EHR MU & PH Data Exchange: Implications & Challenges

Electronic Health Records Meaningful Use & Public Health Virtual Event
December 18, 2012

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Office of the National Coordinator for Health
Agenda

• Overview of Stage 1 MU Public Health Objectives
• Overview of Stage 2 MU Public Health Objectives
• MU Public Health Implications
• MU Public Health Challenges
• MU Public Health Technical Assistance Team
OVERVIEW OF STAGE 1 MU PUBLIC HEALTH OBJECTIVES
Communicate with public health agencies

<table>
<thead>
<tr>
<th>Objective¹</th>
<th>Ambulatory Measure</th>
<th>Hospital Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunization Registries²</td>
<td>≥ 1 test of submission to state immunization registry (unless no registries are capable) with continued submission if successful (y/n)</td>
<td>≥ 1 test of submission to state immunization registry (unless no registries are capable) with continued submission if successful (y/n)</td>
</tr>
<tr>
<td>Reportable Lab Results² (ELR)</td>
<td>N/A</td>
<td>≥ 1 test of submission to public health (unless no ph agency is capable) with continued submission if successful (y/n)</td>
</tr>
<tr>
<td>Syndromic Surveillance²</td>
<td>≥ 1 test of submission to public health (unless no ph agency is capable) with continued submission if successful (y/n)</td>
<td>≥ 1 test of submission to public health (unless no ph agency is capable) with continued submission if successful (y/n)</td>
</tr>
</tbody>
</table>

1. Unless an EP, eligible hospital or CAH has an exception for all of these objectives and measures they must complete at least one in this group as part of their demonstration of a meaningful use to be eligible for incentives.

2. Public health agencies may specify how to test the data submission and to which specific destination

Source: Dr. Paul Kleeberg, Clinical Director, Key Health Alliance
### Standards for Public Health Transactions in Stage 1 Meaningful Use

<table>
<thead>
<tr>
<th>Public Health Domain</th>
<th>Exchange Standards</th>
<th>Vocabulary Standards</th>
</tr>
</thead>
</table>
| Immunization Registries (IIS) | **Standard - HL7 2.3.1**  
|                       | **Standard - HL7 2.5.1**  
  - HL7 2.5.1 Implementation Guide for Immunization Messaging Release 1.0 | |
| Reportable Lab Results (ELR) | **Standard - HL7 2.5.1**  
  - HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health, Release 1 | Logical Observation Identifiers Names and Codes (LOINC®) version 2.27 |
| Syndromic Surveillance | **Standard - HL7 2.3.1**  
  **Standard - HL7 2.5.1**  
  *Guide available, not required for Stage 1: Implementation Guide for Syndromic Surveillance: Emergency Department and Urgent Care Data Release 1.0* | |

*Note: Ambulatory / In-patient Guide under development*
## Communicate with public health agencies

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<th>Hospital Measure</th>
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<tbody>
<tr>
<td>Immunization Registries</td>
<td>Ongoing Submission to Public Health Authority (Core)</td>
<td>Ongoing Submission to Public Health Authority (Core)</td>
</tr>
<tr>
<td>Reportable Lab Results (ELR)</td>
<td>N/A</td>
<td>Ongoing Submission to Public Health Authority (Core)</td>
</tr>
<tr>
<td>Syndromic Surveillance</td>
<td>Ongoing Submission to Public Health Authority (Menu)</td>
<td>Ongoing Submission to Public Health Authority (Core)</td>
</tr>
<tr>
<td>Cancer Registries</td>
<td>Ongoing Submission to Public Health Authority (Menu)</td>
<td>N/A</td>
</tr>
<tr>
<td>Specialized Registry</td>
<td>Ongoing Submission to Public Health Authority or National Specialty Society (Menu)</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### Standards for Public Health Transactions in Stage 2 Meaningful Use

<table>
<thead>
<tr>
<th>Public Health Domain</th>
<th>Exchange Standards</th>
<th>Vocabulary Standards</th>
</tr>
</thead>
</table>
| Immunization Registries (IIS) | **Standard - HL7 2.5.1**  
  • HL7 2.5.1 Implementation Guide for Immunization Messaging Release 1.4 - Approved 7/15 | HL7 Standard Code Set CVX -- Vaccines Administered, updates through July 11, 2012 |
| Reportable Lab Results (ELR)  | **Standard - HL7 2.5.1**  
  • HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health, Release 1 with Errata and Clarifications - Approved 7/15 | SNOMED-CT and Logical Observation Identifiers Names and Codes (LOINC®) Database version 2.40 |
| Syndromic Surveillance       | **Standard - HL7 2.5.1**  
  • PHIN Messaging Guide for Syndromic Surveillance: Emergency Department and Urgent Care Release 1.1 August 2012 (Required for Inpatient and optional for ambulatory) - Approved 7/15  
  *Note: Ambulatory / In-patient Guide under development* |                                                                                       |
| Cancer Registries            | **CDA**  
| Specialized Registries       |                                                                                     |                                                                                       |
Eligible hospitals must certify all modules, since EHR is not performing all MU functions.

Scenario 1: Complete EHR
- HIE (Routing to PH, no transformation of message format)
- Directly to Public Health
- Message Receiver
- Data Stores and Applications

Scenario 2: EHR and/or LIMS
- HIE (Routing to PH, no transformation of message format)
- Directly to Public Health
- Message Receiver
- Data Stores and Applications

Scenario 3: EHR and/or LIMS
- HIE (Routing to PH, with transformation of message format)
- Directly to Public Health
- Message Receiver
- Data Stores and Applications
MU PUBLIC HEALTH IMPLICATIONS
MU Public Health Implications

- Meaningful use activities have and will improve the collaboration between clinical and public health care at local and state levels through:
  - Implementation of electronic reporting to PH
    - Stage 1: immunization, Laboratory, and Syndromic Surveillance
    - Stage 2: Cancer and Specialized Registries
  - Improvement of a patient-centric preventive care (preventive care-oriented quality care measures)
MU Public Health Implications

• Meaningful Use rules bring attention to the readiness of State Public Health agencies for a “bi-directional communication” with clinical care providers ..... moving forward

• Meaningful use has fostered the identification and development of standardized data elements and messaging implementation guides (data exchange) for MU Public Health measures
MU PUBLIC HEALTH CHALLENGES
MU Public Health Challenges

• Preparation of PH systems to accept data using the MU exchange and vocabulary standards
  – Some PH objectives include multiple versions of the standard
• Leveraging state HIEs to support the MU PH reporting
• PH domains included in the MU regulations have varying maturity levels for data exchange with clinical care
• Lack of transport standards in the MU regulations for PH reporting
• No implementation guide specified in MU Stage 1 for syndromic surveillance
MU Public Health Challenges

- Coordination of MU activities across domains within public health agencies
- Collaboration with State Medicaid Offices to support the MU Medicaid program
- Building the capacity and processes to support the volume of MU testing and ongoing submission of data from providers
- Testing and onboarding of providers based on the public health agencies’ priorities
• Local implementation guides include additional required data elements to meeting local reporting regulations

• In MU Stage 1, a failed test with PH enables providers to meeting the PH measure
  – When PH indicates the provider failed the test, the provider has met the measure for that year
Common Issues Encountered in MU Stage 1

• MU Policy Issues

  – Uncertainty if PH has to provide documentation to EPs/EHs confirming testing and/or to confirm exclusion when the PHA doesn’t have the capacity to support a PH objective
Common Issues Encountered in MU Stage 1

• Local PH Reporting Requirements
  
  – Certified EHR technology not creating messages that meet local PH reporting requirements

  • CEHRT creating messages that comply with the exchange and vocabulary standards but not meeting the PH need (e.g. sending “Unknown” for data elements)
Common Issues Encountered in MU Stage 1

• Testing & Onboarding
  – Certified EHR technology not creating messages that meet local PH reporting requirements
  • CEHRT creating messages that comply with the exchange and vocabulary standards but not meeting the PH need (e.g. sending “Unknown” for data elements)
Common Issues Encountered in MU Stage 1

- **Testing & Onboarding**
  - Providers testing successfully with PH but not moving into ongoing submission
  - Public health agencies not testing with any providers due to capacity constraints rather than supporting testing for priority providers
  - Providers sending PH messages that are not compliant with the exchange standards
Common Issues Encountered in MU Stage 1

• Modular Certification
  – PH or HIEs providing technology that transforms data from a provider to meet the MU standards required for the PH objectives
Common Issues Encountered in MU Stage 1

• Transport & Interface
  – Providers not able to test with PH due to the transport methods supported by the PHA
  – Providers may face significant costs to interface with PH for MU data exchange
MU PUBLIC HEALTH TECHNICAL ASSISTANCE – COLLABORATIVE TEAM
Team’s Purpose and Goals

Assist in resolving issues and problems preventing successful achievement of the Meaningful Use public health objectives

- Provide focused policy and technical expertise
- Identify successful methods used to resolve similar issues
- Document and learn from the real problems occurring in the field
Meaningful Use Public Health Technical Assistance Team

Team Structure

MU Public Health Technical Assistance Team

- Responsible Manager
- Team Lead
- Project Manager

Primary Team
- CDC IIS
- CDC LSPPPO (ELR) / ELR TA (APHL)
- SureScripts / CAP / AHA
- BioSense / NEDSS
- CDC NCCDPHP
- CDC PHIN TA

Support Resources
- OSELS
- CMS
- ONC
- NACCHO/ASTHO

12/19/2012
Office of the National Coordinator for Health Information Technology
How to request assistance?

To request technical assistance from the MU PH TA team, send an email to the CDC Meaningful Use Mailbox (meaningfuluse@cdc.gov) with “Request for Technical Assistance” in the Subject line.

Please include a detailed description of the issue or problem and your contact information.