



# SNAPSHOTS

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

## PRESIDENT'S REPORT

Dear Colleagues,

September is here! As summer winds down, the air cools, and the leaves start to change, guess who's just getting started? The AIRA community—that's who! We're always looking for innovative ways to improve the health of our community through the use of immunization information systems, and we show no signs of slowing. In this issue, you'll read about continued efforts to expand the Measurement and Improvement Initiative to include CDC's Clinical Decision Support for Immunization (CDSi) specifications in our march toward standards alignment and how one awardee has demonstrated increased efficiency through CDSi implementation. You'll also learn about AIRA's and CDC's continued dedication to the SmartyStreets address cleansing effort, expanding access to awardees who may have experienced barriers to implementation in the past.

I must admit that what I'm most excited for you to read about are all the wonderful experiences had at the recent AIRA 2019 National Meeting. Marcey Propp paints an inspirational picture of what it's like to attend and shares some thoughts from National Meeting "first-timers." I was touched by the words I found peppered throughout: *excitement, relieved [by the availability of resources!], collaboration, gratified, motivated, support, share, learn, together, energized, camaraderie, community*. I couldn't have written a better pitch to attend next year's meeting if I tried! If you need more convincing, take a look at Maureen Neary's overview of the dynamic two-and-a-half days.

One of the now-favorite sessions of the National Meeting is the rapid-fire roundtables. Gathering all attendees together, it offers a fun way to mingle, learn about each other, have meaningful (if brief!) conversations, and discuss hot IIS topics. This year's session showed us the IIS community's continued focus on data quality and system integration, a growing focus on expanding collaboration with new partners, and how much we all value our colleagues. Most importantly, these sessions allow AIRA to directly engage members on their high-priority topics. The input gathered helps AIRA focus support in the right places. As the article will tell you, AIRA hears you and will continue to advocate on behalf of IIS.

In closing, it has been an honor to serve as your board president. I look forward to working with our newly elected board members and to the new friendships to be forged through our work.

**To the next 20 years!**

Regards,  
**Mandy Harris**  
AIRA Board President  
NV WebIZ Manager  
Nevada Department of Health & Human Services

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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 (IIS) across the country. We invite you to share news about your IIS. Email us at [info@immregistries.org](mailto:info@immregistries.org) with information about a successful programmatic or technical innovation, major accomplishment, or milestone that your IIS has reached.



## 2019 MARKS AN UPTICK IN NUMBER OF SMARTYSTREETS ADDRESS CLEANSING IMPLEMENTERS; MORE ARE EXPECTED IN 2020

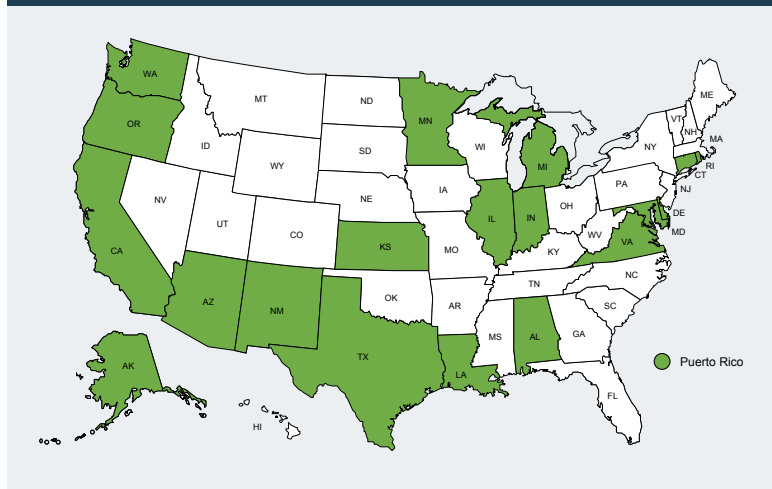
Twenty jurisdictions and one IIS vendor are already using or have signed up to implement SmartyStreets, and several more programs are in the process of signing up for it. SmartyStreets is the shared address cleansing and geocoding service that is available to AIRA members at no charge.

Two developments on the SmartyStreets front are expected to further increase that uptake. AIRA just **updated its [Partner Agreement](#)** to accommodate jurisdictions that have strict policies about indemnification and liability terms. The **[Partner Agreement](#)** is the first step in getting access to the service.

In addition, AIRA and the Centers for Disease Control and Prevention have **extended their funding** of the shared service **through 2024**. That means the service will be available to IIS programs at no charge until **at least** 2024, and likely beyond. The two organizations hope to continue funding the service on an ongoing basis, based on the value and economies of scale it offers the whole IIS community.

Attendees at the 2019 AIRA National Meeting in Indianapolis heard about another positive (and documented!) impact of address standardization during Dr. Shaun Grannis's plenary presentation. A [recent article in JAMIA](#) detailed how USPS address standardization showed the greatest impact on improved matching in the health information exchange based on sensitivity and recall. Read more about this article and its findings [here](#).

Address Cleansing Participants - September 2019



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## 2019 MARKS AN UPTICK IN NUMBER OF SMARTYSTREETS ADDRESS CLEANSING IMPLEMENTERS; MORE ARE EXPECTED IN 2020 *Continued from page 2*

Along with geocoding, SmartyStreets offers address standardization and validation through manual batch processing, automated batch processing, an HL7 real-time solution, and/or a user interface API. The service became available to all AIRA member IIS programs as of June 1, 2017. Between that date and August 31, 2019, AIRA members have validated and standardized nearly 224 million addresses using the service. The flexible service can be used to standardize, validate and/or geocode addresses for patients, responsible persons, providers, partners, or any other address data housed in an IIS.

**Between June 1, 2017 and August 31, 2019, AIRA members have validated and standardized nearly 224 million addresses using SmartyStreets.**

IIS staff who use the service meet every other month as a [User Group](#) to share successes and challenges and learn about a variety of SmartyStreets-related topics from their peers. Past presentations include how to use geocoded data meaningfully, how to manage the cleansing of large data sets, and how to handle rejected addresses.

Jurisdictions interested in learning more about the SmartyStreets service should contact [Maureen Neary](#). We welcome and encourage all IIS programs to access this no-cost service.

*- Submitted by Maureen Neary and Mary Beth Kurilo, MPH, MSW, AIRA*



## A CHAMPIONSHIP EVENT IN INDY!

AIRA was pleased to welcome the IIS community to the AIRA 2019 National Meeting in Indianapolis, Indiana, from Tuesday, August 13 through Thursday, August 15.

### We put the ♥ in heartland

As always, the spirit of the IIS community shone brightly during the two-and-a-half-day event. Whether debating the merits of FHIR (Fast Healthcare Interoperability Resources) or effective strategies to contain measles outbreaks, attendees' passion and engagement were the stars of the show!

After a new-member orientation, newbies joined their colleagues in chatting and laughing during networking breaks, a scavenger hunt, and extracurricular city walks and runs. Participants connected during rapid-fire roundtables, discussed more than 100 subjects during seven different breakout sessions, and interacted via the new AIRA app.

### Memorable content

Keynote speaker Paul Zikopoulos, vice president of data and cognitive systems at IBM, kicked off the event by encouraging everyone to improve whatever they are focused on by just 1%, which feels achievable and over time really adds up! (In a move that shows the effectiveness of this strategy on both data collection and diet, AIRA walked his talk by offering mini-Snickers instead of full-size bars.)



Quan Le demonstrates successful transport on his way to AIRA's 20th anniversary celebration.



Reunited and it feels so good.  
Pictured (left to right): Cindy Sutliff,  
Warren Williams, Mandy Harris,  
Michael Flynn

Other plenary standouts included conversations on national standards and interoperability, a stroll through 20 years of IIS history, and an update on AIRA's key messages. CDC branch chiefs Lynn Gibbs-Scharf and Brock Lamont closed out the event with a well-attended and informative Q&A session, covering topics from their strategic roadmap to the relevance of shared services and the role of innovation.

### Celebrating 20 years!

For the first time, attendees enjoyed an off-site celebration Tuesday night in the Grand Hall at historic Union Station. This beautiful station was the first in the U.S. where multiple railroads were united in one place. It was a fitting location for a vanguard community that came together to move the cause of immunization forward—and also one that prizes successful transport!

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## A CHAMPIONSHIP EVENT IN INDY! *Continued from page 4*

Thank you to Gary Urquhart, Cindy Sutliff, Warren Williams, and Michael Flynn for coming back to help us celebrate 20 years of the IIS community's accomplishments. We all look forward to our next 20 years!



Competing for prizes of a lifetime!  
Pictured (left to right): Steven White, Beth Cox, Quan Le,  
Amy Metroka, Eric Larson, Brittany Gyer, Amanda Dayton

### Gameshow hilarity

AIRA's very own Bob Barker (aka a scarily similar Eric Larson) jump-started Wednesday morning with a rollicking mashup of popular gameshows. Contestants came on down to show off their expertise in VaxCab, The PrIISe is Right, and Who Wants to Be a Vaccinate-aire. They phoned friends, aced Red Light Challenges, and won free address cleansing services. It all culminated in a nail-biter of a Showcase Showdown featuring a surprise appearance by the Big Wheel itself!

### Looking ahead

Everyone faces similar challenges over the next few years. Turnover is at the top of that list, followed by a lack of resources, data quality, and issues engaging with providers. During numerous sessions, IIS staff also shared their experiences and strategies regarding interoperability, IIS business continuity, outbreak response, sustainability and many other topics. There's still a lot to do!

### See you next year?

Join us next year in the beautiful Pacific Northwest as we come together to share our challenges and successes. AIRA's next National Meeting will be August 11–August 13, 2020, in Portland, Oregon. Already, we're looking forward to connecting with you in person again!

- Submitted by **Maureen Neary**, AIRA



## RAPID-FIRE ROUNDTABLES AT AIRA 2019 NATIONAL MEETING

The IIS community is a talented, committed, and engaged group of individuals, and the rapid-fire roundtables at the AIRA 2019 National Meeting highlighted the community's passions and priorities.

The roundtables provided an opportunity for networking and engaging with others across the IIS community on a national and international scale and provided insights on key IIS topics, including top IIS priorities, stakeholder recruitment, key resources that could make all the difference, and how IIS are working to prepare for vaccine-preventable disease outbreaks.

When asked about IIS's single biggest priority in the coming year, IIS had a wide range of answers, but key topics included improving data quality (specifically managing patient status and deduplication), migrating data/systems, IIS integration with other systems and programs (such as Vital Records, Vaccines for Children, and Perinatal Hep B), interoperability, coverage assessments, security and infrastructure, and partnering with stakeholders such as electronic health record (EHR) companies, pharmacies, and others.

The IIS community also described the new stakeholders they are currently recruiting or hope to recruit to champion their IIS. IIS attendees are currently recruiting or plan to recruit pharmacies, schools and universities, legislators, immunization coalitions, local chapters of the American Academy of Pediatrics, pediatric and adult providers, correctional facilities, urgent care networks, insurers and health plans, EHRs,



Advancing IIS together

vaccine manufacturers, and a wide range of other stakeholders to champion their IIS.

We also asked the IIS to dream! If they could have one resource or staff person to significantly help their IIS, what would it be? Several tables discussed unlimited funding and even clones of themselves or other IIS superstars. Beyond this, many tables discussed their desire for highly trained staff with specific skills, including expertise in onboarding, data quality, technical support, information technology, data analysis, programming, epidemiology, research, business analytics, software development, marketing, strategic planning and leadership, health education, and so much more.

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## RAPID-FIRE ROUNDTABLES AT AIRA 2019 NATIONAL MEETING

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Finally, the IIS community discussed vaccine-preventable disease outbreaks, and discussions on measles, hepatitis A, and mumps abounded. For outbreak response, IIS mentioned using their data to look up records; identify pockets of need; provide data to providers, epidemiologists, and local health departments; and conduct reminder/recall. Many IIS reported partnering with correctional facilities, schools, universities, providers, clinics, emergency rooms, local health departments, and other critical stakeholders in their outbreak response. Several IIS discussed “gearing up” to prepare for outbreaks—including drills with public health preparedness and creating strike teams to prepare for epidemics. Other IIS discussed targeted outreach to vulnerable populations and providers to improve vaccination rates in hopes of reducing or preventing outbreaks. Some IIS were making specific improvements to prepare, such as housing historical immunization records in the IIS or denominator cleanup, in an effort to create more accurate coverage assessments. Given the nature of vaccine-preventable disease outbreaks, many IIS reported partnering with key allies to help respond to and prepare for outbreaks.

AIRA also sprinkled in a little light-hearted fun, and it turns out, individuals in the IIS community would love to be famous for a variety of different talents and discoveries, including medical

breakthroughs, world peace, and space travel. But our favorites: one person would like to be famous for accidentally breaking into buildings, and another would love to hold a Guinness World Record for growing the world’s largest vegetable. Yum!

We also learned that many people—even those who didn’t identify as a perpetually tired pigeon—would use an extra hour in a 25-hour-day for sleep. Exercising, reading, and healthy eating also topped the list. Not surprisingly, very few people wanted to work more—although one loyal spouse did say they’d spend their extra hour crushing their “honey do list.” (We give you each permission to share this with your significant other and claim you were the doting spouse who promised to spend an extra hour serving them.)

The rapid-fire roundtables at the AIRA National Meeting are a time for connection, discussion, and engagement.

**At AIRA, we’ll continue to support and promote the use of IIS, and based on all the varied discussions we heard during the rapid-fire roundtables, we want to say: we hear you, and we’ll continue our shared mission to advance IIS together.**

**- Submitted by AIRA**



## MAKING A CONNECTION

### FIRST TIMERS' EXPERIENCE AT AIRA 2019 NATIONAL MEETING

The energy walking into the JW Marriott in Indianapolis for the AIRA 2019 National Meeting was palpable. As a recurring participant, I felt it had the air of returning to camp as a child—the excitement and expectation of seeing old friends, making new ones, learning new things, and having a great time.

Having attended last year's National Meeting in Salt Lake City, and several regional meetings over the years, I looked forward to reconnecting with HLN colleagues, clients, and friends. The night before the meeting, the lounge was packed with people from all over the country and some faraway places, casually chatting about summer travels, children, pets, and of course, immunization programs and immunization information systems (IIS). That was my own experience, but how was it for first-time participants? How did they feel walking into a vibrant and dynamic national community forum? I chatted with a few folks who were experiencing an AIRA National Meeting for the first time to get their perspective and thoughts, and what a good one to attend—in celebration of AIRA's 20th Anniversary!

Georgia Elysee, with the New York City Department of Mental Health and Hygiene, Immunization Bureau, Vaccine for Children Program – Provider Quality Assurance Unit, coordinator of Data Analysis and Training, described her AIRA debut as “a very pleasant experience.” Meeting AIRA volunteer Katie Reed from DXC at the New Member Orientation provided an instant connection and made it a bit easier for Georgia to get out there and meet

others. Attending the early morning orientation (yes, it was early), helped Georgia navigate the meeting setup and events, as well as make some initial contacts and connections.

Georgia thought the breakout sessions provided the opportunity to discuss IIS development, improvements, and best practices with people at all levels, in various roles and organizations. She was gratified to hear that she was not alone in navigating IIS challenges, and she found camaraderie and support in hearing how others faced similar issues to the ones she was tackling. Through the sessions and throughout the meeting, it became clear to Georgia that “we are a community of people who are working to achieve the same goals.”

Although it was a bit daunting, Georgia appreciated being a presenter at the meeting, as it gave her the platform to offer New York City's approach and perspective on using an IIS to achieve compliance with VFC storage and handling requirements and to hear ideas and actions being taken in other jurisdictions. As Georgia so aptly put it, “It was great to be in an environment where individuals at all levels from all over the world not only were excited to share ideas but were open to learning new ones.”

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## MAKING A CONNECTION

### FIRST TIMERS' EXPERIENCE AT AIRA 2019 NATIONAL MEETING

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***"It was great to be in an environment where individuals at all levels from all over the world not only were excited to share ideas but were open to learning new ones."***

**– Georgia Elysee,**  
New York City Department of Mental  
Health and Hygiene

Georgia credited the AIRA anniversary celebration as a great way of networking and putting some faces to the voices and names of people she interacted with on an almost daily basis but had never met in person—a comment heard often from first-time National Meeting attendees.

Another first-time attendee, Loretta Rivera from the Connecticut Department of Public Health Quality Assurance Lead, On-boarding, and Training, had some initial support from her team in reviewing the agenda in advance of the meeting and taking a "divide and conquer" approach to attend as many sessions as possible. Many first-timers indicated their desire to engage, listen, and learn in order to soak up everything they could during the meeting and bring it back for further discussion with their team. Loretta also mentioned that her selection of the sessions to attend shifted a bit as the meeting program and session descriptions became available via the AIRA 2019 National Meeting app.

Loretta's key takeaway from the AIRA 2019 National Meeting was collaboration... collaboration...collaboration! She felt the networking time was well spent in seeking out peers to discuss common pursuits related to IIS data quality and data usage, and discussing other jurisdictions' activities, benefits, and challenges helped Loretta gain a broader perspective of Connecticut's ideas and plans.

As I spoke to and met people from near and far (the Netherlands!), it was inspiring to hear similar attitudes expressed by first-time attendees. In the case of Rob Hargis from the Missouri Department of Health and Senior Services, who has been in his role as the IIS manager and manager of VFC Ordering and Helpdesk since April 2019, his expectations of the AIRA National Meeting did not disappoint. He was energized and, truth be told, a bit relieved by the abundance of resources and support available to a newly appointed IIS manager and someone new to the immunization community. Rob reiterated Georgia's assessment that "we often face similar challenges within our roles and respective IIS and can use one another as a resource."

***As I spoke to and met people from near and far (the Netherlands!), it was inspiring to hear similar attitudes expressed by first-time attendees.***

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## MAKING A CONNECTION

### FIRST TIMERS' EXPERIENCE AT AIRA 2019 NATIONAL MEETING

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Rob also commented on the opportunity to hear from others regarding their challenges and feeling less isolated as he navigates the stresses of testing, planning for training, and learning about immunization programs in general. He has started to build relationships within the IIS community through his participation at the AIRA 2019 National Meeting as well as his attendance over the past few months at the AIRA Regional Workshop and the PHII IIS Manager Leadership Training. As Rob describes his experience at AIRA

2019, "I was a blank canvas trying to soak up as much information as I could during my time there."

Whether you are a first-timer, a recurring participant, or a "scrappy pioneer" of the AIRA National Meetings, there is something to be gained by attending and actively participating in all that is offered...especially the opportunity to interact with such a motivated and dedicated healthcare community.

**- Submitted by Marcey Propp, MBA, CPHIMS, HLN Consulting Senior Project Manager**



## CLINICAL DECISION SUPPORT ASSESSMENT RESULTS NOW AVAILABLE IN AART

The Measurement and Improvement Initiative started in 2015, with the goal of providing IIS with information and guidance to more fully align with [IIS Functional Standards](#).

Over time, the initiative has been adding more content areas of measurement. Most recently, AIRA and members of MACAW (the Measurement for Assessment and Certification Advisory Workgroup) have been working to implement Assessment for Clinical Decision Support. The efforts in our community to implement independent measurement of IIS alignment with Advisory Committee on Immunization Practices (ACIP) recommendations has been a challenge. One tool AIRA had to use in developing measurement was CDC's Clinical Decision Support for Immunization (CDSi) specifications. The CDSi project was launched to address the challenge of interpreting clinically written ACIP recommendations. The purpose of CDSi is to aid technical implementors in aligning CDS engines (e.g., forecasters, shot schedulers, etc.) with current ACIP recommendations. AIRA's Measurement and Improvement Initiative is now assessing IIS implementation of 750 CDSi test cases with 35 individual IIS quarterly. This is a huge step forward for the IIS community, and we hope to increase the number of IIS that are measured in the future. Through tools found in the Aggregate Analysis Reporting Tool (AART), an IIS can drill down into specific CDSi test cases to determine how to better align with ACIP recommendations.

### CDS Results Summary

The following table summarizes the overall results of the 12 CDS Assessment Measures.

Concept	Age Group	Result	Passed		Failed Group Count
Evaluation Status	Supports Evaluation Status	Does Not Meet	0%		
	Accuracy Peds Evaluation Status	Not Measured			
	Accuracy Adol Evaluation Status	Not Measured			
	Accuracy Adult Evaluation Status	Not Measured			
Earliest Date	Supports Earliest Date	Meets	100%		
	Accuracy Peds Earliest Date	Meets	95%		
	Accuracy Adol Earliest Date	Meets	98%		
	Accuracy Adult Earliest Date	Meets	94%		
Recommended Date	Supports Recommended Date	Meets	100%		
	Accuracy Peds Recommended Date	Meets	98%		
	Accuracy Adol Recommended Date	Meets	98%		
	Accuracy Adult Recommended Date	Meets	94%		
New or Changed		Not Measured			

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# CLINICAL DECISION SUPPORT ASSESSMENT RESULTS NOW AVAILABLE IN AART

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## Florida's Journey to Implement CDSi Test Cases and Next Steps

The Florida program is using an awardee-developed IIS; the team started leveraging CDSi test cases to align with ACIP recommendations in June of 2018. Prior to migrating to CDSi, Florida State Health Online Tracking System (SHOTS) had a homegrown, fully functional algorithm engine that provided both evaluation and forecasting capabilities matching ACIP recommendations. With each update to the CDC immunization recommendations, time and resources were needed to evaluate and implement updates to meet the new recommendations and Florida-specific requirements. In addition, time and resources were spent to determine if the overall engine required logic updates to meet the guidelines. After evaluating all resources required to maintain the algorithm, Florida decided to migrate to using CDSi resources to leverage the work already done by the CDSi team. Prior to June 2017, Florida's vaccine-type table was CPT code based. Once the decision was made to migrate to using CDSi, the first requirement was to convert the vaccine-type table to be based on CVX. Next, the CDS engine implementation was developed based on the Logic Specification version 3.0. A utility was developed to import the data contained in the "Supporting Data" XML files and restructure the supporting data for efficient use by the CDS engine. So far, Florida has successfully deployed the Supporting Data versions 3.5, 3.6, 3.7, and 4.0 Logic Specifications. By replacing the homegrown algorithm with CDSi, the overall time for deploying the updated Supporting Data versions to production has decreased. In addition to the CDS implementation, Florida also developed an automated test case evaluation tool that works specifically with the Florida CDS engine and allows them to create and test Florida-specific test cases.

The initial CDS Assessment results within the Measurement and Improvement Initiative reflect the work Florida has done to align with ACIP recommendations. Florida would like to thank the CDSi technical team for their support in addressing clarifications while developing the CDS engine as well as reconciling test case results. For more information about Florida's automated test evaluation tool or their journey to implement CDSi test cases, please contact [Baskar Krishnamoorthy](#).

## Want More Information or Need Help?

More information about [CDS](#) and [AART](#) can be found on [AIRA's website](#). AIRA's technical assistance team is also ready to assist you in understanding your AART results, helping prioritize work, and supporting your movement toward full alignment with standards. Do not hesitate to contact us for technical assistance. We can quickly answer a question or dive into deeper topics, such as assisting you and your IIS technical development team to better understand issues and make plans to more fully align with standards. Fill out a [Technical Assistance Request](#) or contact Kristi Siahaya at [ksiahaya@immregistries.org](mailto:ksiahaya@immregistries.org) for more information.

**- Submitted by Baskar Krishnamoorthy, Lisa Walker, Rick Sulzer, Florida SHOTS Team, & Kristi Siahaya, AIRA**