Medicaid and Public Health Community of Practice

Jointly supported by the Centers for Disease Control and Prevention and the Office of the National Coordinator for Health IT

September 23, 2016
Reminders

• The slides will be available after the webinar.
• Please submit questions during the presentation via the chat function.
• In addition, at the end of the presentation, we will provide an opportunity for participants to raise their hands to ask questions during the Q&A.
CoP Meaningful Use Website

• http://www.cdc.gov/ehrmeaningfuluse/cop.html
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.
Agenda

• Introductions/Announcements

• Leveraging 90/10 Medicaid Funding: New York Citywide Immunization Registry
  » Angel Aponte, Division of Disease Control, New York City Department of Health and Mental Hygiene
  » Brad Duerr, NYSTEC
  » Jim Kirkwood, Office of Quality and Patient Safety, New York State Department of Health
  » Amy Metroka, Citywide Immunization Registry

• Discussion/Q&A

• Proposed Next Steps
Medicaid 90/10 Funding of the New York City Citywide Immunization Registry

Angel Aponte, Amy Metroka – New York City Department of Health and Mental Hygiene
Jim Kirkwood – New York State Department of Health
Brad Duerr – NYSTEC
September 23, 2016
Outline

APPLICATION: State /City - Lead by Jim Kirkwood - Questions at end

AWARD: To New York City’s Immunization Information System, the Citywide Immunization Registry (CIR)

ACCOMPLISHMENTS:
• Onboarding by NYSTEC Staff – Brad Duerr – Questions at end
• Infrastructure Improvements

NEXT STEPS: Apply for 2018 Funding
Application

• Provider Onboarding
  • Requested full-time staff to assist providers to connect to the CIR for Meaningful Use (MU)

• Technology Infrastructure Improvements
  • Needed increased capacity to support large number of providers requesting to communicate with the CIR, including bi-directional data exchange
  • Requested new server and network hardware to support MU
  • Requested funds for software improvements to align with HL7 standards
Award

• Onboarding Staff from NYSTEC – Brad to answer questions at end
  • 2 full-time positions initially awarded
  • 3 full-time positions added due to increased demand
  • Worked with NYSTEC to recruit, hire, and train staff
  • Staff started December 2014 and sit side-by-side with CIR staff

• Technology Infrastructure Improvements
  • $660,000 for new servers and network hardware
  • $165,000 for HL7 software improvements
  • Challenges in funding process – NYS able to overcome and set up contract with nonprofit agency for access to funds in 2016
Accomplishments:
NYSTEC Onboarding Staff
Provider Onboarding Process

**TEST ENVIRONMENT**
- Provider/EHR contacts CIR Interop Team
- Provider/EHR connects to Web service
- Provider/EHR submits month of data
- Facilitates connection
- Conduct Quality Assurance

**PRODUCTION ENVIRONMENT**
- Provider/EHR connects to Web service
- Ongoing data submission
- Conduct Quality Assurance

CIR Interoperability Team
NYSTEC’s Value for NYC CIR Data Capture

- Help standardize onboarding process
  - Standardized communications (e.g., kickoff calls, questionnaires about technical specifications)
- Conduct QA during onboarding
  - Perform QA in test and production environments for immunization reporting and querying
  - Require EHR to demonstrate bidirectional interface before implementation
  - Create QA tools/reports
- Other onboarding related activities
  - Test enhancements to HL7 Web service
  - Identify gaps between local HL7 Web service implementation guide and current CDC guide
NYSTEC’s Value for MU Process

- Track MU statuses and communicate status to providers with standardized communications
- Fulfill requests for audits from the Office of Medicaid Inspector General (~195 audits to date)
- Advise on MU policy questions
Provider Sites Connected to CIR’s HL7 Web Service by Interface Type (2011-2016)

* July and August only
CIR reporting % by method

Percent of Immunizations Reported

<table>
<thead>
<tr>
<th>Year</th>
<th>Online Registry</th>
<th>Batch</th>
<th>WebService</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>49%</td>
<td>9%</td>
<td>42%</td>
</tr>
<tr>
<td>2012</td>
<td>43%</td>
<td>24%</td>
<td>33%</td>
</tr>
<tr>
<td>2013</td>
<td>46%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>2014</td>
<td>28%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>2015</td>
<td>20%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>2016 as of August 26</td>
<td>71%</td>
<td>7%</td>
<td>22%</td>
</tr>
</tbody>
</table>

The data shows the percentage of immunizations reported using Online Registry, Batch, and WebService methods for each year from 2011 to 2016 as of August 26.
Improvement in CIR Data Completeness/Timeliness
New York City, 2014

<table>
<thead>
<tr>
<th></th>
<th>HL7 Web Service</th>
<th>Manual Entry</th>
<th>Non-standard flat file</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Completeness</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imms reported with Lot #</td>
<td>98%</td>
<td>50%</td>
<td>66%</td>
</tr>
<tr>
<td>Imms reported with Manuf.</td>
<td>93%</td>
<td>48%</td>
<td>47%</td>
</tr>
<tr>
<td>Imms reported with VFC elig.</td>
<td>95%</td>
<td>97%</td>
<td>87%</td>
</tr>
<tr>
<td><strong>Timeliness</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imms Reported in &lt; 30 days</td>
<td>97%</td>
<td>93%</td>
<td>93%</td>
</tr>
<tr>
<td>Imms Reported in &lt; 1 day</td>
<td>78%</td>
<td>54%</td>
<td>18%</td>
</tr>
</tbody>
</table>
Accomplishments: CIR Infrastructure Improvements
EHR to CIR message and interface updates

• Improve CIR alignment with CDC HL7 Implementation Guide for Immunization Messaging, Addendum, and other MU requirements

• Immunization reporting (VXU) messages
  • National standard message acknowledgements
  • Support National Drug Code (NDC) number and translate to CVX code
  • Changes to required/optional data elements and standard error messages
  • History of disease as evidence of immunity (Varicella)
  • Serological evidence of immunity

• Immunization query (QBP) messages
  • Separation of immunization registry functionality
  • Addition of 6 query profiles for immunization history, clinical decision support for the vaccination schedule, and forecast for future shots
NYC CIR Server and Network Infrastructure Improvements

- New equipment used to keep up with increased MU demand:
  - Database servers
  - Application servers
  - Web servers
  - Network switches and firewalls
  - Virtual Private Network gateway
  - Increased provider onboarding capacity
- Store and back up full CIR audit trail of HL7 messages for MU
- Less than 2 second response time for EHR requests
Number of HL7 Web Service Reporting Messages CIR Data Exchange Partners
January, 2011 to September 22, 2016

Number of HL7 VXU messages

Month

Number of HL7 VXU messages

0 100,000 200,000 300,000 400,000 500,000 600,000 700,000
Next Steps: Apply for 90/10 Funding for MU3
MU3 Needs for Immunization Registry

• Continue to increase software and hardware capacity to meet EHR demand for immunization record query and clinical decision support
• Add Vaccine Adverse Event Reporting
• Continue to improve alignment with national HL7 message standards assessment
• Pilot Structured Data Capture for School Health, Child Care, Camp physical forms from EHRs
• NYSTEC partner performs onboarding
MU3 Needs for Public Health Case Reporting

- Implement national standard (HL7 CDA R2) for case reporting messages and Web service interface for message delivery
- Perform proof of concept pilot(s) in 2017
- Prepare NYC case reporting software and hardware infrastructure for 3 reporting methods
  - EHRs
  - HIE/RHIO on behalf of provider/hospital
  - Public Health Community Platform on behalf of provider/hospital
- NYSTEC partner performs onboarding
Questions

• Jim Kirkwood – New York State Department of Health
• Brad Duerr – NYSTEC
• Amy Metroka – CIR, New York City Department of Health and Mental Hygiene
• Angel Aponte – Division of Disease Control, New York City Department of Health and Mental Hygiene
Next Steps/Homework

- Next Call: October 7, 2016 2-3PM EST. Topic to be determined.

- Invitations from Basecamp—Please start discussions and post resources. All slides will be posted here as well as CDC’s Meaningful use website (https://www.cdc.gov/ehrmeaningfuluse/)

- Send topics/ideas/questions for future CoP meetings to meaningfuluse@cdc.gov or post them to Basecamp