Meeting Minutes

Digital Bridge Interim Governance Body

Meeting Information

Objective:	(1) Describe overall initiative plans, progress and timeline, (2) identify and discuss eCR implementation progress from technical and legal perspectives, (3) discuss possible ways to address alternate eCR approaches, (4) provide insights to improve the development of strategic plans for the Digital Bridge, and (5) discuss and identify ways that the governance body has and may continue to support communication goals.

Date:	September 7, 2017	**Location:**	1-866-516-9291
Time:	12:00 – 1:30 PM EST	**Meeting Type:**	Virtual
Called By:	Project Management Office	**Facilitator:**	John Lumpkin
Timekeeper:	Charles Ishikawa	**Note Taker:**	Jelisa Lowe, Hoa Truong
Attendees:	See attached		

	Agenda Items	Presenter	Time Allotted
1	Call to Order and Roll Call	John Lumpkin / Charlie Ishikawa	3 min
2	Agenda Review and Approval	John Lumpkin	2 min
3	Overall Status Report: Initiative Roadmap and eCR Timeline	Jim Jellison	5 min
4	Progress: Wave 1 and 2 Implementations	Benson Chang / Rob Brown	35 min
5	Update: Legal and Regulatory	Walter Suarez	10 min
6	Issue Brief: Alternative eCR Approaches	Jim Jellison	10 min
7	Digital Bridge Funding Analysis	Ben Stratton / Benson Chang	5-10 min
8	Feedback on Funding Analysis	Governance Body	10-15 min
9	Digital Bridge Communications	Jessica Cook	10-15 min
10	Review and Adjournment	Charlie Ishikawa / John Lumpkin	Remaining

Decisions

1	None.

New Action Items

	Responsible	Due Date
None.		

Other Notes & Information

1. **Call to Order** – Quorum was not met (however, there are no items on the agenda that require a vote).
2. **Agenda Review and Approval** – Dr. Lumpkin reviewed the agenda. There were no additions.
3. **Overall Status Report: Initiative Roadmap and eCR Timeline –**
    A. **Project Timeline:** The project management team has developed an updated timeline that reflects the current state of the workgroups and the eCR implementations. As this year closes, Digital Bridge will be deciding on the next use case and discussing plans for the transition of eCR to a sustainable foundation. There will be an in-person governance body meeting in January where most of these decisions will be made. The PMO is thinking through both a short-term approach for the eCR implementation and a longer term legal framework for future eCR implementations. That will entail cross pollination with discussions on how the eCR technical approach will evolve. There will be at least one Wave 1 implementation site running by the end of this calendar year—but no later than Feb. 2018—with initial conditions that the decision support intermediary (DSI) is ready to support. Concurrently, there will be evaluations of those implementations. An evaluation plan is expected to be ready in October, and that plan will be executed with the sites that are in production.
4. **eCR Implementation –**
    A. **Progress: Wave 1 and 2 Implementations:**
        - **Risks and Issues:** Since the last meeting, there has been full mitigation for risk number one: Epic has pushed up their timeline, and that software is now available for implementation. The implementation taskforce is working with partners at APHL and CSTE to assess readiness and determine if any changes are needed to the implantation timeline. The team is also currently going through additional work and analysis with Cerner and Intermountain on their approach to eICR.
        - **Site Status:** Rob Brown gave a high-level overview of current implementation site activities. The team is making good progress on implementations besides risks and issues. Cerner and Intermountain's development work can be used for Kansas, and its public health partner has completed connectivity with AIMS. The team is working with two sample eICRs they have for Wave 1 sites as test scenarios while continuing to wait for the full test data package.
        - **Implementation Timeline:** Nine test scenarios have been sent to Lantana, and CDC and CSTE are working on narratives from them. The completion date is by the end of September. Performance testing. Performance testing is an iterative process, and four have been completed so far.
    B. **Legal and Regulatory Update:** Walter Suarez reviewed the three legal options for implementing eCR. After completing review of these options, the legal and regulatory workgroup started a dual path of work. One is short term between now and November and involved DWT drafting agreements for the sites and conducting legal work using the approach outlined in options three. They will follow up with legal contractual points of contact and prioritize actions with the implementation sites. The next group meeting is Sept. 13. Draft agreements will be ready for review and later executed in Nov. The long-term strategy, which will take us to Q1 of 2018, considers work for options one and two and gathers feedback from experience of implementation sites to develop a final scalable approach that will be recommended to the governance body after the analysis is complete.
    C. **Alternative eCR Approaches:** The Michigan site proposed two projects. Both leveraged a health information exchange (HIE), MiHIN. In one approach, MiHIN would serve as an intermediary to the DSI. The other approach had MiHIN sourcing the eCRs from clinical documents received from the provider. Stakeholders part of the Digital Bridge collaborative expressed concerns about the data quality—completeness, timeliness and scalabity—of the eCRs from an HIE if we found that different jurisdictions and clinical partners are implementing eCR in two heterogeneous fashions. Michigan withdrew the

controversial approach, but it left key implementation questions unanswered: (1) Can the alternative approach meet mission-critical requirements for reportable conditions surveillance? (2) Is the alternative approach a consistent, standards-based and nationally scalable solution? (3) When opinions on such questions differ, how does the Digital Bridge collaborative make a decision?

Digital Bridge will continue to support Michigan in the other approach. What we're finding is that Digital Bridge has increased the awareness of electronic case reporting and the technical infrastructure, and it's getting attention and adoption from clinical entities and from state and local public health agencies. This fosters a constructive conversation around how eCR could evolve. It is likely that HIEs will need to play a role. Some jurisdictions will likely be required to use HIEs for routing or for a source for eCRs. In some instances, it's not easy to distinguish a large, integrated delivery network from an HIE.

D. **Discussion on Issue Brief:**
   - Mary Ann Cooney: When will we have an opportunity to thoroughly discuss these three questions?
   - Jim Jellison: These could be substantive enough – could form a workgroup, but that's to be determined. We will need to include technical and legal/regulatory considerations. One dependency is the work on the legal framework and what technical decisions need to be made. We can launch workgroup by the end of the calendar year, but we need to learn about the issues that need to be addressed. There could be more issues/details than the three here.
   - Mary Ann Conney: I'm especially interested in the third question for if any site comes to us. The governance body is the decision making group, but it needs information to do so.
   - Art Davidson: It's important to recognize that local conditions are drivers. As long as they adhere to the standards that Digital Bridge is setting up, why would we stop them?
   - Dr. Lumpkin: Definitely need to have the conversation. When looking at the three architectures, it's more about what are the standards and robustness.
   - Richard H.: Digital Bridge needs to be prepared to handle what happens in the market and field and be able to address them
   - Walter: It would be helpful for us to have an evaluation checklist on meeting the basic elements and the standards to evaluate alternative approaches, and beyond that, they can do whatever they want

5. **Digital Bridge Strategy –** The strategy workgroup took a slight hiatus in August and has now returned. During that time, the workgroup has been working on ad hoc strategy meetings to talk through deliverables for the fall—one thing is both the Digital Bridge and eCR sustainability plans. Final approval from the governance body is needed by November. The workgroup also worked on a funding model to figure out what it would take to sustain Digital Bridge activities beyond the eCR use case.
   A. **Funding Analysis:** Ben Stratton reviewed the funding dashboard the strategy workgroup designed. It outlines how much Digital Bridge will cost in the future to understand the financial needs for operating the initiative. It takes into account different activities identified as critical for the success of Digital Bridge and its projects. The other aspect of the funding model was looking at different revenue streams that will be able to support Digital Bridge in the future. Those include grants, membership fees, contracts and fee for service.
   B. **Sustainability Plan:** Ben also shared a brief outline of the sustainability plan. It has two parts. The first part will focused on the overall organizational structure and business model for the Digital Bridge. It also includes long-term maintenance and financial support. The second part will focus on eCR.
6. **Digital Bridge Communications –**
   A. **Accomplishments:**
      - Communications plan, supporting materials and visual identity—new website, logo, talking points, etc.
      - Six placements in relevant trade publications mainly geared toward health care and health IT audiences.
      - Presented in over 25 outside presentations and at five major conferences in the last year.
      - Website traffic is steadily growing.
      - Public health support with spreading Digital Bridge content on their own channels to expand reach.
      - Outside firm was hired to develop a communications plan, an infographic, an icon, a messaging map

and a presentation template for eCR.

B. **Challenges:**
   - Large, fragmented audiences.
   - Driving home the message that Digital Bridge and eCR are not the same.

7. **Announcements and Adjournment**
   A. Dedicate governance body conversation around the issue brief and content that was presented
   B. Next meeting will take place October 5.
   C. There will be a two-day in-person meeting in January in Atlanta.

Digital Bridge Issue Brief

Alternatives to the Digital Bridge eCR Approach

Digital Bridge Issue Brief

The purpose of this issue brief is to be transparent in the Digital Bridge initiative and set up a discussion that will inform governing process improvements in the future.

Background

The Digital Bridge initiative seeks a consistent, nationwide and sustainable approach to using health care's electronic health record (EHR) data to improve public health surveillance and action. Electronic case reporting (eCR) was selected as the Digital Bridge's initial use case. From November 2016 through January 2017, Digital Bridge workgroups identified and documented an eCR approach designed to relieve the burden of traditional case reporting and improve reporting compliance. Approved by the Digital Bridge Governance Body for implementation and evaluation in January 2017, this approach will be referred to as the Digital Bridge eCR approach (DB-eCR) in this document.

Issue

A site planning to implement an eCR approach that is an alternative of the DB-eCR was selected for Digital Bridge Phase 3. As planning and preparation work commenced, an issue developed over whether or not to support the alternative approach. The issue concerns three questions:

1. Can the alternative approach meet mission-critical requirements for reportable conditions surveillance?
2. Is the alternative approach a consistent, standards-based and nationally scalable solution?
3. When opinions on such questions differ, how does the Digital Bridge collaborative make a decision?

The issue was settled on July 26, 2017 when the site in question reluctantly withdrew plans to implement the alternative eCR approach, and chose to focus on another implementation that aligns with DB-eCR. The issue's questions, however, were left unanswered.

To illustrate the issue's complexity, information about the alternative eCR approach and perspectives on the issue's three questions are presented in the remainder of this document. An additional examination of the processes used to document requirements and select implementation sites may help determine how governing processes can be adjusted to avoid, or more efficiently address, similar issues in the future[1].

The Alternative eCR Approach: AA-eCR

In March 2017, upon a Governance Body decision to approve a draft eCR implementation plan, a team from Michigan (MI) was invited to be one of seven Digital Bridge eCR implementation sites. The MI site included the Michigan Health Information Exchange (MiHIN), a health information exchange. In its application, the MI site

[1] Relevant questions for an examination of processes include: (1) Did the Governance Body intend to support implementations other than DB-eCR; (2) Did the review process autonomously decide that alternative approach was acceptable and not necessary to convey to the Governance Group in their recommendations or did the review process not identify the differences?

proposed two approaches for generating and provisioning initial electronic case reports (eICRs) to the decision support intermediary (DSI) to meet their needs for reportable conditions surveillance.

The proposed approaches are illustrated in Figure 1 in Appendix A (page 6).

- **Part A: Digital Bridge eCR (DB-eCR)**: eICR generation and provisioning is triggered within the health care facility's record environment, and then it's routed through MiHIN to the DSI.

- **Part B: Alternative Approach (AA-eCR)**: Using clinical and visit data received from a health care facility, eICR generation and provisioning is triggered within the MiHIN environment, and then routed to the DSI.

Question 1: Can the alternative approach meet mission-critical requirements?

AA-eCR deviates from technical specifications determined for the Digital Bridge eCR approach. This deviation, and a methodology to assess the impact of the deviations, has led to concerns by some that mission-critical requirements for reportable conditions surveillance would not be satisfied. Specific concerns included meeting requirements for the timeliness and completeness of case reports. The concerns are described and discussed below[2].

Timeliness

The ability for public health agencies to identify and confirm patients with reportable conditions as soon as possible is a critical first step to protecting public health from disease causing agents. Therefore, it is an eCR business requirement that case reports are delivered in a timely manner.

DB-eCR and AA-eCR approach case reports using different schemes. With regard to timeliness, these schemes differ in two important ways:

- In DB-eCR, eICR generation and provisioning to the DSI occur within a health care facility's patient record environment (see Figure 1). In AA-eCR, those tasks occur within a HIE using post-discharge patient records.
- In DB-eCR, reportability responses are provisioned by the DSI directly to health care and public health (see Figure 1). In AA-eCR, reportability responses are provisioned first to the HIE and then by the HIE to health care and public health.

Concerns and discussion over timeliness

- **Reports will be delayed—potentially in some situations by days for inpatient care—**because eICRs are generated and sent only after patients are discharged.
    - Since data on the timeliness of either approach is limited, it is possible that AA-eCR reports will meet eCR requirements and timeliness expectations. Also, since the vast majority of cases will be found in ambulatory care settings, post-discharge data will be available in the HIE on the same day of the visit.

[2] The concerns and discussions are adapted from comments on an initial draft of this issue brief.

- **Delays may fail to meet legal reporting requirements,** because some case reports must be made at the time diagnostic laboratory tests are ordered or before a condition is confirmed (e.g., Pertussis, Measles, or Zika).
  - An eCR system that fails to meet legal reporting requirements is a significant problem, and the MI site is investigating other means for triggering eICRs in these cases.
  - It is important to acknowledge, however, that the majority of public health agencies also mandate telephone reports of selected reportable or suspect cases and receive laboratory results via electronic lab reports. These systems are redundancies and there is no intention or expectation that they will be supplanted by eICR reports in the majority of cases.
- **Delays described above will attenuate eCR value** because case report delays will reduce the likelihood of proactive case management[3], and it will forestall supplemental data collection and manual eICR initiations.
  - Since this concern makes assumptions about case report delays that are disputable, the claim that eCR value will be attenuated by AA-eCR may not be true for the majority of case reports.

Completeness

It is critical that health care providers and public health agencies can consistently communicate essential patient and case information for reportable conditions surveillance. It is a eCR business requirement that case reports must provide a set of minimum data elements in an eICR.

DB-eCR and AA-eCR collect eICR data from a health care facility's records in different ways. With regard to completeness, these schemes differ in one important way: in the AA-eCR approach, eICR data will be assembled from using data that a health care facility provides through continuity of care documents (CCDs).

Concerns and discussion over completeness

- **CCDs are an inconsistent means for collecting data for eICRs**, because there is an absence of CCD standards, and there is considerable variation in implementation and use.
  - Standardized data captured in CCDs are already being exchanged between health care facilities and MiHIN.
- **eICRs generated with CCD data may be incomplete**, because procedures that create CCDs do not gather a few required eICR data elements. Furthermore, since standards for CCDs are not maintained or enforced through health IT certification, there are future data elements that CCDs will never contain (e.g., history of present illness, reason for visit, patient class, and pregnancy data).
  - It is important to note that because required eICR data may not be captured during patient visits, DB-eCR and AA-eCR eICRs may be equally incomplete. There is anticipation that the available information for a patient will, in fact, be more complete at the time of discharge document generation.

[3] Proactive case management includes the possibility that a health care provider would receive a reportability response before a patient has been discharged from care.

Question 2: Is the alternative approach a nationally scalable solution?

Part of the issue over whether limited resources should be used to implement AA-eCR was a question over the AA-eCR's scalability for national implementation. As the question was discussed within the Digital Bridge eCR implementation taskforce, two conflicting perspectives emerged. One perspective contented that the approach was scalable, while the other argued the opposite.

Subsequent to these discussions, CSTE surveyed their membership to collect information on if and how jurisdictions plan to utilize a HIE to support eCR. Aggregate results of this assessment are included in Appendix B on page 7.

To illustrate the depth and complexity of this question, statements that were made from both perspectives are presented below. Please note that this issue brief does not question nor support the validity of these claims, and that how the differences in perspective can be resolved is the issue's third question (discussed below).

AA-eCR is a scalable solution, because…

- An existing data exchange is leveraged.
- Existing legal agreements are leveraged.
- It does not require that all of the certified electronic medical record systems (beyond the three in the Digital Bridge) develop, test and implement a new messaging feature within the HER.
- There is faster scalability within the state if there are only one or two health care provider organizations in the state, or the CCDs used for creation of the eICR are truly standard between the providers within the state (see Appendix 2).
- The approach will be applicable to states with similar HIE Infrastructure.

AA-eCR may not be a scalable solution, because...

- It is unclear whether the proposed CCDs contain all the required data that public health has requested.
- CCDs used by clinical care/EHR vendors may not be sufficiently standardized to allow HIEs to create the eICRs without substantial upfront work with the data from each separate health care provider.
- The number and geographic coverage of HIEs with sufficient technical expertise and resources to implement AA-eCR is low and risks encouraging one-off solutions that work effectively locally but do not build towards a nationwide system.
- It is unclear who will pay for HIEs to do the technical work required for triggering an eICR creation beyond Michigan.

Question 3: When opinions differ, how does Digital Bridge make a decision?

The issue of the alternative eCR approach emerged as the eCR implementation taskforce proceeded with its charge. As the only Digital Bridge workgroup charged with technical oversight responsibilities, the taskforce worked to clarify the issue and find a resolution. When it became clear that there were two perspectives that could not be easily reconciled, the taskforce referred the issue to the Governance Body. If the MI site had not withdrawn their plan to implement AA-eCR, then the Governance Body would have faced a question of how to resolve the issue.

There are at least two ways that the Governance Body could have responded to this question. The options are:

- Form a technical workgroup to review and address questions regarding timeliness of reports to public health, completeness of the requested data and scalability.
- Decide the questions and issue within the Governance Body.

These options should be discussed, and other options should be identified by the Governance Body in order to guide how similar issues are settled in the future.

As the implementers at the MI site continue to collaborate with Digital Bridge on their DB-eCR implementation, they have indicated willingness to share additional findings related to their alternative approach as they emerge, but this will not address several of the questions regarding national scalability.

Appendix A: Proposed eCR Approaches

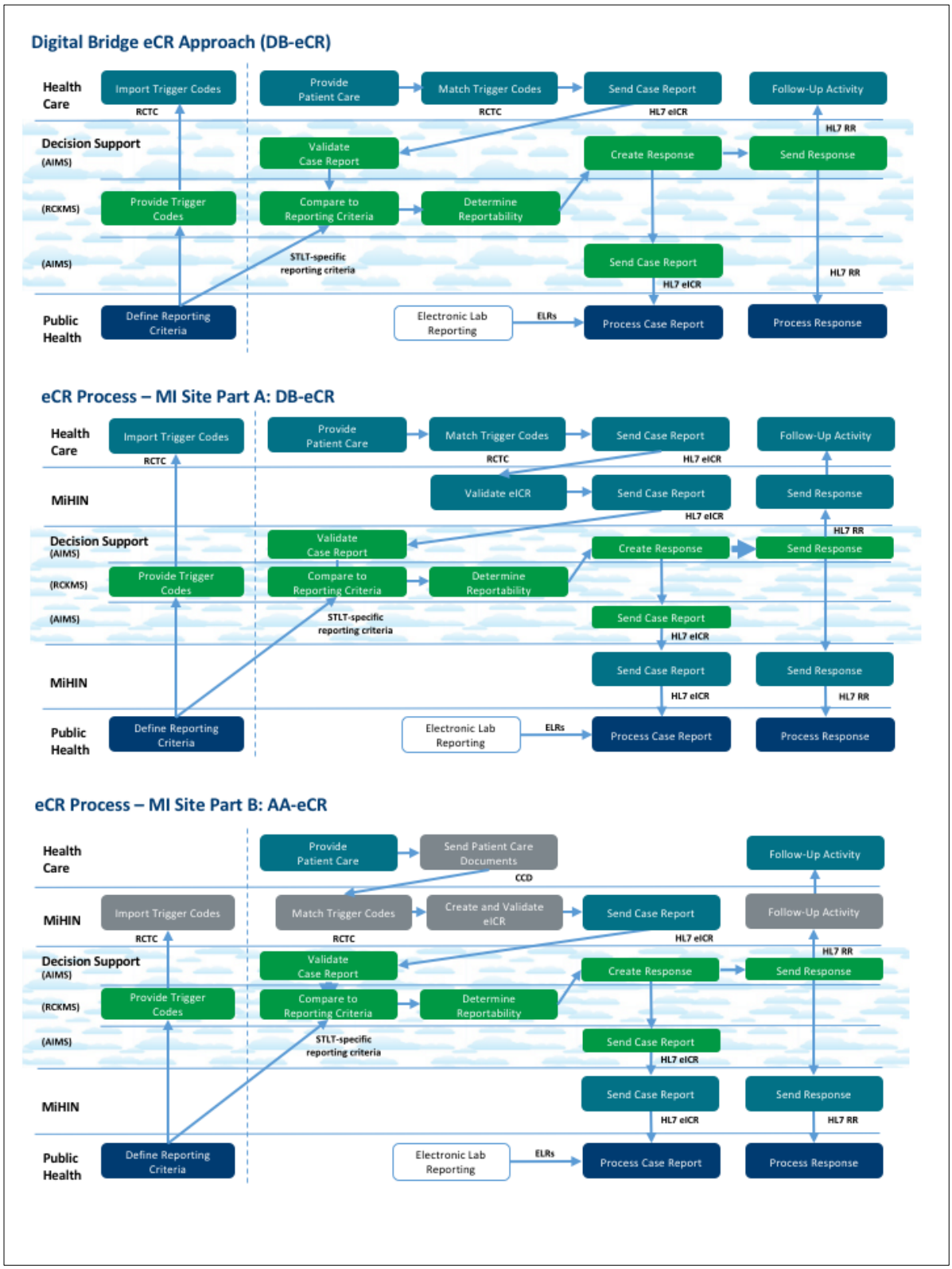

Figure 1: Diagrams of electronic case reporting approaches that are relevant to this issue brief

Council of State and Territorial Epidemiologists

CSTE Electronic Case Reporting (eCR) Rapid Assessment

Aggregate Results

Assessment Details

CSTE launched the eCR Rapid Assessment on Wednesday, August 9 and closed data collection on Wednesday, August 16. Fifty-seven jurisdictions received the request to participate via email through the CSTE Surveillance/Informatics Points of Contact listserv, including all US states, Washington D.C., New York City, Houston, Los Angeles County, and three US territories (American Samoa, Puerto Rico, and Virgin Islands). This list of contacts is updated annually and each primary and secondary contact is designated by the State Epidemiologist or lead epidemiologist in territory or large/urban area health departments. A total of 46 jurisdictions responded to the rapid assessment.

Assessment questions were as follows:

1. Please include your contact information below in case follow-up is needed.
    a. Name
    b. Jurisdiction
    c. Email address
2. Does your jurisdiction plan to use a health information exchange (HIE) to support electronic case reporting (eCR)?
    a. Yes
    b. No
    c. Not sure/Haven't determined
3. If yes, please indicate how the HIE would be used:
    a. For routing eICRs originating from EHRs
    b. For creating eICRs using data received from EHRs
    c. Both routing and creating eICRs
    d. Other (please describe)

Distribution of Responses

Table 1: Does jurisdiction plan to use HIE to support eCR?	**# of Jurisdictions**	**% (N=46)**
Jurisdiction respondents planning to use an HIE to support eCR:	15	32.6%
Jurisdiction respondents NOT planning to use an HIE to support eCR:	7	15.2%
Jurisdiction respondents unsure/haven't yet determined if they will use an HIE to support eCR:	24	52.2%

Table 2: If HIE will be used, then how?	**# of Jurisdictions**	**% (n=15)**
HIE would be used to ROUTE eICRs originating from EHRs:	7	46.7%
HIE would be used to CREATE eICRs using data received from EHRs:	1	6.7%
HIE would be used to both ROUTE and CREATE eICRs:	5	33.3%
Other (see next page)	2	13.3%

Of the 24 jurisdictions that indicated they were “unsure/haven’t determined” if they will use an HIE to support eCR, eight provided responses to how an HIE would be used if they did:

- One respondent said the HIE would be used to route eICRs.
- One respondent indicated the HIE would be used to create eICRs.
- Three respondents indicated the HIE would be used to both route and create eICRS.
- Three respondents indicated “Other” and included descriptions (see below).

Below are the remarks from respondents included in the text box provided in response to how an HIE would be used:

- Uncertain at this time.
- We've had discussions with HIE, but have not determined a plan forward as of yet.
- Could be both [routing and creating]...being determined.
- If we use a HIE, it will be for routing only.
- I could see answering this assessment as a challenge for some states that haven’t had the opportunity to fully evaluate the options.
- Our jurisdiction doesn't have a statewide HIE. We do have a smaller regional HIE that we would work with if they had a partner who wished to send us case reports. We would expect it would be just a pass through based on current implementation, but we do know that they are looking at supporting immunization querying directly from the HIE and not the original EHRs.
- We currently use our ELR system and Rhapsody for this. One partner is reporting directly, providers can also fill in an online form from our home grown system
- Longevity/sustainability of HIE is unclear due to lack of funding on their part. If the HIE is able to continue and get to the point of being capable of handling electronic exchanges, then we would utilize our HIE for that purpose.