

# *IIS Bulk Query Discussion with IIP*

April 26, 2022 | 12:20pm-12:40pm ET | Session 1D Breakout #2

Floyd Eisenberg, MD, MPH  
Damon Ferlazzo, MPA  
Stuart T. Weinberg, MD, FAAP, FAMIA



HIMSS™



AIRA  
AMERICAN IMMUNIZATION  
REGISTRY ASSOCIATION



## *IIP Purpose and Core Components*

- The purpose of the Immunization Integration Program (IIP) effort is to increase the quality and usage of immunization data through cross-sector collaboration, measurement, and technical support to improve IIS and health IT interoperability. The two core components of the program include:
  - **Testing & Recognition Initiative** - facilitates the adoption of high priority immunization-related capabilities within EHRs and other clinical software to improve clinical decision-making and information sharing with IIS
  - **Collaborative** – brings IIS, EHRs and other health IT, HIEs, clinicians, public health and other critical partners together to develop and drive the adoption of solutions to improve immunization interoperability and data exchange
  - <https://www.himss.org/what-we-do-initiatives/immunization-integration-program>

# 2022 Collaborative Priorities



## *Access Bulk Query Data from IIS*

Large provider organizations and health payers would benefit from a standardized way to access large amounts of IIS data for their patients/members.



## *Data Validation & Reasons for IIS Rejections*

Inconsistency in how data is entered, or missing fields can cause IIS to reject immunization messages.



## *Capture of Race & Ethnicity*

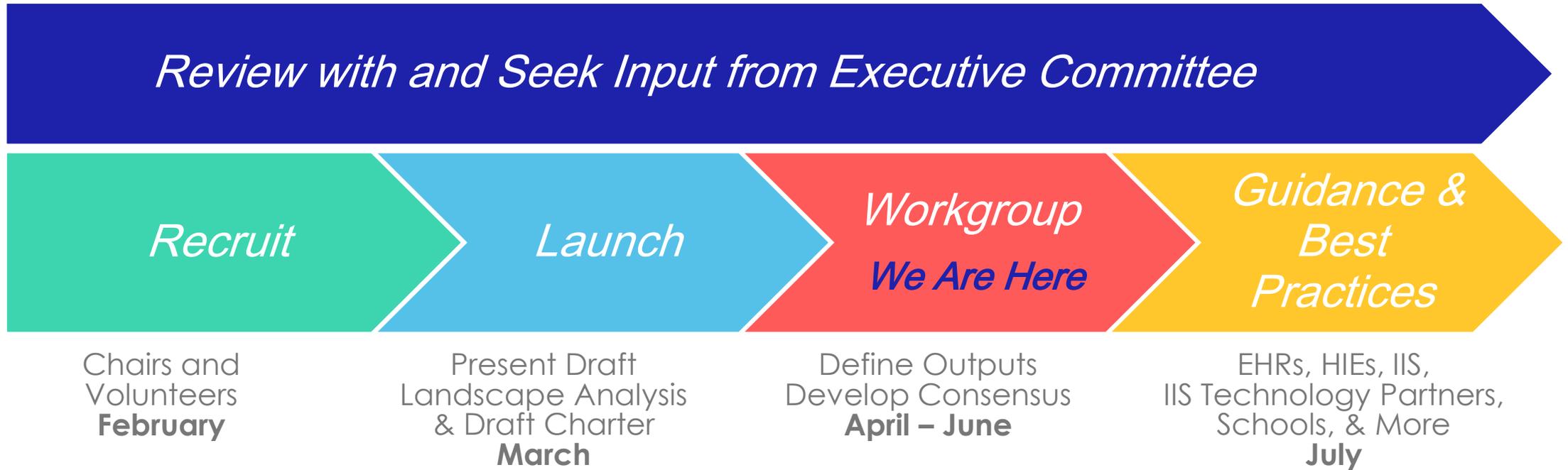
The capture of race and ethnicity is uneven across the immunization information ecosystem.



## *Regular Updates of Code Sets*

Out of sync code sets between data exchange partners (e.g., NDCs for annual flu vaccine) can impede data interoperability including preventing patients' vaccinations from being recorded properly.

# *IIP Collaborative – Bulk Query Timeline*



# *Draft Landscape Analysis Summary*

- **Problem Statement**

- Providers or organizations need to retrieve immunization information from immunization information systems (IIS) without relying on individual queries which can be time consuming for users and overwhelming for IIS.

- **Landscape Analysis Methods**

- **Interviews with 47 subject matter experts** from EHRs, HIEs, IIS, IIS Technology Partners, Providers, School Health, Pharmacy, Payers, Public Health, and Health IT Developers
  - Represent use case stakeholders
- Review of immunization query and bulk FHIR online materials

- **Use Cases**

- Compliance, Quality, Effectiveness, Population Health and Public Health Surveillance
- Planning and Interventions
- Routine Care

*Immunization Integration Program (IIP)*

# *Draft Landscape Analysis Summary (cont 'd)*

- **Stakeholders**

- EHRs, HIEs, IIS, IIS Technology Partners, Providers, School Health, Pharmacy, Payers, Public Health (non-IIS local, state, national), and Health IT Developers

- **Current Immunization Bulk Query Practices and Limitations**

- *Common –*

- Serial single message queries sent using SOAP - CDC WSDL
- IIS-specific delimited and flat file exchange
- Implementation of parallel analysis environments

- *Emerging Practices –*

- FHIR Bulk Query – EHRs to implement FHIR to facilitate bulk query, End of Year Requirement
- Cloud data
- Subscription services
- New SOAP operation / message routing to parallel environment

# Discussion Participation

- Visit Menti.com on another screen and enter the code at the top of the screen
  - Select a response
  - Click “Submit”
- If you have questions or comments during this presentation, click “Open Q&A”
  - Click “Ask new question”
  - For questions - please include your email in your question in case we don't have time to answer during today's session
  - Click submit

How should we classify your answers?

Query-respondent: IIS

Query-generator: EHR, Healthcare, Pharmacy

Neither respond nor generate

Submit

Open Q&A

Questions from audience

Do you have a question for the presenter? Be the first one to ask!

Ask new question

← Back

Help others understand your question by giving clear context.

Write your question here...

me@email.com - What's IIP?

Submit

*Immunization Integration Program (IIP)*

# *How do you define bulk query?*

**Menti question, free text, scrolling responses**

# *How do you (IIS) receive bulk queries today?*

## **Menti slide – Multiple Choice – bars, allow multiple options**

- We don't
- Serial single HL7 v2 messages via SOAP, CDC WSDL
- Flat or delimited file exchange
- Batch HL7 v2 messages in a single text file
- Subscription services
- Bulk FHIR
- Something else (unmute yourself to speak, enter in Q&A or chat)

# *Are you using your production or parallel system to respond to queries (any, including all queries)?*

**Menti question, multiple options (choose one or more), dots accessing impact on system - provide several options**

- *We use our transactional production system also used for VXU-ACK*
- *We have a dedicated query-response (QBP-RSP) environment*
- *We have a dedicated bulk query environment*
- *We use an analytical environment to support queries*
- *We do something else (unmute yourself and speak or enter in the Q&A)*

# *What barriers exist to bulk query -response?*

**Menti question, free text, scrolling responses**

# *What is your (IIS) familiarity with FHIR bulk query?*

## **Menti slide – Multiple Choice – bars, allow multiple options**

- Today is the first time I've heard of it
- Vaguely Familiar
- Started Exploring/reading about it
- Tinkering – trying it out in a test environment
- I'm implementing this functionality now

# *How do you see FHIR playing a role in bulk query?*

**Menti question, free text, scrolling responses**

# *Thank You!*

<https://www.himss.org/what-we-do-initiatives/immunization-integration-program> (search “HIMSS IIP”)

- Floyd Eisenberg, MD, MPH, AIRA Consultant – IIP
  - [feisenberg@iparsimony.com](mailto:feisenberg@iparsimony.com)
- Damon Ferlazzo, MPA, AIRA Business Analyst – IIP
  - [dferlazzo@immregistries.org](mailto:dferlazzo@immregistries.org)
- Stuart T. Weinberg, MD, FAAP, FAMIA, IIP Bulk Query Chair
  - [stwmd@stwmd.net](mailto:stwmd@stwmd.net)