

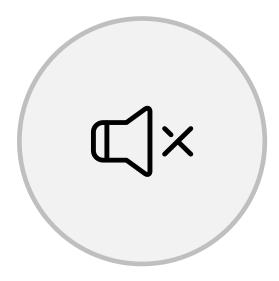
# AIRA Discovery Session

# The CDC Dashboard

February 4, 2019



# Welcome



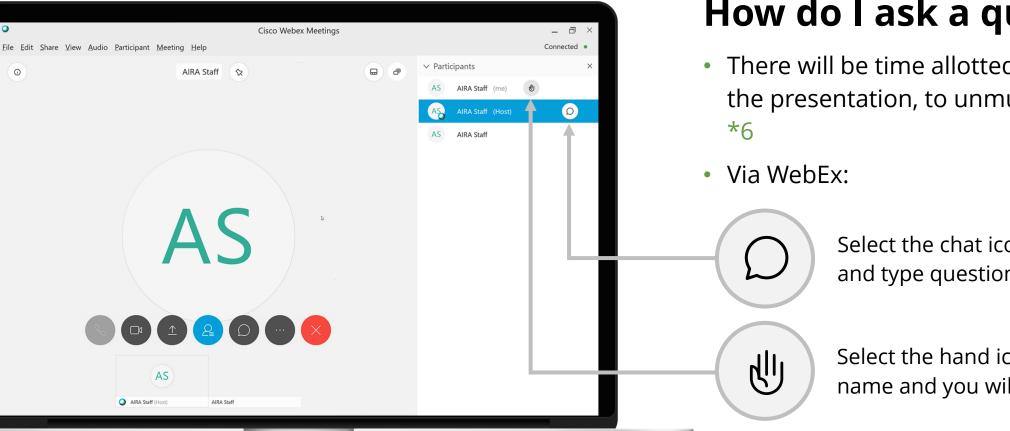
All phone lines are muted



This meeting is being recorded and will be posted on the AIRA repository



#### Welcome



#### How do I ask a question?

 There will be time allotted for Q&A following the presentation, to unmute your line press

> Select the chat icon next to the host and type question into the chat box.

Select the hand icon next to your name and you will be called on.

# Today's Topic

- The CDC Dashboard
  - What is it?
  - How can you access it?
  - How can it help with your planning for the year(s) ahead?



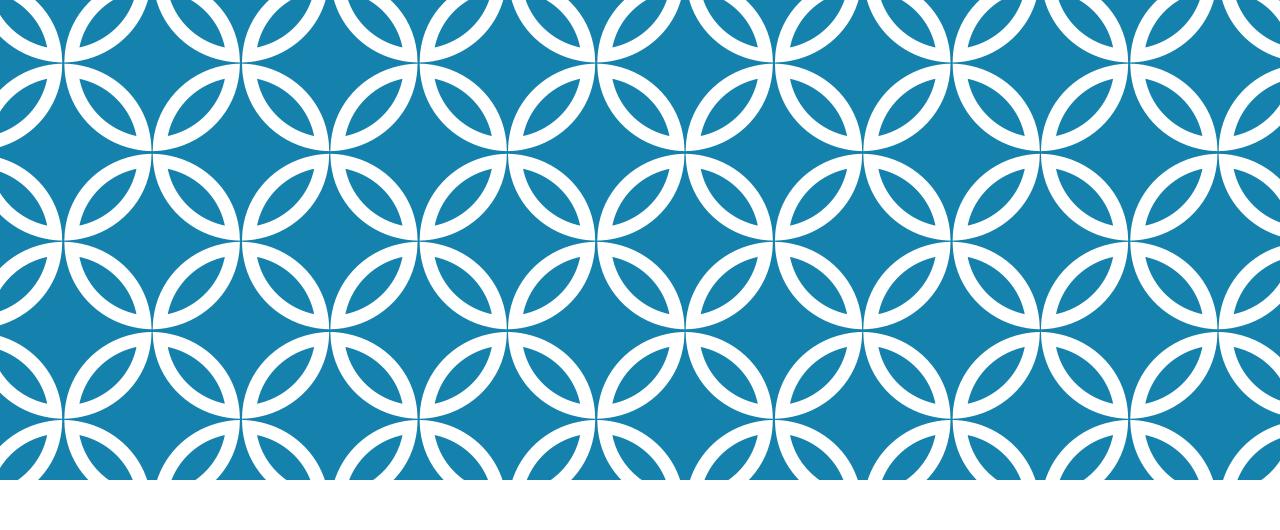


# Today's Speakers

Janet Fath – Operations Team Lead, IISSB, CDC

• Bobbie Strickland – Public Health Analyst, IISSB, CDC





STRENGTHENING THE IMMUNIZATION PROGRAM BY USING THE IIS DASHBOARD

Janet Fath Bobbie Strickland

### **AGENDA**

#### Background

- Functional Standards and the IISAR
- Observations about the new Cooperative Agreement

#### Using the IIS Dashboard to

- Gauge progress of your IIS in supporting all immunization program areas
- Help you plan activities and measures for the new Cooperative Agreement

# BACKGROUND: IIS FUNCTIONAL STANDARDS

**Program Goals** "Business Needs" **Functional Standards** "What" **Operational Guidance** "How" "How well" Measures

# BACKGROUND: IIS FUNCTIONAL STANDARDS



# BACKGROUND: IIS FUNCTIONAL STANDARDS

**Program Goals** 

"Business Needs"

**Functional Standards** 

"What"

**Operational Guidance** 

"How" → Resources

Measures

"How well" → Dashboard

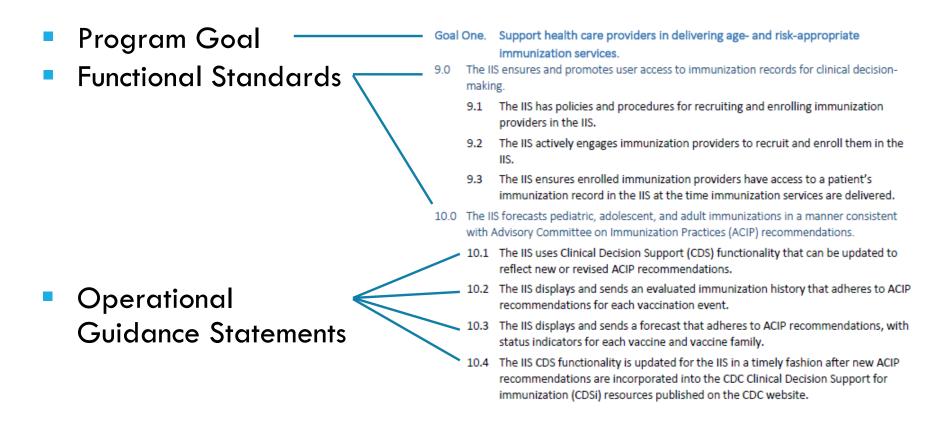
# BACKGROUND: PROGRAM GOALS

#### Four Program Goals

- 1. Support health care providers in delivering age- and risk-appropriate immunization services.
- 2. Support the control and management of vaccine-preventable disease outbreaks.
- 3. Support and inform stakeholder efforts to improve immunization rates.
- 4. Support health care providers in meeting the requirements of the Vaccines for Children (VFC) program and state and local vaccine programs.

#### **Essential Infrastructure Standards**

# SAMPLE GOAL, STANDARDS, AND OPERATIONAL GUIDANCE STATEMENTS



Measures

Most OGS have at least one measure

# BACKGROUND IISAR

- Annual survey that assesses immunization program performance in developing, maintaining, and enhancing Immunization Information Systems activities for a given calendar year
- Reporting requirement for the 64 immunization programs that receive funding under section 317b of the Public Health Service Act
- Self-reported, self-validated survey administered by CDC and answered by immunization program awardees
- CDC's primary source for measuring progress toward achieving the functional standards
- IISAR Data Query Tool

# BACKGROUND IISAR QUERY TOOL

- References Functional Standards and OGS
- Essentially a copy of each individual awardee IISAR responses

Child Participation in IIS (aged 4 months through 5 years)

#### Logic Guidance:

For children born from January 1, 2011 through August 31, 2016.

#### Enrollment:

- Include:
- Children enrolled in the IIS, regardless of having only travel vaccines, only non-vaccine products, or no vaccines in the vaccine record.
- Exclude:
- . Children with addresses outside of your state or geopolitical area. Geopolitical area is defined as the area that contains the

#### Participation:

- Include:
- All doses (valid and invalid) administered before January 1, 2017, including those recorded in the IIS after December 31, 2016.
- Exclude:
  - Children with addresses outside of your state or geopolitical area. Geopolitical area is defined as the area that contains the
    population of children residing in the geopolitical location covered by the IIS.
- 29. Number of children aged 4 months through 5 years in the geopolitical area (2016 Census data)

225320

- 30. Child enrollment: Number of children aged 4 months through 5 years (born from January 1, 2011 through
  Aug 31, 2016) in both in your geopolitical area AND in your IIS
  - a. Proportion of children aged 4 months through 5 years in both your geopolitical area AND in your IIS
     (Q.30/Q.29).
- 31. Child participation: Number of children in question 30 (children born from January 1, 2011 through Aug 31, 2016 that are both in your geopolitical area AND in your IIS) that have 2 or more immunizations recorded in your IIS (Healthy People 2020 Objective)
  - a. Proportion of children aged 4 months through 5 years in your geopolitical area and IIS that have 2 or more immunizations recorded in your IIS (Q.31/Q.29)

**Strategy D1:** Advance immunization information system (IIS) capabilities by implementing the CDC IIS Functional Standards to support public health objectives among children aged 0-18 years.

#### Assess

- D1.d
- D1.c

- D1.a
- D1.b

#### FOUNDATIONAL CAPABILITIES

Coverage estimates for childhood vaccinations (i.e., jurisdictional and provider-based)

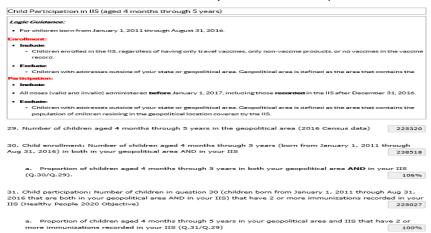
Childhood data completeness (0-18)

Pediatric Clinical Decision Support (CDSi) for immunizations

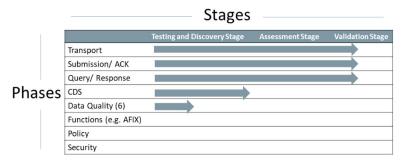
**Bidirectional data exchange** with Electronic Health Record Systems (EHR-S) within the awardee's jurisdiction using published CDC standards

#### ARTIFACTS TO INFORM ASSESSMENT

#### **IISAR** (on PAPA)



#### **AIRA Measurement and Improvement**



#### **IIS Dashboard**

Immunization Information Systems (IIS) Dashboard {Test Awardee} Individual Awardee Progress Report

 Legend

 Query Parameters
 Legend

 Selected FS/OGS Group:
 Coverage Estimates

 Targets Displayed:
 All Targets

 Timeframe:
 2017

 NA Exempt

For resources to learn about and meet the IIS Functional Standards, refer to the IIS Functional Standards Resource Guide.

To change report parameters, click the "Change Query Parameters" button. Refer to the IIS Dashboard User Manual for detailed instructions

unctional Standards / Measures		Year: 2017	2017 Target Achieved	2017 Target	% Awardees Meeting Target in 2017
	contains complete and timely demographic and immunization data for children, adolescents, and adults g or immunized within its jurisdiction.				
1.1.1	Percentage of children born and residing in the IIS's jurisdiction in the last year that had a record established in the IIS within 60 days of birth.	96.1%	*	85%	65%
1.1.2	Percentage of children born and residing in the IS's jurisdiction in the last year that had a record established in the IS's within 45 days of birth.	95.8%	*	85%	42%
1.1.3	Percentage of children born and residing in the IS's jurisdiction in the last year that had a record established in the IS within 30 days of birth.	95.2%	$\otimes$	100%	85%
1.1.4	Percentage of children that were born in the calendar year that reside in the IS's jurisdiction that have a demographic record in the IS.	100.2%	*	85%	65%
1.2.1	The IS identifies records created from vital records.	Yes	*	Yes	96%
1.3.1	Difference between IIS coverage estimate for children aged 19-35 months who received the 7-vaccine series and the respective NIS coverage estimate.	Exempt	N/A	N/A	85%
1.3.2	Difference between IIS coverage estimate for adolescents aged 13-17 years who received Td/Tdap and the respective NIS Teen coverage estimate.	Exempt	N/A	N/A	65%
1.3.3	Difference between IIS coverage estimate for adults aged 18 years and over who received an influenza vaccination and the respective BRFSS coverage estimate:	Exempt	N/A	N/A	80%
1.3.4	Percentage of children aged 0-6 years residing in the IS jurisdiction that are enrolled in the IS.	100.2%	$\bigstar$	85%	65%
1.3.5	Percentage of children and adolescents aged 0-18 years residing in the IIS jurisdiction that are enrolled in the IIS.	96.1%	*	85%	65%
1.3.6	Percentage of children, adolescents, and adults (lifespan) residing in the IIS jurisdiction that are enrolled in the IIS.	No Data	$\otimes$	Yes	80%

### ARTIFACTS TO INFORM IMPROVEMENT

#### **IIS Dashboard**

Immunization Information Systems (IIS) Dashboard {Test Awardee} Individual Awardee Progress Report

#### **Query Parameters**

Selected FS/OGS Group: Coverage Estimates
Targets Displayed: All Targets
Timeframe: 2017

Legend

Targets not achieved

Targets achieved

NA Exempt

For resources to learn about and meet the IIS Functional Standards, refer to the IIS Functional Standards Resource Guide.

To change report parameters, click the "Change Query Parameters" button. Refer to the IIS Dashboard User Manual for detailed instructions.

nctional Standards / Measures		Year: 2017	2017 Target Achieved	2017 Target	% Awardees Meeting Target in 2017
	The IIS contains complete and timely demographic and immunization data for children, adolescents, and adults residing or immunized within its jurisdiction.				
1.1.1	Percentage of children born and residing in the IS's jurisdiction in the last year that had a record established in the IS's within 60 days of birth.	96.1%	*	85%	65%
1.1.2	Percentage of children born and residing in the IS's jurisdiction in the last year that had a record established in the IS's within 45 days of birth.	95.8%	*	85%	42%
1.1.3	Percentage of children born and residing in the IS's jurisdiction in the last year that had a record established in the IS's within 30 days of birth.	95.2%	$\otimes$	100%	85%
1.1.4	Percentage of children that were born in the calendar year that reside in the IIS's jurisdiction that have a demographic record in the IIS.	100.2%	*	85%	65%
1.2.1	The IS identifies records created from vital records.	Yes	*	Yes	96%
1.3.1	Difference between IIS coverage estimate for children aged 19-35 months who received the 7-vaccine series and the respective NIS coverage estimate.	Exempt	N/A	N/A	85%
1.3.2	Difference between IIS coverage estimate for adolescents aged 13-17 years who received Td/Tdap and the respective NIS Teen coverage estimate.	Exempt	N/A	N/A	65%
1.3.3	Difference between IIS coverage estimate for adults aged 18 years and over who received an influenza vaccination and the respective BRFSS coverage estimate:	Exempt	N/A	N/A	80%
1.3.4	Percentage of children aged 0-6 years residing in the IIS jurisdiction that are enrolled in the IIS.	100.2%	*	85%	65%
1.3.5	Percentage of children and adolescents aged 0-18 years residing in the IIS jurisdiction that are enrolled in the IIS.	96.1%	*	85%	65%
1.3.6	Percentage of children, adolescents, and adults (lifespan) residing in the IIS jurisdiction that are enrolled in the IIS.	No Data	$\otimes$	Yes	80%

#### **Functional Standards Resources**

Immunization Information System (IIS) Functional Standards Version 4.0 Resource Guid

Fun	ctional Standard	Primary Resources	AIRA Repository Key Words
1.0	The IIS contains complete and timely demographic and immunization data for children, adolescents, and adults residing or immunized within its jurisdiction.	Introductory  • Data Quality for IIS – no-cost, interactive training that requires setting up an account with PHII	<ul> <li>Data quality assurance</li> </ul>
		Advanced/Technical	
		HLT Version 2.5.1 Implementation Guide for Immunization Messaging, Release 1.5     HLT Version 2.5.1 Implementation Guide for Immunization Messaging (Release 1.5) — Addendum	
		Data Quality Assurance in Immunization Information Systems: Selected Aspects	
		Data Quality Assurance in Immunization Information Systems: Incoming Data     Guidance for HL7 ACK Messages to Support Interoperability	
		AIRA Data Validation Guide – for the IIS Onboarding Process	
2.0	The IIS identifies, prevents, and resolves duplicated and fragmented patient records using an automated process.	Introductory  Consolidating Demographic Records and Vaccination Event Records – mini guide	<ul><li>Deduplication</li><li>Consolidation</li></ul>
		Advanced/Technical	
		Consolidating Demographic Records and Vaccination Event Records – full guide     Immunization Information Systems Patient-Level De-Duplication Best Practices     The Unique Records Portfolio	
3.0	The IIS identifies, prevents, and resolves duplicate vaccination events using an automated process.	Introductory  Consolidating Demographic Records and Vaccination Event Records – mini guide  Vaccination Level De-duplication in Immunization Information Systems – mini guide	<ul><li>Deduplication</li><li>Consolidation</li></ul>
		Advanced/Technical  Consolidating Demographic Records and Vaccination Event Records – full guide  Vaccination Level Deduplication in Immunization Information Systems – full guide	

**Strategy D1:** Advance immunization information system (IIS) capabilities by implementing the CDC IIS Functional Standards to support public health objectives among children aged 0-18 years.

Activity D1a: Advance immunization information system (IIS) capabilities by implementing the CDC IIS Functional Standards to support public health objectives among children aged 0-18 years.

Approach: Develop plans that address progress on Foundational Capabilities before planning to take on additional development activities; consult the Dashboard to determine steady state areas (targets achieved) versus where improvements are needed (targets not met)

#### Assess

- Independent Assessment
- IISAR

**IIS Dashboard** 

- Foundational Capabilities
- Resources

**Strategy D1:** Advance immunization information system (IIS) capabilities by implementing the CDC IIS Functional Standards to support public health objectives among children aged 0-18 years.

**Activity D1b:** Use IIS standards and best practices to implement new functionality and improve existing functionality.

Approach: Use Foundational Capabilities, along with the Dashboard and Resources to focus efforts on continuing with successful implementations and improving items where targets are not met. Best practices and guidance from the Resources document will assist when writing requirements documents, for example.

#### Assess

- Independent Assessment
- IISAR

**IIS Dashboard** 

- Foundational Capabilities
- Resources

**Strategy D1:** Advance immunization information system (IIS) capabilities by implementing the CDC IIS Functional Standards to support public health objectives among children aged 0-18 years.

**Activity D1d:** Complete the IIS annual report and collaborate with CDC to participate in pre- and post-submission quality control activities to verify results.

**Approach:** Provide complete and accurate data on the **IISAR**; cooperate with CDC's independent verification initiative as requested.

#### Assess

- Independent Assessment
- IISAR

**IIS Dashboard** 

- Foundational Capabilities
- Resources

**Strategy D1:** Advance immunization information system (IIS) capabilities by implementing the CDC IIS Functional Standards to support public health objectives among children aged 0-18 years.

Activity D1c: Participate in objective, independent assessments of IIS functionality and data quality and implement system and program improvements based on assessment results.

Approach: Participate in AIRA's Measurement and Improvement Initiative; consider participating in the NIS-IIS Match project.

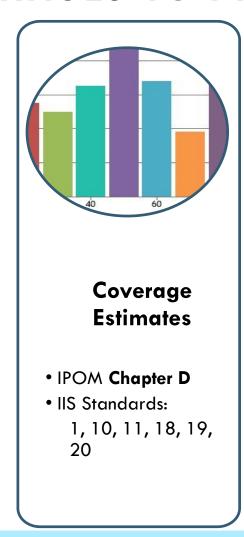
#### Assess

- Independent Assessment
- IISAR

**IIS Dashboard** 

- Foundational Capabilities
- Resources

#### EXAMPLES OF IIS LINKAGES TO PROGRAM OPERATIONS



Foundational Capabilities: Coverage estimates for childhood vaccinations, childhood data completeness (0-18), pediatric Clinical Decision Support for Immunizations, standards-based bi-directional exchange with EHRs

#### EXAMPLES OF IIS LINKAGES TO PROGRAM OPERATIONS



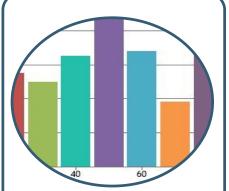
### Vaccine Access & Management

- IPOM Chapter C
- IIS Standards: 1, 9, 23, 25, 26



### Provider Quality Improvement

- IPOM Chapter F
- IIS Standards: 1, 9, 11, 12, 18



### Coverage Estimates

- IPOM Chapter D
- IIS Standards: 1, 10, 11, 18, 19, 20



#### Program Effectiveness

- IPOM Chapter B
- IIS Standards: 1, 10, 11, 12, 18,



### Pandemic Preparedness

- IPOM Chapter I
- IIS Standards: 11, 12, 14

Foundational Capabilities: Coverage estimates for childhood vaccinations, childhood data completeness (0-18), pediatric Clinical Decision Support for Immunizations, standards-based bi-directional exchange with EHRs

### **AGENDA**

#### Background

- Functional Standards and the IISAR
- Observations about the new Cooperative Agreement

#### Using the **IIS Dashboard** to

- Gauge progress of your IIS in supporting all immunization program areas
- Help you plan activities and measures for the new Cooperative Agreement

# **EXAMPLE: VERMONT**

Gauge progress of your IIS in supporting all immunization program areas

Help you plan activities and measures for the new Cooperative Agreement

## ACCESSING THE DASHBOARD

- After this session, Immunization Program Managers and IIS Managers will receive the link to the dashboard
- Dashboard requirements include:
  - Internet Explorer 10 and above for Windows
  - Adobe Reader 9 and higher
  - Operating Systems: .NET Framework 3.0; Windows 2000, Vista, XP, 7

# NEXT STEPS MAKING THE MOST OF THE DASHBOARD

It is important to have accurate data

- If your IIS vendor generates the responses...
  - Do you know how your answers are generated?
  - Do you review them before entering them in the IISAR?

 Immunization Program Managers and IIS Managers should tuned for information on how to access the dashboard

### QUESTIONS TO CONSIDER

- How are my data pulled for submission to the IISAR?
  - Has that data been validated?
- For Targets Achieved
  - What activities should you include to maintain achievements?
- For Targets Not Achieved
  - Are there ones that you are close to achieving?
  - What are your long term goals (over the 5 year CoAg)?
  - What are your short term goals for the upcoming CoAg year?

## THANK YOU!

Janet Fath

**Bobbie Strickland** 

Send questions about this presentation to <a href="mailto:IISInfo@cdc.gov">IISInfo@cdc.gov</a>.

## RESOURCE GUIDE

Immunization Information System (IIS) Functional Standards Version 4.0 Resource Guide

Function	nal Standard	Primary Resources	AIRA Repository Key Words	
der chi	The IIS contains complete and timely demographic and immunization data for children, adolescents, and adults residing or immunized within its jurisdiction.  Introductory  • Data Quality for IIS – no-cost, interactive training that requires setting up an account with PHII		Data quality     assurance	
		<ul> <li>Advanced/Technical</li> <li>HL7 Version 2.5.1 Implementation Guide for Immunization Messaging, Release 1.5</li> <li>HL7 Version 2.5.1 Implementation Guide for Immunization Messaging (Release 1.5) — Addendum</li> <li>Data Quality Assurance in Immunization Information Systems: Selected Aspects</li> <li>Data Quality Assurance in Immunization Information Systems: Incoming Data</li> <li>Guidance for HL7 ACK Messages to Support Interoperability</li> <li>AIRA Data Validation Guide — for the IIS Onboarding Process</li> </ul>		
du	e IIS identifies, prevents, and resolves plicated and fragmented patient records ing an automated process.	Introductory  • Consolidating Demographic Records and Vaccination Event Records – mini guide  Advanced/Technical  • Consolidating Demographic Records and Vaccination Event Records – full guide  • Immunization Information Systems Patient-Level De-Duplication Best Practices  • The Unique Records Portfolio	<ul><li>Deduplication</li><li>Consolidation</li></ul>	
du	e IIS identifies, prevents, and resolves plicate vaccination events using an tomated process.	Introductory  Consolidating Demographic Records and Vaccination Event Records – mini guide  Vaccination Level De-duplication in Immunization Information Systems – mini guide  Advanced/Technical  Consolidating Demographic Records and Vaccination Event Records – full guide  Vaccination Level Deduplication in Immunization Information Systems – full guide	<ul><li>Deduplication</li><li>Consolidation</li></ul>	

#### Immunization Information Systems (IIS) Dashboard {Test Awardee} Individual Awardee Progress Report

**Query Parameters** 

Selected FS/OGS Group:

Coverage Estimates

Targets Displayed: All Targets

Timeframe: 2017 Legend

Targets not achieved

Targets achieved

N/A Exempt

For resources to learn about and meet the IIS Functional Standards, refer to the IIS Functional Standards Resource Guide.

To change report parameters, click the "Change Query Parameters" button. Refer to the IIS Dashboard User Manual for detailed instructions.

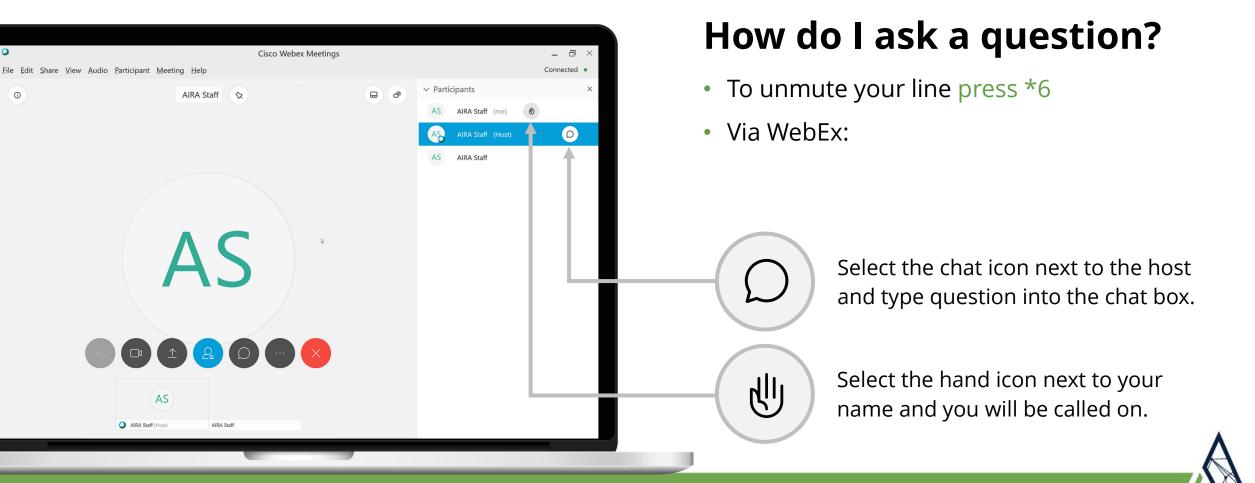
nctional Standards / Measures		Year: 2017	2017 Target Achieved	2017 Target	% Awardees Meeting Target in 2017
	contains complete and timely demographic and immunization data for children, adolescents, and adults g or immunized within its jurisdiction.				
1.1.1	Percentage of children born and residing in the IIS's jurisdiction in the last year that had a record established in the IIS within 60 days of birth.	96.1%	*	85%	65%
1.1.2	Percentage of children born and residing in the IIS's jurisdiction in the last year that had a record established in the IIS within 45 days of birth.	95.8%	*	85%	42%
1.1.3	Percentage of children born and residing in the IIS's jurisdiction in the last year that had a record established in the IIS within 30 days of birth.	95.2%	$\otimes$	100%	85%
1.1.4	Percentage of children that were born in the calendar year that reside in the IIS's jurisdiction that have a demographic record in the IIS.	100.2%	*	85%	65%
1.2.1	The IIS identifies records created from vital records.	Yes	*	Yes	96%
1.3.1	Difference between IIS coverage estimate for children aged 19-35 months who received the 7-vaccine series and the respective NIS coverage estimate.	Exempt	N/A	N/A	85%
1.3.2	Difference between IIS coverage estimate for adolescents aged 13-17 years who received Td/Tdap and the respective NIS Teen coverage estimate.	Exempt	N/A	N/A	65%
1.3.3	Difference between IIS coverage estimate for adults aged 18 years and over who received an influenza vaccination and the respective BRFSS coverage estimate:	Exempt	N/A	N/A	80%
1.3.4	Percentage of children aged 0-6 years residing in the IIS jurisdiction that are enrolled in the IIS.	100.2%	*	85%	65%
1.3.5	Percentage of children and adolescents aged 0-18 years residing in the IIS jurisdiction that are enrolled in the IIS.	96.1%	*	85%	65%
1.3.6	Percentage of children, adolescents, and adults (lifespan) residing in the IIS jurisdiction that are enrolled in the IIS.	No Data	$\otimes$	Yes	80%

# Questions, Comments, Discussion?





# Questions, Comments, Discussion?



# Thank you for joining us!

A brief evaluation survey will be sent out following this webinar

The next Discovery Session will be February 25<sup>th</sup> at 4pm ET

