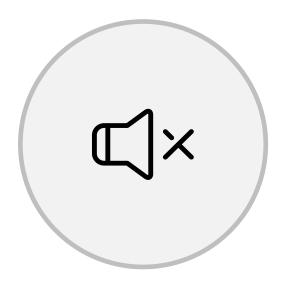


# Provider Organization Participation and Management

Discovery Session February 10, 2020

## AIRA Discovery Session



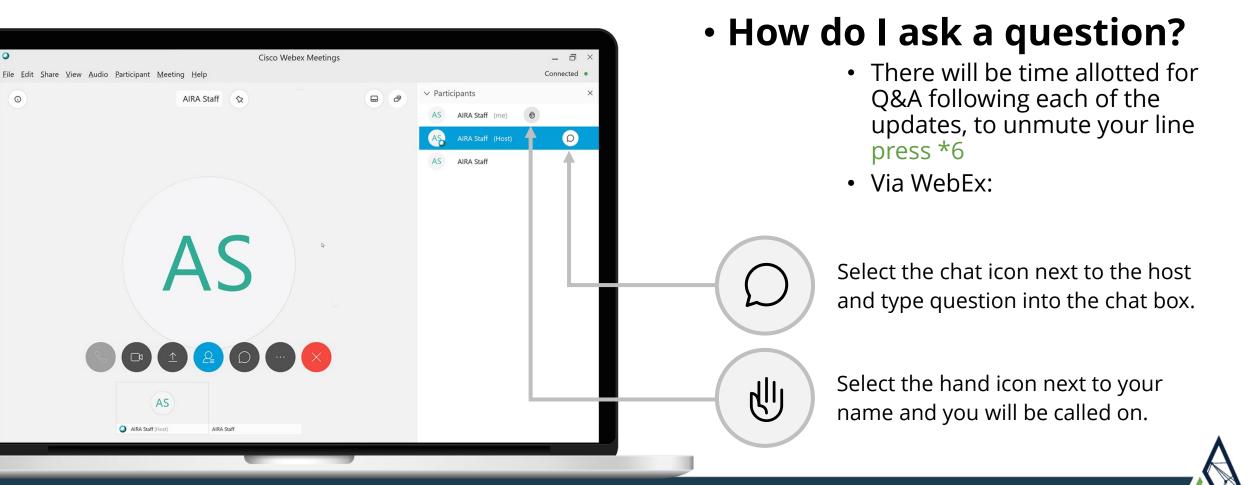
All phone lines are muted



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



## AIRA Discovery Session



# Today's Topic

- Provider Organization Participation
- Tools for Provider Management
- Questions, Comments, Discussion





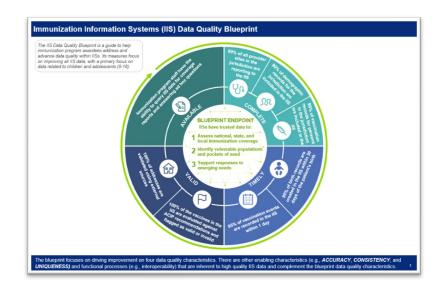
# Today's Speakers

- Jan Hicks-Thomson, CDC
- Darrin Rosebrook, AMCI
- Deb Warren, AMCI





# Identifying and Prioritizing Providers for Data Quality Improvement, Outreach and Training





AIRA Discovery Session, February 2020
Jan Hicks-Thomson, MSW, MPA
Public Health Analyst
Immunization Information Systems Support Branch



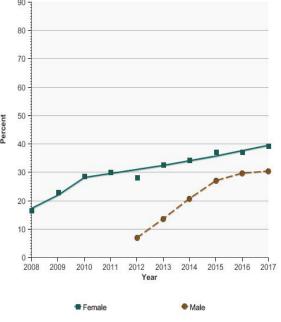
## **Topics For Today**

- 1. The IIS Blueprint, provider management and data quality
- 2. Using IIS data to drive provider outreach for data quality improvement
- 3. Provider IIS participation project outreach and training efforts

# Provider and data quality management and the future of IIS Data Quality

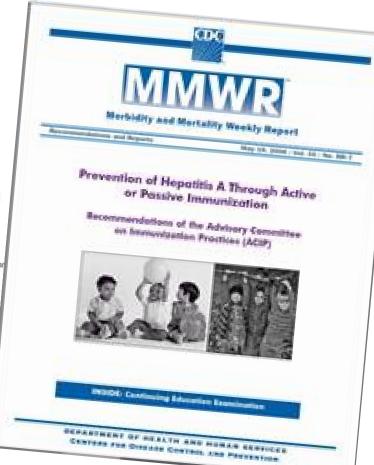
## Begin with the end in mind...

Percent of adolescents aged 13-15 years who had received 2 or 3 doses of the human papillomavirus (HPV) vaccine as recommended at time of vaccine by sex, 208-2017

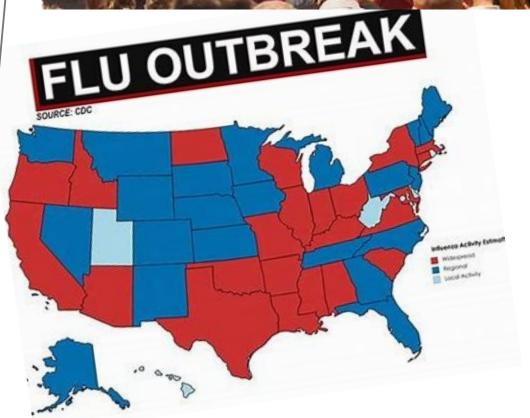


Source: Centers for Disease Control and Prevention, National Center for Immunization ar Respiratory Diseases. National Immunization Survey. Data are not ace-adjusted.

Estimates for 2014+ are not directly comparable to estimates from prior years due to a change in the underlying definition. Detailed information can be found in the 'Measure' section of this page.





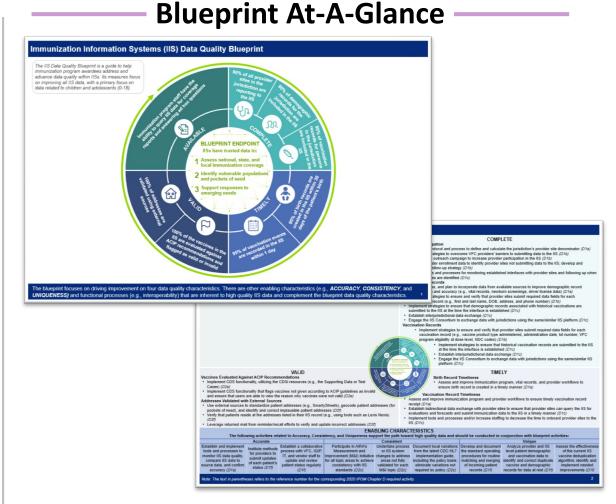


# The Blueprint defines IISSB's goals for IIS and guides awardee activities for data quality improvement

#### - Blueprint Guiding Principles —

#### The Blueprint:

- 1 Focuses on **improved IIS data quality**, which will support improved immunization outcomes by supplying **credible immunization data**
- Prioritizes a small set of meaningful, quantifiable IIS measures
- Informs **technical assistance approach** to address shared challenges
- 4 Adapts to national, state, and local emerging priorities and needs



# The Blueprint builds on a foundation of strong system functionality, helping to advance IIS data use

#### **Advancing IIS Data Use**



# Develop high functioning inputs

The *Functional Standards*outline how awardees can improve IIS **operations and program support,** setting a strong foundation.



The *Blueprint* defines high quality data and provides guidance on how to produce it. CoAg and IPOM requirements are shifting to reflect the importance of IIS outputs in driving data use.



With high functioning systems and high data quality, IIS can assess coverage, identify vulnerable populations, and support responses to emerging needs.

# Use data for provider management and data quality improvement

#### **Examples of Activities**



Establish protocols and identify tools to assess the IIS data completeness, timeliness, validity, accuracy, uniqueness, consistency, and availability.



Establish tools and processes for monitoring established interfaces with provider sites and following up when interface issues are identified.

#### **Examples of Activities**



Analyze provider enrollment data to identify provider sites not submitting data to the IIS; develop and implement a follow-up strategy



Identify, assess, and plan to incorporate data from available sources to improve demographic record completeness and accuracy (e.g., vital records, newborn screenings, driver's license data)

# Using IIS Data to Drive Provider Outreach for Data Quality Improvement

#### Focus on data

- Pull data from IIS for analysis
  - Queries
  - Ad hoc and canned reports
- Identify common provider characteristics
- Categorize non-reporting providers
- Prioritize non-reporting providers





### Incorporate data quality during and after onboarding

- Develop an IIS data quality protocol for incoming data:
  - Identify strong but realistic data quality goal
  - Review for rejected messages, data completeness and accuracy
  - Establish scheduled and ad-hoc review
- Give providers regular feedback in testing and after go live



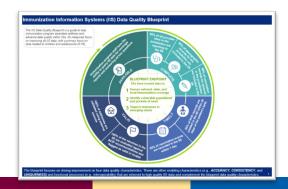
### Incorporate data quality during and after onboarding

- Conduct root cause analysis with providers and EHR vendors
- Establish a process for follow-up and resolution
- Train providers on data quality best practices
- Document the process, staffing, and maintenance activities in the IIS
   Data Quality Improvement Plan



### Be strategic when planning provider outreach and training

- Develop an outreach and training plan
- Gather resources, create or refresh materials
- Engage partners and identify their roles
- Implement the outreach and training plan
- Evaluate outreach and training efforts and materials



## **Provider IIS Participation CoP Outreach**

#### **Alabama**

- Analyzed data and to establish outreach campaign
- Developed outreach report for providers with coverage data and HL7 error message information
- Field staff conducted outreach to share and correct HL7 message errors and data quality issues



**HL7 Error Guide** 

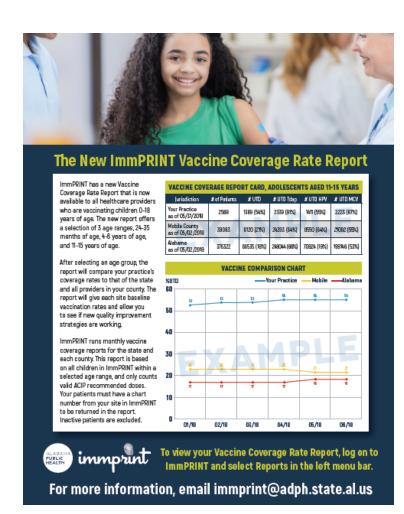
#### **HL7 Error in ImmPRINT**

Every vaccine message submitted through HL7 interface to ImmPRINT will validate vaccines before updating on patient's vaccine history. If a VXU (Vaccination Update) message has an error then the vaccine message will be placed under HL7 errors. In ImmPRINT, HL7 errors are classified into two types.

- 1) Data Errors
- 2) Technical Errors

#### **HL7 Data Errors:**

Data Errors occurred when an incorrect or incomplete patient and/or vaccine information submitted to ImmPRINT. Data Errors provide information like medical record number, patient name, patient DOB, error description and error created date.





#### **California**

- Gathered <u>resources</u> on self-guided training
- Designed outreach and <u>training</u> evaluation plan focusing on VFC providers
- Explored policy solutions and how they impacted IIS participation



#### **Policy Options Adopted by States**



 Vaccines for Children Provider Agreement



■ Medicaid Provider Requirement

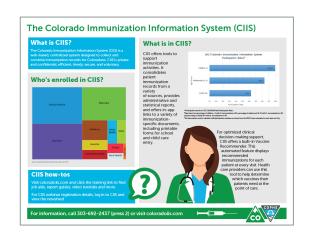


Legal Mandates to Report



#### **Colorado**

- Partnered with AAP and ACOG on outreach (AAP conference, newsletter articles, joint onepager, etc.)
- Created a <u>training plan</u> including a method to track partners, partner activities and events
- Updated their newsletter





**Colorado IIS Training Website** 

#### **Illinois**

- Analyzed data and established an outreach campaign based on provider characteristics
- Prioritized pediatricians, pharmacies, family physicians
- Identified sites that were no longer vaccinating
- Established a list of providers for follow-up

Illinois Department of Public Health

I-CARE Local Implementation Guide for HL7 Immunization Messaging



1	light pink = phone number disconected or could not locate a good number for the provider		
2	purple = call back/was not able to leave a voicemail		
3	yellow = left voicemail		
4	green = needs a follow - up from IL DOH/requested to keep acccount active		
5	red = notified account would be deleted		
6			
7	CLINIC_NAME	ADDRESS_1	AL
8	PEDIATRIC HEALTH ASSOCIATES - NORTH AURORA	98 MILLER DR	Sl
9	ABMCG ARLINGTON HEIGHTS PEDIATRICS	PEDIATRICS	15
10	ABMCG SKOKIE PEDIATRICS (SKPEDS)	9700 KENTON AVE	ST
11	ACCESS PEDIATRICS/MANJU AKHAND	3920 N JOHNSBURG RD	
12	AD PARK PEDIATRIC ASSOCIATES	1640 W LAKE ST	
13	AD-PARK PEDIATRICS OAK PARK	610 S MAPLE AVE	S <sup>T</sup>
14	ADVANCED PEDIATRIC CHILDRENS HEALTH ASSOCIATES SC	246 E JANATA BLVD	ST
15	ALL ABOUT KIDS PEDIATRICS	1250 N MILL ST	S
16	ALL STAR PEDIATRICS, PC	6428 JOLIET RD	S

#### **Maryland**

- Analyzed data, and established and implemented a large scale outreach campaign
- Identified 100 pharmacies reporting under one ID
- Revamped the website
- Used partner promotional materials

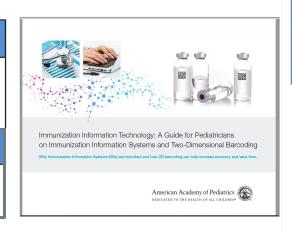
#### For Providers

#### What is an Immunization Information System?

ImmuNet is Maryland's immunization information system (IIS). An IIS is a confidential and secure computer database designed to collect and maintain vaccination records of children and adults. Utilization of the IIS promotes cost-effective and efficient disease prevention, which leads to better health for Maryland's citizens.

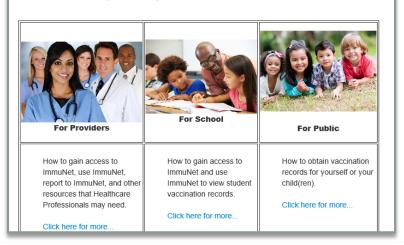
#### Reasons Why ImmuNet is Necessary

- · Physicians overestimate how many of their patients are fully immunized
- · Parents often are not aware of their child's immunization status.
- Due to poor record-keeping, a child may receive too many vaccinations



#### State Laws/Regulations related to ImmuNet • §18–109(b) There is an ImmuNet program in the Department ( PDF)

- \$18–109(d)(6)(l)3 Report to ImmuNet all vaccines administered (some exceptions apply) ( PDF)
- 10.06.03.04 Information Reported to ImmuNet
- §18-109(c) and 10.06.03.07 Permissible Use of ImmuNet Information
- · 10.06.03.05 User Agreement
- · 10.06.03.09 Security and Reliability Standards





#### **New Mexico**

- Updated the outreach pamphlet, fact sheet and provider brochure
- Adapted a bidirectional data exchange flier
- Analyzed data and conducted targeted e-mail outreach
- Developed and disseminated materials with coalition help
- Researched provider incentive programs
- Implemented a patient portal





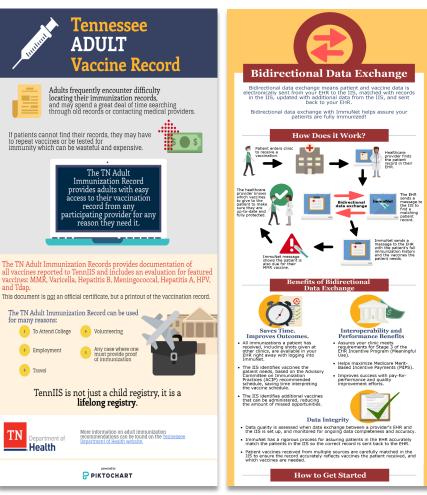


#### **Tennessee**

- Developed an outreach plan
- Identified and prioritized providers for outreach
- Updated IIS reference guides, materials, and website
- Adopted AIRA materials and bidirectional data exchange flier
- Engaged partners in outreach to 1,000 providers









For more information, contact CDC 1-800-CDC-INFO (232-4636) TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.







#### **Collaborative Stakeholder Management Tools**

- Contact Relationship Management
- Onboarding Facilitation
- Learning Management
- Help Desk Ticketing
- EHR Management
- Dx Interface Project Management
- Promoting Interoperability Administration
- Data Analytics and Reporting
- Outreach Prioritization







#### **Stakeholders**



Medical Sites (Public & Private)



Multi-Site Medical Groups



Electronic Health Record Vendors



Pharmacies



School Districts & Schools (Public & Private)



Child Care Centers

Balance workload distribution by incorporating stakeholders, as collaborators, into the workflow.





#### **Consolidate Disparate Data Sources**

- 1. fill Enrollment
- 2. 🏥 Data Exchange 💶 💶 💶
- 3. 🏥 Promoting Interoperability 💶
- 4. 🏥 Training 💵
- 5. Support & achdesk & other 3<sup>rd</sup> party solutions
- 6. Communications ??

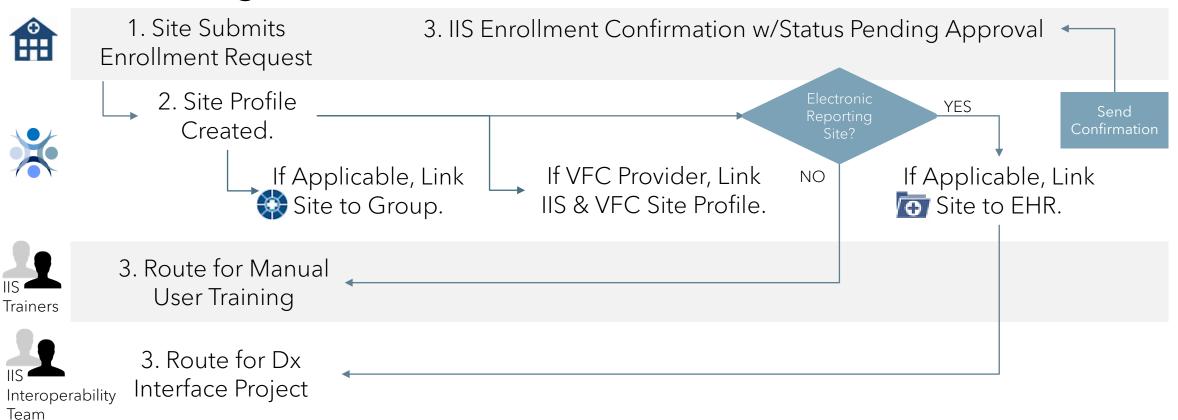
Fragmented data sources create inefficiencies and inaccuracies.

Consolidate.





#### **Onboarding Facilitation - Enrollment**





### **m** Site Management

**EXAMPLE** 

**IIS ID:** 123ABC

#### Abc Family Practice

Primary Contact: Nurse Betty

Ph: 555-555-5555 x123

Fax: 555-555-5123

Email: NurseB@Abc.com

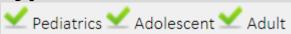
Medical Group: Abc Medical

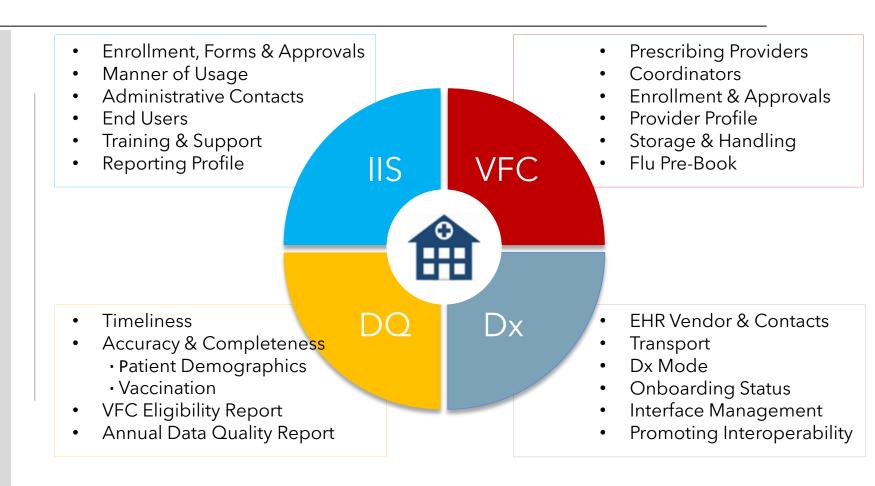
#### **Location:**

123 Vax Street Columbus, OH 43085

✓ VFC: OH1234

#### **Type of Vaccines Given:**









### **Medical Group Management**

**EXAMPLE** 

**Group IIS ID:** 123ABC

#### **Abc Medical**

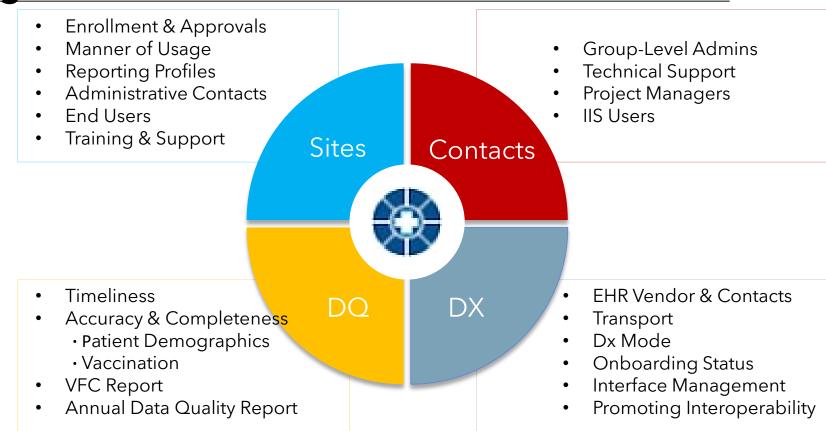
Primary Contact: B. Administrator

Ph: 555-444-5555 x45 Fax: 555-111-1123

Email: B.Admin@Abc.com

#### Location:

123 Vax Street Columbus, OH 43085







### **EHR Vendor Management**

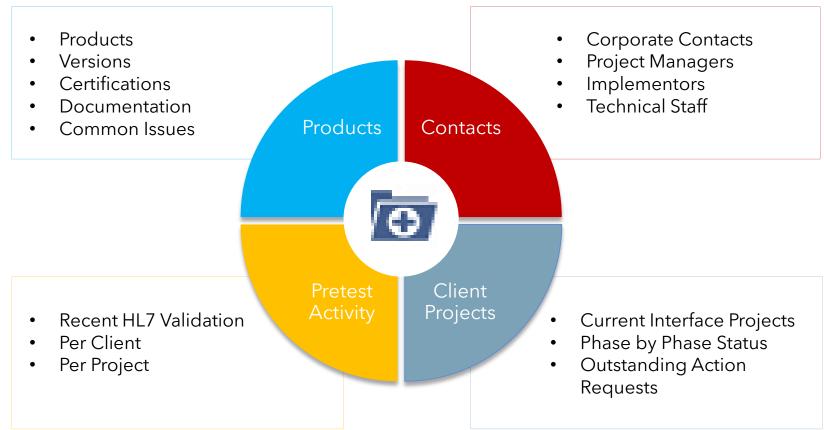
#### **EXAMPLE**

#### CERNER

Primary Contact: B. Concerned

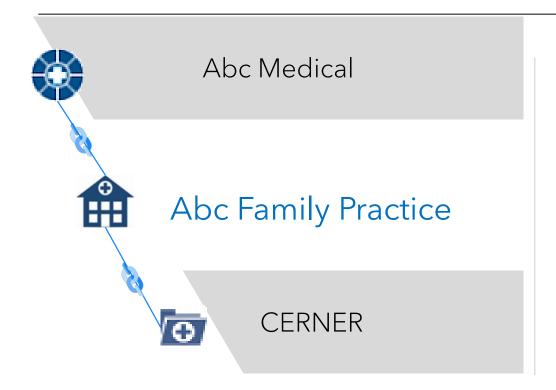
Ph: 555-333-5555 x0 Fax: 555-333-9923

Email: B.Concerned@Abc.com







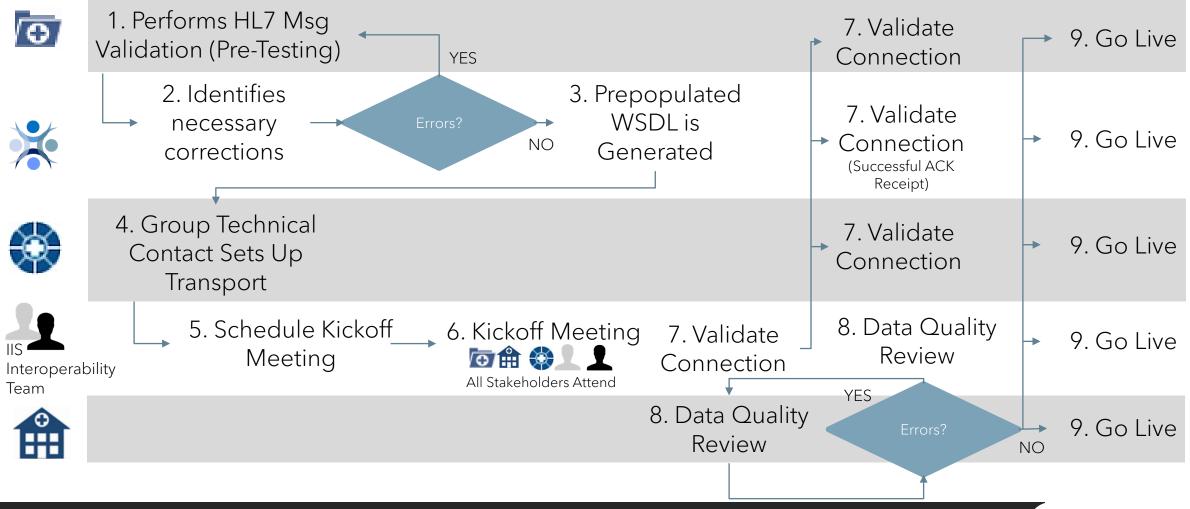


Relationships identify stakeholders with common goals.

These become your collaborators for the next onboarding phase.



#### **Onboarding Facilitation - DX Interface Project**

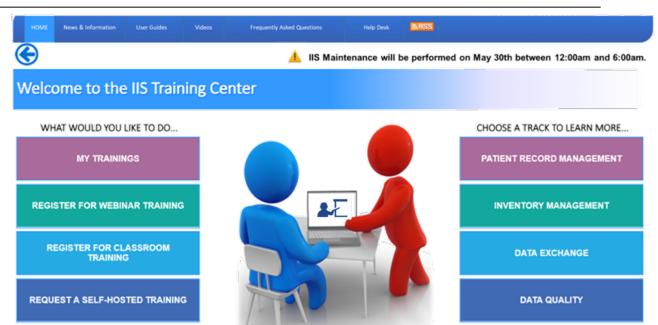






#### **Learning Management**

- Coordinate IIS Training
- Organize Training by Category
- Organize Training by User Type
- Schedule and Facilitate
  - Webinar Trainings
  - Regional Classroom Training
  - Self-hosted Training
- Track Individual Training Histories
- Host Training Videos
- Post SCORM compliant E-Learning
- Create and Send Post-Training Evaluations
- Create and Send Post-Training Quizzes
- Create and Send Certificates



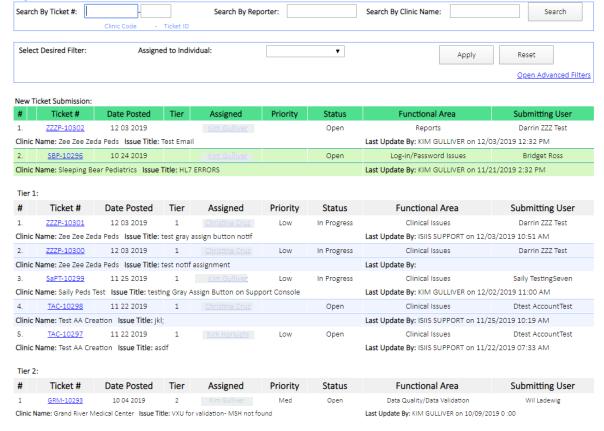






# Help Desk Ticketing

- Help Desk Requests are submitted online
- They then become linked to the site and the user.
- Information collected in this manner may be indicative of the need for more training or additional outreach.



Tier 3:





## **Promoting Interoperability Administration**

- Simply update the Data Exchange Interface Project and the Promoting Interoperability attestation paperwork is automatically completed.
- IIS Coordinator can send by email.
- Attesting Providers can download it at anytime.











# **Reports - Site Reporting Profile**

**EXAMPLE** 

**IIS ID:** 123ABC

Abc Family Practice

Primary Contact: Nurse Betty

Ph: 555-555-5555 x123

Fax: 555-555-5123

Email: NurseB@Abc.com

Medical Group: Abc Medical

Location:

123 Vax Street Columbus, OH 43085

✓ VFC: OH1234

**Type of Vaccines Given:** 

✓ Pediatrics ✓ Adolescent ✓ Adult

**Reporting Profile** 

Vaccine	CVX	Rec'd	Count	#VF
DT (pediatric)	28	0	0	0
DTaP	20	0	0	0
DTaP, 5 pertussis antigens	106	~	140	7
DTaP-Hep B-IPV	110	0	0	0
DTaP-Hib	50	0	0	0
DTaP-Hib-IPV	120	~	6	6
DTaP-IPV	130	0	0	0
Hep A, ped/adol, 2 dose	83	~	72	5
Нер А-Нер В	104	0	0	0
Hep B, adolescent or pediatric	08	~	62	6
Hib (PRP-OMP)	49	0	0	0
Hib (PRP-T)	48	~	105	2
Hib-Hep B	51	0	0	0
HPV, bivalent	118	0	0	0
HPV, quadrivalent	62	0	0	0
HPV9	165	~	111	6
Influenza, injectable, MDCK, preservative free, quadrivalent	171	0	0	0
Influenza, injectable, MDCK, quadrivalent, preservative	186	0	0	0
influenza, injectable, quadrivalent	158	~	163	30
influenza injectable quadrivalent preservative free	150	1	158	1

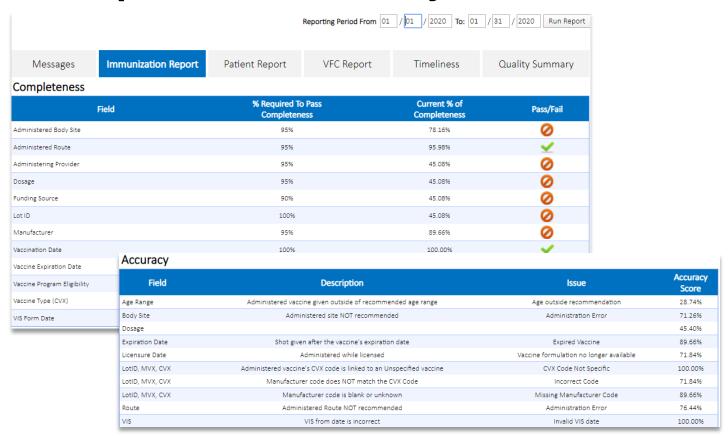
Unexpected Vaccines Reported		
Vaccine	CVX	Count
	90	1
DTaP	20	1446
DTaP-Hep B-IPV	110	730
DTaP-Hib-IPV	120	2066
DTaP-IPV	130	621
Hep A, adult	52	2
Hep A, ped/adol, 2 dose	83	2047
Hep B, adolescent or pediatric	08	1721
Hib (PRP-OMP)	49	617
Hib (PRP-T)	48	1062
HPV, quadrivalent	62	2
HPV9	165	1378
Influenza, injectable, MDCK, preservative free, quadrivalent	171	17
influenza, injectable, quadrivalent	158	2201
influenza, injectable, quadrivalent, preservative free	150	7119
influenza, live, intranasal, quadrivalent	149	84
Influenza, seasonal, injectable	141	25





## Reports - Real-time DQ: Site IZ Completeness & Accuracy

- Tallied in Real-Time via the HL7 Feed
- Overall low percentages may determine quality alerts indicating a need for additional outreach and intervention.







# **INTILITATION OF A PARTIE A PARTIE NO SET A PARTIE SET INTILITATION DE LA PARTIE DEL PARTIE DE LA PARTIE DE L**

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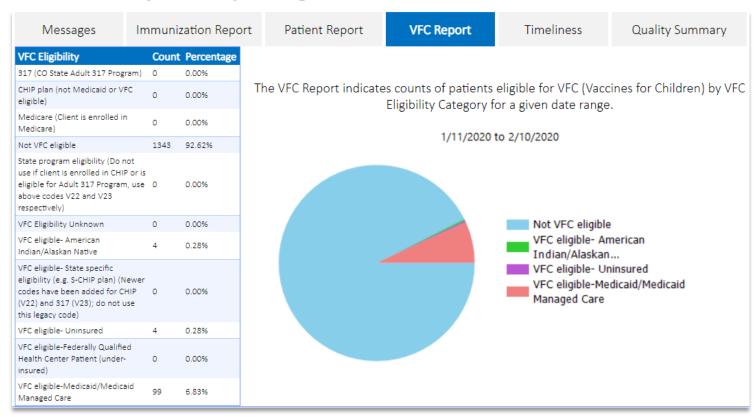
Messages	Immunization Report	Patient Report	VFC Report	Timeliness	Quality Summary
Completeness					
	Field		% Required To Pass Completeness		Pass/Fail
Address		95%		100.00%	✓
Date of Birth		95%		100.00%	✓
Email		90%		59.20%	0
Ethnicity			95%		✓
Gender		95%		100.00%	✓
Mother/Father/Guardian		90% 100.00%		✓	
Patient First Name		100%		100.00%	✓
Patient Last Name		95%		100.00%	✓
Patient Middle Name/Initial		95%		33.33%	0
Phone Number		95%		59.20%	0
Phone Type	Туре		95%		✓
Primary Language		95%		0.00%	
Race		95%	95%		0





# **INTIFY AND SET OF A PARTIES AND SET INTIFY**Reports - Real-time DQ: Site VFC Eligibility Report

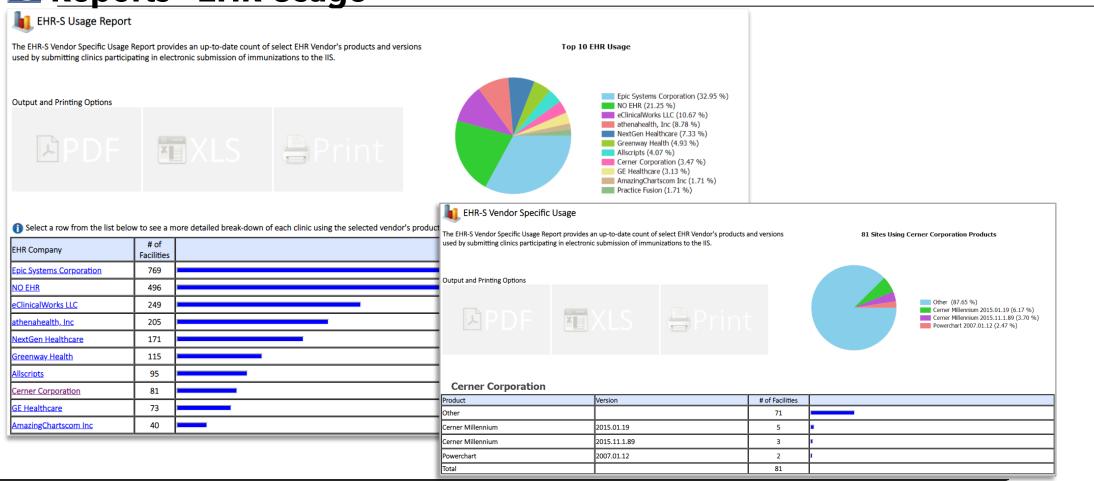
- Tallied in Real-Time via the HL7 Feed
- May be used to validate or even pre-fill VFC Providers' Provider Profile numbers during recertification.







# **Reports - EHR Usage**





## **IIS Integration**

- User Account Management
- Site Enrollment and Update
- Easy Integration of SQL Reporting Services (SRS)
- Gateway Interface Management & Monitoring

#### **Supports both**

- SOAP
- RESTful API





#### **Contact our Customers**

**Kim Gulliver, MS**, Interoperability Unit Supervisor Colorado Immunization Information System <u>kim.gulliver@state.co.us</u>

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**Tricia Charles**, MIIS Manager Massachusetts Immunization Information System (MIIS) <u>tricia.charles@state.ma.us</u>

P: 617-983-6452

**Paula Boatner**, IIS Coordinator OSDH Immunization Service <u>paularb@health.ok.gov</u> P: (405) 271-4073 x46158

#### Michael S. Powell, MSc

Information Systems Supervisor 2 Chief, Immunization Technical Unit Michael.Powell@cdph.ca.gov P: 510-231-7648





#### **Contact AMCI Health Informatics**

#### **Darrin Rosebrook**

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614-390-4808

#### **Debra Warren**

Deputy Project Manager dwarren@amciweb.com 785-393-9451

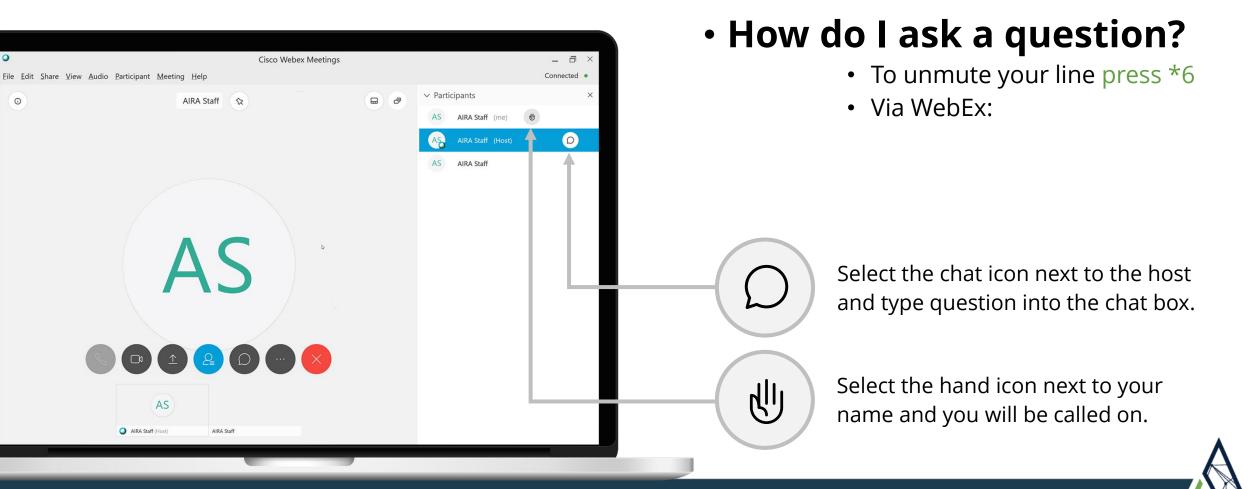


# Questions, Comments, Discussion?





# Questions, Comments, Discussion?





# Thank you to our presenters, and thanks to all of you for joining us!

A brief evaluation survey will be sent out following this webinar

The next Discovery Session will be March 23<sup>rd</sup> at 4pm ET