



**AIRA**  
AMERICAN IMMUNIZATION  
REGISTRY ASSOCIATION

# HL7 Immunization User Group

Monthly Meeting  
December 13, 2018  
2:00 PM ET

# Agenda

- Welcome
  - Poll: Which perspective do you primarily identify yourself with?
  - Functional Guide vol. 2: CDC Endorsed Data Elements, community review in January
- SISC Update
- Year in Review
- Topics for Next Year



# Year in Review

Nathan Bunker, AIRA



# Jan/Feb - Identifying and Authenticating Submitters

- Presentation from Kevin Snow
  - Authentication is the process of verifying who you are.
  - Authorization is the process of verifying that you have access to something.
  - CDC WSDL can provide two levels: User vs Facility
  - Failure in authentication should result in CDC WSDL Security Fault
- Analysis of IIS Authentication
- Discussion with IIS on authentication scenarios
  - Illinois Icare, Colorado CIIS, Florida FL SHOTS, California CAIR, Tennessee TennSIIS, Washington IIS



# Jan/Feb - Authentication Analysis

Pattern (ignoring certificate requirement)	# Met
Required no more than: <ul style="list-style-type: none"><li>• SOAP username</li><li>• SOAP password</li><li>• SOAP facilityID</li><li>• MSH-4</li></ul>	29 / 47
Required no more than: <ul style="list-style-type: none"><li>• SOAP username</li><li>• SOAP password</li><li>• SOAP facilityID</li><li>• <b>MSH-3</b></li><li>• MSH-4</li><li>• <b>RXA-11.4</b></li></ul>	39 / 47



# Mar - Technical Assistance Summary

- Inappropriate Query Response from IIS
- OBX-17 Observation Method
- Patient Status in PD1-1, some ERH's cannot submit inactive
- Deletes in an RSP Messages
- Responding During Downtimes
- Validation of Addresses in RSPs
- Use of Evidence of Immunity Value Sets
- Setting the Scope for Submissions



# Mar - Technical Resources

- Technical Assistance
  - <http://www.immregistries.org/technical-assistance>
  - Training Videos
  - Webinars
- AIRA Repository:
  - <http://repository.immregistries.org/>
- Aggregate Analysis Reporting Tool
  - <http://app.immregistries.org/aart/home>



# Mar - Technical Resources

- Centers for Disease Control and Prevention (CDC)
  - <https://www.cdc.gov/vaccines/programs/iis/index.html>
  - Code Sets (CVX, MVX, etc.)
  - Clinical Decision Support for Immunization (CDSi) resources
  - HL7 Implementation Guide r1.5
- National Institute of Standards and Technology (NIST)
  - <https://hl7v2tools.nist.gov/portal/#/>
  - HL7 v2 Immunization Test Suite
  - Implementation Guide Authoring Tool (IGAMT)
  - Forecasting for Immunization Test Suite (FITS)  
<https://fits.nist.gov/fits/#/home>





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# Mar/Apr – Updating and Deleting Vaccinations

- Group discussed scenarios for deleting vaccinations:
  - Clinician makes minor update to vaccination
  - Clinician makes major update to vaccination
  - Clinician deletes a vaccination record they improperly reported
  - Clinician deletes a vaccination record in the IIS
  - Clinician updates IIS with administered vaccination that matches previously submitted historical vaccination from a different source
  - Clinician updates IIS with administered vaccination that matches previously submitted administered vaccination from a different source



# Apr – Query Triggers

- Presentations from IIS/EHRs:
  - NYC CIR – Monica Sull
  - eClinicalWorks – Vishal Vennavalli
  - Cerner – Michael Gaherty
  - Athena – Katherine Look

Registry Import

Roberts, Bob Male 5 years DOB:5/8/2012

1. Match Name 2. Import Records

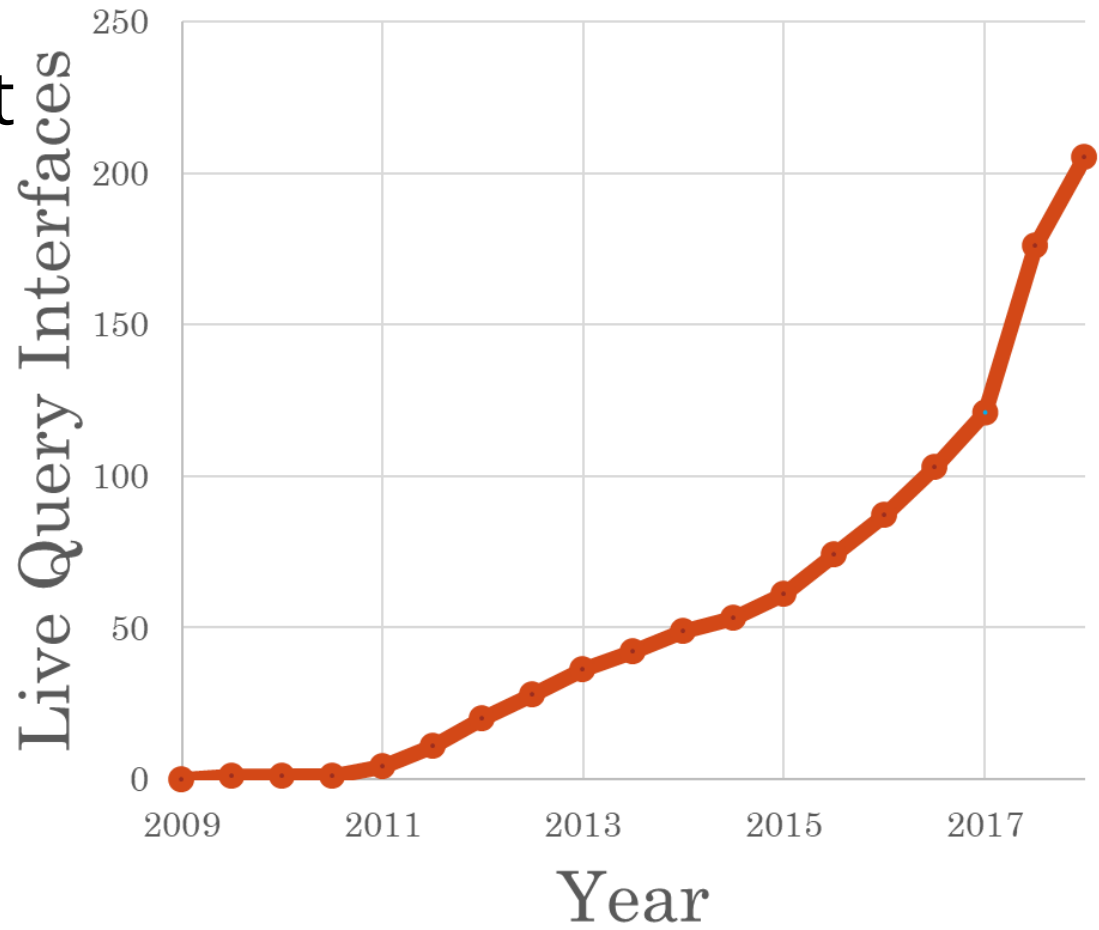
Administration date	Selected registry	Product in selected registry	Product on patient's chart
<b>Diphtheria, Tetanus, and Pertussis</b>			
▶ Jun 13, 0095	Missouri Immunization Registry ShowMeVax	diphtheria/pertussis, acel/tetanus ped	Diphtheria, Tetanus, and Pertussis
▶ Feb 10, 2009	Missouri Immunization Registry ShowMeVax	diphtheria/pertussis, acel/tetanus ped	
▶ Apr 25, 2009	Missouri Immunization Registry ShowMeVax	diphtheria/pertussis, acel/tetanus ped	
▶ Apr 12, 2010	Missouri Immunization Registry ShowMeVax	diphtheria/pertussis, acel/tetanus ped	
<b>Hepatitis A</b>			
Mar 17, 2018			Hepatitis A
			hepatitis A adult vaccine
<b>Influenza</b>			
▶ Oct 10, 2005	Missouri Immunization Registry ShowMeVax	influenza virus vaccine, live, trivalent, not...	Influenza
▶ Oct 10, 2006	Missouri Immunization Registry ShowMeVax	influenza virus vaccine, live, trivalent, not...	
<b>Measles, Mumps, Rubella</b>			
▶ Jan 05, 2010	Missouri Immunization Registry ShowMeVax	measles/mumps/rubella/varicella vaccine	Measles, Mumps, Rubella
<b>Polio</b>			
▶ Jan 05, 2009	Missouri Immunization Registry ShowMeVax	poliovirus vaccine, inactivated	Polio
▶ Jan 05, 2010	Missouri Immunization Registry ShowMeVax	poliovirus vaccine, inactivated	
▶ Apr 12, 2010	Missouri Immunization Registry ShowMeVax	poliovirus vaccine, inactivated	
<b>Varicella</b>			
▶ Jan 05, 2010	Missouri Immunization Registry ShowMeVax	measles/mumps/rubella/varicella vaccine	Varicella

< Back Submit Cancel



# May – Query Triggers

- Update on AIRA Measurement and Improvement
- Introduction to the triggers in the context of queries
  - Expect queries to increase
- Presentation from Epic on query interface
  - Queries are increasing
  - Implementation process
  - Enhancements



# Jun – Query Interfaces

- Presentation from Allscripts and Indiana CHIRP
  - Query profiles
  - Supported data elements
  - Pilot implementation



# Jul – Administered vs Historical Vaccines

- Presentation of current standards and survey results
  - History of reporting vaccinations
  - Overloaded use of RXA-9 for both historical reporting and flagging for lot decrementation
  - Group shared information about how they support RXA-9



# Aug – Pop Quiz

- Group pop quiz and discussion





# Sep – Patient Matching

- Introduction to concepts
  - Basic problem of patient matching
  - Common IIS solutions
  - Potential problems on HL7 interfaces
  - Questions for the group
- Presentation from Kevin Snow about patient matching
  - Challenges and approaches
  - Suggested query configurations for different locations



# Oct – Patient Matching

- Presentation from Greg Faber from Epic
  - How patient matching works in an EHR during queries to IIS
- Presentation from Mike Loula and Aaron Wallisch from DXC
  - How RunMatch works an IIS to find patient matches for HL7 queries



# Nov – Lot Inventory Deduction



- Presentation by Tracy Little and Nathan Bunker
  - History of Vaccines for Children and lot decrementing
  - How IIS have evolved to support these programs
  - Review of key lot decrementing HL7 fields
  - Questions and discussion with group on current strategies



# Topics for Next Year

Nathan Bunker, AIRA



Topics for Next Year





# Future Topics

- What topics would you like to hear about in 2019?
- VXU/ACK Messages:
  - Appropriate triggers for when message should be sent
  - Proper construction of message by EHR
  - Proper processing of message by IIS
  - Proper acknowledgement of message by IIS



# Future Topics

- What topics would you like to hear about in 2019?
- QBP/RSP Messages:
  - Appropriate triggers for when message should be sent
  - Proper construction of message by EHR
  - Proper processing of message by IIS
  - Proper acknowledgement of message by IIS
  - CDS information RSP messages





# Future Topics

- What topics would you like to hear about in 2019?
- HL7 Processing Support
  - Integration of patient matching with VXU and QBP
  - Integration of vaccination matching with VXU and QBP
  - Interaction and support for lot inventory tracking
  - Interaction and support for Vaccines for Children program
  - Inclusion of forecast and evaluation in RSP
  - Supporting data quality activities and reporting



# Future Topics

- What topics would you like to hear about in 2019?
- Special Focus Areas
  - Newborn reporting of unnamed children
  - IIS consent
  - Registry status
  - Next-of-kin and guardian information
  - Reporting insurance information
  - Updating and deleting vaccinations
  - Vaccine eligibility and vaccine funding source
  - Impartial administrations
  - Vaccine refusals
  - Vaccine contraindications and patient conditions affecting forecast



# Future Topics

- What topics would you like to hear about in 2019?
- Special Focus Areas continued...
  - Vaccine CVX codes
  - Vaccine NDC
  - Lot numbers and manufacturers MVX codes
  - Administered vs historical
  - VIS information
  - Observation segments
  - Identifying facilities/organizations/clinics in message



# Future Topics

- What topics would you like to hear about in 2019?
- General Areas
  - History of HL7 v2
  - How to properly handle coded values received
  - How to deal with non-standard messages
  - Strategies for providing effective backwards compatibility
  - How to prepare for future versions of HL7
  - How to document local requirements in guide
  - Authenticating HL7 submitters



# Future Topics

- What topics would you like to hear about in 2019?
- Other Areas
  - Admission/Discharge/Transfer (ADT) messages
  - FHIR
  - XML/JSON
  - PIX/PDQ



# Future Topics

- What topics would you like to hear about in 2019?
- Transport
  - General transport introduction
  - CDC SOAP transport standard introduction
  - CDC SOAP transition strategy
- Testing Tools
  - NIST message testing tools
  - NIST CDC WSDL testing tool
  - 2015 ONC Health IT Certification
  - Aggregate Analysis Reporting Tool (AART)



# Next Meeting

January 10, 2019

2:00 pm ET / 11:00 am PT



# More Information

- Web Links

- Subscribe to immunization group

<http://www.hl7.org/participate/UserGroups.cfm?UserGroup=Immunization>

- Public User Group Wiki

<http://www.hl7.org/special/committees/iug/index.cfm>

- Private User Group Wiki

<http://iugwiki.hl7.org/>

- HL7 Press Release

[http://www.hl7.org/documentcenter/public\\_temp\\_F760602A-1C23-BA17-0C0D326E635471F9/pressreleases/HL7\\_PRESS\\_20140402.pdf](http://www.hl7.org/documentcenter/public_temp_F760602A-1C23-BA17-0C0D326E635471F9/pressreleases/HL7_PRESS_20140402.pdf)

- AIRA Press Release

<http://www.immregistries.org/events/2014/04/10/hl7-immunization-user-group>





# Contact Information

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- Kevin Snow [ksnow@envisiontechnology.com](mailto:ksnow@envisiontechnology.com)
- Danny Wise [Danny.Wise@allscripts.com](mailto:Danny.Wise@allscripts.com)

Thank you!

