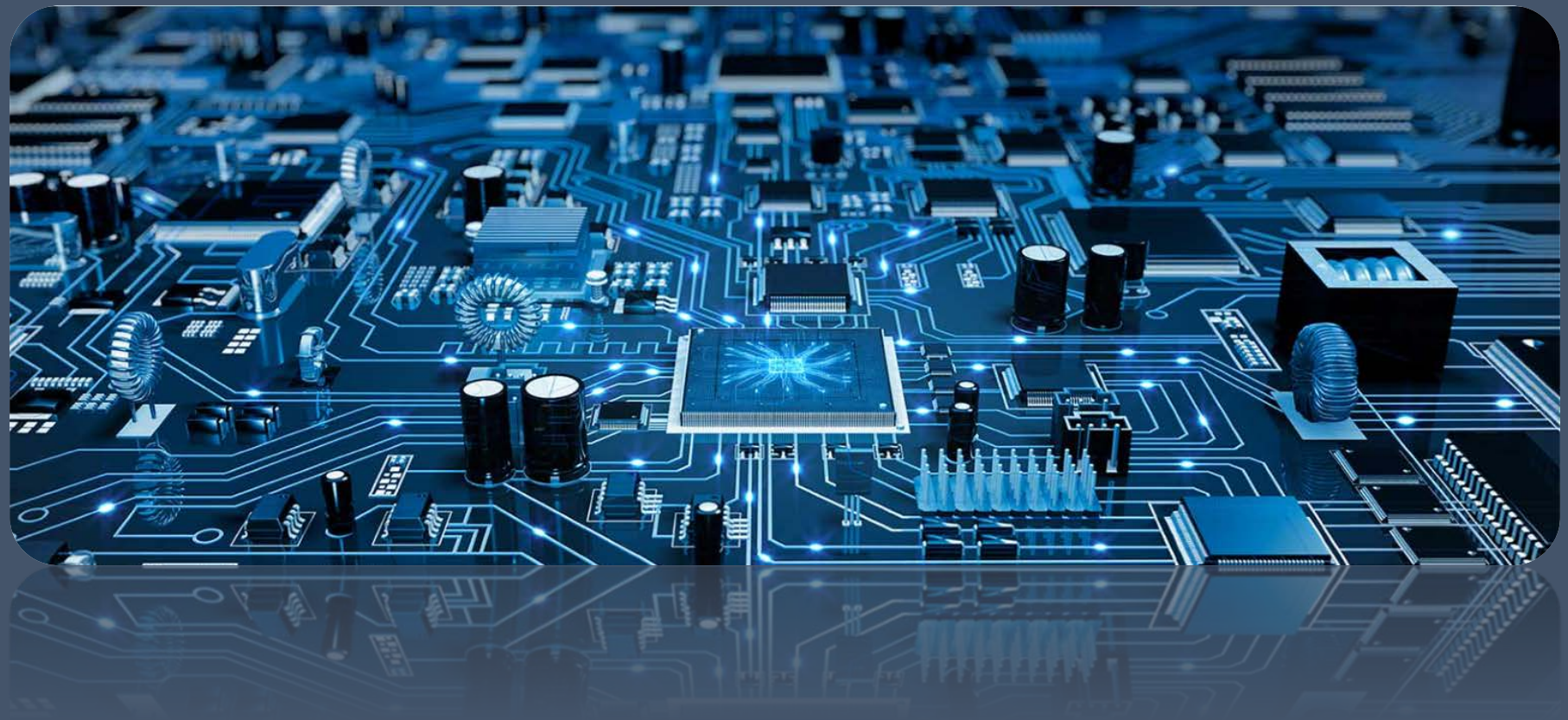
ANTICIPATED SCENARIOS FOR MU3

New Eligible Providers (EPs), Eligible Hospitals (EHs), or Critical Access Hospitals (CAHs) will initiate testing (aka active engagement) to interoperate with an IIS using 2015 Certified EHR Technology (CEHRT)

- This should include registration of intent to submit to/query an IIS

Existing EPs, EHs, or CAHs will enhance their current interfaces to meet 2015 CEHRT

- This will likely take place while IIS are actively rolling out enhancements to meet HL7 2.5.1 Release 1.5 functionality
- It will be important to limit disruption to current interfaces in production



TECHNICAL ASPECTS

NIST 2015 SUBMISSION (VXU) TEST MESSAGES:

EHRs are required to generate 6 VXU message test cases to meet 2015 Certified EHR Technology (CEHRT) criteria. IIS should be prepared to accept messages that resemble these scenarios. They cover:

- Child administration
- Adult administration
- Patient does not consent
- Update to an immunization
- Deletion of an immunization
- Refusal of an immunization

ACCEPT NATIONAL DRUG CODES (NDC) FOR ADMINISTERED VACCINES

Stage 3 requires the use of NDC for administered vaccines

- Historical vaccines continue to use CVX codes
- IIS need to be able to accept and process NDC for administered vaccines
- IIS will likely need to accept and process both
  - Unit of Use (UoU, or vial/syringe)
  - Unit of Sale (UoS, or package/box) NDC codes

ACKNOWLEDGMENT MESSAGES (ACK) CONFORM TO RELEASE 1.5

Conformance: IIS must return conformant acknowledgment messages

Outcome of processing: IIS must ensure the acknowledgment message returned to the EHR is representative of the processing performed by the IIS on the submitted VXU

Return to sender: If an HIE (or some other intermediary) is in between the EHR and the IIS, it should return the IIS ACK to the EHR for parsing/reporting to the end user

NIST 2015 QUERY (QBP) SUPPORTED

EHRs are required to generate 4 Query message test cases. IIS should be prepared to accept messages that resemble these messages. They are all related to Query Profile (Z44) and cover the following scenarios for both Query and Response:

- Query for a child
- Query for an adult
- Query for a patient that does not exist in the IIS
- Query for a patient which matches to multiple patients

RESPONSE MESSAGES, INCLUDING CLINICAL DECISION SUPPORT, CONFORM TO RELEASE 1.5

The Z42 profile is the response which must include the clinical decision support (e.g., forecaster). EHRs are required to display the response from the IIS including the clinical decision support.

- IIS must be returning conformant messages for EHRs to display.
- IIS should ensure that all consolidated data is returned per jurisdictional policy.

LIMIT CONSTRAINTS, ELIMINATE CONFLICTS TO RELEASE 1.5

Constraints – requiring something the National IG does not require – are allowed, but should be limited whenever possible. All constraints should be reviewed to determine if they are truly needed (e.g., required by local law/policy).

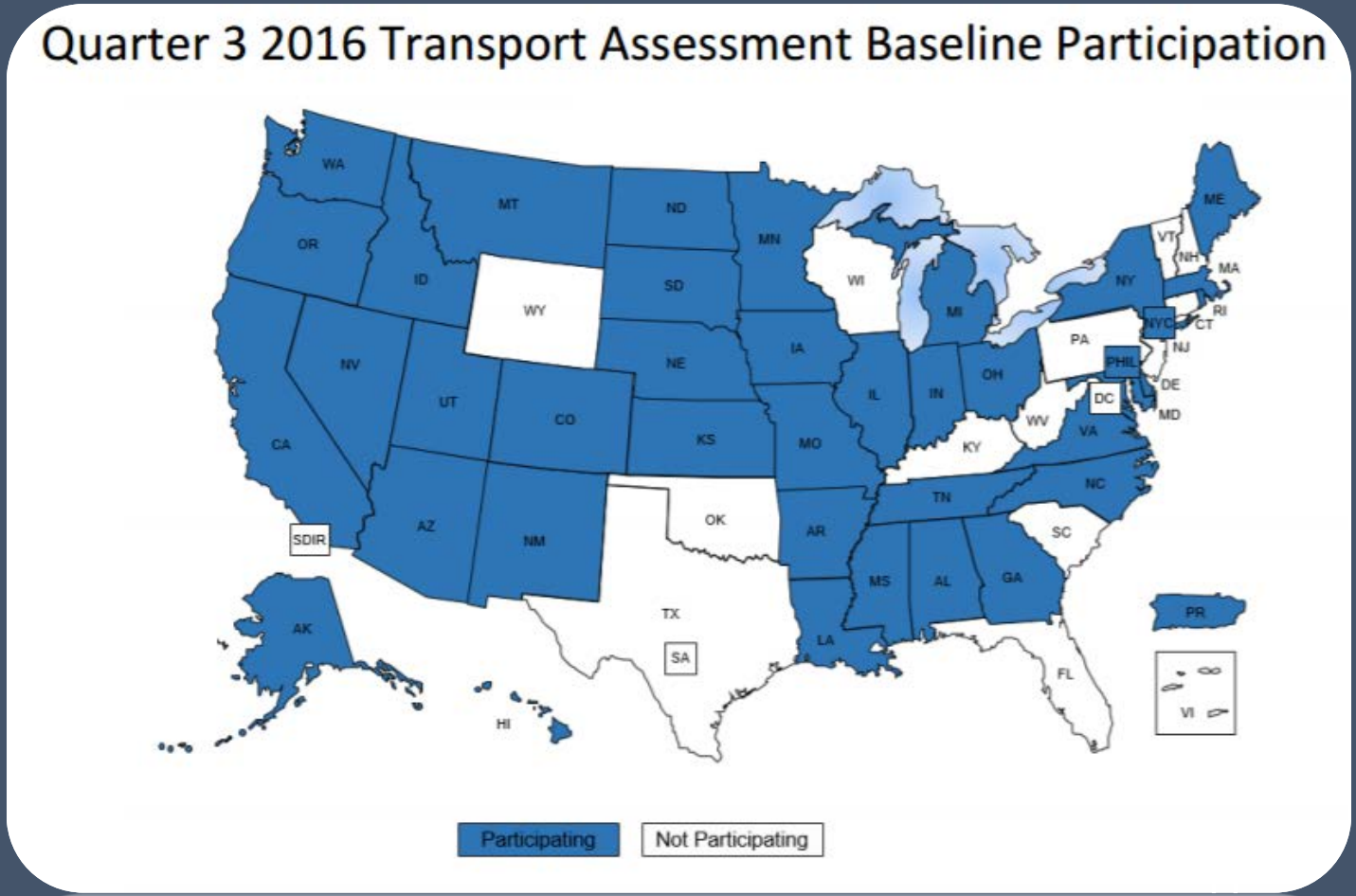
- Example: Requiring address

Conflicts – breaking the rules of the base HL7 standard – are not allowed. The IIS should work to fix these situations. For the most part, these conflicts are historical and simply need to be fixed.

- Example: Not accepting refusals, history of disease

CDC WSDL

While not required for MU3, it is an IIS community-selected standard for transport. It is also being measured as the first phase of IIS Assessment.



OPERATIONAL ASPECTS

DECLARE READINESS

Must be declared publicly, typically on the jurisdiction's website, no later than July 1, 2017 for the January 1, 2018 start of MU3

Since 2017 is an optional year for MU3, it is in the best interest of IIS to declare readiness as soon as possible

The IIS may also choose to voluntarily list their registry on the recently announced CMS Centralized Repository, but this should augment, not replace, the more detailed information posted on your jurisdiction's website

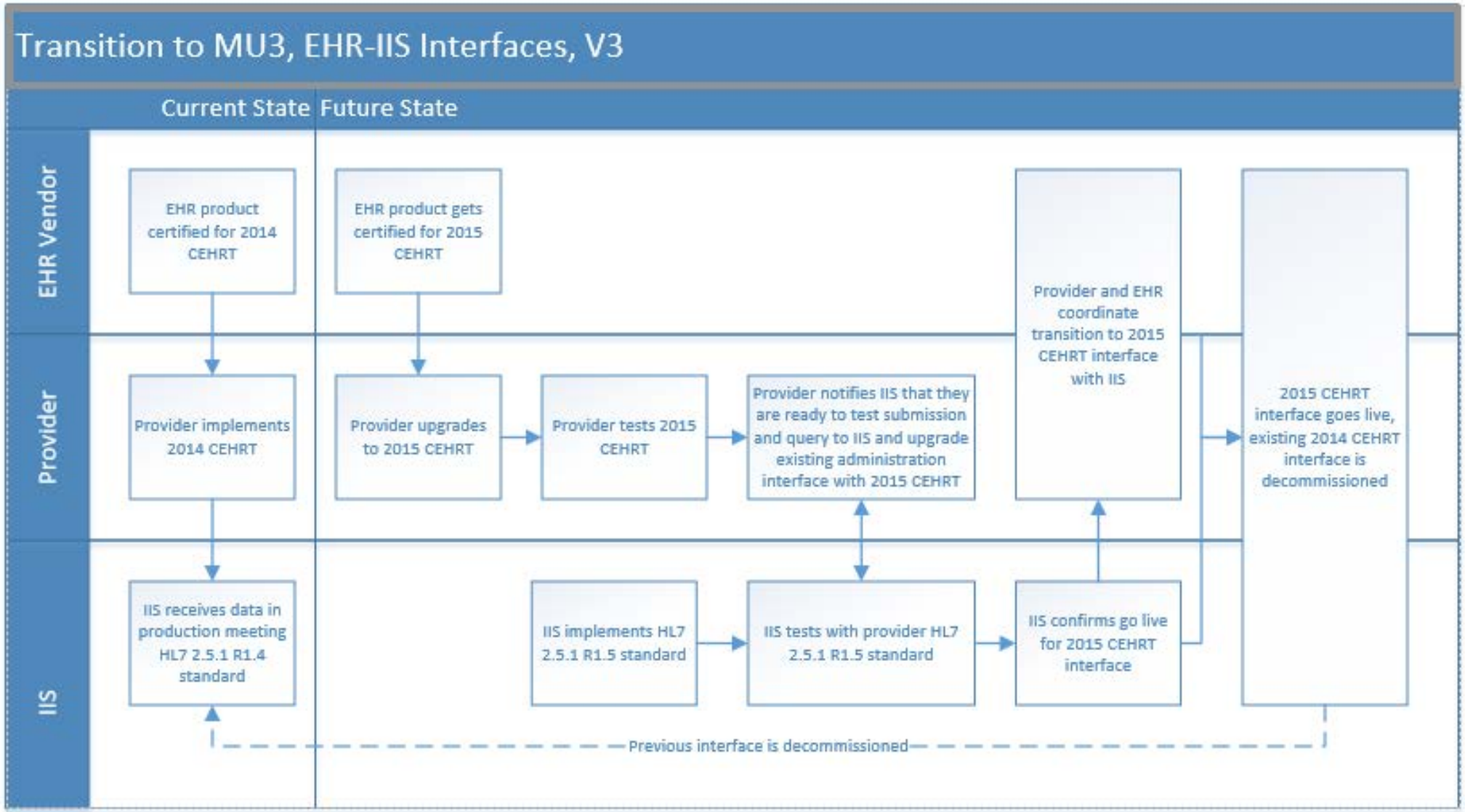
ONBOARDING

Create a procedure for “Re-Onboarding” as needed. Sites are not required by MU3 to re-register; however, IIS may opt to require re-registration to assist in tracking MU3-participating organizations.

PREPARATION FOR AUDITING

Determine what documentation is necessary for IIS to support future CMS audits of EP/EH/CAH participation for MU3, and create a procedure to track efficiently. At a minimum, your site should track:

- A dated confirmation/receipt of intent to register for new registrants
- An EP/EH/CAH's original registration date (noting that they don't need to re-register for MU3)
- The dates the IIS reached out to request action on the part of the EP/EH/CAH, and the dates the EP/EH/CAH responded (or didn't)
- The date (if applicable) that the EP/EH/CAH started actively sending VXUs/QBPs into production



Note: Current state should remain active state until all parties are ready to transition to new interface

MICHIGAN TRANSITION TO SUPPORTING MU3 INTEROPERABILITY

Therese Hoyle
Interoperability Lead
Michigan Care Improvement Registry (MCIR)

CURRENT HL7 INTERFACES INFORMATION

As of October 31, 2016 there are:

- 2,457 approved HL7 VXU interfaces
- 432 approved interfaces for QBP

- 54 Approved Vendor HL7 Interfaces

MILogin

Password Assistance
Technical Assistance
Site Administrator Training

Search ...

Providers

School & Childcare

Public

MU

HL7

Vaccine Information

MILogin - State Employees

The Michigan Care Improvement Registry (MCIR) has the capacity to receive data for Meaningful Use Stages 1, 2 and 3 in accordance to the requirements for both 2014 and 2015 Certified Electronic Health Records Technology (CEHRT) editions. MCIR has been receiving immunization data via HL7 protocol since January 1, 2011. MCIR has been receiving and responding to query for immunization history and forecast since January 1, 2016.

How to Begin Testing for Meaningful Use

- MCIR Provider Checklist for Achieving Meaningful Use
- Michigan Health System Testing Registration (HSTR)

EHR Incentive Program Requirements

- Eligible Professional EHR Incentive Program Objectives and Measures for 2015 Table of Contents
- EHR Incentive Program Requirements

Public Health Meaningful Use Resources

- Additional MU Resources
- CMS/ONC Rules
- HL7 Specification for Vaccine Messages Guide
- Medicaid/Medicare Testing Additional Information
- Michigan Public Health and Meaningful Use Testing Capabilities
- Qualified Sub-State Health Information Exchanges

Exclusion from Testing with the Registry

- MU Exclusion

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JANUARY 2017

Updated MCIR Interface will be available January 1, 2017 to receive HL7 2.5.1 Release 1.5 for:

- VXU (Submission)
- QBP (Query)

MICHIGAN SPECIFIC RULES

MCIR will require NDC and CVX codes for submissions

If a provider administers vaccines they must be submitting VXUs before they can onboard for QBP

MCIR does not have a vendor sandbox for testing. Vendors must connect with a provider to test their HL7 interfaces in Michigan

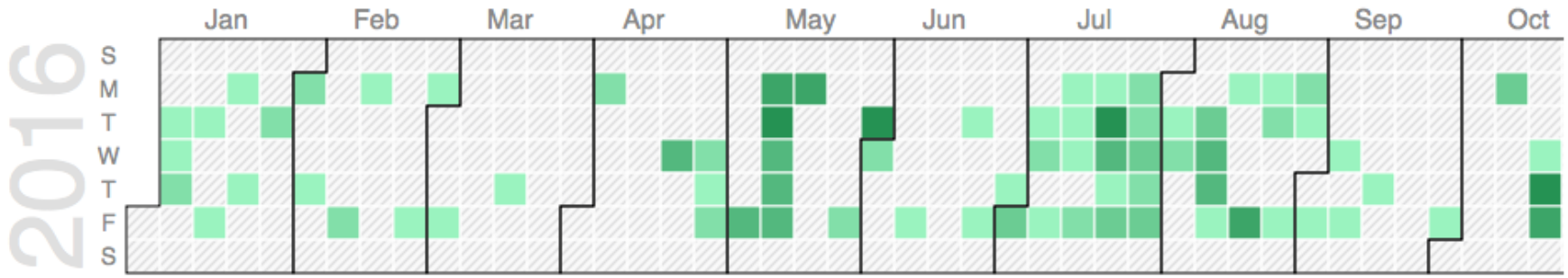
Michigan is an HIE state and all HL7 messages pass through the Health Information Exchange

HL7 IMPLEMENTATION GUIDES

New MCIR HL7 Implementation Guides will be posted the first of January, 2017 on MCIR.org

Providers will have access to an HL7 viewer in MCIR that will display all the HL7 messages the IIS has received and processed

ESSR Statistic: **Immunizations Rejected**



ESSR Statistics

Person

Persons Added/Updated	147
Persons Found/Unmodified	0
Persons Accepted	147
Persons Opted-Out	0
Persons Deceased	0
Multiple Persons found	0
Persons not found for Update	0
Other Persons Errors	0
Persons Rejected	0
Total Persons Processed	147

Responsible Party

Responsible Party Added	147
Responsible Party Updated	0
Responsible Party skipped having Person errors	0
Responsible Party Accepted	147
Responsible Party Rejected	0
Total Responsible Party Processed	147

Immunizations

Immunizations Added	119
Immunizations Deleted	0
Immunizations skipped having Person errors	0
Immunizations Accepted	119
Immunizations Rejected	5
Duplicate Immunizations	23
Total Immunizations Processed	147
Total Records Processed	147

NEW HL7 ACK MESSAGES

Michigan is updating their ACK messages

Developing ACKs according to AIRA/CDC Guidance for HL7 ACK Messages to Support Interoperability

Goal is to implement new ACK messaging by January 2018

ACKNOWLEDGEMENT CODES

Scenario	MSA-1 Value	Sender Expectation
No errors	AA	Message Accepted
Error in a segment	AA	Message Accepted Information returned (NDC code correct but CVX code was wrong)
Application Error	AE	Message was processed and errors are being reported. (no inventory deduction, lot number is not recognized in system)
Application Reject	AR	Message is rejected (example unable to authorize access to MCIR)

NORTH DAKOTA TRANSITION TO SUPPORTING MU3 INTEROPERABILITY

Mary Woinarowicz, MA
North Dakota Immunization Information System (NDIIS) Manager
North Dakota Department of Health

NDIIS INTEROPERABILITY

As of November 2016, the NDIIS is interoperable with 273 individual provider locations, the ND Health Information Network (NDHIN) and the ND Department of Health disease surveillance system (MAVEN)

- 235 providers are connected to the NDIIS via the NDHIN
- 12 providers are submitting real-time, VXU only
- 31 providers (pharmacies) are submitting flat files
- 261 are real-time, fully bi-directional

More than 70% of doses added to the NDIIS come in electronically

24 providers are currently in queue to connect

47 providers currently in different stages of on-boarding and testing

NDIIS TRANSITION

Transition to support HL7 2.5.1 release 1.5

- Work is currently underway and will be complete in January 2017
- Using feedback from AIRA's Aggregate Analysis Reporting Tool (AART) report for guidance on changes
- Will continue to use current CDC-inspired WSDL for HL7 2.5.1 release 1.4 messaging
- Setting up a second instance using the standard CDC WSDL for 2.5.1 release 1.5 messaging

Sunsetting support for HL7 2.3.1

- ND made the decision to discontinue support of 2.3.1 messaging as of December 31, 2017
- Currently have 4 health systems, representing 189 individual provider locations using 2.3.1
- Sent communication to providers in July 2016

NDIIS DECLARATION OF READINESS

The ND Department of Health submitted the Public Health Agency & Clinical Data Registry Centralized Repository Input Forms for the NDIIS, Syndromic Surveillance and Electronic Lab Reporting on September 28, 2016 for inclusion in the CMS Centralized Repository

NDIIS TRANSITION COMMUNICATION

Published a Declaration of Readiness statement on our immunization program web site

Standard response letter to providers wishing to establish a new connection

Drafted letter to send to providers currently in production informing them that the NDIIS can support HL7 2.5.1 release 1.4 and release 1.5 messaging

- Will send once messaging system updates are complete
- Send communication to primary technical contacts and interoperability project sponsors for each connection

TRACKING OF PROVIDER TRANSITIONS

NDIIS team has developed an on-boarding tracking application

- Tracks provider sites from time they are begin the on-boarding process through post-production
- Includes issue-tracking, automated notifications, capturing notes and saving files

Will be able to use the system's current functionality to track testing progress and production status of providers making the transition to using HL7 2.5.1 release 1.5

OREGON TRANSITION TO SUPPORTING MU3 INTEROPERABILITY

Tracy Little
Lead Interoperability and Data Exchange Analyst
Oregon ALERT IIS

ALERT IIS INTEROPERABILITY

1,034 - # of HL7 2.5.1 interfaces

980 - # of real-time interfaces

542 - # of bidirectional interfaces

Interoperability Timeline

- 2011 ALERT IIS declares readiness prior to start of Meaningful Use Stage 1
- 2011 ALERT IIS implements real-time messaging and bidirectional data exchange
- 2012 ALERT IIS supports HL7 2.5.1 messaging
- 2012 ALERT IIS declares readiness for Meaningful Use Stage 2
- *2017 ALERT IIS declares readiness for MU Stage 3*

OPERATIONAL PLANS

Declare readiness by July 1, 2017

Implement a “re-onboarding” plan for providers and EHRs that are partially meeting MU3 now

Host MU3 conference calls for vendors and clinics to answer questions about the testing/onboarding process

Prepare request for CMS 90/10 funding to support MU activities and onboarding

READINESS CHECKLIST

Ready

- ✓ Accept all six VXU message test cases required for NIST 2015 testing
- ✓ Accept all four QBP message test cases required for NIST 2015 testing
- ✓ Utilize CDC WSDL

In Progress

- ✓ Accept National Drug Codes (NDCs) for Administered Vaccines
- ✓ Acknowledgement messages (ACK) conform to release 1.5
- ✓ Response messages (RSP) conform to release 1.5, Z42 profile

CHALLENGES

- IIS can update HL7 2.5.1 message processing to meet release 1.5 requirements; *however, there is no simple way to distinguish if a provider is submitting the updated 2.5.1 format.*
- For MU1 and MU2 we moved senders to CVX codes for administered doses. For MU3 providers will move to NDC codes. *Maintaining an updated NDC code crosswalk will impact workload on IIS and provider practices, and potentially introduce data quality issues.*
- IIS must be proactive in managing the onboarding and testing process with EHR vendors and providers. Having a sustainability plan for interoperability team is important. *IIS onboarding analyst becomes default project manager during onboarding/testing process.*

OPPORTUNITIES FOR COLLABORATION

- ✓Improve process for coordinating with vendors on which practices are ready for onboarding or 'up next'
- ✓Create schedule for testing at the vendor level (i.e., who is ready now, can test early, etc.)
- ✓Partner with other public health programs to enhance MU registration system
- ✓Collaborate with other IIS jurisdictions and AIRA to share lessons learned around testing, onboarding, status/process documentation

RESOURCES

MU3 Readiness Checklist

Aggregate Analysis Reporting Tool (AART)

AIRA Technical Assistance Team: http://www.immregistries.org/resources/technical-assistance

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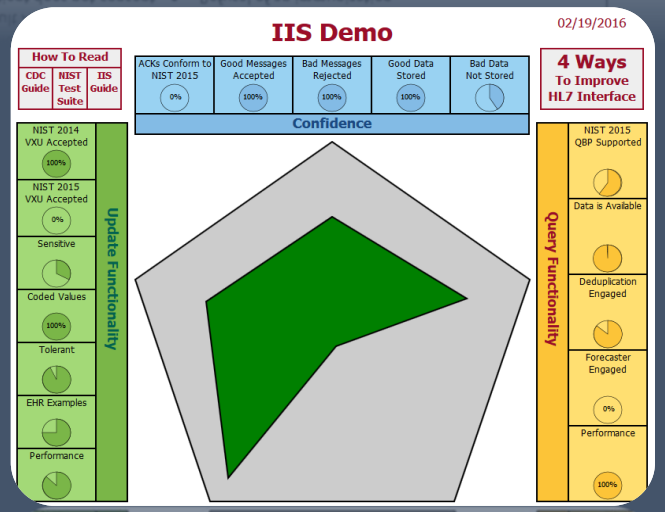
Meaningful Use Stage 3 Readiness Checklist

Checklist Item	Your IIS Status	Work Remaining/Level of Effort/Due Date/Notes
TECHNICAL Checklist		
NIST 2015 Submission (VXU) Test Messages: EHRs are required to generate 6 VXU message test cases to meet 2015 Certified EHR Technology criteria. IIS should be prepared to accept messages that resemble these messages. They cover: • Child administration • Update to an immunization • Adult Administration • Deletion of an immunization • Patient does not consent • Refusal of an immunization		
Accept National Drug Codes (NDC) for Administered Vaccines: Stage 3 requires the use of NDC for administered vaccines. Historical vaccines continue to use CVX codes. IIS need to be able to accept and process NDC for administered vaccines.		



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Request Technical Assistance

Please include technical questions, issues, or assistance that you need. For fastest response from the AIRA team, please be clear and precise.

Name of Submitter *

Organization Name *

Contact Phone Number *

Contact Email *

Issue Description *

DISCUSSION/QUESTIONS

THANK YOU!

PLEASE JOIN US FOR PART TWO OF THIS WEBINAR ON DECEMBER 20, 2016

Further questions? Contact:

Mary Beth Kurilo at mbkurilo@immregistries.org

Therese Hoyle at therese.hoyle@gmail.com

Mary Woinarowicz at mary.woinarowicz@nd.gov

Tracy Little at tracy.c.little@state.or.us

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Visit the AIRA Website at www.immregistries.org for:

MU3 Readiness Checklist

Technical Assistance Requests

AART Tool Videos