AIRA
AMERICAN IMMUNIZATION REGISTRY ASSOCIATION

SNAPSHOTS

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

PRESIDENT'S REPORT

Dear IIS Partners,

Welcome to the summer edition of *SnapShots*! It was a pleasure to connect with many of you during the AIRA 2025 National Meeting in Spokane, Washington. It was especially great engaging with the IIS community during this time of unprecedented change. In the newsletter for this quarter, we begin with a summary of this year's national meeting from Gabriella Wagoner, MPH, AIRA Communications Specialist. In her article, Gabriella reviews meeting highlights, the magnetic keynote speaker Scott Crabtree, meeting breakout sessions, and AIRA Aggregate Analysis Reporting Tool (AART) clinics.

> **"It was a pleasure to connect with many of you during the AIRA 2025 National Meeting in Spokane, Washington."**

In this edition of *SnapShots*, we also learn about a collaborative project between the Alaska IIS team and STChealth. This group created several provider reports focused on improving IIS data quality. Reports were organized on the state, organization, and facility levels. These helpful tools contained quarterly data and were disseminated directly to organizations and facilities identified by program leadership in 10 pilot sites. STChealth's Innovation Partners Summit, held on April 27, 2025, in Phoenix, brought together IIS leaders, public health professionals, technologists, and policy advocates to explore the future of immunization systems and vaccine data.

This quarter's Tech Corner is focused on artificial intelligence (AI) and the use of large language models (LLMs). Nathan Bunker, AIRA Senior Technical Standards Architect, walks us through how LLMs can be used effectively in the workplace. The goal is to use LLMs to support your work, not to drive the decisions behind your work.

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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 with information about a successful programmatic or technical innovation, major accomplishment, or milestone that your IIS has reached.

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PRESIDENT'S REPORT *Continued from page 1*

Finally, we've introduced a new *SnapShots* column in this edition, the "Education Exchange." This new column will feature a variety of educational offerings, both new and existing. Content can include resources, guides, videos, or learning modules. Ultimately, we want to create a go-to place to share any free, valuable offerings with our community. In the inaugural column, we learn about the updated AART 101 video and the Public Health Informatics Institute's (PHII) new e-learning course: "Using IIS Data for Vaccine Decision Making."

Thank you to everyone who contributed to the June 2025 issue of *SnapShots*. **Enjoy your summer!**

Regards,
Melissa Mickle-Hope, MPH
Director, Citywide Immunization Registry (CIR), Bureau of Immunization
NYC Department of Health and Mental Hygiene
AIRA Board President

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FROM BREAKOUTS TO BRAIN SCIENCE:
AIRA 2025 IN REVIEW

The AIRA 2025 National Meeting, held in Spokane, Washington, brought together over 400 members of the IIS community for several days of connection, learning, and collaboration.

While the current public health landscape posed some challenges for planning and attendance, those who joined us made the most out of every moment. From engaging breakout sessions and insightful plenaries to an interactive gameshow, lively hallway conversations, and an overwhelming sense of camaraderie, the atmosphere was buzzing.

This year's meeting featured not one but two motivational sessions from keynote speaker Scott Crabtree, of Happy Brain Science. Through his keynote, *ChChChChanges: The Science of Managing Transitions*, Scott offered science-backed tips for navigating and embracing changes. His second session, *The Science of Being Happier in Tough Times*, left the audience both inspired and uplifted. One attendee described their time in Spokane as a "cathartic reset." What a great reminder of the power that lies in gathering in person to recharge and reconnect!

Despite the high demands our field is facing, there was no shortage of outstanding content. From tracking vaccine trends and coverage, to vaccine code set work, standards, IIS research and publications, FHIR, interoperability, and so much more, the over 90 breakout sessions delivered something for everyone. One attendee summed it up perfectly: "AIRA is the only conference where I want to go to multiple breakouts that happen at the same time—that's why I send more than one employee!"

In addition to the variety of content, the AIRA Aggregate Analysis Reporting Tool (AART) Clinic was another heavily attended offering. This year, 33 clinics were conducted, representing 33 jurisdictions. Based on the overwhelming demand, we were happy to offer these virtually, too, after the meeting.

Whether you were able to join us in person or supported us from afar, we're grateful for the dedication and expertise you bring to the IIS community. Presentation slides and additional materials are available in the AIRA Repository. And keep an eye out for the announcement of the AIRA 2026 National Meeting location. We can't wait to do it all again next year!

> **Whether you were able to join us in person or supported us from afar, we're grateful for the dedication and expertise you bring to the IIS community.**

– Submitted by Gabriella Wagoner, MPH, Communications Specialist, American Immunization Registry Association (AIRA)

PARTNERING FOR PROGRESS: INNOVATIONS IN IMMUNIZATION DATA QUALITY AND COLLABORATION

IIS Data Quality Evaluations and Improvements

In early 2024, the Alaska IIS team partnered with STChealth to cultivate a path forward with actionable insights surrounding data quality improvements.

Data quality evaluations are key for identifying both strengths and areas of opportunity within each IIS. The pandemic brought unprecedented visibility to IIS data and further underscored the importance of a comprehensive view of data quality at the jurisdictional level. Several foundational community resources—such as the 2017 and 2018 IIS Data Quality Practices documents and the 2022 Data Quality Assurance guidance—have helped shape the field. The M&I DAR Assessment launched in 2023 marked an important step toward a more unified approach, and efforts to holistically assess a jurisdiction's overall data quality are still evolving. This project builds on that momentum by providing Alaska with both aggregated and quantified views of high-level data quality, along with actionable insights targeted at the organization and provider level throughout the jurisdiction.

Nineteen (19) key metrics that encompass demographic data, erroneous data entry, invalid vaccinations, and other IIS touchpoints were developed using patient and vaccination data. This data was aggregated at the organization and state levels and subsequently compiled into two separate reports tailored towards program leadership. To facilitate continuous improvement, both reports target data added or updated during the most recent complete calendar-year-quarter. This provided program leadership with key insights into both overall data quality and increased visibility into how organizations within their jurisdiction were performing.

An additional report was created utilizing the same 19 key metrics but aggregated at the facility level. These reports were sent directly to organizations and facilities identified by the program leadership. In doing so, the data quality reports provided an actionable approach by arming facilities with the knowledge of potential issues with their data quality, thereby opening a line of communication with the program leadership on potential next steps.

With the continued emphasis on data quality in the IIS landscape, these reports equip the jurisdiction with both key summary data for leadership as well as meaningful and actionable opportunities for improvement at defined intervals. This also allows the jurisdiction to keep data quality at the forefront and to address trends that are seen over time. By the end of 2024, the 10 pilot organizations had achieved no missingness in almost 60% of their individual key metrics.

PARTNERING FOR PROGRESS: INNOVATIONS IN IMMUNIZATION DATA QUALITY AND COLLABORATION

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There were 50 individual metrics that these organizations had improved on from Q3 to Q4. These organizations had also achieved a 96% average of administered vaccines being submitted into the registry within 24 hours. We are looking forward to continuing working with Alaska on this holistic data quality approach and being able to track the improvement and overall success pertaining towards data quality within their IIS.

– Submitted by Christopher Tarrant, Business Intelligence Analyst II, STChealth,
Sarah Aho, Health Program Manager, Alaska Department of Health (VacTrAK),
and Monette Schwoerer, MS, IIS (VacTrAK) Manager, Alaska Department of Health (VacTrAK)

Spotlighting STChealth's Innovation Partner's Summit

On April 27, 2025, STChealth convened a cross-disciplinary group of jurisdictional IIS leadership, public health professionals, technologists, and policy advocates in Pheonix, Arizona, for a full-day Innovation Summit.

The purpose? To explore the evolving landscape of immunization systems and vaccine data, identify high-impact strategies that drive measurable improvements in access and equity, and strengthen public health outcomes.

Guided by facilitator Bill Goodwin and STChealth leadership, attendees participated in structured ideation around the question: *How can immunization systems and vaccine data create greater value for stakeholders and improve population health?*

CURRENT STATE & SHARED CHALLENGES

Morning sessions highlighted both progress and persistent challenges—such as siloed data systems, limited funding, public misinformation, workforce shortages, and barriers to interoperability. However, the conversations also emphasized opportunities, including increasing collaboration across sectors, expanding pharmacist roles, and growing use of digital tools by consumers.

> **How can immunization systems and vaccine data create greater value for stakeholders and improve population health?**

PARTNERING FOR PROGRESS: INNOVATIONS IN IMMUNIZATION DATA QUALITY AND COLLABORATION

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STRATEGIC PRIORITIES & EMERGING SOLUTIONS

In breakout sessions and collaborative exercises attendees identified strategies such as:

- The creation of comprehensive partnerships among public, private, and community entities, leveraging both in-person and virtual collaboration
- Leveraging storytelling and strategic communication to address vaccine hesitancy,
- Developing an interoperable national network of networks for immunization data
- Driving initiatives to increase adult vaccine engagement to improve adult vaccination rates
- Enhancing data accessibility by providing comprehensive, interoperable, and easily consumable patient records with improved visualization

Attendees also called for improved policies, economic models, and responsible integration of technologies such as AI to support expanded vaccine access and more responsive systems.

CELEBRATING PARTNERSHIP AND LOOKING AHEAD

The summit concluded with a shared sense of urgency and optimism. Participants committed to actionable next steps while recognizing that long-term impact will come from sustained collaboration, innovation, and community-driven solutions. Insights from the summit will inform pilot initiatives and advocacy efforts in the months ahead.

– Submitted by Staci Kroschel Kuester, MBA, MS;
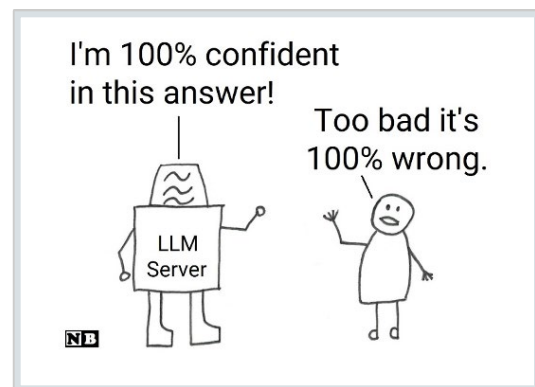*Client Communication Management Specialist, STChealth*

TECH CORNER | PROVIDING PUBLIC HEALTH EXPERTS WITH PRAGMATIC EXPLANATIONS OF TECHNICAL CONCEPTS

THE ROLE OF AI IN PUBLIC HEALTH:
AUGMENT, DON'T REPLACE

As demands on public health programs continue to grow, many of us are looking for ways to increase both the quantity and quality of our work without growing our teams.

This is where Artificial Intelligence (AI)—especially Large Language Models (LLMs)—can help. These tools won't replace staff or domain expertise, but when used well, they can augment human capacity and free up time for higher-value work.

LLMs are particularly good at producing clear, well-structured, easy-to-read language. This makes them excellent drafting tools for reports, memos, meeting summaries, and outreach emails. But this strength can also be misleading: just because something is well-written doesn't mean it's accurate, meaningful, or useful. LLMs can produce empty or misleading content that looks polished on the surface. That's why it's critical not to accept output as-is, but to engage with it critically—just like you would if a new intern handed you a draft.

Another common trap is asking LLMs for authoritative answers on technical or nuanced topics. For example, while a model may sound confident discussing HL7 v2 or IIS standards, it often gets key details wrong—sometimes repeating the same error even after being corrected. LLMs are not experts; they're advanced pattern-recognition systems that generate plausible-sounding responses based on training data. When you need accurate results, don't ask the LLM to guess—give it the documents, context, or data you want it to work from, and ask it to summarize, synthesize, or translate that information for your use.

LLMs are also more reflective than directive. They don't "understand" the world—they mirror it. Their responses are influenced by your prompt, tone, and framing. If you ask vague or biased questions, you're likely to get vague or biased answers. That's why LLMs are best used as language tools, not knowledge authorities. They help you work with ideas, not decide what's true.

THE ROLE OF AI IN PUBLIC HEALTH:
AUGMENT, DON'T REPLACE *Continued from page 7*

So, how can public health professionals use LLMs to their advantage?

- **Writing Assistance**
  Use an LLM to draft emails or documents. Provide it with context (e.g., past messages, goals, tone), then edit the draft thoroughly. Think of the LLM as a language intern—it helps speed up writing, but you're still responsible for the message.

- **Thought Organization**
  When you're stuck on a complex issue, explain it to the LLM like you would to a colleague. It can help you map out the problem, suggest ideas, or point you toward next steps. This is especially helpful when you don't yet know the right question to ask.

- **Information Triage**
  If you need to absorb several documents quickly, upload them to an LLM and describe what you're trying to get out of them. You can give the LLM a role to play—such as "policy analyst" or "summary editor"—and ask it to pull out what matters most for your meeting. This saves time and helps you focus your reading.

- **Meeting Prep and Project Planning:**
  Feed in project notes, goals, and audience details. Ask the LLM to generate a meeting plan, agenda, or draft proposal. Refine its suggestions and use it to clarify your thinking and surface gaps in your approach.

In all of these tasks, the key is to stay in control. LLMs don't replace expertise—they scale it. Their value comes from your input: the clarity of your goals, the quality of your source material, and your willingness to revise what they return. Use them to extend your reach, not outsource your judgment.

> **AI tools can help you do more—but only if you remain the editor-in-chief of your own work.**

AI tools are here, and they're powerful. But they work best when treated as collaborators, not decision-makers. They can help you do more—but only if you remain the editor-in-chief of your own work.

– Submitted by Nathan Bunker, Senior Technical Standards Architect, American Immunization Registry Association (AIRA)

The "AIRA Tech Corner" is published as a blog. Read more on the AIRA website.

EDUCATION E⟩CHANGE

Welcome to the Education Exchange,

where we highlight valuable educational offerings and resources to support learning and professional development within our community.

1 UPDATED AART 101 VIDEO

AIRA's AART 101 Video has been revamped! Get an introduction to the Aggregate Analysis Reporting Tool (AART) in this new video. This video provides a clear overview of how to navigate and utilize the tool effectively.

– Submitted by Angela De La Cruz, Business Analyst,
American Immunization Registry Association (AIRA)

2 PHII'S NEW E-LEARNING COURSE: USING IIS DATA FOR VACCINE DECISION MAKING

The Public Health Informatics Institute (PHII) will launch a new e-learning course this summer, through the Informatics Academy, to help vaccine providers use IIS data in vaccine decision-making. This new course will cover improving data quality, resolving IIS data errors, and helping providers make decisions about patient vaccine schedules, future office visits, vaccine orders, and accurate and complete electronic health record (EHR) documentation.

Send any questions or comments on PHII's IIS resources to iis@phii.org.

– Submitted by Lisa Jones, Communications Manager,
Public Health Informatics Institute