

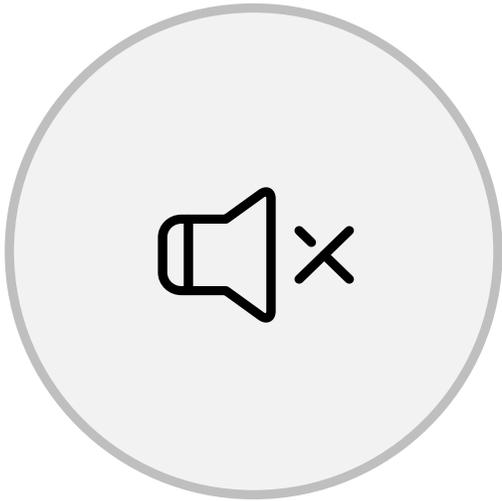


AIRA
AMERICAN IMMUNIZATION
REGISTRY ASSOCIATION

Strategy & Support for Your COVID-19 Vaccination Supplemental Funding Application

AIRA Webinar
February 5, 2021

Housekeeping



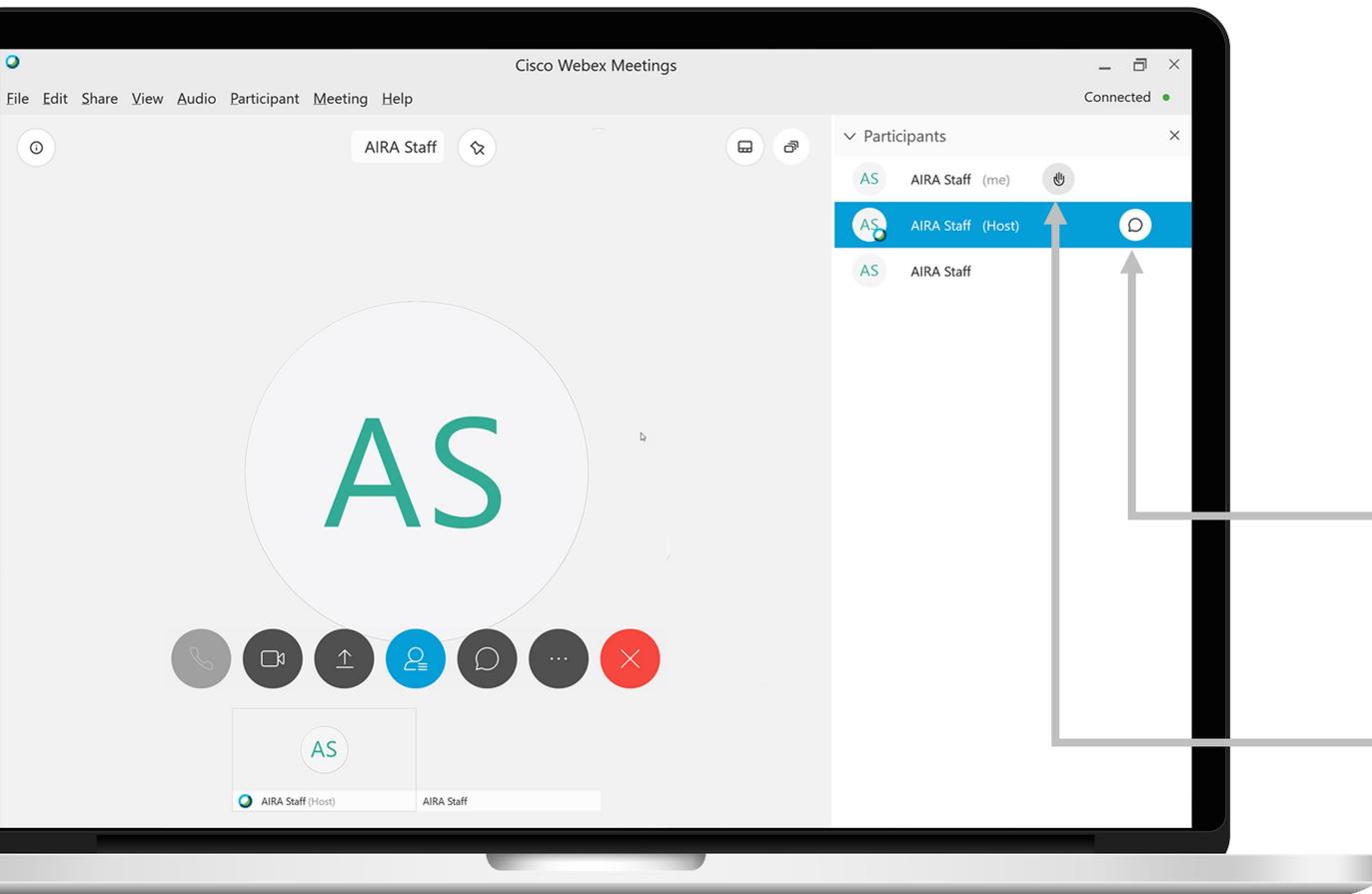
All phone lines
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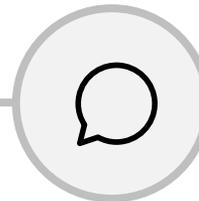


Questions

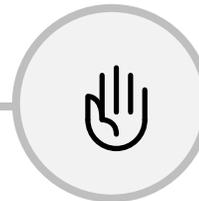


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Questions During the Presentations

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Today's Speakers

Moderator: Alison Chi, MPH, Director of Education & Outreach, AIRA

Overview of CDC COVID-19 Cycle 3 Funding

Nathan E. Crawford, Technical Assistance Team Lead, POB, ISD, NCIRD, CDC

Resources to Support IIS Assessment and Development

Erin Roche, MPH, MS, Senior Informatics Analyst, PHII

Workplan Activity Strategy & Support

Mary Beth Kurilo, MPH, MSW, Senior Director of Health Informatics, AIRA



Overview of CDC COVID-19 Cycle 3 Funding

Nathan Crawford
Technical Assistance Team Lead
POB, ISD, NCIRD, CDC

Resources to Support IIS Assessment and Development

Erin Roche, MPH, MS
Senior Informatics Analyst
PHII

Resources to Support IIS Assessment and Development

*AIRA Webinar
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Topics

- Introduction to the **IIS Functional Model** and **IIS Baseline Requirements Traceability Matrix (RTM)**
- How these resources were developed
- Using these resources to identify areas of opportunity to improve your immunization information system

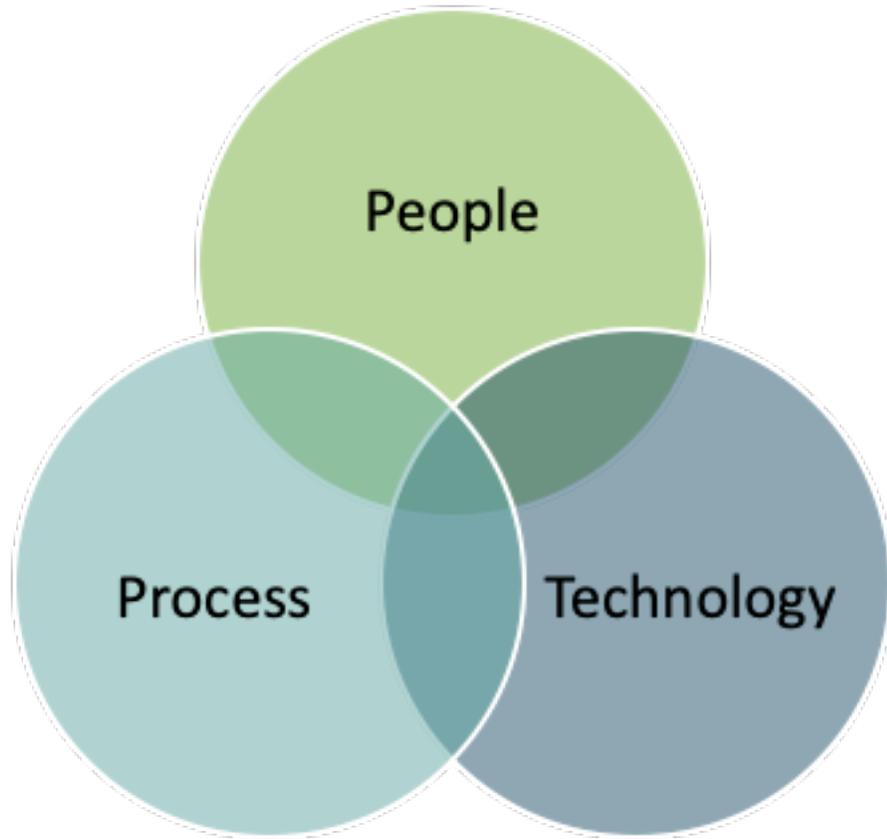
Background

- PHII, CDC, AIRA collaboration to develop a **baseline set of requirements for IIS**
- **What should an IIS do and how should it operate** in support of the IIS Functional Standards?

Requirement:

Statement describing what is needed from an information system in order to achieve a particular objective or support a particular activity

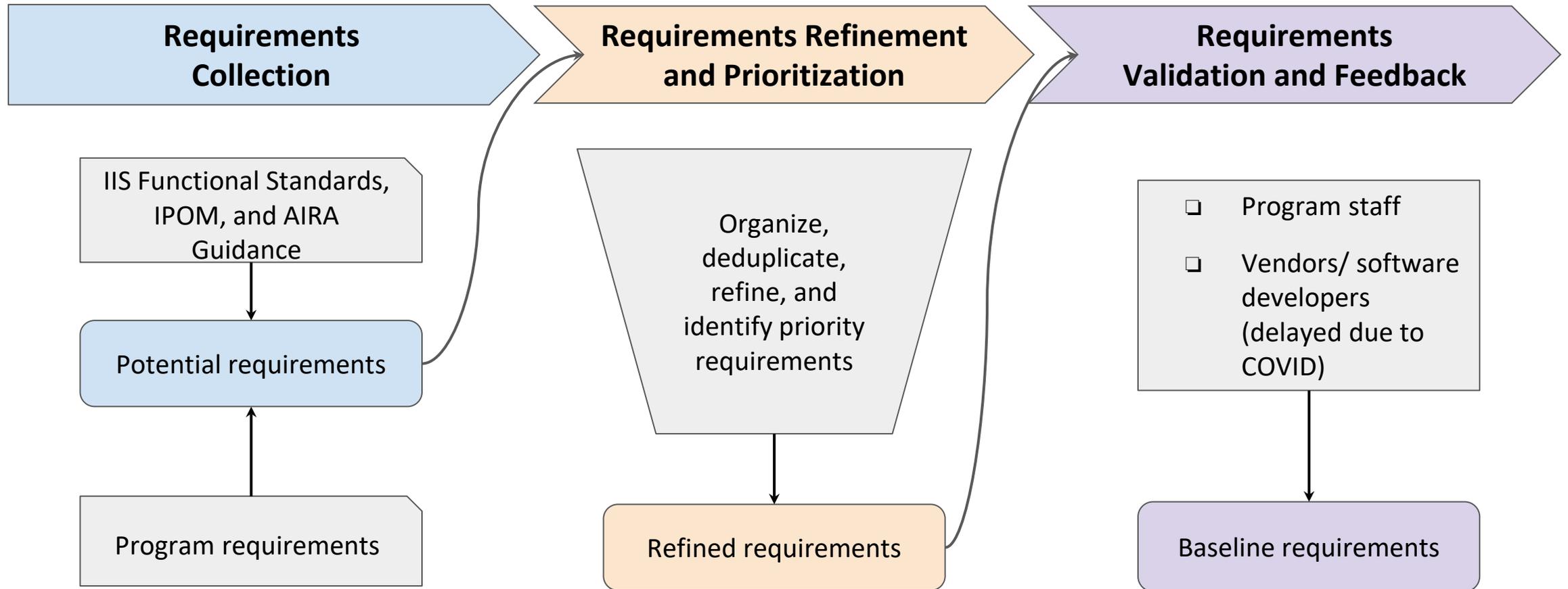
Defining technology needs to improve outcomes



Achieve the IIS Functional Standards

- DQ Blueprint Measures
- IIS Dashboard Measures
- AIRA Measurement & Improvement Measures

Methodology - Process of identifying requirements



IIS Functional Model

IIS Core Functions and Capabilities

These functions and capabilities represent core functionality of IIS. Refer to the **IIS Baseline RTM** for descriptions and functional requirements associated with each.

Administer System	Manage Organizations & Facilities	Manage Users
<ul style="list-style-type: none"> • Hierarchy configuration • System configuration • User roles & permissions • System alerts 	<ul style="list-style-type: none"> • Organization/facility search • Add, edit, inactivate organization/facility • VFC/vaccine program enrollment • Organization/facility outreach 	<ul style="list-style-type: none"> • User search • Add, edit, inactivate user • Authentication & authorization • Password management
Support Interoperability	Ensure Data Quality	Evaluate & Forecast
<ul style="list-style-type: none"> • Onboarding • Interfaces • Data exchange 	<ul style="list-style-type: none"> • Patient matching & deduplication • Vaccination event matching & deduplication 	<ul style="list-style-type: none"> • Clinical decision support • Reminder/recall • Coverage reports
Manage Patient & Immunization Records	Manage Vaccine Inventory	Provide Data Access
<ul style="list-style-type: none"> • Patient search • Add, edit patient demographics • Patient status • Patient consent • Add, edit patient immunization • Print/export record • Mass vaccination 	<ul style="list-style-type: none"> • Vaccine inventory search • Add, edit vaccine inventory • Vaccine ordering • Review/approve order • Vaccine decrementing • Vaccine inventory reconciliation • Vaccine transfer • Vaccine wastage • Vaccine expiration 	<ul style="list-style-type: none"> • Standard reports • Print/export reports • Ad hoc queries & reports • Consumer access

IIS Attributes

These attributes represent the technical characteristics of an IIS necessary to support immunization programs and stakeholders. Refer to the **IIS Baseline RTM** for descriptions and non-functional requirements associated with each.

Performance Efficiency	Usability	Reliability	Security	Maintainability	Portability
<ul style="list-style-type: none"> • Time behavior • Resource utilization • Capacity 	<ul style="list-style-type: none"> • Operability • User error protection • Accessibility 	<ul style="list-style-type: none"> • Availability • Fault tolerance • Recoverability 	<ul style="list-style-type: none"> • Confidentiality • Non-repudiation • Accountability • Authenticity 	<ul style="list-style-type: none"> • Analyzability 	<ul style="list-style-type: none"> • Adaptability • Installability

IIS Baseline RTM Workbook

Immunization Information System (IIS) Baseline Requirements Traceability Matrix (RTM)

DRAFT, version 0.6, last updated 02/02/2021

This requirements traceability matrix (RTM) contains draft baseline functional and non-functional requirements for an immunization information system (IIS). The requirements clarify minimum expectations for what IIS technology must do and how it must operate to support IIS Functional Standards and programmatic and immunization stakeholder needs. The functional requirements describe intended behaviors of an IIS system to support business processes and tasks, by function and capability. The non-functional requirements convey technical requirements related to how a system must operate, by attribute and sub-characteristic. An embedded IIS Functional Model presents a visual depiction of the core functions, capabilities and attributes of IIS and serves as a companion to the requirements.

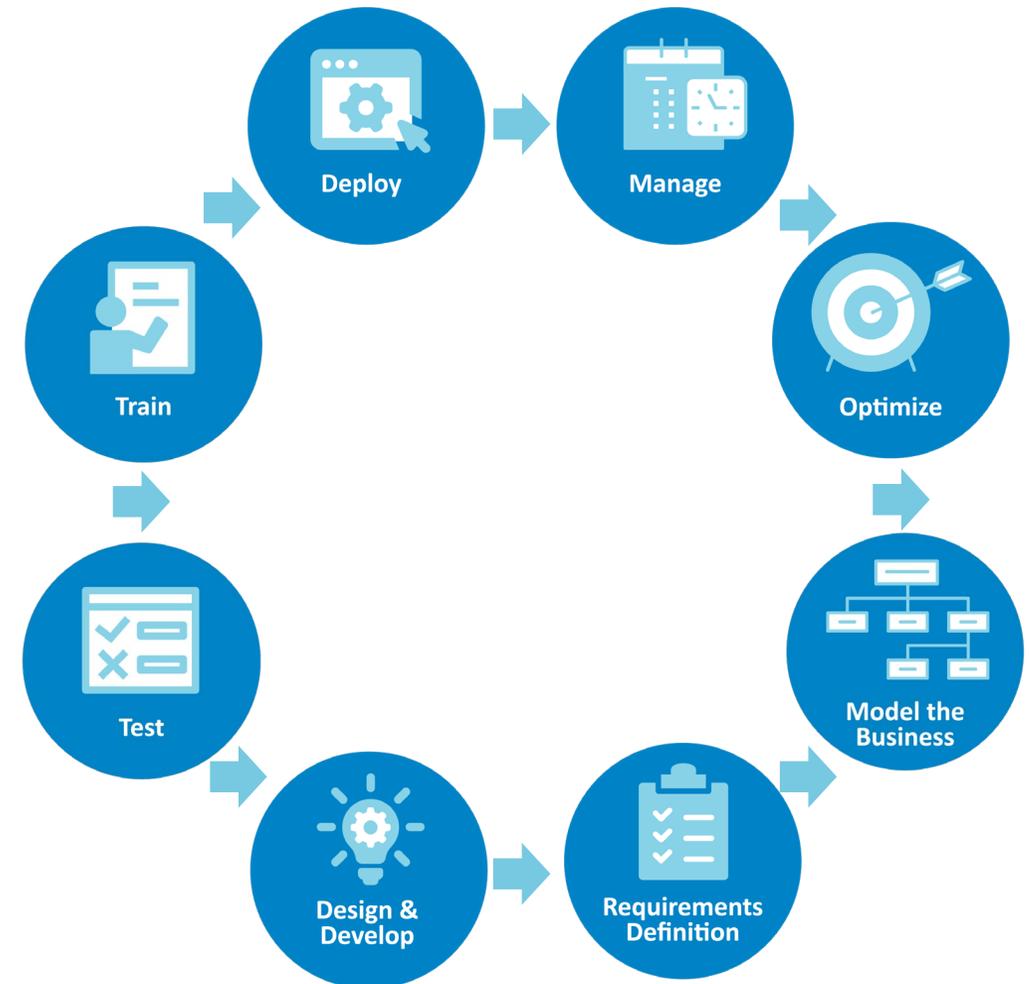
This RTM is intended to be used by immunization programs as a starting point for the procurement of an IIS platform, module or enhancement. The RTM should be used throughout the system development life cycle (SDLC) to ensure requirements are met in a final product or system. Immunization programs and IIS may also use the IIS Functional Model and the requirements within this RTM to help assess and identify gaps in current IIS functions, capabilities and technical quality and provide a roadmap for future development within or across jurisdictions.

Contents

Guidance: using the RTM	Step-by-step guidance and helpful hints/notes for using the RTM as part of a procurement process.
Version history	History of versions and summary of changes.
Functional Model	Draft IIS Functional Model (FM), a visual depiction of IIS functions and capabilities and attributes.
FM descriptions	Descriptions of the IIS Functional Model functions and capabilities and attributes; also provides an indication of total requirements by function/category.
RTM format	Description of how the RTM is structured for presentation of the requirements.
Requirements by Function/Grouping:	
Admin system	Requirements related to the function: Administer System
Manage orgs	Requirements related to the function: Manage Organizations and Facilities
Manage users	Requirements related to the function: Manage Users
Interop	Requirements related to the function: Support Interoperability
Data quality	Requirements related to the function: Ensure Data Quality
Eval forecast	Requirements related to the function: Evaluate & Forecast
Manage pt iz record	Requirements related to the function: Manage Patient & Immunization Records
Manage vaccine inventory	Requirements related to the function: Manage Vaccine Inventory
Data access	Requirements related to the function: Provide Data Access
Non-functional	Technical requirements across key attributes
Glossary	List of terms used in requirements and their definitions
Crosswalk to FS	Compare the Functional Model to the IIS Functional Standards.

Leveraging the IIS Functional Model and RTM in the IT Lifecycle

- Assess areas of opportunity to optimize and enhance your IIS
- Communicate requirements to IIS implementers
- Support testing of enhancements



Assessing areas of opportunity

Does your IIS fully support the core functions/capabilities and attributes depicted in the IIS Functional Model?

- If not, where are there areas of opportunity to enhance your system?
- What essential requirements from the RTM are not met in your current system?

Prioritizing system enhancements

Consider **criteria for prioritizing areas of opportunity**,
i.e., potential to improve:

- IIS Dashboard Measures/AIRA M&I results
- Program efficiency
- IIS data quality
- User experience
- Longer-term system sustainability
- Other

Coming Soon!

IIS Functional Model
Assessment Worksheet

IIS Functional Model and IIS Baseline RTM

- Critical tools to support you in identifying opportunities to leverage funding to enhance your system
- Clarify what IIS technology must do, how it must operate to support the IIS Functional Standards and programmatic/stakeholder needs, and determine any gaps
- Provide a common language for programs to articulate shared needs

Acknowledgements: PHII, CDC, AIRA Project Team

PHII

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- Marcey Propp, SME
- Noam Arzt, SME
- Amy Metroka, SME

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- Janet Fath, Operations Team Lead
- Lynn Gibbs-Scharf, Branch Chief
- LaTreace Harris, Evaluation Team Lead
- Nkenge Jones-Jack, PH Analyst
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- RTI International, CDC partner

AIRA

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Workplan Activity Strategy & Support

Mary Beth Kurilo, MPH, MSW

AIRA Senior Director of Health Informatics

Objectives

Identify ways to utilize M&I report results to strategically develop workplan activities

1

Explore where the COVID-19 response can benefit from broader collaboration across IIS

2

3

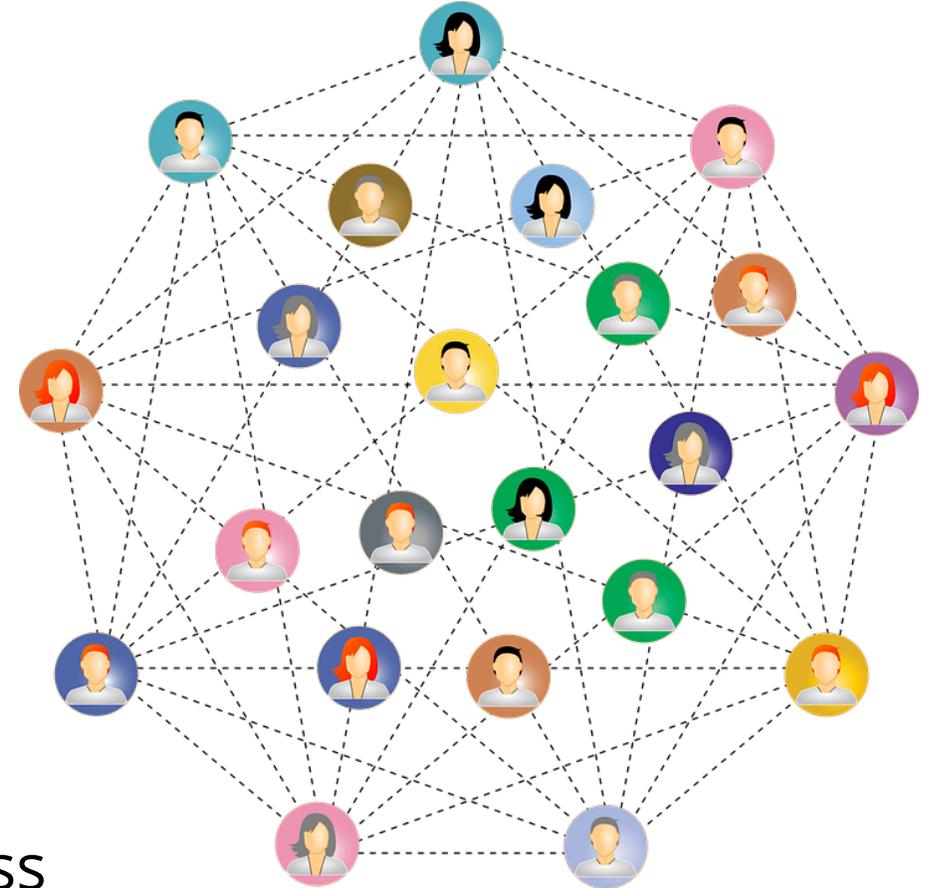
Review and discuss AIRA's resources to assist jurisdictions with workplan development



Big Picture

In Support of a Network of IIS

- IIS were **early adopters of standards**, leading to broad interoperability success
- COVID-19 has highlighted some **ground left to cover** to best support needs nation-wide
 - Full standards alignment
 - Best practice onboarding
 - Interjurisdictional exchange
 - Policies that support broad data access



To Better Support Our Members, AIRA is Exploring Some New Community Offerings Under the Joint Development and Implementation Umbrella

1

Onboarding

Shared onboarding services to support engagement, HL7 and transport testing, and quality improvement

2

Key Data

Guidance on increasing capture of key data fields (e.g., race, ethnicity)

3

EHR Integration

Specifications on returning high-volume data to EHRs, guidance for EHRs on consuming/integrating data

4

Uniform Message

Exploration of a single standardized, uniform message for broad acceptance across IIS

We hope you'll assign staff to collaborate with AIRA for a JDI 2.0 reboot in support of this coordinated IIS work



And There's More!

- We'll share an abundance of ideas today that we hope will support you in your planning, and move our community closer to a well-coordinated network of IIS systems
- And if you need more assistance, we're happy to help!



Measurement & Improvement (M&I) Initiative

Measurement & Improvement (M&I)

Goal of M&I: Provide IIS with actionable information to more fully align with IIS Functional Standards and improve interoperability

- M&I Initiative tests IIS alignment with standards and provides information and assistance to help IIS improve
- Test results are available in the Aggregate Analysis Reporting Tool (AART)



AART Dashboard

- The AART Dashboard provides an at-a-glance overview of results
- All IIS and vendor staff have access to AART
- Jurisdictions are encouraged to view results in AART to inform decisions regarding activities to prioritize



Recommended COVID-19 Vaccination Supplemental Funding Activities

Strategy & Support

- AIRA has developed a resource outlining suggested activities and potential budget considerations
- Activities focus on long-term system sustainability
- AIRA can assist jurisdictions by:
 - Serving in a coordinating role to support efforts
 - Reviewing reports
 - Providing technical assistance



Document Structure

High-Level Categories:

- A. Support Interoperability
- B. Evaluate and Forecast
- C. Ensure Data Quality
- D. Provide Data Access
- E. Manage Organizations and Facilities
- F. Manage Patients and Immunization Records
- G. Manage Vaccine Inventory

Each category is broken into:

- ✓ Overview
- ✓ Suggested Activities
- ✓ Potential Budget Considerations



A. Support Interoperability

- Interoperability is critical to the viability of IIS

Activity Example:

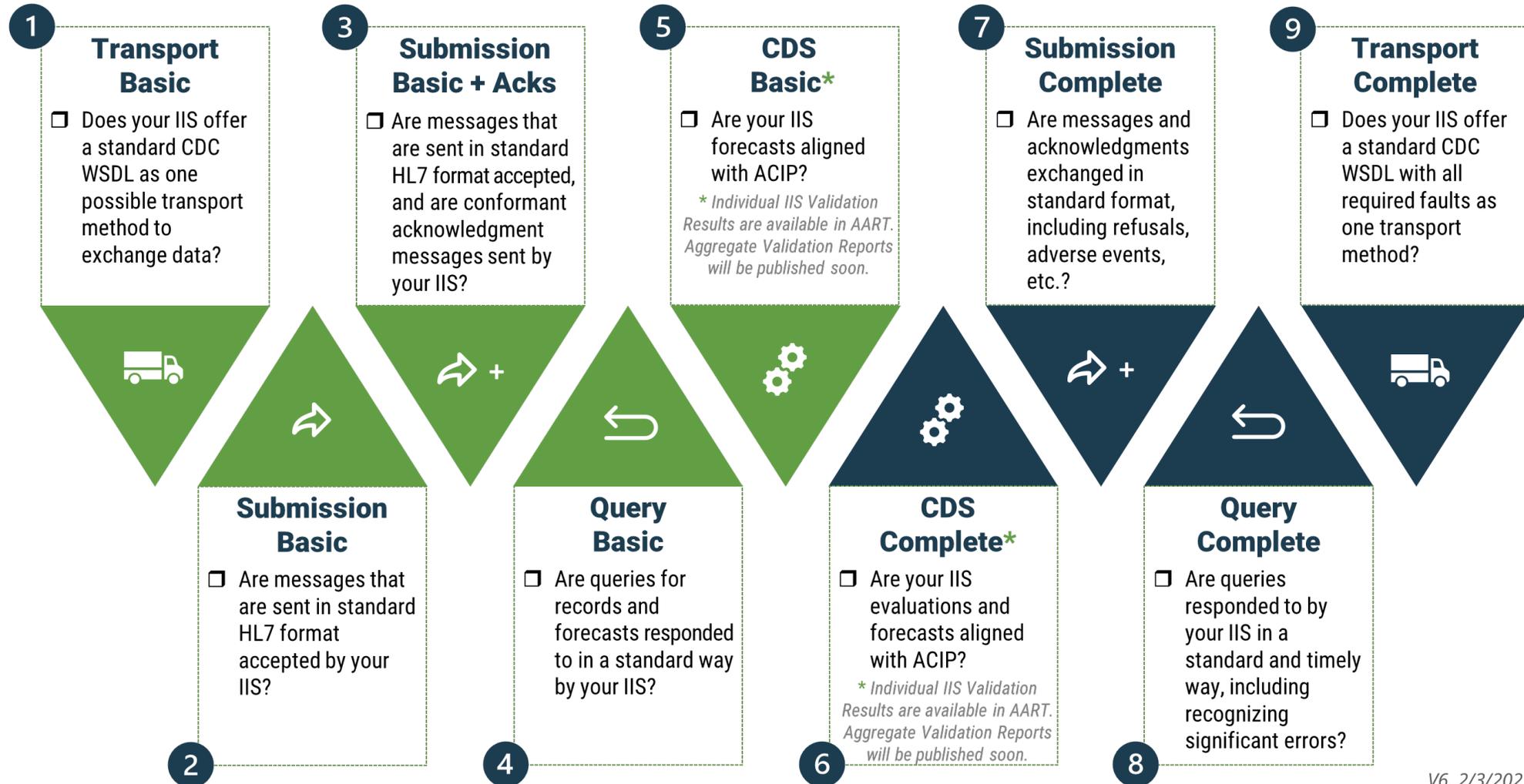
Identify IIS interoperability stage using the IIS Measurement and Improvement Validation - Priority Order document and Aggregate Analysis Reporting Tool (AART) results document. Develop a plan to advance IIS toward standards alignment.

Potential Budget Consideration:

Staff and/or consultants to investigate and document gaps in standards using individual AART reports and other resources (e.g., CDC Dashboard and the IIS Blueprint).



IIS Measurement and Improvement Validation - Priority Order



V6, 2/3/2021



B. Evaluate and Forecast

- CDSi provides clear and accurate clinical guidance and supports the use of IIS data to improve immunization rates

Activity Example:

Review AART CDS Assessment Report for IIS and implement changes to make sure the forecaster functions optimally.

Potential Budget Consideration:

Contracts to develop new or improved IIS CDS and/or reminder/recall functionality.



C. Ensure Data Quality

- High quality data allows IIS to support clinical and public health activities

Activity Example:

Participate in the AIRA Data at Rest Pilot to evaluate data completeness in IIS.

Potential Budget Consideration:

Staff and/or consultants to develop new or improved IIS data quality functionality.



D. Provide Public Data Access

- Giving people a way to access their immunization records encourages patient awareness and accuracy of immunization data

Activity Example:

Develop and publish COVID-19 Dashboards using live IIS data.

Potential Budget Consideration:

Software for visualizing IIS data.



E. Manage Organizations and Facilities

- Full provider participation is key to complete data capture and broad use of IIS data at the clinical point of care and for population health.

Activity Example:

Develop a targeted plan to recruit providers and increase data reporting. Consider stakeholders, such as adult immunizers, pharmacies, Indian Health Services/Tribal health, military, Veterans Affairs, etc.

Potential Budget Consideration:

Review and develop reports on enrollment and participation among current organizations and facilities.



F. Manage Patients and Immunization Records

- Management of patient and vaccine records ensures the IIS has complete immunization history for specific patients without duplications.

Activity Example:

Evaluate and improve system mass vaccination functionality.

Potential Budget Consideration:

Contracts to enhance/modify IIS for mass vaccination capabilities.



G. Manage Vaccine Inventory

- Vaccine inventory tools in an IIS help maintain accurate information about provider vaccine inventories and increase transparency for state and federal programs into the amount of vaccine available at provider sites

Activity Example:

Evaluate and improve vaccine ordering and/or prebook functionality.

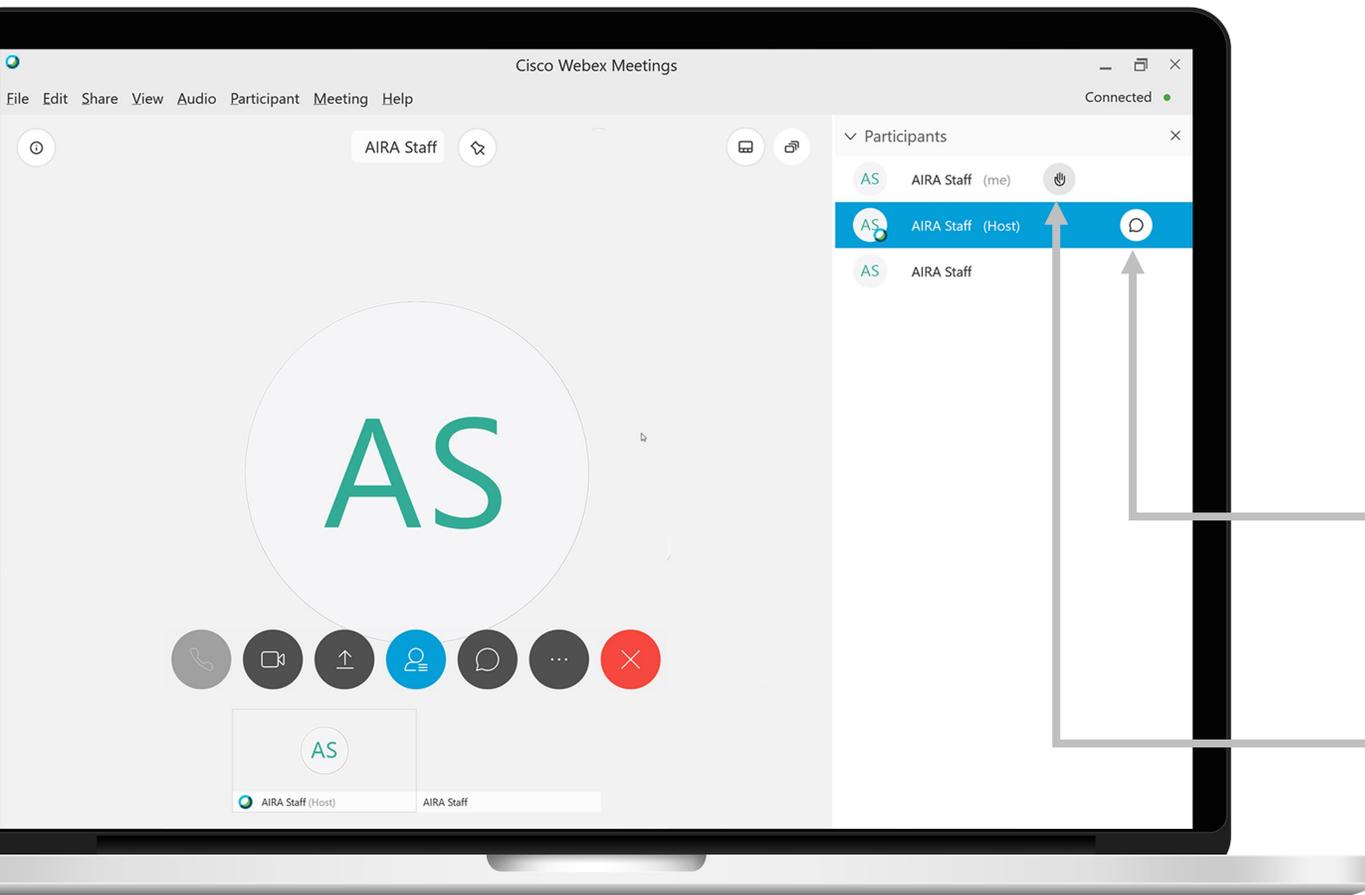
Potential Budget Consideration:

Staff and/or consultants to:

- Develop new or improved IIS vaccine management functionality.
- Manage, analyze, and share data (data management, visualizations, etc.).

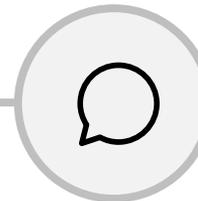


Questions & Discussion

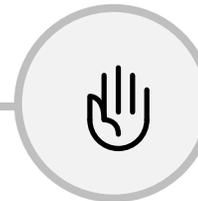


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Thank You!

Please send additional questions to info@immregistries.org