AMERICAN IMMUNIZATION REGISTRY ASSOCIATION

ANNUAL REPORT

OCTOBER 1, 2016 – SEPTEMBER 30, 2017

AIRA
AMERICAN IMMUNIZATION
REGISTRY ASSOCIATION

Hello AIRA Community,

I am pleased to share with you AIRA's first Annual Report. Our intention with this report is to showcase AIRA's progression toward meeting its goals as described in the 2017-2019 Strategic Plan.

The first section of the report describes the structure of both the organization and AIRA's membership program. This is followed by an overview of the existing landscape of the greater immunization information system (IIS) community and the specific ways in which AIRA is striving to improve IIS operations and serve as a leading authority on IIS. Additional sections identify educational offerings, meetings and resources developed by AIRA over the past year, various initiatives under way to support IIS, such as the Measurement and Improvement Initiative, technical assistance, and the development of services that can be shared across the community. This report concludes with an overview of AIRA's fiscal position and a thank you - to all of those who work tirelessly to make the IIS community stronger.

To say it was a busy year seems like such an understatement! We sincerely hope you enjoy learning about AIRA and the IIS community.

Sincerely,
Rebecca Coyle

Vision, Mission, and Purpose of AIRA

AIRA Vision: To facilitate the sharing and use of immunization information by all partners and ensure that immunization information systems are fully supported and represented.

AIRA Mission: To promote and support the use of immunization information to ensure healthy communities.

Purpose: The purpose of AIRA is to support and promote the development, implementation, and interoperability of immunization information systems through partnerships, peer and professional education/training, and resource development.

✉ **General Inquiries:** info@immregistries.org

📍 **Address:** American Immunization Registry Association
1155 F Street NW, Suite 1050 • Washington, DC 20004

📱 **Phone:** 202.552.0208

AIRA BOARD

Officers/Executive Committee
Mary Woinarowicz, *North Dakota – Immediate Past President*

Michelle Hood, *Nebraska – President*

Kim Salisbury-Keith, *Rhode Island – President Elect*

Belinda Baker, *Washington – Treasurer*

Jenne McKibben, *Oregon – Secretary*

Baskar Krishnamoorthy, *Florida – Member-at-Large*

Voting Directors
Bridget Ahrens, *Vermont*

Brittany Ersery, *Kansas*

David McCormick, *Indiana*

Megan Meldrum, *New York State*

Quan Le, *Louisiana*

Non-Voting Directors
Brandy Altstadter
Scientific Technologies Corporation

Kevin Dombkowski
University of Michigan

AIRA STAFF
Rebecca Coyle, *Executive Director*

Alison Chi, *Program Director*

Mary Beth Kurilo, *Policy and Planning Director*

Carmela Gupta, *Senior Program Manager*

Maureen Neary, *Senior Project Manager*

Nathan Bunker, *Senior Technical Project Manager*

Nichole Lambrecht, *Senior Project Manager*

Eric Larson, *Senior Technical Project Manager*

Amanda Dayton, *Business and Grants Manager*

Ketti Turcato, *Program Manager*

Amanda Branham, *Membership and Executive Administrator*

Brittany Gyer, *Administrative Assistant*

STRUCTURE

Supporting the mission and vision of AIRA through a strong organizational structure

AIRA is more than just its dedicated staff and board members. Many of AIRA's initiatives are created and carried out by members who participate on AIRA steering committees and workgroups. AIRA also employs the services of consultants with expertise in technical writing, facilitation, and project management to ensure the success of its guidance documents and initiatives. This combination of staffing, volunteers, and consultants enables AIRA to support the needs of the organization and the IIS community.

AIRA STAFF

AIRA CONSULTANTS

AIRA MEMBERSHIP

AIRA BOARD

AIRA COMMITTEES

AIRA WORKGROUPS

AIRA STEERING COMMITTEES

Assessment Steering Committee (ASC)
co-chaired by Deborah Richards and Heather Roth

Education Steering Committee (ESC)
co-chaired by Jenne McKibben and Katie Reed

Modeling Immunization Registry Operations Workgroup (MIROW)
co-chaired by Warren Williams, Elaine Lowery, and Mandy Harris

Standards and Interoperability Steering Committee (SISC)
co-chaired by Mary Woinarowicz and Craig Newman

AIRA WORKGROUPS

Measurement for Assessment and Certification Advisory Workgroup (MACAW)
co-chaired by Aaron Bieringer and Jane Lammers

Joint Development & Implementation Advisory Workgroup (JDI)
co-chaired by Bill Brand and Michael Flynn

IIS COMMUNITY

Promoting membership engagement

AIRA offers membership to immunization information systems, IIS implementers, and not-for-profit organizations that share and support its mission. AIRA's Partnership Program offers an opportunity for individuals and entities who support AIRA to work together to address health issues affecting the nation.

AIRA membership provides opportunities for:

Building and maintaining strong partnerships with other organizations to resolve common issues together

Advocacy for funding of IIS development and enhancement through legislation, policy development, and public information

Contributions to the ongoing development and evolution of IIS through knowledge-sharing opportunities and capacity-building activities

Advocacy for—as well as development, dissemination, and promotion of—IIS standards

In 2016-2017, there were 485 AIRA members representing:

11 individuals

57 IIS jurisdictions

6 for-profit organizations

7 non profit organizations
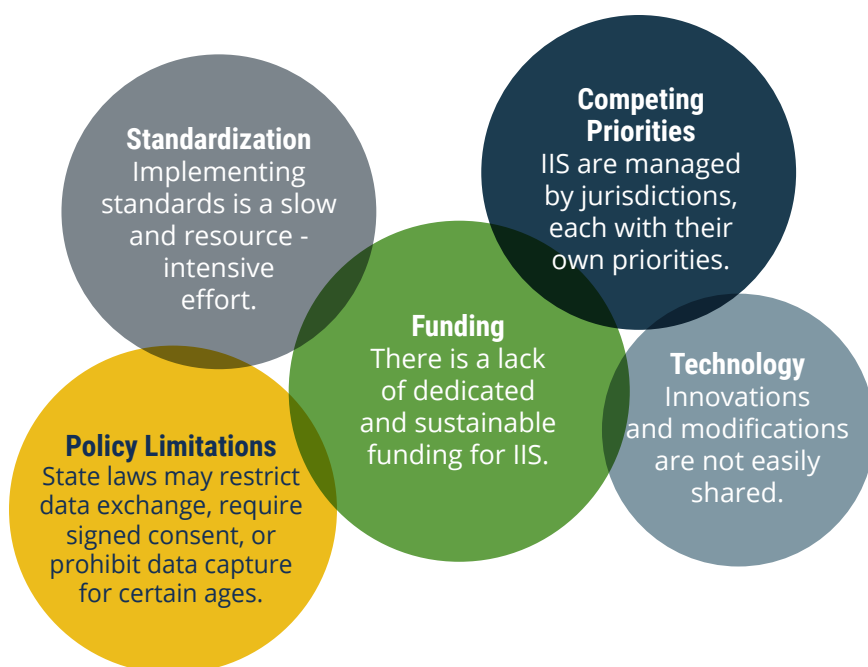
7 IIS implementers

"...it was very helpful knowing that AIRA is always on top of doing everything they can to help the community and their members... even non-members. AIRA always has great subjects and topics of discussion shared via various methods—webinars, meetings, newsletters, email, etc."

— *Celena Calvo-Story, AIRA 2017 Education Survey*

IIS are important tools in the public health system and exist to improve and protect the nation's health from vaccine-preventable diseases. Yet, despite their importance and necessity, **IIS face persistent challenges, including:**

Standardization
Implementing standards is a slow and resource - intensive effort.

Competing Priorities
IIS are managed by jurisdictions, each with their own priorities.

Funding
There is a lack of dedicated and sustainable funding for IIS.

Technology
Innovations and modifications are not easily shared.

Policy Limitations
State laws may restrict data exchange, require signed consent, or prohibit data capture for certain ages.

JOIN AIRA AND GET INVOLVED

IIS provide an essential public health service and are an important part of the nation's public health infrastructure. Yet these persistent problems facing IIS threaten to cripple their very existence.

Through its resources and initiatives, AIRA seeks to reduce variability among IIS, promote shared knowledge, and increase the efficiency of IIS operations. It also seeks to overcome the challenges described above through:

Collaboration
Uniting IIS in the development of standards and best practices

Support
Providing ongoing education, technical assistance, and advocacy

Measurement and Improvement
Assessing gaps in IIS adherence to standards and providing technical assistance to help IIS programs improve
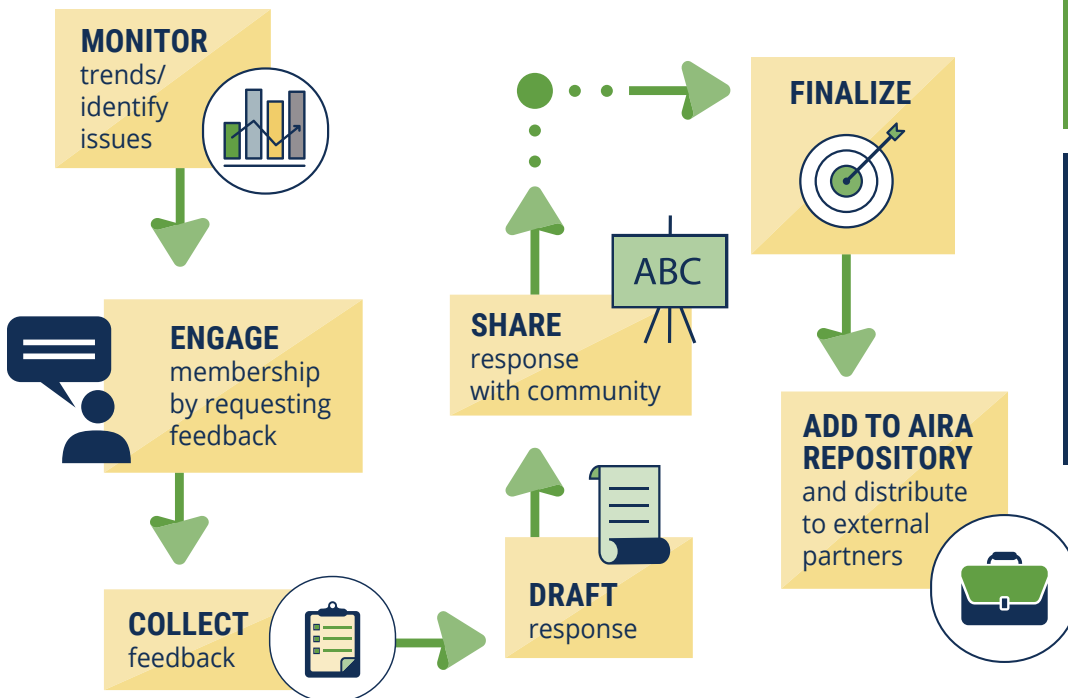
Shared Services
Identifying services that can benefit all IIS for one price

There are many opportunities for AIRA members to get involved:
Join a committee or workgroup • Volunteer as a subject matter expert • Write an article for *SnapShots*
Present at the annual meeting • Attend an educational webinar • Participate in the measurement and improvement initiative.

IIS CHAMPION

To best represent the IIS community, AIRA regularly solicits feedback on key issues through the following process:

MONITOR trends/identify issues

ENGAGE membership by requesting feedback

COLLECT feedback

DRAFT response

SHARE response with community

ABC

FINALIZE

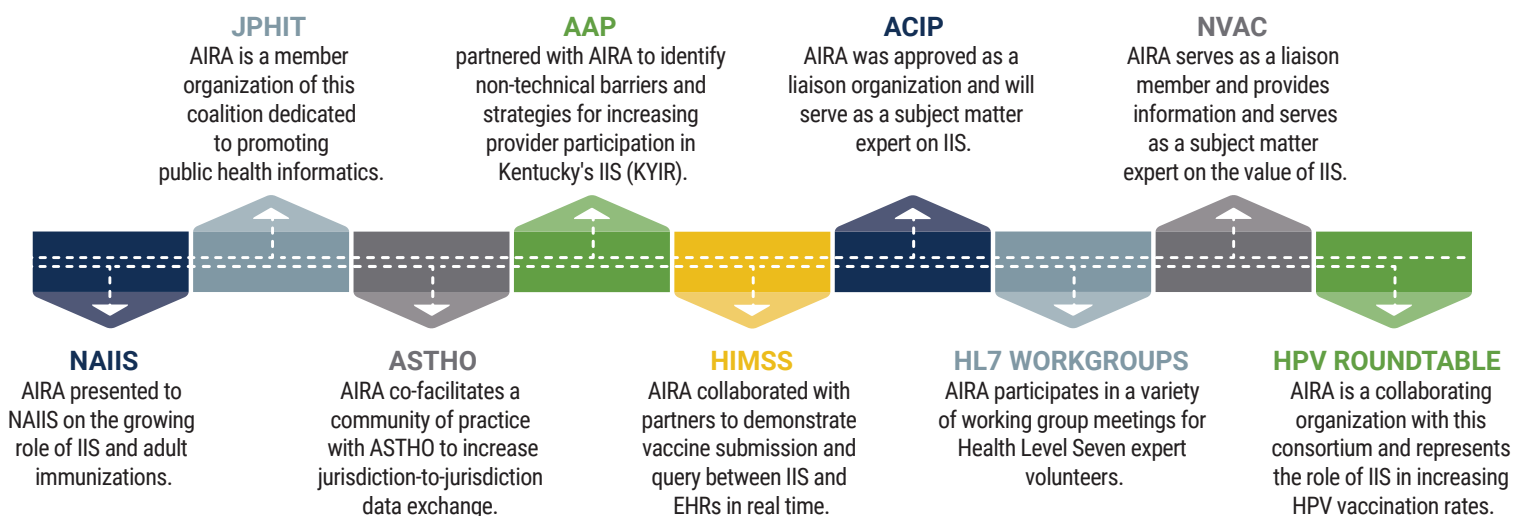**ADD TO AIRA REPOSITORY** and distribute to external partners

"Thank you for your role in supporting IIS!"

— *Leanne Bailey, Vaccine Policy & Government Relations (Merck)*

AIRA hosted more than 70 WORKGROUP MEETINGS over the course of the year

AIRA strives to represent IIS interests and serve as the voice of the community through attendance and participation at stakeholder meetings across the country. AIRA staff and volunteers attended countless meetings with over 45 unique partners in 2017. Some of the key stakeholder meetings AIRA attended are presented below.

JPHIT
AIRA is a member organization of this coalition dedicated to promoting public health informatics.

AAP
partnered with AIRA to identify non-technical barriers and strategies for increasing provider participation in Kentucky's IIS (KYIR).

ACIP
AIRA was approved as a liaison organization and will serve as a subject matter expert on IIS.

NVAC
AIRA serves as a liaison member and provides information and serves as a subject matter expert on the value of IIS.

NAIIS
AIRA presented to NAIIS on the growing role of IIS and adult immunizations.

ASTHO
AIRA co-facilitates a community of practice with ASTHO to increase jurisdiction-to-jurisdiction data exchange.

HIMSS
AIRA collaborated with partners to demonstrate vaccine submission and query between IIS and EHRs in real time.

HL7 WORKGROUPS
AIRA participates in a variety of working group meetings for Health Level Seven expert volunteers.

HPV ROUNDTABLE
AIRA is a collaborating organization with this consortium and represents the role of IIS in increasing HPV vaccination rates.
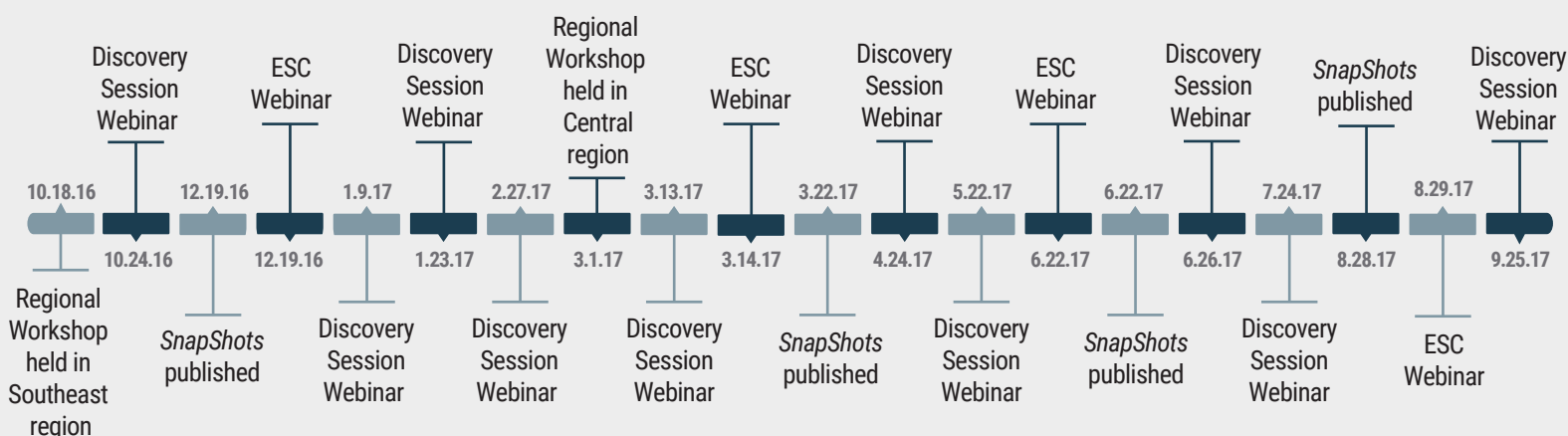
EDUCATION

Supporting increases in IIS competencies through training and education

AIRA serves as the leading authority in education and training for the IIS community. Over the past year, AIRA provided the following educational and training opportunities:

10 — **10 Discovery Session** webinars were held for those new to the IIS community.

4 — **4 Webinars** were hosted by the **Education Steering Committee**.

4 — **4 Webinars** were offered to introduce a **New Educational Tool or Resource**.

4 — **4 Issues** of *SnapShots* were published, highlighting the progress, best practices, and accomplishments of IIS across the country.

2 — **2 In-Person Regional Workshops** were held, one in the Southeast and one in the Central region.

"The regional meeting was such a great opportunity to discuss current hot topics with others in a smaller, more intimate setting."
— *anonymous from the Oklahoma City Regional Meeting Evaluation*

960
TOTAL ATTENDANCE

at **Discovery Sessions** and **ESC webinars** over the past year

Timeline

Date	Event
10.18.16	Discovery Session Webinar
10.24.16	Regional Workshop held in Southeast region
12.19.16	ESC Webinar
12.19.16	SnapShots published
1.9.17	Discovery Session Webinar
1.23.17	Discovery Session Webinar
2.27.17	Regional Workshop held in Central region
3.1.17	Discovery Session Webinar
3.13.17	ESC Webinar
3.14.17	Discovery Session Webinar
3.22.17	Discovery Session Webinar
4.24.17	SnapShots published
5.22.17	ESC Webinar
6.22.17	Discovery Session Webinar
6.22.17	Discovery Session Webinar
6.26.17	SnapShots published
7.24.17	Discovery Session Webinar
8.28.17	SnapShots published
8.29.17	Discovery Session Webinar
9.25.17	ESC Webinar

AIRA NATIONAL MEETING

Advancing IIS Together

AIRA's fifth annual national meeting was a huge success and featured:

- Keynote presentations from Dr. Nancy Messonnier, the director of the National Center for Immunization and Respiratory Diseases (NCIRD), and Dr. Zubin Damania (ZDogg MD)
- 30 breakout sessions and 71 unique presentations on a variety of topics
- 3 small-group roundtables that focused on targeted topics
- Regional breakout session, where attendees were provided a networking opportunity within their geographic region
- A live AIRA gameshow that highlighted AIRA's recent products and activities

> "Great conference. Really good mix of breakouts, plenaries, and roundtables. Also, ample time for networking which can be key to learning."
>
> — *anonymous attendee, AIRA 2017 National Meeting Evaluation*

2017 AIRA Award Winners

CENTERS OF EXCELLENCE:
Innovative Approaches to Increasing or Demonstrating Value of IIS

1ST PLACE:
Illinois Comprehensive Automated Immunization Registry Exchange (I-CARE)

VOLUNTEER SERVICE AWARD RECIPIENTS

Aaron Bieringer

Michael Flynn

Therese Hoyle

Kevin Snow

LIFETIME ACHIEVEMENT AWARD

Amy Metroka

Rob Savage

Previous Meetings and Locations

255 attendees	279 attendees	338 attendees	350 attendees	400 attendees
Saint Paul Minnesota	**Denver** Colorado	**New Orleans** Louisiana	**Seattle** Washington	**Chicago** Illinois
2012	**2013**	**2015**	**2016**	**2017**

The AIRA 2017 National Meeting would not have been possible without the generous contributions of its meeting sponsors. AIRA thanks each of its sponsors who helped make this year's meeting a success.

IIS RESOURCES

Providing resources for optimal IIS performance

AIRA employs the following process when developing best-practice or educational guidance documents:

STEP 2 — AIRA project resources identified

STEP 4 — Product developed

STEP 6 — Product finalized

STEP 8 — Introduction webinar held

STEP 1 — Need for guidance identified

STEP 3 — AIRA member and partner engagement

STEP 5 — Community review

STEP 7 — Product released

AIRA developed a variety of guides during the 2016-17 fiscal year to support IIS readiness and performance, including:

October 16, 2016

Confidentiality and Privacy Considerations for IIS summarizes different IIS confidentiality/privacy issues and provides considerations and sample forms.

⏰ 327   👥 11

February 16, 2017

Data Validation Guide for the IIS Onboarding Process focuses on the data validation process within the onboarding process.

⏰ 545   👥 10
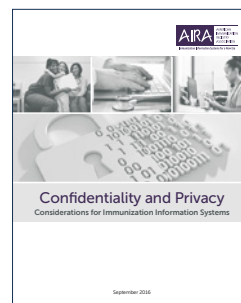
> "The quality and quantity of guidance and educational materials over the 7 years I have been in this role has improved significantly—which we have used to improve our IIS. Thank you."
>
> — *Nancy McConnell, AIRA Education Survey*

▬ Release Date

⏰ Hours to develop

👥 Number of people involved in development

IIS RESOURCES
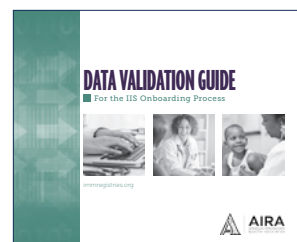
March 15, 2017

Practical Examples of IIS Population-Based Coverage Assessments describes real-life examples of coverage assessments using IIS data.

**PRACTICAL EXAMPLES OF IIS POPULATION-BASED COVERAGE ASSESSMENTS**
An Addendum to the Analytic Guide for Assessing Vaccination Coverage Using an IIS
March 2017

🕐 **273**   👥 **24**
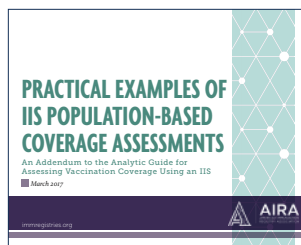
June 15, 2017

Implementation Guidance for a Shared Address Cleansing and Geocoding Service offers practical steps for integrating SmartyStreets into IIS operational and technical activities.

Immunization Information System (IIS) Implementation Guidance for a Shared Address Cleansing and Geocoding Service
May 2017

🕐 **196**   👥 **12**
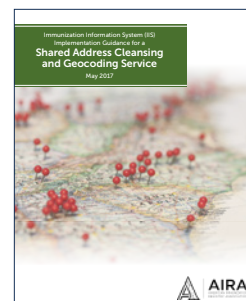
July 7, 2017

Security Guidance: Considerations for IIS explores the various issues that impact IIS security and provides guidance on addressing common security concerns.

Security Guidance
Considerations for Immunization Information Systems
June 2017

🕐 **541**   👥 **21**
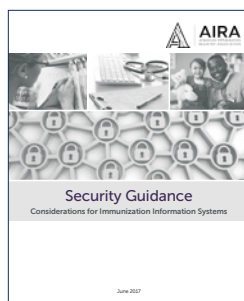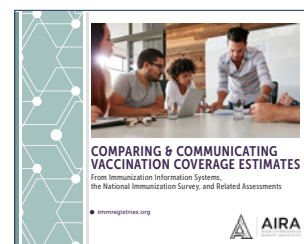
August 25, 2017

Comparing & Communicating Vaccination Coverage Estimates offers tips and tools that can be used to help explain vaccination coverage assessment results to decision makers.

COMPARING & COMMUNICATING VACCINATION COVERAGE ESTIMATES
From Immunization Information Systems, the National Immunization Survey, and Related Assessments
immregistries.org

🕐 **565**   👥 **21**

September 26, 2017

IIS Data Quality Practices – Monitoring and Evaluating Data Submissions focuses on the ongoing data monitoring and evaluation process for incoming data submissions.

IIS DATA QUALITY PRACTICES
Monitoring and Evaluating Data Submissions
immregistries.org

🕐 **450**   👥 **17**

> "As a first-time participant, I enjoyed learning more about AIRA and the work being done. I am excited at the opportunity to participate more in the community and with AIRA."
>
> — *anonymous attendee, AIRA 2017 National Meeting Evaluation*

🔲 Release Date   🕐 Hours to develop   👥 Number of people involved in development

ALIGNMENT

In 2015, AIRA launched the Measurement and Improvement Initiative to assess and increase the level of alignment between IIS and the community's interoperability standards. This initiative follows a three-step process for IIS to measure their alignment with current standards:

1 ▶ **Testing and Discovery** – gathers preliminary information on community alignment with standards

2 ▶ **IIS Assessment** – involves more formal testing to measure individual IIS systems using IIS community-selected measures and tests

3 ▶ **Validation** – the summary stage to acknowledge and share results for IIS that are progressing toward or achieving alignment with community-selected measures and tests

Testing and Discovery → Assessment → Validation (Validated)

> "Participating in IIS assessment has given us a lot of really great information on how our system stacks up against national standards. While we have some work to do, it is nice to have a no cost, very thorough, testing of our application done to help identify some of the changes we need to make."
>
> *— Aaron Bieringer, MIIC Interoperability and Technical Lead*

This process is overseen by the Measurement for Assessment and Certification Advisory Workgroup (MACAW). MACAW recommends processes and measures to the AIRA board for review and approval once they have been vetted and accepted by the IIS community.

AIRA has completed the testing and discovery and IIS assessment phases for three specific areas of IIS functionality:
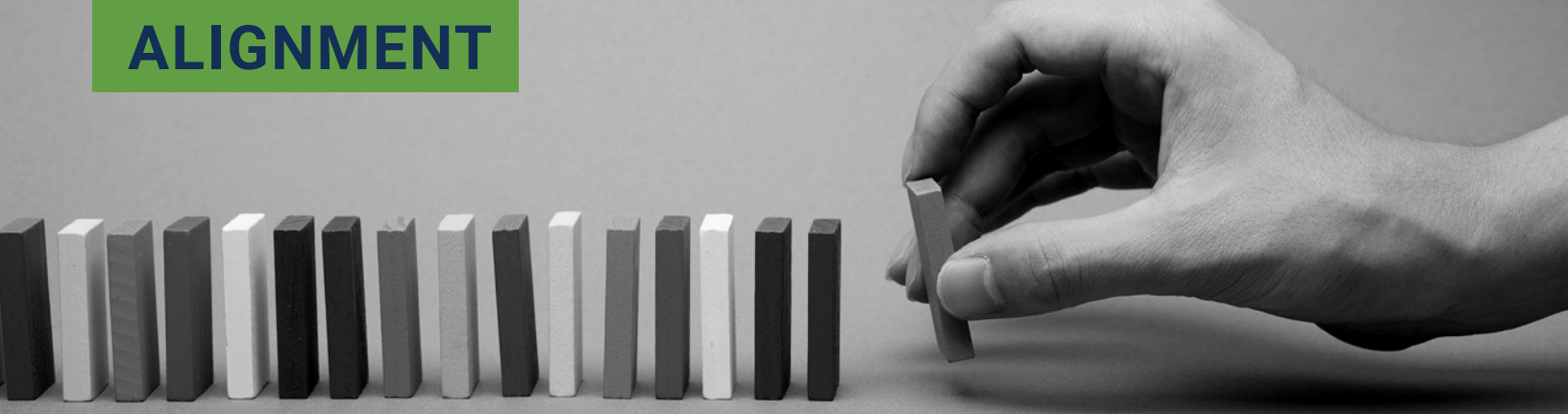
1 ▶ Message Transport

2 ▶ HL7 Submission and Acknowledgement

3 ▶ HL7 Query and Response

A summary of the highlights and progress of the IIS community for each measurement area follows.

ALIGNMENT

MEASUREMENT AREA	HIGHLIGHTS

HIGHLIGHTS
Since the initial baseline measurement, the following progress has been seen in each measurement area:

Message Transport

42% **increase** in the number of IIS nearing alignment (meeting two of the three tests)

71% **increase** in IIS known to have a Centers for Disease Control and Prevention web services definition language (CDC WSDL) implementation

200% **increase** in the number of IIS aligning with CDC WSDL specification

HL7 Submission and Acknowledgement

42% **increase** in the number of IIS able to accept the minimally required messages

400% **increase** in IIS passing the acknowlegement (ACK) measure

HL7 Query and Response

40% **increase** in the number of IIS meeting the timeliness measure of returning 95% of queries within five seconds

47% **increase** in the number of IIS passing the core data elements measure

250% **increase** in the number of IIS successfully passing the measure for returning a conformant response when no patients are found in the IIS

AIRA continues to re-measure each of these areas every quarter and is developing test cases to measure IIS clinical decision support capabilities.

ASSISTANCE

Providing technical assistance and support to IIS

In January 2016, AIRA started a formal process by which its members could request technical assistance (TA). Last year, AIRA received 154 TA requests. AIRA publishes its TA responses in a "Frequently Asked Questions" format on the AIRA website.

AIRA experienced a 16% INCREASE in TA requests from 2016 to 2017.

Topic of TA request

Topic	%
HL7 Format, Messaging, IG	42%
Software Products (DQA, SMM, etc.)	12%
AART and Measurement	12%
Other	10%
Standards, Specifications, Codesets (CDSi, etc.)	9%
Transport	8%
Policy (MU, HIPAA, etc.)	6%

32 unique IIS jurisdictions, 21 unique partners, and 2 unique territories received assistance

"Without the assistance and support we have received through AIRA, we could not do what we are doing now in the same effective and efficient manner."

— anonymous IIS manager/director–Information or Technical Assistance Request Evaluation, 2017

Satisfaction with quality and completeness of response

- **92%** Very satisfied
- **5%** Somewhat satisfied
- **3%** Neutral

Likeliness to request TA again

- **95%** Very likely
- **2.5%** Somewhat likely
- **2.5%** Neutral

AIRA staff or consultants visited the following locations to provide in-depth technical assistance:

CALIFORNIA
December 2016
To review and provide input on California's transition from a series of regional IIS to a state wide system

TEXAS
March 2017
To review and provide input on their transition from a legacy IIS to a new state wide system

OKLAHOMA
June 2017
To assist in operationalizing their HL7 query functions

IDAHO
August 2017
To review IRIS reports and assist in connecting to AART

GUAM
September 2017
To provide HL7 training through peer-to-peer assistance

SPAIN
September 2017
To facilitate needs assessment with the Spanish Ministry of Health to identify key system functionalities

SHARED SERVICES

Supporting cost-effective initiatives and joint development

AIRA supports the coordination, facilitation, and development of collaborative tools, applications, and technologies that can be implemented in multiple IIS programs. The following timeline highlights the accomplishments of this initiative.

Jointly developed projects increase efficiency, improve data quality, and bring value to IIS.

July 2015
Joint Development & Implementation Advisory Workgroup convened

November 2015
JDI in-person meeting, address cleansing identified as initial project focus

September 2016
SmartyStreets selected as service vendor

September 2016–February 2017
SmartyStreets piloted with six IIS jurisdictions

March 2017
Findings from SmartyStreets pilot published

June 2017
Access to SmartyStreets made available to all AIRA member IIS programs

June 2017
Implementation Guidance published

August 2017
SmartyStreets user groups launched

Pilot Findings

The pilot successfully demonstrated that the standardization, validation, and geocoding processes available through SmartyStreets improved the accuracy and completeness of incoming and existing data, as well as improved core IIS processes such as deduplication.

Following SmartyStreets standardization, pilot participants saw an increase in the deliverability of their reminder/recall messages from 71% to 88%.
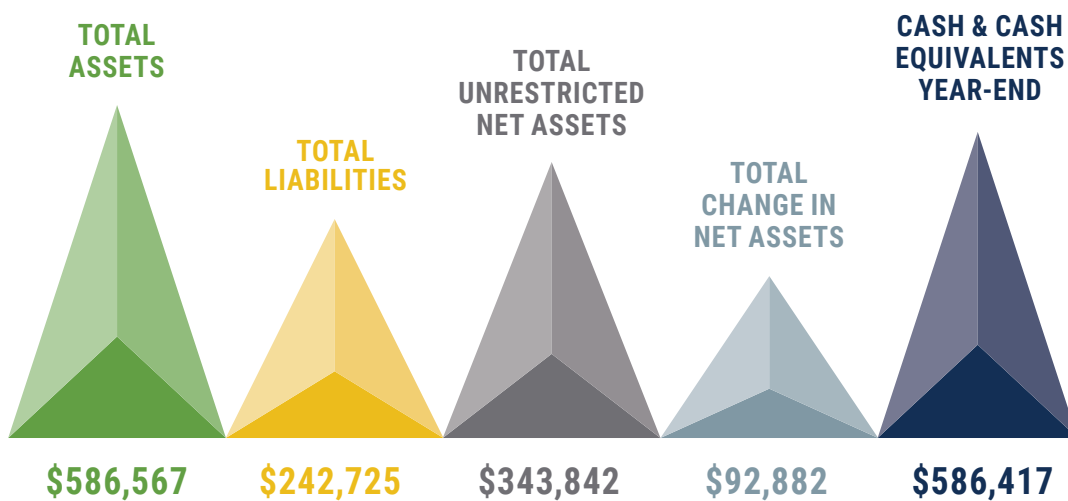
Since community launch, 11 jurisdictions have taken advantage of this service to standardize, validate, and geocode their data.

"The way we incorporated SmartyStreets into our workflow was quick and easy."

— *Pilot Summary, Address Cleansing and Geocoding Services*

FINANCES

The financial information provided below summarizes AIRA's financial position as of September 30, 2017.

2017 Overview

| TOTAL ASSETS	TOTAL LIABILITIES	TOTAL UNRESTRICTED NET ASSETS	TOTAL CHANGE IN NET ASSETS	CASH & CASH EQUIVALENTS YEAR-END
$586,567	$242,725	$343,842	$92,882	$586,417

2017 Income by Type

- **88%** Cooperative Agreements/ Federal Funding
- **9%** National Meeting
- **2%** Membership Dues
- **1%** Other
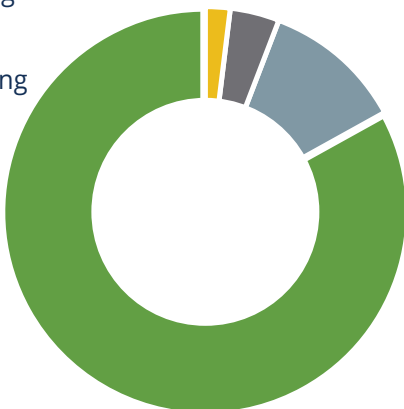
2017 Expenditures by Function

- **96%** Program Service
- **4%** Administration

Working together to make the IIS community stronger
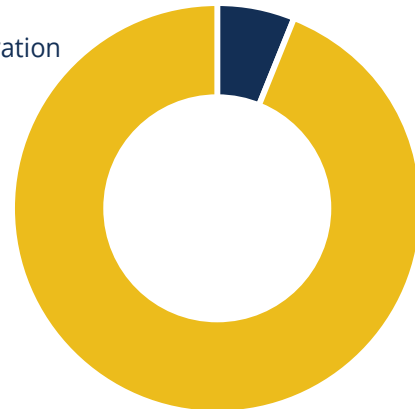
Thank You to Volunteers!

AIRA is a membership-based organization that values the voluntary and collaborative interaction of all its members.

AIRA would like to sincerely thank those who volunteered to develop products, submitted articles for *SnapShots*, presented on a webinar, contributed to the AIRA 2017 National Meeting planning, and participated on a workgroup or steering committee. Without their time, input, and effort, AIRA would be unable to achieve its mission and vision. AIRA largely credits its success to the collaboration of its members.
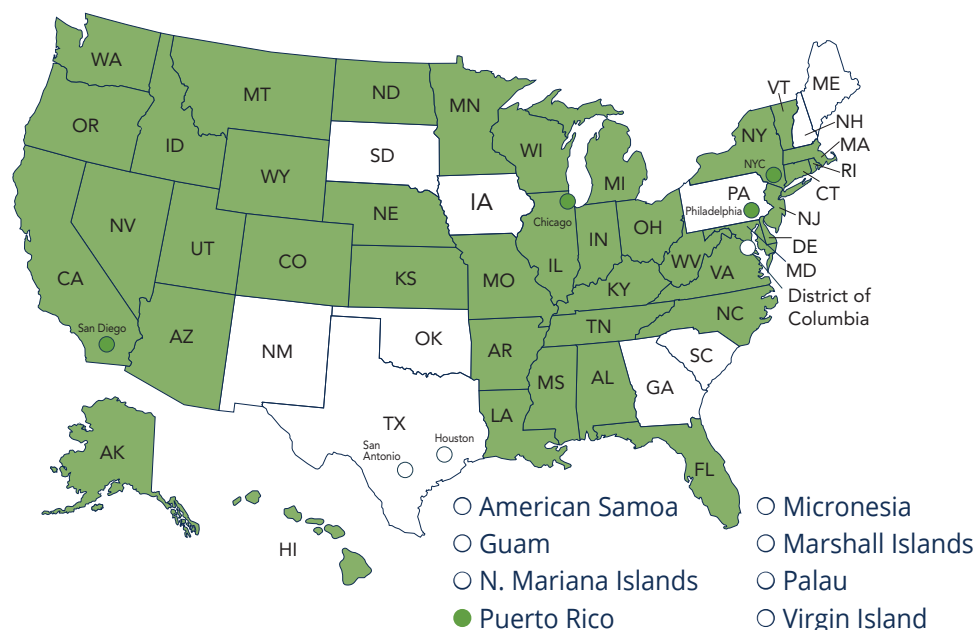
AIRA's educational and training opportunities, including its Educational Webinars, Discovery Sessions, Regional Meetings, and the AIRA 2017 National Meeting reached

1,418
INDIVIDUALS.

○ American Samoa   ○ Micronesia
○ Guam   ○ Marshall Islands
○ N. Mariana Islands   ○ Palau
● Puerto Rico   ○ Virgin Island

The map above illustrates the AIRA members who contributed (in green) to one of these initiatives over the past year and indicates committee and workgroup members who attended at least 50% of monthly meetings in the past year.

Partner Contributors:

AthenaHealth
DXC Technology
Scientific Technologies Corporation (STC)
Envision Technology Partners, Inc.
HLN Consulting, LLC
Cerner

Centers for Disease Control and Prevention (CDC)
National Institute of Standards and Technology (NIST)
Epic Systems Corporation
Public Health Informatics Institute (PHII)

Association of Immunization Managers (AIM)
Joint Public Health Informatics Taskforce (JPHIT)
National Committee for Quality Assurance (NCQA)
Allscripts

Texas Children's Hospital
Battelle
Spokane Regional Health District
Denver Public Health
University of Michigan