Meaningful Use: The Minnesota Experience of Meeting the Challenge

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Outline

- MIIC Overview
- Approach to Meaningful Use
- Progress to Date
- Opportunities
- Challenges
- Next Steps
MIIC Overview
MIIC: Celebrating a Decade of Success

- MIIC in its 10\textsuperscript{th} year

- ~54 million immunizations for 6.2 million clients across the lifespan

- 92\% of records contain at least one immunization and 73\% contain at least two shots

- There are 3,585 organizations using MIIC

- Over 9,000 active users
3,585 active organizations as of July 2012
MIIC: Trends in Reporting

Goal is to move more providers to real time based reporting using standards
Approach to Meaningful Use
MIIC: Facing Meaningful Use

• Exciting opportunity for MIIC to move providers toward HL7 standard and draw attention to the importance of immunization reporting

• Anxiety due to unknown increases in volume and demand for technical assistance

• Due to multiple entities involved in a provider’s switch to standards (HL7) and the varied transport methods, there needed to be increased coordination/communication

• MIIC’s response had to be multi-faceted, addressing many aspects of communication, outreach, technical assistance and resources
MIIC: Meaningful Use Approach

• **Communications**
  - New materials developed and existing ones updated
  - Added MU specific page to MDH web site
  - Created a user-friendly, condensed HL7 specifications document which has been well received by provider IT staff and vendors
  - Updates during staff meetings, sharing with MIIC Regional Coordinators & others
  - Process documents and tracking sheets for meaningful use testing
  - Got Your Shots? Newsletter, GovDelivery for technical updates

• **Collaboration**
  - Participation in various conference calls and national meetings to share stories and learn from others
  - Work with various stakeholders and providers
  - Sharing experiences with other IIS across states
Condensed Specifications document

MIIC HL7 2.3.1 and HL7 2.4 Specifications

Submitting VXU Messages

For Meeting Meaningful Use Stage 1 Reporting to Immunization Information Systems

INTRODUCTION .......................................................... 2

PURPOSE ................................................................. 2

2.3.1 AND 2.4 SPECIFICATIONS ................................ 2

REFERENCE AND CODE TABLES ............................... 2

DETAILED SEGMENT LISTINGS ..................................... 3

MSH – MESSAGE HEADER .......................................... 3

PID – PATIENT IDENTIFICATION ................................ 4

PD1 – ADDITIONAL PATIENT DEMOGRAPHICS ............. 6

NK1 – NEXT OF KIN/ASSOCIATED PARTIES ................. 7

PV1 – PATIENT VISIT INFORMATION ......................... 9

ORX – OBSERVATION/RESULT ................................. 11

Took existing guide of 38 pages down to 13 pages.
**Brief segment descriptions, highlighting required fields**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
<th>Required</th>
<th>Value/Comment</th>
<th>Code Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Set ID – PID</td>
<td></td>
<td>MIIC disregards</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Patient ID</td>
<td></td>
<td>MIIC disregards</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Patient identifier list</td>
<td>Y</td>
<td>Medical record; stored as chart number in MIIC. (ID^~~~HR^~~~)</td>
<td>User-Defined 0203</td>
</tr>
<tr>
<td>4</td>
<td>Alternate patient ID – PID</td>
<td></td>
<td>MIIC disregards</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Patient name</td>
<td>Y</td>
<td>All three elements are required. MIIC does not accept placeholder names such as “Baby” and “Baby Boy.” (Last^First^Middle^Suffix^~~~)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Mother’s maiden name</td>
<td>Y</td>
<td>This is used in client de-duplication. (Mother’s maiden last^Mother’s maiden first^~~~)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Date of birth</td>
<td>Y</td>
<td>Client’s birth date (YYYYMMDD)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Gender</td>
<td>Y</td>
<td>Client’s gender (M/F/O/I)</td>
<td>User-Defined 0001</td>
</tr>
<tr>
<td>9</td>
<td>Patient alias</td>
<td></td>
<td>MIIC disregards</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Race</td>
<td>Y</td>
<td>Client’s race.</td>
<td>User-Defined 0005</td>
</tr>
<tr>
<td>11</td>
<td>Patient Address</td>
<td>Y</td>
<td>Client’s address; incoming address is assumed as the patient’s primary address. (Street_address^other^city^state^zip^~~~)</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>County code</td>
<td></td>
<td>Client’s county of residence. (E.g., 'MN019')</td>
<td>User-Defined 0289</td>
</tr>
<tr>
<td>13</td>
<td>Phone number (home)</td>
<td></td>
<td>Client’s home phone number (NNN)-NNN-NNNN^~~~)</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Phone number –business</td>
<td></td>
<td>MIIC disregards</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Primary language</td>
<td></td>
<td>MIIC disregards</td>
<td></td>
</tr>
</tbody>
</table>
MIIC: Meaningful Use Docs on the Web

Resources

- MIIC and Meaningful Use Fact Sheet
  http://www.health.state.mn.us/divs/idepc/immunize/registry/hp/mu.html

- Public Health Reporting in Minnesota (in collaboration with MDH Office of Health IT)
  http://www.health.state.mn.us/e-health/phreportmu.pdf

- Transport Options for Submitting HL7 Data to MIIC
  http://www.health.state.mn.us/divs/idepc/immunize/registry/hp/datasub.html

- Specifications for Submitting HL7 Messages to Meet Meaningful Use Requirements
  http://www.health.state.mn.us/divs/idepc/immunize/registry/hp/hl7specs.pdf

- Documents to be updated as needed to keep information current
Progress to Date
MIIC: Supporting Meaningful Use

• Assisted several organizations in the move toward standards (HL7 & CVX):
  • 255 in production
  • 384 in process

• Recipient of 2010 EHR-IIS Interoperability grant from CDC
  • Upgrade to HL 7 2.5.1
  • Update to vaccine forecaster
  • Pilot testing of recommended transport protocols (SOAP/web services)
HL7 Submitters Prior to 2011
Parent organization is a vendor reporting on behalf of multiple clinics which in turn have child relationships with other clinics. The children are also directly connected to vendor for reporting purposes.
Opportunities
MIIC: Building on the Meaningful Use Momentum

• High levels of EHR adoption in Minnesota

• Evolution of reporting structure with central IT support and many sites reporting from one point enhances efficiency

• Vendor based support/hosting making its way

• Unique aspects in Minnesota which can be supportive
  • Dominance of integrated delivery network in health care delivery and so many sites in single EHR platform
  • Business affiliate agreements amongst select sites which allows a clinic to be on the EHR platform of the affiliate allowing for electronic reporting, IT support etc
Adoption of EHRs in MN: Ambulatory Clinics

- 20% increase in the number of ambulatory clinics with EHRs installed and in use in all areas of the clinics from 2010 to 2011
- 11% decrease in the number of ambulatory clinics without an EHR from 2010 to 2011

Source: Minnesota Department of Health, Office of Health Information Technology, MN HIT Ambulatory Clinic Survey (2010 & 2011)
2010 Response Rate: 87% (1121/1285) & 2011 Response Rate: 92% (1246/1348)
Ninety-three percent of hospitals report having an EHR system.
Challenges
Challenges/Emerging Issues

**Staffing**
- Work load
- Competing priorities
- Time intensive work to transition to HL7 (several weeks to months)

**Data quality issues**
- Wrong codes being sent due to miscoding/mis-mapping at EHR level
- Central reporting structure and hence more layers to get to the source of data to fix systematic errors

**Reporting structure/support**
- Vendors coming into picture with varied tiers of support based on contracts/business agreements
- Parent-child-vendor relationships becoming trickier!
MIIC & Meaningful Use: Challenges/Emerging Issues

Technology
• Transport – a big black hole!
  • Which transport method would be adopted the most is yet to be seen and hence quandary of efficient use of time and resources
• New technology – web services, document-based reporting

Policy
• Implications around requirements related to final rules for Stage 2 MU
• Burden of attestation on PHA
Next Steps: Stage 2
Ramifications of Stage 2 Meaningful Use Rules

- Acknowledge the efforts of ONC and CMS to solicit hear stakeholder input and address concerns
  - Our voices were heard!

- Positives about Stage 2 rules:
  - Move to “core”
  - HL7 2.5.1 for EHR certification
  - Grandfathering of existing 2.3.1 ongoing submissions
  - Clarification on definition of “ongoing submissions” and timeline
  - PHA determines transport of submissions
  - Flexibility with attestation “letter” or other written correspondence
Ramifications of Affirmation/Readiness

• Rule reads, “…any written communication (which may be in electronic format) from the PHA…”
  • Page 208 of CMS rule

• What burden will be placed on public health to track letters/confirmations of attestation?

• Central repository where PHA can indicate their readiness
  • PHA will need to respond to inquiries about readiness
  • EP and EH could claim exclusion of PHA not ready
Ramifications of Ongoing Submission

• Ongoing submission: must include actual patient data

• Failure to participate in on-boarding process (two written attempts made by PHA)

• A provider who is submitting any reportable data during their normal course of their operations is engaged in ongoing submission.
MIIC: Thoughts/Next Steps

Important more than ever to stay connected with:

- CDC, IIS peers, AIRA

- State and national e-health initiatives

- Tuned into policy items which impact IIS (HIE, consent models, parental access)

- NEED for collaboration/sharing lessons learned
Questions?

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