



Measurement and Improvement (M&I) Plenary

Mary Beth Kurilo, AIRA, Senior Director, Informatics

Megan Fields, AIRA, Director, Standards & Analytics

Josh Hull, Technical Solutions Architect, Kunz Leigh & Associates

Session Overview

Welcome and Introductions

Context and Background for Measurement & Improvement

Measurement and Improvement (M&I): A Decade Later

Building on a Decade of Progress

Recognizing Validated Sites

Introductions



Megan Fields,
Director of Standards
and Analytics, AIRA



Josh Hull, Technical
Solutions Architect &
Engineering Manager,
Kunz Leigh & Associates



Mary Beth Kurilo,
Senior Director of
Informatics, AIRA



Measurement & Improvement Initiative (M&I)

Megan Fields, Director, Standards and Analytics,
AIRA

Happy 10 Year Anniversary – M&I



M&I Overview

Bringing value to the IIS community, partners, and stakeholders since 2015



AIRA Measures and Tests IIS

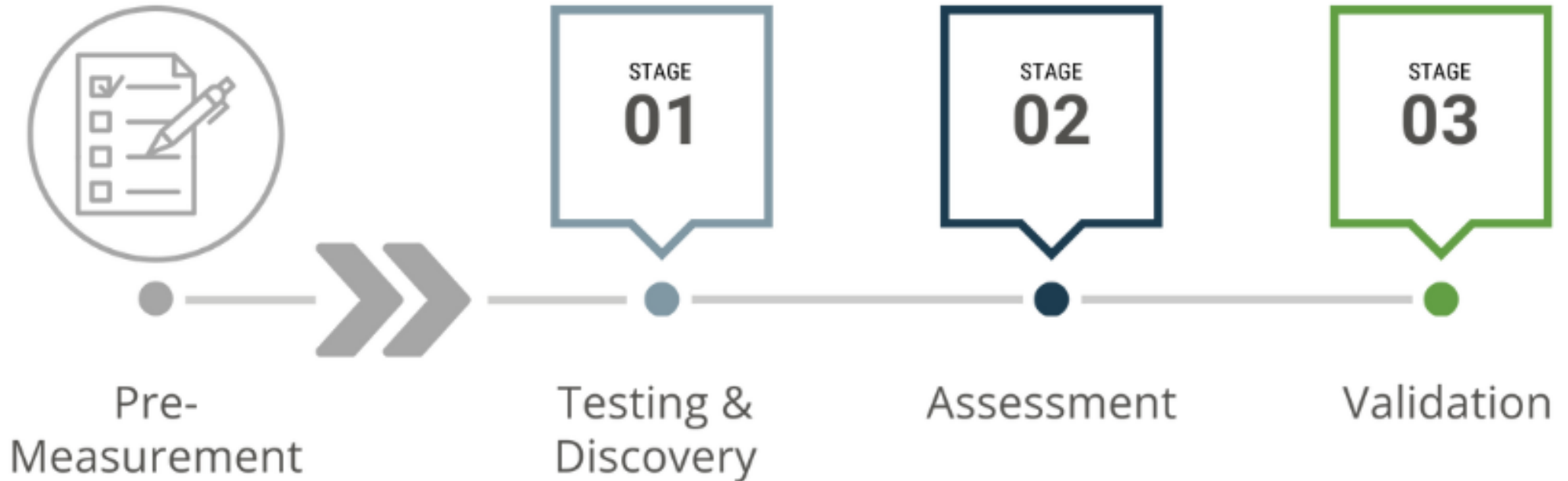


IIS Make Improvements

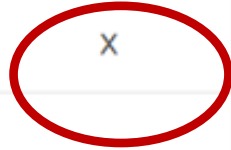


National Standards Alignment across Community

Stages



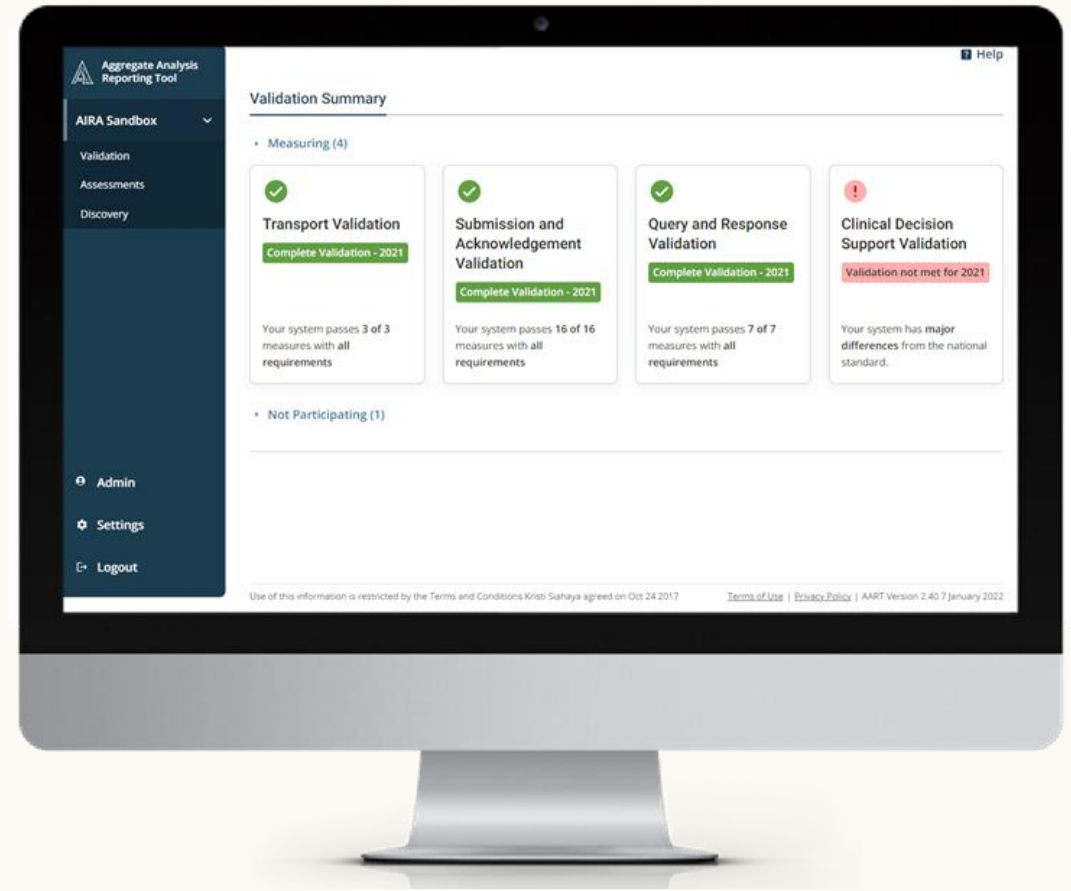
		Stages			
		1	2	3	
		Pre-Measurement	Testing & Discovery	Assessment	Validation
Content Areas	<u>Transport</u>	X	X	X	X
	<u>Submission/Acknowledgment</u>	X	X	X	X
	<u>Query/Response</u>	X	X	X	X
	<u>Clinical Decision Support</u>	X	X	X	X
	<u>Data Quality Incoming/Ongoing</u>	X	X	X	X
	<u>Data at Rest</u>	X	X	X	
	<u>Patient Matching - HL7</u>	X	X	X	
	<u>Provider Participation</u>	X	X		
	<u>Patient Matching - Extract</u>	X			



M&I Overview

All testing is conducted by AIRA through:

- Connecting with pre-production systems and analyzes deidentified data
- Quality assurance of reports
- Sharing results via the Aggregate Analysis Reporting Tool (AART)



Partner Overview

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 Imms 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

Measurement for Assessment & Certification Advisory Workgroup (MACAW)

- CDC, NIST, IIS and immunization programs, IIS vendors/implementers, and community partners.
 - Researches and formulates key IIS assessment components
 - Develops pilot metrics
 - Implements IIS assessment and validation
 - Monthly virtual meetings
 - Annual In-Person meeting



Representing the Community's Voice

MACAW Members

- **Kevin Snow**, Envision (Co-Chair)
- **Valentin Sostaric**, AZ (Co-Chair)
- **Kevin Allen**, TX
- **Elise Balzer**, Indian Health Svc.
- **Scott Benedict**, Gainwell
- **Aaron Bieringer**, MN
- **Shannon Coleman**, STChhealth
- **Alejandra Arias**, CT
- **Zach Kempf**, MO
- **LaTreace Harris**, CDC
- **Dave McCormick**, IN
- **Josh Hull**, MI
- **Lauren Shaw**, CDC
- **Rob Snelick**, NIST
- **Matt Verdon**, WI

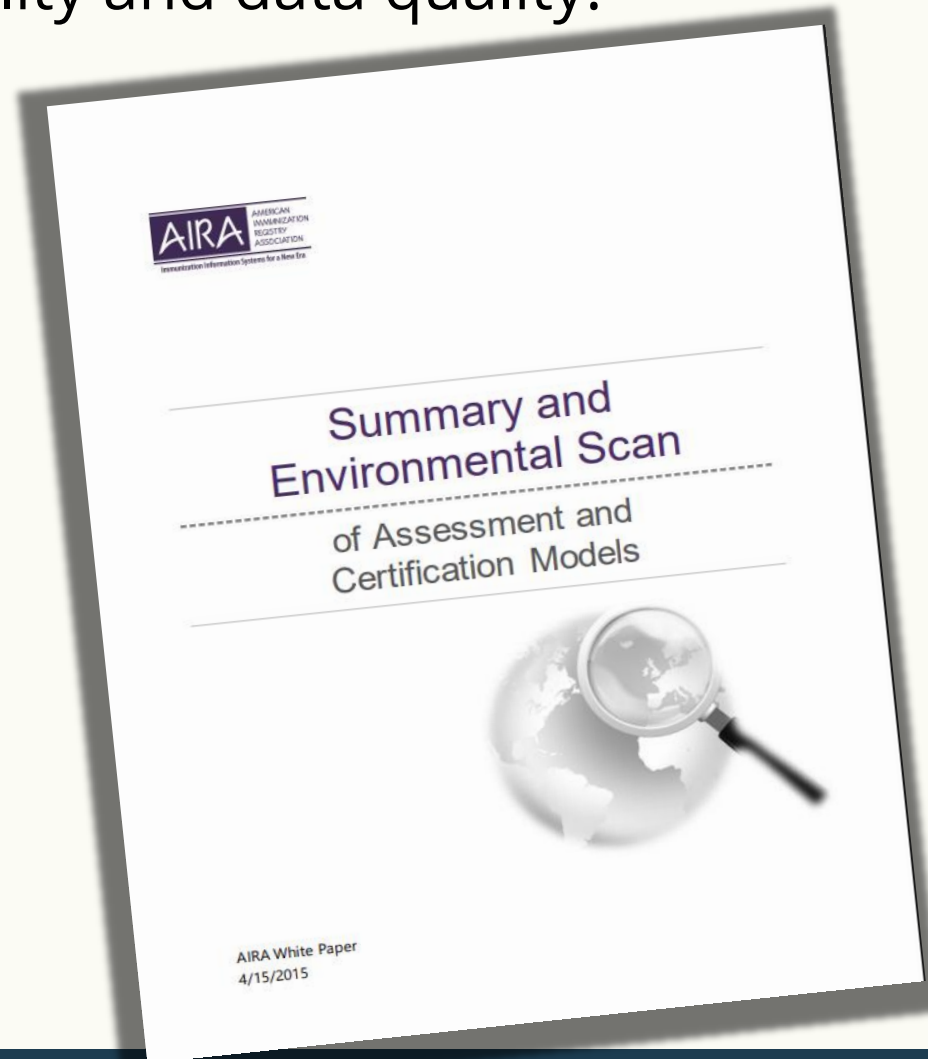
A Decade of Data-Driven Progress: M&I Turns 10

2015–2025 | Celebrating IIS Excellence and National Standards Alignment

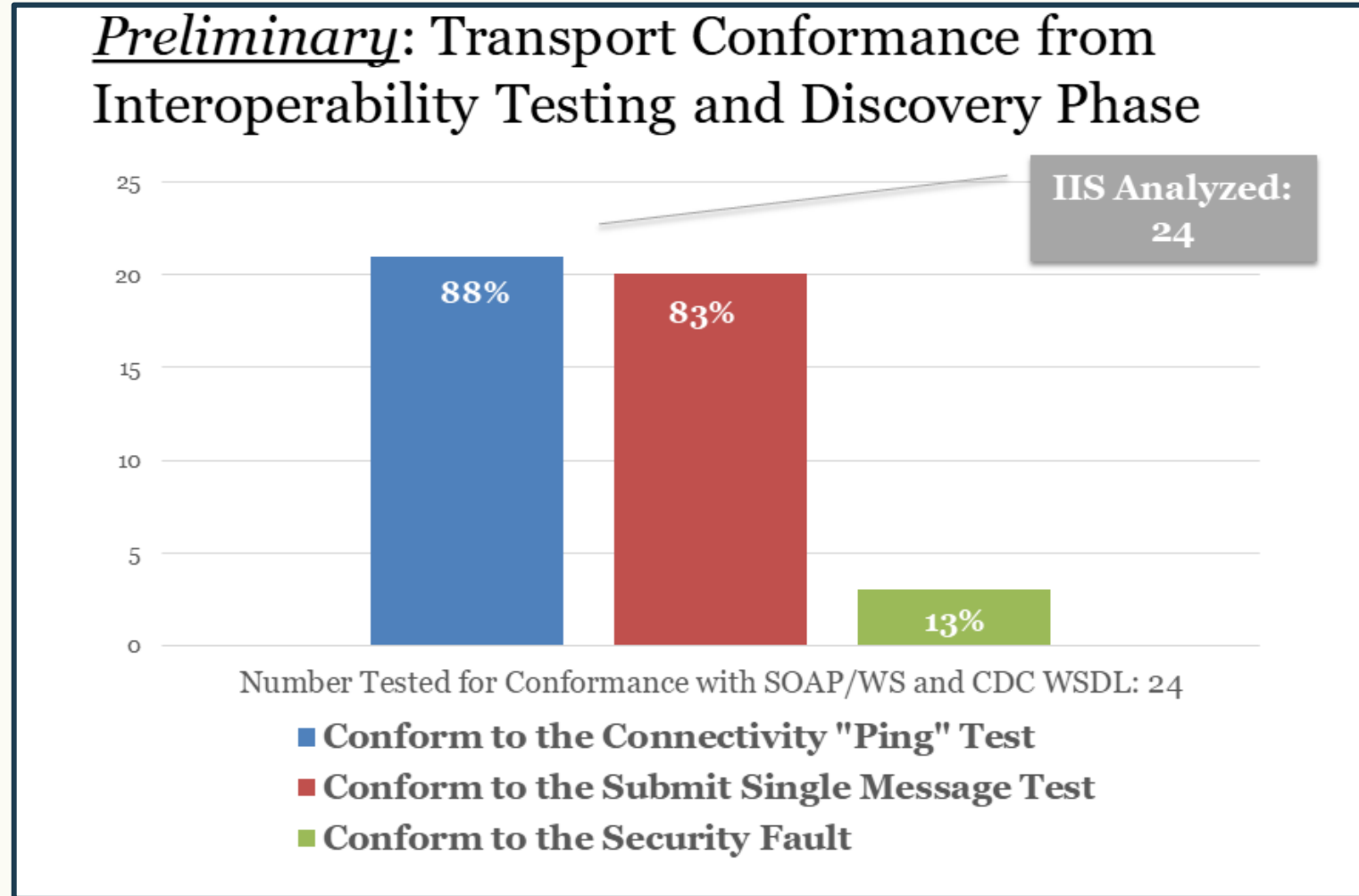


2015 – M&I Initiative Launches

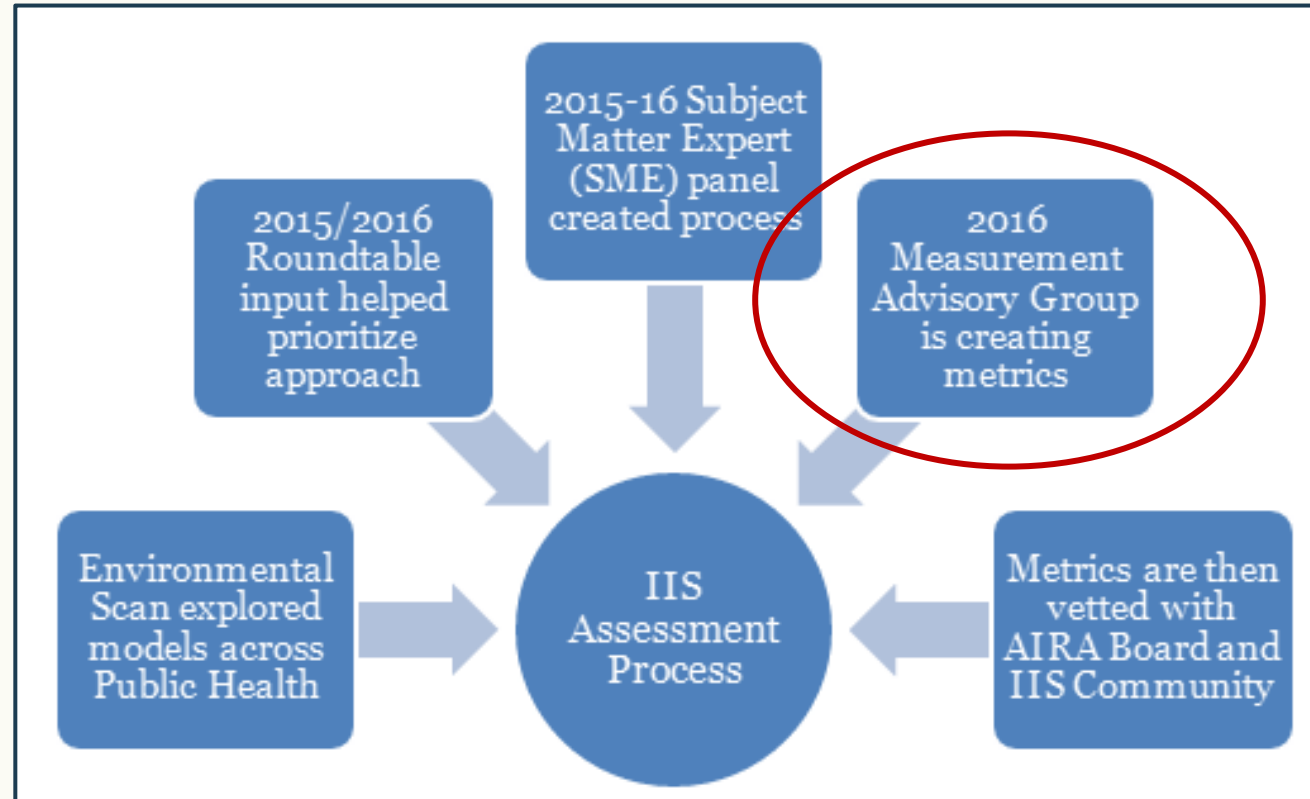
AIRA begins a voluntary, standards-based approach to help jurisdictions improve interoperability and data quality.



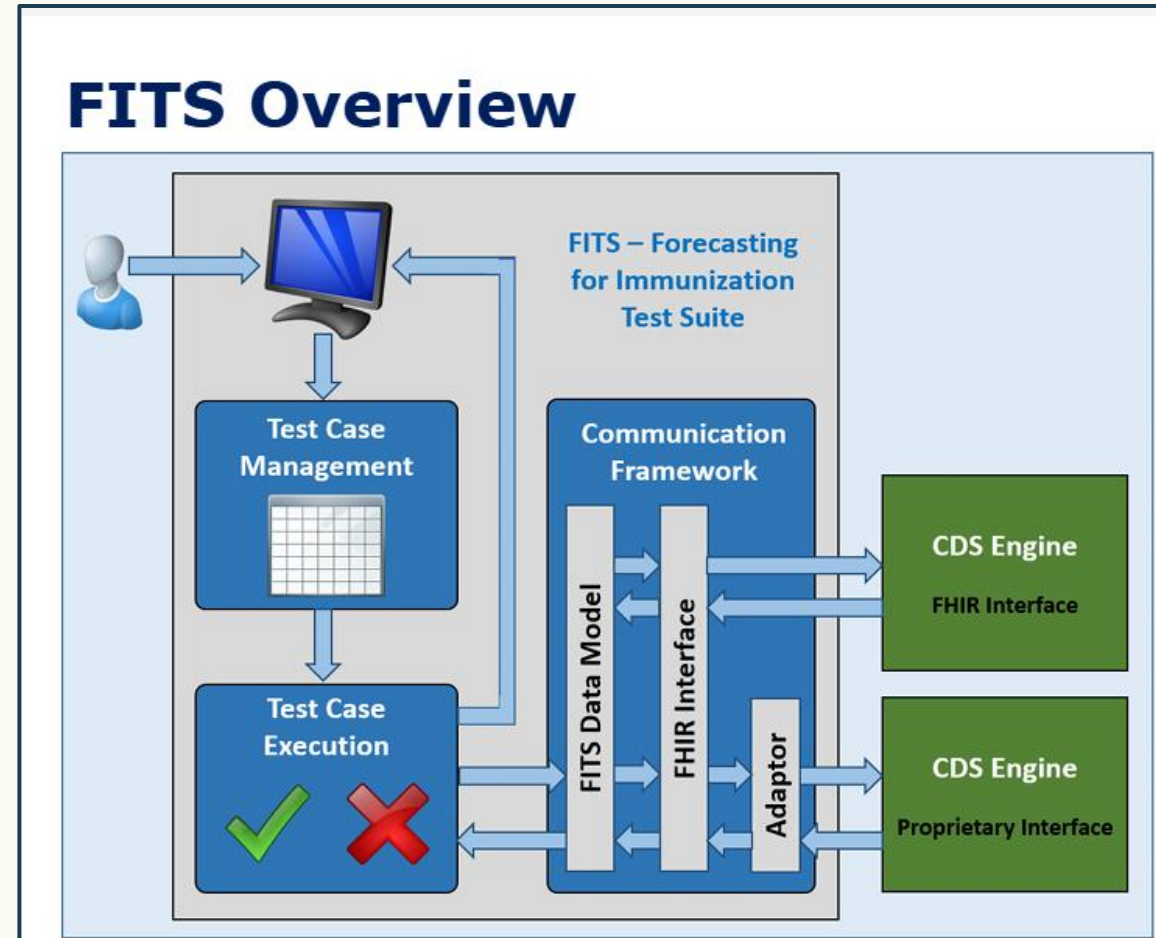
2015 – M&I Initiative Launches



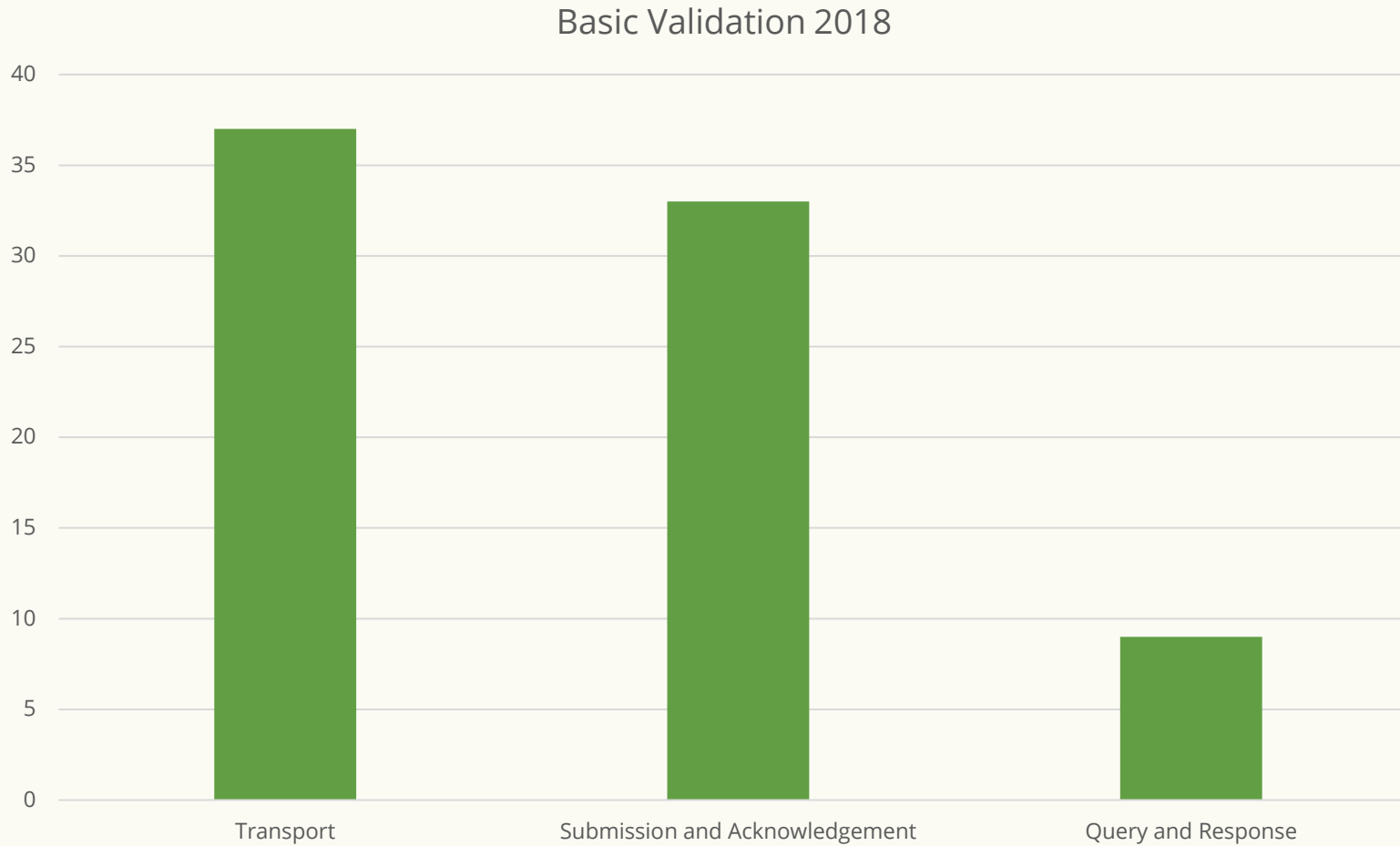
2016 – Formalization of MACAW



2017 – Forecasting for Immunization Test Suite (FITS)



2018 – Validation Comes to Life

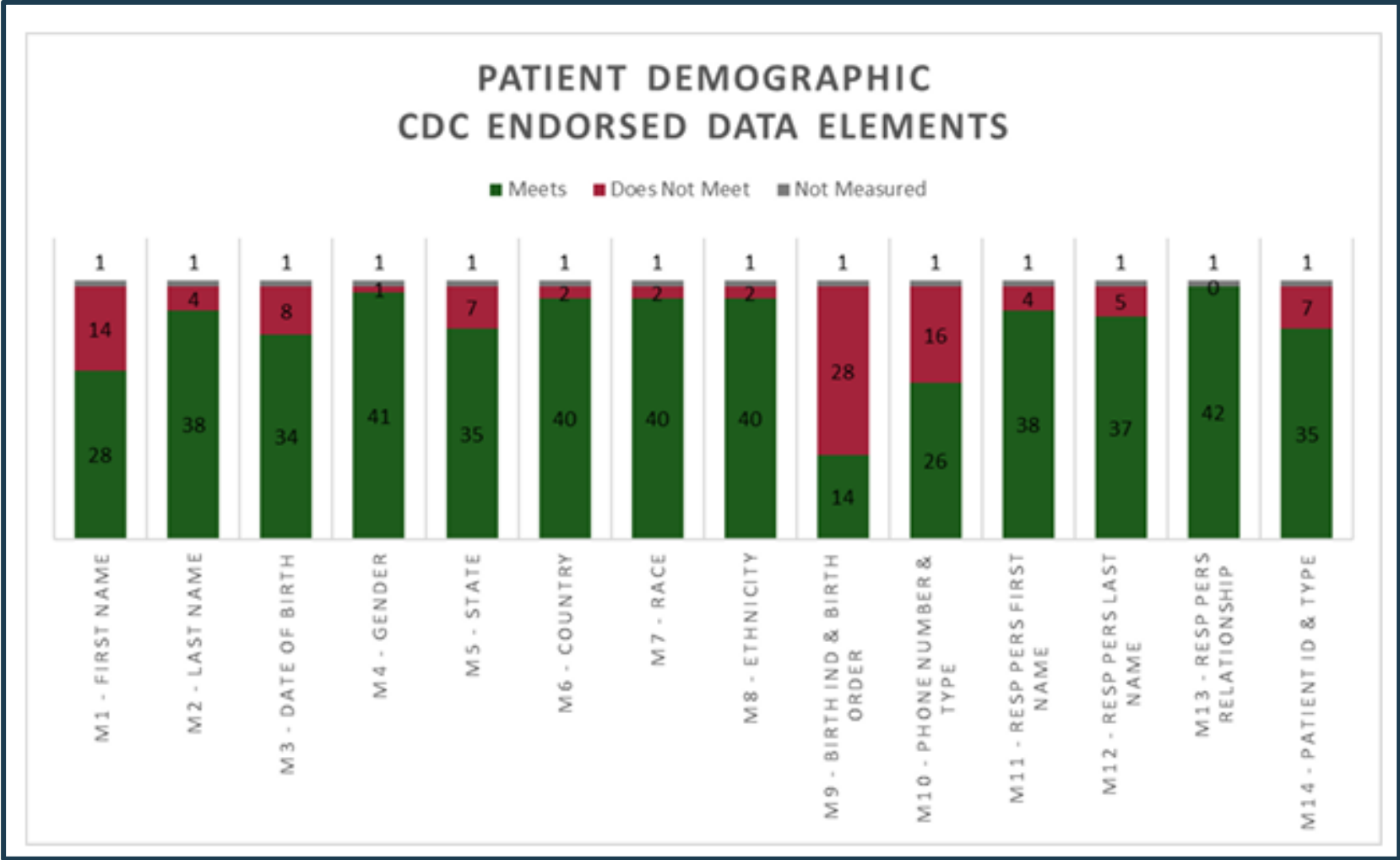


2019 – Clinical Decision Support (CDS) Takes Shape

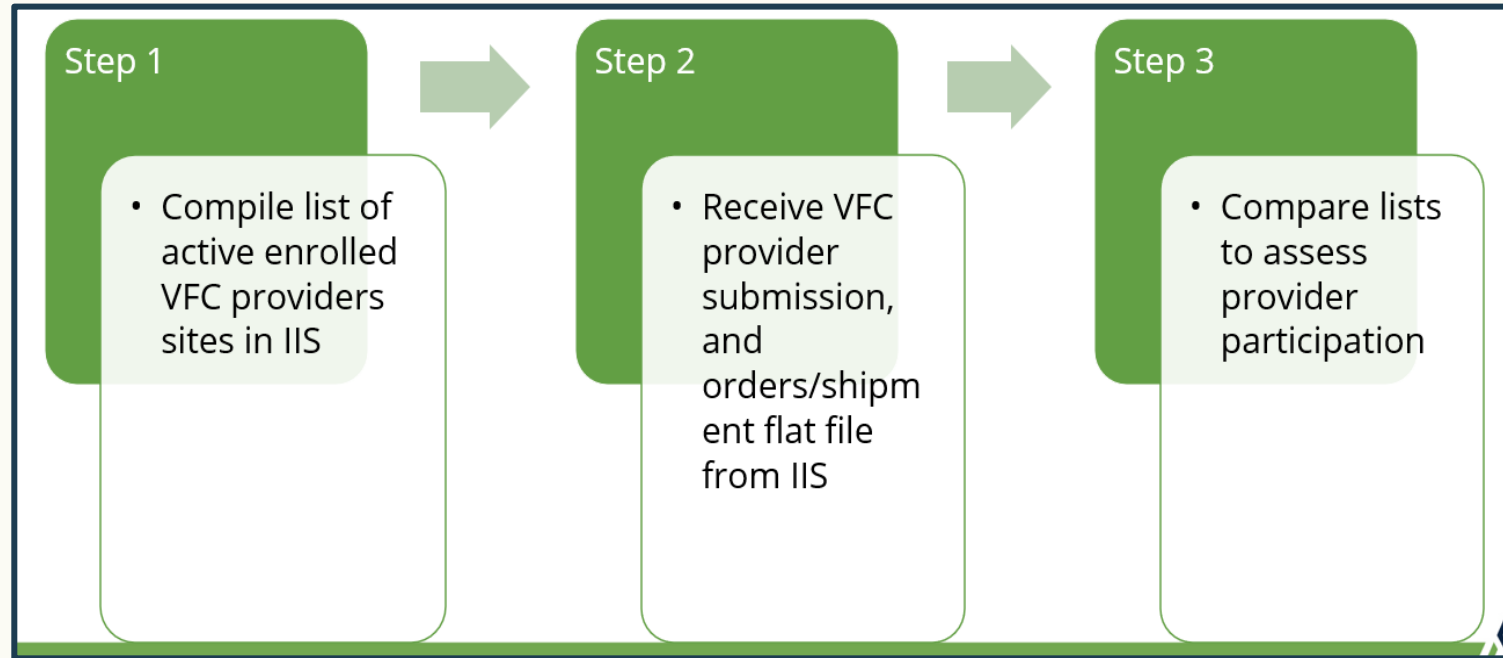
CDS Concept	Supports (N=34)	Meets*	Deviates*
Evaluation Status <i>Did the dose count?</i>	13	9	1
Earliest Date <i>When could the next dose be given?</i>	32	12	7
Recommended Date <i>When should the next dose be given?</i>	34	10	7

* Meets and Deviates represent the average number of IIS across three accuracy measures (peds, adolescent, & adult)

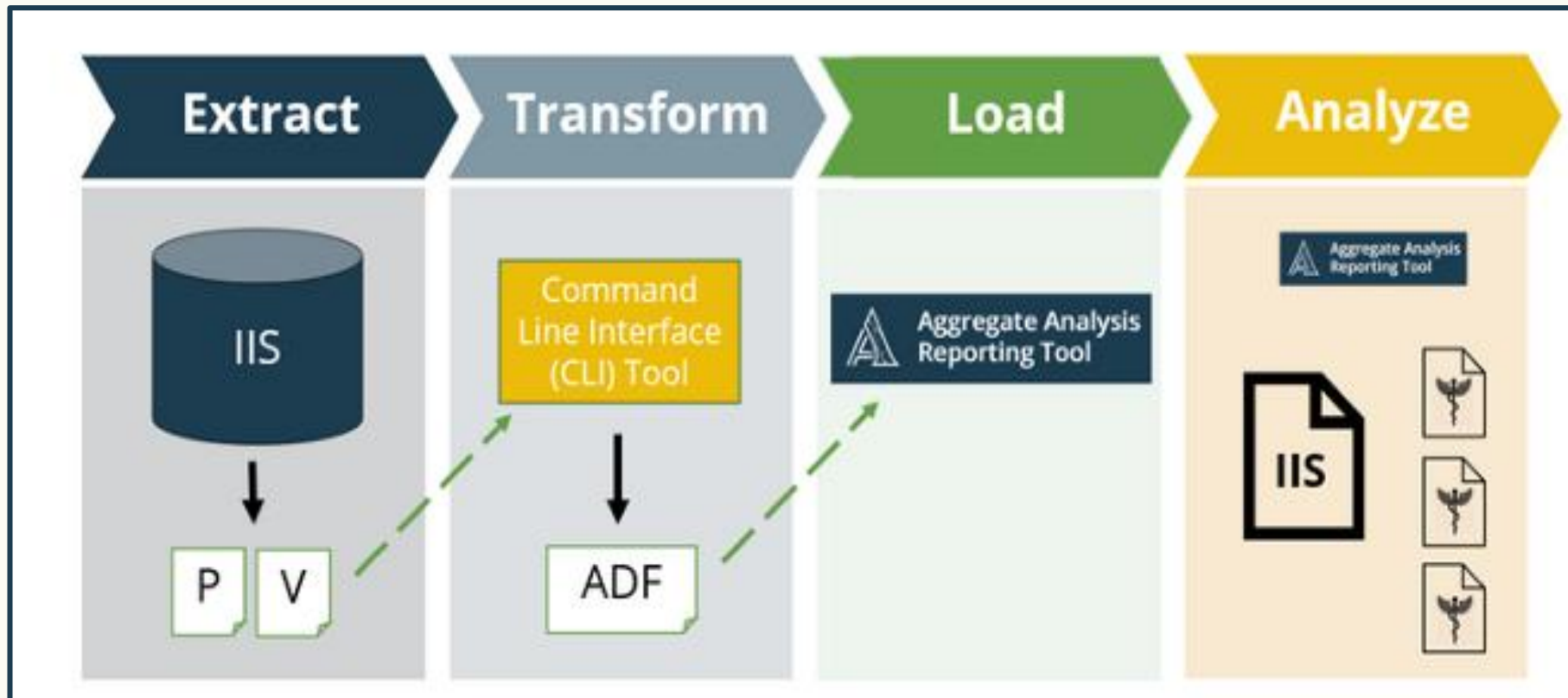
2020 – Supporting IIS Amid a Pandemic



2021 – Provider Participation Pilots



2022 – Data at Rest (DAR) Takes the Stage



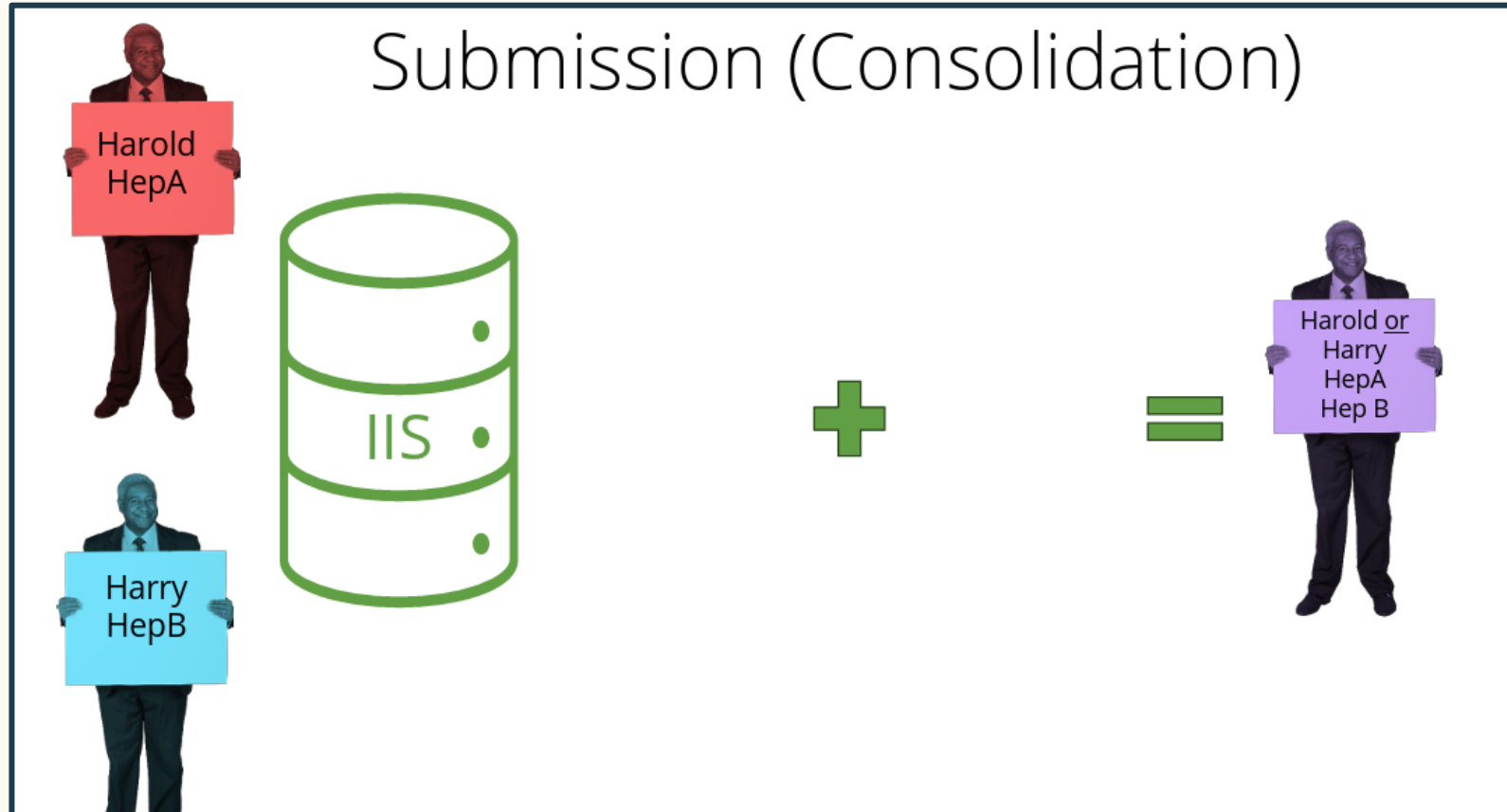
2023 – Advancing New Measures

Early MACAW Measurement Planning – Patient Matching

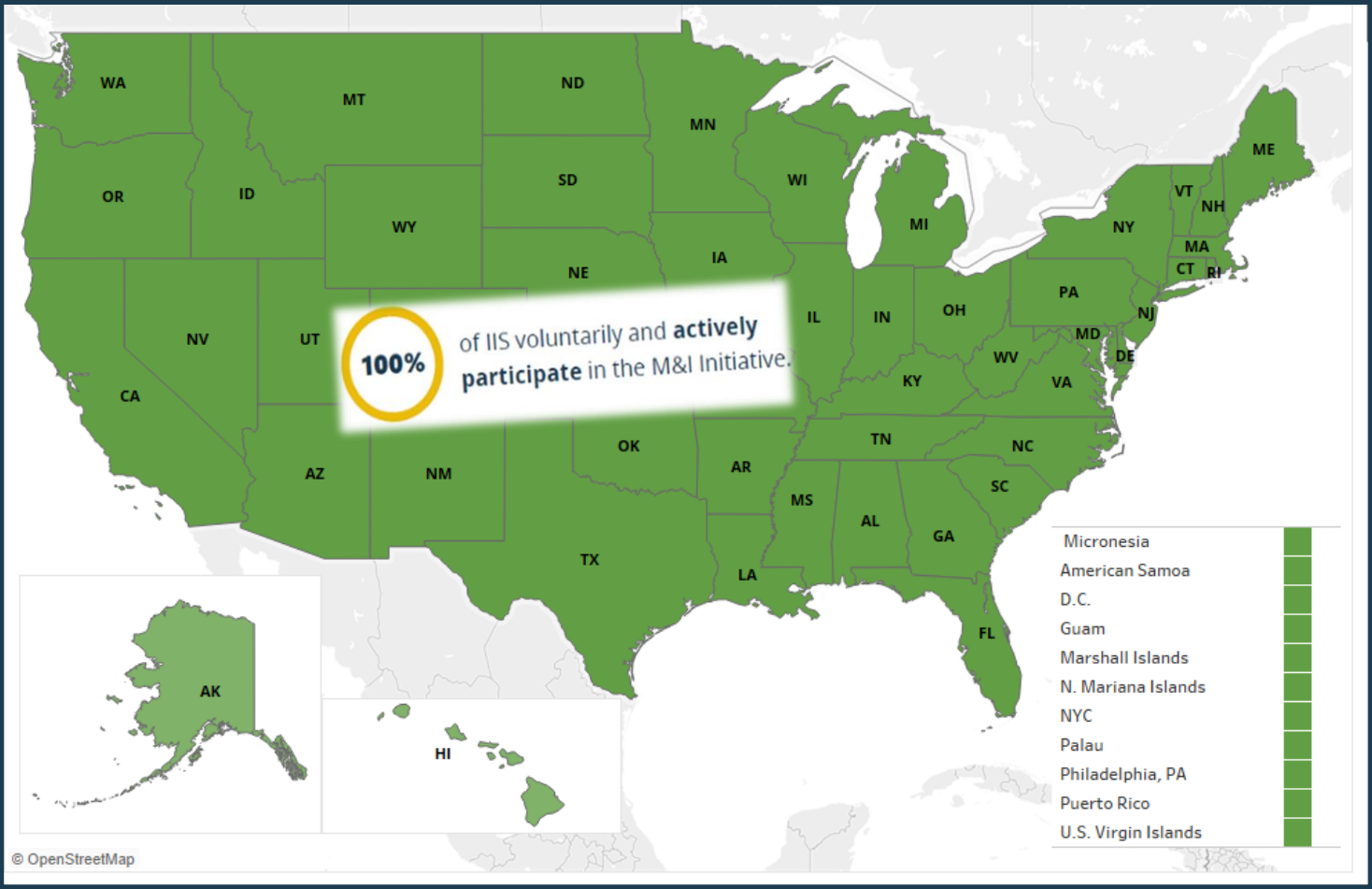
Patient matching is defined as the **identification and linking of one patient's data within and across health systems in order to obtain a comprehensive view of that patient's health care record.**



2024 – Patient Matching – A Total Eclipse of Assessment



2025 – A National Standard





Building on a Decade of Progress

Josh Hull, Technical Solutions
Architect, Kunz Leigh & Associates

Role of IIS in Providing Accurate and Reliable Health Data



Jurisdiction Strengths and Challenges

Strengths

- Broad national coverage
- Improved bi-directional data exchange
- Stronger collaboration across jurisdictions

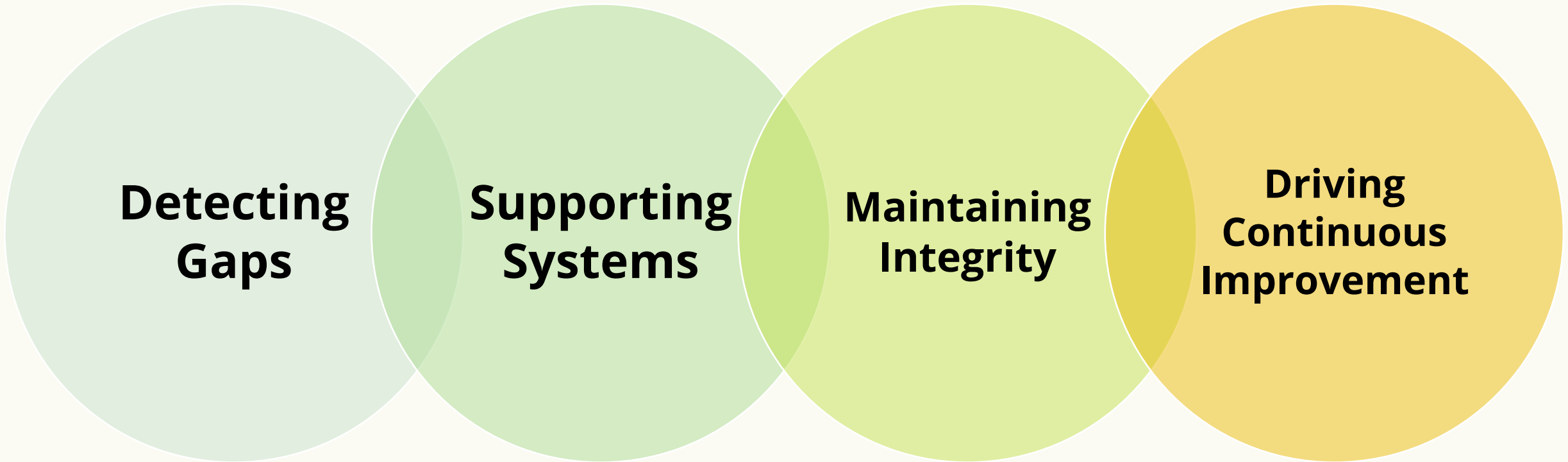
Challenges

- Resource Limitations
- Aging Technology
- Privacy and Security
- Data Quality gaps

Trends

- Push for National Standards and Alignment
- Increased demand for real-time, accessible data
- Integration of modern interoperability standards

The Role of M&I



The Proven Value of Measurement

71% drop in Does Not Meet - SUB/ACK

96% of measures being tested improved – DQI/O

56% improvement in fully compliant jurisdictions –
Transport

The Current Moment



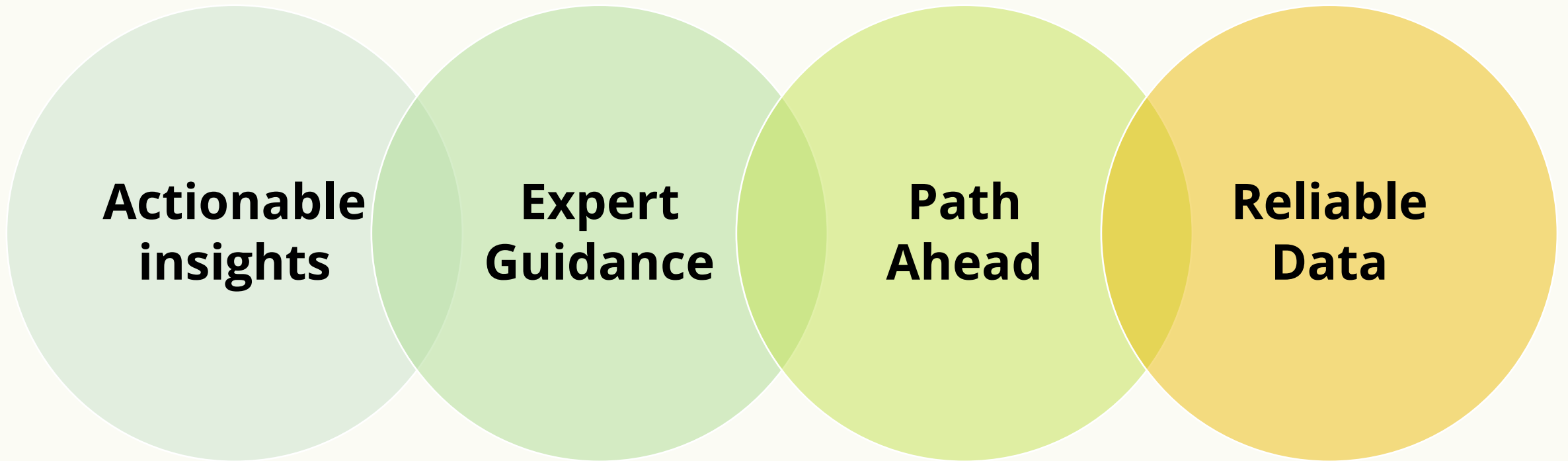
**Resource
Constraints
Amid Growing
Demands**

**Heightened
Expectations
for Data
Quality and
Interoperability**

**Rising Data
Complexity**

**Balancing
Innovation and
Stability**

Why M&I is Critical Right Now



Looking Ahead

- AIRA's Mission: To promote and support the use of immunization information to ensure healthy communities.
- Leading M&I Priority Areas
 - DAR into Validation
 - HL7 Patient Matching into Validation
 - Vaccine Matching
 - Functions
- Modernization
- Improvement Support



Leaning into Improvement

Content Area	First Basic Validation Report date	Percentage of IIS Participating	Percentage of IIS meeting Basic Validation
Transport	2018	98%	100%
Submission/ Acknowledgment	2018	98%	86%
Query/Response	2018	98%	61%
Clinical Decision Support	2021	90%	57%
Data Quality Incoming/Ongoing	2022	92%	44%

Call to Action / Partnership



Jurisdictions



Vendors



Partners



IIS Validation Recognition

Mary Beth Kurilo



IIS Validation – What Is It?

Validation is a summary stage to formally acknowledge and recognize IIS and IIS vendor products that are progressing toward or achieving alignment with community-selected measures and tests

IIS Validation – Who Is Interested?

Everyone! But in particular:

- IIS data exchange partners
- CDC funders/sponsors
- Health payers (inc. CMS)
- ONC and others supporting rule and regulation across Health IT

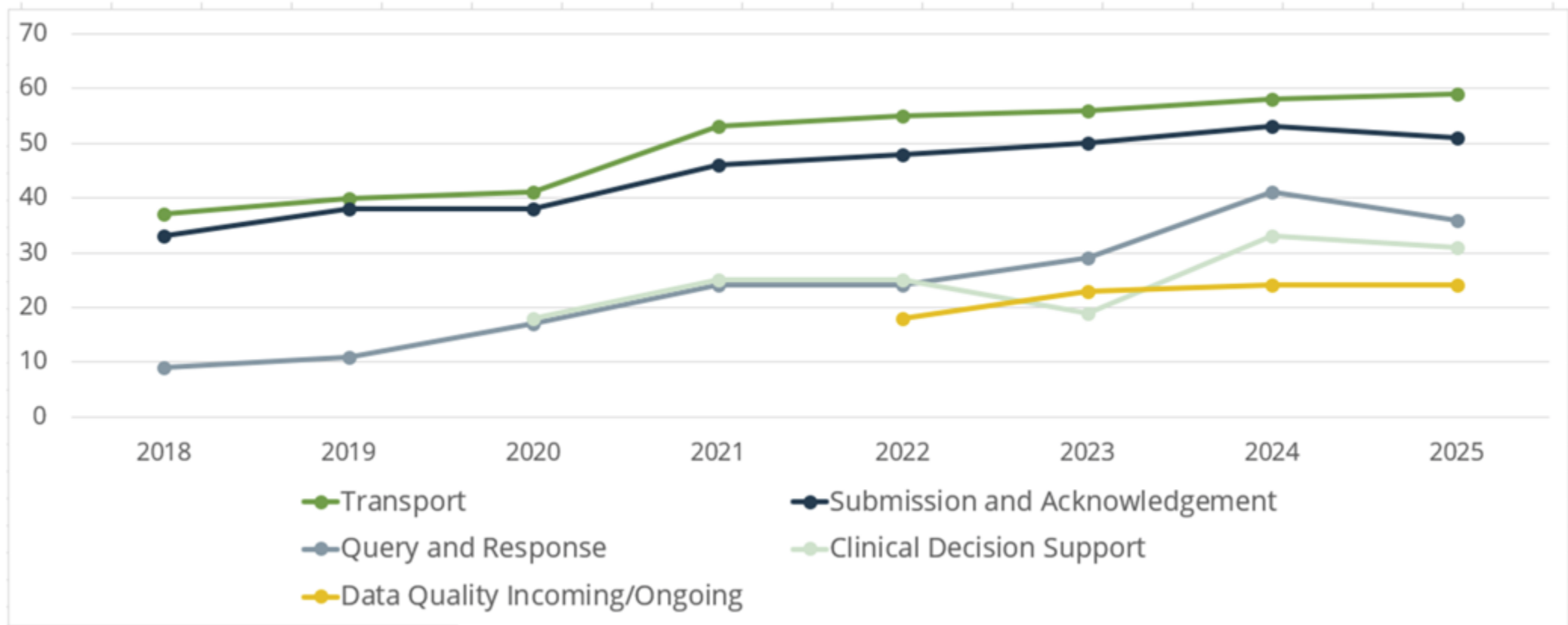
Vendor validation is especially helpful as an evaluation tool for IIS going through the procurement process

All validation data is available and published on AIRA's website:

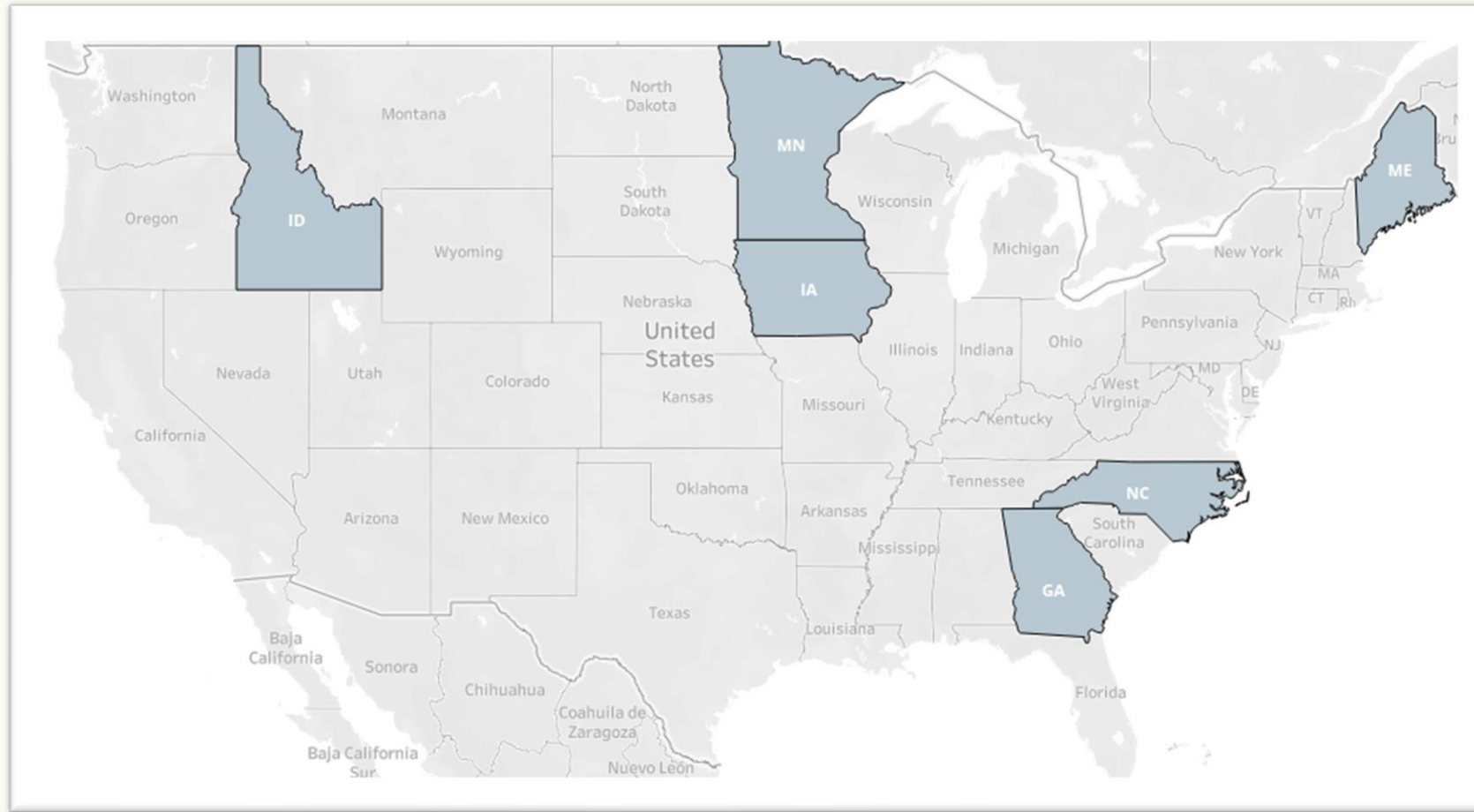
www.immregistries.org/validation

Basic Validation – Over the Years

Basic Validation: Over the Years

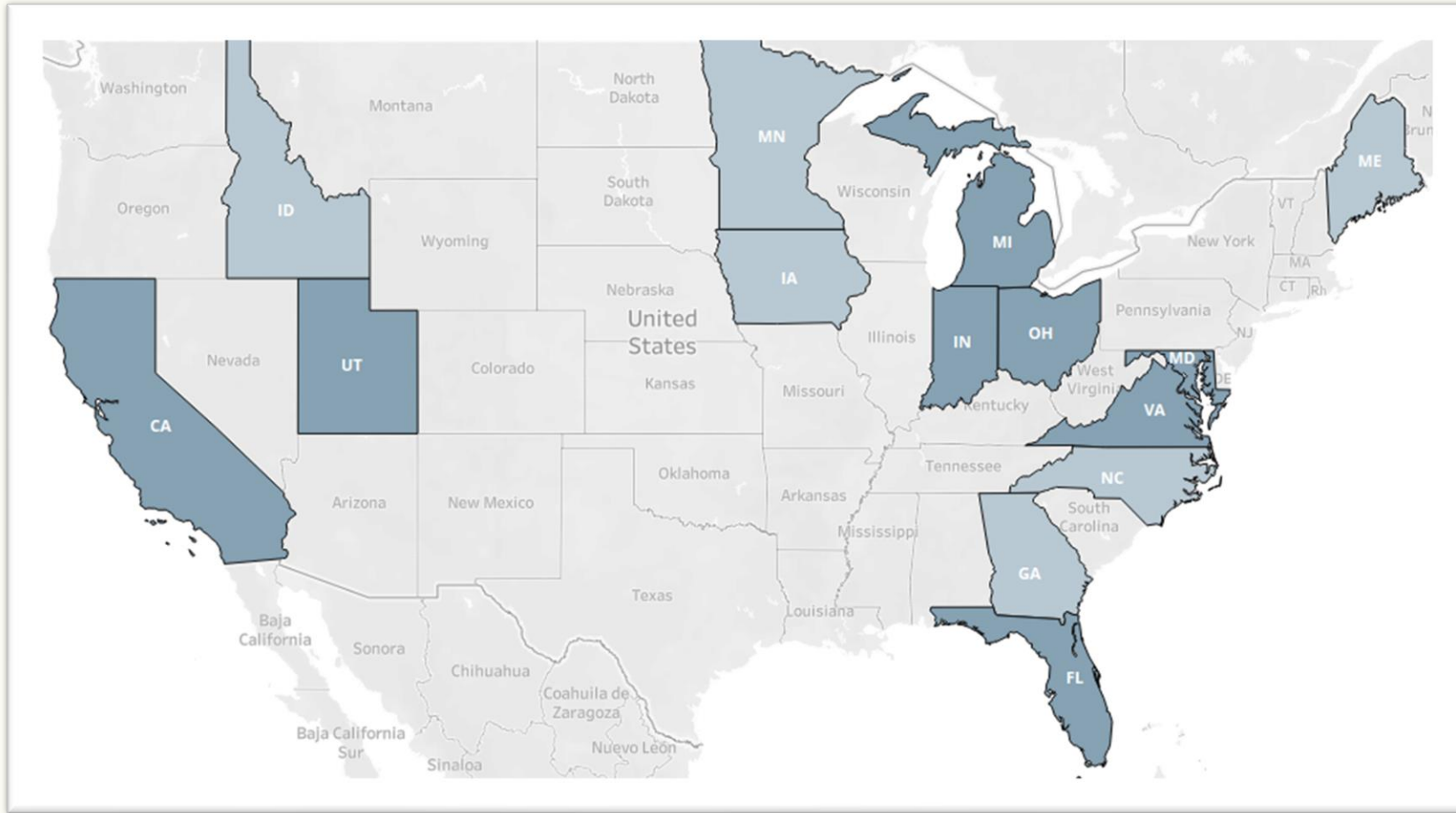


IIS Validated in One Content Area



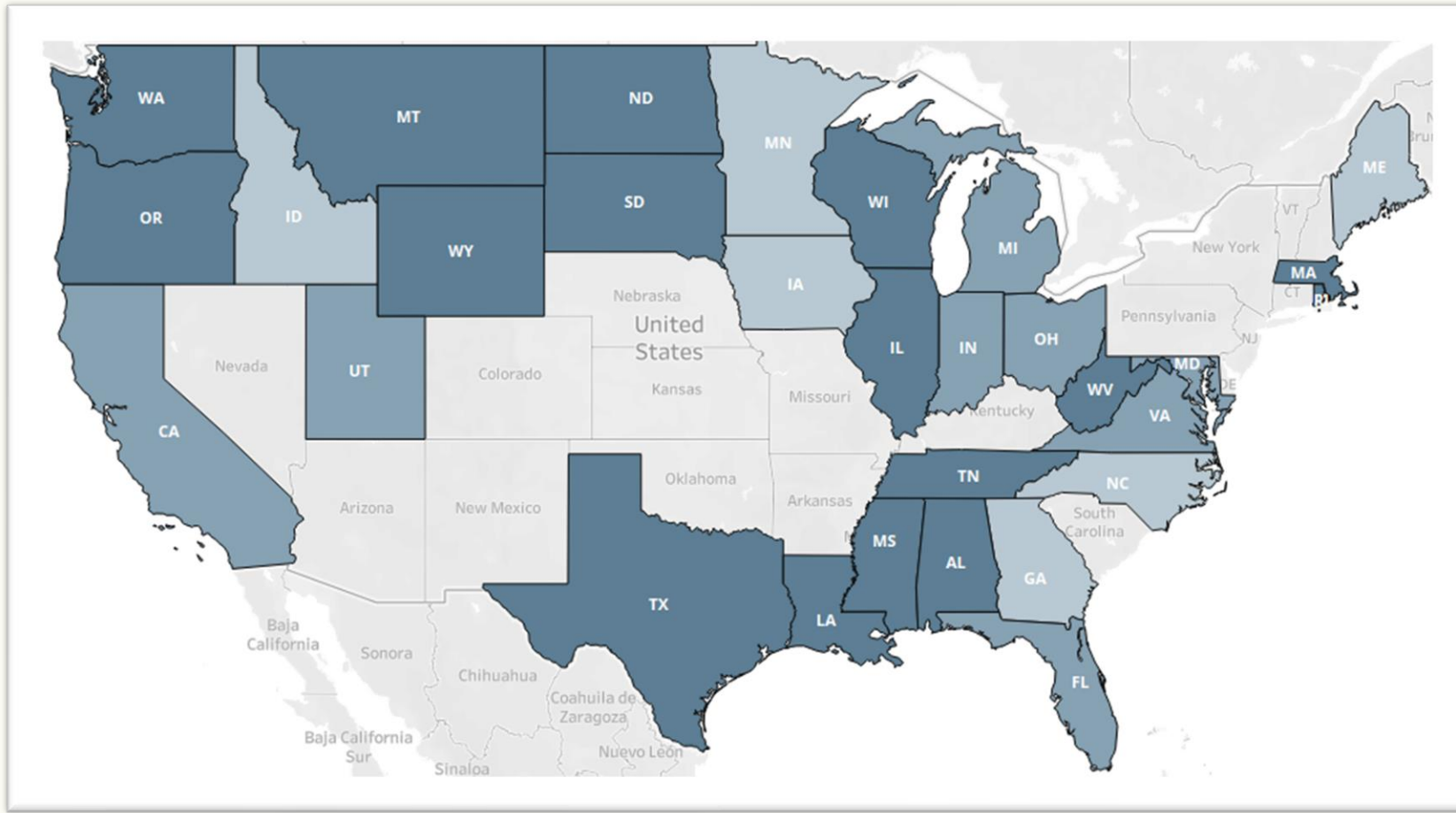
- Georgia
- Hawaii
- Iowa
- Idaho
- Maine
- Minnesota
- North Carolina

IIS Validated in Two Content Areas



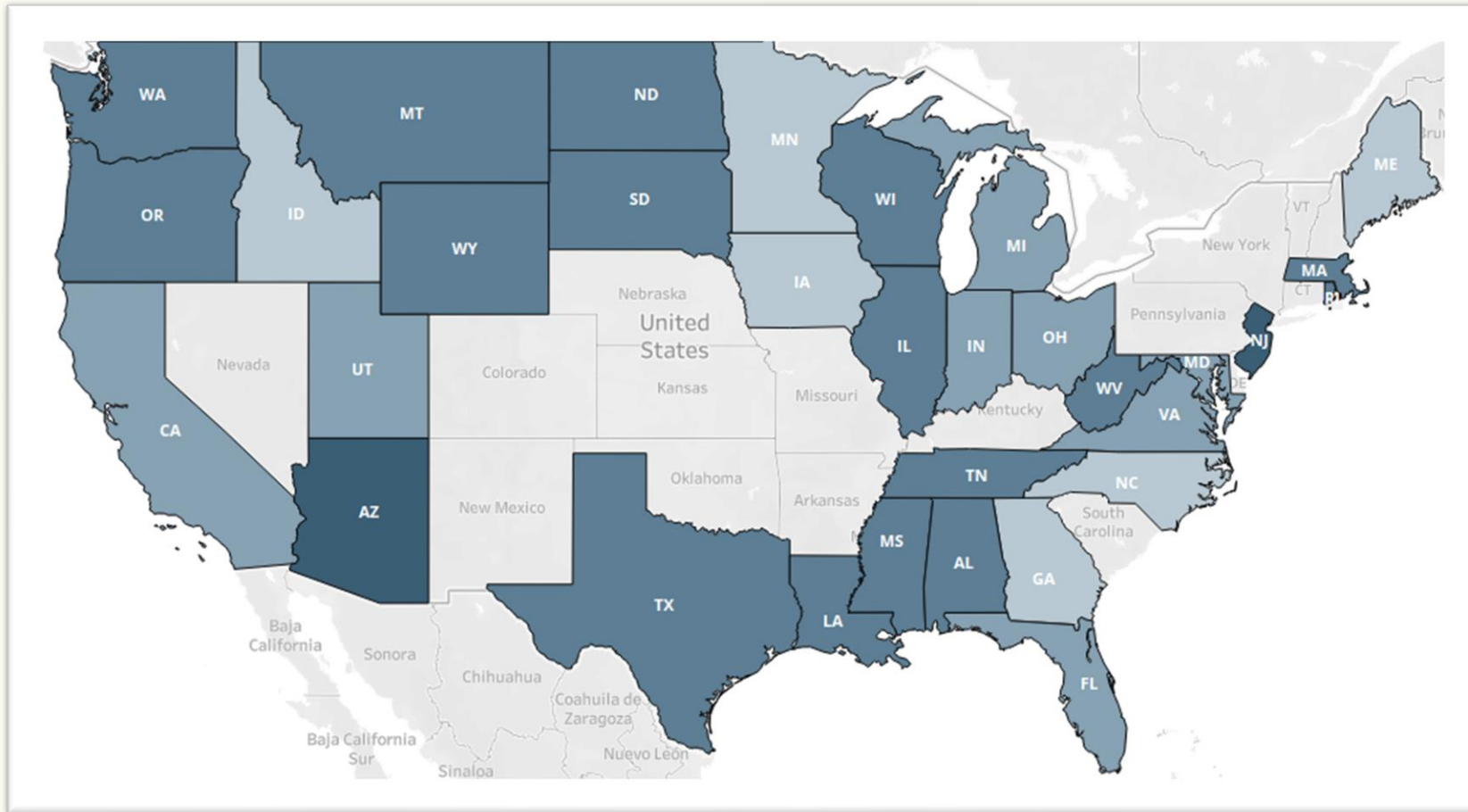
- California
- Florida
- Indiana
- Maryland
- Michigan
- Ohio
- Utah
- Virginia

IIS Validated in Three Content Areas



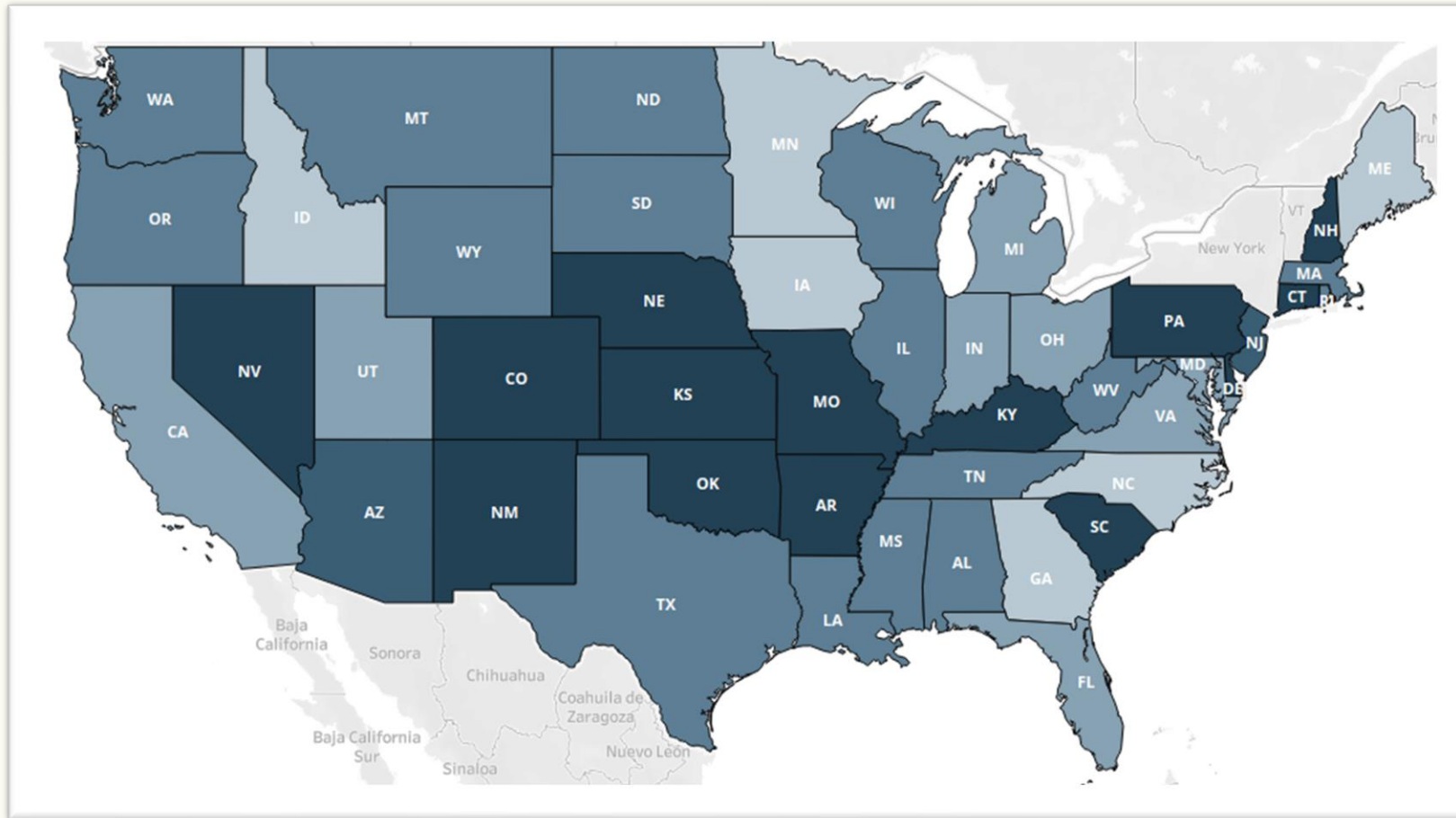
- Alaska
- Alabama
- Illinois
- Louisiana
- Massachusetts
- Mississippi
- Montana
- North Dakota
- New York City
- Oregon
- Rhode Island
- South Dakota
- Tennessee
- Texas
- U.S. Virgin Islands
- Washington
- Wisconsin
- West Virginia
- Wyoming

IIS Validated in Four Content Areas



- Arizona
- District of Columbia
- New Jersey
- Puerto Rico

IIS Validated in Five Content Areas

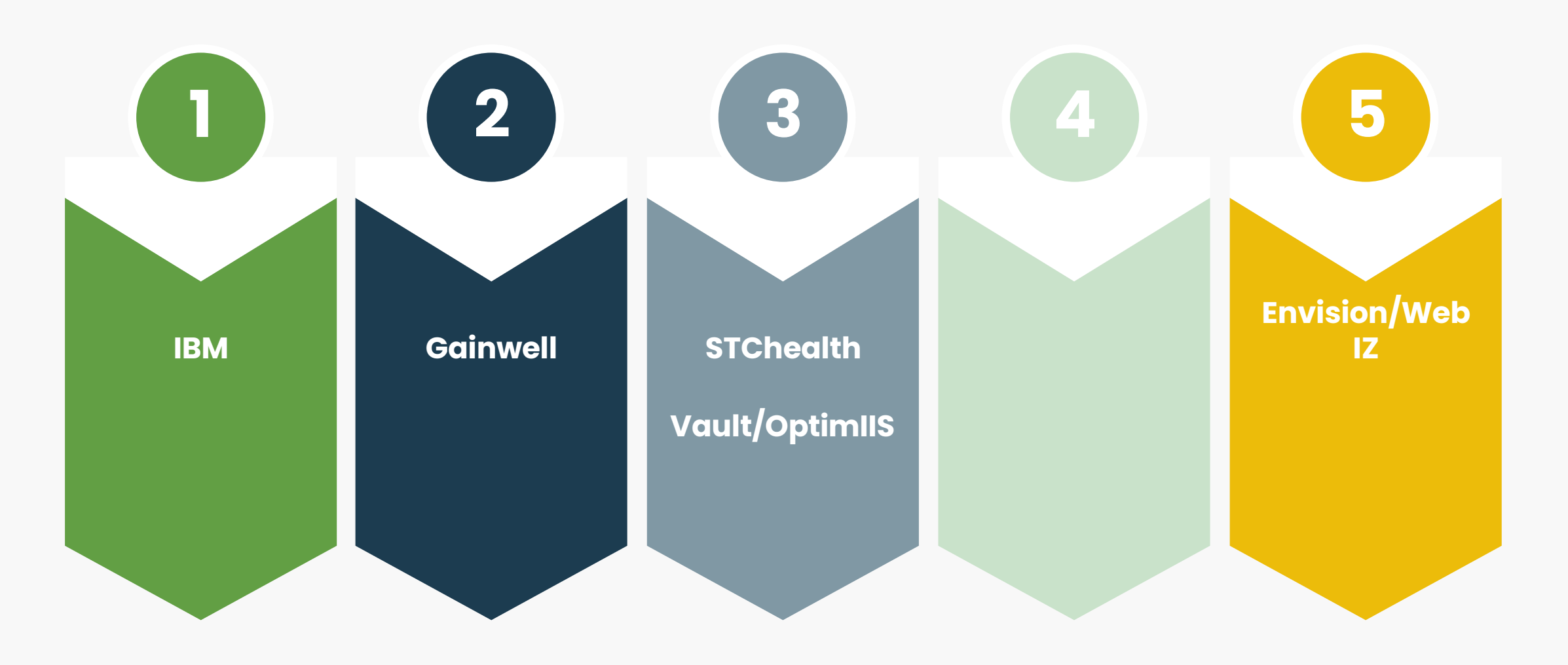


- Arkansas
- Colorado
- Connecticut
- Delaware
- Guam
- Kansas
- Kentucky
- Missouri
- Nebraska
- New Hampshire
- New Mexico
- Nevada
- Oklahoma
- Pennsylvania
- Philadelphia
- South Carolina
- American Samoa
- Federated States of Micronesia
- Northern Mariana Islands
- Palau
- Republic of the Marshall Islands

Vendor Product Validation

- We have been testing our vendor products for several years, and this information has been available through the AART tool
- We're excited to see an increasing number of vendors voluntarily coming forward to be tested
- For the first time, we're recognizing vendors who have been validated at the complete level in Measurement and Improvement

Vendor Product Validation – Number of Content Areas



Be on the Lookout!

- Learn more about M&I by talking with your colleagues with these name tag badges or stopping by the AART Clinic Room!



*Thank you for all your hard work to ensure
high quality immunization data is available
where and when it is needed!*

Questions? Comments?



**Please reach out or come by
with any questions!**

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Josh Hull: j.hull@kunzleigh.com

Mary Beth Kurilo: mbkurilo@immregistries.org

