

Advancing IIS Together

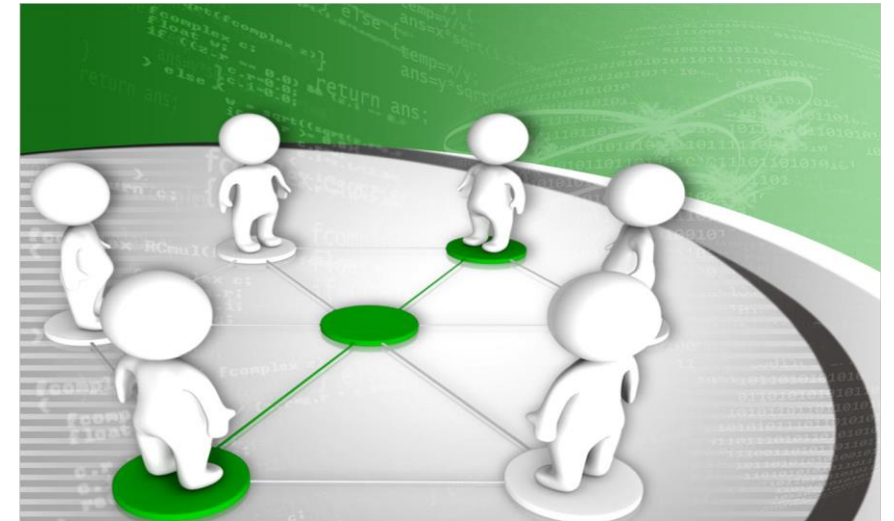
Updates on Branch Strategies for Success in an
Interconnected Era

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IISB Branch Chief
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Advancing IIS Together: Strategies for Success in an Interconnected Era

- IIS success has been built on a strong foundation of partnerships and collaboration
- National interoperability initiatives and limited IIS resources make it even more important for IISs to function as a cohesive national network with high data quality and completeness
- IISSB supporting initiatives to encourage use of common approaches, resources, standards, and best practices



Current IIS Strategic Plan



Enhance IIS Performance

Why is this important?

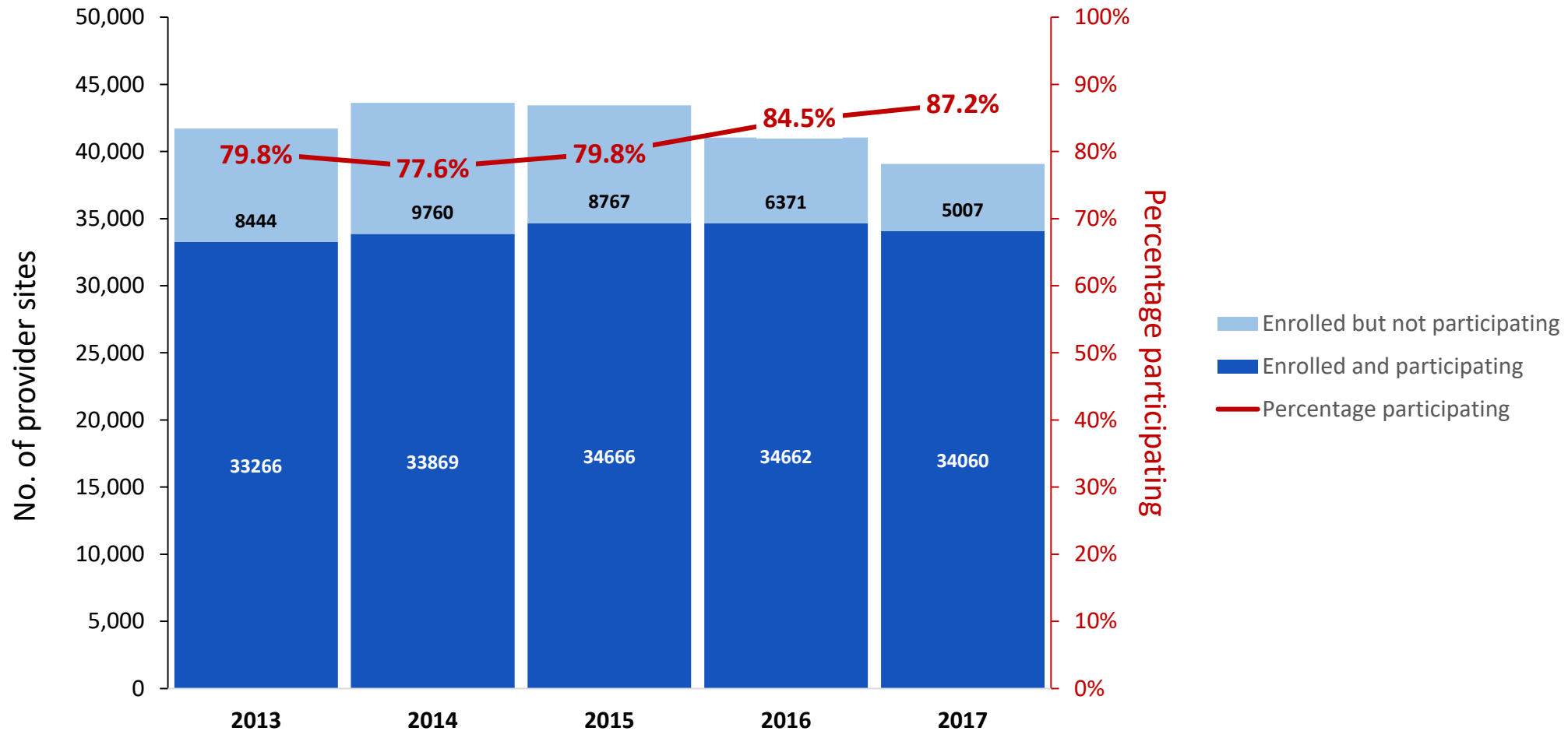
IISs are increasingly viewed as one national network of systems, rather than a collection of independent systems. The success of each IIS depends, in part, on the successes of the IIS community as a whole. Addressing performance disparities will ensure all IISs contain robust functionalities and high data quality.

How is this being addressed?

- Targeted Technical Assistance
 - Improving provider participation
 - Interoperability (CDC, AIRA)
 - Systems migration (PHII)
- IIS Dashboard
 - Intuitive, user-friendly way to look at IISAR data
 - Organized according to Functional Standards



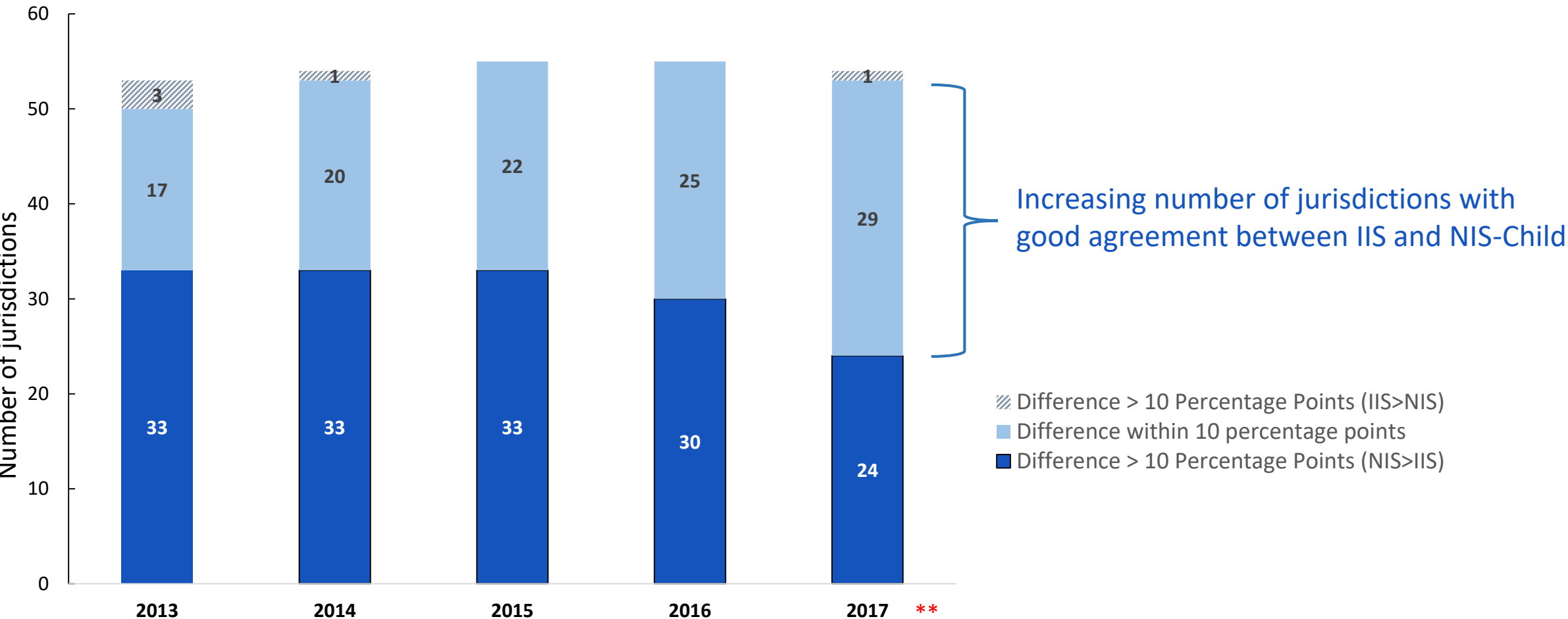
Number and percentage of Vaccines for Children program provider sites enrolled and participating* in an Immunization Information System (IIS), by year — IIS Annual Report, United States, 2013–2017



* Participation is defined as having submitted information to the IIS about administering ≥ 1 vaccine dose in the last 6 months of the preceding calendar year. Provider sites must be enrolled in an IIS to participate in the IIS.

The figure above is a combination line and bar graph showing the number and percentage of Vaccines for Children program provider sites enrolled and participating in an Immunization Information System, by year, in the United States during 2013–2017.

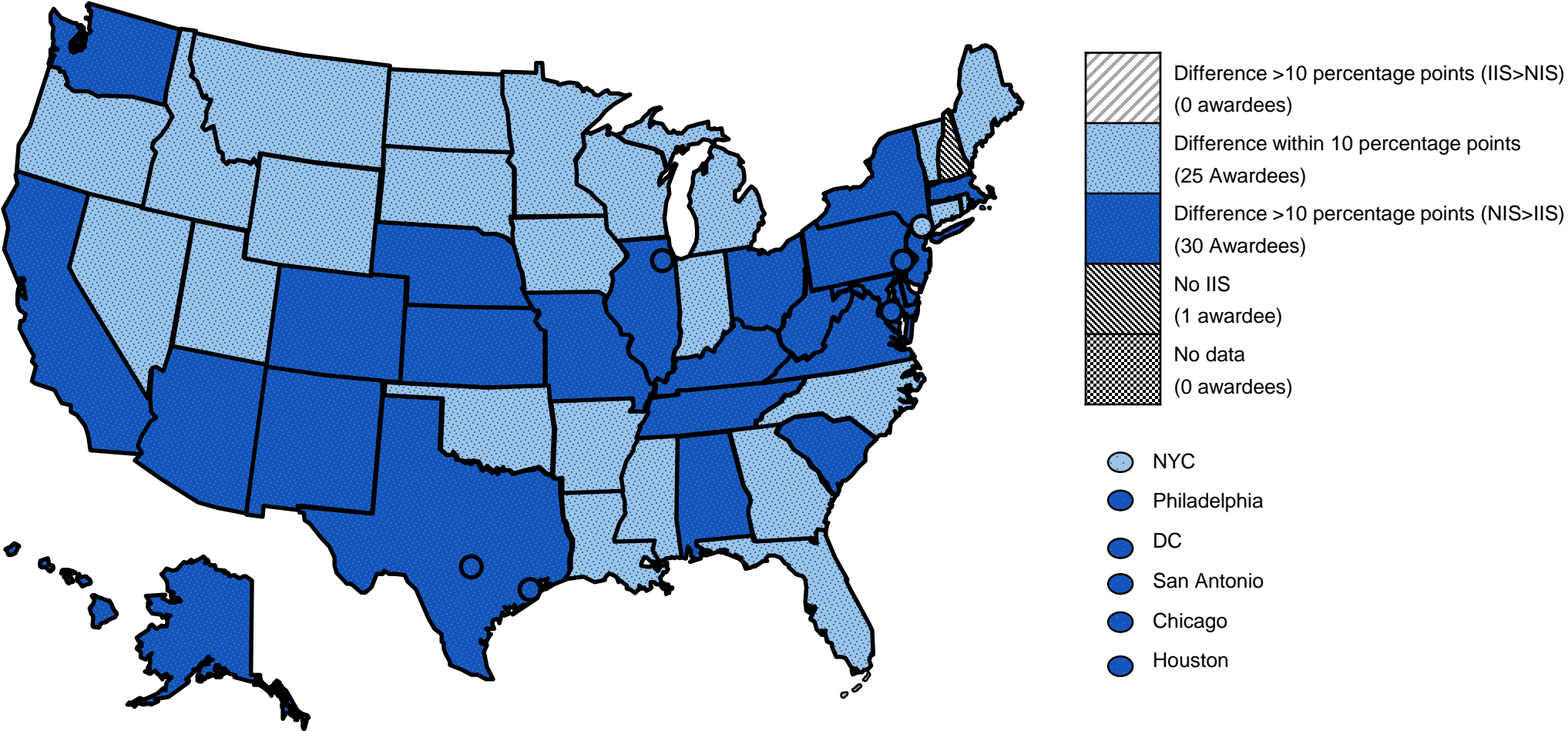
Percentage point differences between National Immunization Survey (NIS)-Child and Immunization Information Systems (IISs) for combined 7-vaccine series* completion — IIS Annual Report, United States, 2013–2017



* ≥4 doses of diphtheria and tetanus toxoids and acellular pertussis vaccine; ≥3 doses of poliovirus vaccine; ≥1 doses of measles-containing vaccine; *Haemophilus influenzae* type B vaccine full series; ≥3 doses of hepatitis B vaccine; ≥1 dose of varicella vaccine; and ≥4 doses of pneumococcal conjugate vaccine.

**The 2017 year uses 2017 IISAR data (numerator for the IIS coverage estimate) and 2016 Census data (denominators for the IIS coverage estimate) and 2016 NIS-Child data for the comparison. When the NIS-Child and US Census are updated, results could change.

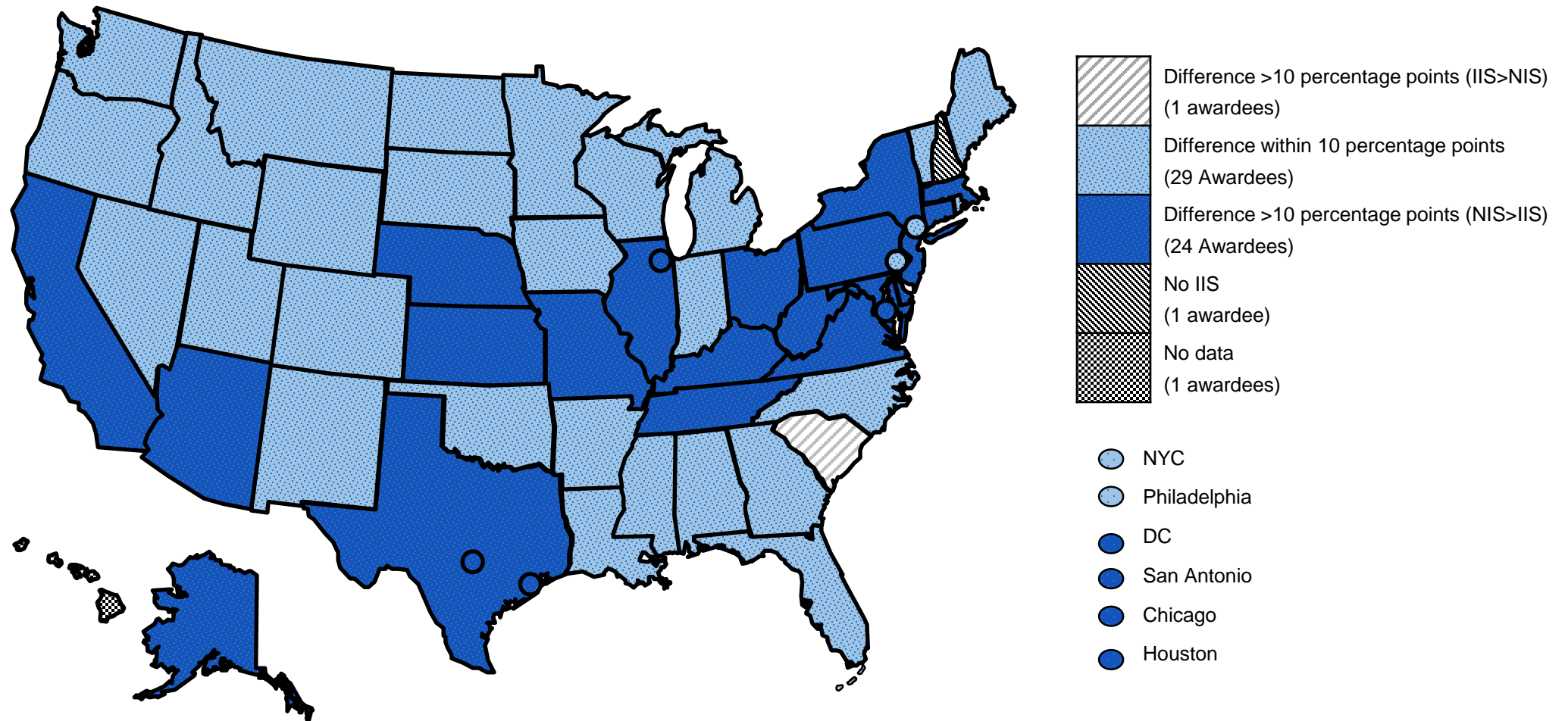
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IIS Dashboard – Tracking Progress across IISs

Session 7E

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.

Functional Standards / Measures	Year: 2017	2017 Target Achieved	2017 Target	% Awardees Meeting Target in 2017
1.0 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 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%	⊗	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%

Promote Adherence to IIS Standards

Why is this important?

The US is moving toward increased standardization across a broad spectrum of health IT systems nationwide. The ability of IISs to demonstrate adherence to national standards increases the credibility and value of IISs, contributes to improved program sustainability, and advances performance.

How is this being addressed?

- AIRA onboarding best practices guidance
- MIROW refresh
- Balloted HL7 implementation guide
- AIRA Assessment and Validation
- NIST Immunization Test Suite



MIROW Refresh: Collaboration for Best Practices for Common Business Processes

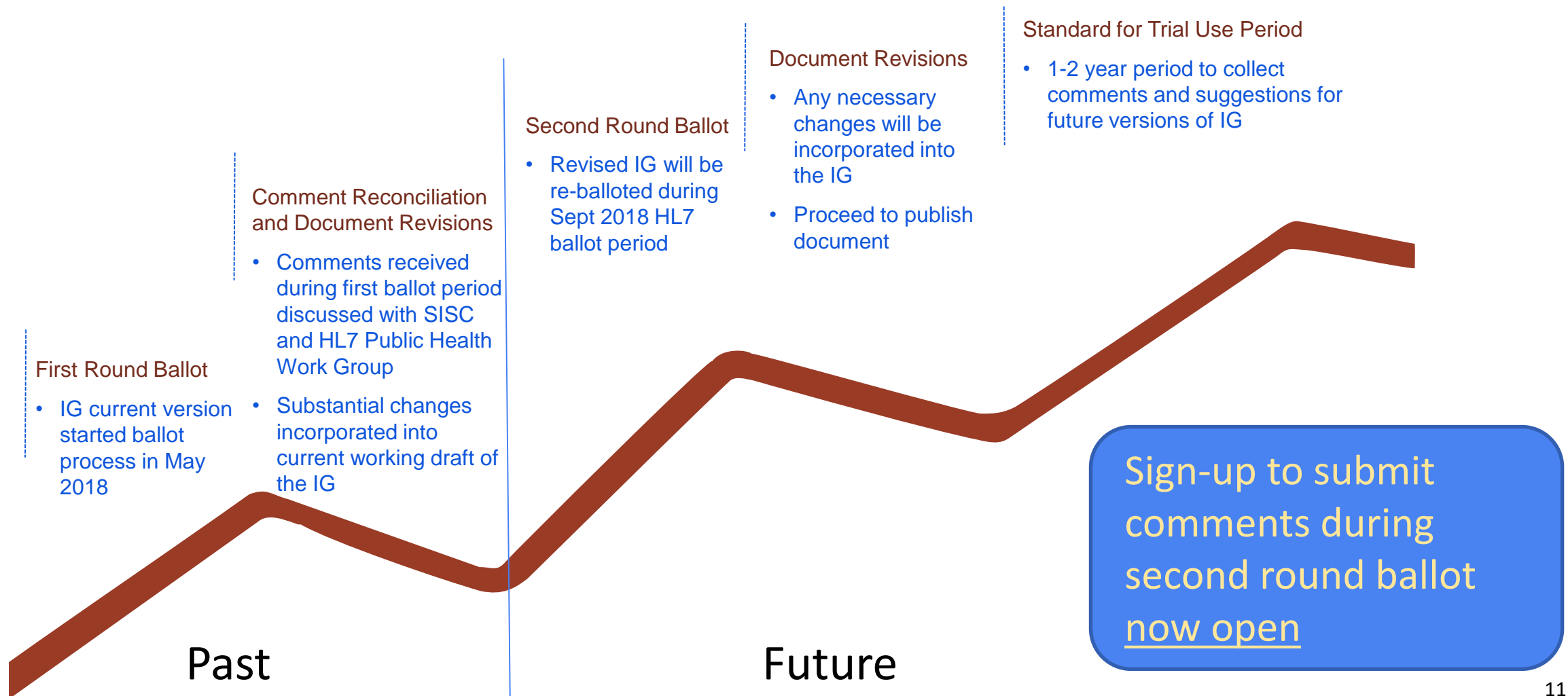
Session 2C

- MIROW embarked on a journey to improve usefulness and readability of best practice guides for the IIS community
 - Strategic planning session of the MIROW Steering Committee in August of 2017, Denver, CO
- Re-packaging of the 2015 Patient Active/Inactive Status guide as a pilot project
- Development of a common vocabulary across MIROW guides
- New topic under development: Business continuity of IIS operations and processes

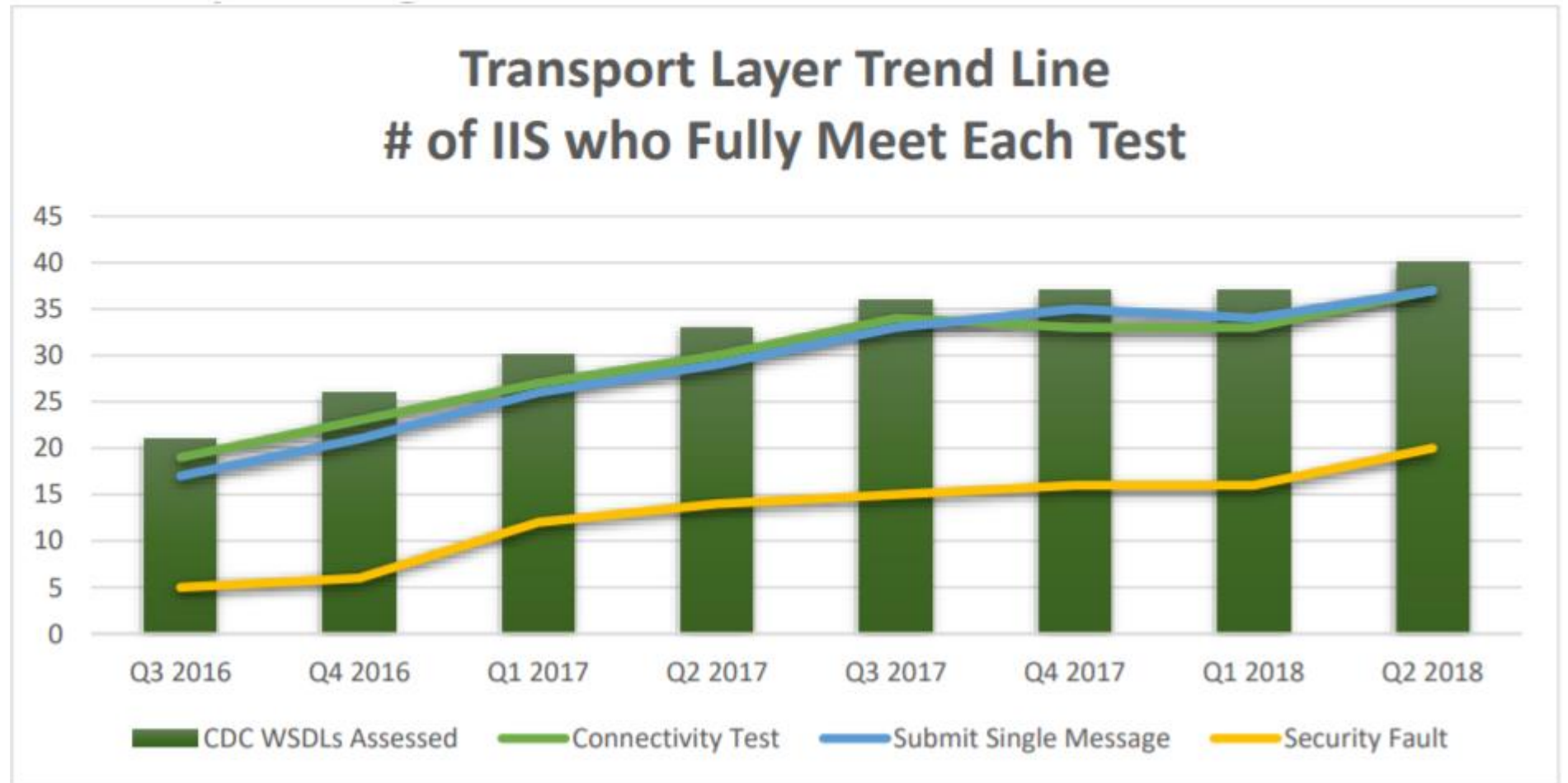


HL7 Implementation Guide Balloting Process: Strengthen Guide through Collaborative Process

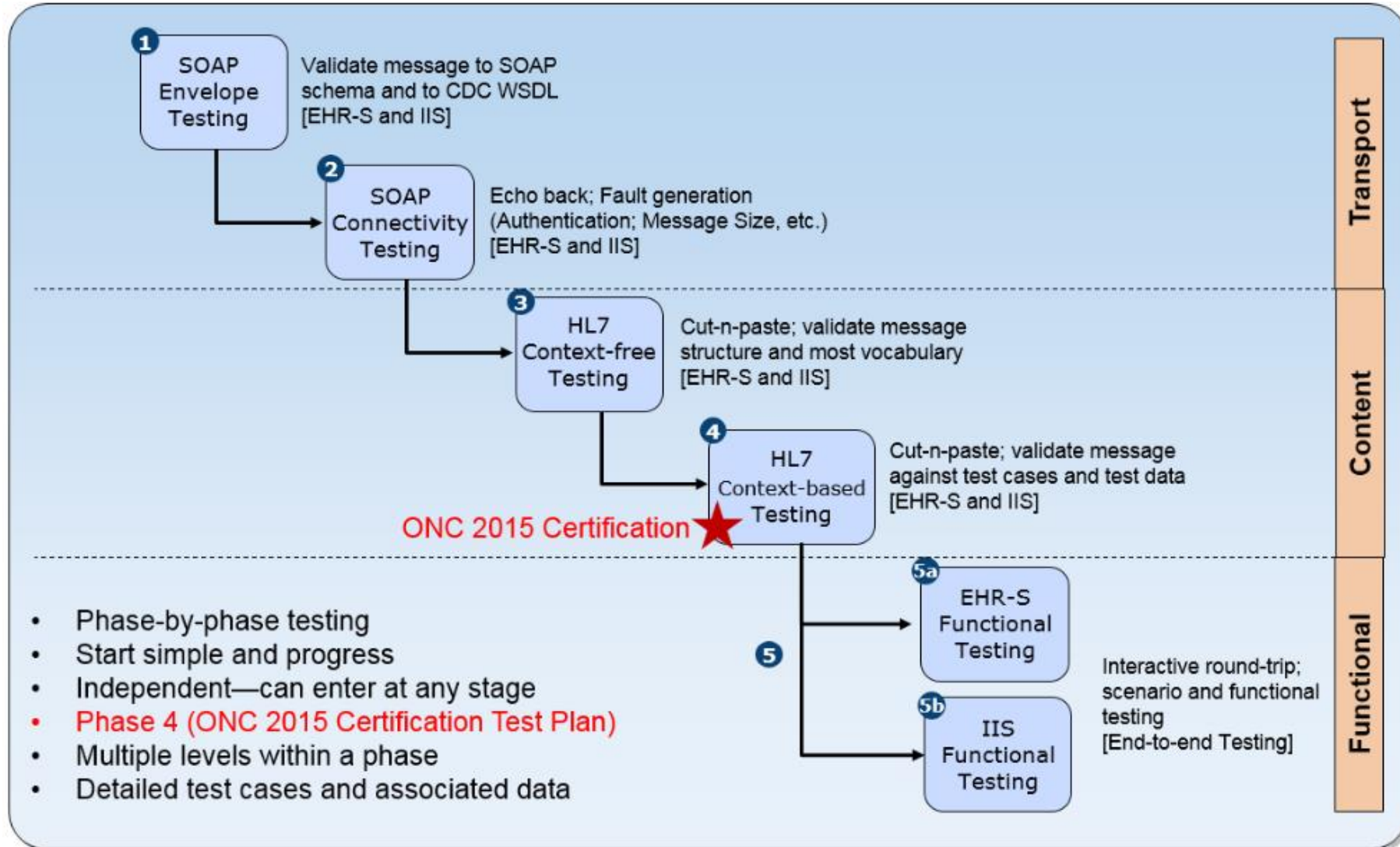
Session 1D



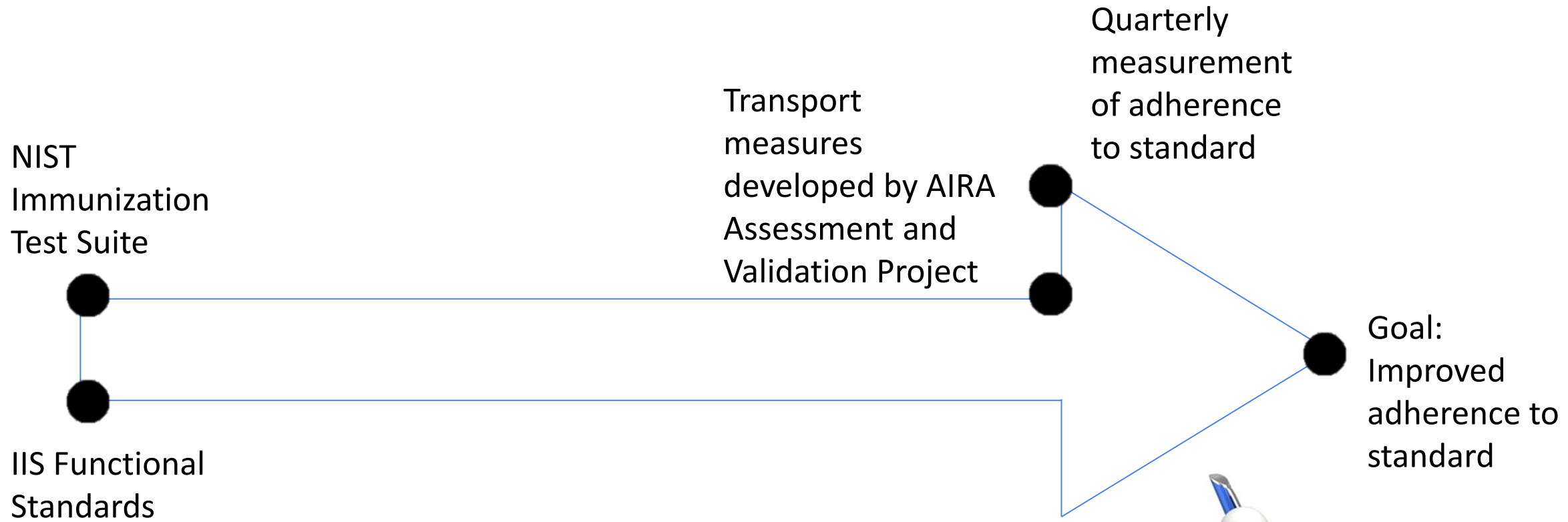
AIRA IIS Measurement and Improvement Initiative: Transport Assessment and Validation



NIST Immunization Test Suite



Example of Connecting the Dots To Reach a Goal: Improving Adherence to Transport Standards



Influence and Monitor the Health IT Environment

Why is this important?

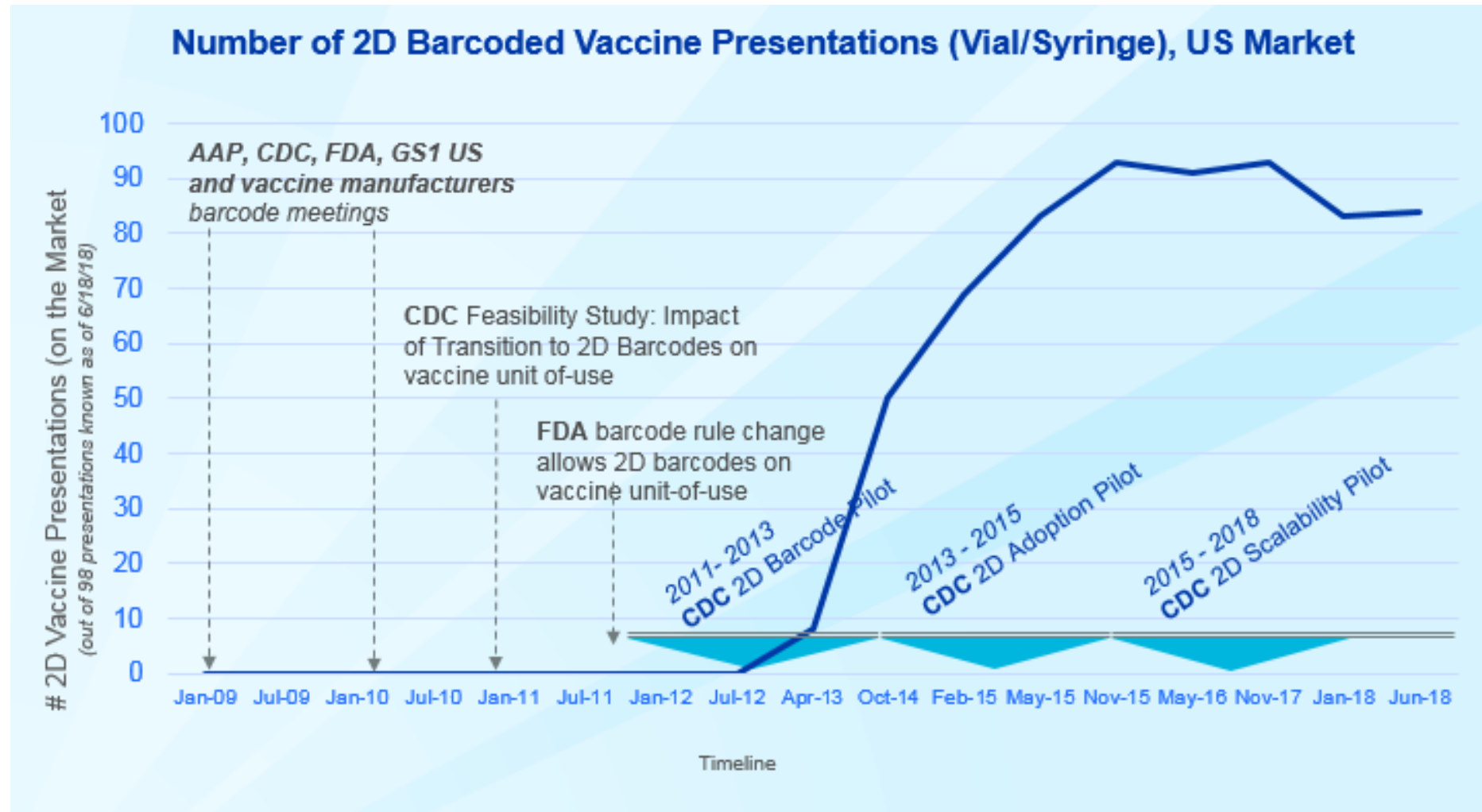
Organizations and federal agencies set standards, policies and strategies at the national level that impact interoperability and use of immunization data and functions. CDC engages these stakeholders to ensure that these activities align with IIS priorities and support high quality immunization services and ultimately improve immunization delivery.

How is this being addressed?

- 2D bar code adoption
- Immunization Integration Program
- Monitoring policy environment
- National Health IT Week



2D Barcode Vaccine Initiative Timeline

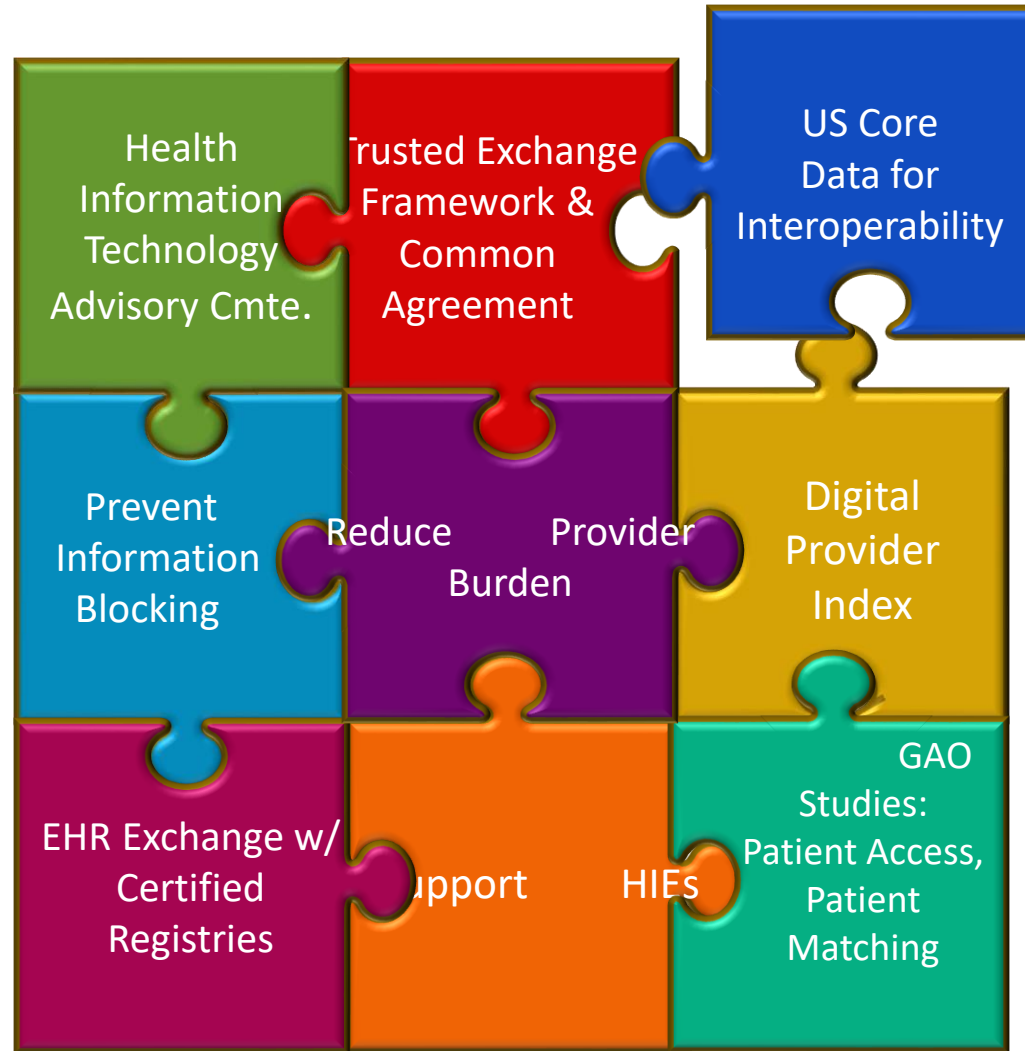


Immunization Integration Program

- Voluntary testing program which recognizes EHRs for priority immunization-related capabilities that align with clinical workflows
- Six EHR products have been recognized, which together represent more than 25% of the EHR market
- Parlayed testing method developed to support immunization community to ONC EHR certification testing method
- Program provides value for IIS community by:
 - Provide a forum for IIS community and EHR community to communicate and solve problems
 - Identify and clarify standards ambiguities
 - Improve data quality and timeliness



Health IT Environment: 21st Century Cures Health IT Provisions and Supporting Initiatives





National Health IT Week – Share Your Story

- National Health IT Week is **October 8-12, 2018**
- Share IIS success stories about improving the provider experience and population health to a national health IT audience
 - Query and response
 - Electronic data exchanges
 - 2D Vaccine barcodes
 - Electronic vaccine ordering and inventory control
 - Data quality improvement strategies
- Blog posts on NHITW website
- Cross promotion of activities with #IHeartHIT

Get Involved

More information and post stories:

<https://www.healthitweek.org/>

Help writing your story: Email Paula Soper at pqs6@cdc.gov

Sustain the IIS Community

Why is this important?

Sustainability of IISs nationwide depends on identifying new ways to reduce costs and use existing resources effectively.

How is this being addressed?

- Shared and Centralized Services
 - Vaccine Code Set Management Service
 - Interoperability Configuration and Provider Onboarding Service Center
 - Onboarding Governance



Vaccine Code Set Management Service



Ability to access vaccine code set content via direct download, such as web services



Ability to subscribe to desired content packages and get notification of updates to packages



Continued production and distribution of reports on CDC website



Streamlined content curation and maintenance process

Looking Forward

The Branch is conducting an IIS vendor industry analysis

The purpose of the industry analysis is to provide the Branch with **IIS vendor firsthand perspectives**, as well as **improved awareness of the drivers in the market** that may influence vendor activities and decisions.

The industry analysis is an independent assessment, and has an external group directly asking a sample group of vendors for feedback around **four main research areas**:

Industry Trends



*How are **Health IT trends** and other external factors influencing IIS vendors support for the IIS program mission?*

Technology



*What do vendors perceive as the most **pressing software and hardware challenges** and enhancement needs?*

Customer Relationships



*How can vendor, awardee, and CDC **interactions and relationships** be improved?*

Contracts Challenges



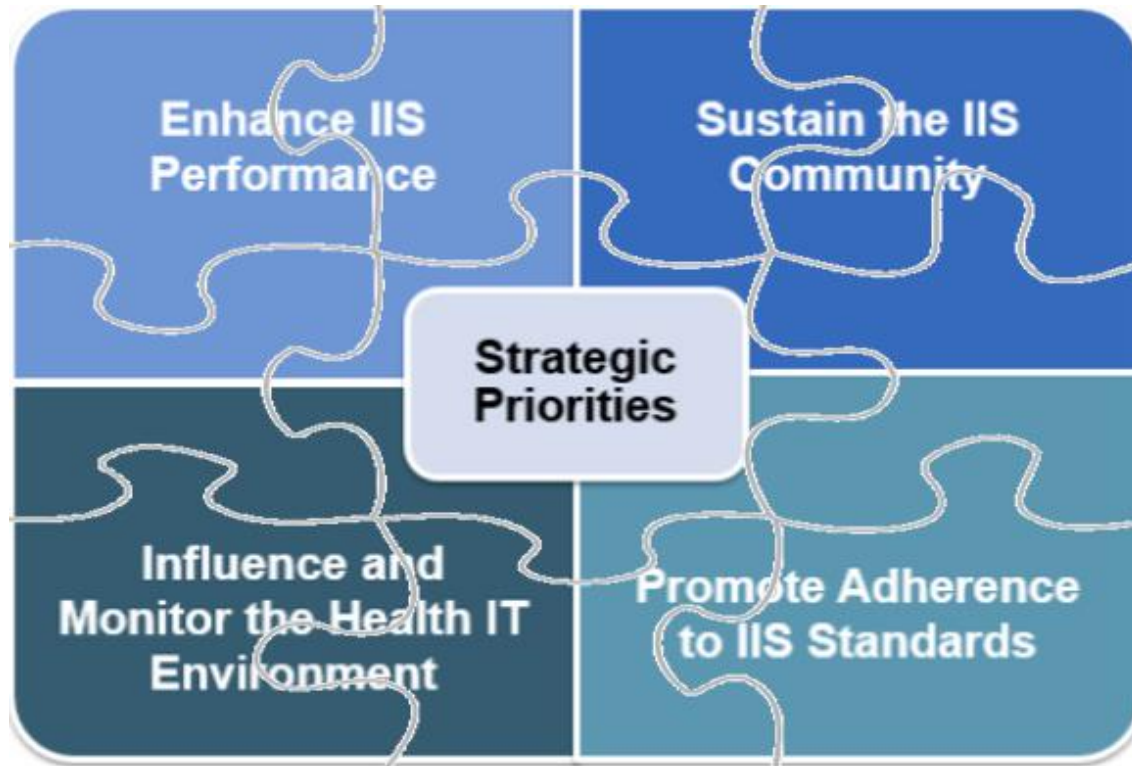
*How do vendors perceive the current **IIS contracting experience**, and how could it be improved?*

The development of the industry analysis report is currently in progress. **CDC will work to communicate relevant findings and next steps to the IIS community**, as appropriate.

2019 Draft IPOM Functions

- 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. The CDC IIS Functional Standards include IIS functions that can support immunization programs to meet required activities in other sections of the IPOM.
- D1b. Use IIS standards and best practices (e.g., HL7 Implementation Guide, Modeling of Immunization Registry Operations Workgroup [MIROW]) to implement new functionality and improve existing functionality.
- D1c. Participate in objective, independent assessments of IIS functionality and data quality (e.g., AIRA's Measurement and Improvement Initiative, NIS-IIS Match), and implement system and program improvements based on assessment results.
- D1d. Complete the IIS annual report and collaborate with CDC to participate in quality control activities to verify results.

Interconnected Priorities and Strategies for Success



- Progress of IISs nationally is dependent on progress of IISs individually
- IISSB portfolio of initiatives and investments continues to be built on interconnected strategies to support IIS success across strategic priorities
- Factors internal and external to the IIS community continue to require collaboration and standardization so IISs are prepared to thrive in interconnected health IT environment

Interconnected Success: The Human Factor



We cannot accomplish
all that we need to do
without working together.

- *Bill Richardson*



“Everything is interconnected.”
- *Marcus Tullius Cicero*