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Welcome to *SnapShots*, the American Immunization Registry Association's newsletter about the progress, best practices, and accomplishments of immunization information systems across the country. We invite you to share news about your registry. Email us at [info@immregistries.org](mailto:info@immregistries.org) or call us at 202-552-0208 with information about a successful programmatic or technical innovation, major accomplishment, or milestone that your registry has reached. SnapShots is sent to subscribers three times a year and posted on AIRA's web site: [www.immregistries.org](http://www.immregistries.org).

Please forward this email to others who may be interested in receiving *SnapShots*. **TO SUBSCRIBE**, send an email to [info@immregistries.org](mailto:info@immregistries.org).

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# SnapShots

IMMUNIZATION REGISTRY NEWS *from* AMERICAN IMMUNIZATION REGISTRY ASSOCIATION (AIRA)

## PRESIDENT'S REPORT

Dear Colleagues,

We were very pleased to hear that the Centers for Disease Control and Prevention (CDC), National Center for Immunization and Respiratory Diseases (NCIRD), will continue to provide the \$156,000 in funding per Immunization Program awardee targeted to immunization information systems (IIS) in the 2016 cooperative agreement. These targeted funds, first provided in 2015, are a welcome step forward on the path toward IIS sustainability. We commend NCIRD for recognizing the value of IIS to providers and immunization programs by maintaining this investment. We also look forward to continuing our collaboration with NCIRD on further steps toward achieving the financial sustainability of IIS across all awardees.

Planning for the AIRA 2016 National Meeting to be held in Seattle, Washington, April 5-7, 2016 has begun! Our 2015 AIRA National Meeting in New Orleans was a resounding success with record numbers of participants and organizations represented as well as a wide range of timely and exciting topics addressed. No doubt the 2016 meeting will be even better! Be on the lookout for the call for abstracts which will be sent out soon. Should you wish to help with the planning, you are welcome to join AIRA's National Meeting planning committee by sending an email to Carmela Gupta at [cgupta@immregistries.org](mailto:cgupta@immregistries.org).

This issue of SnapShots is especially interesting because of articles that feature reports on the work of immunization information systems (IIS). Congratulations to Wyoming, Denver, Washington State, Indiana, and Oregon on your innovative uses of IIS!

In case you missed hearing about the AIRA 2015 Center of Excellence Award and Volunteer Service Award winners at the National Meeting, you can read about their accomplishments and special contributions to the IIS community in this issue.

This issue will also catch you up on the progress of AIRA's high priority projects: electronic health record (EHR)-IIS interoperability testing; joint development; and MIROW best practice resources. **If your state has not yet participated in the AIRA 2015 IIS Interoperability Testing Project, please sign up now by contacting Nichole Lambrecht at [nlambrecht@immregistries.org](mailto:nlambrecht@immregistries.org).** AIRA's aim is to get an accurate and complete picture of IIS interoperability nationwide, so all IIS must participate. **We need you on the map!**

In closing, I wish you all success in your continuing efforts to use IIS to increase immunization coverage and protect people across the nation from vaccine-preventable diseases.

**Amy Metroka, MSW, MPH**

*AIRA President & Director, NYC Citywide Immunization Registry*

## 2015 Center of Excellence and Volunteer Service Award Recipients



Pictured from left to right: Phyllis Bourassa, Steve Robison, Amanda Harris, Amy Metroka, Rob Savage, Yukiko Yoneoka, Rebecca Coyle

**C**enter of Excellence (COE) awards are presented by AIRA to immunization information systems that have actively implemented strategies in support of the activities and goals of their immunization program. This year's topic was *Innovative Methods for Using IIS Data to Improve Immunization Coverage*.

### Center of Excellence Award recipients:

- Utah Department of Health (Yukiko Yoneoka accepted the award)
- Oregon Immunization Program (Steve Robison accepted the award)

AIRA also recognizes the special achievements and efforts made by AIRA volunteers who work above and beyond to further the progress of immunization information systems and the vision and goals of AIRA. Below is a list of award recipients and the reason each person was nominated.

### Volunteer Service Award recipients:

- Phyllis Bourassa, Colorado IIS
- Amanda Harris, Nevada IIS
- Rob Savage, CDC

**Phyllis Bourassa:** In addition to Phyllis' unconditional devotion to improving her own state's immunization registry, she is also involved in helping to improve other state's immunization registries. Phyllis volunteers for the AIRA Education Steering Committee. She also is always willing to talk with other states and makes time to collaborate with them. She is constantly sharing ideas and making great suggestions for improving immunization registries. Phyllis is a great asset to the IIS community.

**Amanda Harris:** Mandy always actively participates in any work she does with AIRA. Mandy has been a member of the MIROW Steering Committee for 3 years and has served as a subject matter expert for 3 best practice chapters. Her continuous participation in MIROW and its activities has been extremely valuable to the committee. In the past Mandy has also served as a Board member.

**Rob Savage:** Rob Savage has contributed extensively to the IIS community in his role as SISC Co-chair. His dedication to shepherding the HL7 Implementation Guide for Immunization Reporting has been invaluable to the progress the IIS community has made towards interoperability with EHRs. ■

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As part of its Standards Development Cooperative Agreement, AIRA has launched three groups focused on exploring Joint Development among IIS across the community.

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Wyoming has been able to achieve 15 IIS enhancements due to their collaborative work with several other states.

## Update on AIRA's IIS Joint Development Initiative

As part of its Standards Development Cooperative Agreement, AIRA has launched three groups focused on exploring Joint Development among IIS across the community. Two of the groups are user groups focused on providing a venue for IIS and vendor representatives using like platforms to share information and ideas on the potential for collaborative work:

- The WIR Joint Development User Group launched in December, 2014, and is co-facilitated by rotating WIR-using IIS staff and AIRA staff. This group has been meeting monthly to provide demonstrations of functionality and discuss joint planning across programs using the WIR application.
- The Grantee-Developed User Group launched in March, 2015, and is co-facilitated by Therese Hoyle from the State of Michigan and AIRA staff. This group has been meeting monthly to also provide demonstrations of functionality and to discuss topics such as open source licensing and data quality.

Both user groups will continue to meet monthly ongoing. In July, AIRA also kicked off the Joint Development Advisory Workgroup, a representative group of IIS program staff, vendor staff, and partners that will provide a community-wide perspective on joint development planning. This group will validate the criteria for choosing joint development projects, and will select a proof of concept joint development project. The group will also be responsible for developing the governance process for ongoing collaborative development. The Advisory Workgroup is expected to complete their work in the next 18 months.

For more information, contact Mary Beth Kurilo at [mbkurilo@immregistries.org](mailto:mbkurilo@immregistries.org). ■

– Submitted by Mary Beth Kurilo, AIRA Policy and Planning Director

## Joint Development in Action: Wyoming's Story

Wyoming has been working with several other states to enhance their IIS in many different ways. Because of this collaborative approach they have been able to get 15 changes in place, while they speculate that independently they would have only been able to implement a few.

Recently, Wyoming has taken enhancements to online vaccine program enrollment to a whole new level by integrating multiple enrollment types in the system simultaneously at the facility level. Because of the uniqueness of Wyoming and the requirements by their Attorney General, they have four different agreement types, two of which are Adult Vaccine Agreements. Wyoming has separated IIS enrollment from vaccine program enrollment, such as VFC. IIS enrollment will now occur at the organization level, while vaccine program enrollment will take place at the facility level. This will allow Wyoming to simplify the process since not all of the providers enrolling into the IIS are enrolling into the vaccine program. This enhancement will be especially helpful when it comes to onboarding providers, as the individuals Wyoming works with to onboard a facility are not the same individuals they work with to enroll in a vaccine program. The CDC is very specific on who the signatory should be on the VFC agreement and it is not the person who signs the IIS agreement. Separating these two enrollments will prevent providers from becoming confused.

Additionally, in 2013 Wyoming transitioned from a paper signature to an electronic one that consisted of typing one's name into a PDF form. Wyoming is now moving this signature process into the IIS to prevent the need to print the agreement from the IIS, sign it, and return it to the Immunization Program. The 'Responsible Physician' will receive a code that s/he will enter prior to completing the agreement within the IIS. Wyoming's previous contract signature process caused many challenges and delays and so it was determined that the electronic signature route was the way to go. Moving this process into the IIS will hopefully make it easier for staff to track agreements that are complete, as well as disable providers that are past due on their enrollment. Although not yet available, Wyoming is looking forward to putting these enhancements in place during their next enrollment period in February 2016. ■

– Submitted by Jude Alden, Wyoming Department of Health

■ Using commonly available mobile devices (e.g., iPhone, iPod touch), HANDI demonstrates the utility of mobile technology in public health and emergency preparedness.

## HANDI – Mobile Technology in Public Health and Emergency Preparedness

Denver Public Health (DPH) has developed the Hand-held Automated Notification for Drugs and Immunizations (HANDI) application as a data collection tool for mass immunization and prophylaxis events and routine clinic operations. Using commonly available mobile devices (e.g., iPhone, iPod touch), HANDI demonstrates the utility of mobile technology in public health and emergency preparedness. HANDI provides a paperless system that is timely, efficient, secure and accurate due to electronic standardized data.

Key features include the ability to:

- Rapidly collect demographic information through scanning technology
- Facilitate intervention eligibility and contraindication assessment
- Capture standardized patient data
- Operate in a variety of network environments
- Securely transfer data to immunization registries and data repositories using HL7 standards

HANDI, created by Countermind using their Mobile Intelligence Clinic product, has been successfully used for multiple immunization events. HANDI has supported data collection during childcare worker pertussis campaigns where nurses traveled to childcare sites. Data were stored on iPod touches until nurses returned to DPH where they were converted to HL7 messages and exported to the Colorado Immunization Information System, Colorado's state immunization registry. HANDI is also used annually to facilitate Denver Health's employee influenza vaccination campaign when close to 6,000 employees are vaccinated.

For more information about HANDI, please visit our website at <http://www.denverhealth.org/professionals/clinical-specialties/public-health/public-health-informatics-and-technology/handi>. ■

– Submitted by by Melissa McClung, Denver Public Health

■ The goal of MIROW is to identify and prioritize functional areas of IIS that can benefit from a collective approach and to develop best practice recommendations for these areas using business modeling and facilitation techniques.

## MIROW Best Practice Resources

The American Immunization Registry Association (AIRA) partnered with the Centers for Disease Control and Prevention/National Center for Immunization and Respiratory Diseases (CDC/NCIRD) in 2005 to begin developing consensus-based best practice recommendations for improving various aspects of IIS operations. This initiative brought together subject matter experts and practitioners from the IIS community to form the Modeling of Immunization Registry Operations Work Group (MIROW).

The goal of MIROW is to identify and prioritize functional areas of IIS that can benefit from a collective approach and to develop best practice recommendations for these areas using business modeling and facilitation techniques. Since 2005, MIROW has developed several best practice guidelines for the following IIS functional areas:

- Management of Patient Active/Inactive Status
- Data Quality Assurance – Selected Aspects
- Data Quality Assurance – Incoming Data
- Vaccination Level Deduplication
- IIS-VFC/Grantee Programs Collaboration
- Inventory Management
- Lot Number Validation Best Practices (micro-guide)
- Lot Number Patterns by Manufacturer and Vaccine Table (micro-guide)
- Reminder/Recall
- IIS-VAERS Collaboration (pilot guide)

These best practice guides along with abridged mini-guides (in several languages) are available on the [AIRA website](#). Future topics for the group will center on key IIS operational issues as determined by the MIROW Steering Committee and with IIS input.

The most recent guide that was published in April 2015 is titled *[“Management of Patient Active/Inactive Status in Immunization Systems – Replacement of 2005 Guidelines.”](#)* Patient active/inactive status (also referred to as “patient status”, “status”, or PAIS) is important to determine which individuals to include in

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assessments and to decide which patients receive reminder-recall notifications. Inappropriate classification of PAIS can result in inaccurate assessments and reminder-recall notifications. Inconsistent definitions among various IIS could result in poor data comparability and data quality issues. As data sharing increases among IIS programs, there is a need to use consistent and agreed upon PAIS definitions and rules, along with consistency and comparability between and within state and local data sources. The guidelines focus on three aspects of patient active/ inactive status:

- Development of criteria to enter and exit various patient statuses at provider organization and geographic jurisdiction levels, with emphasis on issues of updating patient status via electronic data exchange.
- Development of criteria to include patients in assessment reports and reminder-recall notifications based on their status.
- Support of ongoing efforts to integrate some of the AFIX program's functionality into IIS.

To view the full guide or mini-guide, please visit the [AIRA website](#). In addition, the next best practice guide is currently underway and focuses on inventory decrementation via electronic data exchange. Please stay tuned for more information on this important topic.

If you have any questions regarding the MIROW committee, please contact Ketti Turcato at [kturcato@immregistries.org](mailto:kturcato@immregistries.org). ■

– Submitted by Nichole Lambrecht, AIRA Sr. Project Manager

## Washington State Child Profile Health Promotion System

The Washington State Immunization Information System shares a database with its Child Profile Health Promotion System. The database receives information from the public portion of a child's birth certificate, healthcare providers, and health plans. Using information from the database, staff at the Washington State Department of Health use the Health Promotion System to send child health and safety information to all families with kids aged birth to six years (this equals nearly 30,000 mailings each week!).

Each mailing has age-specific reminders about well-child checkups and immunizations. They also give up-to-date information on growth and development, nutrition, safety, and many other child health topics. Mailings are free and sent every few months until a child turns six. Parents automatically get the mailings by postal mail and can also sign up to get the information by e-mail. Health and safety experts create the materials and update them every year with input and feedback from parents. When surveyed, parents say the mailings provide useful and timely information to help them take care of their child. Visit [www.childprofile.org](http://www.childprofile.org) for more information. ■

– Submitted by Lonnie Peterson, Washington Department of Health

## AIRA IIS Interoperability Testing Project

In March 2015, AIRA announced the new IIS Interoperability Testing Project that was created as a way to assist IIS programs in determining their system's level of alignment with HL7 interoperability standards and to determine where the National HL7 Implementation Guide for Immunization Messaging (IG) needs clarifications or updates. The project consists of two phases. Phase I repeats the 2012-2013 IIS Interoperability Status Check project that consists of submitting sample Meaningful Use Stage 2 HL7 2.5.1 messages to the IIS, and verifies that the messages can be accepted by the IIS. Testing for this phase is currently underway, and although not all IIS have been tested, preliminary results show that more IIS are able to accept the sample Meaningful Use Stage 2 HL7 2.5.1 messages with fewer unexpected local modifications than two years ago. This demonstrates a significant improvement over the previous analysis. However, the testing has shown large variation in how IIS structure returned acknowledgement messages. Further analysis will continue and summary results will be shared as soon as all IIS have been tested.

Phase II includes the implementation of an IIS-EHR Interface Testing Pilot, which involves a more complex level of testing. In the first step the testing team reads each IIS guide and enters key information into the common testing system. This allows for comparison with other implementation guides and supports verification testing of the IIS against their own published guide. What has been surprising to the team is how many IIS have created individual implementation guides and how long it takes to properly review

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■  
Parents say the mailings provide useful and timely information.

■  
To date, 46 jurisdictions and 2 vendors have agreed to participate in the project, and efforts are ongoing to engage additional participants.

and capture this information. Once entered into the testing tool, the analysis can detect and document variations from the national implementation guide as well as validate that the IIS interface actually functions according to the published local implementation guide. For example, if a local implementation guide reports that a specific field is 'required but may be empty', the testing tool will run a variety of tests to confirm that the IIS handles the field exactly as documented.

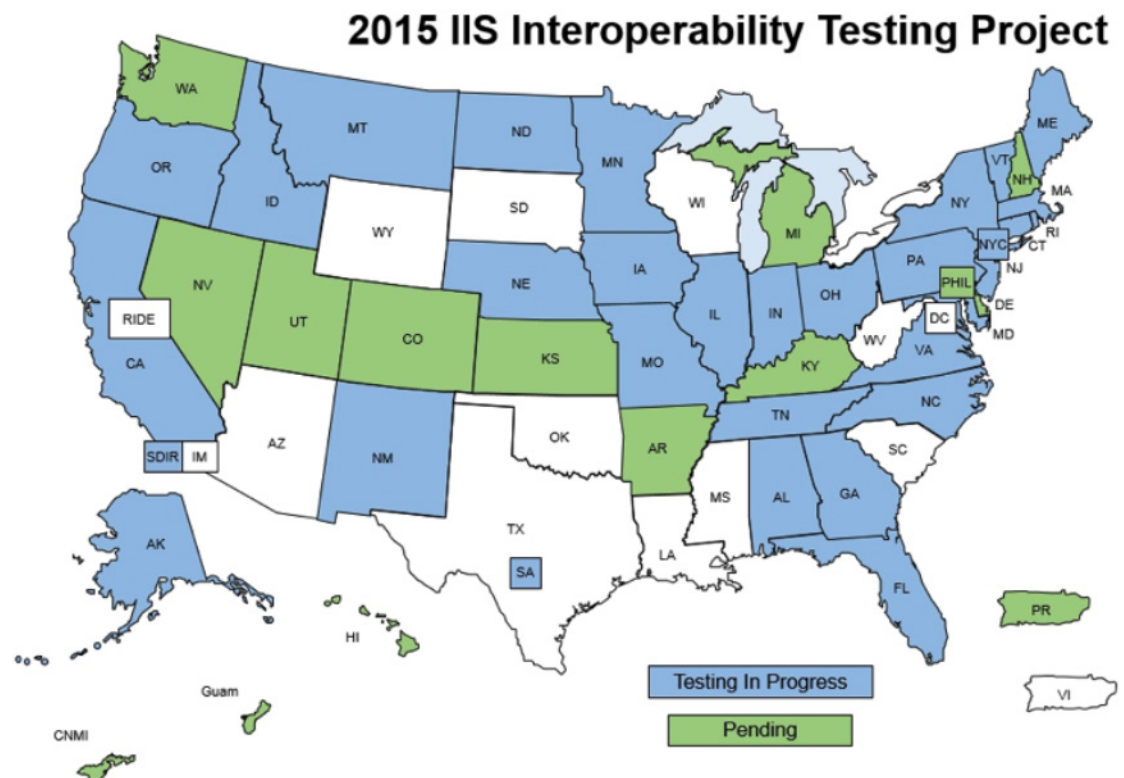
Additional tests that are being conducted include:

- Code values – messages are sent to confirm that an IIS accepts the most relevant and important code values defined in the national guide.
- Tolerance – this testing includes a small set of messages that tests for functionality that may be seen in the future. As more is learned about potential changes in the IG, tests are incorporated to determine what impact the potential changes might have on an IIS, thus enabling an informed decision-making process for IG updates.
- EHR samples – a set of standard sample EHR provided messages are sent through to see how the IIS processes them.
- Performance – provides analysis of how quickly the IIS is able to respond to messages.
- Acknowledgement Conformance – provides analysis of acknowledgement messages received and verifies if they meet the standard format.

Upon completion of testing, each IIS will receive a report illustrating the results of each section, allowing them to drill down in depth on any issue. The first round of reports are being finalized and will be distributed in the coming weeks. It is important to note that testing will continue over the course of the rest of the year, and additional reports will be distributed as updates are made. This will allow IIS staff to review how changes they make to their IIS impacts the results given in their testing report.

To date, 46 jurisdictions and 2 vendors (see map) have agreed to participate in the project, and efforts are ongoing to engage additional participants. The goal of the project is to have full participation of all IIS so that a true picture of IIS Interoperability is obtained. Full details about the interoperability testing project can be found on the [AIRA website](http://AIRA website). To inquire about this project, please contact Nichole Lambrecht at [nlambrecht@immregistries.org](mailto:nlambrecht@immregistries.org). ■

– Submitted by by Nichole Lambrecht, AIRA Sr. Project Manager



With the launch of VTrckS-related capabilities for ordering and importing order shipping data, ALERT IIS became an integrated source of information about vaccine management in Oregon's VFC provider sites.

## Oregon's ALERT IIS Vaccine Accountability Report

The Vaccines for Children (VFC) Program in Oregon has long had a dream of measuring the accountability of providers who receive state-supplied vaccine. The VFC program has been using ALERT IIS since its launch in 2010 to inform many aspects of their work, including dose-level vaccine eligibility, vaccine inventory management, and patient population estimates used during annual VFC recertification. With the launch of VTrckS-related capabilities for ordering and importing order shipping data, ALERT IIS became an integrated source of information about vaccine management in Oregon's VFC provider sites. The dream for an accountability report became much closer to a reality.

The first step in developing this report was to ask a lot of questions. Who will use the accountability report? What should it do? What must it do? What variables should be included? These and more questions were asked and then answered in a series of requirements gathering meetings between IIS and VFC program stakeholders. Then, when a basic set of requirements as well as a much longer "wish list" of features and a design mock-up had been agreed upon, we turned to our vendor, Hewlett Packard, and began a formal requirements definition phase. After a functional design document was eventually approved, this work resulted in a report that is used today at all VFC site visits and as a quarterly tool to monitor vaccine distribution and reporting in Oregon.

So what exactly is the Accountability Report? It is a tool that generates an Excel spreadsheet that tracks at the individual lot level all vaccine that has been entered into the ALERT IIS vaccine inventory module. From starting inventory, it adds and subtracts all vaccine in or out of inventory and arrives at an overall accounted-for dose count and percentage. Specifically, the report tracks inventory transactions in the following categories:

Vaccine Group	+ Starting Inventory	+ Doses Received	- Doses Reported	- Doses Expired	- Doses Spoiled	- Doses Wasted	- Doses Transferred Out	+ Ending Inventory	Accounted for Doses	Accounted for %
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This report is available for state-supplied vaccine, for privately purchased vaccine, or for both funding sources. The summary version of the report shows all vaccine groups; the detail report shows transactions at the individual lot level.

We released the Vaccine Accountability Report to Immunization Program staff in 2014 and to external users with Super User access to ALERT IIS in June 2015. We staggered the release so that program staff would have time to understand the power and flexibility of this report and for VFC health educators to introduce the accountability metrics required of providers during site visits. An ongoing training program is offered, and we are exploring ways that this powerful tool might be further integrated into our program operations. ■

– Submitted by Erin Corrigan, ALERT, Oregon Immunization Program

## Children and Hoosier Immunization Registry Program (CHIRP): Indiana

Indiana's immunization registry, CHIRP (Children and Hoosier Immunization Registry Program) was established in 2002 and has been growing and expanding both in terms of capacity and capability since its creation. CHIRP is a life span registry and currently stores approximately 7 million patients and 63 million vaccination records. Sixty-seven percent of the data that is reported to CHIRP is done electronically. Typically, CHIRP receives and processes about 40,000 records every day. CHIRP is happy to share some of the efforts and initiatives underway to increase immunization rates in Indiana and continue to improve the functionality of the IIS.

One proven method to increase immunization rates is by sending reminder recall letters. The IIS staff works closely with the immunization program staff to generate the appropriate required data and send out at-least two statewide reminder recalls each year. One reminder recall focusing on HPV series completion resulted in a 27% increase of HPV data in the state immunization information system.

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Indiana was among the first states in the nation to launch a patient portal for citizens to electronically access their vaccination records online from the comfort of their home. The MyVaxIndiana web portal (<https://myvaxindiana.in.gov/>) was rolled out in 2012 and since then over 75,000 patients have been granted access to their immunization record. The web portal is unique as it does not require a user name and password to login. All that is required is that the provider activate the patient for MyVaxIndiana access in CHIRP and provide them with a pin number. Using this pin and some patient specific information the user is able to access their immunization record. There is absolutely no charge to use this web portal. This is a great tool for parents, students and general public to be able to obtain the latest vaccination record when they need it.

Indiana is one of the states that have been successful in integrating the use of 2-D barcodes with their IIS. In very simple terms, 2-D barcodes pack a lot of information about the vaccine such as vaccine description, lot number, expiration date, NDC code, etc. The ability of the IIS system to be able to read and decode these barcodes is very useful in terms of both speeding up data entry and reducing data entry errors. As a part of the process, the immunization program offered free 2-D barcode scanners to providers who are manually inputting data into CHIRP and trained them on the use of 2-D barcode scanners with the IIS. The CHIRP technical staff also worked with their IIS vendor to identify and fix issues that initially came up when the feature was first rolled out. We believe that this has helped providers increase their productivity. ■

– Submitted by Vijay Pathangi, Indiana State Department of Health

## CDC EHR–IIS Interoperability Enhancement Project

To facilitate Electronic Health Record (EHR) and Immunization Information System (IIS) integration, the Immunization Information Systems Support Branch (IISSB) at the Centers for Disease Control and Prevention (CDC) was funded to initiate the EHR–IIS Interoperability Enhancement Project. The project began in October 2010 and ran for three years, during which time the resources summarized below were produced.

### Technical Interoperability

One critical component of EHR-IIS interoperability is “technical interoperability” or the physical transmission of health data to and from another system. For IIS, this occurs by way of a transport layer protocol, which is much like a “messenger” who carries data from one location or system to another. The “messenger” of immunization data can come in many forms ranging from email to a web service.

Currently, there are multiple transport layer protocols being utilized by IIS programs and the numerous EHRs with which they exchange data. This lack of standardization creates unnecessary technical complexity and challenges for both IIS programs and EHRs. It also limits the feasibility of real-time or instantaneous immunization data transmission, a long-term goal to meet IIS program objectives. Finally, more and more EHRs are seeking to integrate with IIS to meet criteria associated with the Meaningful Use incentive program (<http://www.cdc.gov/vaccines/programs/iis/meaningful-use/index.html>) and standardization is becoming increasingly imperative for IIS programs to respond to this demand.

Therefore, one critical component of the EHR-IIS Interoperability Enhancement Project centered on the recommendation of a transport layer protocol to serve as a future industry standard for immunization-related messaging. Through numerous remote working sessions and a three-day, in-person session in Atlanta, a panel of experts came to the consensus that **SOAP Web Services** is the recommended standard. The other evaluated protocols were ebXML, HTTPS, and SMTP + S/MIME. While the panel recommended SOAP, it acknowledged the role and value of the other transport layer options. It is not the expectation of the panel or of the EHR-IIS Interoperability Project that IIS programs discontinue the use of existing transport protocols or those currently under development. The panel’s findings do not represent a mandate for IIS programs but rather a recommendation in an effort to move towards standardization across the immunization messaging community.

The collaborative work of the panel was documented in a 75-page recommendations document, which details the panel’s methodology, justifications for its recommendation, acknowledgement of the other transport protocols, and a summary of the impacts of a SOAP implementation. The expert panel and

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■ All IIS should be aware of the products of this project, which can be found on the CDC website at: <http://www.cdc.gov/vaccines/programs/iis/interop-proj/ehr.html>.



project team also developed resources for software interface engineers and technical project manager, including source code samples, a formal specification for SOAP-based submissions and queries to an IIS; and a reference implementation that can serve as a testing service for implementers.

## Patient De-Duplication

Patient de-duplication is the process of removing redundant patient records from a database, preventing fragmented and duplicate information from being processed and ensuring that updates and queries apply to the correct record. Inconsistencies in determining which records represent the same patient, as well as errors in combining patients' immunization records negatively affect the overall data quality and usefulness of IIS. To address the problem of duplicate patient records, the EHR-IIS Interoperability Enhancement Project formed a second expert panel to do the following:

- Identify data that will enhance the quality of patient de-duplication
- Review existing data within the patient de-duplication process (retrospective data cleansing)
- Address manual review
- Create a robust testing methodology/test cases
- Identify best practices in evaluating a de-duplication engine

Members of the panel participated in facilitated remote and in-person sessions. The work of the panel was summarized in a best practices document for patient-level de-duplication. Along with this document, test cases were also developed to assist programmatic, technical, and operational experts involved in creating or maintaining an IIS.

## Semantic Interoperability

The EHR-IIS Interoperability Enhancement Project also formed a panel to look at semantic interoperability, which refers to the ability to automatically interpret the information exchanged meaningfully and accurately in order to produce useful results. To achieve semantic interoperability, both sides must refer to a common information exchange reference model, which for the IIS community has been defined as Health Level 7 (HL7) messaging.

The EHR-IIS Interoperability Enhancement Project formed an expert panel to address the challenges faced by vendors in interpreting local HL7 2.5.1 Implementation Guides and contracting RFP documentation due to the variance among IIS programs. Resources produced include a local HL7 2.5.1 Implementation Guide Template, a template for the documentation of local data exchange business rules, and a comprehensive suite of HL7 test cases that address structure, vocabulary, and data quality congruent with the HL7 2.5.1 Implementation Guide.

## Available Resources

All of the output of the EHR-IIS Interoperability Enhancement Project can be found on the CDC website at: <http://www.cdc.gov/vaccines/programs/iis/interop-proj/ehr.html>.

Another critical resource for EHR-IIS interoperability is the HL7 Version 2.5.1: Implementation Guide for Immunization Messaging. It can be found at: <http://www.cdc.gov/vaccines/programs/iis/technical-guidance/hl7.html#guidance>. ■

*– Submitted by Jennifer Austin, NG/CDC*

■ AIRA will be hosting the next National Meeting April 5 – 7, 2016 in Seattle, Washington.

## AIRA 2016 National Meeting

We are very pleased to announce that AIRA will be hosting the next immunization information systems (IIS) national meeting April 5 – 7, 2016 in Seattle, Washington. The theme of the 2016 National Meeting is “Cultivating Community, Establishing Standards, Supporting Implementation.”



A request for abstracts will be sent out in the near future. If you have any questions regarding the 2016 National Meeting, please contact Carmela Gupta at [cgupta@immregistries.org](mailto:cgupta@immregistries.org).

We hope to see you in Seattle! ■

■ AIRA currently has a stronger membership base than ever before.

## 2015-2016 AIRA Membership Drive

We hope our members will begin planning and budgeting to renew their AIRA membership for 2015. AIRA's membership cycle runs October 1st through September 30th and our annual membership drive will begin in September. AIRA offers membership to organizations and individuals that share and support our mission of preventing and controlling vaccine preventable disease by enhancing the capacity of IIS. AIRA currently has a stronger membership base than ever before with nearly 65 non-profit organizations represented (including 47 states and 3 territories), 8 businesses, 4 sponsors and 30 individual members!

To all members, AIRA membership provides many benefits including discounted registration for AIRA events including the National Meeting, access to members-only resources, participation on committees and workgroups, and the benefits of our Health Level 7 (HL7) membership. It's not too soon to begin planning to ensure you become an AIRA member for 2015-2016! If you have any questions about membership, please email Ketti Turcato at [kturcato@immregistries.org](mailto:kturcato@immregistries.org).

Special note to IIS who receive CDC funds: please remember AIRA when you're completing your grant applications. Awardees may use 317 Operations funds to pay AIRA membership dues (\$300) and attend the 2016 AIRA National Meeting in Seattle. Just include this request in your eGratis application if you are interested. ■

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### COMMENTS, PROBLEMS, OR QUESTIONS, PLEASE CONTACT US AT:

AIRA; 1155 F Street, Suite 1050; Washington DC, 20004 Web site: [www.immregistries.org](http://www.immregistries.org) | Email: [info@immregistries.org](mailto:info@immregistries.org)