



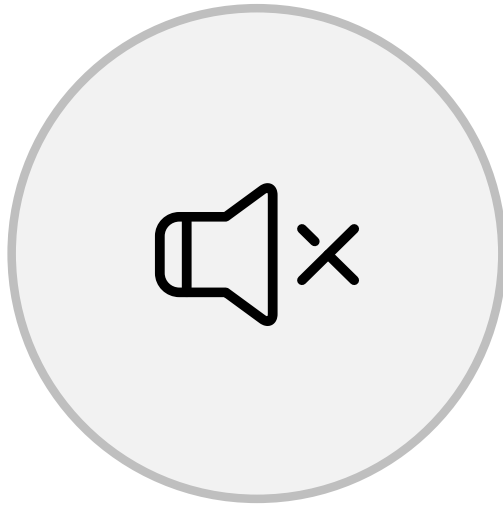
AIRA
AMERICAN IMMUNIZATION
REGISTRY ASSOCIATION



Town Hall on Proposed Submission & Acknowledgment Validation Update

July 7, 2020
3:00pm-4:00pm ET

Welcome



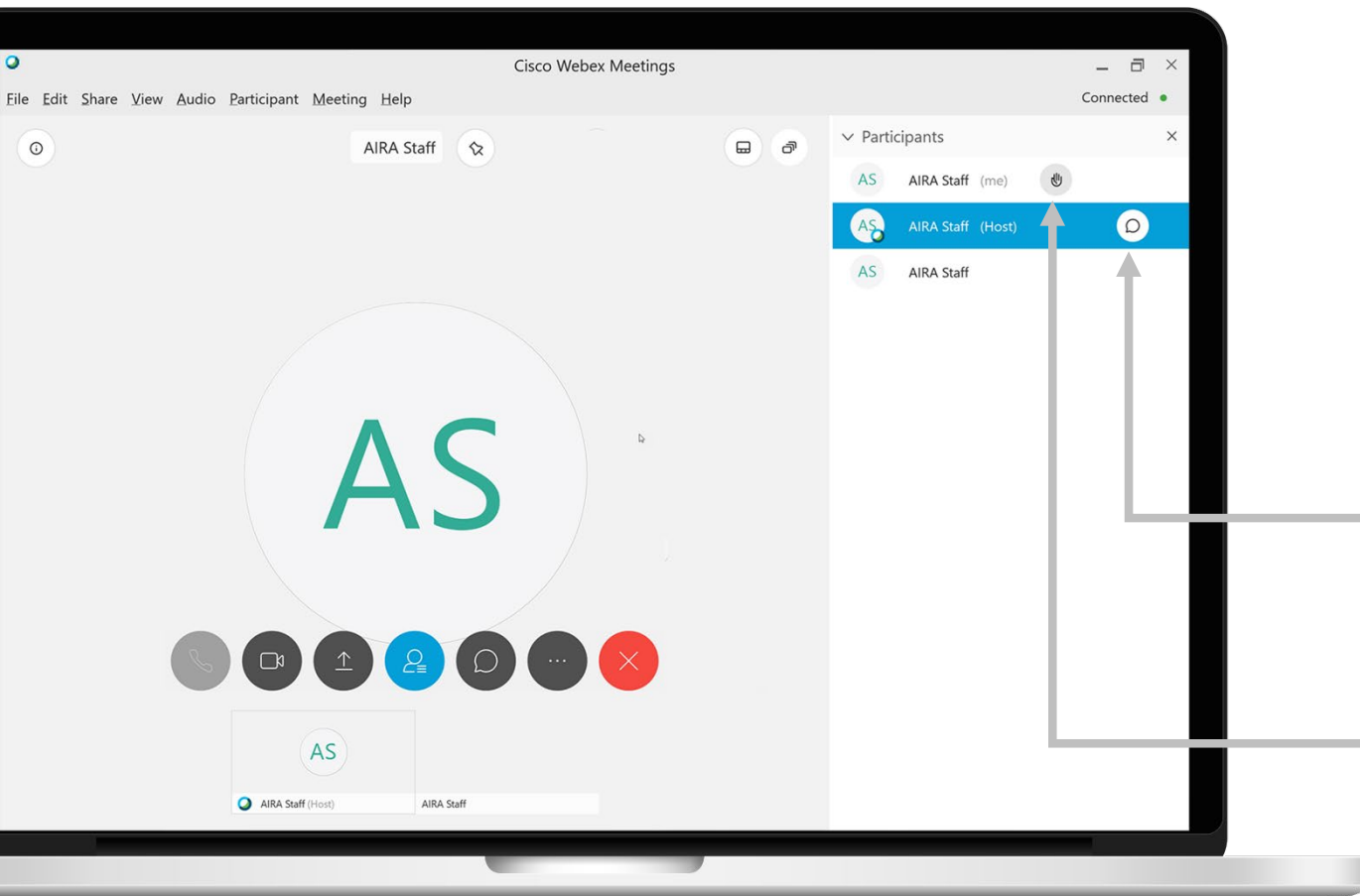
All phone lines
are muted



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

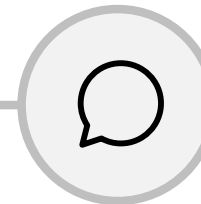


Welcome

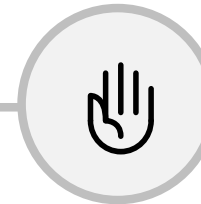


• How do I ask a question?

- There will be time allotted for Q&A following the presentation, to unmute your line **press *6**
- Via WebEx:



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.



Agenda



Welcome – Kevin Snow, Co-Chair, MACAW



Background and Context – Kevin Snow, Co-Chair, MACAW



Acknowledgment (ACK) Processing Rules– Eric Larson, AIRA



Submission & Acknowledgment Validation– Eric Larson, AIRA



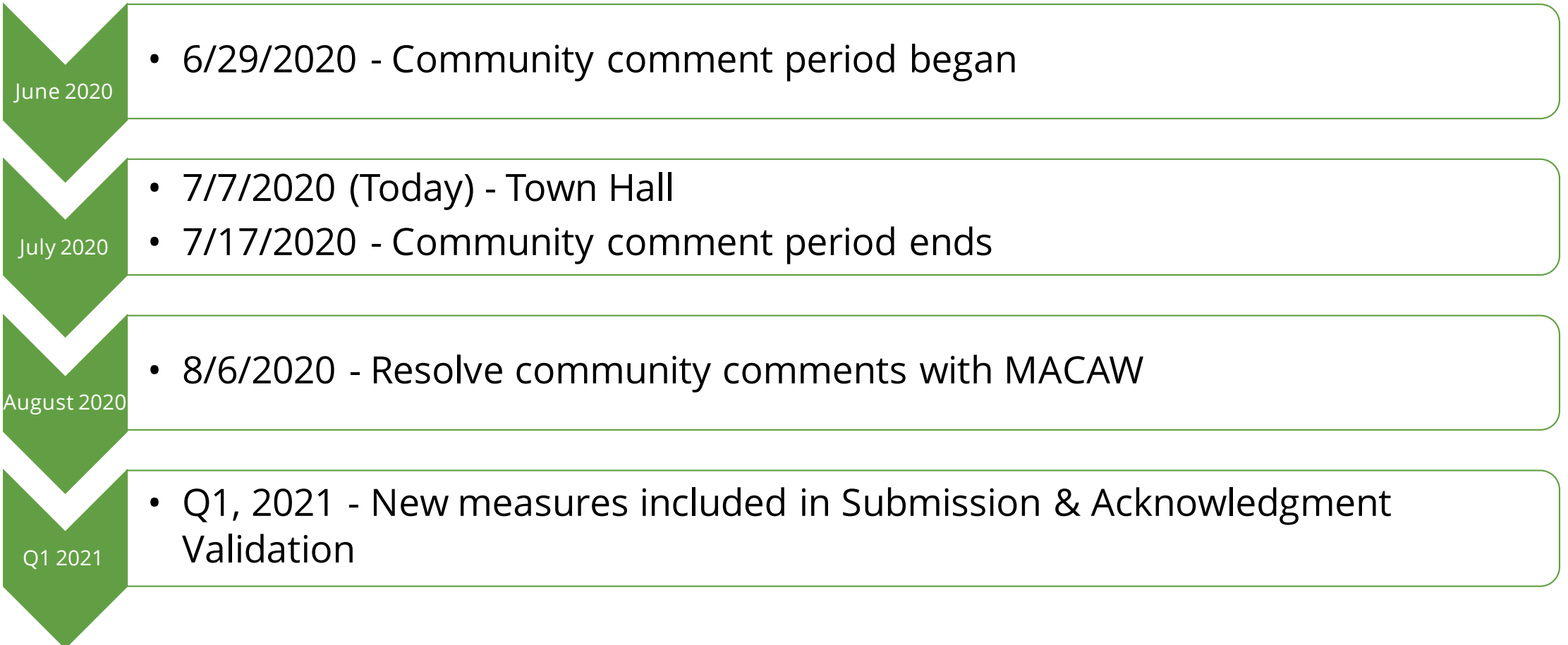
Questions/Discussion/Open Forum – All



Wrap Up – Kevin Snow, Co-Chair, MACAW



Timeline

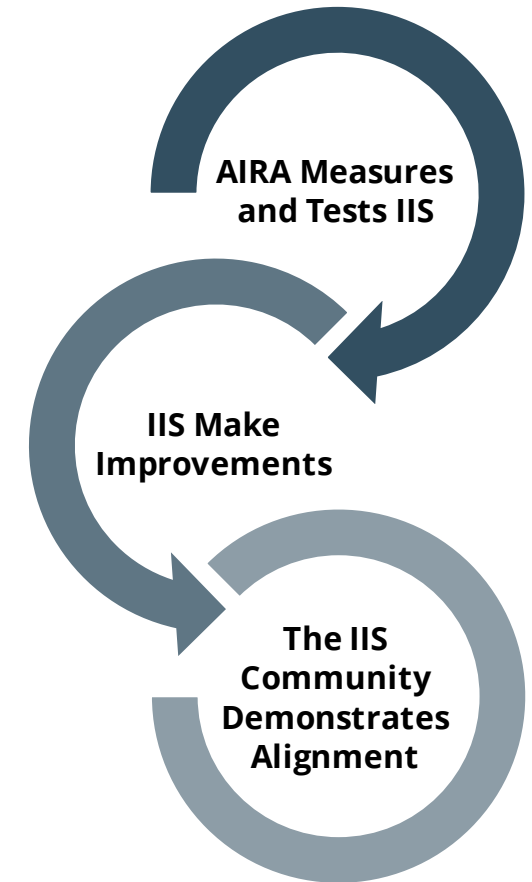


Background and Context

Kevin Snow, MACAW Co-Chair

Measurement and Improvement Initiative – What Is it?

- The IIS Measurement and Improvement (M&I) Initiative began in 2015 as an effort to:
 - Test IIS alignment with standards
 - Provide IIS with information and assistance to improve
- All testing is conducted by AIRA staff, in large part through:
 - Connecting with test or pre-production systems
 - Submitting test messages
 - Analyzing returned messages



Who is Supporting This Process Along with AIRA?

MACAW

The Measurement for Assessment and Certification Advisory Workgroup, made up of IIS, Immunization Program Managers IIS Vendors and Federal Partners

CDC

Centers for Disease Control and Prevention, our funders, supporters, and collaborators

NIST

National Institute of Standards and Technology, who collaborate with AIRA to develop tooling to support measurement

IIS and Imm Programs

IIS and Immunization Programs do the heavy lifting of analysis, planning, funding and implementation

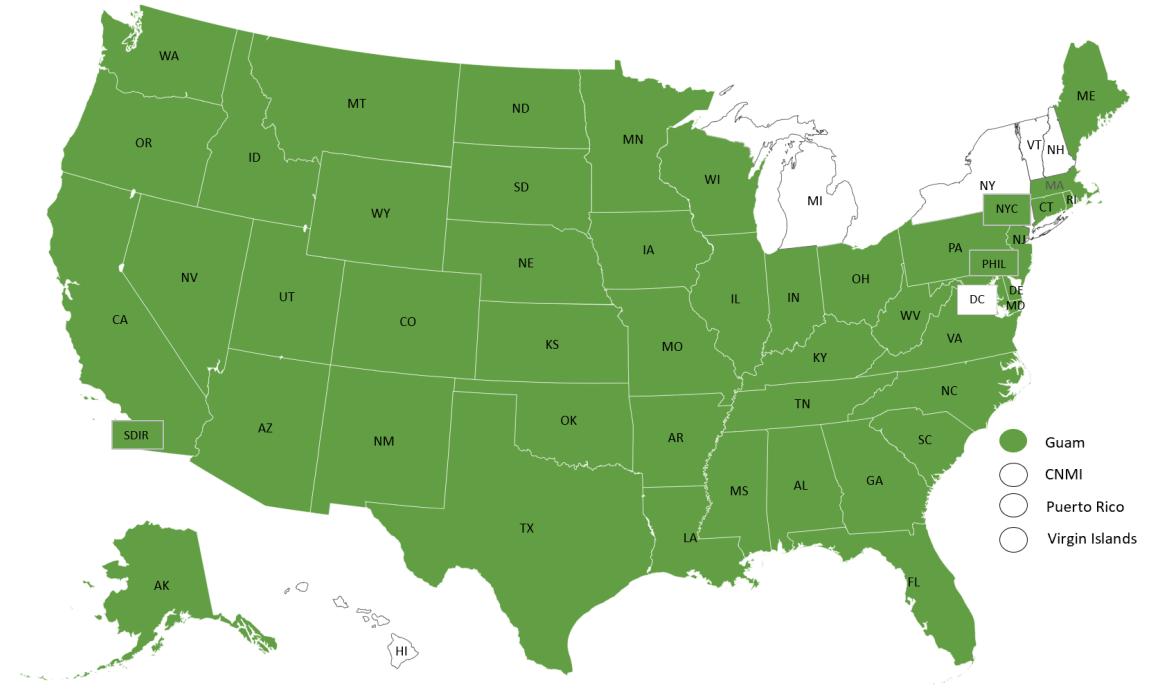
IIS Vendors

IIS Vendors support IIS and Immunization Programs in planning and implementation

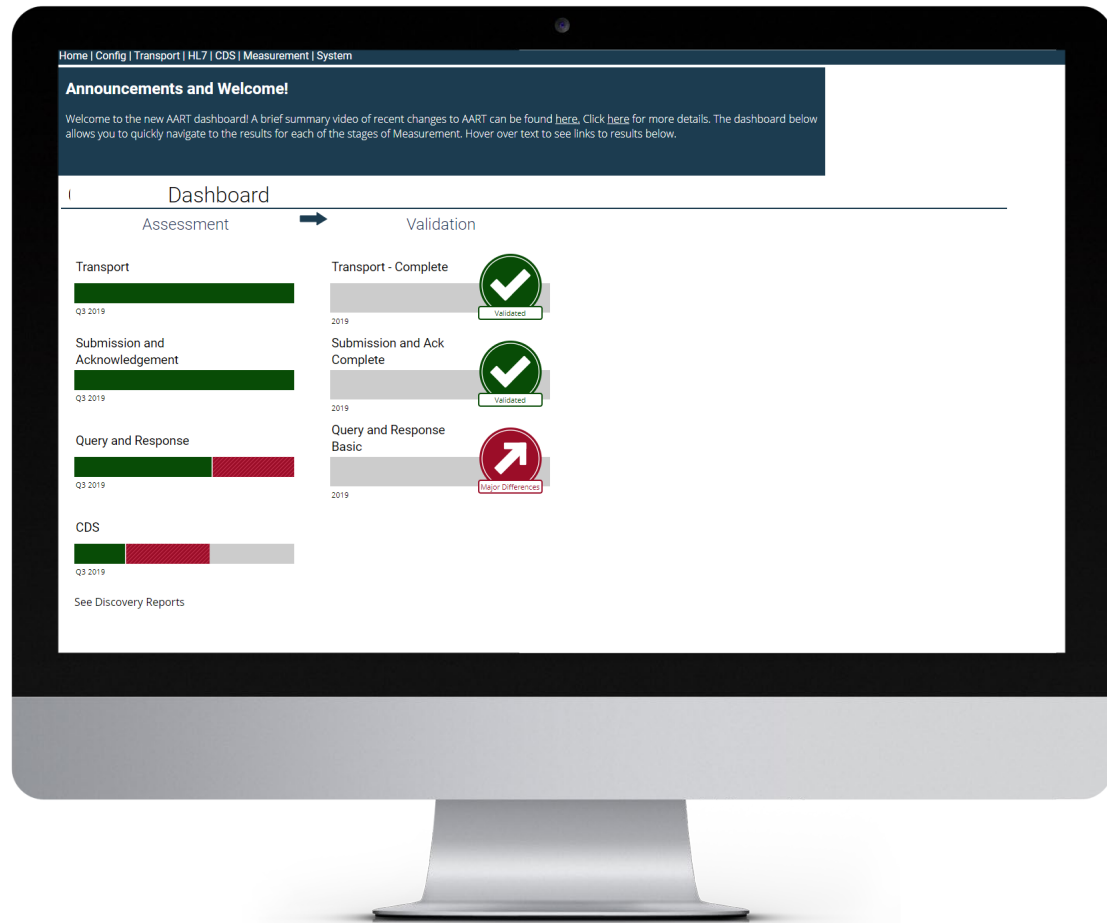


Thank You For Engaging With Us!

- Participation is strong and results are being reviewed and acted upon
- Partners are publicly recognizing improvements in standardization across IIS
- We are seeing progress in all areas of quarterly measurement



The AART Dashboard – Your Gateway To Data



Click to drill down to:

- Measure results and information
- Test case outcomes – expected and actual
- Historical perspectives
- Results from your peers who have shared their data and information



A Quick Reminder of the M&I Measure Development and Approval Process

Measures Created

MACAW Prioritizes,
Discusses and
Develops Measures

1

Measures Shared

Measures are Shared
with IIS Community
For Review and Input

2

**We Are
Here!**

Measures Refined, Updated

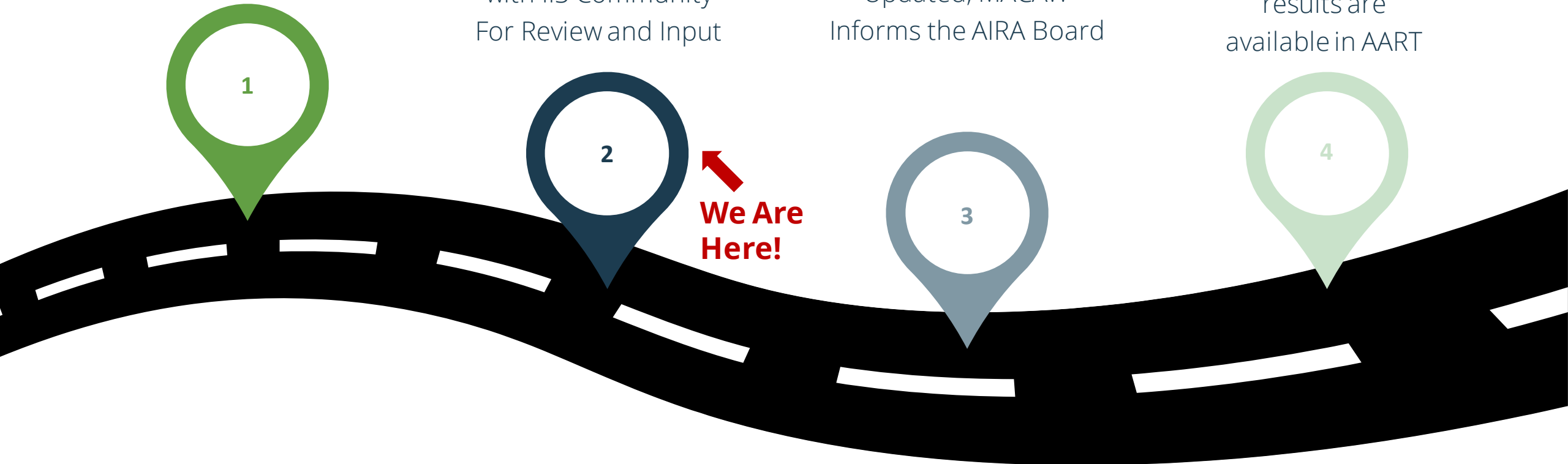
Comments are
Compiled, Measures
Updated, MACAW
Informs the AIRA Board

3

Measures Implemented

Testing occurs and
results are
available in AART

4

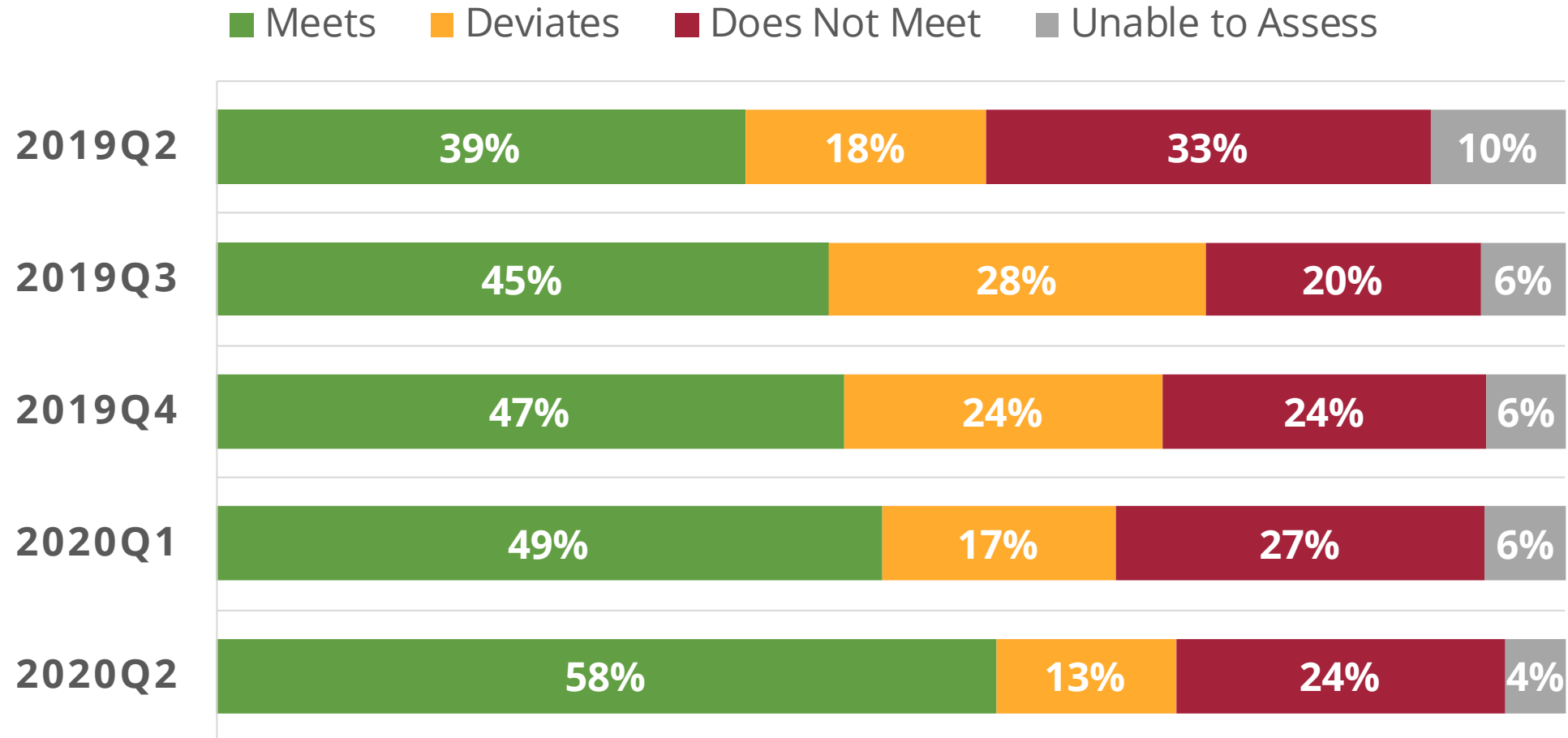


Content Area	Pre-Measurement	Testing & Discovery	Assessment	Validation
Transport	Maintenance			
Submission/ Acknowledgement	Maintenance			
Query/Response	Maintenance			
CDS		Q2 2019	Q2 2019	Q2 2020
Data at Rest		Q4 2020	Q2 2021	Q2 2022
Incoming/Ongoing Data			Q2 2020	Q2 2021



We're Seeing Quick Improvements!

Clinical Decision Support Progress Across Quarters



Acknowledgment (ACK) Processing Rules

Eric Larson



ACK Processing Rules

The logic AART uses to determine if the IIS **accepted** or **rejected** a message.

Further, if the IIS rejected a message (or provided a warning), AART uses this logic to determine **what**, **where**, and **how severe** the error was.

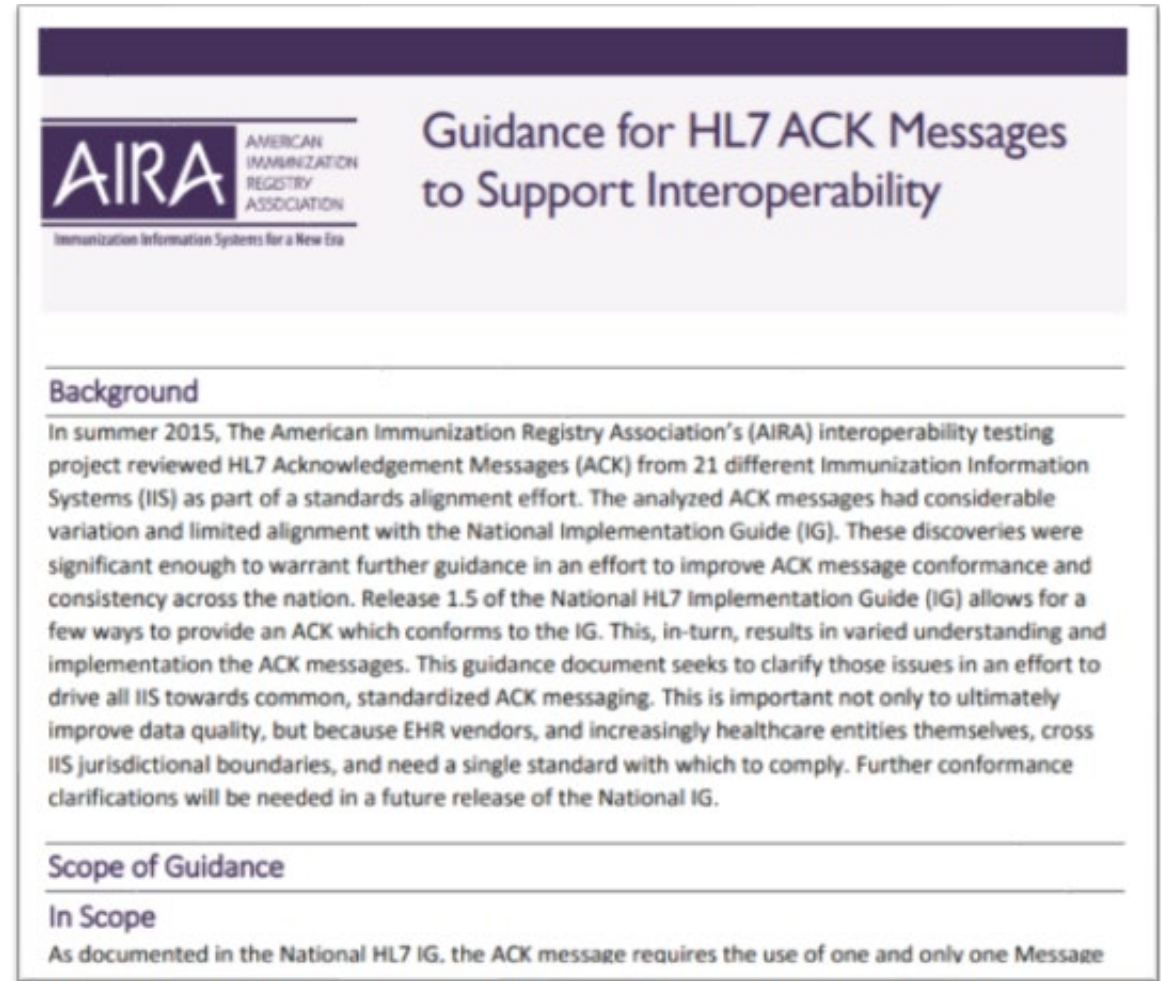


2015 – ACK Guidance Document

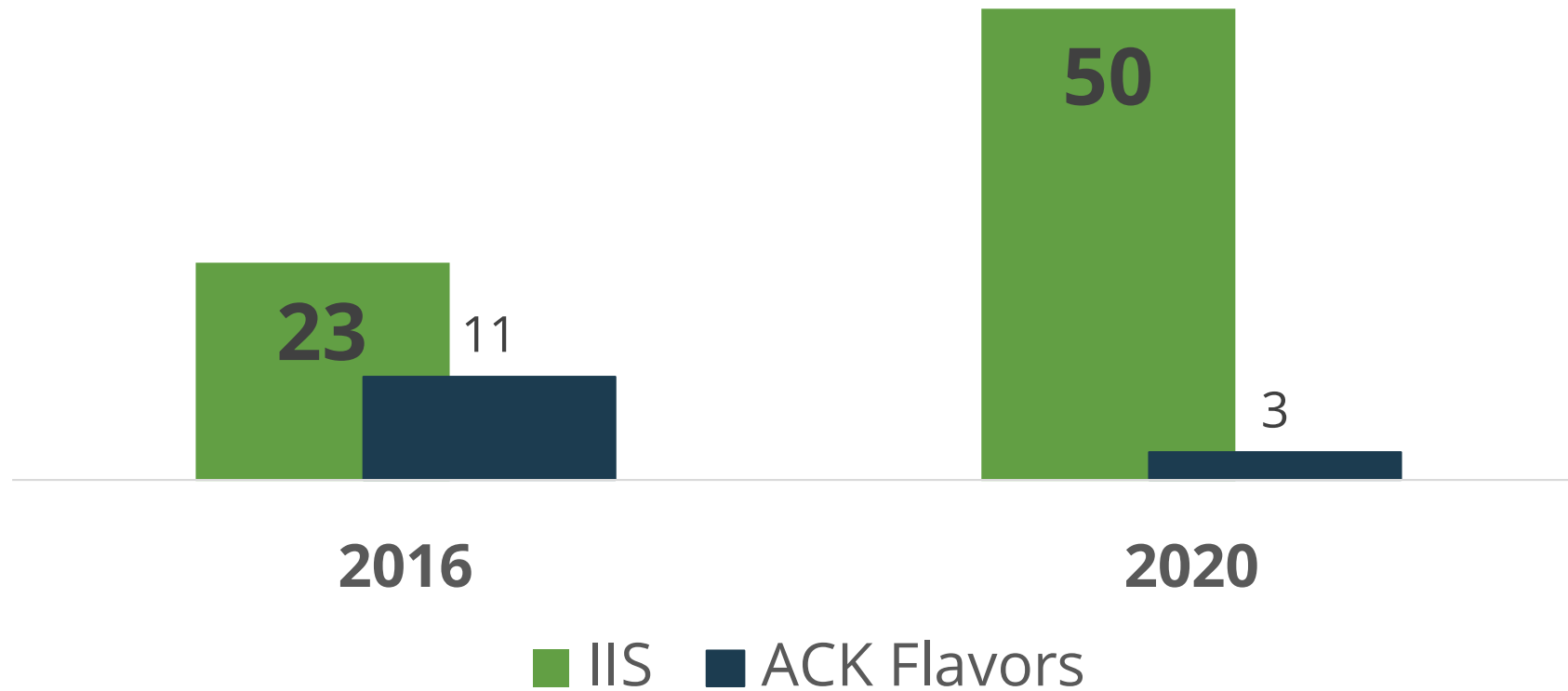
Developed in SISC to further standardize the ACK message

Improves ACK to be meaningful and actionable for EHRs, pharmacies, clinicians, etc.

Goal: One standardized ACK message including meanings of key fields for all IIS



Tremendous Progress!



Moving Forward

- 3 currently connected IIS use 2 different ACK Flavors which are unique compared to the standardized approach.
- **Q3 2020** - Reach out to 3 IIS to inform future changes in M&I program
- **Q2 2021** – Move all IIS to the standardized ACK processing rules. Assessment will begin using the standardized processing rules
- **Q1 2022** – All IIS will be validated per the standardized ACK processing rules
- All newly connected IIS will be measured using the standardized ACK processing rules



Submission & Acknowledgment Validation

Eric Larson



Content Area

Transport

**Submission /
Acknowledgment**

Query / Response

CDS

Data Quality

1

Testing & Discovery

Testing & Discovery

Testing & Discovery

Testing & Discovery

Testing & Discovery

2

Assessment

Assessment

Assessment

Assessment

Assessment

3

Validation

Validation

Validation

Validation



Content Area



- Introduced NDCs in Q4 2019
- Assessed in 3 quarters
- Proposed to be moved into Validation in 2021



NDC Measures

Measure	Measure Language	Notes
15	The IIS processes an administered vaccine using the preferred NDC format.	Tests Unit of Use and Unit of Sale NDCs in the preferred 11 digit with hyphen format (e.g., 49281-0860-10)
16	The IIS processes an administered vaccine using two alternative , but standardized NDC formats.	Tests Unit of Use and Unit of Sale NDCs in alternative – yet standardized – formats. 1) 11 digits without hyphens (e.g., 49281086010) 2) 10 digits with hyphens (e.g., 49281-860-10)

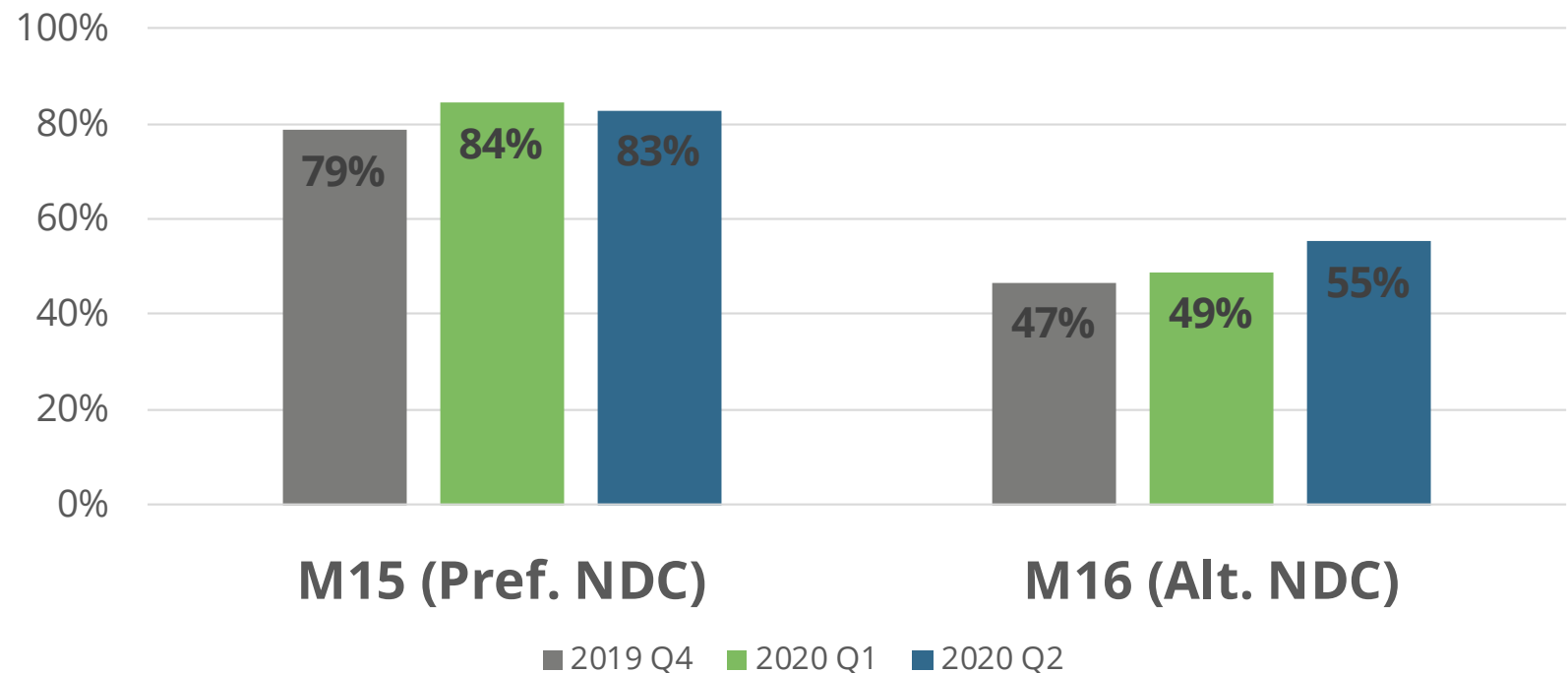


NDC Assessment Data

N = ~47 (varies slightly from quarter to quarter)

Graph includes Meets or Deviates outcomes (e.g., requires CVX)

Percent of IIS who Meet or Deviate NDC Measures



MACAW Proposal for Submission & Acknowledgment Validation (2021)



Assessment Measure	Basic Level	Complete Level
1 - The IIS processes an administered vaccine for a patient.	X	X
2 - The IIS processes a historical vaccine for a patient.	X	X
3 - The IIS processes the submission of a full immunization record for a patient.	X	X
4 - The IIS processes an update to a previously submitted vaccination event.	X	X
5 - The IIS processes a delete to a previously submitted vaccination event.	X	X
6 - The IIS processes a submission where the patient does not give consent (i.e., patient data is protected) to share data.	X	X
7 - The IIS processes a refusal of a vaccination.		X
8 - The IIS processes an adverse event.		X
9 - The IIS processes an observation about a patient which results in a contraindication or immunity to a vaccine preventable disease.		X
10 - The IIS processes messages with only minimally required data elements populated per the HL7 2.5.1, release 1.5 guide and addendum.		X
11 - The IIS processes both complete and incomplete/partially administered doses.		X
12 - The IIS responds to a correctly formatted message with no errors.		X
13 - The IIS responds to a submission that has an error.		X
14 - The IIS responds to a submission with an ACK within 5 seconds or less for 95% of the records		X
15 - The IIS processes an administered vaccine using the preferred NDC format.	X	X
16 - The IIS processes an administered vaccine using alternative NDC formats.		X

IIS Volume Survey

Many of you received a questionnaire from AIRA a few months ago, requesting volume and interoperability data



Thank you to those
who have already
responded

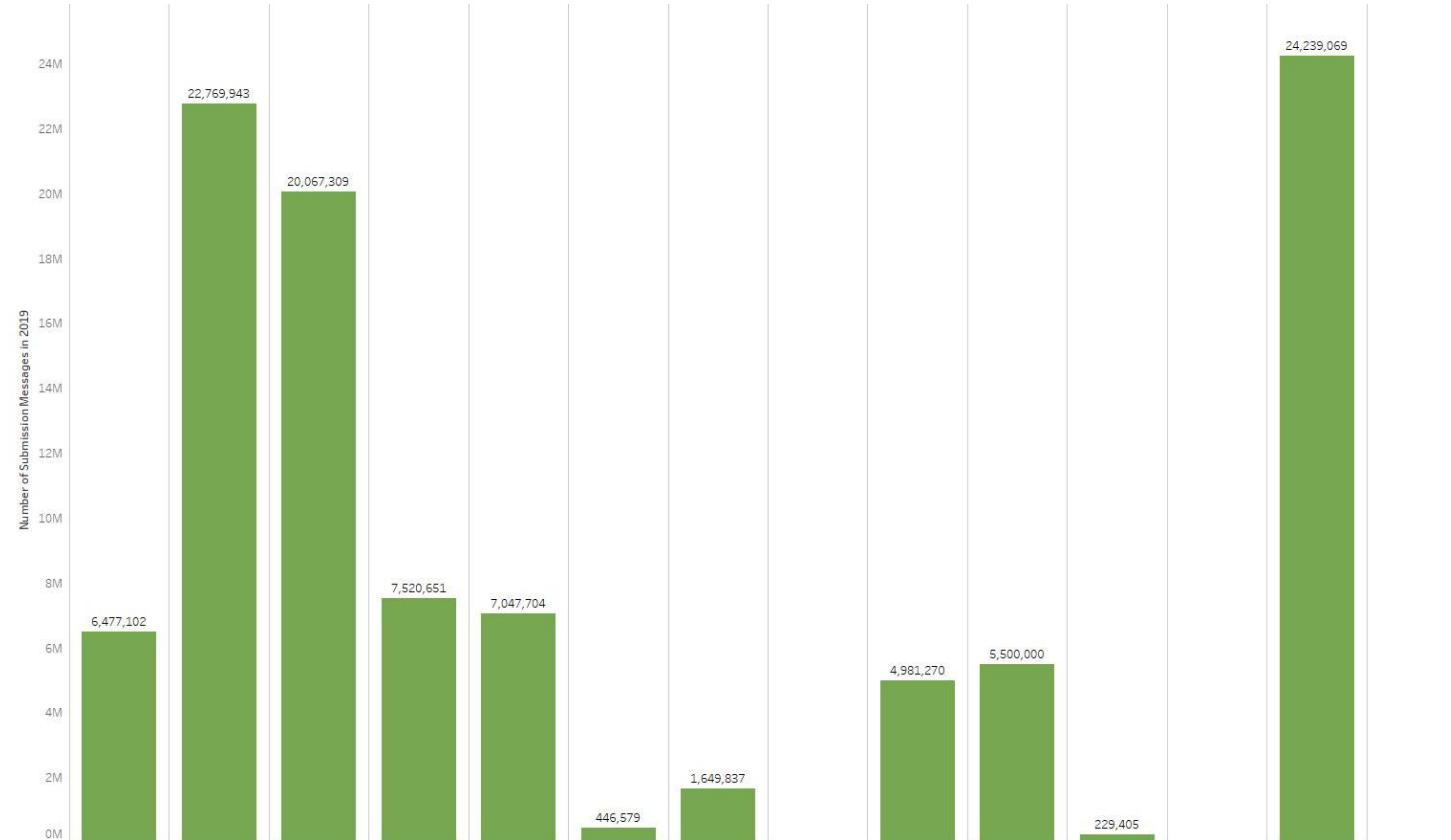
Thank you in advance
to those additional sites
we reached out to as we
round out our sample



HL7 Submissions

Based on the current respondents, the average number of submission messages was **9,175,000** in 2019

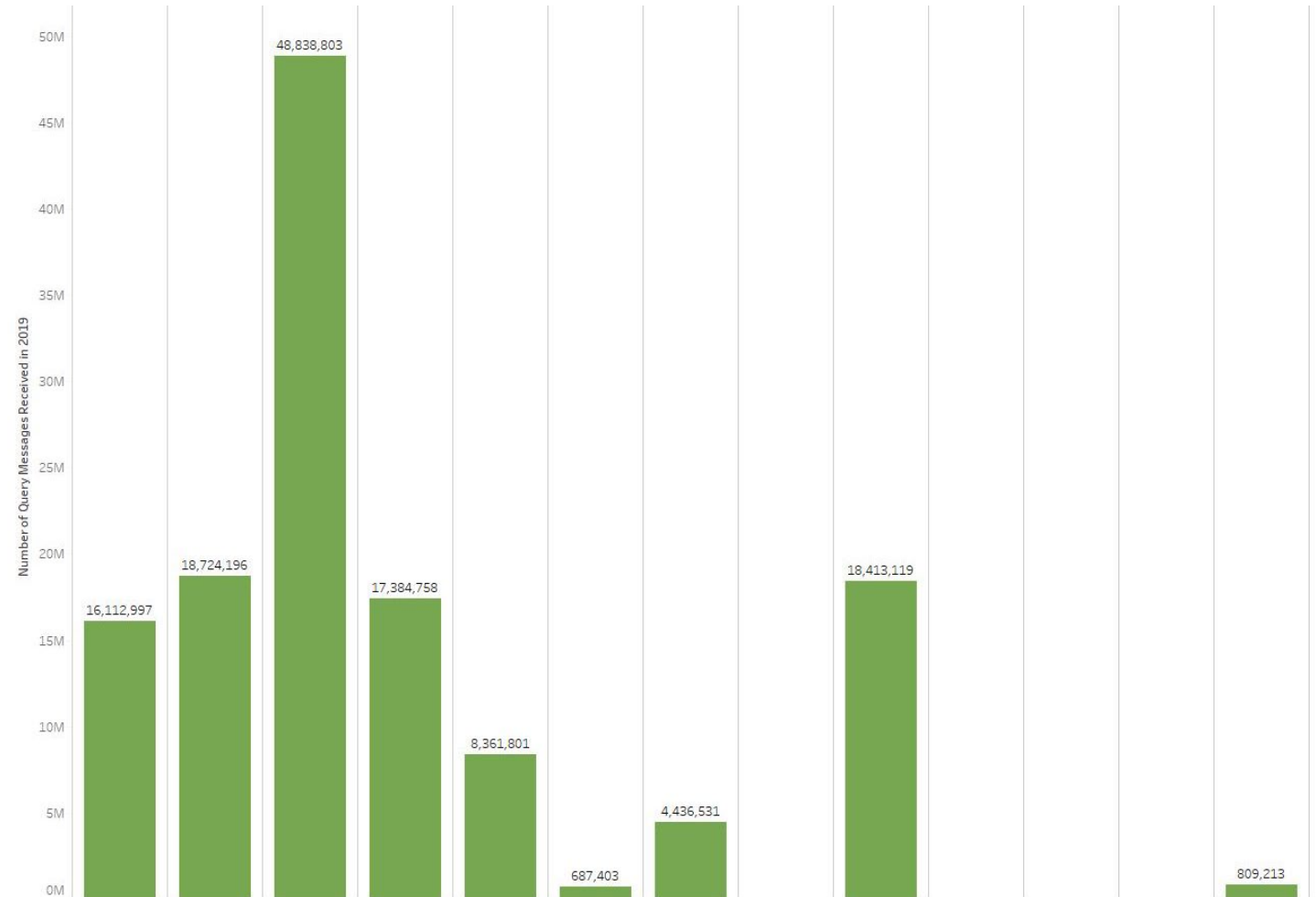
- Highest number reported by an IIS was over **24 million** in 2019



HL7 Queries

Based on the current respondents, the average number of query messages was **14,863,202** in 2019

- Highest number reported by an IIS was almost **49 million** in 2019
 - **4 million/month**
 - **136,000/day**



Questions/Discussion Open Forum

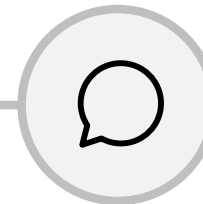
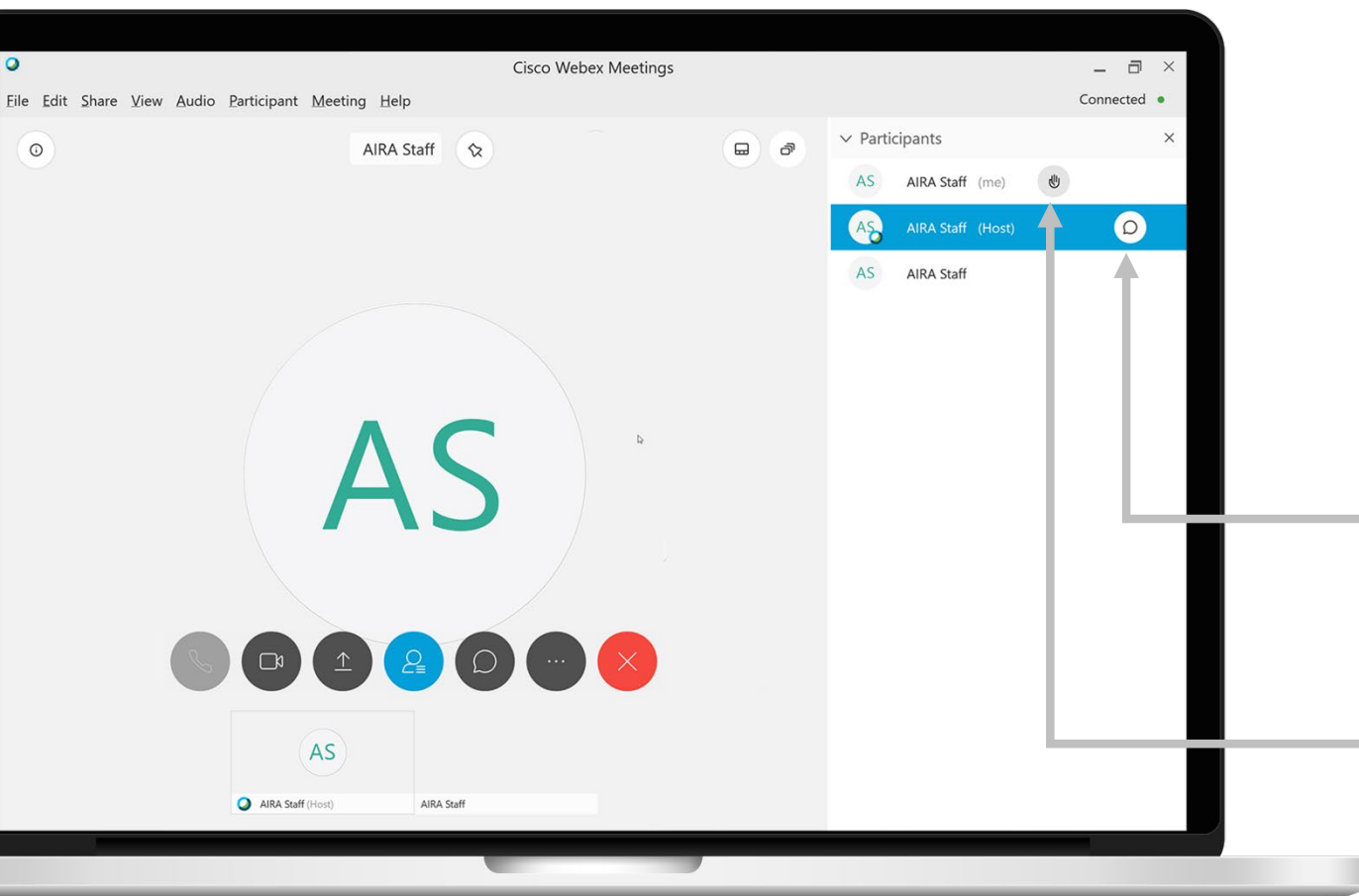
All



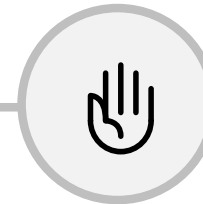
Questions, Comments, Discussion?

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Wrap Up/Next Steps

Kevin Snow



Community Comments Due July 17th

- IIS Validation Measures and Test – Submission Acknowledgment Document went out for community comment on June 29th.
- Written comments or questions can be sent to Kristi Siahaya at ksiahaya@immregistries.org through **July 17**.
 - Please note the document is protected. Please provide feedback within the documents by adding comments.



Thank you for joining us, for your input, and for your continued improvement work!

Kevin Snow: ksnow@envisiontechnology.com

Eric Larson: elarson@immregistries.org