Consumer Engagement for Immunization

Information Systems

Joint Public Health Forum & CDC Nationwide

Webinar

January 19, 2017
Joint Public Health Forum & CDC Nationwide


Community Profile

The Office of the National Coordinator for Health IT (ONC) and the Centers for Disease Control & Prevention (CDC) jointly sponsor this initiative, which features monthly webinars to foster collaboration amongst the public health jurisdictions across the nation, in response to the widespread adoption of electronic health records (EHRs) for Meaningful Use.

The objectives for this initiative include:

- Identify common questions and concerns around meaningful use
- Provide updates on federal partner activities in preparing for meaningful use
- Allow public health jurisdictions to share useful practices and current progress
- Identify technical assistance needs and priorities

Note: Webinar pre-registration is required and the instructions to register are provided in the Monthly Webinar Registration section below.

Please send in your feedback, questions, and/or suggestions for these Joint Public Health Forum & CDC Nationwide Webinars to the Meaningful Use Mailbox (meaningfuluse@cdc.gov).

Meeting Schedule and Webinar Information

Meeting Schedule:
Submit or Ask Questions

• Submit your text question and comments using the Question Panel

• Please raise your hand to be unmuted for verbal questions.
Consumer Engagement for Immunization Information Systems

January 19, 2017

James Daniel | ONC
Kelly Carulli | Audacious Inquiry
Shannon Stokley | CDC NCIRD
Lonnie Peterson | Washington State Department of Health
Introduction

Kelly Carulli, *Health IT Policy Manager, Audacious Inquiry*

- Presentation Overview

Shannon Stokley, *Immunization Services Division, CDC*

- Evaluation of MyIR Implementation

Lonnie Peterson, *Child Profile Health Promotion Supervisor, Washington DOH*

- Washington State MyIR
What is an Immunization Information System?

- **Immunization information systems** (IIS) are confidential, population-based, computerized databases that record all immunization doses administered by participating providers to persons residing within a given state or area.

- Consumer-controlled access to immunization records fosters better immunized families and reduces immunization record-related entry barriers to schools and child care.

- Typically, consumer’s have to visit their healthcare provider or contact state health department staff members to gain access to their immunization records.
Consumer Engagement for IIS Project

- **Goal:** Increase consumer access to online immunization records and forecasts.

- Collaborative project between ONC, CDC, Audacious Inquiry (Ai), and Scientific Technologies Corporation (STC).
Project Implementation

• **Pilot STC Product “MyIR”** (My Immunization Record), an online portal that provides consumer access to immunization records after they complete a registration and authentication process.

• **State Immunization Programs (AK*, AZ, LA, WA, WV)**
  • Recruit and train healthcare providers
  • Promote MyIR to public

• **Healthcare Providers**
  • Promote MyIR to patients
  • Authenticate and register patients

• **Consumers**
  • Register and use MyIR
Project Activities

- Connect to IIS in each pilot state (2013).
- Engage healthcare providers for registration.
- Promote MyIR through various marketing techniques to providers and consumers.
- Evaluate Project Activities.
• **Consumer/Provider-Initiated**

1. Consumer/provider registers online at myir.net

2. Consumer visits healthcare provider for in-person authentication and approval.

3. Healthcare provider identity-proofs consumer and provides access code to consumer.

4. Consumer enters access code to complete the authentication process and obtain access to immunization record.
Registration Challenges

- In the past, consumers had to visit their provider to complete the identity-proofing process to gain anytime anywhere access to immunization records.

- This proved to be a barrier in completing the registration process. Consumer’s registered online, but few visited provider/entered access code to complete the authentication process.
Evaluation Findings – Pilot Year 2

Provider-Initiated registration process

- Forgot to go online and complete steps (27%)
- Forgot/lost PIN (22%)
- Didn’t have time to complete (17%)

Consumer-Initiated registration process

- Didn’t know had to go to provider office to complete registration (37%)
- Waiting until next scheduled visit to complete registration (23%)
- Not willing to schedule a visit just to complete registration (19%)
Overcoming Challenges

• Alternate approaches to increase consumer access:
  
  » Implementation of Automatch May 2016
    
    1. Automatch allows consumers to self-register online and have an access code sent by SMS text or autodial to complete the authentication process.
    
    2. In the event that a record is not found (matched), consumers may request authentication by their healthcare provider/state health dept. to access their immunization record.

  » Increase marketing efforts

  » Pharmacy pilot (in development)
Automatch Workflow

1. Consumer selects Self Registration

2. Consumer enters registration data & multiple phone numbers

3. Registration data matching

4. SMS Text number match?
   - Yes
     - Access Code texted to consumer
   - No
     - Phone number match?
       - Yes
         - Access Code phoned to consumer
       - No
         - Mailed Access Code

5. Access Code texted to consumer

6. Consumer enters Access Code to MyIR & substitutes personal password

7. Anytime access to official Immunization certificates And personal vaccination History and forecast

END
Marketing

• Pilot Ad Campaign in Seattle Metro Area
  » Champion – Dr. Wendy Sue Swanson
    [link to article](http://www.king5.com/news/health/children-healthlink/ask-dr-swanson-what-we-know-about-vaccines/119953103)
  » Online ad campaign

• Printed Materials – posters, brochures for consumers and providers in all Pilot states.

<table>
<thead>
<tr>
<th>Washington MyIR Pilot Ad Campaign</th>
<th>Blogger Campaign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertisers</td>
<td></td>
</tr>
<tr>
<td>Seattle Times</td>
<td>Jenny on the Spot</td>
</tr>
<tr>
<td>Parent Map</td>
<td>Sounds Fun Mom</td>
</tr>
<tr>
<td>VolunteerSpot</td>
<td>Today’s Every Mom</td>
</tr>
<tr>
<td>Seattle’s Child</td>
<td>I am the Maven</td>
</tr>
<tr>
<td>West Seattle Blog</td>
<td>Dad Logic</td>
</tr>
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<td></td>
<td>Mama by Fire</td>
</tr>
</tbody>
</table>
MyIR Accounts Registered and Fully-Activated (2014 – 2016)

Year 1
- Consumers Registered: 3,196
- Fully Activated: 632

Year 2
- Consumers Registered: 6,040
- Fully Activated: 1,067

Year 3
- Consumers Registered: 12,305
- Fully Activated: 3,873

Project Year
- Consumers Registered
- Fully Activated
Evaluation

- Analysis of Weekly Metrics for all registration methods
- Consumer Surveys using Survey Gizmo
- State Key Informant Interviews

<table>
<thead>
<tr>
<th>State</th>
<th>Fully Activated Respondents (n= 212)</th>
<th>Incompletely Activated Respondents (n= 303)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>2 (&lt;1%)</td>
<td>20 (7%)</td>
</tr>
<tr>
<td>Louisiana</td>
<td>21 (10%)</td>
<td>58 (19%)</td>
</tr>
<tr>
<td>Washington</td>
<td>188 (89%)</td>
<td>221 (73%)</td>
</tr>
<tr>
<td>West Virginia</td>
<td>1 (&lt;1%)</td>
<td>4 (1%)</td>
</tr>
</tbody>
</table>
## Year 3 Provider/Automatch Registration Metrics

<table>
<thead>
<tr>
<th></th>
<th>All States</th>
<th>Arizona</th>
<th>Louisiana</th>
<th>Washington</th>
<th>West Virginia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Automatch Registration - # of fully activated accounts</strong></td>
<td>2,052</td>
<td>34</td>
<td>372</td>
<td>1,646</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Automatch Registration - # of self-registered accounts</strong></td>
<td>7,260</td>
<td>338</td>
<td>2,170</td>
<td>4,752</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Automatch Registration - Success Rate</strong></td>
<td>28.0%</td>
<td>9.5%</td>
<td>17.0%</td>
<td>35.0%</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Provider-Initiated Registration - # of fully activated accounts</strong></td>
<td>256</td>
<td>3</td>
<td>206</td>
<td>0</td>
<td>47</td>
</tr>
<tr>
<td><strong>Provider-Initiated Registration - # of accounts registered</strong></td>
<td>1,234</td>
<td>25</td>
<td>804</td>
<td>0</td>
<td>405</td>
</tr>
<tr>
<td><strong>Provider-Initiated Registration - Success Rate</strong></td>
<td>20.7%</td>
<td>12.0%</td>
<td>25.6%</td>
<td>0%</td>
<td>11.6%</td>
</tr>
</tbody>
</table>

### Fully Activated Accounts by Registration Method (9/30/15 - 8/15/16)

- **Automatch, 53%**
- **Provider Registration, 7%**
- **State Assisted, 31%**
- **Combination, 9%**
Consumer Surveys - Purpose for Consumer Registration

Purpose for Consumer Registration

- My healthcare provider recommended that I register: 12
- I wanted to view immunization records for me and/or my family: 202
- I wanted to print immunization records required by daycare, school or camp: 257
- I wanted to print immunization records required by an employer: 20
- Other: 16

Individual Records Requested (Fully and Incompletely Activated Accounts)

- My child(ren): 420
- Myself: 295
- My spouse: 91
- Other: 6
Consumer Survey Respondents – Marketing

**How did you hear about MyIR?**

- **Healthcare Provider**: 23%
- **School**: 20%
- **Internet**: 39%
- **Social Media**: 2%
- **Mailing**: 6%
- **Magazine/Newspaper**: 2%
- **Television**: 1%
- **Friend**: 4%
- **Health Dept**: 3%
- **Other**: 2%

**Save Time By Getting Your Family's Immunization Records Online!**

If you don't need to see the doctor wouldn't you love that? Nothing worse than taking time out of your day to sit in the waiting room waiting for who knows how long and finally getting in ONLY because you need some immunization records. Even making the phone call down there takes time out of your day. They typically wont mail them or fax them to you so you have to make the trip to their office whether you like it or not.

- **What if you could change all that?**
- **What if YOU had control and access to your family’s records?**
### Consumer Survey Respondents Satisfaction

#### Fully Activated Consumers Satisfaction Registering for and Using MyIR

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would recommend MyIR to my friends and relatives</td>
<td>11</td>
<td>40</td>
<td>32</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Electronic access to immunization records is important to me</td>
<td>11</td>
<td>34</td>
<td>39</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>The information included in the immunization records is accurate</td>
<td>7</td>
<td>12</td>
<td>46</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>It is easy to find the information I need</td>
<td>11</td>
<td>16</td>
<td>45</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Overall, I am satisfied with the registration process</td>
<td>11</td>
<td>14</td>
<td>43</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>The registration process was convenient</td>
<td>11</td>
<td>14</td>
<td>45</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>The registration process was fast to complete</td>
<td>11</td>
<td>10</td>
<td>51</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>The registration process was easy to complete</td>
<td>11</td>
<td>6</td>
<td>52</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

*The Office of the National Coordinator for Health Information Technology*
Impact of Use of MyIR on Consumer Behaviors

**ACTIONS TAKEN WHEN A VACCINE WAS NEEDED**

- Have not taken any action yet, 33%
- Waiting to discuss it with my healthcare provider at the next scheduled visit, 22%
- Scheduled a visit with my healthcare provider to receive the vaccine, 29%
- Called my healthcare provider to make sure the vaccine was really needed, 9%
- Called my healthcare provider to report that the vaccine had already been received and that the record contained an error, 7%

Waiting to discuss it with my healthcare provider at the next scheduled visit, 22%
Summary

• Since program inception (2013), across all 4 pilot sites:
  
  » Record pulls to date: **70,150**
  
  » # of accounts that have gained access to their immunization records through self-registration/provider-initiated registration and provider authentication: **3,659**
  
  » Total accounts that have completed the Automatch registration and authentication process: **3,857**

  – Note that Automatch was implemented in May 2016 and has surpassed the provider registration method.
Implementation challenges:

- Provider commitment
- Provider recruitment
- Competing interests between existing EHRs and MyIR
• Solutions using alternative approaches that built upon existing infrastructure:
  » Immunization record request process
  » Promotional webpage (doh.wa.gov/immsrecords)
  » Child Profile Health Promotion mailings
Questions?

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