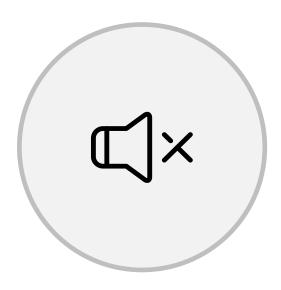
# Patient Status in Immunization Information Systems

Discovery Session October 28, 2019

## AIRA Discovery Session – Patient Status

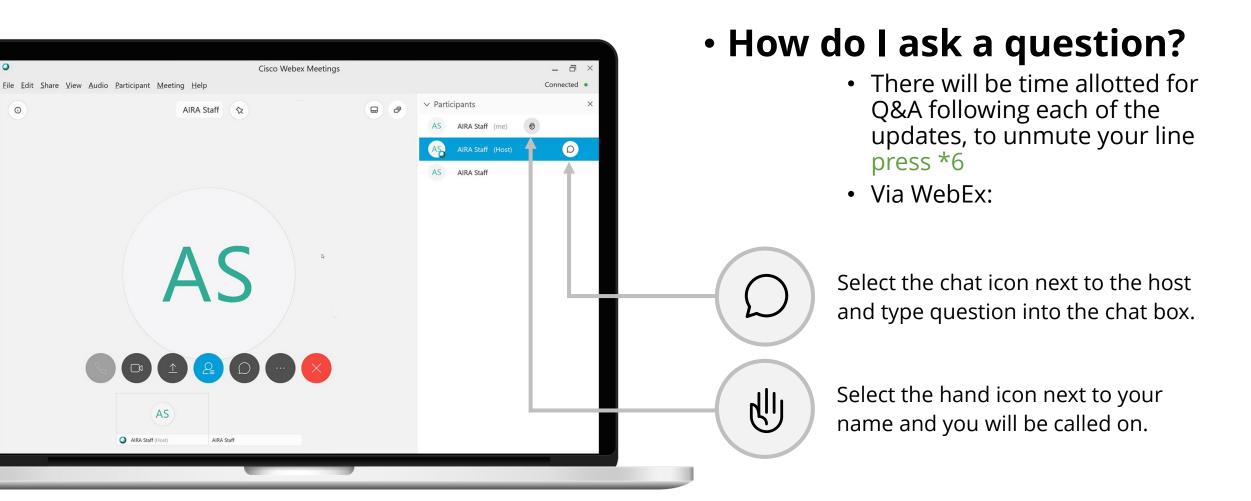


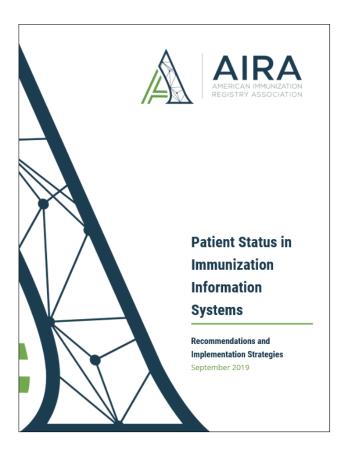
All phone lines are muted



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

## AIRA Discovery Session – Patient Status





#### Presenters

- Nichole Lambrecht (AIRA)
- Sammy Chao (Tennessee IIS)
- Wendy Nye (Michigan IIS)

Once published, document will be found here:

https://repository.immregistries.org/resource/patient-status-in-immunization-information-systems/

# Project/Document Overview

Nichole Lambrecht

AIRA Sr. Project Manager

# Project Purpose

The primary purpose: bridge the gap between currently published guidance on patient status and its actual implementation by IIS

A secondary purpose: address the issue of denominator inflation (number of patient records that incorrectly reflects the actual population)

## Methodology

#### **IIS Survey**

45 IIS respondents (each representing a unique jurisdiction)

#### **EHR Survey**

7 different EHR product representatives responded

#### **SME Interviews**

10 interviews with IIS representatives

#### Virtual SME Workgroup

12 individuals from the IIS community

# Acknowledgments

- Individual subject matter experts who contributed their expertise through telephone interviews, SME group\*, and/or document review:
  - o Aaron Bieringer, Minnesota
  - o Adam Bjork, CDC
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- Veronica Rodriguez, Puerto Rico
- Wendy Nye, Michigan\*

## Why Patient Status is Important

- Patient status plays a role in determining whom to include in reminder/recall lists and assessments
- From the public health perspective, it is important to maintain status for a patient at both provider organization and geographic jurisdiction levels to ensure there is always a party responsible for vaccination of every patient

# Working Definitions

#### **Patient Status**

A concept that defines responsibility for vaccination of a specific patient at a provider organization or geographic jurisdiction level

#### **Provider Level Patient Status**

A patient's active status with a provider signifies that the provider is responsible for ensuring the vaccination of that patient

### Geographic Jurisdiction Level Patient Status

A patient status helps local public health entities ensure that patients without a provider receive the vaccinations they need

Designation of patient status at the provider organization level differs between IIS with the **1–1** and **1–M** approaches:

**1–1** – only one provider at a time responsible for each patient

**1–M** – multiple providers can be responsible a single patient

# Definitions – continued...





- More data coming from electronic data exchange (EDE) contributes to data gaps such as:
  - Inconsistent practices used among IIS and EHRs (status categories)
    - Most EHRs only capture Active or Inactive-unspecified
  - Multiple data fields to transmit patient status (direct and indirect impacts)
  - Different workflows can impact when/if data is sent from EHR partners
    - Patient status is often only sent if an administered immunization is also included
    - ADT messages (Admit, Discharge, Transfer) are not sent often or not accepted
    - Some EHR systems separate the admission/registration data (i.e., address or other demographic information) out from clinical data which then is not always triggered to send to an IIS when that data changes
  - Deceased data is not always in the same interface as Birth Record data which can create some record match up issues

## Implementation Barriers cont'd

- Not all IIS follow MIROW recommended subcategories both at provider organization level and geographic jurisdiction level
- Many IIS struggle with having providers update patient status and may not have tools to help providers keep records up to date
- Denominator inflation increases without clear guidance on when records should be marked appropriately at the geographic jurisdiction level as "unknown-no activity for an extended period of time"

#### Selected Recommendations

- All IIS should include, at a minimum, the three main patient status designations: active, inactive (outside jurisdiction in the case of geographic jurisdiction level), and deceased
- IIS should automate the updating of patient status wherever possible and create easy-to-use tools to facilitate manual updates
- Until EDE barriers are resolved, IIS should encourage providers to update patient status based on their EHR capabilities and provide guidance on how to use automated IIS tools if needed

### Selected Recommendations cont'd

- IIS should strive to obtain updates of deceased notifications when possible
- IIS should allow providers to flag a record as deceased to avoid inappropriate reminder/recall notifications
- IIS should have a distinct field designating geographic jurisdictional level patient status for each patient record
- IIS should implement strategies to obtain the most accurate and up-to-date addresses for patient records

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# Template for provider guidance

- The guide provides a template of basic information that could be included in instructions to providers about the use of the patient status field. Each IIS should adapt the wording to fit its own situation and terminology. Some info includes:
  - Who is the information for?
  - What is patient status?
  - How does patient status get updated in the IIS?
  - Why care about patient status?
  - When should I update patient status?



# Tennessee Perspective

Samantha Chao TN Deputy IIS Manager

#### **Barriers/Challenges**

- Provider Level
  - In the past, switched from 1:1 to 1:M to 1:1
  - Ownership, Service and Patient Status
- Geographic Level
  - No official geographic PAIS yet can currently filter reports
  - Needed implementation guidance



#### **Best Practices**

- Deceased
  - Death records from vital records (want to implement)
  - Secondary confirmation (user interface and HL7)
  - Handling of patient records after status changed to deceased what we do deviates from the guide



#### Plan to implement

- Once we have geographic level patient status, want to implement a mass inactivation process
  - Decide parameters (age group, time since last update)
  - Decide of method
  - Determine frequency



# Michigan Perspective

Wendy Nye Region 1 MCIR Manager

#### **MCIR** Patient Status

- Provider & Geographic Level
  - 1:1 Relationship
- Current Status Options (impacting coverage levels and Reminder/Recall)
  - Active
  - Inactive Lost to follow-up
  - Inactive Moved or gone elsewhere
  - Inactive Deceased
- Status changes pending completion of AIRA status guide updates



#### **Barriers/Challenges**

- Provider Level
  - Manual documentation due to EMR limitations
  - Address impact
- Geographic Level
  - Inactive records
  - Denominator inflation



#### **Best Practice & Other Considerations**

- Provider accessibility and accountability
- Geographic level status
  - Monitor coverage rates and trends
  - Identify pockets of need
- Other considerations
  - Standardization
  - Public Health Impact



### Questions?

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# AIRA Discovery Session – Legacy Data

