



AIRA
AMERICAN IMMUNIZATION
REGISTRY ASSOCIATION

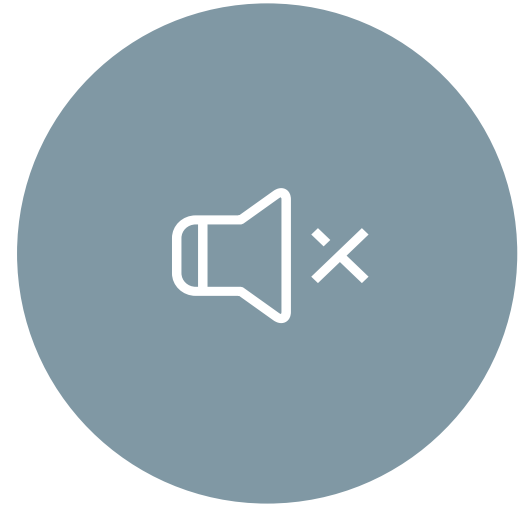
Discovery Session: Electronic Health Records and IIS, Perfect Together

Discovery Session
July 12, 2021
4 PM EST

AIRA Discovery Session



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

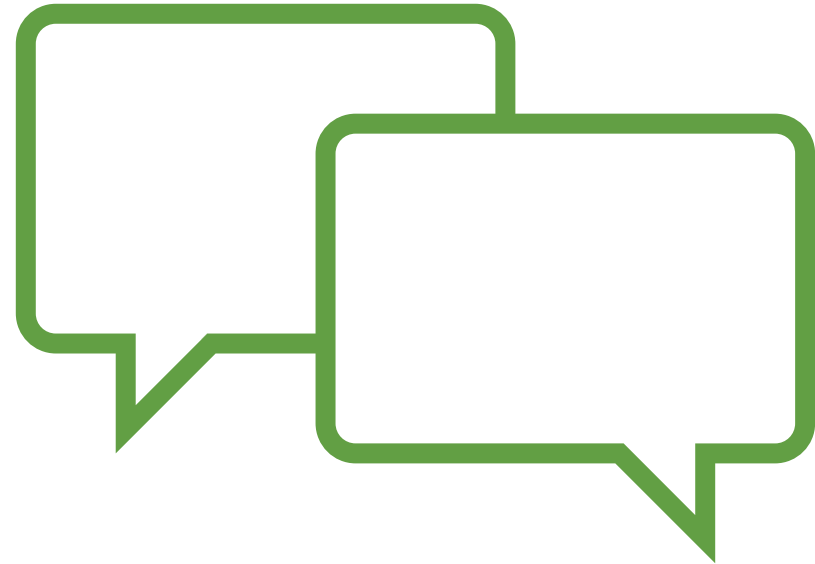


All phone lines
are muted

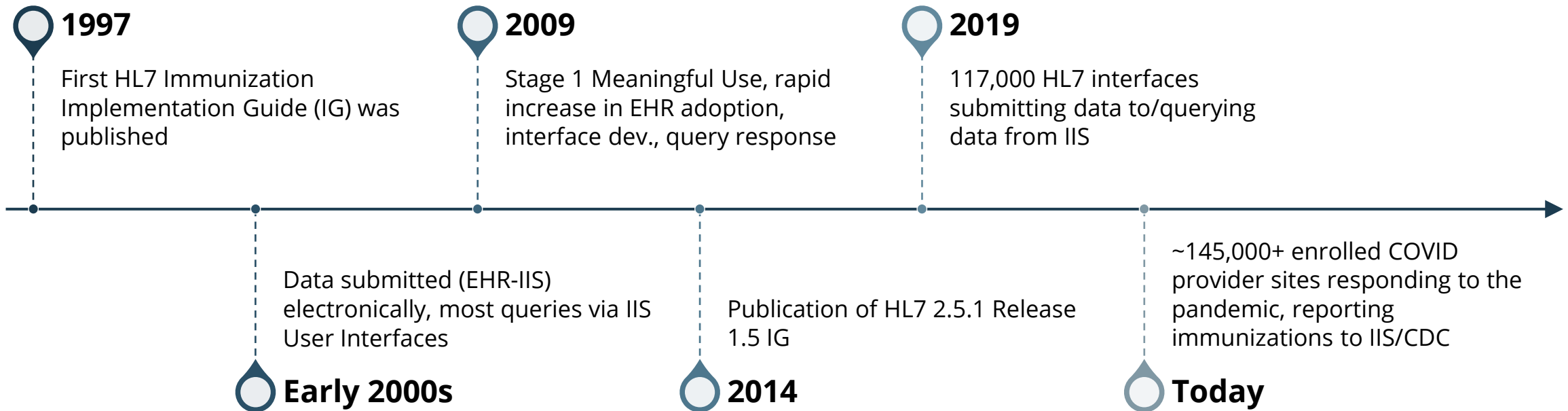


Technical Support

If you experience any technical issues during the meeting, please contact **Sarah Stein** via direct message in the Chat.

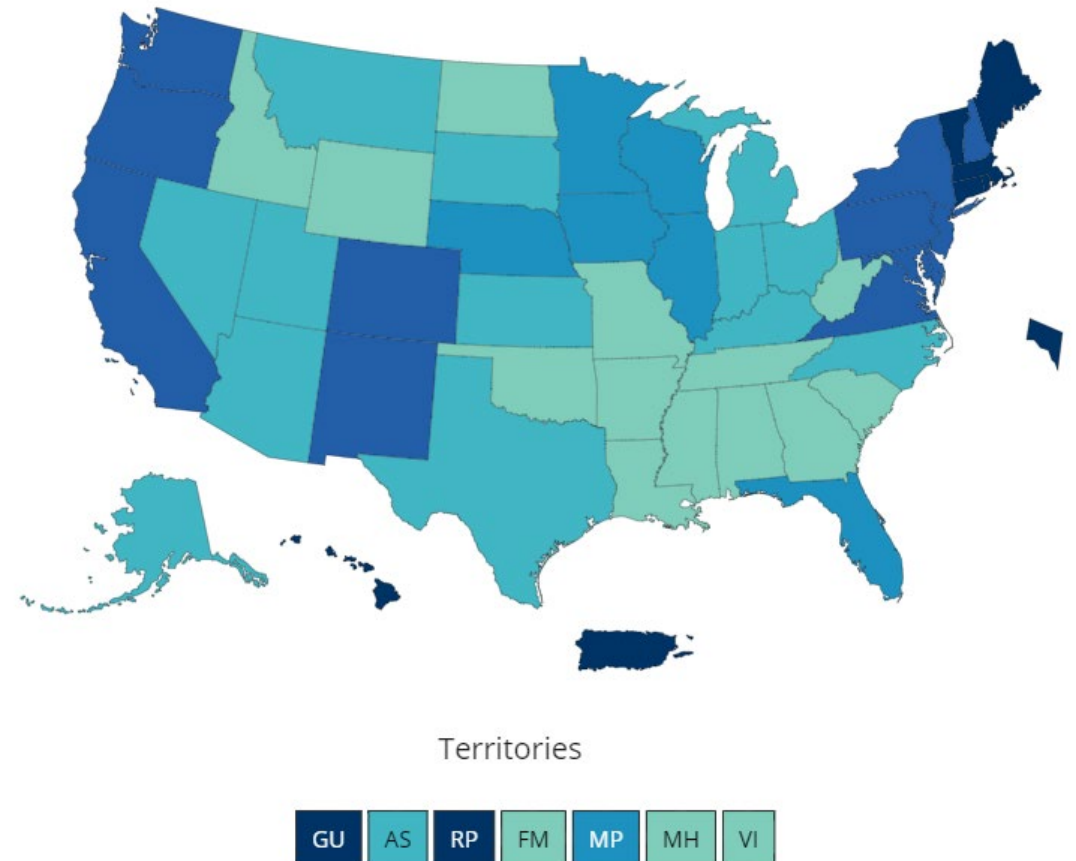


EHR-IIS Interoperability



Outcomes

- EHR-IIS connections have been leveraged heavily through COVID
- IIS are processing hundreds of thousands of submissions and queries per day
- EHRs and IIS are broadly sharing data to ensure patients and populations are up to date



Today's Speakers

- Hans Buitendijk (Cerner)
- David Bucciferro (Foothold Technologies)
- John Stamm (Epic)
- Susan Kressly, MD (Office Practicum)

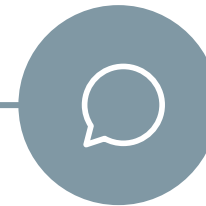


Questions

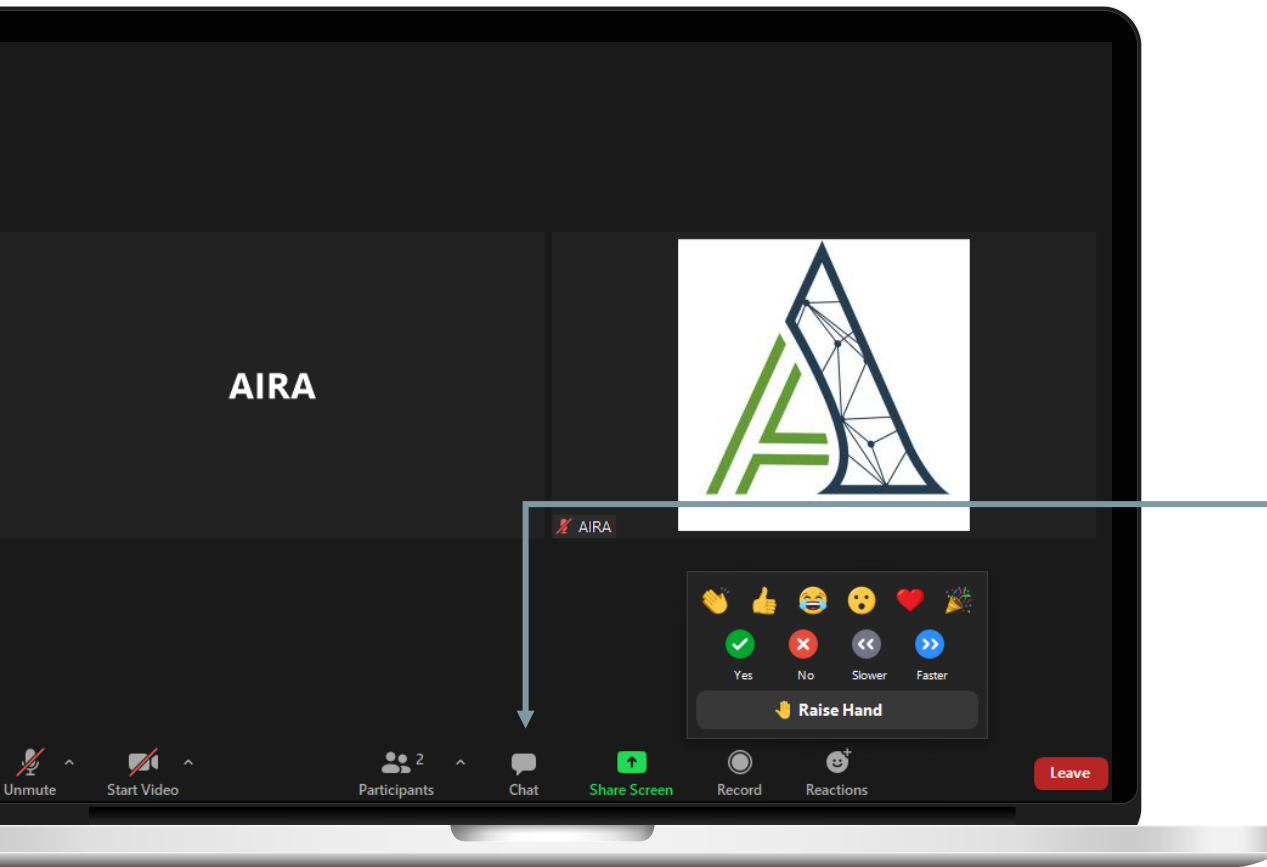
How do I ask a question?

There will be time allotted for Q&A following the presentations.

If you think of a question during the presentations:



Select the chat icon and type your question into the chat box.



Electronic Health Record Association

Overview to the EHR-IIS Interoperability Challenges and Opportunities

Hans Buitendijk, M.Sc., FHL7, Chair EHRA Executive Committee, Cerner

David Bucciferro, Vice-Chair EHRA Executive Committee, Foothold Technology

John Stamm, Epic

Dr. Susan Kressly, Office Practicum

EHRA

HIMSS ELECTRONIC HEALTH RECORD ASSOCIATION

HEALTH RECORD ASSOCIATION

EHR
HIMSS ELECTRONIC

EHRA Makes A Difference

Who We Are

- Nearly 30 EHR developers
- 16 Years Strong and Counting
- HIMSS Corporate Members
- Market products commercially available in US
- Represent the majority of EHR users in the US
- EHR companies of all shapes, sizes, and specialties
- Committed to collaborating on issues that impact collective business and customers

What We Believe

- Collaboration with stakeholders is critical
- EHR adoption is essential to improve the quality of patient care
- EHRs are a key enabler of healthcare transformation
- Fostering safe healthcare delivery and innovation
- Operating with high integrity in the market
- Commitment to users, patients, and families

The EHRA's core objectives focus on collaborative efforts



Accelerate health information and technology adoption



Advance interoperability



Improve the quality and efficiency of care through the use of EHRs

Together We:

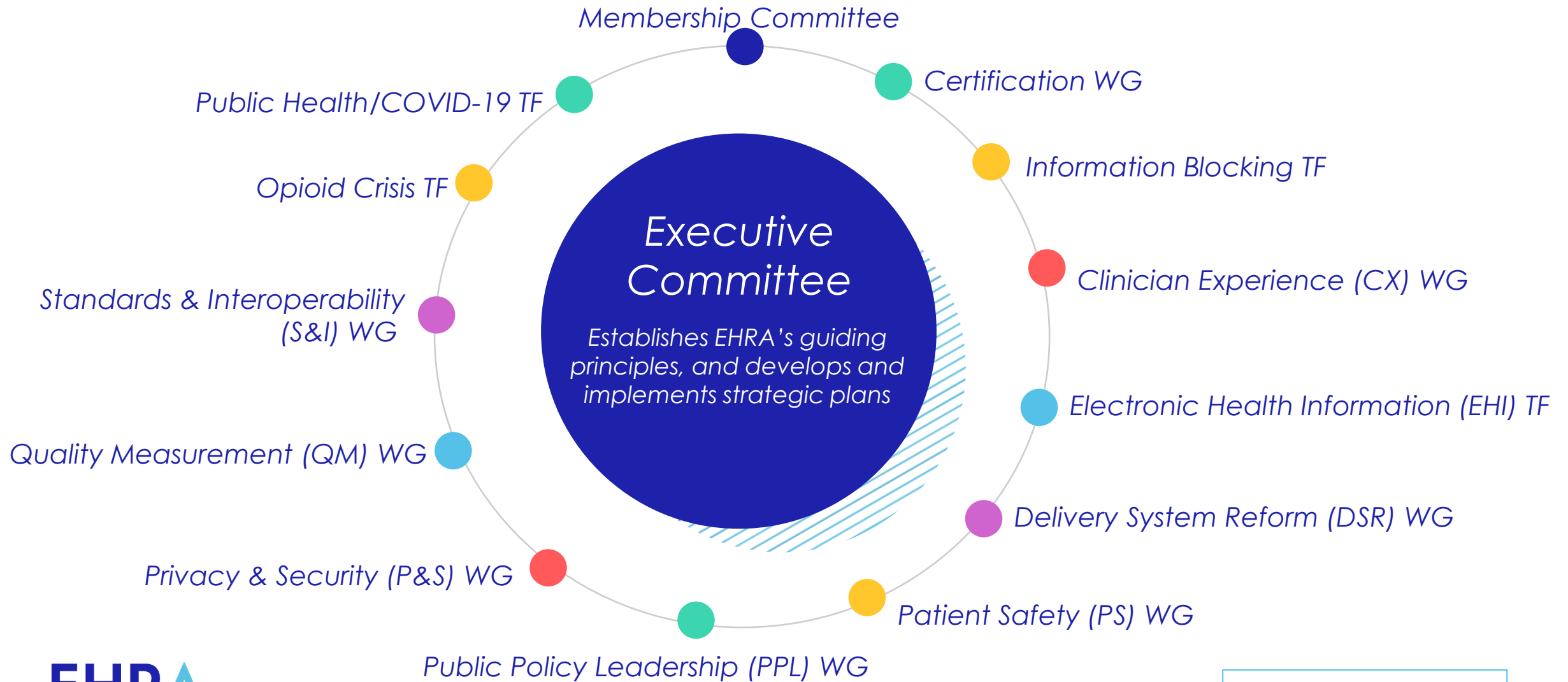
- Advance EHR industry as a whole
- Accelerate safe adoption of EHRs
- Provide collaborative forum for EHR developer community
- Increase value to healthcare organizations and patients
- Improve healthcare quality and productivity

Stakeholder Collaborations

Past, Present, Future

- Federal Government Agencies
 - CMS, CMMI, CDC, FDA, GAO, HHS, OCR, OIG, ONC, etc.
- State Government Agencies
 - NGA, Medicaid Officials, etc.
- Provider Associations
 - AMA, ACP, AAFP, CHIME, MGMA, ADA, AMIA, AHIMA, etc.
- Other Organizations
 - AMA, ACP, AAFP, CHIME, MGMA, ADA, AMIA, AHIMA, etc.
 - AIRA, AQIPS, CSTE, HIMSS IIP, HL7, MITRE, Pew Charitable Trusts, Surescripts, The Sequoia Project, etc.
- EHRA Representation to other organizations
 - CARIN Alliance, CDS Coalition, ECRI Institute, Healthcare Sector Coordinating Council, Health Information Technology Advisory Committee (HITAC), Patient ID Now Coalition, etc.

EHRA Committees, Workgroups & Task Forces





EHR Landscape

David J Bucciferro *Senior Advisor, Foothold Technology*

- Vice-Chair of the Electronic Health Record Association
- Over 30 years with the NYS Office of Mental Health working on program development, compliance, certification and provider quality
- Co-leading task-force a sub-group of the EHRA Opioid Crisis Task Force.
- Vice-Chair of the Patient Safety Workgroup where
- Co-Chaired a workgroup with ECRI on the integration of primary care and behavioral health.

Key EHR Characteristics

- Focused on clinical documentation and decision support
- Used across continuum of care settings
- Used by clinicians and their staff
- May be part of a larger integrated system (including administrative, financial, and specialty modules) and/or connected to other systems to support a provider's organization
- EHRs must meet certified requirements for Promoting Interoperability and other programs
- Supported by EHR vendors

Certification Programs

- **ONC - Public Health Criteria**
 - Antimicrobial Use & Resistance
 - Healthcare Surveys
 - **Case Reporting**
 - **Reportable Laboratory Results**
 - **Syndromic Surveillance**
 - **Vaccine Reporting/Query**
 - ~250 products certified per [CHPL](#)
- **HIMSS IIP - Testing & Recognition**
 - Alternative to ONC Certification

Incentive Programs

- **CMS - Incentive Programs**
 - PI / MIPS / QPP / CMMI
 - Currently optional
 - Public Criterion proposed to be required (four capabilities)
- **States/Jurisdiction**
 - Mandates to report
 - VFC participation requires reporting
 - Electronic transactions optional

Deeper Dive into Two Use Cases

- **Two perspectives:**
 - Larger health system
 - Smaller practice
- **Topics raised generally in play across all EHRs / provider organization**
 - Specifics will vary
 - Not comprehensive

A Health System Perspective

John Stamm *Software Interoperability Engineer, Epic*

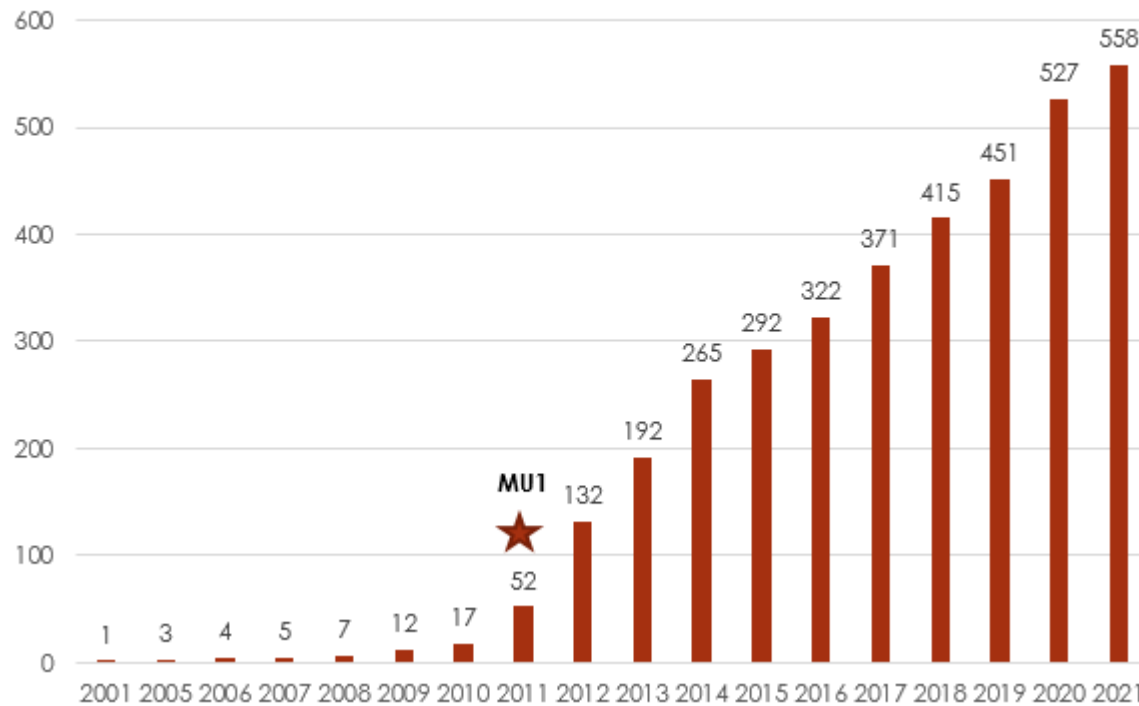
- Software development for Health and Life Safety Systems for 20 years
- Development, design, training owner for EHR system public health interoperability
- Technical co-chair of the IHE Quality, Research and Public Health Committee
- Recipient, 2020 CSELS Director's Award for Innovation

Scope

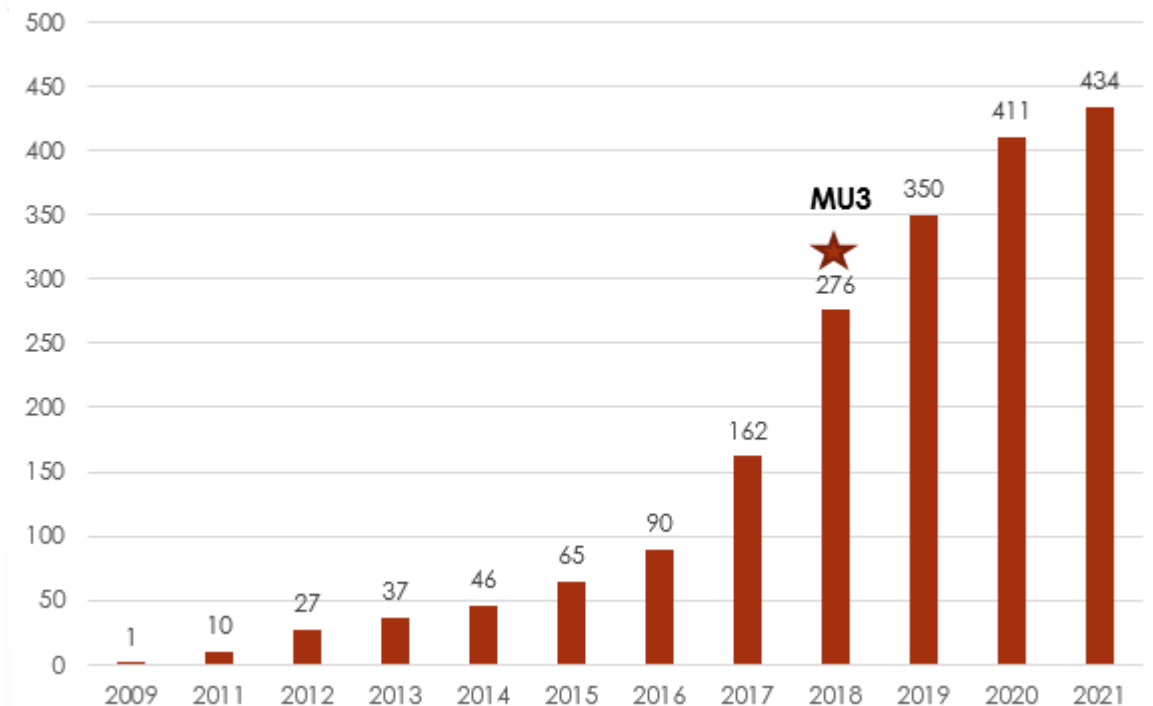
- **EHR Developer**
 - Nationwide
 - Integrated System
- **Shared Experience**
 - Software Development
 - Perspective on Interoperability Standards
 - Implementation Lessons Learned

Growth of Integration

Outgoing Vaccination Administration



Vaccination History Query



System Ownership

- **EHR**
 - Data Structures
 - Build Recommendations
- **Customers and Patients**
 - Facility Structures
 - Clinical Data

Decision to Integrate

- **Organization**
 - Which registries?
 - Staffing and prioritization?
- **EHR**
 - Encourage admin and query
 - Lower barriers
 - Shared setup for a given registry
 - Testing tools
 - Certification Endpoints

Query Workflow

- **Widespread - Manual**
 - When needed by end user
- **Newer - Automatic**
 - Before clinical activity
 - ED Admission
 - Appointment Check-in
 - Routine Process
 - Predefined Patient Cohorts
 - Population Health

Error Handling

- **Interoperability Staff**
 - Error resolution tool suite
- **Error Sources**
 - Transaction Structure
 - Communications or Acknowledgements
 - Local System Build

Propagation of Data

- **Systems**

- Local
- Applications
- Payers
- Providers
 - eHealthExchange/Carequality/Commonwell
 - HIE
 - Direct

- **Care Gap Analysis**

A Practice Perspective

Sue Kressly, MD, FAAP *Medical Director, Office Practicum*

- Pediatrician HIT Subject Matter Expert for American Academy of Pediatrics
- Involved in Immunization and IIS work for 15+ years
- Founding partner of 4 physician independent practice in PA: beta tested early bi-directional IIS interface
- Medical Director, Office Practicum (Pediatric-specific EHR)

EHR/Practice Partnership

- EHR Provides Tools for Practices to Use/Not Use
- Some clients on-premise servers and control when/if they take updates
- Functionality: combination of database, middleware and connections
- Information/education provided to practices, but not always utilized
- Requires collaboration/coordination between practices, EHR vendor and IIS
- Small, independent practices often have limited IT expertise/sophistication and resources which presents additional challenges for the practice and EHR

Specialty EHRs: Unique Needs/Functionality

- Pediatric EHR Functionality in product features prior/ILS functionality: who is source of truth?
 - Vaccine inventory management including private/VFC
 - ACIP forecasting
 - New vaccine products
- EHRs that support other specialties may not prioritize immunization information exchange which has clinical implications on closing care gaps

Onboarding: Size of Practice/EHR Implications

- Must prioritize what work gets done: who funds the work?
- Limited resources: can cause further care disparities
- Switching EHRs
 - Practice may lose IIS connection and be put “back in the queue”
 - Backwards compatibility an issue (EHR may have older technology but IIS may only onboard new practices with newer version and even though “practice” is not new to IIS, the EHR/practice pair is new)
- Data conversion challenges
 - Converted data may not meet “new” standards
 - Report “net new” or “all vaccines”?

Ongoing Education/Support

- As EHRs and IIS change functionality/make improvements: who does and should provide coordinated communication with practices?
- When data transmission fails:
 - Who should notice first?
 - How should communication and troubleshooting be coordinated?
- When there are failure messages or success reports:
 - Who gets them? Who should get them?
- Problems/troubleshooting
 - Whose responsibility is it that accurate information is being exchanged

Collaborative Cooperation: Patients Win!

- The more policy is aligned, the more cost effective it is to implement and support data exchange for **every patient**
- The more that functionality is harmonized, the less obstacles to successful ongoing information exchange
- The more that communication is collaborative, the less opportunity for missed or misunderstood information
- Important to remember: Immunization data exchange is only a very small PART of EHR complexity and care delivery
- Also important to remember: immunization data goes OTHER places with additional impacts (to patient portals, etc.)



Challenges and Opportunities

Challenges: Configuration and Onboarding

- Configuration points
 - VFC - field locations, historical documentation, adults/over 18
 - Consent - Data Capture, Age
 - COVID - Occupation, Priority Group
 - Streamlined onboarding for existing technology partners
- Jurisdictional differences
 - Communication Technology - CDC WSDL
 - Support of Query
 - Limitation on Query Volume
 - Manual / 3rd Party reporting for COVID
- Interpretation of CDC Implementation Guide
 - Application Warning Acknowledgements
- Timely availability of seasonal and updated data
 - ACIP guidance on new vaccines, updates, next flu season, etc.
 - New codes and guidance

Challenges: Incomplete Data

- Demographics
 - Multiple patient matches
 - Low confidence matches
- Missing patient history
 - Cross state queries and moves
- Non discrete data
 - Immunization/medication identification
- Missing administrations
 - Retail Pharmacies not mandated to report
- Non-US vaccine
 - Approved coding/data sources
- Non-Immunization specific data
 - Extended demographic data
 - Health screening results
 - Related therapeutic interventions

AIRA Leadership Empowers

- Consensus Building
 - Priority Groups
 - Application Warning Acknowledgements
 - Guidance for Onboarding
- Patient Matching Guidance
- Industry Initiatives/Collaborations
 - IIS Assessment
 - IZ Gateway
 - HIMSS Immunization Integration Program (IIP)
 - IIP Testing and Recognition initiative has been approved by the Office of the National Coordinator for Health Information Technology (ONC) as an alternative testing method for (f)(1) certification criteria within the [ONC Health IT Certification Program](#).

Opportunities

- Early and direct collaborations
 - IIS, Administering Clinicians, and HIT Suppliers (EHR, IIS technology)
 - SDOs
 - Focusing on root cause upstream
- Streamlined onboarding
- Alignment with case reporting
 - Priority groups, health screening, therapeutics, occupation
- Patient identification/matching and record location
 - Within jurisdictions
 - Across jurisdictions
- Consent management
- Cross-jurisdiction queries

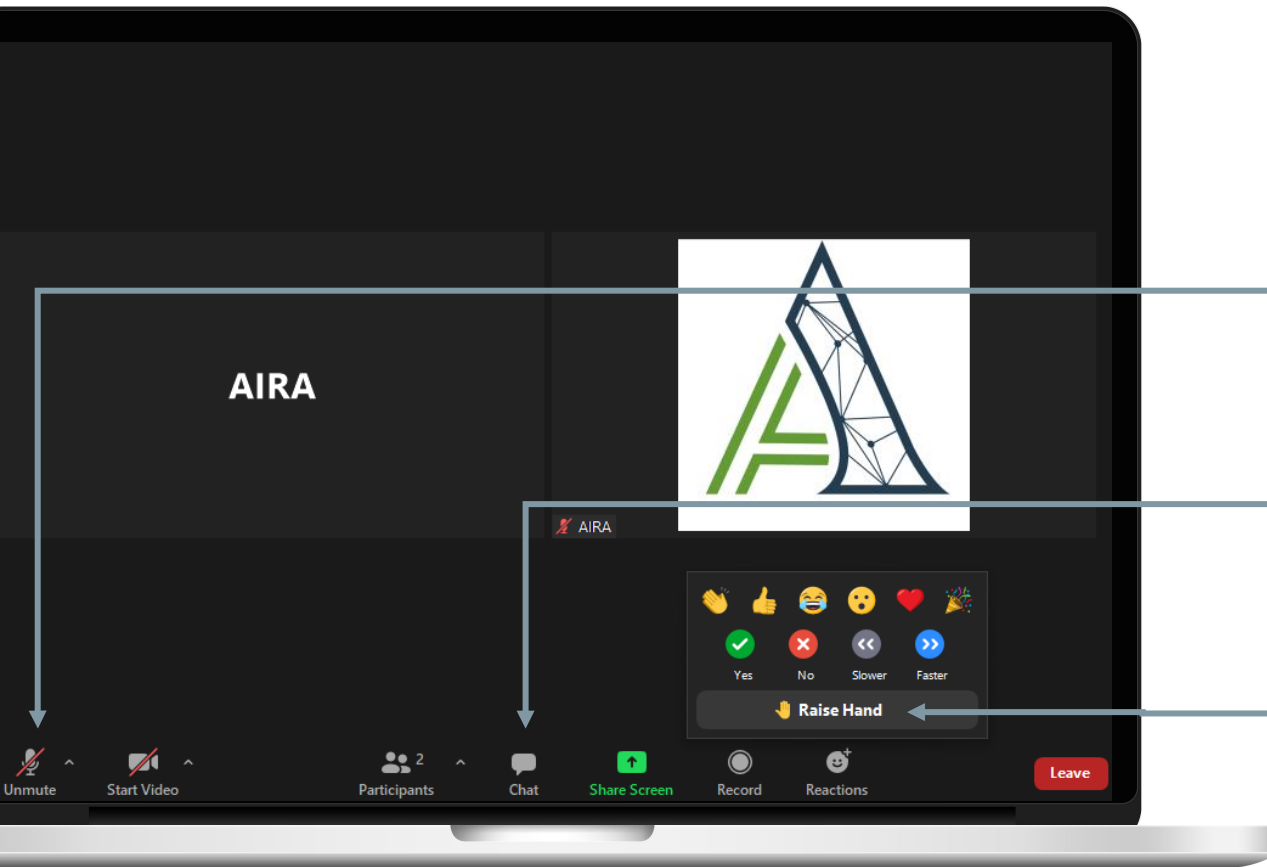
Resources

- [EHRA Website](#)
- [EHRA Blog](#)
- [COVID Resources](#)
- [Public Health System Testimony](#)
- [Health IT Recommendations to Biden Administration on COVID-19 Vaccination Distribution and Administration](#)

EHRA Program Manager:

Kasey Nicholoff, knicholoff@ehra.org

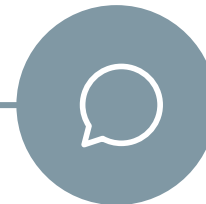
Question & Answer



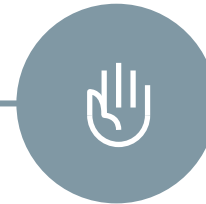
How do I ask a question?



Select the unmute icon and ask your question verbally.




Select the chat icon and type your question into the chat box.



Select the reactions icon, select "Raise Hand," and you will be called on.





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

Please complete a brief evaluation survey.

The next Discovery Session
will be on August 23, 2021