TABLE OF CONTENTS

WELCOME 3
STRUCTURE 4
IIS COMMUNITY 5
ADVOCACY 6
MEDIA 7
EDUCATION 8
NATIONAL MEETING 9
ADULT 10
VACCINATE WITH CONFIDENCE 11
ROUTINE IMMUNIZATIONS 12
ASSISTANCE 13
MEASUREMENT & IMPROVEMENT 14
IMMUNIZATION INTEGRATION PROJECT (IIP) 16
IMMUNIZATION (IZ) GATEWAY 17
SHARED SERVICES 18
FINANCES 19
THANK YOU 20
Dear AIRA Community,

It's hard to believe this year has come to a close. In many ways it feels like we're just beginning, especially when it comes to the pandemic. So much has happened so quickly this year, yet it also feels like it took too long for some things to get going. I’m so proud to be part of a community that has persevered in the face of adversity, and I know we'll come out stronger for it. As I look toward the coming year, I feel hopeful that we'll be moving toward a safer country and world. On behalf of all of us at AIRA, I want to express immense gratitude for the work done and commitment demonstrated by the IIS community and partners in the COVID-19 vaccine response. This community continues to persist through challenges with great fortitude. Your efforts have not gone unnoticed, and we sincerely thank you; your impact over this last year was crucial in moving our nation onto a path of recovery.

Dave McCormick  
Director, Indiana Immunization Division  |  AIRA President 2020–2021

Greetings,

The AIRA community is made up of individuals who are hard-working and dedicated to ensuring that our nation's communities are healthy and safe. During the pandemic, IIS staff and partners rose to the occasion, again and again, giving everything they had to help the country stay healthy and get back on its feet. We are grateful, as many IIS staff also made the time to engage at the national level and participate in AIRA initiatives. As a collaborative body, we have coalesced around key activities and common goals in the interest of advancing all IIS together, particularly as new vaccines were made available to the general public and the role of IIS was thrust into the national spotlight. As an organization, we have evolved and grown to meet the needs of the community during this unsettled time. We've brought on new staff and created exciting initiatives that continue to gain momentum and interest from the community. As a membership-based organization, AIRA would not be able to do our work without our members and volunteers. I'm thankful for the board's strategic direction and leadership in fostering AIRA's mission and vision. I continue to be inspired by the commitment and work you are all taking on. Thank you for being pandemic heroes.

Rebecca Coyle  
AIRA Executive Director
AIRA BOARD

**Officers/Executive Committee Members**
- Dave McCormick, President, Indiana
- Christy Gray, President-Elect, Virginia
- Aaron Bieringer, Governance Chair, Minnesota
- Dannette Dronenburg, Secretary, Washington
- Heather Roth, Treasurer, Colorado

**Directors**
- Jeffrey McIntyre, Mississippi
- John Robinson, Philadelphia
- Mary Woinarowicz, North Dakota
- Melissa Mickle-Hope, New York City
- Kathryn Cruz, New Mexico
- Miriam Muscoplat, Minnesota
- Steve Murchie, Envision Technology Partners
- Tiffany Dent, STCHealth

AIRA VOLUNTEERS

AIRA has three types of volunteer groups: committees, workgroups, and user groups. Steering committees guide the development of projects and activities in the key areas of best practices and interoperability. Workgroups manage specific projects to support the needs of the organization and the IIS community. User groups bring community members together to discuss specific issues that they have in common.

AIRA STAFF

AIRA has a dedicated team providing support to the IIS community and conducting the work of the organization. AIRA’s team grew by 26 talented individuals in 2021, increasing our combined years of experience working in IIS and immunization programs to over 345 years.
Despite the enormous strain the COVID-19 pandemic put on IIS staff, the community was able to adapt and respond to the demands of the pandemic vaccination campaign. AIRA is grateful for its members and the incredible work done advancing the community and public health.

AIRA’s membership includes over 700 individuals, representing:

- **61** IIS members
- **25** supporting members
- **6** individual members
- **13** nonprofit members
- **6** reciprocal members

AIRA’s amazing members can be described as:

- innovative
- resilient
- supportive
- collaborative
- passionate
- brave

**IIS champions**
AIRA’s advocacy work is one of the primary ways we ensure IIS are supported and represented. In 2021, AIRA expanded and mobilized our partnerships in order to navigate the increased attention on the IIS community. AIRA’s advocacy work involves three distinct steps:

- **Awareness** where issues and trends that have the potential to impact IIS are identified
- **Engagement** where collaboration with members and national stakeholders occurs
- **Action** where IIS interests are represented and national priorities on policy, infrastructure, and funding are addressed

AIRA’s strategic partnerships include:

**Programmatic Organizations**
- AIM (Association of Immunization Managers) 
- asthO™ (American Academy of Pediatrics)

**Technical Organizations**
- HL7 International
- IHE International
- HIMSS

**Federal Agencies**
- CMS
- CDC
- NIST

Examples of our advocacy work over the past year include:
- Presenting at the American Medical Informatics Association (AMIA) and Pew Charitable Foundation’s meeting on Modernizing Public Health Data Exchange for Immunization and advocating for better health care interoperability
- Testifying in front of the House Committee on Energy and Commerce hearing, titled “Booster Shot: Enhancing Public Health through Vaccine Legislation,” on modernization needed to support IIS
- Presenting to the FDA Foundation on IIS and possibilities of using IIS data to monitor patient safety
AIRA became a voice for the IIS community explaining to a broad audience what IIS are, why they’re important, and how they would be important partners in the pandemic response.

AIRA created a media initiative to support and unify the messaging about the role of IIS in the COVID-19 response. The media initiative consisted of two main activities:

1. Creating resources specific to COVID-19, such as:
   - Immunization Infrastructure Modernization Act Talking Points
   - SMART Health Cards Info Sheet

2. Completing media interviews for print, web, television and podcast outlets

The most requested interview topics were:

- Vaccine data
- IIS/vaccine tracking systems
- Vaccine credentials
- Vaccine distribution
- Vaccine boosters

AIRA completed 74 MEDIA INTERVIEWS with 45 unique media organizations, including:

The New York Times  USA TODAY  POLITICO  THE WALL STREET JOURNAL
To facilitate the sharing and use of immunization information, AIRA provides education on topics impacting the community. AIRA's trainings were modified to include fewer in-person sessions and more virtual events.

**ONLINE TRAINING**
AIRA hosted 24 different educational webinars reaching a total of 1,378 attendees. The webinars covered a wide range of topics including:
- COVID-19 vaccination response
- Vaccine credentialing
- Data quality improvement
- Electronic health records and IIS

**MEMBER MEET-UPS**
AIRA hosted three member meet-up sessions to give members an opportunity to connect with one another in an open, unstructured format to discuss any hot topics, news of the day, or current challenges. Attended by 83 participants.

**INTERACTIVE CALLS**
AIRA held a town hall meeting and four member and partner calls during the year to share important updates and discuss issues impacting the IIS community.

**INTEROPERABILITY TRAINING COURSE**
AIRA piloted a 13-week course designed to provide a base knowledge of interoperability for immunization public health professionals. 54 participants representing 17 jurisdictions enrolled in the course.

**NEWSLETTERS**
AIRA's Monthly Update and quarterly SnapShots newsletter were published to highlight the progress, activities, and accomplishments of AIRA and IIS.

**92% OF JURISDICTIONS ATTENDED AIRA'S EDUCATIONAL OFFERINGS**

AIRA OFFERED AN EIGHT-WEEK MINDFULNESS SERIES TO HELP ITS MEMBERS MANAGE STRESS & INCREASE FOCUS.
The AIRA National Meeting pivoted from an in-person to a hybrid event with the option for attendees to join in person or online. The three-day meeting, held August 3–5 in Portland, Oregon, was a much-anticipated gathering of the IIS community.

AIRA had a record-setting 462 ATTENDEES at the hybrid 2021 national meeting, including:

- 184 in-person attendees
- 278 virtual attendees

78% of IIS jurisdictions attended
90% of attendees found the meeting’s content to be relevant to their work

AIRA’s National Meeting wouldn’t be as successful without the tremendous support from the public sector. The following organizations help to support not only the National Meeting but also the momentum that follows to advance IIS and public health.

SUPPORTING MEMBERS

DIAMOND
VCI

PLATINUM
SSG
HLN Consulting
Epic
SANOFI

GOLD
gainwell
ENVISION TECHNOLOGY PARTNERS

SILVER
docket
AMC Health Informatics
Cerner

VACmobile
optimoz
IronBridge

LexisNexis RISK SOLUTIONS
athenahealth
MERCK

AIRA pulled it together during a pandemic! It is like putting tires on a car in the middle of a drag race.

Anonymous Participant
Improving the awareness and use of IIS among adult care providers

COVID-19 highlighted the importance of adult vaccination and access to adult vaccination data within IIS. Prior to the pandemic, AIRA initiated a two-year project to assess the challenges, existing practices, and opportunities to capture adult vaccination records.

AIRA worked with partners and key subject matter experts to: complete a Landscape Analysis summarizing existing approaches, systems, and capabilities for capturing adult vaccination records and develop a strategic road map for CDC outlining implementation strategies and recommendations for advancing the awareness, capture, and use of IIS for adults.

LANDSCAPE ANALYSIS

KEY TAKEAWAYS

- Prioritize, fund, and staff adult vaccination capture activities
- Motivate providers to report
- Reduce or eliminate barriers to reporting
- Address data confidence/data quality concerns
AIRA deployed a number of services to support data analysis, visualization, and reporting including Tableau training and user group support. Three fully customized, introductory Tableau training courses were provided, reaching 49 individuals across 19 jurisdictions. In addition, a Tableau User Group (TUG) was formed for anyone with an interest in data visualization. This user group is heavily attended and engagement is strong.

94% of Tableau user group participants reported that attending this group helped them to either partially or completely achieve their goals with data visualization.

"The content was great for those of us who are new to Tableau ... I feel like I have a strong knowledge base moving forward."

Anonymous Participant
Tableau User Group
When routine immunization rates for children and adolescents plummeted because of the COVID-19 pandemic, there was a desire for nationwide, real-time, and accurate assessment of immunization coverage levels. The Routine Immunization initiative sought to:

- Demonstrate that IIS are a reliable source of information for assessing vaccine uptake and coverage levels
- Identify and increase the analytics capacity of IIS staff to assess routine immunization coverage levels for children and adolescents

AIRA initiated a pilot project with two vendors and seven IIS jurisdictions to extract immunization coverage data.

At the conclusion of the pilot, AIRA developed a road map for the CDC that identified and described obstacles the IIS community faces in submitting coverage-level IIS data and provided recommendations and suggested activities that support implementation.
AIRA offers a wide range of technical assistance (TA) to help the IIS community better align with national standards.

The most common topics of technical assistance requested:

- Assisting with the COVID-19 response
- Onboarding
- IIS staff orientation/trainings

AIRA received 547 requests for technical assistance from 57 unique IIS jurisdictions and 29 partner organizations in 2021.

98% OF TA PARTICIPANTS WERE VERY SATISFIED OR SATISFIED WITH THE QUALITY AND COMPLETENESS OF THE ASSISTANCE THEY RECEIVED.

98% OF TA PARTICIPANTS WOULD REQUEST ASSISTANCE FROM AIRA STAFF AGAIN.

AIRA hosted 20 VIRTUAL AART CLINICS AND 27 IN-PERSON CLINICS DURING THE AIRA NATIONAL MEETING.

Anonymous feedback from AART Clinic Evaluation:

"I've always appreciated the thoughtful conversations with the AIRA folks!"

"Knowledgeable staff and are aware of issues IIS are facing."

"AIRA staff is very responsive and timely in their communications. They are thoughtful in their responses and clear in the information they share."
MEASUREMENT & IMPROVEMENT

AIRA, in collaboration with the CDC, began the community-driven IIS Measurement and Improvement (M&I) Initiative in 2015. The goals of the M&I Initiative are to help IIS to more fully align with national standards and best practices through testing and to provide IIS with assistance in making improvements.

M&I is a three-stage process, with each content area progressing through the stages. The stages are:

1. Testing & Discovery
2. IIS Assessment
3. Validation

AIRA repeats this process for each content area to measure IIS functionality and capability within a specific functional area.

How the improvement process works:

- **Testing**: AIRA tests with IIS pre-production/test systems and/or analyzes identified data.
- **Results**: AIRA shares testing results through Aggregate Analysis Reporting Tool (AART) by content area.
- **Opportunities**: IIS identifies opportunities to make enhancements to align with national standards and best practices.
- **Retesting**: AIRA retests IIS to verify improvements and publishes results in AART.
AIRA recognizes the jurisdictions that have achieved validation in one or more of the content areas each year.

- 10 IIS validated in ONE content area.
- 16 IIS validated in TWO content areas.
- 10 IIS validated in THREE content areas.
- 19 IIS validated in FOUR content areas.

95% of IIS jurisdictions are actively participating in the M&I Initiative.
In the fall of 2020, AIRA assumed leadership of the IIP, which aims to support and strengthen interoperability between health information technology and IIS.

The IIP's goal is to improve interoperability between IIS and EHRs to support:

- Improved immunization-related clinical decision-making
- Increased vaccination coverage rates
- Reduced vaccine-preventable diseases

AIRA and its partners use a two-pronged approach to achieve this goal:

1. **Testing & Recognition**
   
   The **Testing and Recognition** initiative is a way for EHRs to be tested on immunization capabilities and to be recognized for their ability to exchange data with IIS.

2. **Collaborative**
   
   The **Collaborative** brings together partners and creates a forum to develop recommendations and solutions to improve interoperability.

The pandemic has shown us the importance of working together as an immunization community to collect complete, accurate information. This is an exciting time to work on immunization information integration and enhance systems for public health and patient care.

Dave McCormick  
*IIP Executive Committee Co-Chair*
The IZ Gateway is a federally supported project that contains an IT infrastructure which supports the exchange of immunization data between IIS, provider organizations, and consumer applications. The use of the IZ Gateway was prioritized at a national level to streamline time and resource-intensive data exchange between providers, non-traditional vaccinators, and IIS. In the fall of 2020, AIRA joined the IZ Gateway team to support IIS awardees with onboarding, connecting, and sharing vaccination encounters through the IZ Gateway.

The IZ Gateway supports four use cases:

1. National immunization providers exchanging immunization data with multiple IIS jurisdictions
2. Cross-jurisdictional IIS-to-IIS data exchange
3. Consumer engagement with IIS immunization records
4. Multijurisdictional query from providers to receive consolidated records

AIRA COMPLETED TESTING OF 45 IIS-TO-IZG CONNECTIONS

ASSISTED IN THE ESTABLISHMENT OF DATA SHARING AGREEMENTS WITH 44 IIS JURISDICTIONS

LED THE DEVELOPMENT OF MULTIPLE INTERNAL AND EXTERNAL IZ GATEWAY RELATED POLICY AND PROCEDURE MANUALS AND RESOURCES.
AIRA provides members with collaborative tools and technologies to support the work of IIS and immunization programs. AIRA's shared services have expanded to include three different initiatives to better accommodate the needs of our members: SmartyStreets, Onboarding Shared Services, and the Message Quality Evaluation (MQE) tool.

**SMARTYSTREETS**

SmartyStreets is an address cleansing and geocoding service that can help IIS improve data quality.

**SHARED SERVICES**

<table>
<thead>
<tr>
<th>Year</th>
<th>Organizations Cleansed</th>
<th>Addresses Cleansed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>10</td>
<td>4,377,606</td>
</tr>
<tr>
<td>2018</td>
<td>16</td>
<td>131,525,311</td>
</tr>
<tr>
<td>2019</td>
<td>21</td>
<td>125,345,076</td>
</tr>
<tr>
<td>2020</td>
<td>40</td>
<td>242,014,440</td>
</tr>
<tr>
<td>2021</td>
<td>32</td>
<td>293,459,474</td>
</tr>
</tbody>
</table>

**AN AVERAGE OF 15,321,575 ADDRESSES HAVE BEEN CLEANSED AND GECODED EACH MONTH.**

**ONBOARDING SHARED SERVICES**

During the pandemic, thousands of new data exchange partners needed to be onboarded to IIS. In collaboration with CDC, AIRA developed the Onboarding Shared Services program to support IIS in provider onboarding for immunization data exchange.

**MESSAGE QUALITY EVALUATION (MQE) TOOL**

The MQE tool is a community-driven initiative used to assist jurisdictions in consistently evaluating and improving the quality of incoming IIS data. This open-source application is a data quality tool available to all AIRA members.

“We are really excited about the support the MQE tool can provide for our onboarding process. We’ll be incorporating the ‘Provider Report Card’ capabilities and leverage that to make our interface with our providers consistent, delightful, and empowering.”

Josh Hull, Software Architect
FINANCES

FY2021 TOTAL LIABILITIES AND ASSETS

ASSETS
$2,784,342

LIABILITIES
$669,951

UNRESTRICTED NET ASSETS
$2,114,391

2021 vs. 2020 Asset, Liability, Net Asset, and Change in Net Asset

Assets
- 2021: $2,784,342
- 2020: $1,439,384

Liabilities
- 2021: $669,951
- 2020: $343,331

Unrestricted Net Assets
- 2021: $2,114,391
- 2020: $1,096,052

Change in Net Assets
- 2021: $1,018,338
- 2020: $308,860

2021 Revenue and Support

- 73% Cooperative Agreements/Federal Funding
- 21% Other
- 2% Membership Dues
- 4% National Meeting

2021 Expenditures by Function

- 96% Program Service
- 4% Administration

Total Revenue:
$7,572,074

Total Expenditures:
$6,553,736
AIRA’s members are made up of hard-working, dedicated individuals. Without the time and effort of our incredible volunteers, AIRA’s work to improve immunization information systems and public health would not possible. We are so thankful for our community’s tremendous efforts during these particularly difficult COVID-19 times.

OVERALL, 78% OF IIS JURISDICTIONS VOLUNTEERED THEIR TIME AND TALENTS WITH AIRA.

28% OF IIS JURISDICTIONS PRESENTED OR MODERATED AT THE AIRA 2021 NATIONAL MEETING.

75% OF IIS JURISDICTIONS REGULARLY ATTENDED A COMMITTEE, WORKGROUP, OR USER GROUP MEETING IN 2021!

44% OF IIS JURISDICTIONS SUBMITTED OR RESPONDED TO AN INFORMATION REQUEST.

25% OF IIS JURISDICTIONS PRESENTED ON AN EDUCATIONAL WEBINAR OR WROTE AN ARTICLE FOR SNAPSHOT THIS PAST YEAR.
THANK YOU

The following partners contributed their time and talents with AIRA. Thank you for your efforts to coordinate and amplify the voice of immunization information systems and public health!

PARTNER COLLABORATORS

American Academy of Family Physicians (AAFP)
American Academy of Pediatrics (AAP)
American Health Care Association (AHCA)
Adult Vaccine Access Coalition (AVAC)
Association of Immunization Managers (AIM)
Association of State and Territorial Health Officials (ASTHO)
Allscripts
Altarum Institute
athenahealth
Atlantic Management Center
Audacious Inquiry
Centers for Disease Control and Prevention
Cerner Corporation
Children’s Hospital of Colorado
Deloitte Consulting
Docket
DXC (Gainwell)
Envision Technology Partners, Inc.
Epic
Food & Drug Administration
Foothold Technologies
HLN Consulting, LLC
Immunization Action Coalition (IAC)
Immunize.org
Mayo Clinic Platform
Microsoft Healthcare
MetaStar
Merck
National Association of County and City Health Officials (NACCHO)
National Association of Community Health Centers (NACHC)
Network for Public Health Law
National Institute of Standards and Technology (NIST)
Office of the National Coordinator for Health IT (ONC)
Office of the Chief Technology Officer (CTO)
Office Practicum
Pfizer
Physicians Computer Company
Practice Fusion
Public Health Informatics Institute
Scientific Technologies Corporation
Schoolcare.com
Strategic Solutions Group
SW Partners
The Commons Project
University of Michigan Child Health Evaluation & Research Unit
University of Montana
U.S. Department of Health and Human Services
VaxAtlas
Vaccination Credential Initiative (VCI)
Vanderbilt University Department of Biomedical Informatics
World Health Organization (WHO)