



Transforming Health through a Digital Bridge

Date

What is Digital Bridge?

- A partnership of health care, health IT and public health organizations
 - Goal is to ensure our nation's health through a bidirectional information flow between health care and public health
 - A forum for sharing ideas
 - An incubator for growing projects that meet this vision
- Funded by the Robert Wood Johnson Foundation and the de Beaumont Foundation. Program management provided by Deloitte Consulting and the Public Health Informatics Institute.
- Initial focus: electronic case reporting (eCR)

Participating Organizations



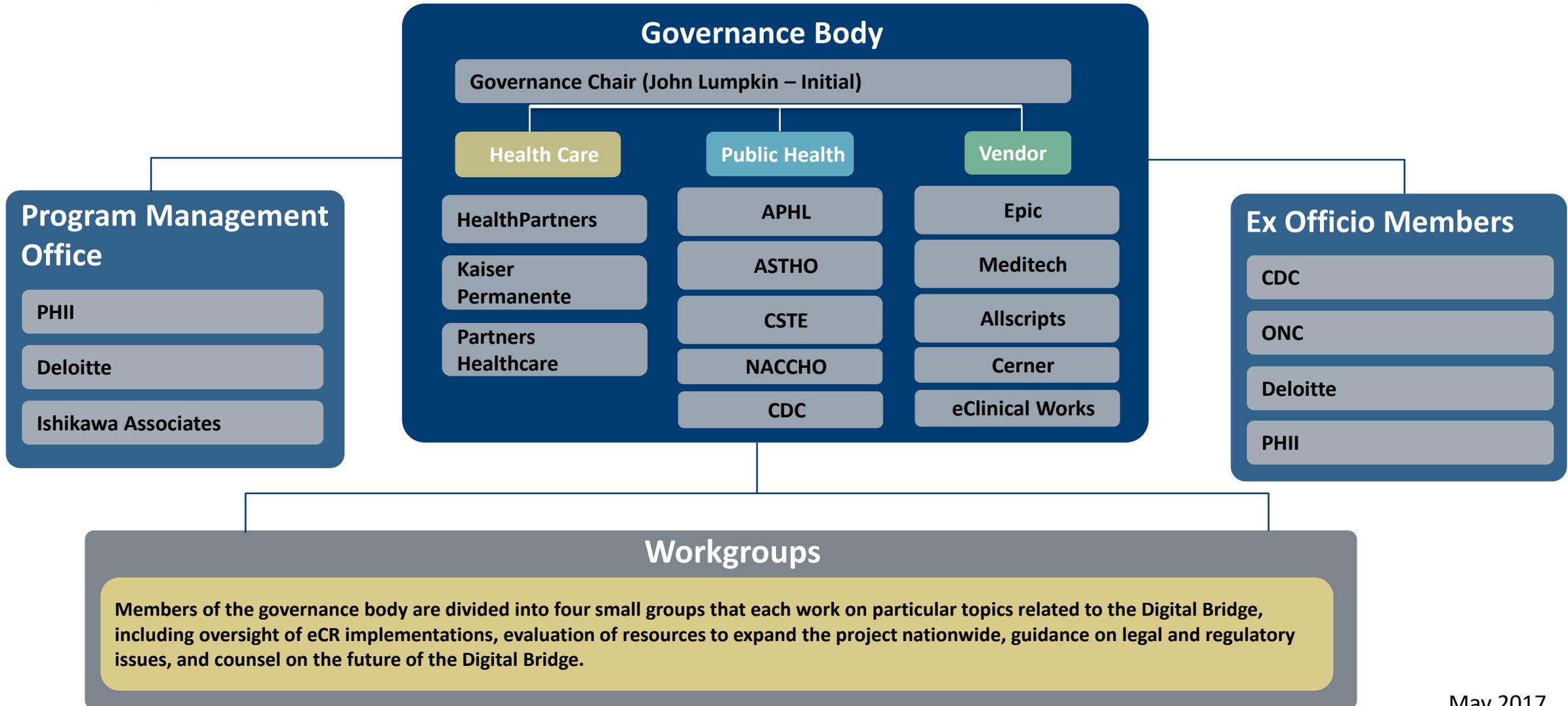
Funders



Project Management Office



Organizational Structure



Benefits to the Digital Bridge Approach

- A unified approach to information exchange eases the burden and costs for all stakeholder groups.
- Lays the foundation for greater bidirectional exchange. Clinicians will be easily informed about population health, environmental risks and outbreaks.
- Bidirectional data exchange can eventually encompass non-communicable diseases.



Electronic Case Reporting (eCR)

The automated generation and transmission of case reports from the electronic health record (EHR) to public health agencies for review and action.

How Electronic Case Reporting Works



01

Provider Enters Information

Health care provider documents patient visit information into electronic health record as part of regular workflow.



02

Health Technology Sends Information

Criteria in electronic health record or health information exchange triggers an electronic case report (eCR) to automatically send.



03

Determine Reportability

Case report is validated and if reportable, is forwarded to the appropriate agency. Health care provider is notified if disease case is submitted.



04

Analysis and Evaluation

Public health professionals receive the disease case for analysis and evaluation.



05

Additional Feedback to Provider

In the future, the provider can choose to receive guidance on patient care and outbreak response from public health.

Value of Electronic Case Reporting (eCR)

- More complete, accurate data in real time for action
- Early detection of cases allows
 - Earlier intervention
 - Diminished transmission of disease
- Improves detection of outbreaks
- Responds directly to local and state partner needs
- Diminishes burden on health care provider to report
- Directly links health care to population health

Digital Bridge eCR Approach

Digital Bridge Approach for eCR

- An interoperable, scalable, and multi-jurisdictional approach to eCR.
- Not a *new* technology product. The Digital Bridge approach is based on existing eCR tools and standards, and seeks to support their development and adoption.
- eCR is incorporated into the EHR as a background operation requiring little or no effort on the part of the clinical end user.
- The approach will be tested through seven implementation sites in 2017.
- The implementation sites' technical solution will remain EHR vendor-agnostic so that any vendor can adopt the solution and pass on this functionality to their clients.

eCR Implementation Sites

eCR Site Participation

Public Health Agency	Health Care Provider	EHR Vendor
California	UC Davis	Epic
Kansas	Lawrence Memorial Hospital	Cerner
Massachusetts	Partners HealthCare	Epic
Michigan	Local Public Health Clinics	NetSmart/HIE-MiHIN
New York City	Institute of Family Health	Epic
Utah	Intermountain Healthcare	Cerner

Site Participation

- Sites will support five conditions initially: pertussis, gonorrhea, chlamydia, salmonellosis, and Zika.
- Participating sites will participate in eCR evaluations.
- Any public health agency participating in eCR outside of Digital Bridge is encouraged to continue to do so.

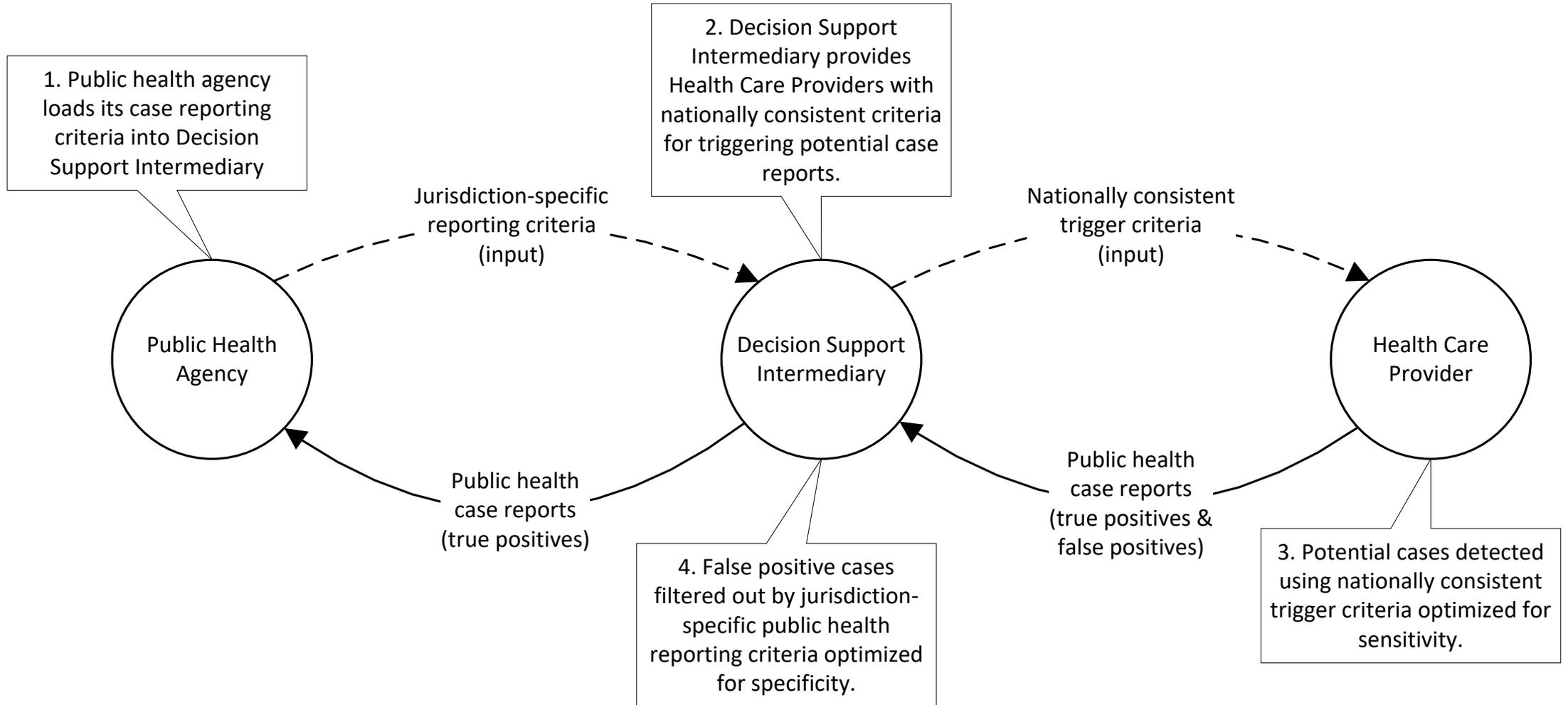
Workgroup Activities

Workgroup Activities (2017)

- **Implementation task force:** oversees eCR implementation and determines if sites have met the reportable conditions business requirements.
- **Evaluation committee:** assesses resources needed for nationwide expansion and measures outcomes of the project to recommend improvements.
- **Legal and regulatory workgroup:** identifies and defines alternative technical and legal approaches to eCR and advises the legal SME in work.
- **Strategy workgroup:** devises strategic goals and objectives on the future of Digital Bridge and its services and recommends strategies.

Legal and Regulatory Workgroup

eCR Overview



Long-Term Strategy

During initial eCR implementations (aka “short-term”), Digital Bridge will also plan longer term strategy for legal and regulatory compliance:

- Increase acceptability among health care, governmental partners
- Increase scalability through reduction of point-to-point agreements
- Inform evolution of eCR technical architecture
- Will likely entail examining “trust networks”, e.g.:
 - Sequoia/eHealth Exchange (<http://sequoiaproject.org/ehealth-exchange/>)
 - DirectTrust (<https://www.directtrust.org/>)

Strategy Workgroup

Strategy Workgroup Activities

- Developed Digital Bridge roadmap that outlines major milestones and plans for upcoming phases.
- Developing a Digital Bridge sustainability plan that includes recommendations for robust business and financial models to support long-term sustainment.
- Developing a framework to determine the next use case for Digital Bridge.
- Finalizing a Digital Bridge ROI model.

Stakeholder Participation and Resources

- We value the input of a diverse audience. Dialogue is encouraged with governance body representatives. Feedback and questions can also be sent to info@digitalbridge.us
- The Digital Bridge intends to be transparent. See www.digitalbridge.us for:
 - Workgroup updates, completed products and resources
 - Governance meeting notes and slides
 - Upcoming events and news
 - Mail list sign-up

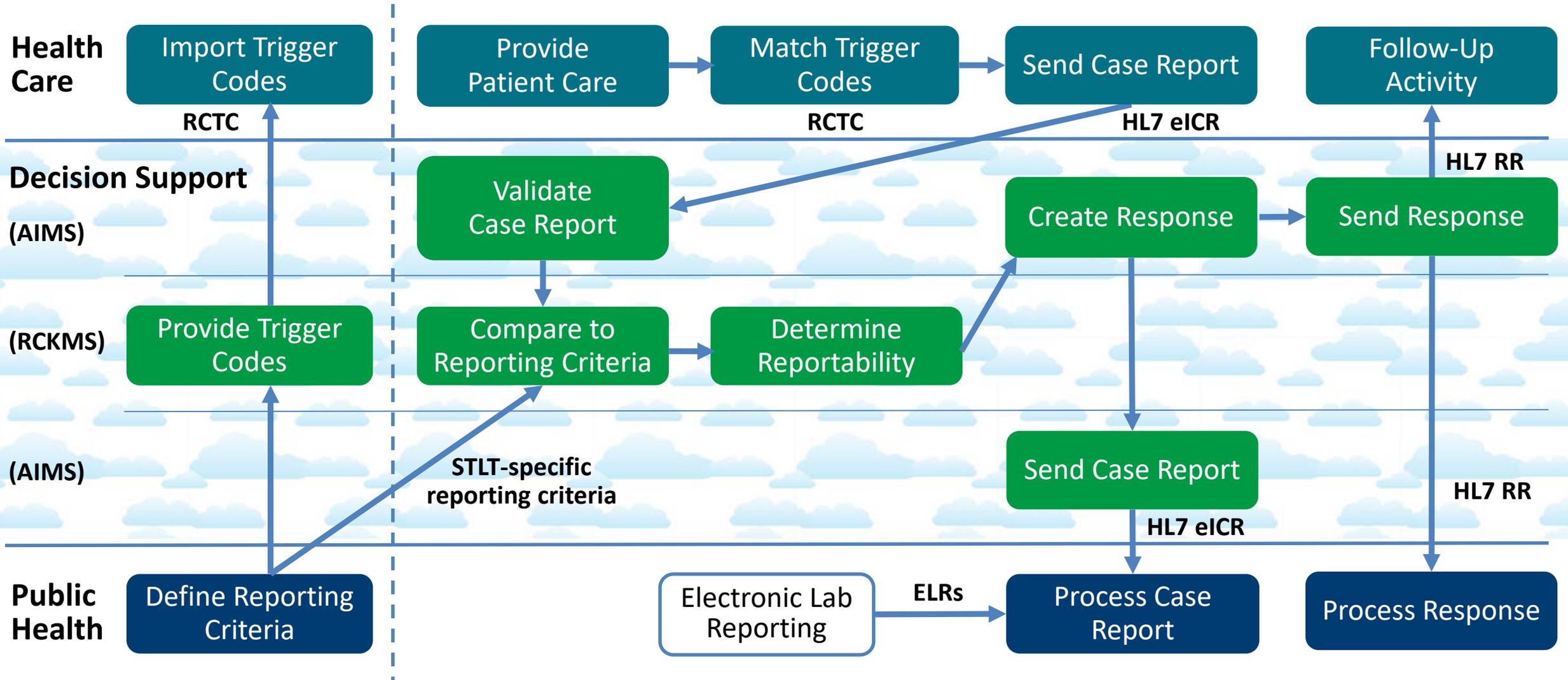
Thank you!

For updates: www.digitalbridge.us

For questions and input: info@digitalbridge.us

Additional Slides for Reference

eCR Process



Digital Bridge Accomplishments

Phase I	Phase II	Phase III
<ul style="list-style-type: none">• Established vision• Created project charter• Formed governance body	<ul style="list-style-type: none">• Formed distinct workgroups• Developed functional requirements and a technical architecture diagram• Created initial sustainability plan and communications plan• Shared preliminary legal recommendations• Selected seven eCR implementation sites• Held first successful in-person governance body meeting	<ul style="list-style-type: none">• Established new workgroups (implementation taskforce, evaluation committee, strategy workgroup and legal and regulatory)